

2023-02-20

IAFSM CONFERENCE, TINLEY PARK, IL

LAKE LORIN SITE TOUR, ORLAND HILLS, IL (South COOK COUNTY)

Lake Lorin was built in the late 1970's to provide 88 acre-ft of detention for surrounding residential developments in Orland Hills, IL (south Cook County). The created storage is on-line detention associated with Tinley Creek, which has a total drainage area of approximately three square miles at this location. The western and southern portions of the lake were enlarged to provide wetland mitigation for the Pepperwood Subdivision in the late 1990's. The control structure at the NE corner of the lake was replaced in 2010.

Due to deep highly organic non-cohesive soils and severe wave action approximately 25' – 30' of the east and north shoreline severely eroded landward over the years. This also created an unsafe condition with up to a 5' vertical drop close to the perimeter walking path enjoyed by many local residents.

Recognizing the need to protect the residents and the integrity of the lake the Village of Orland Hills obtained a permit from the USACE to stabilize / restore / protect approximately 900 linear feet back of the bank to the historical shoreline location in 2021. They also obtained a "No permit required" confirmation from the MWRDGC and relied upon the IDNR-OWR Regional Permit #3 for construction in a designated floodway.

Limestone ledgerrock, steel sheet piling, and synthetic sheet piling alternatives were designed along with an option to dredge the lake to restore fish habitat. Bids ranging from \$0.45M to \$1.5M for the shore stabilization and \$0.45M to \$1.05M for the dredging were received in May, 2021.

Only the limestone ledgerrock shoreline stabilization work was awarded in June, 2021 for \$0.45M. Authorization to proceed with the dredging was received later in August, 2021. The was completed (except the dredging and restoration) before winter set in. Unfortunately permits were not obtained for the disposal of the dredged material in a future park less than a ½ mile from Lake Lorin until October, 2022. Work is now scheduled to be completed in 2023.

LAKE LORIN SHORELINE RESTORATION

Existing Conditions





The Village of Orland Hills

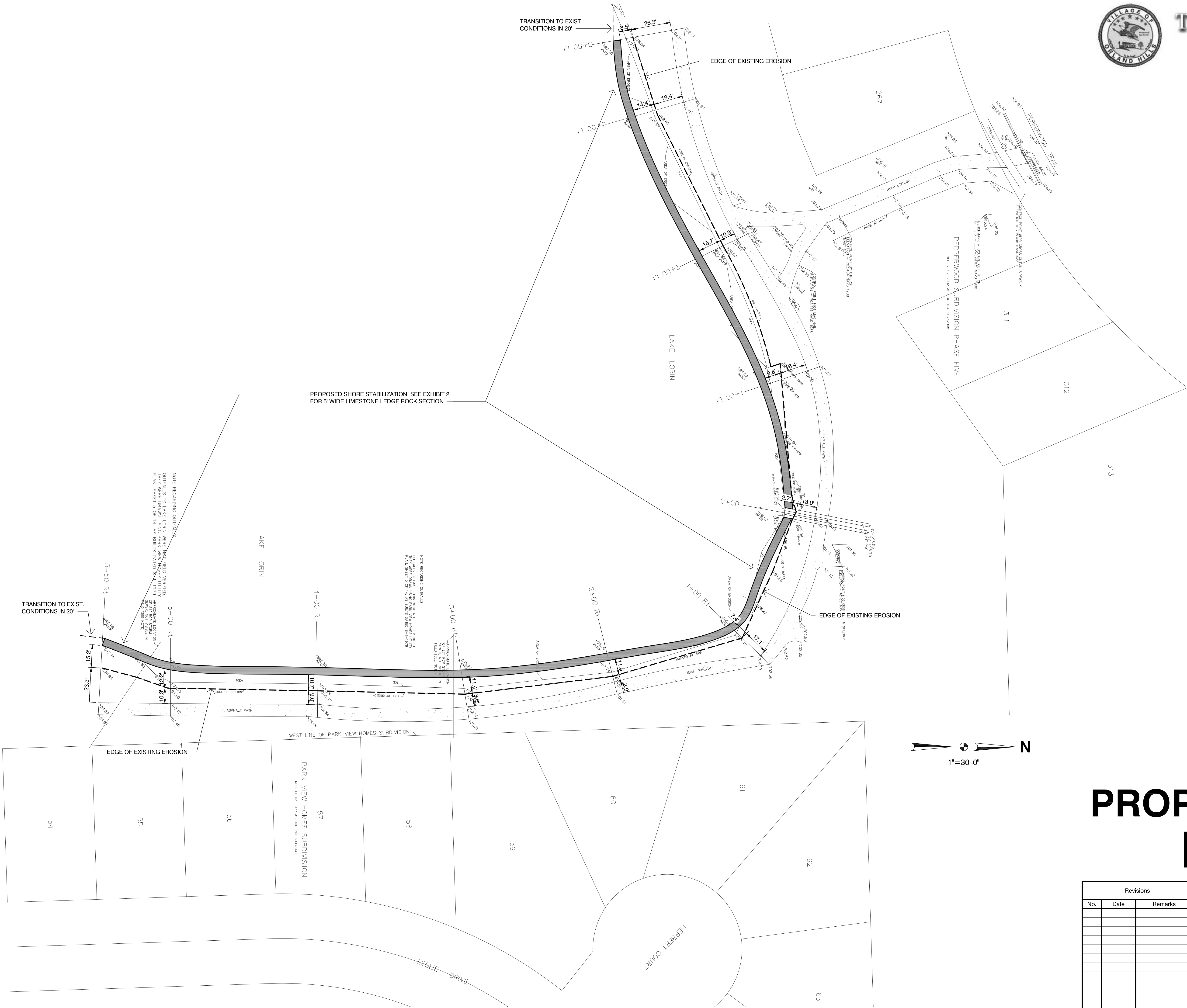
Mayor Kyle R. Hastings

The Best Kept Secret In The Southwest

President
Kyle R. Hastings

Clerk
Jennifer Iannantone

Trustees
Kyle Hastings II
Joseph Janachowski
Tracy Roti
Curt Petrey
Candace Morrison
Marcia Kissane



PROPOSED PLAN EXHIBIT 1

Revisions			BRADLEY E. BRINK ENGINEERING, LTD 120 4TH STREET, #523 PETALUMA, CA 94952 708-906-6101	
No.	Date	Remarks		
			LAKE LORIN SHORE STABILIZATION VILLAGE OF ORLAND HILLS	
			EXHIBIT 1	
			Drawn By: BK	Date: 03-08-18
			Checked By: B. BRINK	Sheet 1 of 2
			Project No.: 03-059	



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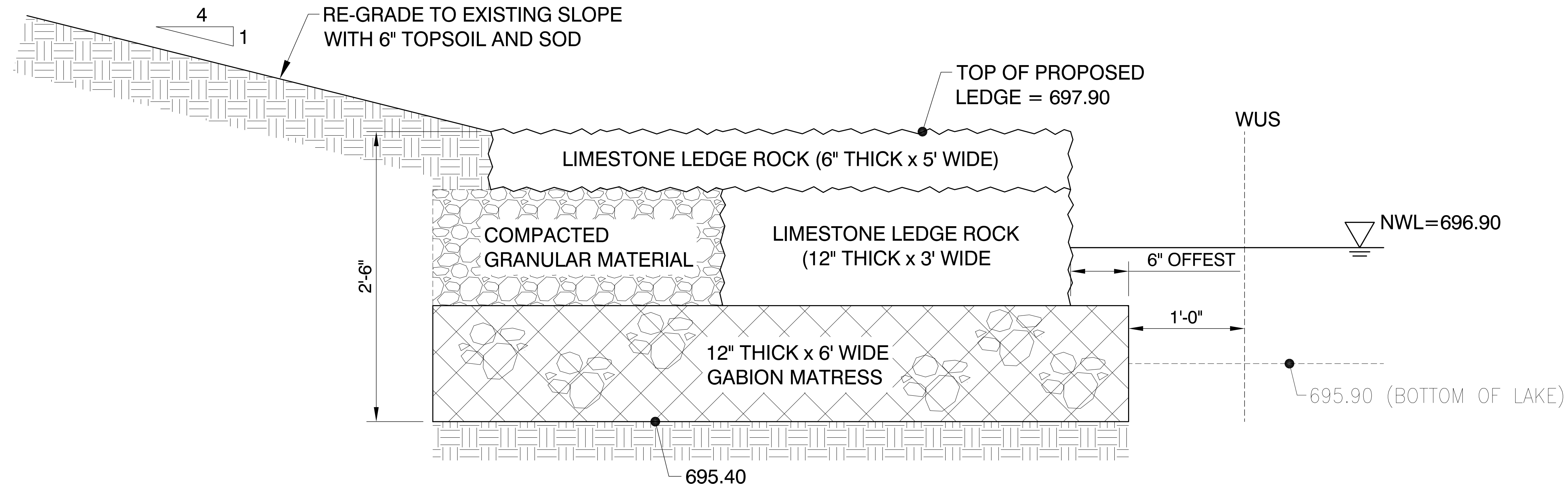
Joseph Janachowski

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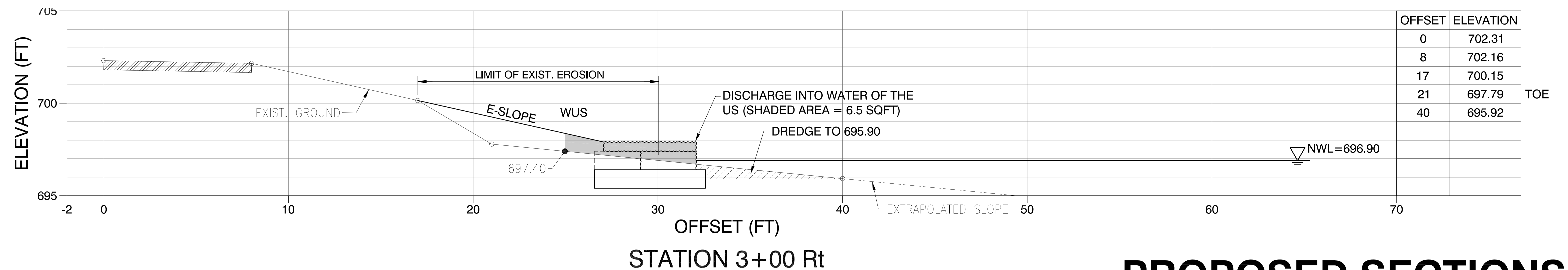
Curt Petrey

Candace Morrison

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LIMESTONE LEDGE ROCK WITH GABION MATTRESS BASE



PROPOSED SECTIONS EXHIBIT 2

Revisions			BRADLEY E. BRINK ENGINEERING, LTD 120 4TH STREET, #523 PETALUMA, CA 94952 708-906-6101	
No.	Date	Remarks		
			LAKE LORIN SHORE STABILIZATION VILLAGE OF ORLAND HILLS	
Sheet Title: EXHIBIT 2			EXHIBIT 2	
Drawn By: BK			Date: 03-08-18	
Checked By: B. BRINK			Sheet 2 of 2	
Project No.: 03-059				

