

**WEST SLOPE CONTINGENCY SECONDARY
CONTAINMENT PLAN
CHIQUITA CANYON LANDFILL
CASTAIC, CALIFORNIA**

Prepared for:



**Chiquita Canyon, LLC
29201 Henry Mayo Dr,
Castaic, CA 91384**

**April 2026
Revision v1.4**

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List of Acronyms and Abbreviations

CCL	Chiquita Canyon Landfill
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CY	Cubic Yards
ft-msl	Feet (above) Mean Sea Level
EPA	Environmental Protection Agency
ETLF	Elevated Temperature Landfill
EU	Environmental Unit
IC	Incident Command
JHA	Job Hazard Analysis
MG	Million Gallons
Plan	West Slope Contingency Secondary Containment
SAP	Sampling and Analysis Plan

1.0 Introduction

1.1 Purpose

This Plan is in response to and intended to satisfy the request of the US EPA as part of a Work Order Letter *RE: Additional Work Required Under UAO for West Toe Improvements* dated March 17, 2026. As part of that letter, EPA requested that Chiquita Canyon Landfill review and revise the contingency measures previously submitted as part of the 2024 West Toe Project and revise as necessary for the upcoming West Toe Buttress Project. All contingency measures are intended to be implemented prior to observable indicators in the unlikely event of catastrophic slope failure in accordance with the Slope Monitoring Plan.

1.2 Overview

The Chiquita Canyon Landfill (CCL) operated by Chiquita Canyon, LLC (Chiquita) has been experiencing a subsurface reaction also known as an Elevated Temperature Landfill (ETLF) event.

As a result of both the mobility of post-reacted material¹ through the waste mass as well as settlement within the reaction area, surface bulging along the west slope toe is occurring and leachate seepage has been observed. Previous construction activities to remove the bulge and install new leachate collection piping and sumps at the toe of the west toe slope were completed in December 2024.

CCL understands conditions can change, so out of an abundance of caution this plan has been developed. This Plan is in response to, and intended to satisfy the request of, the US EPA to develop contingency measures to be implemented prior to observed indicators that slope failure could soon occur.

Differing from past construction activities that were detailed in the 2024 West Slope Contingency Secondary Containment Plan, this project will, as directed by EPA, consist of constructing a soil buttress on the west side of the landfill, adjacent to the prior “west slope toe drain project” to support the west side of the landfill in light of the continued extrusion of reacted material at certain preferential pathways that daylight on the west slope. To do so, CCL will extend the bottom liner under the waste mass, construct a new drainage pathway, install the soil buttress, and line over the entire installation. The project will involve moving a stormwater channel and redirecting stormwater flow in the area.

This West Slope Contingency Secondary Containment Plan (Plan) provides the proposed measures that are intended to, when combined with the separately submitted West Slope Preemptive Secondary Containment, will contain the extrusion of reacted material or a leachate release in the unlikely event of slope failure.

¹ Post-reacted material is the solid byproduct of the pyrolysis condition. It has been likened to an oatmeal-like consistency that can be pushed through the waste mass by gas pressure and/or leachate movements.

1.3 Scope of Plan

The Plan outlines a general approach to retain potential slumped material and containment of leachate liquids, in the unlikely event of catastrophic slope failure. To this end, the Plan provides the means for:

- Construction of a Soil Dam between the landfill and the western canyon wall to temporarily contain leachate.

2.0 Area Setting and Features

This section of the Plan describes the area setting and pertinent site features.

2.1 Landfill General Setting

The Landfill is located immediately north of Henry Mayo Drive (Rt. 120). The Santa Clara River is approximately ½ mile to the south and receives stormwater discharge from the Landfill. A tributary to the Santa Clara River is located off-site to the west of the West Slope area.

2.2 Topography of the West Slope Area

The reaction zone occurs in the high elevation area in the northwest quadrant of the Landfill, with surface elevations of approximately 1390 ft above mean sea level (ft-msl). The west slope is an area sloping to the western margin of the Landfill in the reaction zone area, terminating at the toe of the Landfill at approximately 1300 ft-msl and sloping to lower elevation to the south following the grade of the stormwater conveyance.

2.3 Contingency Containment Structures

This Contingency Plan (Plan) is to contain any possible slumped material in place and prevent off-site excursion of leachate by strategic placement of structures and removal of contained leachate and solids from the containment system. The basis for engineering design as well as design specifications are provided in the drawings set - Attachment A to this Plan. Note that none of these actions are expected to affect site access or traffic to the Landfill for waste acceptance operations.

CCL will perform daily inspections of slope stability. When such inspections indicate that a slope failure is imminent, elements of the Contingency Plan will be implemented as appropriate.

2.3.1 Soil Dam

The construction of a soil dam across the drainageway immediately down-gradient of the West Slope area is a contingency measure to provide secondary containment of leachate potentially released from the west slope. See Attachment A, Sheets 2 and 8. The dam is considered temporary in the duration of use and likely will be constructed for less than 180 days.

The combination of the north levee, as described in the separately submitted Preemptive West Slope Plan, the south levee (as incorporated into the West Toe Berm Project), and the soil dam described here,

there is a minimum leachate containment capacity of approximately 28.1 million gallons² (MG). See Attachment B. This volume is approximate as the south levee will be incorporated into the West Toe Buttress design which has not been finalized. Design cross sections are provided in Attachment A (Sheet No. 3 and 4) which show liquid levels in the containment basin.

Slumped material from a potential West Slope failure into the containment area is expected to be a slurry of waste/soil solids and leachate. CCL response will be to remove the liquid (leachate) fraction via the use of vac trucks, pumps and hoses and potentially pump liquids directly into the HDPE force main feeding Tank Farm #13. An approximately 55 x 110-foot pad will be constructed for truck loadout as shown in Attachment A, Sheet No. 8.

Traffic to and from the truck unload pad to pump liquids is not anticipated to affect site traffic.

Once the soil dam is constructed under this Plan, the containment volume of the combined facilities (levees and dam) will be approximately 24.6 million gallons (MG) at a design freeboard elevation of 1228 feet MSL and an overall maximum potential containment volume of 28.1 MG at 1230 feet MSL (volume calculations provided in Attachment B).

3.0 Additional Protocols

This section of the Plan describes the additional contingency protocols CCL will observe.

3.1 Communications

Specific points of contact for agency personnel are provided in Table 3-1 below, in the event of a catastrophic event. The Los Angeles County Department of Public Health, certified by California Department of Resource Recovery and Recycling (CalRecycle) to act as the Local Enforcement Agency should be notified in the event of any emergency related to the landfill, not just a hazardous waste release event.

Table 1: Emergency Organizations and Contact Information

Emergency	Organizations	Telephone
Explosive/Chemical Mitigation	DTSC's Emergency Response Unit (ERU)	916.255.6504 800.260.3972
	California Office of Emergency Services (OES)	800.852.7550
	Los Angeles County Fire Department	661.257.4144 (Day) / 911

² The volume of leachate within the reaction area of the west slope is unknown; however, CCL and our consultants have previously estimated the volume to be upwards of 24.6 MG plus freeboard based on the volume per cubic yard (CY) of waste in place. The retention capacity of at least 28.1 MG was back-calculated based on a topographic elevation of 1230 for the top of the soil dam and freeboard containment provided by the north levee, south levee as it is included in the West Toe Berm design, and the soil dam.

Emergency	Organizations	Telephone
Hazardous Waste Release	EPA Region 9 Emergency Response Section	800.300.2193
	South Coast Air Quality Management District	800.572.6306
	California Regional Water Quality Control Board	213.620.2246
	Los Angeles County Department of Public Health	888.700.9995
	National Response Center (NRC)	800.424.8802
	Clean Harbors Environmental Services	800.645.8265
	Los Angeles County Fire Department (Health HAZMAT)	323.890.4317 (Day) / 911
Release in Waterway	National Response Center (NRC)	800.424.8802
	California Regional Water Quality Control Board	213.576.6600
	California Fish and Wildlife	888.334.2258
Security	Los Angeles County Sheriff's Office	661.255.1121 (Day) / 911
	California Highway Patrol (CHP)	661.600.1600
	Security (Excalibur Security)	310.919.8780
State and Local Services	Henry Mayo Newhall Hospital	661.253.8000
	First Care Occupational Clinic	661.295.2500
	Regional Planning Committee	661.253.0111
	California Emergency Management Agency (Cal-EMA)	800.852.7550

3.2 Materials Sampling and Analysis (Waste Characterization)

In the unlikely event of a catastrophic failure of the West Slope, a mixture of solids (comprised largely of soil with some solid waste refuse) and liquid (leachate) could be released to the containment area created by the Soil Dam and Levee. Potential excursion from the containment to the South Detention Basin is also recognized. These media will be sampled for the purpose of waste characterization to determine disposition, in accordance with the Sampling and Analysis Plan (SAP), draft dated January 23, 2025.

3.3 Health and Safety

The updated West Slope Improvements Health and Safety Plan (HASP) Version 1.0, updated March 31, 2026 provides the appropriate general protocols for worker health and safety applicable to the various contingency measures described herein.

3.4 Fugitive Landfill Gas Emissions

The West Toe Work Plan dated April 1, 2026 includes the procedures for potential fugitive landfill gas emissions associated with the West Toe project.

4.0 Waste Characterization

4.1 Waste Streams

Waste streams specific to the matter of contingency measures are as described below.

- **Leachate:** Leachate is the liquid generated from water percolating through a solid waste disposal site. Slope failure could result in significant release of leachate presently contained in storage within the waste cell to collect within the stormwater conveyance drainageway. The contingency measure involves construction of a soil berm to contain leachate within the conveyance to prevent flow to the south basin and ultimately from leaving the site, in the unlikely event of slope failure.
- **Solid Waste:** For purposes of this Plan, solid waste is comprised of a mixture of refuse and soil slump flow from the waste cell into the drainageway, which will be pre-emptively contained by a network of soil berms.

4.2 Waste Characterization and Profiling

4.2.1 Leachate Waste

Protocols for leachate sampling, testing, and waste determination have been developed as part of the Master Work Plan submitted by CCL to the U.S. Environmental Protection Agency, Region IX on March 27, 2024. Specifically, Attachment B of the Master Work Plan provided the Leachate Management Plan. Additional applicable protocols are contained within the SAP, draft dated January 2025.³

The SAP provides a mechanism for collecting data to support waste classification and inform decision-making regarding the appropriate management and disposal of the waste. The SAP: (1) provides the technical approach (i.e., sampling design) and rationale for waste characterization, including sampling locations, frequency of sampling, and the analytical testing regimen; (2) describes the field procedures and methods for implementing the sampling design (i.e., the field sampling plan); and (3) discusses the relevant regulatory frameworks and thresholds defining hazardous waste. These same protocols are applicable to the Preemptive and contingent upon factors such as leachate accumulation rate, remaining freeboard in the basin, and expected weather conditions.

³ Leachate in this area is designated as Group A, which has been characterized.

4.2.2 Solid Waste

Should soil or other solids accumulate within the constructed secondary containment area, such materials, following first removal of liquids, will be removed and placed in the active face of the landfill in a manner consistent with other derived solids (e.g., well drilling cuttings).

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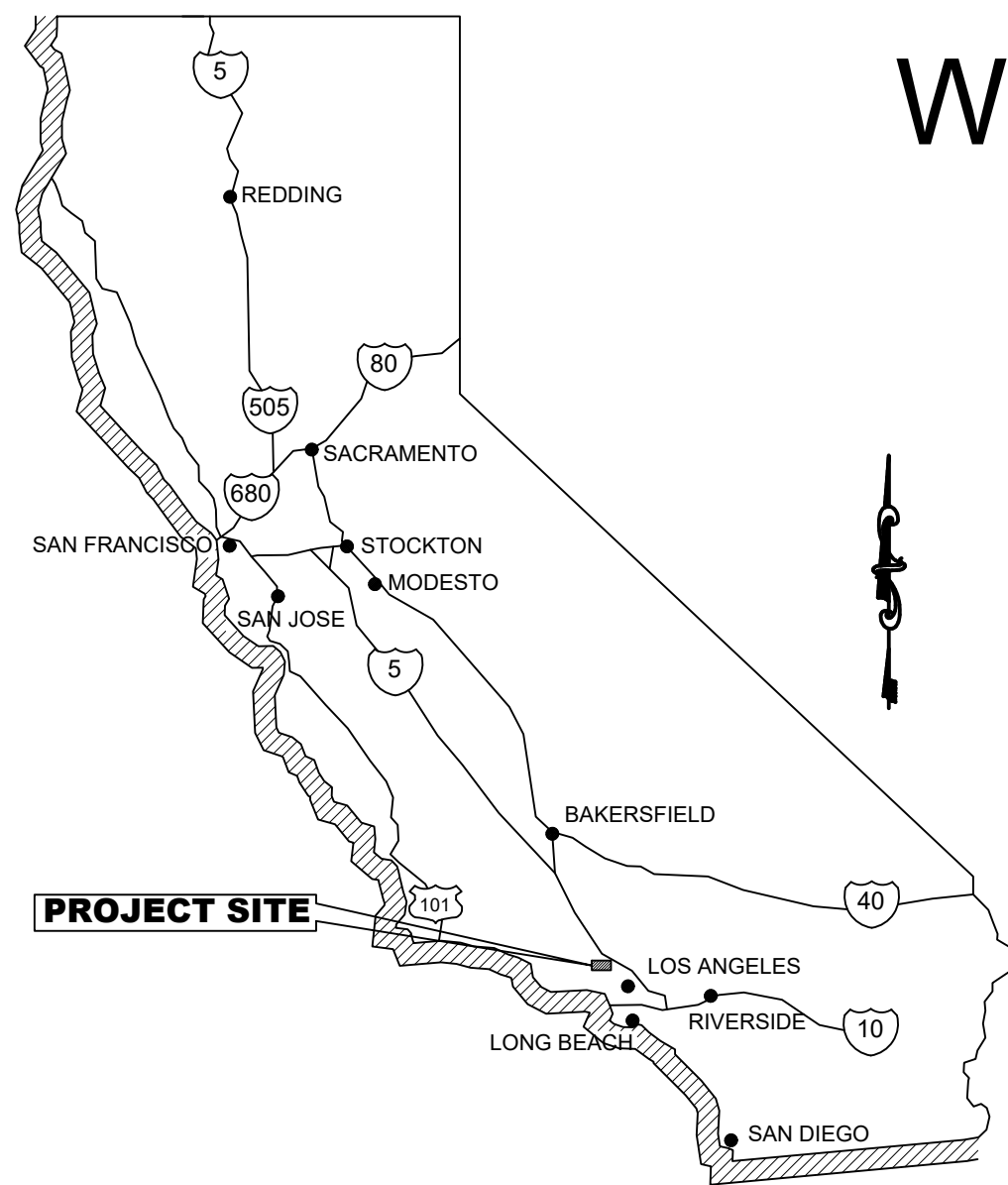
Attachment A

Pre-emptive and Contingency Plans
West Slope Secondary Containment Plan
Sheet Set

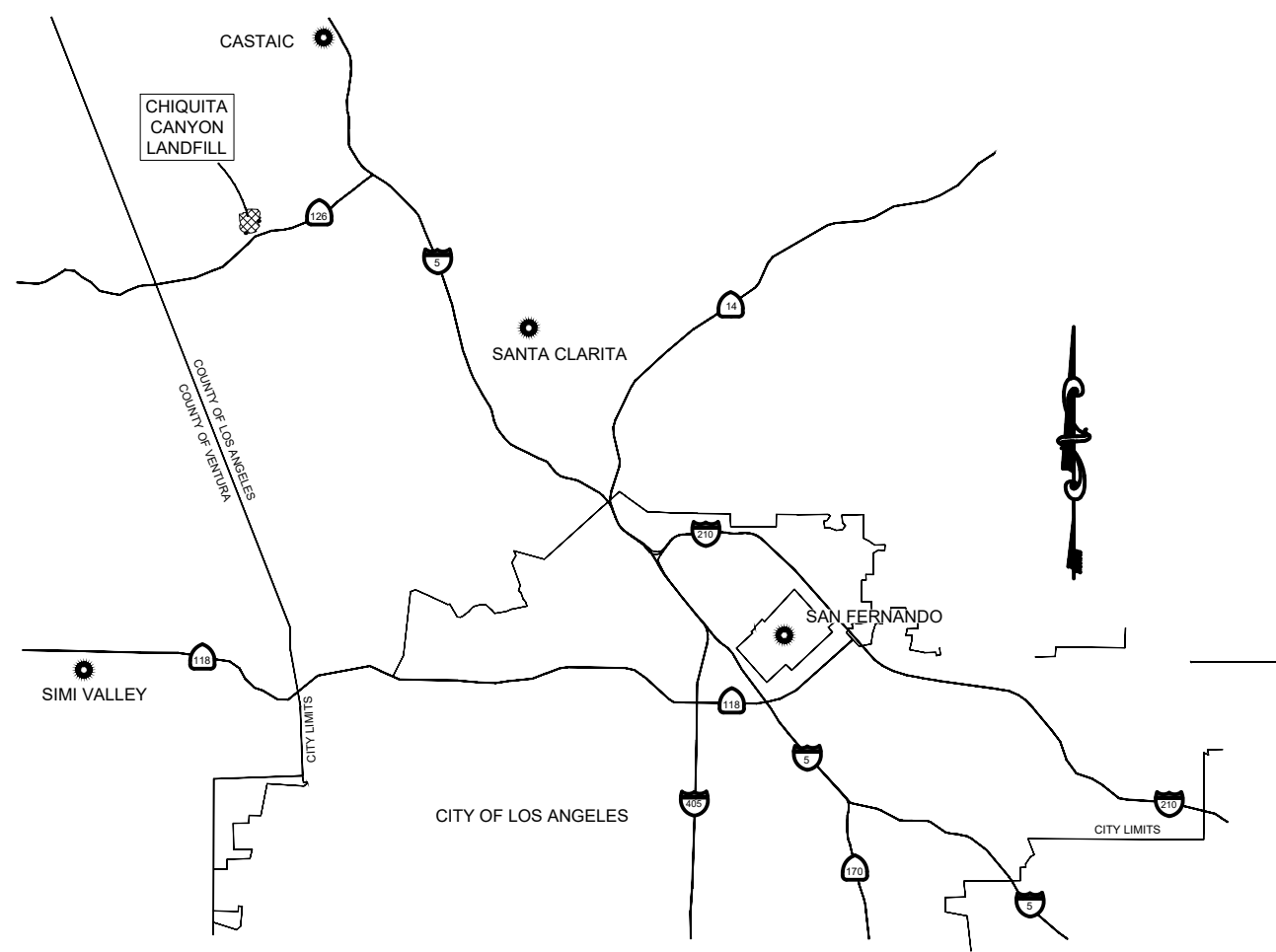
PREEMPTIVE AND CONTINGENCY PLANS

WEST SLOPE PREEMPTIVE SECONDARY CONTAINMENT PLAN

CHIQUITA CANYON LANDFILL, LOS ANGELES COUNTY

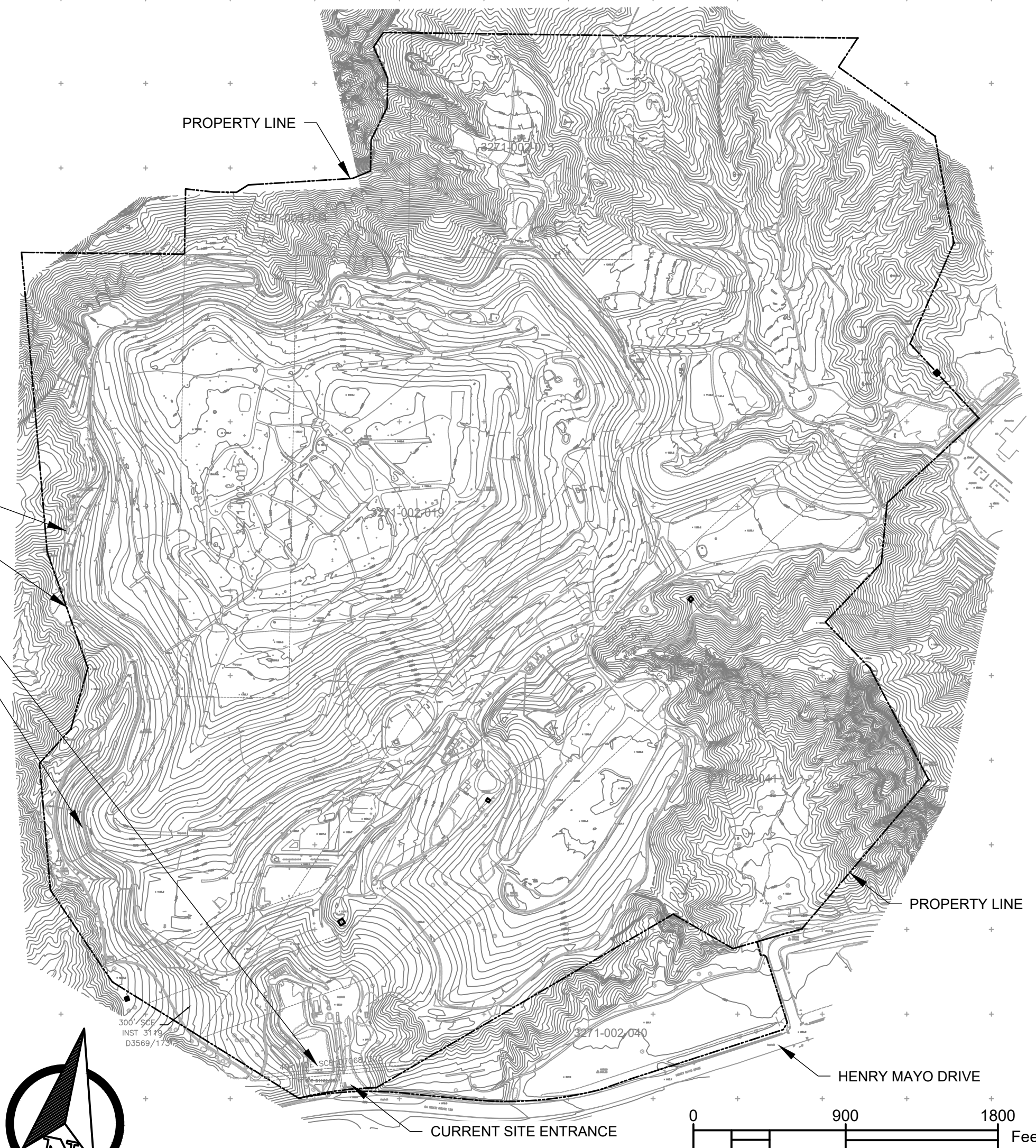


**STATE
LOCATION MAP**
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

SEE SHEET 2 FOR
PROJECT LOCATIONS
IN THESE AREAS



OVERALL SITE MAP
1" = 600'

SHEET INDEX

- SHEET 1 - TITLE SHEET
- SHEET 2 - SITE PLAN
- SHEET 3 - LEVEE GEOLOGIC SECTIONS
- SHEET 4 - SOUTH DAM

GENERAL INFORMATION

- REFERENCE DRAWINGS FOR CAPPING THE REACTION AREA:
- FILE NO. _____ PREPARED BY _____ DATED _____

PROPERTY INFORMATION

- PROPERTY ADDRESS 29201 HENRY MAYO DRIVE, CASTAIC, CA 91384
- RECORD OF SURVEY BOOK 204 PAGES 34-38
- PROPERTY OWNER CHIQUITA CANYON, LLC
- ASSESSORS ID NUMBER(S) 3271-002-011, 013, 019, 041; 3271-005-0034

ZONING, REGIONAL PLANNING, AND OTHER AGENCY INFORMATION

- PROPERTY ZONING: INDUSTRIAL
- INTENDED LAND USE: LANDFILL
- CONDITIONAL USE PERMIT: CUP NO. 2004-00042-(5) EXPIRATION DATE: 07/27/2047
- OAK TREE PERMIT NUMBER: OTP NO. 2015-0007-(5)632 EXPIRATION DATE: N/A
- REGIONAL WATER QUALITY CONTROL BOARD PERMIT NO. R4-2018-0172, EXPIRATION DATE N/A
- LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING: TBD

NOTE:
HORIZONTAL COORDINATE SYSTEM: NAD 83, CALIFORNIA STATE PLANE, ZONE 5, NAVD 88 VERTICAL DATUM: NAVD 88
THE AERIAL SURVEY IS WITHIN +/- 4 FEET BASED ON THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY (NSSDA) FOR A CONTOUR INTERVAL OF 2- FEET AND MAP SCALE OF 1"=100

BENCH MARK	
BM: VL 6106	Elev.: 982.885 FT 299.584 METER
LACO BM TAG IN CTR NOSE OF C/L MED S END C/L CHIQUITA CYN LANDFILL ENT 89' N/O C/L HENRY MAYO DR (HWY 126) 0.6 MI E/O CHIQUITO CYN RD	
QUAD: Newhall (2018)	

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ISSUED FOR REVIEW
REFERENCE AERIAL TOPO BASED ON FEBRUARY 26, 2026 AERIAL SURVEY BY TETRATECH

REV. NO.	DATE	DESCRIPTION	APPROVED BY

DATE OF ISSUE: 16 APR 2026
DESIGNED BY: R JOHNSON
DRAWN BY: L PADILLA
CHECKED BY: R JOHNSON
APPROVED BY: R JOHNSON



Geo-Logic ASSOCIATES
2777 EAST GUAISTI ROAD
SUITE 1
ONTARIO, CA 91761
(909) 626-2282
www.geo-logic.com

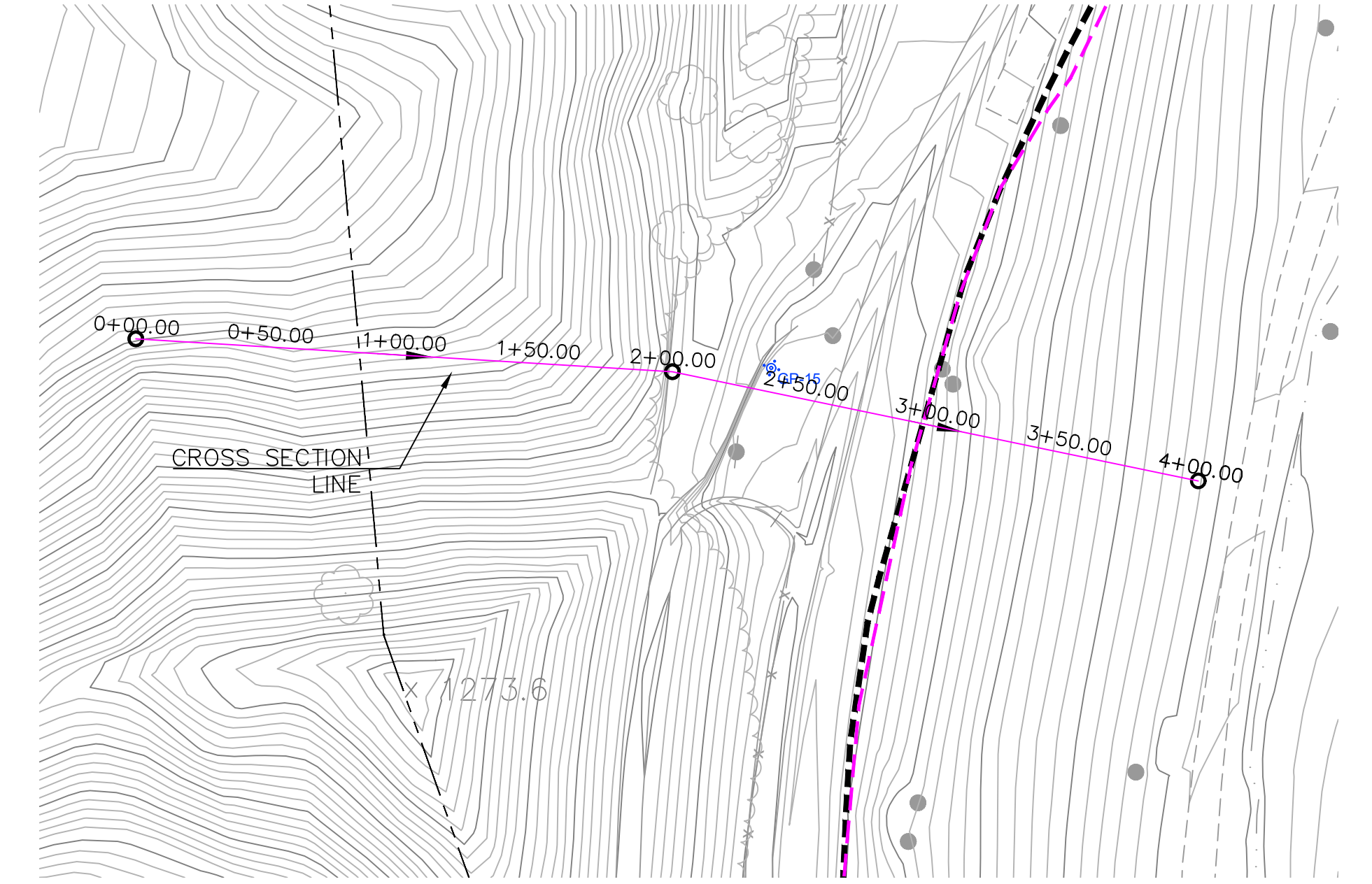
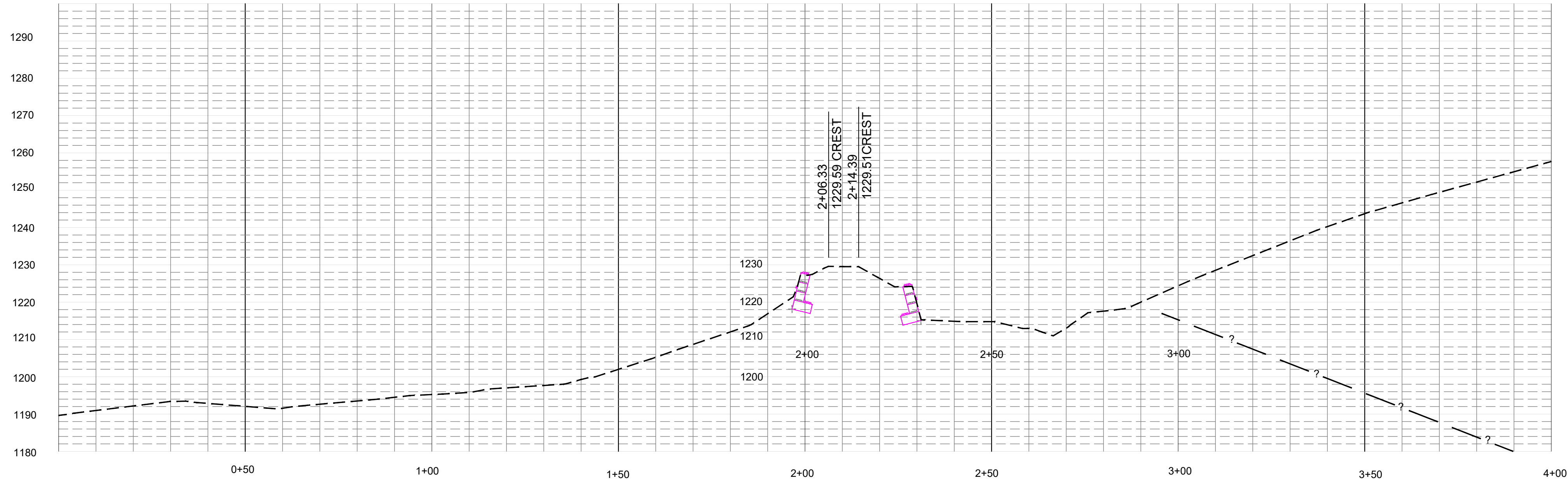
CHIQUITA CANYON
A Waste Connections Company
29201 HENRY MAYO DRIVE
CASTAIC, CA 91384

CHIQUITA CANYON LANDFILL
PREEMPTIVE & CONTINGENCY PLAN
TITLE SHEET

DWG NO.
01
PROJECT NO.
2013.0094

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GEOLOGIC CROSS SECTION FOR NORTH LEVEE

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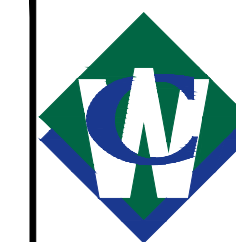
ISSUED FOR REVIEW
REFERENCE AERIAL TOPO BASED ON FEBRUARY 26, 2026 AERIAL SURVEY BY TETRATECH

REV. NO.	DATE	DESCRIPTION	APPROVED BY

DATE OF ISSUE: 16 APR 2026
 DESIGNED BY: R JOHNSON
 DRAWN BY: L PADILLA
 CHECKED BY: R JOHNSON
 APPROVED BY: R JOHNSON



2777 EAST GUASTI ROAD
 SUITE 1
 ONTARIO, CA 91761
 (909) 626-2282
 www.geo-logic.com



CHIQUITA CANYON
A Waste Connections Company

29201 HENRY MAYO DRIVE
 CASTAIC, CA 91384

**CHIQUITA CANYON LANDFILL
 PREEMPTIVE & CONTINGENCY PLAN**

GEOLOGIC CROSS SECTIONS

DWG NO.
03

PROJECT NO.
2013.0094

Attachment B
Volume Calculations

**Chiquita Canyon Landfill - Preemptive and Contingency Plan for ETLF Area
Containment Upstream of South Dam
April 16, 2026**

Elev (Ft)	Area (sf)	Avg Area	Hgt (Ft)	Cu ft	Cu Yd	Gallon	Elevation Ft, MSL	Cumulative Gallon	Volume Ac-Ft
1178	363								
		751	2	1,501	56	11,243	1180	11,243	0.04
1180	1,138								
		1,675	2	3,350	125	25,092	1182	36,335	0.12
1182	2,212								
		3,770	2	7,539	280	56,468	1184	92,803	0.29
1184	5,327								
		7,262	2	14,523	538	108,778	1186	201,581	0.62
1186	9,196								
		11,599	2	23,198	860	173,754	1188	375,335	1.16
1188	14,002								
		17,179	2	34,358	1,273	257,342	1190	632,677	1.94
1190	20,356								
		24,564	2	49,127	1,820	367,962	1192	1,000,639	3.07
1192	28,771								
		33,240	2	66,480	2,463	497,936	1194	1,498,575	4.6
1194	37,709								
		42,443	2	84,886	3,144	635,797	1196	2,134,372	6.55
1196	47,177								
		63,459	2	126,918	4,701	950,616	1198	3,084,988	9.46
1198	79,741								
		86,454	2	172,908	6,404	1,295,081	1200	4,380,069	13.43
1200	93,167								
		100,153	2	200,305	7,419	1,500,285	1202	5,880,354	18.03
1202	107,138								
		114,156	2	228,312	8,456	1,710,057	1204	7,590,411	23.27
1204	121,174								
		139,506	2	279,011	10,334	2,089,793	1206	9,680,204	29.67
1206	157,837								
		165,489	2	330,978	12,259	2,479,026	1208	12,159,230	37.27
1208	173,141								
		181,560	2	363,119	13,449	2,719,762	1210	14,878,992	45.61
1210	189,978								
		196,424	2	392,848	14,550	2,942,432	1212	17,821,424	54.63
1212	202,870								
		209,050	2	418,099	15,486	3,131,562	1214	20,952,986	64.23
1214	215,229								
		221,566	2	443,132	16,413	3,319,059	1216	24,272,045	74.4
1216	227,903								
		235,005	2	470,009	17,408	3,520,368	1218	27,792,413	85.19
1218	242,106								
		249,368	2	498,736	18,472	3,735,533	1220	31,527,946	96.64
1220	256,630								
				Total:	155,910	31,527,946			