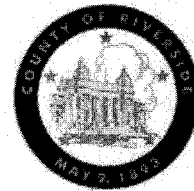


**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM
12.2
(ID # 6519)**

MEETING DATE:

Tuesday, March 27, 2018

FROM : DEPARTMENT OF WASTE RESOURCES:

SUBJECT: DEPARTMENT OF WASTE RESOURCES: Contract Change Order Numbers 1 and 2 for the Southeast Drainage Channel Improvement Project at the Corona Landfill, District 2. [\$262,623.10 – Department of Waste Resources Enterprise Funds] (Nothing Further Required under CEQA)

RECOMMENDED MOTION: That the Board of Supervisors:

1. Find that nothing further is required pursuant to the California Environmental Quality Act (CEQA), whereas on June 21, 2016 (12.2-C of 6/21/2016), the Board of Supervisors (Board) adopted a Mitigated Negative Declaration (MND) and Mitigation Monitoring Program (MMP) for the Southeast Drainage Channel Improvement Project at the Corona Landfill (Project), based on the findings incorporated in Environmental Assessment (EA) Corona No. 2015-02, concluding that with mitigation, the Project would not cause significant environmental impacts; and
2. Approve Contract Change Order (CCO) Numbers 1 and 2 in the total amount of \$262,623.10, to the contract with H&H General Contractors, Inc. (H&H) for the Project; and
3. Authorize the General Manager-Chief Engineer to execute the CCOs on behalf of the County.

ACTION: Change Order, Policy

Hans Kemkamp, General Manager - Chief Engineer 3/15/2018

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Jeffries, seconded by Supervisor Ashley and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Tavaglione, Washington and Ashley
Nays: None
Absent: Perez
Date: March 27, 2018
xc: Waste

Kecia Harper-Ihem

Clerk of the Board

By:
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$ 262,623.10	\$ 0	\$ 262,623.10	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: Department of Waste Resources Enterprise Funds			Budget Adjustment:	No
			For Fiscal Year:	17/18

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

On July 25, 2017 (MT# 4840, 12.2 of 7/25/2017) the Board of Supervisors (Board) approved the contract documents for the Project, and authorized the Department to advertise for bids. On August 15, 2017, a total of four (4) bids were received, with H&H submitting the lowest bid in the amount of \$3,407,279.25. On September 12, 2017 (MT# 5170, 12.2 of 9/12/2017), the Board awarded the contract to H&H for the Project. Construction began on October 16, 2017 and has been ongoing.

Contract Change Order No. 1

The following work was added with CCO No. 1: Dirt Haul, additional refuse excavation, additional Final Cover construction, addition of a riprap revetment system, removal of Articulating Concrete Block (ACB) quantities, removal of ACB backfill quantities, removal of replacement of riprap over ACB quantities, and reduction of the block wall length.

The net increase to the total cost of the project from CCO No.1 is \$109,687.00. CCO No.1 was authorized by the General Manager-Chief Engineer under authority previously granted by the Board and in accordance with Article 3.5 of the Public Contract Code, and the limits set forth in Section 20142.

Contract Change Order No. 2

The following work was added with CCO No. 2: re-grading a low spot in a landfill bench, installation of a gate in the block wall, dirt haul, rock haul, additional block wall costs, and the removal of work within the CalTrans right-of-way.

The net increase to the total cost of the project from CCO No. 2 is \$152,936.10.

California Environmental Quality Act (CEQA) Findings

The Project was evaluated under EA Corona No. 2015-02, and on June 21, 2016 (12.2 of 6/21/2016), the Board adopted a MND and MMP for the Project. On July 25, 2017 (MT# 4840, 12.2 of 7/25/2017), the Board approved contract documents for the Project, and a Notice of Determination (NOD) was filed, identifying that the Project, with mitigation, would not cause

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

significant environmental impacts. The 30-day statute of limitations for review and comment of NOD expired with no comments or challenges received. Since the proposed motion in this Form-11 involves change orders to a contract without expanding the impact area already assessed under the adopted MND, and identified in the NOD (posted 7/25/2017), nothing further is required under CEQA.

Impact on Residents and Businesses

The Project limits are located near neighborhoods to the southeast of the landfill site. Temporary sound walls have been installed for the duration of the Project next to the homes to reduce heavy equipment sound. Additionally, work will not be permitted between 3:30PM and 7:00AM to further minimize sound. No businesses will be affected by construction.

Completion of the Project protects the public health and safety from the potential exposure of landfill material.

Additional Fiscal Information

The Department had budgeted \$3,407,279.25 for the project during fiscal year 17/18. The Riverside County Flood Control District has committed to provide cooperative funding in the amount of \$900,000 from Zone 2 funds towards this project. The agreement for the cooperative funding was approved by the Board on January 30, 2018 (MT# 6195, 12.1 of 1/30/2018). Funds to cover the additional work will be provided from Fund 40200, Department ID – 4500100000, Program Code 99916, Account 542120 (asset) and Account 522320 (non-asset).

Contract History and Price Reasonableness

On September 12, 2017 (MT# 5170, 12.2 of 9/12/2017), the Board approved a contract award to H&H in the amount of \$3,407,279.25. CCO Numbers 1 and 2 will increase the contract in the amount of \$262,623.10. The revised total contract cost including CCO Numbers 1 and 2 is \$3,669,902.35.

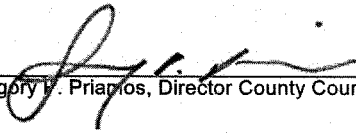
SUPPLEMENTAL:

ATTACHMENTS:

ATTACHMENT A. CONTRACT CHANGE ORDER No. 1

ATTACHMENT B. CONTRACT CHANGE ORDER No. 2

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**



Gregory W. Priamos, Director County Counsel 3/19/2018

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Construction of the Southeast Drainage Channel Improvement Project at the Corona Landfill
Sheet 1 of 4

CONTRACT CHANGE ORDER NO. 1

To: H&H General Contractors, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED AND EXECUTED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES, IF APPLICABLE SIGNATURE AUTHORITY APPROVAL IS GIVEN BY BOARD ORDER AND AS PROVIDED IN THE GENERAL PROVISIONS, OR THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY FOR THE COUNTY AND THE AUTHORIZED DELEGATE FOR THE CONTRACTOR.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

Additional Landfill Excavation:

On November 15, 2017, the Contractor began excavation activities on the Northwest Floodplain, starting at the CalTrans Right-of-Way boundary and continued excavation along the alignment downstream. Around station 2+00, along the Channel Alignment, which is outside the historic landfill boundaries, the Contractor encountered landfilled waste. According to historic records, waste should not have been encountered in this location and this excavation was to provide a source of clean final cover material for the project. As a result, the following is additional work that occurred and will have to occur at the site:

- Excavate an additional 5,100CY of landfill material. An additional 5,100CY shall be added to Bid Item No. 28 – Excavate Landfilled Material, increasing the total quantity from 10,760CY to 15,860CY and increasing the total bid item cost by \$34,425.
- Haul an additional 7,000CY of clean earthen material that meets Final Cover requirements for hydraulic conductivity to make up for the lost clean earthen material and the additional Final Cover Material that must now be constructed over the unexpected waste. The County has agreed on the price of \$110.69 per double bottom load delivered to the site and a loading cost of \$27 per load, for a combined unit cost of \$137.69. The maximum number of loads to be hauled to the site is 700 loads; therefore, the total cost of the dirt haul shall not exceed \$96,383.
- Construct an additional 2,000CY of Final Cover. An additional 2,000CY shall be added to Bid Item No. 29- Earthwork – Place Final Cover over Landfilled Materials, increasing the total quantity from 24,782CY to 26,782CY and increasing the total bid item cost by \$8,000.
- Remove Bid Item No. 27 – Earthwork – Excavate NW Floodplain Subgrade since all the excavation fell under Bid Item No. 28 – Earthwork – Excavate Landfilled Material and no more excavation exists within the NW Floodplain outside the CalTrans Right-of-Way Limits. This reduces the cost of the Contract by \$35,469.30.

Rock Protection Outside ACB Limits

The County shall direct the Contractor to place up to 30,000SF of drainage gravel and quarter or half ton riprap rock, depending on the location in the channel (as shown in Project Drawing Sheets 8, 11, and 14), from the onsite riprap stockpile over graded areas within the channel outside the ACB limits to protect the channel from erosion. A total of ten (10) additional Contract Working Days shall be added to the Contract for this work. The placement of the drainage gravel shall be paid under the agreed upon unit price of \$2.05/SF for a total of \$61,500. The placement of the

quarter ton and half ton riprap rock in the within the grading limits and outside of the ACB limits shall be paid under Time and Materials. The Contractor shall be instructed to use the onsite stockpiled quarter ton riprap until it runs out before purchasing riprap to place in the channel. Placement of the riprap in the channel, including any material purchase shall be paid as Force Account work under General Provisions Section 7.3 and shall not exceed \$159,000. The locations of the gravel and rock placement are shown on revised Project Drawing Sheets 8, 11, and 14 and the details for the rock placement are shown on Project Drawing Sheets 16, 20, and 21.

Decrease of ACB Quantities

On January 4, 2018, CalTrans informed the County via email that the Encroachment Permit shall not be approved with the articulated concrete block (ACB) system. At this time, the County is working with CalTrans on an encroachment permit with an alternative revetment system, a rock slope protection. Therefore, the Contractor shall not install ACB within the CalTrans Right-of-Way limits. Instead of the ACB terminating in a connection to the concrete channel inlet as initially designed, the ACB limits shall now terminate in an ACB Flank Termination Trench outside of the CalTrans Right-of-Way limits, as shown on the revised Project Drawing Sheet 8 and shall be built according to detail H on the revised Project Drawing Sheet 17, attached to Contract Change Order No. 1. The Contractor shall use quarter ton rock stockpile onsite, if available, prior to hauling quarter ton rock for the ACB Flank Termination Trench. The contract shall be modified as follows:

- Bid Item No. 9 – ACB Contech Size 70L: The amount of ACB size 70L shall be decreased by 9,289SF, which is the amount of ACB that was to be installed within the CalTrans Right-of-Way on both the Northwestern and Southeastern Floodplains. This reduces the total quantity from 64,206SF to 54,917SF, reducing the cost of Bid Item No. 9 by \$158,841.90.
- The ACB Flank Termination Trench shall be paid as force account work and shall not exceed \$6,100.
- Bid Item No. 11 – Earthwork Backfill ACB shall be reduced by 8,454SF, reducing the cost by \$4,227.
- Bid Item No. 12 – Hydroseed shall be reduced by 2,358SF, reducing the cost by \$235.80.
- Bid Item No. 13 – Placement of Riprap Rock over ACB shall be reduced by 2,807SF, reducing the cost by \$2,807.

Block Wall Design Change

The Contractor brought to the attention of the County the that location of the block wall along two property lines, both adjacent to two homes, lies on top of a slope and that the block wall was designed for flat ground, not sloped ground. This affects approximately 380 linear feet of block wall along the property lines the County shares with two neighbors. Therefore the County shall instruct the Contractor to use the City of Corona Standard Detail for a “Combo Block Wall Over 2’ Retaining Wall” Standard detail where the wall lies on the slope. The affected lengths of the block wall to be constructed according to the City of Corona Standard shall be paid under Bid Item No. 31 – Time and Materials and 380 linear feet shall be removed from Bid Item No. 24 – Construct Block Wall. This shall reduce the cost of Bid Item No. 24 by \$53,960.00.

Table 1: Quantity and Cost Difference

Bid Item	Description	Unit	Quantity Difference	Unit Cost	Total Cost Difference
9	ACB Contech Size 70L Material and Installation	SF	-9,289	\$17.10	-\$158,841.90
11	Earthwork – Backfill ACB	SF	-8,454	\$0.50	-\$4,227.00
12	Hydroseed	SF	-2,358	\$0.10	-\$235.80
13	Placement of Riprap Rocks over ACB	SF	-2,807	\$1.00	-\$2,807.00
24	Construct Block Wall	LF	-380	\$142.00	-\$53,960.00
27	Earthwork – Excavate NW Floodplain Subgrade	CY	-5,178	\$6.85	-\$35,649.30
28	Earthwork – Excavate Landfilled Material	CY	5,100	\$6.75	\$34,425.00
29	Earthwork – Place Final Cover over Landfilled Materials	CY	2,000	\$4.00	\$8,000.00
	T&M – ACB Flank Termination Trench	LS	1	\$6,100	\$6,100.00
	T&M – Dirt Haul	LD	700	\$137.69	\$96,383.00
	T&M – Place Gravel	SF	30,000	\$2.05	\$61,500.00
	T&M – Riprap Material and Installation	LS	1	\$159,000.00	\$159,000.00
Total:					\$109,687.00

Table 2: Revised Bid Item Total Quantity and Cost

Bid Item	Description	Unit	Quantity	Unit Cost	Total Cost
9	ACB Contech Size 70L Material and Installation	SF	54,917	\$17.10	\$939,080.70
11	Earthwork – Backfill ACB	SF	102,954	\$0.50	\$51,477.00
12	Hydroseed	SF	80,273	\$0.10	\$8,027.30
13	Placement of Riprap Rocks over ACB	SF	24,942	\$1.00	\$24,942.00
24	Construct Block Wall	LF	158	\$142.00	\$22,436.00
27	Earthwork – Excavate NW Floodplain Subgrade	CY	0	\$6.85	\$0.00
28	Earthwork – Excavate Landfilled Material	CY	15,860	6.75	\$107,055.00
29	Earthwork – Place Final Cover over Landfilled Materials	CY	26,782	\$4.00	\$107,128.00
	T&M – ACB Flank Termination Trench	LS	1	\$6,100	\$6,100.00
	T&M – Dirt Haul	LD	700	\$137.69	\$96,383.00
	T&M – Place Gravel	SF	30,000	\$2.05	\$61,500.00
	T&M – Riprap Material and Installation	LS	1	\$159,000.00	\$159,000.00

Table 3: Contract Cost Summary

Original Contract Cost	\$3,407,279.25
Prior Authorized Change:	
Increase:	\$0.00
Decrease:	\$0.00
Net:	\$0.00
Total Contract Cost Prior to this Change Order	\$3,407,279.25
Authorized Changes on this Change Order:	
Increase:	\$365,408.00
Decrease:	-\$255,721.00
Net:	\$109,687.00
Amount of Contract Authorized Including this Change Order	\$3,516,966.25

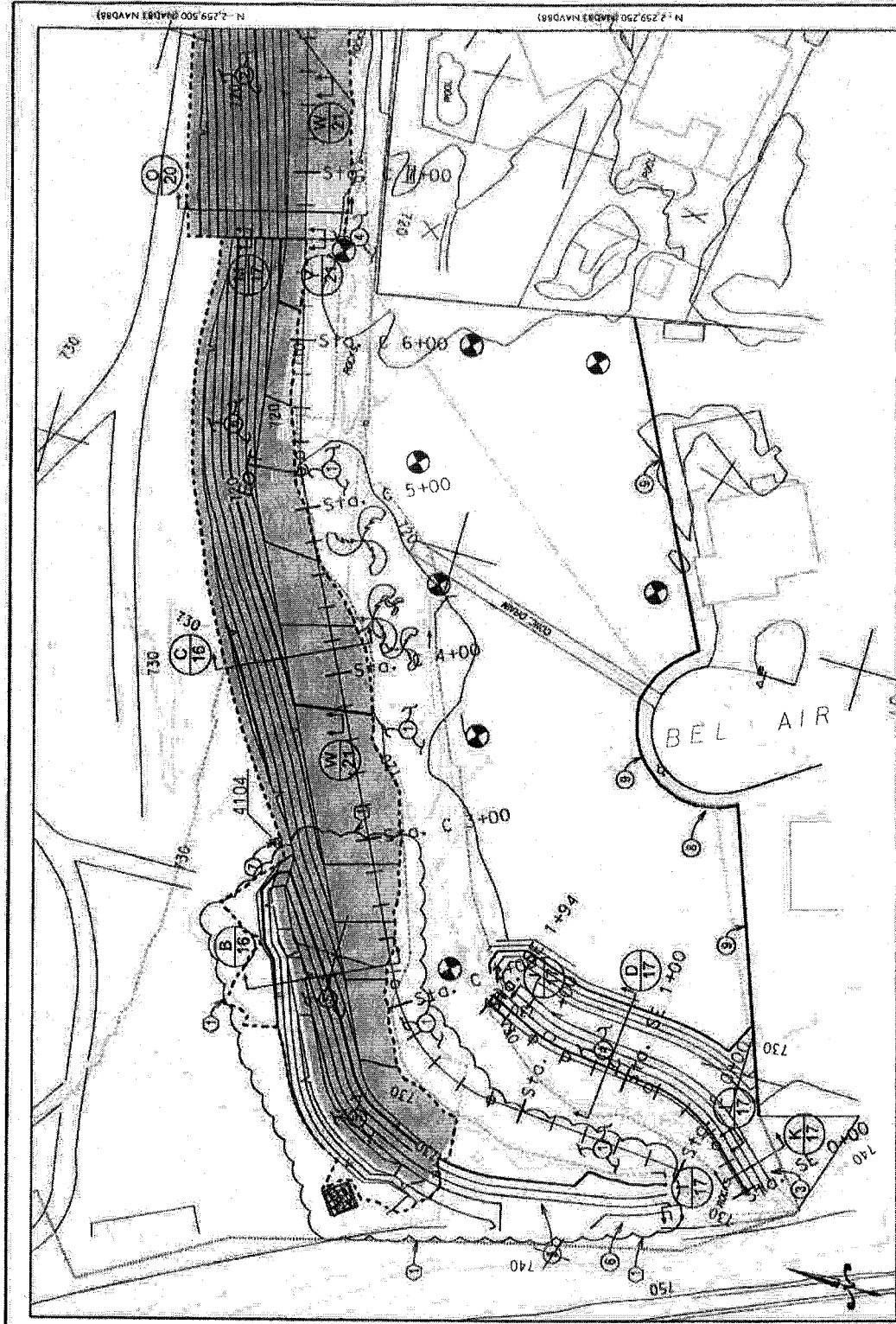
Table 4: Contract Working Day Summary

Original Contract Duration	70 Contract Working Days
Prior Authorized Time Extensions	10 Contract Working Days
Contract Change Order 1 Time Extension	10 Contract Working Days
Revised Contract Duration	90 Contract Working Days

Attachments: Revised Project Drawing Sheets 8, 11, 14, 16, 17, 20, 21

FORM APPROVED COUNTY COUNSEL
 BY: SYNTHIA M. GUNZEL 2-13-18
 DATE: _____
 SYNTHIA M. GUNZEL

Estimated Cost: Decrease - \$ _____ or Increase \$ 109,687.00	
By reason of this order the time of completion will be adjusted as follows: Add ten (10) days	
Submitted by: _____ Approved by: <u>[Signature]</u> General Manager-Chief Engineer Department of Waste Resources _____ Chairman, Board of Supervisors	Date: _____ Date: <u>2/26/18</u> Pursuant to M.O. _____ & Date: _____ Date: _____
<p>We, the undersigned Contractor, have given careful consideration to the change proposed, including its effect on other work already contracted for, and hereby agree, if this change order proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment for all costs related in any way thereto the prices shown above. Contractor expressly waives any contract right to pursue any further claim, including indirect or impact costs, related to this change order work.</p>	
Accepted: _____ By: <u>[Signature]</u>	Date: <u>2/17/18</u> Contractor: <u>H-H GENERAL CONTRACTORS 102</u> Title: <u>OFFICER</u>
<p>If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.</p>	



Construction Notes

- 1 Areas delineated for Habitat Preservation must not be disturbed. Any areas to be disturbed must be approved by the local regulatory agency. The Contractor shall be responsible for obtaining all necessary permits, fees, and approvals from the local regulatory agency.
- 2 Use Computer Aided Design (CAD) for all construction details. All construction details shall be checked by the Designer before construction.
- 3 Reconstruct riprap channel from station 0+00 to 0+30 along the SE Floodplain Alignment per detail D-17.
- 4 Start Channel 600 size 70L or approved detail riprap along the Floodplain Alignment to construct at station 0+30.
- 5 Construct riprap channel per detail C-20.
- 6 Start Channel 600 size 70L or approved detail riprap along the Floodplain Alignment to construct at station 0+30 and continue to end of alignment at station 1+00.
- 7 Protect survey markers 2104 in place.
- 8 30x45 Steel Inverted Tee.
- 9 Repave the three (3) feet of the end of the Bel Air Street. Repave the three (3) feet of the end of the Bel Air Street. Repave the three (3) feet of the end of the Bel Air Street. Repave the three (3) feet of the end of the Bel Air Street.
- 10 Construct riprap channel per detail C-20.
- 11 Place half ton riprap along the outside bank of the channel.

- Legend**
- Grading Limits (Note not to scale)
 - Edge of (Trash) Fill
 - Property Line
 - Project Limits
 - ACB Placement Limits
 - Quarter Ton Riprap Rock Placement
 - Half Ton Riprap Rock Placement
 - Sound Barrier Placement
 - Protect in Place
 - Gas Monitoring Wells
 - Protect in Place Monument Point
 - Protect in Place Ground Water Monitoring Well
 - Habitat Preservation Limits
 - Ground Contours
 - Floodplain and Channel Final Grade Design Contours

NO.	REVISION	DATE
1	Revised Grading Plan and Alignment	8/9/17
2	RMW Floodplain connects with riprap (ripap)	8/9/17
3	Remove fence and construct block wall	8/9/17
4	Riprap over graded areas of the channel	1/22/18

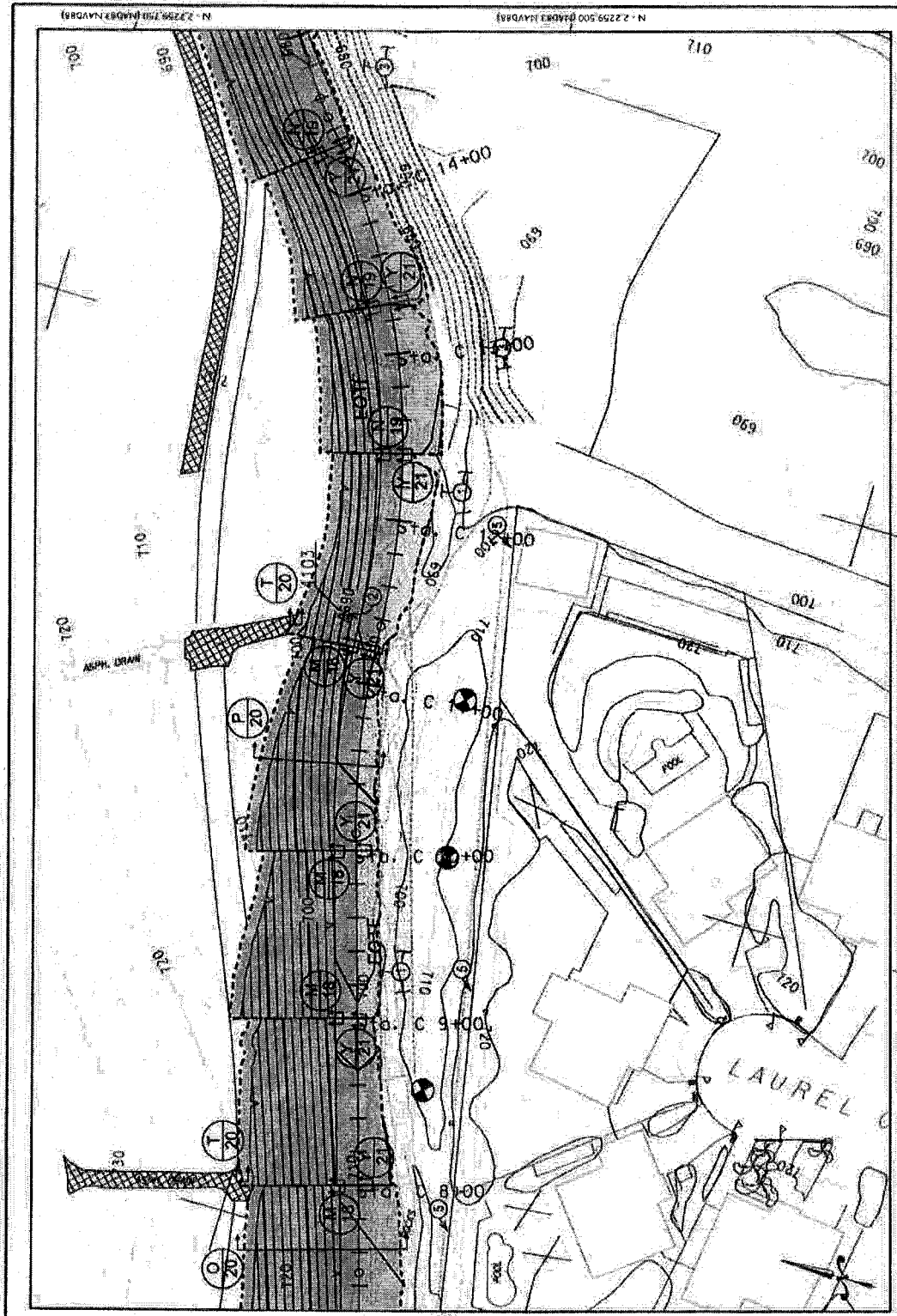
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Corona Landfill
Southeast Drainage Channel Improvement Project
Project Plan - ACB Placement

SCALE: 23.24' 1" = 30' 11.17' 1" = 200'
 DRAWN BY: T. Gibson/SE/Design/Channel
 CHECKED BY: AMC
 DATE: July 2017
 DATE OF REVISION: Oct. 2015

PROJECT: Project Drawing/Channel - Drain
 TITLE: Corona Landfill Southeast Drainage Channel Improvement Project
 SHEET: 8 OF 20

WASTE RESOURCES
 Risk Engineers, Survey, Remediation, Construction
 10000 10th Street, Suite 100, San Diego, CA 92161
 Phone: 619.444.1000 Fax: 619.444.1001
 Website: www.waste-resources.com



- Construction Notes**
- Areas delineated for Habitat Preservation need not be delineated during construction. Any areas delineated for Habitat Preservation that are disturbed by the Contractor may subject the Contractor to fines imposed by local, state, and federal regulatory agencies.
 - Survey monument 4103 shall be removed.
 - Notes: Contractors placed uncontracted engineered fill within the channel in early 2016. Updated topographic contours of the indicated channel section are shown.
 - Use the Channel sizes listed in this table or equivalent with width approved from the County, below for ACB Placement along the Channel Alignment.
 - Sound Barrier Placement
 - Construct upper channel protection per detail.

ACB SIZINGS	Downstream	Upstream	Size
6+60	8+00	50	50
8+00	9+00	50	50
9+00	10+00	50	50
10+00	11+20	70L	70L
11+20	12+40	70L	70L
12+40	13+30	50	50
13+30	14+30	50	50
14+30	17+90	70L	70L

- Legend**
- Grading Limits (Line not to scale)
 - Edge of (Trash) Fill
 - Property Line
 - Project Limits
 - Sound Barrier Placement
 - Protected In Place Gas Monitoring Wells
 - Remove Survey Monument
 - Habitat Preservation Limits
 - Project In Place Asphalt Concrete Channels
 - ACB Placement Limits
 - Channel Liner Riprap Rock Placement
 - Half Ton Riprap Rock Placement
 - Ground Contours
 - ACB Channel Slope
 - Final Grade Contours
 - Updated Topographic Ground Contours (May 2016)

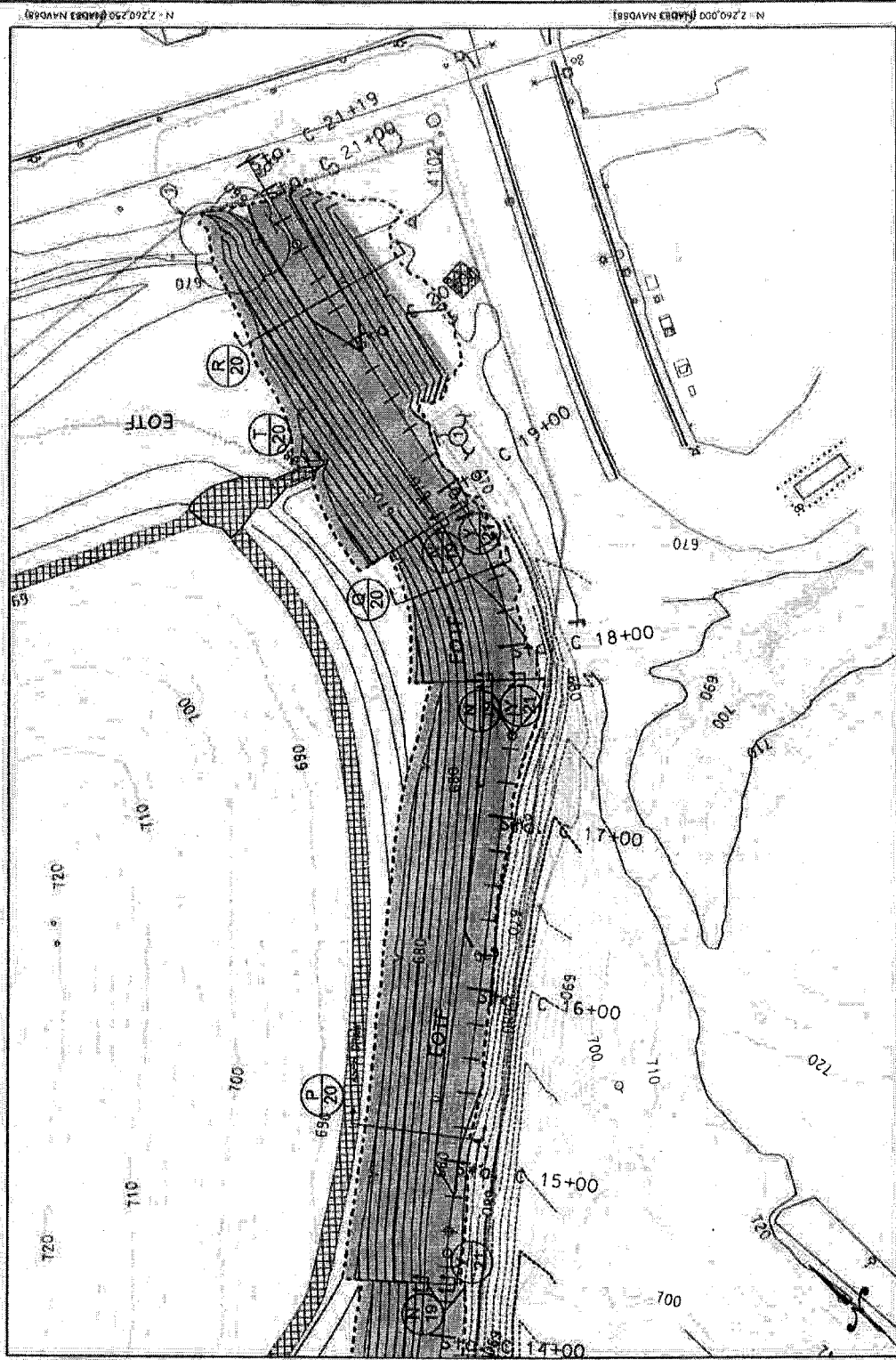
<p>INSURED BY: SNL</p> <p>DATE: 8/9/17</p>		<p>PROJECT: 2016-12-30 11-17-17-18-2</p> <p>CLIENT: 2016-12-30 11-17-17-18-2</p> <p>PROJECT: 2016-12-30 11-17-17-18-2</p> <p>PROJECT: 2016-12-30 11-17-17-18-2</p>	
<p>DATE: 1/27/18</p> <p>DATE OF TOPOGRAHY: Oct. 2015</p>		<p>PROJECT: 2016-12-30 11-17-17-18-2</p> <p>CLIENT: 2016-12-30 11-17-17-18-2</p> <p>PROJECT: 2016-12-30 11-17-17-18-2</p> <p>PROJECT: 2016-12-30 11-17-17-18-2</p>	
<p>BY: APPROVED: DATE</p> <p>SNL AMC 8/9/17</p> <p>SNL AMC 1/27/18</p>		<p>PROJECT: 2016-12-30 11-17-17-18-2</p> <p>CLIENT: 2016-12-30 11-17-17-18-2</p> <p>PROJECT: 2016-12-30 11-17-17-18-2</p> <p>PROJECT: 2016-12-30 11-17-17-18-2</p>	

E - 6,172,250 (MAGNET NAVD83)
 E - 6,172,250 (MAGNET NAVD83)

Corona Landfill
 Southeast Drainage Channel Improvement Project
 Project Plan - Final Grade and ACB Layout

WASTE SERVICES
 1100 W. 10th Street, Suite 100, Lincoln, NE 68502
 (402) 441-1100

SHEET 11 OF 20



Construction Notes

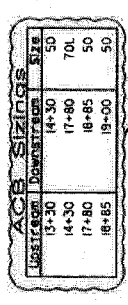
1. Areas delineated for habitat preservation must not be disturbed during construction. Any areas delineated for Habitat Preservation that are disturbed by the Contractor may require the Contractor to file a permit with local, state, and federal regulatory agencies.

2. Notes: Contractor placed unconsolidated engineered fill within the channel in early 2016. Updated topographic contours of the affected channel station are shown.

3. Use the Contour sizes listed in this table, or equivalent with written approval from the County, below for ACB Placement along the Channel.

4. Construct riprap channel protection per detail:

ACB SIZES	Downstream	Upstream
13-30	50	50
14-30	70L	70L
17-80	50	50
18-85	50	50
18-00	50	50



Legend

- Grading Limits (Line not to scale)
- Edge of (Trash) Fill
- Property Line
- Project Limits
- Protect Survey Monument In-Place
- Project In Place Asphalt Concrete Channels
- ACB Placement Limits
- Quarter-Ton Riprap Rock Placement
- Habitat Preservation Limits
- Ground Contours
- ACB Channel Slope
- Re-Design Contours
- Updated Topographic Ground Contours (May 2016)

NO.	BY	APPROVED	DATE
1	SNL	AMC	8/9/17
2	SNL	AMC	8/9/17
3	SNL	AMC	1/22/18

Corona Landfill
Southeast Drainage Channel Improvement Project
Project Plan - Final Grade

DESIGNED BY: SNL
 CHECKED BY: SNL
 DATE: July 2017
 DATE OF TOPOGRAPHY: Oct-2015

BY: APPROVED DATE

SNL AMC 8/9/17
 SNL AMC 8/9/17
 SNL AMC 1/22/18

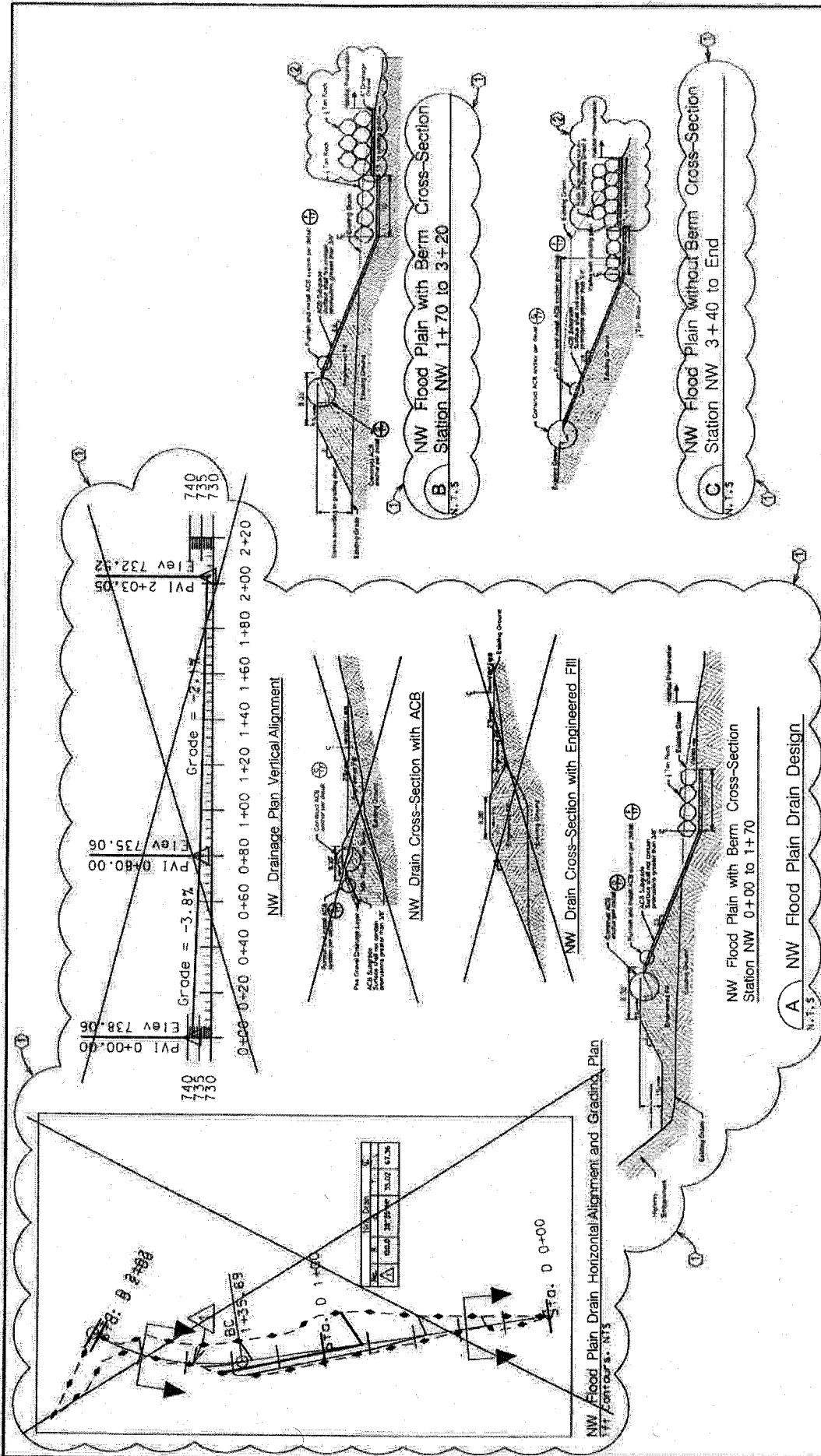
Revised Grading Plan
 Updated ACB Sizing Table
 Riprap over graded areas of the channel

WASTE RESOURCES
 100% RECYCLING
 100% REUSE

SCALE: 1" = 20'

E - 6,172,750 (NAD83 NAVD 83)
 N - 2,260,000 (NAD83 NAVD83)

DATE: 11/15/17
 DRAWN: [Name]
 PROJECT: [Name]

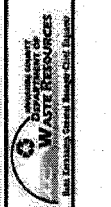


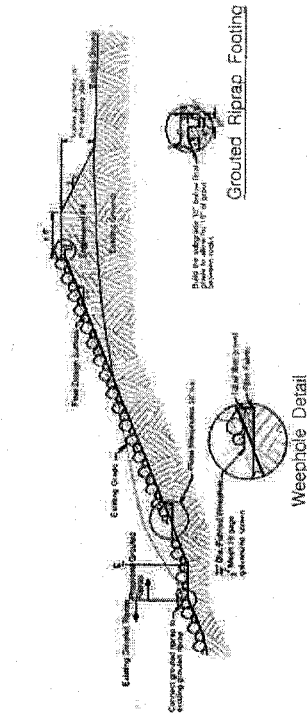
NO.	REVISIONS	BY	APPROVED	DATE
1	Revised Grading Plan and Alignment	SNL	AMC	8/9/17
2	Riprap over graded areas of the channel	SNL	AMC	1/18/18

DESIGNED BY:	SNL
DRAWN BY:	SNL
CHECKED BY:	AMC
DATE:	JULY 2017
DATE OF TOPOGRAPHY:	2015

SCALE:	NTS
PROJECT:	Corona Landfill
PROJECT NUMBER:	177/00009 S. NTS
PROJECT TITLE:	Southeast Drainage Channel Improvement Project
FILE:	177/00009 S. NTS - 00001.dwg
DATE:	8/9/17
BY:	SNL
CHECKED BY:	AMC
DATE:	JULY 2017

Corona Landfill
 Southeast Drainage Channel Improvement Project
 Details - Sheet 1





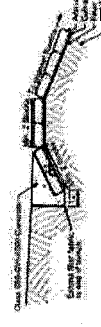
D SE Flood Plain with Berm Cross-Section
N.T.S.



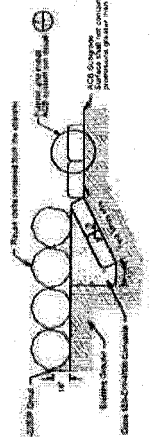
E ACB System
N.T.S.



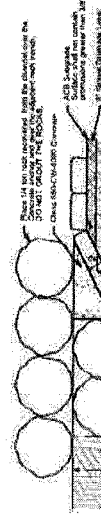
F ACB System w/Gravel
N.T.S.



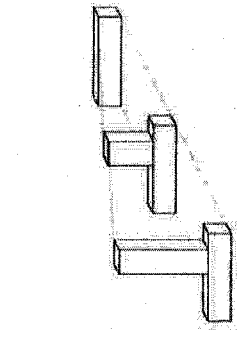
G Anchor Trench Along Hinge
N.T.S.



H Flank Termination Along NW Floodplain Upstream Limits
N.T.S.



I Flank Termination Along Grouted Riprap Edge
N.T.S.



J Flank Termination
N.T.S.

Hydraulic Drop Retaining Wall End Structure
Taper to Hinge of Slope

L Hydraulic Drop Retaining Wall
N.T.S.

K SE Channel Grouted Riprap Inlet Connection Cross-Section
N.T.S.

Weephole Detail

Grouted Riprap Footing

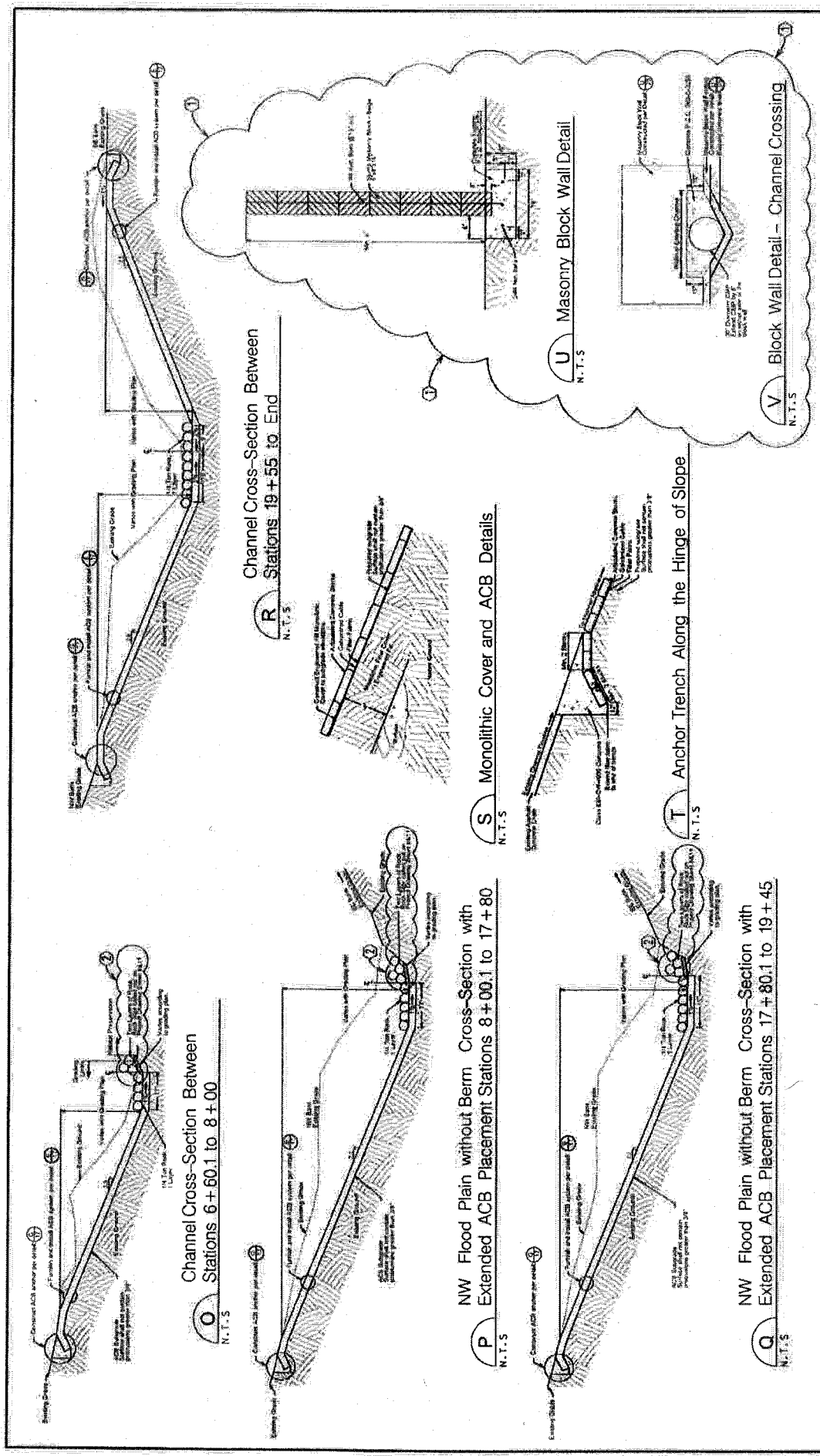
NO.	REVISIONS	BY	APPROVED	DATE
1	AW Floodplain connects to the grouted riprap apron	SNL	AMC	8/26/17
2	Change the gravel designation to 1/4"	SNL	AMC	8/27/17
3	Change of the detail to	SNL	AMC	8/27/17
4	NW Floodplain does not connect to grouted riprap apron.	SNL	AMC	1/22/18

ISSUED BY:	SNL
DRAWN BY:	SNL
CREATED BY:	AMC
DATE:	July 2017
DATE OF TOPOGRAPHY:	Oct. 2015

SCALE:	NTS
PROJECT:	Corona Landfill
FILE:	CR/Drainage-S17-Detail2.dgn
DATE:	8/26/17
PROJECT:	Southwest Drainage Channel Improvement Project
PROJECT:	Details - Sheet 2



Corona Landfill
Southwest Drainage Channel Improvement Project
Details - Sheet 2



NO.	REV.	BY	APPROVED	DATE	DESIGNED BY:	SNL
1		AMC	AMC	08/17	DESIGNED BY:	SNL
2		AMC	AMC	11/01/18	CHECKER BY:	AMC
					DATE OF REVISION:	July 2017
					DATE OF REVISION:	Oct 2015

 WASTE RESOURCES	Corona Landfill Southeast Drainage Channel Improvement Project Details - Sheet 5
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PROJECT: T/CoronaSEDrainageChannel DRAWING: Project Drawings FILE: CoronaSE-STS-Details.dgn SHEET: 09 20	SCALE: N.T.S. TITLE: Details - Sheet 5
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RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

Project: Construction of the Southeast Drainage Channel Improvement Project at the Corona Landfill
Sheet 1 of 4

CONTRACT CHANGE ORDER NO. 2

To: H&H General Contractors, Inc., Contractor, you are hereby directed to make the herein described changes from the plans and specifications or to do the following described work not included in the plans and specifications.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED AND EXECUTED BY THE GENERAL MANAGER-CHIEF ENGINEER OF THE DEPARTMENT OF WASTE RESOURCES, IF APPLICABLE SIGNATURE AUTHORITY APPROVAL IS GIVEN BY BOARD ORDER AND AS PROVIDED IN THE GENERAL PROVISIONS, OR THE BOARD OF SUPERVISORS OF RIVERSIDE COUNTY FOR THE COUNTY AND THE AUTHORIZED DELEGATE FOR THE CONTRACTOR.

Description of work to be done, estimate of quantities, and prices to be paid. Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. Change requested by Riverside County:

Block Wall Gate

The County is constructing a block wall around the property boundaries on Bel Air Street and needs to maintain secure access to the three County parcels. Therefore, the Contractor shall install a steel gate, twelve feet (12ft) wide by six feet (6ft) high. The gate shall consist of Hot Dip Galvanized Steel with a black coat finish. The County shall pay for the material and the installation of the gate at the agreed upon lump sum (LS) of \$4,596.55.

Landfill Bench Grading Work

The Contractor shall fill in a low spot along one of the landfill benches, as shown on revised Project Drawing Sheet 3 with material hauled from the Robertson's quarry off Cajalco Road. The County shall be notified a minimum of two work days in advance of when the Contractor intends to perform work to allow the County enough time to place grading stakes for the Contractor. The additional work shall require approximately 140CY of earthen material, which shall be paid for under the agreed upon price of \$110.69 per double belly dump load delivered to the site and a loading cost of \$27 per load, for a combined unit cost of \$137.69 and with superten trucks at the agreed upon unit price of \$87.76 per load and a loading cost of \$27 per load, for a combined unit cost of \$114.76. The Contractor shall use two (2) superten trucks and thirteen (13) double bottom dump trucks; therefore, the total cost of the dirt haul for the landfill bench grading work shall be \$2,019.49. The labor and equipment costs shall be paid at the agreed upon lump sum (LS) of \$2,100.00. The total cost for the landfill bench grading work shall not exceed \$4,119.49.

Additional Dirt Haul

The Contract requires approximately 8,970CY (loose) of engineered fill to complete the final cover over the refuse re-burial stockpile and the ACB backfill. Therefore, the Contractor shall haul clean earthen material from the Robertson's quarry off Cajalco Road with double belly dump trucks at the agreed upon unit price of \$110.69 per load and a loading cost of \$27 per load, for a combined unit cost of \$137.69 per load and with superten trucks at the agreed upon unit price of \$87.76 per load and a loading cost of \$27 per load, for a combined unit cost of \$114.76. The maximum number of double belly dump truck loads to be hauled on site is 551 and the maximum number of superten truck loads to be hauled on site is 90 for a total cost not to exceed of \$86,195.59.

Rock Haul

The Contractor used all the available riprap rocks pulled from the project and required an

additional 1,665.32 tons of quarter rock to be brought on site. The additional rock haul was performed under Force Account work and came to a total cost of \$78,494.48.

Block Wall Design Change

The Force Account work for the Block Wall Design Change, as described in Contract Change Order No. 1, exceeded the Bid Item No. 31 amount by \$3,775.24.

Removal of Work within the CalTrans Right-of-Way

Contract Bid Items for the work within the CalTrans right-of-way as listed below.

- Bid Item No. 6 – Earthwork – SE Floodplain Engineered Fill to Subgrade is mostly within the CalTrans right-of-way and will be removed from the contract. The total cost of Bid Item No. 6 is \$8,076.25.
- Bid Item No. 7 – Construct Grouted Riprap Inlet is within the CalTrans right-of-way and will be removed from the contract. The total cost of Bid Item No. 7 is \$16,169.00.

Table 1: Quantity and Cost Difference

Bid Item	Description	Unit	Quantity Difference	Unit Cost	Total Cost Difference
6	Earthwork – SE Floodplain Engineered Fill to Subgrade	CY	-923	\$8.75	-\$8,076.25
7	Construct Grouted Riprap Inlet	SF	-851	\$19.00	-\$16,169.00
	T&M – Dirt Haul	LD	551	\$137.69	\$75,867.19
	T&M – Dirt Haul (Supertens)	LD	90	\$114.76	\$10,328.40
	T&M – Block Wall Gate	LS	1	\$4,596.55	\$4,596.55
	T&M – Landfill Bench Grading Work	LS	1	\$4,119.49	\$4,119.49
	T&M – Rock Haul	LS	1	\$78,494.48	\$78,494.48
	T&M – Block Wall Design Change	LS	1	\$3,775.24	\$3,775.24

Total: \$152,936.10

Table 2: Revised Bid Item Total Quantity and Cost

Bid Item	Description	Unit	Quantity	Unit Cost	Total Cost
6	Earthwork – SE Floodplain Engineered Fill to Subgrade	CY	0	\$8.75	\$0.00
7	Construct Grouted Riprap Inlet	SF	0	\$19.00	\$0.00
	T&M – Dirt Haul	LD	1,251	\$137.69	\$172,250.19
	T&M – Dirt Haul (Supertens)	LD	90	\$114.76	\$10,328.40
	T&M – Block Wall Gate	LS	1	\$4,596.55	\$4,596.55
	T&M – Landfill Bench Grading Work	LS	1	\$4,119.49	\$4,119.49
	T&M – Rock Haul	LS	1	\$78,494.48	\$78,494.48
	T&M – Block Wall Design Change	LS	1	\$3,775.24	\$3,775.24

Table 3: Contract Cost Summary

Original Contract Cost	\$3,407,279.25
Prior Authorized Change:	
Increase:	\$109,687.00
Decrease:	\$0.00
Net:	\$0.00
Total Contract Cost Prior to this Change Order	\$3,516,966.25
Authorized Changes on this Change Order:	
Increase:	\$177,181.35
Decrease:	-\$24,245.25
Net:	\$152,936.10
Amount of Contract Authorized Including this Change Order	\$3,669,902.35

Table 4: Contract Working Day Summary

Original Contract Duration	70 Contract Working Days
Prior Authorized Time Extensions	20 Contract Working Days
Contract Change Order 1 Time Extension	0 Contract Working Days
Revised Contract Duration	90 Contract Working Days

Attachments: Revised Project Drawing Sheets 3 and 21

Estimated Cost: Decrease - \$ _____ or Increase \$ 152,936.10	
By reason of this order the time of completion will be adjusted as follows: Add zero (0) days	
Submitted by: _____	Date: _____
Approved by: _____ General Manager-Chief Engineer Department of Waste Resources	Date: _____ Pursuant to M.O.12.2 (MT5170) & Date 9/12/2017
_____	Date: _____
Chairman, Board of Supervisors	
We, the undersigned Contractor, have given careful consideration to the change proposed, including its effect on other work already contracted for, and hereby agree, if this change order proposal is approved, that we will provide all equipment, furnish all materials, except as may be otherwise noted above, and perform all services necessary for the work above specified, and will accept as full payment for all costs related in any way thereto the prices shown above. Contractor expressly waives any contract right to pursue any further claim, including indirect or impact costs, related to this change order work.	
Accepted: _____	Date: 3/21/18
By: <u>JUAN M OLIVEIRA</u>	Contractor: _____
	Title: <u>OFFICER</u>
If the Contractor does not sign acceptance of this order, his attention is directed to the requirements of the specifications as to the proceeding with the ordered work and filing a written protest within the time therein specified.	

FORM APPROVED COUNTY COUNSEL
 BY: SYNTHIA M. GUNZEL 3-23-18
 DATE
 SYNTHIA M. GUNZEL