CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WEB: WWW.COASTAL.CA.GOV

F13a

CDP 3-19-0894 (CARMEL RIVER FREE PROEJCT)
JUNE 10, 2022 HEARING
EXHIBITS

Table of Contents

Exhibit 1: Regional Vicinity Map
Exhibit 2: Project Site Map
Exhibit 3: Proposed Project Plans (excerpts)
Exhibit 4: Proposed Restoration Plans
Exhibit 5: Proposed Public Access Trail Map

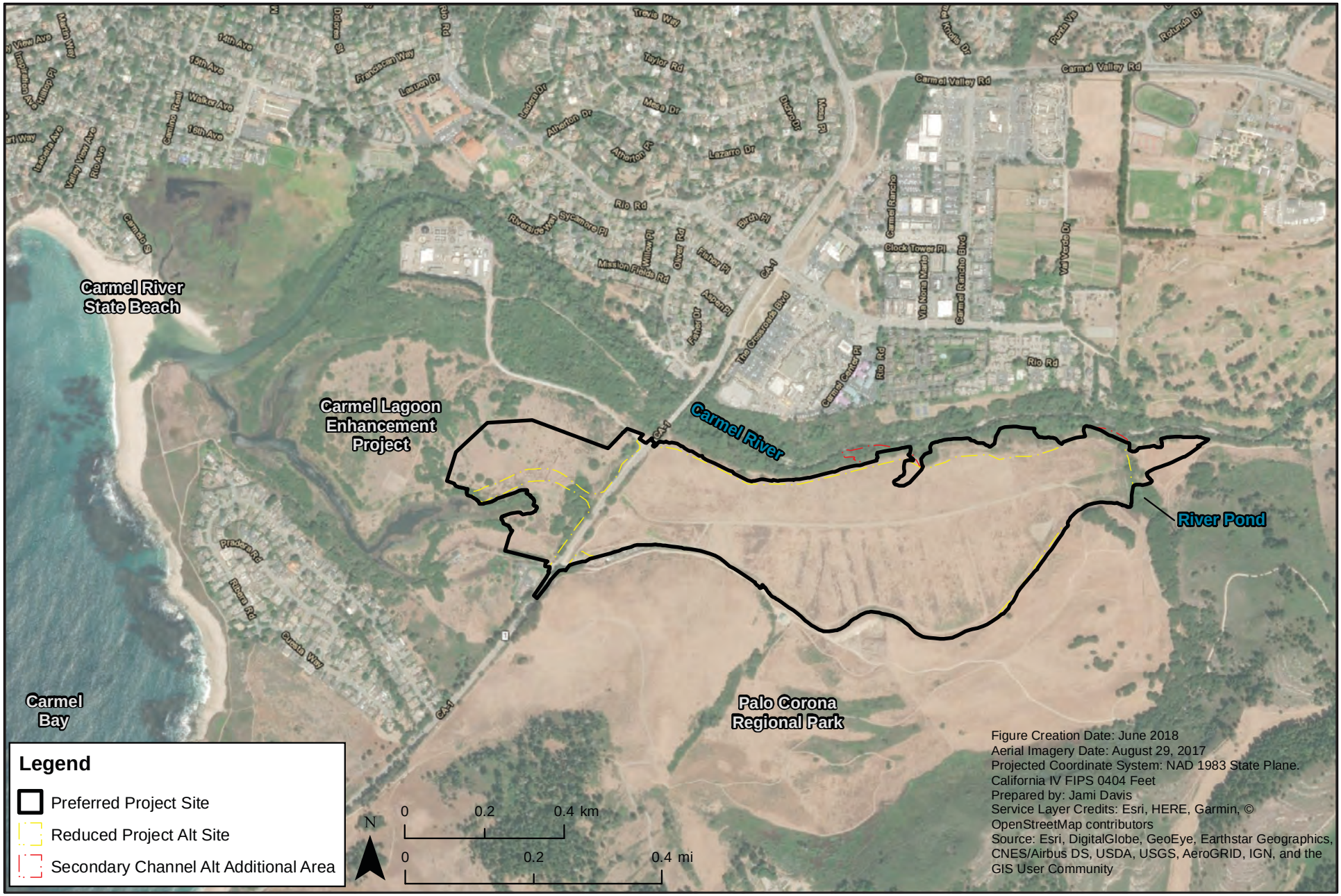
DD&A

Project Vicinity Map

June 2018

Exhibit 1

3-19-0894 (Carmel River FREE Project)

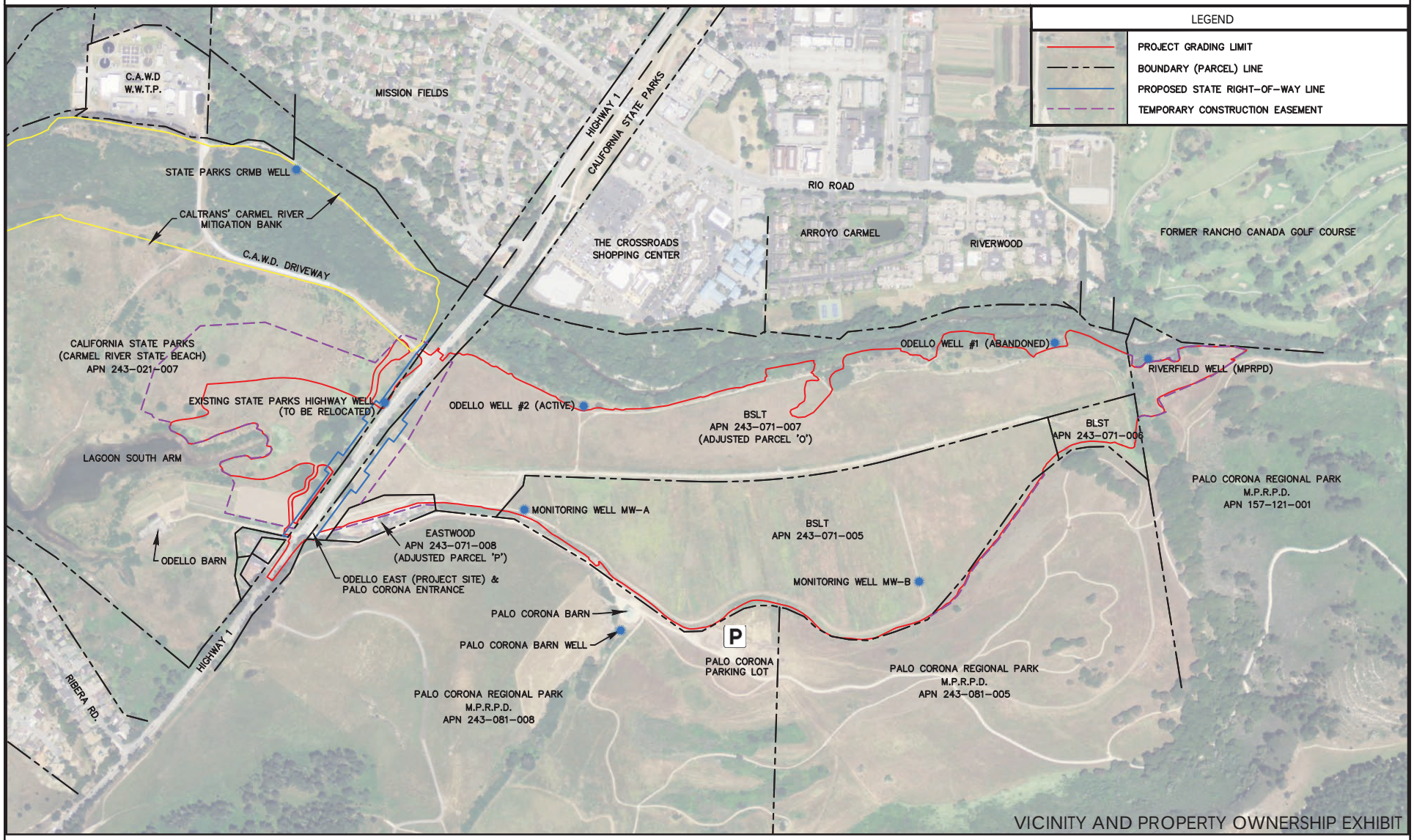


Project Location Map

June 2018

Exhibit 2

3-19-0894 (Carmel River FREE Project)



Aerial Imagery Date: NAIP 2012
Horizontal Coordinate System: NAD 83, Calgrid Zone 4
Vertical Coordinate System: NAD 88

Source: Whitson Engineers, June 2018

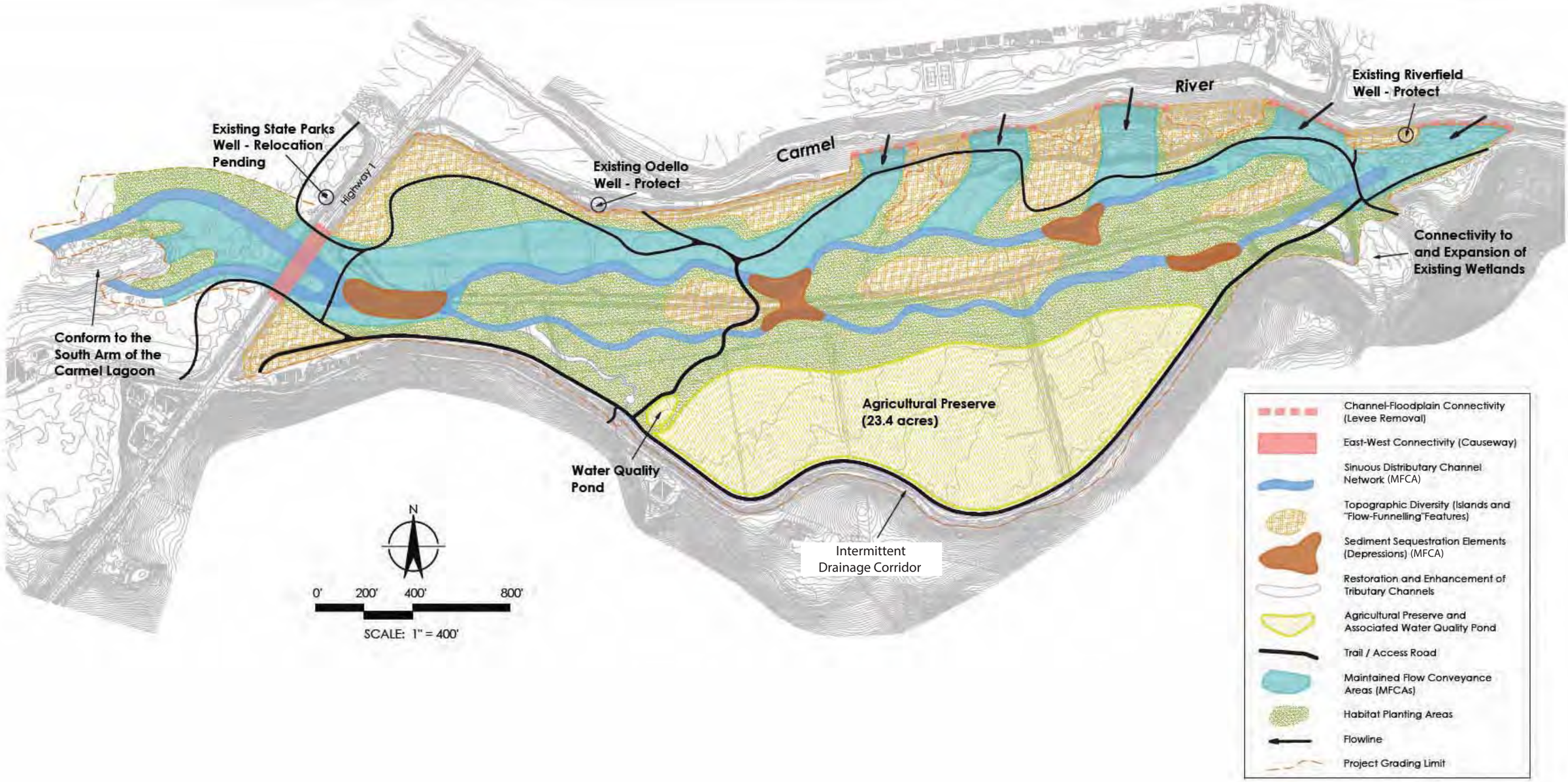
DD&A

Property Ownership Map

June 2018

Exhibit 2

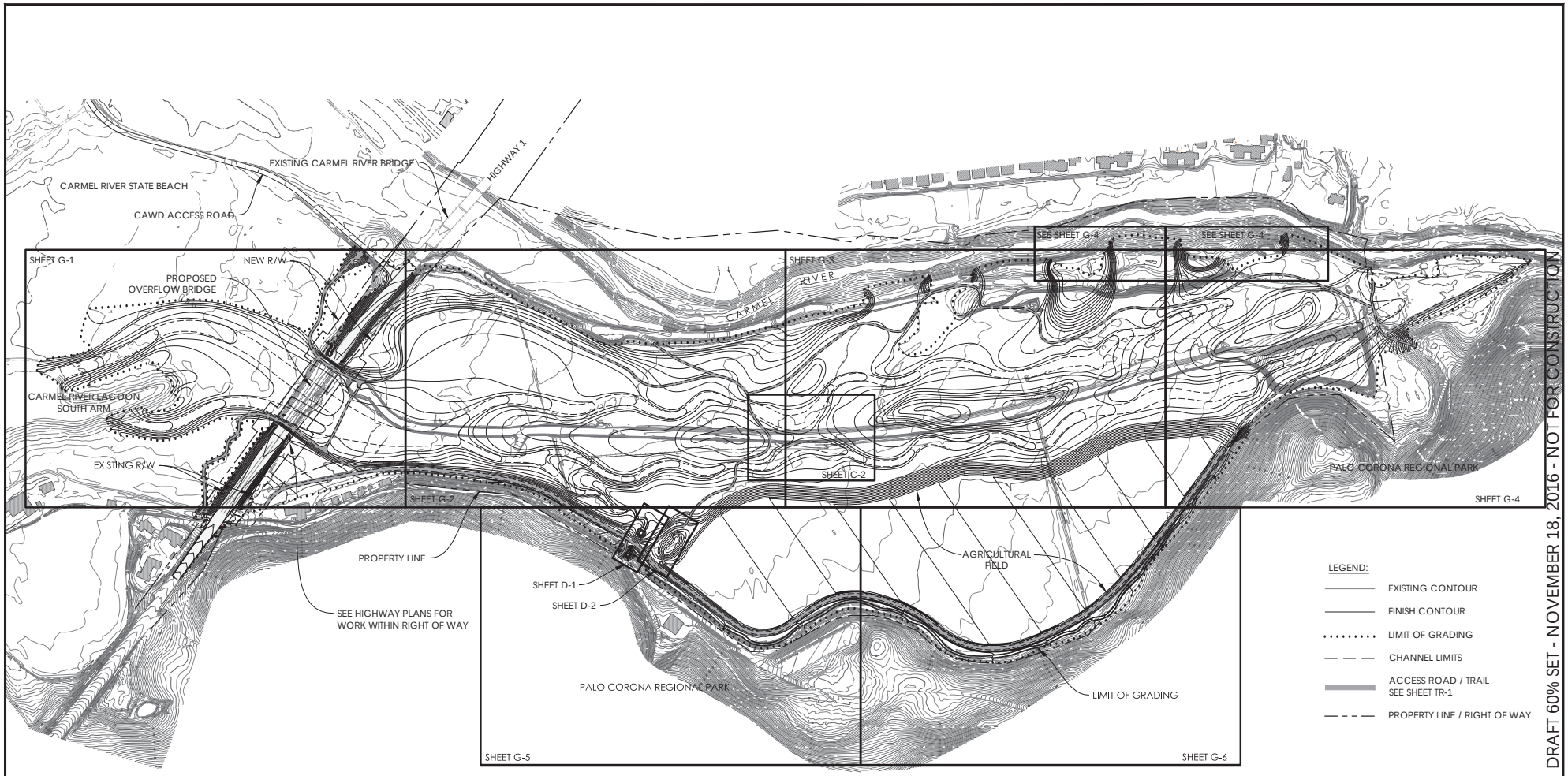
3-19-0894 (Carmel River FREE Project)
2 of 2



Source: Balance Hydrologics, May 2015

Project Design Features

June 2018



DRAFT 60% SET - NOVEMBER 18, 2016 - NOT FOR CONSTRUCTION

OVERALL SITE PLAN

BIG SUR LAND TRUST

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:
EB	06/12/2018	COUNTY COMMENT RESPONSES

DATE: 11/18/2016
SCALE: 1" = 200'
DRAWN BY: DJ
JOB #: BH # 214044

NOT FOR CONSTRUCTION

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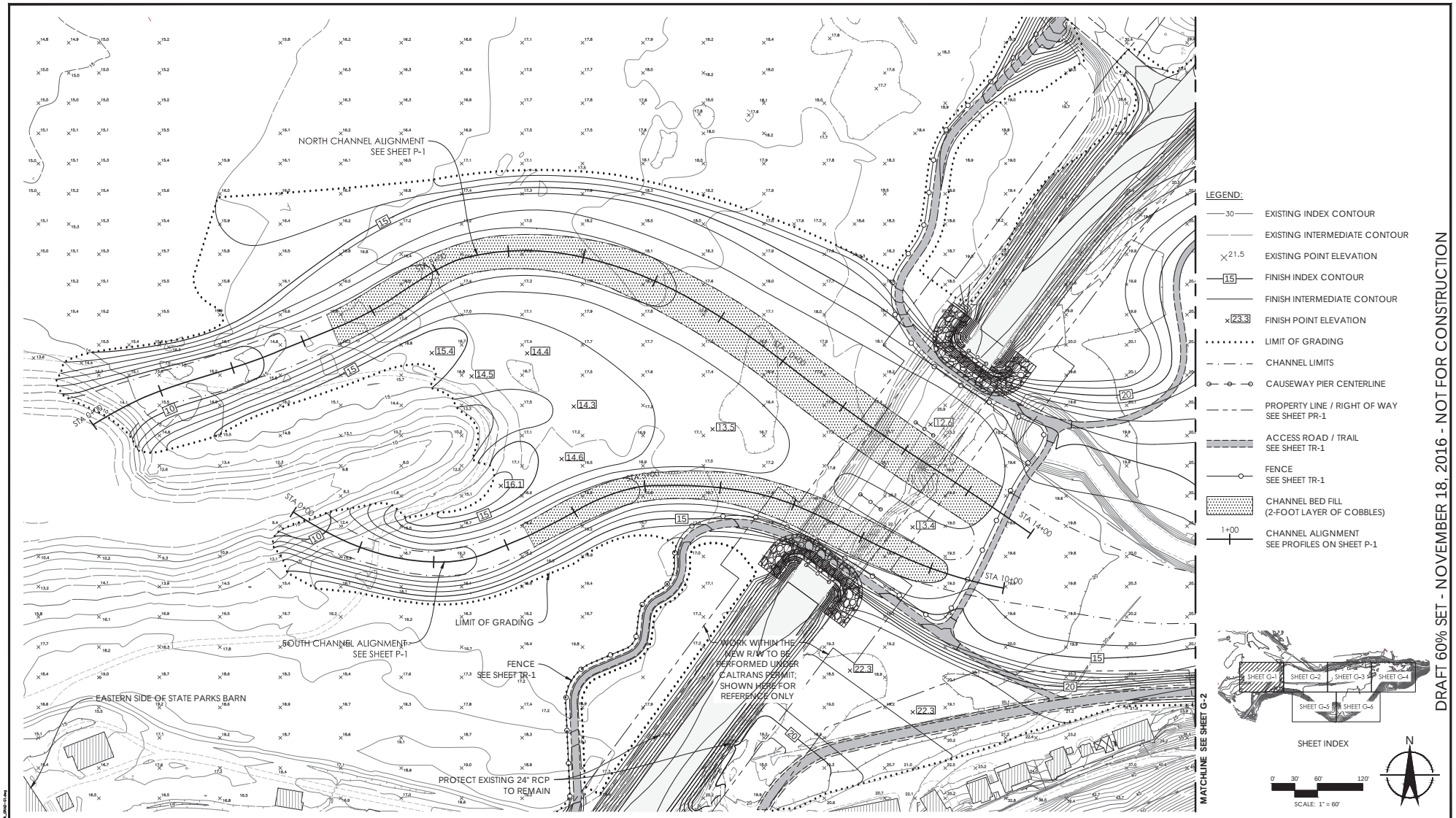
tel (510) 704-1000 · *fax* (510) 704-1001 · www.balancehydro.com

SHEET S-1 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
2 of 16



DRAFT 60% SET - NOVEMBER 18, 2016 - NOT FOR CONSTRUCTION

GRADING PLAN

BIG SUR LAND TRUST

CARMEL RIVER FLOODPLAIN RESTORATION
AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:
EB	06/12/2018	COUNTY COMMENT RESPONSES

DATE: 11/18/2016
SCALE: 1" = 60'
DRAWN BY: DJ
JOB #: BH # 214044

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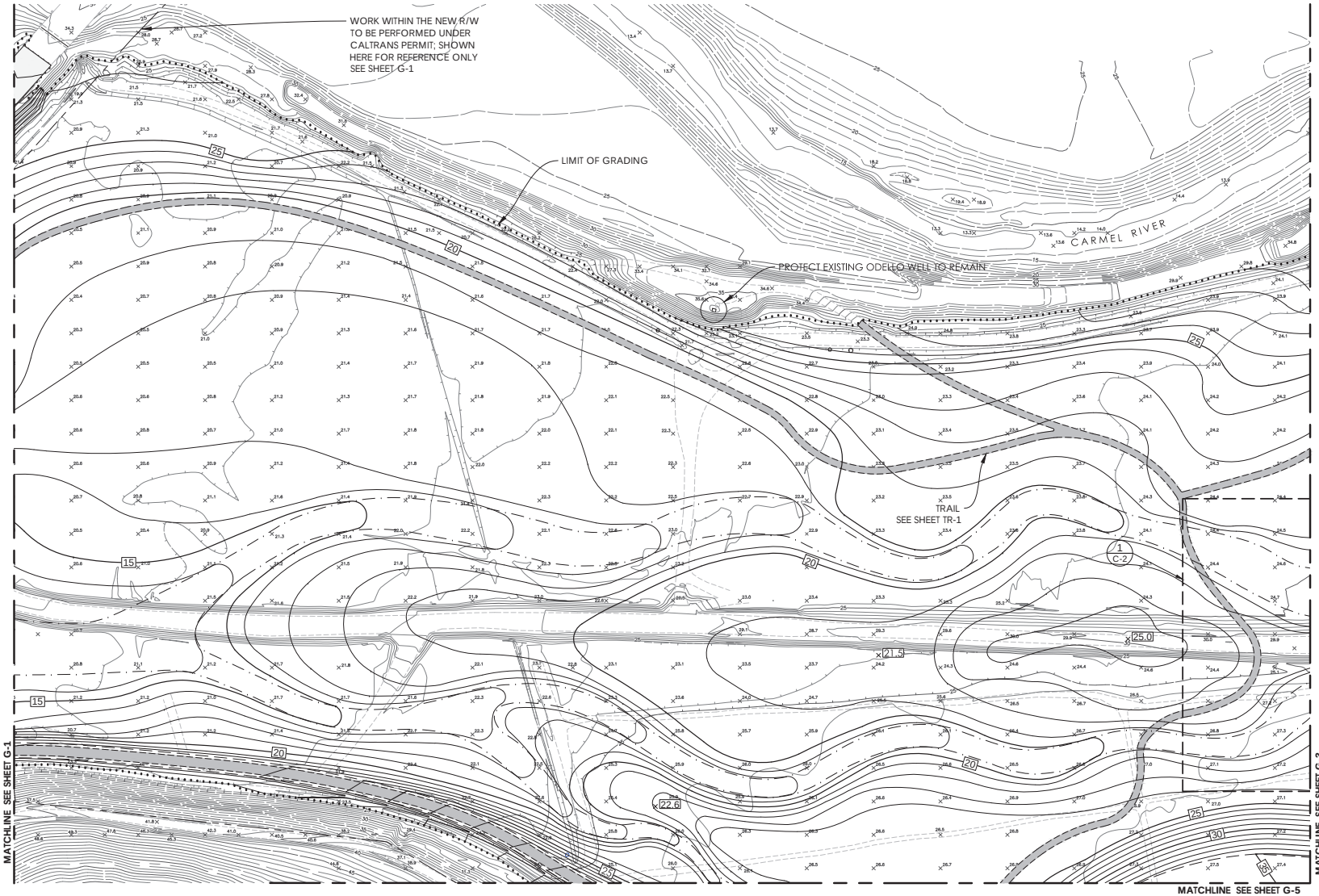
SHEET G-1 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
3 of 16

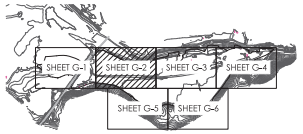


NOTES:

1. SEE SHEET C-1 FOR DETAILS ON LOG PLACEMENT.

LEGEND:

- 30 — EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- ×21.5 — EXISTING POINT ELEVATION
- 15 — FINISH INDEX CONTOUR
- FINISH INTERMEDIATE CONTOUR
- ×23.3 — FINISH POINT ELEVATION
- LIMIT OF GRADING
- CHANNEL LIMITS
- PROPERTY LINE / RIGHT OF WAY SEE SHEET PR-1
- ACCESS ROAD / TRAIL SEE SHEET TR-1



SHEET INDEX

0' 30' 60' 120'

SCALE: 1" = 60'

N

DRAFT 60% SET - NOVEMBER 18, 2016 - NOT FOR CONSTRUCTION

GRADING PLAN

BIG SUR LAND TRUST

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT

PROJECT No. 7200

COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:
EB	06/12/2018	COUNTY COMMENT RESPONSES

DATE: 11/18/2016

SCALE: 1" = 60'

DRAWN BY: DJ

JOB #: BH # 214044

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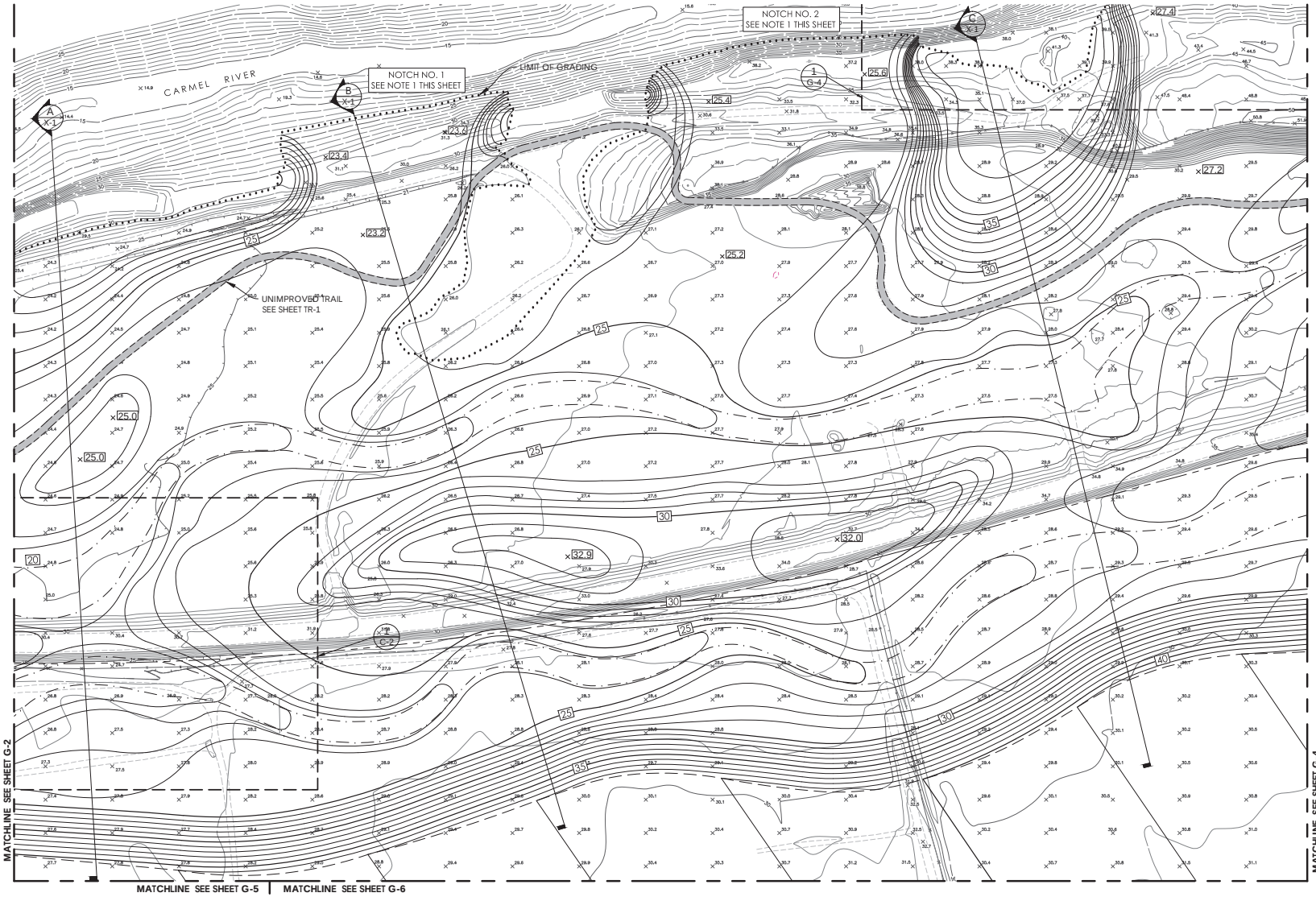
SHEET G-2 OF

Exhibit 3

3-19-0894 (Carmel River FREE Project)

4 of 16

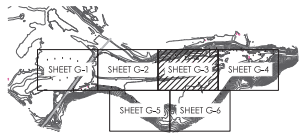


NOTES:

1. THE GRADING PLAN CALLS FOR THE EXCAVATION OF FOUR NOTCHES IN THE BERM ALONG THE SOUTH SIDE OF THE CARMEL RIVER. NOTCHES 1 AND 2 ARE SHOWN ON THIS SHEET. NOTCHES 3 AND 4 ARE SHOWN ON SHEET G-4. AFTER GRADES SHOWN ON THIS SHEET HAVE BEEN ACHIEVED, FURTHER EARTH WORK IN THE NOTCH AREAS IS REQUIRED. SEE SHEET G-7.
2. SEE SHEET C-1 FOR DETAILS ON LOG PLACEMENT.

LEGEND:

- 30 — EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- ×21.5 — EXISTING POINT ELEVATION
- 15 — FINISH INDEX CONTOUR
- FINISH INTERMEDIATE CONTOUR
- ×23.3 — FINISH POINT ELEVATION
- BREAKLINE
- LIMIT OF GRADING
- CHANNEL LIMITS
- TRAIL SEE SHEET TR-1



SHEET INDEX

0' 30' 60' 120'
SCALE: 1" = 60'

N

DRAFT 60% SET - NOVEMBER 18, 2016 - NOT FOR CONSTRUCTION

GRADING PLAN

BIG SUR LAND TRUST

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:
EB	06/12/2018	COUNTY COMMENT RESPONSES

DATE: 11/18/2016
SCALE: 1" = 60'
DRAWN BY: DJ
JOB #: BH # 214044

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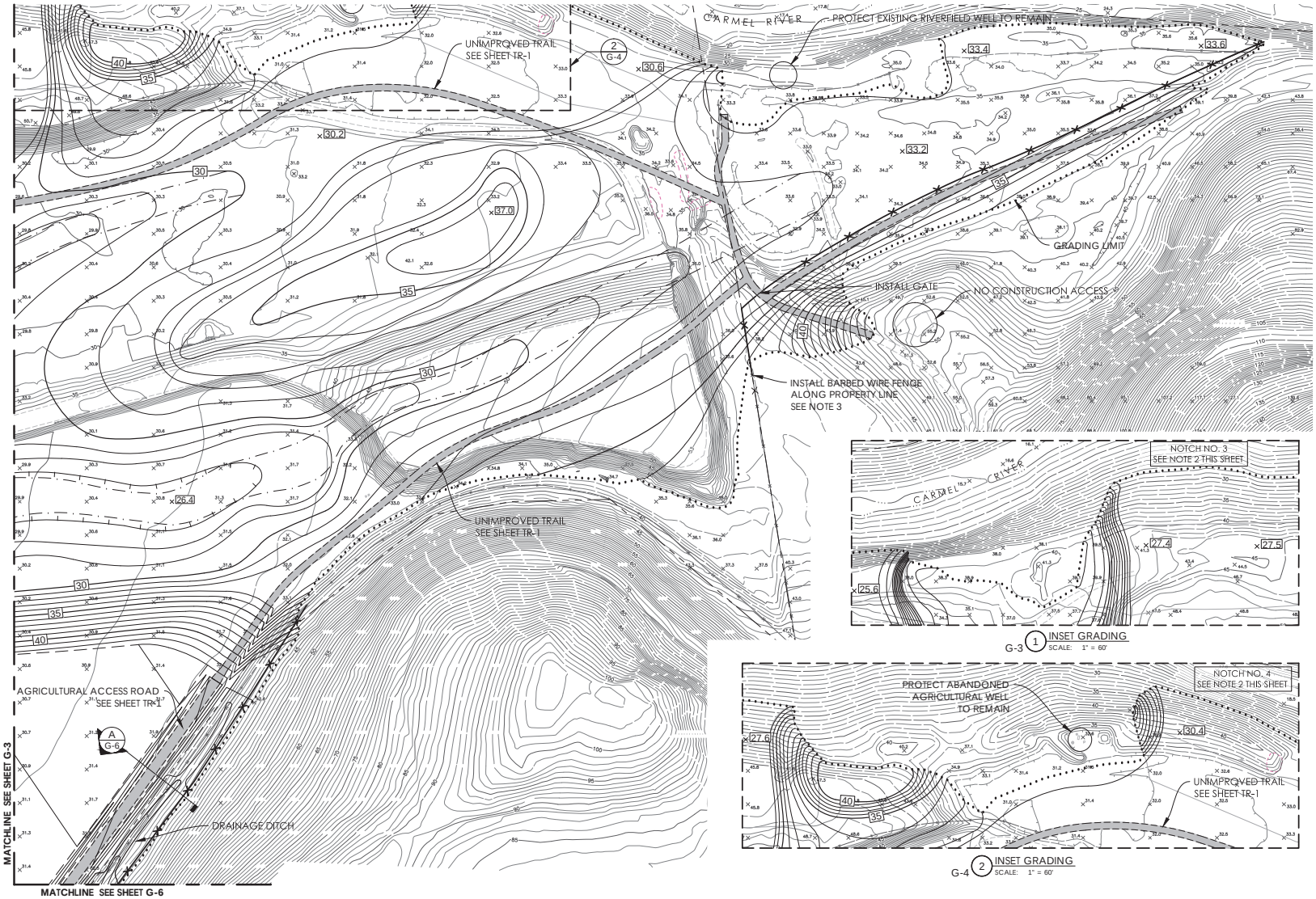
SHEET G-3 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
5 of 16



G-3 1 INSET GRADING
SCALE: 1" = 60'

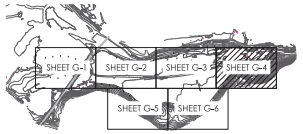
G-4 2 INSET GRADING
SCALE: 1" = 60'

NOTES:

1. PROPOSED GRADING BEYOND BIG SUR LAND TRUST PROPERTY TO BE COORDINATED WITH MONTEREY PENINSULA REGIONAL PARKS DISTRICT.
2. THE GRADING PLAN CALLS FOR THE EXCAVATION OF FOUR NOTCHES IN THE BERM ALONG THE SOUTH SIDE OF THE CARMEL RIVER. NOTCHES 3 AND 4 ARE SHOWN ON THIS SHEET. NOTCHES 1 AND 2 ARE SHOWN ON SHEET G-3. AFTER GRADES SHOWN ON THIS SHEET HAVE BEEN ACHIEVED, FURTHER EARTH WORK IN THE NOTCH AREAS IS REQUIRED. SEE SHEET G-7.
3. CONSTRUCT BARBED WIRE FENCE (5 STRAND) WITH WOOD POSTS PER CALTRANS PLANS A86 THROUGH A86D, IN LOCATIONS SHOWN ON THE DRAWINGS, AND WITH GATES AT TRAIL CROSSINGS.

LEGEND:

- 30 — EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- ×21.5 — EXISTING POINT ELEVATION
- 15 — FINISH INDEX CONTOUR
- FINISH INTERMEDIATE CONTOUR
- ×23.3 — FINISH POINT ELEVATION
- BREAKLINE
- LIMIT OF GRADING
- CHANNEL LIMITS
- PROPERTY LINE / RIGHT OF WAY SEE SHEET PR-1
- ACCESS ROAD / TRAIL SEE SHEET TR-1
- NEW BARBED WIRE FENCE SEE NOTE 3



SHEET INDEX

0' 30' 60' 120'
SCALE: 1" = 60'

N

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GRADING PLAN

BIG SUR LAND TRUST

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:

DATE: 11/18/2016
SCALE: 1" = 60'
DRAWN BY: DJ
JOB #: BH # 214044

NOT FOR CONSTRUCTION

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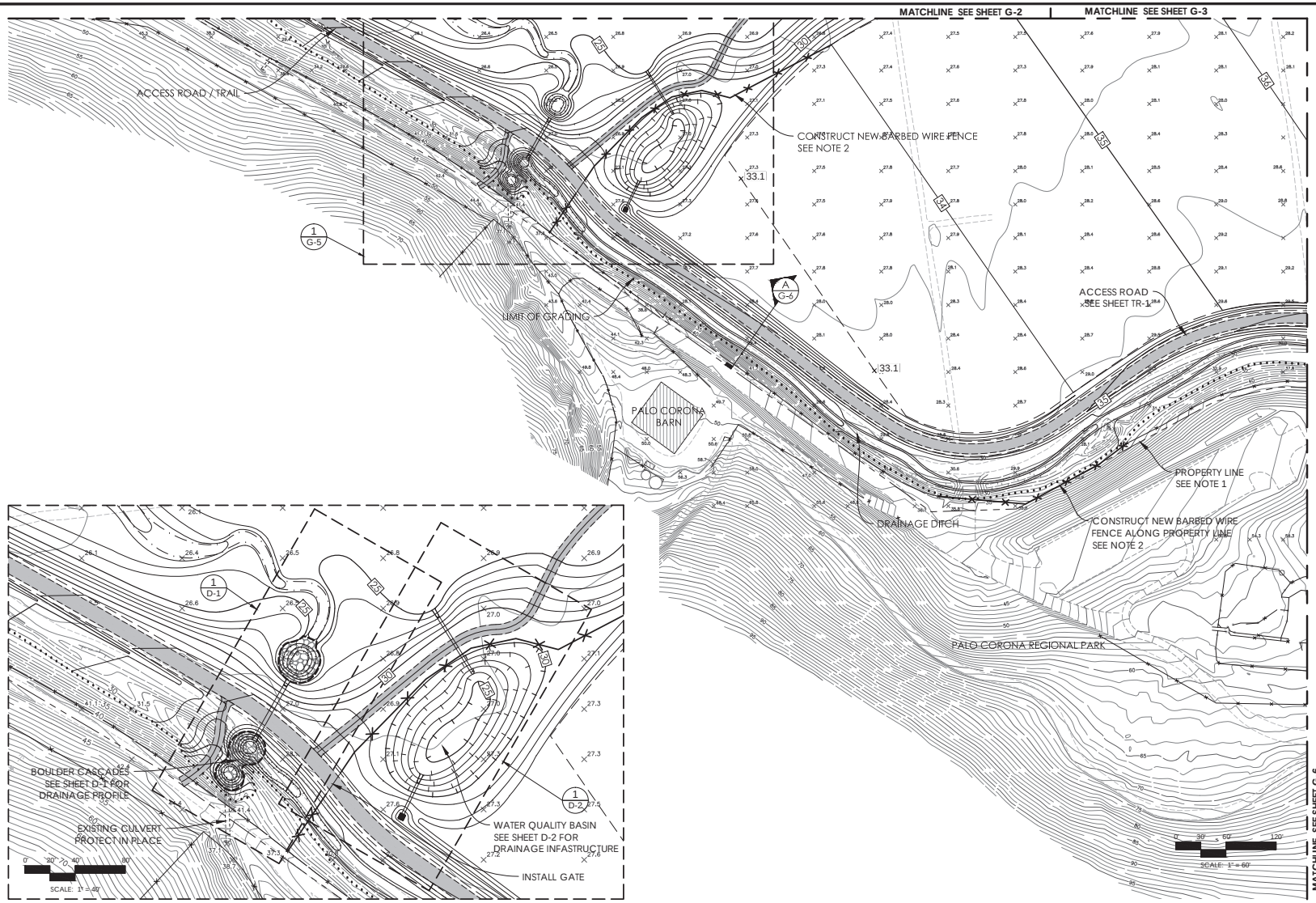
SHEET G-4 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
6 of 16



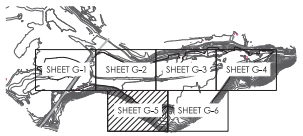
1 GRADING INSET
SCALE: 1" = 40'

NOTES:

1. PROPOSED GRADING BEYOND BIG SUR LAND TRUST PROPERTY TO BE COORDINATED WITH MONTEREY PENINSULA REGIONAL PARKS DISTRICT.
2. CONSTRUCT BARBED WIRE FENCE (5 STRAND) WITH WOOD POSTS PER CALTRANS PLANS A86 THROUGH A86D, IN LOCATIONS SHOWN ON THE DRAWINGS, AND WITH GATES AT TRAIL CROSSINGS. ASSURE THAT NEW FENCE CLOSES WITH EXISTING FENCE.

LEGEND:

- 30 — EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- 21.5 — EXISTING POINT ELEVATION
- 30 — FINISH INDEX CONTOUR
- FINISH INTERMEDIATE CONTOUR
- 23.3 — FINISH POINT ELEVATION
- BREAKLINE
- LIMIT OF GRADING
- CHANNEL LIMITS
- PROPERTY LINE / RIGHT OF WAY SEE SHEET PR-1
- ACCESS ROAD / TRAIL SEE SHEET TR-1
- EXISTING FENCE TO REMAIN
- NEW BARBED WIRE FENCE SEE NOTE 2



SHEET INDEX

N

DRAFT 60% SET - NOVEMBER 18, 2016 - NOT FOR CONSTRUCTION

GRADING PLAN

BIG SUR LAND TRUST

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:

DATE: 11/18/2016
SCALE: AS NOTED
DRAWN BY: DJ
JOB #: BH # 214044

NOT FOR CONSTRUCTION

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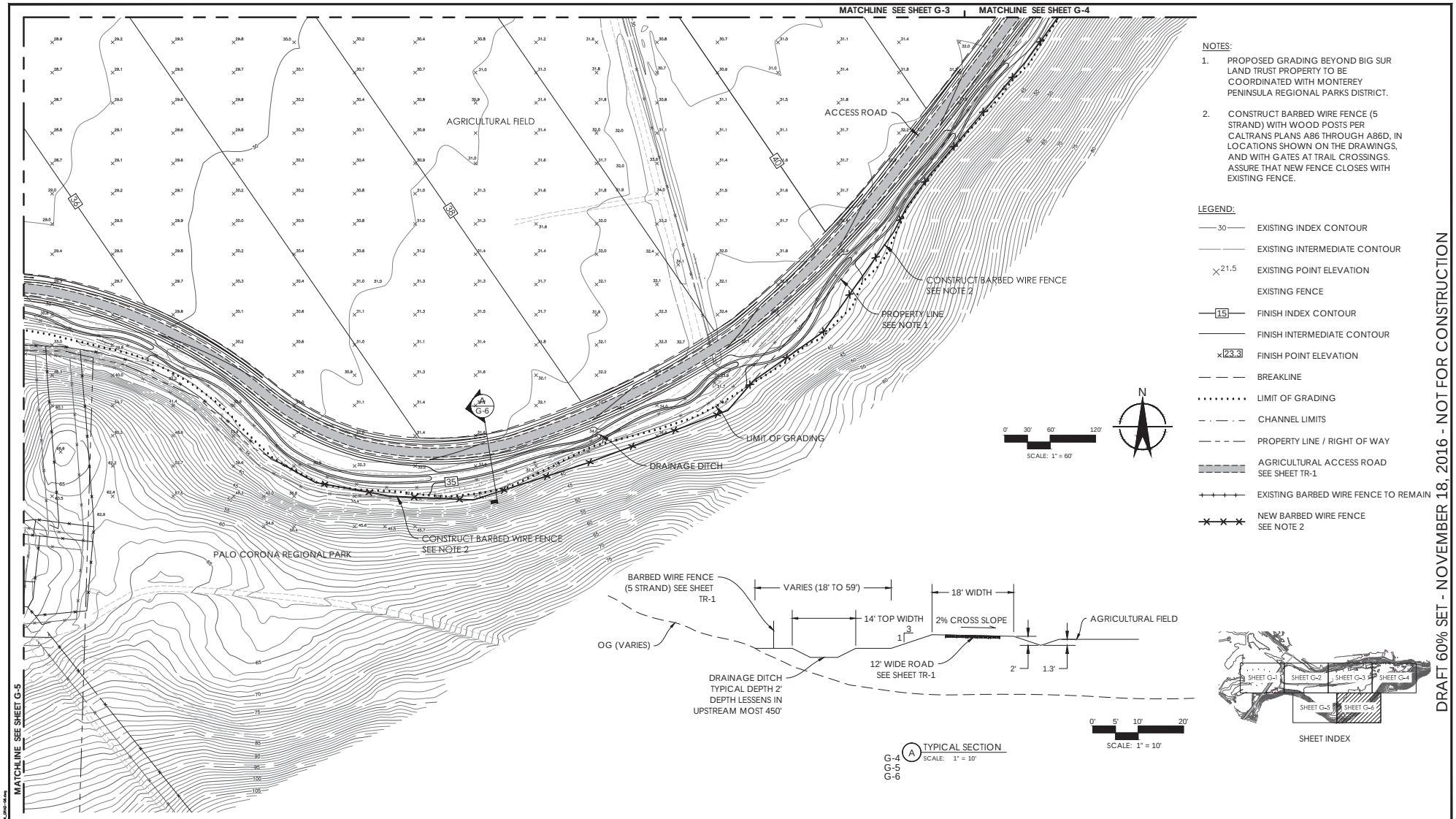
tel (510) 704-1000 · *fax* (510) 704-1001 · www.balancehydro.com

SHEET G-5 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
7 of 16



NOTES:

1. PROPOSED GRADING BEYOND BIG SUR LAND TRUST PROPERTY TO BE COORDINATED WITH MONTEREY PENINSULA REGIONAL PARKS DISTRICT.
2. CONSTRUCT BARBED WIRE FENCE (5 STRAND) WITH WOOD POSTS PER CALTRANS PLANS A86 THROUGH A86D, IN LOCATIONS SHOWN ON THE DRAWINGS, AND WITH GATES AT TRAIL CROSSINGS. ASSURE THAT NEW FENCE CLOSES WITH EXISTING FENCE.

LEGEND:

- 30 — EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- 21.5 — EXISTING POINT ELEVATION
- EXISTING FENCE
- 15 — FINISH INDEX CONTOUR
- FINISH INTERMEDIATE CONTOUR
- 23.3 — FINISH POINT ELEVATION
- BREAKLINE
- LIMIT OF GRADING
- CHANNEL LIMITS
- PROPERTY LINE / RIGHT OF WAY
- AGRICULTURAL ACCESS ROAD SEE SHEET TR-1
- EXISTING BARBED WIRE FENCE TO REMAIN
- NEW BARBED WIRE FENCE SEE NOTE 2

DRAFT 60% SET - NOVEMBER 18, 2016 - NOT FOR CONSTRUCTION

GRADING PLAN

BIG SUR LAND TRUST

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:

DATE: 11/18/2016
SCALE: AS NOTED
DRAWN BY: DJ
JOB #: BH # 214044

NOT FOR CONSTRUCTION

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tel (510) 704-1000 · *fax* (510) 704-1001 · www.balancehydro.com

SHEET G-6 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
8 of 16

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	MON	1	71.9/72.3	–	–

REGISTERED STRUCTURAL ENGINEER

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAWN M. CULLERS No. S5561 STRUCTURAL STATE OF CALIFORNIA

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CORNERSTONE STRUCTURAL ENGINEERING GROUP
986 W. Alluvial Ave, Suite 201
Fresno, California 93711

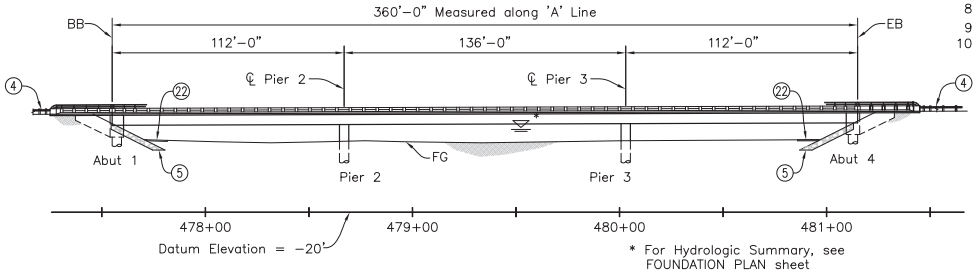
MONTEREY COUNTY PUBLIC WORKS
168 W. Alisal St, 2nd Floor
Salinas, California 93901

INDEX TO BRIDGE PLANS

SHEET NO.	TITLE	SHEET NO.	TITLE
1	GENERAL PLAN	11	ADDITIONAL REINFORCEMENT
2	DECK CONTOURS	12	JOINT SEAL DETAILS
3	FOUNDATION PLAN	13	STRUCTRURE APPROACH SLAB DETIALS
4	ABUTMENT LAYOUT	14	STRUCTURE APPROACH DRAINAGE DETAILS
5	ABUTMENT DETAILS NO. 1	15	TUBULAR BICYCLE RAILING DETAILS
6	ABUTMENT DETAILS NO. 2		
7	PIER LAYOUT AND DETAILS		
8	PILE DETAILS		
9	TYPICAL SECTION		
10	GIRDER LAYOUT		

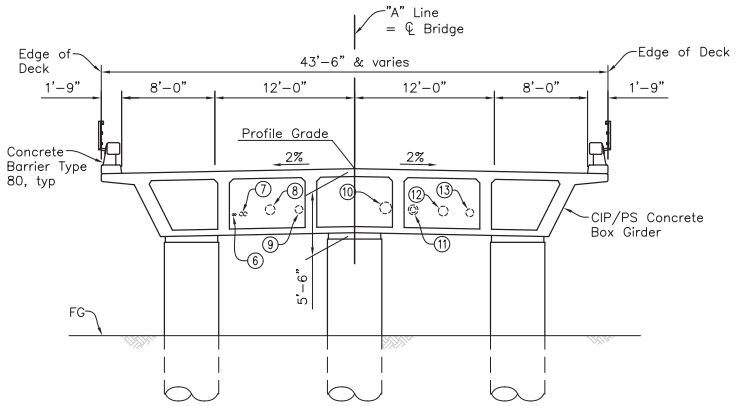
PROFILE GRADE

NO SCALE



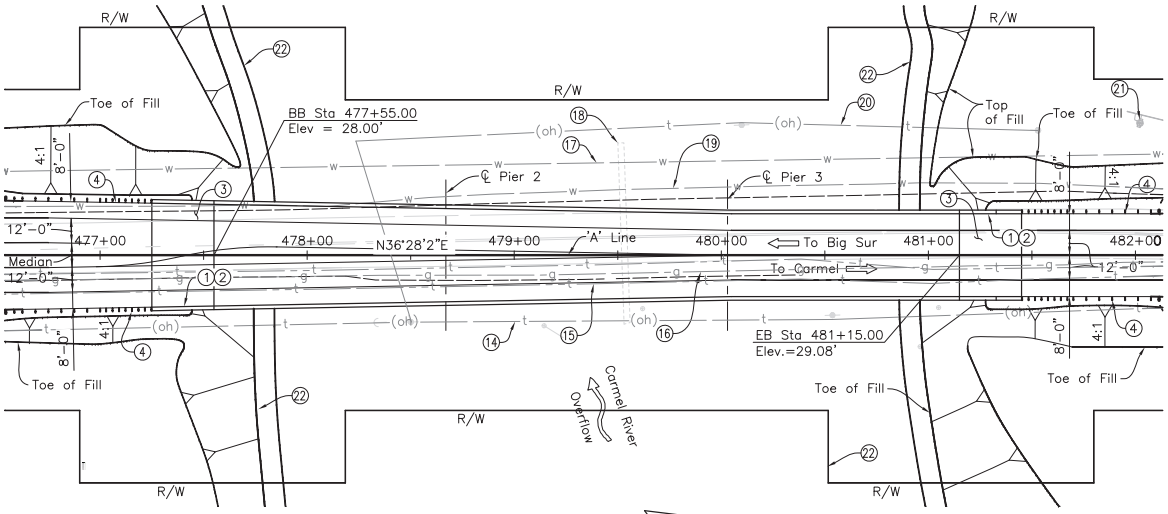
ELEVATION

1"=30'–0"



TYPICAL SECTION

3/16"=1'–0"



PLAN

1"=30'–0"

LEGEND:

1. Paint "Br. No. 44–0279"
2. Paint "Carmel River Overflow Bridge"
3. Structure Approach Type N(30S), see STRUCTURE APPROACH SLAB DETAILS sheet
4. MBGR, see Road Plans
5. Rock Slope Protection, see Road Plans
6. 2–2" Dia Electrical Conduits (Caltrans)
7. 2–4" Dia Cable Conduits (Comcast)
8. 1–10" Dia Future Utility Casing
9. 1–8" Dia Water Line (Cal Am)
10. 1–12" Dia Telephone Conduit (AT&T)
11. 1–6" Dia Gas Line in 10" Dia Steel Casing (PG&E)
12. 1–10" Dia Fiber Optic Conduit (AT&T)
13. 1–8" Dia Electric Conduit (PG&E)
14. Existing Overhead 12kV Electric (PG&E) and Cable TV Lines (Comcast) to be undergrounded
15. Existing Underground Telelcomm. Duct Bank to be relocated (AT&T)
16. Existing Underground 6" Dia High Pressure Gas Line to be relocated (PG&E)
17. Abandoned 8" Dia Steel Water Main to be removed
18. Existing 36" Dia CMP Culvert (Caltrans) to be removed
19. Existing 8" Dia Underground Water Line to be relocated (Cal Am)
20. Existing Overhead Electric Line (PG&E) to be undergrounded
21. Existing Underground Well to remain in place (California State Parks)
22. Dirt Trail / Maitenance Access, see Road Plans

⇦ Indicates direction of traffic

Utilities in bridge are shown schematically only. Utilities will be updated following utility coordination

B0–3 / 3–1 — Indicates Caltrans standard plan sheet no. / Indicates detail no.

A / S5 — Indicates section letter / Indicates sheet no. shown on

1 / S5 — Indicates detail no. / Indicates sheet no. shown on

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN

PRELIMINARY - NOT FOR CONSTRUCTION

DESIGN OVERSIGHT	DESIGN	BY Narciso R. Zermeno	CHECKED –	LRFD	LIVE LOADING: "LOAD & RESISTANCE FACTOR DESIGN", & "HL93 W/ 'LOW BOY' & PERMIT DESIGN VEHICLE"		
	DETAILS	BY Narciso R. Zermeno	CHECKED –	LAYOUT	BY Shawn M. Cullers	CHECKED	
SIGN OFF DATE	QUANTITIES	BY –	CHECKED –	SPECIFICATIONS	BY Shawn M. Cullers	PLANS AND SPECS COMPARED	

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Shawn M. Cullers — PROJECT ENGINEER

BRIDGE NO. 44–0279 — POST MILE 71.9

CARMEL RIVER OVERFLOW

GENERAL PLAN

Rev. Date: 11-13-07

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 05–1F6501 PROJECT ID
EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES 11/18

REVISION DATES			SHEET	OF
11/18			1	–

FILE => W:\2014\2014064 carmel river overflow\2014064S1 – General Plan.dwg

USERNAME => shawnc DATE PLOTTED => 11/22/2016 TIME PLOTTED => 5:46:20 PM

Exhibit 3
3-19-0894 (Carmel River FREE Project)
9 of 16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	MON	1	71.9/72.3		xxx

REGISTERED STRUCTURAL ENGINEER

PLANS APPROVAL DATE

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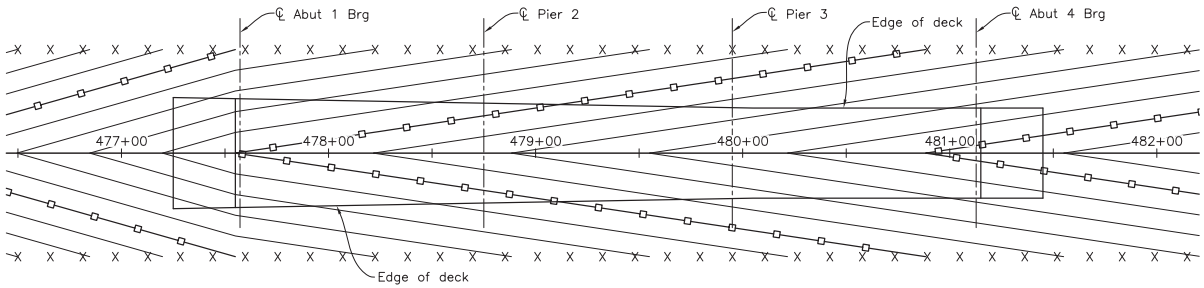
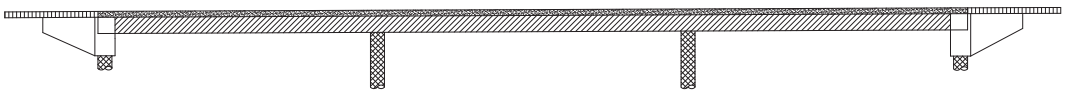
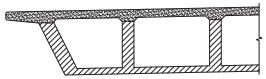


DECK CONTOURS

1"=30'-0"

Notes:
1. Contours indicate top of deck elevation.
2. ☐ Indicates even foot contours.
3. X Indicates 10 ft intervals measured along ℄ Ave 416.
4. Contour interval = 0.2 ft
5. Contours do not include camber or falsework deflection and settlement.





PARTIAL TYPICAL SECTION

- Indicates Structural Concrete, Bridge (f'c = 4.0 ksi at 28 days)
- Indicates Structural Concrete, Approach Slab (f'c = 4.0 ksi at 28 days)
- Indicates Structural Concrete, Bridge (Polymer Fiber) (f'c = 4.0 ksi at 28 days)
- Indicates Structural Concrete, Bridge (f'c = 3.6 ksi at 28 days)
- Indicates CIDH Piling (f'c = 3.6 ksi at 28 days)

CONCRETE STRENGTH & TYPE LIMITS

No Scale

CALTRANS 2015 STANDARD PLANS

	A3A	ABBREVIATIONS (SHEET 1 OF 3)
	A3B	ABBREVIATIONS (SHEET 2 OF 3)
	A3C	ABBREVIATIONS (SHEET 3 OF 3)
	A10A	LEGEND – LINES AND SYMBOLS (SHEET 1 OF 5)
	A10B	LEGEND – LINES AND SYMBOLS(SHEET 2 OF 5)
	A10C	LEGEND – LINES AND SYMBOLS (SHEET 3 OF 5)
	A10D	LEGEND – LINES AND SYMBOLS (SHEET 4 OF 5)
	A10E	LEGEND – LINES AND SYMBOLS (SHEET 5 OF 5)
	A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL – BRIDGE
	B0-1	BRIDGE DETAILS
	B0-3	BRIDGE DETAILS
	B0-5	BRIDGE DETAILS
	B0-13	BRIDGE DETAILS
	B7-1	BOX GIRDER DETAILS
	B7-6	DECK DRAINS – TYPE D-1 AND D-2
	B7-8	DECK DRAINAGE DETAILS
	B7-10	UTILITY OPENING BOX GIRDER
RSP	B7-11	UTILITY DETAILS
	B8-5	CAST-IN-PLACE POST TENSIONED GIRDER DETAILS
	B11-60	CONCRETE BARRIER TYPE 80 (SHEET 1 OF 2)
	B11-61	CONCRETE BARRIER TYPE 80 (SHEET 2 OF 2)

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

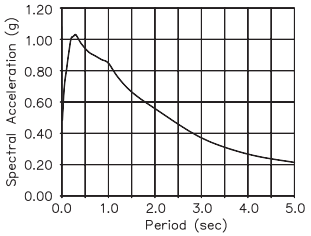
DESIGN: AASHTO LRFD Bridge Design Specifications 6th Edition and the Caltrans Amendments, preface dated January 2014.

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) Version 1.7

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL93 & Permit Design Vehicle

SEISMIC LOADING: V_{S30} = 210 m/s
Peak Ground Acceleration = 0.48g
5% Damping



ACCELERATION RESPONSE SPECTRUM

REINFORCED CONCRETE: fy = 60 ksi
f'c = See 'Concrete Strength and Type Limits' this sheet
n = 8.0

PRESTRESSED CONCRETE: See 'Prestressing Notes' on GIRDER LAYOUT sheet

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN

PRELIMINARY - NOT FOR CONSTRUCTION

DESIGN OVERSIGHT

SIGN OFF DATE

	BY	CHECKED
DESIGN	Narciso R. Zermeno	–
DETAILS	Narciso R. Zermeno	–
QUANTITIES	–	–

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Shawn M. Cullers
PROJECT ENGINEER

BRIDGE NO. 44-0279
POST MILES 71.9

CARMEL RIVER OVERFLOW
DECK CONTOURS

DESIGN DETAIL SHEET (ENGLISH) (REV. 7/16/10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 05-1F6501 PROJECT ID
EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES 11/18

SHEET 2 OF –

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Exhibit 3
3-19-0894 (Carmel River FREE Project)
10 of 16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	MON	1	71.9/72.3		xxx

REGISTERED STRUCTURAL ENGINEER

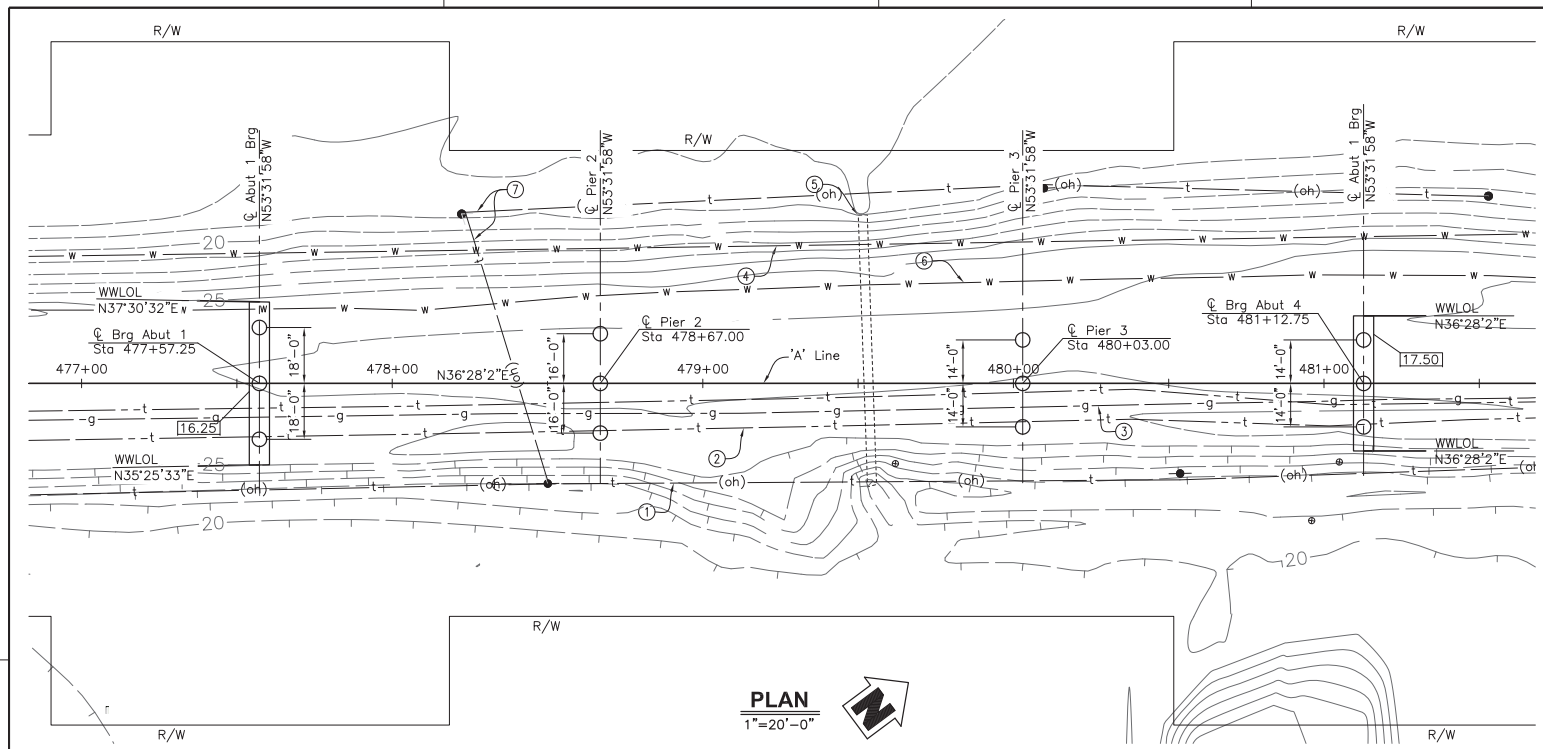
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAWN M. CULLERS No. S5561 STRUCTURAL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

CORNERSTONE STRUCTURAL ENGINEERING GROUP
986 W. Alluvial Ave, Suite 201
Fresno, California 93711

MONTEREY COUNTY PUBLIC WORKS
168 W. Alisal St, 2nd Floor
Salinas, California 93901



PLAN
1"=20'-0"

NOTES:

1. 16.00 Indicates bottom of abutment pile cap
2. 290 Indicates contour elevation.
3. ○ Indicates CISS Pile.
4. See Road Plans for limits of work.
5. Contractor shall verify all existing controlling field dimensions before ordering or fabricating any material.
6. Contour interval = 1'
7. Contours shown indicate existing conditions. For finished grade contours, see Road Plans.

LEGEND:

1. Existing Overhead 12kV Electric (PG&E) & Cable TV Lines (Comcast) to be undergrounded
2. Existing Underground Telelcomm. Duct Bank to be relocated (AT&T)
3. Existing Underground 6" Dia High Pressure Gas Line to be relocated (PG&E)
4. Abandoned 8" Dia Steel Water Main to be removed
5. Existing 36" Dia CMP Culvert (Caltrans) to be reomoved
6. Existing 8" Dia Underground Water Line to be relocated (Cal Am)
7. Existing Overhead Electric Line (PG&E) to be undergrounded

PILE DATA TABLE

Support Location	Pile Type	Nominal Resistance (kips) Compression	Nominal Resistance (kips) Tension	Cut-off Elev (ft)	Design Tip Elev (ft)	Specified Tip Elev (ft)
Abut 1	56" dia CISS Piles	5,580	–	16.50	−52(a); −55(a−I); −47(c); −61(d)	−61
Pier 2	56" dia CISS Piles	6,070	–	–	−31(a); −40(a−I); −32(a−II); −27(c); −56(d)	−56
Pier 3	56" dia CISS Piles	7,810	–	–	−98(a); −105(a−I); −102(a−II); −98(c); −94(d)	−105
Abut 4	56" dia CISS Piles	7,980	–	17.75	−59(a); −61(a−I); −57(c); −90(d)	−90

Notes:

1. Design tip elevations are controlled by: (a) Compression (Service Limit), (a−I) Compression (Strength Limit), (b−I) Tension (Strength Limit), (a−II) Compression (Extreme Event), (b−II) Tension (Extreme Event), (c) Settlement, (d) Lateral Load.
2. The specified tip elevation shall not be raised above the design tip elevations for tension, lateral, and tolerable settlement.
3. The nominal driving resistance required is equal to the nominal resistance needed to support the factored load plus driving resistance from the potentially scoured and liquefied soil layers, which do not contribute to the design resistance. Unsuitable soil layers (scourable and liquefiable) that do not contribute to the design nominal resistance exist at supports extending to elevation −9.25 feet (scour Strength−Limit state) and elevations −42, −16, −67 and −60 for liquefaction at Abutment 1, Pier 2, Pier 3 and Abutment 4, respectively.

Hydrologic Summary

	Design Flood	Base Flood
Frequency (years)	50	100
Discharge (cubic feet per second)	10,500	13,000
Water surface (elevation at bridge in feet)	19.98	20.64

Flood plain data are based upon information available when the plans were prepared and are shown to meet federal requirements. The accuracy of said information is not warranted by the County of Monterey, Big Sur Land Trust, Whitson Engineers, or Cornerstone Structural Engineering Group and interested or affected parties should make their own investigation. Flood plain data are based on the Bridge Design Hydraulic Study Report by Avila and Associates dated September 11, 2015.

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN

Geotechnical Professional — APPROVAL DATE

PRELIMINARY - NOT FOR CONSTRUCTION

DESIGN OVERSIGHT — SIGN OFF DATE

SCALE: – | VERT.DATUM – | HORZ.DATUM –
PHOTOGRAMMETRY AS OF: – | ALIGNMENT TIES –
SURVEYED BY – | DRAFTED BY –
FIELD CHECKED BY – | CHECKED BY –

DESIGN BY Narciso R. Zermeno CHECKED –
DETAILS BY Narciso R. Zermeno CHECKED –
QUANTITIES BY – CHECKED –

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Shawn M. Cullers
PROJECT ENGINEER

BRIDGE NO. 44-0279
POST MILE 71.9

CARMEL RIVER OVERFLOW
FOUNDATION PLAN

FOUNDATION PLAN SHEET (ENGLISH) (REV. 06-01-09)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 05-1F6501 PROJECT ID
EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES 11/18

REVISION DATES | SHEET 3 | OF –

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Exhibit 3
3-19-0894 (Carmel River FREE Project)
11 of 16

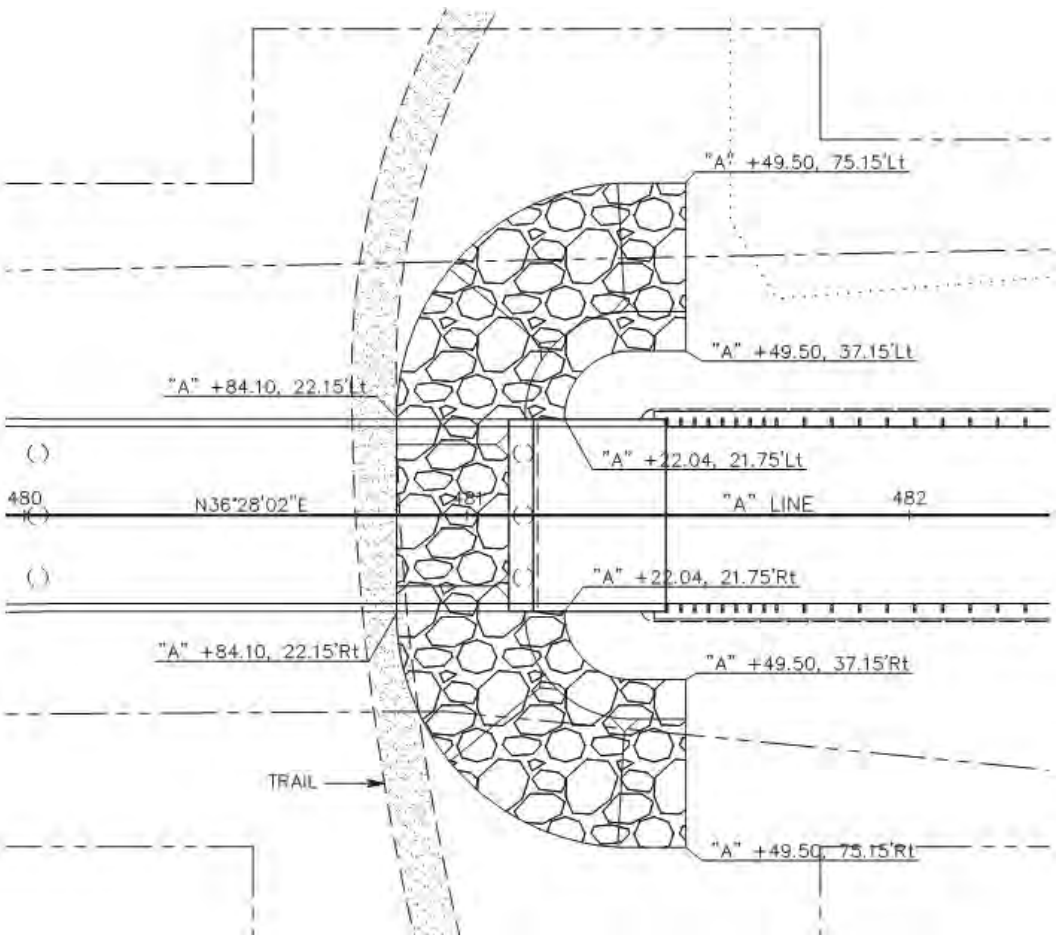


Figure 10. Proposed RSP in plan view.

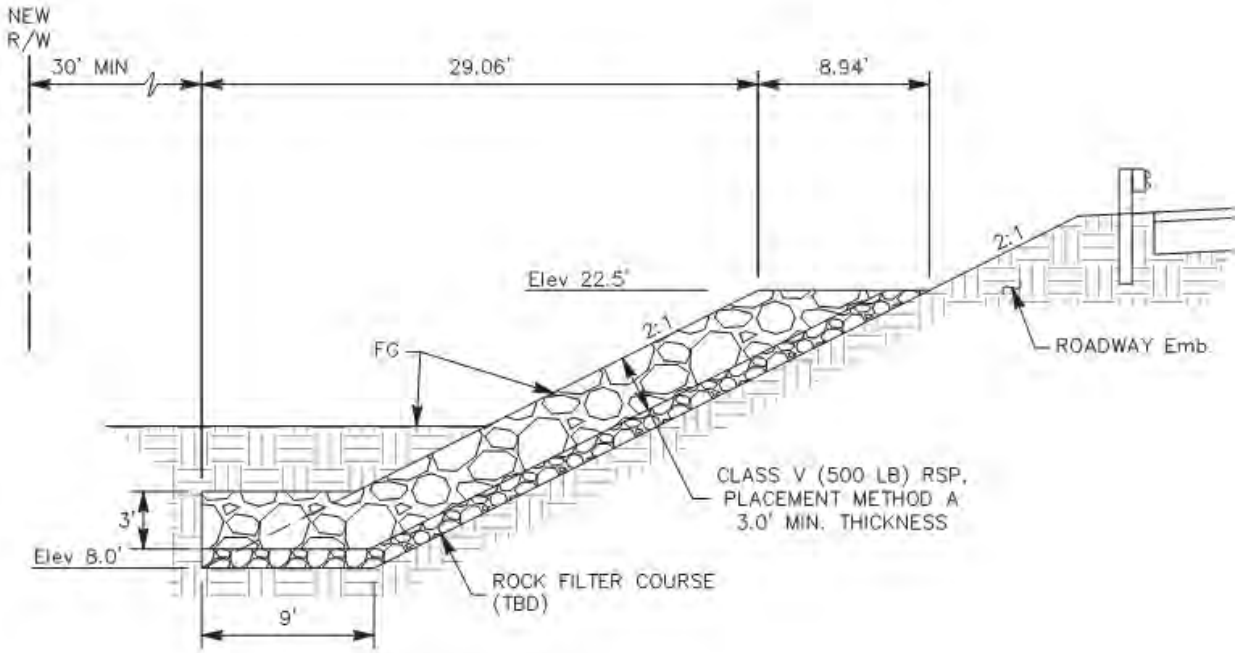


Figure 11. Bank RSP termination

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
5	MON	1	71.9/72.3	.	x

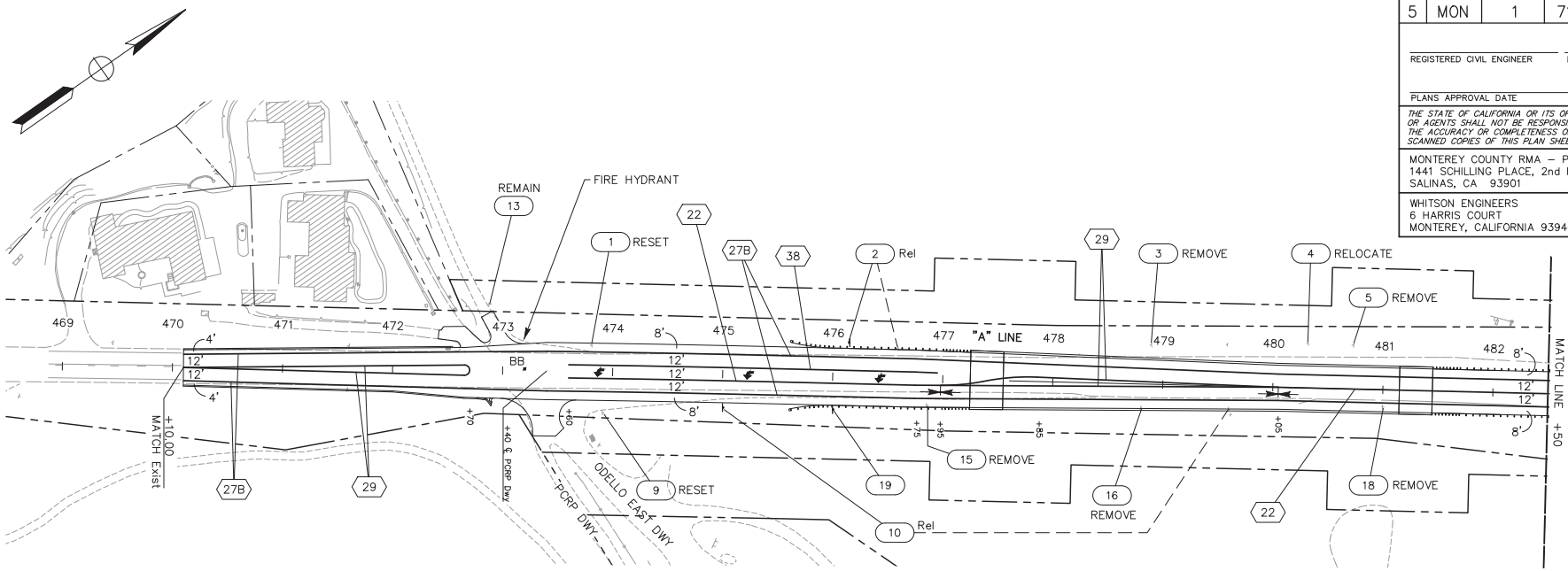
REGISTERED CIVIL ENGINEER DATE

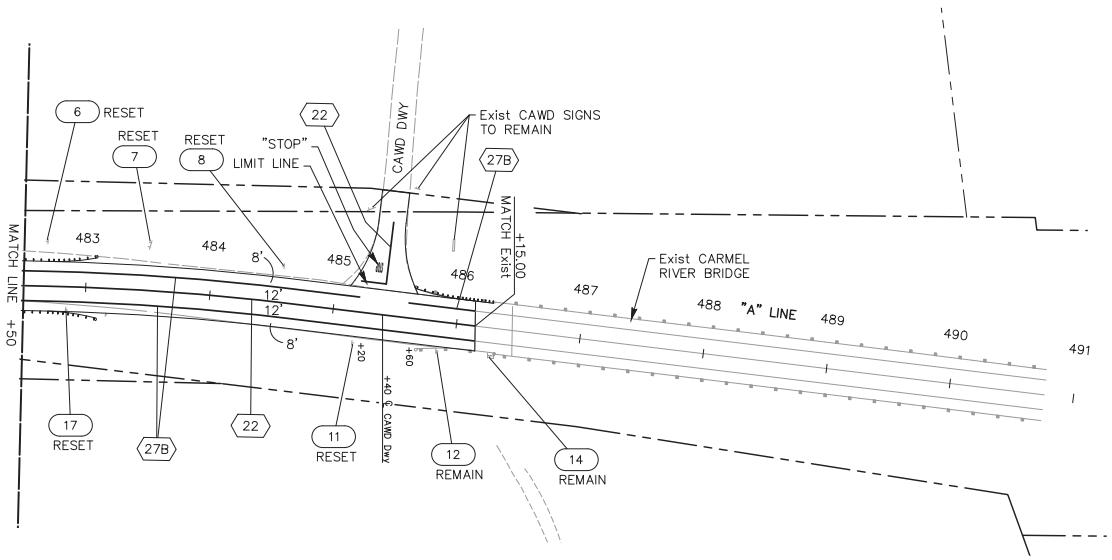
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

MONTEREY COUNTY RMA – PUBLIC WORKS
1441 SCHILLING PLACE, 2nd FLOOR SOUTH
SALINAS, CA 93901

WHITSON ENGINEERS
6 HARRIS COURT
MONTEREY, CALIFORNIA 93940





LEGEND

	CHANGE OF STIRPING PATTERN
#	TRAFFIC STRIPE DETAIL NUMBER
#	FURNISH AND INSTALL ROADSIDE SIGN
# RESET	RESET ROADSIDE SIGN
# Rel	RELOCATE ROADSIDE SIGN
# REMOVE	REMOVE ROADSIDE SIGN
# REMAIN	EXISTING ROADSIDE SIGN TO REMAIN
•BB	PAVEMENT MARKER TYPE BB
L-1	OBJECT MARKER (TYPE L-1)

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ALL EXISTING SIGNS NOT SHOWN FOR REMOVAL SHALL REMAIN IN PLACE.
3. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.

DRAFT 60% DESIGN - 11/18/16
NOT FOR CONSTRUCTION
PLANS SUBJECT TO CHANGE

PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 50'

PD-1

REVISED BY | DATE REVISED

N. MILAM

CALCULATED/DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR

RICHARD P. WEBER, PE, LS

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 6/12/18 | DATE PLOTTED => 18-Jun-2018 | TIME PLOTTED => 11:21

BORDER LAST REVISED 7/2/2010 | DWG FILE => 0514000043na001 PD.dwg | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT | PROJECT NUMBER & PHASE | 0514000043

Exhibit 3

3-19-0894 (Carmel River FREE Project)

PLANTING SCHEDULES

WILLOW AND COTTONWOOD RIPARIAN FOREST

SYMBOL	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	ON CENTER SPACING (feet)	FOLIAGE PROTECTION CAGE	WOODEN STAKE	PLANTING QUANTITIES BY PLANTING AREA (EACH)									TOTAL PLANTS
							W1a 6.92 acres	W1b 1.44 acres	W2 0.48 acres	W3 0.51 acres	W4a 1.15 acres	W4b 0.23 acres	W5 2.17 acres	W6 0.82 acres	W7 0.49 acres	
	ACER NEGUNDO	BOX ELDER	TP4	10	Y	N	-	-	-	-	-	-	55	-	-	55
	ALNUS RHOMBIFOLIA	WHITE ALDER	TP4	12	Y	N	-	202	-	-	-	32	-	29	17	280
	CORNUS SERICEA	REDOSIER DOGWOOD	TP4	10	Y	N	348	-	-	-	58	-	55	41	25	527
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	TP4	16	Y	N	-	113	-	-	-	18	43	16	10	200
	POPULUS TRICHOCARPA	BLACK COTTONWOOD	TP4	12	Y	N	242	20	34	36	40	3	152	57	34	618
	SALIX LAEVIGATA	RED WILLOW	TP4	10	Y	N	1393	58	97	103	232	9	327	103	62	2384
	SALIX LASIOLEPIS	ARROYO WILLOW	TP4	10	Y	N	1393	58	97	103	232	9	327	103	62	2384

MIXED RIPARIAN FOREST

SYMBOL	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	ON CENTER SPACING (feet)	FOLIAGE PROTECTION CAGE	WOODEN STAKE	PLANTING QUANTITIES BY PLANTING AREA (EACH)
							MR1 0.51 acres
	ACER NEGUNDO	BOX ELDER	TP4	10	Y	N	38
	AESCULUS CALIFORNICA	BUCKEYE	TP4	10	Y	N	39
	CORNUS SERICEA	REDOSIER DOGWOOD	TP4	10	Y	N	7
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	TP4	12	Y	N	5
	POPULUS TRICHOCARPA	BLACK COTTONWOOD	TP4	12	Y	N	5
	QUERCUS AGRIFOLIA	COAST LIVE OAK	TP4	16	Y	N	30
	SALIX LAEVIGATA	RED WILLOW	TP4	12	Y	N	5
	SALIX LASIOLEPIS	ARROYO WILLOW	TP4	12	Y	N	5
	SAMBUCUS NIGRA SSP. CAERULEA	BLUE ELDERBERRY	TP4	10	Y	N	39
	ARTEMISIA CALIFORNICA	CALIFORNIA SAGEBRUSH	TB4	6	N	Y	7
	ARTEMISIA DOUGLASIANA	MUGWORT	D40	6	N	Y	7
	BACCHARIS PILULARIS	COYOTE BRUSH	TB4	6	N	Y	7
	BACCHARIS SALICIFOLIA	MULEFAT	D40	6	N	Y	7
	CEANOTHUS THYRSIFLORUS	BLUE BLOSSOM	D40	6	Y	N	7
	FRANGULA CALIFORNICA	COFFEEBERRY	TB4	6	Y	N	14
	HETEROMELES ARBUTIFOLIA	TOYON	TB4	6	Y	N	14
	RUBUS URSINUS	CALIFORNIA BLACKBERRY	TP4	6	N	Y	7

PLANTING NOTES

1. CONTAINER PLANTS SHALL BE INSTALLED PER (1 / L-4).
2. FOLIAGE PROTECTION CAGES SHALL BE INSTALLED PER (2 / L-4).
3. WOODEN STAKES SHALL BE INSTALLED PER (3 / L-4).

EROSION CONTROL SCHEDULE

EROSION CONTROL TYPE 2

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
GRASSLAND HABITAT/EROSION CONTROL SEED MIX				
STEP 1	DRILL SEED ALL AREAS WHERE POSSIBLE	SEED	SEED MIX 1 OR 2 AS SHOWN ON PLANS	28 LB/ACRE
STEP 2	HAND BROADCAST DRY SEED ALL REMAINING AREAS	SEED	SEED MIX 1 OR 2 AS SHOWN ON PLANS	28 LB/ACRE
STEP 3	RAKE HAND-BROADCAST DRY SEED INTO GROUND	RAKE	SEED MIX 1 OR 2 AS SHOWN ON PLANS	28 LB/ACRE

EROSION CONTROL TYPE 3

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
AGRICULTURAL FIELD / EROSION CONTROL SEED MIX				
STEP 1	DRILL SEED ALL AREAS WHERE POSSIBLE	SEED	SEED MIX 3	40 LB/ACRE
STEP 2	HAND BROADCAST DRY SEED ALL REMAINING AREAS	SEED	SEED MIX 3	40 LB/ACRE
STEP 3	RAKE HAND-BROADCAST DRY SEED INTO GROUND	RAKE	SEED MIX 3	40 LB/ACRE

SEED MIXES

SEED	BOTANICAL NAME	COMMON NAME	SEEDING RATE (LBS. PLS/ac)
MIX 1	*BROMUS CARINATUS*[1]	CALIFORNIA BROME	8
	ELYMUS GLAUCUS[1]	BLUE WILDRYE	8
	FESTUCA MICROSTACHYS[1]	SMALL FESCUE	4
	HORDEUM BRACHYANTHERUM[1]	MEADOW BARLEY	8
MIX 2	*BROMUS CARINATUS*	CALIFORNIA BROME	8
	ELYMUS GLAUCUS	BLUE WILDRYE	8
	FESTUCA MICROSTACHYS	SMALL FESCUE	4
	HORDEUM BRACHYANTHERUM	MEADOW BARLEY	8
MIX 3	*ELYMUS X TRITICUM*	STERILE WHEAT	40

[1] FOR MIX 1 SEED SOURCE SHALL CONFORM TO CRITERIA OUTLINED IN *GUIDELINES FOR SEED AND PLANT MATERIAL FOR THE CARMEL RIVER STATE BEACH PORTION OF THE CRFREE PROJECT*

DRAFT 60% SET - NOV 18, 2016 - NOT FOR CONSTRUCTION

PLANTING NOTES, LEGEND AND SCHEDULE

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

BIG SUR LAND TRUST

REVISIONS:

BY:	DATE:	DESCRIPTION:

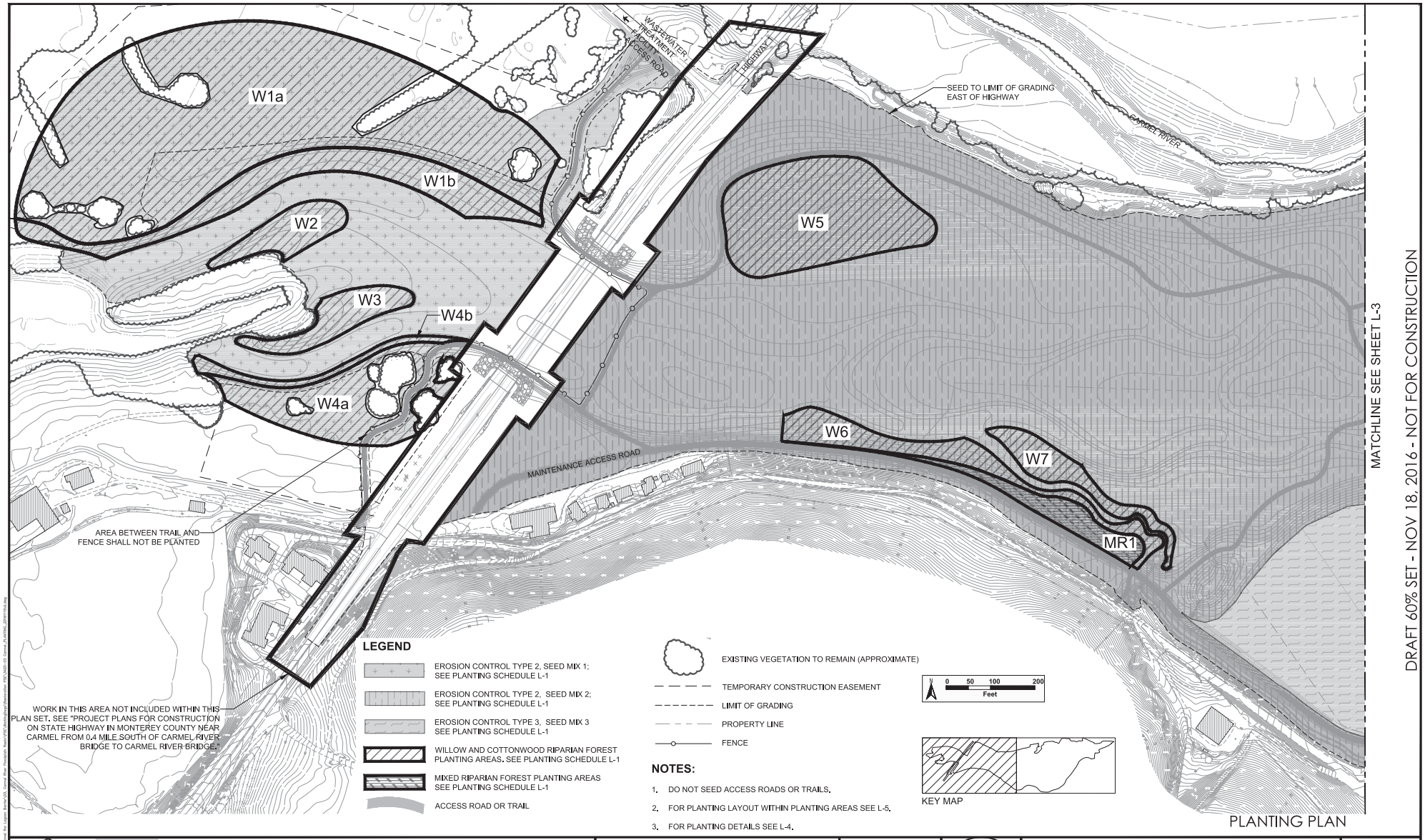
DATE: 11/18/2016
SCALE: NONE
DRAWN BY: LD/RV
JOB #: 3420-04

NOT FOR CONSTRUCTION

H. T. HARVEY & ASSOCIATES
Ecological Consultants

SHEET L-1 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
14 of 16



CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

BIG SUR LAND TRUST

REVISIONS:		
BY:	DATE:	DESCRIPTION:

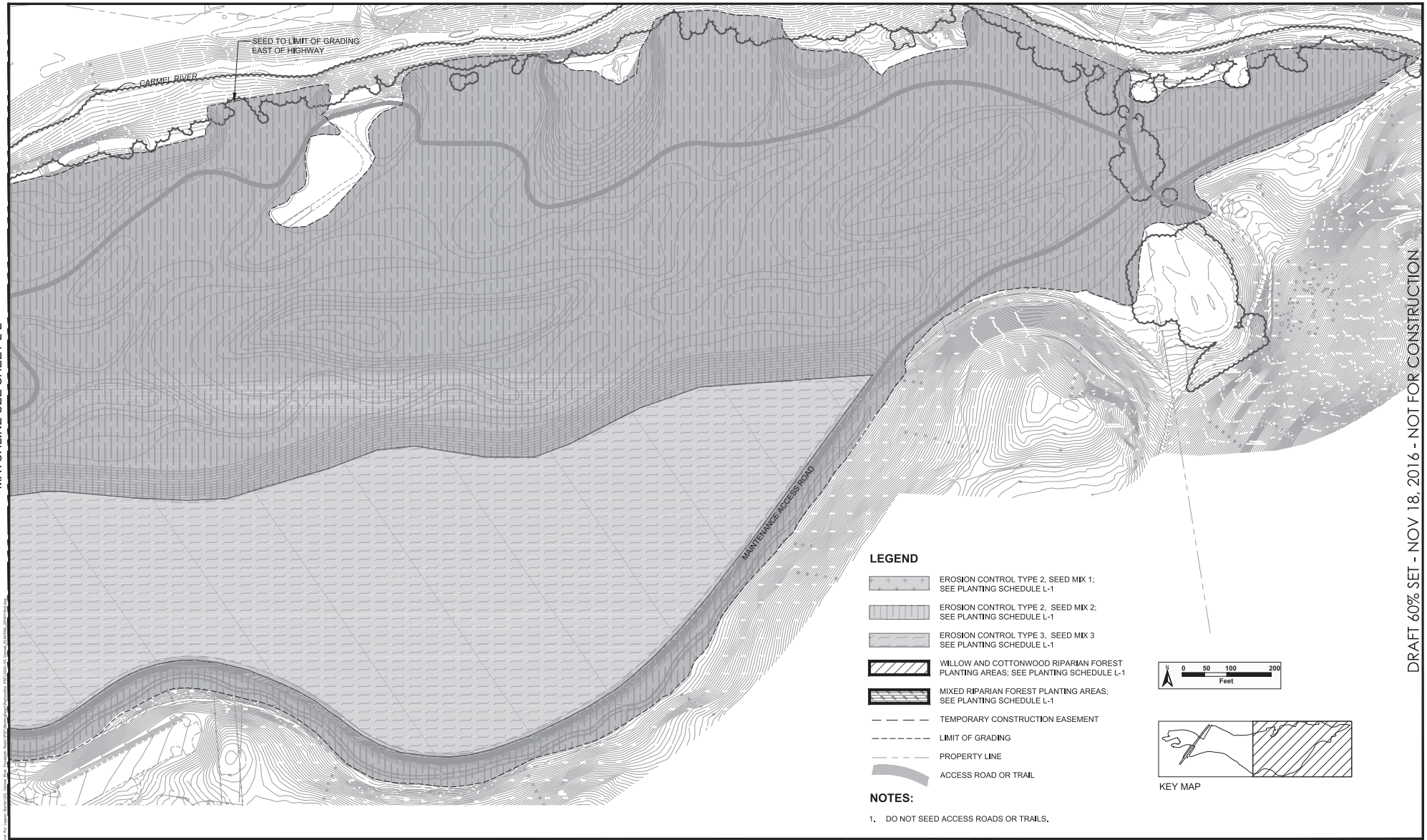
DATE: 11/18/2016
SCALE: 1:100
DRAWN BY: LD/RV
JOB #: 3420-04

NOT FOR CONSTRUCTION

H. T. HARVEY & ASSOCIATES
Ecological Consultants

SHEET L-2 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
15 of 16



CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

BIG SUR LAND TRUST

REVISIONS:		
BY:	DATE:	DESCRIPTION:

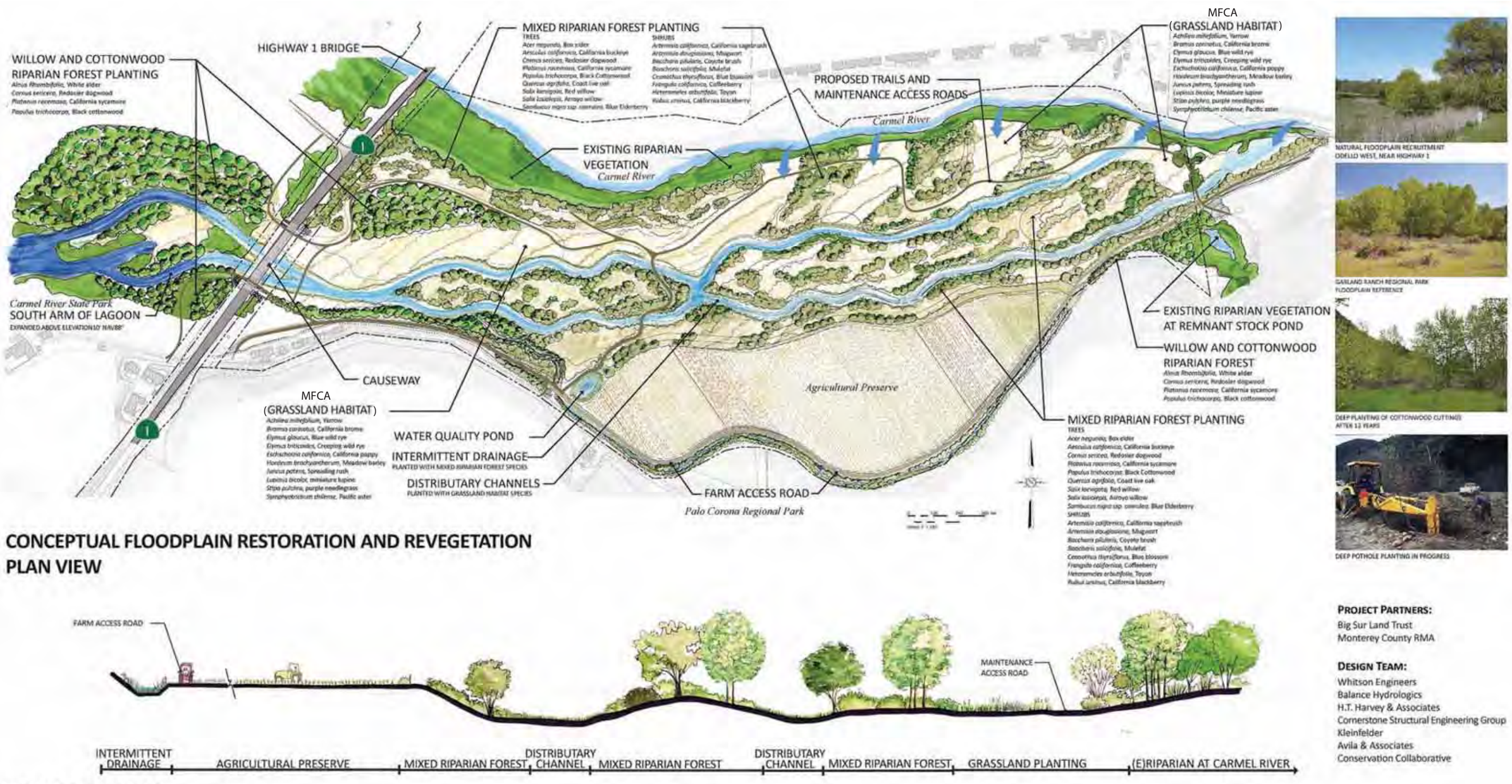
DATE: 11/18/2016
SCALE: 1:100
DRAWN BY: LD/RV
JOB #: 3420-04

NOT FOR CONSTRUCTION

H. T. HARVEY & ASSOCIATES
Ecological Consultants

SHEET L-3 OF

Exhibit 3
3-19-0894 (Carmel River FREE Project)
16 of 16



Source: Big Sur Land Trust and County of Monterey, May 2015

Tier 1 Mitigation and Revegetation Areas

CARMEL RIVER STATE PARK

CARMEL RIVER

SR 1

SOUTH ARM OF LAGOON

CAUSEWAY

AGRICULTURAL PRESERVE

REMNANT STOCK POND

INTERMITTENT DRAINAGE CHANNEL

PALO CORONA REGIONAL PARK

NOTE:
As part of Tier 1 work all areas disturbed by construction will receive native seed mix.

N
0 100 200 400
FEET

Legend

- Right of Way
- Proposed Grading Limit
- Existing Riparian Forest to Remain
- Existing Riparian Scrub to Remain
- Existing Coastal Scrub to Remain
- Existing Wetland or Waters to Remain
- Compensatory Mitigation Areas (CMA)
- Willow and Cottonwood Riparian Forest Planting Areas -- CMA
- Mixed Riparian Forest Planting Area--CMA
- Tier II Restoration and Natural Recruitment Area
- Maintained Flow Conveyance Area (MFCA)-- Distributary channel, herbaceous groundcover only
- MFCA--Riparian planting may occur in future
- MFCA--Floodplain area, herbaceous groundcover only
- Proposed Maintenance Access Road
- Proposed Trail

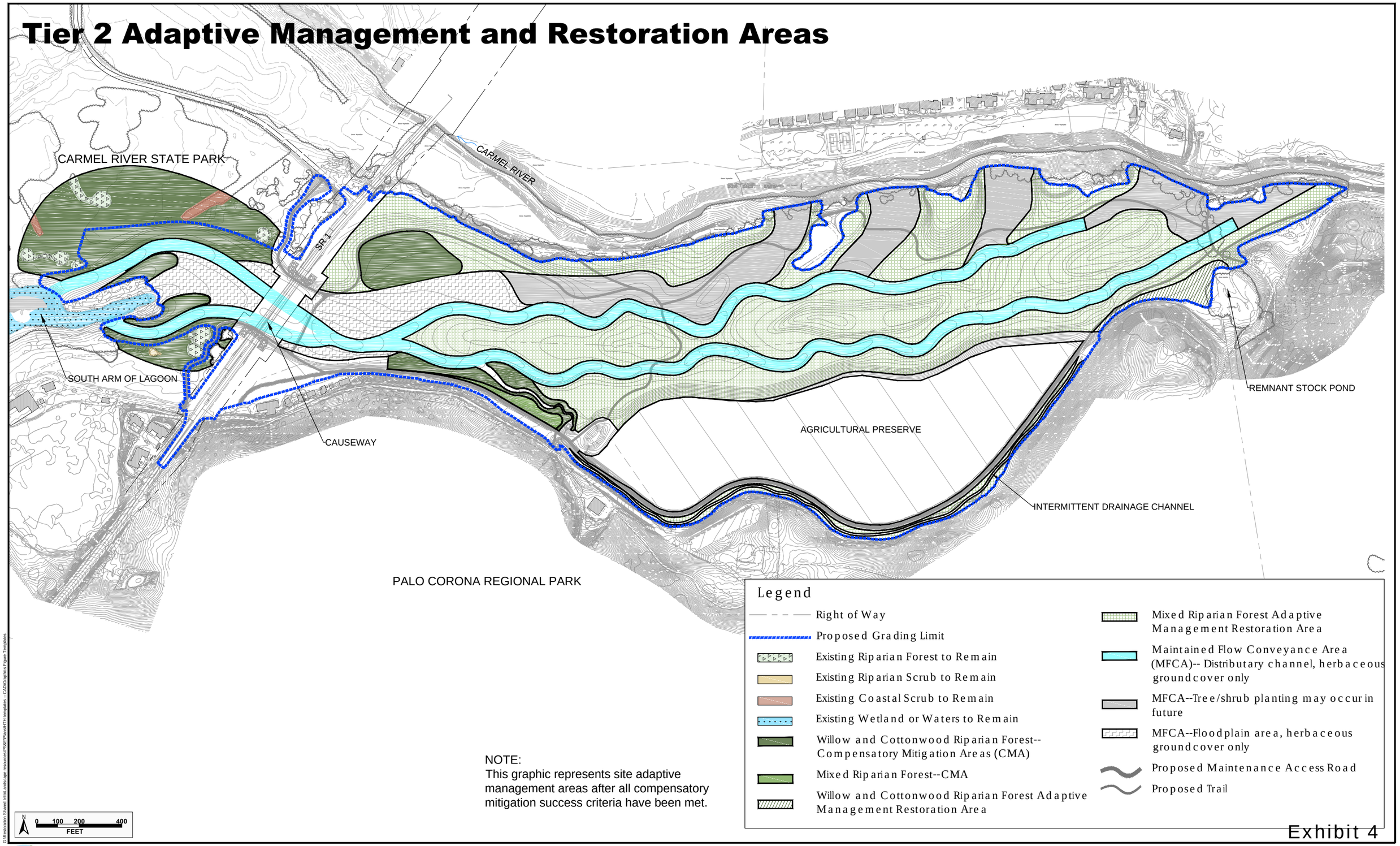
G:\Restoration Shared Info\Landscape resources\PSE\Plans\HTH templates -- CAD\Graphics Figure Templates

H.T. HARVEY & ASSOCIATES
Ecological Consultants

Exhibit 4

3-19-0894 (Carmel River FREE Project)

Tier 2 Adaptive Management and Restoration Areas



NOTE:
This graphic represents site adaptive management areas after all compensatory mitigation success criteria have been met.

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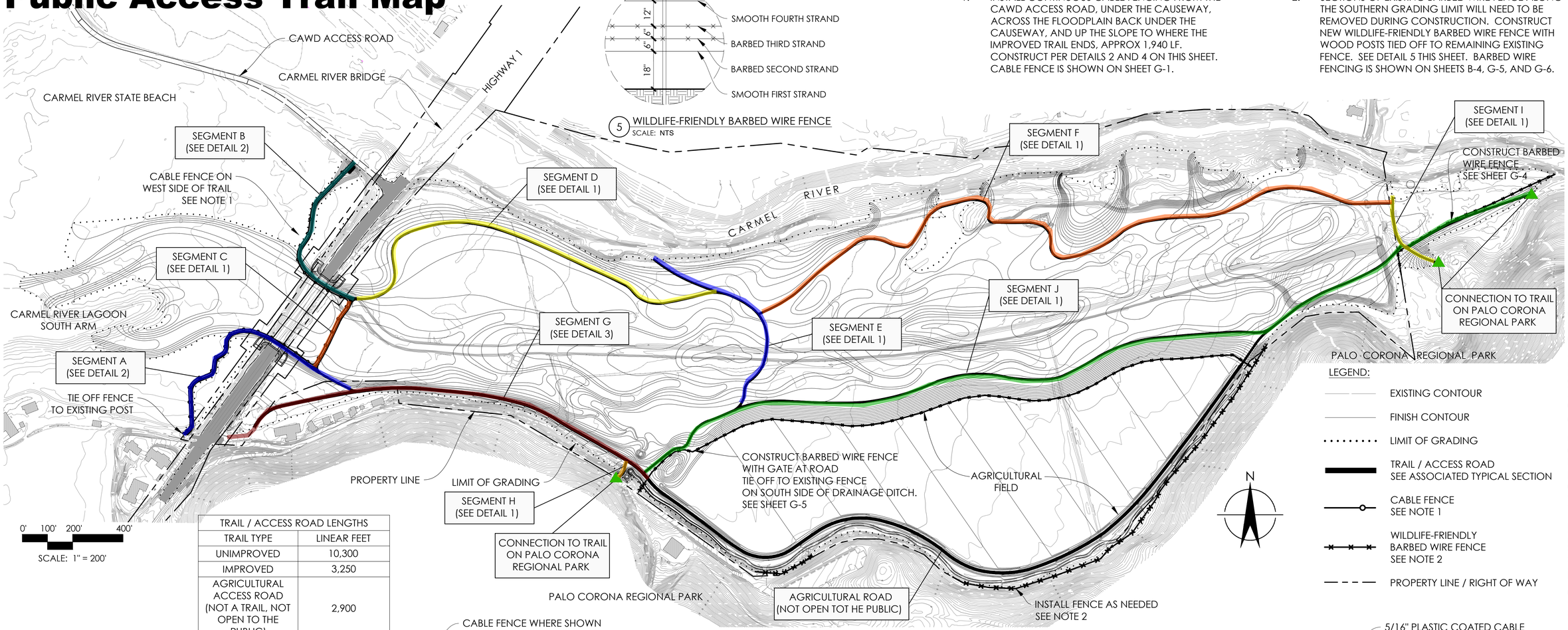
H.T. HARVEY & ASSOCIATES
Ecological Consultants

Exhibit 4
3-19-0894 (Carmel River FREE Project)
3 of 3

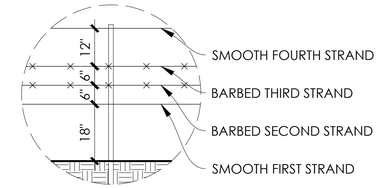
Public Access Trail Map

NOTES:

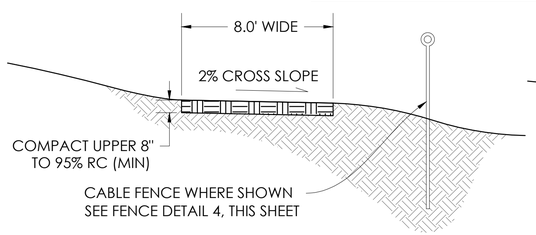
1. INSTALL CONTINUOUS CABLE FENCING FROM THE CAWD ACCESS ROAD, UNDER THE CAUSEWAY, ACROSS THE FLOODPLAIN BACK UNDER THE CAUSEWAY, AND UP THE SLOPE TO WHERE THE IMPROVED TRAIL ENDS, APPROX 1,940 LF. CONSTRUCT PER DETAILS 2 AND 4 ON THIS SHEET. CABLE FENCE IS SHOWN ON SHEET G-1.
2. SECTIONS OF EXISTING BARBED WIRE FENCE ALONG THE SOUTHERN GRADING LIMIT WILL NEED TO BE REMOVED DURING CONSTRUCTION. CONSTRUCT NEW WILDLIFE-FRIENDLY BARBED WIRE FENCE WITH WOOD POSTS TIED OFF TO REMAINING EXISTING FENCE. SEE DETAIL 5 THIS SHEET. BARBED WIRE FENCING IS SHOWN ON SHEETS B-4, G-5, AND G-6.



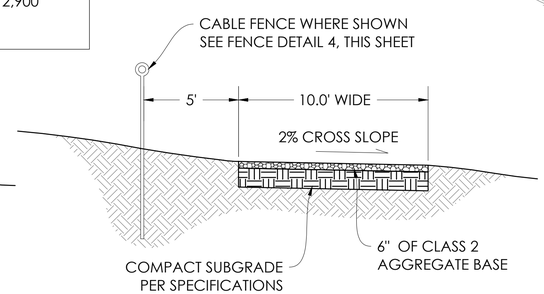
TRAIL / ACCESS ROAD LENGTHS	
TRAIL TYPE	LINEAR FEET
UNIMPROVED	10,300
IMPROVED	3,250
AGRICULTURAL ACCESS ROAD (NOT A TRAIL, NOT OPEN TO THE PUBLIC)	2,900



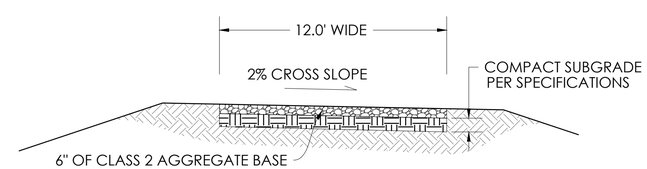
5 WILDLIFE-FRIENDLY BARBED WIRE FENCE
SCALE: NTS



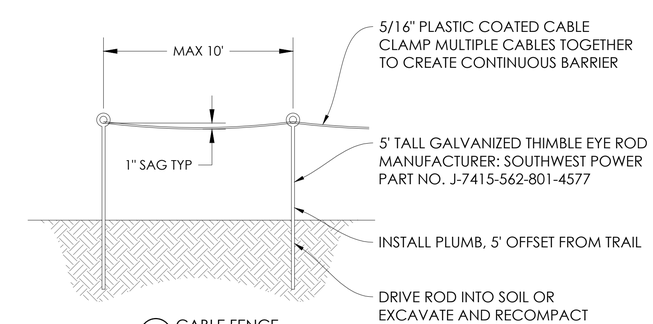
1 UNIMPROVED TRAIL (SEGMENTS C - F, H & I)
SCALE: 1" = 4'



2 IMPROVED TRAIL (SEGMENTS A & B)
SCALE: 1" = 4'



3 AGRICULTURAL ACCESS ROAD (SEGMENT G)
SCALE: 1" = 4'



4 CABLE FENCE
SCALE: 1" = 4'

PLANNING EXHIBIT - NOT FOR CONSTRUCTION

TRAILS AND FENCES

BIG SUR LAND TRUST

RESOURCE MANAGEMENT AGENCY — PLANNING, BUILDING SERVICES, PUBLIC WORKS, ENVIRONMENTAL SERVICES

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT
PROJECT No. 7200
COUNTY PLAN SET

REVISIONS:		
BY:	DATE:	DESCRIPTION:

DATE: 3/16/2022
SCALE: AS NOTED
DRAWN BY: DJ
JOB #: BH # 220044

NOT FOR CONSTRUCTION

Balance Hydrologics, Inc.

Exhibit 5
3-19-0894 (Carmel River FREE Project)