SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY
BEES LAKES HABITAT RESTORATION PROJECT
FOR THE CITY OF WEST SACRAMENTO

APRIL 2020

65% DESIGN

CONTRACTOR'S NOTE

CONTRACTORS ARE REQUIRED BY LAW TO HAVE A CLASS "A" LICENSE AND REGULATED BY THE CALIFORNIA STATE LICENSE CONTROL BOARD. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO:

REGISTRAR CONTRACTOR'S STATE LICENSE BOARD
9021 BUSINESS PARK DRIVE
SACRAMENTO, CA 95827

MAILING ADDRESS:
P.O. BOX 26000
SACRAMENTO, CA 95826.

HDR Engineering Inc.
Folsom, CA
FLOATING ISLAND A - SECTION

FLOATING ISLAND B - SECTION

FLOATING ISLAND C - SECTION

PLAN VIEW

ELEVATION VIEW

FLOATING ISLAND HELICAL Anchor

NOTE:
1. HELICAL ANCHORS ARE DESIGNED TO AMINIMIZE UPLIFT FOR A MINIMUM INSTALLATION TORSION OF 600 LBS.
   A SIZING TABLE DEPICTING TOTAL SHEARING CAPACITY VS. LENGTH IS PROVIDED IN THE INSTALLATION.
2. ANCHORS SHALL BE INSTALLED BY A CERTIFIED INSTALLER.
3. INSTALLATION IS TO BE PERFORMED IN CONCRETE MASONRY HARDWARE SHALL BE RATED TO BE USED IN CONCRETE.
4. INSTALLATION IS TO BE PERFORMED TO A MINIMUM DEPTH OF 5' BELOW GRADE AND 3' ABOVE GRADE.
5. HAVE A SUPERVISION SIDE AT A RATE OF 1 PER TORSION AT A MINIMUM INSTALLATION TORSION OF 600 LBS
6. THE HELICAL ANCHORS INSTALLATION SHALL CONSIST OF A MINIMUM OF THREE HELICAL ANCHORS.
7. A MINIMUM OF THREE HELICAL ANCHORS SHALL BE INSTALLED TO A MAXIMUM OF 600 LBS PER UNIT.
NOTES:
1. INSTALL ALL PVC AIR LINES IN SINGLE TRENCH FROM PUMP TO COUPLER BOX.
2. LAY AIR LINE ON BED FROM COUPLER BOX TO DIFFUSER LOCATION.

NOTES:
3. PUMP PAD, PUMP HOUSING AND BOLLARD DIMENSIONS ARE SIMILAR FOR BOTH PUMP LOCATIONS.
4. NEW POWER POLE TO BE INSTALLED AT MAIN POND ONLY.
SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY
BEES LAKES HABITAT RESTORATION PROJECT

65% DESIGN

AERATION PLAN DETAILS
ELECTRICAL AND TRENCHING
TOP OF GUARDRAIL BEYOND

METAL GRATE TENSION CABLE, TYP

HORIZONTAL DATUM IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 2 (NAD 83)
VERTICAL DATUM IS NAVD 88

EL NAVD 88 = EL NGVD 29+2.6’

BEES LAKES HABITAT RESTORATION PROJECT

HDR Engineering, Inc.
Project Manager
T. CHAPMAN

Designed
M. LAMBERT

Checked
D. MENDOZA

SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY

65% DESIGN

MAIN POND VIEWING PLATFORM SECTION

3/8" = 1'-0"
BOARDWALK / RETAINING BUTTRESS PARTIAL PLAN

1/2" = 1'-0"
Deer Creek Bridge

Description

CONCRETE SLAB ON GRADE

BOARDWALK SECTION - CONCRETE
1" = 1'-0"

BOARDWALK SECTION - GRATING
1" = 1'-0"

RETAINING BUTTRESS SECTION
1" = 1'-0"

4"x4 VERTICAL POSTS @ 48" o.c.

METAL GRATED DECK 4"x1/2" SLOTS MAX

HORIZONTAL DATUM IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 2 (WGS 84)
VERTICAL DATUM IS NAVD 88 EL NAVD 88 = EL NGVD 29 + 2.6'

HER Engineering, Inc.
Project Manager: T. CHAPMAN
Designated: M. MENDOZA

SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY Bees Lakes Habitat Restoration Project

BOARDWALK / RETAINING BUTTRESS SECTIONS

65% DESIGN

A-21
GUARDRAIL DETAIL
3" = 1'-0"

BEAM

LAG BOLTS

METAL GRATING

2x4

SIZED FOR 8'-0" O.C.

TENSION CABLE THROUGH CENTER OF POST

2x10

GUARDRAIL POST

METAL WASHER SPACER

WELDED CHANNEL TO METAL GRATE

THREAD BOLT

ANCHOR BRACKET CONNECTED TO BEAM

HEAVY TIMBER BEAM

METAL GRATE ANCHOR (CONCEALED)
3" = 1'-0"

1/2" GAP

1/8" TO 1/4" GAP

18 GA. GALV. METAL FLASHING

1/2" TO 1/4" GAP

ANCHOR BRACKET CONNECTED TO BEAM
CURB DETAIL
3" = 1'-0"

BENCH DETAIL
3" = 1'-0"

PRE-CAST ARCHITECTURAL CONCRETE

3" THICK SMOOTH RIVER ROCK VENEER W/ MASONRY ANCHORS SET IN MORTAR

CONCRETE RETAINING WALL AND SLAB

PRE-CAST ARCHITECTURAL CONCRETE 40" SQUARE

FINISHED WOOD BACK AND SEAT 2" THICK

1/2" STEEL BRACKET @ 24" O.C.

CONCRETE PEDESTAL W/ RIVER ROCK VENEER

TUBE STEEL BEAM

PLATE ANCHOR @ EACH END

HORIZONTAL DATUM IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 2 (NAVD 83)

VERTICAL DATUM IS NAVD 88

EL NAVD 88 = EL NGVD 29 + 2.6'

HDR Engineering, Inc.

Designed

Checked

Fabricated

ARCHITECTURAL DETAILS II

BEES LAKES HABITAT RESTORATION PROJECT

1/2" = 1'-0"
G11 WHEN CONFLICT OCCURS BETWEEN STRUCTURAL DRAWINGS AND E. NPS 2018 B. ASCE7-16 DESIGN CRITERIA

G3 OPENINGS

G7 STANDARD DETAILS

G5 DESIGN CRITERIA

D. SEISMIC: AND IS THE BASIS OF THIS STRUCTURAL DESIGN:

LOCATIONS, ALONG WITH ANY FLOOR OPENINGS, NOTCHES, AND RECESSES REQUIRED BY SUCH EQUIPMENT.

PRIOR TO CONSTRUCTION.

CONCRETE SUPPORT PADS AND/OR FRAMING REQUIRED TO SUPPORT SAID EQUIPMENT SHALL NOT BE FABRICATED

SAFETY AND STRUCTURE STABILITY DURING CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL AND APPLY TO THE ENTIRE PROJECT WHETHER SPECIFICALLY CALLED

THE NOTES ON THIS SHEET AND THE STANDARD STRUCTURAL DETAILS ARE

fy = 60,000 PSI

ALLOWABLE [NET] SOIL BEARING:

RESISTING SYSTEM:

rz' = 0.311 1.5

I

h. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE ANALYSIS.

g.

k. RESPONDED MODIFICATION FACTOR: SEE TABLE BELOW

V = W*Cs

TBD 0.311 1.5

f. IMPORTANCE FACTOR: 1.0

e. RISK CATEGORY: II i. DESIGN BASIC SHEAR: SEE TABLE BELOW.

a. RISK CATEGORY: II i. DESIGN BASIC SHEAR: SEE TABLE BELOW.

b. IMPORTANCE FACTOR: 1.0

THE DECREASE IN LENGTH DURING WELDING APPROXIMATELY 1/8" FOR 5/8" DIAMETER

THE PLATE. THERE SHOULD NO POROSITY OR EVIDENCE OF LACK OF FUSION

INSPECTORS. AMPERAGE AND VOLTAGE SHALL BE MEASURED NEAR THE ARC.

THE WELD (I.E. THE INTERPASS TEMPERATURE) IS ESSENTIAL. MAXIMUM

PRE-HEAT REQUIREMENT FOR THE THICKER PLATE SHALL GOVERN.

INTERPASS TEMPERATURES SHOULD BE LIMITED TO 550 DEGREES F FOR

THE WELD (I.E. THE INTERPASS TEMPERATURE) IS ESSENTIAL. MAXIMUM

BEYOND THE RANGE OR TOLERANCE OR REQUIREMENTS FOR PREQUALIFICATION

COMPLIANCE WITH THE APPROVED WPS.

STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH

SPECIFICATIONS.

FOR SLRS SYSTEMS OR PARTS OF SYSTEMS THAT ARE NOT INCLUDED IN

DENOTED AS FOLLOWS:

A. MOMENT FRAME:

B. MOMENT FRAME/FORCE BIASED:

C. MOMENT FRAME/FORCE RESISTING:

D. MOMENT FRAME/WALL:

E. V. RUSSO NOT TO SCALE XXXXX.DWG

CHECKED Pn,jed

65% DESIGN

SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY
DEESE LAKES HABITAT RESTORATION PROJECT
TYPICAL SLAB CORNER DETAIL

1. PROVIDE 2" LAYER OF SAND WHERE UNDER SLAB VAPOR BARREER IS NOT REQUIRED.

UNDER SLAB VAPOR BARRIER (MORE SPECIFIED)

TOP AND BOTTOM SAND IS REQUIRED AT THE SLAB/SLAB JUNCTION, EDGE OF SLAB, EDGE OF FOOTING, OR CONDITIONAL EDGE.

TYPICAL SLAB EDGE

1. **STEP** = 3/16" SAWCUT PROVIDE TROUGED JOINT (OR BE USED AS AN ALTERNATE ONLY FOR STRUCTURES NOT REQUIREMENMWATER.

PROTECT JOINT CUTS WITH WAX AND SEALANT GROOVE AS SPECIFIED (SEE NO. 2).

FOR SLAB REINFORCING SEE SPEC.

NOTE: 1. SAWCUT TO SUBDIVIDE SOG TO AREAS OF 250 SQUARE FEET OR LARGER WHERE TO BE SAWN OR IRREGULARLY SQUARE.

2. SAWCUT AS SHOWN AFTER ALL MINIMUM 24 HOURS AFTER POURING.

CONCRETE SIDEWALK AND TYPICAL SLAB-ON-GRADE

NOTES:

1. PROVIDE BROOM FINISH UNO PER THE REQUIREMENTS OF SPEC SECTION 03002.

2. PROVIDE TOOLED JOINTS AT 5 FOOT SPACING IN PERPENDICULAR DIRECTIONS.

3. #5 @ 7" OC EW AT CONCRETE CURB AND RAMPS.

4. #5 @ 12" OA NW AT CONCRETE CURB AND RAMPS.

5. **LEAD CONCRETE WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH F'c=3,000 PSI 8" THICKNESS AT CONCRETE PAVEMENT AND RAMPS.

6. **8" THICKNESSES AT CONCRETE PAVEMENT AND RAMPS.

7. #3 @ 12" OA NW AT CONCRETE CURB AND RAMPS.

8. **8" THICKNESSES AT CONCRETE PAVEMENT AND RAMPS.

9. **1'-0" MIN SLOPE 1/4"/LF UNO

10. WIDTH AS SPECIFIED

REINFORCING AT WALL CORNER

CONCRETE CURB

HORIZONTAL Datum & THE CALIFORNIA COORDINATE SYSTEM, ZONE 2 (NAD 83)

MATERIAL DATUM IS HAND SHOWN EL NAV: 88 - EL NAV: 29'-3"6"
**MINIMUM COVER**

Informal or top surfaces exposed to weather or saturated are submerged or in contact with earth.

Other locations, walls, or grills, including column splicing or ties, slabs, walls, and joints:
- #6 and larger
- #5 and smaller

Guide for reinforcing steel shall not be less than the minimum shown below the appropriate column. Also shall not exceed the minimum of more than 1/4 inch where the concrete thickness is 24" or less. More than 1/2 inch where the concrete thickness is more than 24 inches.

**REINFORCEMENT CONCRETE COVER**

<table>
<thead>
<tr>
<th>BAR SIZE</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>#6</td>
<td>1.5</td>
</tr>
<tr>
<td>#5</td>
<td>2.0</td>
</tr>
<tr>
<td>#4</td>
<td>2.5</td>
</tr>
<tr>
<td>#3</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**REINFORCING HOOK SCHEDULE**

<table>
<thead>
<tr>
<th>MIN SPACING</th>
<th>MAX MINIMUM BAR SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 / 4&quot;</td>
<td>1 1/4&quot;</td>
</tr>
<tr>
<td>1&quot;</td>
<td>2&quot;</td>
</tr>
<tr>
<td>2&quot;</td>
<td>3 1/2&quot;</td>
</tr>
</tbody>
</table>

**NOTES:**
1. All bar lengths shown are minimum. Splices for top reinforcing bars in beams and slabs shall be centered over the supports. Splices for top reinforcing bars shall be spaced on center to span.
2. All embedments shall be per Schedule above, unless noted otherwise.
3. Splice length shall be as shown under heading "Other." Except if spliced bars are horizontal, bars with 1/2" or more concrete below them. Splice length shall be as shown unless heading "TYPICAL." Spliced bars shall be treated as "tied" bars.

**ADHESIVE ANCHOR DETAILS & SCHEDULE**

<table>
<thead>
<tr>
<th>BEAD TYPE</th>
<th>MINIMUM REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>3/16&quot;</td>
</tr>
</tbody>
</table>

**NOTES:**
1. All embedments shown are minimum. Splices for top reinforcing bars in beams and slabs shall be centered over the supports. Splices for top reinforcing bars shall be spaced on center to span.
2. All embedments shall be per Schedule above, unless noted otherwise.
65% Design

Bees Lakes
Concrete Pile Typical Details / Schedule

Typical Concrete Pile Detail

Notes:
1. See Specification Section 316316 for information not noted.
2. Pile splices are not allowed unless reviewed and approved by engineer of record.

Section NTS

Typical Concrete Pile Detail

Notes:
1. See Specification Section 316316 for information not noted.
2. Pile splices are not allowed unless reviewed and approved by engineer of record.

Pile Schedule

<table>
<thead>
<tr>
<th>Pile #</th>
<th>Pile Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-1</td>
<td>20'-0&quot;</td>
</tr>
<tr>
<td>P-2</td>
<td>20'-0&quot;</td>
</tr>
</tbody>
</table>

Section NTS

Typical Concrete Pile Detail

Notes:
1. See Specification Section 316316 for information not noted.
2. Pile splices are not allowed unless reviewed and approved by engineer of record.

Pile Schedule

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<tbody>
<tr>
<td>P-1</td>
<td>20'-0&quot;</td>
</tr>
<tr>
<td>P-2</td>
<td>20'-0&quot;</td>
</tr>
</tbody>
</table>
LAG SCREW - SEE DETAILS FOR SIZE

PLACE WASHERS UNDER HEAD OF LAG SCREW WHERE SCREW BORDS DIRECTLY ON WOOD

NOTES:
1. HOLE DIAMETER AT SHANK SHALL BE THE SAME DIAMETER AS THE SHANK
2. HOLE DIAMETER AT THE THREADED PORTION SHALL BE NO MORE THAN 70% OF THE SHANK DIAMETER
3. LAG SCREW SHALL BE INSERTED IN ITS LEAD HOLE BY TURNING WITH A WRENCH AND SHALL NOT BE HAMMER DRIVEN
4. LUBRICANT SHALL BE USED TO EASE INSTALLATION OF SCREW INTO LEAD HOLE

TYPICAL LAG SCREW LEAD HOLE DETAIL

WOOD CONNECTION DETAILS

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HDR Engineering, Inc.

SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY
BEES LAKES HABITAT RESTORATION PROJECT
MAIN POND VIEWING PLATFORM SECTION

3/4" = 1'-0"

SECTION
3/4" = 1'-0"

MAIN POND VIEWING PLATFORM SECTION
3/4" = 1'-0"

DETAIL
3/4" = 1'-0"

BEES LAKES
SECTIONS AND DETAILS
VIEWING PLATFORM

65% DESIGN

SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY
BEES LAKES HABITAT RESTORATION PROJECT

HORIZONTAL DATUM IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 2 (NAD 83)
VERTICAL DATUM IS NAVD 88
BAR LEVEL ON ORIGINAL ORIGINAL EQUALS ONE INCH AT SCALE, THEREFORE.

AS NOTED

D R. PRASAD
DATE APRIL 2020

DRAWN

CHECKED

ENGINEERED BY

HDR Engineering, Inc.

S-11
### Planting Palette - Floating Wetland Islands

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Plant Size</th>
<th>Quantity A</th>
<th>Quantity B</th>
<th>Quantity C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthericum liliago</td>
<td>mugwort</td>
<td>Tree/turf</td>
<td>20</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Carex pleiantha</td>
<td>slender sedge</td>
<td>Tree/turf</td>
<td>30</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Drosera rotundifolia</td>
<td>drosera</td>
<td>grass</td>
<td>70</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td>Echinops ritro</td>
<td>globe thistle</td>
<td>Tree/turf</td>
<td>15</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Elymus trivialis</td>
<td>meadow barley</td>
<td>Tree/turf</td>
<td>50</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>Juncus effusus</td>
<td>marsh reed</td>
<td>Tree/turf</td>
<td>45</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>Carex rostrata</td>
<td>narrow-leaved sedge</td>
<td>Tree/turf</td>
<td>80</td>
<td>40</td>
<td>8</td>
</tr>
<tr>
<td>Carex spicata</td>
<td>needle needlegrass</td>
<td>Tree/turf</td>
<td>100</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Carex spicata</td>
<td>needle needlegrass</td>
<td>Tree/turf</td>
<td>75</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td>Cirsium arvense</td>
<td>silver thistle</td>
<td>Tree/turf</td>
<td>45</td>
<td>22</td>
<td>4</td>
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</tbody>
</table>

### Planting Palette - Mixed Riparian Woodland Establishment Areas

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<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Plant Size</th>
<th>Quantity A</th>
<th>Quantity B</th>
<th>Quantity C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acorus gramineus</td>
<td>spike rush</td>
<td>Tree/turf</td>
<td>20</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Andropogon gerardii</td>
<td>big bluestem</td>
<td>Tree/turf</td>
<td>30</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Carex spicata</td>
<td>needle needlegrass</td>
<td>Tree/turf</td>
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<td>35</td>
<td>5</td>
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<td>5</td>
</tr>
</tbody>
</table>

### Seed Mix - Type 1

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Drilling Seedling Rate (PLS² Balancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achillea millefolium</td>
<td>yarrow</td>
<td>0.2</td>
</tr>
<tr>
<td>Agrimonia eupatoria</td>
<td>ageratum</td>
<td>0.2</td>
</tr>
<tr>
<td>Allium tauricum</td>
<td>garlic</td>
<td>0.2</td>
</tr>
<tr>
<td>Anemone tangutica</td>
<td>anemone</td>
<td>0.2</td>
</tr>
<tr>
<td>Euphorbia griffithii</td>
<td>euphorbia</td>
<td>0.2</td>
</tr>
<tr>
<td>Eryngium alatum</td>
<td>eryngo</td>
<td>0.2</td>
</tr>
<tr>
<td>Erysimum cheiri</td>
<td>erysimum</td>
<td>0.2</td>
</tr>
<tr>
<td>Hesperis matronalis</td>
<td>sweet pea</td>
<td>0.2</td>
</tr>
<tr>
<td>Ipomoea tricolor</td>
<td>morning glory</td>
<td>0.2</td>
</tr>
</tbody>
</table>

### Seed Mix - Type 2

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Drilling Seedling Rate (PLS² Balancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achillea millefolium</td>
<td>yarrow</td>
<td>0.2</td>
</tr>
<tr>
<td>Agrimonia eupatoria</td>
<td>ageratum</td>
<td>0.2</td>
</tr>
<tr>
<td>Allium tauricum</td>
<td>garlic</td>
<td>0.2</td>
</tr>
<tr>
<td>Anemone tangutica</td>
<td>anemone</td>
<td>0.2</td>
</tr>
<tr>
<td>Euphorbia griffithii</td>
<td>euphorbia</td>
<td>0.2</td>
</tr>
<tr>
<td>Eryngium alatum</td>
<td>eryngo</td>
<td>0.2</td>
</tr>
<tr>
<td>Erysimum cheiri</td>
<td>erysimum</td>
<td>0.2</td>
</tr>
<tr>
<td>Hesperis matronalis</td>
<td>sweet pea</td>
<td>0.2</td>
</tr>
<tr>
<td>Ipomoea tricolor</td>
<td>morning glory</td>
<td>0.2</td>
</tr>
</tbody>
</table>

### Seed Mix - Type 3

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Drilling Seedling Rate (PLS² Balancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achillea millefolium</td>
<td>yarrow</td>
<td>0.2</td>
</tr>
<tr>
<td>Agrimonia eupatoria</td>
<td>ageratum</td>
<td>0.2</td>
</tr>
<tr>
<td>Allium tauricum</td>
<td>garlic</td>
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</tr>
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<td>Anemone tangutica</td>
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</tr>
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<td>Euphorbia griffithii</td>
<td>euphorbia</td>
<td>0.2</td>
</tr>
<tr>
<td>Eryngium alatum</td>
<td>eryngo</td>
<td>0.2</td>
</tr>
<tr>
<td>Erysimum cheiri</td>
<td>erysimum</td>
<td>0.2</td>
</tr>
<tr>
<td>Hesperis matronalis</td>
<td>sweet pea</td>
<td>0.2</td>
</tr>
<tr>
<td>Ipomoea tricolor</td>
<td>morning glory</td>
<td>0.2</td>
</tr>
</tbody>
</table>
CONTAINER PLANTING
ROOTBALL SET 1/2" ABOVE FINISH GRADE TO ALLOW FOR FUTURE SETTLING
FLEXIBLE TUBING WITH THREE DRIP EMITTERS PER PLANT.
SPACE EMITTERS 12" O.C.
PULLED PLANTING BERM
DISTURBED SOIL
EXISTING GRADE
PLANTING PIT; SEE SPECIFICATIONS FOR MORE DETAIL
BAMBOO POLE WITH IDENTIFICATION TAG

NOTES:
1. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL T-POST IN TWO PLACES FOR BEST FIT TO AVOID INSTALLED IRRIGATION TUBING AND ROOTBALL
3. PLANT PROTECTION CAGE SHALL BE INSTALLED ON SELECTED PLANTS DETERMINED BY CITY DURING THE MAINTENANCE PERIOD.
4. PLANTS SHALL BE INSTALLED IN AN ALTERNATING PATTERN TO ADJACENT PULLED BERMS.
5. COMPANION PLANTS WILL BE PLANTED IN ASSOCIATION WITH SOME TREE AND SHRUB SPECIES AS DESCRIBED IN MIXED RIPARIAN WOODLAND PLANTING PALETTE (SHEET L-02).
6. TREE SPECIES POPULUS FREMONTII (COTTON WOOD), PLATANUS RACEMOSA (CALIFORNIA SYCAMORE), SHALL BE PLANTED TOGETHER IN CLUSTERS OF THREE TO SIX WITHIN WOODLAND PLANTING AREAS.
7. EXISTING TREES SHALL BE AVOIDED.
8. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
9. SEE THIS SHEET FOR ADDITIONAL PLANTING DETAILS.

HDR Engineering, Inc.
SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY BEES LAKES HABITAT RESTORATION PROJECT
65% DESIGN

HDR Engineering, Inc.
2868 PROSPECT PARK DRIVE SUITE 400 RANCHO CORDOVA, CA 95670 (916) 631-4500
PLANTING POCKET FILLED WITH COCO COIR OR APPROVED SUITABLE HYDROPONIC ROOTING MEDIUM

CONTAINER PLANTING (TYP. TREEBAND SIZE)

NOTES:
1. CAREFULLY REMOVE MOST POTTING SOIL FROM PLANT ROOTBALL BEFORE PLANTING INTO COCO COIR MEDIUM (OR APPROVED SUBSTITUTE) IN PLANTING POCKET.
2. SEE SPECIFICATIONS FOR MORE DETAIL ON PLANTING MEDIUM.

FLOATING ISLAND MATRIX

1. CAREFULLY REMOVE MOST POTTING SOIL FROM PLANT ROOTBALL BEFORE PLANTING INTO COCO COIR MEDIUM (OR APPROVED SUBSTITUTE) IN PLANTING POCKET
2. SEE SPECIFICATIONS FOR MORE DETAIL ON PLANTING MEDIUM
BEES LAKES - PARKING AREA TYPICAL SECTION

SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY
BEES LAKES HABITAT RESTORATION PROJECT

65% DESIGN

HDR Engineering, Inc.

Scale: MTS

Horizontal Datum is the California Coordinate System (NAD 83)

Vertical Datum is NGVD 88

El. NAD 88 = El. NGVD 29 + 2.6

HDR Engineering, Inc.

Project Name
SACRAMENTO-SAN JOAQUIN DELTA CONSERVANCY BEES LAKES HABITAT RESTORATION PROJECT

Project Number
0T-02

Prepared By
V. Russo

Drawn By
X

APRIL 2020

NOTE: SCALE COORDINATE SYSTEM IS AN 1812

Real World Coordinate System

HORIZONTAL COORDINATE SYSTEM: WRGS 1983

VERTICAL COORDINATE SYSTEM: NGVD 88