

COMMITTEE MEMBERS

Trustees

Art Sperber, Chair
Carol Chaplin, Vice Chair
Shaun Carey, Member
Jenifer Rose, Member
Lisa Gianoli, Alternate
Richard Jay, Alternate

Staff Liaison

Gary Probert, Chief Planning & Construction Officer

PRESIDENT/CEO

Daren Griffin, A.A.E.

GENERAL COUNSEL

Ann Morgan, Fennemore Craig

CLERK OF THE BOARD

Lori Kolacek

***** CANCELLATION NOTICE *****

AGENDA

PLANNING & CONSTRUCTION COMMITTEE

The Reno-Tahoe Airport Authority Planning & Construction Committee Meeting scheduled for Tuesday, December 6, 2022 at 9:00 a.m. has been canceled.

For informational purposes, the following documents are attached:

1. Administrative Award of Contracts (Expenditures)
2. Monthly Project Status Report
3. Engineering Project Schedule

Administrative Report

Date: December 1, 2022
To: All Board Members
From: Daren Griffin, President/CEO
Subject: Administrative Award of Contracts (Expenditures) Pursuant to Resolution No. 557 for the Month of November 2022

BACKGROUND

At the July 14, 2022, Board of Trustees' Meeting of the Reno-Tahoe Airport Authority, the Board approved Resolution No. 557 authorizing the President/CEO to award contracts for:

- budgeted professional services when the estimated amount to perform the work is \$200,000 or less, and approve amendments to professional services agreements where the sum of the total net of amendments per professional services agreement does not to exceed \$50,000, as well as all Work Orders associated with Construction Management and Administration when any single Work Order does not exceed \$250,000; and
- budgeted goods, materials, supplies, equipment, technical services, and maintenance contracts when the estimated amount to perform the contract, including all change orders, is \$250,000 or less; and
- budgeted construction contracts when the estimated amount to perform the work is \$500,000 or less, and approve change orders to construction contracts where the sum of the total net of change orders per contract does not exceed \$250,000; and
- all construction contracts exceeding \$500,000 must be approved by the Board of Trustees along with an Owner's Contingency; additionally, if the Board of Trustees originally approved the construction contract, any construction change order exceeding the sum of the total of the contract and Owner's Contingency must also be approved by the Board.

DISCUSSION

Resolution No. 557 requires that the President/CEO provide the Board of Trustees with a monthly administrative report setting forth a list of goods, materials, supplies, equipment, technical services, maintenance contracts, construction contracts, and professional services agreements in excess of \$25,000 and approved administratively as a result of this Resolution. Further, all construction change orders, and professional services agreements amendments approved administratively as a result of this Resolution shall be included in a separate administrative report regardless of value.

November 2022 – Agreements and POs in Excess of \$25,000

Date	Name of Company	Dollar Amount	Description	Funding Source	Department / Division
10/26/22	Summit Engineering Corporation	\$27,390.00	PSA for surveying & geotechnical services was issued for the Air Cargo Way Reconstruction Project.	FY23 CIP	Engineering & Construction
11/03/22	EDAWN	\$25,000.00	A PO was issued for semi-annual membership.	FY23 O&M	President/CEO
11/03/22	Sierra Electronics	\$67,500.20	A PO was issued to outfit four (4) Police Cars with emergency lights, sirens, radios, etc. per standards.	FY22 CIP (Carry-Over)	Airport Police
11/15/22	Risk Solutions International LLC	\$54,750.00	Technical Services Contract was issued for services associated with the FY2023 Full Scale Exercise.	FY23 O&M	Operations & Public Safety
11/21/22	CDW Government LLC	\$32,188.50	A PO was issued for Mimecast Email Security annual renewal of software.	FY23 O&M	Technology & Information Systems
11/22/22	Flyers Energy LLC	\$31,032.16	A PO was issued for gasoline and diesel fuel delivery.	FY23 O&M	Airfield Maintenance
11/23/22	CDW Government LLC	\$48,742.15	A PO was issued for Endpoint Security annual renewal of software.	FY23 O&M	Technology & Information Systems

November 2022 – Change Orders, Amendments, and Work Orders

Date	Name of Company	Dollar Amount	Description	Funding Source	Department / Division
10/25/22	Automated Temperature Controls	\$12,388.00	Owner's Contingency CO#1 on Phase 5 of the Building Control Systems Upgrade Project for additional Scope of Work (attached). Contract total revised to \$233,799.00.	FY22 CIP (Carry-Over)	Facilities & Maintenance
10/31/22	Farr Construction Corporation	\$12,619.48	CO #2 for the Air Cargo Sanitary Sewage Lift Station (attached) for additional Scope of Work. Contract total revised to \$762,019.48.	FY22 CIP (Carry-Over)	Engineering & Construction
11/01/22	Granite Construction Company	(\$1.38) & (\$20.00)	Stead Taxiway Alpha and Aircraft Apron Reconstruction, Phase 3: CO #1 (for grant 46-2022) was a deductive CO for (\$1.38) for revised Scope of Work and Final Adjusted Quantities (attached). CO #1 (for grant 47-2022) was a deductive CO for (\$20.00) for revised Scope of Work and Final Adjusted Quantities (attached). Contract total revised to \$3,099,077.62	FY22 CIP (Carry-Over)	Engineering & Construction
11/01/22	Sierra Nevada Construction, Inc.	(\$39,772.50)	CO #1 is a deductive change order for the Blue Lot Reconstruction project (attached) for revisions to Scope of Work and Final Adjusted Quantities. Contract total revised to \$2,096,454.50.	FY22 CIP (Carry-Over)	Engineering & Construction
11/03/22	Sierra Nevada Construction, Inc.	\$47,030.00	Owner's Contingency CO#1 for the RTAA Airport Pavement Maintenance (2022) contract for additional Scope of Work and Final Adjusted Quantities (attached). Contract total revised to \$604,037.00.	FY22 CIP (Carry-Over)	Engineering & Construction
11/08/22	QSI, Inc. dba PAR Electric Contractors, Inc.	\$30,000.00	CO#4 (4 th and final) to Technical Services Contract for FY22/23 snow removal services for Landside areas. Original contract was informally bid/awarded. Contract total revised to \$87,302.93.	FY23 O&M	Landside
11/15/22	72 Hour LLC	\$5,150.00	CO#1 to equipment contract for 3,600 Gallon Water Truck for inflationary pressures on supply chain.	FY22 CIP (Carry-Over)	Airfield Maintenance
11/18/22	Granite Construction Company	\$269,396.00	Stead Taxiway Alpha and Aircraft Apron Reconstruction, Phase 3: CO#1 (for grant 48-2022) was awarded based on delivery of grant by the FAA for the additional Scope of Work (attached). Contract revised total to \$3,368,473.62.	FY22 CIP (Carry-Over)	Engineering & Construction

Key to abbreviations:

AIP = Airport Improvement Project
 CIP = Capital Improvement Program
 CFC = Customer Facility Charge

CO = Change Order
 NTE = Not to Exceed
 PFC = Passenger Facility Charge

PO = Purchase Order
 PSA = Professional Service Agreement

RENO-TAHOE AIRPORT AUTHORITY OWNER'S CONTINGENCY CHANGE ORDER

CCO No.

Contractor:

Project:

Solicitation #:



Summary of Change and List of Attachments:

Discovery of additional pneumatic Dual Duct Terminal Unit.
 Installation of DDC Controls, Power Wiring, Communication, Programming and Graphics.
 Installation of two additional Sump Pump Monitoring devices, Programming and Graphics.

Change in Contract Dates:

Owner's Contingency Total:	\$	<input type="text" value="12,388.00"/>	Original Duration (Days):	<input type="text" value="240"/>
Total Previously Authorized:	\$	<input type="text" value="0.00"/>	Previous Authorization:	<input type="text" value="0"/>
Total Change this CCO:	\$	<input type="text" value="12,388.00"/>	ADD/DEDUCT This Authorization:	<input type="text" value="0"/> ADD
Remaining Contingency Balance:	\$	<input type="text" value="0.00"/>	Revised Contract (Days):	<input type="text" value="240"/>

Contract Summary:

Original Contract: \$

Total Previously Authorized COs \$

Total Previously Authorized CCOs \$

Contract Sum Prior to this CCO \$

Total Change this Authorization: \$

New Contract Sum Incl this CCO: \$

Distribution to:

RTAA PURCHASING	<input checked="" type="checkbox"/>
PM	<input type="checkbox"/>
CM	<input type="checkbox"/>
ENGINEER	<input type="checkbox"/>
CONTRACTOR	<input checked="" type="checkbox"/>

Contractor Signature *P. Sellman* Date: 10/25/22

Project Mgr Signature *George Lanyon* Date: 10-25-2022

Contractor Name & Title: Peter Sellman, Emcor

RTAA Project Manager: George Lanyon, Facilities Superint.

Construction Mgr Signature *N/A* Date:

RTAA Mgr Signature *Chris Cobb* Date: 10/25/22

Const Mgr Name & Title:

RTAA Mgr Engineering & Construction: Chris Cobb

Engineer/Architect Signature *N/A* Date:

Engineer/Architect Name & Title:

Not valid until signed by ALL parties. Execution of this Contingency Change Order by both Owner and Contractor constitutes a binding agreement and serves as a full accord and satisfaction of any claim, demand, lien, stop notice or further request for compensation, past or present, known or unknown, and/or time extension arising out of or by virtue of the work described above in the Contingency Change Order. Contractor's signature indicates agreement herewith, including any adjustments in the Contract Sum or Contract Time.

Automated Temperature Controls, Inc.
8535 Double R Blvd, Reno, NV, 89511
Tel 775-826-7700 Fax 775-826-4782
info@atc-nv.com www.atc-nv.com
Nevada License #0083284 & 0073520
Calif. License #611215



CONTROLS BREAKDOWN

OCTOBER 24, 2022

Reno Tahoe Airport Authority Building Control System Upgrade Phase 5, Additional Work

Additional Work included:

- Discovery of additional pneumatic Dual-Duct Terminal Unit
- Installation of DDC Controls, Power Wiring, Communication, Programming, and Graphics
- Installation of (2) additional Sump Pump Monitoring devices, Programming, and Graphics

Labor	\$ 7,718.00
Material	\$ 4,670.00
Additional Work Total	\$ 12,388.00

Warm Regards,
Peter Sellman

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**CHANGE
ORDER****Distribution to:**

RTAA PURCHASING	<input checked="" type="checkbox"/>
PM	<input checked="" type="checkbox"/>
CM	<input checked="" type="checkbox"/>
ENGINEER	<input checked="" type="checkbox"/>
CONTRACTOR	<input checked="" type="checkbox"/>
FAA	<input type="checkbox"/>

Reno-Tahoe Airport Authority

Reno-Tahoe International Airport
Reno-Stead Airport
Box 12490
Reno, NV 89510



Project: Air Cargo Way Sanitary Sewage Lift Station
Replacement

Solicitation #: ITB #21/22-12

To: Farr Construction Corporation
Dba Resource Development Company
1050 Linda Way
Sparks, NV 89411

Change Order Number 02

Change Order Initiation Date: October 27, 2022

AIP No. N/A

Original Contract Date: April 14, 2022

You are directed to make the following changes in the Contract:

Additional fence demolition and set up of additional traffic control, install Mirafi fabric and 6" rock riprap to bottom of wet well, install additional barrel risers and grade rings for manholes beyond what was shown in the drawings. See attached Extra Work Bill Summary for details.

\$12,619.48

All other terms, conditions, and requirements not modified herein remain unchanged.

Not valid until signed by ALL parties. Execution of this Change Order by both Owner and Contractor constitutes a binding agreement and serves as a full accord and satisfaction of any claim, demand, lien, stop notice or further request for compensation, past or present, known or unknown, and/or time extension arising out of or by virtue of the work described above in the Change Order. Contractor's signature indicates agreement herewith, including any adjustments in the Contract Sum or Contract Time.

The Original Contract Sum was.....	\$749,400.00
Net Changes by Previously Authorized Change Orders	\$0.00
Net Changes by Previously Authorized Contingency Change Orders	\$0.00
The Revised Contract Sum Prior to this Change Order was	\$749,400.00
The Contract Sum will be increased by this Change Order.	\$12,619.48
The new Contract Sum, including this Change Order will be	\$762,019.48

The Contract Completion date prior to this Change Order was November 17, 2022.

The Contract Time will be **increased** by Three (3) calendar days.

The Contract completion date, as of the date of this Change Order, therefore is November 20, 2022.

Authorized By:**Atkins North America**

Construction Manager
10509 Professional Cir. Ste 103
Reno, NV 89521

By: Kara Bymers

10/27/2022

Date

Shaw Engineering

Engineer/Architect
20 Vine Street,
Reno, Nevada 89503

Marc N. Belanger
Digitally signed by Marc N. Belanger
Date: 2022.10.27 16:19:34 -0700

By: Mark Belanger

10/27/2022

Date

RDC

Contractor
1050 Linda Way
Sparks, NV 89431

Nick Christensen
Digitally signed by Nick Christensen
DN: cn=N, o=Shaw Engineering/Resource Development Company, c=US, email=nick.christensen@shawengineering.com, Date: 2022.10.27 15:56:35-0700

By: Nick Christensen

10/27/2022

Date

Reno-Tahoe Airport Authority

Owner
P.O. Box 12490
Reno, NV 89510

By: Chris Cobb

10/31/2022

Date

EXTRA WORK BILL SUMMARY

CHANGE ORDER #:
CONTRACTOR JOB #: 22-007-A

DATE	WORK DESCRIPTION	AMOUNT
	T&M work for the 150 rip rap and mirafi fabric, extra traffic control requirements, and barrel risers	\$ 12,619.48
	RDC is requesting 3 additional days to be added to the contract.	
TOTAL =		\$ 12,619.48

FORCE ACCOUNT COST BACKUP

RDC Job number 22-011-A

PCO# 1

DATE PERFORMED: Monday, October 3, 2022

WORK DESCRIPTION: Demo fence and set up additional Traffic control beyond what was shown in the drawings. Install mirafi fabric and 6" minus rock to bottom of wet well, added barrel risers for

LABOR CHARGES

NAME	CRAFT	ST HRS	ST RATE	OT HRS	OT RATE	FRINGE RATE	EXT.	TOTAL
<u>TRAFFIC CONTROL & FENCE DEMO</u>								
LABOR CHARGES	Laborer	28.00	\$ 44.23				\$ -	\$ 1,238.44
OPERATOR	operator	20.00	\$ 66.34				\$ -	\$ 1,326.80
							\$ -	\$ -
<u>MIRAFI and 150 RIP RAP</u>								
LABOR CHARGES	Laborer	4.00	\$ 44.23				\$ -	\$ 176.92
OPERATOR	operator	2.00	\$ 66.34				\$ -	\$ 132.68
							\$ -	\$ -
<u>INSTALLATION OF BARREL RISERS & GRADE RINGS</u>								
LABOR CHARGES	Laborer	4.00	\$ 44.23				\$ -	\$ 176.92
OPERATOR	operator	2.00	\$ 66.34				\$ -	\$ 132.68
							\$ -	\$ -
LABOR TOTALS:						\$ 2,565.24		\$ 3,184.44

EQUIPMENT CHARGES

EQUIP. #	DESCRIPTION	HOURS	RATE	TOTAL
31111	John Deer, 310SE	8.00	\$ 43.10	\$ 344.80
42166	Ford F-350	8.00	\$ 10.00	\$ 80.00
32109	Front End Loader	8.00	\$ 61.20	\$ 489.60
34149	500 gal water trailer	8.00	\$ 54.70	\$ 437.60
35112	Flat bed utility trailer	8.00	\$ 20.00	\$ 160.00
42145	Transport Truck	8.00	\$ 85.00	\$ 680.00
				\$ -
EQUIPMENT TOTALS:				\$ 2,192.00

MATERIALS

INVOICE #	DESCRIPTION	QTY	UNITS	PRICE	TOTAL
	Asphalt-	8.00	tons	\$ 129.00	\$ 1,032.00
	Class 2 AB	140.00	tons	\$ 7.00	\$ 980.00
	NDOT Class 150 rip rap	17.39	tons	\$ 18.50	\$ 321.72
	Mirafi fabric	1.00	roll	\$ 1,319.03	\$ 1,319.03
	Additional fence rental (2 months)	350.00	lf	\$ 3.00	\$ 1,050.00
	Barrel Risers- Jensen Precast	2.00	ea	\$ 92.00	\$ 184.00
	grade ring	1.00	ea	\$ 75.00	\$ 75.00
	joint sealant	16.00	ea	\$ 13.00	\$ 208.00
					\$ -
TAX %:				8.265%	
TAX:					\$ 427.28
MATERIALS TOTALS:					\$ 5,597.02

SUBCONTRACTOR

INVOICE #	DESCRIPTION	QTY	UNITS	PRICE	TOTAL
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
TAX %:				0.000%	
TAX:					\$ -
SUBCONTRACTOR TOTALS:					\$ -

SUMMARY

LABOR TOTAL (Less Fringes) \$ 2,565.24	EQUIPMENT COST \$ 2,192.00
SURCHARGE %	EQUIPMENT MARKUP % 15.00%
SURCHARGE COST \$ -	EQUIPMENT MARKUP \$ 328.80
MARKUP % 15.00%	
MARKUP AMOUNT \$ 477.67	
	TOTAL EQUIPMENT COSTS: \$ 2,520.80
TOTAL LABOR COSTS: \$ 3,662.11	
SUBCONTRACTOR COST \$ -	MATERIAL COST \$ 5,597.02
MARKUP % 15.00%	MATERIAL MARKUP % 15.00%
SUBCONTRACTOR MARKUP \$ -	MATERIAL MARKUP \$ 839.55
	TOTAL MATERIAL COSTS: \$ 6,436.58
TOTAL SUBCONTRACTOR COSTS: \$ -	
COST FOR EXTRA WORK: \$ 12,619.48	
PRIME MARKUP ON SUBCONTRACTORS (10%) \$ -	
TOTAL COST FOR EXTRA WORK: \$ 12,619.48	

Daily Time and Materials (T&M) Report

Date: 10/3/2022
Foreman: Ramon Serafin (SERA050)
Resource Development Co.

22-007-A (RTAA Air Cargo Way)		
070-02-10-340 - DEMO-Fence		Quantity: 200 LS
Labor		Hours
LABR01 - Laborer-01		12
OPER10 - Operator-10		4
Total Labor Hours: 16		
Equipment		Hours
31111 - John Deere, 310SE, Turbo 4X4 w		4
42166 - Ford F-350		4
Total Equipment Hours: 8		
020-01-60-010 - TC-Traffic Control		Quantity: 0.5 EA
Labor		Hours
LABR01 - Laborer-01		16
OPER10 - Operator-10		16
Total Labor Hours: 32		
Equipment		Hours
31111 - John Deere, 310SE, Turbo 4X4 w		4
32109 - Front End Loader		8
34149 - 500 GAL. Water Trailer		8
35112 - Flatbed-Utility 40'		8

42145 - Transport Truck	8
42166 - Ford F-350	4

Total Equipment Hours: 40

Materials	Qty Installed
2.32.05 - Asphalt	10 TON
2.02.00.00 - Class 2	140 TON
4.060 - Fence Sub	350 LS



INVOICE

PLEASE MAIL REMITTANCE TO:

Granite Construction Company
PO Box 742478
Los Angeles, CA 90074-2478

INVOICE DATE: 9/30/2022

Bill To:

RESOURCE DEVELOPMENT
1050 LINDA WAY
SPARKS NV 89431-6117
AP@RESOURCEDEVELOPMENTCO.COM

ORDER NO.	CUSTOMER NO.	PLANT	INVOICE NO.
282867	122571	SPARKS AC 216815 100184	2339834
ORIGINAL INVOICE #		JOB ADDRESS	DATE OF SALE
		AIR CARGO RENO NV 89501	9/30/2022
			PO #
			22007

A LATE FEE OF 1.5% PER MONTH (18% PER ANNUM) WILL BE APPLIED ON PAST DUE BALANCES

A CREDIT CARD FEE OF 2.3% WILL BE APPLIED TO ALL CREDIT CARD PAYMENTS MADE MORE THAN 10 BUSINESS DAYS AFTER THE INVOICE DATE ABOVE

TICKET NUMBER	TICKET DATE	MATERIAL DESCRIPTION	QTY	UNIT PRICE	EXTENDED AMOUNT	FOB	TAX RATE AREA
9093146	9/30/2022	1013 - 1/2"CMASC800	11.210	TN	129.000	\$1,446.09	P V290310110
TOTAL:		1013 - 1/2"CMASC800	11.2100	TN		\$1,446.09	
		13959 - ENERGY SURCHARGE AC	11.2100	TN		\$34.86	

TERMS: A/R Net 30 Days

The prevailing party shall be entitled to reasonable attorney's fees and costs in any action to collect the amounts due hereunder.

Note: if haul charges are indicated separately above, then the title passage of materials is at the plant, with delivery provided for customers.

For any question regarding this billing, please call (831)768-4002.

TOTAL FREIGHT	.00
MATERIAL	1,446.09
FEES	34.86
SALES TAX	122.40

FOB: P=PLANT J=JOB

FOR OFFICIAL USE ONLY

Thank You for your business.

WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. MSDS SHEETS AVAILABLE AT WWW.GRANITECONSTRUCTION.COM/MSDS OR BY CONTACTING YOUR LOCAL OFFICE.

INVOICE TOTAL

\$1,603.35

WHITE CAP®

White Cap, L.P.
PO Box 4944, Orlando, FL 32802-4944

BRANCH ADDRESS
040 - RENO
(775) 353-3333
1830 EAST LINCOLN WAY
SPARKS NV 89434
WASHOE

INVOICE

INVOICE NUMBER
50019742719
INVOICE DATE
09/23/2022
CUSTOMER PO NUMBER
22007

ENROLLMENT TOKEN: HQD BQW WPW

SOLD TO: 130415000

TERRITORY:

SHIP TO: 130415999

PLEASE REMIT PAYMENT TO:

White Cap, L.P.
P.O. BOX 6040
CYPRESS, CA 90630-0040

FARR CONSTRUCTION CORP DBA RESOURCE DEVEL CO
1050 LINDA WAY
SPARKS NV 89431

YARD/FARR CON COR DBA RESO DEV-130415999
1050 LINDA WAY
SPARKS NV 89431

ORDER DATE		ORDER NO.	ORDERED BY	ACCOUNT MANAGER			TAKEN BY		
09/22/2022		49096813	NEIL DONAHUE	STONE, ROWLAND R			BROOKS, MICHAEL J		
BRANCH		ACCT JOB NO.	TERMS	SHIP VIA / ROUTING				CUSTOMER JOB NO.	
040		130415999	2% 15TH NET 30TH	0. WILL CALL					
LINE	PART NUMBER	DESCRIPTION		QTY ORD	UNIT PRICE	QTY BKO	QTY SHP	EXTENDED PRICE	TAX AMT
0	HDRDESC	***** DELIVERY TAG#: 22000463 *****		1	0	0	1	0.00	
2	157R180NC15	MIRAFI 180NC (15' X 300') 500 SY/ROLL		1	1,319.03 RL	0	1	1,319.03	109.02
<div>The White Cap Family of Brands includes All-Tex Waterproofing Solutions, Harmac, Kenseal, Marvel Building & Masonry Supply, MASONPRO, and Williams Equipment & Supply. Learn more at About.WhiteCap.com</div> <div>THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED OR OTHERWISE DISPOSED OF TO ANY OTHER COUNTRY OR ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.</div>									
For questions regarding this invoice please call 1-866-857-0295.						TOTAL GROSS		1,319.03	
NO REFUNDS OR EXCHANGES ON NON STOCK MERCHANDISE						TOTAL TAX		109.02	
Visit https://www.whitecap.com/terms/terms-conditions-of-sale-terms to view complete terms and conditions.						TOTAL SHIPPING AND HANDLING		0.00	
RECEIVED BY: MICHAEL						TOTAL INVOICE		1,428.05	
SIGNATURE COPY ON FILE									



Q&D Construction LLC
PO Box 10865
Reno NV 89510
(775) 786-2677

INVOICE

Invoice #:	18376
Date:	09/30/22
Customer No:	2351

Sold To: Resource Development Company
1050 Linda Way
Sparks, NV 89431 US

Delivered To:

Sale Date	Material	Ticket #	Units	UM	Unit Price	Matl Total	Haul Total	Tax	Total
Job# 22007 / PO# 22007									
09/23/22	NDOT Class 150 Rip Rap	30095939	17.39	TON	18.5000 E	321.72		26.59	348.31
			17.39	TON		321.72		26.59	348.31

Payment Type: On Account

35 Pay Terms Net 30 days

Total: 348.31



625 Bergin Way
Sparks NV 89431
(800) 648-1134

Sales Rep
Zachary Piekarski

Payment Terms
Net 30 Days

Invoice -

Invoice Date
10/11/22
Order Date
10/10/22
Order Number
K134603
Customer PO
101628

CD99172241

Shipment ID

Ship Via
Will Call
Terms of Delivery
Shipping Point
Customer ID
100050

Bill To:
Resource Development Company
1050 Linda Way
Sparks NV 89431

Ship To:
Will Call
625 Bergin Way
Sparks NV 89431

Qty	UOM	Part No Description	Unit Price	Net Amount USD
2	PCS	100001617 MANHOLE 4858-12 BARREL Shipment(s): 220180	92.00	184.00
1	PCS	100005512 GRADE RING 2434X06 MANHOLE Shipment(s): 220180	75.00	75.00
16	PCS	100013648 JOINT SEALANT CONSEAL 1" DIA. X 14.5' LONG CS-102 Shipment(s): 220184	13.00	208.00
Sub Total				467.00
Total Tax				38.60
Invoice Amount				505.60

Want to receive your Invoices via Email?
Let us know at AR@jensenprecast.com.

Cust Note:

REMIT Address
9895 Double R Blvd.
Reno, NV 89521

**CHANGE
ORDER****Distribution to:**

RTAA PURCHASING	<input checked="" type="checkbox"/>
PM	<input checked="" type="checkbox"/>
CM	<input checked="" type="checkbox"/>
ENGINEER	<input checked="" type="checkbox"/>
CONTRACTOR	<input checked="" type="checkbox"/>
FAA	<input checked="" type="checkbox"/>

Reno-Tahoe Airport Authority

Reno-Tahoe International Airport
Reno-Stead Airport
Box 12490
Reno, NV 89510



Project: Taxiway Alpha and Aircraft Apron Reconstruction
Project-Phase 3

Solicitation #: ITB #21/22-17

Change Order Number 01 (Grant 46-2022)

Change Order Initiation Date: October 24, 2022

AIP No. 3-32-0018-46-2022

Original Contract Date: 4/14/2022

To: Granite Construction Company
P.O. Box 2087
Sparks, NV 89431

You are directed to make the following changes in the Contract:

**Base Bid Schedule 1 – Subgrade Preparation in lieu of P-156-1 Cement
Treated Subgrade (5% Cement, 10 Inches Thick)** (See Exhibit A for details) **\$5,676.62**

Base Bid Schedule 1 – Final Adjusted Quantities (See Exhibit B for details) **(\$118,206.00)**

**Award modified Bid Alternate No. 1 to utilize stabilization method of P-
207 Pulverize 14" and Cement Treat 10" at 4% in lieu of P-154-1
Uncrushed Aggregate Subbase Course (4 Inches Thick), P-156-1
Cement Treated Subgrade (5% Cement, 10 Inches Thick), P-209-1
Crushed Aggregate Base Course (6 Inches Thick), and P-304S-1
Cement-Treated Base Course (6 Inches Thick)** (See Exhibit C for details) **\$112,528.00**

Total (\$1.38)

All other terms, conditions, and requirements not modified herein remain unchanged.

Not valid until signed by ALL parties. Execution of this Change Order by both Owner and Contractor constitutes a binding agreement and serves as a full accord and satisfaction of any claim, demand, lien, stop notice or further request for compensation, past or present, known or unknown, and/or time extension arising out of or by virtue of the work described above in the Change Order. Contractor's signature indicates agreement herewith, including any adjustments in the Contract Sum or Contract Time.

The Original Contract Sum was..... \$3,099,099.00

Net Changes by Previously Authorized Change Orders \$0.00

Net Changes by Previously Authorized Contingency Change Orders \$0.00

The Revised Contract Sum Prior to this Change Order was \$3,099,099.00

The Contract Sum will be **decreased** by this Change Order. (\$1.38)

The new Contract Sum, including this Change Order will be \$3,099,097.62

The Contract Completion date prior to this Change Order was November 11, 2022.

The Contract Time will not change due to this change order.

Authorized By:**Atkins North America**

Construction Manager
10509 Professional Cir. Ste 103
Reno, NV 89521

By: Kara Bymers

10/24/2022

Date

Kimley-Horn

Engineer/Architect
7900 Rancharra Pky, Ste 100,
Reno, Nevada 89511

By: Heath Hildebrandt

10/31/2022

Date

Granite

Contractor
P.O. Box 2087
Sparks, NV 89431

By: Ryan Ho

10/31/22

Date

Reno-Tahoe Airport Authority

Owner
P.O. Box 12490
Reno, NV 89510

By: Chris Cobb

11/01/2022

Date

Exhibit A



EXTRA WORK BILL SUMMARY

WORK ORDER #: PCO #1

GRANITE JOB #: 1154061

WORK PERFORMED: Finish P152 Subgrade

WORK LOCATION: Stead Taxiway Alpha Phase 3

DATE	WORK DESCRIPTION	LOCATION	AMOUNT
8/2/2022	P-152-7 Finish and certify subgrade	Base Schedule 1	\$ 5,676.62
8/10/2022	Delete P-156 from Base Bid Schedule 1	Base Schedule 1	\$ (71,400.00)
TOTAL =			\$ (65,723.38)

0

FORCE ACCOUNT BILLING

GRANITE JOB #: 1154061

DATE PERFORMED: 8/2/2022
WORK DESCRIPTION: FINISH AND CERTIFY P152
LOCATION: STEAD APRON PHASE 3



LABOR CHARGES								
NAME	CRAFT	ST HRS	ST RATE	OT HRS	OT RATE	FRINGE RATE	FRINGE EXT.	TOTAL
Brian Thrailkill	Operating Engineer Foreman	6.00	\$ 47.66		\$ 71.49	\$ 37.32	\$ 223.92	\$ 509.88
Austin Marcum	Operator	5.00	\$ 38.92		\$ 58.38	\$ 37.32	\$ 186.60	\$ 381.20
Isaac Rodriguez	Laborer 1	5.00	\$ 28.55		\$ 42.83	\$ 20.35	\$ 101.75	\$ 244.50
Anthony Thrailkill	App Laborer 4	5.00	\$ 25.70		\$ 38.55	\$ 20.35	\$ 101.75	\$ 230.25
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
LABOR TOTALS:						\$ 751.81		\$ 1,365.83

EQUIPMENT CHARGES							
EQUIP. #	DESCRIPTION		HOURS	RATE			TOTAL
4.20664	Ford 1.25TN Utility Truck		2.00	\$ 52.70		\$	105.40
12.365	CAT 14H Motor Grader		6.00	\$ 148.26		\$	889.56
10.459	CAT CS583E Compactor		5.00	\$ 111.63		\$	558.15
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
EQUIPMENT TOTALS:							\$ 1,553.11

MATERIALS						
INVOICE #	DESCRIPTION	QTY	UNITS	PRICE		TOTAL
		-		\$ -		\$ -
		-		\$ -		\$ -
		-		\$ -		\$ -
		-		\$ -		\$ -
		-		\$ -		\$ -
		-		\$ -		\$ -
TAX %:						8.270%
TAX:					\$	-
MATERIALS TOTALS:					\$	-

SUBCONTRACTS						
INVOICE #	DESCRIPTION	QTY	UNITS	PRICE		TOTAL
	MAPCA - Certify P152	1.00	LS	\$ 1,500.00		\$ 1,500.00
	Great Basin Water Supply	4.00	HR	\$ 115.00		\$ 460.00
		-		\$ -		\$ -
		-		\$ -		\$ -
		-		\$ -		\$ -
		-		\$ -		\$ -
TAX %:						-
TAX:					\$	-
SUBCONTRACT TOTALS:					\$	1,960.00

SUMMARY					
LABOR TOTAL \$		751.81	EQUIPMENT COST \$		1,553.11
LABOR SURCHARGE %		18.95%	EQUIPMENT MARKUP %		15.00%
SURCHARGE COST \$		142.47	EQUIPMENT MARKUP \$		232.97
MARKUP %		15.00%			
MARKUP AMOUNT \$		226.24	TOTAL EQUIPMENT COSTS: \$		1,786.08
TOTAL LABOR COSTS: \$		1,734.54	MATERIAL COST \$		-
			MATERIAL MARKUP %		15.00%
			MATERIAL MARKUP \$		-
			TOTAL MATERIAL COSTS: \$		-
			SUBCONTRACT COST \$		1,960.00
			SUB MARKUP %		10.00%
			SUB MARKUP \$		196.00
			TOTAL SUBCONTRACT COSTS: \$		2,156.00
TOTAL COST FOR EXTRA WORK: \$ 5,676.62					

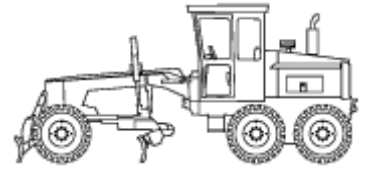
Rental Rate Blue Book®

August 15, 2022

Caterpillar 14H (disc. 2007)

Articulated Frame Graders

Size Class:
200 - 249 HP
Weight:
41465 lbs


Configuration for 14H (disc. 2007)

Moldboard Size **14.0 ft** Operator Protection **EROPS**
Power Mode **Diesel**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$14,495.00	USD \$4,060.00	USD \$1,015.00	USD \$155.00	USD \$90.61	USD \$172.97
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2007: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (70%)	(USD \$4,348.50)	(USD \$1,218.00)	(USD \$304.50)	(USD \$46.50)		
Hourly Operating Cost (100%)					-	
Total:	USD \$10,146.50	USD \$2,842.00	USD \$710.50	USD \$108.50	USD \$90.61	USD \$148.26

Non-Active Use Rates

	Hourly
Standby Rate	USD \$31.71
Idling Rate	USD \$97.80

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	35%	USD \$5,073.25/mo
Overhaul (ownership)	45%	USD \$6,522.75/mo
CFC (ownership)	6%	USD \$869.70/mo
Indirect (ownership)	14%	USD \$2,029.30/mo
Fuel (operating) @ USD 5.70	44%	USD \$40.15/hr

Revised Date: 3rd quarter 2022

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

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(jeffrey.lighthall@gcinc.com)

Rental Rate Blue Book®

August 15, 2022

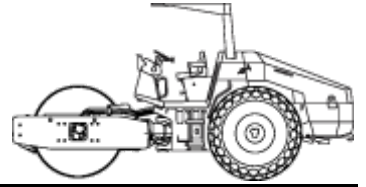
Caterpillar CS-583E (disc. 2008)

Single Drum Vibratory Compactors

Size Class:

15.0 MTons & Over

Weight:

34023 lbs

Configuration for CS-583E (disc. 2008)

Drum Type
Power Mode

**Smooth
Diesel**

Drum Width

84.0 in
Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$8,745.00	USD \$2,450.00	USD \$615.00	USD \$92.00	USD \$76.85	USD \$126.54
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2008: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (70%)	(USD \$2,623.50)	(USD \$735.00)	(USD \$184.50)	(USD \$27.60)		
Hourly Operating Cost (100%)					-	
Total:	USD \$6,121.50	USD \$1,715.00	USD \$430.50	USD \$64.40	USD \$76.85	USD \$111.63

Non-Active Use Rates

Standby Rate

Hourly

USD \$24.00

Idling Rate

USD \$53.58

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	43%	USD \$3,760.35/mo
Overhaul (ownership)	31%	USD \$2,710.95/mo
CFC (ownership)	8%	USD \$699.60/mo
Indirect (ownership)	18%	USD \$1,574.10/mo
Fuel (operating) @ USD 5.70	24%	USD \$18.80/hr

Revised Date: 3rd quarter 2022

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(jeffrey.lighthall@gcinc.com)

Rental Rate Blue Book®

August 15, 2022

Ford F450SD XLT 4x4 Diesel (disc. 2018)

Crew Cab Pickups

Size Class:

3

Weight:

N/A

Configuration for F450SD XLT 4x4 Diesel (disc. 2018)

Power Mode
Axle Configuration
Gross Vehicle Weight

Diesel
4x4
14000 Pounds

Wheelbase
Complete / Incomplete

176 Inches
C
Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$3,635.00	USD \$1,020.00	USD \$255.00	USD \$38.00	USD \$38.24	USD \$58.89
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2018: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (70%)	(USD \$1,090.50)	(USD \$306.00)	(USD \$76.50)	(USD \$11.40)		
Hourly Operating Cost (100%)					-	
Total:	USD \$2,544.50	USD \$714.00	USD \$178.50	USD \$26.60	USD \$38.24	USD \$52.70

Non-Active Use Rates

Standby Rate
Idling Rate

Hourly

USD \$9.25
USD \$41.15

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	38%	USD \$1,381.30/mo
Overhaul (ownership)	36%	USD \$1,308.60/mo
CFC (ownership)	4%	USD \$145.40/mo
Indirect (ownership)	22%	USD \$799.70/mo
Fuel (operating) @ USD 5.70	70%	USD \$26.69/hr

Revised Date: 3rd quarter 2022

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Survey Services Change Order

Date: 8/11/2022

Project Name: Reno-Stead Taxiway A Phase 3

Project Number:1332-03

Client: Granite Construction

Requested By: Ryan Ho

Completion Date Requested: 8/4/2022

Description of tasks: Base Bid, Schedule 1 – 152 Certification

Fee: 1,500

Signed:_____

Name:_____

Title:_____

The scope of services included in this change order is limited to the specific scope outlined above only. Any exclusions listed are for clarity only and do not represent a complete list of exclusions to the scope. Any additional scope proposed or performed other than those listed in this proposal shall be provided as Additional Service.

Exhibit B

TXY Alpha and Aircraft Apron Reconstruction Project-Phase 3 Final Adjusted Quantities Base Bid Schedule 1

Item #	Description		Quantity				Cost				
		Unit	Estimated	Measured	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Measured)	\$ Over/Under	Comments
C-105-1	Mobilization	LS	1	1.00	0.00	100.00%	\$46,084.00	\$ 46,084.00	\$ 46,084.00	\$ -	
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	4,000	4,000.00	0.00	100.00%	\$4.20	\$ 16,800.00	\$ 16,800.00	\$ -	
P-102-1	Airport Safety and Security	MO	2	1.50	0.00	100.00%	\$38,000.00	\$ 57,000.00	\$ 57,000.00	\$ -	
P-102-2	Temporary Asphalt Pavement Transition (Contingent)	LS	1	1.00	0.00	100.00%	\$33,000.00	\$ 33,000.00	\$ 33,000.00	\$ -	
P-152-1	Unclassified Excavation	CY	850	850.00	0.00	100.00%	\$8.00	\$ 6,800.00	\$ 6,800.00	\$ -	
P-152-2	Embankment In Place	CY	100	100.00	0.00	100.00%	\$16.00	\$ 1,600.00	\$ 1,600.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	85	-	(85.00)	0.00%	\$76.00	\$ 6,460.00	\$ -	\$ (6,460.00)	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	85	-	(85.00)	0.00%	\$310.00	\$ 26,350.00	\$ -	\$ (26,350.00)	
P-152-5	Remove, Stockpile, and Re-Install Existing Asphalt Millings (3 Inches Min. Thick)	SY	875	875.00	0.00	100.00%	\$5.00	\$ 4,375.00	\$ 4,375.00	\$ -	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	5,200	3,760.00	(1440.00)	72.31%	\$0.40	\$ 2,080.00	\$ 1,504.00	\$ (576.00)	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	4,150	4,150.00	0.00	100.00%	\$8.00	\$ 33,200.00	\$ 33,200.00	\$ -	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	4,200	-	(4200.00)	0.00%	\$17.00	\$ 71,400.00	\$ -	\$ (71,400.00)	
P-208-1	Aggregate Base Course (6 Inches Thick)	SY	50	-	(50.00)	0.00%	\$50.00	\$ 2,500.00	\$ -	\$ (2,500.00)	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	4,100	4,100.00	0.00	100.00%	\$15.00	\$ 61,500.00	\$ 61,500.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	4,100	4,100.00	0.00	100.00%	\$25.00	\$ 102,500.00	\$ 102,500.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	4,000	4,000.00	0.00	100.00%	\$40.00	\$ 160,000.00	\$ 160,000.00	\$ -	
P-401-2	Hot Mix Asphalt (HMA) Pavement (Variable Depth Transition)	SY	450	295.00	(155.00)	65.56%	\$64.00	\$ 28,800.00	\$ 18,880.00	\$ (9,920.00)	
P-620-1	Permanent Reflective Airfield Pavement Markings	SF	500	250.00	(250.00)	50.00%	\$4.00	\$ 2,000.00	\$ 1,000.00	\$ (1,000.00)	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	3,000	3,000.00	0.00	100.00%	\$1.75	\$ 5,250.00	\$ 5,250.00	\$ -	
L-100-1	Airfield Electrical Demolition	LS	1	1.00	0.00	100.00%	\$32,000.00	\$ 32,000.00	\$ 32,000.00	\$ -	
	Total							\$ 699,699.00	\$ 581,493.00	\$ (118,206.00)	Funded Utilizing Grant 3-32-0018-46-2022

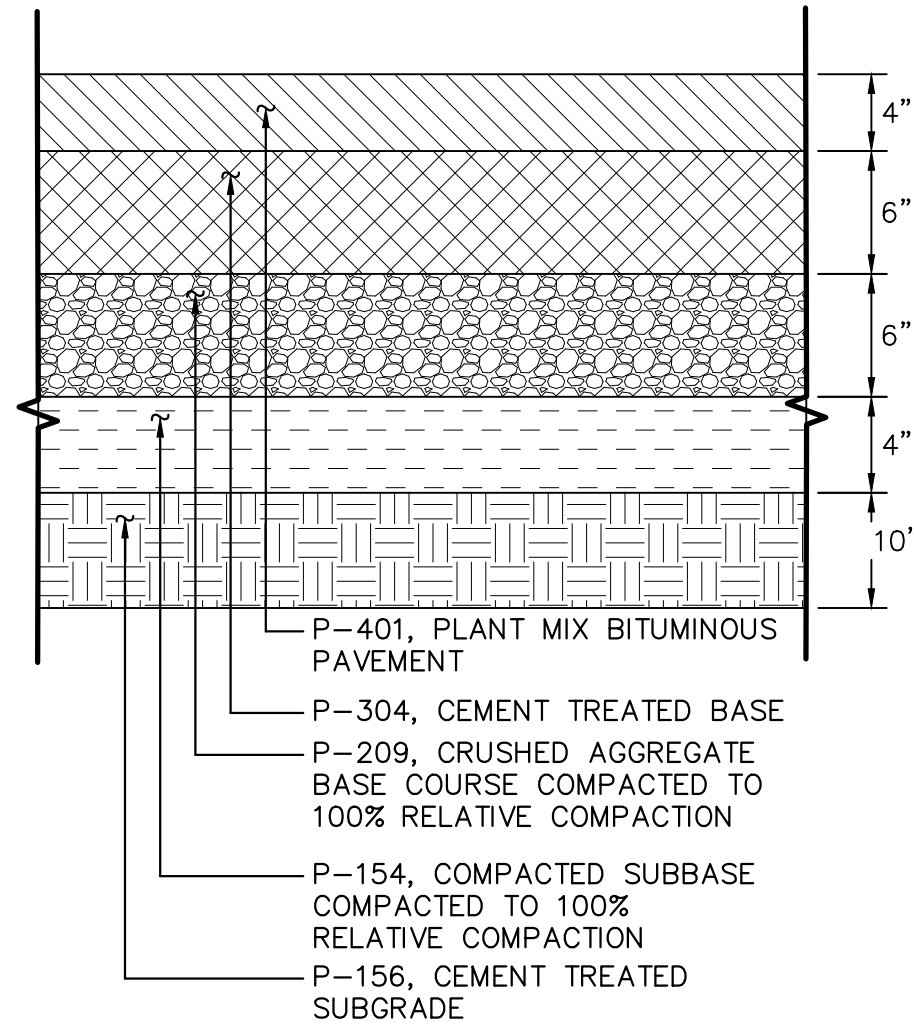
Exhibit C

Taxiway Alpha and Aircraft Apron Reconstruction Project-Phase 3 Bid Alt 1

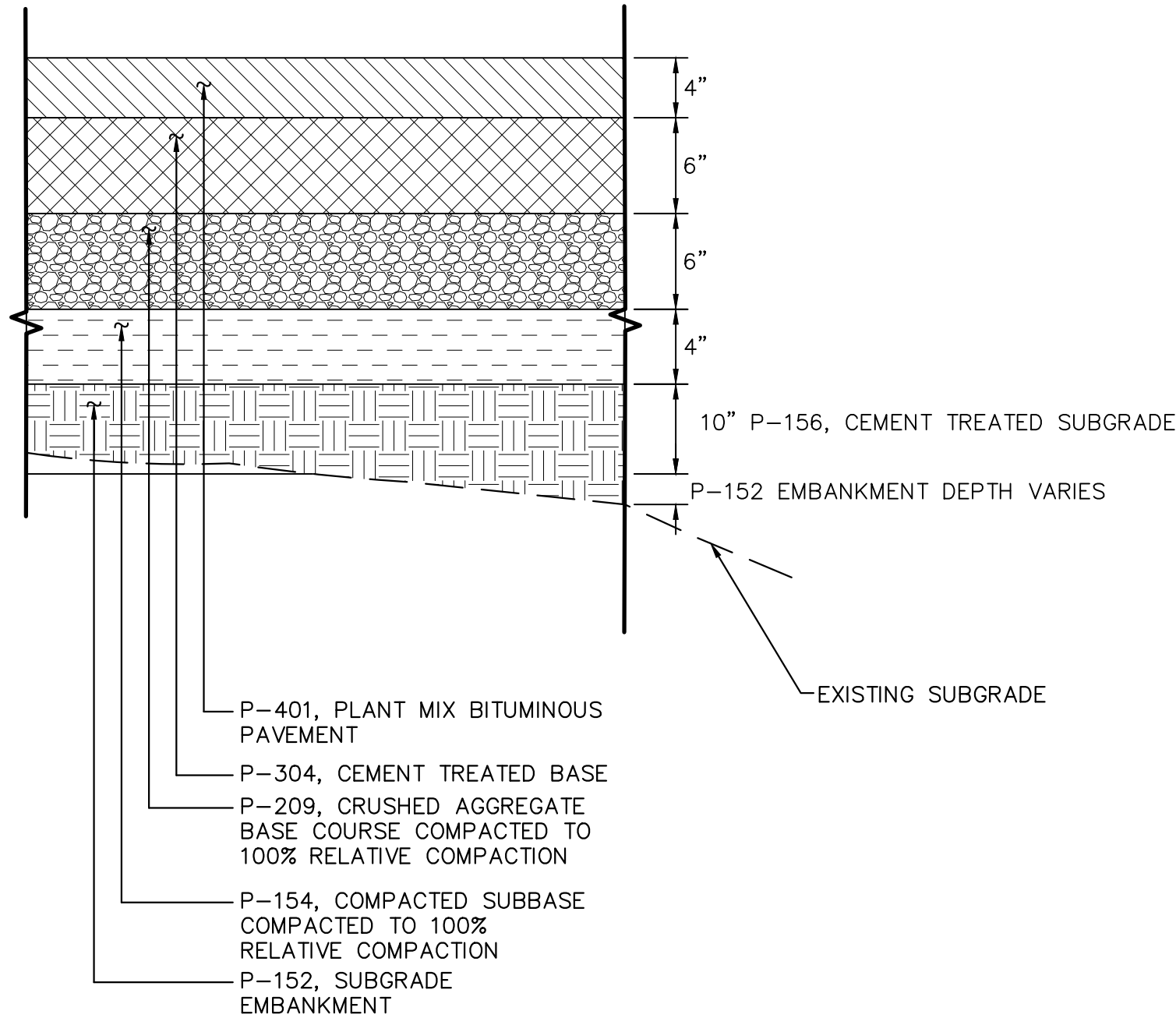
Item #	Description		Quantity				Cost			
		Unit	Estimated	Projected	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Projected)	Comments
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	1,150	-	(1150.00)	0.00%	\$5.00	\$ 5,750.00	\$ -	
P-101-6	Partial Depth Milling 2"	SY	115	115.00	0.00	100.00%	\$3.00	\$ 345.00	\$ 345.00	
P-102-1	Airport Safety and Security	MO	0.5	0.40	(0.10)	80.00%	\$110,000.00	\$ 55,000.00	\$ 44,000.00	
P-152-1	Unclassified Excavation	CY	500	-	(500.00)	0.00%	\$12.00	\$ 6,000.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	50	-	(50.00)	0.00%	\$68.00	\$ 3,400.00	\$ -	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	50	-	(50.00)	0.00%	\$310.00	\$ 15,500.00	\$ -	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	1,250	1,250.00	0.00	100.00%	\$0.40	\$ 500.00	\$ 500.00	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$11.00	\$ 12,650.00	\$ -	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$18.00	\$ 20,700.00	\$ -	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$14.00	\$ 16,100.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$26.00	\$ 29,900.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	1,150	1,150.00	0.00	100.00%	\$40.00	\$ 46,000.00	\$ 46,000.00	
P-401-3	Hot Mix Asphalt (HMA) Pavement (2 Inches Thick)	SY	115	115.00	0.00	0.00%	\$37.00	\$ 4,255.00	\$ 4,255.00	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	200	200.00	0.00	100.00%	\$2.50	\$ 500.00	\$ 500.00	
	Original Total							\$ 216,600.00	\$ 95,600.00	
P-207-1	Pulverize 14" and Cement Treat 10" at 4%	SY	0	529	529.00		\$ 32.00	\$ -	\$ 16,928.00	
	Total								\$ 112,528.00	Funded Utilizing Grant 3-32-0018-46-2022

Plotted By: Fitzgerald, Joke Sheet Set: RTS-P3Apron Layout: C203 September 19, 2022 03:45:12pm K:\REN_Aviation\RTS\091479017-Aircraft Parking Apron and Taxiway Alpha CAD Plan Sheets-P3\091479017-P3.dwg

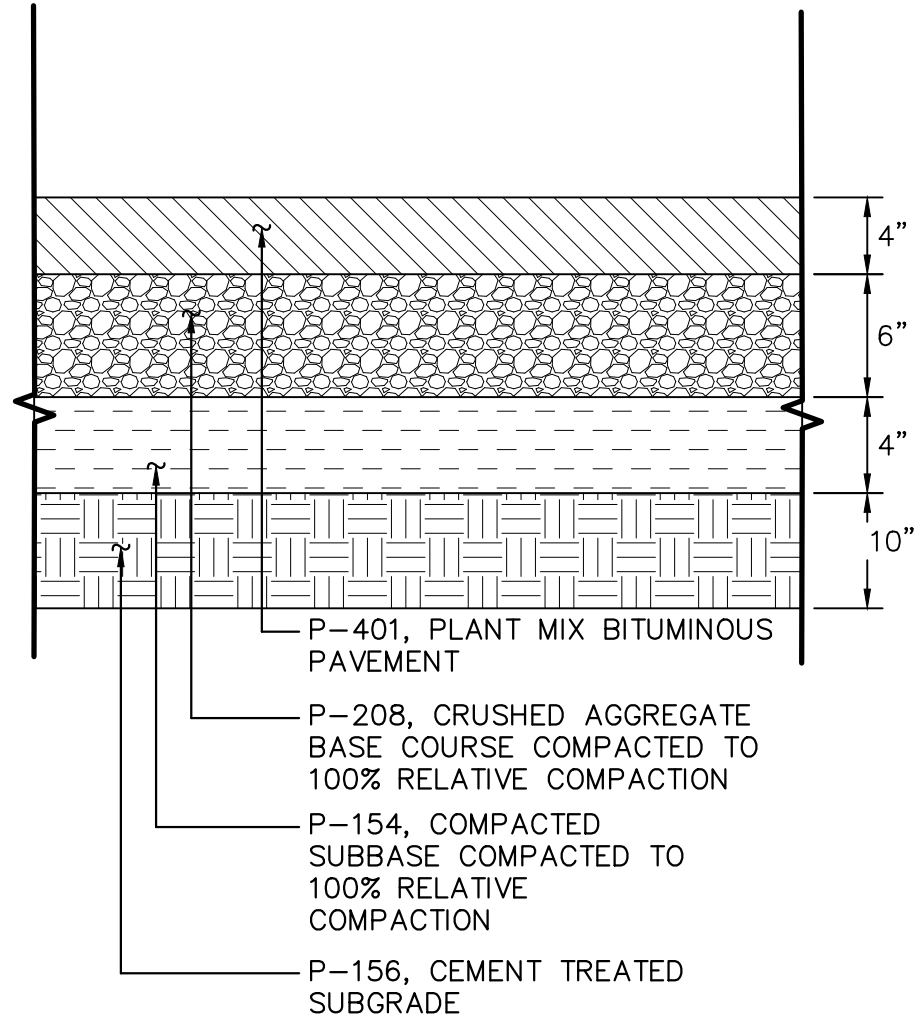
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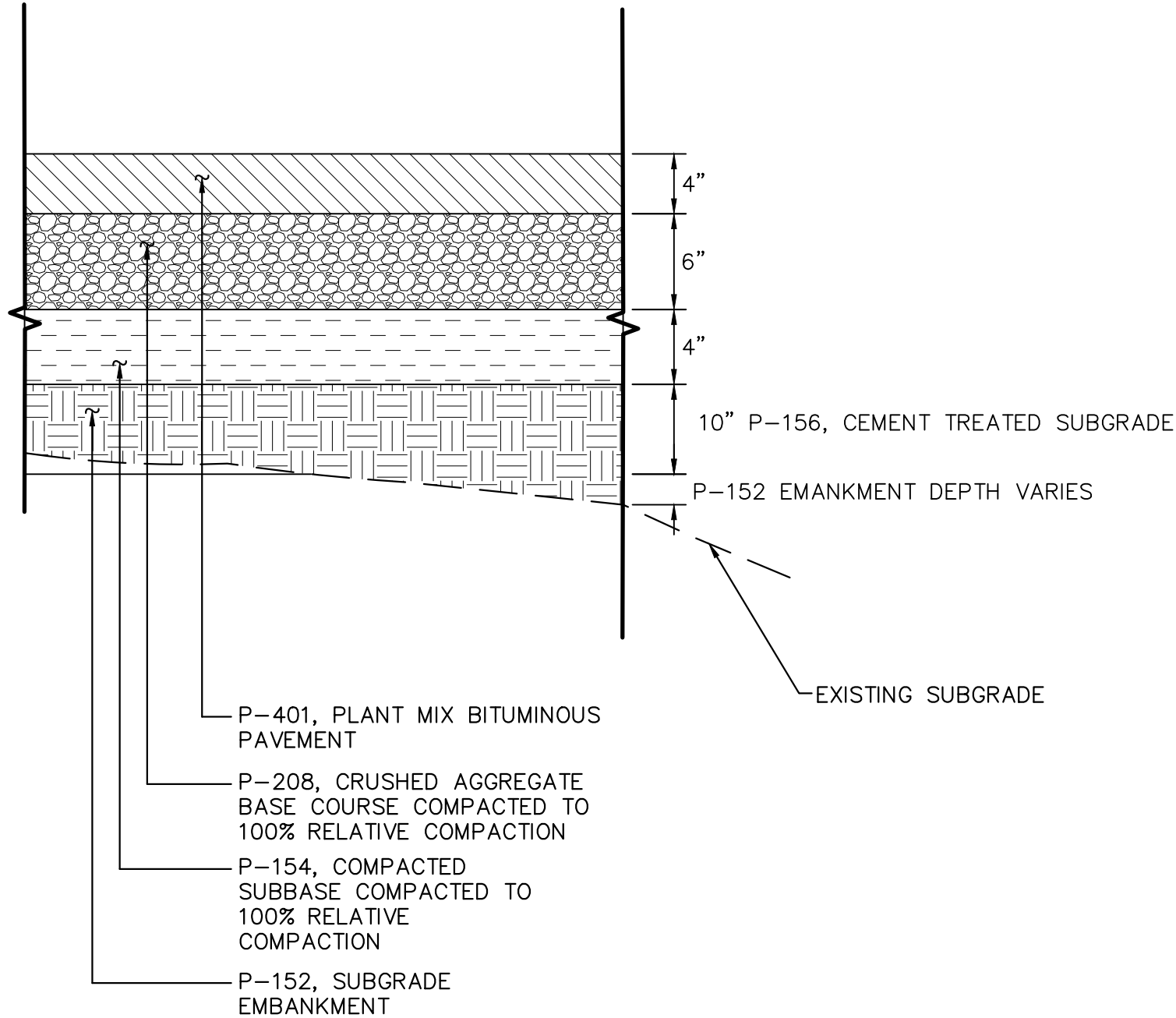
TYPICAL CUT SECTION



TYPICAL FILL SECTION

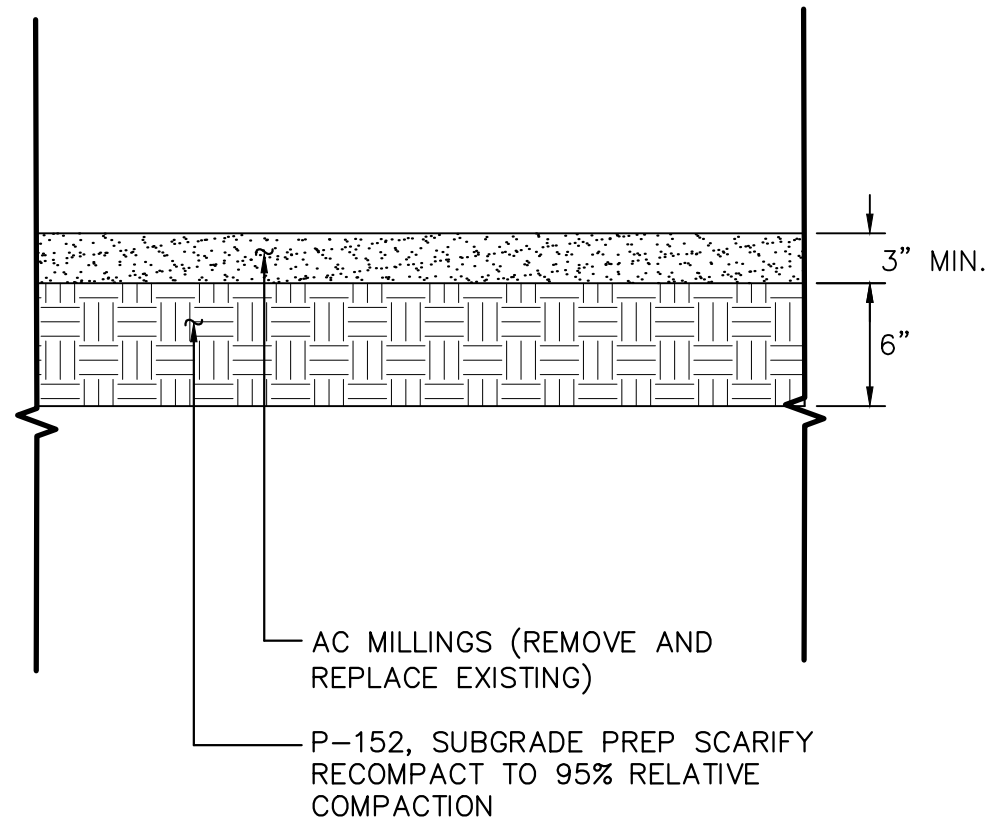


TYPICAL CUT SECTION

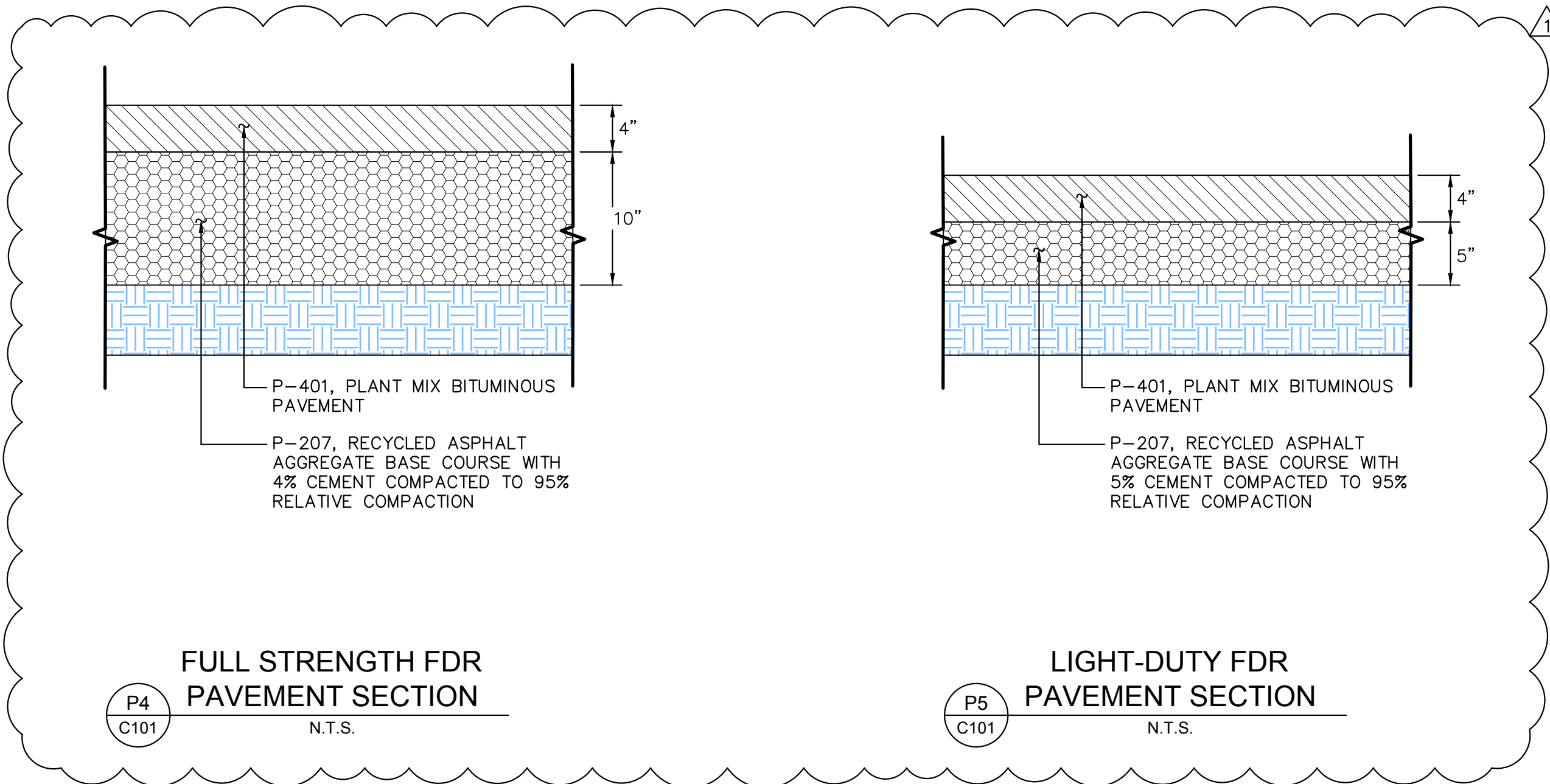


TYPICAL FILL SECTION

P1
C101
FULL STRENGTH
PAVEMENT SECTION
N.T.S.



P3
C101
TAXIWAY SHOULDER
SECTION
N.T.S.



P4
C101
FULL STRENGTH FDR
PAVEMENT SECTION
N.T.S.

P5
C101
LIGHT-DUTY FDR
PAVEMENT SECTION
N.T.S.

- GENERAL NOTES:
1. REFER TO C500 SERIES FOR GRADING CONFORMANCE.
 2. EXISTING TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
 3. RELATIVE DENSITIES FOR ALL SECTIONS INDICATED ARE BASED ON ASTM D1557.

KHA PROJECT 091479023		DATE 09/19/2022		SCALE N/A		DESIGNED BY STH		DRAWN BY JPC		CHECKED BY THH	
TYPICAL SECTIONS											
RENO-TAHOE AIRPORT AUTHORITY TAXIWAY A & AIRCRAFT APRON RECONSTRUCTION PROJECT PHASE 3						NEVADA RENO					
SHEET NUMBER C203						SHEET 18 OF 36					

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7900 RANCH-HARRAH PARKWAY, SUITE 100, RENO, NV 89511
PHONE: 775-787-7552
WWW.KIMLEY-HORN.COM

PAVEMENT SECTIONS		REVISIONS		DATE		BY	
No.				09/19/22		JWF	

ITEM P-207 IN-PLACE FULL DEPTH RECLAMATION (FDR) RECYCLED ASPHALT AGGREGATE BASE COURSE

DESCRIPTION

207-1.1 This item consists of a recycled asphalt aggregate base course resulting from the in-place full depth reclamation (FDR) of the existing pavement section (asphalt wearing surface and aggregate base), plus mechanical stabilization with additional aggregate or chemical stabilization with cement, asphalt emulsion or fly ash when required.

MATERIALS

207-2.1 Aggregate. The FDR shall consist of materials produced by recycling (pulverizing and mixing) the existing asphalt pavement, aggregate base, subgrade, and any additional aggregate as necessary. Material larger than 2 inches in any dimension shall not be permitted in the recycle asphalt aggregate base course.

The FDR shall meet the gradation in the table below.

FDR Gradation

Sieve	Minimum Percentage by weight passing sieves
2 inch (51 mm)	100
No. 4 (4.75 mm)	55
No. 200 (75 µm)	0-15

a. Deleterious substances. Materials for aggregate base shall be kept free from weeds, sticks, grass, roots and other foreign matter.

b. Uniformity. The materials shall be thoroughly recycled (pulverized and mixed) to ensure a uniform gradation.

207-2.2 Stabilization.

a. Mechanical stabilization. If necessary, addition of corrective aggregate material to adjust gradation shall be equivalent to P-208 or better.

b. Chemical Stabilization. Cement shall meet the requirements of ASTM C150 or ASTM C595. Materials shall be handled, stored, and applied in accordance with all federal, state, and local requirements.

207-2.3 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

207-2.4 Quality Control (QC) Sampling and testing. The Contractor shall take at least two FDR samples per day of production in the presence of the Resident Project Representative (RPR) to check the gradation. Sampling shall be per ASTM D75. Material shall meet the requirements in paragraph 207-2.1.

Samples shall be taken from the in-place, un-compacted material at random sampling locations per ASTM D3665.

CONSTRUCTION METHODS

207-3.1 Milling. Milling is not required.

207-3.2 Control Strip. The first half-day of construction shall be considered the control strip. The Contractor shall demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the RPR. Upon acceptance of the control strip by the RPR, the Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

207-3.3 Recycling (Pulverization and mixing). The asphalt pavement, aggregate base and subgrade shall be recycled (pulverized and mixed) into a uniformly blended mixture cement and water to the depth indicated on the plans. The cement percentage by dry unit weight shall be as indicated on the plans. All material over approximately 2 inches (50 mm) shall be removed by the Contractor. The mixture shall be brought to the desired moisture content.

The maximum lift thickness of the recycled aggregate base course material to be compacted shall be 10 inches.

207-3.4 Grading and compaction. Immediately upon completion of recycling (pulverization and mixing), the material shall be shaped and graded in accordance with the project plans. The recycled asphalt aggregate base course shall be compacted within the same day to an in-place density of 95% as determined by ASTM D1557. The moisture content of the material during compaction shall be within $\pm 2\%$ of the optimum moisture content as determined by ASTM D2216. The number, type and weight of rollers shall be sufficient to compact the material to the required density. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

207-3.5 Finishing. The surface of the aggregate base course shall be finished by blading or with automated equipment designed for this purpose. If the top layer is 1/2 inch (12 mm) or more below grade, the top layer shall be scarified to a depth of at least 3 inches (75mm), new material added, and the layer blended and re-compacted to bring it to grade. The addition of layers less than 3 inches (75mm) shall not be allowed.

207-3.6 Proof rolling. Compacted asphalt aggregate base course shall be proof rolled with a tandem axle dual wheel dump truck loaded to the legal limit with tires inflated to 80 psi (550 kPa) in the presence of the RPR. Soft areas that deflect greater than 0.5 inch (12 mm) or show permanent deformation greater than 0.5 inch (12 mm) shall be removed and reworked at the Contractor's expense.

207-3.7 Weather limitations. When weather conditions detrimentally affect the construction process and/or quality of the materials, the Contractor shall stop construction. Cement or fly ash shall not be applied when wind conditions affect the distribution of the materials. When the aggregates contain frozen materials or when the underlying course is frozen or wet, the construction shall be stopped. Construction shall not be performed unless the atmospheric temperature is above 35°F (2°C) and rising or approved by the RPR. When the temperature falls below 35°F (2°C), protect all completed areas against detrimental effects of freezing by approved methods. Correct completed areas damaged by freezing, rainfall, or other weather conditions to meet specified requirements.

207-3.8 Maintenance. The asphalt aggregate base course shall be maintained in a satisfactory condition until the work is accepted by the RPR. Equipment used in the construction of an adjoining section may be routed over completed sections of asphalt aggregate base course, provided that no damage results and equipment is routed over the full width of the completed asphalt aggregate base course. Any damage to the recycled asphalt aggregate base course shall be repaired by the Contractor at the Contractor's expense.

207-3.9 Surface tolerances. The finished surface shall be tested for smoothness and accuracy of grade. Any area failing smoothness or grade shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted by the Contractor at the Contractor's expense.

a. Smoothness. The finished surface shall not vary more than 3/8-inch (9 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.

b. Grade. The grade shall be measured on a 50-foot (15-m) grid and shall be within +0 and -1/2 inch (12 mm) of the specified grade.

207-3.10 Acceptance sampling and testing for density. FDR base course shall be accepted for density and thickness on an area basis. One (1) test for density and thickness will be made for each 1200 square yds (1000 square meters). Sampling locations will be determined on a random basis in accordance with ASTM D3665.

a. Density. The RPR shall perform all density tests.

Each area will be accepted for density when the field density is at least 95% of the maximum density of the FDR base course in accordance with ASTM D1557. The in-place field density shall be determined in accordance with ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. If the specified density is not attained, the area represented by the failed test must be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

b. Thickness. The thickness of the base course shall be within +0 and -1/2 inch (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the presence of the RPR for each area. Where the thickness is deficient by more than 1/2-inch (12 mm), the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches (75 mm), adding new material, and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

207-4.1 The quantity of FDR asphalt aggregate base course shall be measured by the number of square yards (m²) of material in compliance with the plans and specifications.

207-4.2 The quantity of corrective aggregate material or cement shall not be measured separately.

BASIS OF PAYMENT

207-5.1 Payment shall be made at the contract unit price per square yard (m²) for recycling the existing asphalt pavement, aggregate base course, subgrade and mixing with stabilizing agent, if required, spreading, compacting, and maintaining the recycled material to the compacted thickness as indicated on

the drawings. There shall be no separate measurement or payment for the removal, haul, and placement of excess material at a location determined by the Owner. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment tools and incidentals to complete the item.

Payment will be made under:

Item P207-5.1	In-place Full Depth Recycled (FDR) asphalt aggregate base course (10" depth, 4% Cement) – per square yard
Item P207-5.2	In-place Full Depth Recycled (FDR) asphalt aggregate base course (5" depth, 5% Cement) – per square yard

207-5.2 There shall be no separate payment for corrective aggregate material or cement.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C29	Unit Weight of Aggregate
ASTM C88	Soundness of Aggregates by Use of Sodium or Magnesium Sulfate
ASTM C117	Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregate by Washing
ASTM C131	Resistance to abrasion of Small Size Coarse Aggregate by Use of Los Angeles Machine
ASTM C136	Sieve or Screen Analysis of Fine and Coarse Aggregate
ASTM C150	Standard Specification for Portland Cement
ASTM C595	Standard Specification for Blended Hydraulic Cements
ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
ASTM D75	Sampling Aggregate
ASTM D558	ASTM D558 Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
ASTM D698	Moisture Density Relations of Soils and Aggregate using 5.5 lb Rammer and 12 in drop
ASTM D977	Standard Specification for Emulsified Asphalt
ASTM D1556	Test Method for Density and Unit Weight of Soil in Place by the Sand Cone Method
ASTM D1557	Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D2216	Test Methods for Laboratory Determination of Water (Moisture) Soil and Rock by Mass

ASTM D2419	Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D4751	Standard Test Methods for Determining Apparent Opening Size of a Geotextile
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)
American Association of State Highway and Transportation Officials (AASHTO)	
M288	Standard Specification for Geosynthetic Specification for Highway Applications

END OF ITEM P-207

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**CHANGE
ORDER****Distribution to:**

RTAA PURCHASING	<input checked="" type="checkbox"/>
PM	<input checked="" type="checkbox"/>
CM	<input checked="" type="checkbox"/>
ENGINEER	<input checked="" type="checkbox"/>
CONTRACTOR	<input checked="" type="checkbox"/>
FAA	<input checked="" type="checkbox"/>

Reno-Tahoe Airport Authority

Reno-Tahoe International Airport
Reno-Stead Airport
Box 12490
Reno, NV 89510



Project:	Taxiway Alpha and Aircraft Apron Reconstruction	Change Order Number 01 (Grant 47-2022)
	Project-Phase 3	Change Order Initiation Date: October 24, 2022
Solicitation #:	ITB #21/22-17	AIP No. 3-32-0018-47-2022
To:	Granite Construction Company	Original Contract Date: 4/14/2022
	P.O. Box 2087	
	Sparks, NV 89431	

You are directed to make the following changes in the Contract:

Base Bid Schedule 2 – For light duty pavement section south of pad 9, utilize stabilization method of P-207 Pulverize 9" and Cement Treat 5" at 5% in lieu of P-152-3 Owner Authorized Over-Excavation, P-156-1 Cement Treated Subgrade (5% Cement, 10 Inches Thick) and P-208-1 Aggregate Base Course (6 Inches Thick) (See exhibit A for details)

\$16,320.00

Base Bid Schedule 2 – Final Adjusted Quantities (See exhibit B for details)

(\$122,816.00)

Award modified Bid Alternate No. 2 to utilize stabilization method of P-207 Pulverize 14" and Cement Treat 10" at 4% in lieu of P-154-1 Uncrushed Aggregate Subbase Course (4 Inches Thick), P-156-1 Cement Treated Subgrade (5% Cement, 10 Inches Thick), P-209-1 Crushed Aggregate Base Course (6 Inches Thick), and P-304S-1 Cement-Treated Base Course (6 Inches Thick) (See Exhibit A and C for details)

\$106,476.00

Total (\$20.00)

All other terms, conditions, and requirements not modified herein remain unchanged.

Not valid until signed by ALL parties. Execution of this Change Order by both Owner and Contractor constitutes a binding agreement and serves as a full accord and satisfaction of any claim, demand, lien, stop notice or further request for compensation, past or present, known or unknown, and/or time extension arising out of or by virtue of the work described above in the Change Order. Contractor's signature indicates agreement herewith, including any adjustments in the Contract Sum or Contract Time.

The Original Contract Sum was.....	\$3,099,099.00
Net Changes by Previously Authorized Change Orders	(\$1.38)
Net Changes by Previously Authorized Contingency Change Orders	\$0.00
The Revised Contract Sum Prior to this Change Order was	\$3,099,097.62
The Contract Sum will be decreased by this Change Order.	(\$20.00)
The new Contract Sum, including this Change Order will be	\$3,099,077.62

The Contract Completion date prior to this Change Order was November 11, 2022.
The Contract Time will not change due to this change order.

Authorized By:

Atkins North America
Construction Manager
10509 Professional Cir. Ste 103
Reno, NV 89521

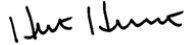


By: Kara Bymers

10/24/2022

Date

Kimley-Horn
Engineer/Architect
7900 Rancharra Pky, Ste 100,
Reno, Nevada 89511

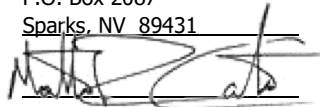


By: Heath Hildebrandt

10/31/2022

Date

Granite
Contractor
P.O. Box 2087
Sparks, NV 89431



By: ~~Ryan Ho~~ Matt Cates

10/31/22

Date

Reno-Tahoe Airport Authority
Owner
P.O. Box 12490
Reno, NV 89510



By: Chris Cobb

11/01/2022

Date

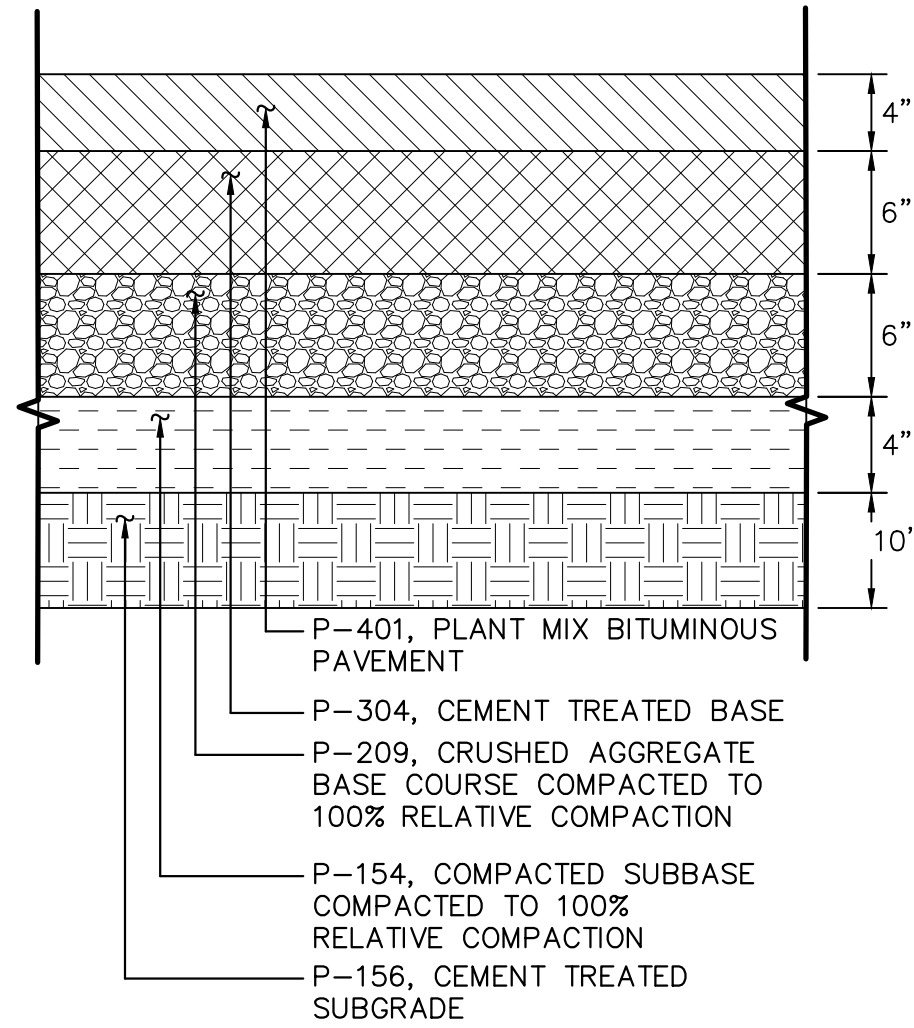
Exhibit A

TXY Alpha and Aircraft Apron Reconstruction Project-Phase 3 Base Bid Schedule 2 Final Adjusted Quantities

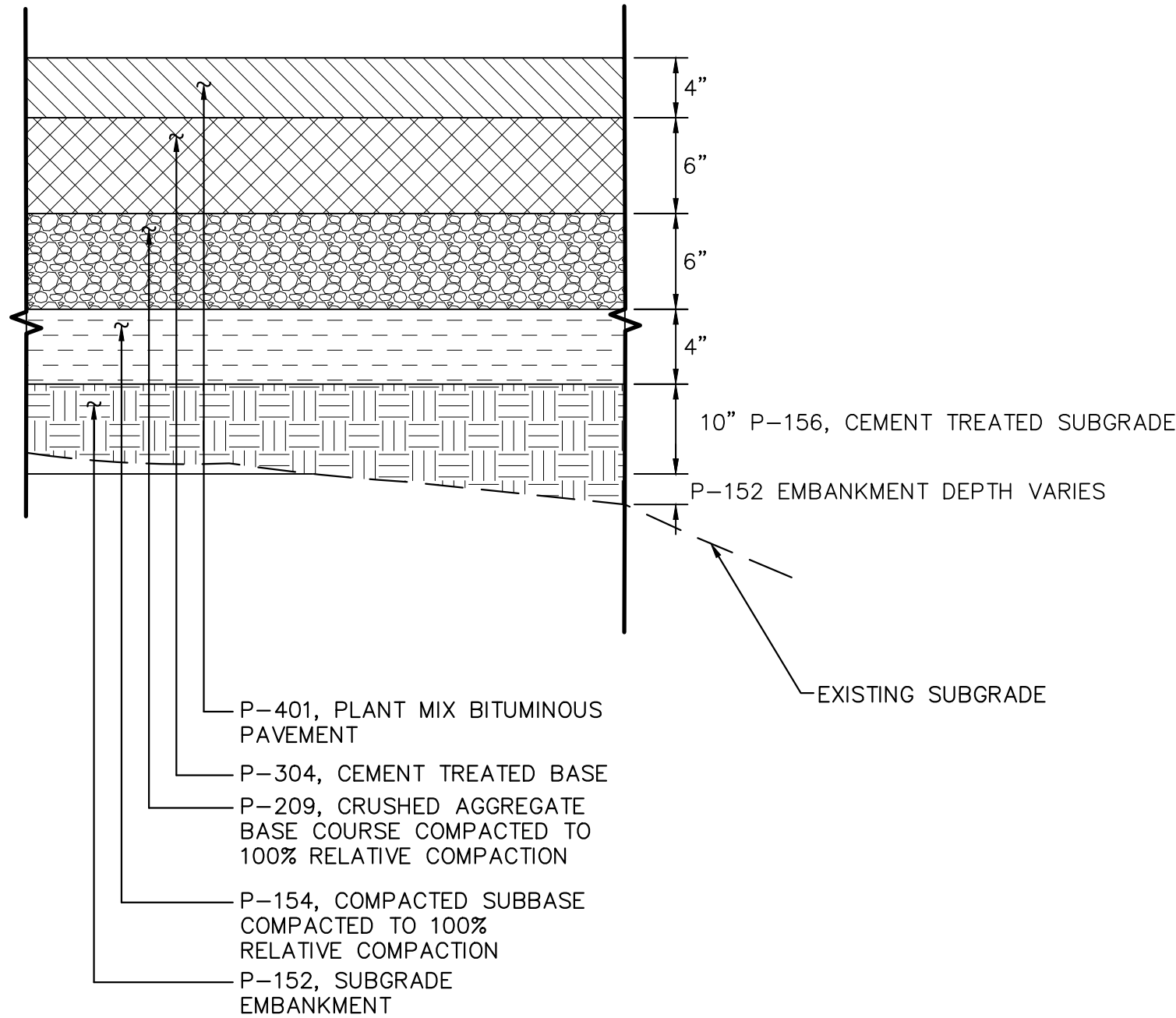
Item #	Description	Unit	Quantity				Cost				Comments
			Estimated	Projected	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Measured)	\$ Over/Under	
C-105-1	Mobilization	LS	1	1.00	0.00	100.00%	\$161,030.00	\$ 161,030.00	\$ 161,030.00	\$ -	
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	5,400	5,080.00	(320.00)	94.07%	\$2.30	\$ 12,420.00	\$ 11,684.00	\$ (736.00)	
P-101-2	Full Depth Pavement Section Removal (Bituminous and Concrete)	SY	6,800	6,800.00	0.00	100.00%	\$15.00	\$ 102,000.00	\$ 102,000.00	\$ -	
P-101-3	Removal of Storm Drain Pipe	LS	1	1.00	0.00	100.00%	\$12,500.00	\$ 12,500.00	\$ 12,500.00	\$ -	
P-101-4	Removal of Storm Drain Structures	EA	1	1.00	0.00	100.00%	\$4,950.00	\$ 4,950.00	\$ 4,950.00	\$ -	
P-102-1	Airport Safety and Security	MO	1.5	1.50	0.00	100.00%	\$69,000.00	\$ 103,500.00	\$ 103,500.00	\$ -	
P-102-2	Temporary Asphalt Pavement Transition (Contingent)	LS	1	-	(1.00)	0.00%	\$24,000.00	\$ 24,000.00	\$ -	\$ (24,000.00)	
P-152-1	Unclassified Excavation	CY	2,000	2,000.00	0.00	100.00%	\$17.00	\$ 34,000.00	\$ 34,000.00	\$ -	
P-152-2	Embankment In Place	CY	100	100.00	0.00	100.00%	\$15.00	\$ 1,500.00	\$ 1,500.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	200	-	(200.00)	0.00%	\$68.00	\$ 13,600.00	\$ -	\$ (13,600.00)	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	200	-	(200.00)	0.00%	\$310.00	\$ 62,000.00	\$ -	\$ (62,000.00)	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	12,200	600.00	(11600.00)	4.92%	\$1.00	\$ 12,200.00	\$ 600.00	\$ (11,600.00)	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	12,200	11,880.00	(320.00)	0.00%	\$8.00	\$ 97,600.00	\$ 95,040.00	\$ (2,560.00)	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	12,200	11,880.00	(320.00)	100.00%	\$14.00	\$ 170,800.00	\$ 166,320.00	\$ (4,480.00)	
P-208-1	Aggregate Base Course (6 Inches Thick)	SY	5,200	4,880.00	(320.00)	100.00%	\$12.00	\$ 62,400.00	\$ 58,560.00	\$ (3,840.00)	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	7,000	7,000.00	0.00	100.00%	\$14.00	\$ 98,000.00	\$ 98,000.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	7,000	7,000.00	0.00	100.00%	\$22.00	\$ 154,000.00	\$ 154,000.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	12,200	12,200.00	0.00	100.00%	\$40.00	\$ 488,000.00	\$ 488,000.00	\$ -	
P-401-2	Hot Mix Asphalt (HMA) Pavement (Variable Depth Transition)	SY	175	175.00	0.00	100.00%	\$75.00	\$ 13,125.00	\$ 13,125.00	\$ -	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	1,500	1,500.00	0.00	100.00%	\$1.75	\$ 2,625.00	\$ 2,625.00	\$ -	
P-620-3	Tie Down Anchor	EA	31	31.00	0.00	100.00%	\$ 500.00	\$ 15,500.00	\$ 15,500.00	\$ -	
D-701-1	Install 48 Inch Pipe (Reinforced Concrete Class III)	LF	50	50.00	0.00	100.00%	\$ 742.00	\$ 37,100.00	\$ 37,100.00	\$ -	
D-701-2	Install 54 Inch Pipe (Reinforced Concrete Class III)	LF	180	180.00	0.00	100.00%	\$ 935.00	\$ 168,300.00	\$ 168,300.00	\$ -	
D-701-3	Install 54 Inch Flared End Section With Riprap	EA	1	1.00	0.00	100.00%	\$ 19,250.00	\$ 19,250.00	\$ 19,250.00	\$ -	
D-703-1	Install 24 Inch Cured In Place Pipe (Contingent)	LF	200	200.00	0.00	100.00%	\$ 750.00	\$ 150,000.00	\$ 150,000.00	\$ -	
D-751-1	Type 3 Manhole	EA	1	1.00	0.00	100.00%	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ -	
D-751-2	Type 4 Manhole	EA	1	1.00	0.00	100.00%	\$ 85,000.00	\$ 85,000.00	\$ 85,000.00	\$ -	
D-751-3	Stormwater Treatment Device with Vault	LS	1	1.00	0.00	100.00%	\$ 220,000.00	\$ 220,000.00	\$ 220,000.00	\$ -	
L-100-1	Airfield Electrical Demolition	LS	1	1.00	0.00	100.00%	\$ 24,000.00	\$ 24,000.00	\$ 24,000.00	\$ -	
	Total							\$ 2,399,400.00	\$ 2,276,584.00	\$ (122,816.00)	
CO No. 1 P-207	Pulverize 9" and Cement Treat 5" at 5%	SY	510	510	0.00		\$ 32.00	\$ 16,320.00	\$ 16,320.00	\$ -	Funded Utilizing Grant 3-32-0018-47-2022

Plotted By: Fitzgerald, Joke Sheet Set: RTS-P3Apron Layout: C203 September 19, 2022 03:45:12pm K:\REN_Aviation\RTS\091479017-Aircraft Parking Apron and Taxiway Alpha CAD Plan\Sheets-P3\C201-091479017_P3.dwg

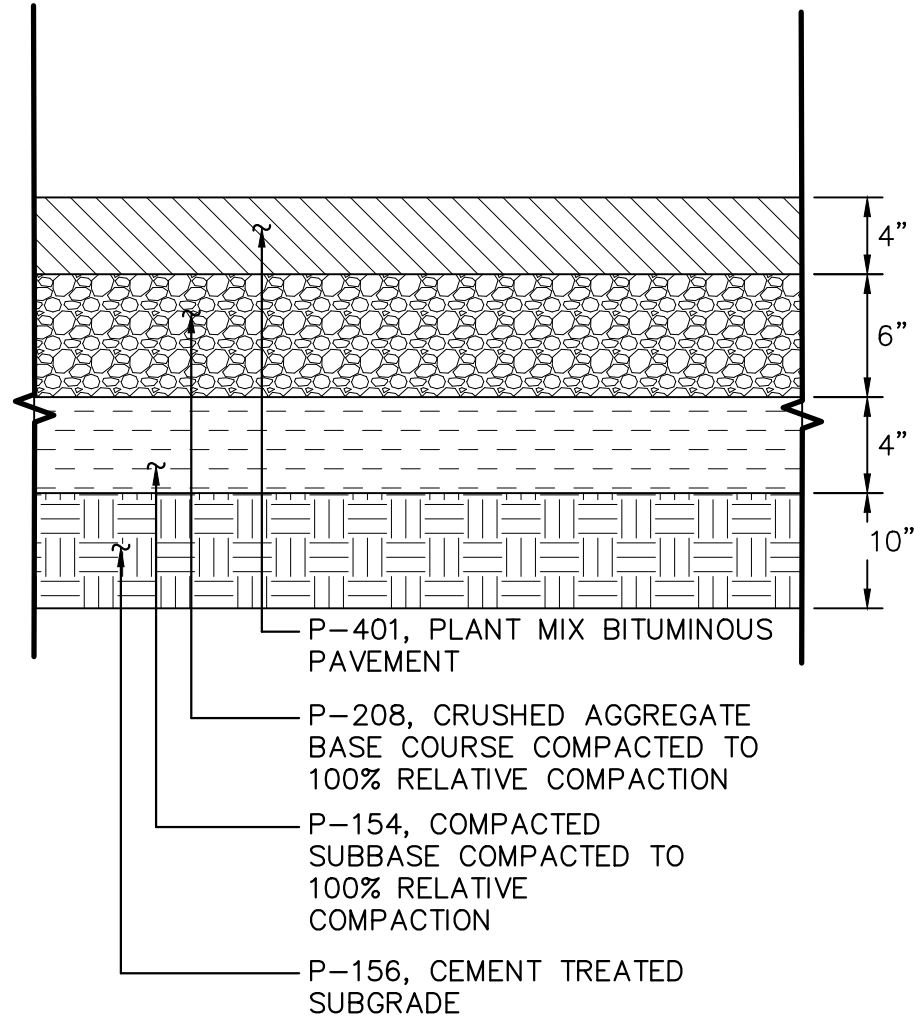
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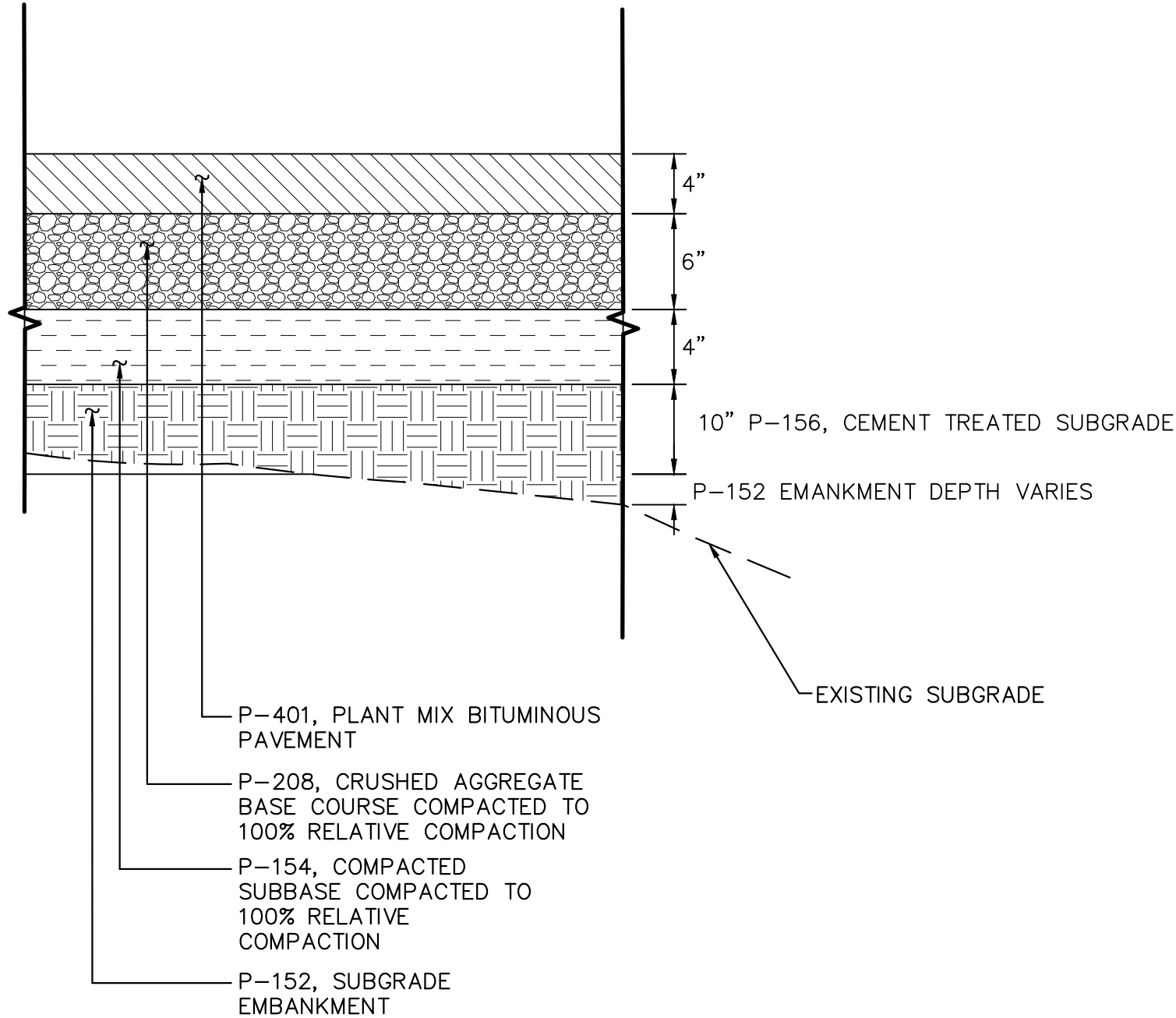
TYPICAL CUT SECTION



TYPICAL FILL SECTION

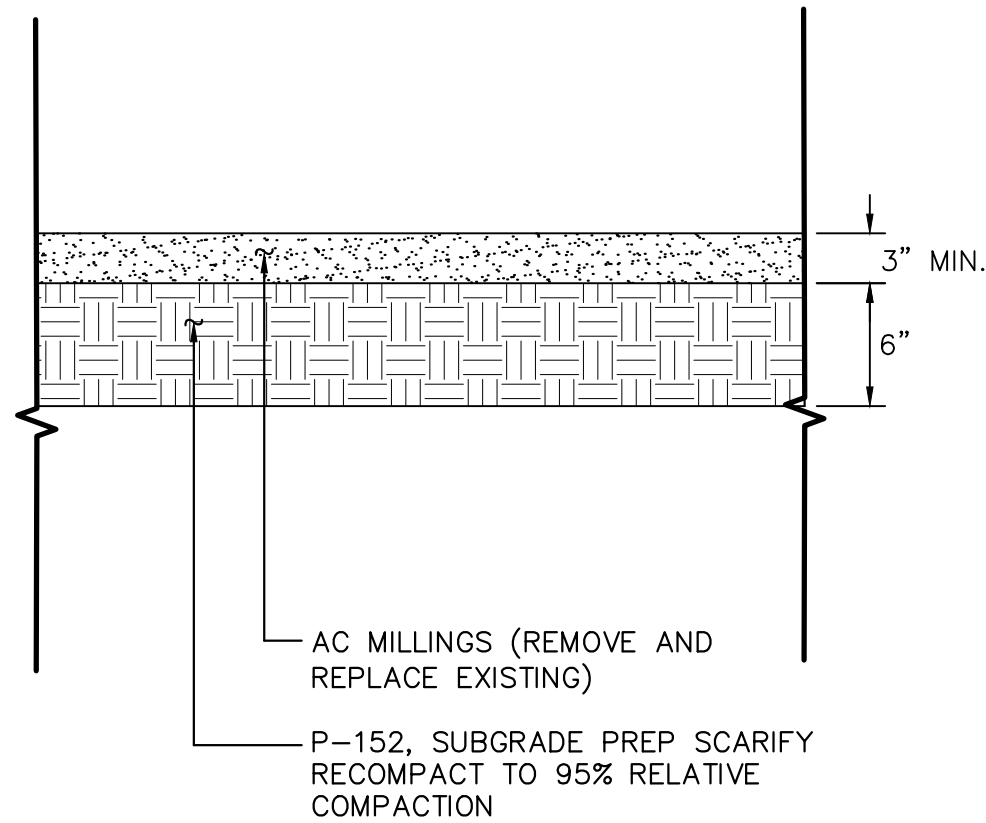


TYPICAL CUT SECTION

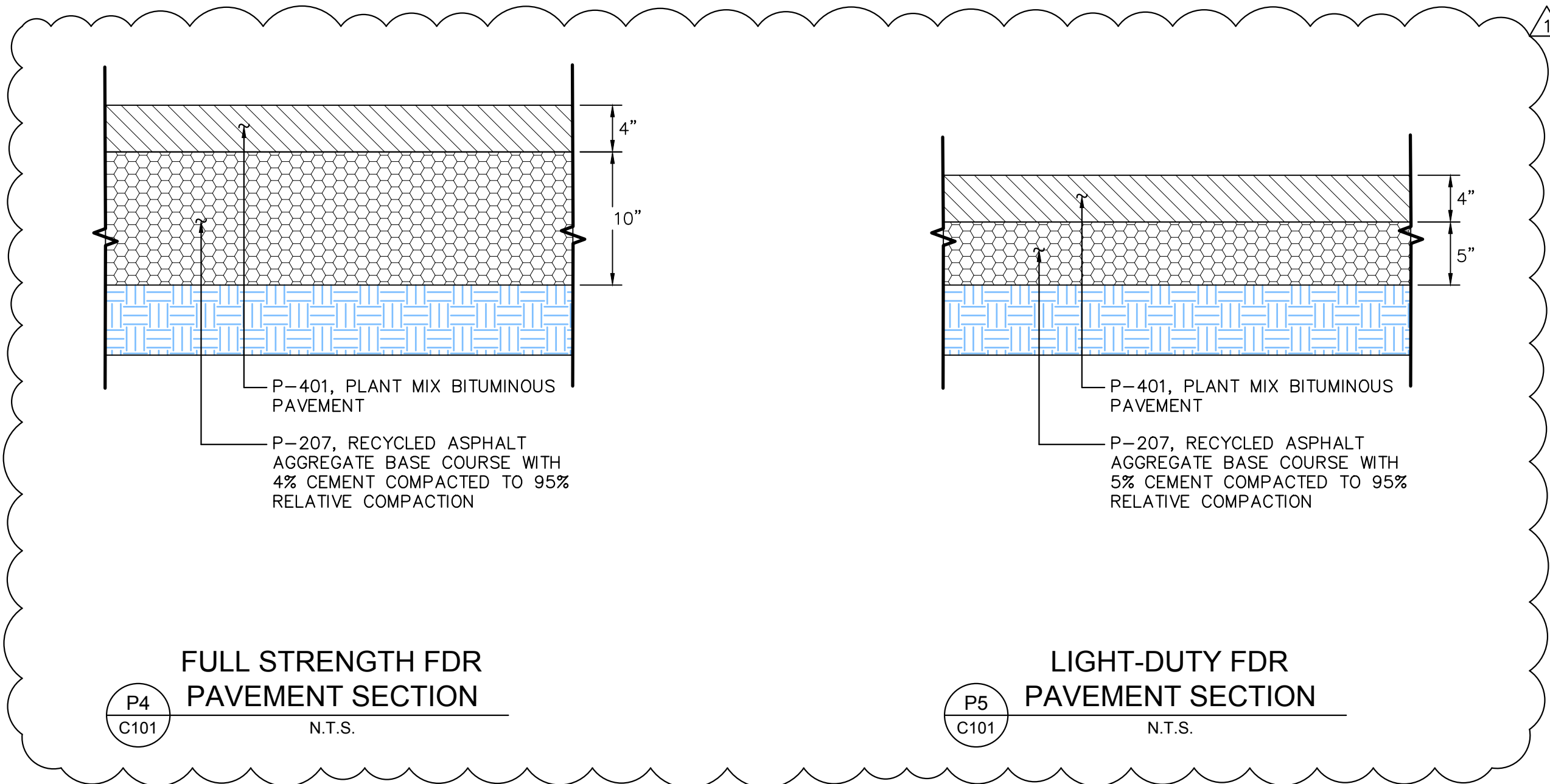


TYPICAL FILL SECTION

P1
C101
FULL STRENGTH
PAVEMENT SECTION
N.T.S.



P3
C101
TAXIWAY SHOULDER
SECTION
N.T.S.



P4
C101
FULL STRENGTH FDR
PAVEMENT SECTION
N.T.S.

P5
C101
LIGHT-DUTY FDR
PAVEMENT SECTION
N.T.S.

- GENERAL NOTES:
1. REFER TO C500 SERIES FOR GRADING CONFORMANCE.
 2. EXISTING TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
 3. RELATIVE DENSITIES FOR ALL SECTIONS INDICATED ARE BASED ON ASTM D1557.

KHA PROJECT 091479023		DATE 09/19/2022		SCALE N/A		DESIGNED BY STH		DRAWN BY JPC		CHECKED BY THH	
RENO-TAHOE AIRPORT AUTHORITY TAXIWAY A & AIRCRAFT APRON RECONSTRUCTION PROJECT PHASE 3						NEVADA RENO					
SHEET NUMBER C203						SHEET 18 OF 36					
Kimley-Horn & Associates, Inc. © 2022 KIMLEY-HORN AND ASSOCIATES, INC. 7900 RANCH-HARRAH PARKWAY, SUITE 100, RENO, NV 89511 PHONE: 775-787-7552 WWW.KIMLEY-HORN.COM						PAVEMENT SECTIONS REVISIONS No.					
09/19/22 JWF						DATE BY					

ITEM P-207 IN-PLACE FULL DEPTH RECLAMATION (FDR) RECYCLED ASPHALT AGGREGATE BASE COURSE

DESCRIPTION

207-1.1 This item consists of a recycled asphalt aggregate base course resulting from the in-place full depth reclamation (FDR) of the existing pavement section (asphalt wearing surface and aggregate base), plus mechanical stabilization with additional aggregate or chemical stabilization with cement, asphalt emulsion or fly ash when required.

MATERIALS

207-2.1 Aggregate. The FDR shall consist of materials produced by recycling (pulverizing and mixing) the existing asphalt pavement, aggregate base, subgrade, and any additional aggregate as necessary. Material larger than 2 inches in any dimension shall not be permitted in the recycle asphalt aggregate base course.

The FDR shall meet the gradation in the table below.

FDR Gradation

Sieve	Minimum Percentage by weight passing sieves
2 inch (51 mm)	100
No. 4 (4.75 mm)	55
No. 200 (75 µm)	0-15

a. Deleterious substances. Materials for aggregate base shall be kept free from weeds, sticks, grass, roots and other foreign matter.

b. Uniformity. The materials shall be thoroughly recycled (pulverized and mixed) to ensure a uniform gradation.

207-2.2 Stabilization.

a. Mechanical stabilization. If necessary, addition of corrective aggregate material to adjust gradation shall be equivalent to P-208 or better.

b. Chemical Stabilization. Cement shall meet the requirements of ASTM C150 or ASTM C595. Materials shall be handled, stored, and applied in accordance with all federal, state, and local requirements.

207-2.3 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

207-2.4 Quality Control (QC) Sampling and testing. The Contractor shall take at least two FDR samples per day of production in the presence of the Resident Project Representative (RPR) to check the gradation. Sampling shall be per ASTM D75. Material shall meet the requirements in paragraph 207-2.1.

Samples shall be taken from the in-place, un-compacted material at random sampling locations per ASTM D3665.

CONSTRUCTION METHODS

207-3.1 Milling. Milling is not required.

207-3.2 Control Strip. The first half-day of construction shall be considered the control strip. The Contractor shall demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the RPR. Upon acceptance of the control strip by the RPR, the Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

207-3.3 Recycling (Pulverization and mixing). The asphalt pavement, aggregate base and subgrade shall be recycled (pulverized and mixed) into a uniformly blended mixture cement and water to the depth indicated on the plans. The cement percentage by dry unit weight shall be as indicated on the plans. All material over approximately 2 inches (50 mm) shall be removed by the Contractor. The mixture shall be brought to the desired moisture content.

The maximum lift thickness of the recycled aggregate base course material to be compacted shall be 10 inches.

207-3.4 Grading and compaction. Immediately upon completion of recycling (pulverization and mixing), the material shall be shaped and graded in accordance with the project plans. The recycled asphalt aggregate base course shall be compacted within the same day to an in-place density of 95% as determined by ASTM D1557. The moisture content of the material during compaction shall be within $\pm 2\%$ of the optimum moisture content as determined by ASTM D2216. The number, type and weight of rollers shall be sufficient to compact the material to the required density. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

207-3.5 Finishing. The surface of the aggregate base course shall be finished by blading or with automated equipment designed for this purpose. If the top layer is 1/2 inch (12 mm) or more below grade, the top layer shall be scarified to a depth of at least 3 inches (75mm), new material added, and the layer blended and re-compacted to bring it to grade. The addition of layers less than 3 inches (75mm) shall not be allowed.

207-3.6 Proof rolling. Compacted asphalt aggregate base course shall be proof rolled with a tandem axle dual wheel dump truck loaded to the legal limit with tires inflated to 80 psi (550 kPa) in the presence of the RPR. Soft areas that deflect greater than 0.5 inch (12 mm) or show permanent deformation greater than 0.5 inch (12 mm) shall be removed and reworked at the Contractor's expense.

207-3.7 Weather limitations. When weather conditions detrimentally affect the construction process and/or quality of the materials, the Contractor shall stop construction. Cement or fly ash shall not be applied when wind conditions affect the distribution of the materials. When the aggregates contain frozen materials or when the underlying course is frozen or wet, the construction shall be stopped. Construction shall not be performed unless the atmospheric temperature is above 35°F (2°C) and rising or approved by the RPR. When the temperature falls below 35°F (2°C), protect all completed areas against detrimental effects of freezing by approved methods. Correct completed areas damaged by freezing, rainfall, or other weather conditions to meet specified requirements.

207-3.8 Maintenance. The asphalt aggregate base course shall be maintained in a satisfactory condition until the work is accepted by the RPR. Equipment used in the construction of an adjoining section may be routed over completed sections of asphalt aggregate base course, provided that no damage results and equipment is routed over the full width of the completed asphalt aggregate base course. Any damage to the recycled asphalt aggregate base course shall be repaired by the Contractor at the Contractor's expense.

207-3.9 Surface tolerances. The finished surface shall be tested for smoothness and accuracy of grade. Any area failing smoothness or grade shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted by the Contractor at the Contractor's expense.

a. Smoothness. The finished surface shall not vary more than 3/8-inch (9 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.

b. Grade. The grade shall be measured on a 50-foot (15-m) grid and shall be within +0 and -1/2 inch (12 mm) of the specified grade.

207-3.10 Acceptance sampling and testing for density. FDR base course shall be accepted for density and thickness on an area basis. One (1) test for density and thickness will be made for each 1200 square yds (1000 square meters). Sampling locations will be determined on a random basis in accordance with ASTM D3665.

a. Density. The RPR shall perform all density tests.

Each area will be accepted for density when the field density is at least 95% of the maximum density of the FDR base course in accordance with ASTM D1557. The in-place field density shall be determined in accordance with ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. If the specified density is not attained, the area represented by the failed test must be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

b. Thickness. The thickness of the base course shall be within +0 and -1/2 inch (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the presence of the RPR for each area. Where the thickness is deficient by more than 1/2-inch (12 mm), the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches (75 mm), adding new material, and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

207-4.1 The quantity of FDR asphalt aggregate base course shall be measured by the number of square yards (m²) of material in compliance with the plans and specifications.

207-4.2 The quantity of corrective aggregate material or cement shall not be measured separately.

BASIS OF PAYMENT

207-5.1 Payment shall be made at the contract unit price per square yard (m²) for recycling the existing asphalt pavement, aggregate base course, subgrade and mixing with stabilizing agent, if required, spreading, compacting, and maintaining the recycled material to the compacted thickness as indicated on

the drawings. There shall be no separate measurement or payment for the removal, haul, and placement of excess material at a location determined by the Owner. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment tools and incidentals to complete the item.

Payment will be made under:

Item P207-5.1	In-place Full Depth Recycled (FDR) asphalt aggregate base course (10" depth, 4% Cement) – per square yard
Item P207-5.2	In-place Full Depth Recycled (FDR) asphalt aggregate base course (5" depth, 5% Cement) – per square yard

207-5.2 There shall be no separate payment for corrective aggregate material or cement.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C29	Unit Weight of Aggregate
ASTM C88	Soundness of Aggregates by Use of Sodium or Magnesium Sulfate
ASTM C117	Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregate by Washing
ASTM C131	Resistance to abrasion of Small Size Coarse Aggregate by Use of Los Angeles Machine
ASTM C136	Sieve or Screen Analysis of Fine and Coarse Aggregate
ASTM C150	Standard Specification for Portland Cement
ASTM C595	Standard Specification for Blended Hydraulic Cements
ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
ASTM D75	Sampling Aggregate
ASTM D558	ASTM D558 Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
ASTM D698	Moisture Density Relations of Soils and Aggregate using 5.5 lb Rammer and 12 in drop
ASTM D977	Standard Specification for Emulsified Asphalt
ASTM D1556	Test Method for Density and Unit Weight of Soil in Place by the Sand Cone Method
ASTM D1557	Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D2216	Test Methods for Laboratory Determination of Water (Moisture) Soil and Rock by Mass

ASTM D2419	Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D4751	Standard Test Methods for Determining Apparent Opening Size of a Geotextile
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)
American Association of State Highway and Transportation Officials (AASHTO)	
M288	Standard Specification for Geosynthetic Specification for Highway Applications

END OF ITEM P-207

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Exhibit B

TXY Alpha and Aircraft Apron Reconstruction Project-Phase 3 Base Bid Schedule 2 Final Adjusted Quantities

Item #	Description	Unit	Quantity				Cost				Comments
			Estimated	Projected	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Measured)	\$ Over/Under	
C-105-1	Mobilization	LS	1	1.00	0.00	100.00%	\$161,030.00	\$ 161,030.00	\$ 161,030.00	\$ -	
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	5,400	5,080.00	(320.00)	94.07%	\$2.30	\$ 12,420.00	\$ 11,684.00	\$ (736.00)	
P-101-2	Full Depth Pavement Section Removal (Bituminous and Concrete)	SY	6,800	6,800.00	0.00	100.00%	\$15.00	\$ 102,000.00	\$ 102,000.00	\$ -	
P-101-3	Removal of Storm Drain Pipe	LS	1	1.00	0.00	100.00%	\$12,500.00	\$ 12,500.00	\$ 12,500.00	\$ -	
P-101-4	Removal of Storm Drain Structures	EA	1	1.00	0.00	100.00%	\$4,950.00	\$ 4,950.00	\$ 4,950.00	\$ -	
P-102-1	Airport Safety and Security	MO	1.5	1.50	0.00	100.00%	\$69,000.00	\$ 103,500.00	\$ 103,500.00	\$ -	
P-102-2	Temporary Asphalt Pavement Transition (Contingent)	LS	1	-	(1.00)	0.00%	\$24,000.00	\$ 24,000.00	\$ -	\$ (24,000.00)	
P-152-1	Unclassified Excavation	CY	2,000	2,000.00	0.00	100.00%	\$17.00	\$ 34,000.00	\$ 34,000.00	\$ -	
P-152-2	Embankment In Place	CY	100	100.00	0.00	100.00%	\$15.00	\$ 1,500.00	\$ 1,500.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	200	-	(200.00)	0.00%	\$68.00	\$ 13,600.00	\$ -	\$ (13,600.00)	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	200	-	(200.00)	0.00%	\$310.00	\$ 62,000.00	\$ -	\$ (62,000.00)	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	12,200	600.00	(11600.00)	4.92%	\$1.00	\$ 12,200.00	\$ 600.00	\$ (11,600.00)	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	12,200	11,880.00	(320.00)	0.00%	\$8.00	\$ 97,600.00	\$ 95,040.00	\$ (2,560.00)	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	12,200	11,880.00	(320.00)	100.00%	\$14.00	\$ 170,800.00	\$ 166,320.00	\$ (4,480.00)	
P-208-1	Aggregate Base Course (6 Inches Thick)	SY	5,200	4,880.00	(320.00)	100.00%	\$12.00	\$ 62,400.00	\$ 58,560.00	\$ (3,840.00)	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	7,000	7,000.00	0.00	100.00%	\$14.00	\$ 98,000.00	\$ 98,000.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	7,000	7,000.00	0.00	100.00%	\$22.00	\$ 154,000.00	\$ 154,000.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	12,200	12,200.00	0.00	100.00%	\$40.00	\$ 488,000.00	\$ 488,000.00	\$ -	
P-401-2	Hot Mix Asphalt (HMA) Pavement (Variable Depth Transition)	SY	175	175.00	0.00	100.00%	\$75.00	\$ 13,125.00	\$ 13,125.00	\$ -	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	1,500	1,500.00	0.00	100.00%	\$1.75	\$ 2,625.00	\$ 2,625.00	\$ -	
P-620-3	Tie Down Anchor	EA	31	31.00	0.00	100.00%	\$ 500.00	\$ 15,500.00	\$ 15,500.00	\$ -	
D-701-1	Install 48 Inch Pipe (Reinforced Concrete Class III)	LF	50	50.00	0.00	100.00%	\$ 742.00	\$ 37,100.00	\$ 37,100.00	\$ -	
D-701-2	Install 54 Inch Pipe (Reinforced Concrete Class III)	LF	180	180.00	0.00	100.00%	\$ 935.00	\$ 168,300.00	\$ 168,300.00	\$ -	
D-701-3	Install 54 Inch Flared End Section With Riprap	EA	1	1.00	0.00	100.00%	\$ 19,250.00	\$ 19,250.00	\$ 19,250.00	\$ -	
D-703-1	Install 24 Inch Cured In Place Pipe (Contingent)	LF	200	200.00	0.00	100.00%	\$ 750.00	\$ 150,000.00	\$ 150,000.00	\$ -	
D-751-1	Type 3 Manhole	EA	1	1.00	0.00	100.00%	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ -	
D-751-2	Type 4 Manhole	EA	1	1.00	0.00	100.00%	\$ 85,000.00	\$ 85,000.00	\$ 85,000.00	\$ -	
D-751-3	Stormwater Treatment Device with Vault	LS	1	1.00	0.00	100.00%	\$ 220,000.00	\$ 220,000.00	\$ 220,000.00	\$ -	
L-100-1	Airfield Electrical Demolition	LS	1	1.00	0.00	100.00%	\$ 24,000.00	\$ 24,000.00	\$ 24,000.00	\$ -	
	Total							\$ 2,399,400.00	\$ 2,276,584.00	\$ (122,816.00)	Funded Utilizing Grant 3-32-0018-47-2022

Exhibit C

Taxiway Alpha and Aircraft Apron Reconstruction Project-Phase 3 Bid Alt 2

Item #	Description		Quantity				Cost			Comments
		Unit	Estimated	Projected	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Projected)	
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	980	-	(980.00)	0.00%	\$5.00	\$ 4,900.00	\$ -	
P-101-2	Full Depth Pavement Section Removal (Bituminous and Concrete)	SY	120	120.00	0.00	100.00%	\$50.00	\$ 6,000.00	\$ 6,000.00	
P-101-6	Partial Depth Milling 2"	SY	115	115.00	0.00	100.00%	\$3.00	\$ 345.00	\$ 345.00	
P-102-1	Airport Safety and Security	MO	0.5	0.40	(0.10)	80.00%	\$110,000.00	\$ 55,000.00	\$ 44,000.00	
P-152-1	Unclassified Excavation	CY	500	-	(500.00)	0.00%	\$12.00	\$ 6,000.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	50.0	-	(50.00)	0.00%	\$68.00	\$ 3,400.00	\$ -	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	50	-	(50.00)	0.00%	\$310.00	\$ 15,500.00	\$ -	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	1,400	1,400.00	0.00	100.00%	\$0.40	\$ 560.00	\$ 560.00	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$11.00	\$ 12,100.00	\$ -	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$18.00	\$ 19,800.00	\$ -	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$14.00	\$ 15,400.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$26.00	\$ 28,600.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	1,100	1,100.00	0.00	0.00%	\$40.00	\$ 44,000.00	\$ 44,000.00	
P-401-3	Hot Mix Asphalt (HMA) Pavement (2 Inches Thick)	SY	115	115.00	0.00	100.00%	\$37.00	\$ 4,255.00	\$ 4,255.00	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	200	200.00	0.00	100.00%	\$2.50	\$ 500.00	\$ 500.00	
	Total							\$ 216,360.00	\$ 99,660.00	
P-207	Pulverize 14" and Cement Treat 10" at 4%	SY	0	213	213.00		\$ 32.00	\$ -	\$ 6,816.00	
	Total								\$ 106,476.00	Funded Utilizing Grant 3-32-0018-47-2022
P-207	Pulverize 14" and Cement Treat 10" at 4%	SY	0	887	887.00		\$ 32.00	\$ -	\$ 28,384.00	
	Total								\$28,384.00	Funded Utilizing Grant 3-32-0018-48-2022

**CHANGE
ORDER****Distribution to:**

RTAA PURCHASING	<input checked="" type="checkbox"/>
PM	<input checked="" type="checkbox"/>
CM	<input checked="" type="checkbox"/>
ENGINEER	<input checked="" type="checkbox"/>
CONTRACTOR	<input checked="" type="checkbox"/>
FAA	<input type="checkbox"/>

Reno-Tahoe Airport Authority

Reno-Tahoe International Airport
Reno-Stead Airport
Box 12490
Reno, NV 89510



Project: Blue Parking Lot Reconstruction Project
Solicitation #: ITB #21/22-21

Change Order Number 01
Change Order Initiation Date: October 18, 2022
AIP No. N/A
Original Contract Date: May 19, 2022

To: Sierra Nevada Construction, Inc.
P.O. Box 50760
Sparks, NV 89435

You are directed to make the following changes in the Contract:

Revised Storm Drain and Routing (See attached details)	\$5,870.00
Revised Landscaping Plans (See attached details)	(\$91,309.00)
Multimodal Fiber Revisions (See attached details)	13,938.00
Final Adjusted Quantities (See attached details)	<u>\$31,728.50</u>

Total (\$39,772.50)

All other terms, conditions, and requirements not modified herein remain unchanged.

Not valid until signed by ALL parties. Execution of this Change Order by both Owner and Contractor constitutes a binding agreement and serves as a full accord and satisfaction of any claim, demand, lien, stop notice or further request for compensation, past or present, known or unknown, and/or time extension arising out of or by virtue of the work described above in the Change Order. Contractor's signature indicates agreement herewith, including any adjustments in the Contract Sum or Contract Time.

The Original Contract Sum was.....	\$2,136,227.00
Net Changes by Previously Authorized Change Orders	\$0.00
Net Changes by Previously Authorized Contingency Change Orders	\$0.00
The Revised Contract Sum Prior to this Change Order was	\$2,136,227.00
The Contract Sum will be decreased by this Change Order.	(\$39,772.50)
The new Contract Sum, including this Change Order will be	\$2,096,454.50

The Contract Completion date prior to this Change Order was July 14, 2022.

The Contract Time will be **increased** by six (6) calendar days.

The Contract completion date, as of the date of this Change Order, therefore is July 20, 2022.

Authorized By:**Atkins North America**

Construction Manager
10509 Professional Cir. Ste 103
Reno, NV 89521

Kara M. Bymers

By: Kara Bymers

10/18/2022

Date

Kimley-Horn

Engineer/Architect
7900 Rancharra Pky, Ste 100,
Reno, Nevada 89511

Tiffany Patrick

By: Tiffany Patrick

10/19/2022

Date

SNC

Contractor
P.O. Box 50760
Sparks, NV 89435

Tyler Scranton

By: Tyler Scranton

10-18-22

Date

Reno-Tahoe Airport Authority

Owner
P.O. Box 12490
Reno, NV 89510

Chris Cobb

By: Chris Cobb

11/01/2022

Date



SIERRA NEVADA CONSTRUCTION, INC.

June 3rd, 2022

Reno Tahoe Airport Authority
2001 E. Plumb Lane
Reno, NV 89512

Project: RTAA Blue Lot Reconstruction Project

Subject: **Revised Storm Drain Routing**

Attn: Bryce Juzak

Mail PO Box 50760
Sparks, NV 89435-0760

Yard 2055 East Greg Street
Sparks, NV 89431

Phone 775.355.0420
Fax 775.355.0535

NV lic. 25565 CA lic. 593393

Sierra Nevada Construction, Inc. (SNC) is submitting the requested pricing for the installation of $\pm 64'$ of 10" SDR Storm Drain, necessary fittings, and abandonment of existing storm drain. Bid item 23 included 8' of Storm drain needed for installation. This quantity was deducted out of the needed 64'. The layout will be completed per the attached revised sketch. A credit was proved for removing the existing drop inlets rather than modifying them. This proposal excludes installation of any cleanouts. SNC also requests 2 additional contract days for Phase 1.1 to complete this work.

The manhole installation and the new drop inlets are covered in contract bid items with no additional costs.

Attached is a breakdown of estimated cost for the work described above.

Total Price: \$5,870.00

If you have any questions, please feel free to contact me at (775)-276-2418

Sincerely,

Tyler Scranton
Project Manager
Sierra Nevada Construction, Inc.

06/03/2022

15:33

22TSC017

RTAA - BLUE LOT CHANGES

*** Tyler Scranton

BID TOTALS

<u>Biditem</u>	<u>Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Bid Total</u>
200	MODIFIY EXISTING CATCH BASIN	-2.000	EA	3,500.00	-7,000.00
900	10" SDR STORM DRAIN LINE	56.000	LF	195.00	10,920.00
910	REMOVE EXISTING DI'S	2.000	EA	975.00	1,950.00

Bid Total	=====>	\$5,870.00
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SIERRA NEVADA CONSTRUCTION, INC.

June 21st, 2022

Reno Tahoe Airport Authority
2001 E. Plumb Lane
Reno, NV 89512

Project: RTAA Blue Lot Reconstruction Project

Subject: **Revised Landscape Plans**

Attn: Bryce Juzak

Mail PO Box 50760
Sparks, NV 89435-0760

Yard 2055 East Greg Street
Sparks, NV 89431

Phone 775.355.0420
Fax 775.355.0535

NV lic. 25565 CA lic. 593393

Sierra Nevada Construction, Inc. (SNC) is submitting the requested pricing for revised landscape drawings. A credit was provided by Legends Landscaping that covers the changes to the irrigation system and reduction in the size of shrubs and trees. A credit for removing over excavation and the installation of new topsoil is also provided. Some landscape areas were previously hardscape and still require installation of topsoil to meet needed subgrades. SNC estimates approximately 10,300 SF of topsoil replacement can be credited back.

Legends Landscaping Credit: \$30,059.00

Top Soil Replacement Credit: \$61,250.00

Total Deductive Credit: \$91,309.00

If you have any questions, please feel free to contact me at (775)-276-2418

Sincerely,

Tyler Scranton
Project Manager
Sierra Nevada Construction, Inc.



July 19th, 2022

Reno Tahoe Airport Authority
2001 E. Plumb Lane
Reno, NV 89512

Project: RTAA Blue Lot Reconstruction Project

Subject: **Multimodal Fiber Revisions**

Attn: Bryce Juzak

Mail PO Box 50760
Sparks, NV 89435-0760

Yard 2055 East Greg Street
Sparks, NV 89431

Phone 775.355.0420
Fax 775.355.0535

NV lic. 25565 CA lic. 593393

Sierra Nevada Construction, Inc. (SNC) is submitting the requested pricing for revised fiber performed by Titan Electric Contractors and Cabling Solutions. SNC requests 4 additional contract days in Phase 1.2 to complete this work.

Fiber Revisions:

\$13,938.00

If you have any questions, please feel free to contact me at (775)-276-2418

Sincerely,



Tyler Scranton
Project Manager
Sierra Nevada Construction, Inc.



Proposed Change Order PCO-001 JOB #2222

To: Tyler Scranton	Job Name: RTIA Blue Parking Lot
Company: SNC	Change Re: Multimode Fiber
Address: 2055 E. Greg Street Sparks, NV 89431	Date: 07-07-2022
Phone: (775) 355-0420	Cc: Ryan Greenhalgh

Work Scope:

Supply and install Multimode fiber per attached layout and splice location. Scope battery limits includes connections at both gates, and ends at the multimode splice. It is our understanding the airport has fiber from the point to the appropriate location inside the terminal.

See attached Cabling Solutions Inc PCO for Relays & Services (including tax) \$12,120.00

Please review and confirm the multimode cable spec sheet attached that is reserved with expected arrival on 7/15 is appropriate for installation at the airport. Lead times for other multimode fiber will have to be inquired on if this is not acceptable.

Exclusions:

No overhead mark-ups or profits included.

Price as described above \$12,120.00

Titan Electrical Contracting will only proceed with this work upon return of this proposal signed by a person authorized to approve work and payment at this location.

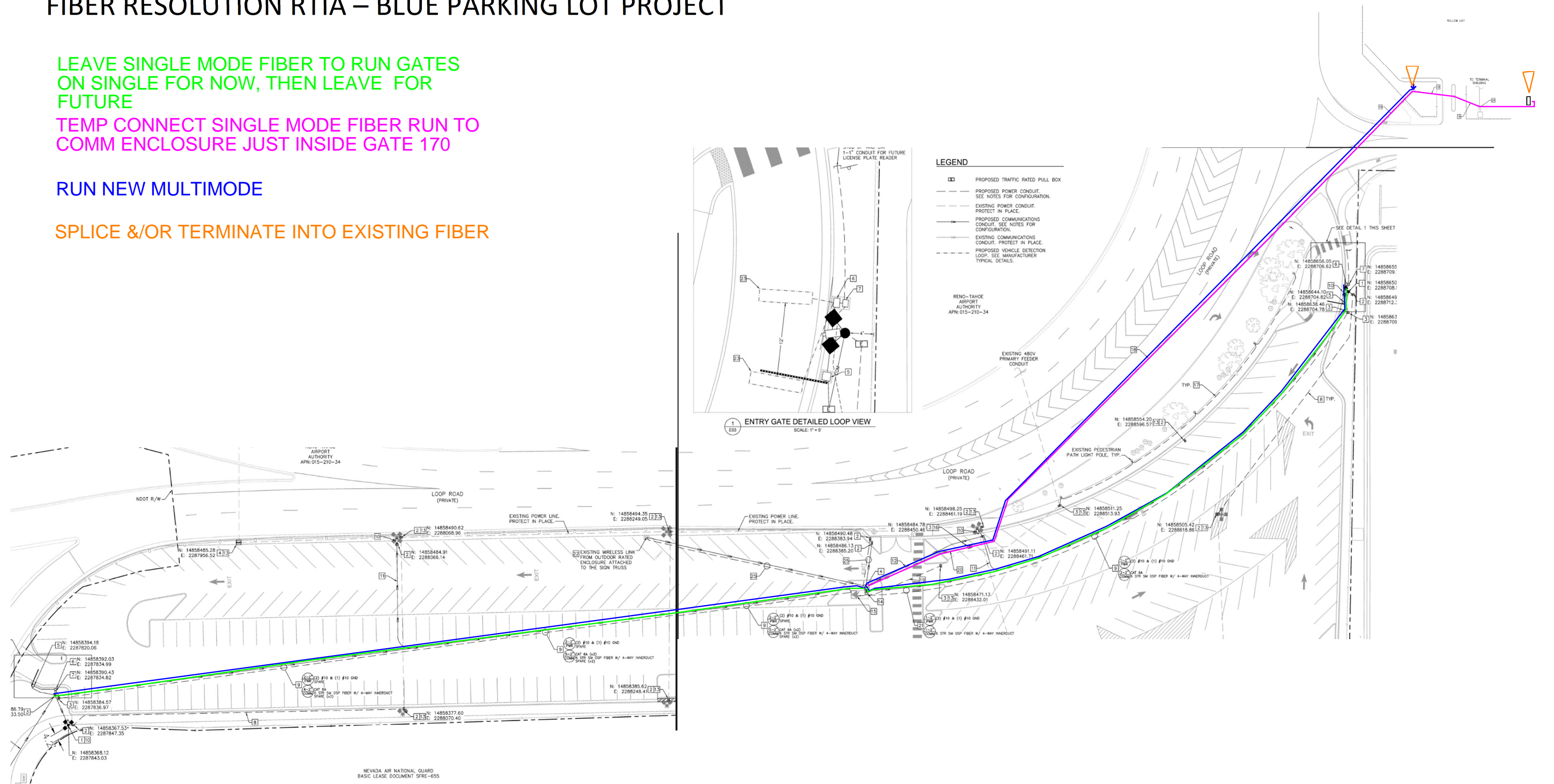
Approved By: _____ Date: _____

FIBER RESOLUTION RTIA – BLUE PARKING LOT PROJECT

LEAVE SINGLE MODE FIBER TO RUN GATES
ON SINGLE FOR NOW, THEN LEAVE FOR
FUTURE
TEMP CONNECT SINGLE MODE FIBER RUN TO
COMM ENCLOSURE JUST INSIDE GATE 170

RUN NEW MULTIMODE

SPLICE &/OR TERMINATE INTO EXISTING FIBER



Cabling Solutions Inc

1591 Greg St.
Sparks, Nevada 89431
Phone 775-356-8870
Fax 775-356-8878

VOICE AND DATA CONTRACTING · DESIGN · SERVICE

PROPOSAL/CONTRACT CO #1

TO: Jenny Lumos
Titan Electrical Contracting, Inc.
5450 Mill St,
Reno, NV 89502
Tel: (775) 857-4500
Email: jenny@titanelectric.biz

PROPOSAL: RTAA Blue Parking Lot Reconstruction
CO #1
Multi-Mode Fiber Cabling

DATE: 7/5/2022

We hereby propose labor and material to complete the following per
Installation of 62.5 multi-mode fiber optic cable as per print FIBER-RESOLUTION-RTIA-Site-Plan-2022-06-30

Projected Time Line

To be determined

Inclusions:

Fiber Optic Cabling

- 2- 6 strand Multi-mode OM1 OSP fiber optic cables from the yellow lot POC to the new Telecommunications cabinet
- 1- 6 strand Muti-mode OM1 OSP Fiber optic cable from the Telecommunications cabinet to the entry gate
- 1- 6 strand Multi-mode OM1 OSP Fiber optic cable from the Telecommunications cabinet to the exit gate
- Fiber runs include Corning Multi-mode OM1 OSP fiber, Corning Fiber panels and Corning Fusion Splice Pigtailes & 6 strand LC bulkheads
- Fiber will be light meter tested and labeled upon completion of installation

Exclusions:

- Any Additional Work Not Expressly Stated Above
- Trash Receptacle
- Permits & Fees
- Overtime & Shift Pay
- Drywall Patching & Painting
- Concrete Coring & Patching
- Electrical, Conduit & Boxes
- Telecommunications Cabinet Provision & Installation
- Max Cell Innerduct Provision & Installation
- Gate System Cabling & Devices
- Reader/Keypad Cabling & Devices
- RS-232 & RS-485 Cabling

OFFERED BY: Nick Mongillo
Senior Estimator (775) 745-5346

FREEDM® LST™ Single-Tube, Gel-Free Cable, Riser

6 F, 62.5 µm multimode (OM1)

CORNING

Corning Cable Systems FREEDM® LST™ Gel-Free Cables are flame-retardant, indoor/outdoor, riser-rated cables designed for interbuilding and intrabuilding backbones in aerial, duct and riser applications. With a riser rating, there is no need for a transition splice when entering the building. Available in a compact design, these cables are protected against water penetration by innovative waterblocking tapes and yarns that swell to absorb water. Waterblocking without the use of messy gels provides more efficient and craft-friendly cable preparation, allows easier cable access and simplifies the use of buffer tube fan-out kits. The buffer tubes and fibers in each tube are color-coded for quick, easy identification.

The SZ-stranded, loose tube design isolates fibers from installation and environmental rigors and allows for easy midspan access. The cable design is also National Electrical Code® (NEC®) listed (OFNR and FT-4). The all-dielectric cable construction requires no grounding or bonding and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip.

This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

Features and Benefits

Riser rating

No transition splices when entering buildings

Gel-free waterblocking technology

Craft-friendly cable preparation

Color-coded fibers

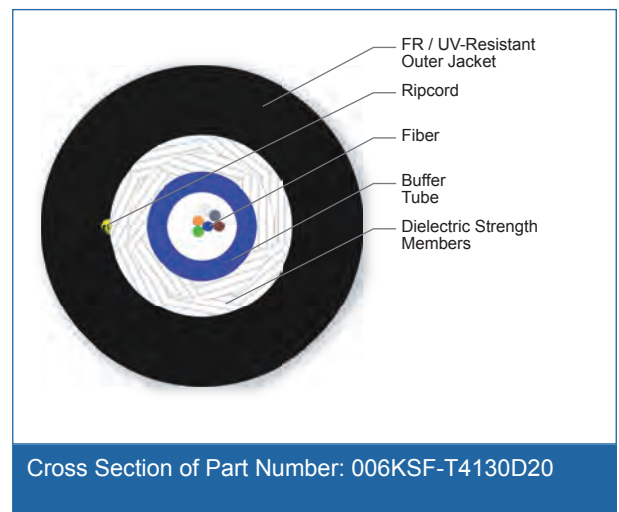
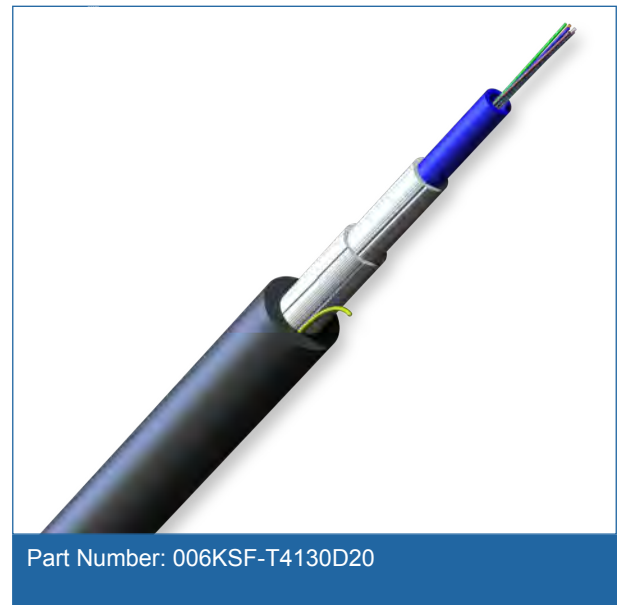
Quick and easy identification

All-dielectric construction

Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



FREEDM® LST™ Single-Tube, Gel-Free Cable, Riser

6 F, 62.5 µm multimode (OM1)

CORNING

Standards

Approval and Listings	National Electrical Code® (NEC®) OFNR, CSA OFN FT-4
Common Installations	Outdoor lashed aerial and duct; indoor vertical riser and general purpose horizontal according to National Electrical Code® (NEC) Article 770
Design and Test Criteria	ANSI/ICEA S-104-696

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser)
Cable Type	Loose Tube
Product Type	Dielectric
Flame Rating	Riser (OFNR)
Fiber Category	62.5 µm MM (OM1)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Fiber Count	6
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White
Fibers per Tube	6
Number of Tube Positions	1
Number of Active Tubes	1
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tensile Strength Elements and/or Armoring - Layer 2	Water-swellable dielectric strength members
Number of Ripcords	1

CORNING

FREEDM® LST™ Single-Tube, Gel-Free Cable, Riser

6 F, 62.5 µm multimode (OM1)

CORNING

Cable Design

Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable

Weight	56 kg/km (38 lb/1000 ft)
Nominal Outer Diameter	7.4 mm (0.29 in)
Max. Tensile Strengths, Short-Term	1350 N (300 lbf)
Max. Tensile Strengths, Long-Term	400 N (90 lbf)
Min. Bend Radius Installation	111 mm (4.4 in)
Min. Bend Radius Operation	37 mm (1.5 in)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
------	---

Fiber Specifications

Optical Characteristics (cabled)

Fiber Type	Multimode
Fiber Core Diameter	62.5 µm
Fiber Category	OM1
Fiber Code	K
Performance Option Code	30
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.4 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	200 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	220 MHz*km / -
Serial 1 Gigabit Ethernet	300 m / 550 m
Serial 10 Gigabit Ethernet	33 m / -

Notes: 1) Improved attenuation and bandwidth options available.
2) Bend-insensitive single-mode fibers available on request.
3) Contact a Corning Cable Systems Customer Care Representative for additional information.

CORNING

FREEDM® LST™ Single-Tube, Gel-Free Cable, Riser

6 F, 62.5 µm multimode (OM1)

CORNING

Ordering Information

Part Number	006KSF-T4130D20
Product Description	FREEDM® LST™ Single-Tube, Gel-Free Cable, Riser, 6 F, 62.5 µm multimode (OM1)



Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA

800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/cablesystems

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CORNING

Blue Lot Final Adjusted Quantities

Item #	Description	Unit	Quantity				Cost			
			Estimated	Measured	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Measured)	\$ Over/Under
1	MOBILIZATION (5% OF TOTAL CONSTRUCTION COST)	LS	1	1.00	0.00	100.00%	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ -
2	REMOVE COMPOSITE SURFACE	SY	2,290	2,369.00	79.00	103.45%	\$ 22.00	\$ 50,380.00	\$ 52,118.00	\$ 1,738.00
3	REMOVE EXISTING LANDSCAPE ROCK	SF	1,722	2,208.00	486.00	128.22%	\$ 3.00	\$ 5,166.00	\$ 6,624.00	\$ 1,458.00
4	REMOVE EXISTING ELECTRICAL BOX	EA	22	22.00	0.00	100.00%	\$ 475.00	\$ 10,450.00	\$ 10,450.00	\$ -
5	REMOVE EXISTING FENCE	LF	620	620.00	0.00	100.00%	\$ 20.00	\$ 12,400.00	\$ 12,400.00	\$ -
6	REMOVE EXISTING LANDCAPING	LS	1	1.00	0.00	100.00%	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ -
7	OVEREXCAVATION (CONTINGENT ITEM)	CY	100	287.00	187.00	287.00%	\$ 110.00	\$ 11,000.00	\$ 31,570.00	\$ 20,570.00
8	CONTAMINATED MATERIAL (CONTINGENT ITEM)	CY	50	-	(50.00)	0.00%	\$ 165.00	\$ 8,250.00	\$ -	\$ (8,250.00)
9	PULVERIZE AND GRADE	SY	11,412	11,412.00	0.00	100.00%	\$ 10.00	\$ 114,120.00	\$ 114,120.00	\$ -
10	TRENCH AND BACKFILL FOR CONDUITS AND CABLES	LF	1,120	1,120.00	0.00	100.00%	\$ 55.00	\$ 61,600.00	\$ 61,600.00	\$ -
11	JOINT TRENCH AND BACKFILL FOR CONDUITS AND CABLES	LF	1,140	1,140.00	0.00	100.00%	\$ 58.00	\$ 66,120.00	\$ 66,120.00	\$ -
12	6" TYPE 2 CLASS B AGGREGATE BASE	SY	11,485	11,485.00	0.00	100.00%	\$ 12.00	\$ 137,820.00	\$ 137,820.00	\$ -
13	3" ASPHALT CONCRETE	SY	11,485	11,564.00	79.00	0.00%	\$ 22.50	\$ 258,412.50	\$ 260,190.00	\$ 1,777.50
14	AC MULTI-USE PATH (3" AC ON 6" AB) (no qty w/bid alt No. 1 awarded)	SY	0	-	0.00	100.00%	\$ 100.00	\$ -	\$ -	\$ -
15	PCC SIDEWALK	SF	5,270	5,320.00	50.00	100.00%	\$ 18.00	\$ 94,860.00	\$ 95,760.00	\$ 900.00
16	PCC PEDESTRIAN RAMP	SF	302	398.00	96.00	131.79%	\$ 55.00	\$ 16,610.00	\$ 21,890.00	\$ 5,280.00
17	PCC TYPE 1 CURB AND GUTTER	LF	1,530	1,573.00	43.00	102.81%	\$ 65.00	\$ 99,450.00	\$ 102,245.00	\$ 2,795.00
18	PCC TYPE 2 MEDIAN CURB	LF	749	749.00	0.00	100.00%	\$ 55.00	\$ 41,195.00	\$ 41,195.00	\$ -
19	DRIVEWAY	EA	2	2.00	0.00	100.00%	\$ 7,500.00	\$ 15,000.00	\$ 15,000.00	\$ -
20	ADJUST MANHOLE TO FINISH GRADE	EA	3	3.00	0.00	100.00%	\$ 2,000.00	\$ 6,000.00	\$ 6,000.00	\$ -
21	MANHOLE	EA	1	1.00	0.00	100.00%	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ -
22	MODIFIY EXISTING CATCH BASIN	EA	2	2.00	0.00	100.00%	\$ 3,500.00	\$ 7,000.00	\$ 7,000.00	\$ -
CO No. 1	Revised Storm Drain Routing (Modify Existing Catch Basin)	EA	2	2.00	0.00	100.00%	\$ (3,500.00)	\$ (7,000.00)	\$ (7,000.00)	\$ -
23	NEW CATCH BASIN	EA	2	2.00	0.00	100.00%	\$ 5,500.00	\$ 11,000.00	\$ 11,000.00	\$ -
24	TRAFFIC RATED NO. 3-1/2 PULL BOX	EA	15	15.00	0.00	100.00%	\$ 2,050.00	\$ 30,750.00	\$ 30,750.00	\$ -
25	TRAFFIC RATED NO. 5 PULL BOX	EA	9	9.00	0.00	100.00%	\$ 2,400.00	\$ 21,600.00	\$ 21,600.00	\$ -
26	TRAFFIC RATED NO. 9 PULL BOX	EA	2	2.00	0.00	100.00%	\$ 5,000.00	\$ 10,000.00	\$ 10,000.00	\$ -
27	(2) #6 AWG THWN AND (1) #8 AWG GND	LF	415	415.00	0.00	100.00%	\$ 7.50	\$ 3,112.50	\$ 3,112.50	\$ -
28	(2) #2 AWG THWN-2 AND (1) #2 AWG THWN-2 GND	LF	60	60.00	0.00	100.00%	\$ 16.00	\$ 960.00	\$ 960.00	\$ -
29	(2) #10 AWG THWN AND (1) #10 AWG GND	LF	1,000	1,000.00	0.00	100.00%	\$ 4.50	\$ 4,500.00	\$ 4,500.00	\$ -
30	6 STRAND MULTIMODE OSP FIBER OPTIC CABLE	LF	2,105	2,105.00	0.00	100.00%	\$ 11.00	\$ 23,155.00	\$ 23,155.00	\$ -
31	CAT 6A PAIGE DATACOM OSP GAMECHANGER SHIELDED UTP WITH ezEX48 SHIELDED CAT	LF	1,630	1,630.00	0.00	100.00%	\$ 9.00	\$ 14,670.00	\$ 14,670.00	\$ -
32	INSTALL NEW KAX1 LED LIGHT FIXTURES (2 HEADS) ON RTAA PROVIDED 50' POLE AND CON	EA	1	1.00	0.00	100.00%	\$ 17,000.00	\$ 17,000.00	\$ 17,000.00	\$ -
33	INSTALL NEW KAX1 LED LIGHT FIXTURES (3 HEADS) ON RTAA PROVIDED 50' POLE AND CON	EA	1	1.00	0.00	100.00%	\$ 17,000.00	\$ 17,000.00	\$ 17,000.00	\$ -
34	REMOVE AND REINSTALL ENTRY GATE ARM/ENCLOSURE, TICKET READER/DISPENSER EQUIP	LS	1	1.00	0.00	100.00%	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ -
35	REMOVE AND REINSTALL EXIT GATE ARM/ENCLOSURE, TICKET READER/DISPENSER EQUIP	LS	1	1.00	0.00	100.00%	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ -
36	480 TO 120/240V TRANSFORMER/PANEL LOAD CENTER MOUNTED ON PAD	EA	1	1.00	0.00	100.00%	\$ 17,000.00	\$ 17,000.00	\$ 17,000.00	\$ -

Blue Lot Final Adjusted Quantities

Item #	Description		Quantity				Cost			
		Unit	Estimated	Measured	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Measured)	\$ Over/Under
37	INSTALL NEW NEMA 3R AZE TELECOM COMMUNICATIONS ENCLOSURE MODEL NUMBER R	EA	1	1.00	0.00	100.00%	\$ 14,000.00	\$ 14,000.00	\$ 14,000.00	\$ -
38	NEW MULTISENSOR AXIS CAMERA MODEL P3727-PLE WITH AXIS T94N01D PENDANT CAP AN	EA	4	4.00	0.00	100.00%	\$ 4,600.00	\$ 18,400.00	\$ 18,400.00	\$ -
39	STRIPING AND SIGNAGE	LS	1	1.00	0.00	100.00%	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ -
40	LANDSCAPING	LS	1	1.00	0.00	100.00%	\$ 350,000.00	\$ 350,000.00	\$ 350,000.00	\$ -
CO No. 1	Revised Landscaping Plans	LS	1	1.00	0.00	100.00%	\$ (91,309.00)	\$ (91,309.00)	\$ (91,309.00)	\$ -
41	EMERGENCY ACCESS GATE	EA	1	1.00	0.00	100.00%	\$ 34,000.00	\$ 34,000.00	\$ 34,000.00	\$ -
42	DECORATIVE FENCE	LF	608	608.00	0.00	100.00%	\$ 100.00	\$ 60,800.00	\$ 60,800.00	\$ -
43	TRAFFIC CONTROL	LS	1	1.00	0.00	100.00%	\$ 188,226.00	\$ 188,226.00	\$ 188,226.00	\$ -
	BID ALTERNATES									
B1	PCC MULTI-USE PATH	SF	4,230	4,620.00	390.00	109.22%	\$ 14.00	\$ 59,220.00	\$ 64,680.00	\$ 5,460.00
	Change Orders									
CO No. 1	Revised Storm Drain Routing (10" SDR Storm Drain Line)	LF	56	56.00	0.00	100.00%	\$ 195.00	\$ 10,920.00	\$ 10,920.00	\$ -
CO No. 1	Revised Storm Drain Routing (Remove existing Drop Inlet)	EA	2	2.00	0.00	100.00%	\$ 975.00	\$ 1,950.00	\$ 1,950.00	\$ -
CO No. 1	Multimodal Fiber Revision	LS	1	1.00	0.00	100.00%	\$ 13,938.00	\$ 13,938.00	\$ 13,938.00	\$ -
	Total							\$ 2,064,726.00	\$ 2,096,454.50	\$ 31,728.50

RENO-TAHOE AIRPORT AUTHORITY CONTINGENCY CHANGE ORDER



CCO No.

Contractor:

Project:

Project Number:

Summary of Change and List of Attachments:

Additional P-608 (GSB-88) pavement sealing at T Hanger apron and M Block. Additional cost of \$46,250.00 (see Exhibit A for details)

Final Adjusted Quantities. Additional cost of \$780.00 (see Exhibit B for details)

Contingency Change Order Summary:

Contract Contingency Total: \$

Total Previously Approved: \$

Total Change this Authorization: \$ ADD/DEDUCT

Remaining Contingency Balance: \$

Change in Contract Times:

Original Duration:

Previous Authorization:

This Authorization: ADD/DEDUCT

Revised Contract Time:

Contract Summary:

Original Contract: \$

Total Previously Approved CO's \$

Total Previously Approved CCO's \$

Contract Sum Prior to this CCO \$

Total Change this Authorization: \$

New Contract Sum: \$

Contractor Signature *Oswaldo Arias* Date: 10/31/22

Sierra Nevada Construction, Inc., Oswaldo Arias

Project Mgr Signature *Bryce Juzek* Date: 11/03/2022

RTAA Project Mgr: Bryce Juzek

Construction Mgr Signature *Kara M. Bymers* Date: 10/26/2022

Atkins, Construction Manager: Kara Bymers

Manager Signature *Chris Cobb* Date: 11/03/22

RTAA Mgr Engineering&Construction: Chris Cobb, P.E.

Exhibit A



SIERRA NEVADA CONSTRUCTION, INC.

October 26, 2022

Bryce R. Juzek, PE
Project Manager II
Engineering & Construction
Reno Tahoe Airport Authority
2001 E Plumb Lane
Reno, NV 89502

Mail PO Box 50760
Sparks, NV 89435-0760

Yard 2055 East Greg Street
Sparks, NV 89431

Phone 775.355.0420
Fax 775.355.0535

NV lic. 25565, CA lic. 593393
84791

Project: Reno-Stead Pavement Maintenance Project

RE: Revised Hanger Apron GSB 88

Mr. Juzek,

Please see below Sierra Nevada Construction, Inc. (SNC) proposal for GSB 88 pavement sealing on 25,000 SY of hanger aprons located on the Reno-Stead Airport as shown on the attachment below.

BID ITEM	DESCRIPTION	UM	BID QUANTITY	UNIT PRICE	TOTAL
1	GSB 88 Pavement Sealing	SY	25,000	\$ 1.85	\$46,250.00
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
TOTAL					\$46,250.00

Should you have any questions or require additional information, please feel free to call me at (775) 484-0615.

Sincerely,

Osvaldo Arias

Osvaldo Arias
Sierra Nevada Construction
Project Manager

CCO #1

RTS-Pavement Maintenance

PROJECT: RTS Pavement Maintenance Project
SNC JOB#: 58068
CUSTOMER: RTAA



2055 east greg street
sparks, nv 89431
775-355-0420 phone
775-355-0535 fax

nv. lic. #25565 ca. lic. #593393

DESCRIPTION OF WORK: Additional GSB 88 at T Hanger Apron and M Block For 24,000 SY

LOCATION: Stead Airport

Labor		Straight Time		Overtime		Amount
Name	Type	Hours	Rate	Hours	Rate	
Operator foreman		16.0	68.95	4.00	92.34	\$ 1,472.56
Operator		32.0	67.07	12.00	89.52	\$ 3,220.48
						\$ -
						\$ -
						\$ -
						\$ -
Sub-Total						4,693.04
Equipment	Attachments/Rental	Number	Hours	Rate	Amount	
Foreman truck			20.0	18.31	\$ 366.20	
Distributor			20.0	188.00	\$ 3,760.00	
Crew Truck			12.0	21.00	\$ 252.00	
Tack Pot			10.0	21.00	\$ 210.00	
Sweeper			10.0	225.00	\$ 2,250.00	
Forklift			4.0	41.00	\$ 164.00	
Sub-Total					7,002.20	
Subs, Supplies or Materials		Quantity	Unit	Price	Amount	
GSB 88		3600	Gal	5.86	\$ 21,096.00	
Haul GSB 88		35	TN	168.00	\$ 5,880.00	
					\$ -	
					\$ -	
					\$ -	
					\$ -	
					\$ -	
					\$ -	
Sub-Total					\$ 26,976.00	

SUB TOTAL \$ 38,671.24

MARK-UP 15% \$ 5,728.76

TOTAL AMOUNT \$ 44,400.00

\$44,400/24,000SY=\$1.85/SY

Exhibit B

RTS AIRPORT PAVEMENT MANAGEMENT PROJECT - 2022 FINAL ADJUSTED QUANTITIES

Item #	Description		Quantity				Cost			
		Unit	Estimated	Measured	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Measured)	\$ Over/Under
1	Mobilization/Demobilization complete at	LS	1	1.00	0.00	100.00%	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ -
2	Traffic Control complete at	LS	1	1.00	0.00	100.00%	\$ 47,670.25	\$ 47,670.25	\$ 47,670.25	\$ -
3	Airport Safety & Security complete at	LS	1	1.00	0.00	100.00%	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ -
4	Type II Rapid Setting Slurry Seal (12lbs/ft3) complete and in place at	SY	29,201	29,201.00	0.00	100.00%	\$ 2.75	\$ 80,302.75	\$ 80,302.75	\$ -
5	12" Wide Solid White Stop Bar (Traffic Paint)	LF	27	27.00	0.00	100.00%	\$ 1.80	\$ 48.60	\$ 48.60	\$ -
6	4" Wide Solid White Striping (Traffic Paint)	LF	15,562	15,562.00	0.00	100.00%	\$ 0.35	\$ 5,446.70	\$ 5,446.70	\$ -
7	4" Wide Solid Double Yellow Striping (Traffic Paint)	LF	7,381	7,381.00	0.00	100.00%	\$ 0.70	\$ 5,166.70	\$ 5,166.70	\$ -
8	Handicap Pavement Marking (Thermoplastic)	EA	2	5.00	3.00	250.00%	\$ 260.00	\$ 520.00	\$ 1,300.00	\$ 780.00
9	P-608 (2:1 Dilution 2% Polymer) complete and in place at	SY	128,739	128,739.00	0.00	100.00%	\$ 1.50	\$ 193,108.50	\$ 193,108.50	\$ -
1.1	P-608 (2:1 Dilution 3% Polymer) complete and in place at	SY	34,527	34,527.00	0.00	100.00%	\$ 1.50	\$ 51,790.50	\$ 51,790.50	\$ -
2.1	P-608 (1:1 Dilution 4% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
2.2	P-608 (1:1 Dilution 3% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
2.3	P-608 (1:1 Dilution 2% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
2.4	P-608 (1:1 Dilution 1% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
2.5	P-608 (2:1 Dilution 1% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
2.6	P-608 (2:1 Dilution 2% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
2.7	P-608 (2:1 Dilution 3% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
2.8	P-608 (2:1 Dilution 4% Polymer) complete and in place at	SY	4,709	4,709.00	0.00	100.00%	\$ 1.50	\$ 7,063.50	\$ 7,063.50	\$ -
3.1	P-608 (2:1 Dilution 3% Polymer) complete and in place at	SY	10,278	10,278.00	0.00	100.00%	\$ 1.50	\$ 15,417.00	\$ 15,417.00	\$ -
4.1	Type I Rapid Setting Slurry Seal (8lbs/ft3) complete and in place at	SY	18,014	18,014.00	0.00	100.00%	\$ 2.00	\$ 36,028.00	\$ 36,028.00	\$ -
	CHANGE ORDERS							\$ -	\$ -	\$ -
1	Revised Hangar Apron GSB88 Pavement Sealing	SY	25,000	25,000.00	0.00	100.00%	\$ 1.85	\$ 46,250.00	\$ 46,250.00	\$ -
	Total							\$ 603,257.00	\$ 604,037.00	\$ 780.00

**CHANGE
ORDER****Distribution to:**

RTAA PURCHASING	<input checked="" type="checkbox"/>
PM	<input checked="" type="checkbox"/>
CM	<input checked="" type="checkbox"/>
ENGINEER	<input checked="" type="checkbox"/>
CONTRACTOR	<input checked="" type="checkbox"/>
FAA	<input checked="" type="checkbox"/>

Reno-Tahoe Airport Authority

Reno-Tahoe International Airport
Reno-Stead Airport
Box 12490
Reno, NV 89510



Project:	Taxiway Alpha and Aircraft Apron Reconstruction	Change Order Number 01 (Grant 48-2022)
	Project-Phase 3	Change Order Initiation Date: November 15, 2022
Solicitation #:	ITB #21/22-17	AIP No. 3-32-0018-48-2022
To:	Granite Construction Company	Original Contract Date: 4/14/2022
	P.O. Box 2087	
	Sparks, NV 89431	

You are directed to make the following changes in the Contract:

Award modified Bid Alternate No. 3 and to utilize stabilization method of P-207 Pulverize 14" and Cement Treat 10" at 4% in lieu of P-154-1 Uncrushed Aggregate Subbase Course (4 Inches Thick), P-156-1 Cement Treated Subgrade (5% Cement, 10 Inches Thick), P-209-1 Crushed Aggregate Base Course (6 Inches Thick) P-304S-1 Cement-Treated Base Course (6 Inches Thick) (See Exhibit A)

\$137,340.00

Award the remaining quantity of P-207 Pulverize 14" and Cement Treat 10" at 4% in lieu of P-154-1 Uncrushed Aggregate Subbase Course (4 Inches Thick) from Bid Alternate No. 2 (See Exhibit B)

\$28,384.00

Award the remaining quantity of P-207 Pulverize 14" and Cement Treat 10" at 4% in lieu of P-154-1 Uncrushed Aggregate Subbase Course (4 Inches Thick) from Bid Alternate No. 1 (See Exhibit C)

\$19,872.00

Award Bid Alternate Nos. 5 and 6 in their entirety. All estimated quantities and unit prices will remain the same at time of bid. (See Exhibit D)

\$83,800.00

Total \$269,396.00

All other terms, conditions, and requirements not modified herein remain unchanged.

Not valid until signed by ALL parties. Execution of this Change Order by both Owner and Contractor constitutes a binding agreement and serves as a full accord and satisfaction of any claim, demand, lien, stop notice or further request for compensation, past or present, known or unknown, and/or time extension arising out of or by virtue of the work described above in the Change Order. Contractor's signature indicates agreement herewith, including any adjustments in the Contract Sum or Contract Time.

The Original Contract Sum was.....	\$3,099,099.00
Net Changes by Previously Authorized Change Orders	(\$21.38)
Net Changes by Previously Authorized Contingency Change Orders	\$0.00
The Revised Contract Sum Prior to this Change Order was	\$3,099,077.62
The Contract Sum will be increased by this Change Order.	\$269,396.00
The new Contract Sum, including this Change Order will be	\$3,368,473.62

The Contract Completion date prior to this Change Order was November 11, 2022.
The Contract Time will not change due to this change order.

Authorized By:

Atkins North America

Construction Manager
10509 Professional Cir. Ste 103
Reno, NV 89521



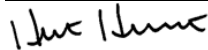
By: Kara Bymers

11/16/2022

Date

Kimley-Horn

Engineer/Architect
7900 Rancharrah Pky, Ste 100,
Reno, Nevada 89511



By: Heath Hildebrandt

11/18/2022

Date

Granite

Contractor
P.O. Box 2087
Sparks, NV 89431



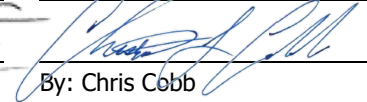
By: Matt Cates

11/17/22

Date

Reno-Tahoe Airport Authority

Owner
P.O. Box 12490
Reno, NV 89510



By: Chris Cobb

11/18/22

Date

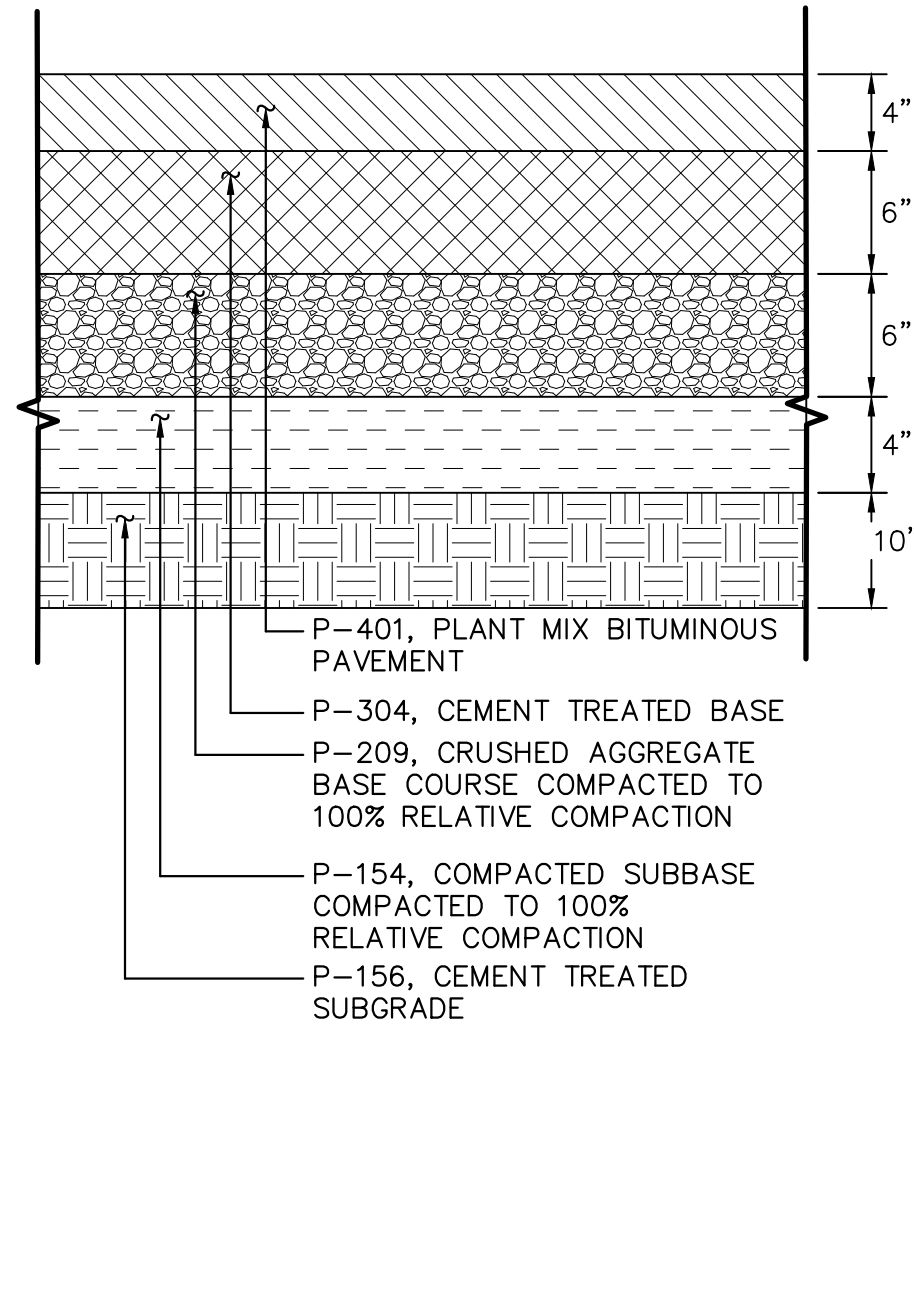
Exhibit A

Taxiway Alpha and Aircraft Apron Reconstruction Project-Phase 3 Bid Alt 3

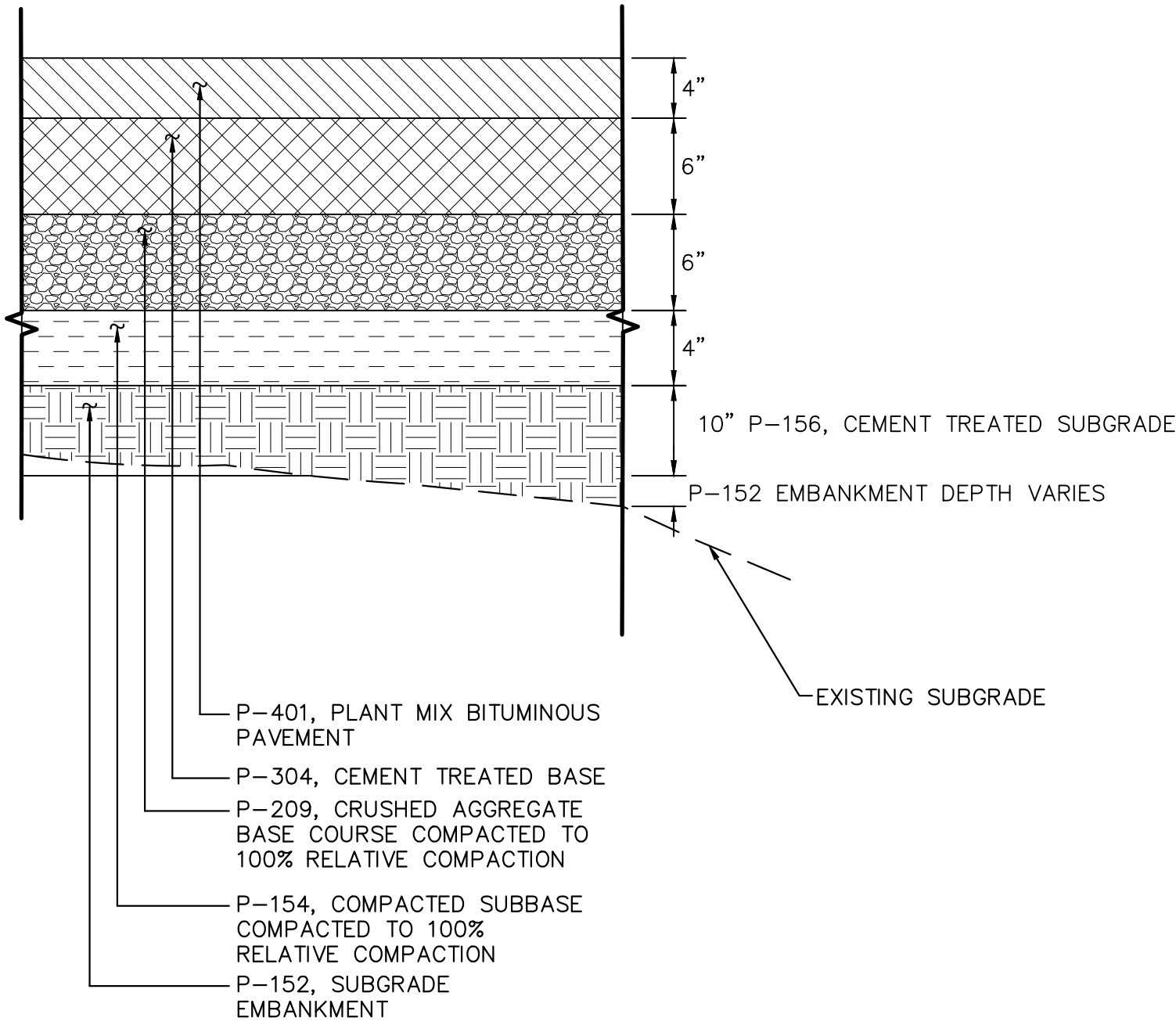
Item #	Description	Unit	Quantity				Cost			Comments
			Estimated	Projected	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Projected)	
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	990	-	(990.00)	0.00%	\$5.00	\$ 4,950.00	\$ -	
P-101-2	Full Depth Pavement Section Removal (Bituminous and Concrete)	SY	110	110.00	0.00	100.00%	\$50.00	\$ 5,500.00	\$ 5,500.00	
P-101-6	Partial Depth Milling 2"	SY	115	115.00	0.00	100.00%	\$3.00	\$ 345.00	\$ 345.00	
P-102-1	Airport Safety and Security	MO	0.5	0.43	(0.07)	85.45%	\$110,000.00	\$ 55,000.00	\$ 47,000.00	
P-152-1	Unclassified Excavation	CY	500	-	(500.00)	0.00%	\$12.00	\$ 6,000.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	50.0	-	(50.00)	0.00%	\$68.00	\$ 3,400.00	\$ -	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	50	-	(50.00)	0.00%	\$310.00	\$ 15,500.00	\$ -	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	1,350	1,350.00	0.00	100.00%	\$0.40	\$ 540.00	\$ 540.00	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$11.00	\$ 12,100.00	\$ -	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$18.00	\$ 19,800.00	\$ -	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$14.00	\$ 15,400.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$26.00	\$ 28,600.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	1,100	1,100.00	0.00	0.00%	\$40.00	\$ 44,000.00	\$ 44,000.00	
P-401-3	Hot Mix Asphalt (HMA) Pavement (2 Inches Thick)	SY	115	115.00	0.00	100.00%	\$37.00	\$ 4,255.00	\$ 4,255.00	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	200	200.00	0.00	100.00%	\$2.50	\$ 500.00	\$ 500.00	
Total								\$ 215,890.00	\$ 102,140.00	
P-207	Pulverize 14" and Cement Treat 10" at 4%	SY	0	1100	1100.00		\$ 32.00	\$ -	\$ 35,200.00	
Total									\$137,340.00	Funded Utilizing Grant 3-32-0018-48-2022

Plotted By: Fitzgerald, Joke Sheet Set: RTS-P3Apron Layout: C203 September 19, 2022 03:45:12pm K:\REN_Aviation\RTS\091479017-Aircraft Parking Apron and Taxiway Alpha CAD\PlanSheets-P3\091479017-P3.dwg

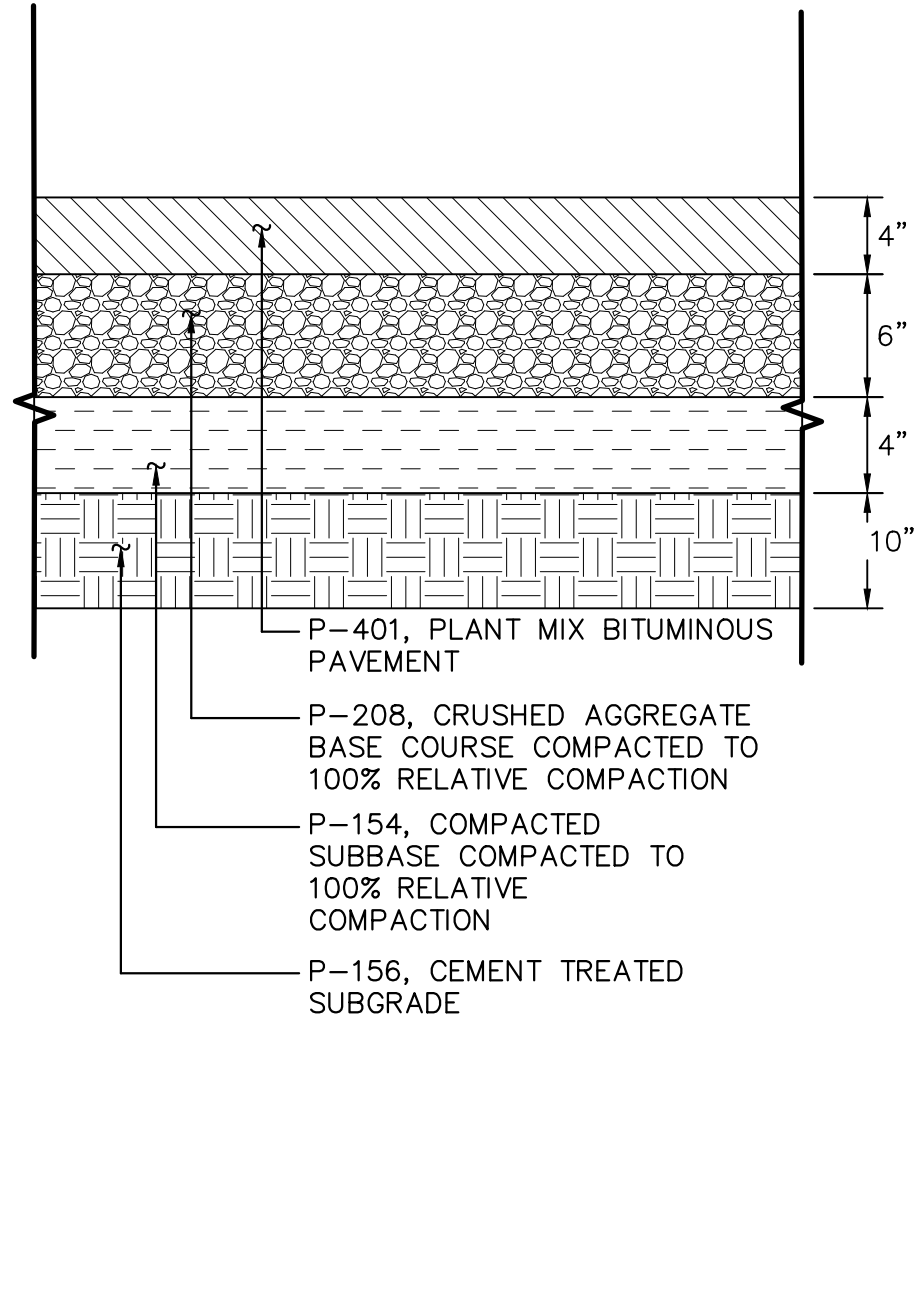
This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse or improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



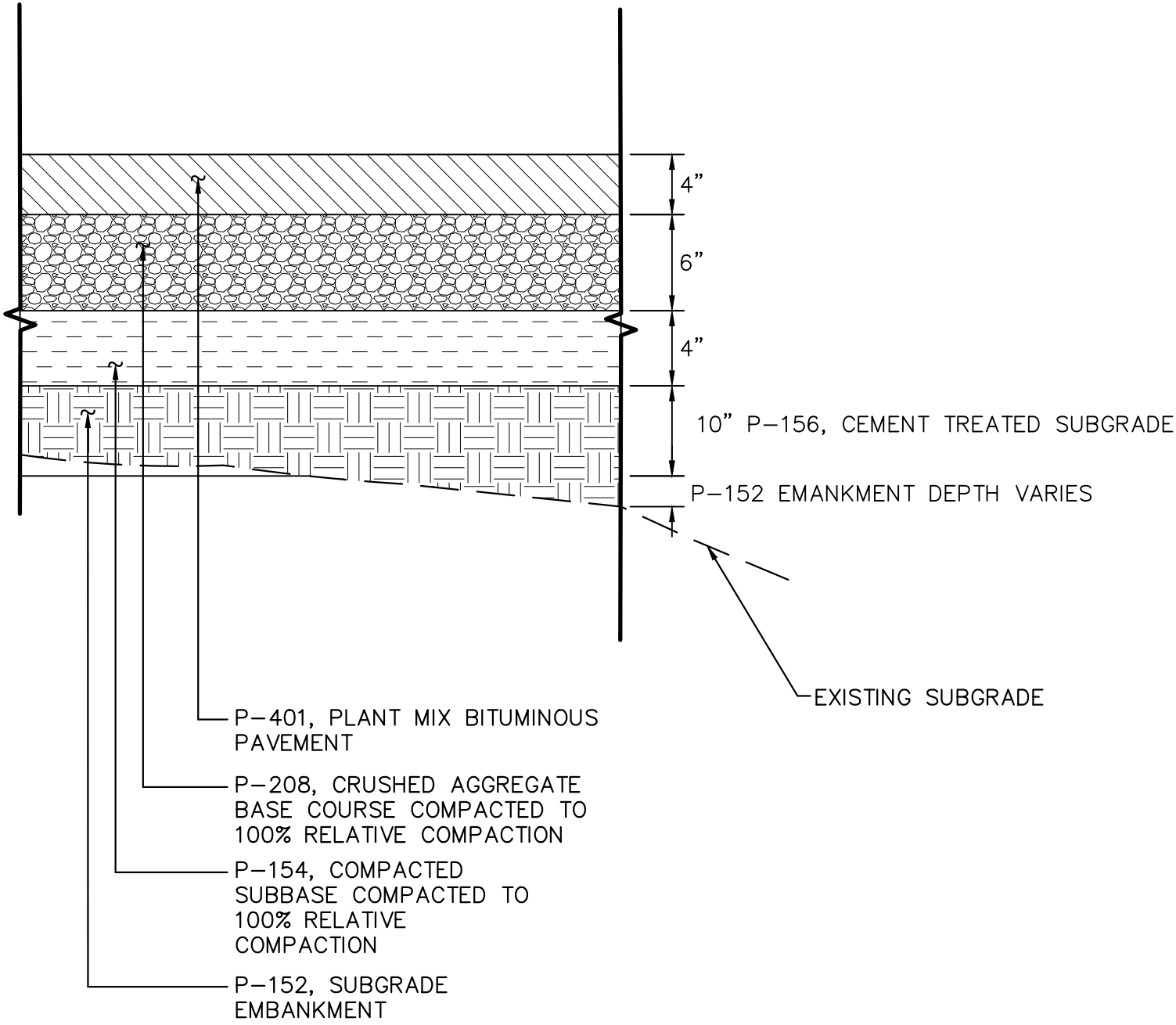
TYPICAL CUT SECTION



TYPICAL FILL SECTION



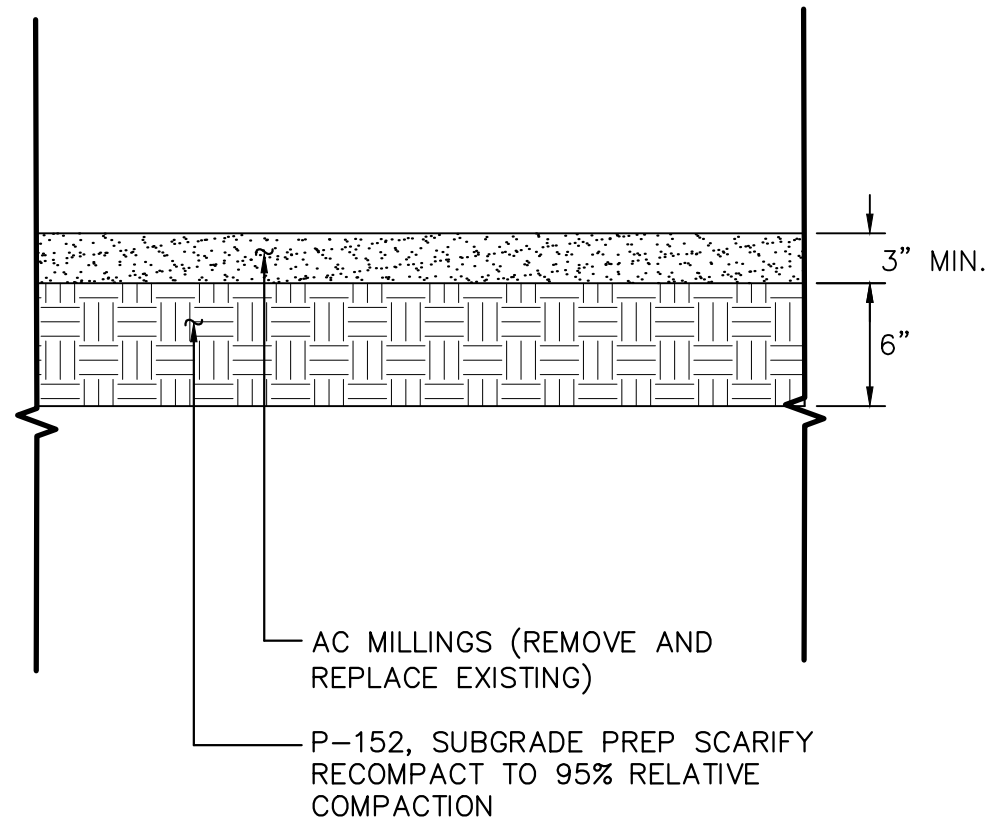
TYPICAL CUT SECTION



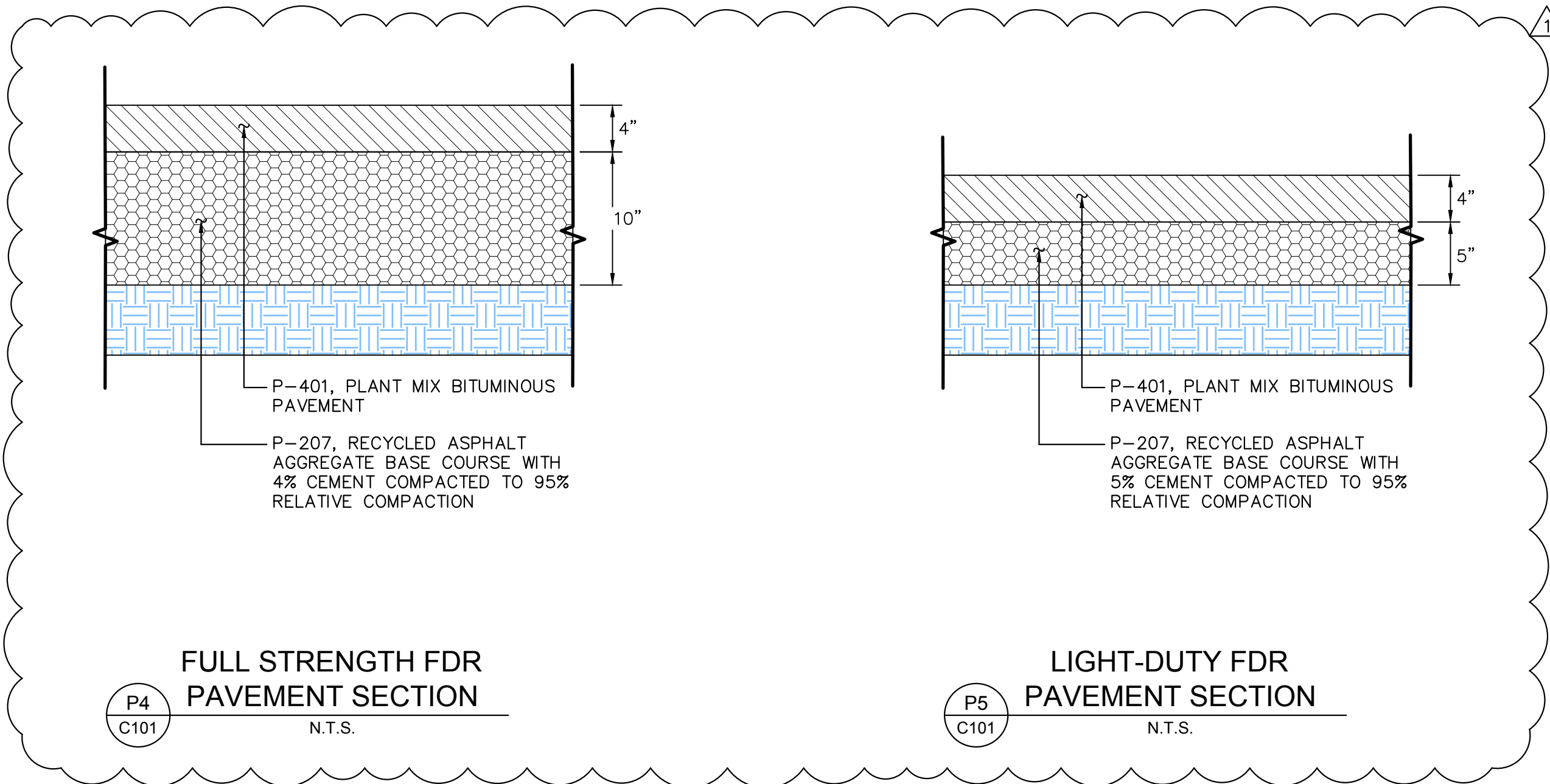
TYPICAL FILL SECTION

- GENERAL NOTES:
1. REFER TO C500 SERIES FOR GRADING CONFORMANCE.
 2. EXISTING TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
 3. RELATIVE DENSITIES FOR ALL SECTIONS INDICATED ARE BASED ON ASTM D1557.

P1
C101
FULL STRENGTH
PAVEMENT SECTION
N.T.S.



P3
C101
TAXIWAY SHOULDER
SECTION
N.T.S.



P4
C101
FULL STRENGTH FDR
PAVEMENT SECTION
N.T.S.

P5
C101
LIGHT-DUTY FDR
PAVEMENT SECTION
N.T.S.

KHA PROJECT 091479023		DATE 09/19/2022		SCALE N/A		DESIGNED BY STH		DRAWN BY JPC		CHECKED BY THH	
RENO-TAHOE AIRPORT AUTHORITY TAXIWAY A & AIRCRAFT APRON RECONSTRUCTION PROJECT PHASE 3						NEVADA RENO					
SHEET NUMBER C203						SHEET 18 OF 36					

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7900 RANCH-HARRAH PARKWAY, SUITE 100, RENO, NV 89511
PHONE: 775-787-7552
WWW.KIMLEY-HORN.COM

PAVEMENT SECTIONS		REVISIONS	
No.		DATE	BY
09/19/22	JWF		

ITEM P-207 IN-PLACE FULL DEPTH RECLAMATION (FDR) RECYCLED ASPHALT AGGREGATE BASE COURSE

DESCRIPTION

207-1.1 This item consists of a recycled asphalt aggregate base course resulting from the in-place full depth reclamation (FDR) of the existing pavement section (asphalt wearing surface and aggregate base), plus mechanical stabilization with additional aggregate or chemical stabilization with cement, asphalt emulsion or fly ash when required.

MATERIALS

207-2.1 Aggregate. The FDR shall consist of materials produced by recycling (pulverizing and mixing) the existing asphalt pavement, aggregate base, subgrade, and any additional aggregate as necessary. Material larger than 2 inches in any dimension shall not be permitted in the recycle asphalt aggregate base course.

The FDR shall meet the gradation in the table below.

FDR Gradation

Sieve	Minimum Percentage by weight passing sieves
2 inch (51 mm)	100
No. 4 (4.75 mm)	55
No. 200 (75 µm)	0-15

a. Deleterious substances. Materials for aggregate base shall be kept free from weeds, sticks, grass, roots and other foreign matter.

b. Uniformity. The materials shall be thoroughly recycled (pulverized and mixed) to ensure a uniform gradation.

207-2.2 Stabilization.

a. Mechanical stabilization. If necessary, addition of corrective aggregate material to adjust gradation shall be equivalent to P-208 or better.

b. Chemical Stabilization. Cement shall meet the requirements of ASTM C150 or ASTM C595. Materials shall be handled, stored, and applied in accordance with all federal, state, and local requirements.

207-2.3 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

207-2.4 Quality Control (QC) Sampling and testing. The Contractor shall take at least two FDR samples per day of production in the presence of the Resident Project Representative (RPR) to check the gradation. Sampling shall be per ASTM D75. Material shall meet the requirements in paragraph 207-2.1.

Samples shall be taken from the in-place, un-compacted material at random sampling locations per ASTM D3665.

CONSTRUCTION METHODS

207-3.1 Milling. Milling is not required.

207-3.2 Control Strip. The first half-day of construction shall be considered the control strip. The Contractor shall demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the RPR. Upon acceptance of the control strip by the RPR, the Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

207-3.3 Recycling (Pulverization and mixing). The asphalt pavement, aggregate base and subgrade shall be recycled (pulverized and mixed) into a uniformly blended mixture cement and water to the depth indicated on the plans. The cement percentage by dry unit weight shall be as indicated on the plans. All material over approximately 2 inches (50 mm) shall be removed by the Contractor. The mixture shall be brought to the desired moisture content.

The maximum lift thickness of the recycled aggregate base course material to be compacted shall be 10 inches.

207-3.4 Grading and compaction. Immediately upon completion of recycling (pulverization and mixing), the material shall be shaped and graded in accordance with the project plans. The recycled asphalt aggregate base course shall be compacted within the same day to an in-place density of 95% as determined by ASTM D1557. The moisture content of the material during compaction shall be within $\pm 2\%$ of the optimum moisture content as determined by ASTM D2216. The number, type and weight of rollers shall be sufficient to compact the material to the required density. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

207-3.5 Finishing. The surface of the aggregate base course shall be finished by blading or with automated equipment designed for this purpose. If the top layer is 1/2 inch (12 mm) or more below grade, the top layer shall be scarified to a depth of at least 3 inches (75mm), new material added, and the layer blended and re-compacted to bring it to grade. The addition of layers less than 3 inches (75mm) shall not be allowed.

207-3.6 Proof rolling. Compacted asphalt aggregate base course shall be proof rolled with a tandem axle dual wheel dump truck loaded to the legal limit with tires inflated to 80 psi (550 kPa) in the presence of the RPR. Soft areas that deflect greater than 0.5 inch (12 mm) or show permanent deformation greater than 0.5 inch (12 mm) shall be removed and reworked at the Contractor's expense.

207-3.7 Weather limitations. When weather conditions detrimentally affect the construction process and/or quality of the materials, the Contractor shall stop construction. Cement or fly ash shall not be applied when wind conditions affect the distribution of the materials. When the aggregates contain frozen materials or when the underlying course is frozen or wet, the construction shall be stopped. Construction shall not be performed unless the atmospheric temperature is above 35°F (2°C) and rising or approved by the RPR. When the temperature falls below 35°F (2°C), protect all completed areas against detrimental effects of freezing by approved methods. Correct completed areas damaged by freezing, rainfall, or other weather conditions to meet specified requirements.

207-3.8 Maintenance. The asphalt aggregate base course shall be maintained in a satisfactory condition until the work is accepted by the RPR. Equipment used in the construction of an adjoining section may be routed over completed sections of asphalt aggregate base course, provided that no damage results and equipment is routed over the full width of the completed asphalt aggregate base course. Any damage to the recycled asphalt aggregate base course shall be repaired by the Contractor at the Contractor's expense.

207-3.9 Surface tolerances. The finished surface shall be tested for smoothness and accuracy of grade. Any area failing smoothness or grade shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted by the Contractor at the Contractor's expense.

a. Smoothness. The finished surface shall not vary more than 3/8-inch (9 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.

b. Grade. The grade shall be measured on a 50-foot (15-m) grid and shall be within +0 and -1/2 inch (12 mm) of the specified grade.

207-3.10 Acceptance sampling and testing for density. FDR base course shall be accepted for density and thickness on an area basis. One (1) test for density and thickness will be made for each 1200 square yds (1000 square meters). Sampling locations will be determined on a random basis in accordance with ASTM D3665.

a. Density. The RPR shall perform all density tests.

Each area will be accepted for density when the field density is at least 95% of the maximum density of the FDR base course in accordance with ASTM D1557. The in-place field density shall be determined in accordance with ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. If the specified density is not attained, the area represented by the failed test must be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

b. Thickness. The thickness of the base course shall be within +0 and -1/2 inch (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the presence of the RPR for each area. Where the thickness is deficient by more than 1/2-inch (12 mm), the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches (75 mm), adding new material, and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

207-4.1 The quantity of FDR asphalt aggregate base course shall be measured by the number of square yards (m²) of material in compliance with the plans and specifications.

207-4.2 The quantity of corrective aggregate material or cement shall not be measured separately.

BASIS OF PAYMENT

207-5.1 Payment shall be made at the contract unit price per square yard (m²) for recycling the existing asphalt pavement, aggregate base course, subgrade and mixing with stabilizing agent, if required, spreading, compacting, and maintaining the recycled material to the compacted thickness as indicated on

the drawings. There shall be no separate measurement or payment for the removal, haul, and placement of excess material at a location determined by the Owner. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment tools and incidentals to complete the item.

Payment will be made under:

Item P207-5.1	In-place Full Depth Recycled (FDR) asphalt aggregate base course (10" depth, 4% Cement) – per square yard
Item P207-5.2	In-place Full Depth Recycled (FDR) asphalt aggregate base course (5" depth, 5% Cement) – per square yard

207-5.2 There shall be no separate payment for corrective aggregate material or cement.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C29	Unit Weight of Aggregate
ASTM C88	Soundness of Aggregates by Use of Sodium or Magnesium Sulfate
ASTM C117	Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregate by Washing
ASTM C131	Resistance to abrasion of Small Size Coarse Aggregate by Use of Los Angeles Machine
ASTM C136	Sieve or Screen Analysis of Fine and Coarse Aggregate
ASTM C150	Standard Specification for Portland Cement
ASTM C595	Standard Specification for Blended Hydraulic Cements
ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
ASTM D75	Sampling Aggregate
ASTM D558	ASTM D558 Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
ASTM D698	Moisture Density Relations of Soils and Aggregate using 5.5 lb Rammer and 12 in drop
ASTM D977	Standard Specification for Emulsified Asphalt
ASTM D1556	Test Method for Density and Unit Weight of Soil in Place by the Sand Cone Method
ASTM D1557	Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D2216	Test Methods for Laboratory Determination of Water (Moisture) Soil and Rock by Mass

ASTM D2419	Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D4751	Standard Test Methods for Determining Apparent Opening Size of a Geotextile
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)
American Association of State Highway and Transportation Officials (AASHTO)	
M288	Standard Specification for Geosynthetic Specification for Highway Applications

END OF ITEM P-207

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Exhibit B

Taxiway Alpha and Aircraft Apron Reconstruction Project-Phase 3 Bid Alt 2

Item #	Description		Quantity				Cost			Comments
		Unit	Estimated	Projected	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Projected)	
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	980	-	(980.00)	0.00%	\$5.00	\$ 4,900.00	\$ -	
P-101-2	Full Depth Pavement Section Removal (Bituminous and Concrete)	SY	120	120.00	0.00	100.00%	\$50.00	\$ 6,000.00	\$ 6,000.00	
P-101-6	Partial Depth Milling 2"	SY	115	115.00	0.00	100.00%	\$3.00	\$ 345.00	\$ 345.00	
P-102-1	Airport Safety and Security	MO	0.5	0.40	(0.10)	80.00%	\$110,000.00	\$ 55,000.00	\$ 44,000.00	
P-152-1	Unclassified Excavation	CY	500	-	(500.00)	0.00%	\$12.00	\$ 6,000.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	50.0	-	(50.00)	0.00%	\$68.00	\$ 3,400.00	\$ -	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	50	-	(50.00)	0.00%	\$310.00	\$ 15,500.00	\$ -	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	1,400	1,400.00	0.00	100.00%	\$0.40	\$ 560.00	\$ 560.00	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$11.00	\$ 12,100.00	\$ -	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$18.00	\$ 19,800.00	\$ -	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$14.00	\$ 15,400.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	1,100	-	(1100.00)	0.00%	\$26.00	\$ 28,600.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	1,100	1,100.00	0.00	0.00%	\$40.00	\$ 44,000.00	\$ 44,000.00	
P-401-3	Hot Mix Asphalt (HMA) Pavement (2 Inches Thick)	SY	115	115.00	0.00	100.00%	\$37.00	\$ 4,255.00	\$ 4,255.00	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	200	200.00	0.00	100.00%	\$2.50	\$ 500.00	\$ 500.00	
	Total							\$ 216,360.00	\$ 99,660.00	
P-207	Pulverize 14" and Cement Treat 10" at 4%	SY	0	213	213.00		\$ 32.00	\$ -	\$ 6,816.00	
	Total								\$ 106,476.00	Funded Utilizing Grant 3-32-0018-47-2022
P-207	Pulverize 14" and Cement Treat 10" at 4%	SY	0	887	887.00		\$ 32.00	\$ -	\$ 28,384.00	
	Total								\$28,384.00	Funded Utilizing Grant 3-32-0018-48-2022

Exhibit C

Taxiway Alpha and Aircraft Apron Reconstruction Project-Phase 3 Bid Alt 1

Item #	Description		Quantity				Cost			
		Unit	Estimated	Projected	Over/Under	% Complete	Unit Cost	Bid Price	\$ Extended (Projected)	Comments
P-101-1	Full Depth Pavement Section Removal (Bituminous)	SY	1,150	-	(1150.00)	0.00%	\$5.00	\$ 5,750.00	\$ -	
P-101-6	Partial Depth Milling 2"	SY	115	115.00	0.00	100.00%	\$3.00	\$ 345.00	\$ 345.00	
P-102-1	Airport Safety and Security	MO	0.5	0.40	(0.10)	80.00%	\$110,000.00	\$ 55,000.00	\$ 44,000.00	
P-152-1	Unclassified Excavation	CY	500	-	(500.00)	0.00%	\$12.00	\$ 6,000.00	\$ -	
P-152-3	Owner Authorized Over-Excavation (Contingent)	CY	50	-	(50.00)	0.00%	\$68.00	\$ 3,400.00	\$ -	
P-152-4	Disposal of Contaminated Material (Contingent)	CY	50	-	(50.00)	0.00%	\$310.00	\$ 15,500.00	\$ -	
P-152-6	Asphalt Milling Placement (3 Inches Min. Thick)	SY	1,250	1,250.00	0.00	100.00%	\$0.40	\$ 500.00	\$ 500.00	
P-154-1	Uncrushed Aggregate Subbase Course (4 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$11.00	\$ 12,650.00	\$ -	
P-156-1	Cement Treated Subgrade (5% Cement,10 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$18.00	\$ 20,700.00	\$ -	
P-209-1	Crushed Aggregate Base Course (6 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$14.00	\$ 16,100.00	\$ -	
P-304S-1	Cement-Treated Base Course (6 Inches Thick)	SY	1,150	-	(1150.00)	0.00%	\$26.00	\$ 29,900.00	\$ -	
P-401-1	Hot Mix Asphalt (HMA) Pavement (4 Inches Thick)	SY	1,150	1,150.00	0.00	100.00%	\$40.00	\$ 46,000.00	\$ 46,000.00	
P-401-3	Hot Mix Asphalt (HMA) Pavement (2 Inches Thick)	SY	115	115.00	0.00	0.00%	\$37.00	\$ 4,255.00	\$ 4,255.00	
P-620-2	Permanent Non-Reflective Airfield Pavement Marking	SF	200	200.00	0.00	100.00%	\$2.50	\$ 500.00	\$ 500.00	
	Original Total							\$ 216,600.00	\$ 95,600.00	
P-207-1	Pulverize 14" and Cement Treat 10" at 4%	SY	0	529	529.00		\$ 32.00	\$ -	\$ 16,928.00	
	Total								\$ 112,528.00	Funded Utilizing Grant 3-32-0018-46-2022
P-207-2	Pulverize 14" and Cement Treat 10" at 4%	SY	0	621	621.00		\$ 32.00	\$ -	\$ 19,872.00	
	Total								\$19,872.00	Funded Utilizing Grant 3-32-0018-48-2022

Exhibit D

Taxiway Alpha and Aircraft Apron Reconstruction Project-Phase 3 Bid Alt 5&6

[illegible]

**RENO-TAHOE AIRPORT AUTHORITY
PLANNING AND CONSTRUCTION COMMITTEE
PROJECT STATUS REPORT
DECEMBER 2022**

ENGINEERING PROJECTS

RENO-STEAD AIRPORT PROJECTS

Taxiway Alpha and Adjoining Aircraft Parking Apron Rehabilitation

This project consists of the design for the reconstruction of the asphalt cement (AC) general aviation Apron and the adjoining Taxiway Alpha. In addition, the project will correct the FAA identified non-complying intersection of Taxiway A2 and the apron, and the replacement of the aging apron lighting head fixtures to LED fixtures at RTS. The apron consists of approximately 255,070 square yards of AC and Taxiway A consists of 30,540 square yards of AC. Design consists of geotechnical services, final design, and bidding for Apron construction in multiple phases. Construction is anticipated to be constructed in approximately six phases.

Phase 3 – Construction

The design of Phase 3 is near completion with the project planned to be advertised for bids in February 2022 and bids opening in March 2022. This year's phase will include 16,200 square yards of new TWY A & Apron and storm drain improvements. Construction start date will be dependent upon receipt of the FAA AIP grant. Bids were opened on February 24, 2022. The low responsive bidder is Granite Construction. Granite Construction was awarded the construction contract at the April Board meeting for the Base Bid 1, Base Bid 2, Alternate 1, and Alternate 5 pending receipt of the FAA grants. The RTAA has received the two base bid grants and issued Granite a Notice to Proceed for July 25, 2022. Construction will be completed in two phases to allow for the Reno Air Races. The first phase of construction was completed September 5 to allow for the Reno Air Races. Granite has paved out the second phase of this year's work. Due to a value engineering in the pavement section the RTAA was able to add in paving Bid Alternates 2 & 3. Along with LED lighting upgrade Bid Alternate 6 to the original contract. There is supply chain issues with some of the storm drain structures and with the addition of the lighting alternates award the anticipated final completion to be by February 2023.

Phase 3 – The following are project milestones:

- | | |
|---------------------------|-------------------|
| • Design Completed | February 2, 2022 |
| • Issue for Bid | February 4, 2022 |
| • Bids Opened | February 24, 2022 |
| • Award of Construction | April 14, 2022 |
| • Notice for Construction | July 20, 2022 |

Phase 3 – The following are the next steps:

- | | |
|--------------------------|---------------|
| • Substantial Completion | February 2023 |
|--------------------------|---------------|

RENO-TAHOE INTERNATIONAL AIRPORT PROJECTS

Runway 16R/34L Reconstruction

Runway 16R/34L Construction Phase 2

Granite Construction has completed the Phase 2 of the Runway 16R/34L Reconstruction project for 2021. The remaining work is the Magnetic Variation (MagVar) commenced October 10, 2022 and was completed on November 23, 2022. This work changed the runway numbers for all three runways due to the change in the shifting of magnetic north and **became effective on November 3, 2022. With completion, the runways are now renumbered as 17-35 and 8-26. RTAA staff is continuing to work with Granite on warranty items related to the RWY Keel section.**

The project is on schedule with the next steps listed below:

- 2022 Project MagVar October-November 2022

Pavement Management Program (2022-2025)

The Pavement Management Program (PMP) scope consists of airfield and landside pavement inspections at both Reno-Tahoe International (RNO) and Reno-Stead (RTS) Airports. The program is funded from the Capital Improvements Budget for this fiscal year.

An RFQ for the PMP was issued and four SOQs were received on September 28, 2021. The Evaluation Committee short listed to three firms and conducted interviews on November 5, 2021. Scope and fee negotiations occurred in December 2021-January 2022, and the RTAA Board of Trustees approved the PSA with RDM International at the February 2022 Board Meeting.

The pavement inspections process has been revised for the 2022-2025 cycle. In the past, the inspections of the airport pavements were split up into thirds over a 3-year cycle. This year, with RDM International, the inspections of all the airport pavements will occur in one-year and producing a report based on projected projects over the following 3-years. Both methods were acceptable to the FAA. RNO airfield and runway pavement inspections began end of April and occur during scheduled runway closures. Pavement inspections were completed in May and pavement coring will be done during June. **Draft reports for both Landside and Airside have been received and being reviewed by staff.**

The following are project milestones:

- Consultant Interviews November 5, 2021
- Design PSA Approval February 10, 2022
- Kickoff Meeting February 22, 2022
- Pavement Inspections April/May 2022

The project is on schedule with the next steps listed below:

- Final Report/Closeout December 2022

Ticketing Hall Expansion Project - Design (Part of the MoreRNO Program)

A Request for Qualifications (RFQ) for design services was advertised on March 4, 2021, through NGEM. SOQs from six (6) interested respondents were received on April 8, 2021. The review committee, consisting of RTAA staff and a Board of Trustee, evaluated the submittals and short-

listed two (2) respondents to proceed to the interview process. Interviews were held on May 12th and 13th. Staff selected RS&H Nevada, Inc. and proceeded with negotiations. A Professional Services Agreement for Design Services with RS&H was presented for Board approval at the July 8th Board Meeting.

RS&H was issued a Notice to Proceed with a contract date of August 2, 2021. Design kick-off meetings site investigations, and stakeholder engagement meetings were held August 16-18.

The solicitation for Construction Manager at Risk (CMAR) services was advertised on July 6, 2021. A mandatory pre-proposal meeting was held on July 15th, with eight (8) contractors in attendance. Proposals were received on August 16th from six (6) interested respondents. The review committee, consisting of members from the RTAA, RS&H, Atkins and the Board of Trustees, evaluated the submittals and short-listed three (3) respondents to proceed to the interview process. The interviews were held on September 8th and staff selected McCarthy Building Companies, Inc.

A Professional Services Agreement for CMAR Services with McCarthy Building Companies, Inc. was presented for Board approval at the October 14th Board Meeting. McCarthy was issued a Notice to Proceed with a contract date of October 26, 2021

The Basis of Design Report was submitted to the RTAA for review on November 1st. RS&H presented a summary of the BOD Report at the November 10th Board Meeting. Schematic Design was completed on January 21st. The RTAA reviewed the documents and provided comments on February 4th. Design Development was completed on March 29th and RS&H conducted review meetings with multiple stakeholder groups on April 6-7.

McCarthy actively provided assistance and insight as the team worked through value engineering options, phasing, and logistics. The design team developed pre-packages on several items that will require a long lead time to procure, including the air handling unit (equipment only), the roofing (material and labor), and enabling work to be able to start the project as soon as possible. These items were issued for bid in May 2022 and are being brought in front of the Board in July for approval.

90% Construction Documents were completed on June 3rd. The 90% documents were then submitted to the City of Reno Building Department for Plan Review and to the CMAR to start bidding the bidding process to establish their GMP. McCarthy opened the bids on July 7th and are currently in the descoping phase. 100% Construction Documents were completed on July 8th and provided to McCarthy for reconciliation. The final Guaranteed Maximum Pricing (GMP) was presented and approved at the September Board meeting.

McCarthy has completed all the necessary enabling work including lane closures for construction to begin the Ticketing Hall Expansion project on October 13, 2022. Demolition of the ceiling “clouds” over the airline queuing has been completed. Demolition within the construction wall is underway, including some interior walls, flooring, and the roadway. **Relocation of utilities is underway and tile demolition within the Ticketing Hall began December 4th.**

The following are project milestones:

- | | |
|---|-------------------|
| • Consultant Selection | May 13, 2021 |
| • Board Approval for Design | July 8, 2021 |
| • Design Kick-off | August 2, 2021 |
| • Board approval for CMAR | October 14, 2021 |
| • Basis of Design Report Completed | November 1, 2021 |
| • Schematic Design (30%) Submittal | January 21, 2022 |
| • Design Development (60%) Submittal | March 29, 2022 |
| • Construction Document (90%) Submittal | June 3, 2022 |
| • Submit for Permit | June 6, 2022 |
| • Construction Documents (100%) Submittal | July 8, 2022 |
| • Pre-package GMP for Board Approval | July 14, 2022 |
| • Full GMP Board Approval | September 8, 2022 |
| • Enabling Work Complete | October 12, 2022 |
| • Construction Walls Erected | October 13, 2022 |

The project is on schedule with the next steps listed below:

- Substantial Completion February 2024

Taxiway B/M Reconstruction & General Aviation Runup Areas (Design)

This project consists of the design for the reconstruction of Taxiway (TWY) B on either side of Runway 7/25 of the Portland Cement Concrete (PCC) Taxiway, reconstruction of TWY M between TWY A & TWY B of the Asphalt Cement (AC) taxiway to a PCC taxiway. In addition, two General Aviation (GA) Runup Areas along TWY C, with one at the north end and the other at the south end of Runway 7/25. The design of TWY B and the GA Runup Areas will include the TWY's, asphalt shoulders, and edge lighting. The design of the GA Runup areas will look at primary aircraft to be served and a pavement section that will provide the most cost efficient to maintain into the future.

The design Request for Qualifications (RFQ) was advertised on April 22, 2021, with the Statement of Qualifications (SOQ) due on May 14, 2021. Three respondents submitted SOQ's and a committee met to review on May 19, 2021. Wood Rodgers was selected, and the design contract was approved at the June 2021 Board Meeting. Project design has been completed and the Issue to Bid plans were released in February 2022.

The project was bid with a Base Bid for the TWY B/M reconstruction and Alternate 1 to construct the North GA Runup area. Bids were opened on March 24, 2022. Four bids were received for the project. All four bids submitted were substantially over the project budget. Based on review by RTAA Staff, FAA PHX ADO staff and available FAA AIP funding, this project will be rebid in spring 2023. This project will be funded by a Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grant; the construction start date will be dependent upon receipt of the grant.

The following are project milestones:

- | | |
|-----------------------------|-------------------|
| • RFQ Advertising | April 22, 2021 |
| • Design SOQs submitted | May 14, 2021 |
| • Board Approval for Design | June 10, 2021 |
| • Notice to Proceed | July 11, 2021 |
| • Design Completion | February 2022 |
| • Bid Advertising | February 10, 2022 |
| • Bid Opening 2022 | March 24, 2022 |

The project is on schedule with the next steps are listed below:

- | | |
|-----------------------------------|-----------------------|
| • Rebid | February 2023 |
| • Board of Trustees Meeting/Award | April 13, 2023 |
| • Begin Construction | TBD |

Terminal Arc Flash Study

Arc-Flash Hazard Assessments are required by OSHA and NFPA 70E as a part of an Electrical Hazard Assessment. The Terminal Arc Flash study will be inclusive to the panelboard level or a minimum of 100-amp protective devices. Devices that are found to be non-coordinated will be indicated in a summary report of which corrective action will need to be addressed as a separate task. Arc Flash labels will be provided as recommended by the study. Labels will be installed by the airport facilities staff with guidance by our office. To complete the study, intensive field investigation is needed as well as detailed review of record drawings to determine electrical equipment make and model, conductor size, approximate conductor lengths, fuse sizes, etc. We are estimating approximately 510 points of Arc Flash for the main terminal and concourse and approximately 200 points of Arc Flash for offsite buildings. Phase 1 was completed in June 2022. The consultant is working on developing the scope of work for Phase 2 being anticipated to include the remaining RTAA owned offsite facilities at RNO and RTS.

The following are project milestones:

- | | |
|------------------------------------|--------------|
| • PSA Executed | July 8, 2021 |
| • 1 st Phase Completion | June 2022 |

The project is on schedule with the next steps listed below:

- | | |
|------------------------------------|-----|
| • 2 nd Phase Completion | TBD |
|------------------------------------|-----|

Airport Terminal Lift Station Project

This project is to replace and relocate the electrical controls for the north and south terminal lift stations. New level sensors and monitors will be installed, the existing control panels will be reviewed, and specifications will be given for repair or replacement. A new lift station bypass pump connection will be installed for emergency use.

Shaw Engineering specializes in the lift station field of civil engineering and has been selected as the consultant for design. Bids were opened on March 31, 2022 and are being evaluated by staff for conformance. The RTAA received one bid that was substantially over budget. The bid was canceled, and staff is working with the design consultant to redesign improvements with a reduced scope of work and rebid on June 1, 2022. The project was bid June 1, 2022, and bids

were opened on June 29, 2022. Two bids were received, and Triumph Electric was deemed the low responsive bidder with a bid of \$249,500. Based on lead times for materials the construction will begin in the Spring of 2023.

The following are project milestones:

- | | |
|---------------------|-------------------|
| • PSA Executed | August 2021 |
| • Design Completed | January 2022 |
| • Bid Advertising | February 23, 2022 |
| • Bids Opened | March 31, 2022 |
| • Redesign Complete | May 13, 2022 |
| • Rebid Advertised | June 1, 2022 |
| • Rebid Opening | June 29, 2022 |
| • Intent to Award | July 19, 2022 |

The project is on schedule with the next steps listed below:

- | | |
|---------------------|--------------|
| • Notice to Proceed | Oct/Nov 2022 |
| • Construction | Spring 2023 |

Air Cargo Way Lift Station Project

The lift station located in Air Cargo Way that serves the Air Cargo building and FedEx building has been failing and needs replacement. The lift station will be relocated outside of the road to allow safer access to the lift station when needing maintenance. This project will replace a lift station with equipment that is past its design life cycle and create a safer environment for our maintenance teams.

Shaw Engineering specializes in this field of civil engineering and has been direct selected and approved by the Board to do the design. The project design was completed in December and went out to bid in January. Bids were opened on February 24, 2022. Farr Construction was deemed the low responsive bidder and has been awarded the construction contract at the April Board Meeting. Farr Construction has begun the procurement process, however, due to long lead material items, the project will not start until the Spring of 2023. Farr Construction has been able to procure necessary materials and began construction on September 19, 2022. **Substantial completion of construction of the lift station work except for the generator was on December 2nd. The emergency backup generator which will be installed in April 2023.**

The following are project milestones:

- | | |
|-----------------------|-------------------|
| • PSA Executed | September 9, 2021 |
| • Design Completed | December 2021 |
| • Bidding Advertising | January 26, 2022 |
| • Bids Opened | February 24, 2022 |
| • Board Approval | April 12, 2022 |

The project is on schedule with the next steps listed below:

- | | |
|--------------------------------------|----------------------|
| • Substantial Completion | December 2022 |
| • Emergency Generator Install | April 2023 |

Terminal Loop Road (Part of the MoreRNO Program)

The Terminal Loop Road Reconstruction, ADA, and Safety/Security Project is for the full reconstruction of the existing PCC portion of the Terminal Loop Road, will also include improvements associated with Safety/Security and the Americans with Disabilities Act of 1990 (ADA). The full project consists of the reconstruction of six travel lanes, two pick-up and drop off lanes, drainage improvements as necessary, curb and gutter, post curb, sidewalk, a new crosswalk, landscaping, electrical, street lighting, guidance and traffic signs, striping, security bollards and new ADA pedestrian ramps.

The Request for Qualifications (RFQ) for design services was publicly advertised on July 28, 2021, and Statements of Qualifications (SOQ) were received on September 2, 2021, from Horrocks, Kimley-Horn, NCE, and Wood Rodgers.

An evaluation committee comprised of RTAA staff reviewed the submittals and determined Kimley-Horn and Associates Inc. as the most qualified firm for the project. The evaluation was based on the qualifications and experience requirements stipulated in the RFQ. The PSA for design services was presented to the Board of Trustees and approved at the October 14, 2021, Board meeting.

Kimley-Horn has completed the early phases of design including data gathering and reaching out to the different departments at the RTAA to determine levels of security and design options. Construction will be coordinated with the Ticketing Hall Expansion Project to ensure safety of airport staff and patrons and maintain consistency of construction phasing of the two projects. Recommendations for ADA, sidewalks, and security were discussed among the stakeholders were presented at the April Planning and Construction Committee Meeting.

Kimley Horn has been approved to design canopies along with the Loop Road project. Kimley Horn will submitted 90% plans October 31st for staff to review that included the Loop Road design and the canopy design as one set of plans. **Final plans and specifications will be completed by the end of December 2022.**

The following are project milestones:

- | | |
|-----------------------------|------------------|
| • Board Approval for Design | October 14, 2021 |
| • Notice to Proceed | October 2021 |

The project is on schedule with the next steps are listed below:

- | | |
|-------------------------|----------------------|
| • Design Completed | December 2022 |
| • Bidding Advertising | January 2023 |
| • Board Approval | March 9, 2023 |
| • Construction | Spring/Summer 2023 |

Arrival/Departure Escalator Modernization Project

The arrival/departure escalators located on the east side of the main lobby were replaced in 2002 and are now 21 years old. The purpose of this project is the "preservation of infrastructure" by modernizing and refurbishing the four (4) public use escalators for arriving and departing passengers.

This project will consist of two (2) phases: design and construction. The design phase involves selecting a consultant to research commercially available products and provide a detailed design, phasing plan, and bid package. The construction phase will involve awarding a contract to a contractor to procure the identified equipment and refurbish the escalators. This phase will include procurement, delivery, and installation.

An RFQ for design was issued and two SOQs were received on October 27, 2021. The Evaluation Committee selected H+K Architects as the most qualified consultant. The PSA with H+K Architects in the amount of \$98,000 design fees was presented and approved at the December 9, 2021, Board Meeting.

The project is funded in PFC 15 in the amount of \$2,889,000. The project was bid May 24, 2022, and bids were opened on June 28, 2022. One bid was received by Kone, Inc. and staff reviewed the bid and found all documents fully executed and to be responsive. The bid amount was for \$1,890,000. The project was awarded by the Board at the August 11, 2022, meeting. The contractor will take measurements onsite and begin the procurement process in September 2022, with construction anticipated to begin in March/April of 2023.

The following are project milestones:

- | | |
|--------------------------------|-------------------|
| • Design PSA Board Approval | December 9, 2021 |
| • Notice to Proceed for Design | December 10, 2021 |
| • Design Complete | May 2022 |
| • Bids Advertised | May 24, 2022 |
| • Bids Opened | June 28, 2022 |
| • Board Approval | August 11, 2022 |
| • Notice Procurement | September 2022 |

The project is on schedule with the next steps are listed below:

- | | |
|----------------|-------------|
| • Construction | Spring 2022 |
|----------------|-------------|

Remote Economy Lot Project – Phase 1

The Remote Economy Parking Lot is an undeveloped site and is approximately 4 acres. It is bordered to the west by Terminal Way, south and east by the rental car surface storage and maintenance lots, and to the north by the NDOT off ramp. The Remote Economy Parking Lot Project consist of all the necessary grading, utilities, drainage, lighting, pavement, and card access gates.

J-U-B Engineering, Inc. (JUB) was selected from list of firms that previously submitted on the RFQ for the Parking Lot reconstruction. The PSA for design services was presented to the Board of Trustees at the March Board meeting for approval.

RTAA and Enterprise Rental Car have agreed to reconfigure the Enterprise Lot with adjacent RTAA land. Enterprise will release some of their existing parking lot in exchange for new improved parking adjacent to their existing lot. This agreement allows RTAA to get additional parking spaces for employee parking quickly as a portion of the area RTAA is receiving is already paved.

JUB has completed the plans with the project going out to bid on July 28, 2022. Bids were opened on August 16, 2022. RTAA received two bids and Armac Construction was the low apparent

bidder. Board approved the construction contract with Armac at the September Board meeting and construction began September 14, 2022. **Substantial completion of the Remote Lot Phase 1 was on November 18, 2022, in time for Thanksgiving travel.**

Phase 2 design of the Remote Economy Lot has been submitted for review by the RTAA with comments being returned to the consultant in mid-October. Construction is anticipated to begin in Spring 2023.

The following are project milestones:

- | | |
|---|--------------------------|
| • Survey & Geotechnical | February 18, 2022 |
| • Board Approval for Design | March 10, 2022 |
| • Design Complete | July 25, 2022 |
| • Bidding Advertising | July 28, 2022 |
| • Bids Opened | August 16, 2022 |
| • Board Approval | September 8, 2022 |
| • Notice to Proceed | September 14, 2022 |
| • Substantial Completion Phase 1 | November 18, 2022 |

FAA VALE PCA/GPU Replacement

The FAA's VALE Program provides Airport Improvement Program (AIP) grant funding to commercial service airports such, as the RNO, that are in non-attainment or maintenance of National Ambient Air Quality Standards areas for emission reduction projects proven to benefit local air quality. VALE AIP funding comes from Noise & Environmental Set Aside funds and does not affect regular RNO entitlements or discretionary allotments. The program is to improve environmental issues with aging equipment by replacing with new efficient equipment.

This project will include the replacement of 26 Pre-Conditioned Air (PCA) units, 26 Ground Power Units (GPU), 1 portable PCA and 1 portable GPU for the Passenger Boarding Bridges (PBB). The PCA units provide fresh conditioned heat or cooling to the aircraft while they are at the PBB. The new units are much more energy efficient than the units being replaced which are at the end of their useful lives. The GPU provide a constant regulated power that is specific to aircraft. The new GPUs are much more efficient than those being replaced which are at the end of their useful lives. The installation of the submeters will allow for electrical usage to be tracked to the respective users.

The PSA with PK Electric, Inc. for design services of \$86,000 is being presented to the Board of Trustees at the March Board meeting for approval.

Should the FAA VALE Program applications be successful in resulting in an FAA AIP grant award, all costs associated with the design, procurement and construction of the equipment is reimbursed in accordance with the percentage established by the FAA's AIP participation rate.

The following are project milestones:

- | | |
|------------------------|---------------|
| • Consultant Selection | February 2022 |
| • Design Complete | July 26, 2022 |

The project is on schedule with the next steps are listed below:

- | | |
|----------------------------|-----------------------|
| • FAA Preliminary Approval | January 2023 |
| • Bid Advertising | March 1, 2023 |
| • Bid Opening | March 31, 2023 |
| • Board Approval | May 18, 2023 |
| • Construction | TBD |

Airfield Administration & Airport Duty Managers Offices Remodel Project

Airfield Administrative Offices: The current airfield administrative offices are located within the existing vehicle maintenance building. The office space is inadequate in the number of offices and the size of the offices, are inefficient in layout and continuity, located in areas with inadequate heating and cooling systems, located adjacent to loud work, and many offices don't meet the American Disabilities Act (ADA) requirements. In addition, the vehicle maintenance storage areas/rooms have been minimized due to conversion to offices. Management and administrative staffing levels have increased since the original building was constructed in 1978. The proposed project would consolidate the administrative/management staff to a central location, provide a professional atmosphere to conduct business and significantly increase the efficiency of the administrative operations as well as the vehicle maintenance services at Airfield Maintenance.

Airport Duty Managers Office: The existing Airport Duty Managers (ADM) offices are located in the Airport Vassar Annex (AVA) warehouse building. The building houses the ADMs, Airport Communications and Purchasing departments. Traveling between the ADM's current office location to anywhere on the airfield or landside requires the ADM's to travel a circuitous and congested section of deteriorated roadway, drive at a low rate of speed, and weave between Air Cargo aircraft. The congestion is created by tugs towing multiple containers as well as other ground equipment in the area. Additional delays can occur if aircraft are pushing back or taxiing in the area as aircraft always have the right of way. The ADM's have a mission critical role to provide quick emergency response. In addition, they need to have quick response during winter operations and to wildlife hazard management. The mission critical roles are hampered by the remote location and lack of connectivity to the airport operation.

RTAA Engineering staff direct selected Paul Cavin Architect LLC based on their experience providing required services, knowledge of weather conditions in the Reno area, knowledge of local labor and material costs, and overall performance with RTAA and other agencies in the Reno area.

The scope of work will include design services and providing construction documents for the bidding of the Airfield Administrative and Airport Duty Managers Offices and was presented and approved by the Board at the June 9, 2022, Board Meeting.

The consultant has completed the plans and specifications and the project is currently out to bid. Bids are due on December 13, 2022.

The following are project milestones:

- | | |
|----------------------------|------------------|
| • Consultant Selection | May 2022 |
| • Board Approval of Design | June 9, 2022 |
| • Award PSA | July 5, 2022 |
| • Design Complete | November 1, 2022 |
| • Bidding Advertising | November 8, 2022 |

The project is on schedule with the next steps are listed below:

- | | |
|-------------------------|--------------------------|
| • Bid Opening | December 13, 2022 |
| • Board Approval | January 12, 2023 |
| • Construction | TBD |

Shared Use – Construction Only

The construction portion of the Shared Use project includes installation of 12 gate podiums, 12 scanner podiums, and 18 ticketing inserts with corresponding electrical and data runs.

PK Electric, Inc., is providing design services for the electrical and data runs.

The following are project milestones:

- | | |
|------------------------------------|--------------------------|
| • Mill Work Bid Advertising | December 17, 2022 |
|------------------------------------|--------------------------|

The project is on schedule with the next steps are listed below:

- | | |
|-----------------------------------|-------------------------|
| • Millwork Bids Open | January 17, 2023 |
| • Electrical/Data Design Complete | January 2023 |
| • Electrical/Data Bid Advertising | March 2023 |
| • Electrical/Data Bids Open | April 2023 |
| • Electrical Installation | May 2023 |
| • Millwork Installation | May 2023 |

MZ3 Replacement Project

This project will include demolition of an existing roof mounted multi-zone mechanical unit that provides conditioned air to the RTAA TIS Department offices. The multi-zone unit will be replaced by two (2) fan coil units that will be installed in an existing mechanical room. The scope of work also includes installation of new ductwork and new grid ceilings, lights, and diffusers.

A design contract was awarded to Ainsworth Associates Mechanical Engineers, through an Administrative Award of Contract, on July 25, 2022. Design was completed on September 19th and subsequently submitted for permitting with the City of Reno. An Invitation to Bid was issued on October 14th and a mandatory pre-bid meeting was held on October 25th. The bid opening was held on November 17th. **Two responsive bids were received and Gardner Engineering, Inc. was the low apparent bidder.**

The following are project milestones:

- | | |
|----------------------|--------------------------|
| • Contract Award | July 25, 2022 |
| • Design Complete | September 19, 2022 |
| • Bids Advertised | October 14, 2022 |
| • Bids Opened | November 17, 2022 |

The project is on schedule with the next steps listed below:

- | | |
|------------------------|--------------|
| • NTP for Procurement | January 2023 |
| • NTP for Construction | April 2023 |
| • Project Completed | June 2023 |

PLANNING PROJECTS

Concourse Redevelopment Project at Reno-Tahoe International Airport (Part of the MoreRNO Program)

The development of replacement concourses was identified in the 2018 Master Plan Update as a critical project to improve functional performance, operational efficiency, address the forecasted passenger demand, be flexible to address changing fleet mixes, and provide adequate passenger and airline spaces. Building off the Master Plan Update, the Detailed Planning Study (Study) will identify the operational, space, and level of service needs to provide a plan for the orderly and efficient redevelopment of the existing concourses. The primary purpose of the Study is to identify the preferred scope for a future concourse redevelopment project which could include renovation/retrofit of the existing concourse(s), renovation/retrofit and expansion-in-place of the existing concourse(s), and/or construction of new replacement concourses.

The 2018 Master Plan Update recommended a three-phase concourse redevelopment program, starting with a replacement Concourse C, followed by a replacement Concourse B, and concluding with new Concourse D. The Study will consider, in further detail, the feasibility of renovating/expanding one or both existing concourses in lieu of total replacement.

The Detailed Planning Study is a necessary precursor to design and construction of a potential future concourse redevelopment project and will provide the airport planning analysis, investigative work, infrastructure assessment, facility needs analysis, alternatives analysis, preferred alternative, operational plan for accommodating normal airport operations during construction, cost estimates, financial plan, and stakeholder efforts to solidify an accurate statement of work prior to design solicitation.

As required for Passenger Facility Charge (PFC) funded projects, the selection of the preferred consultant team was a qualifications-based selection. An RFQ for consultant services was issued on March 2, 2020, and nine (9) SOQs were received on April 9, 2020. The Evaluation Committee selected Mead & Hunt, Inc. as the most qualified consultant. The PSA with Mead & Hunt, Inc. in the amount of \$2,029,611 was approved at the December 10, 2020, Board Meeting. A Notice to Proceed was issued on January 25, 2021.

Site visits associated with the inventory/data collection phase occurred on February 17 and 18, 2021. Report, plan, and dataset reviews were conducted in February-April 2021.

The first deliverables, the Existing Conditions draft technical memos, have been created and include the following topics: Architectural Building Analysis, Building Systems (Mechanical, Electrical, Plumbing, IT, etc.), Concessions, Pavements & Utilities, Site Utilities, and Engineering Structural Analysis. The analysis and preliminary conclusions were discussed with staff at Workshop: Existing Conditions, on April 29, 2021.

A workshop series, focused on *Visioning the Post-Security Experience for Passengers, Tenants, and Employees*, was held on May 27. Three different workshops were led by Gensler: the first workshop was for post-security tenants (corporate and local representation), the second for airport employees, and the third for RTAA Trustees, the Executive Team, and community leadership. The workshops included over 50 stakeholders.

A preliminary "Minimum Build" Report was received in late July 2021. The report was reviewed and discussed by the primary internal stakeholders in August and then finalized by the consultant team with preliminary cost estimates. The "Minimum Build" Report presents a summary of recommended future improvements to remain in Concourse B and C for the next 20 years. This information was presented to the Planning & Construction Committee on September 7, 2021. Expanded findings were subsequently presented to the RTAA Board of Trustees (October 14), to the RNO Signatory Airlines (October 15), at the monthly RTAA Management Roundtable Meeting (October 20), and at the monthly RNO Station Managers Meeting (October 21).

Also on October 14, a mini-workshop was held with the RTAA Executive Team and key staff to establish the evaluation criteria for the alternative analysis process. This mini-workshop kicked off the alternative development phase of the study. In October and November, the consultant team met regularly to brainstorm and flesh out a variety of alternative concourse redevelopment options. A staff workshop was held on December 9 to discuss the preliminary alternative concepts in anticipation of the next workshop series in late January 2022.

On December 10, a mini-workshop was held with key RTAA staff and the consultant team to discuss measures to improve the flood preparedness of any future concourse development.

A workshop series, focused on the preliminary alternatives, occurred at the end of January. Workshops for the RNO Airline Station Managers and the RNO Concessions/Tenants (non-airlines) group was held on January 26, a RNO Airport Airline Affairs Committee workshop occurred on January 28, and a workshop for the RTAA Board of Trustees was subsequently held on January 27. At the January 27 workshop, the RTAA Board of Trustees took action to narrow the preliminary alternatives to a short-list of three (3) alternatives: Alternative 1 (Minimum Build), Alternative 3 (Expansion, with new building up and over existing building), and Alternative 9 (new two-pier build with equal walking distances and dual taxi-lane between concourses).

Iterative refinement and further development of the short-listed alternatives continued into April. The consultant team explored options to increase the total aircraft gates and to maximize space within the concourses, completed new cost estimates, analyzed construction phasing options & impacts, and developed a financial analysis.

A workshop series, focused on the developed alternatives began in April and continued into May. In between each workshop, the consultant team further refined their work based on feedback from the workshop participants. A small group staff workshop was held on April 8, followed by a larger staff workshop on April 14 to discuss the progress, and on April 29, a presentation was provided to the RTAA Board of Trustees during the annual Board Retreat. Stakeholder workshops on the developed alternatives for the airlines, concessions, and tenants were held on May 25 and May 26.

In June and July, the project team refined the remaining three (3) alternatives and developed derivatives in order to explore options to increase capacity and/or decrease costs. Airline coordination meetings were held on June 9, 10, 15, and July 21.

During the June coordination meetings, staff and the airlines agreed that Alternative 2 (Expansion, with new building up and over existing building) was the least preferred of the remaining alternatives.

During the July coordination meeting, staff and the airlines agreed that of the final alternatives: Alternative 1 (Minimum Build), Alternative 3 (new two-pier build with equal walking distances and dual taxi-lane between concourses), and derivatives of Alternative 1 & 3 – the best option is likely the new two-pier build with equal walking distances and a dual taxi-lane between the new concourses. As a result, staff and the project team developed a formal presentation to share at Corporate Airline HQ meetings in August to secure critical partner support of the preferred concourse redevelopment plan.

The August Corporate Airline HQ meetings went extremely well. As presented by the RTAA Executive Team, the alternatives analysis process and recommendations, alongside the proposed financial plan, was well received and is expected to be formally supported by our airline partners. An update on the progress was presented to the Board of Trustees on September 8, 2022.

On September 15, 2022, two (2) workshops were held for RTAA staff and RNO tenants, including airlines, concessions, and TSA. The primary purpose of the September workshops was to provide a summary of the nine (9)-month alternatives development process, to detail the comparisons between the final two (2) alternatives, and to outline the reasons why the preferred alternative is being recommended. Staff and our airport partners were encouraged to ask questions and provide feedback.

On October 13, 2022, the RTAA Board of Trustees adopted the preferred alternative. **The project team is currently on schedule to complete the final deliverable, a basis of design report, by December 31, 2022.**

The following are project milestones:

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| • Planning RFQ Issued | March 2, 2020 |
| • Consultant SOQs Received | April 9, 2020 |
| • Notice of Intent to Award | June 24, 2020 |
| • Study PSA Board Approval | December 10, 2020 |
| • Notice to Proceed for Study | January 25, 2021 |
| • Existing Conditions Site Visits | February 17-18, 2021 |
| • Workshop #1 (Existing Conditions) | April 29, 2021 |
| • Workshop #2 (Visioning) | May 27, 2021 |
| • Final Existing Conditions Deliverables | July 26, 2021 |
| • Final Visioning Deliverables | July 26, 2021 |
| • Financial Assumptions Memo | July 30, 2021 |
| • Workshop #3 (Preliminary Minimum Build) | August 2021, September 7, 2021 |
| • Workshop #4 (Minimum Build & Space Programming) | October 14, 15, 20, and 21, 2021 |
| • Mini-Workshop #1 (Evaluation Criteria) | October 14, 2021 |
| • Mini-Workshop #2 (Preliminary Alternatives) | December 9, 2021 |
| • Mini-Workshop #3 (Flood Preparedness) | December 10, 2021 |
| • Workshop #5 (Preliminary Alternatives) | January 26, 28, and 31, 2022 |
| • Short-List Analysis and Refinement | February-March 2022 |
| • Workshop #6 (Developed Alternatives) | April 8, 14, and 29, 2022 (Staff, Board) |
| • Workshop #6 (Developed Alternatives) | May 25-26, 2022 (Airlines, Concessions, Tenants) |
| • Workshop #6 (Developed Alternatives) | June 9, 10, and 15, 2022 (Airlines) |

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| • Workshop #6 (Developed Alternatives) | July 21, 2022 (Airlines) |
| • Corporate Airline HQ Meetings | August 2022 |
| • Board Update (Preferred Alternative) | September 8, 2022 |
| • Workshop #7 (Preferred Alternative) | September 15, 2022 (Staff, Tenants) |
| • Preferred Alternative Adoption | October 13, 2022 |

Next steps for the project are listed below:

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| • Basis of Design Report (Phase 1) | October - December 2022 |
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RNO Workspace Study, Phase 2 (Part of the MoreRNO Program)

A Professional Services Agreement (PSA) for consultant services was executed on September 13, 2021, for the RNO Workspace Study in the amount of \$100,000. Approval for the PSA was granted by the RTAA Board of Trustees at the August 2021 Board of Trustees Meeting. The scope of work included an evaluation and recommendations for administrative workspaces for RTAA staff based at RNO. Although the primary focus was on landside administrative functions, consideration was also given to Airport Communications, Airfield Maintenance, Fire, Police, Purchasing, Security, Airside Operations, Landside Operations, and Building Maintenance.

The final deliverable documented immediate life-safety issues in existing offices and locations, current and future space needs, new office/workspace configuration options, new office/workspace location options, alternate use options for existing spaces, and rough order of magnitude costs for location options. The RNO Workspace Study final deliverable was provided on April 13, 2022.

In May 2022, staff began discussions with H+K Architects regarding supplementing the original RNO Workspace Study PSA with an amendment focused on the relocation and expansion of the Administrative Headquarters (HQ) and the Police Station. The goal for Phase 2 is to solidify the location and scope of a future Administrative HQ and Police Station and enable staff to move forward with design and construction, pending future funding. The final deliverable will be a basis of design report.

Amendment No. 1 to the PSA with H+K Architects, in the amount of \$289,280, was approved at the June 9, 2022, Board Meeting, increasing the total value of the PSA to \$389,280. A Notice to Proceed was issued on July 1, 2022.

As of October 2022, the Study has completed the Space Program and Potential Locations Phase and transitioned into the Alternatives Phase.

In the Space Program and Potential Locations Phase, staffing projections and space program assumptions were re-analyzed and revised based on new information. The Admin HQ space program is now approximately 1.8 acres, while the Police Station space program is now approximately 1.3 acres. Additionally, twenty-eight (28) alternate sites were identified for the Admin HQ and/or the Police Station. Two (2) of those alternate sites were off-airport and required acquisition.

In the Alternatives Phase, the project team, in collaboration with the Working Group (WG) identified ten (10) criteria for the Police Station Phase 1 evaluation, and seven (7) criteria for the

Admin HQ Phase 1 evaluation. The Phase 1 evaluation focused on critical issues that helped identify the most viable sites for continuation into the more detailed Phase 2 evaluation.

Upon completion of the Phase 1 evaluation process, eight (8) of the original twenty-eight (28) alternative sites were selected to move forward into the Phase 2 evaluation process. Seven (7) alternative sites were further analyzed for the Admin HQ, three (3) alternative sites for the Police Station, and two (2) alternative sites as co-location sites. **The Phase 2 evaluation process is on schedule for completion in December.**

The project team is supported by a Working Group (WG) that includes participation from Ops & Public Safety, People Operations, Commercial Business, Facilities & Maintenance, IT, Planning, and Engineering. Additionally, there are five (5) representatives from the Police Division in the WG who are providing critical input and feedback.

The following are project milestones:

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| • Phase 1 Completed | April 13, 2022 |
| • Amendment No. 1 Board Approval | June 9, 2022 |
| • Notice to Proceed for Study | July 1, 2022 |
| • WG Meeting #1 (Kick Off) | July 29, 2022 |
| • WG Meeting #2 (Alternate Brainstorming) | August 18, 2022 |
| • Police Only Meeting #1 (Spaces, Functions) | August 19, 2022 |
| • ET Briefing #1 (Staffing, Spaces) | August 23, 2022 |
| • ET Briefing #2 (Alternates) | September 6, 2022 |
| • WG Meeting #3 (Eval. Matrix) | September 9, 2022 |
| • Police Only Meeting #2 | September 29, 2022 |
| • WG Meeting #4 (Phase 1 Eval.) | October 20, 2022 |
| • ET Briefing #3 (Phase 1 Eval.) | October 25, 2022 |
| • P&C Committee Update | November 8, 2022 |

Next steps for the project are listed below:

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| • WG Meeting #5 (Phase 2 Eval.) | December 2, 2022 |
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			E&C - PROJECT SCHEDULE 2022																								E&C - PROJECT SCHEDULE 2023																																																				
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Project Name		RNO/RTS	PM	JULY 2022				AUG 2022				SEPT 2022				OCT 2022				NOV 2022				DEC 2022				JAN 2023				FEB 2023				MARCH 2023				APRIL 2023				MAY 2023				JUNE 2023																															
				W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41	W42	W43	W44	W45	W46	W47	W48	W49	W50	W51	W52	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22	W23	W24	W25	W26																								
Airport Improvement Program (AIP)																																																																															
Runway 16R-34L Reconstruction - Phase 2		RNO	TC																																																																												
Taxiway B/M & GA Runup Areas Design (Rebid Spring)		RNO	JL																																																																												
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Capital Improvement Program (CIP) 2021-22																																																																															
2022 Pavement Management Program		RNO	BJ																																																																												
Airport Terminal Lift Station		RNO	TO																																																																												
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FAA VALE PCA/GPU Replacement		RNO	TO																																																																												
Capital Improvement Program (CIP) 2022-23																																																																															
Airfield Admin & Airport Duty Mngr Office Remodel		RNO	TO																																																																												
Remote Economy Lot - Phase 1		RNO	BJ																																																																												
Terminal Arc Flash Study Phase 2		RNO	TO																																																																												
Ticketing Hall Expansion		RNO	AT																																																																												
MZ3 HVAC Replacement		RNO	AT																																																																												
Shared Use Phase 1		RNO	TO																																																																												
HQ/PD Workspace Study		RNO	LB																																																																												
Passenger Facility Charge (PFC 14)																																																																															
Terminal Development (Concourse) Planning Study		RNO	LB																																																																												
Passenger Facility Charge (PFC 15)																																																																															
Terminal Loop Road Reconstruction		RNO	JL																																																																												
Arrival/Departure Escalators		RNO	TO																																																																												

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