

89029

1471

1472

1501

1502

PROJECT SITE

BULLHEAD CITY

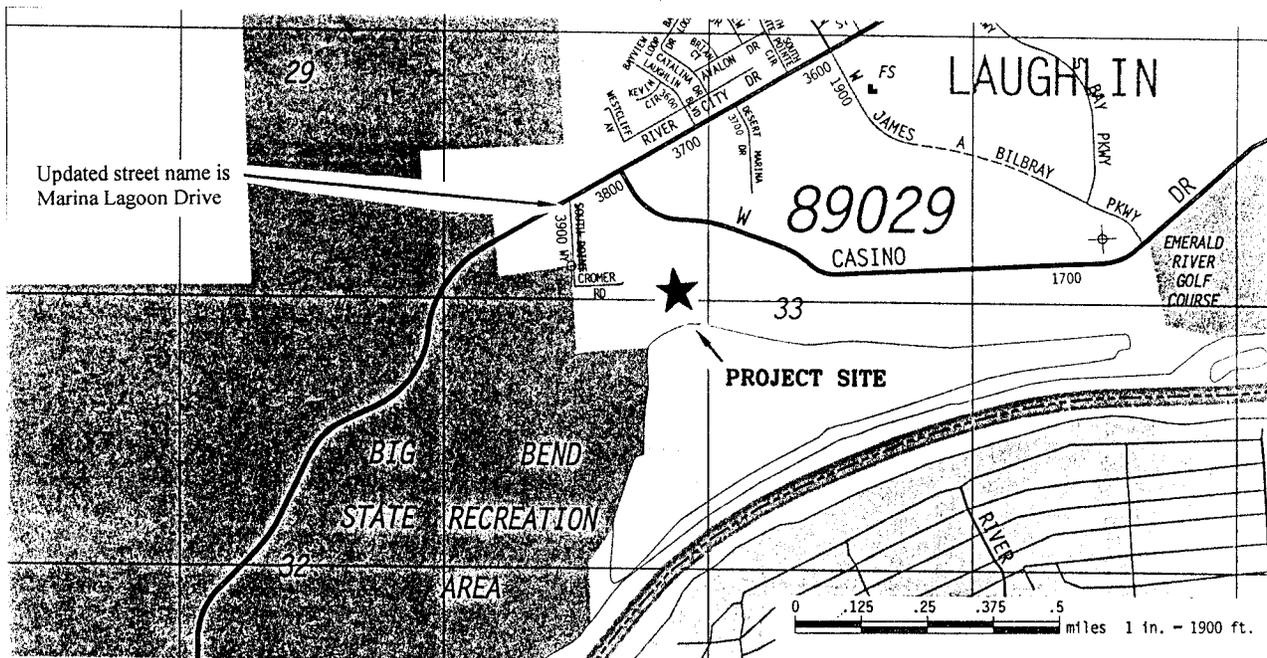
BIG BEND STATE RECREATION AREA

LAUGHLIN

LAUGHLIN BULLHEAD CITY INTERNATIONAL AIRPORT

ROGERS LANDING

0 1 2 3 4 miles 1 in. = 2.5 mi.



Updated street name is Marina Lagoon Drive

89029 CASINO

PROJECT SITE

BIG BEND STATE RECREATION AREA

LAUGHLIN

EMERALD RIVER GOLF COURSE

0 .125 .25 .375 .5 miles 1 in. = 1900 ft.

VICINITY MAP



PURPOSE: CONSTRUCT AND OPERATE AN A.D.A. ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP AND ASSOCIATED INFRASTRUCTURE

CLARK COUNTY THOMAS GUIDE 2002

- ADJACENT PROPERTY OWNERS:**
1. STATE OF NEVADA
 2. VALE P. MYLES
 3. MICHAEL CEPERICH
 4. GARY CALHOUN
 5. YVON BOUDREAULT
 6. LAUGHLIN 1356 LLC

APPLICATION BY:
COLORADO RIVER MARINA LLC
 C/O
 SAMUEL WACHT ASSOCIATES, A.I.A.
 5016 N. Parkway Calabasas, Suite # 222
 Calabasas, CA 91302 • (818) 222-4777

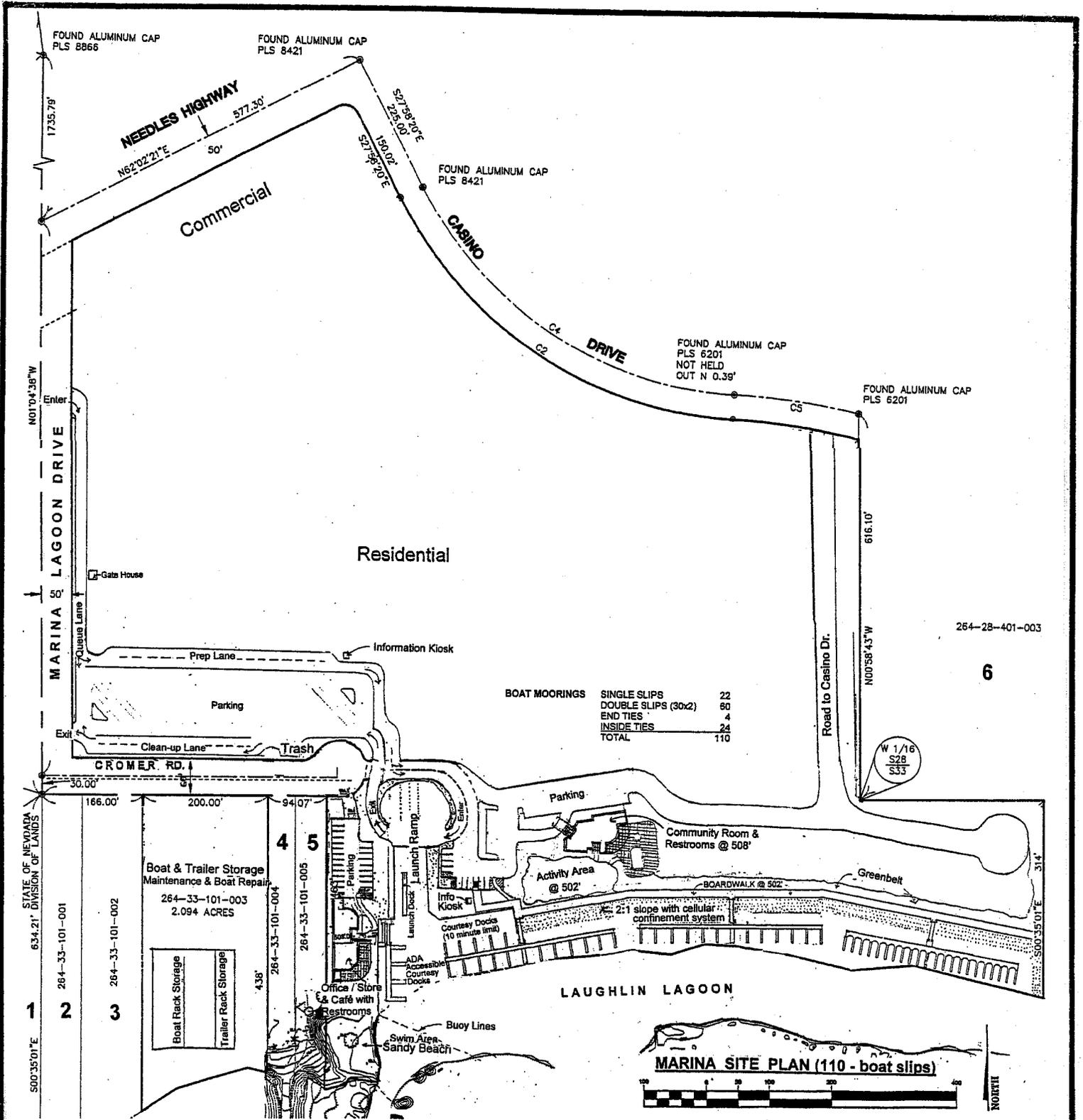
AGENT:
LONDON BRIDGE MARINE CORP.
 911 No. Lake Havasu Avenue, Unit # 102
 Lake Havasu City, Arizona 86403
 Ph: (928) 855-1555 • Fax (928) 680-9220

LAUGHLIN BAY MARINA
 Needles Hwy & Casino Dr. - Laughlin, NV

SWA
 samuel wacht associates, a.i.a.
 architects • engineers • planners

5016 n. parkway calabasas #222
 calabasas • california 91302
 818 222 4777 • fax 818 222 0775

JOB NO.
DATE
REVISED DATE
1 of 13 SHEET NO



PURPOSE: CONSTRUCT AND OPERATE AN A.D.A. ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP AND ASSOCIATED INFRASTRUCTURE

DATUM: NAVD88 ELEVATION: 157.128 meters (515.51 feet)
CLARK COUNTY BENCHMARK: 2C26-33NNW6

- ADJACENT PROPERTY OWNERS:**
1. STATE OF NEVADA
 2. VALE P. MYLES
 3. MICHAEL CEPERICH
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 5. YVON BOUDREAU
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samuel wacht associates, a.i.a.
architects • engineers • planners

5016 n. parkway calabasas #222
calabasas • california 91302
818 222 4777 • fax 818 222 0775

JOB NO.

DATE

REVISED DATE

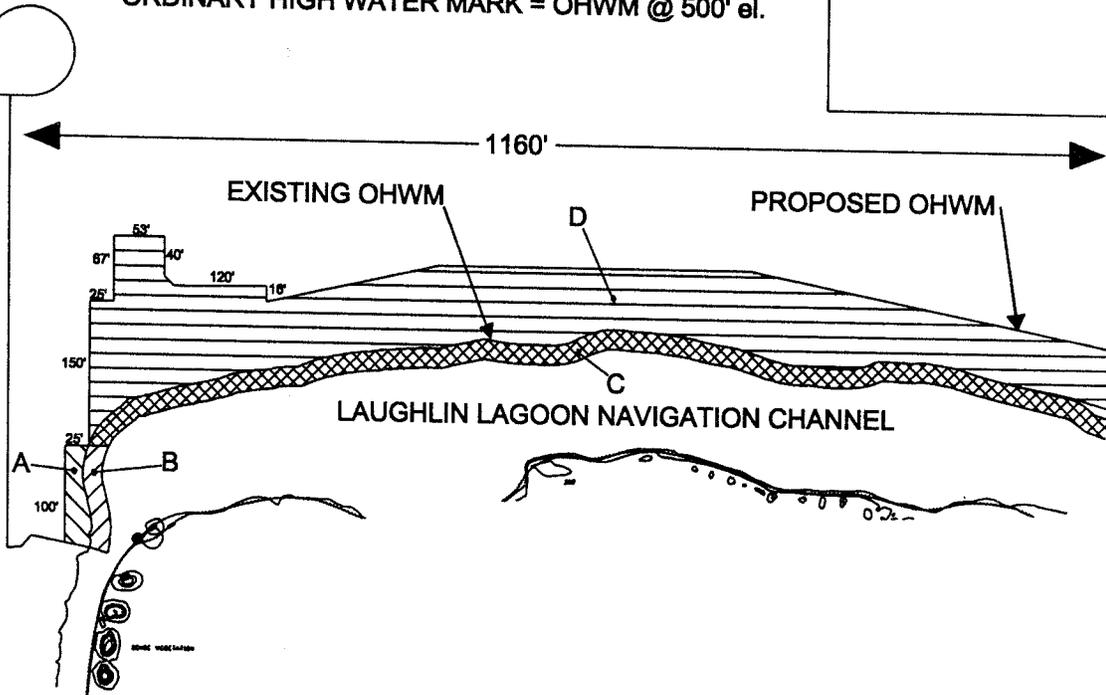
2 of 13

SHEET NO.

PROJECT PARCEL APN 264-28-402-001

LEGEND FOR SHEETS 3 - 13

LAGOON BOTTOM = 490' el.
 ORDINARY LOW WATER LINE = OLWL @ 494' el.
 ORDINARY HIGH WATER LINE = OHWL @ 500' el.
 ORDINARY HIGH WATER MARK = OHWM @ 500' el.



- A BEACH GROOMING
- B BEACH GROOMING
- C DREDGING
- D UPLAND EXCAVATION

PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: NORTH AMERICAN VERTICAL DATUM OF 1998 (NAVD88)

- ADJACENT PROPERTY OWNERS:
1. NEVADA STATE LANDS DEPT.
 2. VALE P. MYLES
 3. MICHAEL CEPERICH
 4. GARY CALHOUN
 5. YVON BOUDREAULT
 6. LAUGHLIN 1356 LLC

DREDGING/EXCAVATION PROFILE

PLAN VIEW
 SCALE: 1" = 200'

LAUGHLIN BAY MARINA
 NEEDLES HWY @ CASINO DR.
 LAUGHLIN, NV 89029

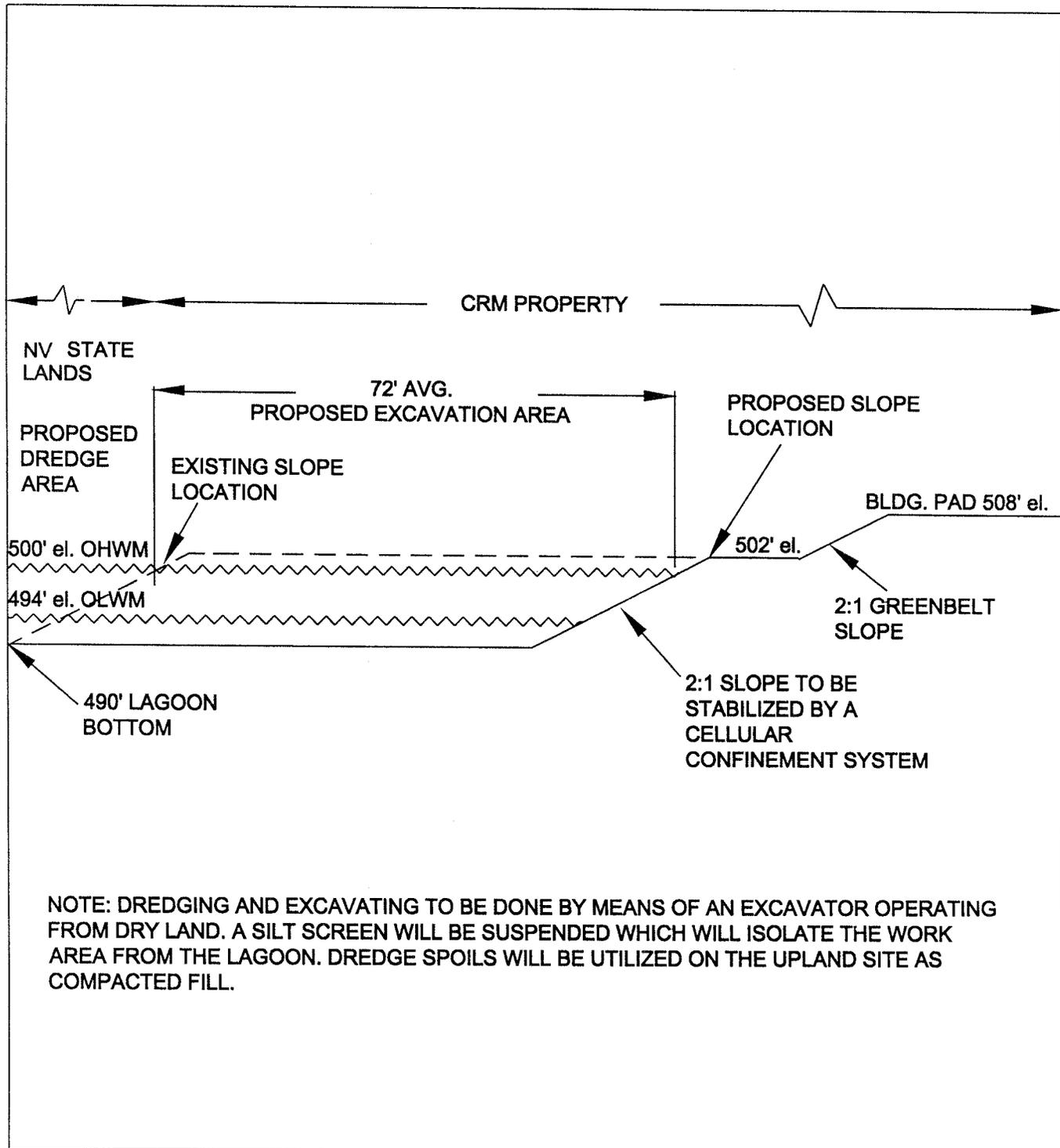
PROPOSED: DREDGING, EXCAVATION & BEACH ENHANCEMENT

IN: COLORADO RIVER
 AT: LAUGHLIN LAGOON
 COUNTY OF: CLARK STATE: NV

APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.



NOTE: DREDGING AND EXCAVATING TO BE DONE BY MEANS OF AN EXCAVATOR OPERATING FROM DRY LAND. A SILT SCREEN WILL BE SUSPENDED WHICH WILL ISOLATE THE WORK AREA FROM THE LAGOON. DREDGE SPOILS WILL BE UTILIZED ON THE UPLAND SITE AS COMPACTED FILL.

PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

- ADJACENT PROPERTY OWNERS:
1. NEVADA STATE LANDS DEPT.
 2. VALE P. MYLES
 3. MICHAEL CEPERICH
 4. GARY CALHOUN
 5. YVON BOUDREAULT
 6. LAUGHLIN 1358 LLC

DREDGING/EXCAVATING

SECTION VIEW

SCALE 1" = 20'

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

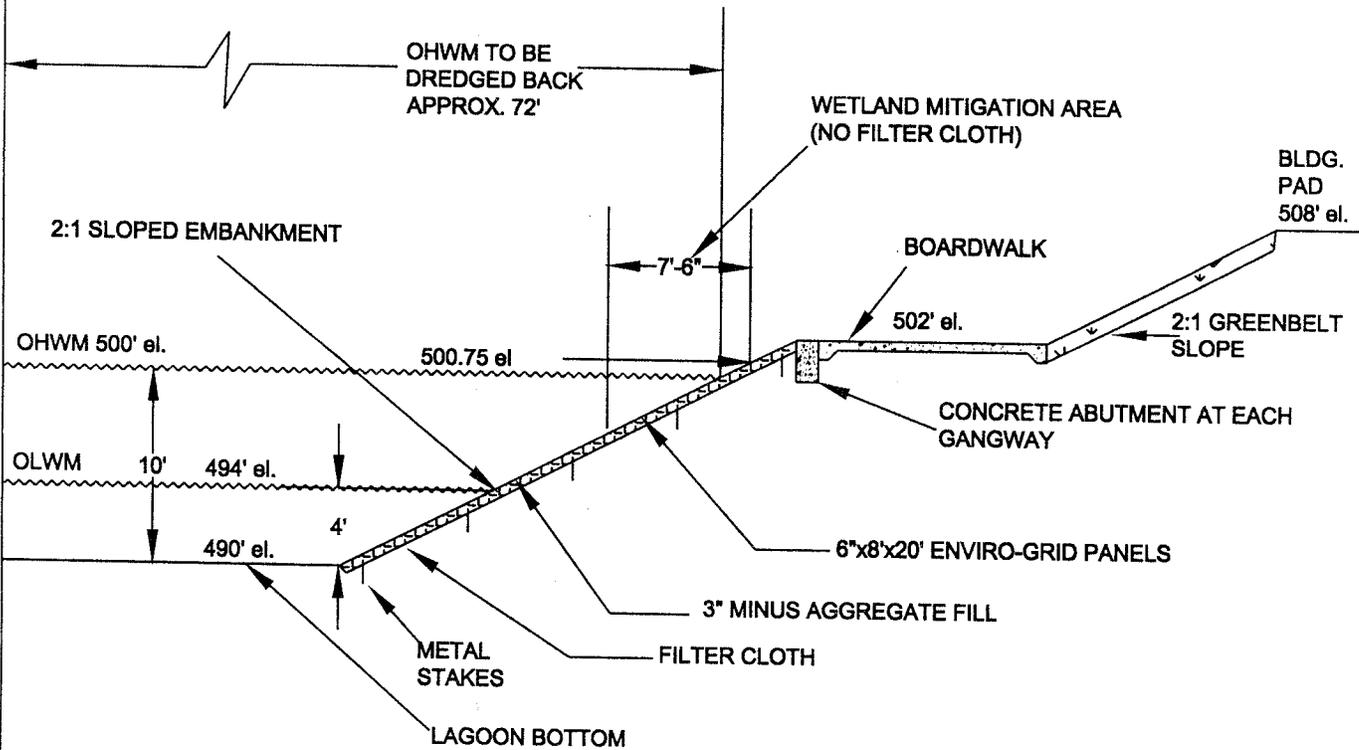
PROPOSED: DREDGING/EXCAVATING PROFILE- BOAT DOCK AREA (TYP)

IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK STATE: NV

APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER
ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.

CRM MARINA SLOPE TO BE EXCAVATED BACK AND HELD IN PLACE AT A 2:1 ANGLE BY MEANS OF A HONEYCOMB POLYETHYLENE CELLULAR CONFINEMENT SYSTEM FILLED WITH 3" MINUS AGGREGATE, LAID ATOP FILTER CLOTH



PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

- ADJACENT PROPERTY OWNERS:
1. NEVADA STATE LANDS DEPT.
 2. VALE P. MYLES
 3. MICHAEL CEPERICH
 4. GARY CALHOUN
 5. YVON BOUDREAULT
 6. LAUGHLIN 1356 LLC

CELLULAR CONFINEMENT SYSTEM

SECTION VIEW
SCALE 1" = 10'

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

PROPOSED: CELLULAR CONFINEMENT AND WETLAND MITIGATION AREA

IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK STATE: NV

APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

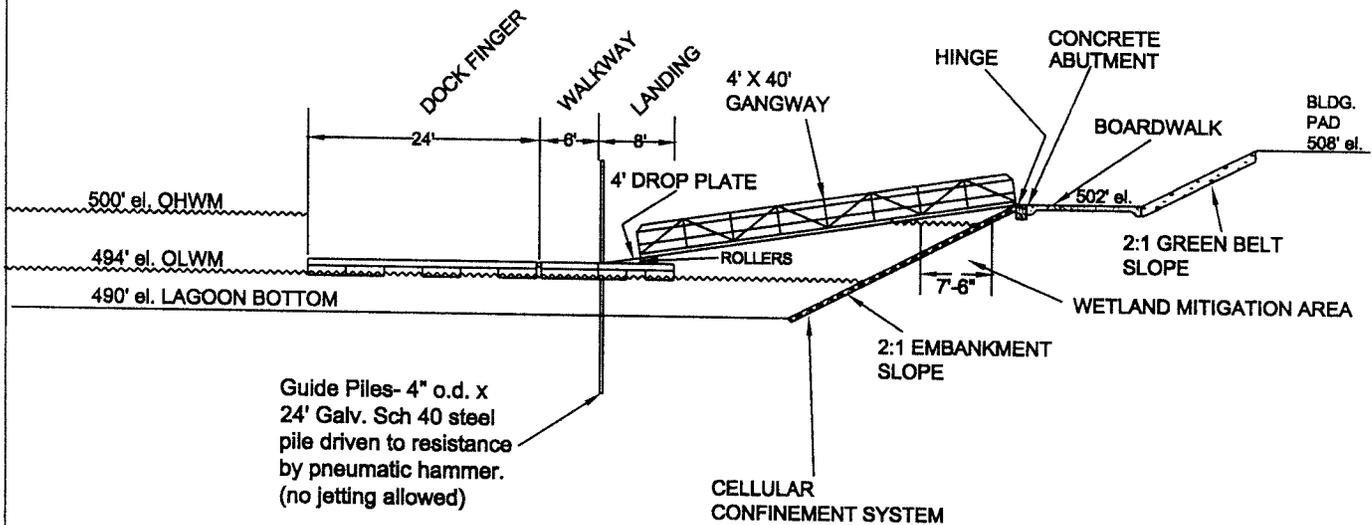
AGENT: LONDON BRIDGE MARINE CORP.

SHEET 5 OF 13

DATE 07-17-02

LAUGHLIN BAY MARINA FLOATING BOAT DOCK SYSTEM

Commercial Grade Specifications: U.S. Army Corps approved foam filled polyethylene floatation; 6061 welded aluminum framework; mono-extruded, UV protected white vinyl decking; 10" aluminum mooring cleats; UHMW polyethylene padded pile guides.



PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

ADJACENT PROPERTY OWNERS:

1. NEVADA STATE LANDS DEPT.
2. VALE P. MYLES
3. MICHAEL CEPERICH
4. GARY CALHOUN
5. YVON BOUDREAULT
6. LAUGHLIN 1356 LLC

BOAT DOCK SYSTEM

SECTION VIEW

SCALE 1" = 20'

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

PROPOSED: BOAT DOCK SYSTEM MAIN MOORING AREA

IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK STATE: NV

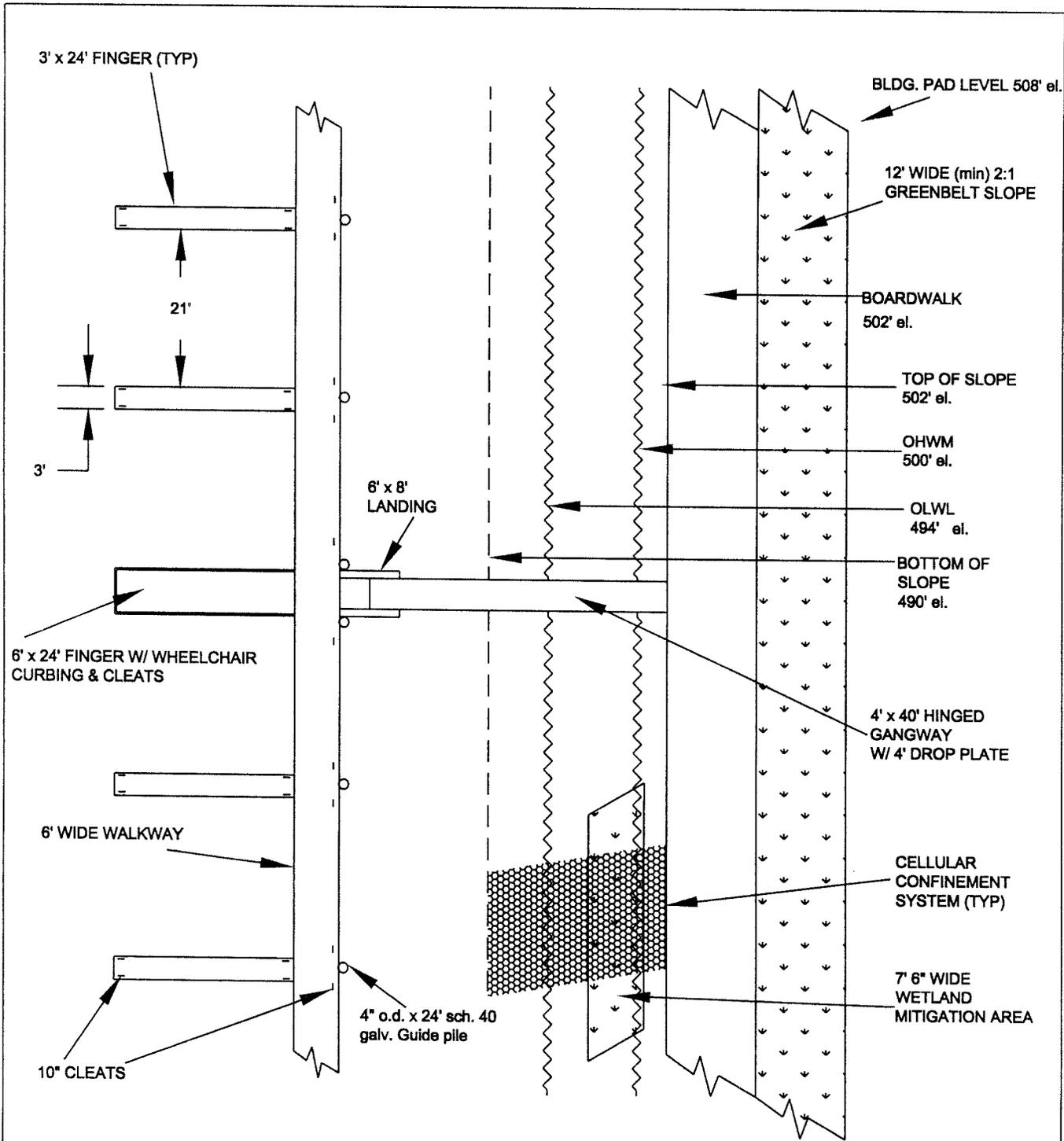
APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.

SHEET 6 OF 13

DATE 07-17-02



PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

ADJACENT PROPERTY OWNERS:

1. NEVADA STATE LANDS DEPT.
2. VALE P. MYLES
3. MICHAEL CEPERICH
4. GARY CALHOUN
5. YVON BOUDREAULT
6. LAUGHLIN 1356 LLC

BOAT DOCK SYSTEM (DOUBLE SLIPS)

PLAN VIEW
SCALE 1" = 20'

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

PROPOSED: DOUBLE BOAT SLIPS (TYP)

IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK STATE: NV

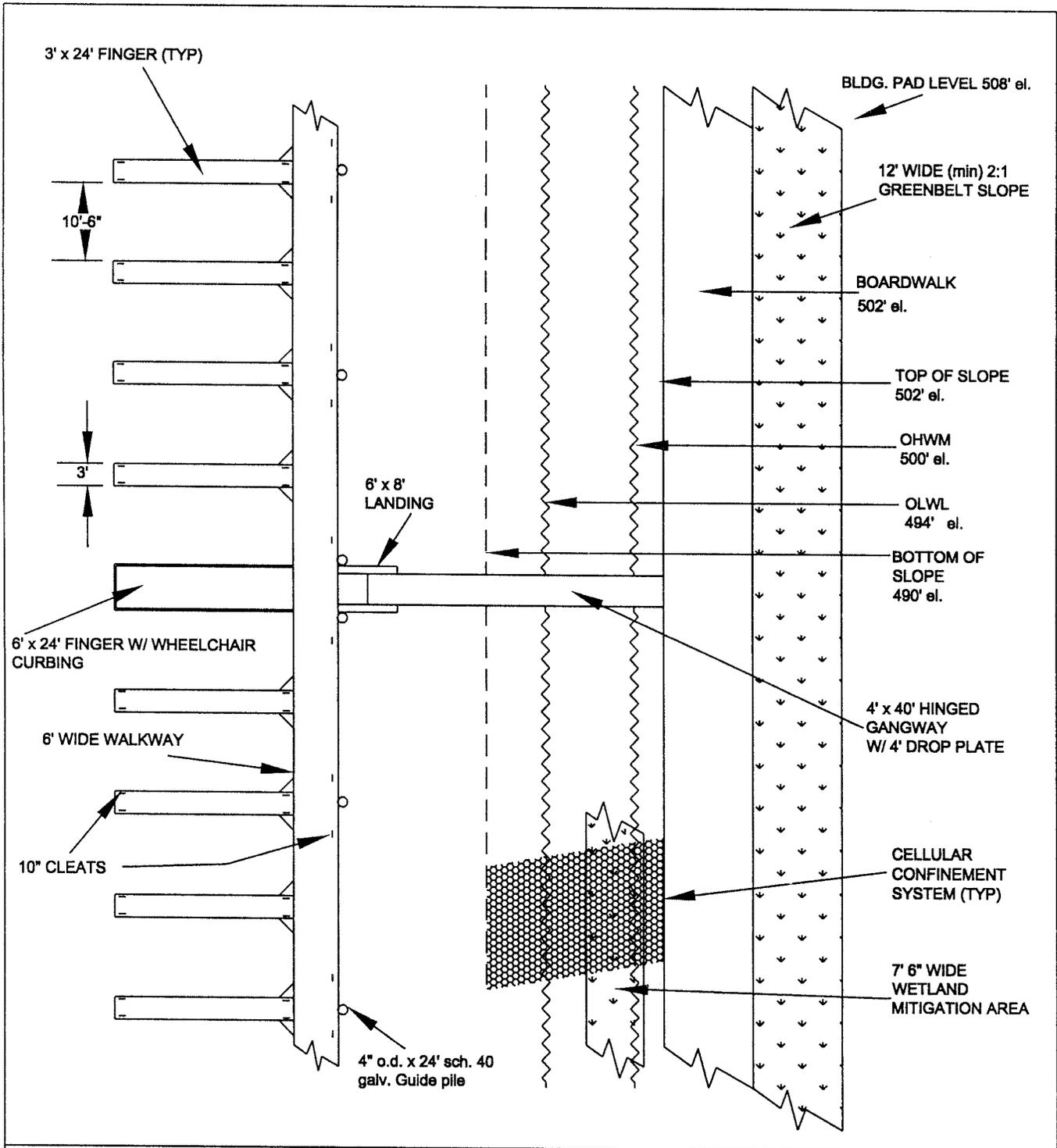
APPLICATION BY: CRM COLORADO RIVER
MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.

SHEET 7 OF 13

DATE 07-17-02



PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

ADJACENT PROPERTY OWNERS:

1. NEVADA STATE LANDS DEPT.
2. VALE P. MYLES
3. MICHAEL CEPERICH
4. GARY CALHOUN
5. YVON BOUDREAUULT
6. LAUGHLIN 1356 LLC

BOAT DOCK SYSTEM
(SINGLE SLIPS)

PLAN VIEW
SCALE 1" = 20'

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

PROPOSED: SINGLE BOAT SLIPS (TYP)

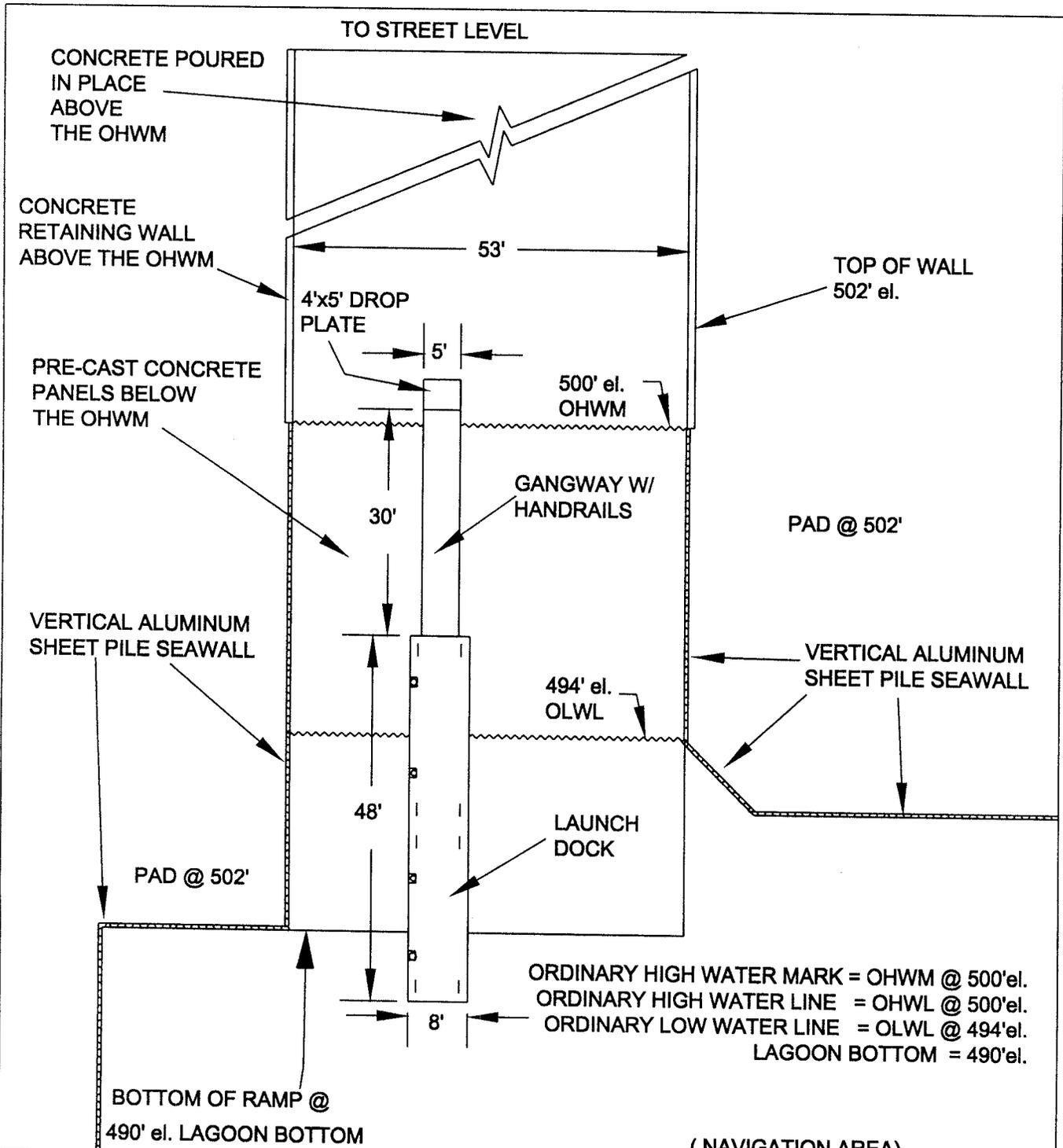
IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK **STATE:** NV

APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.

SHEET 8 OF 13 **DATE 07-17-02**



ORDINARY HIGH WATER MARK = OHWM @ 500'el.
 ORDINARY HIGH WATER LINE = OHWL @ 500'el.
 ORDINARY LOW WATER LINE = OLWL @ 494'el.
 LAGOON BOTTOM = 490'el.

(NAVIGATION AREA)

PURPOSE: CONSTRUCT AND OPERATE AN
 ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH
 RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

- ADJACENT PROPERTY OWNERS:
1. NEVADA STATE LANDS DEPT.
 2. VALE P. MYLES
 3. MICHAEL CEPERICH
 4. GARY CALHOUN
 5. YVON BOUDREAULT
 6. LAUGHLIN 1356 LLC

BOAT LAUNCH RAMP

PLAN VIEW
 SCALE 1" = 20'

LAUGHLIN BAY MARINA
 NEEDLES HWY @ CASINO DR.
 LAUGHLIN, NV 89029

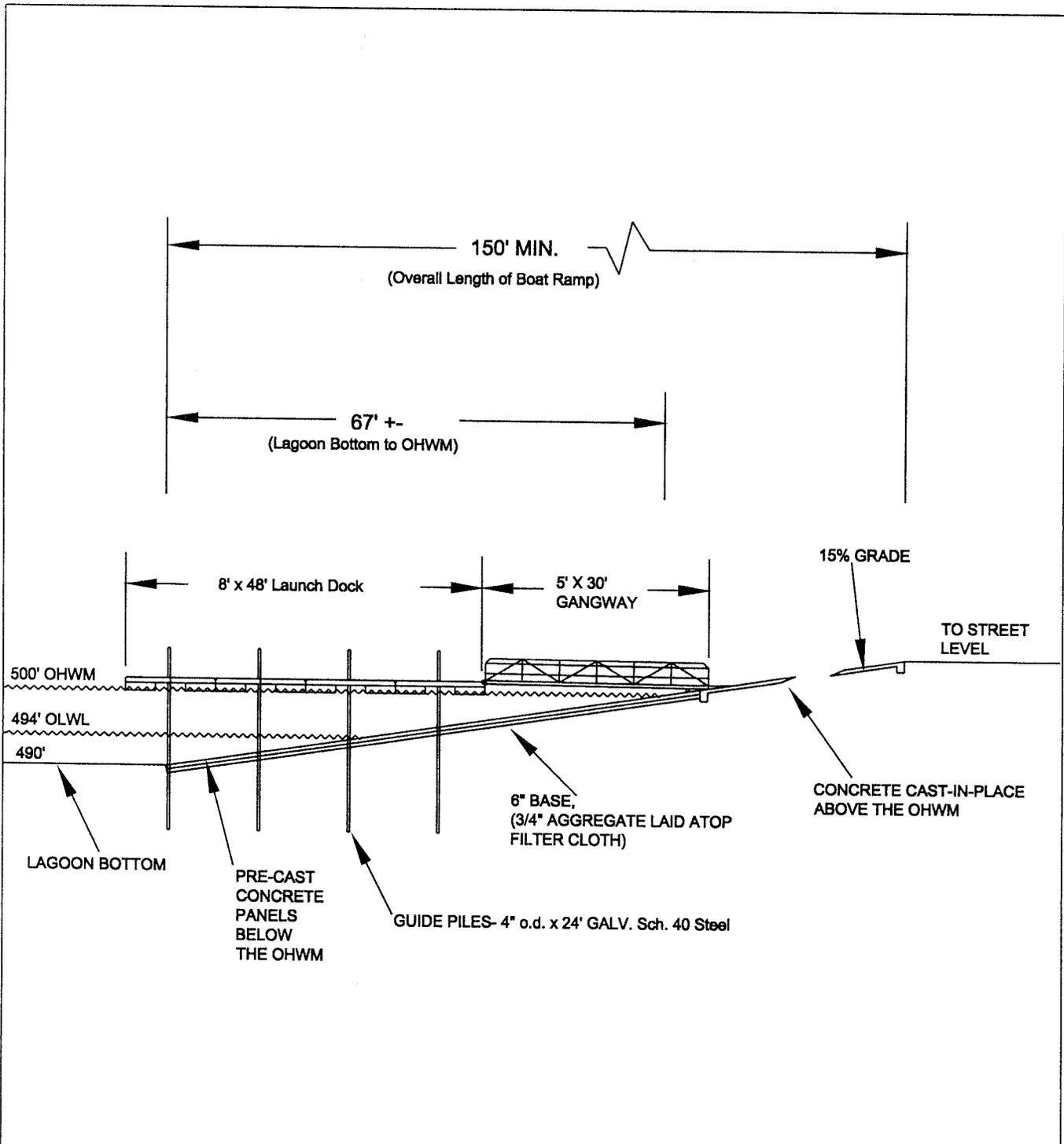
PROPOSED: PUBLIC BOAT LAUNCH RAMP AND LAUNCH DOCK

IN: COLORADO RIVER
 AT: LAUGHLIN LAGOON
 COUNTY OF: CLARK STATE: NV

APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.



PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: ORDINARY HIGH WATER MARK = 500' el. MSL

ADJACENT PROPERTY OWNERS:

1. NEVADA STATE LANDS DEPT.
2. VALE P. MYLES
3. MICHAEL CEPERICH
4. GARY CALHOUN
5. YVON BOUDREAULT
6. LAUGHLIN 1356 LLC

BOAT LAUNCH RAMP

SECTION VIEW

SCALE 1" = 20'

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

PROPOSED: PUBLIC BOAT LAUNCH RAMP AND LAUNCH DOCK

IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK STATE: NV

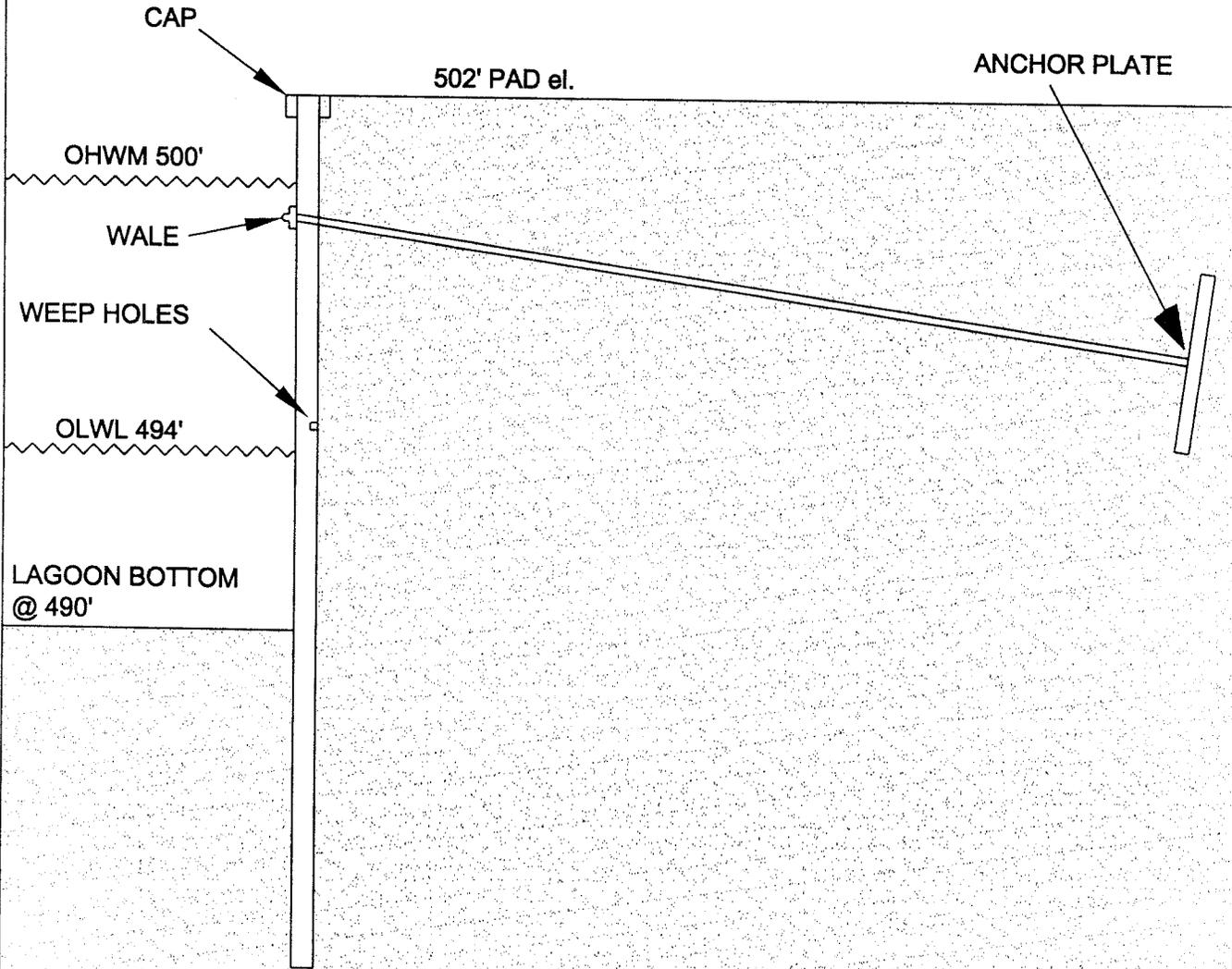
APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.

SHEET 10 OF 13 DATE 07-17-02

SEAWALL NOTE:
 20' HIGH "Z" STYLE ALUMINUM SHEET PILE SEAWALL DRIVEN INTO PLACE BY
 VIBRATORY HAMMER AND ANCHORED BY A SERIES OF ANCHOR PLATES
 APPROX. 10' APART.



PURPOSE: CONSTRUCT AND OPERATE AN
 ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH
 RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

- ADJACENT PROPERTY OWNERS:
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 4. GARY CALHOUN
 5. YVON BOUDREAUULT
 6. LAUGHLIN 1356 LLC

ALUMINUM SEAWALL

SECTION VIEW

SCALE 1" = 4'

LAUGHLIN BAY MARINA
 NEEDLES HWY @ CASINO DR.
 LAUGHLIN, NV 89029

PROPOSED: ALUMINUM RETAINING WALL

IN: COLORADO RIVER
 AT: LAUGHLIN LAGOON
 COUNTY OF: CLARK STATE: NV

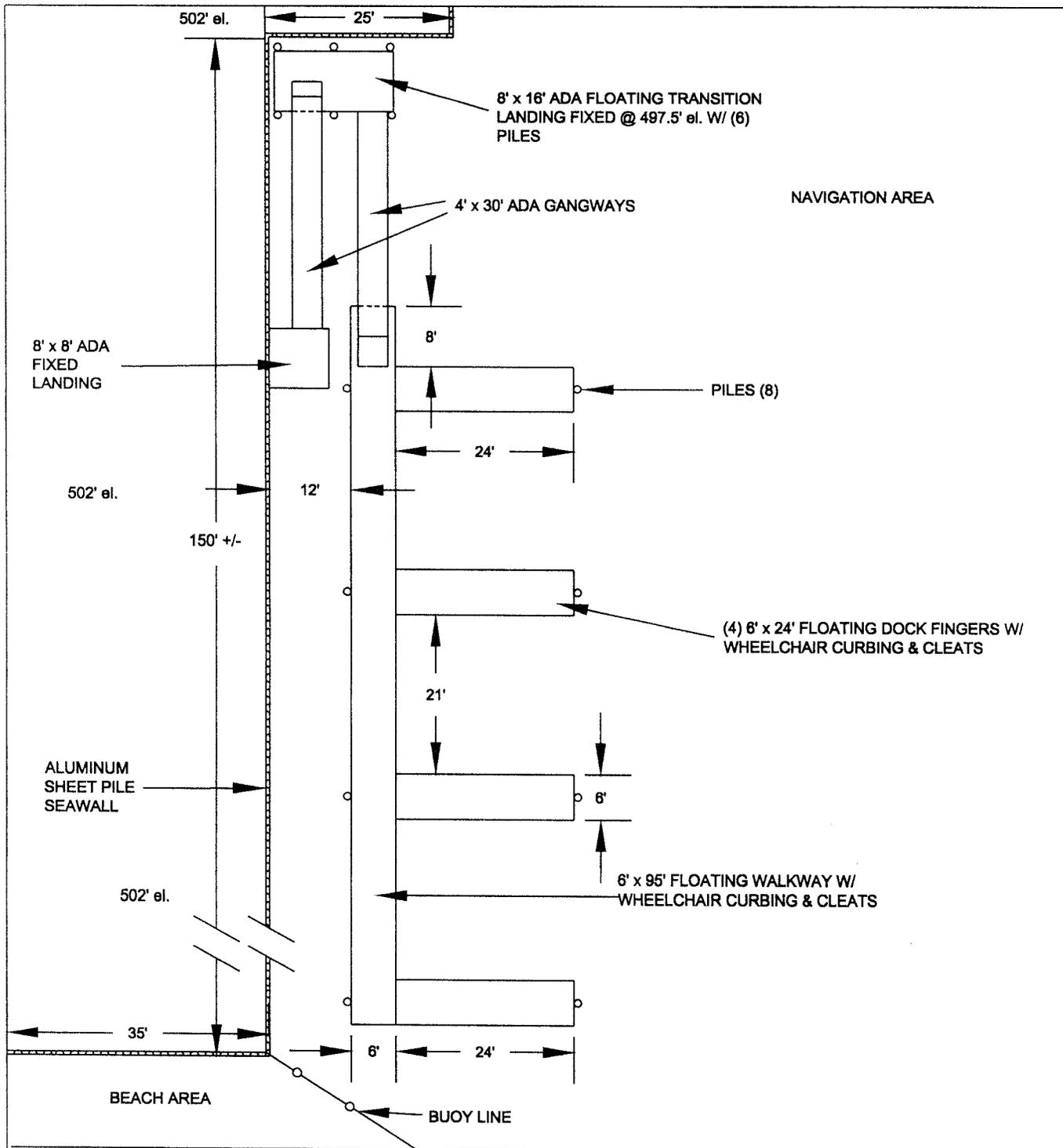
APPLICATION BY: CRM COLORADO RIVER
 MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.

SHEET 11 OF 13

DATE 07-17-02



PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

- ADJACENT PROPERTY OWNERS:
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 3. MICHAEL CEPERICH
 4. GARY CALHOUN
 5. YVON BOUDREAULT
 6. LAUGHLIN 1356 LLC

ADA-ACCESSIBLE COURTESY DOCK

PLAN VIEW
SCALE: 1" = 20'-0"

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

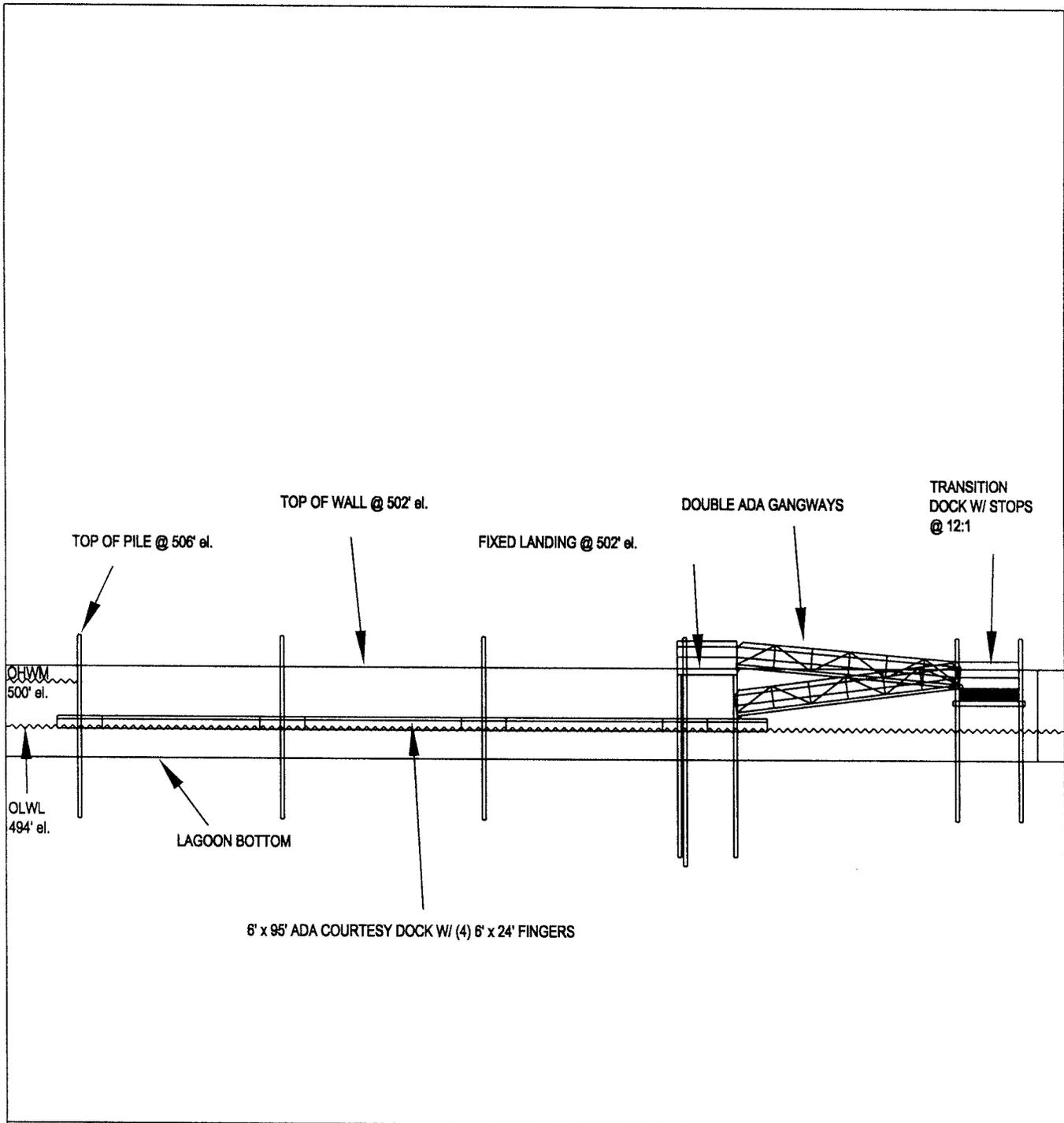
PROPOSED: ACCESSIBLE COURTESY DOCKS

IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK STATE: NV

APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.



PURPOSE: CONSTRUCT AND OPERATE AN ADA-ACCESSIBLE PUBLIC MARINA, LAUNCH RAMP, AND ASSOCIATED INFRASTRUCTURE

DATUM: OHWM = 500' el. MSL

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 3. MICHAEL CEPERICH
 4. GARY CALHOUN
 5. YVON BOUDREAULT
 6. LAUGHLIN 1356 LLC

ADA-ACCESSIBLE COURTESY DOCK

SECTION VIEW

SCALE: 1" = 20'-0"

LAUGHLIN BAY MARINA
NEEDLES HWY @ CASINO DR.
LAUGHLIN, NV 89029

PROPOSED: ACCESSIBLE COURTESY DOCKS

IN: COLORADO RIVER
AT: LAUGHLIN LAGOON
COUNTY OF: CLARK STATE: NV

APPLICATION BY: CRM COLORADO RIVER MARINA LLC - OWNER

ARCHITECT: SAMUEL WACHT ASSOC.

AGENT: LONDON BRIDGE MARINE CORP.

SHEET 13 OF 13

DATE 07-17-02

**TABLE 1
ALTERNATIVE COMPARISON MATRIX**

	ALTERNATIVES					
Practicability	A	B	C	D	E	F
Docking/Launching	Launch ramp; 120 slips; gas dock	Launch ramp and 110 slips	Launch ramp; 100 slips; gas dock	Launch ramp; about 100 slips; gas dock	Launch ramp and 50 slips	None
ADA-accessible	Yes	Yes	Yes	Yes	Yes	No
Land Access	Good access from Laughlin; land available and zoned	Good access from Laughlin; land available and zoned	Access from Laughlin Bridge congested; land available for use	Good access from Laughlin; federal land may be avail.	Good access from Laughlin; land may not be avail; zoned rural	N/A
Topo/Flood Control	Suitable topo and established flood control	Suitable topo and established flood control	Suitable topo; flood control for 2 drainages needed	Suitable topo; major flooding issues	Suitable topo on portion of site; potential flooding from minor wash	N/A
Safety & Protection	Available	Available	High variable currents from Davis Dam	Severe variable currents from Davis Dam	Available	N/A
Environmental						
Waters of the U.S.	0.67 acres	0.67 acres	Estimated 1.5 acres	Estimated 1.5 acres	Estimated 7 acres	None
Habitat	Impacts to 0.16 acres wetlands; impact and increase to razorback sucker habitat	Impacts to 0.16 acres wetlands; impact and increase to razorback sucker habitat; lagoon wildlife protection areas	Impacts to less than 1 acres wetlands; impact and increase to razorback sucker habitat	Impacts and increase to razorback sucker habitat	Impacts to wetlands; direct impacts to razorback sucker and Yuma clapper rail habitat; impacts to upland habitat	Lagoon wildlife areas remain unprotected
Evaporative Surface Area	3 acres	2 acres	3.5 acres	6 acres	1.75 acres	No increase
Erosion and Sedimentation	Low	Low	High	High	Low	Medium