CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT OFFICE
1385 EIGHTH STREET, SUITE 130
ARCATA, CA 95521
VOICE (707) 826-8950
FAX (707) 826-8960

F9a

1-19-0462

(MCKINLEYVILLE COMMUNITY SERVICES DISTRICT)

May 14, 2021

EXHIBITS

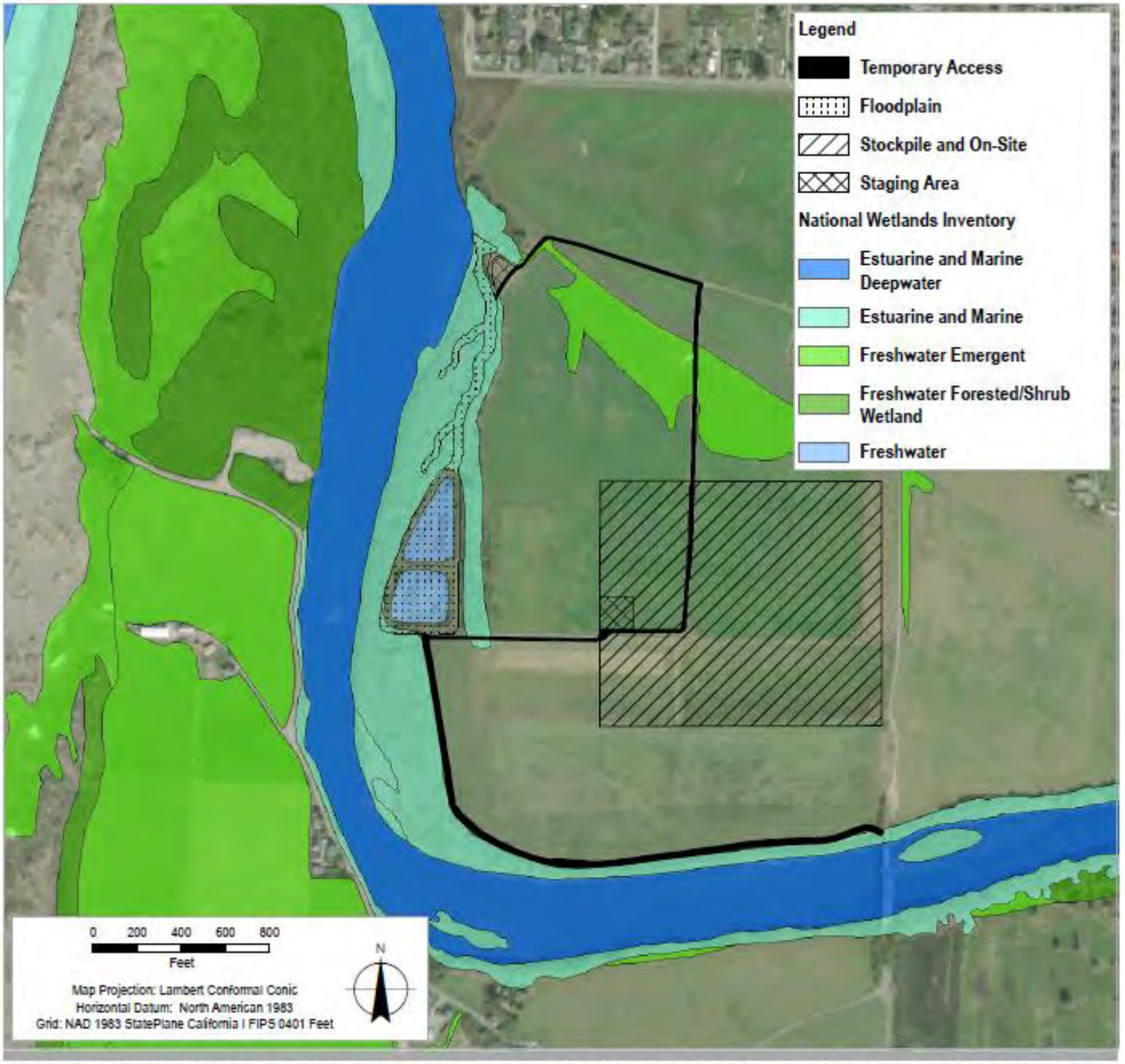
Exhibit 1 – Regional Location Map
Exhibit 2 – Vicinity map
Exhibit 3 – Existing Wetland and Proposed Staging Areas
Exhibit 4 – Fish and Wildlife Habitat Improvement Plans (excerpts)
Exhibit 5 – Preliminary Public Access Plans
Exhibit 6 – Preliminary Vegetation Trimming Plan
Exhibit 7 – Proposed Monitoring Plan (excerpts)

EXHIBIT NO. 1

CDP Application No.
1-19-0462 (MCSD)
REGIONAL LOCATION

EXHIBIT NO. 2

CDP Application No.
1-19-0462 (MCSD)
VICINITY MAP



N:\US\Eureka\Projects\661\11203489\GIS\Maps\Deliverables\11203489_RestorationStockpileAreas.mxd Data source: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

EXHIBIT NO. 3

CDP Application No.
1-19-0462 (MCSD)
(E) WETLANDS AND (P) STAGING AREAS

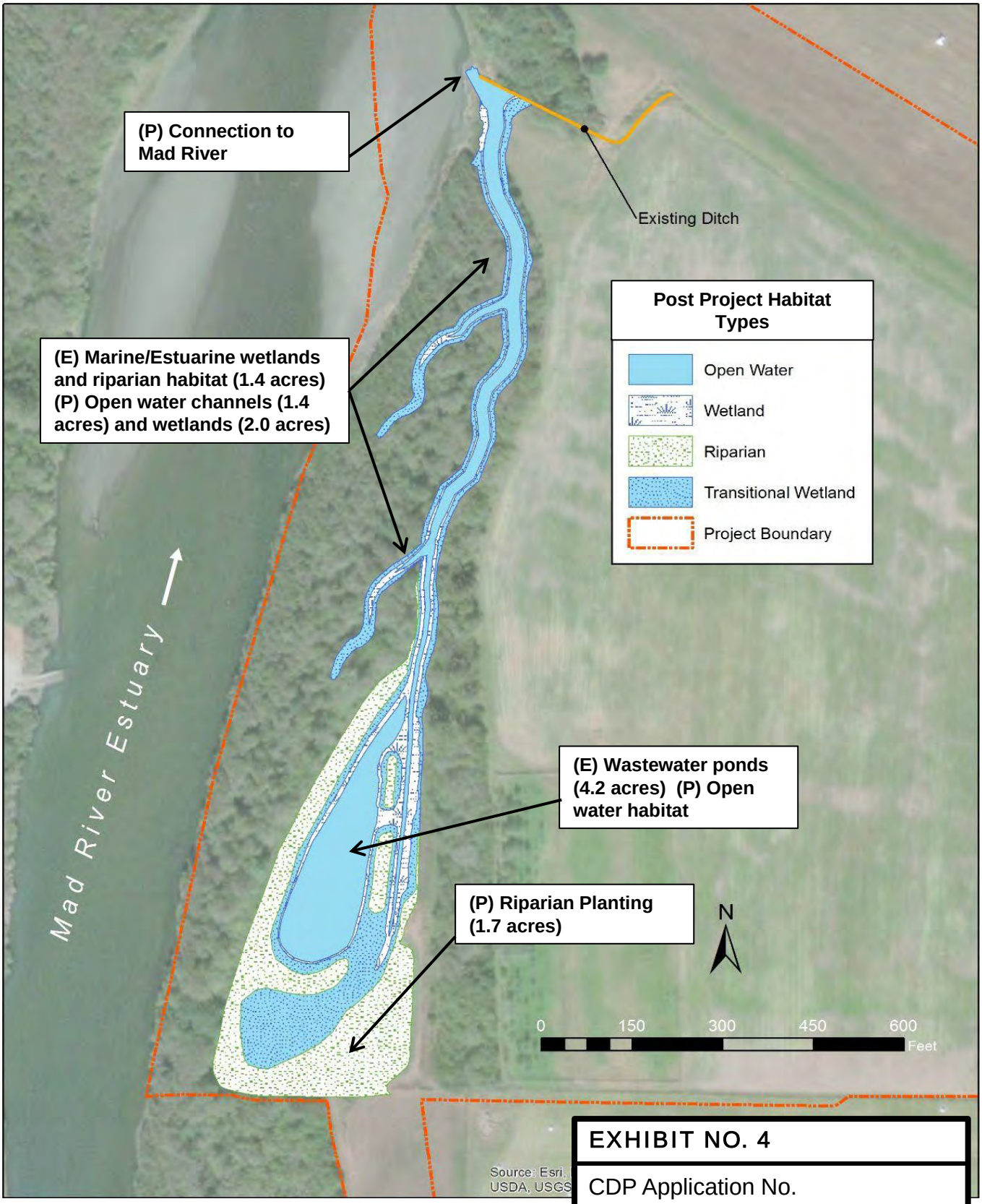
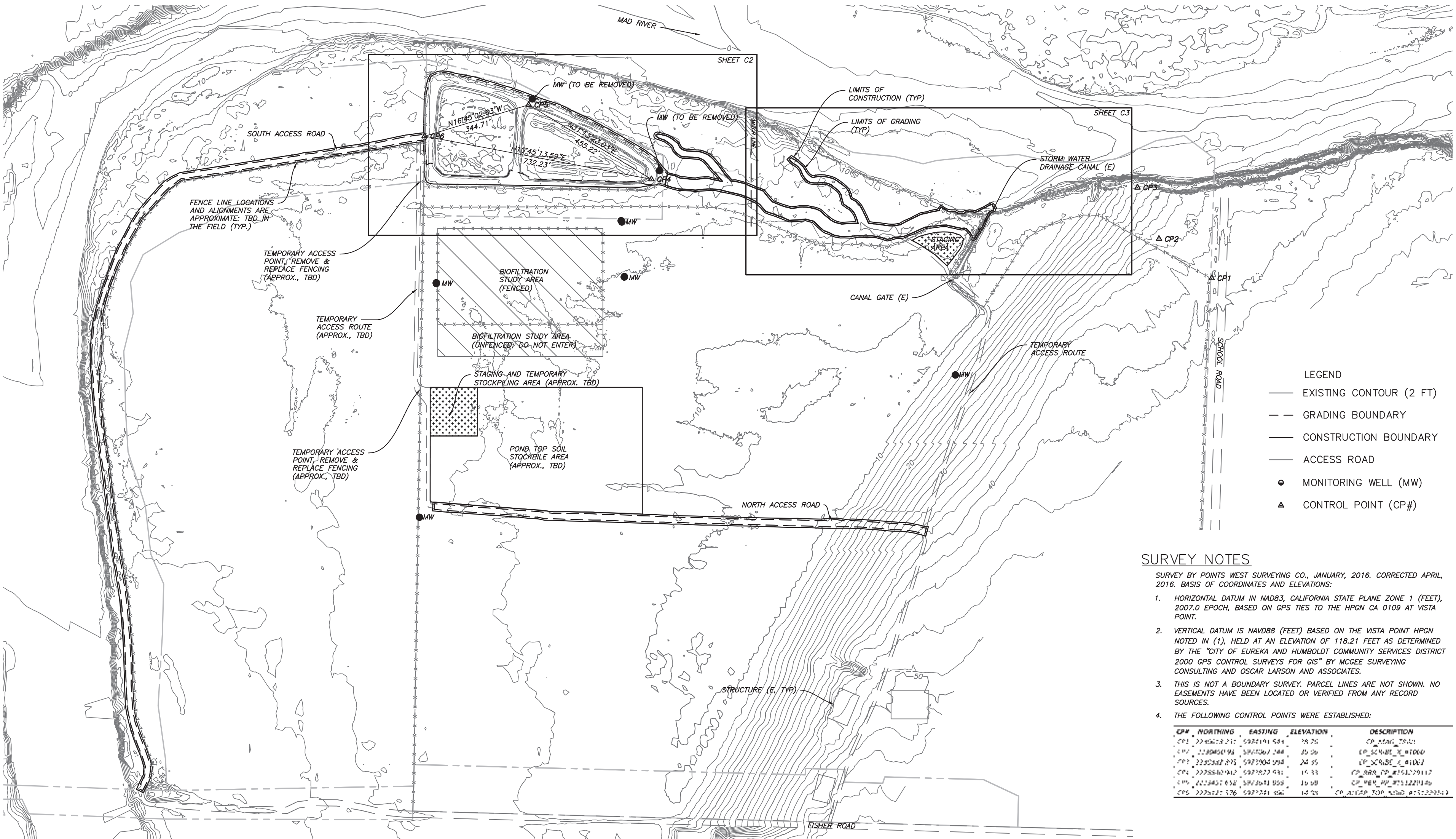


EXHIBIT NO. 4

CDP Application No.
1-19-0462 (MCSD)
HABITAT IMPROVEMENT PLANS
(Page 1 of 7)



SURVEY NOTES

SURVEY BY POINTS WEST SURVEYING CO., JANUARY, 2016. CORRECTED APRIL, 2016. BASIS OF COORDINATES AND ELEVATIONS:

1. HORIZONTAL DATUM IN NAD83, CALIFORNIA STATE PLANE ZONE 1 (FEET), 2007.0 EPOCH, BASED ON GPS TIES TO THE HPGN CA 0109 AT VISTA POINT.
2. VERTICAL DATUM IS NAVD88 (FEET) BASED ON THE VISTA POINT HPGN NOTED IN (1), HELD AT AN ELEVATION OF 118.21 FEET AS DETERMINED BY THE "CITY OF EUREKA AND HUMBOLDT COMMUNITY SERVICES DISTRICT 2000 GPS CONTROL SURVEYS FOR GIS" BY MCGEE SURVEYING CONSULTING AND OSCAR LARSON AND ASSOCIATES.
3. THIS IS NOT A BOUNDARY SURVEY. PARCEL LINES ARE NOT SHOWN. NO EASEMENTS HAVE BEEN LOCATED OR VERIFIED FROM ANY RECORD SOURCES.
4. THE FOLLOWING CONTROL POINTS WERE ESTABLISHED:

CP#	NORTHING	EASTING	ELEVATION	DESCRIPTION
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

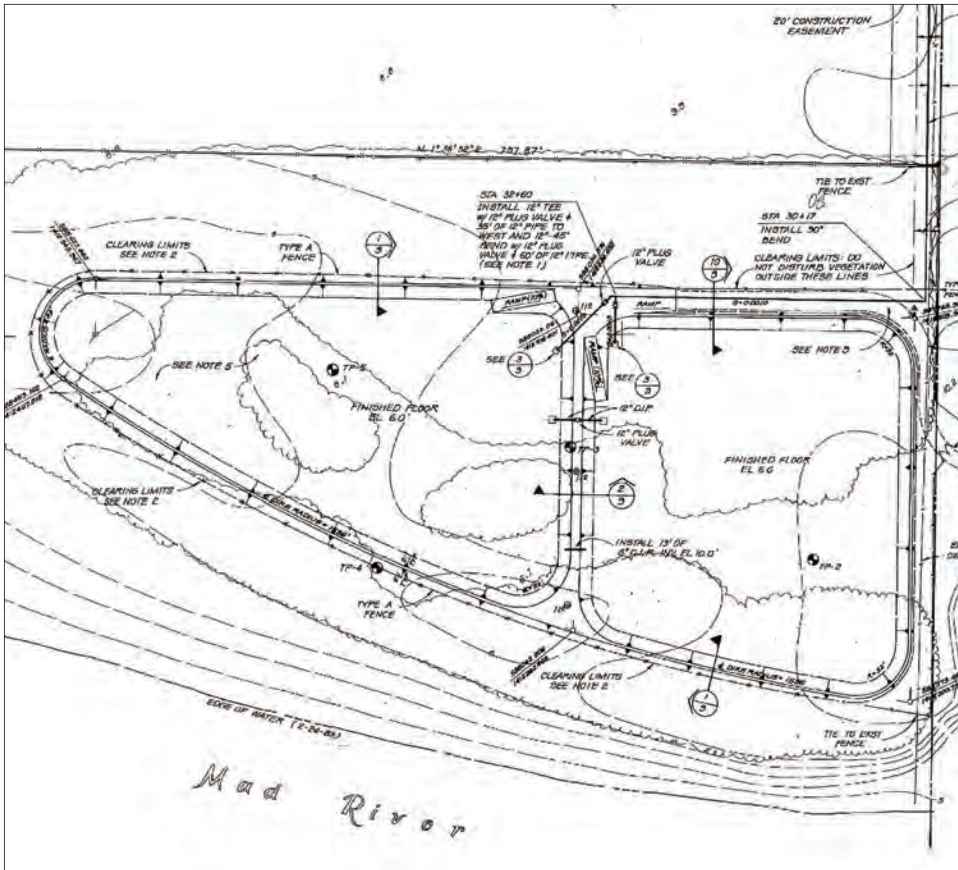
REGISTERED PROFESSIONAL ENGINEER
JUSTICE ROSE PATENAUDE
No. 65963
Exp. 6/30/18
CIVIL
STATE OF CALIFORNIA

Northern Hydrology & Engineering

EXHIBIT NO. 4

CDP Application No.
1-19-0462 (MCSD)

HABITAT IMPROVEMENT PLANS
(Page 2 of 7)

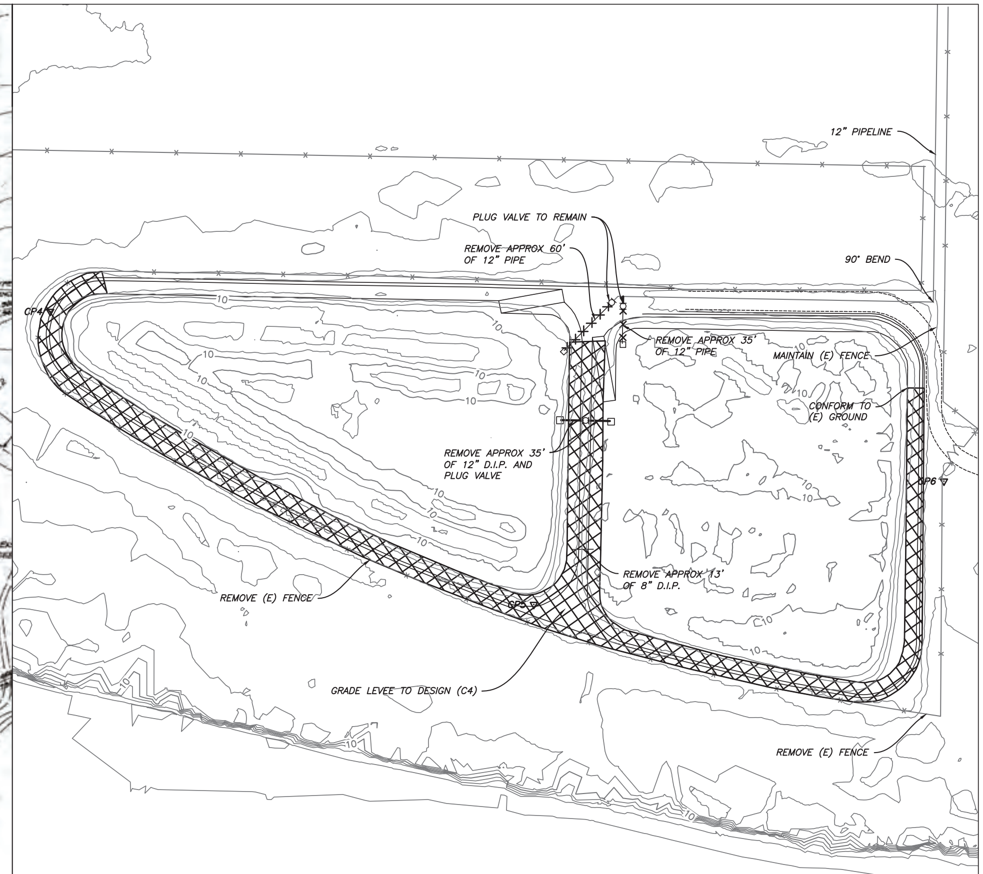


PERCOLATION PONDS DESIGN

WINZLER & KELLY, 3/8/83

NOTE:

ELEVATIONS ASSUMED TO BE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.



LEGEND

EXISTING CONTOUR (2 FT)

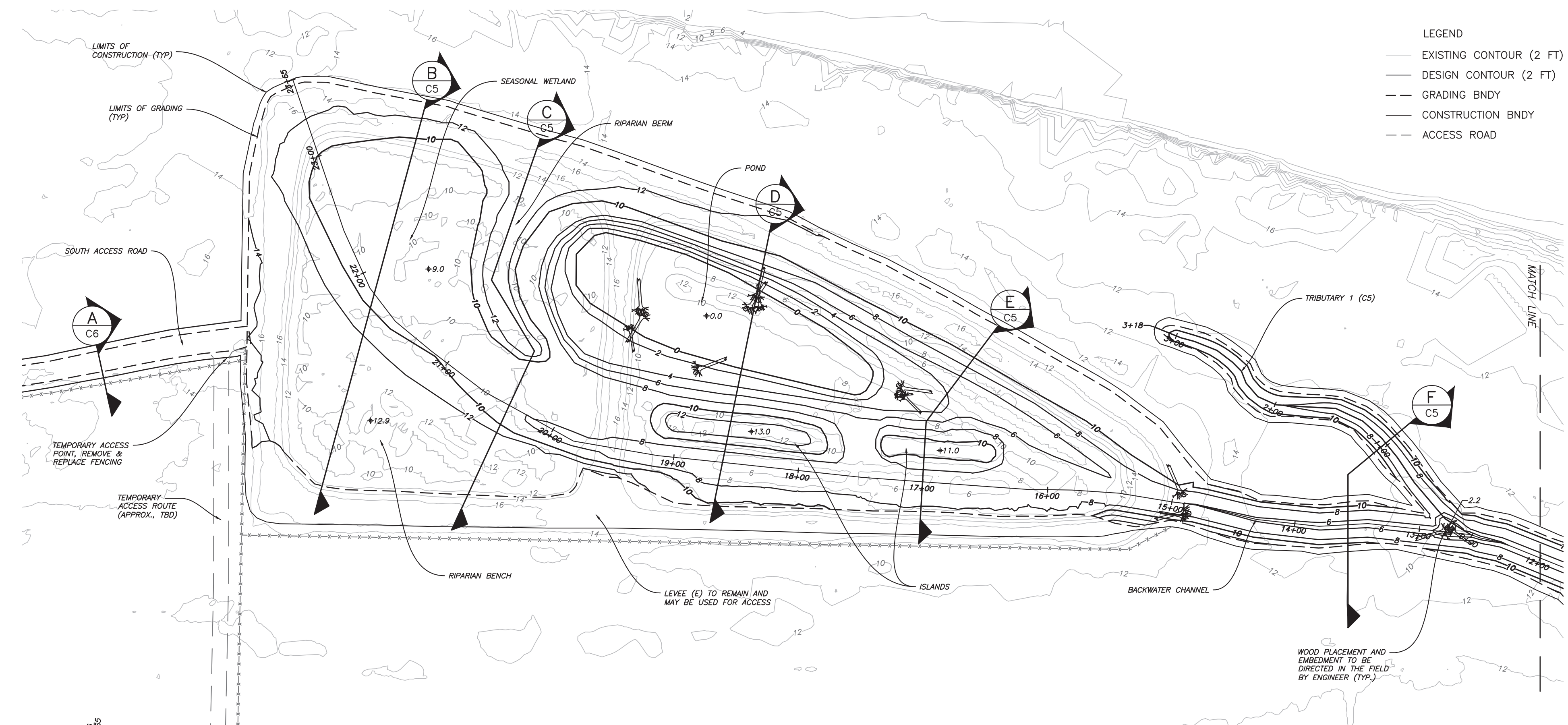
50 0 50 100

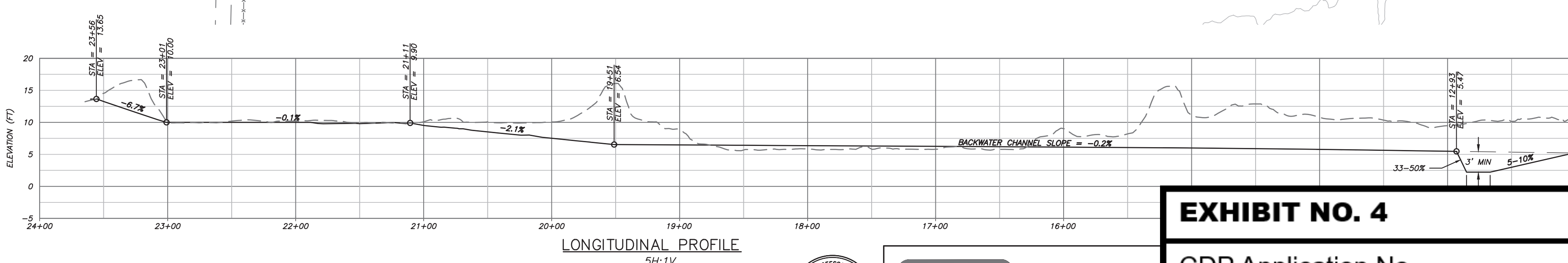
SCALE OF FEET

Northern Hydrology & Engineering

EXHIBIT NO. 4

CDP Application No.
1-19-0462 (MCSD)
HABITAT IMPROVEMENT PLANS
(Page 3 of 7)





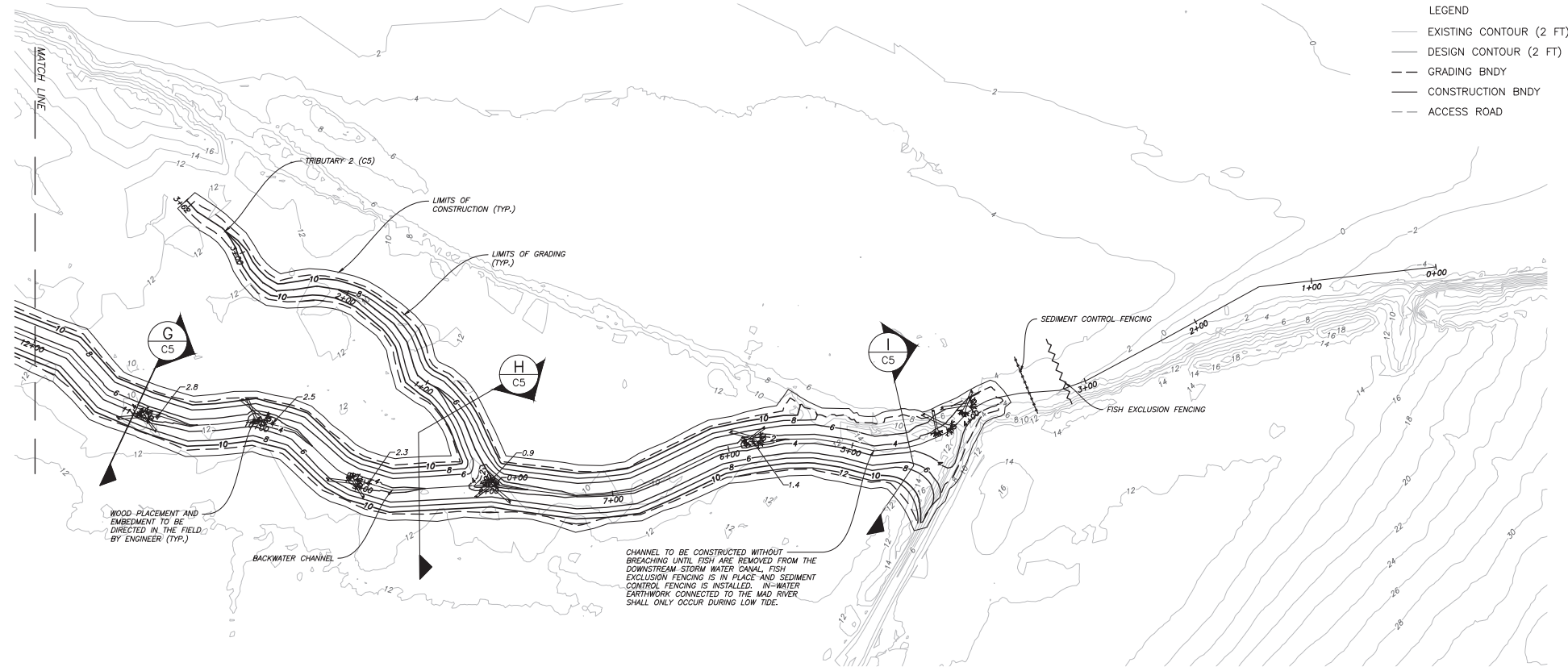
FEET

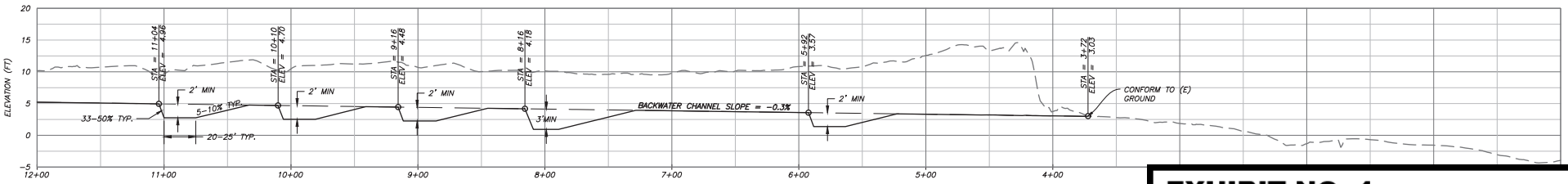
Northern Hydrology & Engineering

EXHIBIT NO. 4

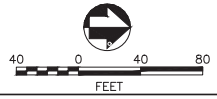
CDP Application No.
1-19-0462 (MCSD)

HABITAT IMPROVEMENT PLANS
(Page 4 of 7)





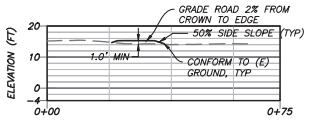
LONGITUDINAL PROFILE
5H:1V



Northern Hydrology & Engineering

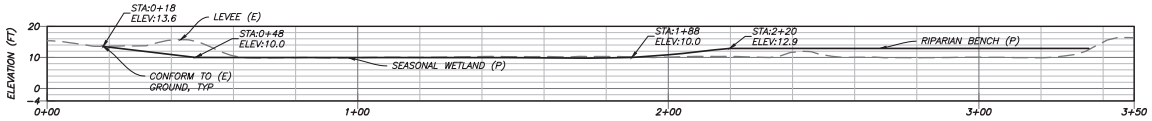
EXHIBIT NO. 4

CDP Application No.
1-19-0462 (MCSD)
HABITAT IMPROVEMENT PLANS
(Page 5 of 7)



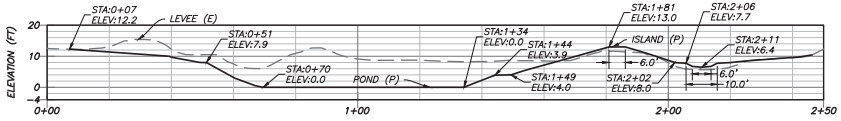
SECTION A (C3)
(TYPICAL ROAD CROSS-SECTION)

NOTE:
1. ROAD CONSTRUCTION DETAILS AND COMPACTION SPECIFICATIONS TO BE DESIGNED BY OTHERS.



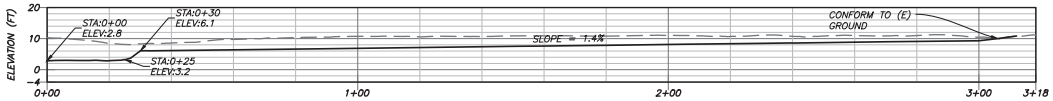
SECTION B (C3)
(STATION 21+80)

SECTION C (C3)
(STATION 20+40)



SECTION D (C3)
(STATION 18+61)

NOTES:
1. CHANNEL BOTTOM GRADES TOWARDS CHANNEL CENTER AT 10% SLOPES (TYP).
2. CHANNEL BANKS GRADE AT 50% SLOPES.



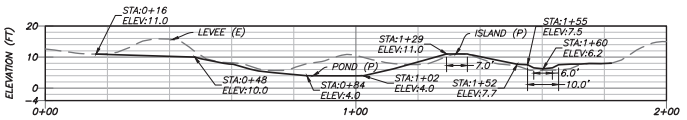
TRIBUTARY PROFILE 1 (C3)
(CONFLUENCE AT BACKWATER CHANNEL STATION 12+50)

TRIBUTARY PROFILE 2 (C4)
(CONFLUENCE AT BACKWATER CHANNEL STATION 8+00)

LEGEND
EXISTING GROUND
DESIGN GROUND

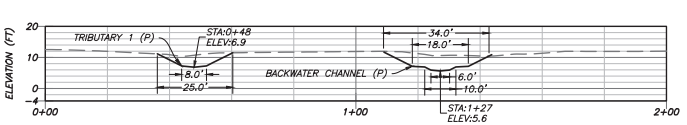
20 0 20 40
FEET

1H:1V



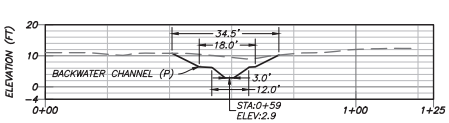
SECTION E (C3)
(STATION 17+00)

NOTES:
1. CHANNEL BOTTOMS AND BENCHES GRADE TOWARDS CHANNEL CENTER AT 10% SLOPES (TYP).
2. CHANNEL BANKS GRADE AT 50% SLOPES.



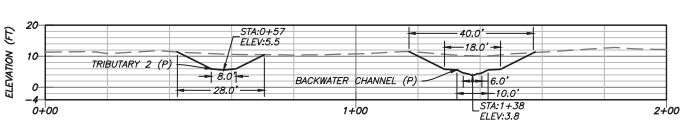
SECTION F (C3)
(STATION 13+58)

NOTES:
1. CHANNEL BOTTOMS AND BENCHES GRADE TOWARDS CHANNEL CENTER AT 10% SLOPES (TYP).
2. CHANNEL BANKS GRADE AT 50% SLOPES.



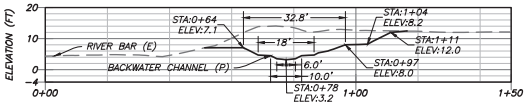
SECTION G (C4)
(STATION 11+00)

NOTES:
1. CHANNEL POOL BOTTOMS ARE FLAT ACROSS SECTIONS.
2. CHANNEL BENCHES GRADE TOWARDS CHANNEL CENTER AT 10% SLOPES (TYP).
3. CHANNEL BANKS GRADE AT 50% SLOPES.



SECTION H (C4)
(STATION 8+56)

NOTES:
1. CHANNEL BOTTOMS AND BENCHES GRADE TOWARDS CHANNEL CENTER AT 10% SLOPES (TYP).
2. CROSS-SECTION H SHOWS BACKWATER CHANNEL CROSSING POOL TAILOUT.
3. CHANNEL BANKS GRADE AT 50% SLOPES.



SECTION I (C4)
(STATION 4+53)

NOTES:
1. CHANNEL BOTTOMS AND BENCHES GRADE TOWARDS CHANNEL CENTER AT 10% SLOPES (TYP).
2. CHANNEL BANKS GRADE AT 50% SLOPES.

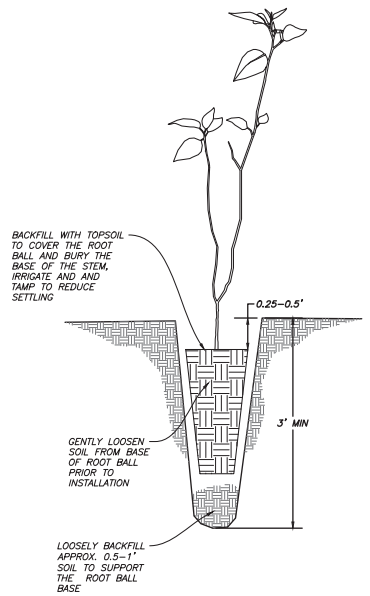
REGISTERED PROFESSIONAL ENGINEER
SCOTT ROSE PATZKE
No. 65963
Exp. 6/30/18
CIVIL
STATE OF CALIFORNIA

Northern Hydrology & Engineering

EXHIBIT NO. 4

CDP Application No.
1-19-0462 (MCSD)
HABITAT IMPROVEMENT PLANS
(Page 6 of 7)

REVEGETATION PLANFORM LAYOUT



TYPICAL TREE PLANTING DETAIL
NTS

REGISTERED PROFESSIONAL ENGINEER
JUSTICE ROSE PATENAUDE
No. 65963
EXP.
CIVIL
STATE OF CALIFORNIA

Northern Hydrology & Engineering

EXHIBIT NO. 4

CDP Application No.
1-19-0462 (MCSD)
HABITAT IMPROVEMENT PLANS
(Page 7 of 7)

PLAN
1"=30'

NOTE:
LOCATIONS ARE GENERALLY DIAGRAMMATIC. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL IMPROVEMENTS WITH OWNER PRIOR TO STARTING ANY CLEARING OR EARTHWORK ACTIVITIES.

LEGEND

GRAVEL PATH

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHN
812 W. WABASH AVE.
EUREKA, CA 95501
WWW.SHN-ENGR.COM
707-441-8855

NO.	DATE	REVISION	BY

DSGN CJL
DR CDN
CHK JSO
APVD

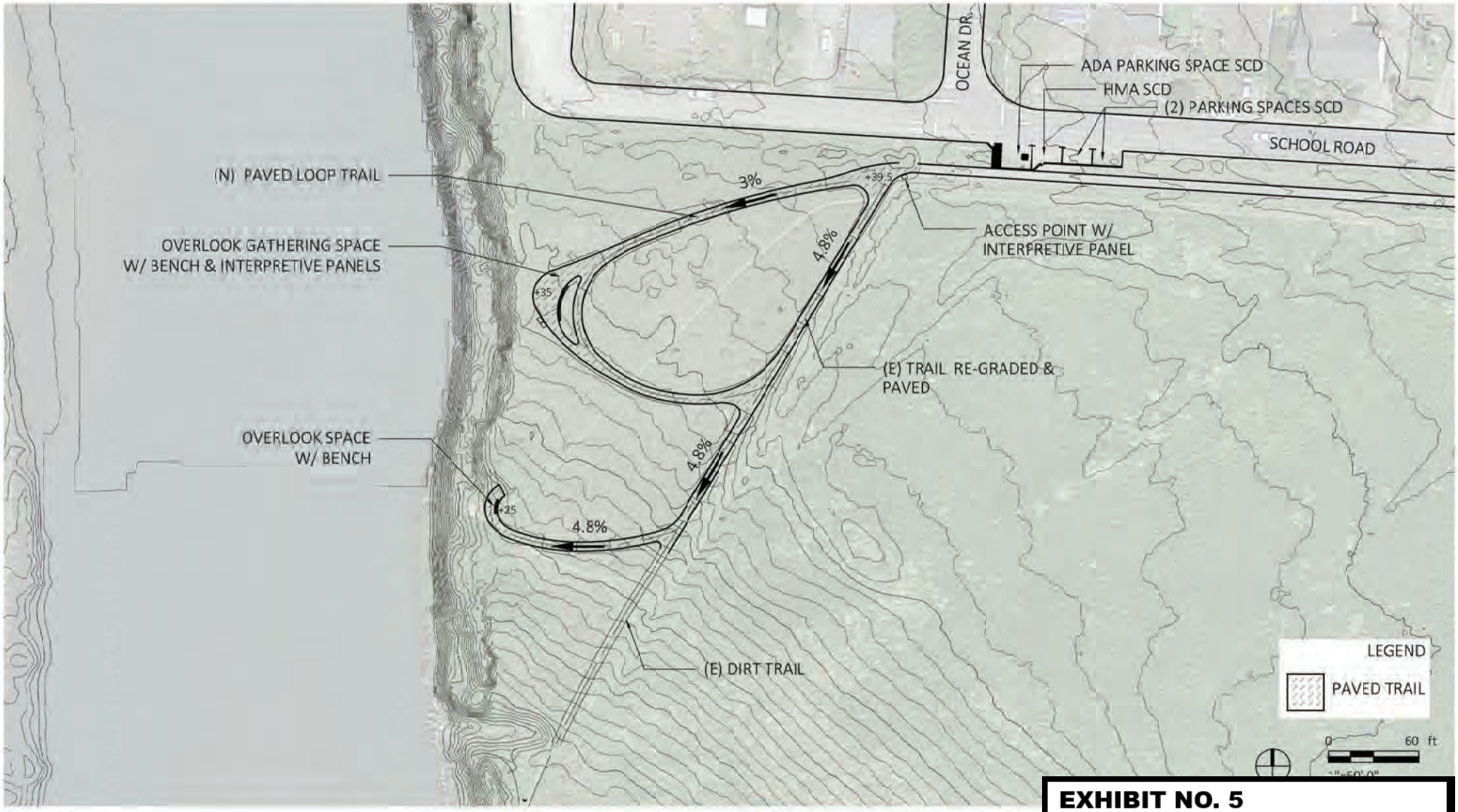
MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
MAD RIVER TRAIL
MCKINLEYVILLE, CALIFORNIA

PHASE 1 SITE PLAN

SAVED: 6/25/2020 3:26 PM MMALONE, PLOTTED: 6/25/2020 3:27 PM MIKE MALONE
\\eureka\projects\2019\019025-Mad-River-Pub-Access\200-Civil-Design\Dwgs\019025-200-SITE.dwg

EXHIBIT NO. 5

CDP Application No.
1-19-0462 (MCSD)
PRELIM PUBLIC ACCESS PLANS
(Page 1 of 4)



JUNE 11, 2020

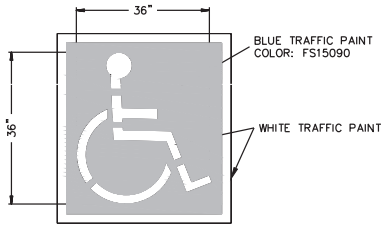
EXHIBIT NO. 5

CDP Application No.
1-19-0462 (MCSD)
PRELIM PUBLIC ACCESS PLANS
(Page 2 of 4)

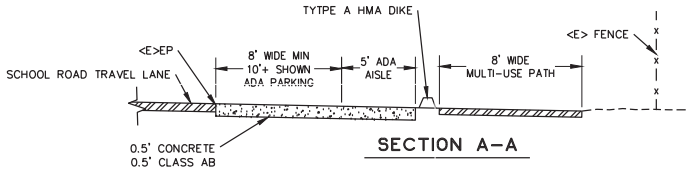
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: SCHOOL ROAD		DESIGN SECTION R. W. BRONKALL	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 1 OF 2
	ROAD NO: C3L070	MILE POST:			
	PROJECT NO.:	EA NO.:	DESIGNED BY: JAB	SCHOOL ROAD IMPROVEMENTS	
	CONTRACT NO.: 1H0321	PPNO:	DRAWN BY: JAB/RWB		
	DRAWING FILE NAME: School Parallel Parking.DWG		REVIEWED BY: RWB	PARKING ALONG SCHOOL ROAD FOR MAD RIVER PUBLIC TRAIL	
	PLOT DATE: 8-31-2020		APPROVED BY: CJW		

NORTH
SCALE: 1" = 10'

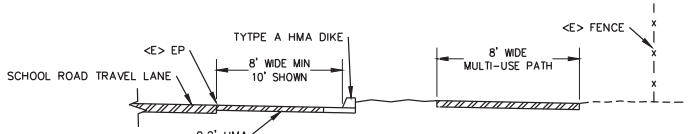
FIELD TOPO FROM 2004 SCHOOL ROAD DRAINAGE PROJECT



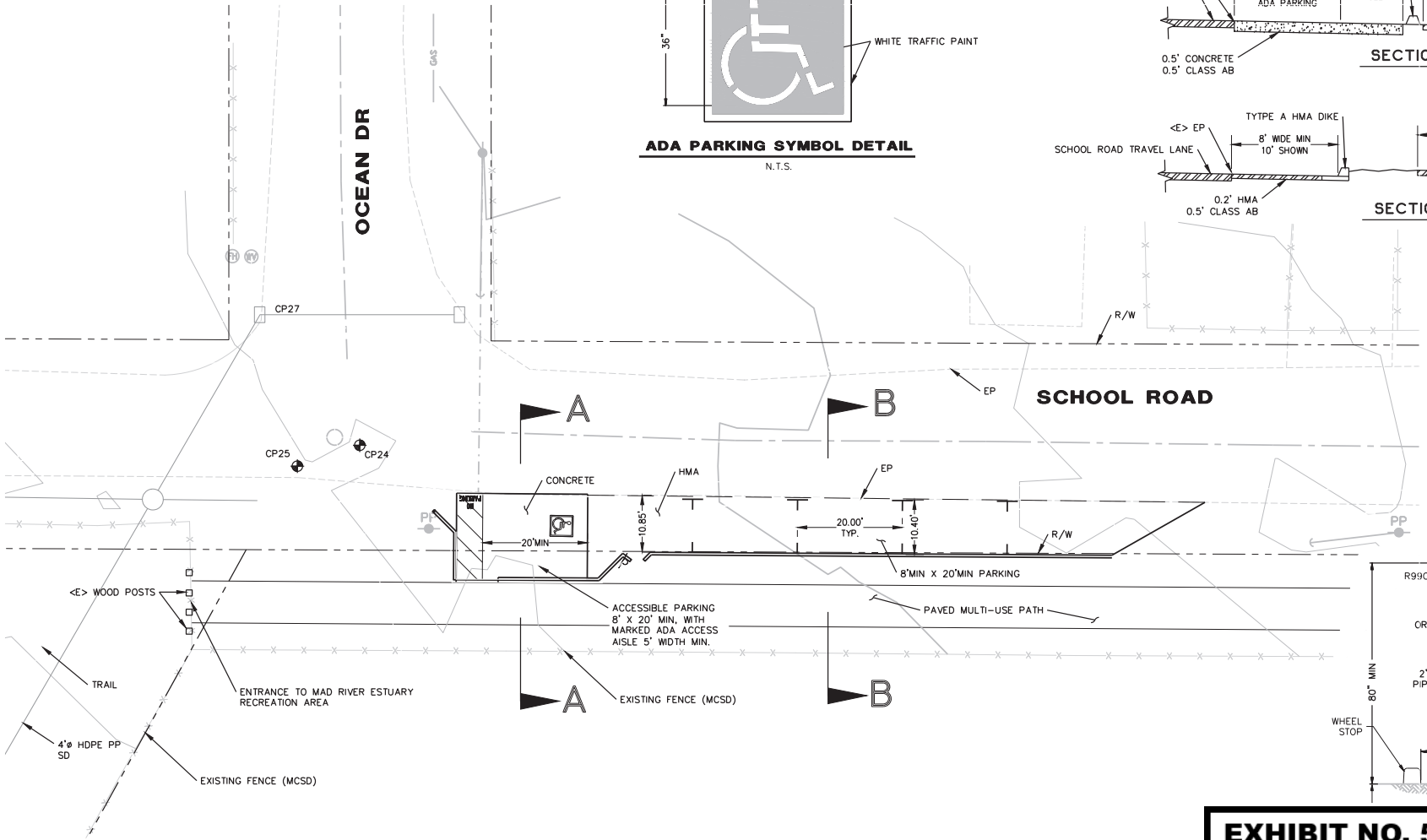
ADA PARKING SYMBOL DETAIL
N.T.S.



SECTION A–A



SECTION B–B



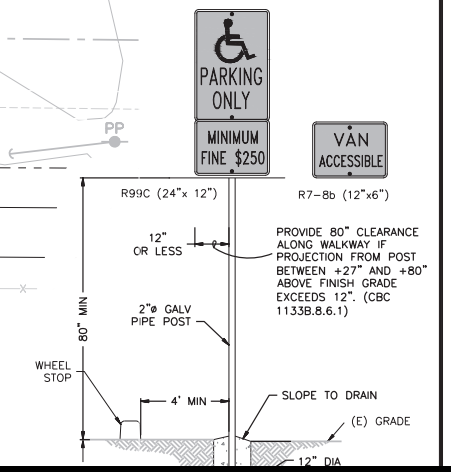


EXHIBIT NO. 5

CDP Application No.
1-19-0462 (MCSD)
PRELIM PUBLIC ACCESS PLANS
(Page 3 of 4)

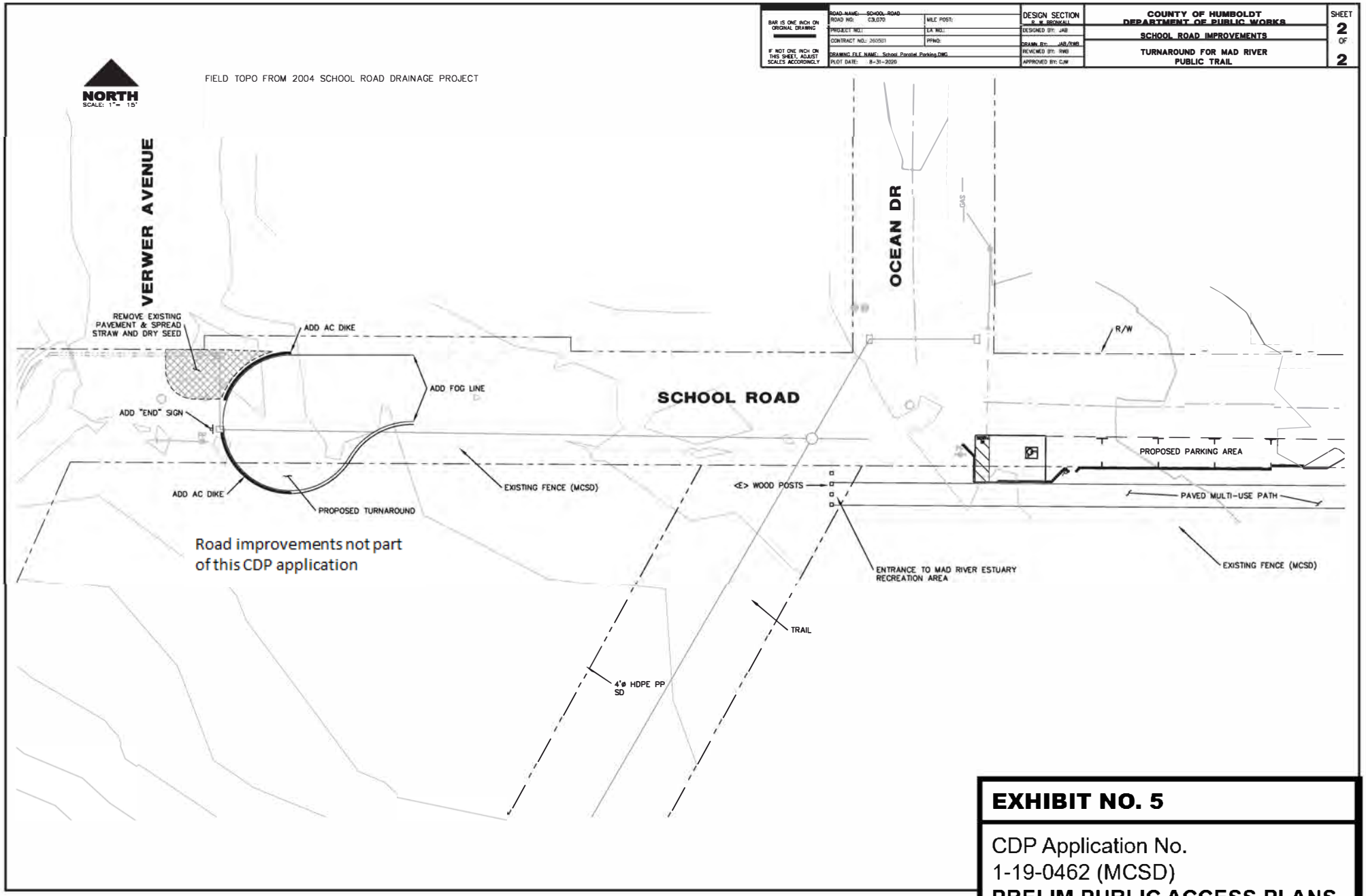


EXHIBIT NO. 5

CDP Application No.
1-19-0462 (MCSD)
PRELIM PUBLIC ACCESS PLANS
(Page 4 of 4)

MCSD Mad River - Vegetation Removal Guidelines:

Tree trimming will be planned for 1-2 times per year outside of the breeding bird window (March 15 – August 15).

In the bench location, vegetation removal of approximately 2-3 feet in length to achieve the desired viewscape. In other locations where vegetation blocks normal use of trails and access points, vegetation removal will occur in the most minimal amount practicable to re-establish a clear pathway.

EXHIBIT NO. 6

CDP Application No.
1-19-0462 (MCSD)
PRELIM VEG TRIMMING PLAN

Mad River Floodplain and Public Access Enhancement Project

Vegetation Monitoring Plan

California Trout

EXHIBIT NO. 7

CDP Application No.
1-19-0462 (MCSD)
PROPOSED MONITORING PLAN
(Page 1 of 3)

1. Project Objectives

Key ecological objectives of the Mad River Floodplain and Public Access Enhancement Project are to restore floodplain habitat to benefit fish and wildlife by removing percolation ponds to (1) restore a more natural connection to the river, (2) increase quantity of available salmonid habitat, and (3) increase the quality of available salmonid habitat. Implementation of riparian and wetland revegetation will help achieve project objectives.

2. Vegetation Maintenance and Monitoring Approach

Following initial construction, the restoration area is expected to be self-maintaining and dynamic into the long-term future. The restoration of floodplain connectivity in the area of the percolation ponds will permanently restore floodplain habitat. The restoration enhancement will occur in a fluvial setting where floodplain inundation occurs on an annual basis. Channels are being constructed to provide a more frequent connection between the restoration area and the river. Channel and habitat evolution is expected and desired, specifically to promote channel complexity and natural riverine processes preferred by anadromous salmonids. Immediately following construction, the restoration design anticipates the creation of 2.0 acres of wetland, 1.4 acres of new stream (open water), and 0.5 acres of riparian habitat. However, over time, it is anticipated that these areas will adjust in response to Mad River stream flow conditions, sediment deposition and routing, and fluvial scour. For example, open water stream habitat at times (seasonally and annually) could convert to wetland habitat, or vice versa. For this reason, holding the project accountable to maintain static habitat type outcomes (2.0, 1.4. and 0.5 acres of wetland, open water, and riparian habitat, respectively) for a period of up to five years or longer would not be applicable and could limit more meaningful ecological outcomes (dynamic and complex habitat).

MCSD and California Trout desire to achieve success of revegetated areas for an initial period of survival; however constraining plant survival to habitat type would be at odds with project objectives, which include a self-maintaining and dynamic off-channel habitat complex to benefit anadromous salmonids and other aquatic species.

2.1 Revegetation Strategy

Riparian and wetland revegetation will focus on appropriate native species, as described in the project's 100% revegetation design (forthcoming). A diverse array of riparian and wetland species will be included in the riparian and wetland planting palettes. Revegetation will occur in fall and winter months following earth work and will be timed with hydrologic conditions to maximize plant survival and will adhere to planting specifications detailed in the 100% revegetation design. Irrigation is not planned.

Some wetland areas may not be directly planted and would be allowed to largely recolonize naturally, consistent allowances provided to other local proje
and other resource agencies) in brackish/tidal settings (e.g.
estuary, and Wood Creek restoration projects). Thus in area
colonization (no plantings), monitoring plant survival would r

EXHIBIT NO. 7

CDP Application No.
1-19-0462 (MCSD)
PROPOSED MONITORING PLAN
(Page 2 of 3)

2.2 Monitoring Strategy and Success Criteria

Initial monitoring will occur one year following completion of revegetation. Post-construction monitoring will focus on monitoring survival of replanted species (primarily riparian species). Monitoring will include broad mapping by each of the three habitat types: open water, riparian, and wetlands. The area (acres) and quality (habitat condition) of each of the three habitat types will be documented. In addition, riparian and wetland revegetation survival will be documented. Areas with poor revegetation survivability will be documented. If possible, the cause of poor revegetation survivability will be noted (e.g. beaver or deer browsing). Areas where invasive plant species (e.g. reed canary grass) are establishing, if any, will also be documented and options to eradicate invasive plant species will be evaluated and pursued as feasible.

2.3 Reporting

Following monitoring, MCSD will submit to the Regional Board one brief report summarizing (1) vegetation monitoring methods, (2) results, and (3) and any necessary adaptive management, such as targeted replanting, removal of invasive species, or future considerations for design adjustment to better achieve project objectives.

Constructed channels are designed to have depth and velocity conditions desired by rearing salmonids. Thus, all open water habitat, as mapped at median tidal conditions during Year 1 monitoring, will be considered salmonid habitat. Monitoring will include captioned photographs of the constructed channel complex. If post-construction fisheries monitoring is conducted, results will be included in reporting.

Reporting will include captioned photographs and mapping results. Reporting will also highlight how the project area has changed since as-built construction and how the restoration is providing dynamic and complex habitat area for salmonids.

Reporting will also include comparative pre and post-project drone photography. The report will be submitted to the Regional Board within 18 months following completion of revegetation.

EXHIBIT NO. 7

CDP Application No.
1-19-0462 (MCSD)
PROPOSED MONITORING PLAN
(Page 3 of 3)