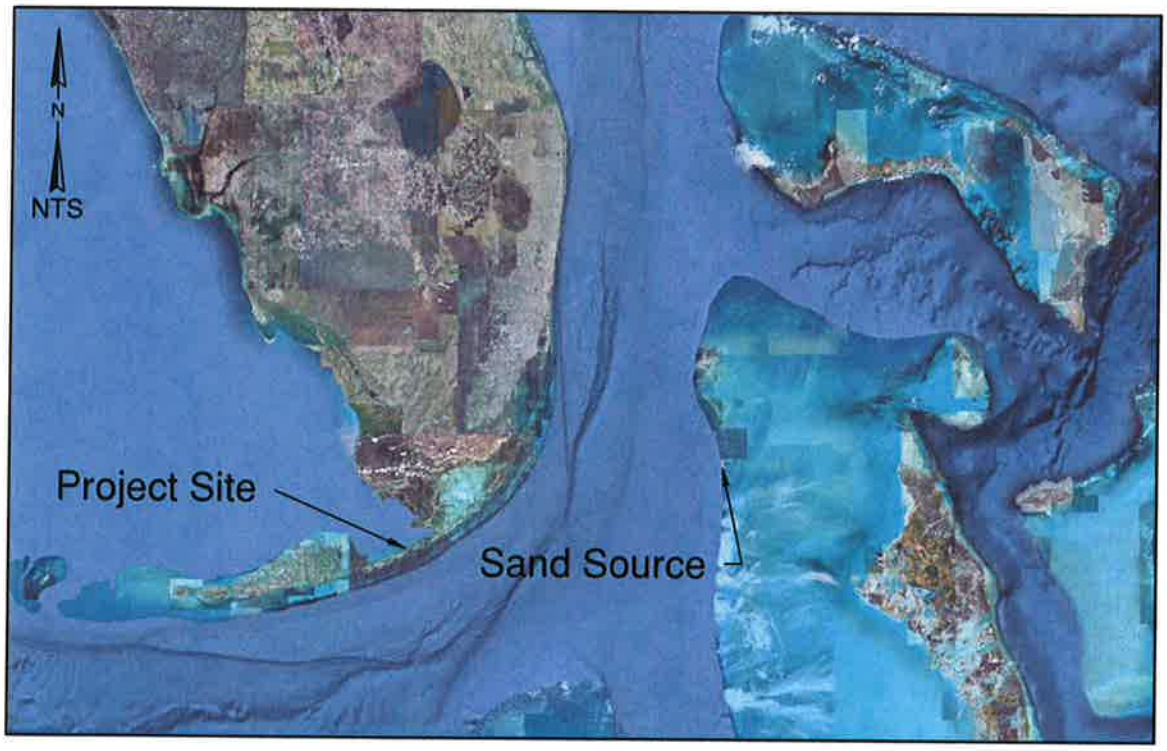
Long Key State Park
Recovery And Stabilization Project



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Project Location Map	SHEET 1	Peter N. Seidle, P.E. 5/29/2012
	JOB NUMBER: 12-2328	FL P.E. No. 59493
Long Key State Park Shoreline Recovery And Stabilization Project	DATE: 10-01-2010	
	REVISED: 03-20-2012	

Submerged Aquatic Vegetation and benthic habitat Survey

Habitat mapping was conducted on September 24, 2009. The Mapping efforts involved a comprehensive submerged aquatic vegetation (SAV) survey. This survey was preformed to delineate percent of cover, density, species composition of seegrass, macroalgal beds, mapping, characterization of intertidal, and shallow submerged hardbottom communities within Long Key State Park. During a site visit on May 1, 2010, some changes were noted in movement of muck layers, wrack line, and seagrass beds west of the project in the vicinity of MOV352-C1.

Habitat Types:

SAND

DRIFT ALGAE/WRACK

MUCK WITH SAND/RUBBLE COMPONENT

RUBBLE: Small boulders and coral rubble/fragments predominantly colonized by Acetabularia sp. within intertidal zone.

KEY LARGO LIMESTONE PLATFORM: Recently exposed intertidal hardbottom platform formed from the surface rock of the Upper Keys, predominantly colonized by Acetabularia and Batophora, typically covered in a thin layer of sediment and coral gravel and small-size rubble predominantly colonized by Acetabularia.

KEY LARGO LIMESTONE PLATFORM (SG): Recently exposed intertidal hardbottom platform with emergent rocks/boulders predominantly colonized by Acetabularia and Batophora, scattered coral gravel and small-size rubble predominantly colonized by Acetabularia, and patchy sand cover with patchy sparse cover of Halodule wrightii more frequently encountered along the seaward portions of the platform.

HARDBOTTOM COMMUNITY: Subtidal hard substrate comprised of Key Largo Limestone with a thin layer of sediment and sparse seagrass cover in sand patches/depressions and areas of hardbottom with adequate sediment cover. Hardbottom community is comprised of small scleractinian corals, octocorals, sponges, calcareous and fleshy macroalgae (dominated by Laurencia sp) and coralline algae.

THALASSIA-CORALLINE ALGAE-PORITES ZONE: High cover of coralline algae (Neogoniolithon) and calcareous green macroalgae (Penicillus, Halimeda, Udotea, Avrainvillea, and Rhipocephalus) intermixed with sparse Thalassia and scattered small stony corals (Porites, Cladocora, and Siderastrea spp) on hardbottom substrate with a thin layer of sediment.

MACROALGAL BED: Dominant flora consists of calcareous green macroalgae (commonly Penicillus, Halimeda, Rhipocephalus, Udotea, and Avrainvillea) with sparse seagrass cover.

HALODULE WRIGHTII: Continuous moderate to dense cover of Halodule wrightii.

HALODULE WRIGHTII (S): Continuous low density cover of Halodule wrightii.

HALODULE WRIGHTII (P): Moderate to dense patches of Halodule wrighitti in areas of deep sediment surrounded by sand patches, often found intermixed with scattered coral rubble component colonized by macroalgae.

HALODULE WRIGHTII (D): Halodule wrightii in areas of deep depressional features filled with sediment (sand-silt-mud).

HALODULE WRIGHTII/THALASSIA TESTUDINUM (S): Sparse continuous cover of mixed Halodule wrightii/Thalassia testudinum.

HALODULE WRIGHTII/THALASSIA TESTUDINUM: Moderate to dense continuous cover of mixed Halodule wrightii and Thalassia testudinum.

HALODULE WRIGHTII/SYRINDOGIUM FILIFORME (S): Mixed sparse continuous cover of Halodule wrightii and Syringodium filiforme.

HALODULE WRIGHTII/THALASSIA TESTUDINUM/SYRINGODIUM FILIFORME: Mixed seagrass community typically dominated by mixed continuous cover of Thalassia testudinum and Halodule wrightii intermixed with low cover of Syringodium filiforme.

THALASSIA TESTUDINUM/SYRINDOGIUM FILIFORME (D): Continuous dense cover of mixed Thalassia testudinum and Syringodium filiforme.

THALASSIA TESTUDINUM: Continuous moderate to dense cover of Thalassia testudinum intermixed with various green calcareous macroalgal species (commonly Penicillus, Halimeda, Udotea, and Avrainvillea), fleshy macroalgae (Laurencia, Acanthopthura and Batophora) and low coralline algal cover (Neogoniolithon sp.).

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Habitat Types	SHEET 2
	JOB NUMBER: 12-2328
Long Key State Park Shoreline Recovery And Stabilization Project	DATE: 10-01-2010
	REVISED: 03-20-2012

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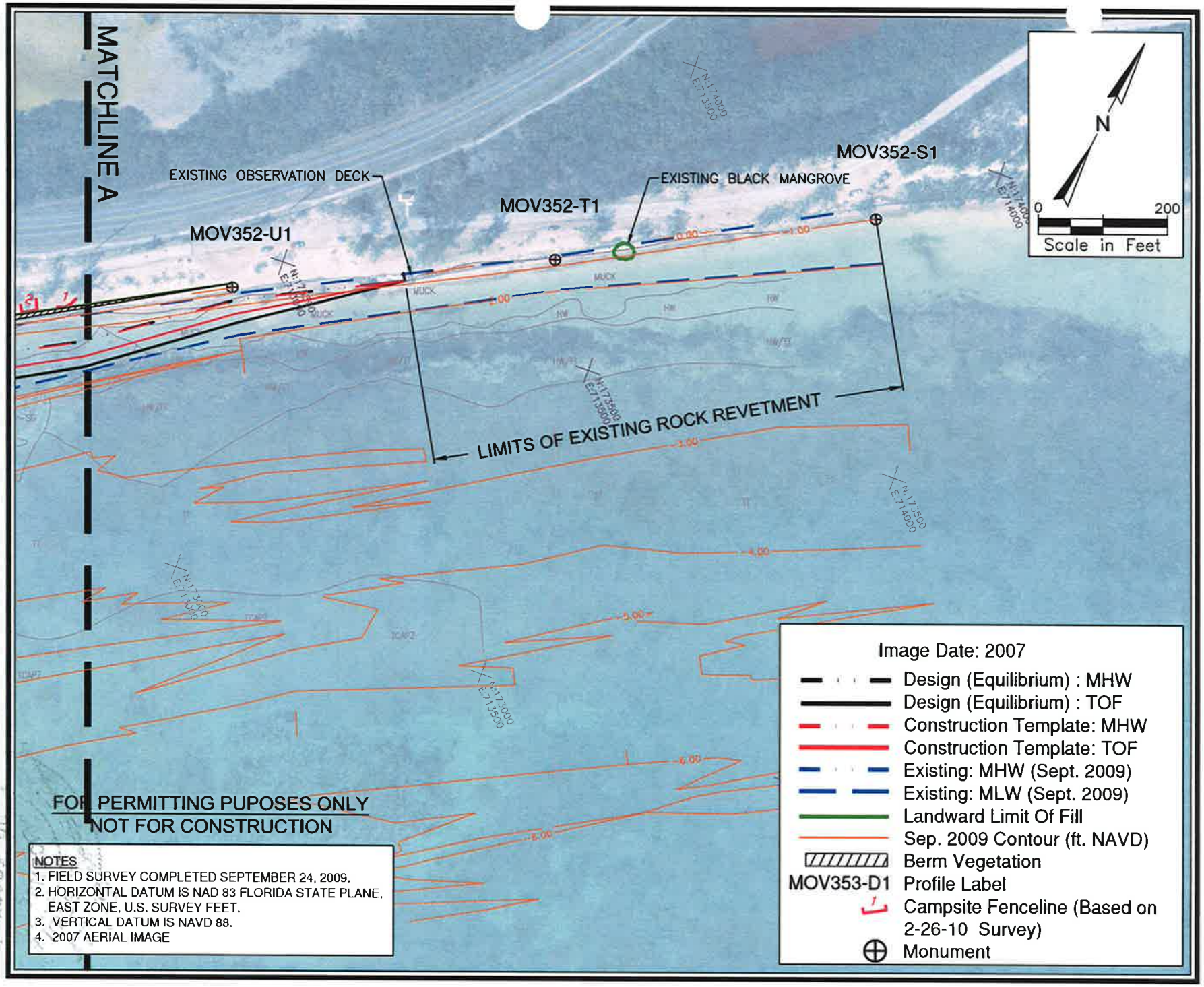

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NOTES
1. FIELD SURVEY COMPLETED SEPTEMBER 24, 2009.
2. HORIZONTAL DATUM IS NAD 83 FLORIDA STATE PLANE, EAST ZONE, U.S. SURVEY FEET.
3. VERTICAL DATUM IS NAVD 88.
4. 2007 AERIAL IMAGE

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Project Planview

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 3
JOB NUMBER: 12-2328
DATE: 10-01-2010
REVISED: 03-20-2012

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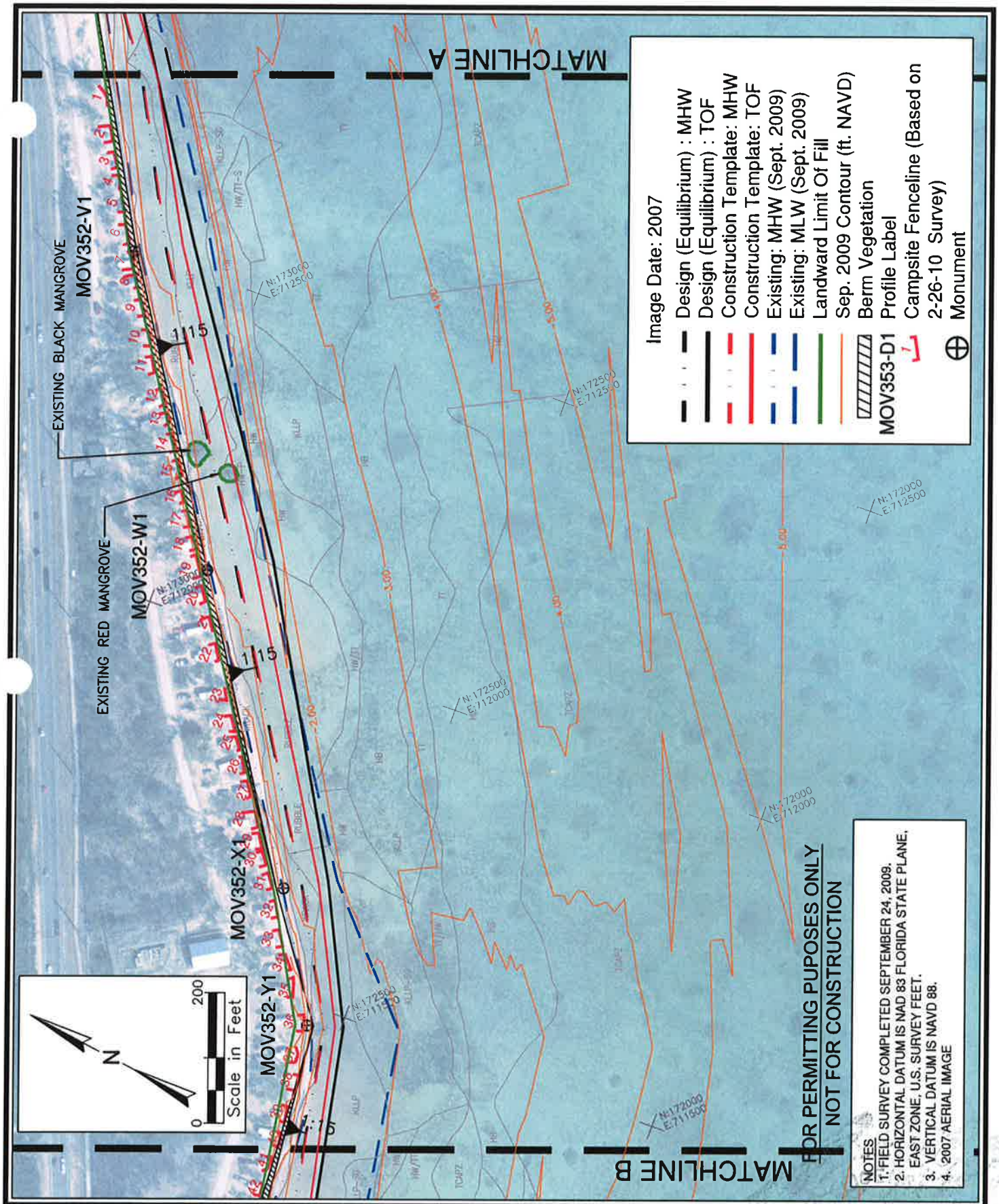
FL P.E. No. 59493



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Project Planview

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 4

JOB NUMBER: 12-2328

DATE: 10-01-2010

REVISED: 03-20-2012

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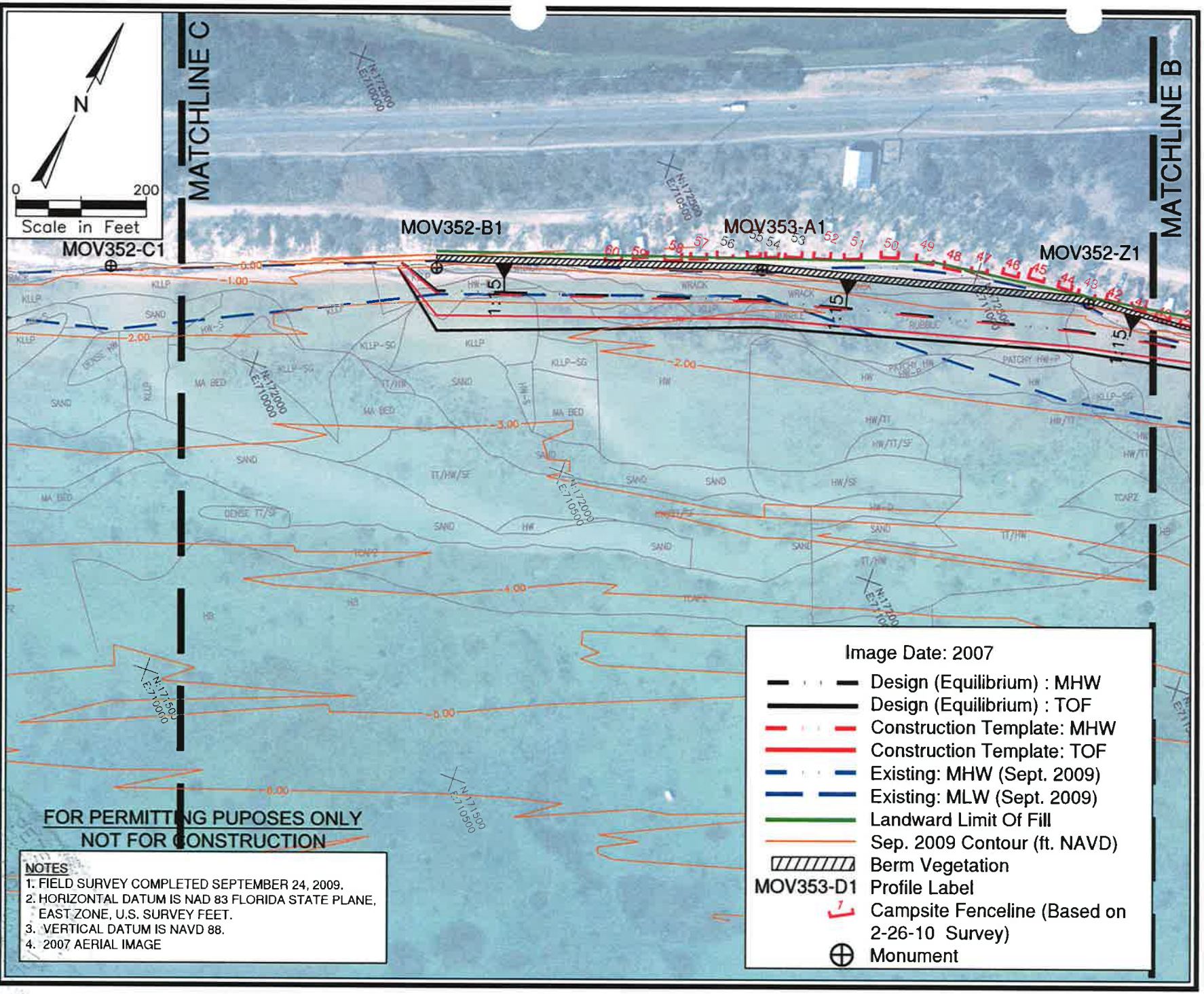

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Project Planview

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 5

JOB NUMBER: 12-2328

DATE: 10-01-2010

REVISED: 03-20-2012

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Project Planview

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 6

JOB NUMBER: 12-2328

DATE: 10-01-2010

REVISED: 03-20-2012

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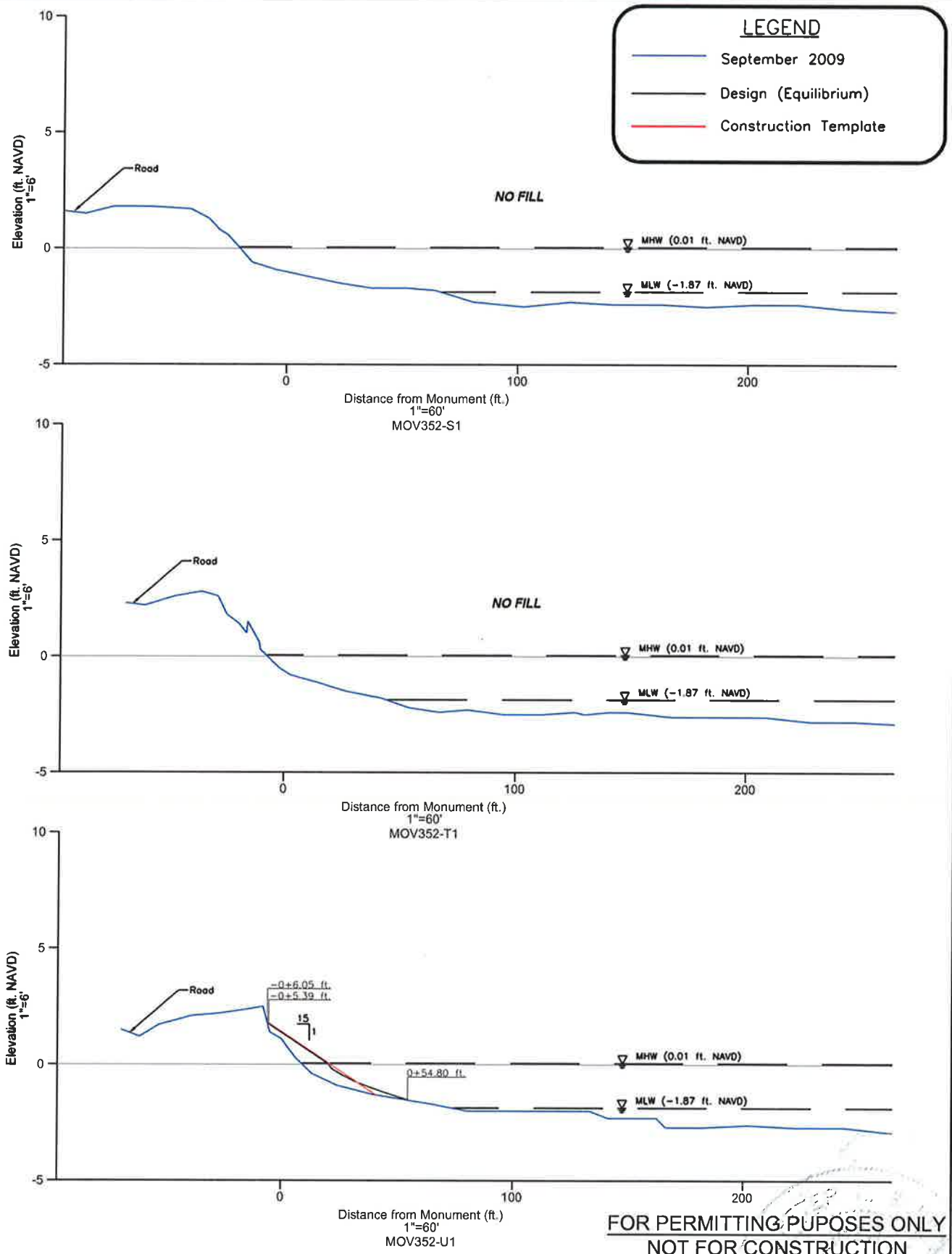

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Cross - Sections (MOV352-S1, T1,U1)

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 7

JOB NUMBER: 12-2328

DATE: 10-01-2010

REVISED: 03-20-2012

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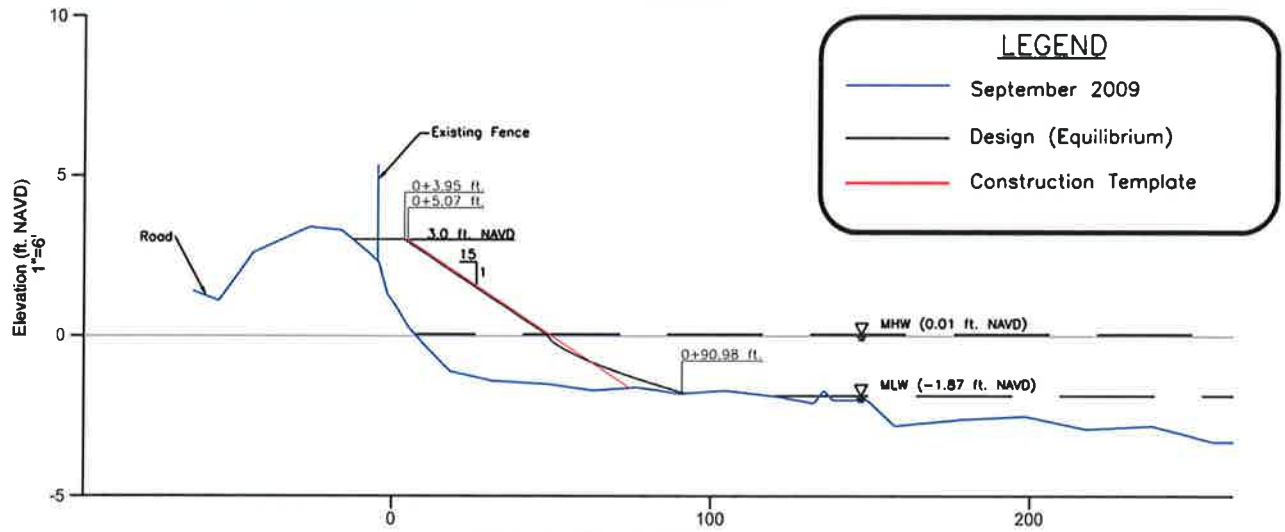
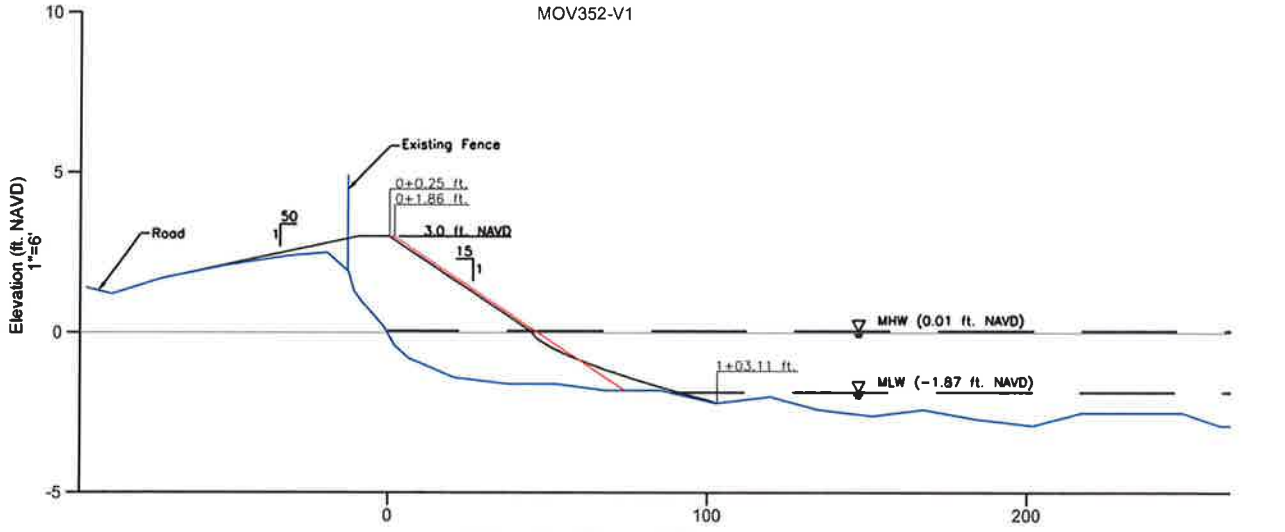
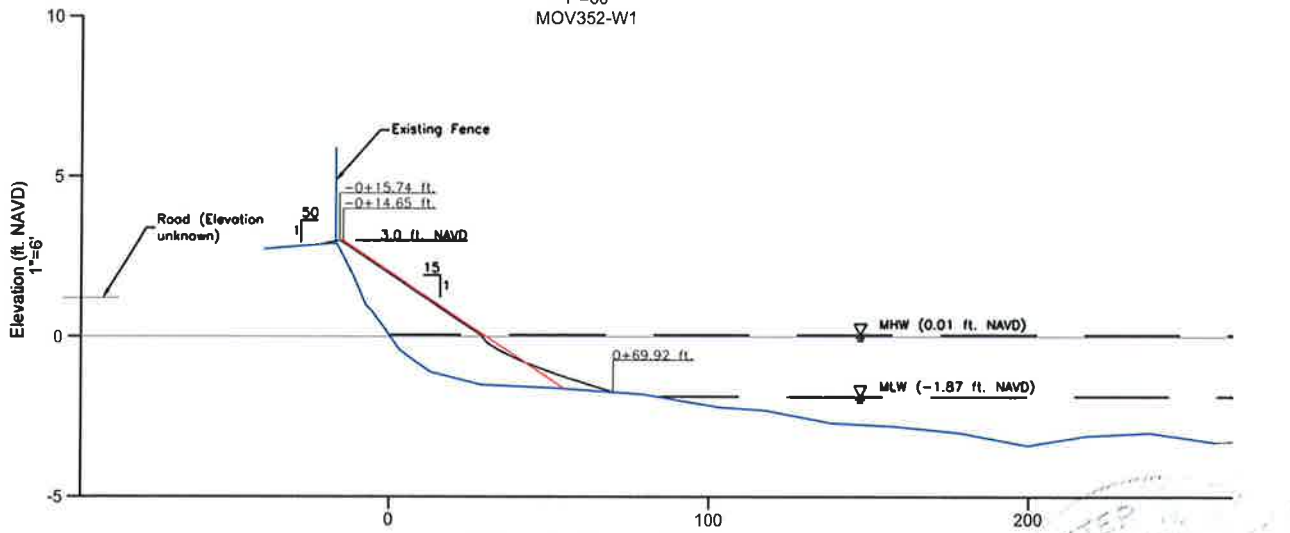
3/20/2012



MOV352-V1



MOV352-W1



MOV352-X1

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Cross - Sections (MOV352-V1, W1,X1)

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 8
JOB NUMBER: 12-2328
DATE: 10-01-2010
REVISED: 03-20-2012

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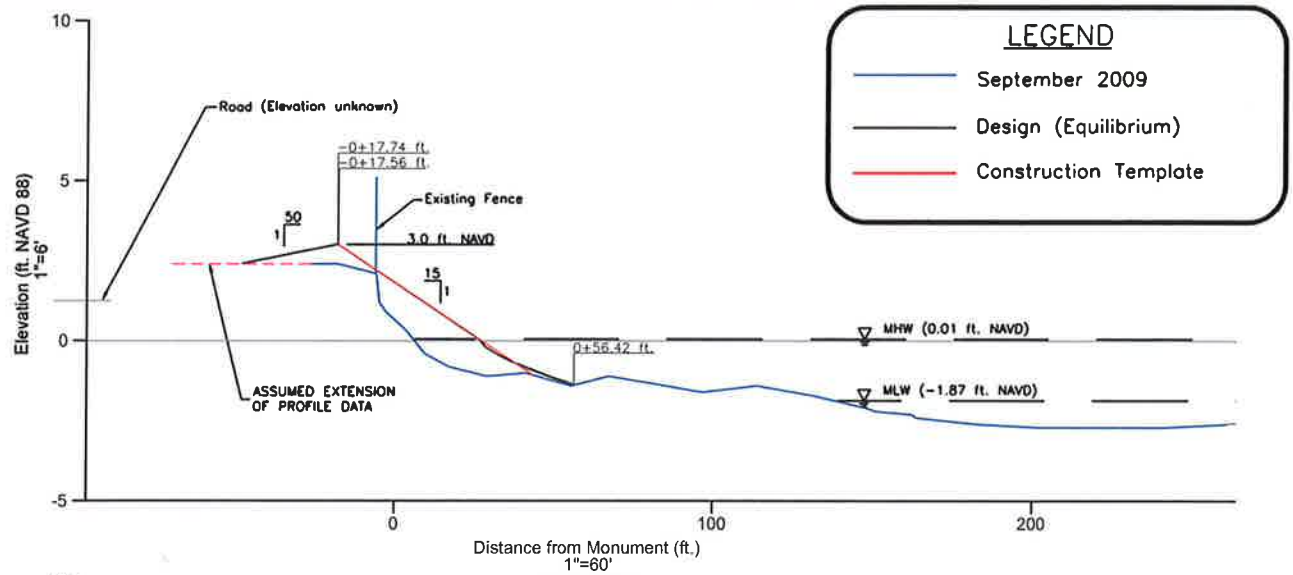

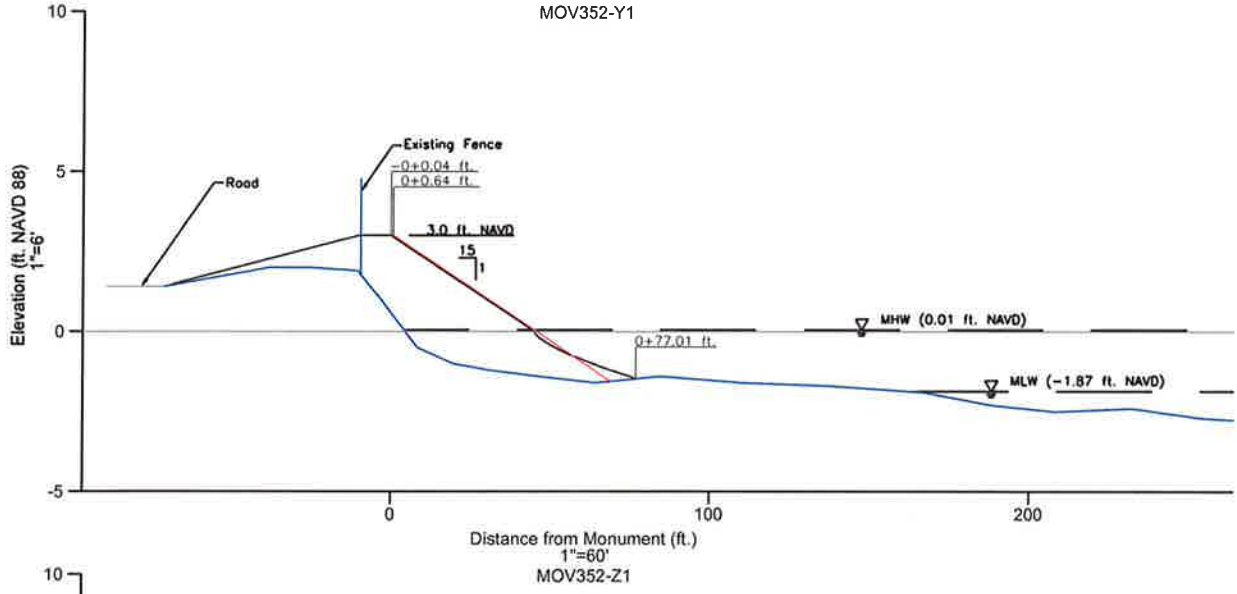

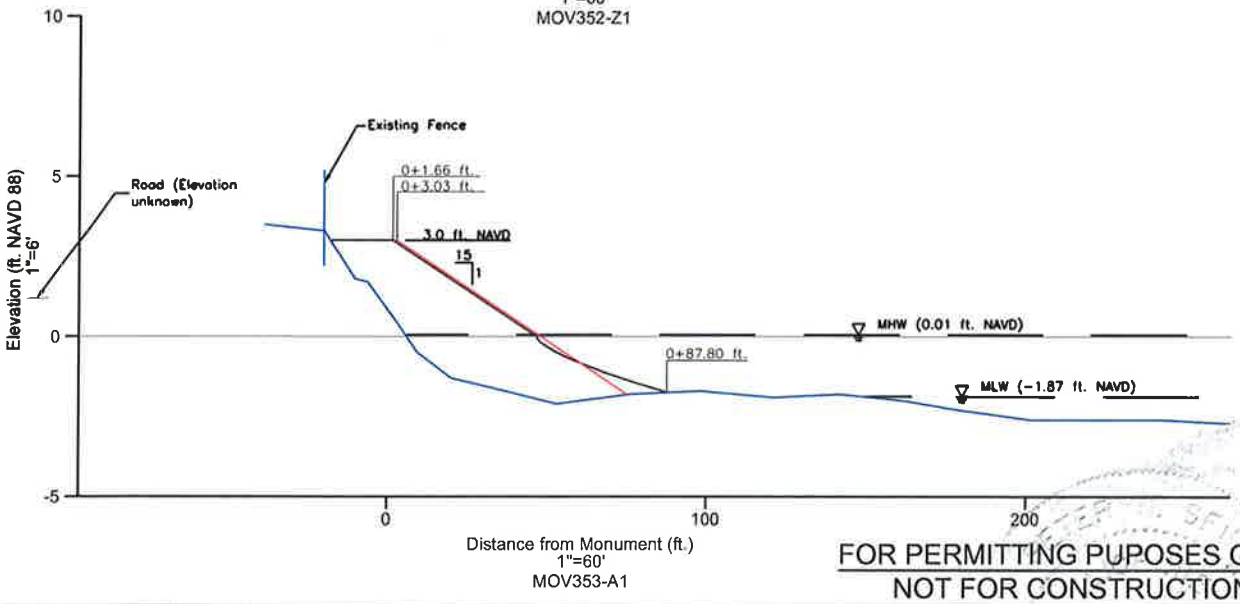

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Cross - Sections
(MOV352-Y1, Z1,MOV353-A1))

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 9

JOB NUMBER: 12-2328

DATE: 10-01-2010

REVISED: 03-20-2012

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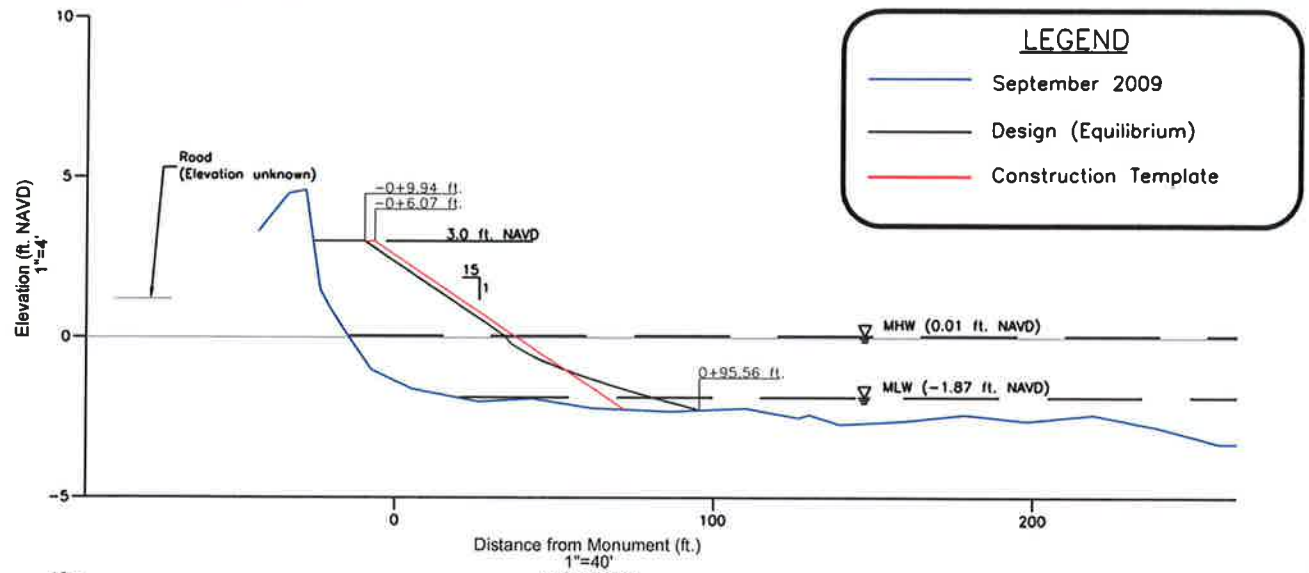

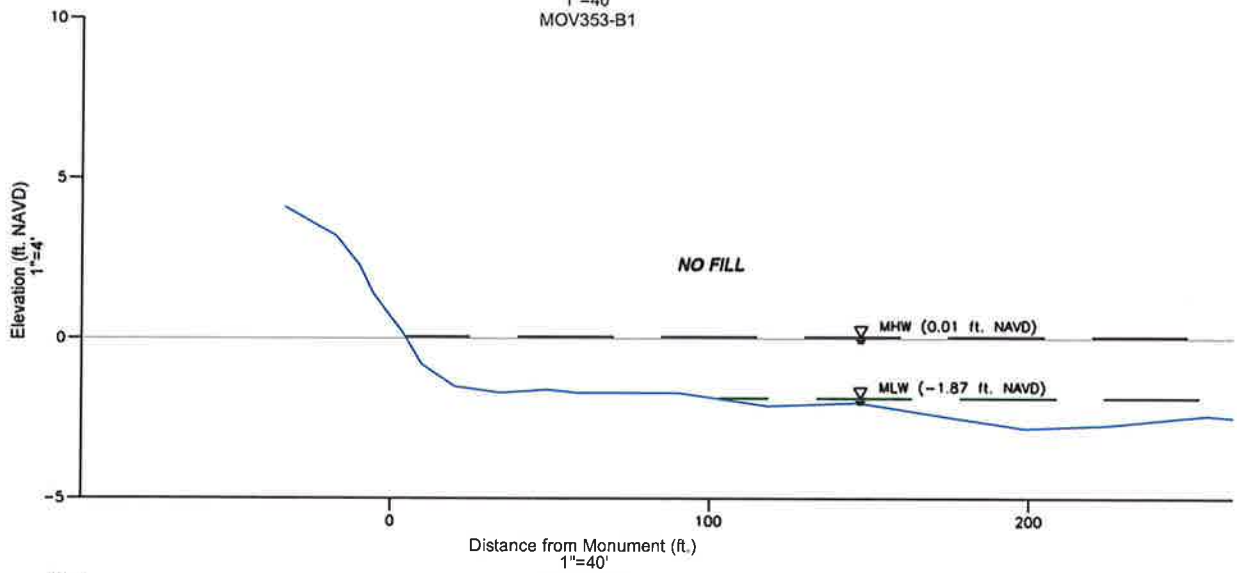

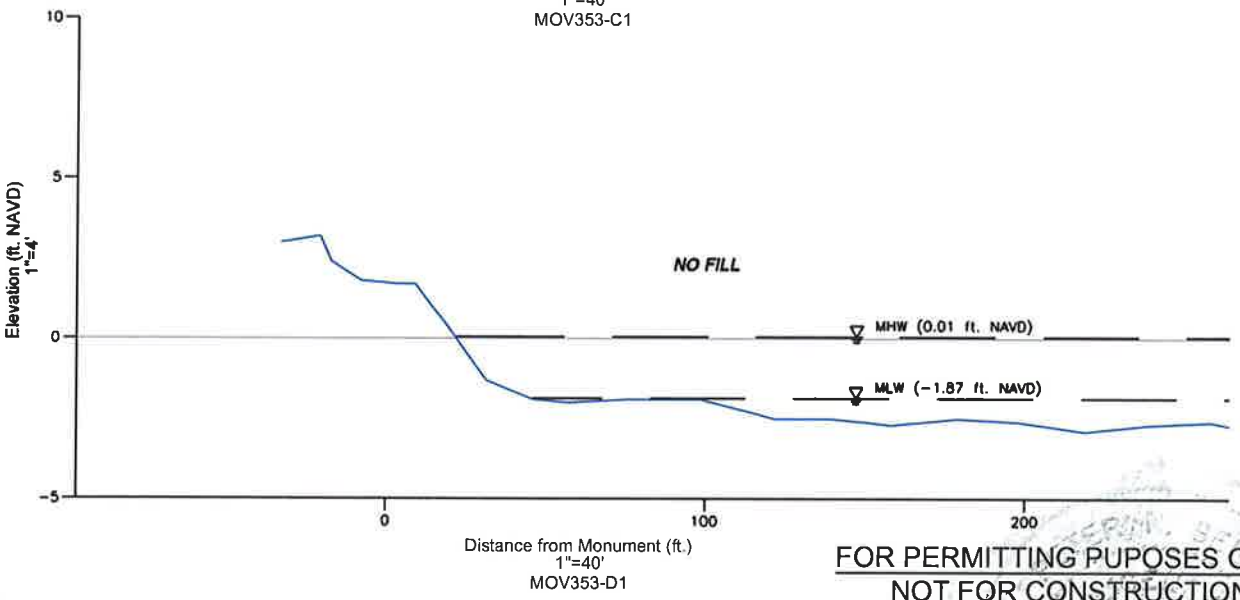

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Cross - Sections (MOV353-B1, C1,D1)

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Shoreline Recovery And Stabilization Project

SHEET 10
JOB NUMBER: 12-2328
DATE: 10-01-2010
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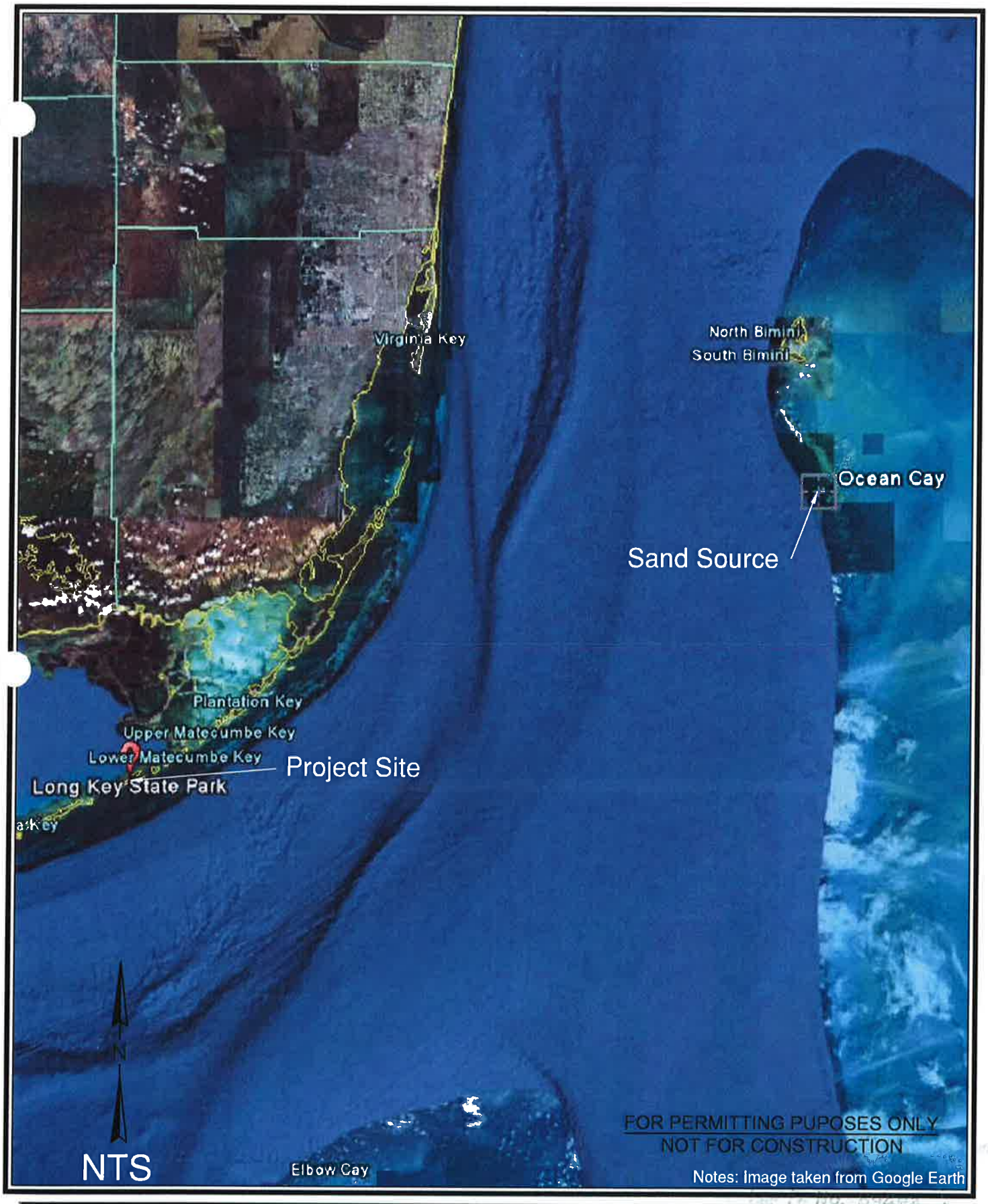

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Sand Source Location Map
Ocean Cay

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 11

JOB NUMBER: 12-2328

DATE: 10-01-2010

REVISED: 03-20-2012

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FL P.E. No. 59493
3/29/2012

Point #	Northing	Easting
1	2812974.14	680110.25
2	2813041.59	680410.11
3	2812928.07	680473.64
4	2812877.80	680545.67
5	2812618.20	680600.15
6	2812610.22	680544.27
7	2812530.76	680560.36
8	2812489.88	680431.43
9	2812513.28	680390.11
10	2812506.63	680373.07
11	2812681.98	680281.68
12	2812671.77	680221.69

Notes: 1. Image From Google Earth Dated July 24, 2004.
2. Horizontal Datum is UTM-WGS 1984 datum, Zone 17 North, Meter

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Sand Source Area
Ocean Cay

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 12

JOB NUMBER: 12-2328

ISSUE DATE: 10-01-2010

REVISED: 03-20-2012

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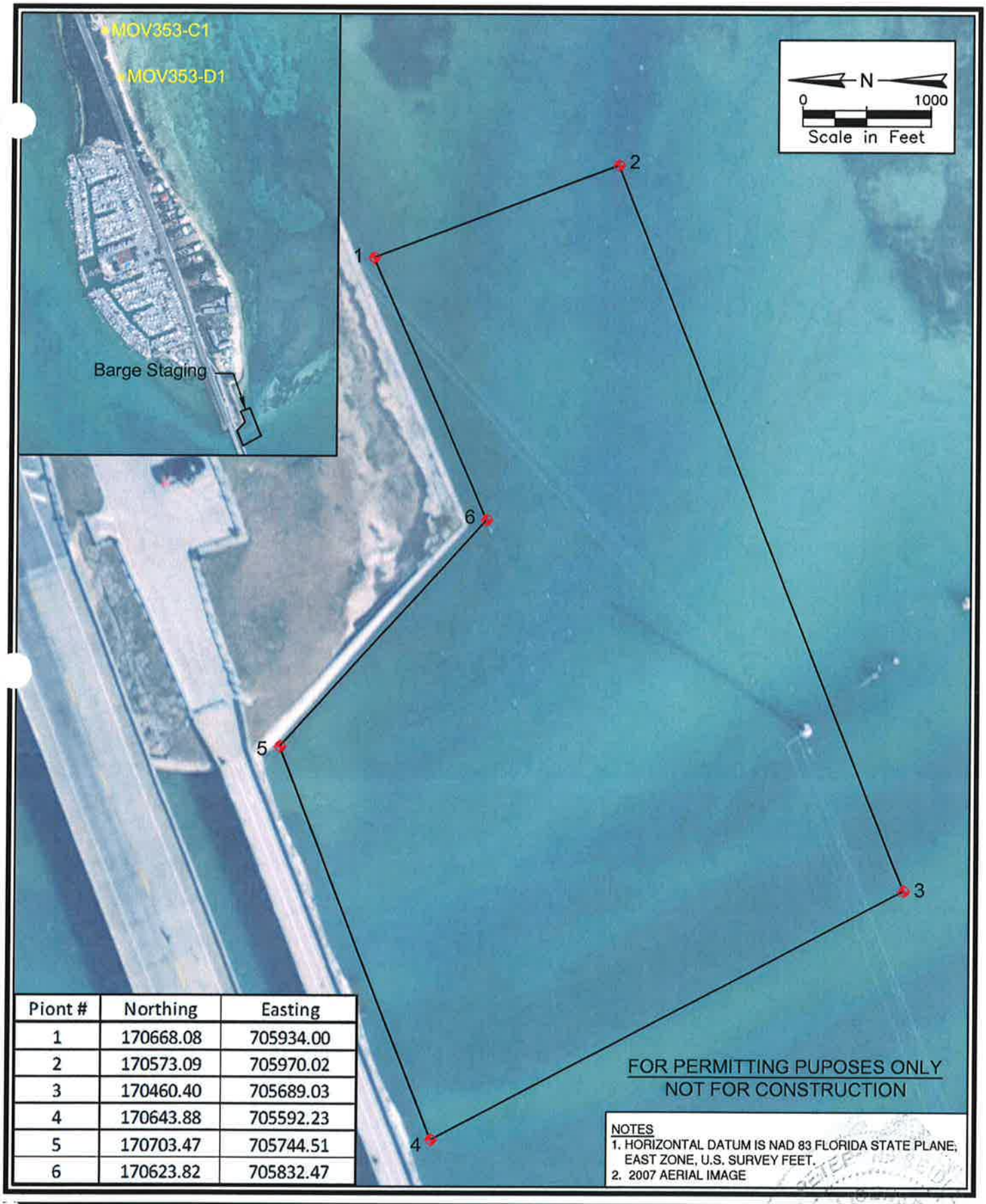
FL P.E. No. 49294
3/20/2012



Piont #	Northing	Easting
1	170668.08	705934.00
2	170573.09	705970.02
3	170460.40	705689.03
4	170643.88	705592.23
5	170703.47	705744.51
6	170623.82	705832.47

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NOTES
1. HORIZONTAL DATUM IS NAD 83 FLORIDA STATE PLANE, EAST ZONE, U.S. SURVEY FEET.
2. 2007 AERIAL IMAGE

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Barge Staging Area

Long Key State Park
Shoreline Recovery And Stabilization Project

SHEET 13

JOB NUMBER: 12-2328

DATE: 10-01-2010

REVISED: 03-20-2012

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