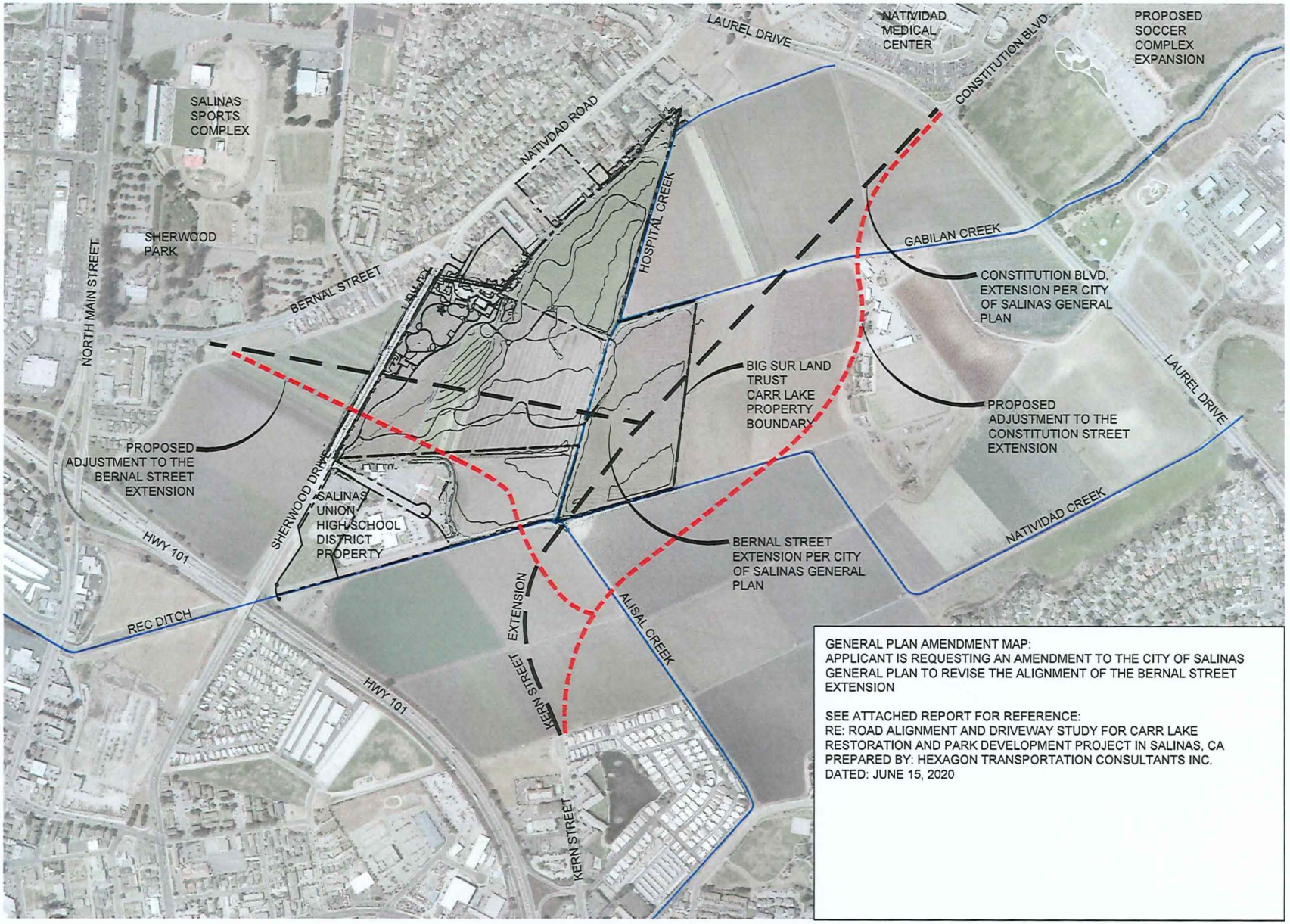
North

Vicinity Map

GENERAL PLAN AMENDMENT 2020-001, REZONE 2020-001, and SITE PLAN REVIEW 2020-006
618 Sherwood Drive

Exhibit 1



GENERAL PLAN AMENDMENT MAP:
APPLICANT IS REQUESTING AN AMENDMENT TO THE CITY OF SALINAS GENERAL PLAN TO REVISE THE ALIGNMENT OF THE BERNAL STREET EXTENSION

SEE ATTACHED REPORT FOR REFERENCE:
RE: ROAD ALIGNMENT AND DRIVEWAY STUDY FOR CARR LAKE RESTORATION AND PARK DEVELOPMENT PROJECT IN SALINAS, CA
PREPARED BY: HEXAGON TRANSPORTATION CONSULTANTS INC.
DATED: JUNE 15, 2020

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS

06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
NO. DATE DESCRIPTION

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

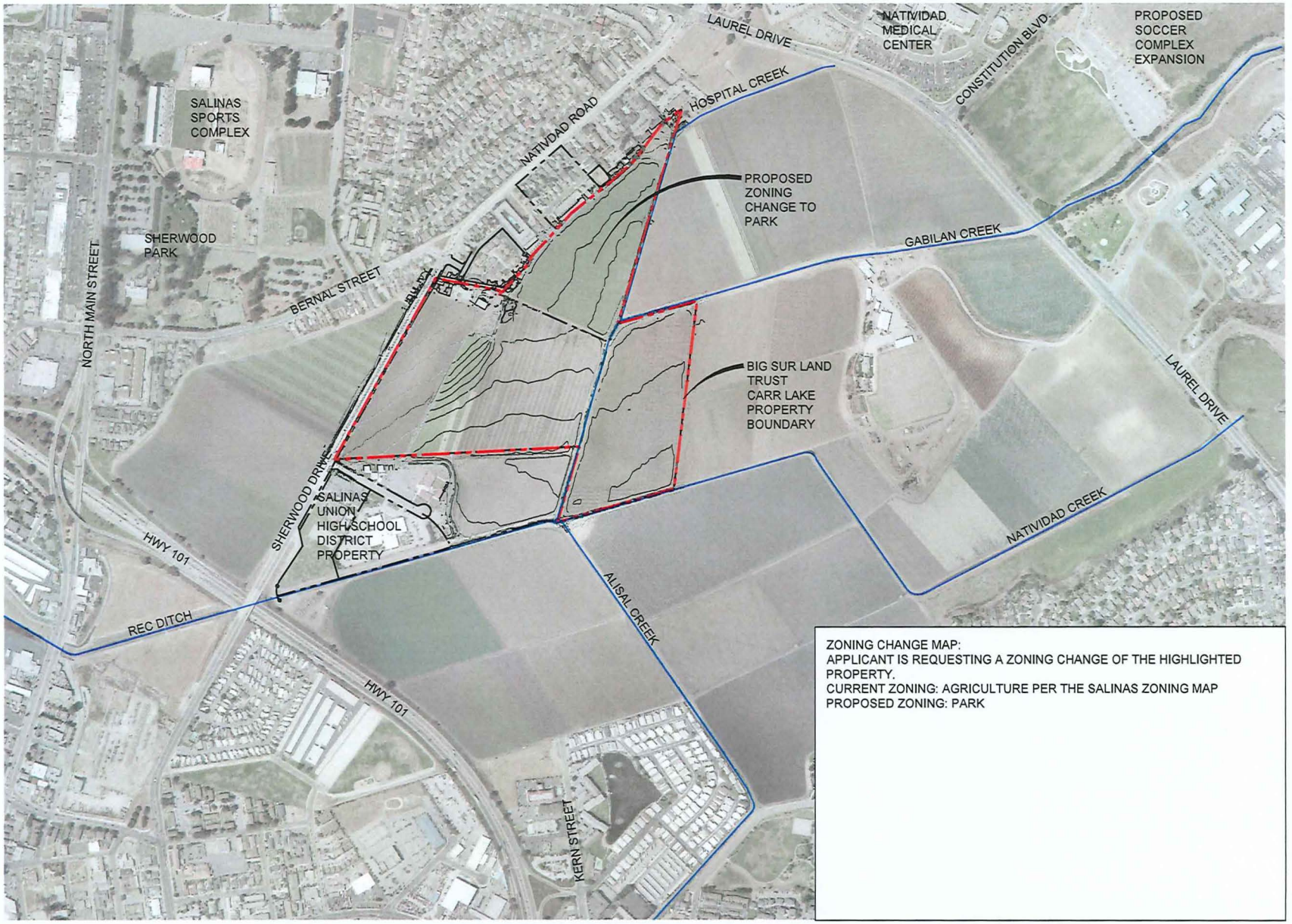
BIG SUR LAND TRUST

PROJECT NO: 19.016
DATE: 06/22/2020
SCALE:
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
GENERAL PLAN AMENDMENT MAP

SHEET NO:
L-1.0

Exhibit 2



ZONING CHANGE MAP:
APPLICANT IS REQUESTING A ZONING CHANGE OF THE HIGHLIGHTED PROPERTY.
CURRENT ZONING: AGRICULTURE PER THE SALINAS ZONING MAP
PROPOSED ZONING: PARK

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS

06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
NO. DATE DESCRIPTION

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST

PROJECT NO: 19.016
DATE: 06/22/2020
SCALE:
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
ZONING CHANGE MAP

SHEET NO:
L-1.0

Exhibit 3

CARR LAKE RESTORATION AND PARK DEVELOPMENT

618 SHERWOOD DRIVE SALINAS, CALIFORNIA

30% DESIGN DOCUMENTS

LOCATION MAP

PROJECT DIRECTORY

CLIENT
Big Sur Land Trust
509 Hartnell Street
Monterey, CA 93940
(831) 625-5523
Contact: Rachel Saunders

HYDROLOGY/LEAD CONSULTANT
Balance Hydrologics
800 Bancroft Way, Suite 101
Berkeley, CA 94710-2251
(510) 704-1000
Contact: Chelsea Neill

LANDSCAPE ARCHITECT
BFS Landscape Architects
425 Pacific Street, Suite 201
Monterey, CA 93940
(831) 646-1383
Contact: Michael Bellinger

GEOTECHNICAL/ SOILS
KLEINFELDER
40 Clark St #J
Salinas, CA 93901
(831) 755-7900
Contact: Dan Dockendorf

CIVIL
Whitson Engineers
6 Harris Ct
Monterey, CA 93940
(831) 649-5525
Contact: Rich Weber

ELECTRICAL
Aurum Consulting Engineers
60 Garden Ct, #210
Monterey, CA 93940
(831) 646-3330
Contact: Najib Anwary

TRAFFIC ENGINEERS
Hexagon Transportation Consultants
N 2nd St #400
San Jose, CA 95113
(831) 971-6100
Contact: Gary Black

SOILS HEALTH RISKS ASSESSMENT
Tox Risk Consulting
6516 27th Ave
Gig Harbor, WA 98335
(425) 922-5424
Contact: Scott Dwyer

PROJECT INFORMATION

PROPERTY OWNER
Big Sur Land Trust
509 Hartnell Street
Monterey, CA 93940
831-625-5523
Contact: Rachel Saunders

ASSESSOR PARCEL NUMBERS
003-212-007
003-212-015
003-212-016
003-821-033
261-191-001
261-191-007

CURRENT ZONING
Farmland

PROPOSED USES
Native vegetation restoration for stormwater quality improvement, open space for urban wildlife and public access, and neighborhood park.

SHEET INDEX

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS

09/14//2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

ISSUANCE/REVISIONS:

NO.	DATE	DESCRIPTION
	06/22/2020	1st CITY SUBMITTAL
	09/14/2020	2nd CITY SUBMITTAL

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

PROJECT NO: 19.016
DATE: 09/14/2020
SCALE:
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

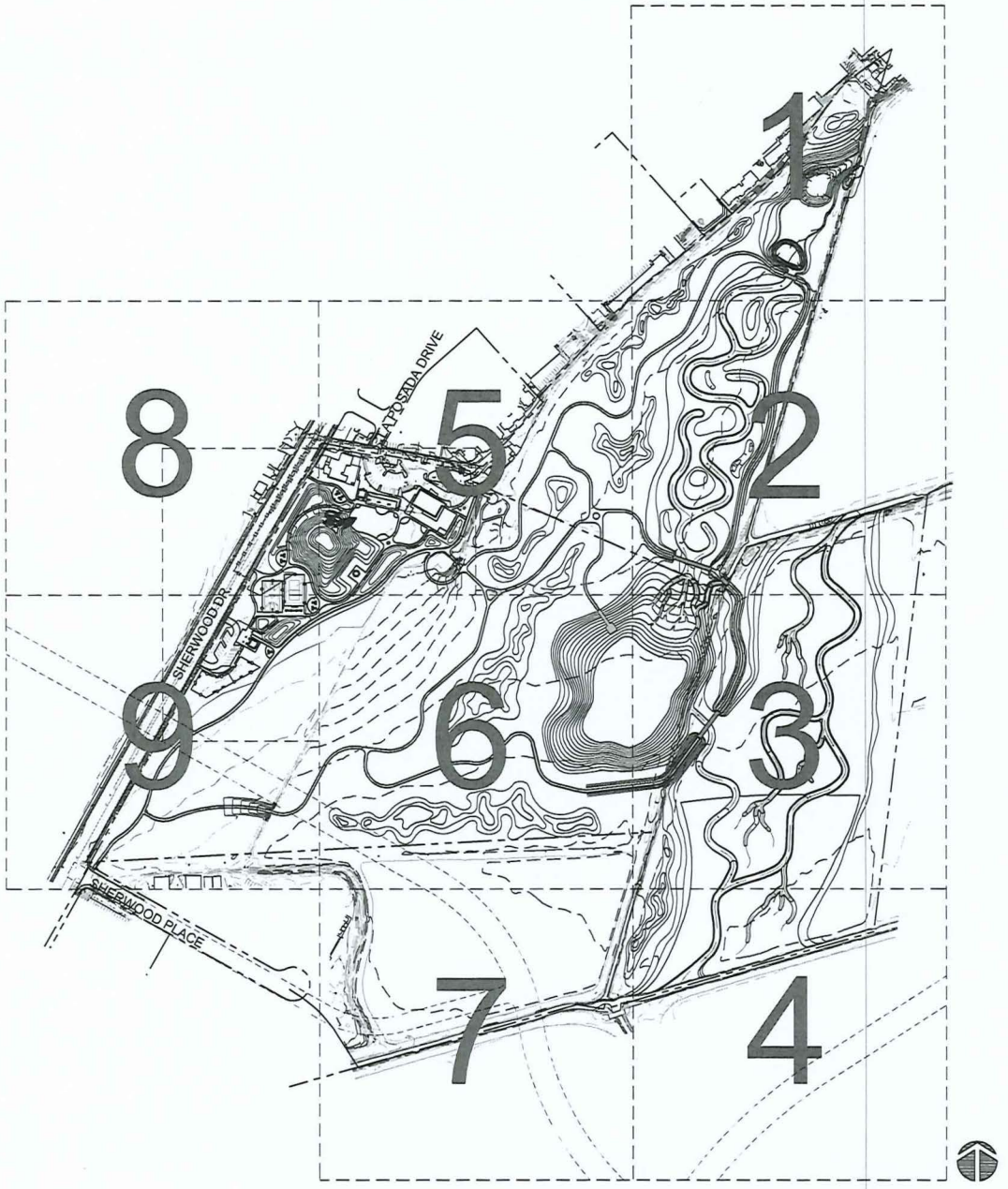
SHEET NAME:
COVER SHEET

SHEET NO:
L-0.0

Exhibit 4

F:\PRODUCTION\Projects\2019\19.016\CAD\19016_00 Cover Sheet.dwg 9/10/2020

4



Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS

09/14//2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

ISSUANCE/REVISIONS:

NO.	DATE	DESCRIPTION
	06/22/2020	1st CITY SUBMITTAL
	09/14/2020	2nd CITY SUBMITTAL

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
for the lands you love

PROJECT NO: 19.016
DATE: 09/14/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
OVERALL SITE PLAN

SHEET NO:
L-0.1

Exhibit 5

5

09/14//2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

NOTES:

1. THIS MAP REPRESENTS AN AERIAL TOPOGRAPHIC SURVEY FLOWN JUNE, 2019, SUPPLEMENTED BY A FIELD SURVEY PERFORMED BY WHITSON ENGINEERS JULY-NOVEMBER, 2019.
2. THIS MAP PORTRAYS THE SITE AT THE TIME OF THE SURVEY AND DOES NOT SHOW SOILS OR GEOLOGY INFORMATION, UNDERGROUND CONDITIONS, ZONING OR REGULATORY INFORMATION OR ANY OTHER ITEMS NOT SPECIFICALLY REQUESTED BY THE CLIENT.
3. BOUNDARY LOCATIONS SHOWN HEREON WERE DETERMINED WITH THE BENEFIT OF A FIELD SURVEY SUPPLEMENTED BY RECORD DATA. THIS TOPOGRAPHY DOES NOT CONSTITUTE A COMPLETE BOUNDARY SURVEY OF THE SUBJECT PROPERTY. THE EASEMENTS SHOWN HEREON ARE THOSE DISCLOSED BY RECORD PER THE TITLE REPORT PREPARED BY CHICAGO TITLE COMPANY, ORDER NUMBER FWMN-52115017B2-RS DATED OCTOBER 3, 2016. THERE MAY BE EASEMENTS OR OTHER RIGHTS, RECORDED OR UNRECORDED, AFFECTING THE SUBJECT PROPERTY WHICH ARE NOT SHOWN HEREON.
4. DISTANCES AND DIMENSIONS SHOWN ARE EXPRESSED IN FEET AND DECIMALS THEREOF, UNLESS OTHERWISE NOTED.
5. BENCHMARK TAKEN AS THE MONTEREY COUNTY BENCHMARK #337, DESIGNATION "TOWER 229", ELEVATION 83.88 FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (CORPSCON ADJUSTMENT +2.74' APPLIED TO NGVD VALUE PUBLISHED IN MONTEREY COUNTY BENCHMARK BOOK).
6. UNDERGROUND UTILITIES WERE NOT WITHIN THE SCOPE THIS SURVEY. THE UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, LOCATION AND DEPTH OF ALL UTILITIES SHOULD BE CONFIRMED PRIOR TO CONSTRUCTION.
7. DIAMETERS OF TREES ARE SHOWN IN INCHES MEASURED AT 2 FEET ABOVE GRADE. TREES SMALLER THAN 6" WERE NOT NECESSARILY LOCATED AS PART OF THIS SURVEY.

LEGEND

- 100 — GROUND CONTOUR
- SUBJECT PROPERTY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- CENTER LINE
- RECLAMATION DITCH

REFERENCES

R1 = VOLUME 18 PARCEL MAP PAGE 48

ABBREVIATIONS

C.U.M.	CONCRETE UNDERGROUND MONUMENT
FD	FOUND
IP	IRON PIPE
TBM	TEMPORARY BENCH MARK

Civil Engineering
Land Surveying
Whitson ENGINEERS

LICENSED LAND SURVEYOR BLAKE P. WEBER No. 8702 STATE OF CALIFORNIA

SUBMITAL / REVISION

618 SHERWOOD DRIVE AND CARR LAKE RANCH
Salinas, California

OVERALL BOUNDARY
TOPOGRAPHIC SURVEY

APN's 003-212-007, -015, -016, 261-191-001, -007, 003-821-033

SCALE:	1" = 200'
DRAWN:	TH
JOB No.:	3806
SHEET	1 OF 3

NOT FOR CONSTRUCTION

EXHIBIT

6

NOTES:

1. THIS MAP REPRESENTS AN AERIAL TOPOGRAPHIC SURVEY FLOWN JUNE, 2019, SUPPLEMENTED BY A FIELD SURVEY PERFORMED BY WHITSON ENGINEERS JULY-NOVEMBER, 2019.
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09/14//2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

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

0 1 2 INCHES 3

618 SHERWOOD DRIVE AND CARR LAKE RANCH
Salinas, California
AERIAL TOPOGRAPHIC SURVEY
APN's 003-212-007, -015, -016, 261-191-001, -007, 003-821-033

SUBMITTAL / REVISION

SCALE:	1" = 200'
DRAWN:	TH
JOB No.:	3806
SHEET	2 OF 3

LICENSED LAND SURVEYOR RICHARD P. WEBER No. 8002 STATE OF CALIFORNIA

Whitson ENGINEERS
Civil Engineering
Land Surveying

NOT FOR CONSTRUCTION

Exhibit 7

NOTES:

1. THIS MAP REPRESENTS AN AERIAL TOPOGRAPHIC SURVEY FLOWN JUNE, 2019, SUPPLEMENTED BY A FIELD SURVEY PERFORMED BY WHITSON ENGINEERS JULY-NOVEMBER, 2019.
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LEGEND

Symbol	Description
100	GROUND CONTOUR
	SUBJECT PROPERTY LINE
	ADJACENT PROPERTY LINE
	EASEMENT LINE
	CENTER LINE
200	CONTROL POINT
BM	BENCHMARK
FSP L50000	FOUND 3/4" IRON PIPE, TAGGED AS NOTED
+ 928.30	SPOT GRADE
12" OAK	TREE
	EDGE OF FOLIAGE
x	FENCE
	SIGN
UP	UTILITY POLE SHOWING ARMS AND GUY WIRE
SD	STORM DRAIN LINE
MH TYPE RIM INV	STORM DRAIN MANHOLE
SSCO	CLEANOUT
WV	WATER VALVE
HB	HOSE BIB
	UTILITY VAULT

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
C&G	CURB AND GUTTER
CO	CLEANOUT
CONC	CONCRETE
DI	DRAIN INLET
ELEC	ELECTRIC
ELEV	ELEVATION
FL	FLOWLINE
GRT	GRATE
INV	INVERT
MH	MANHOLE
SD	STORM DRAIN
SS	SANITARY SEWER
TBM	TEMPORARY BENCH MARK
UP	UTILITY POLE
WM	WATER METER
WV	WATER VALVE

N

40 0 40 80
SCALE: 1" = 40'

09/14//2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

SUBMITTAL / REVISION

Whitson ENGINEERS
Civil Engineering
Land Surveying

LICENSED LAND SURVEYOR RICHARD P. WEBER No. 8002 STATE OF CALIFORNIA

618 SHERWOOD DRIVE AND CARR LAKE RANCH

Salinas, California

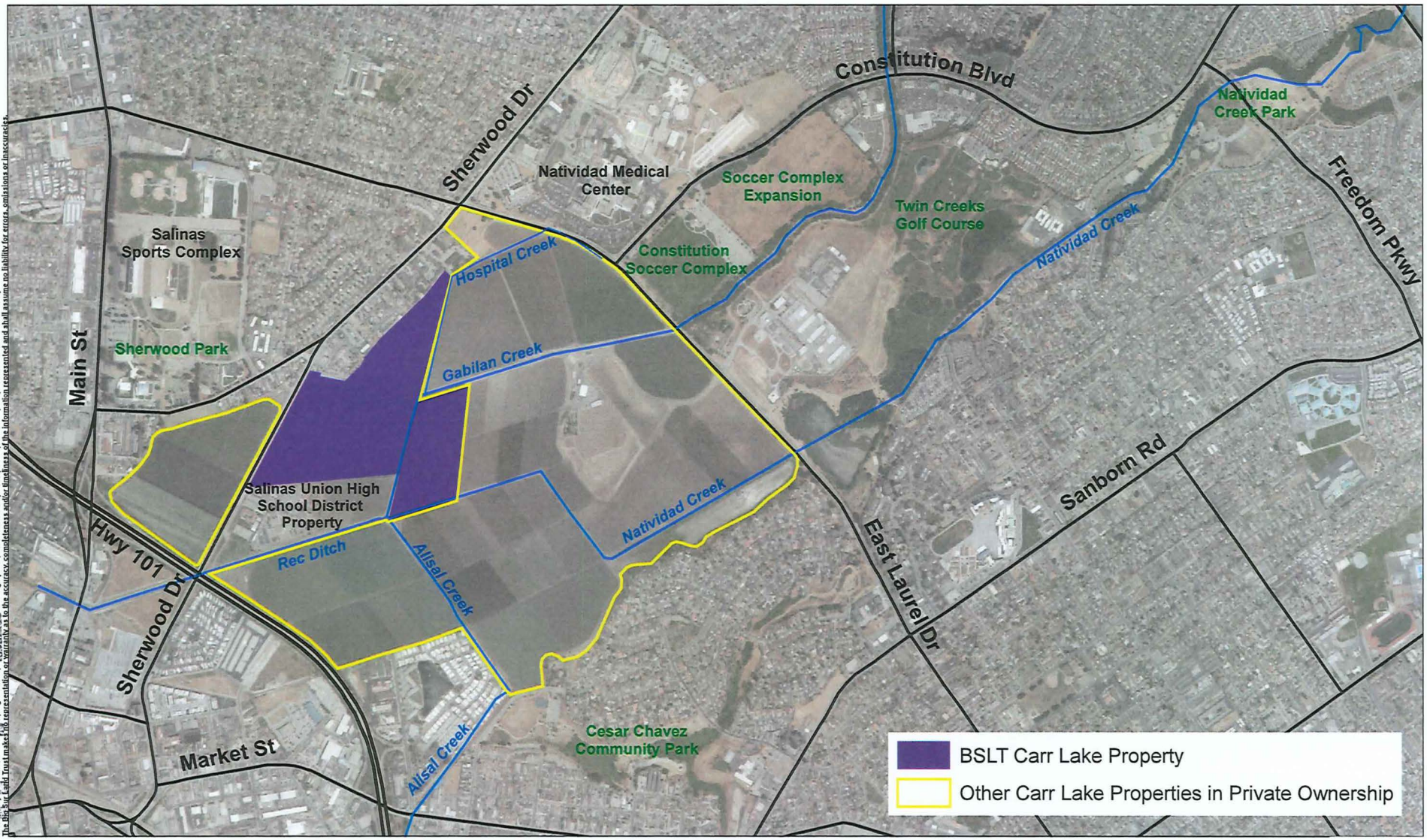
TOPOGRAPHIC SURVEY

APN's 003-212-007, -015, -016, 261-191-001, -007, 003-821-033

SCALE:	1" = 40'
DRAWN:	TH
JOB No.:	3806
SHEET	3 OF 3

NOT FOR CONSTRUCTION

Exhibit 8



0 0.25 0.5 Miles

Big Sur Land Trust
Property at Carr Lake

N W E S

BIG SUR LAND TRUST

Exhibit 4

WATER POLLUTION CONTROL PLAN

1. ESTIMATED TOTAL DISTURBED AREA
2. TOTAL PROPERTY AREA
3. BEST MANAGEMENT PRACTICES (BMPs) (MATERIALS AND THEIR INSTALLATION) SHALL CONFORM TO ONE OF THE FOLLOWING:
   3.1. THE 2011 EDITION OF THE CALTRANS STORM WATER QUALITY HANDBOOK / CONSTRUCTION SITE BMP MANUAL. THE HANDBOOK MAY BE DOWNLOADED FOR FREE AT http://www.dot.ca.gov/hq/construc/stormwater/documents/CAPPP_Prep_Manual_June2011.pdf
   3.2. THE 2015 EDITION OF THE CALIFORNIA STORMWATER BMP HANDBOOK PROMULGATED BY THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA). THE HANDBOOK MAY BE DOWNLOADED FOR A FEE FROM THE CASQA WEBSITE AT http://www.casqastormwatebooks.com/
4. THE BMPs SHOWN ON THIS WATER POLLUTION CONTROL PLAN SHALL BE ADJUSTED OR SUPPLEMENTED AS REQUIRED TO PROTECT WATER QUALITY AND/OR AS DIRECTED BY THE ENGINEER OR JURISDICTION HAVING AUTHORITY.
5. THIS PLAN IS INTENDED TO BE USED FOR INTERIM WATER POLLUTION CONTROL ONLY AND IS NOT TO BE USED FOR FINAL ELEVATIONS OR PERMANENT IMPROVEMENTS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING BMPs PRIOR TO, DURING, AND AFTER STORM EVENTS, AND SHALL PROMPTLY CORRECT ANY DEFICIENCIES NOTED.
7. ALL PAVED AREAS SHALL BE KEPT CLEAN OF SOIL AND DEBRIS. REGULAR STREET SWEEPING IS REQUIRED. ADDITIONAL STREET SWEEPING MAY BE REQUIRED BY THE ARCHITECT/ENGINEER OR JURISDICTION HAVING AUTHORITY.
8. REASONABLE CARE SHALL BE TAKEN WHEN HAULING ANY EARTH, SAND, GRAVEL, STONE, DEBRIS, PAPER OR ANY OTHER SUBSTANCE OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE. ANY MATERIAL THAT IS TO BE HAULED OFF-SITE SHALL BE COVERED. SHOULD ANY SLOW, SPILL, OR TRACK OVER AND UPON SAID PUBLIC OR ADJACENT PRIVATE PROPERTY, IMMEDIATE REMEDY SHALL OCCUR.
9. KEEP ADDITIONAL EROSION AND SEDIMENT CONTROL SUPPLIES ON SITE IN CASE IMMEDIATE REPAIRS OR MODIFICATIONS ARE REQUIRED. THESE SUPPLIES MAY INCLUDE ADDITIONAL SILT FENCING, FILTER FABRIC, HAY BALES, JUTE NETTING, BAGS AND TARPS.
10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.
11. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY FEDERAL, STATE, AND LOCAL AGENCY REQUIREMENTS.
12. PROVIDE TEMPORARY "EFFECTIVE SOIL COVER" ON ALL INACTIVE DISTURBED AREAS (AREAS WHICH HAVE NOT BEEN DISTURBED FOR AT LEAST 14 DAYS) PRIOR TO INSTALLATION OF FINAL LANDSCAPING, IF REQUIRED DUE TO PROJECT SCHEDULING.
13. PROVIDE WIND EROSION CONTROL AT ALL TIMES IN ACCORDANCE WITH BEST MANAGEMENT PRACTICE WE-1.
14. LIMIT THE USE OF PLASTIC MATERIALS. WHEN MORE SUSTAINABLE, ENVIRONMENTALLY FRIENDLY ALTERNATIVES EXIST. WHERE PLASTIC MATERIALS ARE DEEMED NECESSARY, CONSIDER THE USE OF PLASTIC MATERIALS RESISTANT TO SOLAR DEGRADATION AND WHICH MAY BE RECYCLED.
15. ESTABLISH AND MAINTAIN EFFECTIVE PERIMETER CONTROLS AND STABILIZE ALL CONSTRUCTION ENTRANCES AND EXITS TO SUFFICIENTLY CONTROL EROSION AND SEDIMENT DISCHARGES FROM THE SITE.
    - PROVIDE SILT FENCE AT CONSTRUCTION SITE PERIMETER WHERE RUNOFF LEAVES THE CONSTRUCTION SITE.
    - PROVIDE INLET PROTECTION AT ALL DRAIN INLETS.
16. ALL GRADING SHALL CONFORM TO THE MONTEREY COUNTY GRADING ORDINANCE #2535, EROSION CONTROL ORDINANCE #2806, AND CALIFORNIA BUILDING CODE.
17. PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE, THE CONTRACTOR SHALL SCHEDULE AN INSPECTION WITH THE CITY OF SALINAS TO ENSURE ALL NECESSARY SEDIMENT CONTROLS ARE IN PLACE AND IN COMPLIANCE WITH CALTRANS OR CASQA BMP FACT SHEETS.
18. DURING CONSTRUCTION, INSPECTIONS BY THE CITY OF SALINAS WILL BE CONDUCTED TO INSPECT DRAINAGE DEVICE INSTALLATION, REVIEW THE MAINTENANCE AND EFFECTIVENESS OF BMPS INSTALLED, AS WELL AS, TO VERIFY THAT POLLUTANTS OF CONCERN ARE NOT DISCHARGED FROM THE SITE.
19. PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL SCHEDULE AN INSPECTION WITH THE CITY OF SALINAS TO ENSURE THAT ALL DISTURBED AREAS HAVE BEEN STABILIZED AND THAT ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES THAT ARE NO LONGER NEEDED HAVE BEEN REMOVED.
20. CONTRACTOR SHALL SCHEDULE INSPECTIONS WITH THE CITY OF SALINAS AT ALL STAGES OF SOURCE CONTROL MEASURES CONSTRUCTION.
21. ALL OF PART OF THE CONSTRUCTION OF THIS PROJECT IS EXPECTED TO OCCUR DURING THE WINTER SEASON (OCTOBER 15TH THROUGH APRIL 15TH).
22. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE PERMITTEE TO ENSURE THAT EROSION DOES NOT OCCUR FROM AN ACTIVITY DURING OR AFTER PROJECT CONSTRUCTION. ADDITIONAL MEASURES, BEYOND THOSE SPECIFIED, MAY BE REQUIRED AS DEEMED NECESSARY TO CONTROL ACCELERATED EROSION. (MOC 16.12.100)
23. CONTRACTOR TO COORDINATE INSTALLATION OF JOB TRAILER WITH CITY OF SALINAS PERMIT CENTER, DEVELOPMENT ENGINEERING DIVISION. INSTALLATION SHALL REQUIRE ENCROACHMENT PERMIT.

GENERAL REQUIREMENTS

ACTUAL GRADING SHALL BEGIN WITHIN 30 DAYS OF VEGETATION REMOVAL OR THE AREA SHALL BE PLANTED TO CONTROL EROSION. VEGETATION REMOVAL BETWEEN OCTOBER 15TH AND APRIL 15TH SHALL NOT PRECEDE SUBSEQUENT GRADING OR CONSTRUCTION ACTIVITIES BY MORE THAN 15 DAYS.

THE FOLLOWING PROVISIONS SHALL APPLY BETWEEN OCTOBER 1 AND APRIL 30:

A. DISTURBED SURFACES NOT INVOLVED IN THE IMMEDIATE OPERATIONS MUST BE PROTECTED BY APPLYING STRAW MULCH AT 2000 LBS. PER ACRE AND ANCHORED BY TRACK-WALKING TO PREVENT MOVEMENT DURING WATER FLOW.

B. RUNOFF FROM THE SITE SHALL BE DETAINED OR FILTERED BY BERMS, VEGETATED FILTER STRIPS AND/OR CATCH BASINS TO PREVENT THE ESCAPE OF SEDIMENT FROM THE SITE. THESE DRAINAGE CONTROLS MUST BE MAINTAINED BY THE CONTRACTOR AS NECESSARY TO ACHIEVE THEIR PURPOSE THROUGHOUT THE LIFE OF THE PROJECT. SEE THIS SHEET FOR EROSION CONTROL PLAN AND EROSION CONTROL DETAILS.

C. EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH DAY'S WORK.

D. THE BUILDING INSPECTOR SHALL STOP OPERATIONS DURING PERIODS OF INCLEMENT WEATHER IF HE DETERMINES THAT EROSION PROBLEMS ARE NOT BEING CONTROLLED ADEQUATELY.

E. CUT AND FILL SLOPES SHALL BE PLANTED WITH AN SEED MIX APPROVED BY THE LANDSCAPE ARCHITECT. AMOUNT OF SEED AND FERTILIZER SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.

5. ALL SURFACES EXPOSED OR EXPECTED TO BE EXPOSED DURING GRADING ACTIVITIES SHALL BE PREPARED AND MAINTAINED THROUGH THE LENGTH OF THE ENTIRE PROJECT TO PROTECT AGAINST EROSION.
4. AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION, THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTORS ARE OPERATING EQUIPMENT ON THE SITE, SHALL PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFINE DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE DONE BY DUST FROM HIS OR HER SUBCONTRACTOR.

OBSERVATION AND MAINTENANCE

1. VISUALLY OBSERVE AND MAINTAIN BEST MANAGEMENT PRACTICES (BMPs) AS FOLLOWS:
   A. WEEKLY; AND
   B. WITHIN 48 HOURS PRIOR TO EACH STORM EVENT; AND
   C. WITHIN 48 HOURS AFTER EACH STORM EVENT
   D. DAILY DURING STORM EVENTS
2. REPAIR DAMAGED BMPs WITHIN 48 HOURS OF OBSERVATION.
3. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL BMPs BEFORE SEDIMENT HAS ACCUMULATED TO A DEPTH OF ONE THIRD THE HEIGHT OF THE SEDIMENT BARRIER OR SUMP. IF NOT OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS OR BY THE BMP SUPPLIER OR MANUFACTURER.
4. TRASH AND DEBRIS SHALL BE REMOVED FROM BMPs DURING SCHEDULED INSPECTIONS.
5. REMOVED SEDIMENT SHALL BE PLACED AT AN APPROVED LOCATION AND IN SUCH A MANNER THAT IT WILL NOT ERODE, OR SHALL BE DISPOSED OF OFF-SITE.
6. REPAIR RILLS AND GULLIES BY RE-GRADING AND THEN TRACK-WALKING PERPENDICULAR TO THE SLOPE. PROVIDE TEMPORARY SOIL COVER IF NECESSARY.

NON-STORM WATER DISCHARGES

NON-STORM WATER DISCHARGES INCLUDE A WIDE VARIETY OF SOURCES, INCLUDING IMPROPER DUMPING, SPILLS, OR LEAKAGE FROM STORAGE TANKS OR TRANSFER AREAS. NON-STORM WATER DISCHARGES MAY CONTRIBUTE SIGNIFICANT POLLUTANT LOADS TO RECEIVING WATERS, AND AS SUCH ARE PROHIBITED. MEASURES TO CONTROL SPILLS, LEAKAGE, AND DUMPING, AND TO PREVENT ILLICIT CONNECTIONS DURING CONSTRUCTION, MUST BE TAKEN. HOWEVER, CERTAIN NON-STORM WATER DISCHARGES MAY BE AUTHORIZED FOR THE COMPLETION OF CONSTRUCTION. AUTHORIZED NON-STORM WATER DISCHARGES MAY INCLUDE THOSE FROM DECHLORINATED POTABLE WATER SOURCES SUCH AS:

- FIRE HYDRANT FLUSHING;
- IRRIGATION OF VEGETATIVE EROSION CONTROL MEASURES;
- PIPE FLUSHING AND TESTING;
- WATER TO CONTROL DUST;
- UNCONTAMINATED GROUND WATER FROM DEWATERING;
- OTHER DISCHARGES NOT SUBJECT TO A SEPARATE GENERAL NPDES PERMIT ADOPTED BY A REGIONAL WATER BOARD.

4. THE DISCHARGE OF NON-STORM WATER IS AUTHORIZED UNDER THE FOLLOWING CONDITIONS:
   - THE DISCHARGE DOES NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD
   - THE DISCHARGE DOES NOT VIOLATE ANY OTHER PROVISION OF THE GENERAL PERMIT
   - THE DISCHARGE IS NOT PROHIBITED BY THE APPLICABLE BASIN PLAN
   - THE DISCHARGER HAS INCLUDED AND IMPLEMENTED SPECIFIC BMPS REQUIRED BY THE GENERAL PERMIT TO PREVENT OR REDUCE THE CONTACT OF THE NONSTORM WATER DISCHARGE WITH CONSTRUCTION MATERIALS OR EQUIPMENT.
   - THE DISCHARGE DOES NOT CONTAIN TOXIC CONSTITUENTS IN TOXIC AMOUNTS OR (OTHER) SIGNIFICANT QUANTITIES OF POLLUTANTS
   - THE DISCHARGE IS MONITORED.
5. IF ANY OF THE ABOVE CONDITIONS ARE NOT SATISFIED, THE DISCHARGE IS NOT AUTHORIZED.

EMPLOYEE TRAINING

STORM WATER POLLUTION PREVENTION TRAINING SHALL BE PROVIDED AT THE BEGINNING OF CONSTRUCTION AND REGULARLY DURING CONSTRUCTION FOR ALL EMPLOYEES WORKING ON THE JOB SITE. TRAINING SHALL BE PROVIDED BY THE CONTRACTOR'S WATER POLLUTION CONTROL MANAGER. TOPICS SHALL INCLUDE, BUT ARE NOT LIMITED TO:

- SPILL PREVENTION AND RESPONSE;
- LOCATIONS AND FUNCTIONS OF SEDIMENT/EROSION CONTROL DEVICES;
- GOOD HOUSEKEEPING;
- FINES AND PENALTIES;
- MATERIAL MANAGEMENT PRACTICES.

GENERAL NOTES

1. CODES
   1. Walking surfaces shall comply with CBC 11B-403 Walking Surfaces. All finishes shall be slip resistant.
   2. Curb ramps shall be in compliance with CBC 11B-406 Curb Ramps, Blended Transitions and Islands
   3. Ramps, including handrails, shall be in compliance with CBC 11B-405 Ramps
   4. Steps, including handrails, shall be in compliance with CBC 11B-504 Stairways
   5. Accessible parking stalls shall be in compliance with CBC 11B-502 Parking spaces
   6. Detectable walking surfaces shall be in compliance with CBC 11B-705 Detectable Warnings and Detectable Directional Texture
   7. Passenger drop-offs shall be in compliance with CBC 11B-503 Passenger drop-off and loading zones

LANDSCAPE CALCULATIONS

ITEM	AREA (SF)	AREA (AC)	PERCENTAGE
TOTAL PROPERTY AREA	3,184,236	73.1	
RESTORATION/OPEN SPACE LANDSCAPE	2,739,103	62.88	
NEIGHBORHOOD PARK LANDSCAPE (INCLUDES PARKING LOT PLANTING & TURF)	144,065	3.3	
TOTAL LANDSCAPE	2,883,168	66.19	90.5%
TRADITIONAL TURF	15,476	0.36	0.5%
TOTAL PARKING AREA	49,127	1.12	
PARKING LOT LANDSCAPE	12,628	0.29	25.7%

PARKING CALCULATIONS

VEHICLE PARKING - 60 Stalls Total	
Standard Parking Stalls per City of Salinas Standard	57
ADA Parking Stalls per City of Salinas Standard	3
Bicycle Parking	9

BUILDING DATA

Existing Buildings on Site	5	17,683 SF
Existing Floor Area Ratio		0.006
Existing Buildings to Remain	3	10,792 SF
New Buildings Proposed	2	1,088 SF
New Floor Area Ratio		0.0003
Total	5	11,883 SF
Total Floor Area Ratio		0.004
FLOOR AREA BREAKDOWN BY STRUCTURE		
Residential Structures	2	6,564 SF
Storage Building	1	4,231 SF
Prefabricated Restroom Buildings	2	1088 SF

STORMWATER MITIGATION

ITEM	AREA (SF)	% COVERAGE
Impervious Surfaces at Neighborhood Park Project	51,843	
Stormwater Treatment Area	25,300	49%

LEGEND

- Park pathway: Granitecrete. See (1/L-5.0)
- Recreation trail: 8' aggregate path with 2' natural shoulder on each side. See (2/L-5.0)
- Boardwalk: See (1/L-5.1)
- Resilient surfacing. See (3/L-5.0)
- PA Planting area: See Planting Plan
- Property Line
- 100-Year Floodplain: Elevation at 46.8

REFERENCE NOTES

1. Existing building: Preserve and protect
2. Existing native garden: Preserve and protect
3. Existing perimeter fence: 6' chainlink. Preserve and protect
4. Existing city sidewalk: Preserve and protect
5. Existing water quality swale: Preserve and protect
6. Existing stormdrain piping and inlet: Preserve and protect
7. Existing sanitary sewer piping and manhole: Preserve and protect
8. Existing PG&E utility pole: Preserve and protect
9. Proposed roadway alignment: See Traffic Report
10. Parking lot: Asphalt paving
11. Passenger loading and unloading
12. Driveway apron per City Standards
13. Trail head to Openspace
14. School-bus parking
15. Trash enclosure: Capacity for (2) standard dumpsters
16. Play area: 2-5 year and 5-12 year old natural play area, with inclusive features and accessible surfacing. Includes benches, drinking fountain, trash and recycling containers
17. Amphitheater
18. Picnic area: BBQ grills, picnic tables, preparation tables and trash and recycling containers
19. Basketball court
20. Skate park: Custom designed and cast in place elements, with fencing
21. Dog park: Off-leash dog area with 6' tall fence enclosure with gates
22. Multipurpose court: Asphalt pad with sports surface coating
23. Restroom building: Capacity to accommodate 100 users per hour. Connect to water, sanitary sewer and electrical. See (1/L-5.2)
24. Outdoor gathering space
25. Gazebo: Overhead structure and stage for gatherings and events. Includes electrical
26. Bench: Seating area with trash and recycling
27. Interpretive and historical site feature
28. Bicycle parking
29. Bridge: Prefabricated structure to support vehicle loading
30. Raised boardwalk & observation deck: See (2/L-5.1)
31. Realigned flow Line: See plans prepared by Balance Hydrologics
32. Stormwater mitigation and interpretation area
33. Wood steps with handrails: See (4/L-5.0)
34. Concrete split rail fence: See (6/L-5.0)
35. 4' Tall metal fence and gate at play area: See (7/L-5.0) (8/L-5.0)
36. 6' Tall chainlink fence: See (9/L-5.0)
37. City sidewalk per City Standards
38. Existing gate: Pipe gate, 4' tall. Preserve and Protect
39. Existing residential fence: Wood, 6' tall. Preserve and Protect
40. Existing masonry wall at HACM Property: CMU Block, 6' tall. Preserve and Protect
41. ADA parking stall: See (4/L-5.2)

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS

09/14//2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

ISSUANCE/REVISIONS:

NO.	DATE	DESCRIPTION
	06/22/2020	1st CITY SUBMITTAL
	09/14/2020	2nd CITY SUBMITTAL

PROJECT:

CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

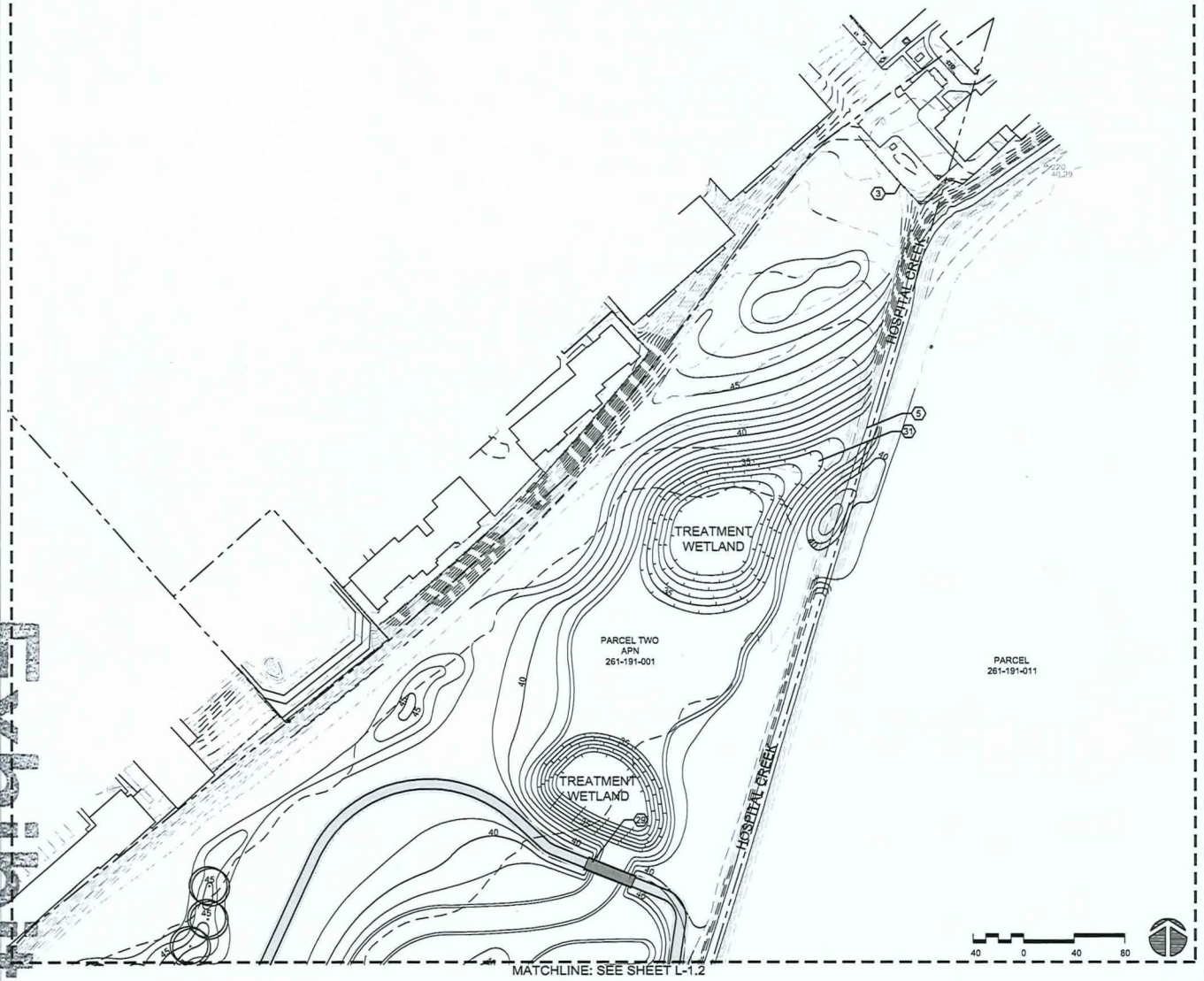
PROJECT NO: 19.016
DATE: 09/14/2020
SCALE: AS NOTED
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:

CONSTRUCTION LEGEND & NOTES

SHEET NO:

L-1.0



LEGEND

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- PA Planting area: See Planting Plan
- Property Line
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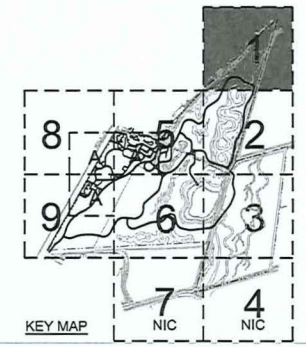

KEY MAP

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS
1329 PACIFIC STREET #201
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SALINAS, CALIFORNIA
BIG SUR LAND TRUST

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PROJECT NO: 19.016
DATE: 09/14/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:

CONSTRUCTION PLAN

SHEET NO:

L-1.1

Exhibit 11

LEGEND

Park pathway: Granitecrete. See (1/L-5.0)

Recreation trail: 8' aggregate path with 2' natural shoulder on each side. See (2/L-5.0)

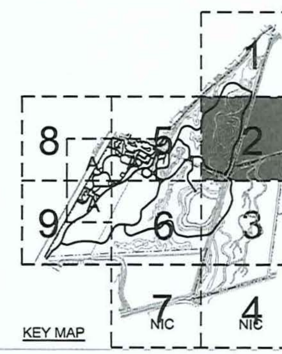
Boardwalk: See (1/L-5.1)

Resilient surfacing. See (3/L-5.0)

PA Planting area: See Planting Plan

Property Line

100-Year Floodplain: Elevation at 46.8



KEY MAP

Balance Hydrologics
800 BANCROFT WAY SUITE 101
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SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:

CONSTRUCTION PLAN

SHEET NO:

L-1.2

LEGEND

- Park pathway: Granitecrete. See 1/L-5.0
- Recreation trail: 8' aggregate path with 2' natural shoulder on each side. See 2/L-5.0
- Boardwalk: See 1/L-5.1
- Resilient surfacing. See 3/L-5.0
- PA Planting area: See Planting Plan
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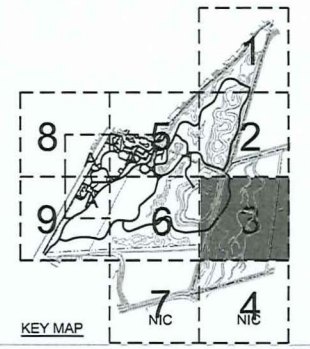

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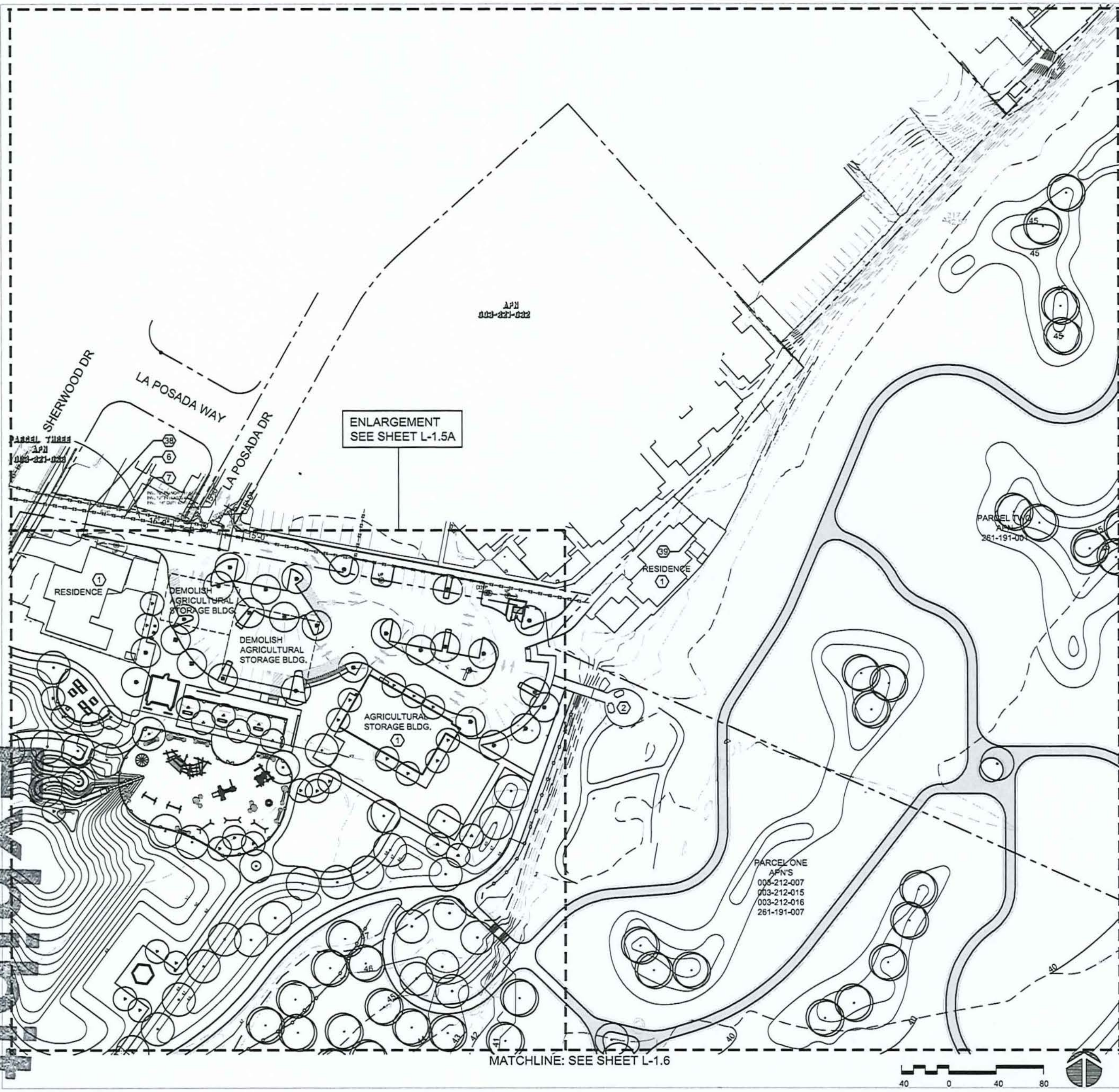
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
CONSTRUCTION PLAN

SHEET NO:
L-1.3

Exhibit 1

13



LEGEND

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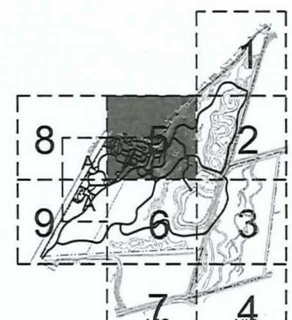

KEY MAP

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DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

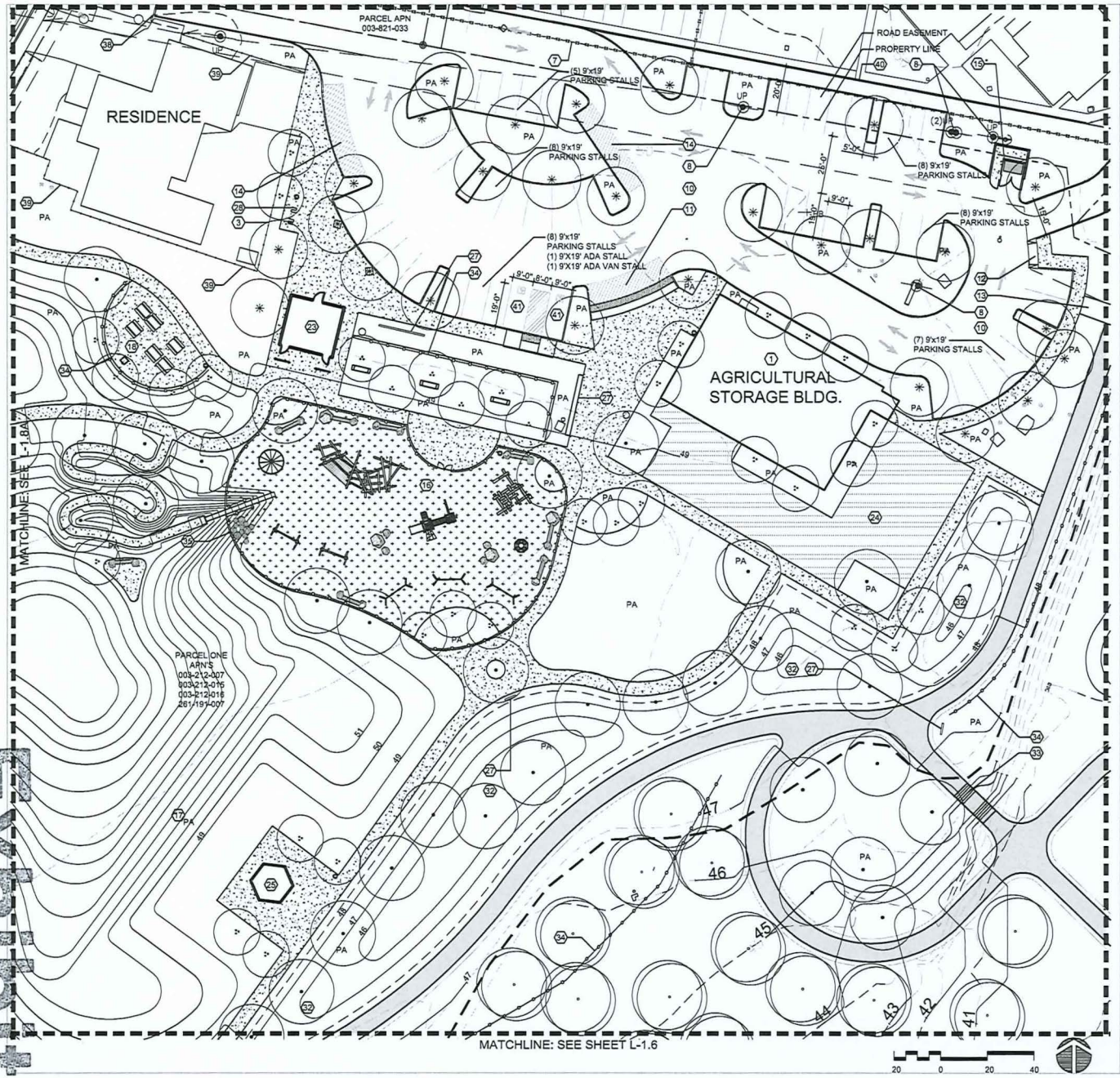
SHEET NAME:

CONSTRUCTION PLAN

SHEET NO:

L-1.5

Exhibit 14



LEGEND

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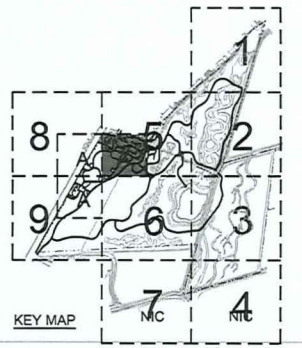

KEY MAP

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
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BFS LANDSCAPE ARCHITECTS

09/14//2020 30% DESIGN PLANS
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SCALE: 1" = 20'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

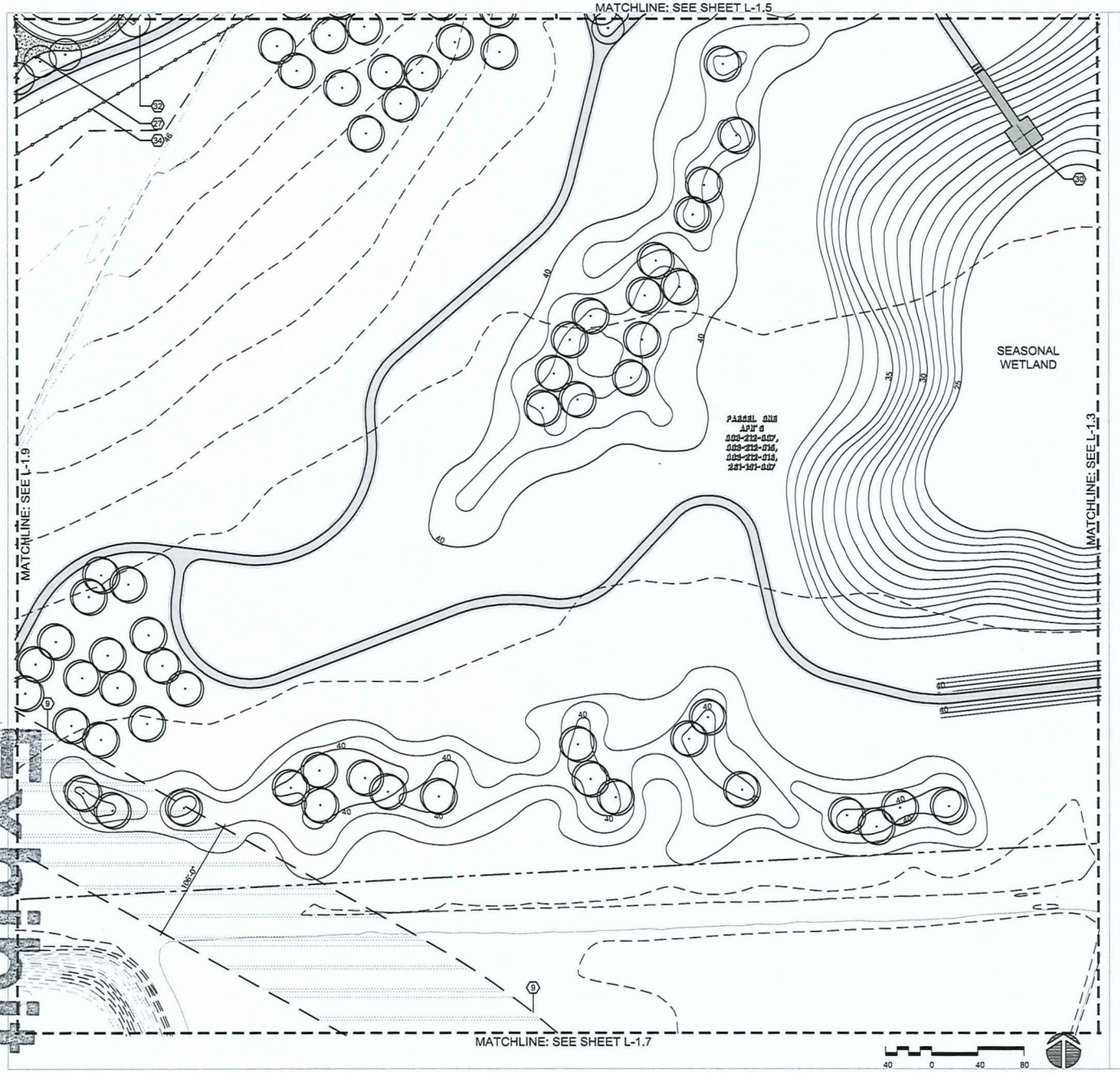
SHEET NAME:

CONSTRUCTION PLAN ENLARGEMENT: PARK

SHEET NO:

L-1.5A

Exhibit 15



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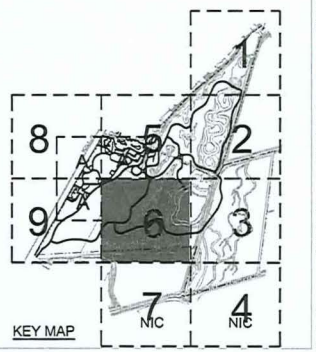

KEY MAP

Balance Hydrologics
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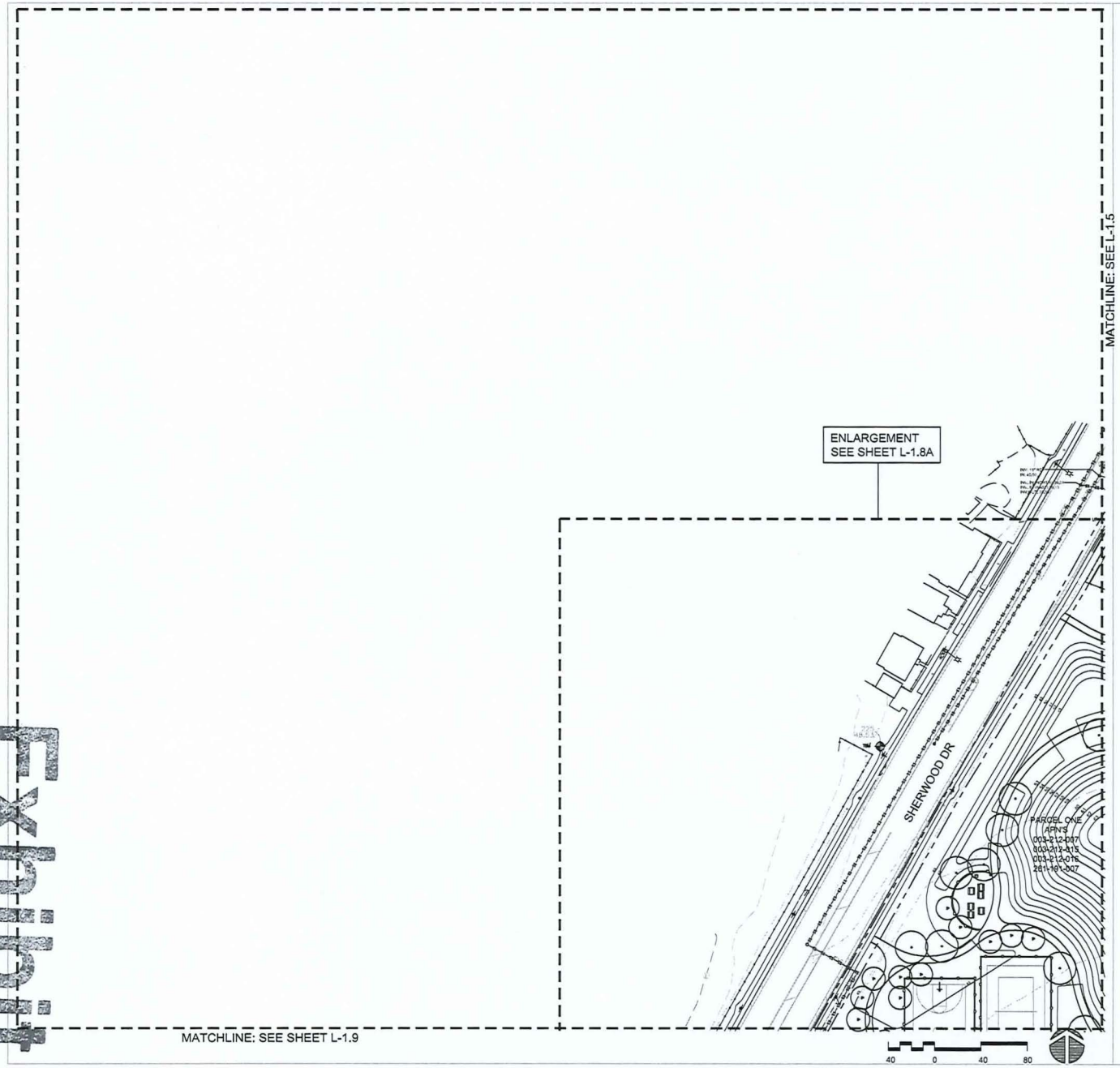
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
CONSTRUCTION PLAN

SHEET NO:
L-1.6

Exhibit

91



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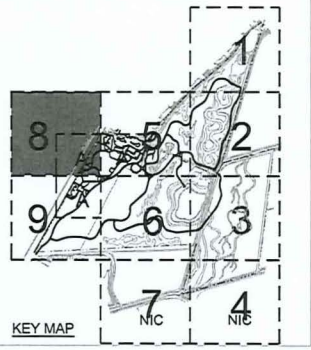

Balance Hydrologics
800 BANCROFT WAY SUITE 101
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BFS LANDSCAPE ARCHITECTS
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CARR LAKE RESTORATION AND PARK DEVELOPMENT
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DATE: 09/14/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
CONSTRUCTION PLAN

SHEET NO:
L-1.8

Exhibit 4

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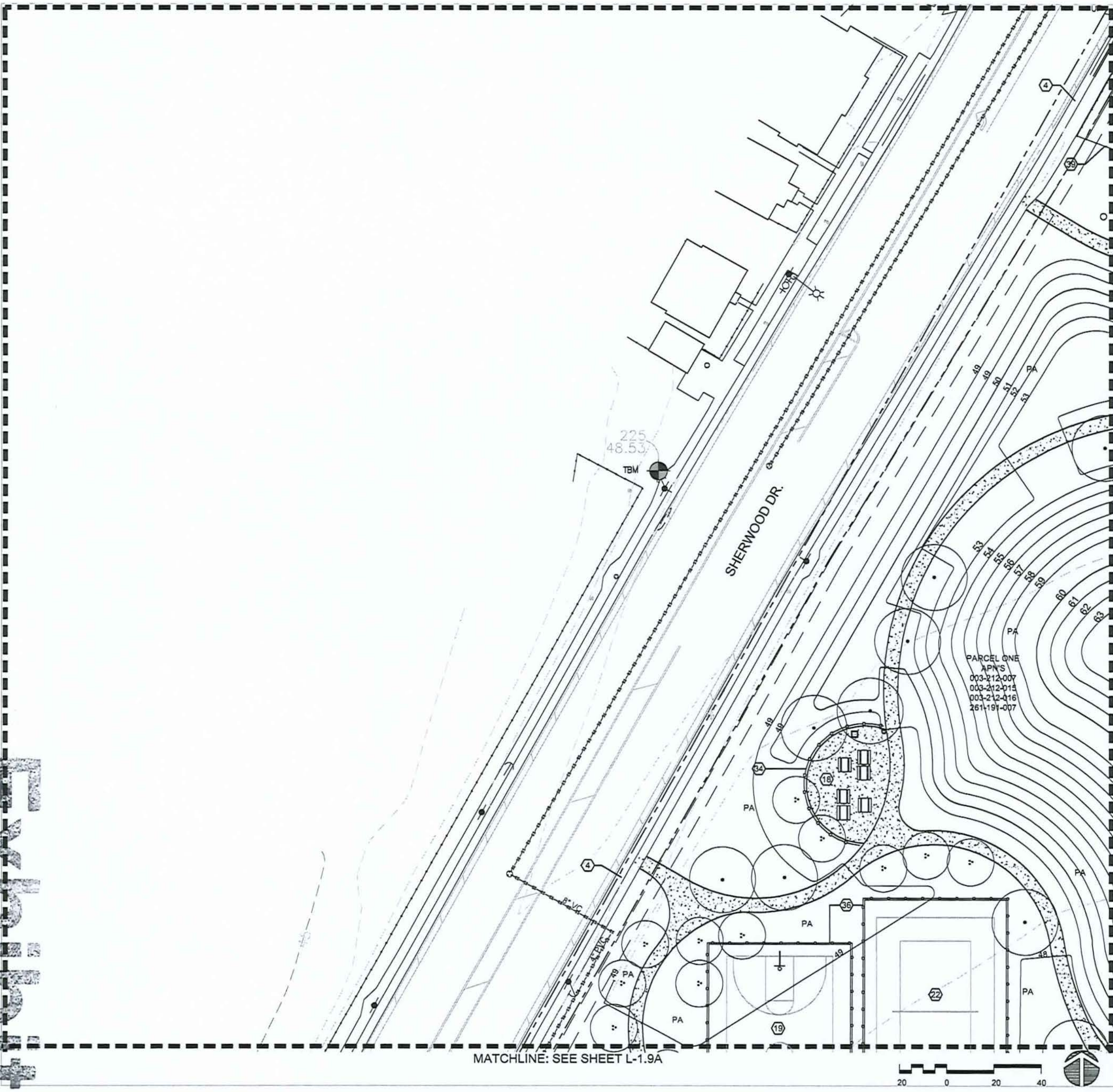
1



LEGEND

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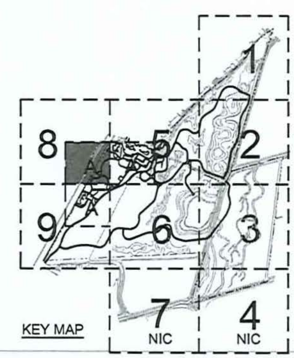

KEY MAP

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS
425 PACIFIC STREET #201
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SCALE: 1" = 20'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:

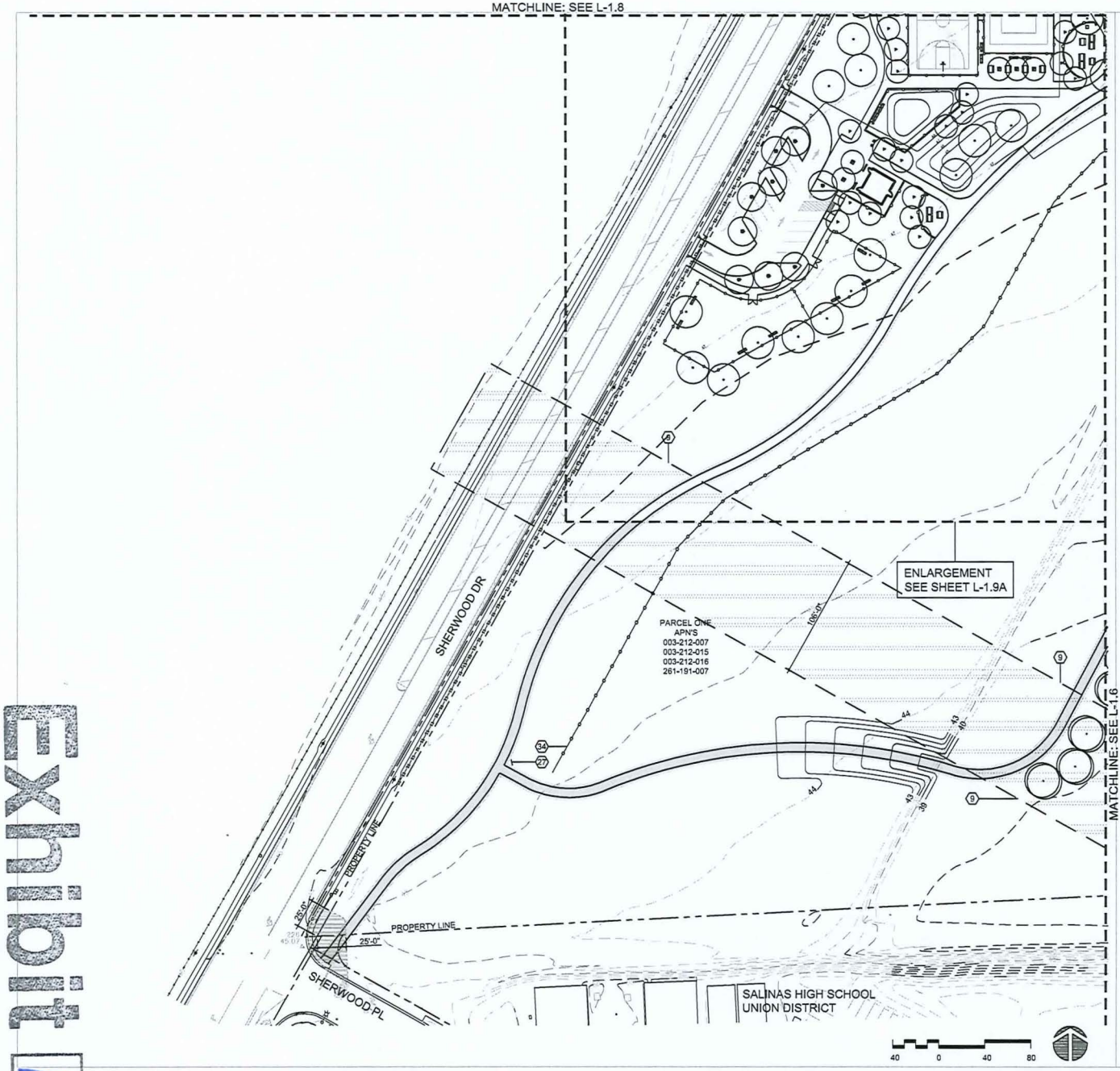
CONSTRUCTION PLAN ENLARGEMENT: PARK

SHEET NO:

L-1.8A

Exhibit

18



LEGEND

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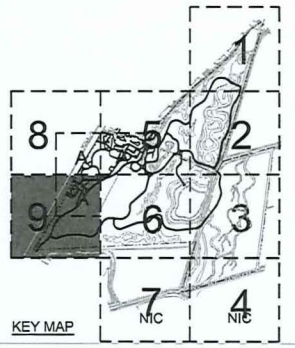

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BFS LANDSCAPE ARCHITECTS

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SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

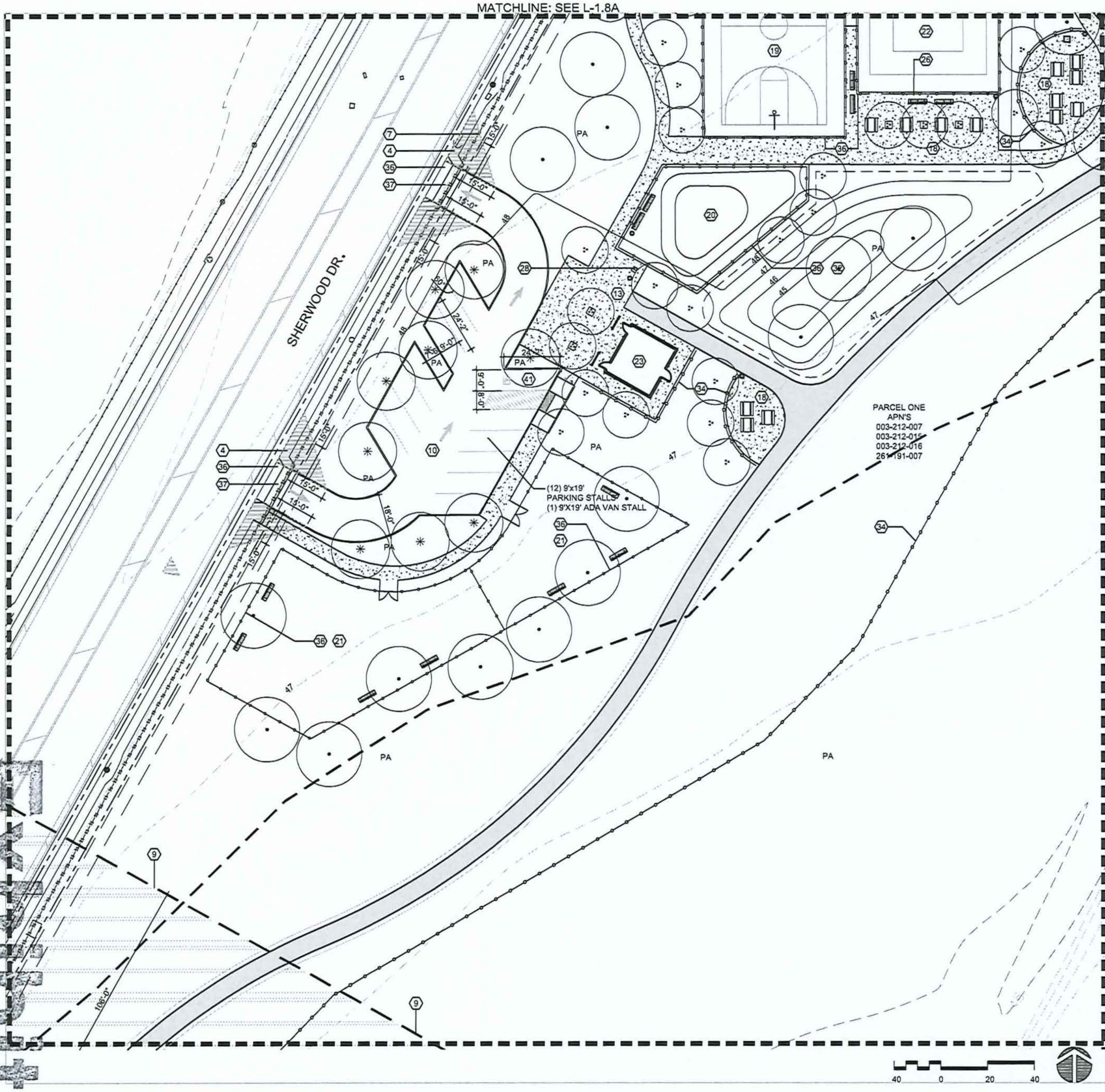
PROJECT NO: 19.016
DATE: 09/14/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
CONSTRUCTION PLAN

SHEET NO:
L-1.9

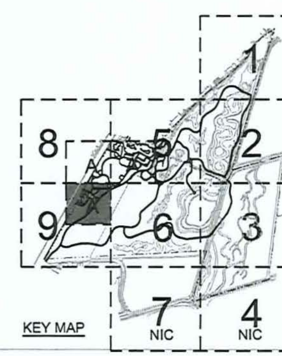
F:\PRODUCTION\Projects\2019\19.016\CAD\19016_01 ConstructionLay.dwg 9/16/2020

Exhibit 19



LEGEND

- Park pathway: Granitecrete. See (1/L-5.0)
- Recreation trail: 8' aggregate path with 2' natural shoulder on each side. See (2/L-5.0)
- Boardwalk: See (1/L-5.1)
- Resilient surfacing. See (3/L-5.0)
- PA — Planting area: See Planting Plan
- Property Line
- 100-Year Floodplain: Elevation @ 46.8



Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS

09/14/2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

ISSUANCE/REVISIONS:

NO.	DATE	DESCRIPTION
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PROJECT:

CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

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SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:

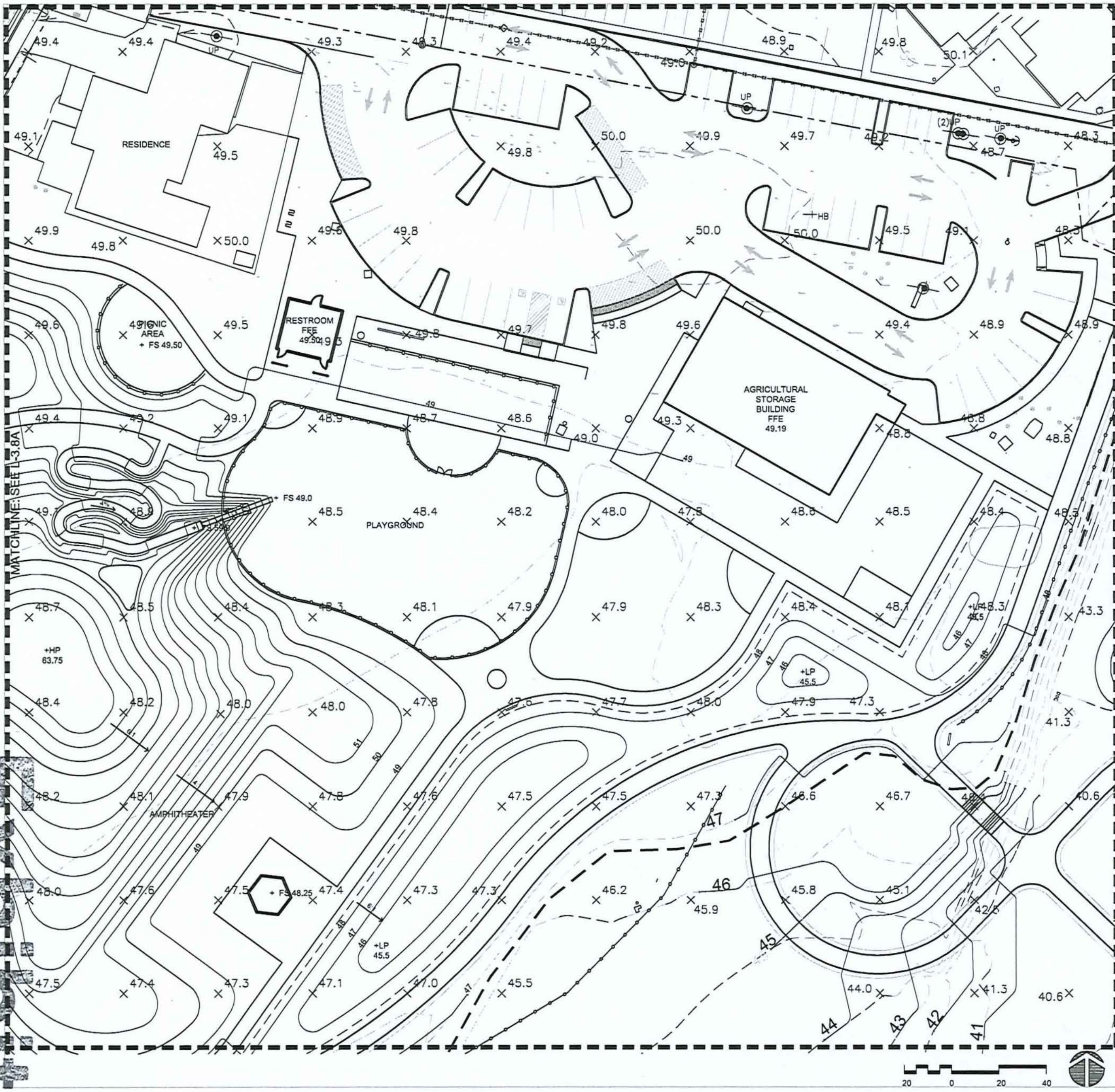
CONSTRUCTION PLAN ENLARGEMENT: PARK

SHEET NO:

L-1.9A

Exhibit

20



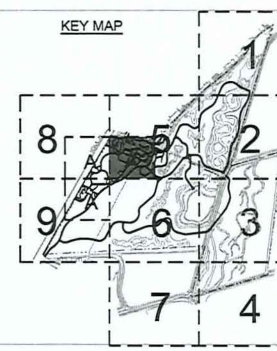
LEGEND

- 100 Year Floodplain Line @ 46.8
- FS 0.00 — Spot Elevation
- FS — Finish Surface (Paving or DG)
- FG — Finish Grade
- HP / LP — High Point / Low Point
- VIF — Verify In Field
- 6:1 → Slope

GENERAL NOTES

1. Walking surfaces shall comply with CBC 11B-403 Walking Surfaces. Walkway slopes shall not exceed 4.9% in the direction of travel and 1.9% cross-slope.
2. Ramp slopes shall be in compliance with CBC 1133B.5 Ramps. Ramp slopes shall not exceed 8.33% (1:12) in the direction of travel and 2% cross-slope.

KEY MAP



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SALINAS, CALIFORNIA
BIG SUR LAND TRUST

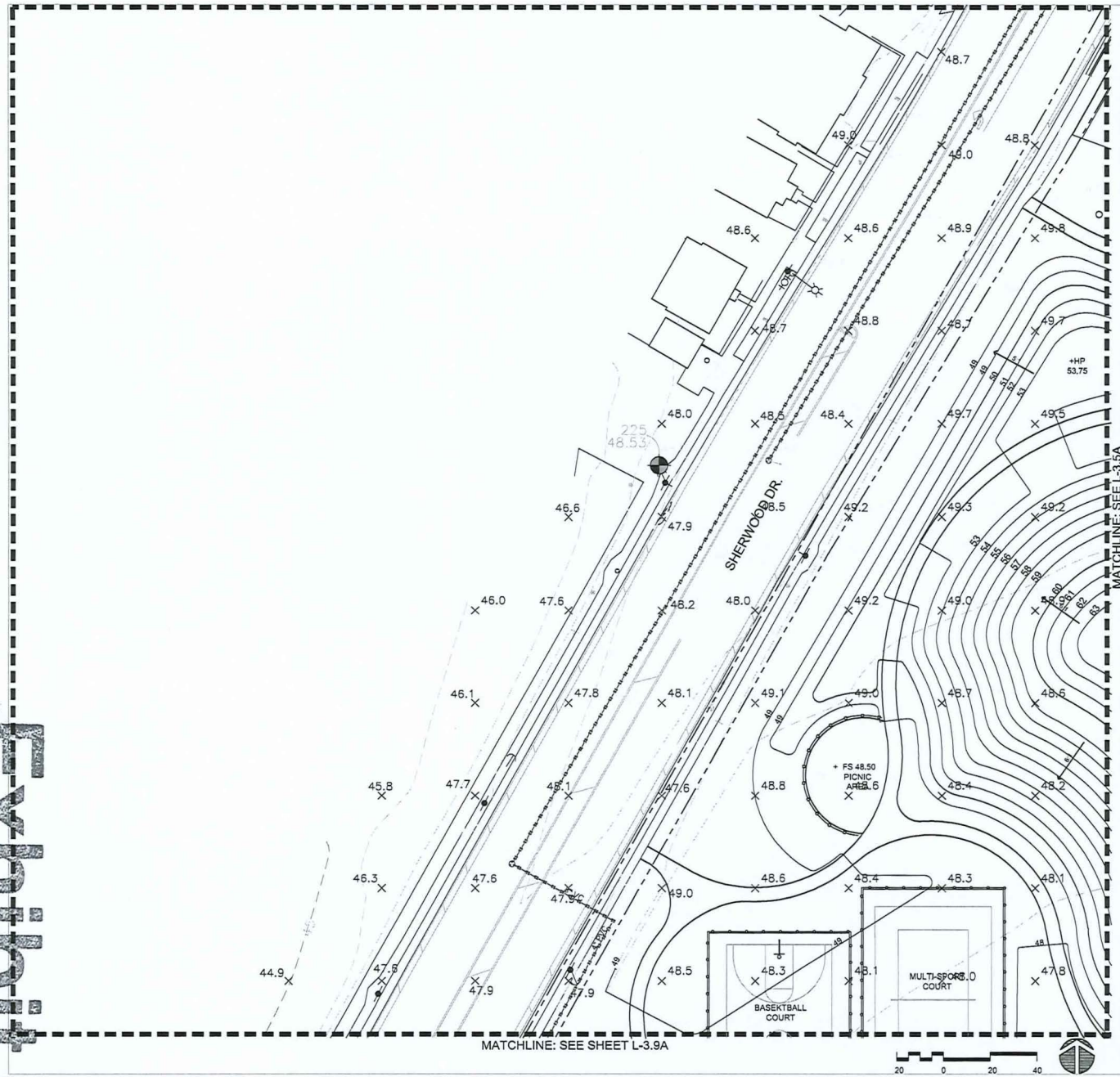
PROJECT NO: 19.016
DATE: 09/14/2020
SCALE: 1" = 20'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
GRADING PLAN ENLARGEMENT: PARK

SHEET NO:
L-3.5A

Exhibit

12



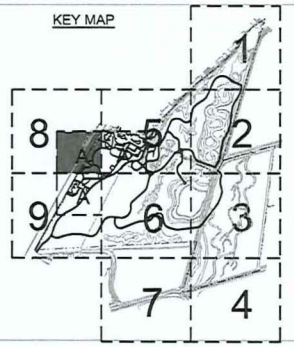
LEGEND

- 100 Year Floodplain Line @ 46.8
- + FS 0.00 Spot Elevation
- FS Finish Surface (Paving or DG)
- FG Finish Grade
- HP / LP High Point / Low Point
- VIF Verify In Field
- 6:1 Slope

GENERAL NOTES

1. Walking surfaces shall comply with CBC 11B-403 Walking Surfaces. Walkway slopes shall not exceed 4.9% in the direction of travel and 1.9% cross-slope.
2. Ramp slopes shall be in compliance with CBC 1133B.5 Ramps. Ramp slopes shall not exceed 8.33% (1:12) in the direction of travel and 2% cross-slope.

KEY MAP



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SCALE: 1" = 20'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

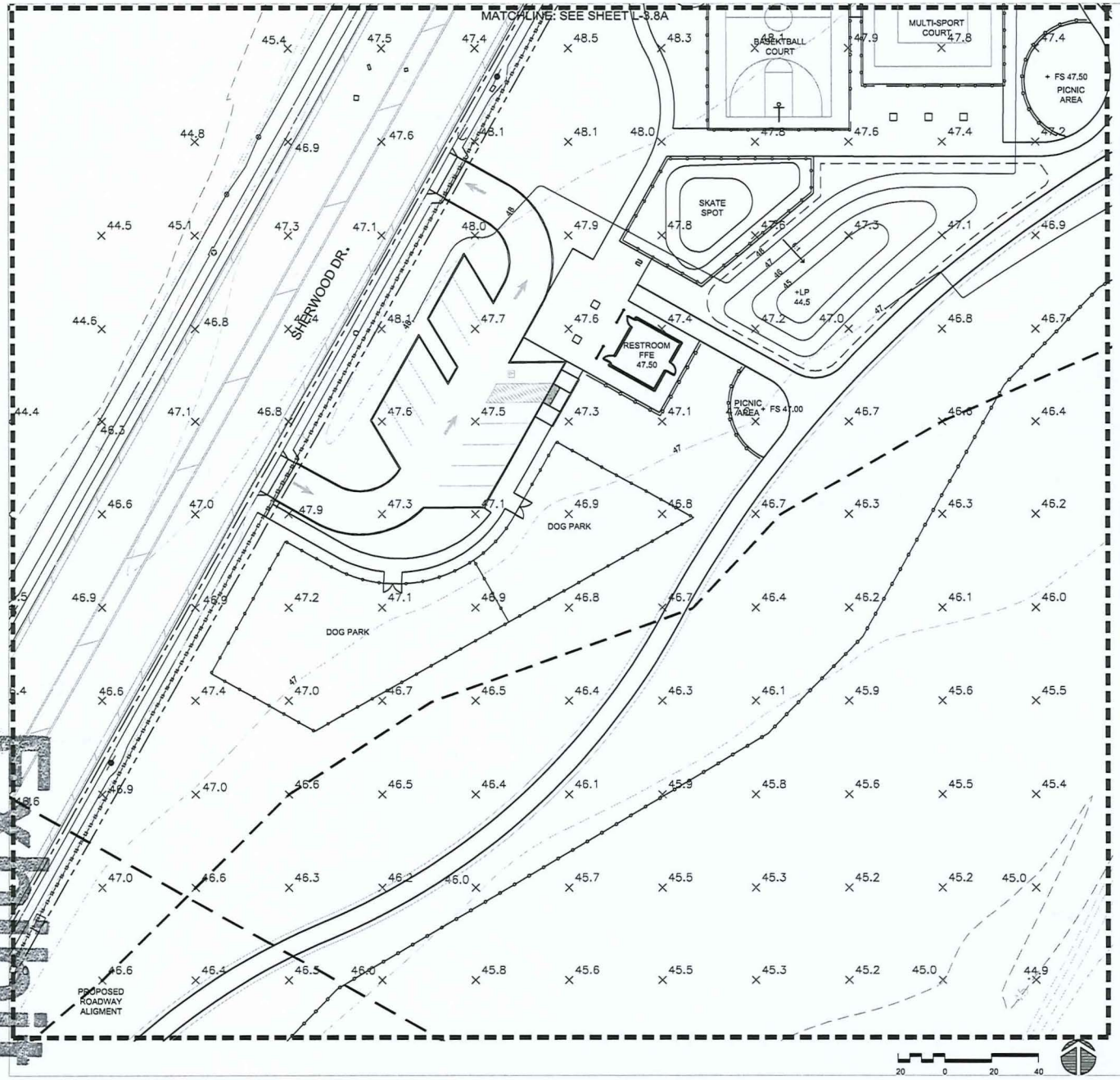
SHEET NAME:

GRADING PLAN ENLARGEMENT: PARK

SHEET NO:

L-3.8A

Exhibit 22



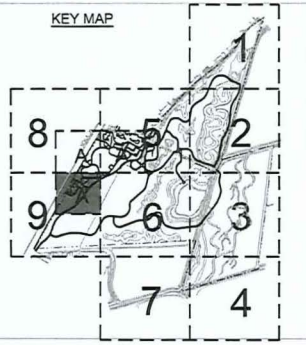
LEGEND

- 100 Year Floodplain Line @ 46.8
- FS 0.00 — Spot Elevation
- FS — Finish Surface (Paving or DG)
- FG — Finish Grade
- HP / LP — High Point / Low Point
- VIF — Verify in Field
- 6:1 → Slope

GENERAL NOTES

1. Walking surfaces shall comply with CBC 11B-403 Walking Surfaces. Walkway slopes shall not exceed 4.9% in the direction of travel and 1.9% cross-slope.
2. Ramp slopes shall be in compliance with CBC 11338.5 Ramps. Ramp slopes shall not exceed 8.33% (1:12) in the direction of travel and 2% cross-slope.

KEY MAP



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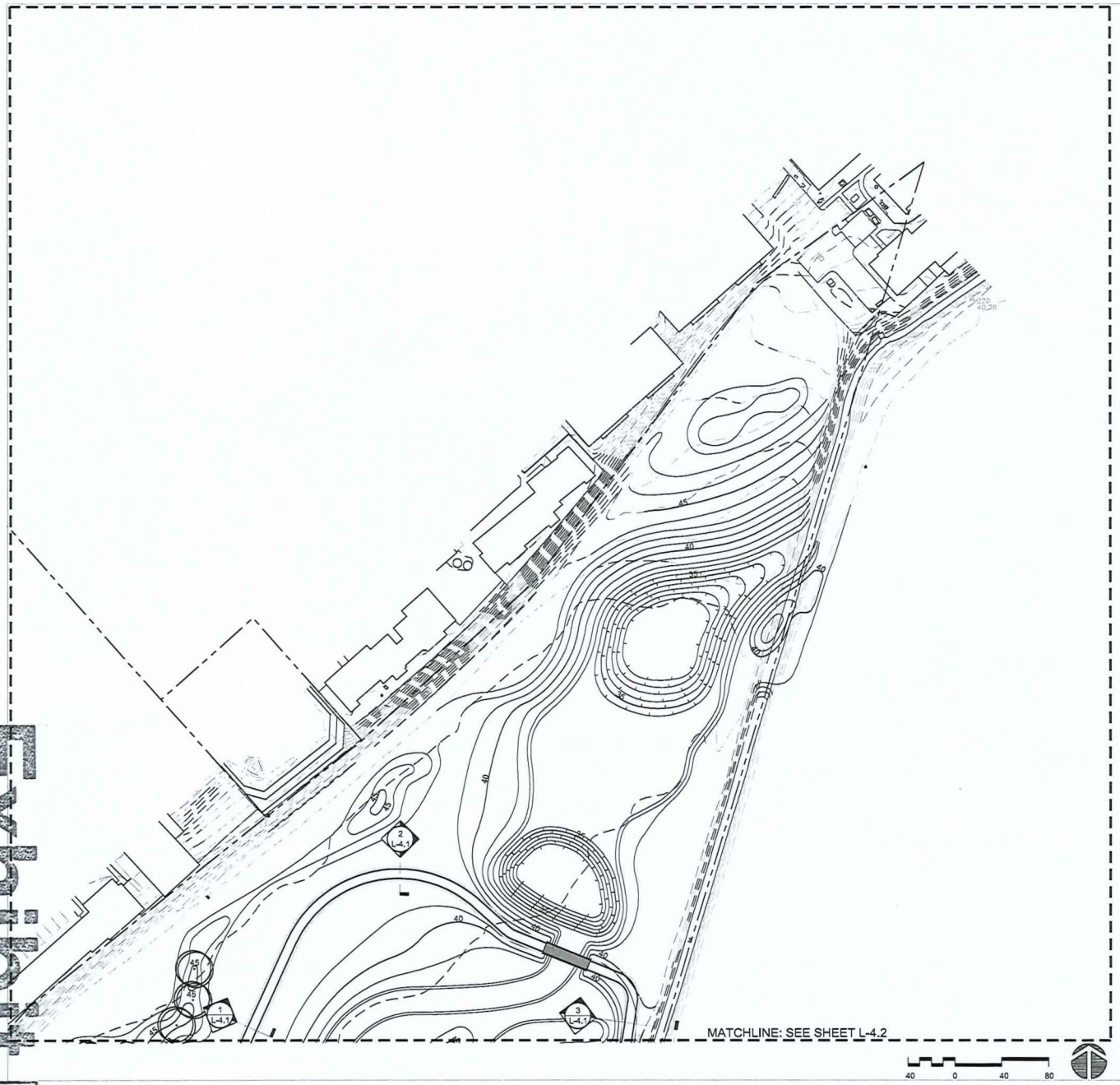
DATE: 09/14/2020
SCALE: 1" = 20'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

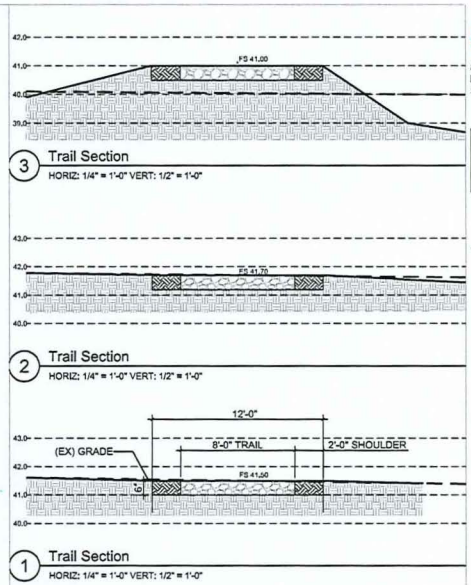
SHEET NAME:
GRADING PLAN ENLARGEMENT: PARK

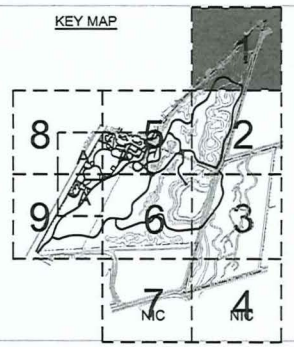
SHEET NO:
L-3.9A

EXHIBIT

23







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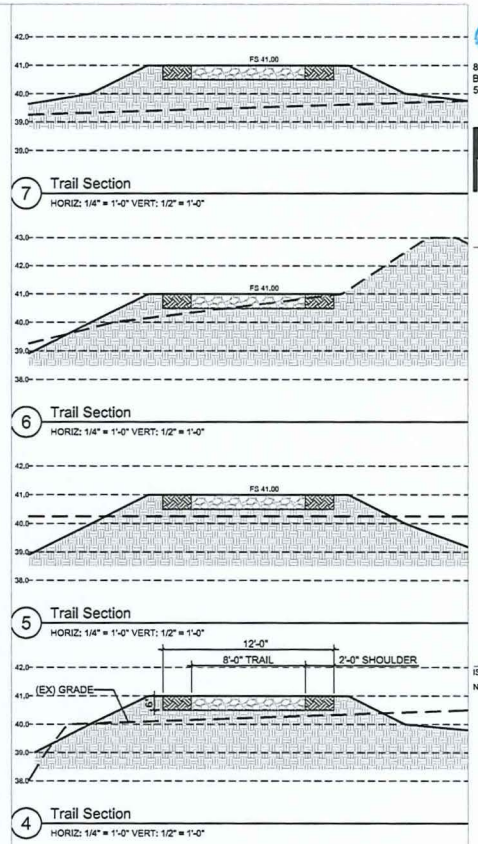
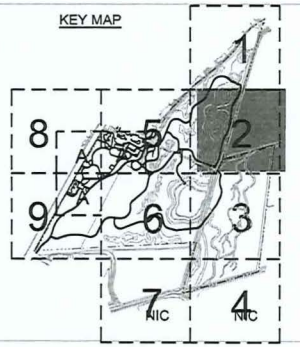
DATE: 09/14/2020
SCALE:
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
TRAIL SECTIONS

SHEET NO:
L-4.1

Exhibit 4





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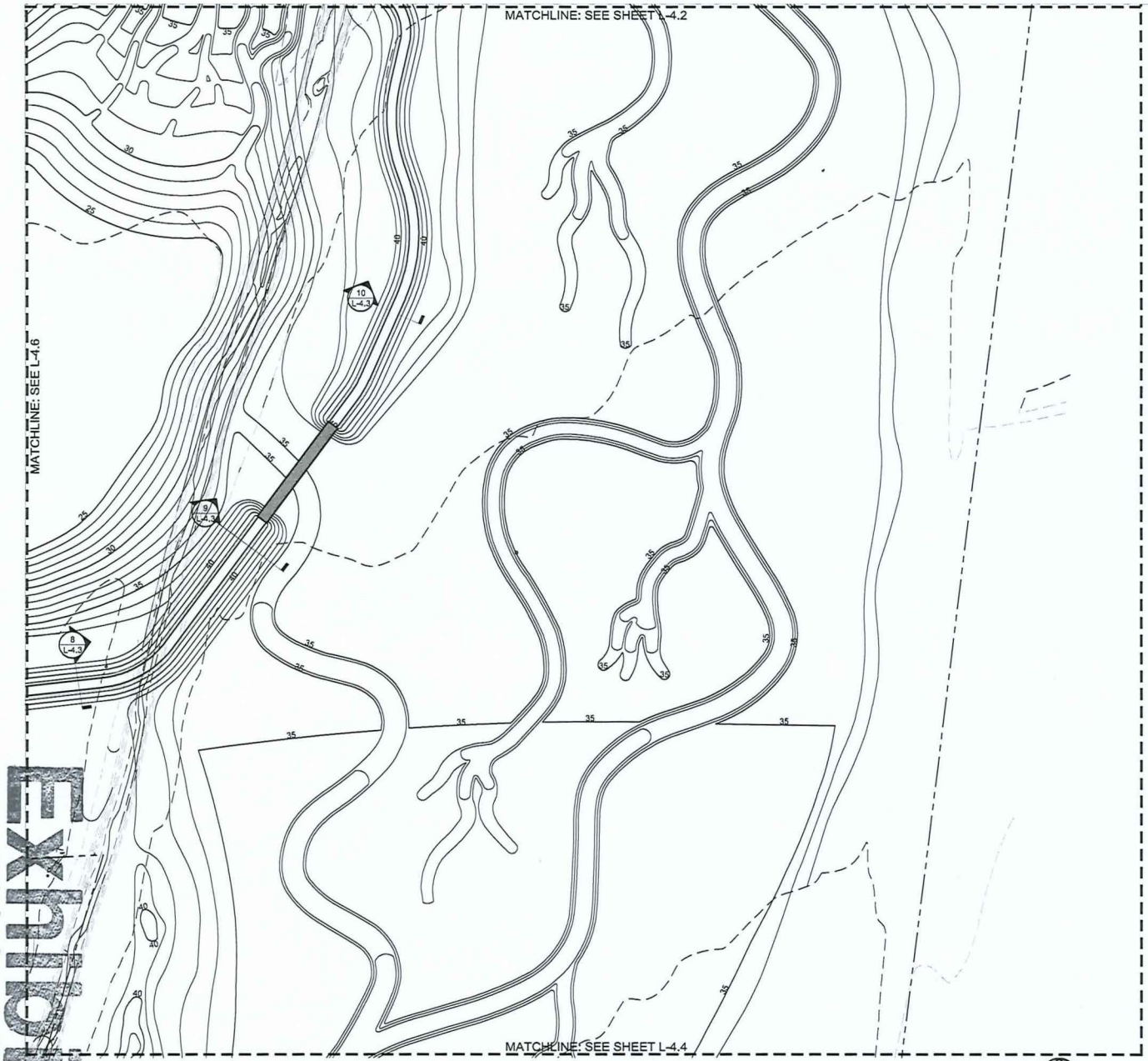
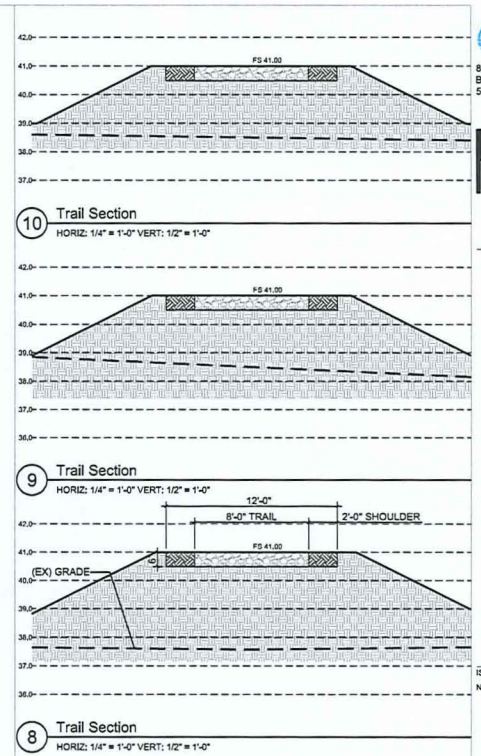
ISSUANCE: 30% DESIGN

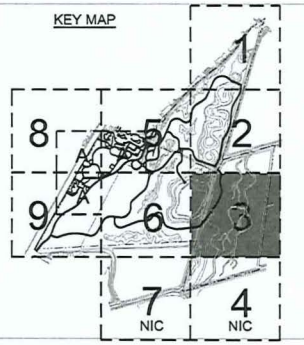
SHEET NAME:
TRAIL SECTIONS

SHEET NO:
L-4.2

25







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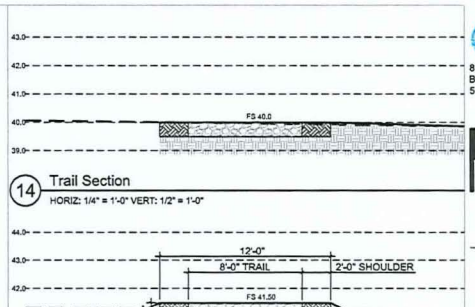
SHEET NAME:
TRAIL SECTIONS

SHEET NO:
L-4.3

Exhibit

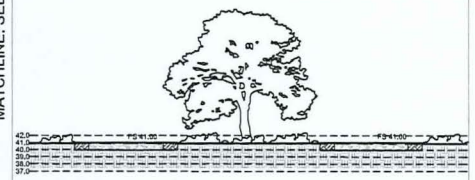
F:\PRODUCTION\Projects\2019\19.016\CAD\19016_04 Sections_Trail.dwg 9/10/2020

27

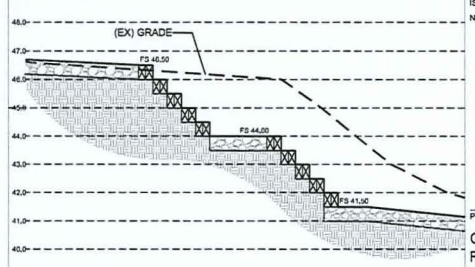


14 Trail Section
HORIZ: 1/4" = 1'-0" VERT: 1/2" = 1'-0"

13 Trail Section
HORIZ: 1/4" = 1'-0" VERT: 1/2" = 1'-0"

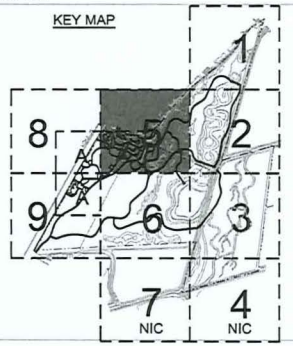


12 Trail Section
1/8" = 1'-0"



11 Trail Steps Section
HORIZ: 1/4" = 1'-0" VERT: 1/2" = 1'-0"

KEY MAP



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BIG SUR LAND TRUST

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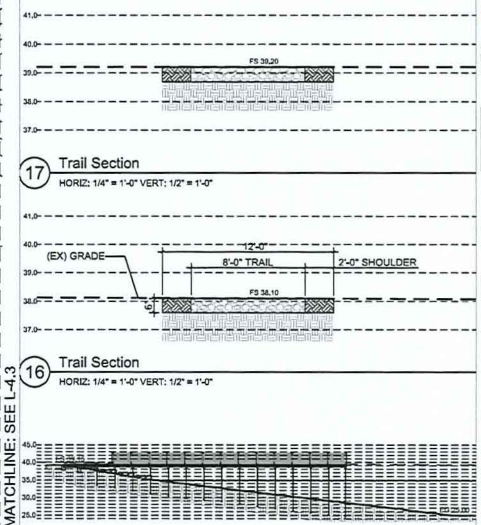
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
TRAIL SECTIONS

SHEET NO:
L-4.5

27

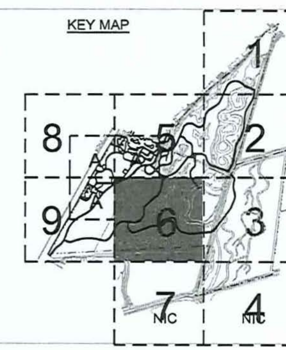


17 Trail Section
HORIZ: 1/4" = 1'-0" VERT: 1/2" = 1'-0"

16 Trail Section
HORIZ: 1/4" = 1'-0" VERT: 1/2" = 1'-0"

15 Boardwalk & Pier Longitudinal Section
1/16" = 1'-0"

KEY MAP



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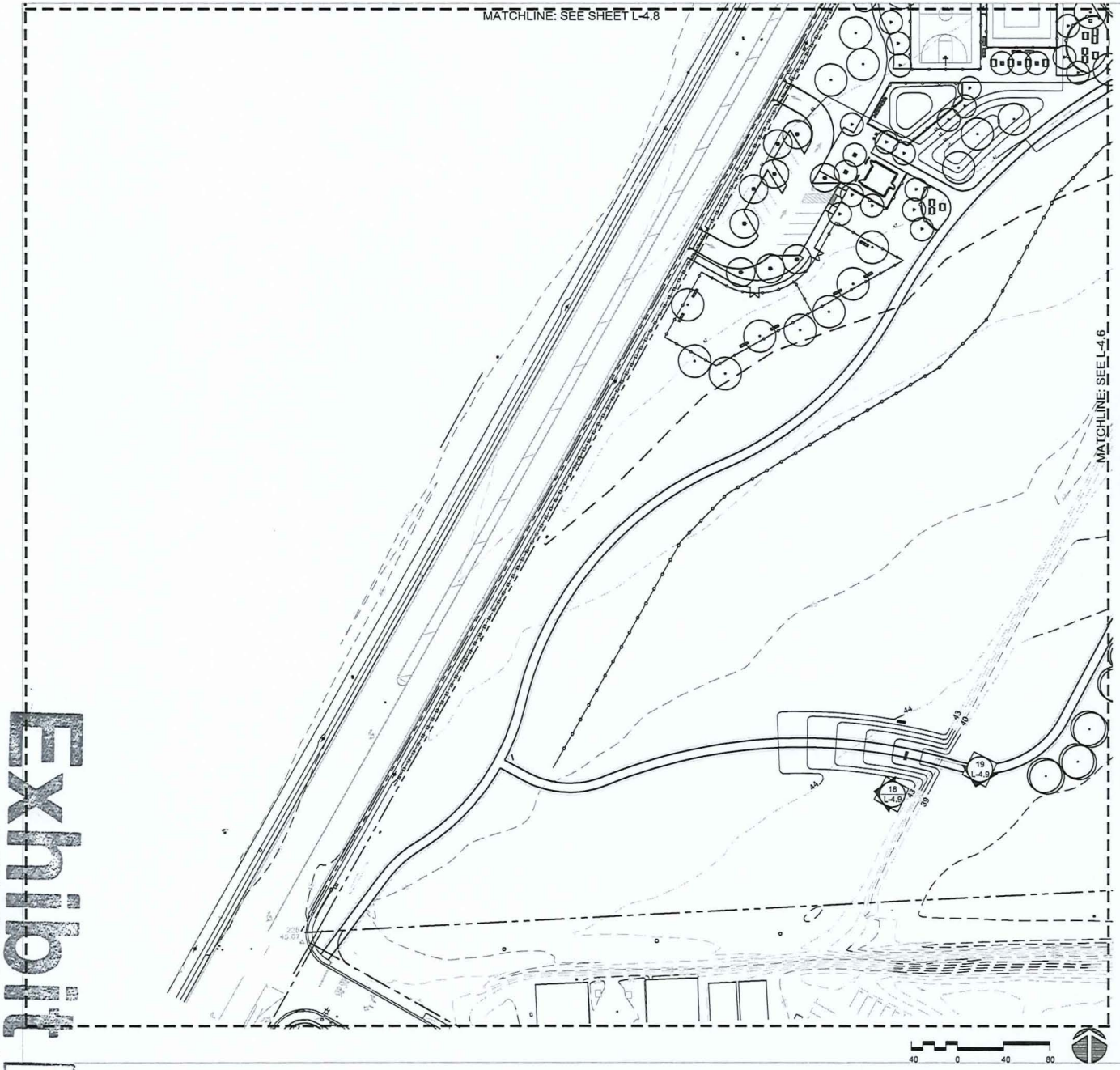
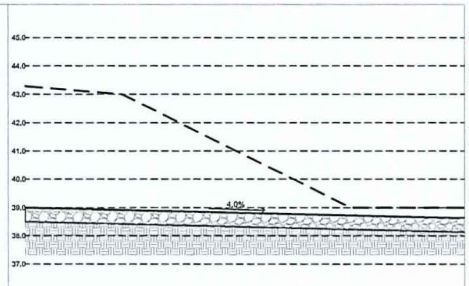
SHEET NAME:
TRAIL SECTIONS

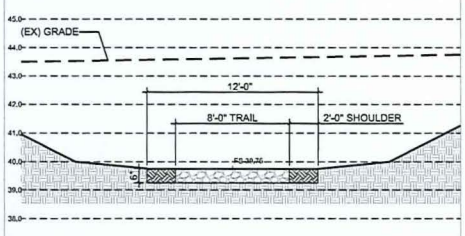
SHEET NO:
L-4.6

Exhibit
82



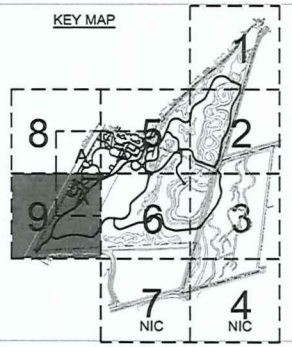


19 Trail Longitudinal Section
HORIZ: 1/4" = 1'-0" VERT: 1/2" = 1'-0"



18 Trail Section
HORIZ: 1/4" = 1'-0" VERT: 1/2" = 1'-0"

KEY MAP



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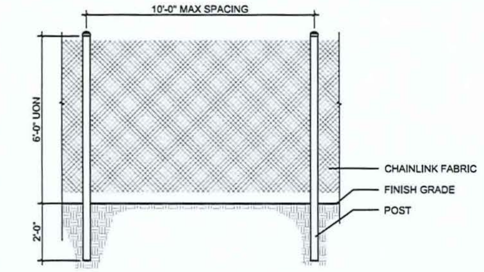
ISSUANCE: 30% DESIGN

SHEET NAME:
TRAIL SECTIONS

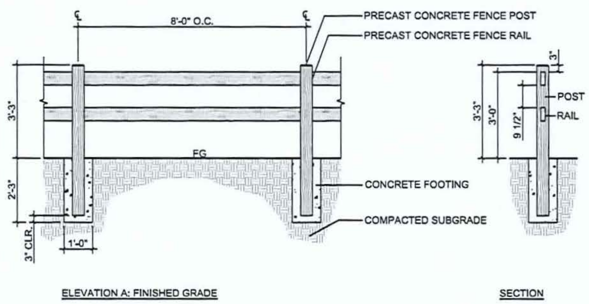
SHEET NO:
L-4.9

Exhibit

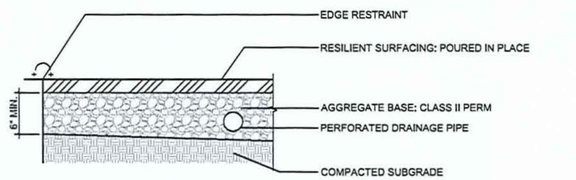
27



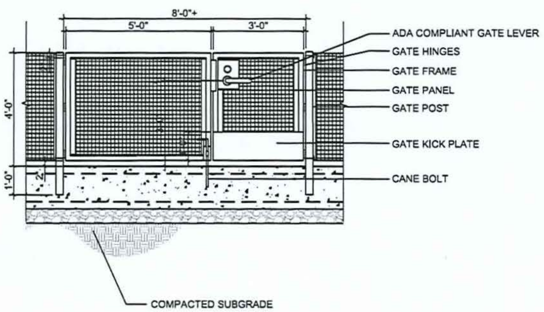
9 **6' Tall Chainlink Fence**
1/2" = 1'-0"



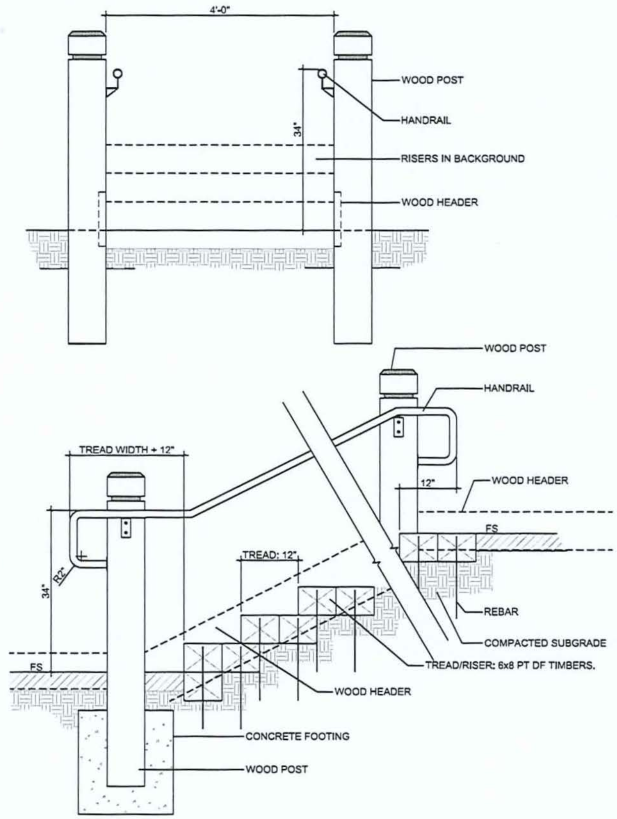
6 **Concrete Split Rail Fence**
1/2" = 1'-0"

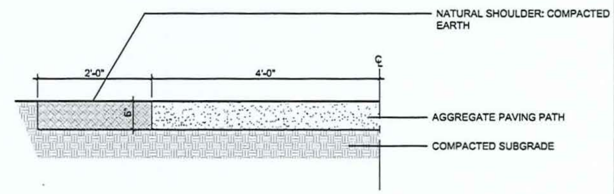


3 **Resilient Surfacing**
1" = 1'-0"

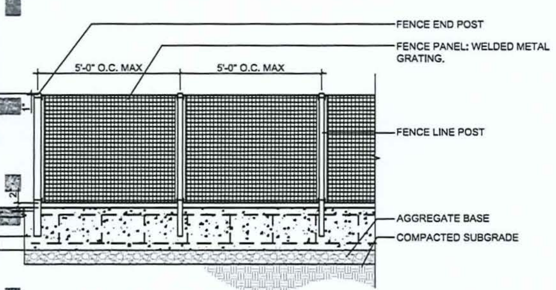


8 **4' Tall Metal Gate @ Play Area**
1/2" = 1'-0"



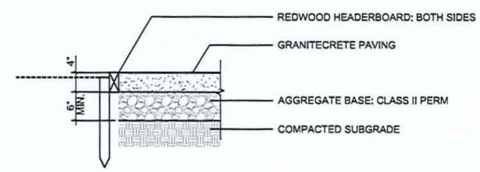


2 **Recreation Trail: Aggregate Path with Natural Shoulders**
1" = 1'-0"



7 **4' Tall Metal Fence @ Play Area**
1/2" = 1'-0"

4 **Wood Steps and Handrail**
1" = 1'-0"



1 **Park Pathway: GraniteCrete Permeable Paving**
1" = 1'-0"

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09/14/2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

ISSUANCE/REVISIONS:

NO.	DATE	DESCRIPTION
	06/22/2020	1st CITY SUBMITTAL
	09/14/2020	2nd CITY SUBMITTAL

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
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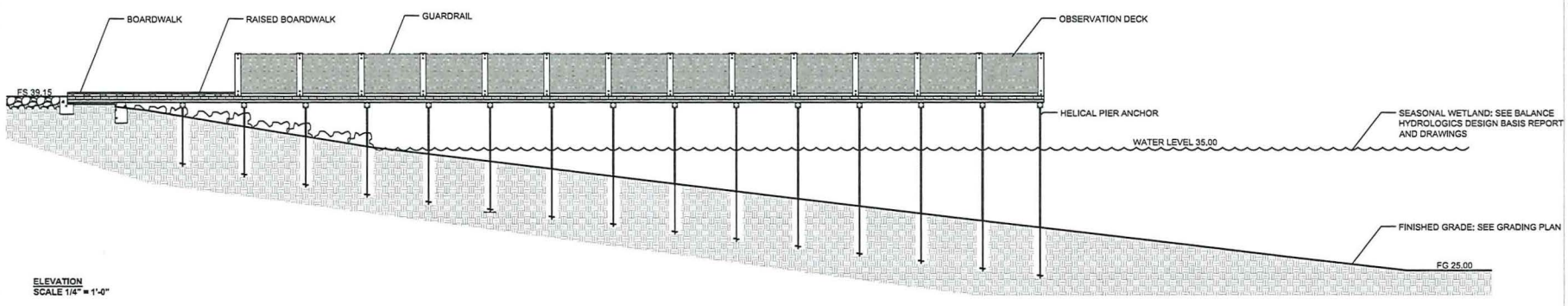
PROJECT NO: 19.016
DATE: 09/14/2020
SCALE:
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

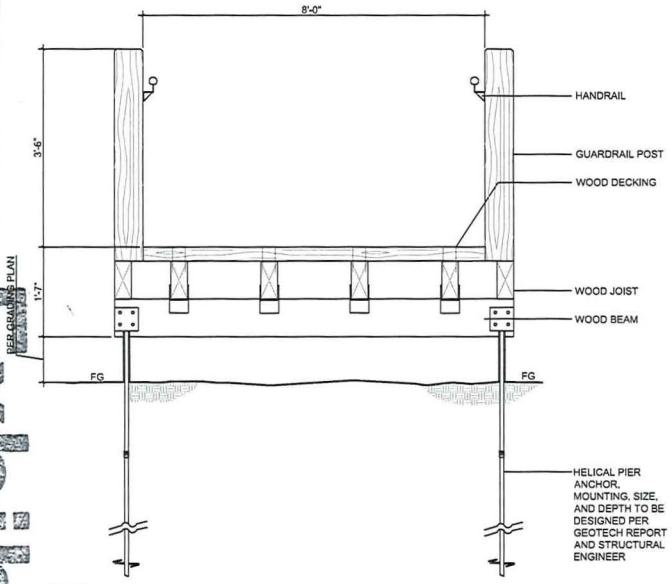
SHEET NAME:
CONSTRUCTION DETAILS

SHEET NO:
L-5.0

Exhibit
30

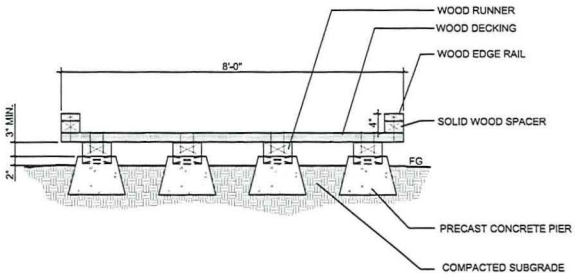


ELEVATION
SCALE 1/4" = 1'-0"



SECTION:
SCALE 1" = 1'-0"

2 Raised Boardwalk & Observation Deck
As Noted



1 Boardwalk
1" = 1'-0"

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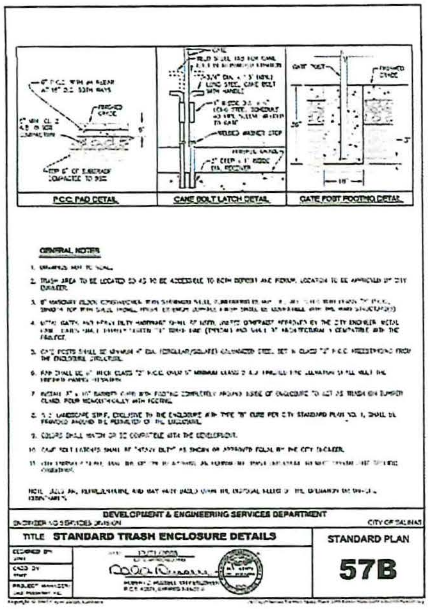
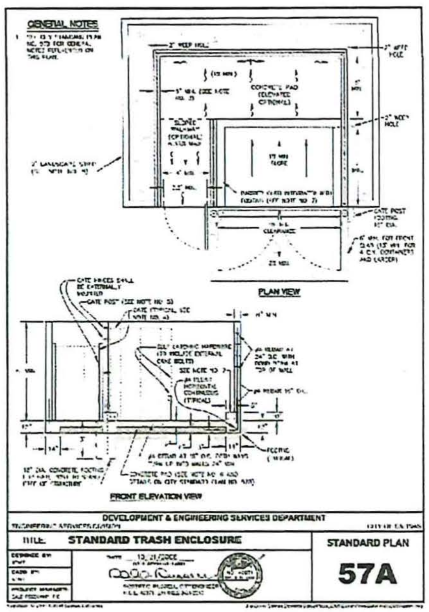
ISSUANCE: 30% DESIGN

SHEET NAME:
CONSTRUCTION DETAILS

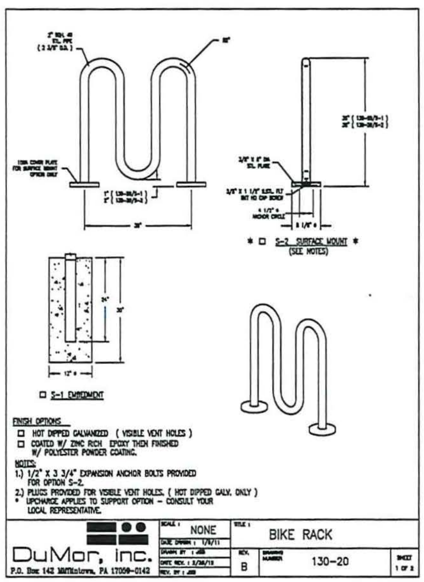
SHEET NO:
L-5.1

EXHIBIT
13

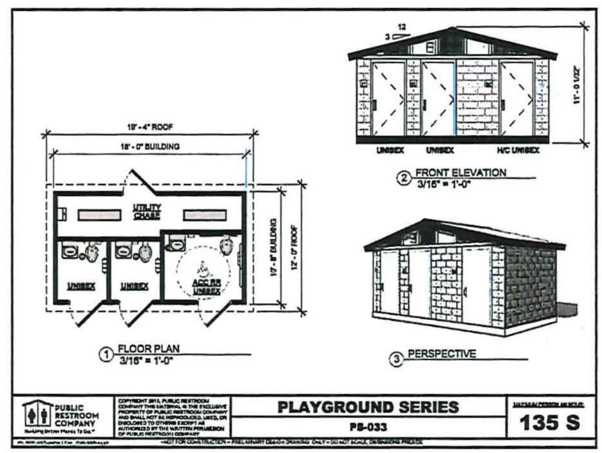




③ Trash Enclosure
As Noted



② Bicycle Rack
As Noted



① Restroom
As Noted

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06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
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PROJECT:
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DATE: 06/22/2020
SCALE:
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
CONSTRUCTION DETAILS

SHEET NO:
L-5.2

Exhibit

32

Establishment MAWA/ETWU: 1-3 years

WATER EFFICIENT LANDSCAPE WORKSHEET

Project Name: Carr Lake-Establishment Irrigation | Status: 30% Design | Calc By: Beth Mize
Project Number: 19.016 | Date: [illegible]

Reference Evapotranspiration (ETo): 47.00

Hydrozone & Planting Description*	Plant Factor (PF)	Irrigation Method* s or d	Irrigation Efficiency (IE)*	ETAF (PF/IE)	Landscape Area (sq ft)	ETAF x Area
Regular Landscape Areas						
Freshwater Emergent Wetland-Establishment Irrigation	[illegible]	s	0.75	[illegible]	[illegible]	[illegible]
Freshwater Forested Wetland-Establishment Irrigation	[illegible]	s	0.75	[illegible]	[illegible]	[illegible]
Seasonal Wetland-Establishment Irrigation	[illegible]	s	0.75	[illegible]	[illegible]	[illegible]
Seasonal Wetland-Permanent Irrigation	[illegible]	s	0.75	[illegible]	[illegible]	[illegible]
Upland Grassland-Establishment Irrigation	[illegible]	s	0.75	[illegible]	[illegible]	[illegible]
Upland Grassland-Permanent Irrigation	[illegible]	s	0.75	[illegible]	[illegible]	17,355.20
Upland Riparian Tree Groves-Establishment Irrigation	[illegible]	s	0.75	[illegible]	[illegible]	[illegible]
Neighborhood Park Planting-Permanent Irrigation	0.40	d	0.81	[illegible]	[illegible]	[illegible]
				Total	[illegible]	[illegible]
Special Landscape Areas						
Turf-Permanent Irrigation				1.00	[illegible]	[illegible]
				Total	[illegible]	[illegible]

ETWU Total* (Gallons)	[illegible]
ETWU (Acre-Feet)	[illegible]
MAWA* (Gallons)	[illegible]
MAWA (Acre-Feet)	[illegible]

*MAWA (Annual Gallons Allowed) = [illegible]

ETAF Calculations

BFS Landscape Architects

Permanent MAWA/ETWU: 3 years

WATER EFFICIENT LANDSCAPE WORKSHEET

Project Name: Carr Lake-Permanent Irrigation | Status: 30% Design | Calc By: Beth Mize
Project Number: 19.016 | Date: 5/16/2020

Reference Evapotranspiration (ETo): 47.00

Hydrozone & Planting Description*	Plant Factor (PF)	Irrigation Method* s or d	Irrigation Efficiency (IE)*	ETAF (PF/IE)	Landscape Area (sq ft)	ETAF x Area
Regular Landscape Areas						
Seasonal Wetland-Permanent Irrigation	0.30	s	0.75	0.40	25,305	10,122.00
Upland Grassland-Permanent Irrigation	0.20	s	0.75	0.27	65,082	17,355.20
Neighborhood Park Planting-Permanent Irrigation	0.40	d	0.81	0.49	23,584	11,646.42
				Total	113,971	39,123.62
Special Landscape Areas						
Turf-Permanent Irrigation				1.00	15,476	15,476.00
				Total	129,447	54,599.62

ETWU Total* (Gallons)	1,591,802.92
ETWU (Acre-Feet)	4.88
MAWA* (Gallons)	1,949,472.30
MAWA (Acre-Feet)	5.97

*MAWA (Annual Gallons Allowed) = (ETo) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for nonresidential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)	39123.62
Total Area	(A)	113971.00
Average ETAF	B ÷ A	0.34

All Landscape Areas

Total ETAF x Area	(B+D)	54599.62
Total Area	(A+C)	129447.00
Sitewide ETAF	(B+D) ÷ (A+C)	0.39

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

BFS Landscape Architects

LEGEND

NEIGHBORHOOD PARK PLANTING LEGEND

SYMBOL	*WUC	BOTANICAL NAME	COMMON NAME	CHARACTER
PARKING LOT TREE				
	M	Pyrus kawakamii	Evergreen Pear	20-30 ft tall/wide. Evergreen, white flowers
LARGE SHADE TREE				
	M	Pistache chinensis	Chinese Pistache	25-35 ft tall/wide. Deciduous, fall color
	M	Platanus racemosa	California Sycamore	40-80 ft tall/wide. Deciduous, riparian tree
	VL	Quercus agrifolia	Coast Live Oak	40-50 ft tall/wide. Evergreen
	L	Schinus molle	California Pepper Tree	40-50 ft tall/wide. Evergreen, red pepper fruit
ACCENT FLOWERING TREE				
	M	Cercis occidentalis	Western Redbud	15-20 ft tall/wide. Deciduous, pink flowers
	L	Lagerstroemia indica	Crape Myrtle	15-20 ft tall/wide. Deciduous, colors vary

NEIGHBORHOOD PARK SHRUBS AND GROUNDCOVERS: Permanent, drip irrigation

*WUC	BOTANICAL NAME	COMMON NAME
L	Achillea moonshine	Moonshine Yarrow
L	Arctostaphylos 'uva-ursi'	Bearberry
L	Baccharis p. 'Pigeon Point'	Coyote Bush
L	Carex divulsa	Berkeley Sedge
L	Ceanothus 'Concha'	California Lilac
L	Cistus x purpureus	Orchid Rockrose
L	Cistus salvifolius	Sageleaf Rockrose
L	Dietes grandiflora	Fortnight Lily
L	Erigeron karvinskianus	Mexican Daisy
	Festuca mairei	Atlas Fescue
L	Lobelia laxifolia	Mexican Lobelia
L	Muhlenbergia rigens	Deer Grass
L	Salvia clevelandii 'Winifred Gilman'	Winifred Gilman Sage

TRADITIONAL TURF

H To have permanent irrigation

STORMWATER TREATMENT: See Concept Restoration Plan by Biotics Resources Group for planting palette for Seasonal Wetland planting palette

L All stormwater from the Neighborhood Park Project to be mitigated on-site using the City of Salinas standards and codes. To be irrigated for establishment

UPLAND GRASSLAND: See Concept Restoration Plan by Biotics Resources Group for planting palette

L To be irrigated for establishment

L To have permanent irrigation

* WATER USE CATEGORY (WUC) KEY

WUCOLS Region Applicable to this Project: REGION 1
H = High; M = Moderate; L = Low; VL = Very Low; NL = Species Not Listed
* from: Water Use Classification of Landscape Species,
A Guide to the Water Needs of Landscape Plants (WUCOLS)
Revised August 2000, University of California Cooperative Extension, L.R. Costello, K.S. Jones

LEGEND

RESTORATION PLANTING LEGEND

- FRESHWATER EMERGENT WETLAND: Edge of Pond, Meanders of Gabilan Creek and Hospital Creek. Herbaceous Riparian. Non Irrigated
- FRESHWATER FORESTED/SHRUB WETLAND: Select meanders of Gabilan Creek. Early Successional Riparian Scrub/Woodland. Non Irrigated
- SEASONAL WETLAND: Depressions amid Grassland. Wet Meadow. Irrigated for establishment
- UPLAND GRASSLAND: East and West Edges of Project Site. Irrigated for establishment
- UPLAND RIPARIAN TREE GROVES: Groves and Grassland. Irrigated for establishment

WILDLIFE FEATURE

- RRP: Raptor Roost Pole: Located in the grassland areas. Encourages raptor foraging and rodent Control
- RN: Raptor Nesting Platform/Box: Located on the edge of the Seasonal Wetland. Nest boxes will provide cavity nesting species with nesting opportunities
- SNB: Songbird Nest Box: Located in the grassland areas.

GENERAL NOTES

1. Refer to Carr Lake Concept Restoration Plan Report and Plan Matrix prepared by Biotics Resources Group for planting palette and planting implementation and maintenance strategies
2. Irrigation for Establishment: Irrigation to be temporary and above ground ground heads and laterals. Establishment to be 2-3 years duration

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06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
NO. DATE DESCRIPTION

PROJECT:
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SALINAS, CALIFORNIA
BIG SUR LAND TRUST

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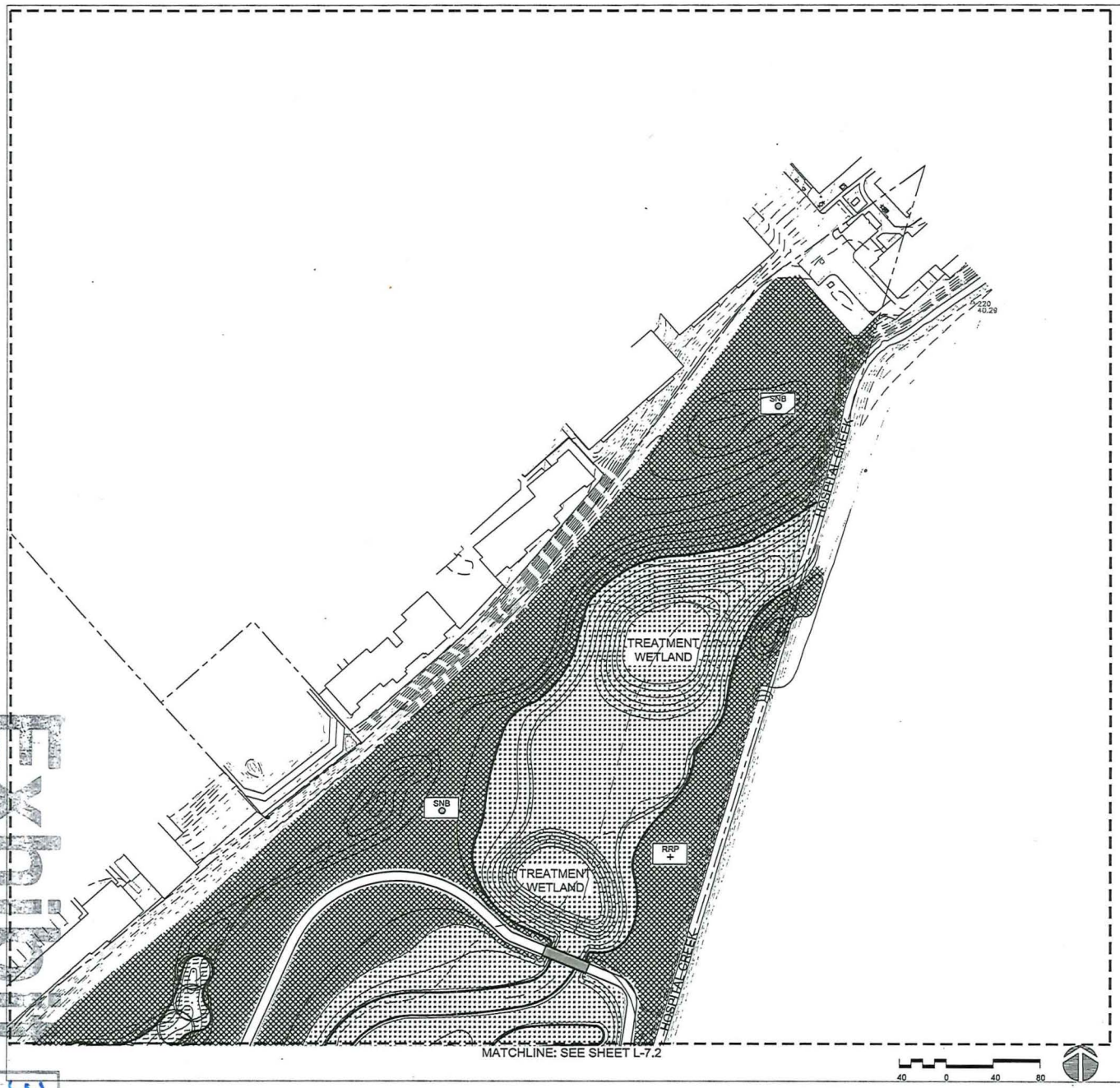
PROJECT NO: 19.016
DATE: 06/22/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANT LEGEND & NOTES

SHEET NO:
L-7.0

Exhibit
33



LEGEND

RESTORATION PLANTING LEGEND

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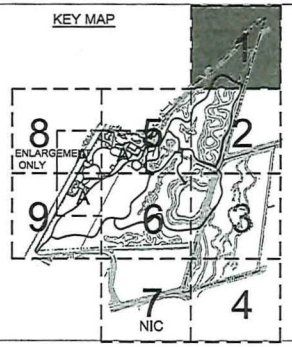
KEY MAP



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BIG SUR LAND TRUST

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SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:

PLANTING PLAN

SHEET NO:

L-7.1

EXHIBIT

34

LEGEND

RESTORATION PLANTING LEGEND

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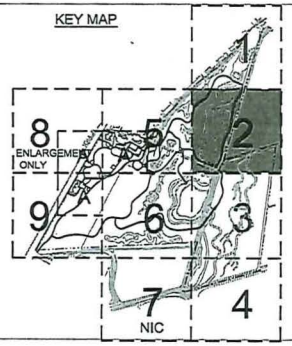

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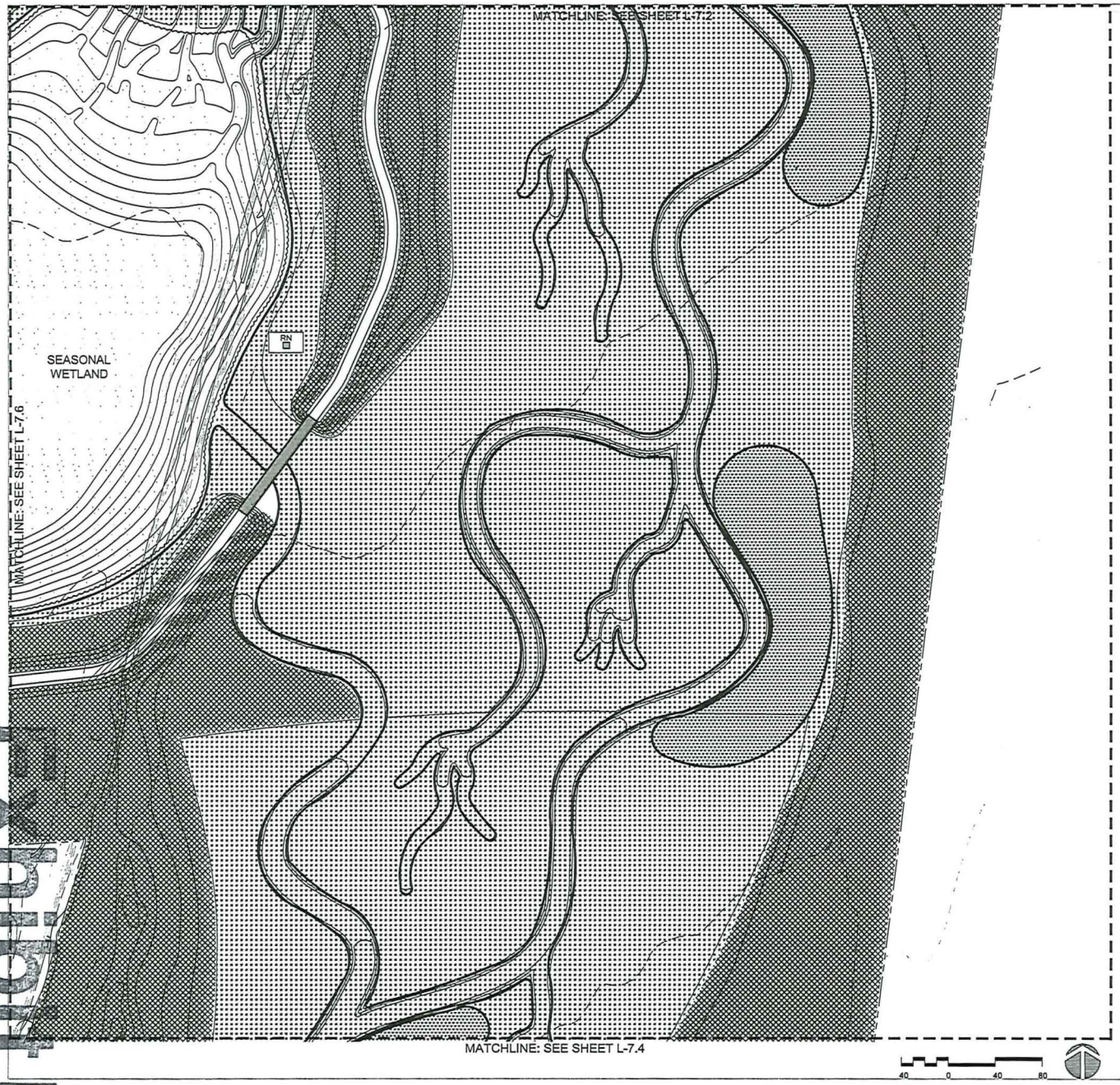
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN

SHEET NO:
L-7.2

35



LEGEND

RESTORATION PLANTING LEGEND

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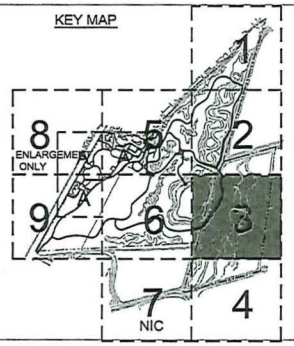

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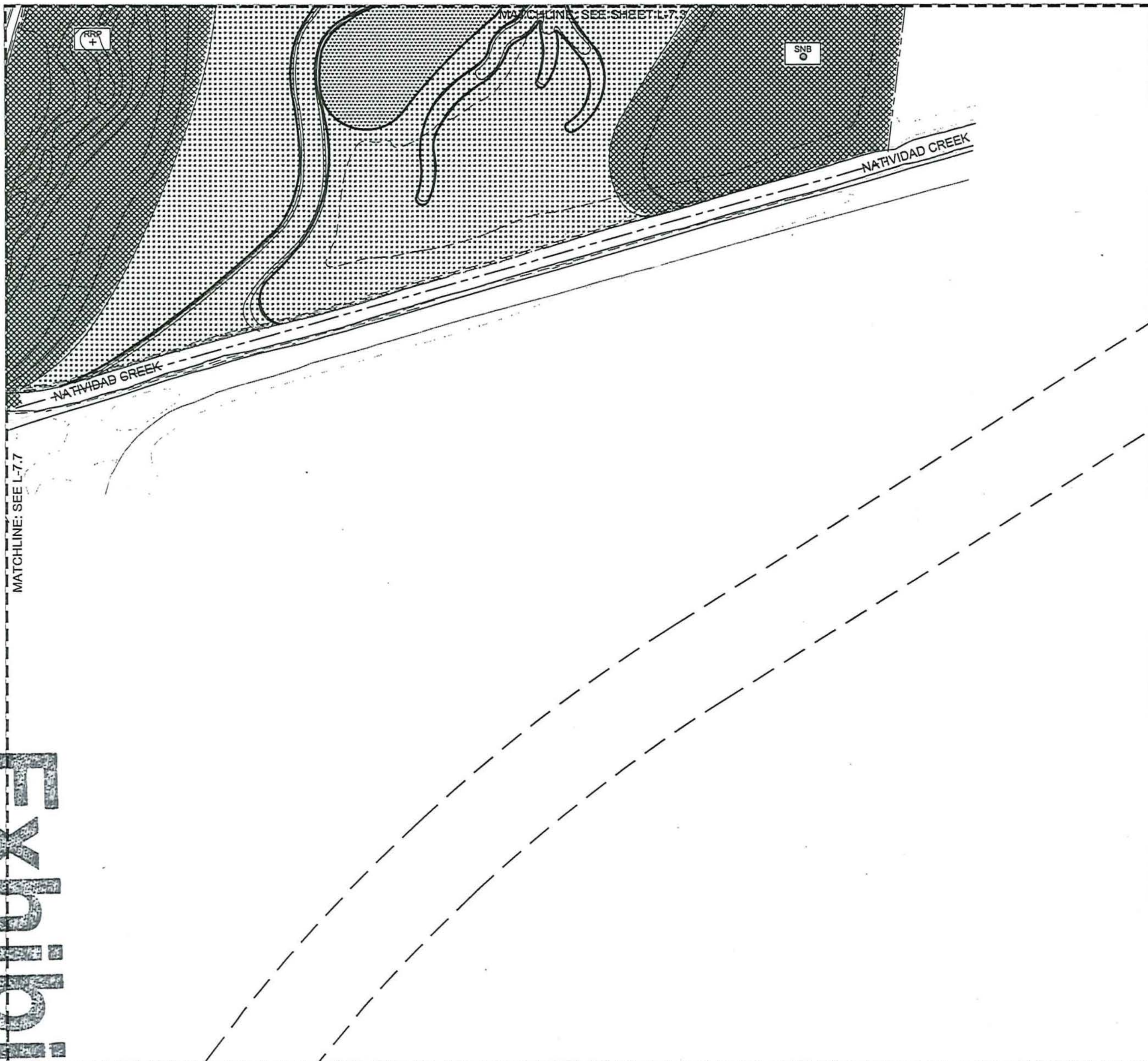
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN

SHEET NO:
L-7.3

EXHIBIT
36



40 0 40 80

LEGEND

RESTORATION PLANTING LEGEND

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KEY MAP

Balance Hydrologics
800 BANCROFT WAY SUITE 101
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BFS LANDSCAPE ARCHITECTS

06/22/2020 30% DESIGN PLANS
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PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

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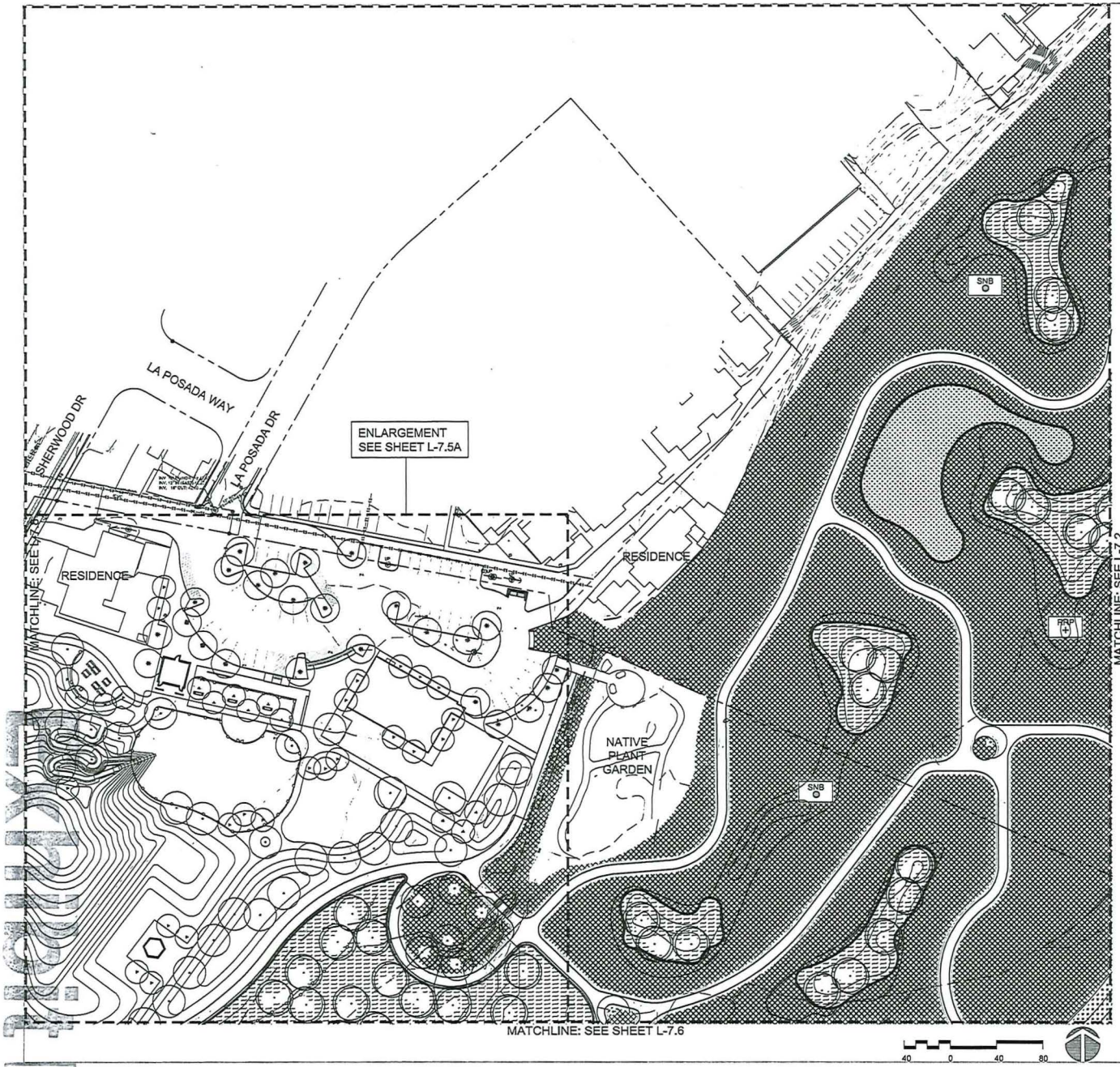
PROJECT NO: 19.016
DATE: 06/22/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN

SHEET NO:
L-7.4

Exhibit 37



LEGEND

RESTORATION PLANTING LEGEND

- FRESHWATER EMERGENT WETLAND: Edge of Pond, Meanders of Gabilan Creek and Hospital Creek. Herbaceous Riparian. Non Irrigated
- FRESHWATER FORESTED/SHRUB WETLAND: Select meanders of Gabilan Creek. Early Successional Riparian Scrub/Woodland. Non Irrigated
- SEASONAL WETLAND: Depressions amid Grassland. Wet Meadow. Irrigated for establishment
- UPLAND GRASSLAND: East and West Edges of Project Site. Irrigated for establishment
- UPLAND RIPARIAN TREE GROVES: Groves and Grassland. Irrigated for establishment

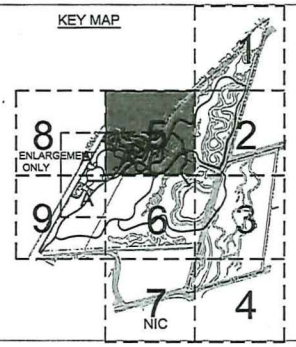
WILDLIFE FEATURE

- RRP — Raptor Roost Pole: Located in the grassland areas. Encourages raptor foraging and rodent Control
- RN — Raptor Nesting Platform/Box: Located on the edge of the Seasonal Wetland. Nest boxes will provide cavity nesting species with nesting opportunities
- SNB — Songbird Nest Box: Located in the grassland areas.

GENERAL NOTES

1. Refer to Carr Lake Concept Restoration Plan Report and Plan Matrix prepared by Biotics Resources Group for planting palette and planting implementation and maintenance strategies
2. Irrigation for Establishment: Irrigation to be temporary and above ground ground heads and laterals. Establishment to be 2-3 years duration

KEY MAP



Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS
425 PACIFIC STREET #201
MONTEREY, CALIFORNIA 93940
831.646.1383 • BFSLA.COM

06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
for the lands you love

PROJECT NO: 19.016
DATE: 06/22/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN

SHEET NO:
L-7.5

38

MATCHLINE: SEE L-7.8A

MATCHLINE: SEE SHEET L-7.6

20 0 20 40

EXHIBIT

39

LEGEND

NEIGHBORHOOD PARK PLANTING LEGEND

SYMBOL	*WUC	BOTANICAL NAME	COMMON NAME	CHARACTER
PARKING LOT TREE				
	M	Pyrus kawakamii	Evergreen Pear	20-30 ft tall/wide. Evergreen, white flowers
LARGE SHADE TREE				
	M	Pistache chinensis	Chinese Pistache	25-35 ft tall/wide. Deciduous, fall color
	M	Platanus racemosa	California Sycamore	40-80 ft tall/wide. Deciduous, riparian tree
	VL	Quercus agrifolia	Coast Live Oak	40-50 ft tall/wide. Evergreen
	L	Schinus molle	California Pepper Tree	40-50 ft tall/wide. Evergreen, red pepper fruit
ACCENT FLOWERING TREE				
	M	Cercis occidentalis	Western Redbud	15-20 ft tall/wide. Deciduous, pink flowers
	L	Lagerstroemia indica	Crape Myrtle	15-20 ft tall/wide. Deciduous, colors vary
NEIGHBORHOOD PARK SHRUBS AND GROUNDCOVERS: Permanent, drip irrigation				
	L	Achillea moonshine	Moonshine Yarrow	
	L	Arctostaphylos 'uva-ursi'	Bearberry	
	L	Baccharis p. 'Pigeon Point'	Coyote Bush	
	L	Carex divulsa	Berkeley Sedge	
	L	Ceanothus 'Concha'	California Lilac	
	L	Cistus x purpureus	Orchid Rockrose	
	L	Cistus salvifolius	Sageleaf Rockrose	
	L	Dietes grandiflora	Fortnight Lily	
	L	Erigeron karvinskianus	Mexican Daisy	
		Festuca mairei	Atlas Fescue	
	L	Lobelia laxifolia	Mexican Lobelia	
	L	Muhlenbergia rigens	Deer Grass	
	L	Salvia clevelandii 'Winifred Gilman'	Winifred Gilman Sage	
TRADITIONAL TURF				
	H	To have permanent irrigation		

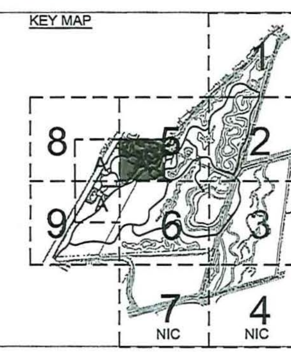
STORMWATER TREATMENT: See Concept Restoration Plan by Biotics Resources Group for planting palette for Seasonal Wetland planting palette

	L	All stormwater from the Neighborhood Park Project to be mitigated on-site using the City of Salinas standards and codes. To be irrigated for establishment

UPLAND GRASSLAND: See Concept Restoration Plan by Biotics Resources Group for planting palette

	L	To be irrigated for establishment
	L	To have permanent irrigation

KEY MAP



Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS
425 PACIFIC STREET #201 MONTEREY, CALIFORNIA 93940
831.646.1383 • BFSLA.COM

06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
NO. DATE DESCRIPTION

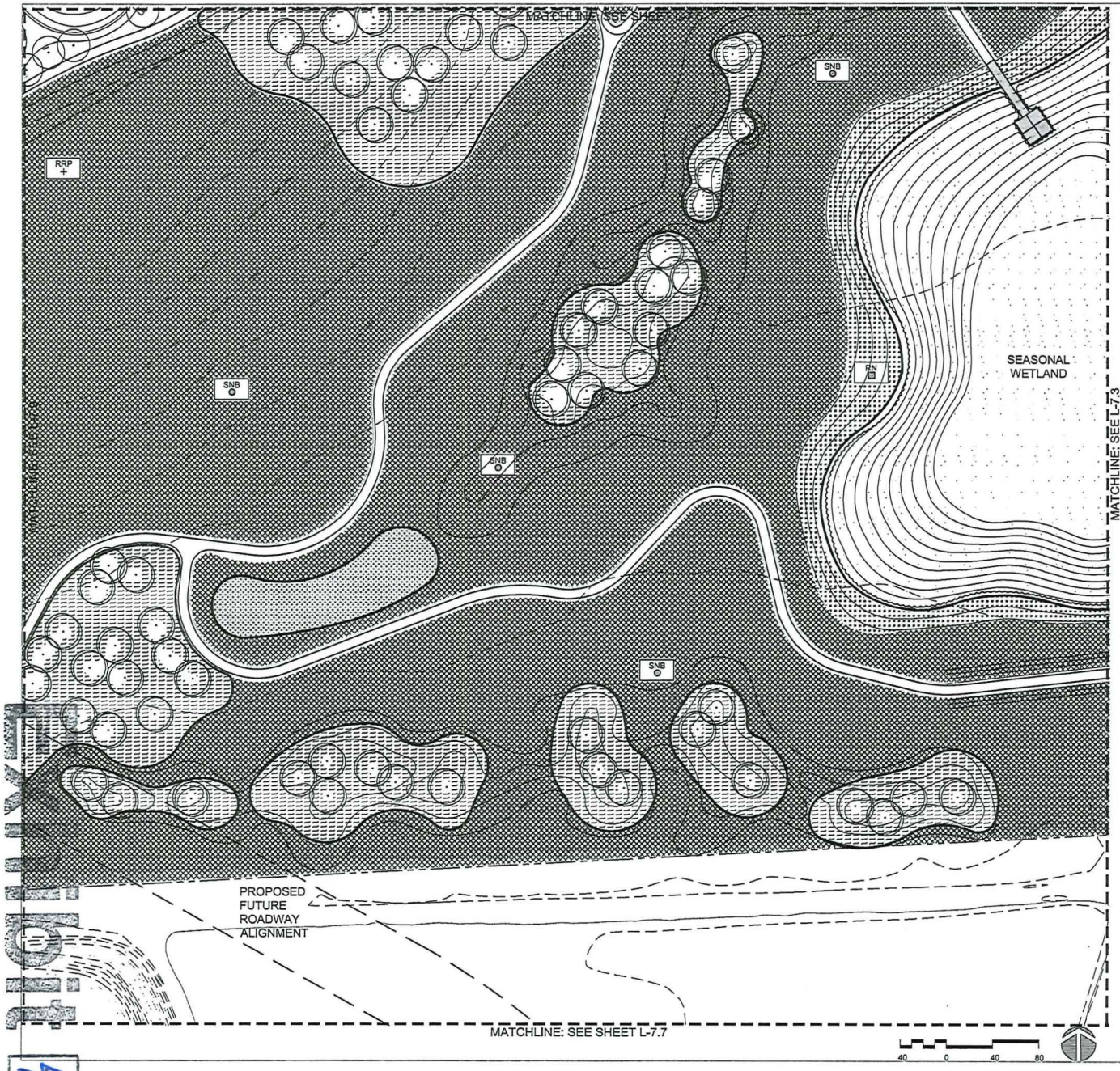
PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

PROJECT NO: 19.016
DATE: 06/22/2020
SCALE: 1" = 20'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN ENLARGEMENT: PARK

SHEET NO:
L-7.5A



LEGEND

RESTORATION PLANTING LEGEND

- FRESHWATER EMERGENT WETLAND: Edge of Pond, Meanders of Gabilan Creek and Hospital Creek. Herbaceous Riparian. Non Irrigated
- FRESHWATER FORESTED/SHRUB WETLAND: Select meanders of Gabilan Creek. Early Successional Riparian Scrub/Woodland. Non Irrigated
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- RRP: Raptor Roost Pole: Located in the grassland areas. Encourages raptor foraging and rodent Control
- RN: Raptor Nesting Platform/Box: Located on the edge of the Seasonal Wetland. Nest boxes will provide cavity nesting species with nesting opportunities
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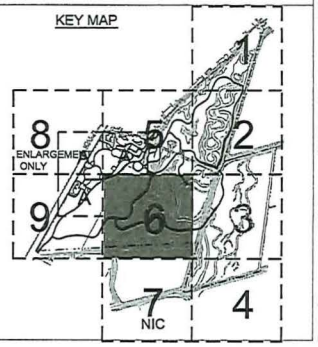
GENERAL NOTES

1. Refer to Carr Lake Concept Restoration Plan Report and Plan Matrix prepared by Biotics Resources Group for planting palette and planting implementation and maintenance strategies
2. Irrigation for Establishment: Irrigation to be temporary and above ground ground heads and laterals. Establishment to be 2-3 years duration

KEY MAP



Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS
489 PACIFIC STREET #301
MONTEREY, CALIFORNIA 93940
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06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
NO. DATE DESCRIPTION

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

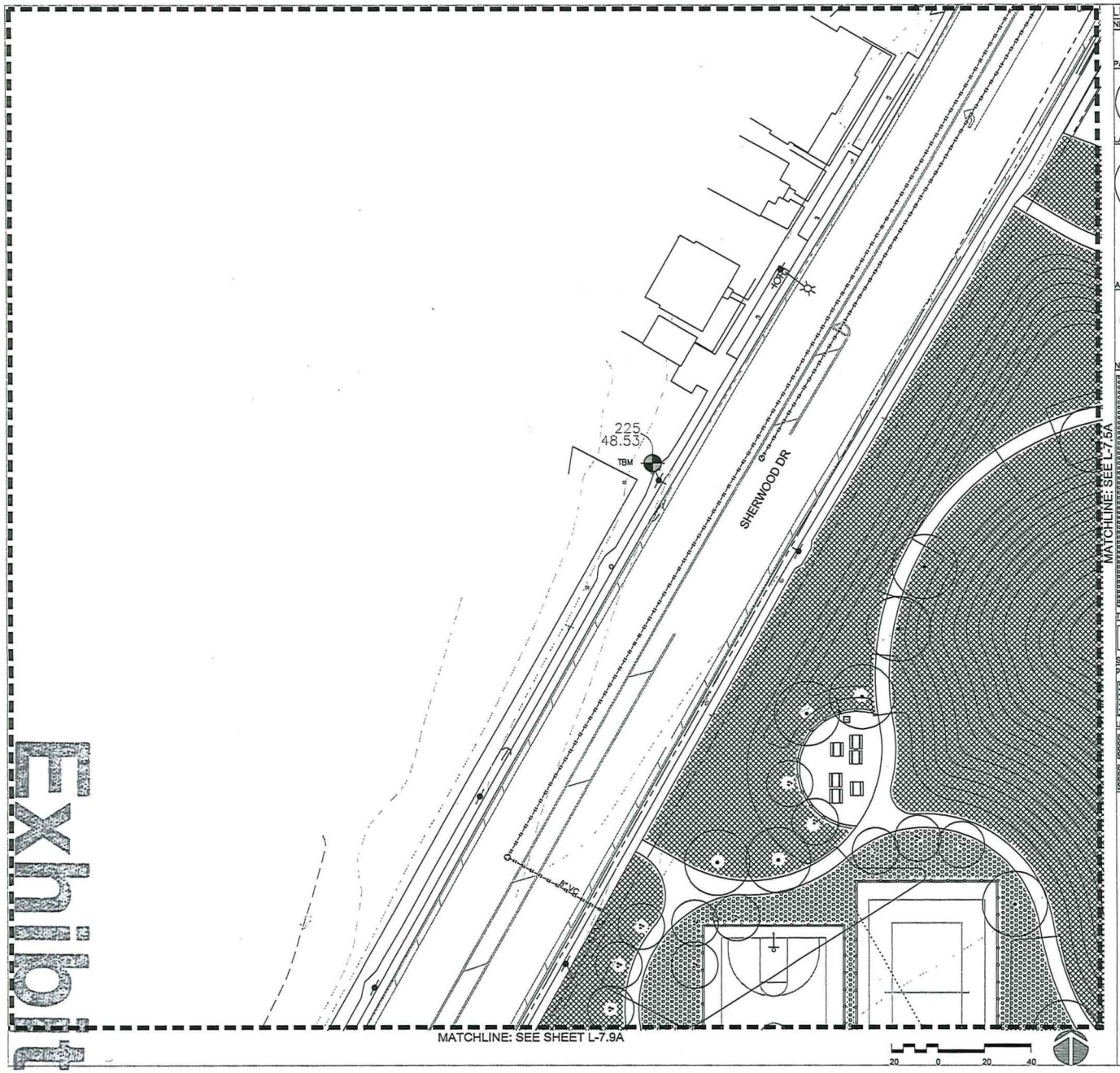
BIG SUR LAND TRUST
For the lands you love

PROJECT NO: 19.016
DATE: 06/22/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN

SHEET NO:
L-7.6

40



Exhibit

LEGEND

NEIGHBORHOOD PARK PLANTING LEGEND

SYMBOL	*WUC	BOTANICAL NAME	COMMON NAME	CHARACTER
PARKING LOT TREE				
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	M	Platanus racemosa	California Sycamore	40-80 ft tall/wide. Deciduous, riparian tree
	VL	Quercus agrifolia	Coast Live Oak	40-50 ft tall/wide. Evergreen
	L	Schinus molle	California Pepper Tree	40-50 ft tall/wide. Evergreen, red pepper fruit
ACCENT FLOWERING TREE				
°	M	Cercis occidentalis	Western Redbud	15-20 ft tall/wide. Deciduous, pink flowers
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	L	Baccharis p. 'Pigeon Point'	Coyote Bush	
	L	Carex divulsa	Berkeley Sedge	
	L	Ceanothus 'Concha'	California Lilac	
	L	Cistus x purpureus	Orchid Rockrose	
	L	Cistus salvifolius	Sageleaf Rockrose	
	L	Dietes grandiflora	Fortnight Lily	
	L	Erigeron karvinskianus	Mexican Daisy	
		Festuca mairei	Atlas Fescue	
	L	Lobelia laxiflolia	Mexican Lobelia	
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	L	Salvia clevelandii 'Winifred Gilman'	Winifred Gilman Sage	
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	H	To have permanent irrigation		
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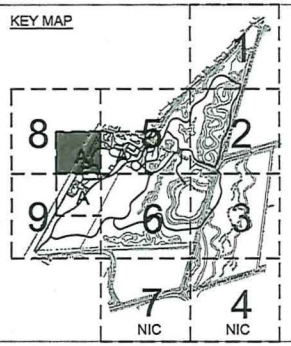
	L	To be irrigated for establishment		
	L	To have permanent irrigation		

KEY MAP



Balance Hydrologics
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BFS LANDSCAPE ARCHITECTS
1328 PACIFIC STREET #201
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06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
NO. DATE DESCRIPTION

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

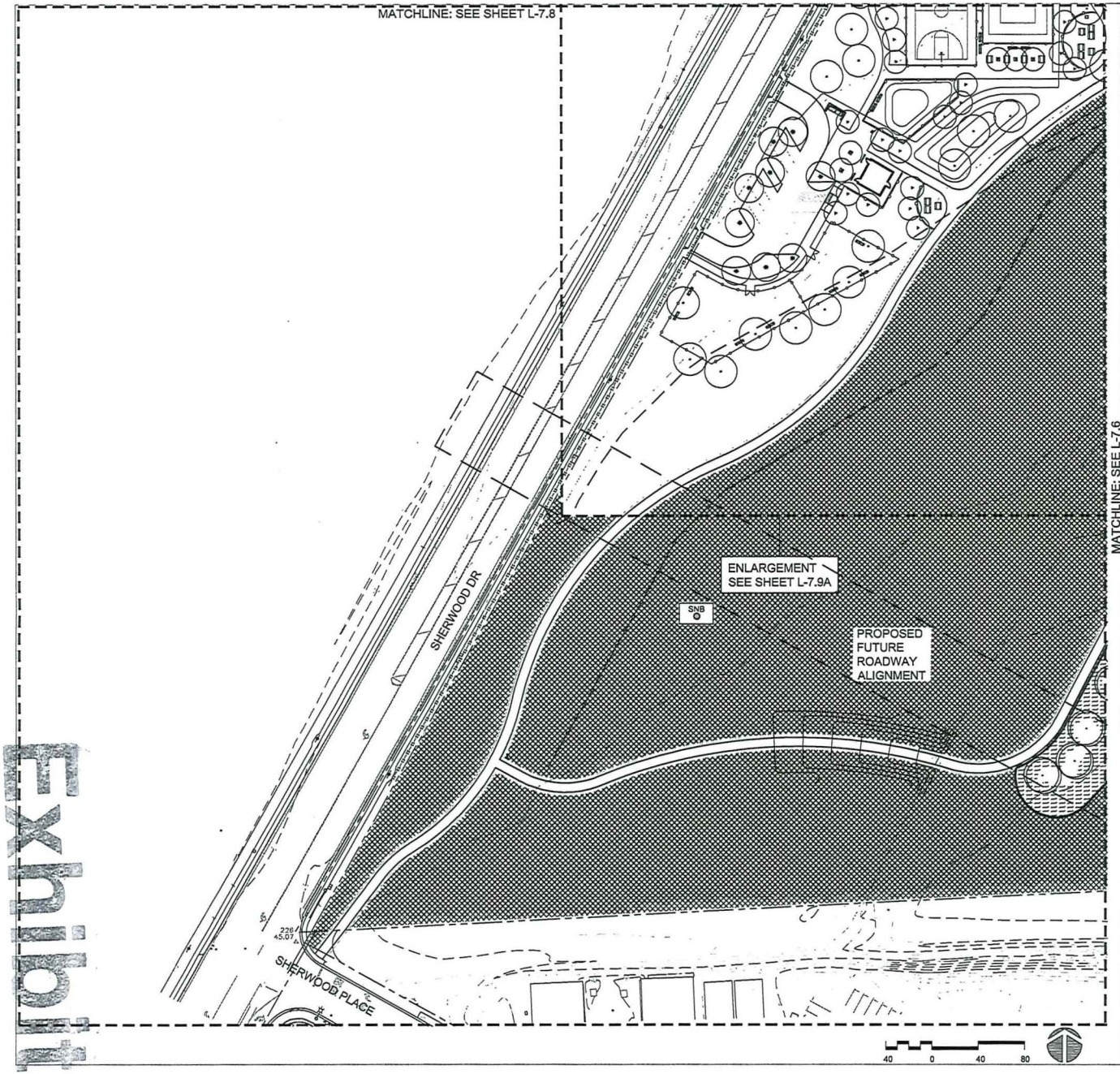
BIG SUR LAND TRUST
For the lands you love

PROJECT NO: 19.016
DATE: 06/22/2020
SCALE: 1" = 20'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN ENLARGEMENT: PARK

SHEET NO:
L-7.8A

14



LEGEND

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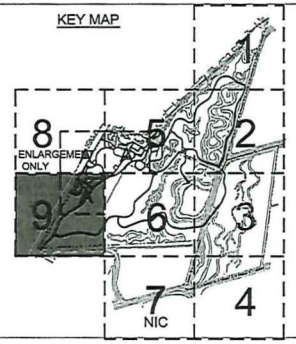

Balance Hydrologics
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BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS
423 PACIFIC STREET #201
MONTEREY, CALIFORNIA 93940
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06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:
NO. DATE DESCRIPTION

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

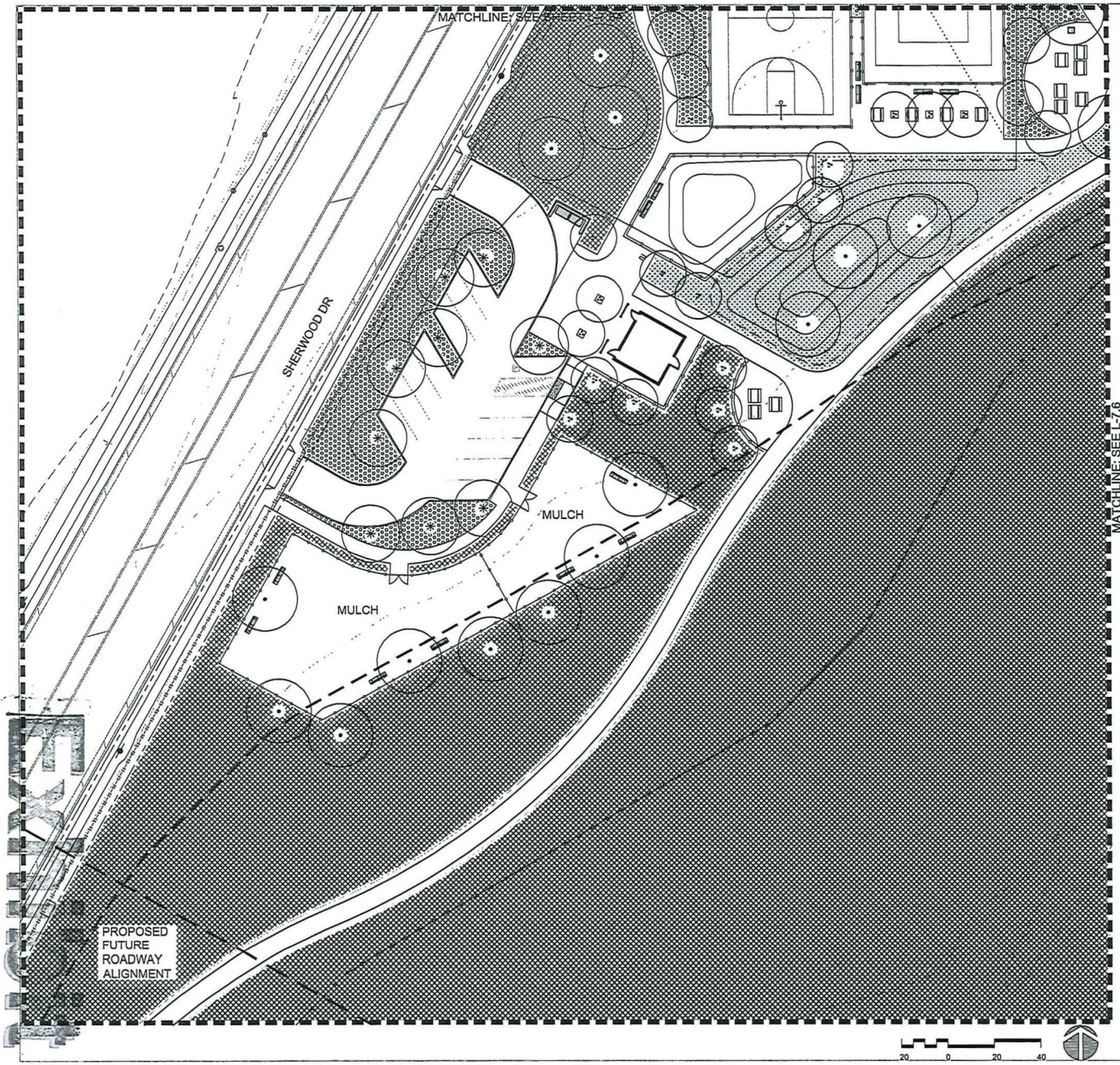
PROJECT NO: 18.016
DATE: 06/22/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN

SHEET NO:
L-7.9

Exhibit

42



LEGEND

NEIGHBORHOOD PARK PLANTING LEGEND

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	L	Baccharis p. 'Pigeon Point'	Coyote Bush	
	L	Carex divulsa	Berkeley Sedge	
	L	Ceanothus 'Concha'	California Lilac	
	L	Cistus x purpureus	Orchid Rockrose	
	L	Cistus salvifolius	Sageleaf Rockrose	
	L	Dietes grandiflora	Fortnight Lily	
	L	Erigeron karvinskianus	Mexican Daisy	
		Festuca mairei	Atlas Fescue	
	L	Lobelia laxiflora	Mexican Lobelia	
	L	Muhlenbergia rigens	Deer Grass	
	L	Salvia clevelandii 'Winifred Gilman'	Winifred Gilman Sage	
TRADITIONAL TURF				
	H	To have permanent irrigation		

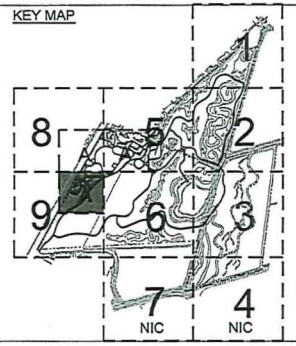
STORMWATER TREATMENT: See Concept Restoration Plan by Biotics Resources Group for planting palette for Seasonal Wetland planting palette

	L	All stormwater from the Neighborhood Park Project to be mitigated on-site using the City of Salinas standards and codes. To be irrigated for establishment

UPLAND GRASSLAND: See Concept Restoration Plan by Biotics Resources Group for planting palette

	L	To be irrigated for establishment
	L	To have permanent irrigation

KEY MAP



Balance Hydrologics
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510-704-1000

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MONTEREY, CALIFORNIA 93940
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06/22/2020 30% DESIGN PLANS
CITY APPLICATION

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

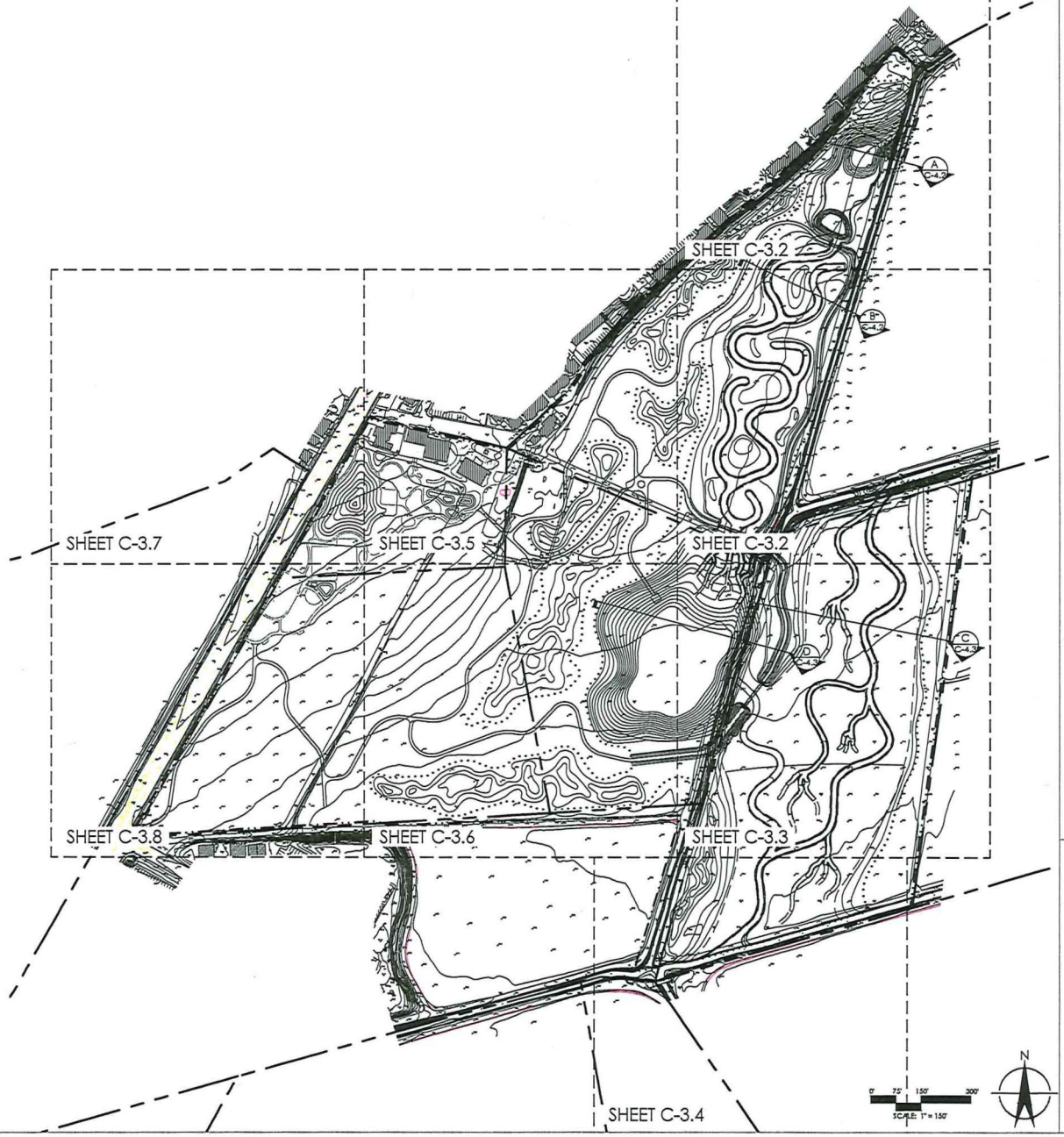
PROJECT NO: 19.016
DATE: 06/22/2020
SCALE: 1" = 40'-0"
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
PLANTING PLAN ENLARGEMENT: PARK

SHEET NO:
L-7.9A

F:\PRODUCTION\Projects\2019\19.016\CAD\19016_07 Plan&Ig_20Scale.dwg 6/16/2020

43

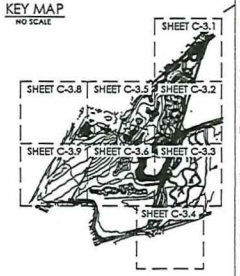


NOTES:

LEGEND:

- 40 EXISTING CONTOUR
- PROPERTY LINE
- FINISH CONTOUR
- LIMIT OF RESTORATION GRADING
- LIMITS OF WORK

KEY MAP
NO SCALE



Balance Hydrologics

REGISTERED PROFESSIONAL ENGINEER EDWARD D. BALLMAN CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

GEOMORPHOLOGY

BALANCE HYDROLOGICS

224 WALNUT AVENUE SUITE E
SANTA CRUZ, CA 95060
831.457.9900
CHELSEA NEILL, PG

RESTORATION ENGINEERING

BALANCE HYDROLOGICS

800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710
510.704.1000
EDWARD D. BALLMAN, PE

LANDSCAPE ARCHITECTURE

BFS

425 PACIFIC STREET #201
MONTEREY, CA 93940
831.646.1383
MICHAEL BELLINGER

REVISIONS:

NO. DATE DESCRIPTION

PROJECT:

CARR LAKE PARK PHASE 1

SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

PROJECT NO: 219170
DATE: 11/06/2019
SCALE: AS NOTED
DRAWN | CHECKED: DJ/EB
ISSUANCE: 30% DESIGN

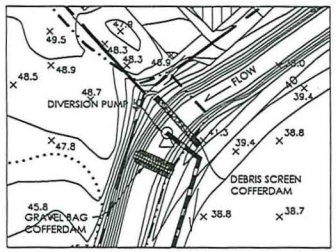
SHEET NAME:

OVERVIEW MAP & CROSS SECTION LOCATIONS

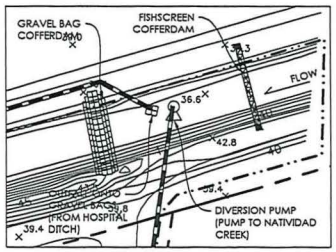
SHEET NO:

C-2.1

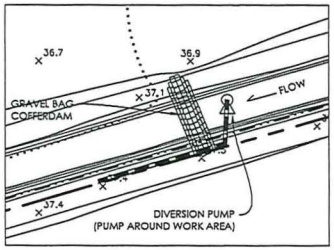
Exhibit 44



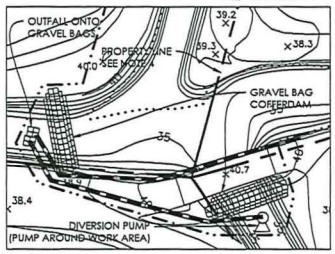
1 DIVERSION AT HOSPITAL DITCH
SCALE: 1" = 30'



2 DIVERSION AT GABILAN CREEK
SCALE: 1" = 30'



3 DIVERSION AT NATIVIDAD CREEK
SCALE: 1" = 30'



4 DIVERSION AT ALISAL CREEK AND OUTFALL AT NATIVIDAD CREEK
SCALE: 1" = 30'

NOTES:

1. DIVERSION ALIGNMENT SHOWN IN NOT PRESCRIPTIVE. CONTRACTOR SHALL SUBMIT A DIVERSION AND DEWATERING PLAN FOR APPROVAL PRIOR TO COMMENCING EARTHWORK ACTIVITIES.
2. THERE ARE DIFFERING REQUIREMENTS FOR THE TESTING, TREATMENT, AND DISCHARGE OF "DIVERTED" WATER AND "SUMP" WATER. "DIVERTED" REFERS TO WATER CAPTURED UPSTREAM OF A GRAVEL BAG COFFERDAM AND DISCHARGED DOWNSTREAM OF THE WORK. "SUMP" WATER IS WATER COLLECTED FROM WITHIN THE LIMITS OF GRADING BY SUMPS AND DISCHARGED IN SUCH AS MANNER THAT DOING SO WILL NOT VIOLATE ANY PROJECT PERMIT REQUIREMENTS.
3. LIMITS OF WORK SHOWN ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, THE OWNERS REPRESENTATIVES, AS WELL AS ADJACENT LANDOWNERS TO AGREE ON APPROPRIATE LIMITS.
4. PROPERTY LINE INFORMATION SHOWN ON THIS SHEET WAS PROVIDED BY BIG SUR LAND TRUST TO THE ENGINEER. CONFIRM PROPERTY LINE LOCATIONS PRIOR TO BEGINNING WORK.
5. IDENTIFY AND PROTECT AGRICULTURAL FIELD DRAINS AND UNDERDRAINS.

LEGEND:

- 40 — EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- x38.3 EXISTING POINT ELEVATION
- PROPERTY LINE
- LIMIT OF RESTORATION GRADING
- LIMITS OF WORK
- GRAVEL BAG COFFERDAM
- FISH OR DEBRIS SCREEN COFFERDAM
- DIVERTED OR SUMP WATER PIPE
- DIVERSION OR DEWATERING PUMP

Balance Hydrologics

EDWARD D. BALLMAN
CIVIL
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

GEOMORPHOLOGY
BALANCE HYDROLOGICS
224 WALNUT AVENUE SUITE E
SANTA CRUZ, CA 95060
831.457.9900
CHELSEA NEILL, PG

RESTORATION ENGINEERING
BALANCE HYDROLOGICS
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710
510.704.1000
EDWARD D. BALLMAN, PE

LANDSCAPE ARCHITECTURE
BFS
425 PACIFIC STREET #201
MONTEREY, CA 93940
831.646.1383
MICHAEL BELLINGER

REVISIONS:
NO. DATE DESCRIPTION

PROJECT:
CARR LAKE PARK PHASE 1
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST
For the lands you love

PROJECT NO: 219170
DATE: 11/09/2019
SCALE: AS NOTED
DRAWN | CHECKED: DJ/EB
ISSUANCE: 30% DESIGN

SHEET NAME:
SITE PREPARATION

SHEET NO:
C-2.2

Exhibit 4
4/5

Balance Hydrologics
800 BANCROFT WAY SUITE 101
BERKELEY, CA 94710-2251
510-704-1000

BFS LANDSCAPE ARCHITECTS

09/14//2020 30% DESIGN PLANS
PLAN CHECK
SPR2020-006

ISSUANCE/REVISIONS:

NO.	DATE	DESCRIPTION
	06/22/2020	1st CITY SUBMITTAL
	09/14/2020	2nd CITY SUBMITTAL

PROJECT:
CARR LAKE RESTORATION AND PARK DEVELOPMENT
SALINAS, CALIFORNIA
BIG SUR LAND TRUST

BIG SUR LAND TRUST

PROJECT NO: 19.016
DATE: 09/14/2020
SCALE:
DRAWN | CHECKED: JB/MB
ISSUANCE: 30% DESIGN

SHEET NAME:
CARR LAKE ROAD ACCESS DIAGRAM

SHEET NO:
L-1.0

Exhibit 9/3

CARR LAKE RESTORATION PROJECT

BIOTIC REPORT

1.0 INTRODUCTION

The Carr Lake Restoration Project is located in the City of Salinas. The site is accessed from Sherwood Drive; the proposed project site extends along the east side of Sherwood Drive then eastward into existing agricultural fields. The project area includes portions of Gabilan Creek and Hospital Ditch, which empty into Natividad Creek in the southwestern corner of the project area. The project location is depicted on Figure 1. Adjacent land uses are depicted on Figure 2.

Specific tasks conducted for this study include:

- Characterize the major plant communities within the project area and the immediate project area,
- Identify sensitive biotic resources, including species and habitat of concern, within the project area, and
- Evaluate the proposed projects potential to impact to sensitive resources and identify measures to avoid or minimize these impacts.

1.1 Description of Proposed Project

Four creeks (Gabilan, Alisal, Natividad, and Santa Rita) traverse the City of Salinas. Historically, Gabilan, Alisal and Natividad creeks joined to form a 480-acre seasonal lake, Carr Lake. In the early 1900's landowners drained the lake to provide land for farming and development. In 1917, the Reclamation Ditch Assessment District was formed wherein the creeks feeding Carr Lake were channelized to accommodate greater flows and facilitate agricultural land uses in the filled lake bed. The creation of the ditches and farming in the former lake bed significantly altered the ecological resources of the region. Riparian and wetland resources were lost and much of the low-water flows in the ditches is now tailwater or water runoff from nearby farm fields.

The purpose of the proposed project is to convert existing agricultural fields of the former Carr Lake basin into public open space. The project includes a park along Sherwood Drive and habitat restoration. Habitat restoration is proposed for Hospital Ditch and Gabilan Creek with a goal to improve water quality and habitats. The project also includes the creation of multi-use trails through the restored open space. The project is being undertaken by the Big Sur Land Trust. The existing conditions within the approximately 73-acre project area are described in this report. The project was also analyzed for potential impacts to biological resources and avoidance and minimization measures identified for sensitive resources.

1.2 Intended Use of this Report

The findings presented in this biological report are intended for the sole use of BFS Landscape Architecture and the Big Sur Land Trust in evaluating the proposed project. The findings presented by the Biotic Resources Group in this report are for information purposes only; they are not intended to represent the interpretation of any State, Federal or City law or ordinance pertaining to permitting actions within sensitive habitat or endangered species. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.

2.0 METHODOLOGY

The biological resources of the project area were assessed through literature review and field observations by Kathleen Lyons (plant ecologist) and Gary Kittleson (wildlife biologist). The major plant communities within the project area were identified during field visit(s) and review of aerial photographs. The distribution of plant communities on the site was depicted onto an aerial photo.

To assess the potential occurrence of special status biological resources, two electronic databases were accessed to determine recorded occurrences of sensitive plant communities and sensitive species. Information was obtained from the California Native Plant Society's (CNPS) Electronic Rare Plant Inventory (2020) and California Department of Fish &Wildlife (CDFW) RareFind 5 database (CDFW, 2020) for the quadrangle containing the project site: Salinas U.S.G.S., 7.5' quadrangle and the surrounding quadrangles.

3.0 EXISTING ENVIRONMENTAL CONDITIONS

The project area supports a portion of Gabilan Creek. This perennial waterway flows into Natividad Creek in the southwestern corner of the project area. A portion of Hospital Ditch is located along the northwestern boundary of the project area. This intermittent drainage empties into Gabilan Creek within the project area. The habitat types in the project area are limited to active agricultural fields (row crops) and patches of freshwater marsh emergent vegetation within Hospital Ditch and Gabilan Creek. The distribution of vegetation types, and location of drainage features is depicted on Figure 3. The vegetation types are listed on Table 1.

Table 1. Plant Associations within Carr Lake Restoration Project Area

CNDDB Code	Map Code (Figure 3)	Vegetation Type	Plant Association
None	AG	Agriculture	None (row crops)
None	HR	Herbaceous Riparian	Watercress –curly dock – nutgrass

3.1 Agriculture Fields

The project area is dominated by active agricultural fields (row crops). At times the fields may be bare or planted with a crop. The project area also supports many areas that are periodically disturbed by adjacent agricultural activities, such as clearing, mowing or placement of farm equipment. The vegetation is dominated by non-native plant species. Herbaceous plants typical of disturbed conditions may occur within or adjacent to the agricultural fields at some times of the year. Non-native plant species are common, such as sow thistle (*Sonchus asper)*, wild radish (*Raphanus sativa)*, wild mustard (*Brassica* sp.), and bull mallow (*Malva neglecta)*. The National Wetlands Inventory (NWI) identifies the agricultural field as seasonally flooded emergent wetlands that are farmed. The NWI designation is PEM1Cf (Palustrine [P], emergent [EM], seasonally flooded [C], farmed wetlands [f]), as depicted on Figure 4.

Wildlife use of agricultural fields is largely limited to opportunistic foraging by blackbirds, ground squirrels and hares, due to frequent disturbances from farming activities. However, the habitat values will vary depending on the frequency of disturbances and crop type. For example, fallow fields may temporarily support a level of use similar to that of grasslands, when allowed to produce ruderal vegetation, and perennial crops, such as strawberry fields, may even support nesting by killdeer (*Charadrius vociferus*) and horned larks, which prefer the bare areas between the rows.

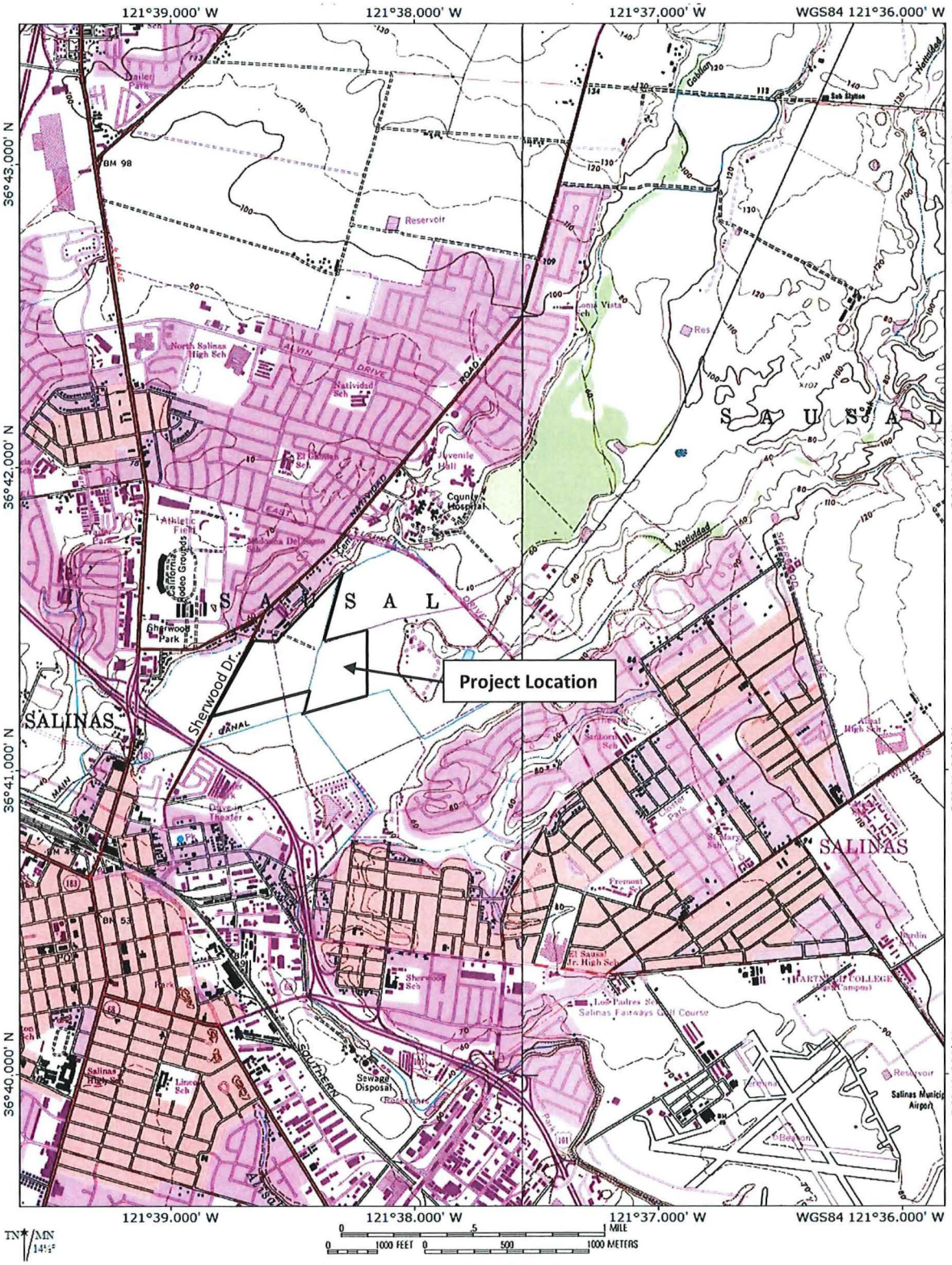


Figure 1. Location of Project
(USGS Salinas Quadrangle)

Figure 2. Proposed Project Area and Surrounding Land Uses (Source: BFS, 2019)

Figure 3. Distribution of Vegetation Types

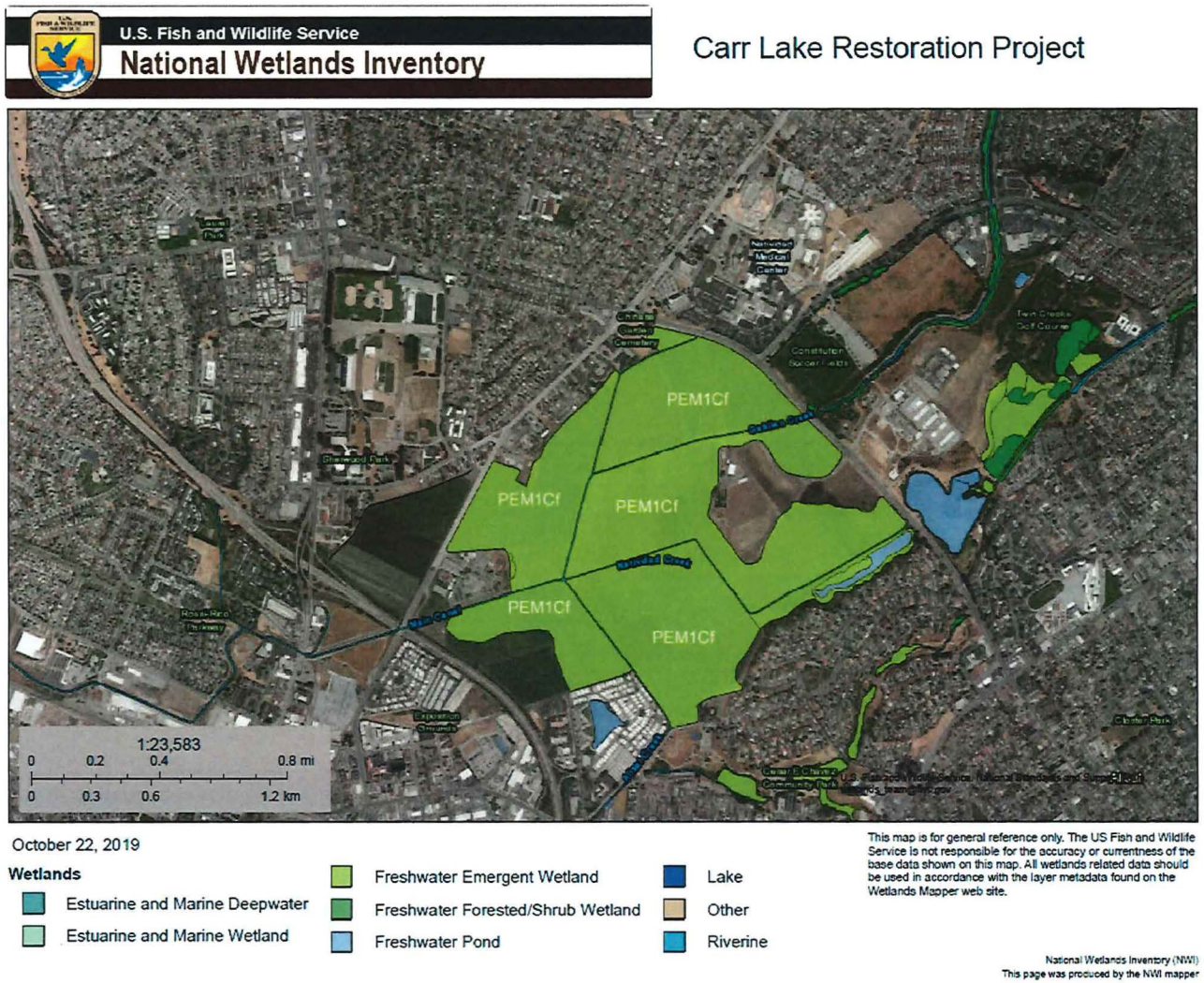


Figure 4. National Wetlands Inventory Map

3.2 Herbaceous Riparian

The bed of Gabilan Creek and Hospital Ditch support patches of freshwater marsh vegetation, depending upon stream flow. These drainages have been modified by agricultural activities (i.e., excavated, periodically cleared, and/or subject to herbicide application), yet some areas support herbaceous species within the bottom and lower edges of the channel, such as watercress (*Nasturtium officinale)*, nutgrass (*Cyperus eragrostis)*, curly dock (*Rumex crispus)*, cocklebur (*Xanthium strumarium)*, Italian ryegrass (*Festuca perennis)*, and rabbitsfoot grass (*Polypogon monspeliensis)*.

The NWI identifies Gabilan Creek as riverine. The NWI designation is R2UBHx (Riverine [R], Lower perennial [2], Unconsolidated Bottom [U], Permanently Flooded [H], excavated [x]), as depicted on Figure 4. Hospital Ditch is demarcated as riparian.

4.0 SENSITIVE BIOTIC RESOURCES

4.1 Sensitive Habitats

Sensitive habitats are defined by local, state, or federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. California Department of Fish and Wildlife (CDFW) classifies and ranks the State's natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (CDFW, 2018). Within the project area, none of the habitats are identified as rare (CDFW, 2018).

4.2 Regulated Habitats

CDFW is a trustee agency that has jurisdiction under CDFW Code Section 1600 et seq. CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife. Along watercourses, CDFW jurisdictional limit typically extends to the top of bank or to the edge of riparian habitat if such habitat extends beyond top of bank (outer drip line), whichever is greater. The following areas are expected to be under the jurisdiction of CDFW:

1. Gabilan Creek, extending to top-of-bank.
2. Hospital Ditch, extending to top-of-bank.

Activities within these areas may be subject to permit action by CDFW. The state agency has a no-net-loss policy for riparian habitat. CDFW requires riparian habitat replacement ratio for impacts to riparian woodland, pursuant to the project's CEQA review and issuance of a Streambed Alteration Agreement.

Water quality in California is governed by the Porter-Cologne Water Quality Control Act and certification authority under Section 401 of the Clean Water Act, as administered by the Regional Water Quality Control Board (RWQCB). The Section 401 water quality certification program allows the State to ensure that activities requiring a Federal permit or license comply with State water quality standards. Water quality certification must be based on a finding that the proposed discharge will comply with water quality standards which are in the regional board's basin plans. The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the waters of the state to file a report of waste discharge. The RWQCB issues a permit or waiver that includes implementing water quality control plans that take into

account the beneficial uses to be protected. Waters of the State subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features and saline waters. Should there be no Section 404 nexus (i.e., isolated feature not subject to USACE jurisdiction); a report of waste discharge (ROWD) should be filed with the RWQCB. The RWQCB interprets waste to include fill placed into water bodies.
The following areas are expected to be under the jurisdiction of RWQCB:

1. Gabilan Creek, extending to top-of-bank.
2. Hospital Ditch, extending to top-of-bank.

The US Army Corps of Engineers (USACE) regulates activities within waters of the United States pursuant to congressional acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (1977, as amended). Section 10 of the Rivers and Harbors Act requires a permit for any work in, over, or under navigable waters of the United States. Navigable waters are defined as those waters subject to the ebb and flow of the tide to the Mean High Water mark (tidal areas) or below the Ordinary High Water Mark (OHWM) (freshwater areas). The USACE has ultimate responsibility for determining the extent of their jurisdiction. In general, fill placed with jurisdictional waters is subject to permitting. Although a formal delineation of wetlands was not conducted as part of this study, the following areas are expected to be under the jurisdiction of USACE:

1. Gabilan Creek, to OHWM.
2. Hospital Ditch, to OHWM

The City of Salinas General Plan requires a 100-foot setback between development and creeks (measured from top-of bank or outer edge of the riparian woodland, whichever is greater). Encroachments into the 100-foot creek setback may be considered pursuant to the General Plan COS-17 Implementation Program. Development activities may be considered for certain areas within the City if the encroachment will not have a significant adverse impact on the riparian and wetland resources because mitigation measures will achieve a comparable or better level of mitigation than the 100-foot setback OR the property is adjacent to a reclamation ditch and no riparian or wetland resources are identified outside the ditch. A portion of the proposed project area is within an area of the City subject to consideration of a creek setback encroachment (i.e., within and adjacent to Gabilan Creek, Hospital Ditch and Natividad Creek (where creek abuts project area).

4.3 Special Status Plant Species

Plant species of concern include those listed by either the Federal or State resource agencies as well as those identified as rare (i.e., List 1B) by CNPS. The search of the CNPS and CNDDB inventories for the area resulted in several special status plant species of concern known, or with potential, to occur within the project area (Table 2).

Alkali milkvetch (*Astragalus tener tener).* The CNDDB lists an occurrence of alkali milkvetch (*Astragalus tener tener)*, from the greater project region. This annual plant species grows in low, alkaline grasslands. No individuals of these species were observed and no suitable habitat is present due to the active agricultural activities (row crops). No other special status plant species were documented on the site during the survey, and none are expected due to a lack of suitable habitat.

Congdon's Tarplant (*Centromadia parryi ssp. congdonii)*. This species is recognized as rare by the California Native Plant Society (List 1B). The species is also considered rare by the California Department of Fish and Game (CDFW); however, the species is not currently listed as rare or endangered under the California Endangered Species Act. The species is not currently listed as

rare or endangered under the Federal Endangered Species Act. Congdon's tarplant grows in annual grasslands, typically in areas with high seasonal moisture. The blooming period is typically from June to October. Because Congdon's tarplant is an annual species, its population can vary from year to year depending upon weather conditions (e.g., rainfall, temperature), as well as human and natural disturbances within the species' habitat. Seeds are known to persist in the soil seedbank and germinate under favorable conditions. The species responds well to site disturbances that remove thatch and create open areas that are conducive to seed germination and plant growth. This species is known from the greater Monterey Bay region, with several occurrences recorded in the CNDDB from the Salinas area. The closest recorded colony is located south of the Natividad Creek detention pond where the species grows on a low, flat floodplain east of East Laurel Drive. Another colony of this species is known from the Gabilan Creek floodplain, upstream of the project site near the intersection of Independence and Constitution Boulevard.

Table 2. List of Special Status Plant Species Evaluated as to their Potential to Occur in the Vicinity of the Carr Lake Restoration Project Area

Species	CNPS	State Status	Federal Status	Habitat Type	Occurrence in Vicinity by CNDDB? Likely Occurrence on Site?
Vernal pool bent grass (*Agrostis lacuna-vernalis*)	List 1B.1	None	None	Vernal pools, mima mounds	Known from Ft. Ord Project area does not provide suitable habitat
Hickman's Onion (*Allium hickmanii*)	List 1B.2	None	None	Closed cone coniferous forests, chaparral, coastal bluff scrub	Recorded from south of Marina (Ft. Ord) Project area does not provide suitable habitat
Gabilan Mtns. manzanita (*Arctostaphylos gabilanensis*)	List 1B.2	None	None	Maritime chaparral, coastal scrub, coastal dunes	Not observed. Project area does not provide suitable habitat
Hooker's manzanita (*Arctostaphylos hookeri ssp. hookeri*)	List 1B.2	None	None	Closed-cone coniferous forest, maritime chaparral, coastal scrub	Recorded from Ft. Ord Not observed. Project area does not provide suitable habitat
Toro manzanita (*Arctostaphylos montereyensis*)	List 1B.2	None	None	Chaparral, coastal scrub	Recorded from Ft. Ord Not observed. Project area does not provide suitable habitat
Pajaro manzanita (*Arctostaphylos pajaroensis*)	List 1B.1	None	None	Closed-cone coniferous forest, maritime chaparral, coastal scrub, coastal dunes	Recorded from Prunedale Area Not observed. Project area does not provide suitable habitat
Sandmat manzanita (*Arctostaphylos pumila*)	List 1B.2	None	None	Maritime chaparral, coastal scrub, coastal dunes	Recorded from Ft. Ord area Not observed. Project area does not provide suitable habitat
Alkali milk-vetch (*Astragalus tener var. tener*)	List 1B.2	None	None	Alkali wetlands	Historic occurrence around project area; other occurrences from Hollister (San Benito County); herbarium collections from 1889 Area does not provide suitable habitat.
Pink Johnny -nip (*Castilleja ambigua var. insulata*)	List 1B.1	None	None	Coastal scrub; coastal prairie.	Big Sur, South Monterey Project area does not provide suitable habitat
Congdon's tarplant (*Centromadia parryi ssp. congdonii*)	List 1B.1	None	None	Annual grasslands, often seasonally wet or with wet clays.	Known record near Project area along Natividad Creek area and other areas in greater project vicinity. Area does not provide suitable habitat.
Monterey spineflower (*Chorizanthe pungens var. pungens*)	List 1B.2	None	Threatened	Coastal dunes, chaparral, coastal scrub (in loose sandy soils)	Recorded from Ft. Ord, Marina and Seaside Areas Project area does not provide suitable habitat
Seaside bird's beak (*Cordylanthus rigidus*	List 1B.1	Endangered	None	Closed cone coniferous forest, chaparral, cismontane	Recorded from sand hills of Seaside at Ft. Ord

Table 2. List of Special Status Plant Species Evaluated as to their Potential to Occur in the Vicinity of the Carr Lake Restoration Project Area

Species	CNPS	State Status	Federal Status	Habitat Type	Occurrence in Vicinity by CNDDB? Likely Occurrence on Site?
littoralis)				woodland, coastal scrub/dunes	Project area does not provide suitable habitat
Hutchinson's larkspur *(Delphinium hutchinsoniae)*	List 1B.2	None	None	Cismontane woodland, coastal scrub	Recorded from Spreckels area Project area does not provide suitable habitat
Umbrella larkspur *(Delphinium umbraculorum)*	List 1B.3	None	None	Cismontane woodland, coastal scrub	Recorded from Big Sur, Chualar, Spreckels Project area does not provide suitable habitat
Eastwoods goldenbush *(Ericameria fasciculate)*	List 1B.1	None	None	Closed-cone coniferous forest, maritime chaparral, coastal scrub, coastal dunes	Recorded from Seaside, Ft. Ord, Marina and Carmel Valley areas Project area does not provide suitable habitat
Pinnacles buckwheat *(Eriogonum nortonii)*	List 1B3	None	None	Closed-cone coniferous forest, maritime chaparral, coastal scrub, coastal dunes	Recorded from Big Sur, Hollister, Fremont Peak Project area does not provide suitable habitat
Sand-loving wallflower *(Erysimum ammophilum)*	List 1B.2	None	Species of Concern	Maritime chaparral, coastal dunes, coastal scrub	Recorded from south of Ft. Ord, south of Marina along Highway 1 and E of Reservation Road, Marina State Beach Project area does not provide suitable habitat
San Joaquin spearscale *(Extriplex joaquinea)*	List 1B.2	None	None	Washes, riparian scrub	Known from Hollister area Project area does not provide suitable habitat
Fragrant fritillary *(Fritillaria liliacea)*	List 1B.2	None	None	Grasslands	Recorded from south of Aromas No suitable habitat present
Monterey gilia *(Gilia tenuiflora ssp. arenaria)*	List 1B.2	Threatened	Endangered	Coastal dunes, coastal scrub, maritime chaparral	Recorded from Marina State Beach, Ft. Ord, E of Del Monte and Reservation Rd., NW of Hwy 1and Reservation Rd., Project area does not provide suitable habitat
Santa Cruz tarplant *(Holocarpha macradenia)*	List 1B.1	Endangered	Threatened	Grassland	Known form northern Monterey County, off Elkhorn Road Project area does not provide suitable habitat.
Kellogg's horkelia *(Horkelia cuneata ssp. sericea)*	List 1B.1	None	Species of Concern	Closed cone coniferous forests, chaparral, coastal scrub, old dunes	Recorded from 1 mi. N of Marina (1940) and Ft. Ord S of Marina No suitable habitat within Project area
Contra Costa goldfields *(Lasthenia conjugens)*	List 1B.1	None	Endangered	Mesic grassland	Known form Ft. Ord, southwest of Salinas No suitable habitat within Project area; marginally suitable habitat east of site.
Legenere *(Legenere limosa)*	List 1B.1	None	Endangered	Edges of ponds	Known form Ft. Ord, Butterfly Valley

Table 2. List of Special Status Plant Species Evaluated as to their Potential to Occur in the Vicinity of the Carr Lake Restoration Project Area

Species	CNPS	State Status	Federal Status	Habitat Type	Occurrence in Vicinity by CNDDB? Likely Occurrence on Site?
					No suitable habitat within Project area; marginally suitable habitat along Natividad Creek pond.
Indian Valley bush mallow (*Malacothamnus aboriginum*)	List 1B.2	None	None	Chaparral, scrub	Recorded from Gonzales, east of Soledad Project area does not provide suitable habitat
Carmel Valley bush mallow (*Malacothamnus palmeri var. involucratus*)	List 1B.2	None	None	Chaparral, scrub	Recorded from Jolon, Ft. Hunter Liggett Project area does not provide suitable habitat
Santa Lucia bush mallow (*Malacothamnus palmeri var. palmeri*)	List 1B.2	None	None	Chaparral, scrub	Recorded from Carmel Project area does not provide suitable habitat
Oregon meconella *(Meconella oregana)*	List 1B.1	None	None	Coastal prairie and coastal scrub	Recorded from Spreckels area No suitable habitat within Project area
Marsh microseris *(Microseris paludosa)*	List 1B.2	None	None	Mesic grassland	Recorded from Seaside area No suitable habitat within Project area; marginally suitable habitat east of site.
Northern curly-leaved monardella (*Monardella sinuata ssp. nigrescens*)	List 1B.2	None	None	Dunes	Recorded from east of Monterey Airport Project area does not provide suitable habitat
Yadon's rein orchid (*Piperia yadonii*)	List 1B.1	None	Endangered	Closed cone coniferous forests, chaparral, coastal bluff scrub	Recorded from south of Marina (Ft. Ord), Marina, Prunedale Project area does not provide suitable habitat
Choris' popcorn flower (*Plagiobothrys chorisianus var. chorisianus*)	List 1B.2	None	None	Mesic grasslands	Recorded from Ft. Ord, Moro Cojo Slough, Dolan Road area Project area does not provide suitable habitat
San Francisco popcorn flower (*Plagiobothrys diffusus*)	List 1B.1	Endangered	None	Mesic grasslands	Project area does not provide suitable habitat
Pine rose (*Rosa pinetorum*)	List 1B.2	None	None	Scrub and woodlands	Recorded from Pacific grove, Veterans Memorial Park, Pt. Lobos Project area does not provide suitable habitat
Santa Cruz microseris (*Stebbinsoseris decipiens*)	List 1B.2	None	None	Mesic grasslands; coastal prairie	Recorded from Laureles Grade Road, Camp Roberts, Hwy 68/218 area Project area does not provide suitable habitat
Santa Cruz clover	List 1B.1	None	None	Mesic grassland	Recorded from Laguna Seca, Tarpy Flats and Ft. Ord

Table 2. List of Special Status Plant Species Evaluated as to their Potential to Occur in the Vicinity of the Carr Lake Restoration Project Area

Species	CNPS	State Status	Federal Status	Habitat Type	Occurrence in Vicinity by CNDDB? Likely Occurrence on Site?
(Trifolium buckwestiorum)					No suitable habitat within Project area.
Saline clover *(Trifolium. hydrophilum)*	List 1B.2	None	None	Alkali wetlands	Historic occurrence near Moss Landing; other occurrences from Soda Lake (Santa Cruz County) and Hwy 25 (San Benito County) No suitable habitat within Project area.

CNPS Status:

List 1B: These plants (predominately endemic) are rare through their range and are currently vulnerable or have a high potential for vulnerability due to limited or threatened habitat, few individuals per population, or a limited number of populations. List 1B plants meet the definitions of Section 1901, Chapter 10 of the CDFG Code. **List 4:** Plants of limited distribution; a watch list.

4.4 Special Status Animal Species

Special status wildlife species include those listed, proposed or candidate species by the Federal or the State resource agencies as well as those identified as State species of special concern. In addition, all raptor nests are protected by Fish and Game Code, and all migratory bird nests are protected by the Federal Migratory Bird Treaty Act. Special status wildlife species were evaluated for their potential presence in the project area as described in Table 3 below.

Table 3. Special Status Wildlife Species and Their Predicted Occurrence within the Vicinity of the Carr Lake Restoration Project Area

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
Fish			
Steelhead (*Oncorhynchus mykiss)*	FT, CSC	Perennial waterways	Reported in Gabilan Creek, upstream of the project area; poor on-site habitat due to barriers and low flows.
Chinook salmon (*Oncorhynchus tshawytscha*)	FT, CSC	Perennial waterways	Reported in Gabilan Creek, upstream of the project area; poor on-site habitat due to barriers and low flows.
Amphibians			
California tiger salamander *Ambystoma californiense*	FT, ST	Ponds for breeding, adjacent grasslands with burrows for upland	None, agricultural fields lack burrows and are unsuitable for upland refugia; no breeding habitat within project site. Closest known record 2 mi NE, and genetic studies shows all CTS in this area are non-natives and hybrids.
Foothill yellow-legged frog *Rana boylii*	CSC	Perennial rivers and creeks with cobble substrate	None; no suitable habitat on site.
California red-legged frog *Rana draytonii*	FT, CSC	Riparian, marshes, estuaries and ponds.	No suitable ponded breeding habitat within site. May occasionally occur in Gabilan Creek for foraging or movement when water present. Closest known record2.5 mi NE.
Reptiles			
Western pond turtle *Emys marmorata*	CSC	Creeks and ponds, grasslands for nesting.	Gabilan Creek not suitable habitat due to lack of deep pools, seasonal water. Agricultural fields not suitable for nesting.
Black legless lizard *Anniella pulchra nigra*	CSC	Sand dunes, sandy soils with lupines, mock heather other natives plants	None. No suitable habitat on site.
Birds			
White-tailed kite *Elanus leucurus*	FP	Nests in dense canopy riparian and oak woodlands; forages in open areas	May nest in riparian habitat upstream along portions of Gabilan or Natividad Creek, but not likely at project site due to lack of riparian vegetation
Northern harrier *Circus cyaneus*	CSC	Nests on ground in tall grasses or marshes; forages over open habitats.	No nesting habitat; agricultural lands routine disked
Western burrowing owl *Athene cunicularia hypugea*	CSC	Lives in grasslands with short vegetation and burrows	Unlikely, agricultural fields lack burrows. No known records within >5 miles
California horned lark *Eremophila alpestris actia*	CSC	Nests on ground in grasslands with short vegetation	None, agricultural fields too disturbed
Mammals			
Townsend's big-eared bat *Corynorhinus townsendii*	CST	Forested habitats with caves, mines, old buildings and hollows in redwood trees as roosts	None. Site lacks suitable habitat.

[1] Key to status:

FT = Federally listed as threatened species

CST	=	Candidate for State listing as threatened species
CSC	=	California species of special concern
FP	=	Fully protected by State

In general, the habitats with the project site provide only marginal habitat for native wildlife species because of the narrow drainage corridors and the surrounding row crop agriculture. Most wildlife species expected to occur on the site are those that can tolerate high human presence in the surrounding areas. Special status species that may occasionally occur along Gabilan Creek are is discussed in more detail below.

California red-legged frog: The California red-legged frog (CRLF) is a State Species of Special Concern and Federally listed as threatened. This species is found in quiet pools along streams, in marshes, and ponds. CRLF are closely tied to aquatic environments and favor intermittent streams which include some areas with water at least 0.7 meters deep, a largely intact emergent or shoreline vegetation, and a lack of introduced bullfrogs and non-native fishes. This species' breeding season spans January to April (Stebbins 1985). Females deposit large egg masses on submerged vegetation at or near the surface. Embryonic stages require a salinity of $\leq$4.5 parts per thousand (Jennings and Hayes 1994). They are generally found on streams having a small drainage area and low gradient (Hayes and Jennings 1988). Recent studies have shown that although only a small percentage of CRLF from a pond population disperse, they are capable of moving distances of up to 2 miles (Bulger 1999). The CRLF occurs west of the Sierra Nevada-Cascade crest and in the Coast Ranges along the entire length of the state. Much of its habitat has undergone significant alterations in recent years, leading to extirpation of many populations. Other factors contributing to its decline include its former exploitation as food, water pollution, and predation and competition by the introduced bullfrog and green sunfish (Moyle 1973, Hayes and Jennings 1988).

The habitat for CRLF frogs along Gabilan Creek (within project area and upstream) and in nearby Natividad Creek is poor, and the impoundment (detention pond) of Natividad Creek at East Laurel Drive is manipulated for flood control. There are no off-channel slow-moving or ponded areas present in this portion of Gabilan Creek for breeding. It is unknown if fish inhabit the Natividad Creek detention pond, but many surveys have documented large populations of bullfrogs along the creek. The closest documented occurrence of CLRF to the project site is approximately 2.5 miles northeast in a tributary to Natividad Creek (CDFW 2015). The CRLF is usually absent from urbanized creeks and waterways. However, this frog is capable of relatively long-distance movements, and may occasionally traverse this portion of Gabilan Creek or find summer habitat when water is present. However, the CRLF is unlikely to occur within most of the project site.

Steelhead and Chinook Salmon: According to the 2007 *Carr Lake Project: Potential Biophysical Benefits of Conservation to a Multiple Use Park* report adult steelhead (*Oncorhynchus mykiss)* and chinook salmon (*Oncorhynchus tshawytscha*) have been reported in Gabilan Creek, upstream of the project area. Adult chinook salmon, non-native to the drainage, were also found upstream during the winters of 2005 and 2006. According to Casagrande (2007), these fish may have originated from aquaculture pens in Moss Landing or Santa Cruz harbors. Gabilan Creek is designated as Critical Habitat for steelhead as part of the South-Central California Coast Evolutionary Significant Unit (ESU). The habitat listing was based on the close proximity of Gabilan Creek to the Salinas River drainage. Other studies indicate that spawning and rearing habitat exists in the upper watershed (Hager, 2001); however, within the project area there are

several limiting factors for the species, particularly migration barriers, low stream flow during migration, and degraded water quality conditions downstream.

California Tiger Salamander. The CNDDB contains records for California tiger salamander (CTS) in the project region. The most current records are from Natividad Creek, west of the project area. These animals are reportedly hybrids and/or non-native salamanders.

Western Pond Turtle. This species (*Emys marmorata*) has been reported in ponds 2.3 miles west of the project area in the Natividad Creek watershed, upstream of Boronda Road. Active agricultural activity and periodic channel clearing currently limits habitat potential for turtles in the project area.

Burrowing Owl. Burrowing owls (*Athene cunicularia hypugea*) have been recorded in the Carr Lake vicinity. Sites include the Upper Carr Lake area and along the banks of the Reclamation Ditch east of Carr Lake. Burrowing owl breeding was observed locally in 1993 and 1994 approximately 0.7 miles from the project site at the County of Monterey property on East Laurel Drive. Other records in the CNDDB include sites near the Salinas Municipal Airport and in the western and northern-most fringes of the City boundaries.

5.0 IMPACT ANALYSIS

5.1 Significance Thresholds

The thresholds of significance presented in Appendix G of the California Environmental Quality Act (CEQA) were used for this analysis. For this analysis, significant impacts may occur if the project would substantially affect, either directly or through habitat modifications:

- A species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2. Analysis

Development of the Carr Lake Restoration Project will have few impacts on native habitats, as most of the project area supports active agricultural fields. There will be an impact to Gabilan Creek, which support Waters of the U.S. and Waters of the State, as restoration work will re-align and widen the existing creek channel. There will be minor impact to Hospital Ditch to direct flows from this creek onto the restoration site. However, after project completion, there will be a net gain in Waters of the U.S. and Waters of the State as more open water and wetland habitat will be created. Restoration actions will also create riparian scrub and riparian woodland, two habitat types that do not currently occur on site. The restoration plan also includes creation of seasonal wetlands amid grassland, a habitat that does not currently occur on site. Construction will alter areas supporting ruderal grassland and the creek channels; however, this will be a temporary impact.

Impacts to nesting birds could be significant if construction occurs during the bird breeding season; however, measures to prevent impacts to breeding birds are identified. Impacts could also occur to special status wildlife species, if any species are found to occur within the project area at the time of construction. A summary of potential significant impacts is presented in Table 4.

Impacts to the existing agricultural areas was not deemed to be a significant impact to biological resources as these habitats were not found to support special status species. However, impacts to breeding birds in these habitats, if present, could be significant.

Table 4. Summary of Potential Significant Biological Impacts

Biological Resource	Impact	Permitting	Avoidance/Minimization Measures	Monitoring
Herbaceous Riparian (Waters of the U.S. and Waters of the State, within Gabilan Creek and Hospital Ditch)	Removal of herbaceous vegetation due to grading for restored channels and construction of in-stream structures. Placement of fill within Waters of the U.S. and Waters of the State to accommodate re-alignment of channels.	City of Salinas USACE RWQCB CDFW	Avoid or minimize impact to greatest extent; re-create herbaceous riparian, riparian scrub, and riparian woodland vegetation within the re-aligned channels and pond; see Measure BIO-1	Monitor progress of restoration so as document no net loss of Waters of U.S. and Waters of the State with 5-year monitoring period
Nesting Birds	Potential impact to nesting birds if active nests are present during construction		Conduct vegetation removal September 1 to February 1 to avoid nesting birds; if not feasible, conduct pre-construction survey; see Measure BIO-2	None
Special Status Species	Potential impact to steelhead, Chinook salmon, California tiger salamander, California red-legged frog	NMFS USFWS CDFW	Implement pre-construction surveys; monitor creek dewatering and relocate wildlife if needed; see Measure BIO-3	None

Permitting Codes: USACE = U.S. Army Corps of Engineers
RWQCB = Regional Water Quality Control Board
USFWS = U.S. Fish and Wildlife Service
NMFS = National Marine Fisheries Service
CDFW = California Department of Fish and Wildlife

Impacts to Herbaceous Riparian, Waters of the U.S. and Waters of the State

The project will impact herbaceous riparian vegetation that grows within Gabilan Creek and Hospital Ditch. This will occur from grading during re-alignment of the channels for habitat restoration. The herbaceous vegetation grows below the OHWM of the channels, so these areas are also expected to meet the definition of Waters of the U.S. under Section 404 of the Clean Water Act (as regulated by the USACE) and Waters of the State (as regulated by CDFW and RWQCB). The restoration project will impact approximately 2,660 linear feet of channel. Assuming the entire length of the channel also supports herbaceous riparian/wetland vegetation (approximately 6 feet wide), up to 15,990 square feet (0.37 acre) of herbaceous riparian/wetland could be affected by the project.

The Concept Restoration Plan states that the graded channel and adjacent low-elevation floodplain of Gabilan Creek and Hospital Ditch will be inundated during most winter storm events and will have varying amounts of sediment deposition. These conditions will be conducive to early successional wetland and riparian plant species. The mainstem of Gabilan Creek and some meanders of Gabilan Creek and Hospital Ditch will, over time, develop into a diverse mosaic of freshwater marsh and riparian scrub/woodland. The restoration concept focuses on first establishing early successional wetland and riparian plant species along sections of the newly-created creek channel(s) to create marsh and riparian habitat, and allowing natural recruitment of additional species from upstream waters. In Year 1, the plan identifies erosion control seeding of newly graded areas within the riparian floodplain. In Years 2 and 3 select plantings of herbaceous wetland species is proposed to increase plant species diversity and to contribute to habitat development. Plantings are proposed as

distinct blocks/groves, thus allowing open areas between the planting blocks where other vegetation can naturally establish. Woody riparian trees and shrubs will not be planted; however, it is expected that some woody species, such as willows, will naturally colonize the area. The Restoration Plan identifies creation of over 20 acres of wetlands and wet riparian scrub (i.e., 19.5 acres of freshwater emergent wetlands and 1.10 acre of freshwater scrub). The 20 acres of restoration offers a significant increase in herbaceous riparian/wetlands compared to the approximately 0.37 acre of existing resources affected by the project. The project will result in a net gain in wetlands. Despite this increase construction-period best management practices should be implemented to prevent inadvertent impacts to downstream waters of the U.S and waters of the State, as described in Measure BIO-1.

Recommended Measure BIO-1. ***The following measures shall be implemented to protect adjacent retained herbaceous riparian/wetlands and downstream waters from inadvertent impacts during construction and to mitigate for impacts to on-site wetland and riparian resources temporarily impacted by the project.***

1. Prior to construction, obtain all necessary permits from regulating agencies, such as USACE, California Department of Fish and Game (CDFW), Regional Water Quality Control Board (RWQCB), and City of Salinas;
2. Install temporary construction fencing at the edge of the construction area to prevent inadvertent impacts to herbaceous riparian/wetlands located outside the project area. This fencing should remain in-place until all project construction is complete;
3. Install erosion control measures/construction Best Management Practices (BMP's) during construction to prevent any inadvertent impacts to downstream sections of Gabilan Creek, Hospital Ditch, or nearby Natividad Creek. Such measures shall include use of silt fencing, straw wattles, and seeding/revegetation of disturbed area with a native erosion control seed mix prior to the onset of the winter rainy season;
4. Implement features of the Restoration Plan that pertain to the restored creeks, including erosion control seeding, planting of native wetland species, and allowing recruitment of other native wetland and riparian plant species. Monitor plan implementation and success of revegetation for a five (5) year period after construction;
5. Control occurrences of invasive, non-native plant species. Monitor removal and control measures for a five (5) year period after construction;
6. All refueling, maintenance, and staging of equipment and vehicles will occur at least 100-feet from any riparian habitat or water body, unless protective spill measures are implemented;
7. The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. These areas shall be outside of the riparian/wetland areas;
8. To control erosion during and after project implementation, the Applicant or successor-in-interest shall implement BMP's, as may be identified by the RWQCB; and
9. Restore areas of temporary impacts with an appropriate assemblage of native riparian, wetland, and upland vegetation suitable for the areas of temporary impacts.

Impacts to Breeding Birds

Construction activities have the potential to cause direct and indirect impacts to nesting migratory birds and raptors within the project area, if any are present. Removal of vegetation, grading, and increased noise and dust from construction activities has the potential to indirectly impact nesting birds potentially resulting in the abandonment of nests by parent birds, and death to eggs or nestlings. This potential impact is considered significant, yet can be avoided with

implementation of Measure BIO-2.

Recommended Measure BIO-2. ***Avoid direct and indirect impacts to breeding birds. To avoid impacts to migratory birds and raptors that may be present in the project area, it is preferable that ground disturbance (including stripping, vegetation removal, grading, and excavation) be scheduled for the period of September 1 to February 1 of any given year.***

If project activities during the nesting season (February 1 through September 1) of protected raptors and other avian species are unavoidable and are scheduled during the nesting season, a focused survey for active nests of such birds shall be conducted by a qualified biologist within three (3) days prior to the beginning of project activities. Surveys shall be conducted in all suitable habitat located at project work sites, in staging, storage and soil stockpile areas, and along transportation routes. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for other small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos. Surveys shall be conducted at the appropriate times of day, and during appropriate nesting times and shall concentrate on areas of suitable habitat. If a lapse in project activities of seven (7) days or longer occurs, another focused nesting bird survey will be required before project activities can be reinitiated. If nesting birds are identified during pre-construction surveys, an appropriate buffer shall be imposed within which no construction activities or disturbance will take place (generally 300 feet in all directions). A qualified biologist shall be on-site during work re-initiation in the vicinity of the nest offset to ensure that the buffer is adequate and that the nest is not stressed or abandoned to comply with the Fish and Game Code (FGC) of California and the federal Migratory Bird Treaty Act (MBTA) of 1918. No work shall proceed in the vicinity of an active nest until such time as all young are fledged, as determined by the qualified biologist, or until after September 1 (when young are assumed fledged).

Impacts to Special Status Species

The project area has a low potential for special status wildlife species. The low potential is due to the degraded condition of both Gabilan Creek and Hospital Ditch within the project area, the lack of structurally diverse vegetation, and the long-term use of the area for row crop agriculture. Nevertheless, there is a potential for special status wildlife to be present in the project area at the time of construction. Avoidance and minimization measures are identified in Measure BIO-3 to avoid impacts to special status wildlife species.

Recommended Measure BIO-3. ***The following measures shall be implemented to avoid, minimize and mitigate for impacts to special status wildlife species during project construction:***

1) Prior to construction, obtain all necessary permits and authorizations from CDFW, Service and NMFS.
2) Implement all avoidance, minimization and mitigation measures as outlined by regulating agencies;
3) The following measures shall be implemented to avoid, minimize and mitigate potential impacts to listed California red-legged frog and California tiger-salamander (listed species):
   a) At least 30 days prior to the onset of activities, the Applicant or Project Proponent shall submit the name(s) and credentials of qualified biologists to the United States Fish and Wildlife Service (USFWS) and CDFW. The Applicant or Project Proponent shall submit the name(s) and credentials of the biologists who would conduct activities specified in the

following measures. No project activities shall begin until proponents have received written approval from the USFWS and CDFW that the biologist(s) is qualified to conduct the work.

b) A USFWS and CDFW-approved biologist shall survey the work site no more than 48-hours before the onset of activities. If species are found, the approved biologist shall relocate the animals to any area of suitable habitat either upstream or downstream and well away from the project work area. Only Service and CDFW-approved biologists shall participate in activities associated with the capture, handling, and moving of listed species.

c) Before any activities begin on a project, a USFWS and CDFW-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of listed species and its habitat, the importance of the species and its habitat, general measures that are being implemented to conserve the species as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

d) A USFWS and CDFW-approved biologist shall be present at the work site until such time as all removal of the listed species, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on-site compliance with all minimization measures. The USFWS and CDFW-approved biologist shall ensure that this individual receives training outlined in above No. 3 of Mitigation Measure BIO-3 and in the identification of California red-legged frogs and California tiger salamander. The monitor and the USFWS and CDFW-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the United States Army Corps of Engineers (USACE) and USFWS during review of the proposed action. If work is stopped, the USACE and USFWS shall be notified immediately by the USFWS and CDFW-approved biologist or on-site biological monitor.

e) During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

f) All refueling, maintenance, and staging of equipment and vehicles shall occur at least 20 meters from any riparian habitat or water body. The permittee shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the permittee shall prepare a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

g) A USFWS and CDFW-approved biologist shall ensure that the spread or introduction of invasive exotic plant species shall be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project areas shall be removed.

h) Project sites shall be revegetated with an appropriate assemblage of native riparian, wetland, and upland vegetation suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for review and approval by the USFWS and USACE. Such a plan must include, but not be limited to, location of the restoration, species to be used, restoration techniques, time of the year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.

i) The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas.

j) Work activities shall occur during periods specified by above listed permitting agencies.
k) To control erosion during and after project implementation, the Applicant shall implement best management practices, as may be identified by RWQCB.
l) Where the work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than five (5) millimeters (mm) to prevent the listed species from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

4) The following measures shall be implemented to avoid and minimize potential impacts to steelhead and chinook salmon (listed species).
   a) During construction, a USFWS or National Marine Fisheries Service (NMFS)-approved biologist shall remove from within the project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes that are encountered.
   b) A dewatering structure shall be installed and water will be directed away from the instream work area through a minimum 10-inch diameter pipe. Water will be diverted downstream into a reach of creek below the work area. The project's engineering plans will identify the diversion structure, cross-section diagram, diversion pipe location, and dewatering plan details.
   c) Dewatering activities may require the temporary relocation of fish and larval or neotonic salamanders. In case any fish are found on the project site, the following measures will be implemented to minimize potential fish mortality during relocation activities:
      1. Block nets will be placed at the upper and lower extent of the diversions to ensure that salmonids upstream and downstream do not enter the areas proposed for dewatering. Keep the intake/inlet screened for the duration of construction to prevent fish passage into the diversion pipe.
      2. If electrofishing techniques are utilized during fish relocation activities, activities will comply with NMFS' Backpack Electrofishing Guidelines (June 2000) available at http://www.fwspubs.org/doi/suppl/10.3996/112016-JFWM-083/suppl_file/fwma-08-01-30_reference+s02.pdf.
      3. Field supervisors and crew members must have appropriate training and experience with electrofishing techniques. Training for field supervisors can be acquired from programs such as those offered from the U.S. Fish and Wildlife Service – National Conservation Training Center (Principles and Techniques of Electrofishing course).
      4. A crew leader having at least 100 hours of electrofishing experience in the field using similar equipment must train the crew. The crew leader's experience must be documented and available for confirmation; such documentation may be in the form of a logbook.
      5. Electrofishing may not be performed if water temperatures exceed 18-Celsius, or could reasonably be expected to rise above this temperature during the activities.
      6. At least one (1) assistant shall aid the biologist during the electrofishing by netting stunned fish and other aquatic vertebrates.
      7. Each electrofishing session must start with all equipment settings (voltage, pulse width, and pulse rate) set to the minimums needed to capture fish. These setting should be gradually increased only to the point where fish are immobilized and captured, and not allowed to exceed the specified maxima: Voltage = 100V (Initial) – 400V (Max); Pulse width = 500 mS (Initial) – 5 mS (Max); Pulse rate = 30 Hz (Initial) – 70 Hz (Max).
      8. A minimum of three (3) passes with the electrofisher will be utilized to ensure

maximum capture probability of salmonids within the area proposed for dewatering, unless the number of fish captured in the second pass is less than 10-percnt of the first pass. In that case, two (2) passes are adequate. If fish are present on any pass, a minimum of 20 minutes will separate the beginning of each pass through the project reach to allow time for fish that are not captured to become susceptible to the electrofishing again.

9. All captured fish will be held in water with temperatures not greater than ambient in-stream temperatures. If cooling is uses, water temperatures will be maintained not more than three (3) degrees Celsius less than ambient in-stream temperatures. All captured fish will be held in well-oxygenated water, with a dissolved oxygen level of not less than seven (7) parts per million.
10. Prior to release, the following information shall be recorded: 1) list fish species, 2) visual determination of age, 3) describe injuries and fatalities by age class, 4) document successfully relocated fish by age class for each relocation site, and 5) document date and time of release of fish to each relocation site.
11. Fish shall be subject to the minimum handling and holding times required. All captured fish will be allowed to recover from electrofishing and other capture gear before being returned to the stream. All captured fish will be processed and released prior to any subsequent electrofishing pass or netting effort.
12. All capture fish will be released in the best available habitat in closest proximity to the work area, preferably upstream of the block nets to facilitate redistribution into dewatered areas following construction activities.

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Cultural Resource Assessment:

Carr Lake Project at 618 Sherwood Drive in Salinas, Monterey County, California

Prepared for Big Sur Land Trust

ALBION

FEBRUARY 2021

Exhibit 48

Cultural Resource Assessment:

Carr Lake Project at 618 Sherwood Drive in Salinas, Monterey County, California

FEBRUARY 2021
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Photo Credit: Hannah Ehrlich

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Executive Summary

In December 2020, Big Sur Land Trust contracted with Albion Environmental, Inc. (Albion) to conduct a cultural resource assessment of a 73.1-acre Project Area, located at 618 Sherwood Drive (APNs 003-212-007, 003-212-015, 003-212-016, 003-821-033, and 261-191-001) in Salinas, California. The Project proposes the restoration of Carr Lake and development of a new public park (Project). Specific Project objectives include the creation of a six-acre neighborhood park offering a variety of amenities and recreational activities; the restoration and enhancement of 67 acres of land for improved wetland and riparian fish and wildlife habitats with public access trails; improvement of water quality through natural physical and biological enhancement and stormwater treatment using green infrastructure; and improvement and maintenance of flood conveyance and capacity. The Project requires permits from the City of Salinas, and the Project is subject to environmental review, including an assessment of archaeological resources. Moreover, the Project must comply with the California Environmental Quality Act (CEQA). As such, it is necessary for the Project to determine if it will have an effect on historical resources under CEQA, which includes archaeological resources.

To comply with CEQA requirements, Albion completed the following tasks: (1) background historical research, including archival maps and photos and a records search at the Northwest Information Center (NWIC), extending to a quarter mile beyond the Project Area; (2) pedestrian field survey of the entire Project Area to identify any previously unidentified archaeological resources; (3) presence/absence testing; and (4) a cultural resources report documenting the methods and results of each task, including identifying and determining potential effects on archaeological resources within the Project Area and making recommendations on how to address any effects.

The records search revealed that one cultural resource study has been conducted within a small section of the southwest corner of the Project Area. This study was an architectural/historical field study, and according to NWIC, the location of this study is only approximate. It is Albion's judgement that this study likely did not encompass any of the current Project Area and instead was conducted within the immediate vicinity of the Project Area. In addition, the record search revealed one previously documented cultural resource within a quarter-mile of the Project Area, a historical portion of Highway 101. However, no previously recorded cultural resources were identified within the Project Area boundaries.

Archival and background research revealed that the Project Area is the historic location of Carr Lake and has been subject to multiple large-scale modifications for over a century, in the form of agricultural use and, especially, water management projects undertaken to control both native wetlands and natural flooding that occurred seasonally. Historic reclamation maps indicate a consistent effort that essentially channelized a series of creeks that fed Carr Lake to a degree that these historic channels appear to remain located and arrayed just as they did more than a century ago. Nevertheless, periodic flooding, as recent as the last 30 years, has kept the Project Area an undeveloped oasis within a sprawling city, used only for agriculture.

The results of Albion's pedestrian survey failed to yield evidence of historic-era cultural resources within the Project Area that could be considered historical resources under CEQA. An isolated surface find of two marine shells was the only evidence of precolonial cultural material within the Project Area. The subsequent subsurface testing of the Project Area, and specifically in and around the area of the precolonial surface finds, failed to locate anthrosols, features or intact cultural deposits that may indicate a precolonial archaeological site presence in the Project Area. The items that were recovered were on the surface or within the upper 20 centimeters of the surface, and due to the history of the landscape were not the remains of a primary deposit. Moreover, the intensive cultivation of the Project Area, resulting in regular plowing of the clay soil, results in the dissemination of any deposits on the surface or within the deep plow zone (a minimum of 20 cm [eight inches]), as evidenced by the ever-present modern trash debris visible over the entirety of the Project Area and recovered as deep as 60 centimeters below surface (cmbs) in many of the archaeological test units during the subsurface investigation. A consistent deposit of fragmentary concrete, glass, ceramics, plastic, and metal were observed on the surface, but all this material is less than fifty years old and is a product of recent farming activities and littering.

Moreover, the channels in the Project Area appear to correspond, at least approximately, with channels created over the last century-plus to reclaim the area for agriculture, but these channels retain no aspects of their historic construction and in fact are regularly dredged and maintained for modern use, so they too are not considered a historical resource under CEQA. The current study has sufficiently investigated the Project Area, and based on these findings, it is Albion's judgment that the development of the Carr Lake Project will not cause an adverse effect to a historical resource, and no further archaeological studies are warranted under CEQA.

Overall, given the lack of substantial postcolonial occupation visible in historic imagery from the nineteenth and early twentieth centuries, the lack of previously documented cultural resources recorded within the Project Area, the lack of intact archaeological resources uncovered during Albion's pedestrian survey and subsurface investigation, and the fact that the majority of the Project is located within the historic lakebed, the potential for buried archaeological deposits within the Project Area is low. However, there is a portion of the western Project Area that is moderately sensitive to contain buried archaeological deposits. Since the western portion of the Project Area holds low to moderate sensitivity for cultural resources, Albion recommends that a qualified archaeologist and a representative from the local Native American community monitor all initial ground-disturbing activities associated with the development project in a manner outlined in the Archaeology Monitoring Plan.

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In December 2020, Big Sur Land Trust contracted with Albion Environmental, Inc. (Albion) to conduct a cultural resource assessment of a 73.1-acre Project Area, located at 618 Sherwood Drive (APNs 003-212-007, 003-212-015, 003-212-016, 003-821-033, 261-191-001, 261-191-001) in Salinas, California. The Project proposes the restoration of Carr Lake and the development of a new public park (Project). The Project requires permits from the City of Salinas, and the Project is subject to environmental review, including an assessment of archaeological resources.

This report documents the results of a Phase I cultural resource inventory and an Extended Phase I subsurface investigation of the Project Area. Albion's Phase I cultural resource inventory included archival research, a review of records from the Northwest Information Center (NWIC), and an intensive surface survey of the Project Area. The Extended Phase I investigation entailed excavation of two Shovel Probes (SP) and eight Auger Probes (AP) to test for the presence/absence of subsurface cultural resources.

The investigation was designed to address the treatment of cultural resources under current California Environmental Quality Act (CEQA) guidelines (Public Resources Code 21000 et seq.). This includes (1) identification of significant resources, (2) determination of significant impacts to said resources, and (3) development of any necessary mitigation measures. All work was conducted in accordance with guidelines and regulations set forth in CEQA.

The records search was conducted by Albion in December 2020. Albion Principal Archaeologist Sarah Nicchitta, MA, supervised the entire project. Ms. Nicchitta has over 12 years of experience working in California archaeology and cultural resource management. She received her Master's degree in Anthropology from the University of California at Santa Barbara in 2011, and she meets the U.S. Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61) for precolonial archaeologists. Albion Archaeologist Robert Johnson-Ramirez led the field survey team and has over five years of experience working in California archaeology and cultural resource management. Mr. Johnson-Ramirez was assisted by Albion archaeologists Hannah Ehrlich, Cris Lowgren, and Paul Rigby, and they conducted the pedestrian survey on January 5, 2021. Albion Archaeologist Cris Lowgren led the field excavation team and has over 25 years of experience working in California archaeology and cultural resource management. Mr. Lowgren was assisted by Albion archaeologists Hannah Ehrlich, Ryan Phillip, Kaya Wiggins, and Paul Rigby, and they conducted the test excavations between January 21–22, 2021.

Project Information

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PROJECT LOCATION

The Project Area is located at 618 Sherwood Drive (APNs 003-212-007, 003-212-015, 003-212-016, 003-821-033, and 261-191-001) in Salinas, California, measures approximately 73.1 acres and is located on flat agricultural land (Figure 1 and 2). The Project Area is located in the center of the community of Salinas, at approximately 30 feet above sea level. The Project Area is bound to the south by the Salinas Union High School District Property, Sherwood Drive to the west, residential neighborhoods accessed by Natividad Road to the northwest, and privately owned agricultural land to the east. A reclamation ditch cuts through and borders some of the Project Area, connecting Hospital, Gabilan, Natividad, and Alisal Creeks. Rural agricultural land and residential neighborhoods are found within the vicinity of the Project Area.

Soils mapped in the Project Area include a variety of soils such as Clear Lake Clay, Chualar Loam, and Cropley Silty Clay (USDA 2019). Clear Lake Clay is characterized as a poorly drained basin alluvium derived from igneous, metamorphic, and sedimentary rock over floodplain alluvium derived from igneous, metamorphic sedimentary rock. Chualar Loam is characterized as well drained loamy alluvium derived from igneous and metamorphic rock. Cropley Silty Clay is characterized as well drained silty and clayey alluvium derived from sedimentary rock.

PROJECT DESCRIPTION

In 2017, Big Sur Land Trust, the Project proponent, purchased 73 acres within the Carr Lake basin in Salinas with the intent of creating a new multi-benefit park and open space in the heart of Salinas. The components of the Project include (1) a new neighborhood park with a variety of amenities that will benefit local residents and (2) restoration of the land to thriving riparian, freshwater marsh, and upland habitat, as well as offering access to a natural environment. Once constructed, the entire park will be open to the public. The Project objectives are as follows:

- Create a 6-acre neighborhood park that offers a variety of amenities and recreational opportunities.
- Restore and enhance 67 acres of land to improve wetland and riparian fish and wildlife habitat with public and maintenance access via trails.
- Improve water quality through enhancement of natural physical and biological processes and constructed stormwater treatment green infrastructure.
- Maintain or improve flood conveyance and capacity.

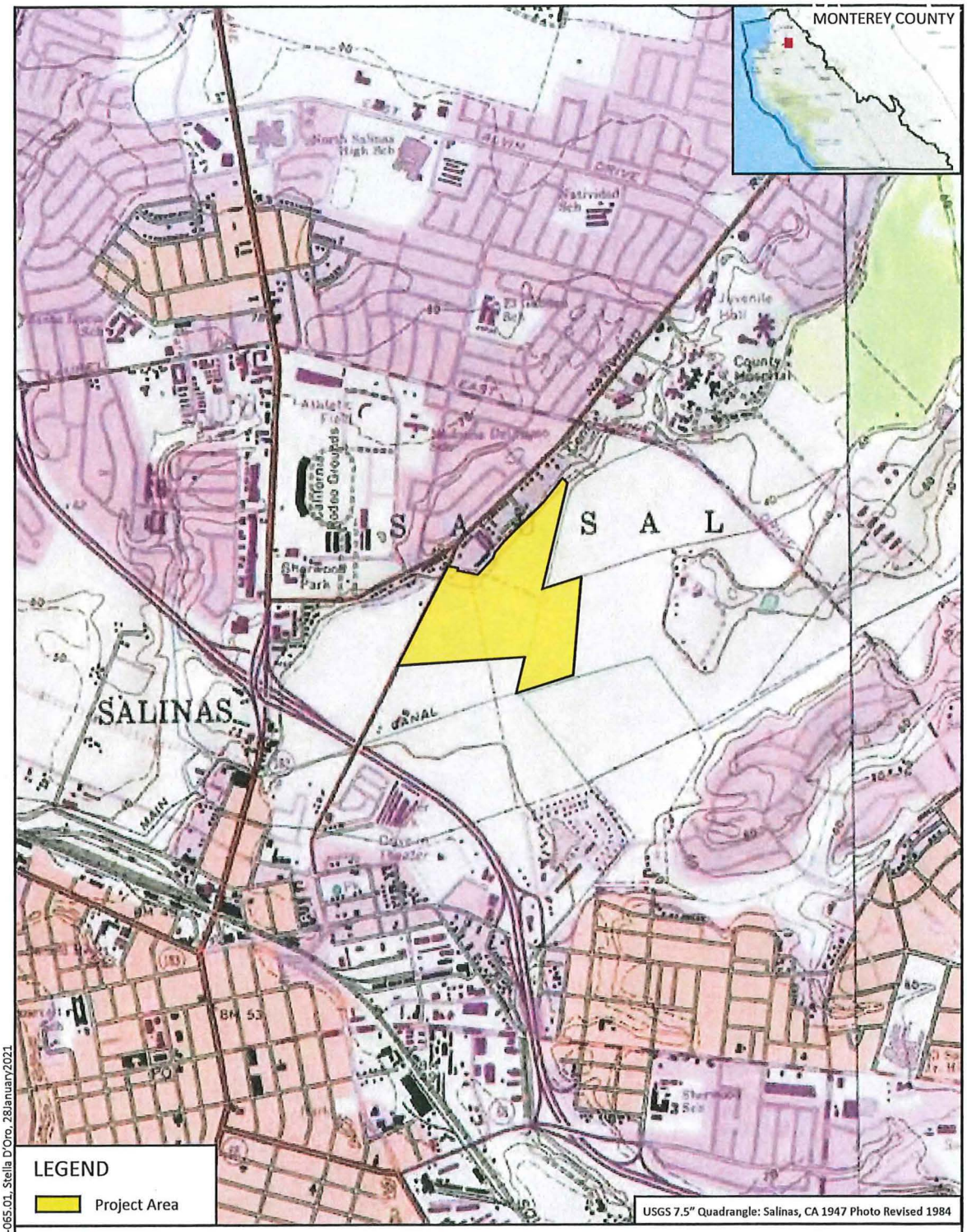

Figure 1. Project vicinity map.

File name: Figure_1.ai, J2020-065.01, Stella D'Oro, 28January2021

File name: Figure_2_ProjectLocation.ai, J2020-065.01, Stella D'Oro, 28January2021

Figure 2. Project location map.

The Project has currently been designed to a 30% level through a robust community engagement process that incorporated ideas and needs of the local community. Project ideas were gathered from local residents at community events held on the property, through specific outreach activities and through a series of five public meetings held at Sherwood Hall during 2018 and 2019. This input was incorporated into the design and refined after each meeting, with an opportunity for the public to review and comment after each design revision to achieve the current 30% design. These designs can be found in Appendix A.

TRADITIONAL NEIGHBORHOOD PARK

The traditional park area is proposed on six acres abutting Sherwood Drive above the 100-year flood plain. The open space, public access, and park play spaces will be a valuable resource to the neighborhood and community. The park will feature grass open space, walking paths, playground, picnic tables, benches, play courts, skate spot, restrooms, dog play area, and parking.

Park access will be offered through the existing La Posada Drive entrance. The 30% design includes 48 parking spaces, as well as bus drop-off and parking at the north side of the site. An additional 13 parking spaces are proposed in a new parking lot with access off Sherwood Drive at the southern edge of the park. Sewer, water, stormwater, and electric are available via site easements. An existing site irrigation pump and well will be utilized, if practical, for areas needing temporary and permanent irrigation.

Two existing agricultural storage buildings are proposed for removal as a part of this project. A third agricultural storage building (approximately 4,000 square feet) will be removed and replaced with a new structure utilizing a similar building footprint in that location. The intention of this community serving space will be to support uses such as community meetings, educational programming, office space, equipment storage and/or offer additional bathroom facilities. Conceptual designs for this building have not been developed but will be submitted to the City for approval once complete. Until such time of replacement, this existing building will remain in its current condition and configuration for continued use for storage and infrequent events related to Big Sur Land Trust's community programs via Temporary Use of Land (TULP) permits. Two residential homes on the property will remain and are not included in this permit application. All facilities will drain to green-infrastructure elements that encourage bioretention treatment and infiltration of stormwater runoff.

Limited fencing is proposed at the site perimeter. Site lighting will be provided for security at the parking areas and the primary path through the park.

FLOODPLAIN RESTORATION

The proposed restoration area objectives are to enhance natural habitat, improve water quality through enhancement of natural physical and biological processes and constructed water treatment infrastructure, and maintain or improve flood conveyance and capacity. The proposed Project incorporates design elements to meet these design objectives. Along Gabilan Creek the proposed Project includes excavating and grading a new geomorphically appropriate channel within an inset floodplain. Along Hospital Creek the proposed Project includes excavating and grading a treatment wetland, a new main channel with associated backwater channels, and a seasonal wetland. These proposed Project elements will slow the flow of water and aid in improving water quality, while also

creating natural habitat for fish and wildlife. See attached Design Basis Memorandum for a more detailed description of the Floodplain Restoration elements.

In addition to the treatment wetland, there will also be a trash capture system at the upstream end of Hospital Creek as it flows into the proposed Project area. Seasonal maintenance will be needed to clear debris from this feature. Additional maintenance will need to be done every few years (depending on the amount of precipitation) to remove excess sediment deposited in the treatment and seasonal wetlands, as well as at the upstream end of Gabilan Creek. The existing Gabilan and Hospital Creek ditches abutting neighboring farm properties will be left in place and modified to accommodate runoff and farm drainage systems from the neighboring farms. No grading or drainage channel changes are proposed beyond the limits of the Project site.

Construction of the proposed Project (both the neighborhood park and the restoration area) will require approximately 180,000 cubic yards of excavation and 34,000 cubic yards of fill placement. The fill will be used to create micro-topography throughout the site and to elevate public access trails. There are limited options for use of the remaining 146,000 cubic yards of excavated soil on site, because most of the site is within a designated FEMA floodway and fill placement will need to be strategically considered to assure that there are no adverse flood impacts locally or regionally.

The vegetation and planting plan for the floodplain restoration areas will include a detailed plant species palette, planting and irrigation schedule, design targets and specific management actions for each of the three main habitats created: freshwater wetland, seasonal wetland and upland grassland. Restored areas will be planted via a combination of erosion control seeding, nursery stock of plants and trees and natural recruitment. While most of the Project Area will not require supplemental water, a few small areas will need irrigation in the first few years after construction. The planting plan will utilize adaptive management to allow flexibility to adapt the plan as needed to maximize restoration success.

TRAILS

A recreational trail loop system will be constructed with excavated soil from the site and the finished surface will be an all-weather surface to support walking, bicycling, park maintenance and security vehicles. The path is 12 feet wide with 8 feet of aggregate surface and 2-foot-wide shoulders of compacted earth. The trail will traverse the traditional neighborhood park as well as the restoration area. Trail segments will include slightly elevated boardwalk and stream channel bridges. Trails, boardwalks and bridges will be designed to withstand inundation during high-flow events. The trail system has been designed to maximize recreation opportunities as well as facilitate future operations and maintenance of the site and offer access to security vehicles, as needed.

EXISTING LAND USE AND PROPOSED CHANGES

This proposed Project includes restoring land currently in agricultural production to riparian and wetland habitat. The current farmable area is 62.8 acres, the entirety of which is proposed for restoration. Existing land uses are summarized in Table 1 and proposed land uses are summarized in Table 2.

Table 1. Details of Existing Land Use.

Existing Land Use	Acres
Farmable area	62.8
Internal roads	4.6
Buildings, equipment yard and native plant garden	3.3
Drainage ditches	2.4
Total	73.1

Table 2. Details of Proposed Land Use.

Proposed Land Use	Acres
Open space/restoration area	62.8
Traditional park area (includes program elements, pathways and landscape areas	4.4
Pedestrian and maintenance trails and bridges	2.8
Vehicle access, parking areas, and parking landscape	1.3
Buildings/restrooms	0.3
Total	73.1

The Zoning District for the proposed Project Area is "Agriculture" and the Project proponent is requesting a zoning amendment to change the designation to "Parks" (or the most appropriate designation). The current General Plan Land Use Designation is "Park" and the proposed Project is consistent with this designation. The current General Plan identifies two Proposed Major Arterials—plan lines—that significantly impact the Project Area. At the request of City staff, the Project proponent has refrained from designing any hardscape portions of the Project within the vicinity of these General Plan proposed road concepts. The Project proponent is requesting a General Plan Amendment to relocate the alignment of the two proposed arterials to create less of an impact on the proposed Project.

The overall Project design has taken into account the need to minimize impacts to adjacent agricultural operations, both during construction and over the longer term.

MAINTENANCE AND MANAGEMENT

The Project proponent has designed the proposed Project with long-term maintenance and management considerations in mind and will develop a robust adaptive maintenance and management plan as part of the final design process prior to Project construction.

REGULATORY CONTEXT

As the proposed Project requires a General Plan amendment and permits from the City of Salinas, it must comply with CEQA. As such, it is necessary for the Project to determine if it will have an effect on historical resources under CEQA, which includes archaeological resources.

The proposed Area of Potential Effect (APE) for this Project includes all areas that may experience ground disturbance as a result of Project activities, including staging of vehicles, equipment, and construction materials.

In order to comply with CEQA requirements, Albion completed the following tasks:

1) Background historical research, including archival maps and photos and a record search at the Northwest Information Center (NWIC), extending to a quarter mile beyond the Project APE. The goal was to identify any known or potential archaeological resources in or near the APE.
2) Pedestrian field survey of the entire APE to identify any previously unidentified archaeological resources.
3) Excavation of Shovel Probes and Auger Probes to test for the presence of subsurface cultural resources.
4) Cultural resources report documenting the methods and results of each task, including identifying and determining potential effects on archaeological resources within the APE and making recommendations on how to address any effects.

The Albion team conducted investigations per standards and guidelines outlined in CEQA and the Secretary of the Interior's Standards for Archaeological Documentation. These investigations were completed under the supervision of Sarah Nicchitta, MA, who has been a professional archaeologist for over 12 years and exceeds the Secretary of the Interior's Professional Qualifications Standards.

NATIVE AMERICAN PARTICIPATION

The City of Salinas (City) initiated Assembly Bill 52 and Senate Bill 18 tribal consultation in the fall of 2020. To date, the Ohlone/Costanoan-Esselen Nation (OCEN), is the only tribal group to formally consult with the City for the Carr Lake Project. Therefore Albion's cultural resource assessment did not include tribal outreach or Native American Heritage Commission outreach.

It is Albion's understanding that through consultation, OCEN requested that any precolonial cultural materials discovered during any archaeological studies be transferred to them in perpetuity. Albion confirmed with Big Sur Land Trust, the landowner, that they agree to fulfill this request. Albion will facilitate the transfer of any precolonial cultural materials uncovered during our studies to Ms. Louise J. Miranda Ramirez, Tribal Chairwoman Ohlone/Costanoan-Esselen Nation (OCEN).

Additionally, through consultation, OCEN requested that a Native American Monitor of the Ohlone/Costanoan-Esselen Nation, approved by the OCEN Tribal Council, be used for this Project. Albion contracted with OCEN and an approved member of OCEN, Mike Casares, monitored Albion's subsurface testing fieldwork.

Sources Consulted

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RECORD SEARCH

Jessika Akmenkalns, PhD, Researcher for the Northwest Information Center (NWIC), provided the results of a records search for a quarter-mile (0.25-mile) radius of the Project Area on December 17, 2020 (Appendix B). Albion also conducted research of the area and located an additional cultural resource just outside the 0.25-mile radius. In addition to official maps and records, the following sources of information were consulted as part of the records search:

- National Register of Historic Places
- California Register of Historical Resources—Determined Eligible Properties
- California State Historic Property Data Files
- California Points of Historical Interest
- California Historical Landmarks
- Caltrans State and Local Bridge Survey
- Office of Historic Preservation Archaeological Determinations of Eligibility
- Special Research Collections at the UCSB Library (Aerial Images and Historic Maps)

PREVIOUSLY CONDUCTED CULTURAL RESOURCES STUDIES IN THE PROJECT AREA

According to the NWIC, one cultural resource study has been conducted within a small section of the southwest corner of the Project Area (Table 3). This study was an architectural/historical field study, and according to NWIC, the location of this study is only approximate. It is Albion's judgement that this study likely did not encompass any of the current Project Area and instead was conducted within the immediate vicinity of the Project Area.

Table 3. Previous Cultural Resource Studies Within the Project Area.

NWIC Report	Title of Study	Author and Year
S-43489	Architectural Evaluation Study of the Downtown Salinas Project, AT&T Mobility Site No. CNU3535, 220 Bridge Street, Salinas, Monterey County, California 93941	(Supernowicz 2013)

Additionally, the record search identified three cultural resource studies that have been previously conducted within a 0.25-mile radius of the Project Area (Table 4). These studies consisted of archaeological assessments or construction monitoring, and two of the studies noted historic materials, including a barn, in the vicinity. Based on the record search results, it is Albion's judgment that the Project Area and immediate vicinity are generally understudied for the presence of cultural resources.

Table 4. Previous Cultural Resource Studies Within 0.25-Mile Radius of the Project Area.

NWIC Report	Title of Study	Author and Year
S-03302	Archaeological Impact Evaluation of proposed site of Municipal Tennis Courts, Sherwood Park (letter report)	(Flynn 1976)
S-35311	Letter Report on Monitoring Findings for the Salinas Municipal Aquatic Center	(Breschini 2008)
S-38928	Archaeological Assessment—Laurel Natividad Conceptual Alternatives Development Projects, Salinas, Monterey Country, California (letter report)	(Busby 2009)

PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN 0.25 MILES OF THE PROJECT AREA

The record search identified no previously recorded cultural resources within the Project Area and one previously recorded cultural resource within a 0.25-mile radius of the Project Area; Albion's review of their internal cultural resource database located an additional resource a few hundred feet outside the 0.25-mile radius of the Project Area (Table 5). Both of these previously recorded cultural resources are historic-era in nature and detailed below.

Table 5. Cultural Resource Within 0.25-Mile Radius of the Project Area.

Trinomial No.	Description	Reference	Distance from Project
CA-MNT-1058H*	Temporary detention camps for Japanese Americans during World War II; California Registered Historical Landmark	(Arbuckle 1984)	~500 m northeast of Project Area
CA-MNT-2050H	Portion of historic Highway 101.	(Berg and Mikesell 1999)	~400 m southeast of Project Area

*Resource identified by Albion just outside 0.25-mile radius of Project Area

CA-MNT-1058H is located at the current site of the Salinas Sports Grounds which was called the California Rodeo Grounds, Salinas, when first recorded. A Cabrillo College student by the name of T. McGregor recorded the site in the 1980s, describing it as a temporary detention camp for Japanese Americans. It has since become a California Registered Historical Landmark. The monument is dedicated to the 3,586 Monterey Bay area residents of Japanese ancestry who were temporarily

confined to the grounds between April and July of 1942. The survey record indicates that most of those interred at the camp were American citizens. These people were detained, without charge or trial, and were later transported to permanent camps. The survey record notes: "May such injustice and humiliation never recur" (Arbuckle 1984).

CA-MNT-2050H is a portion of the historic alignment of State Route 101, located just northeast of the San Benito County line, south to its intersection with Dunbarton Road in Northern Monterey County. The site was recorded by Berg (Far Western) and Mikesell (JRP) during a Caltrans transportation enhancement project, for which they surveyed portions of Highway 101 in Monterey, San Benito, San Luis Obispo, and Santa Barbara Counties. The site was evaluated by Rogers and Wee of JRP Historical Consulting Services in 2002, during which they determined the portion of the highway was ineligible for listing on both the California and National Registers of Historic Places. In an earlier evaluation of a nearby portion of Highway 101, Rogers and Wee received State Historic Preservation Officer concurrence for their ineligibility determination. The original Highway alignment near the Project Area was built as a two-lane road in 1932. In 1946, Caltrans added two lanes, which remain in the current alignment, although pavement has been replaced and maintenance has occurred since that time.

HISTORICAL AERIAL IMAGERY AND MAPS

Albion also conducted online research of historic maps and aerials and found information pertinent to the Project Area from the following:

- 1820 Diseño map of Rancho Sausal, GLO No. 264, Monterey County, California
- 1906 reclamation map
- 1919 Reclamation District No. 1665 engineering plans
- 1941 aerial photograph

Environmental and Cultural Context 4

ENVIRONMENTAL CONTEXT

The study area is within the Salinas Valley, a fluvial valley trending northwest-southeast and located within the Southern Coast Range physiographic province and passing through parts of Monterey, San Benito, and San Luis Obispo Counties. The Salinas Valley was formed by fluvial action of the Salinas River, which is the largest river on the Central Coast and runs in a north and northwesterly course approximately 170 miles from its headwaters near Santa Margarita in San Luis Obispo County to its mouth at the south-central edge of Monterey Bay, where it outflows into a lagoon adjacent to the Pacific Ocean. The Salinas Valley is bound by the Santa Lucia and Sierra de Salinas Ranges to the southwest and the Gabilan and Diablo Ranges to the northeast, all part of the Southern Coast Ranges.

The Southern Coast Range consists of a series of longitudinal mountains and valleys, which parallel the coastline and separate the Pacific Ocean from the Central Valley. It runs for nearly 250 miles, from the San Francisco Bay Area to the Santa Ynez Mountains of the Transverse Ranges in the south. The range is highly folded and fractured and is generally attributed to events associated with subduction of the Pacific Plate beneath the western border of North America. Steep slopes with exaggerated relief are common where the mountains rise abruptly from the sea. Overall, however, this range is not particularly high. The range averages 760 meters in height, with occasional peaks reaching over 1,830 meters, most notably in the Santa Lucia Range (Burcham 1957). The hydrology of the Southern Coast Range is complex, and the Salinas Valley demonstrates this. Due to the parallel faults and folds of the range, many river systems run northward and empty into the Pacific Ocean from their source. The Salinas River, which formed the Salinas Valley through fluvial action, is an exemplar of this type of river system (Harden 2003).

Geologically, the Southern Coast Range is a diverse region consisting predominantly of marine-derived Miocene and Pliocene-age sedimentary rocks (Alt and Hyndman 2000; Christensen 1966; Compton 1966; Dupre 1991; Hart 1976; Lewis et al. 1991; Norris and Webb 1976; Page 1966). However, the eastern portion of the South Coast Ranges is much older and is characterized largely by the Cretaceous-age Franciscan formation, which consists of sandstone, chert, serpentine, basalt, greenstone, shale, and blue schist. To the west is the so-called Salinan block, a large zone of granitics and metamorphic rocks. The Salinan block dates from the Paleozoic and consists of metamorphosed marine sedimentary rocks including schist, quartzite, granulite gneiss, granofels, and marble. West of the Salinan block is the Nacimiento fault, which trends northwest to southeast and forms the eastern boundary of the Salinas Valley area. Much of the exposed rocks in the Southern Coast Ranges, however, belong to the so-called Paso Robles formation, which dates to the Plio-Pleistocene era and is made up chiefly of conglomerate and sandstone but also includes some mudstone (Burch and Durham 1970). Quaternary stream deposits, consisting of unconsolidated gravel, clay, and silt,

overlie the Paso Robles formation. The mountain ranges bordering the Salinas Valley are largely composed of the Paso Robles formation.

PRECOLONIAL CONTEXT

In recent years, many contemporary archaeologists working along the central coast have adopted the chronological sequence proposed by Jones et al. (1996b). This sequence recognizes six major precolonial periods of cultural adaptation extending beyond the last 10,000 years of human occupancy. The proposed temporal periods emphasize changes in human adaptation over time and focus largely on the shifting significance of coastal vs. terrestrial habitats and the associated artifact assemblages. Jones et al. (2007) present a more recent application of this framework along with a regional overview.

The initial period in this sequence, termed the Paleoindian, originates in the late Pleistocene and continues until approximately 10,000 BP. This is followed by the Millingstone Period (10,000–5500 BP) and is recognized by increasingly abundant milling equipment (manos and metates) in the archaeological record when populations apparently followed a generalized subsistence pattern that placed an importance on coastal resources, namely shellfish. The ensuing Early Period (5500–2600 BP) was a time of new subsistence emphases that include a greater reliance on hunting and the initial exploitation of acorns. The Middle Period (2600–1000 BP) was marked by the intensification of subsistence practices, especially a greater reliance on marine and littoral foods where fish played an important role in the diet. During the Middle/Late Transition (1000–750 BP), populations in central California experienced deteriorating environmental conditions, and apparently underwent major adaptive shifts in both subsistence and settlement. Finally, the Late Period (750 BP–Historic) marks the initial appearance of numerous projectile points, including small side-notched (Desert side-notched), triangular (Cottonwood), and leaf-shaped points, representing the introduction of the bow and arrow. There is an apparent shift in settlements to interior settings while the immediate coastal environments appear to have been used for more short-term gathering and processing activities.

Indications of precolonial inhabitation of the central California coast dating to the terminal Pleistocene/early Holocene is limited. The dearth of sites dating to this antiquity may, in part, be related to progressively rising sea levels that accompanied the end of the Pleistocene and the early Holocene (Masters and Aiello 2007). Between ca. 10,000 and 8000 BP, the Elkhorn Valley was inundated by saltwater and transformed into a high energy tidal channel (Jones et al. 1996a:6). At 8,000 years ago, sea level was about 15 meters below its present level at Elkhorn Slough (Masters and Aiello 2007:49). Bickle (1978:8) estimates that sea level rise has submerged 20,000 km^2 of land along the California coast. Sea level transgression slowed after about 7,000 years ago, prompting fluvial sedimentation and tectonic uplift. Consequently, coastal sites earlier than 7000 BP may have been inundated by rising waters.

In general, researchers normally divide this early time span into two divisions: the Paleoindian (pre-10,000 BP) and the Millingstone (10,000–5500 BP). A coastal focused alternative to the large game focused Paleoindian model, the Paleo-Coastal Tradition, was first proposed by Davis et al. (1969) and later expanded upon by Moratto (1984). Although few sites or site components dating from this time period have been investigated and its presence is largely conjectural, some researchers have posited that Paleo-Coastal peoples established residences along estuaries and bay shores. Associated toolkits are suggested to be scrapers, scraper-planes, bifaces, and lack milling equipment. Jones et

al. (1996a:39) note that "the extent to which these assemblages are constituted to some unknown degree by materials mixed from more recent contexts is indicated by the occurrence of obsidian among strata assigned to these phases since none of the obsidian hydration results equate with a time depth greater than 7000 B.C." As a result, the Paleo-Coastal tradition is not readily described in the Monterey Bay area.

Coastal sites attributed to the Millingstone Period (10,000–5500 BP) are best characterized by high density shell middens—composed primarily of mussel (*Mytilus* spp.)—located adjacent to extant estuaries or near areas where paleo-estuaries once existed as a result of early Holocene sea level rise. As the name for this period implies, site assemblages generally contain abundant milling stones and hand stones (Erlandson 1991, 1994; Fitzgerald and Jones 1999), although this is not always the case (Jones et al. 2004; Jones et al. 1996b).

In addition to milling equipment, Millingstone Period sites are typified by eccentric crescents, long-stemmed projectile points, and cobble/core tools. In general, there is a low incidence of projectile points and other flaked stone. Shell beads from this time period are characterized as thick rectangular (L-series) *Olivella* beads (Glassow 1996). Erlandson (1991, 1994) has suggested that Millingstone Period groups were semi-sedentary, their diets emphasizing shellfish and small seeds. The hunting of large terrestrial game and marine mammals as well as the exploitation of fishes was apparently of minor importance. Other researchers, however, have argued that both coastal and interior habitats were exploited by early Holocene populations targeting small fauna, and a variety of grass seeds, nuts, and other inland plant taxa as well as shellfish (Jones and Richman 1995; McGuire and Hildebrandt 1994; Mikkelsen et al. 1998; Milliken et al. 1999). Jones (2003:218) argues for a more mobile settlement pattern during this time that included the exploitation of marine mammals.

The next few thousand years (between 5500 and 2600 BP) are referred to as the Early Period throughout southern and central California. Most notable about precolonial adaptations at this time are innovations in subsistence technology, especially the initial appearance of mortars and pestles (perhaps signaling acorn use) and an increase in the frequency of large side-notched and contracting-stem projectile points along with flaked stone debris. Shell beads common during this time period include thick rectangular (L-series), end-ground (B-series), and split (C-series) *Olivella* beads. The appearance of eastern California obsidian (mainly Casa Diablo) in Early Period assemblages also implies that long-distance trade and exchange relations developed during this period (Jones 1995). Jones (1995) and Jones and Waugh (1997) posit a decrease in residential mobility, which they attribute to the advent of mortar and pestle use and a clearer delineation of gender roles that accompanied a trend toward greater population circumscription. Jones and Waugh (1997) also contend that Early Period sites, in contrast to Millingstone Period sites, are found in more diverse settings, including interior, estuary, and outer coast contexts.

In terms of subsistence, mammals and fish increased in importance relative to shellfish. These resources, coupled with the addition of acorns, signified a broadening of the diet breadth. Glassow (1996:134) has pointed out that this expansion of the diet breadth was accompanied by a significant increase in labor devoted to food processing. Before acorns can be made palatable, the toxic tannic acid must be leached out of the meal, a process not required by hard seeds. Glassow (1996:134) stated, "it is likely, therefore, that people would consume acorns no more than necessary, as insurance against normal fluctuations in food resource productivity from one year to the next." While the introduction of acorns has implications for labor organization and settlement, the

peripheral role played by the resource base at this time in prehistory may relate to more of a process of "extensification" (*sensu* Beaton 1991) where new foods are introduced to the diet, rather than "intensification" where greater amounts of labor are focused on the processing of a particular resource, as is more characteristic of later precolonial times. Acorn macrofossils are recovered in lesser amounts in these early assemblages than in later ones.

The change that occurred from the Millingstone to the Early Period has traditionally been interpreted as an adaptive shift accompanying the arrival of Rogers's (1929) "Hunting Culture." In his original conception, Rogers described Hunting Culture people as a separate ethnic population more reliant upon use of the acorn and on both terrestrial and marine mammals. These Hunting peoples, he hypothesized, entered the central coast and gradually displaced the earlier populations of Millingstone-adapted peoples. This premise, however, has more recently been discounted largely in favor of the idea that observed differences in artifact assemblages are probably more indicative of seasonal or functional variability in site occupations (Erlandson 1997; Glassow 1997). Jones, moreover, views the transition from Millingstone to Hunting technologies largely as the result of population circumscription and economic intensification, an *in situ* development that reflected the shift from an earlier, mobile, more selective adaptive strategy to one emphasizing limited mobility and decreased subsistence efficiency.

Cultural changes marking the transition from the Early to Middle Period (2600-1000 BP) were much less pronounced than during the Millingstone/Early Period transition. Instead, many of the adaptive traits initiated during the Early Period continued and grew in relative importance. The use of mortars and pestles increased, as did reliance on small schooling fishes (e.g. anchovies, herring, smelt). The use of shellfish, however, appears to have steadily declined. Middle Period populations also began to focus more on the exploitation of smaller, more elusive game; sea otters and rabbits, for instance, were more important than they had been previously. Glassow (1996) and Lambert (1993) place a slightly stronger emphasis on the importance of increasingly maritime adaptations during this time, arguing that fishing and sea mammal hunting were important subsistence pursuits. Artifact assemblages are typified by large-stemmed points, mortars, pestles, handstones, and milling slabs. Shell beads include *Olivella* saucer (G-series) and saddle (F-series) types. Perhaps the most significant change in the artifact assemblage was the introduction of the circular shell fishhook. This artifact class is recovered more commonly on rocky coasts than in protected slough habitats where schooling fishes were likely captured through other means such as baskets, nets, or other trapping methods (Jones et al. 1996b:193; Strudwick 1986). Circular shell fishhooks no doubt facilitated an increase in the exploitation of fishes, but, at the same time, may have resulted in a decrease in dietary efficiency (Glassow 1990:89; Jones 2003:226), a pattern that continues throughout the Holocene. Trans-Sierran trade, especially in obsidian, appears to increase during the Middle Period. Casa Diablo obsidian, a source whose origin is east of the Sierra Nevada Mountains was the chief import in the vicinity Monterey Bay, whereas Coso obsidian is more common to the south (Jones et al. 1996:197, 199). Jones (2003:226) also notes a high frequency of sea otter (*Enhydra lutris*) bones at Middle Period sites, which he interprets as evidence of exchange in otter pelts.

It was also during the Middle Period that a few researchers (Breschini 1983; Moratto 1984; Whistler 1977, 1980) have suggested a major shift in population occurred in the Bay Area. This shift is usually viewed within an ethnolinguistic framework, whereby an indigenous Hokan-speaking population merged with or was displaced by a later Penutian-speaking population. Specifically, Breschini (1983) and Breschini and Haversat (1980) contend that ca. 2500 BP a distinct ethnic population speaking a Penutian language expanded into the Monterey Bay area. These new peoples were the precursors

of the ethnohistoric Ohlone, or Costanoans. Their settlement-subsistence pattern was characterized by low mobility, logistical organization, and a more specialized subsistence regime based primarily on the exploitation of the acorn. Breschini (1983) dubbed this the "Monterey Pattern," and stated that it was akin to a "collector" pattern. The prior language group, which Breschini argued had characterized the area since approximately 4000 years BP, was organized more around a "forager" pattern. Breschini called this the "Sur Pattern" and argued that it was typified by high mobility and a generalized adaptive pattern geared toward the exploitation of a wide range of resources and environments.

The Middle/Late Transition (1000-750 BP) is a short period of time when there appears to have been a time of rapid change in settlement organization. It is represented along the central California coast by Contracting-stemmed and double Side-notched projectile points. Small leaf-shaped points also occur alongside these larger points, though their numbers are few (Jones 2003:221). Several types of *Olivella* shell beads, including split punched (D-series), are also found. Hopper mortars make their first appearance in the archaeological record and are found in tandem with bowl mortars and pestles, as well as handstones and milling slabs. Subsistence regimes during this time demonstrate substantial differences from the previous period. Marine resources, such as fish and marine mammals, appear to have been largely dropped from native diets. Instead, populations emphasized terrestrial resources, especially small mammals and acorns. This stands in marked contrast to developments along the Santa Barbara Channel where precolonial populations underwent increasingly progressive maritime adaptations, and fishing was a major subsistence pursuit.

As originally perceived, these changes were largely considered to have resulted from an overexploitation of coastal resources accompanying the increased demographic pressures that were initiated during the Middle Period. However, more recent evidence suggests that other factors, especially environmental degradation, played a more significant role. Coinciding with the Middle/Late Transition (1000-750 BP), California and parts of western North America underwent a dramatic warming trend, known as the "Medieval Climatic Anomaly" (Graumlich 1993; Jones and Kennett 1999; Stine 1990, 1994). Researchers have identified three major environmental trends during this period: (1) changing sea temperatures (Arnold 1992; Kennett 1998; Kennett and Kennett 2000; Pisias 1978); (2) warmer summer temperatures (Graumlich 1993); and (3) decreased precipitation (Stine 1990, 1994). According to Jones (1995:223), this latter trend had especially serious consequences for precolonial coastal populations.

Serious drought after A.D. 1000 (950 BP) caused such rapid, severe deterioration of the resource base that major subsistence problems developed, causing widespread settlement shifts and resource competition. Unlike the environmental changes of the early and Mid-Holocene, technological innovations could not mitigate the environmental problems, because they developed rapidly and were severe. Jones and Ferneau (2002) posit the argument that central coast populations during this time underwent a process of "deintensification." Population growth declined, diet breadth contracted, and interregional exchange systems collapsed. In Monterey County, for example, numerous coastal sites were abandoned, and populations relocated to more interior settings (Jones 1995:215). Populations also apparently declined, perhaps as a result of resources stress, and systems of trade and exchange collapsed. Obsidian, for instance, virtually disappears from the archaeological record.

Late Period (750 BP–Historic) populations on the central coast apparently rebounded from the environmental stresses that characterized the previous period. Their subsistence practices

continued to demonstrate a terrestrial focus. Jones (1995:221), for example, indicates that the consumption of fish and other marine resources was less intensive and the extraction of mussels perhaps more selective than during the previous interval. From his analysis of several sites in Big Sur, Jones (1995:206) suggests that Late Period populations focused their subsistence activities on black-tailed deer (*Odocoileus hemionus*). This view has recently been challenged by the findings from CA-MNT-1942 (Wohlgemuth et al. 2002), where fish, including several species of clupeidae (such as anchovies and herrings), constitute significant portions of the overall faunal assemblage.

Nevertheless, it appears that Late Period habitation on the central coast shifted to inland localities (Jones and Ferneau 2002:230), and many coastal sites occupied during the Middle Period were no longer used in the Late Period, or see less intensive use (Jones et al. 1996:196; Milliken et al. 1999:153). Late period midden sites on the interior are often associated with bedrock mortars (Jones et al. 2007:140), and on the coast are more often shellfish processing sites (Jones et al. 1996:41). Population circumscription is suggested by a drop off in the diversity of obsidian sources and its use as a raw material. In fact, a decrease in the presence of Franciscan chert relative to the more locally available Monterey chert has been identified in Late Period contexts, suggesting more restricted mobility (Hylkema 1991; Jones et al. 2007:143).

Jones (1995, 2003) suggests that central coast sites dating to this time period, excluding habitation sites along productive estuaries, probably represent specialized forays made from large interior settlements. During this time, populations did not undergo transformational changes in social and political organization that led to greater complexity. Instead, human populations in these areas maintained a tribelet system of socio-political organization (Jones 1995:223). Artifact assemblages from this time are marked by contracting-stem, leaf-shaped, and small, triangular-shaped and side-notched projectile points, mortars and pestles, and a variety of late precolonial bead types, including *Olivella* lipped (E-series) and callus (K-series). Clam shell disk beads and talc schist disk beads are also common during this time. Bifacial bead drills and detritus from *Olivella* bead manufacture are also common at well sampled late period sites, suggesting bead manufacture was common and widespread, though not intensive (Jones et al. 2007:140).

ETHNOGRAPHIC CONTEXT

By the time the Spanish began extensively exploring Alta California in the 18th century, a substantial Native American population occupied the Monterey Bay area. This population, originally called Costanoan but now known as the Ohlone, occupied a relatively large area in north-central California, from the San Francisco Peninsula and the East Bay, south to the Santa Clara Valley down to Monterey, and inland south to San Juan Bautista. This area encompassed a mosaic of different habitat types, including grasslands, woodlands, chaparral, redwood forests, coastal shrub, estuaries, and tidal marshes. Miwok tribelets were to the north and northeast of their Ohlone neighbors. Yokuts tribelets were to the east. Immediate neighbors to the south of the Ohlone included the Hokan-speaking Esselen and Salinan.

The Ohlone spoke a Costanoan language, which belongs to the Utian family of the larger Penutian language stock. Speakers of Penutian inhabited north central California and included tribal groups such as the Maidu, Wintu, Miwok, and Yokuts. Anthropologists have traditionally divided the Costanoan language into eight different dialects, which Levy (1978) characterized as "different from one another as Spanish is to French."

The original name for the Ohlone, Costanoan, is a derivation of the Spanish term "costeños" or "costaños," which means "coast dwellers." In the early part of the 20th century, many anthropologists used the term "Costanoan" in reference to native peoples who once occupied the Bay Area. In 1902, C. Hart Merriam (in Heizer 1967) referred to Bay Area languages as "Olhonean," a term derived from the name of a tribelet located on the coast between San Francisco and Santa Cruz that was spelled variously as "Alchone," "Olchone," "Oljon," or "Olhon" (Heizer 1974; Levy 1978). More recently, modern descendants of Costanoan peoples have identified themselves as "Ohlone" (Bean 1994), a derivation of "Olhone," and that is the term that will be used here, except in reference to the language family.

Researchers have hypothesized from linguistic evidence that the Ohlone were relatively late entrants into the area. Anthropologists argue that the ancestors of the Ohlone originally migrated into the San Francisco and Monterey Bay areas from the San Joaquin-Sacramento River system sometime around A.D. 500 (linguistic and archaeological evidence summarized by Levy 1978:486; Bean 1994:xxi). This migration represented movement of several Penutian-speaking peoples westward into areas formerly inhabited by Hokan-speakers. Other researchers have posited a much earlier time for the movement of Penutian-speakers into the area. For example, Whistler (1977) suggests that Penutian-speakers (e.g., Miwok and Ohlone) settled in the area around 3000 B.C. Whenever the migration actually occurred, and indeed if such a migration took place, the ancestors of the ethnohistoric Ohlone were fully ensconced in the area by the Late Holocene.

Estimates of total Ohlone population during the time of European contact are varied. Kroeber (1925) suggested an estimate of 7,000 people, while Cook (1943) posited a total of about 11,000 at the beginning of the Mission Period, and Heizer (1974) and Levy (1978) estimated about 10,000. Based on Mission records, R. Milliken (1995:25) estimated a population density of about 2.5 people per square mile. In the San Francisco peninsula area, Milliken (1995:19) claimed that the earliest explorers usually encountered native villages every "three to five miles," and noted that their descriptions suggested village populations numbering from 60 to 90 persons. Elsewhere in Ohlone territory, estimates of village sizes range from 200 to 400 people. Milliken (1995:19) reported that the largest village, near Carquinez Strait, had a population of some 400 people. Other large villages were located on San Francisquito Creek (250 inhabitants), and on the coast at Point Año Nuevo (no estimate given).

By the time anthropologists like Kroeber (1925), J.P. Harrington (1985), and Merriam (1966-1967) began their systematic studies of the California Indians in the early 20th century, many of the pre-contact cultural traditions of these native groups had been forgotten. The Ohlone were no exception. They underwent cataclysmic changes during the period of Spanish colonialism and missionization. During the Mission period, the Franciscan fathers actively discouraged or banned traditional Ohlone customs, rites, and rituals. The Ohlone also suffered a major drop in population during this time. As a result of introduced diseases and a declining birth rate, the Ohlone population fell from some 10,000 in 1770 and then to less than 2,000 in 1832 Cook (1943). Despite this, some knowledge of their language, folkways, and material culture was preserved by the few surviving Ohlone. This information was supplemented by 18th century Spanish letters, diaries, and accounts. From these scattered bits of information, and archaeological investigations, ethnographers (Bean 1994; Broadbent 1972; Kroeber 1925; Levy 1978; Milliken 1995) have been able to piece together a generalized picture of traditional Ohlone culture.

The Ohlone lived in approximately 50 autonomous villages that Kroeber called tribelets (Levy 1978). The tribelet defined the basic unit of Ohlone political organization. Tribelet chiefs might be either men or women. The office was inherited patrilineally, usually passing from father to son (Levy 1978:487). Each tribelet occupied a permanent primary habitation site, in addition to many smaller resource procurement camps. Each village within the tribelet was probably occupied for several months each year, with groups of families moving between different locations as food resources became seasonally available. Groups of families coalesced during winter, in part to make use of shared food stores but also to engage in annual ceremonial activities. Many Spanish diaries also note that warfare was common between Ohlone groups, normally consisting of small-scale battles resulting from arguments over land rights, or in defense of the honor of some individual or family in a tribelet (Broadbent 1972; Margolin 1978; Milliken 1995).

Early Spanish chroniclers, like Father Juan Crespi, describe the Ohlone as "graceful and well-formed" (Heizer 1974:15). Diaries and ethnographic reports indicate that Ohlone men and boys generally went naked, but covered themselves in mud during chill mornings. They wore necklaces of Olivella shells and abalone pendants, and many had pierced ears and nasal septums, which they adorned with various ornaments. Unlike most native Californians, some Ohlone men did not pluck out their beards but allowed the hair to grow on their chins (Levy 1978:493; Milliken 1995:18). Men with long hair either braided it or tied it on top of their head with a buckskin thong. Women wore skirts of braided plant fiber in the front and sea otter or deerskin rear aprons. Women commonly sported tattooed chins, which consisted largely of lines and rows of dots. Both sexes wore robes in cold weather. These consisted of woven animal skins such as rabbit or sea otter fur. During ritual occasions, ceremonial dances, and warfare, men frequently applied various plant dyes to their body and adorned themselves with feathers and other finery.

The Ohlone were hunters and gatherers who supported themselves largely or entirely by the exploitation of natural plants and animals. They followed a seasonal round of resource availability. Life varied with the seasons, requiring dispersed family groups to move over the tribelet territory during seasons of abundance when a heavy labor effort was required; resources were stored for the lean winter and early spring when the tribelet tended to congregate together (Levy 1978).

Although the Ohlone consumed a variety of different foods, most references to ethnographic subsistence practices indicate that they relied on the acorn as a staple food (Beechey 1968; Bickel 1981; Broadbent 1972; King 1974; Milliken 1995:17). The preferred acorns came from Tanbark oak (*Lithocarpus densiflorus*), valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), and California black oak (*Quercus kelloggii*). Readying the acorns for consumption was an involved process. Acorns were usually collected in fall and ground into flour using stone pestles in either portable stone or bedrock mortars. The flour was leached in freshwater streams to remove the tannic acid. Acorn meal was consumed during winter as mush or cakes (Broadbent 1972:61). In addition to acorns, other important plant resources were Buckeye (the nuts of which were leached and made into a mush), and the seeds of dock, gray pine, and tarweed, all of which were roasted in baskets with hot coals before eating. Berries gathered by the Ohlone included gooseberries, blackberries, madrone, and wild grapes. Roots were also gathered; these included wild onion, cattail, and wild carrot. For coastal groups, kelp was a common food, which was sun-dried and roasted (Broadbent 1972).

Shell mounds attest to the importance of shellfish in the Ohlone diet, particularly for coastal populations. Indeed, there are many references to shellfish collection and consumption in the

diaries of Spanish explorers, indicating that this resource was of significance to Contact-Period diets. Shellfish resources of primary importance included mussels (*Mytilus* spp.), abalone, (*Haliotis* spp.), and various clam, oyster, and scallop species. Mussels, clams, and other species were probably collected year-round but primarily during winter, being taken by hand or with prying bars or sticks. Clams were dug from beds within tidal flats, and a variety of fish (salmon, sturgeon, steelhead, and numerous other marine species native to California waters) were captured with spears or nets from riverine or coastal habitats (Broadbent 1972; Levy 1978). In addition, sea lions, seals, and sea otters were taken, generally by clubbing them on the beaches (Baumhoff 1963:17). The meat of beached whales was also occasionally consumed after being roasted in earth ovens. Some Ohlone groups also used small "balsas," or rafts made from Tule reeds, not only to exploit marine fishes but also to obtain lakeside waterfowl, such as ducks and geese.

Various land animals were also important to Ohlone subsistence. Large terrestrial game mammals such as deer, pronghorn, and tule elk (Baumhoff 1963:17) were key sources of protein. In order to facilitate the hunting of deer, the Ohlone, like many other Californian groups, periodically practiced controlled burning of chaparral-bearing grasslands and woodlands. These fires cleared lands of dense vegetation cover and increased the productivity of grasses and stimulated re-growth of tender shoots that attracted browsing deer. Rabbits were also taken. These were hunted in large, communal drives and snared in nets, where they were summarily clubbed to death. Ohlone hunted other small game as well, such as squirrel, ground squirrel, woodrat, and even mouse and mole (Levy 1978:491). Insects such as caterpillars and grasshoppers were also collected and eaten.

Little is known about Ohlone mythology and cosmology, although ethnographers generally agree that their beliefs were similar to their Yokuts and Salinan neighbors to the east and south (Kroeber 1925:470-473; Levy 1978:489-490). The sun was one of several principal deities; prayers were directed to the sun through offerings of smoke, seeds, tobacco, and shell beads (Broadbent 1972; Levy 1978). Other prominent deities included Coyote, who was reputed to have taught the Ohlone the arts of subsistence. Shamans held prominent places in Ohlone culture. They wielded magical powers and maintained contact with the spirit realm. They were also healers who cured disease and could diagnose ailments through ritual singing and dancing. Shamans could also control the weather and assure an abundant crop of acorns or a successful hunt (Levy 1978:489).

According to ethnographers (Baumhoff 1980; Kroeber 1925; Loeb 1933; Milliken 1995), it is likely that Ohlone peoples practiced elements of the Kuksu religious cult. This cult was prominent among a number of indigenous northern and central California groups during the period just before and during European contact (e.g., Pomo, Patwin, Maidu, and Miwok). The Kuksu religion involved ceremonial dances, ritual, and specific regalia, such as elaborate headgear made of tule and decorated with sticks to which feathers were attached. Although the purpose of the cult has been debated and speculated upon for decades, it appears that it might have been practiced for the purpose of ensuring productive hunting, fertility, bountiful harvests, good weather, and good health.

POSTCONTACT HISTORIC CONTEXT

ETHNOHISTORY AND CONTEMPORARY OHLONE COMMUNITY

The Ohlone first came into contact with Europeans in 1602-03 during the voyage of Sebastian Vizcaino, who briefly described the Ohlone inhabitants of Monterey (known as the Rumsen):

> The land [is] well populated with Indians without number many of whom came on different occasions to our camp. They seem to be gentle and peaceful people; they say with signs that there are many villages inland. The sustenance which these Indians eat most of daily, besides fish and shellfish, is acorns and another fruit larger than a chestnut; this is what we could understand of them (Vizcaino [1602] in Broadbent 1972:47).

This contact was brief and it was not until nearly 170 years later that the Ohlone again made contact with the Spanish. In 1769, Gaspar de Portola, traveling north by land along the Pacific Ocean from San Diego in order to establish a settlement in Monterey, was the first European to sight San Francisco Bay. As he journeyed through Ohlone territory, Portola gave brief descriptions of the Indians he encountered. Shortly thereafter, in 1770, Lieutenant Pedro Fages led a small expedition inland from Monterey. One of the expedition's chroniclers, Juan Crespi, made extensive notes on the aboriginal inhabitants of the area. From that time on, the Spanish were a constant presence in the lives of the Ohlone. Between 1770 and 1797, seven missions were established within Ohlone territory (Levy 1978:486).

The Mission period (1776–1834) saw the disruption of traditional Ohlone culture and lifeways. As the Ohlone were gradually brought into the mission system, and placed under the protection and tutelage of the Mission fathers, they lost much of their erstwhile autonomous existence and traditional lifeway. Compounding the difficulties and disruption to traditional life, the Mission fathers inducted members of distant and distinct tribes into the Mission neophyte population. At Mission Santa Cruz (founded 1791), for example, Costanoan peoples were joined by Northern Valley Yokuts, conscripted from the San Joaquin Valley, as the local Indian workforce succumbed to diseases and hardships ubiquitous to the Spanish and Mexican missions.

In 1834, under the new Mexican government, secularization of the mission lands began in earnest. The indigenous population scattered away from the mission centers, and the few that were given rancherias from the mission lands were ill-equipped to maintain or work their land. Most of the former mission land was divided among loyal Mexican subjects, and the few Ohlone who chose to remain in their ancestral territory were obligated to become squatters. Some were given jobs as manual laborers or domestic servants on Mexican, or later American, cattle ranches.

The Ohlone underwent a period of near cultural anonymity from the mid-19th century to the relatively recent past. During this time Ohlone often presented themselves as other than Indian to the outside world, in large part to the discrimination suffered during and after the mission period. Present day Ohlone descendants often remark that they were unaware of their heritage or that elders and relatives had at least not encouraged an interest in Ohlone heritage.

As was common elsewhere in California, Native peoples were forced to live on the fringes of American society, often in settlements near ranches or towns, or, were subjected to forced assimilation. Often Ohlone descendants identified themselves as of Mexican heritage, in many ways a valid self-description considering the close ties, often marital between the Ohlone and Mexican groups. This, however, served to mask Ohlone identity for a long period.

The so-called plight of California Indians, often considered "shameful" by observers in the period, brought the attention of the federal and State governments and religious groups and missionaries. Few true reservations had been established in California at the time of the American ascension to authority in 1850, so at the beginning of the 20th century a large number of "rancherias" were

established throughout California to accommodate "landless Indians". These were administered by the federal government and were strongly influenced by religious agents. Unfortunately rancherias were not established in Ohlone territory, at least not formal rancherias that would fit the criteria of federal trust status. As a result, the present day Ohlone community has been forced to seek federal trust status or formal recognition by the federal government, in the absence of a rancheria land base. Thus far no group within the greater Ohlone community has been able to navigate the hurdles to federal recognition. In the absence of such recognition, the Ohlone are denied the many benefits of federal trust status, and, importantly do not have the same standing as recognized tribes under regulations such as Section 106 of the National Historic Preservation Act. Currently under Section 106 Ohlone representatives occupy the lesser role of "interested persons" as opposed to "concurring parties".

Recognition of Ohlone heritage, while present in some form since mission times, became more public in the 1960s and 1970s. A general recognition that civil rights had been denied to minority or ethnic populations, the explosion of the pan-Indian movement, and the political statements made in such places as Wounded Knee and Alcatraz, brought the "plight" of the Native American into sharp focus. Within this context, the Ohlone began to take a much greater public interest in the protection of their heritage, cultural, spiritual, and physical. This was strongly expressed in a unified desire to preserve those elements of the traditional Ohlone lifeway still visible on the landscape: archaeological deposits from villages and camps, spiritual and ceremonial locales, and particularly burial sites.

At present the Ohlone in the Santa Cruz region are represented by a number of individuals, in turn representing themselves, family groups or organized Ohlone community groups, and interest in heritage resources in the Monterey and San Francisco Bay Areas has become the purview of Ohlone throughout the region.

SPANISH AND MEXICAN PERIODS

The first European to see Monterey Bay was probably explorer Juan Rodrigues Cabrillo, who sailed north from Guatemala in 1542 and named the bay Bahia de los Pinos (Bay of the Pines) upon sighting it in November of that year. The next European visitor was Sebastian Vizcaino in 1602, who received a commission from the Spanish Viceroy in Mexico to explore the coast of California, and who renamed the bay Monterey in honor of the viceroy. Members of Vizcaino's expedition noted the large number of pine trees and rich marine resources in the area and interacted and traded with local Native people.

Alta California was not settled by Europeans, however, until the 1760s when Spanish authorities decided to establish colonies there to prevent Russian and English explorers and traders from encroaching on territory they claimed for the Spanish Crown. A military outpost (presidio) was founded at Monterey in 1770, accompanied by a mission that was subsequently moved to nearby Carmel. The mission had a major effect on the lives of local Native groups who were physically displaced, exploited as laborers in mission ranching and other activities, and suffered heavily from European diseases.

The Carmel River was named *El Rio de Carmelo* by the order of the friars who "discovered" it during Vizcaíno's expedition in 1603. European occupation of Carmel begins with the establishment of the *Misión San Carlos Borroméo de Carmelo*. The mission, founded by Padre Junípero Serra in 1770, was

the second Franciscan mission in *Alta California*. Originally located at the Presidio of Monterey and called *Misión San Carlos Borroméo de Monterey,* it was moved to the Carmel River area a year later and renamed. The mission church is the final resting place of Padre Serra (Clark 1991).

Monterey was named the capital of Alta California in 1775 but remained a relatively small settlement and military outpost that was often poorly provisioned. Following its successful struggle for independence from Spain in 1821, Mexico took control of Alta California and dismantled and secularizing the mission system by 1833, granting church lands to Mexican landowners but retaining Monterey as the territorial capital and official port of entry. The secularization process also released Native peoples from servitude and distributed a portion of mission property to former neophytes.

Most land, however, was granted to wealthy Mexican families in the form of expansive ranchos. Ranchos were dominated by cattle herding used to support the demands of the expanding hide and tallow trade, but also contained sheep, horses, and agricultural crops. The result of this unequal distribution of land was a stratified society with wealthy landowners at the top of the social and economic hierarchy, with average Californios and Native Americans working as rancho laborers.

During the Mexican Period, the area that would become Salinas was occupied by a series of Mexican land grants used primarily as grazing lands. The ranches that would later form the core of Salinas were Rancho Nacional, granted to Vicente Cantua in 1839 and sold to James Bryant Hill in 1851, and Rancho Sausal, granted to José Tibúrcio Castro in 1834 and sold to Jacob Leese in 1852. Other land grants in the vicinity included Rancho Los Gatos/Santa Rita, Rancho Rincon del Sanjon, Rancho La Natividad, Rancho El Alisal, and Rancho Llano de Buena Vista.

AMERICAN PERIOD

In 1846, during the Mexican-American war, U.S. forces captured Monterey without a fight and occupied it as a defensive position. Upon conclusion of the war in 1848, Mexico ceded California to the United States and in 1849 a constitutional convention was held in Monterey, followed by ratification of the California Constitution and the next year by statehood. In 1855, the U.S. government constructed a lighthouse at Point Pinos in Pacific Grove, but overall Monterey declined in importance and lost its status as the capital to Sacramento and its role as the main port to San Francisco.

James Bryant Hill purchased Rancho Nacional in the Salinas Valley in 1851 and established an agricultural operation on the land for growing wheat and barley. He set up offices near the Salinas River where a settlement called Hilltown soon emerged just north of where modern day Highway 68 crosses the river (Seavey 2010). In 1854, a post office was opened at Hilltown with Hill as its first postmaster. Merchant Jacob Leese acquired nearby Rancho Sausal in 1852, location of the bulk of modern-day Salinas, selling a portion of it to Deacon Elias Howe in 1856. That same year Howe built a stage stop called the Half Way House on the land, at the intersection of two regional stage routes halfway between Monterey and San Juan Bautista, which he sold to Alberto Trescony in 1857. Trescony subsequently built a hotel, store, blacksmith shop, and stable at the site, forming the heart of what would become the town of Salinas. The Salinas post office was moved here from Hilltown in 1864. José Manuel Soto purchased nearby Rancho Los Gatos (aka Santa Rita) in 1867 and established a town there called New Republic, including a post office in 1870, but renamed Santa Rita in 1874.

By the 1860s, Salinas was becoming a center of agricultural production and distribution (including wheat, barley, and dairy products) and the town itself was growing rapidly, with the street grid laid out in 1867. The Southern Pacific Railroad (SPRR) was built through Salinas in 1872, and that same year the town was formally incorporated and became the county seat. The SPRR was accompanied by a private narrow gauge railroad to Monterey in 1874, later incorporated into the SPRR in 1879, and the narrow gauge Pajaro Valley Railroad in 1891. Developments in Salinas during the 1870s and 1880s included a telegraph, newspapers, macadamized roads, a gas works, a water company, electric lighting, and a formal board of trade, alongside schools, churches, banks, hotels, stores, and residences.

Agricultural production in the Salinas Valley was enhanced by draining of swamp land for cultivation in the 1870s and 1880s, undertaken primarily by Chinese farmers, who established a substantial Chinatown in Salinas north of the SPRR between North Main and East Lake Streets. At the same time, newly introduced irrigation technology supported development of the local sugar beet industry by the 1890s. At the heart of this industry was Claus Spreckels' sugar beet processing factory, completed in 1899 and operated in large part by Japanese workers. Arrival of Japanese laborers led to the development of a Japanese neighborhood in Salinas adjacent to Chinatown at the start of the twentieth century, including churches and community halls. Japanese residents of the Valley were also skilled farmers, growing crops like celery, broccoli, and strawberries. By the early twentieth century, sugar beets were the dominant crop in the Salinas Valley, alongside dairy products. Nobel Prize winning author, John Steinbeck, was born in Salinas in 1902 and graduated high school there in 1919.

The 1906 earthquake caused substantial damage in Salinas, but recovery and rebuilding were relatively rapid. The first formal California Rodeo was held in Salinas in 1911, a tradition that has continued to this day, and in 1915 Highway 101 was built through the town. Salinas formally became a city in 1919 and acquired telephone service, a sewage system, an airport, and expanded rodeo grounds in the 1920s. In that same decade, lettuce began to replace sugar beets as the primary crop, facilitated by development of refrigerated rail cars permitting shipment of fresh produce across the country. Row crops like artichokes also became increasingly important to the local agricultural economy, as did Filipino farmers who developed their own community east of Chinatown. Filipino farmers were one of the first groups in California to form a labor union in the 1930s in response to rising labor tensions. The 1930s also saw major municipal, commercial, and residential development, including expansion of the city to create new subdivisions with a strong focus on modern architecture.

In preparation for World War II, the airport became an Army training base, accompanying the California National Guard, which had been present in Salinas since the 1890s. During the war, Mexican migrant laborers were employed to fill labor shortages, introducing another important group of farmers to the local agricultural economy. In 1942, Japanese residents of Salinas were forcibly assembled at the California Rodeo grounds and transported to incarceration centers in the interior, with many from Salinas ending up at the Poston camp in Arizona. Following the war, Salinas experienced substantial urban and suburban development into surrounding farmland, including a major expansion in the 1950s and 1960s that led to the eventual annexation of the nearby communities of Alisal (1963) and Santa Rita (1975).

HISTORY OF THE PROJECT AREA

HISTORICAL ECOLOGY WORK (RESEARCH PROVIDED BY ANDREA WOOLFOLK)

Andrea Woolfolk, Stewardship Coordinator for the Elkhorn Slough National Estuarine Research Reserve, provided the historical ecology research on the area, which we outline here. The Project Area is within the Carr Lake Basin northeast of Salinas in the lower Salinas Valley, where historically there was a chain of lakes, ponds, and freshwater marshes forming wetland habitat extending from Salinas to the mouth of the Tembladero Slough at Monterey Bay. Most of these wetlands have been drained and reclaimed since the nineteenth century for use as agricultural land. The Carr Lake Basin exists at the confluence of three large creeks, the Gabilan, Natividad, and Alisal Creeks, which drain from the Gabilan Range (the northeast boundary of the Salinas Valley) and encompass about 112 square miles of watershed (Hare 2008). The wetland system was characterized by potentially dramatic rises and falls of water levels with the winter rains—still true of the landscape today—and small watercourses connected and drained these bodies of water in the dry season.

The Carr Lake area was part of the Sausal Rancho (Spanish *Rancho del Sauzal*), a 10,242-acre Mexican Period rancho which Governor José Figueroa granted to José Tibúrcio Castro in 1834. The rancho was sold to Jacob Leese in 1852, later purchased by Eugene Sherwood, and in 1875 sold to wealthy Salinas landowners including J.D. Carr, who drained and reclaimed the land to grow grain and root crops (Castroville Argus 1880; Pacific Rural Press 1875). The rancho diseño as well as newspaper articles of the time describe marshy areas with tules and willows in parts of Carr Lake.

The creation of reclamation ditches at Carr Lake appears to have occurred in several iterations over time. A soil survey in 1925 notes that the construction of the Southern Pacific Railroad (which reached Salinas in 1872) cut off the natural outlet of Carr Lake and motivated the construction of the "Carr ditch", which extended through Markley Swamp to Boronda Lake to the west but was apparently abandoned later due to low gradient and difficulty of maintenance (Carpenter and Cosby 1925). Early maps from surveys for reclamation planning depict several reclamation ditches bisecting parts of Carr Lake (Figures 3–5). The 1906 survey map shows numerous branches of "drain ditches" and notes that 333 acres of the lake area were underwater in June 1906, and a 1916 survey noted that the reclamation ditch in Carr Lake was simply an "improvement" of the natural water course rather than an artificial channel (Hare 2008) (Figure 3). From 1917 and into the 1920s, a full system of reclamation ditches, canals, and other infrastructure was built in the lower Salinas Valley as part of a wider effort by the state to establish reclamation and irrigation districts throughout California, and this development included Carr Lake and extended from Heinz Lake just southeast of Carr Lake to the mouth of the Salinas River. The 1919 survey map for this development shows the canals (i.e., ditches) at Carr Lake aligning with the courses of the Gabilan, Natividad, and Alisal Creeks as they enter the Carr Lake Basin (Figure 4). Based on a 1941 aerial image (Figure 5) and modern satellite imagery, the planned locations of ditches depicted in the historical maps of reclamation plans appear to match the locations of drainage ditches which act as outlets for the major creeks converging at Carr Lake Basin and the Project Area.

Observations since the eighteenth century have frequently noted that the lakes and marshes, and the creeks feeding them, overflow and flood with the winter rains. In 1916, Carr Lake had filled up "an area of two miles" from the overflow of the Gabilan and Alisal Creeks and had encroached on the city of Salinas (San Francisco Chronicle 1916), and the seasonal overflow of the Salinas River was

observed to deposit a substantial amount of sand, silt, and gravel on the floodplains (Lapham and Heileman 1901). Carr Lake and other lakes and marshy areas in the lower Salinas Valley are still subject to significant inundation after winter rains, despite the water reclamation systems that were developed. Currently, the Carr Lake Basin consists of agricultural fields bisected by the drainage ditches.

It is Albion's understanding that in personal communication with Big Sur Land Trust on November 6, 2020, City staff (Thomas Wiles and Robert Latino) indicated that per City records, the project site has not been surveyed as historic in the past and therefore a historic study of structures at the Project will not be required.

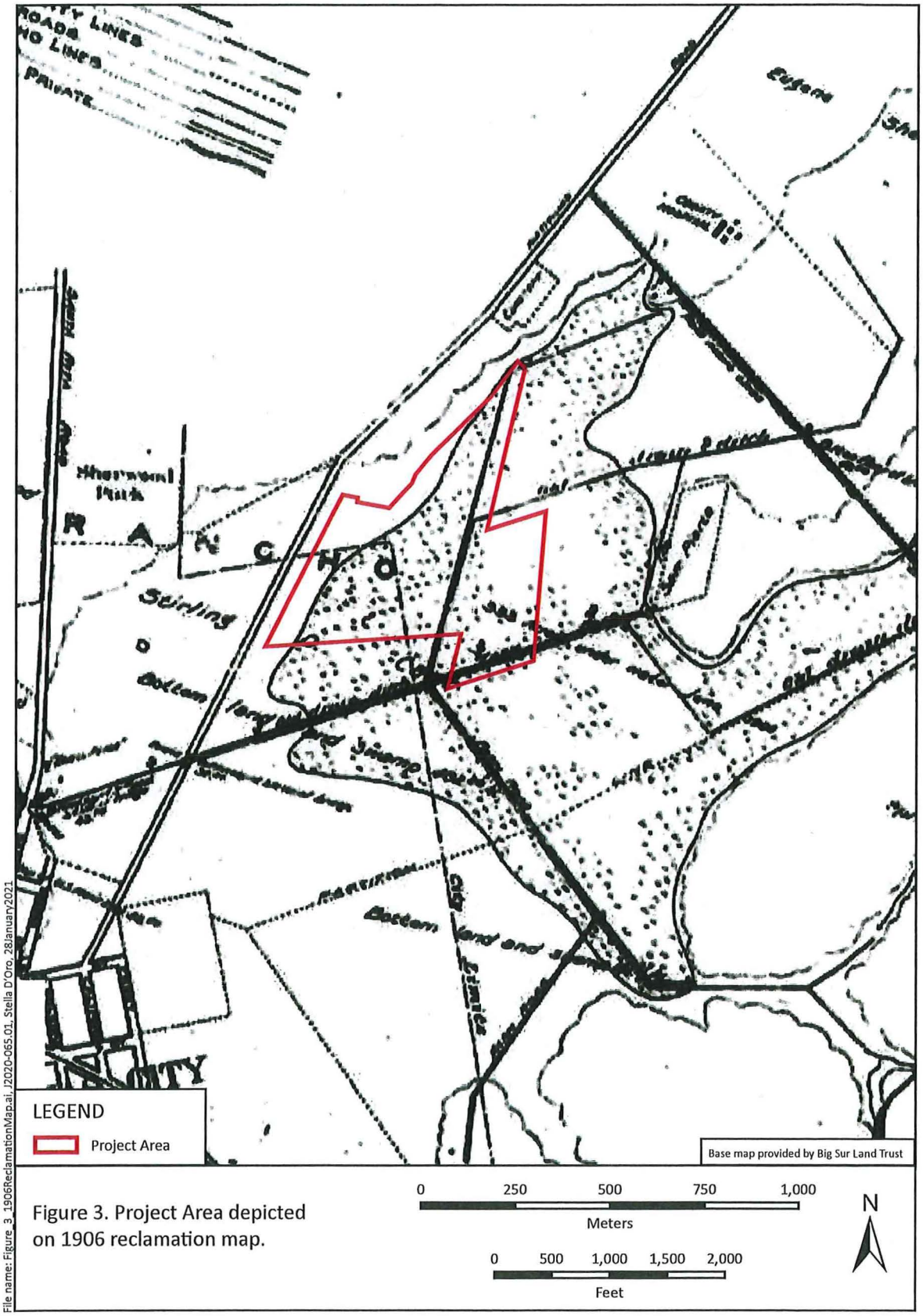

Figure 3. Project Area depicted on 1906 reclamation map.

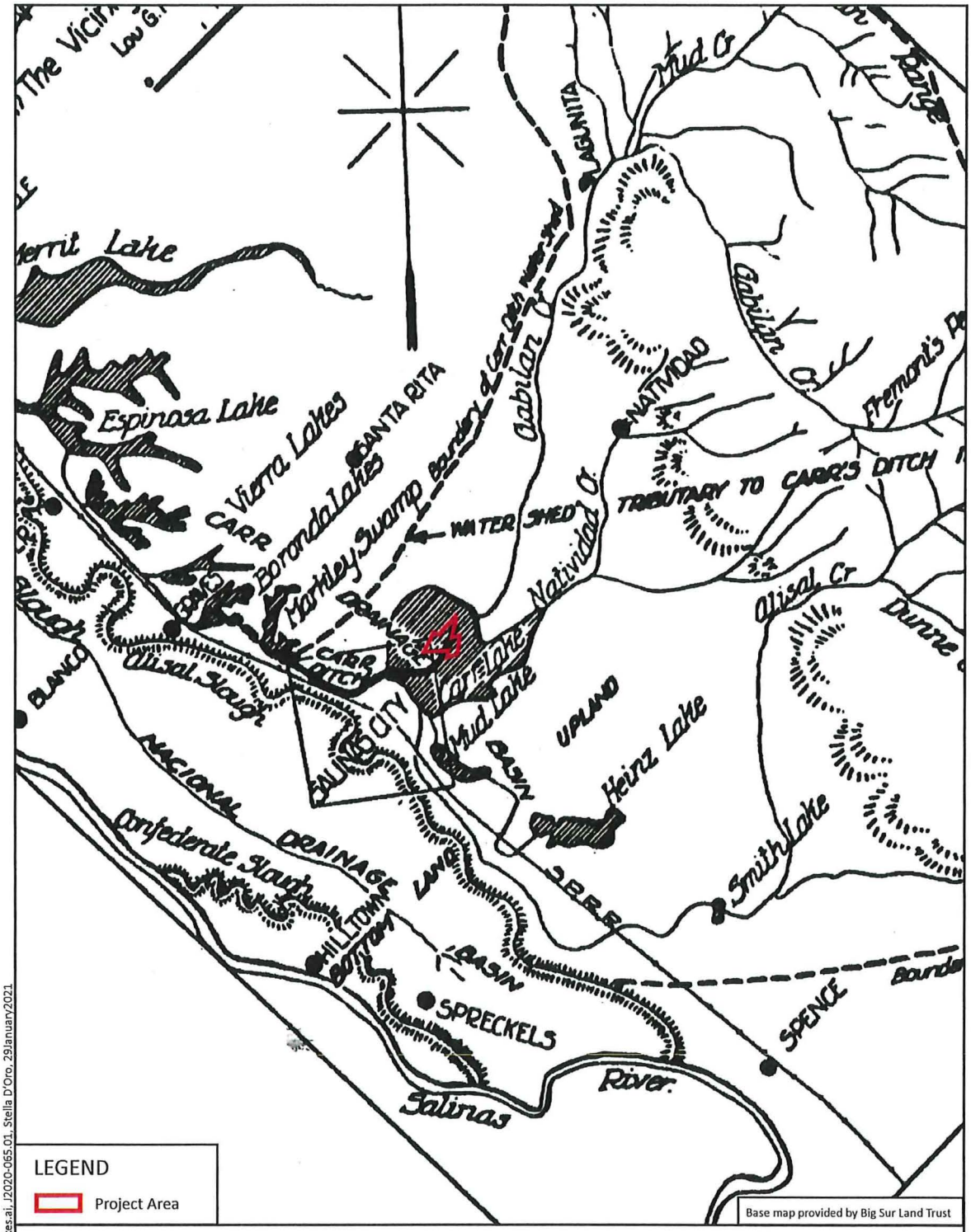

Figure 4. Project Area depicted on 1916 reclamation district No. 1665 engineering plans index map.

File name: Figure_4_1916Lakes.ai, J2020-065.01, Stella D'Oro, 29January2021

File name: Figure_5_1941Aerial.ai; J2020-065.01, Stella D'Oro, 28January2021

Figure 5. Project Area depicted on 1941 aerial image.

Field Methods

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PEDESTRIAN SURVEY

On January 5, 2021, Albion Archaeologists Robert Johnson-Ramirez, Cris Lowgren, Hannah Ehrlich, and Paul Rigby conducted an intensive surface survey of the Project Area (Figure 6 and Photograph 1). This involved walking 10-meter-wide transects while closely inspecting the ground surface, so that the entire Project Area was intensely inspected.

Photograph 1. Project Area, southern portion overview to the North.

Once an artifact was encountered, the archaeologists halted temporarily while the area immediately adjacent to the find was inspected for additional materials. An isolated artifact was determined to be up to three artifacts lacking other associated materials in the immediate vicinity; more than three artifacts were considered a site. If a site is encountered, its surface is carefully inspected, with crew pin-flagging all surface artifacts and features. Having established site characteristics and boundaries, crew then completes California Department of Parks and Recreation (DPR) primary site record forms, takes site overview and artifact photographs, and takes UTM coordinates using a Trimble Global Positioning System (GPS) device.

File name: Figure_6_SurveyArea.ai, J2020-065.01, Stella D'Oro, 28January2021

Figure 6. Survey area and excavation unit location map.

SUBSURFACE PRESENCE/ABSENCE INVESTIGATION

On January 21 and 22, 2021, Albion Archaeologists Cris Lowgren, Hannah Ehrlich, Ryan Phillip, Paul Rigby, and Kaya Wiggins conducted subsurface presence/absence testing of the Project Area. The subsurface study consisted of excavating a series of Shovel Probes (SPs) and Auger Probes (APs) within the proposed excavation footprint for ponds, channels, and infrastructure in the Project Area to identify potential subsurface constituents associated with materials identified during pedestrian survey of the Project Area (Figure 6).

SPs are hand-excavated units measuring approximately 40 cm in diameter by up to 60 cm in depth, depending on project impacts. A 7.5-cm-diameter auger is then deployed to access the soils below 60 cm. These SPs are useful for identifying cultural materials in areas where surface visibility is obscured by heavy vegetation, landscaping materials, modern fill, or natural overburden. SP placement was determined by project impact depths (specifically, major excavation impacts) and survey finds. Additionally, APs were excavated from the surface using a 7.5-cm-diameter auger to a depth of up to 150 centimeters below surface (cmbs). These APs are useful when working in difficult soils such as heavy clay, identifying paleosols or stratigraphic deposit information over a large space to define presence or absence of archaeological materials. APs were employed to help inform possible depth of deposits and to investigate the Project Area in a timely manner.

In order to investigate the entire Project Area, two SPs and eight APs were excavated in the Project Area (Figure 6). The SPs were excavated in 20 cm arbitrary levels, and both SPs were hand excavated to 60 cmbs before augering commenced at 60 cmbs. Both SPs 1 and 2 were augered from 60 to 140 cmbs. All excavated sediments were dry-screened through 3 mm mesh. APs were augered in 20 cm arbitrary levels, typically to 140 cmbs, but AP 1 was terminated at 80 cmbs when calcium carbonate deposits indicated a paleosol; AP 5 was terminated at 120 cmbs for the same reason, and AP 6 was taken to 150 cmbs to confirm the naturally occurring sand deposit along the western edge of Carr Lake.

Formal or diagnostic items were photographed and measured in the field, while debitage and faunal remains were quantified, described on Project forms, and a representative sample photographed. For this Project, all historical and recent items were quantified, described, and photographed by level before being reburied in the bottom of the excavation unit before backfilling. All items identified as precolonial were collected after being photographed, quantified, and described on Project forms. All collected cultural material will be transferred to Louise J. Miranda Ramirez, Tribal Chairwoman Ohlone/Costanoan-Esselen Nation (OCEN), for final disposition at the completion of the Project. Big Sur Land Trust agreed to turn over possession of the precolonial artifacts to OCEN, and an artifact transfer record can be found in Appendix C.

DECISION THRESHOLDS OF DEPOSIT INTEGRITY

The determination of the presence of an intact subsurface deposit was based on careful examination of stratigraphy observed in excavation units. Intact cultural deposits are those that (1) lack any evidence of re-deposition or disturbance, and (2) produce precolonial or historic-era materials in densities greater than 50 items per cubic meter of site matrix (e.g., six items in a 100-cm-deep SP).

If no archaeological deposits are encountered, or materials are found in disturbed contexts, no further action is required. If intact deposits are encountered, test excavations will be required to evaluate the site for California Register of Historical Resources (CRHR) eligibility, assess Project impacts, and (if needed) develop mitigation measures. All work was conducted by Albion personnel, all of whom exceed federal experience guidelines for their respective positions.

All fieldwork (survey and subsurface investigation) was completed in three 10-hour days with a team of four (4) archaeologists per day and one representative from the local Native American community, Mike Casares from OCEN monitored fieldwork for tribal resources for the subsurface study.

Results

6

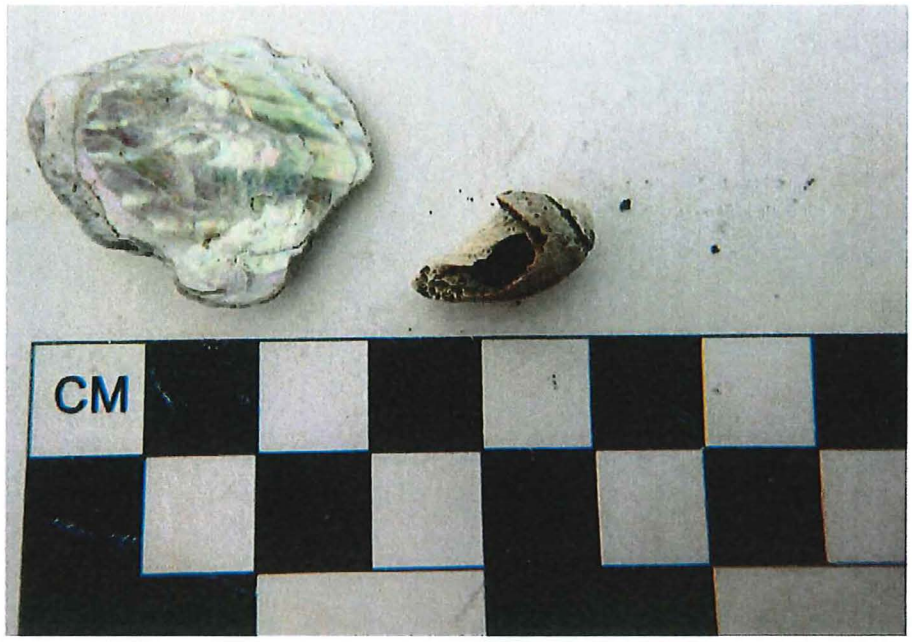
PEDESTRIAN SURVEY RESULTS

Survey efforts identified one new isolate within the northern portion of the Project Area, given the temporary designation of Carr Lake ISO 1 (Primary number pending from NWIC) (Appendix D). Carr Lake ISO 1 consists of two marine shell fragments, one abalone (*Haliotis* sp.) fragment, and one Olivella shell (*Callianax biplicata*) fragment (Photograph 2) The two marine shell fragments were located with one-half meter of each other within the raised spoils from the recent plowing of the agricultural field. Naturally occurring freshwater mussel shell fragments were identified in the east portion of the Project Area, as well as along the berm of dredged spoils that sits beside Natividad Creek. Also found on this berm were freshwater gastropods (Physidae family, Lymnaeidae family, and *Planorbella occidentale*), brought up with the dredged drainage soils; none of these naturally occurring shellfish remains were collected. The cultural materials located on the surface of the northern portion of the survey are congruent to those generally found in precolonial sites in central California and could indicate that intact subsurface archaeological deposits exist in the Project Area. These cultural materials were collected and turned over to OCEN (Appendix A).

Surface visibility throughout the Project Area was categorized as excellent (Photograph 3). The majority of the Project Area is within agricultural fields. Two single-family residences and a few steel agricultural warehouse buildings are currently located within the western portion of the Project Area. The northern portion of the Project Area is the proposed location of pooling ponds, pedestrian trails, and water channels. The central portion of the Project Area will contain one large pond with a pier and access trails. The western portion of the Project Area is the proposed location of restrooms, parking area, and recreational activity sites (i.e., basketball courts and playground). Previous disturbances to the Project Area include general agricultural land use, controlled tilling, grubbing, and waterway channelization. Modern materials observed during the survey included household and agricultural refuse, including glass bottles, plastic bags, broken concrete piping, and plastic tubing.

SUBSURFACE STUDY RESULTS

Albion excavated two Shovel Probe (SP) units and eight Auger Probe (AP) units to assess whether any archaeological materials exist within the proposed Project APE. The two SPs were placed in the northern portion of the Project Area since that area yielded the only surface manifestation of cultural material within the Project Area. Since most units were placed in a recently and deeply plowed field, it was necessary to clear this overburden soil for the two SPs to allow for these units to start in a flat surface; the overburden was screened for cultural materials. The APs had a sufficiently small diameter to fit in the furrows of the plow zone, thus negating the need to clear or screen



Photograph 2. Marine shell fragments located during pedestrian survey of the Project Area.

overburden. One SP (SP 1) and one AP (AP 2) yielded subsurface cultural material; the remaining SP and seven APs yielded no precolonial or historic cultural material (Figure 7).

The subsurface study produced very minimal cultural material (Table 6) but did yield indications of natural past lakebed remnants in the form of mottled clays with associated carbonized vegetal remains and freshwater shell fragments including mussel and Valvatidae snails. A stratum of this old lakebed was best observed in APs 2, 4 and 5, where such a stratum was noted at 85–100 cmbs, followed by gray clay to depth. However, manifestations of old lakebed surfaces, in the form of carbonized vegetation, mottled clays, and naturally occurring freshwater shell remains were observed in all the APs placed in the central and eastern parts of the Project Area at depths ranging from 40 cmbs to 140 cmbs. This consistency and variation indicate not only the extent of the lakebed, but the varying levels of disturbance of the soil in the Project Area.

Albion's subsurface investigation within the Project Area revealed no intact subsurface deposit, and all non-modern cultural items were concentrated within the initial 0–20 cm of the ground surface. No anthropogenic soils were observed, and no archaeological features were discovered. The soil stratigraphy revealed in all the units were essentially consistent and contained native clay soils, except for two APs in the western Project Area that were placed on the old shore of the Carr Lake lakebed; these two units produced soil profiles that were consistent with each other. A narrative description of SP 1, AP 2, and AP 6 is provided here and represents the subsurface stratigraphy of each of the excavated units.

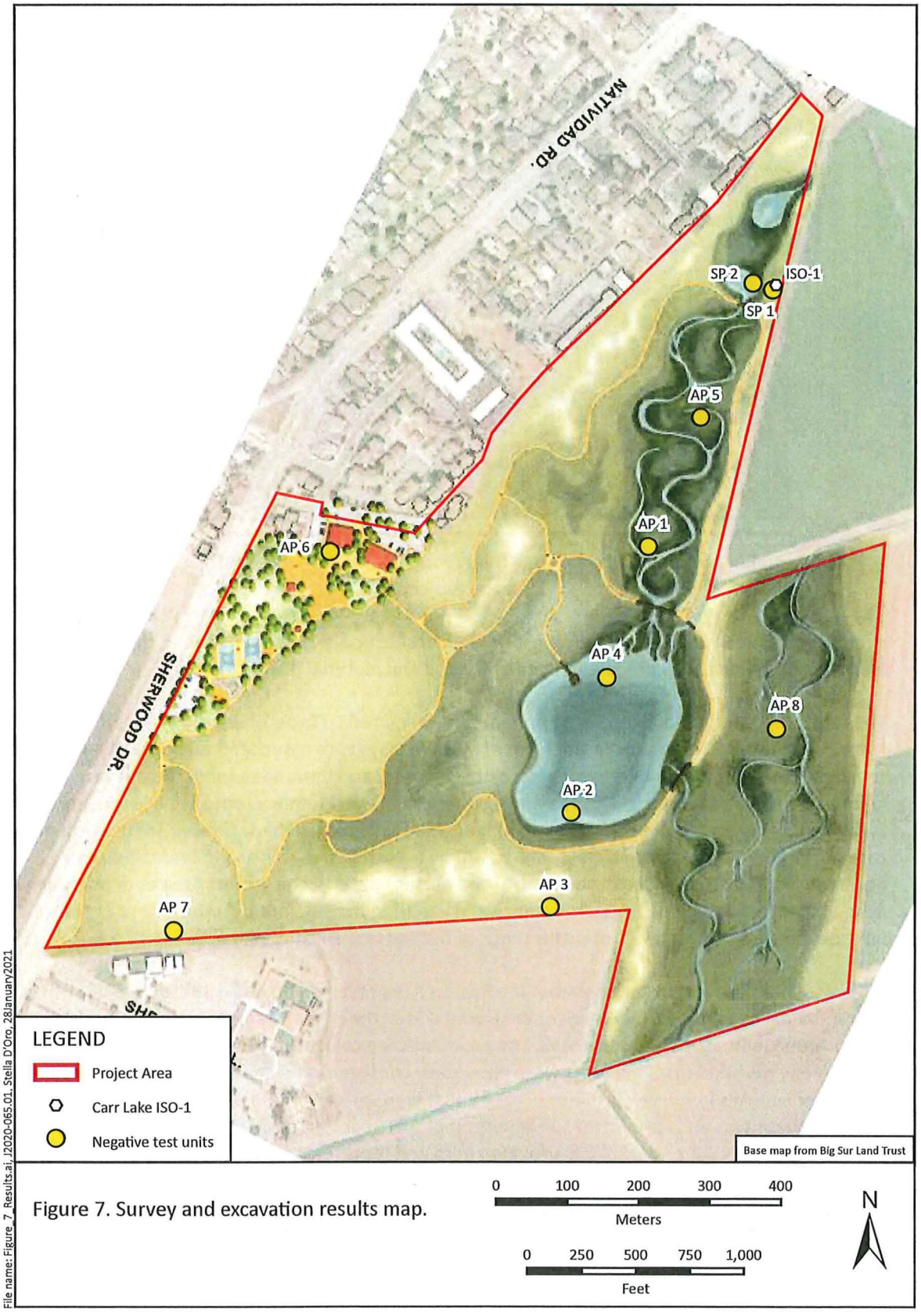


Figure 7. Survey and excavation results map.

Table 6. Summary of Excavation Findings by Shovel Probe.

Unit	Size (Dia.)	Depth (cmbs*)	Auger Depth (cmbs*)	Volume (m^3)	FAU	MOD	Density of Cultural Materials
SP 1	40 cm	0–60	60–140	0.078	3**	13	38.23
SP 2	40 cm	0–60	60–140	0.078	0	2	None
AP 1	7.5 cm	-	0–80	0.003	0	0	None
AP 2	7.5 cm	-	0–140	0.005	1***	2	185.6
AP 3	7.5 cm	-	0–140	0.005	0	0	None
AP 4	7.5 cm	-	0–140	0.005	0	3	None
AP 5	7.5 cm	-	0–120	0.005	0	1	None
AP 6	7.5 cm	-	0–150	0.006	0	0	None
AP 7	7.5 cm	-	0–140	0.005	0	3	None
AP 8	7.5 cm	-	0–140	0.005	0	0	None
Total	-	-	-	0.195	4	17	-

FAU=Faunal (dietary bone or shell); MOD=Modern Trash; *= Centimeters below surface; **=Marine shell- two fragments are the fragments found during the pedestrian survey; ***=Dietary bone

The first of the two SPs were placed directly atop the marine shell fragments location found during survey and designated Carr Lake ISO 1 (Figures 6 and 7). These shell fragments were collected as part of the initial 0–20 cmbs level of AP 1, and an additional small fragment of marine shell was collected during the excavation of 0–20 cmbs in that same SP. No other precolonial material was recovered from SP 1, neither from the hand-excavated 0–60 cmbs, nor from the additional 80 cm of augering in the unit. However, modern debris were observed throughout the 60 cmbs that was hand-excavated. SP 2 was placed approximately 20 meters to the west of SP 1 to further explore the possibility of a subsurface deposit, but it yielded only modern debris to a depth of 40 cmbs, with no finds from the final hand-excavated level nor the additional 80 cm of augering to 140 cmbs (Figures 6 and 7).

The remaining excavation units for the subsurface study were APs so as to maximize the area investigated as efficiently as possible. For the central part of the Project Area, where a series of channels would terminate at a deep pond, five APs (APs 1–5) were place approximately every 250 linear meters apart (from a northern starting point at SPs 1 and 2), resulting in five more APs in the central linear configuration (Figures 6 and 7). None of these APs yielded cultural material, with the exception of one fragment of faunal bone recovered (and collected) from the 0–20 cmbs level of AP 2, in the southcentral part of the Project Area; and plastic sheeting recovered from 80–140 cmbs in AP 7 in the southwest part of the Project Area.

Two APs (APs 6 and 7) were placed along the western edge of the Project Area in response to three issues: (1) the central western area is proposed to be subjected to development for recreational activities that includes an amphitheater, restrooms, and other development necessitating subsurface disturbance; (2) historic maps (e.g., the 1906 reclamation map, Figure 3) indicate that Carr Lake's stand sometimes did not extend to this part of the Project Area, affording the investigation of the lakeshore of historic Carr Lake as opposed to the lakebed of historic Carr Lake; and (3) during survey, fragments of marine mussel (*Mytilus californiensis*) were observed outside the

Project Area, on the slope of the rise bordering the southwest part of the Project Area (where present-day school buildings are situated); it would be expected that precolonial sites would be concentrated on the raised parts of the landscape rather than in the lake basin, so it was thought that placing an AP as close to this rise as possible (and on the old lake shore) held the best potential to yield a deposit of subsurface cultural material. Except for the plastic sheeting in AP 7, no cultural material was observed in APs 6 or 7.

Lastly, a single AP (AP 8) was placed in the eastern section of the Project Area, both to investigate an area slated for wetland channels and because, during survey, fragments of freshwater mussel, believed to be remnants of the old lakebed, were observed on the surface in the area. SP 1 and AP 2 represent the soil profile for the Carr Lake lakebed (SPs 1 and 2, APs 1–5 and 8), while AP 6 represents the soil profile for the Carr Lake lakeshore (APs 6 and 7).

SHOVEL PROBE 1

Shovel Probe 1 (SP 1) was located in the northern portion of the Project Area (Photograph 3 and Figures 6 and 7), directly upon the only cultural resources located during the survey of the Project. The two marine shell fragments recorded during survey were given the designation Carr Lake Isolate 01, as they were in close proximity and their total number of two items did not meet the criterion for recording as a site. SP 1 was hand excavated to a depth of 60 cmbs, and augered from 60 to 140 cmbs. As Carr Lake Isolate 1 had been found in a plow zone, plow row overburden was removed to prepare SP 1 for excavation; this overburden was screened through 3 mm mesh and yielded seven modern debris (two plastic fragments, four glass fragments, and one metal fragment), all of which were returned to the unit before backfilling after being noted and photographed. Overburden was very dark gray silty clay loam, loose due to having been plowed recently. Level 1, 0–20 cmbs, was composed of very dark gray (Munsell 10 YR 3/1) moderately compacted silty clay loam with less than 1% pea- to subpea-sized, subrounded gravels comprised of locally derived rock. Level 1 yielded the two marine shells already recorded during survey (Carr Lake Isolate 1), on the surface, and another, very small fragment of unidentified marine shell. In addition, three glass fragments, two plastic fragments, and one metal rivet were recovered from Level 1. The precolonial resources were collected, noted and photographed, and will be provided to OCEN, per the agreement with BSLT. The modern debris were recorded and photographed before being returned to the unit before backfilling. Level 2, 20–40 cmbs, was composed of highly compacted clay loam (10 YR 3/1 very dark gray), with a continuation of <1% pea- to subpea-sized subrounded gravels. Level 2 yielded no precolonial cultural material, but did yield one intrusive recent rodent bone fragment, one plastic fragment, one milled wood fragment, and one glass fragment. The rodent bone and modern debris were photographed and noted before being returned to the SP when it was backfilled. Level 3, 40–60 cmbs, was composed of the same compacted, very dark gray clay (Munsell 10 YR 3/1) with <1% gravels as in Level 2, but had increasing moisture content with depth. This level yielded one metal pellet gun projectile and a single glass fragment; this modern debris was photographed and noted before being returned to the unit before backfilling.

Below 60 cmbs, SP 1 was augered with a 7.5-cm-diameter auger, attaining a depth of 140 cmbs. Level 4, 60-80 cmbs, continued the profile noted in Level 3, as did Level 5 (80–100 cmbs), and the first half of Level 6 (100–120 cmbs): highly compacted very dark gray clay (Munsell 10 YR 3/1), slightly moist, with <1% pea- to subpea-sized inclusions of subrounded locally-derived rock. However, no modern debris, nor any cultural material, was recovered. In Level 6, at 110 cmbs, a change in the soil was noted, with dark brown (Munsell 10 YR 3/3) clay with <1% gravels characterizing the rest of the

level. The final level, Level 7 (120-140 cmbs) yielded yet another change in the soil profile, with yellow-brown (Munsell 10 YR 6/6) sandy clay with up to 75% small gravel inclusions emerging. SP 1 was terminated at this point both because the depth was sufficient for the Project elements to be undertaken in the immediate area, and because it appeared that the expected find of culturally sterile subsurface old lakebed deposit was being confirmed. Density of cultural material in SP 1 was 38.23 items per cubic meter, thus did not meet the threshold for cultural deposit integrity. This finding is bolstered by the three precolonial artifacts being located atop the surface and in the initial 20 cmbs, well within the plow zone.

Photograph 3. Overview of Shovel Probe 1 location (view west).

AUGER PROBE 2

Auger Probe 2 (AP 2) was the only excavation unit that yielded collected cultural besides SP 1, and, similarly, the single fragment of faunal bone was recovered near the surface (Photograph 4). Unlike the recent invasive rodent bone fragment from SP 1, the bone fragment from AP 2 appeared weathered and from a larger animal than a burrowing rodent; thus, in an abundance of caution, the bone fragment was considered dietary and not modern debris. AP 2 was excavated at the bottom of a plowed furrow, so did not necessitate the clearing and screening of overburden to facilitate excavation. It was one of a series of seven units laid out in a north-northeast—south-southwest line to cover the projected meandering backwater channels feeding into a seasonal wetland pond that characterize the central part of the Project Area. These units were spaced roughly 250 linear meters apart, except for SPs 1 and 2 (placed within 20 meters of each other at the north end of the line, so as to investigate the subsurface around Isolate 1), and AP 3, at the south end of the line, which was perhaps 200 lines meters from the next unit in the line due to lack of space. AP 2 was placed in the south-central part of the Project Area. AP 2 was excavated to 140 cmbs. Level 1, 0–20 cmbs, was composed of very dark gray (Munsell 10 YR 3/1) moderately compacted silty clay loam with less than 1% pea- to subpea-sized, subrounded gravels comprised of locally derived rock. Level 1 yielded only the single small fragment of dietary bone mentioned previously. This bone fragment was

photographed and noted on the AP field form and collected so it can be provided to OCEN at the Project's completion. Level 2, 20–40 cmbs, continued the soil noted in Level 1 until 25 cmbs, at which point soil changed to a compacted clay, still very dark gray (Munsell 10 YR 3/1) and retaining sparse inclusions. Level 3, 40–60 cmbs, was a continuation of the same soil, compaction, color, and inclusions, again with no cultural deposit. Level 4, 60–80 cmbs, continued with the same soil as Level 3. Level 5, 80–100 cmbs, yielded a soil change at 85 cmbs, where the compacted very dark clay became mottled with tan (Munsell 10 YR 5/4 yellow-brown) clay infused with blackened decomposed matter (assumed to be plant material) and crushed freshwater shell fragments. This stratum, roughly 15 cm thick, is interpreted as being a past lake bottom. Below it, in Level 6 (100–120 cmbs), dark gray (Munsell 10 YR 4/1) moist clay was encountered and continued for the remainder of the unit. The dark gray moist clay had sparse inclusions of complete Valvata freshwater snails, which decreased in number with depth. The presence of these tiny native gastropods supported the notion that the mottled, organics-rich 85–100 cmbs level represented a past lake bottom. AP 2 was backfilled upon completion. It was located in the area of the Project where the deepest subsurface disturbance is slated to occur, for the creation of the wetland pond. While the AP did not attain the projected depth of disturbance for the Project element, it was terminated when the soil profile indicated strata likely to preclude, if not predate, cultural deposits. Density of cultural material was 185.6 items per cubic meter; however, this high density value is dependent and a reflection of the low volume of soil excavated during augering and only represents one small fragment of dietary bone. Therefore, this single artifact was not sufficient to meet the threshold for cultural deposit integrity.

Photograph 4. Overview of Auger Probe 2 location (view north).

AUGER PROBE 6

Auger Probe 6 (AP 6) was one of two APs placed near the western boundary of the Project Area (Photograph 5). This was done to investigate an area slated for subsurface infrastructure, and to investigate an area that appeared to fall outside the historic stand of Carr Lake. The AP was placed

Photograph 5. Overview of Auger Probe 6 location (view southwest).

outside currently cultivated fields, on a dirt access road near extant agricultural structures. AP 6 yielded no finds.

Level 1, (0–20), produced a compacted silty clay loam (Munsell 10 YR 3/3 dark brown) with approximately 5% decomposed granite gravels, pea- to blueberry-sized and generally subangular. Level 2, 20–40 cmbs, broke through the road fill to reveal the same dark brown (Munsell 10 YR 3/3) silty clay loam encountered in previous SPs and APs and in this AP's previous level. Without the infusion of road base material, inclusions reverted to the <1% pea- to subpea-sized, subrounded gravels. Level 3, 40–60 cmbs, produced a mottled combination of the above compacted silty clay loam and a dark yellow-brown (Munsell 10 YR 4/6) clay loam. This dark yellow-brown color remained for Level 4, 60–80 cmbs, but increasing sand turned the soil to a sandy clay, still compacted. Level 5, 80–100 cmbs, saw no change from the previous level. Level 6, 100–120 cmbs, resulted in the ratio of sand to clay switch so that the soil, still the same color and with the same <1% of inclusions, was characterized as clayey sand, and still compacted. This same soil continued for the remainder of the unit, Level 7 (120–140 cmbs) and Level 8 (140–150 cmbs). Level 8 was excavated deeper than any other unit for this Project in an expedient effort to try and determine if a clay stratum underlaid what appeared to be past lakeshore sand. Time limits on the Project prevented further investigation of depth.

Summary and Conclusions

7

Albion's cultural resource assessment for proposed Carr Lake Project (e.g., wetland restoration, interpretive parkland, and recreational facilities) planned by Big Sur Land Trust at Carr Lake included an NWIC records search, archival and background research, a pedestrian survey of the entire Project Area, and the excavation of ten units to test for the presence/absence of subsurface cultural resources within the Project Area.

The records search revealed that one cultural resource study has been conducted within a small section of the southwest corner of the Project Area. This study was an architectural/historical field study and according to NWIC, the location of this study is only approximate. It is Albion's judgement that this study likely did not encompass any of the current Project Area and instead was conducted within the immediate vicinity of the Project Area. In addition, the record search revealed one previously documented cultural resource within a quarter-mile of the Project Area, a historical portion of Highway 101. However, no previously recorded cultural resources were identified within the Project Area boundaries.

Archival and background research revealed that the Project Area is the historic location of Carr Lake and has been subject to multiple large-scale modifications for over a century, in the form of agricultural use and, especially, water management projects undertaken to control both native wetlands and natural flooding that occurred seasonally. Historic reclamation maps indicate a consistent effort that essentially channelized a series of creeks that fed Carr Lake to a degree that these historic channels appear to remain located and arrayed just as they did more than a century ago. Nevertheless, periodic flooding, as recent as the last 30 years, has kept the Project Area an undeveloped oasis within a sprawling city, used only for agriculture. A 1941 aerial photograph shows the Project Area to be a series of agricultural fields within the reclaimed the former lakebed, much as it remains today.

The results of Albion's pedestrian survey failed to yield evidence of historic-era cultural resources within the Project Area that could be considered historical resources under CEQA. An isolated surface find of two marine shells was the only evidence of precolonial cultural material within the Project Area. The subsequent subsurface testing of the Project Area, and specifically in and around the area of the precolonial surface finds, failed to locate anthrosols, features or intact cultural deposits that may indicate a precolonial archaeological site presence in the Project Area. The items that were recovered were on the surface or within the upper 20 centimeters of the surface, and due to the history of the landscape were not the remains of a primary deposit. Moreover, the intensive cultivation of the Project Area, resulting in regular plowing of the clay soil, results in the dissemination of any deposits on the surface or within the deep plow zone (a minimum of 20 cm [eight inches]), as evidenced by the ever-present modern trash debris visible over the entirety of the Project Area and recovered as deep as 60 cmbs in many of the archaeological test units during the subsurface investigation. A consistent deposit of fragmentary concrete, glass, ceramics, plastic, and metal were observed on the surface, but all this material is less than fifty years old and is a product of recent farming activities and littering. The channels in the Project Area appear to correspond, at

least approximately, with channels created over the last century-plus to reclaim the area for agriculture, but these channels retain no aspects of their historic construction and in fact are regularly dredged and maintained for modern use, so they too are not considered a historical resource under CEQA. The current study has sufficiently investigated the Project Area, and based on these findings, it is Albion's judgment that the development of the Carr Lake Project will not cause an adverse effect to a historical resource, and no further archaeological studies are warranted under CEQA.

ASSESSMENT OF POTENTIAL PROJECT IMPACTS

Overall, given the lack of substantial postcolonial occupation visible in historic imagery from the nineteenth and early twentieth centuries, the lack of previously documented cultural resources recorded within the Project Area, the lack of intact archaeological resources uncovered during Albion's pedestrian survey and subsurface investigation, and the fact that the majority of the Project is located within the historic lakebed, the potential for buried archaeological deposits within the Project Area is low. However, there is a portion of the western Project Area that is moderately sensitive to contain buried archaeological deposits. Cultural resource sensitivity and impact assessment per Project element is detailed below and summarized in Table 7.

The vicinity around the Carr Lake area was undoubtedly used during precolonial times, and likely through a prolonged period of time, as it would have been an excellent natural resource acquisition area and a direct link to the Pacific Ocean. This area is also very important to the local Tribal community represented by OCEN and they have expressed their concerns during the City's AB 52 consultations.

Based on our archival and background research, the majority of the current Project Area is located within the historic lakebed, which would not likely hold archaeological deposits, as it does not represent a stable landform that could support habitation or a use that would leave an archaeological footprint (Figures 3 and 4). Moreover, the Project elements with the deepest impacts (e.g., areas for wetland and riparian fish and wildlife habitat restoration, and stormwater treatment green infrastructure) are also located within the lakebed, so these Project elements do not pose a risks to impacting unknow cultural resources.

The western portion of the Project Area that parallels Natividad Road and Sherwood Drive is located along the historic lake shoreline and therefore has a moderate sensitivity to contain buried archaeological deposits. Albion's pedestrian survey and subsurface testing gathered data indicating that, at minimum, the upper two feet (~60 cmbs) of soil across the Project Area is heavily disturbed and therefore, any cultural material within this upper two feet lacks integrity and should not require further consideration under CEQA. However, Project elements located along the historic lake shoreline associated with the traditional park, buildings, and restrooms that have ground disturbing elements greater than two feet (~60 cm) have the potential to impact cultural resource should they exist in these areas.

Table 7. Project Elements and Impact Assessment on Cultural Resources.

Project Elements	Cultural Resource Sensitivity	Impact Assessment
Open space/restoration area (62.8 acres)	No to low sensitivity	No impact
Traditional park area (includes program elements, pathways and landscape areas) (4.4 acres)	Low to moderate sensitivity	No impact for Project elements with ground disturbance less than 2 ft (~60 cm); Potential impact for Project elements with ground disturbance greater than 2 ft (~60 cm)
Pedestrian and maintenance trails and bridges (2.8 acres)	No to low sensitivity	No impact
Vehicle access, parking areas, and parking landscape (1.3 acres)	No to low sensitivity	No impact
Buildings/restrooms (0.3 acres)	Low to moderate sensitivity	No impact for Project elements with ground disturbance less than 2 ft (~60 cm); Potential impact for Project elements with ground disturbance greater than 2 ft (~60 cm)

RECOMMENDATIONS

Albion's study determined that the Project Area does not contain significant and CRHR eligible archaeological deposits and the proposed Project will not cause an adverse effect to a historical resource. Since the western portion of the Project Area holds low to moderate sensitivity for cultural resources, Albion recommends that a qualified archaeologist and a representative from the local Native American community monitor all initial ground-disturbing activities associated with the development Project in a manner outlined in an Archaeology Monitoring Plan.

It is Albion's judgement that not all Project elements require construction monitoring, and only Project elements located along the historic lake shoreline associated with the traditional park, buildings, and restrooms that have ground disturbing elements greater than two feet (~60cm) should be subject to monitoring. Since the Project plans are only at 30%, it's unclear the maximum depth of disturbance for these Project elements at the time of Albion's study.

Additionally, Albion recommends a Project-specific Archaeological Monitoring plan be developed and implemented for the Project. The Archaeological Monitoring plan should be developed prior to construction and detail the monitoring protocol for all initial ground disturbing Project elements associated with the Traditional Park area and Buildings/restrooms. The plan should describe protocols or the treatment of any unanticipated cultural resources discovered in the course of

Project construction, develop and implement a cultural resource awareness training for all Project personnel, define monitoring methodology specific to the traditional park, buildings, and restrooms that have ground disturbing elements greater than two feet (~60cm), outline tribal participation as directed by the City's AB 52 consultations, and outline solutions for conflict resolution. The plan should be developed with input from Native American community stakeholders.

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Appendix A

Summary Project Design Plans

Appendix B

NWIC Records Search Results

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA, COLUSA, CONTRA COSTA, DEL NORTE, HUMBOLDT, LAKE, MARIN, MENDOCINO, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA, YOLO

Northwest Information Center
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150 Professional Center Drive, Suite F
Rohnert Park, California 94928-3609
Tel 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

12/17/2020 NWIC File No.: 20-1114

Sarah Nicchitta
Albion Environmental, Inc.
3563 Sueldo Street, Suite P
San Luis Obispo, CA 93401

Re: BSLT Lake Carr Cultural Assessment

The Northwest Information Center received your record search request for the project area referenced above, located on the Salinas USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a one-quarter mile radius:

Resources within project area:	None
Resources within ¼-mile radius:	P-27-002322
Reports within project area:	S-43489
Reports within ¼-mile radius:	S-03302, S-35311, S-38928

Resource Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☒ not requested	☐ nothing listed
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☒ enclosed	☐ not requested	☐ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Jessika Akmenkalns, Ph.D.
Researcher

Appendix C

Artifact Transfer Record

ALBION

TRANSFER OF ARCHAEOLOGICAL MATERIAL FORM

Date 01/29/2021

PROJECT INFORMATION

Albion Project No. J2020065.01
Project Name BSLT, Carr Lake Cultural Assessment
Site/Trinomial N/A
Albion Project Mgr Sarah Nicchitta
County/District Monterey
Project Description Phase I and XPI cultural assessment

CLIENT INFORMATION

Client Name Big Sur Land Trust
Client Contact Rachel Saunders
Client Phone (831) 625-5523
Client FAX
Client Email rsaunders@bigsurlandtrust.org

STORAGE FACILITY INFORMATION

Storage Facility Ohlone/Costanoan Esselen Nation
Street Address 1 PO Box 1301 CA 93942
Street Address 2
City Monterey
State CA
Zip 93942

ARCHAEOLOGICAL COLLECTION

Provenience Carr Lake, Salinas, CA
No. of Boxes 1
Collection Description 3 marine shell from SP 1 0-20 cmbs; 1 faunal bone from AP 2 0-20 cmbs

STATUS

Check all that apply

		Date
☐	Processed/Cleaned	
☐	Cataloged	
☐	Prepared for Curation	

DOCUMENTATION INCLUDED

☐	Catalog	☑	Report(s)	☐	Field Notes/Records
☐	Maps	☐	Digital Images	☐	Photo Log
☐	Sketches/Drawings	☐	Color Prints	☐	B/W Prints
☐	Negatives	☐	SD Card	☐	Slides
☐	Audio Tapes	☐	Disks/CDR/DVR	☐	Flash Drive/Hard Drive
☐	Other (list)				

SIGNATURES

Prepared By

Date 01/29/2021
Form Prepared By Cris Lowgren
Signature

Collection Received By

Date
Form Received By
Signature

Appendix D

Primary record and location map
for Carr Lake ISO 1

State of California & The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial Carr Lake ISO 1
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 3 ***Resource Name or #:** Carr Lake ISO 1
P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☐ **Unrestricted**
***a. County** Monterey **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Salinas and Natividad **Date** 1947 (PR 1984) **T** 14S; **R** 3 E; NE ¼;NW ¼ **of Sec** 28; 27; Mount Diablo **B.M.**
c. Address 618 Sherwood Drive. City Salinas Zip 93905
d. UTM: (Give more than one for large and/or linear resources) Zone 10 S, 621580 mE/ 4061685 mN
e. Other Locational Data:

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This isolate consists of two marine shell fragments, one *Callianax biplicata* and one *Haliotis* sp., encountered during pedestrian survey of existing agricultural fields within the historic bed of Carr Lake in Salinas, California. Shell fragments were located within close proximity (~1 meter or less) of each other. Subsequent to the pedestrian survey, a small-scale Extended Phase I excavation occurred at the pedestrian survey area. Two shovel probes, approximately 40 cm wide and 140 cm deep, were excavated within the immediate vicinity of marine shell surface find. One shovel probe (SP 1) produced a single additional marine shell fragment within the initial 20 cmbs, while the other nearby excavation (SP 2) produced only modern materials.
See Continuation Sheet. page 2 of 3.

***P3b. Resource Attributes:** AP1; AP15

***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☒ Other: Isolate

P5b. Description of Photo: (view, date, accession #)
Callianax biplicata and *Haliotis* sp. fragments encountered during pedestrian survey of the Carr Lake agricultural fields.

***P6. Date Constructed/Age and Source:** ☐ Historic ☒ Prehistoric ☐ Both

***P7. Owner and Address:**
Big Sur Land Trust
509 Hartnell Street
Monterey, CA
93940

***P8. Recorded by:** Robert Johnson-Ramirez, Cris Lowgren, Hannah Ehrlich, and Paul Rigby
Date Recorded: 1/05/2021

***P10. Survey Type:** (Describe)
Pedestrian Survey 15m transects.

***P11. Report Citation:** Phase I Cultural Resource Inventory Study: Big Sur Land Trust Carr Lake Project at 618 Sherwood Drive in Salinas, Monterey County, California.
***Attachments:** ☐ NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

*P3a. (Continued): All collected cultural material was transferred, in agreement with the landowner Big Sur Land Trust, to Louise J. Miranda Ramirez, Tribal Chairwoman for the Ohlone/Costanoan-Esselen Nation. Final disposition of the artifacts will be coordinated with the landowner upon completion of future construction activities. The agricultural field in which the shell fragments were located has been extensively plowed, and in combination with flooding events, likely has affected the context of the artifacts. Historically, the Carr Lake basin floods seasonally.

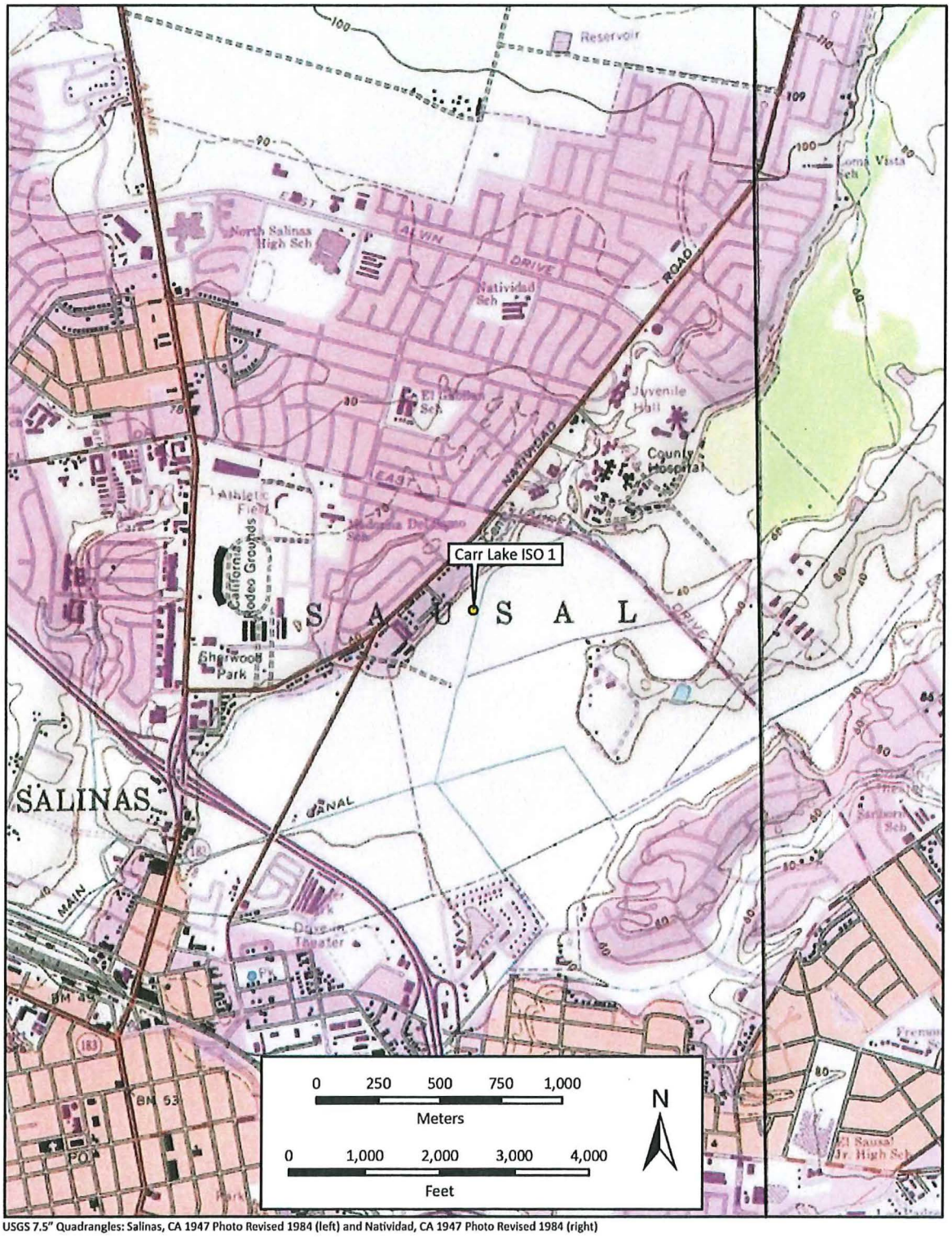
State of California & Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial Carr Lake ISO 1

*Resource Name or # (Assigned by recorder) Carr Lake ISO 1

*Map Name: Salinas/Natividad *Scale: 1:24,000 *Date of map: 1947 (PR 1984)



USGS 7.5" Quadrangles: Salinas, CA 1947 Photo Revised 1984 (left) and Natividad, CA 1947 Photo Revised 1984 (right)

* Required information

Hexagon Transportation Consultants, Inc.

Memorandum

Date: September 11, 2020

To: Mr. Mike Bellinger, BFS Landscape Architects

From: Gary Black, Marc Powell, Rueben Rodriguez

Subject: Road Alignment and Driveway Study for Carr Lake Restoration and Park Development Project in Salinas, CA

Hexagon Transportation Consultants, Inc. has completed a road alignment and driveway study for the proposed Carr Lake Restoration and Park Development project in Salinas, California. The goals of this traffic analysis were to (1) develop an alternate road alignment for the Salinas General Plan's proposed Bernal Drive and Constitution Boulevard extensions and (2) to evaluate the site access and circulation of the proposed Carr Lake Restoration and Park Development project. Hexagon's recommendations regarding the alternate road alignment and the project site access and circulation are described below.

Road Alignment

The Salinas General Plan (2002) identified future improvements to the roadway network, which included the extensions of Bernal Drive and Constitution Boulevard. The General Plan's proposed extension of these roadways would cut-through the project site of the proposed Carr Lake Restoration and Park Development. In order to minimize the effect on the proposed project while achieving the General Plan's goals, Hexagon has developed an alternate road alignment. The proposed project site, the General Plan roadway extensions, and the alternate road alignment are shown on Figure 1.

The alternate road alignment was designed utilizing the criteria listed below, which are derived from specifications in the Salinas General Plan.

- 45 miles per hour (mph) design speed
- Four-lane arterial
- Daily traffic of 32,500
- 10% of daily traffic occurring during the peak hour
- 60/40 directional split

The alternate road alignment denotes the extension from Bernal Street as Street A and denotes the extension from Constitution Road as Street B. Street A and Street B would be arterials with 2 lanes in each direction, a median wide enough for left-turn pockets and/or a two-way left-turn lane, and Class II bicycle lanes in each direction. The alternate road alignment proposed intersections and intersection controls are listed below.

1. Street A and Bernal Street – signal control
2. Street A and Sherwood Drive – signal control
3. Street A and Street B – signal control
4. Laurel Drive and Constitution Boulevard/Street B – signal control

Exhibit 49

The alternate road alignment proposed intersection configurations and controls are shown on Figure 2. A conceptual plan of the alternate road alignment is provided as Attachment 1 and Attachment 2.

Site Access and Circulation

The proposed Carr Lake Restoration and Park Development project would be located directly south of Sherwood Drive between La Posada Drive and Sherwood Place. The project site would include driveways along Sherwood Drive and La Posada Drive. The conceptual plan for the Carr Lake Restoration and Park Development project is shown on Figure 3.

As currently proposed, the project site would include a Sherwood Drive parking lot and a La Posada Drive parking lot. The Sherwood Drive parking lot is shown to include two driveways. It is recommended that the Sherwood Drive parking lot operate with a one-way, counterclockwise traffic flow. To accomplish this, the western driveway should be inbound only and the eastern driveway should be outbound only. The site plan shows angled parking spaces in the Sherwood Drive parking lot which would help facilitate the counterclockwise traffic flow. Due to the traffic volumes on Sherwood Drive, it is likely that left-turn vehicles at the Sherwood Drive driveways would experience significant delays. Therefore, it is recommended that left-turn in and out movements at the Sherwood Drive driveways be restricted by a raised median. A conceptual plan for a raised median on Sherwood Drive is provided as Attachment 3. It is anticipated that during the AM and PM peak-hours there would be sufficient gaps in traffic to allow inbound and outbound right-turns to complete their movements. Because of the low volume of traffic using the small parking lot, a deceleration lane on Sherwood Drive into the driveway would not be warranted.

The project site would also include a parking lot that is accessible from La Posada Drive. Due to the low traffic volumes on La Posada Drive, this driveway could be full access.

The Sherwood Drive parking lot would have approximately 13 parking spaces, and the La Posada Drive parking lot would have approximately 48 parking spaces.

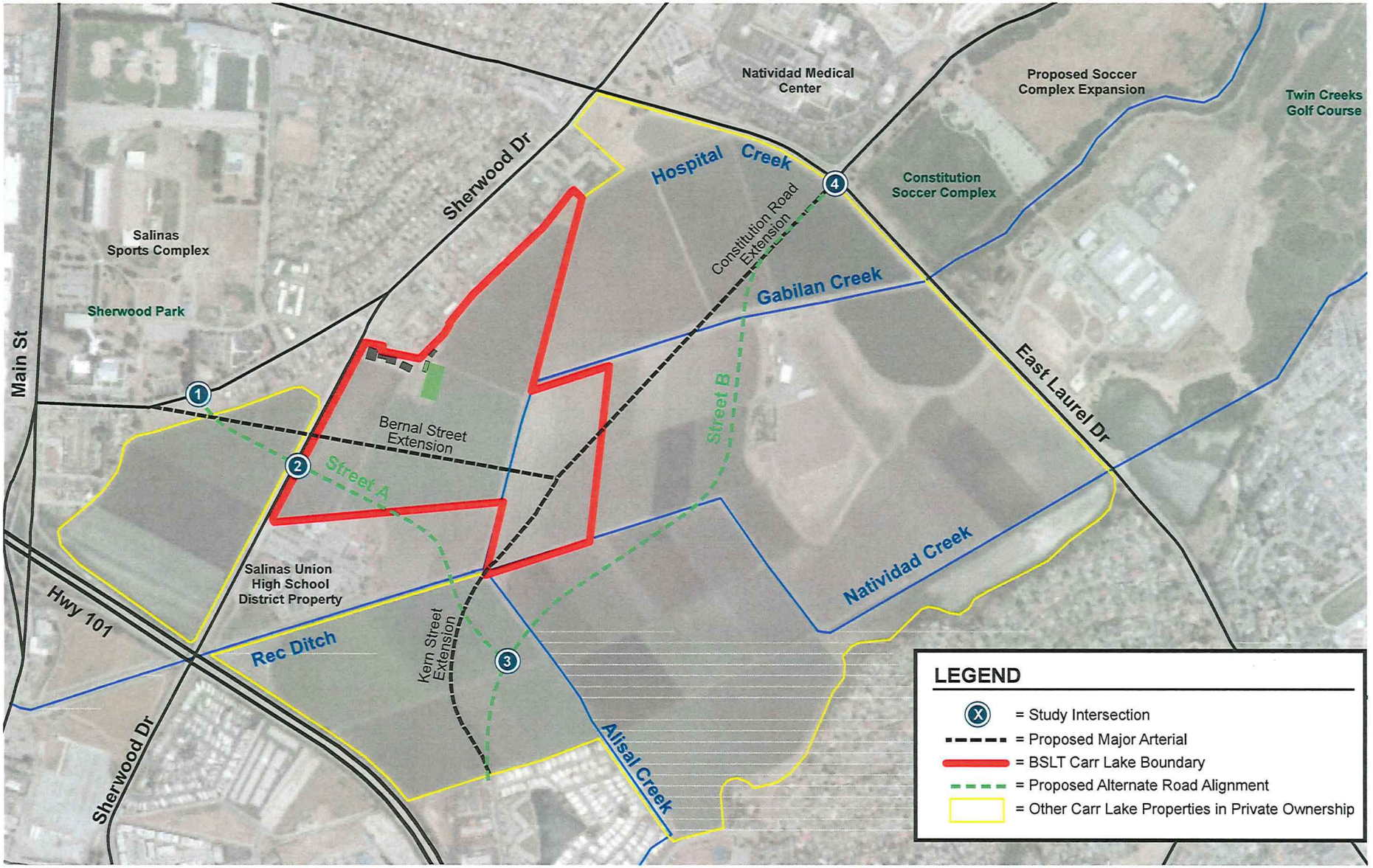


Figure 1
General Plan and Alternate Road Alignment

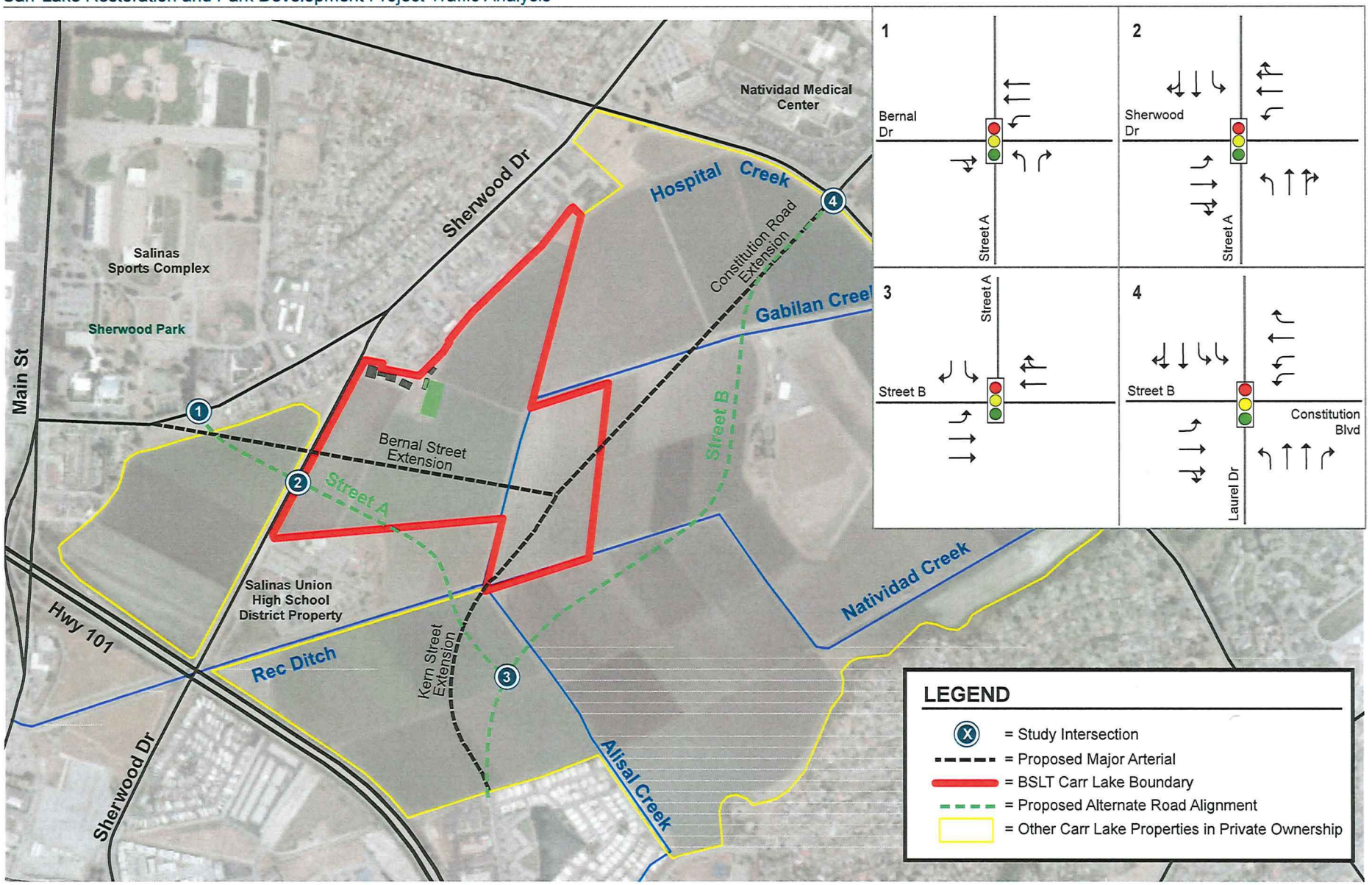


Figure 2
Proposed Alternate Road Alignment Intersection Configurations and Controls

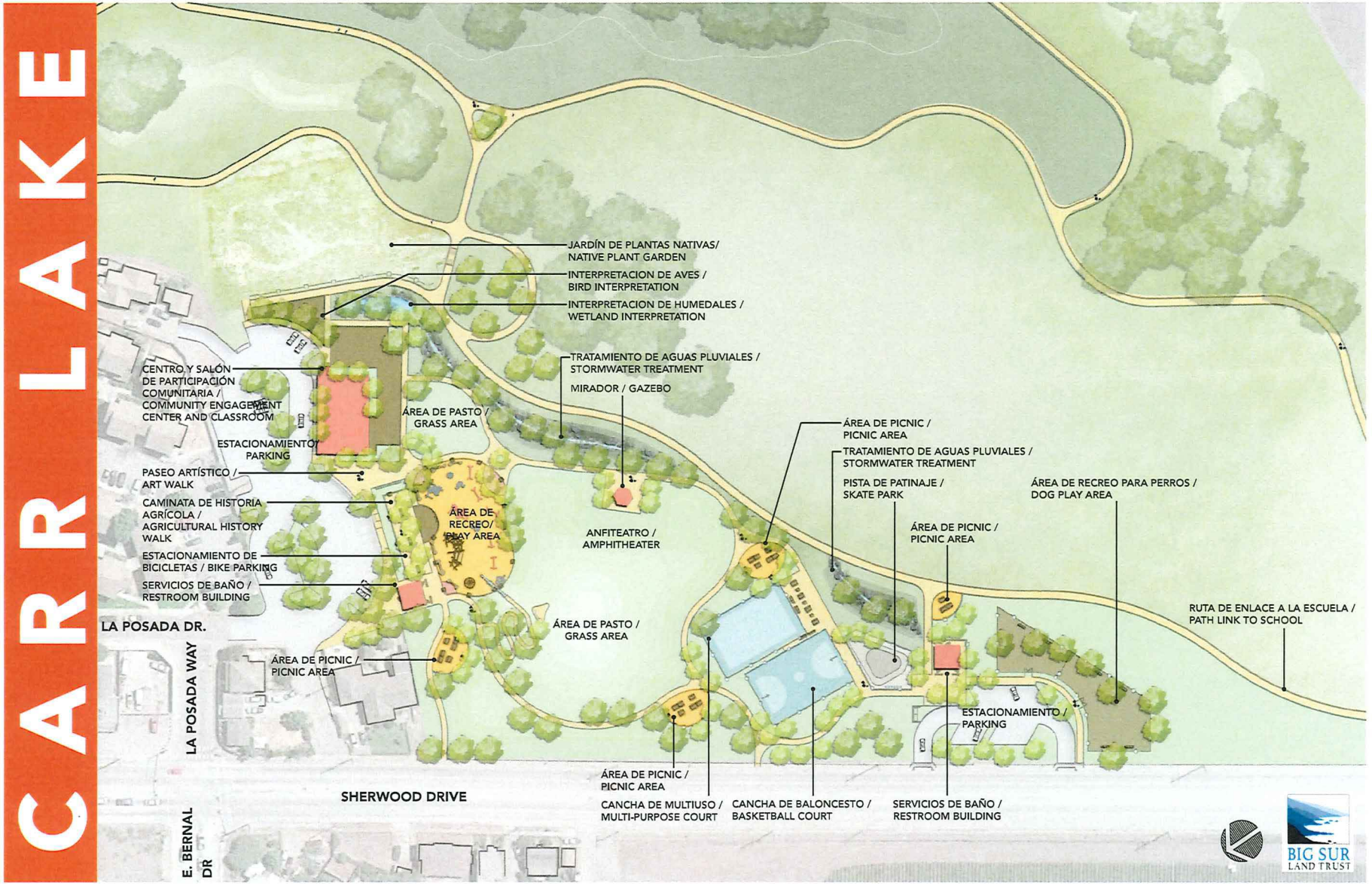
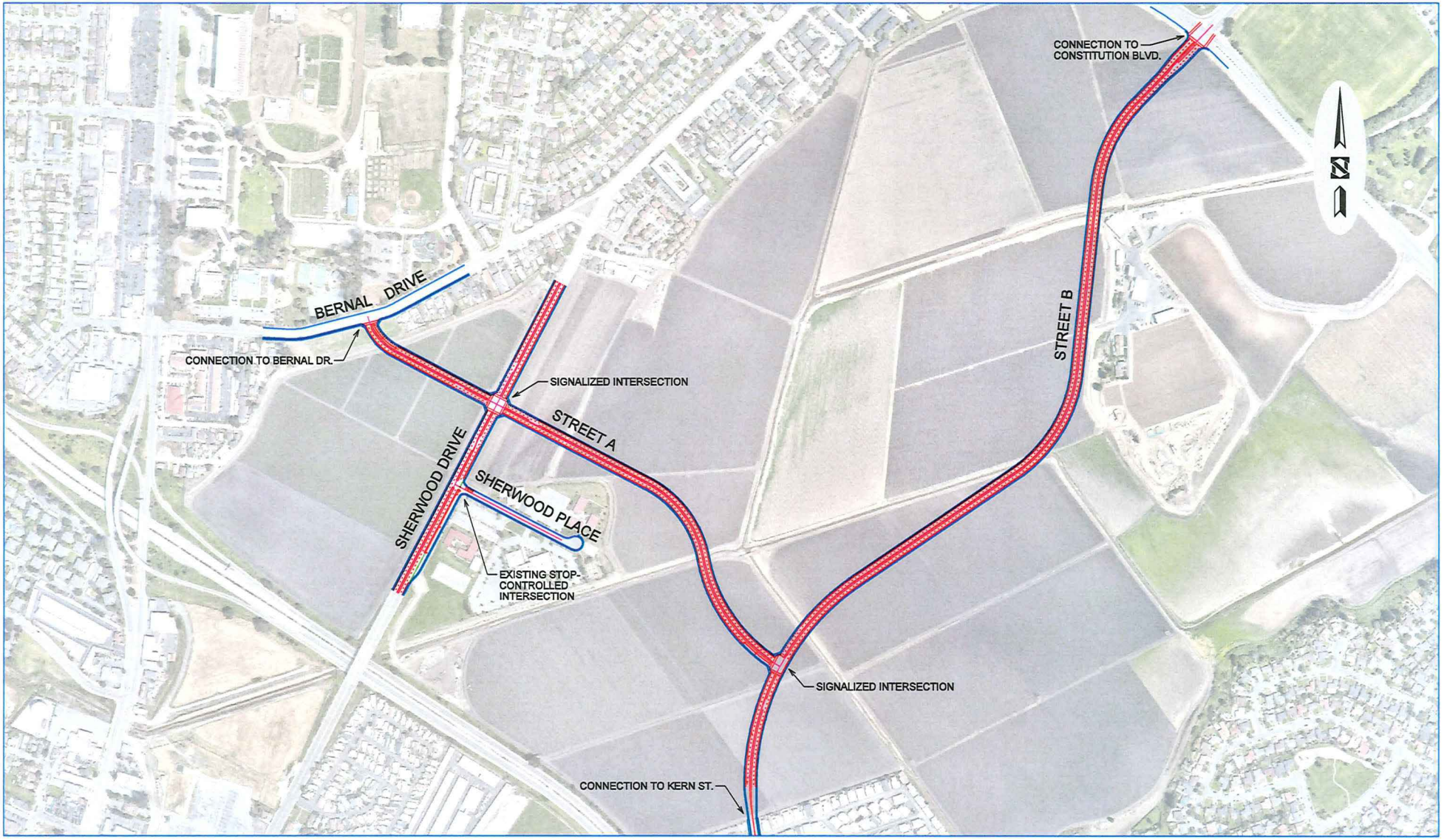


Figure 3
Proposed Conceptual Plan of Carr Lake Restoration and Park Development Project

Attachment 1:

Alternate Road Alignment



Hexagon Transportation Consultants, Inc.

4 North Second Street, Suite 400
San Jose, California 95113
Phone: (408) 971-6100
www.hextrans.com

ALIGNMENT OF PROPOSED ROADWAYS
CARR LAKE PROJECT
SALINAS, CALIFORNIA

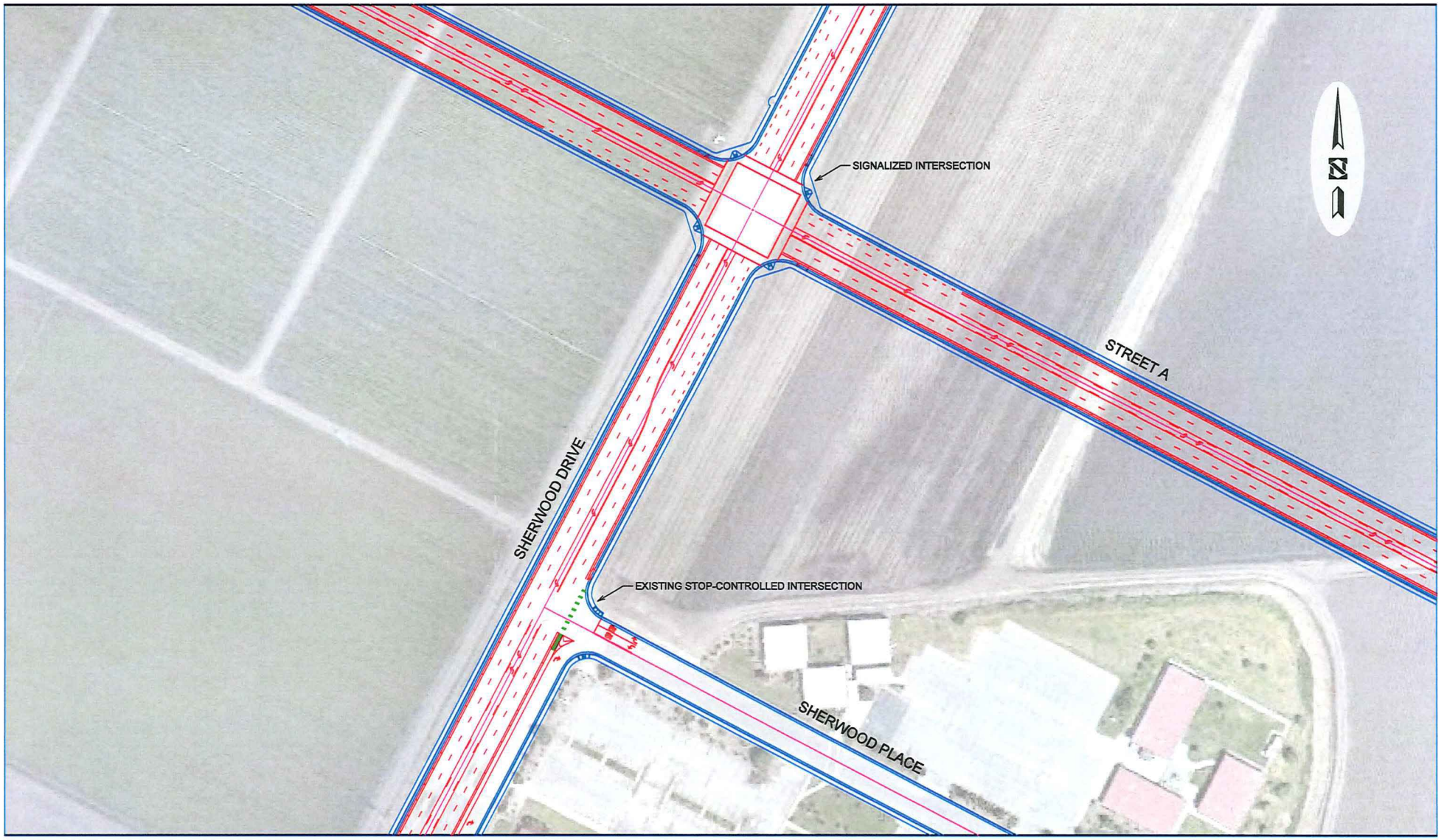
DESIGNED BY: M. POWELL

DATE: 6/10/2020

GRAPHIC SCALE
0 500 750 1000
1 INCH = 500 FEET

Attachment 2:

Alternative Road Alignment Detail



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PROPOSED ROADWAYS DETAIL
CARR LAKE PROJECT
SALINAS, CALIFORNIA

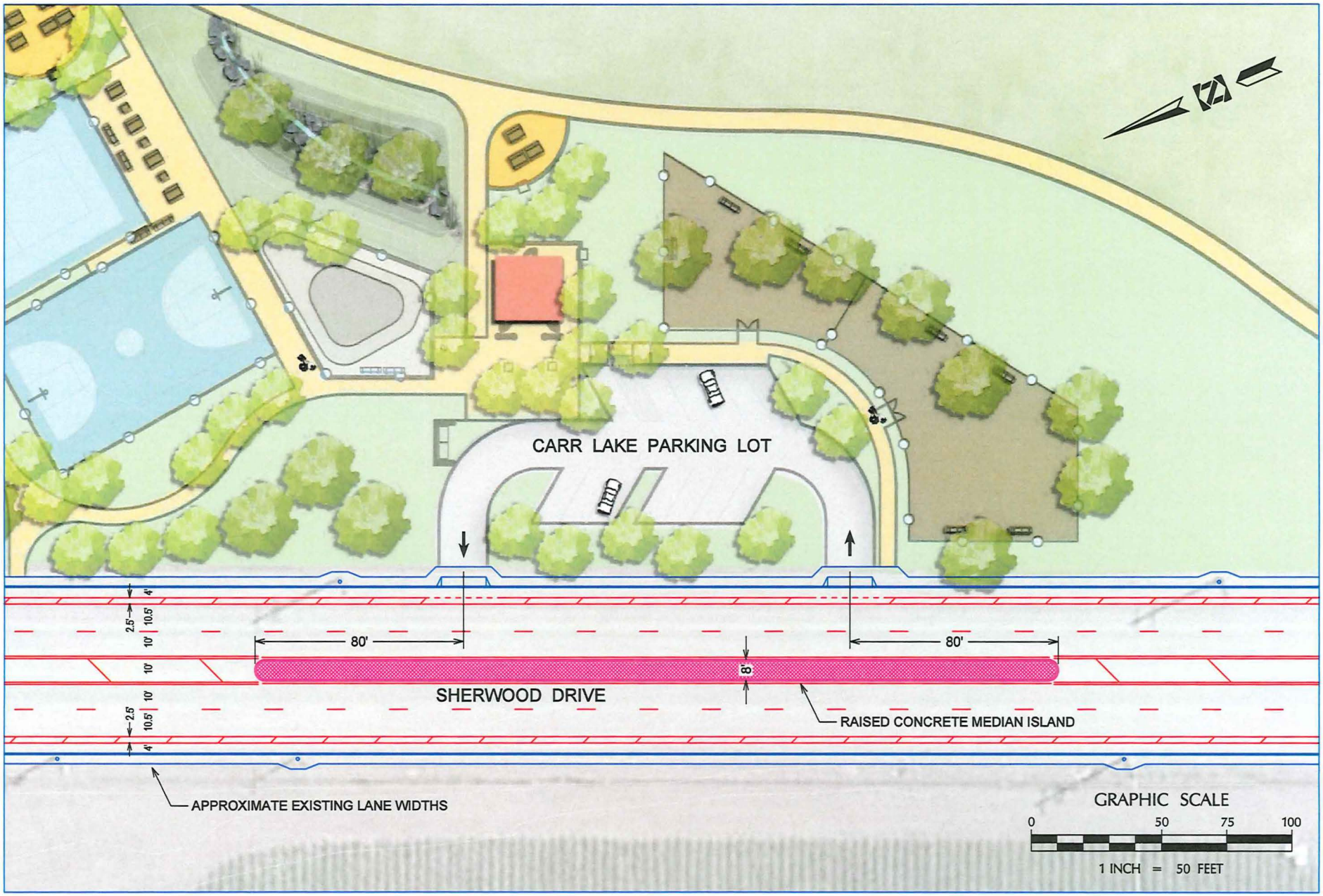
DESIGNED BY: M. POWELL

DATE: 8/10/2020

GRAPHIC SCALE
0 100 150 200
1 INCH = 100 FEET

Attachment 3:

Proposed Sherwood Drive Median



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PROPOSED MEDIAN ISLAND
SHERWOOD DRIVE AT
CARR LAKE PROJECT DRIVEWAYS

DESIGNED BY: M. POWELL

DATE: 9/11/2020