

APPENDIX D

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# CIP COST ESTIMATES

**Cox Field (Paris, TX)**  
**CIP Projects**  
**Opinion of Probable Construction Costs**

**December 6, 2010**

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Runway 17-35: 2" HMAC Maintenance Overlay (0-5 Years)</b>					
1.01	2" HMAC Overlay Course	Ton	7,502	\$95.00	\$712,690.00
1.02	HMAC Overlay Level-Up Course	Ton	788	\$95.00	\$74,860.00
1.03	Joint or Crack Sealing Filler	Gal.	3,334	\$25.00	\$83,350.00
1.04	Runway Markings	L.F.	64,776	\$1.00	\$64,776.00
1.05	Erosion Control Improvements	L.S.	1	\$20,000.00	\$20,000.00
1.06	Runway Light Adjustments	L.S.	1	\$115,900.00	\$115,900.00
1.07	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.08	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.09	Mobilization, Insurance, Etc.	L.S.	1	\$132,000.00	\$132,000.00
1.10	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
1.11	Proof Rolling	Hrs.	133	\$55.00	\$7,334.56
1.12	Pavement Marking Obliteration	S.F.	64,776	\$0.25	\$16,194.00
1.13	Paving Mat	S.Y.	66,678	\$3.00	\$200,033.33
1.14	Cold Milling of Asphalt and Concrete Paving (1/2-inch)	S.Y.	1,500	\$8.00	\$12,000.00
Subtotal					\$1,450,637.89
15% Contingencies					\$217,595.68
<b>Construction Costs (Including Contingencies)</b>					<b>\$1,668,233.57</b>

**Runway 17-35: 2" HMAC Maintenance Overlay (0-5 Years)**

Design Phase Services (Estimated):	\$86,770.00
Design Phase Surveying (Estimated):	\$4,200.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$21,690.00
Construction Materials Testing (Estimated):	\$25,000.00
Construction Staking and Grade Verification (Estimated):	\$4,200.00
Construction Inspection (Estimated):	\$38,500.00
Construction Costs (Estimated):	\$1,668,233.57
<b>Total Estimated Project Cost:</b>	<b>\$1,852,093.57</b>

**Runway 17-35: Rehabilitation - Seal Coat (5-10 Years)**

1.01	Joint or Crack Sealing Filler	Gal.	1,001	\$25.00	\$25,025.00
1.02	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	66,678	\$1.25	\$83,347.50
1.03	Runway Markings	L.F.	64,776	\$1.00	\$64,776.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$18,000.00	\$18,000.00
Subtotal					\$191,148.50
15% Contingencies					\$28,672.28
<b>Construction Costs (Including Contingencies)</b>					<b>\$219,820.78</b>

**Runway 17-35: Rehabilitation - Seal Coat (5-10 Years)**

Design Phase Services (Estimated):	\$21,120.00
Construction Phase Services (Estimated):	\$5,280.00
Construction Inspection (Estimated):	\$11,000.00
Construction Costs (Estimated):	\$219,820.78
<b>Total Estimated Project Cost:</b>	<b>\$257,220.78</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Runway 17-35: PCC Structural Overlay to Increase Pavement Strength to 60,000 SWL (10-15 Years)</b>					
1.01	Offsite Material Embankment In Place	C.Y.	2,623	\$3.00	\$7,869.00
1.02	HMAC Overlay Level-Up Course	Ton	788	\$95.00	\$74,860.00
1.03	6" PCC Pavement	S.Y.	66,678	\$32.00	\$2,133,696.00
1.04	Joint or Crack Sealing Filler	Gal.	1,001	\$25.00	\$25,025.00
1.05	Runway Markings	L.F.	64,776	\$1.00	\$64,776.00
1.06	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	29,971	\$0.60	\$17,982.60
1.07	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	5,035	\$1.20	\$6,042.00
1.08	Temporary Cool Weather Seeding	S.Y.	35,006	\$0.35	\$12,252.10
1.09	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	35,006	\$4.00	\$140,024.00
1.10	Runway Light Adjustments	L.S.	1	\$5,000.00	\$5,000.00
1.11	Temporary Sediment Control Fence	L.F.	11,328	\$2.00	\$22,656.00
1.12	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.13	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.14	Mobilization, Insurance, Etc.	L.S.	1	\$253,000.00	\$253,000.00
1.15	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
Subtotal					\$2,774,682.70
15% Contingencies					\$416,202.41
<b>Construction Costs (Including Contingencies)</b>					<b>\$3,190,885.11</b>

<b>Runway 17-35: PCC Structural Overlay to Increase Pavement Strength to 60,000 SWL (10-15 Years)</b>					
	Design Phase Services (Estimated):				\$153,180.00
	Design Phase Surveying (Estimated):				\$4,200.00
	Geotechnical Investigation (Estimated):				\$3,500.00
	Construction Phase Services (Estimated):				\$38,300.00
	Construction Materials Testing (Estimated):				\$50,000.00
	Construction Staking and Grade Verification (Estimated):				\$4,200.00
	Construction Inspection (Estimated):				\$38,500.00
	Construction Costs (Estimated):				\$3,190,885.11
<b>Total Estimated Project Cost:</b>					<b>\$3,482,765.11</b>

<b>Runway 17-35: Rehabilitation - Joint Seal and Panel Replacements (15-20 Years)</b>					
1.01	Sawcut, Remove, and Replace Partial Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	667	\$70.00	\$59,850.00
1.02	Sawcut, Remove, and Replace Full Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	667	\$55.00	\$47,080.00
1.03	Joint Replacement in Existing PCC Pavement	L.F.	1,801	\$1.00	\$1,801.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$11,000.00	\$11,000.00
Subtotal					\$119,731.00
15% Contingencies					\$17,959.65
<b>Construction Costs (Including Contingencies)</b>					<b>\$137,690.65</b>

<b>Runway 17-35: Rehabilitation - Joint Seal and Panel Replacements (15-20 Years)</b>					
	Design Phase Services (Estimated):				\$13,250.00
	Construction Phase Services (Estimated):				\$3,320.00
	Construction Materials Testing (Estimated):				\$3,500.00
	Construction Inspection (Estimated):				\$16,500.00
	Construction Costs (Estimated):				\$137,690.65
<b>Total Estimated Project Cost:</b>					<b>\$174,260.65</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Apron: 2" HMAC Maintenance Overlay (0-5 Years)</b>					
1.01	2" HMAC Overlay Course	Ton	2,823	\$95.00	\$268,185.00
1.02	HMAC Overlay Level-Up Course	Ton	131	\$95.00	\$12,445.00
1.03	Joint or Crack Sealing Filler	Gal.	1,255	\$25.00	\$31,375.00
1.04	Apron Markings	L.F.	12,000	\$1.00	\$12,000.00
1.05	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	156	\$0.60	\$93.60
1.06	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	125	\$1.20	\$150.00
1.07	Temporary Cool Weather Seeding	S.Y.	280	\$0.35	\$98.00
1.08	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	280	\$4.00	\$1,120.00
1.09	Temporary Sediment Control Fence	L.F.	300	\$2.00	\$600.00
1.10	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.11	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.12	Mobilization, Insurance, Etc.	L.S.	1	\$43,000.00	\$43,000.00
1.13	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$2,500.00	\$2,500.00
1.14	Proof Rolling	Hrs.	50	\$55.00	\$2,760.12
1.15	Pavement Marking Obliteration	S.F.	12,000	\$0.25	\$3,000.00
1.16	Paving Mat	S.Y.	25,092	\$3.00	\$75,275.95
1.17	Cold Milling of Asphalt and Concrete Paving (1/2-inch)	S.Y.	1,702	\$8.00	\$13,619.76
Subtotal					\$472,722.42
15% Contingencies					\$70,908.36
<b>Construction Costs (Including Contingencies)</b>					<b>\$543,630.79</b>

**Apron: 2" HMAC Maintenance Overlay (0-5 Years)**

Design Phase Services (Estimated):	\$37,000.00
Design Phase Surveying (Estimated):	\$1,500.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$9,250.00
Construction Materials Testing (Estimated):	\$18,000.00
Construction Staking and Grade Verification (Estimated):	\$1,500.00
Construction Inspection (Estimated):	\$38,500.00
Construction Costs (Estimated):	\$543,630.79
<b>Total Estimated Project Cost:</b>	<b>\$652,880.79</b>

**Apron: Rehabilitation - Seal Coat (5-10 Years)**

1.01	Joint or Crack Sealing Filler	Gal.	377	\$25.00	\$9,425.00
1.02	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	25,092	\$1.25	\$31,365.00
1.03	Apron Markings	L.F.	12,000	\$1.00	\$12,000.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$5,000.00	\$5,000.00
Subtotal					\$57,790.00
15% Contingencies					\$8,668.50
<b>Construction Costs (Including Contingencies)</b>					<b>\$66,458.50</b>

**Apron: Rehabilitation - Seal Coat (5-10 Years)**

Design Phase Services (Estimated):	\$7,990.00
Construction Phase Services (Estimated):	\$2,000.00
Construction Inspection (Estimated):	\$11,000.00
Construction Costs (Estimated):	\$66,458.50
<b>Total Estimated Project Cost:</b>	<b>\$87,448.50</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Apron: Rehabilitation - Reconstruction (10-15 Years)</b>					
1.01	Concrete Pavement Removal	S.Y.	25,092	\$6.00	\$150,552.00
1.02	Unclassified Excavation	C.Y.	2,091	\$4.00	\$8,364.00
1.03	Undercut and Replace Unsuitable Subgrade Material with Suitable Material as Directed by the Engineer	C.Y.	7	\$20.00	\$140.00
1.04	6" Lime Stabilized Subgrade	S.Y.	25,248	\$6.00	\$151,488.00
1.05	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	382	\$170.00	\$64,940.00
1.06	9" PCC Pavement	S.Y.	25,092	\$36.50	\$915,858.00
1.07	Yellow Taxiway Markings (Reflective)	S.F.	3,000	\$1.00	\$3,000.00
1.08	Drainage Improvements	L.S.	1	\$25,000.00	\$25,000.00
1.09	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	101	\$0.60	\$60.60
1.10	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	125	\$1.20	\$150.00
1.11	Temporary Cool Weather Seeding	S.Y.	280	\$0.35	\$98.00
1.12	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	280	\$3.00	\$840.00
1.13	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	280	\$4.00	\$1,120.00
1.14	Taxiway Light and Sign Adjustments	L.S.	1	\$5,000.00	\$5,000.00
1.15	Temporary Sediment Control Fence	L.F.	300	\$2.00	\$600.00
1.16	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.17	Mobilization, Insurance, Etc.	L.S.	1	\$138,000.00	\$138,000.00
1.18	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
1.19	Proof Rolling	Hrs.	51	\$55.00	\$2,805.00
1.20	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	421	\$80.00	\$33,680.00
Subtotal					\$1,508,195.60
15% Contingencies					\$226,229.34
<b>Construction Costs (Including Contingencies)</b>					<b>\$1,734,424.94</b>

**Apron: Rehabilitation - Reconstruction (10-15 Years)**

Design Phase Services (Estimated):	\$83,270.00
Design Phase Surveying (Estimated):	\$2,800.00
Geotechnical Investigation (Estimated):	\$3,200.00
Construction Phase Services (Estimated):	\$20,830.00
Construction Materials Testing (Estimated):	\$30,000.00
Construction Staking and Grade Verification (Estimated):	\$2,800.00
Construction Inspection (Estimated):	\$38,500.00
Construction Costs (Estimated):	\$1,734,424.94
<b>Total Estimated Project Cost:</b>	<b>\$1,915,824.94</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Apron: Rehabilitation - Joint Seal and Panel Replacements (15-20 Years)</b>					
1.01	Sawcut, Remove, and Replace Partial Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	126	\$70.00	\$59,850.00
1.02	Sawcut, Remove, and Replace Full Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	126	\$55.00	\$47,080.00
1.03	Joint Replacement in Existing PCC Pavement	L.F.	377	\$1.00	\$377.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$11,000.00	\$11,000.00
Subtotal					\$118,307.00
15% Contingencies					\$17,746.05
<b>Construction Costs (Including Contingencies)</b>					<b>\$136,053.05</b>

**Apron: Rehabilitation - Joint Seal and Panel Replacements (15-20 Years)**

Design Phase Services (Estimated):	\$10,910.00
Design Phase Surveying (Estimated):	\$1,500.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$2,730.00
Construction Materials Testing (Estimated):	\$3,500.00
Construction Staking and Grade Verification (Estimated):	\$1,500.00
Construction Inspection (Estimated):	\$16,500.00
Construction Costs (Estimated):	\$136,053.05
<b>Total Estimated Project Cost:</b>	<b>\$176,193.05</b>

**Hangar Access Taxiway: Rehabilitation - Seal Coat (0-5 Years)**

1.01	HMAC Base Course for Full Depth Pavement Repair	Ton	602	\$95.00	\$57,190.00
1.02	Bituminous Prime Coat (Full Depth Pavement Repair)	Gal.	313	\$3.00	\$939.00
1.03	Joint or Crack Sealing Filler	Gal.	268	\$25.00	\$6,700.00
1.04	Taxiway Markings	L.F.	1,500	\$1.00	\$1,500.00
1.05	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	17,830	\$1.25	\$22,287.50
1.06	Mobilization, Insurance, Etc.	L.S.	1	\$9,000.00	\$9,000.00
Subtotal					\$97,616.50
15% Contingencies					\$14,642.48
<b>Construction Costs (Including Contingencies)</b>					<b>\$112,258.98</b>

**Hangar Access Taxiway: Rehabilitation - Seal Coat (0-5 Years)**

Design Phase Services (Estimated):	\$9,910.00
Design Phase Surveying (Estimated):	\$2,800.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$2,480.00
Construction Materials Testing (Estimated):	\$12,000.00
Construction Staking and Grade Verification (Estimated):	\$2,800.00
Construction Inspection (Estimated):	\$27,500.00
Construction Costs (Estimated):	\$112,258.98
<b>Total Estimated Project Cost:</b>	<b>\$173,248.98</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Hangar Access Taxiway: Rehabilitation - Seal Coat (5-10 Years)</b>					
1.01	HMAC Base Course for Full Depth Pavement Repair	Ton	602	\$95.00	\$57,190.00
1.02	Bituminous Prime Coat (Full Depth Pavement Repair)	Gal.	313	\$3.00	\$939.00
1.03	Joint or Crack Sealing Filler	Gal.	268	\$25.00	\$6,700.00
1.04	Taxiway Markings	L.F.	1,500	\$1.00	\$1,500.00
1.05	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	17,830	\$1.25	\$22,287.50
1.06	Mobilization, Insurance, Etc.	L.S.	1	\$9,000.00	\$9,000.00
Subtotal					\$97,616.50
15% Contingencies					\$14,642.48
<b>Construction Costs (Including Contingencies)</b>					<b>\$112,258.98</b>

<b>Hangar Access Taxiway: Rehabilitation - Seal Coat (5-10 Years)</b>	
Design Phase Services (Estimated):	\$9,910.00
Design Phase Surveying (Estimated):	\$2,800.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$2,480.00
Construction Materials Testing (Estimated):	\$12,000.00
Construction Staking and Grade Verification (Estimated):	\$2,800.00
Construction Inspection (Estimated):	\$27,500.00
Construction Costs (Estimated):	\$112,258.98
<b>Total Estimated Project Cost: \$173,248.98</b>	

<b>Hangar Access Taxiway: 2" HMAC Maintenance Overlay (10-15 Years)</b>					
1.01	2" HMAC Overlay Course	Ton	2,006	\$95.00	\$190,570.00
1.02	HMAC Base Course for Full Depth Pavement Repair	Ton	602	\$95.00	\$57,190.00
1.03	Bituminous Prime Coat	Gal.	5,349	\$3.00	\$16,047.00
1.04	Bituminous Prime Coat (Full Depth Pavement Repair)	Gal.	268	\$3.00	\$804.00
1.05	Joint or Crack Sealing Filler	Gal.	446	\$25.00	\$11,150.00
1.06	Taxiway Markings	L.F.	4,500	\$1.00	\$4,500.00
1.07	Temporary Sediment Control Fence	L.F.	500	\$2.00	\$1,000.00
1.08	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.09	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.10	Mobilization, Insurance, Etc.	L.S.	1	\$36,000.00	\$36,000.00
1.11	Cold Milling Asphalt Pavement	S.Y.	17,830	\$4.00	\$71,320.00
Subtotal					\$395,081.00
15% Contingencies					\$59,262.15
<b>Construction Costs (Including Contingencies)</b>					<b>\$454,343.15</b>

<b>Hangar Access Taxiway: 2" HMAC Maintenance Overlay (10-15 Years)</b>	
Design Phase Services (Estimated):	\$29,110.00
Design Phase Surveying (Estimated):	\$3,500.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$7,280.00
Construction Materials Testing (Estimated):	\$12,000.00
Construction Staking and Grade Verification (Estimated):	\$3,500.00
Construction Inspection (Estimated):	\$33,000.00
Construction Costs (Estimated):	\$454,343.15
<b>Total Estimated Project Cost: \$546,233.15</b>	

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Hangar Access Taxiway: Rehabilitation - Seal Coat (15-20 Years)</b>					
1.01	HMAC Base Course for Full Depth Pavement Repair	Ton	2,006	\$95.00	\$190,570.00
1.02	Bituminous Prime Coat (Full Depth Pavement Repair)	Gal.	268	\$3.00	\$804.00
1.03	Joint or Crack Sealing Filler	Gal.	446	\$25.00	\$11,150.00
1.04	Taxiway Markings	L.F.	4,500	\$1.00	\$4,500.00
1.05	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	17,830	\$1.25	\$22,287.50
1.06	Mobilization, Insurance, Etc.	L.S.	1	\$23,000.00	\$23,000.00
Subtotal					\$252,311.50
15% Contingencies					\$37,846.73
<b>Construction Costs (Including Contingencies)</b>					<b>\$290,158.23</b>

<b>Hangar Access Taxiway: Rehabilitation - Seal Coat (15-20 Years)</b>		
	Design Phase Services (Estimated):	\$18,600.00
	Design Phase Surveying (Estimated):	\$3,500.00
	Geotechnical Investigation (Estimated):	\$3,500.00
	Construction Phase Services (Estimated):	\$4,650.00
	Construction Materials Testing (Estimated):	\$12,000.00
	Construction Staking and Grade Verification (Estimated):	\$3,500.00
	Construction Inspection (Estimated):	\$27,500.00
	Construction Costs (Estimated):	\$290,158.23
<b>Total Estimated Project Cost:</b>		<b>\$363,408.23</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Taxiway A: 2" HMAC Maintenance Overlay (0-5 Years)</b>					
1.01	2" HMAC Overlay Course	Ton	4,159	\$95.00	\$395,105.00
1.02	HMAC Overlay Level-Up Course	Ton	596	\$95.00	\$56,620.00
1.03	Joint or Crack Sealing Filler	Gal.	1,849	\$25.00	\$46,225.00
1.04	Taxiway Markings	L.F.	3,196	\$1.00	\$3,196.00
1.05	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	7,101	\$0.60	\$4,260.60
1.06	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	5,681	\$1.20	\$6,817.20
1.07	Temporary Cool Weather Seeding	S.Y.	5,681	\$0.35	\$1,988.35
1.08	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	5,681	\$4.00	\$22,724.00
1.09	Temporary Sediment Control Fence	L.F.	6,391	\$2.00	\$12,782.00
1.10	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.11	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.12	Mobilization, Insurance, Etc.	L.S.	1	\$71,000.00	\$71,000.00
1.13	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
1.14	Proof Rolling	Hrs.	74	\$55.00	\$4,065.85
1.15	Pavement Marking Obliteration	S.F.	3,195	\$0.25	\$798.77
1.16	Paving Mat	S.Y.	36,962	\$3.00	\$110,886.69
1.17	Cold Milling of Asphalt and Concrete Paving (1/2-inch)	S.Y.	3,531	\$8.00	\$28,250.14
Subtotal					\$776,219.60
15% Contingencies					\$116,432.94
<b>Construction Costs (Including Contingencies)</b>					<b>\$892,652.54</b>

**Taxiway A: 2" HMAC Maintenance Overlay (0-5 Years)**

Design Phase Services (Estimated):	\$53,580.00
Design Phase Surveying (Estimated):	\$4,200.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$13,400.00
Construction Materials Testing (Estimated):	\$25,000.00
Construction Staking and Grade Verification (Estimated):	\$4,200.00
Construction Inspection (Estimated):	\$38,500.00
Construction Costs (Estimated):	\$892,652.54
<b>Total Estimated Project Cost:</b>	<b>\$1,035,032.54</b>

**Taxiway A: Rehabilitation - Seal Coat (5-10 Years)**

1.01	Joint or Crack Sealing Filler	Gal.	555	\$25.00	\$13,875.00
1.02	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	36,963	\$1.25	\$46,203.75
1.03	Taxiway Markings	L.F.	3,196	\$1.00	\$3,196.00
1.03	Mobilization, Insurance, Etc.	L.S.	1	\$7,000.00	\$7,000.00
Subtotal					\$70,274.75
15% Contingencies					\$10,541.21
<b>Construction Costs (Including Contingencies)</b>					<b>\$80,815.96</b>

**Taxiway A: Rehabilitation - Seal Coat (5-10 Years)**

Design Phase Services (Estimated):	\$6,480.00
Design Phase Surveying (Estimated):	\$1,500.00
Construction Phase Services (Estimated):	\$1,630.00
Construction Inspection (Estimated):	\$11,000.00
Construction Costs (Estimated):	\$80,815.96
<b>Total Estimated Project Cost:</b>	<b>\$101,425.96</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Taxiway A: PCC Structural Overlay to Increase Pavement Strength to 60,000 SWL (10-15 Years)</b>					
1.01	Offsite Material Embankment In Place	C.Y.	2,959	\$3.00	\$8,877.00
1.02	HMAC Overlay Level-Up Course	Ton	1,391	\$95.00	\$132,145.00
1.03	6" PCC Pavement	S.Y.	36,963	\$32.00	\$1,182,816.00
1.04	Joint or Crack Sealing Filler	Gal.	555	\$25.00	\$13,875.00
1.05	Taxiway Markings	L.F.	3,196	\$1.00	\$3,196.00
1.06	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	29,821	\$0.60	\$17,892.60
1.07	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	5,681	\$1.20	\$6,817.20
1.08	Temporary Cool Weather Seeding	S.Y.	35,501	\$0.35	\$12,425.35
1.09	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	35,501	\$4.00	\$142,004.00
1.10	Temporary Sediment Control Fence	L.F.	6,391	\$2.00	\$12,782.00
1.11	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.12	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.13	Mobilization, Insurance, Etc.	L.S.	1	\$155,000.00	\$155,000.00
1.14	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
Subtotal					\$1,699,330.15
15% Contingencies					\$254,899.52
<b>Construction Costs (Including Contingencies)</b>					<b>\$1,954,229.67</b>

**Taxiway A: PCC Structural Overlay to Increase Pavement Strength to 60,000 SWL (10-15 Years)**

Design Phase Services (Estimated):	\$101,640.00
Design Phase Surveying (Estimated):	\$4,200.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$25,420.00
Construction Materials Testing (Estimated):	\$50,000.00
Construction Staking and Grade Verification (Estimated):	\$4,200.00
Construction Inspection (Estimated):	\$38,500.00
Construction Costs (Estimated):	\$1,954,229.67
<b>Total Estimated Project Cost:</b>	<b>\$2,181,689.67</b>

**Taxiway A: Rehabilitation - Joint Seal and Panel Replacements (15-20 Years)**

1.01	Sawcut, Remove, and Replace Partial Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	370	\$70.00	\$59,850.00
1.02	Sawcut, Remove, and Replace Full Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	370	\$55.00	\$47,080.00
1.03	Joint Replacement in Existing PCC Pavement	L.F.	959	\$1.00	\$959.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$11,000.00	\$11,000.00
Subtotal					\$118,889.00
15% Contingencies					\$17,833.35
<b>Construction Costs (Including Contingencies)</b>					<b>\$136,722.35</b>

**Taxiway A: Rehabilitation - Joint Seal and Panel Replacements (15-20 Years)**

Design Phase Services (Estimated):	\$10,960.00
Design Phase Surveying (Estimated):	\$1,500.00
Construction Phase Services (Estimated):	\$2,750.00
Construction Materials Testing (Estimated):	\$3,500.00
Construction Inspection (Estimated):	\$16,500.00
Construction Costs (Estimated):	\$136,722.35
<b>Total Estimated Project Cost:</b>	<b>\$171,932.35</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Runway 14-32: Rehabilitation - Joint Seal and Panel Replacements (0-5 Years)</b>					
1.01	Sawcut, Remove, and Replace Partial Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	362	\$70.00	\$59,850.00
1.02	Sawcut, Remove, and Replace Full Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	362	\$55.00	\$47,080.00
1.03	Joint Replacement in Existing PCC Pavement	L.F.	978	\$1.00	\$978.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$11,000.00	\$11,000.00
Subtotal					\$118,908.00
15% Contingencies					\$17,836.20
<b>Construction Costs (Including Contingencies)</b>					<b>\$136,744.20</b>

**Runway 14-32: Rehabilitation - Joint Seal and Panel Replacements (0-5 Years)**

Design Phase Services (Estimated):	\$13,150.00
Construction Phase Services (Estimated):	\$3,290.00
Construction Materials Testing (Estimated):	\$7,500.00
Construction Inspection (Estimated):	\$16,500.00
Construction Costs (Estimated):	\$136,744.20
<b>Total Estimated Project Cost:</b>	<b>\$177,184.20</b>

**Runway 14-32: 2" HMAC Maintenance Overlay (5-10 Years)**

1.01	2" HMAC Overlay Course	Ton	4,073	\$95.00	\$386,935.00
1.02	HMAC Overlay Level-Up Course	Ton	268	\$95.00	\$25,460.00
1.03	Joint or Crack Sealing Filler	Gal.	1,810	\$25.00	\$45,250.00
1.04	Runway Markings	L.F.	38,866	\$1.00	\$38,866.00
1.05	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.06	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.07	Mobilization, Insurance, Etc.	L.S.	1	\$65,000.00	\$65,000.00
1.08	Barricades and Markings for Pavement Closures and	L.S.	1	\$5,000.00	\$5,000.00
1.09	Proof Rolling	Hrs.	72	\$55.00	\$3,982.00
1.10	Pavement Marking Obliteration	S.F.	38,866	\$0.25	\$9,716.40
1.11	Paving Mat	S.Y.	36,200	\$3.00	\$108,600.00
1.12	Cold Milling of Asphalt and Concrete Paving (1/2-inch)	S.Y.	1,500	\$8.00	\$12,000.00
Subtotal					\$707,309.40
15% Contingencies					\$106,096.41
<b>Construction Costs (Including Contingencies)</b>					<b>\$813,405.81</b>

**Runway 14-32: 2" HMAC Maintenance Overlay (5-10 Years)**

Design Phase Services (Estimated):	\$50,460.00
Design Phase Surveying (Estimated):	\$4,200.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$12,620.00
Construction Materials Testing (Estimated):	\$15,000.00
Construction Staking and Grade Verification (Estimated):	\$4,200.00
Construction Inspection (Estimated):	\$27,500.00
Construction Costs (Estimated):	\$813,405.81
<b>Total Estimated Project Cost:</b>	<b>\$930,885.81</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Runway 14-32: Rehabilitation - Seal Coat (10-15 Years)</b>					
1.01	Joint or Crack Sealing Filler	Gal.	543	\$25.00	\$13,575.00
1.02	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	36,200	\$1.25	\$45,250.00
1.03	Runway Markings	L.F.	38,866	\$1.00	\$38,866.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$10,000.00	\$10,000.00
Subtotal					\$107,691.00
15% Contingencies					\$16,153.65
<b>Construction Costs (Including Contingencies)</b>					<b>\$123,844.65</b>

<b>Runway 14-32: Rehabilitation - Seal Coat (10-15 Years)</b>					
Design Phase Services (Estimated):					\$14,880.00
Construction Phase Services (Estimated):					\$3,730.00
Construction Inspection (Estimated):					\$11,000.00
Construction Costs (Estimated):					\$123,844.65
<b>Total Estimated Project Cost:</b>					<b>\$153,454.65</b>

<b>Runway 14-32: Rehabilitation - Seal Coat (15-20 Years)</b>					
1.01	Joint or Crack Sealing Filler	Gal.	543	\$25.00	\$13,575.00
1.02	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	36,200	\$1.25	\$45,250.00
1.03	Runway Markings	L.F.	38,866	\$1.00	\$38,866.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$10,000.00	\$10,000.00
Subtotal					\$107,691.00
15% Contingencies					\$16,153.65
<b>Construction Costs (Including Contingencies)</b>					<b>\$123,844.65</b>

<b>Runway 14-32: Rehabilitation - Seal Coat (15-20 Years)</b>					
Design Phase Services (Estimated):					\$14,880.00
Construction Phase Services (Estimated):					\$3,730.00
Construction Inspection (Estimated):					\$11,000.00
Construction Costs (Estimated):					\$123,844.65
<b>Total Estimated Project Cost:</b>					<b>\$153,454.65</b>

<b>Taxiway B: Rehabilitation - Joint Seal and Panel Replacements (0-5 Years)</b>					
1.01	Sawcut, Remove, and Replace Partial Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	264	\$70.00	\$59,850.00
1.02	Sawcut, Remove, and Replace Full Cracked or Damaged Panels in Existing 12" PCC Pavement	S.Y.	264	\$55.00	\$47,080.00
1.03	Joint Replacement in Existing PCC Pavement	L.F.	671	\$1.00	\$671.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$11,000.00	\$11,000.00
Subtotal					\$118,601.00
15% Contingencies					\$17,790.15
<b>Construction Costs (Including Contingencies)</b>					<b>\$136,391.15</b>

<b>Taxiway B: Rehabilitation - Joint Seal and Panel Replacements (0-5 Years)</b>					
Design Phase Services (Estimated):					\$13,110.00
Construction Phase Services (Estimated):					\$3,280.00
Construction Materials Testing (Estimated):					\$6,500.00
Construction Inspection (Estimated):					\$16,500.00
Construction Costs (Estimated):					\$136,391.15
<b>Total Estimated Project Cost:</b>					<b>\$175,781.15</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Taxiway B: 2" HMAC Maintenance Overlay (5-10 Years)</b>					
1.01	2" HMAC Overlay Course	Ton	2,960	\$95.00	\$281,200.00
1.02	HMAC Overlay Level-Up Course	Ton	268	\$95.00	\$25,460.00
1.03	Joint or Crack Sealing Filler	Gal.	1,316	\$25.00	\$32,900.00
1.04	Taxiway Markings	L.F.	2,236	\$1.00	\$2,236.00
1.05	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.06	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.07	Mobilization, Insurance, Etc.	L.S.	1	\$45,000.00	\$45,000.00
1.08	Barricades and Markings for Pavement Closures and	L.S.	1	\$5,000.00	\$5,000.00
1.09	Proof Rolling	Hrs.	53	\$55.00	\$2,893.68
1.10	Pavement Marking Obliteration	S.F.	2,235	\$0.25	\$558.85
1.11	Paving Mat	S.Y.	26,306	\$3.00	\$78,918.56
1.12	Cold Milling of Asphalt and Concrete Paving (1/2-inch)	S.Y.	1,000	\$8.00	\$8,000.00
Subtotal					\$488,667.09
15% Contingencies					\$73,300.06
<b>Construction Costs (Including Contingencies)</b>					<b>\$561,967.15</b>

**Taxiway B: 2" HMAC Maintenance Overlay (5-10 Years)**

Design Phase Services (Estimated):	\$35,980.00
Design Phase Surveying (Estimated):	\$2,800.00
Geotechnical Investigation (Estimated):	\$2,500.00
Construction Phase Services (Estimated):	\$9,000.00
Construction Materials Testing (Estimated):	\$12,000.00
Construction Staking and Grade Verification (Estimated):	\$2,800.00
Construction Inspection (Estimated):	\$27,500.00
Construction Costs (Estimated):	\$561,967.15
<b>Total Estimated Project Cost:</b>	<b>\$654,547.15</b>

**Taxiway B: Rehabilitation - Seal Coat (10-15 Years)**

1.01	Joint or Crack Sealing Filler	Gal.	395	\$25.00	\$9,875.00
1.02	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	26,307	\$1.25	\$32,883.75
1.03	Taxiway Markings	L.F.	2,236	\$1.00	\$2,236.00
1.04	Mobilization, Insurance, Etc.	L.S.	1	\$5,000.00	\$5,000.00
Subtotal					\$49,994.75
15% Contingencies					\$7,499.21
<b>Construction Costs (Including Contingencies)</b>					<b>\$57,493.96</b>

**Taxiway B: Rehabilitation - Seal Coat (10-15 Years)**

Design Phase Services (Estimated):	\$6,920.00
Construction Phase Services (Estimated):	\$1,740.00
Construction Inspection (Estimated):	\$11,000.00
Construction Costs (Estimated):	\$57,493.96
<b>Total Estimated Project Cost:</b>	<b>\$77,153.96</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Taxiway B: Rehabilitation - Seal Coat (15-20 Years)</b>					
1.01	Joint or Crack Sealing Filler	Gal.	395	\$25.00	\$9,875.00
1.02	Refined Coal Tar Emulsion with Additives, Sealcoat Surface Treatment	S.Y.	26,307	\$1.25	\$32,883.75
1.03	Taxiway Markings	L.F.	2,236	\$1.00	\$2,236.00
1.03	Mobilization, Insurance, Etc.	L.S.	1	\$5,000.00	\$5,000.00
Subtotal					\$49,994.75
15% Contingencies					\$7,499.21
<b>Construction Costs (Including Contingencies)</b>					<b>\$57,493.96</b>

<b>Taxiway B: Rehabilitation - Seal Coat (15-20 Years)</b>					
Design Phase Services (Estimated):					\$6,920.00
Construction Phase Services (Estimated):					\$1,740.00
Construction Inspection (Estimated):					\$11,000.00
Construction Costs (Estimated):					\$57,493.96
<b>Total Estimated Project Cost:</b>					<b>\$77,153.96</b>

<b>Close / Remove Runway 3-21</b>					
1.01	Concrete Pavement Removal	S.Y.	82,510	\$6.00	\$495,060.00
1.02	Offsite Material Embankment In Place	C.Y.	27,504	\$3.00	\$82,512.00
1.03	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	82,510	\$0.60	\$49,506.00
1.04	Temporary Cool Weather Seeding	S.Y.	82,510	\$0.35	\$28,878.50
1.05	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	82,510	\$4.00	\$330,040.00
1.06	Temporary Sediment Control Fence	L.F.	3,700	\$2.00	\$7,400.00
1.07	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.08	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$3,000.00	\$3,000.00
1.09	Mobilization, Insurance, Etc.	L.S.	1	\$101,000.00	\$101,000.00
1.10	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
Subtotal					\$1,103,896.50
15% Contingencies					\$165,584.48
<b>Construction Costs (Including Contingencies)</b>					<b>\$1,269,480.98</b>

<b>Close / Remove Runway 3-21</b>					
Design Phase Services (Estimated):					\$66,040.00
Design Phase Surveying (Estimated):					\$1,500.00
Construction Phase Services (Estimated):					\$16,520.00
Construction Inspection (Estimated):					\$27,500.00
Construction Costs (Estimated):					\$1,269,480.98
<b>Total Estimated Project Cost:</b>					<b>\$1,381,040.98</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Extend Terminal (Hangar Taxilane)</b>					
1.01	Unclassified Excavation	C.Y.	3,000	\$2.00	\$6,000.00
1.02	Onsite Borrow Embankment In Place	C.Y.	1,275	\$2.25	\$2,868.75
1.03	Undercut and Replace Unsuitable Subgrade Material with Suitable Material as Directed by the Engineer	C.Y.	126	\$20.00	\$2,520.00
1.04	6" Lime Stabilized Subgrade	S.Y.	5,633	\$6.00	\$33,798.00
1.05	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	86	\$170.00	\$14,620.00
1.06	6" PCC Pavement	S.Y.	4,393	\$32.00	\$140,576.00
1.07	Yellow Taxiway Markings (Reflective)	S.F.	500	\$1.00	\$500.00
1.08	Drainage Improvements	L.S.	1	\$20,000.00	\$20,000.00
1.09	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	546	\$0.60	\$327.60
1.10	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	992	\$1.20	\$1,190.40
1.11	Temporary Cool Weather Seeding	S.Y.	1,538	\$0.35	\$538.30
1.12	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	4,393	\$3.00	\$13,179.00
1.13	Temporary Sediment Control Fence	L.F.	1,339	\$2.00	\$2,678.00
1.14	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.15	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.16	Mobilization, Insurance, Etc.	L.S.	1	\$26,000.00	\$26,000.00
1.17	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
1.18	Proof Rolling	Hrs.	12	\$55.00	\$660.00
1.19	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	94	\$80.00	\$7,520.00
Subtotal					\$284,476.05
15% Contingencies					\$42,671.41
<b>Construction Costs (Including Contingencies)</b>					<b>\$327,147.46</b>

<b>Extend Terminal (Hangar Taxilane)</b>	
Design Phase Services (Estimated):	\$22,270.00
Design Phase Surveying (Estimated):	\$1,500.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$5,570.00
Construction Materials Testing (Estimated):	\$7,500.00
Construction Staking and Grade Verification (Estimated):	\$1,500.00
Construction Inspection (Estimated):	\$27,500.00
Construction Costs (Estimated):	\$327,147.46
<b>Total Estimated Project Cost:</b>	<b>\$396,487.46</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Construct New Terminal Taxiway from Alpha</b>					
1.01	Clearing	Acre	8.05	\$2,000.00	\$16,100.00
1.02	Unclassified Excavation	C.Y.	500	\$2.00	\$1,000.00
1.03	Onsite Borrow Embankment In Place	C.Y.	425	\$2.25	\$956.25
1.04	Offsite Material Embankment In Place	C.Y.	4,000	\$3.00	\$12,000.00
1.05	Undercut and Replace Unsuitable Subgrade Material with Suitable Material as Directed by the Engineer	C.Y.	121	\$20.00	\$2,420.00
1.06	6" Lime Stabilized Subgrade	S.Y.	5,439	\$6.00	\$32,634.00
1.07	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	83	\$170.00	\$14,110.00
1.08	6" PCC Pavement	S.Y.	4,216	\$32.00	\$134,912.00
1.09	Yellow Taxiway Markings (Reflective)	S.F.	500	\$1.00	\$500.00
1.10	Remove Existing Chain-Link Security Fence	L.F.	6,108	\$8.00	\$48,864.00
1.11	2 - 8' x 6' RCBC	L.F.	65	\$530.00	\$34,450.00
1.12	Sloped End Treatment (2 - 8' x 6' RCBC)	EA.	2	\$8,000.00	\$16,000.00
1.13	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	28,782	\$0.60	\$17,269.20
1.14	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (Slopes > 5%)	S.Y.	9,594	\$1.20	\$11,512.80
1.15	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	979	\$1.20	\$1,174.80
1.16	Temporary Cool Weather Seeding	S.Y.	39,355	\$0.35	\$13,774.25
1.17	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	4,216	\$3.00	\$12,648.00
1.18	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	39,355	\$4.00	\$157,420.00
1.19	Rock Filter Dam	L.F.	125	\$25.00	\$3,125.00
1.20	Temporary Sediment Control Fence	L.F.	1,322	\$2.00	\$2,644.00
1.21	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.22	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.23	Mobilization, Insurance, Etc.	L.S.	1	\$56,000.00	\$56,000.00
1.24	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
1.25	Proof Rolling	Hrs.	11	\$55.00	\$605.00
1.26	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	91	\$80.00	\$7,280.00
Subtotal					\$608,899.30
15% Contingencies					\$91,334.90
<b>Construction Costs (Including Contingencies)</b>					<b>\$700,234.20</b>
<b>Construct New Terminal Taxiway from Alpha</b>					
Design Phase Services (Estimated):					\$42,350.00
Design Phase Surveying (Estimated):					\$2,800.00
Geotechnical Investigation (Estimated):					\$2,500.00
Construction Phase Services (Estimated):					\$11,950.00
Construction Materials Testing (Estimated):					\$5,000.00
Construction Staking and Grade Verification (Estimated):					\$1,500.00
Construction Inspection (Estimated):					\$49,500.00
Construction Costs (Estimated):					\$700,234.20
<b>Total Estimated Project Cost:</b>					<b>\$815,834.20</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Extend Taxiway A to South Runway 35</b>					
1.01	Concrete Pavement Removal	S.Y.	5,359	\$6.00	\$32,154.00
1.02	Clearing and Grubbing	Acre	34.24	\$5,500.00	\$188,320.00
1.03	Unclassified Excavation	C.Y.	2,139	\$2.00	\$4,278.00
1.04	Onsite Borrow Embankment In Place	C.Y.	1,818	\$2.25	\$4,090.50
1.05	Offsite Material Embankment In Place	C.Y.	1,818	\$3.00	\$5,454.00
1.06	Undercut and Replace Unsuitable Subgrade Material with Suitable Material as Directed by the Engineer	C.Y.	261	\$20.00	\$5,220.00
1.07	6" Lime Stabilized Subgrade	S.Y.	11,725	\$6.00	\$70,350.00
1.08	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	178	\$170.00	\$30,260.00
1.09	9" PCC Pavement	S.Y.	13,830	\$36.50	\$504,795.00
1.10	Yellow Taxiway Markings (Reflective)	S.F.	3,000	\$1.00	\$3,000.00
1.11	Remove Existing Chain-Link Security Fence	L.F.	3,753	\$8.00	\$30,024.00
1.12	Drainage Improvements	L.S.	1	\$20,000.00	\$20,000.00
1.13	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	6,320	\$0.60	\$3,792.00
1.14	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (Slopes > 5%)	S.Y.	3,403	\$1.20	\$4,083.60
1.15	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	2,002	\$1.20	\$2,402.40
1.16	Temporary Cool Weather Seeding	S.Y.	11,725	\$0.35	\$4,103.75
1.17	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	19,195	\$3.00	\$57,585.00
1.18	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	11,725	\$4.00	\$46,900.00
1.19	Rock Filter Dam	L.F.	125	\$25.00	\$3,125.00
1.20	Temporary Sediment Control Fence	L.F.	2,035	\$2.00	\$4,070.00
1.21	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.22	Mobilization, Insurance, Etc.	L.S.	1	\$106,000.00	\$106,000.00
1.23	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
1.24	Proof Rolling	Hrs.	24	\$55.00	\$1,320.00
1.25	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	256	\$80.00	\$20,480.00
Subtotal					\$1,158,307.25
15% Contingencies					\$173,746.09
<b>Construction Costs (Including Contingencies)</b>					<b>\$1,332,053.34</b>

**Extend Taxiway A to South Runway 35**

Design Phase Services (Estimated):	\$66,620.00
Design Phase Surveying (Estimated):	\$2,800.00
Geotechnical Investigation (Estimated):	\$3,200.00
Construction Phase Services (Estimated):	\$16,660.00
Construction Materials Testing (Estimated):	\$13,000.00
Construction Staking and Grade Verification (Estimated):	\$2,800.00
Construction Inspection (Estimated):	\$38,500.00
Construction Costs (Estimated):	\$1,332,053.34
<b>Total Estimated Project Cost:</b>	<b>\$1,475,633.34</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Construct New Terminal Road</b>					
1.01	Unclassified Excavation	C.Y.	2,122	\$2.00	\$4,244.00
1.02	Onsite Borrow Embankment In Place	C.Y.	1,803	\$2.25	\$4,056.75
1.03	Undercut and Replace Unsuitable Subgrade Material with	C.Y.	302	\$20.00	\$6,040.00
1.04	6" Lime Stabilized Subgrade	S.Y.	13,582	\$6.00	\$81,492.00
1.05	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	206	\$170.00	\$35,020.00
1.06	6" PCC Pavement	S.Y.	9,605	\$32.00	\$307,360.00
1.07	Road Markings	S.F.	100	\$1.00	\$100.00
1.08	Drainage Improvements	L.S.	1	\$20,000.00	\$20,000.00
1.09	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	180	\$0.60	\$108.00
1.10	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4'	S.Y.	3,182	\$1.20	\$3,818.40
1.11	Temporary Cool Weather Seeding	S.Y.	3,362	\$0.35	\$1,176.70
1.12	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	9,605	\$3.00	\$28,815.00
1.13	Temporary Sediment Control Fence	L.F.	2,148	\$2.00	\$4,296.00
1.14	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.15	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$2,500.00	\$2,500.00
1.16	Mobilization, Insurance, Etc.	L.S.	1	\$51,000.00	\$51,000.00
1.17	Barricades and Markings for Pavement Closures and	L.S.	1	\$2,500.00	\$2,500.00
1.18	Proof Rolling	Hrs.	28	\$55.00	\$1,540.00
Subtotal					\$555,566.85
15% Contingencies					\$83,335.03
<b>Construction Costs (Including Contingencies)</b>					<b>\$638,901.88</b>

<b>Construct New Terminal Road</b>	
Design Phase Services (Estimated):	\$40,910.00
Design Phase Surveying (Estimated):	\$1,500.00
Geotechnical Investigation (Estimated):	\$3,500.00
Construction Phase Services (Estimated):	\$10,240.00
Construction Materials Testing (Estimated):	\$7,500.00
Construction Staking and Grade Verification (Estimated):	\$1,500.00
Construction Inspection (Estimated):	\$33,000.00
Construction Costs (Estimated):	\$638,901.88
<b>Total Estimated Project Cost:</b>	<b>\$737,051.88</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Construct 10-Unit Box Hangar (Like Hangar D)</b>					
1.01	Unclassified Excavation	C.Y.	434	\$2.00	\$868.00
1.02	Offsite Material Embankment In Place	C.Y.	217	\$3.00	\$651.00
1.03	Over-Excavation for Foundation Pad	C.Y.	3,082	\$2.00	\$6,164.00
1.04	Compacted Select Fill for Foundation Pad	C.Y.	3,082	\$25.00	\$77,050.00
1.05	6" Lime Stabilized Subgrade	S.Y.	1,940	\$6.00	\$11,640.00
1.06	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	30	\$170.00	\$5,100.00
1.07	6" PCC Pavement	S.Y.	1,540	\$32.00	\$49,280.00
1.08	Yellow Taxiway Markings (Reflective)	S.F.	500	\$1.00	\$500.00
1.09	Drainage Improvements	L.S.	1	\$20,000.00	\$20,000.00
1.10	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	327	\$0.60	\$196.20
1.11	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	320	\$1.20	\$384.00
1.12	Temporary Cool Weather Seeding	S.Y.	823	\$0.35	\$288.05
1.13	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	3,903	\$3.00	\$11,709.00
1.14	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	823	\$4.00	\$3,292.00
1.15	Temporary Sediment Control Fence	L.F.	360	\$2.00	\$720.00
1.16	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.17	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$2,500.00	\$2,500.00
1.18	Mobilization, Insurance, Etc.	L.S.	1	\$78,000.00	\$78,000.00
1.19	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$2,500.00	\$2,500.00
1.20	Proof Rolling	Hrs.	8	\$55.00	\$440.00
1.21	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	33	\$80.00	\$2,640.00
1.22	10-Unit Box Hangar Completed-in-place	L.S.	1	\$520,000.00	\$520,000.00
1.23	Electrical Lighting System	L.S.	1	\$50,000.00	\$50,000.00
1.24	Utility Relocations	L.S.	1	\$10,000.00	\$10,000.00
Subtotal					\$855,422.25
15% Contingencies					\$128,313.34
<b>Construction Costs (Including Contingencies)</b>					<b>\$983,735.59</b>
<b>Construct 10-Unit Box Hangar (Like Hangar D)</b>					
Design Phase Services (Estimated):					\$59,040.00
Design Phase Surveying (Estimated):					\$1,500.00
Geotechnical Investigation (Estimated):					\$2,500.00
Construction Phase Services (Estimated):					\$14,770.00
Construction Materials Testing (Estimated):					\$5,000.00
Construction Staking and Grade Verification (Estimated):					\$1,500.00
Construction Inspection (Estimated):					\$38,500.00
Construction Costs (Estimated):					\$983,735.59
<b>Total Estimated Project Cost:</b>					<b>\$1,106,545.59</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Construct 10-Unit T-Hangar (Like Hangar I)</b>					
1.01	Unclassified Excavation	C.Y.	455	\$2.00	\$910.00
1.02	Offsite Material Embankment In Place	C.Y.	228	\$3.00	\$684.00
1.03	Over-Excavation for Foundation Pad	C.Y.	2,571	\$2.00	\$5,142.00
1.04	Compacted Select Fill for Foundation Pad	C.Y.	2,571	\$25.00	\$64,275.00
1.05	6" Lime Stabilized Subgrade	S.Y.	2,470	\$6.00	\$14,820.00
1.06	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	38	\$170.00	\$6,460.00
1.07	6" PCC Pavement	S.Y.	1,925	\$32.00	\$61,600.00
1.08	Yellow Taxiway Markings (Reflective)	S.F.	600	\$1.00	\$600.00
1.09	Drainage Improvements	L.S.	1	\$20,000.00	\$20,000.00
1.10	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	227	\$0.60	\$136.20
1.11	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	436	\$1.20	\$523.20
1.12	Temporary Cool Weather Seeding	S.Y.	784	\$0.35	\$274.40
1.13	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	4,095	\$3.00	\$12,285.00
1.14	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	784	\$4.00	\$3,136.00
1.15	Temporary Sediment Control Fence	L.F.	491	\$2.00	\$982.00
1.16	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.17	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$2,500.00	\$2,500.00
1.18	Mobilization, Insurance, Etc.	L.S.	1	\$69,000.00	\$69,000.00
1.19	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$2,500.00	\$2,500.00
1.20	Proof Rolling	Hrs.	9	\$55.00	\$495.00
1.21	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	42	\$80.00	\$3,360.00
1.22	10-Unit T-Hangar Completed-in-place	L.S.	1	\$420,000.00	\$420,000.00
1.23	Electrical Lighting System	L.S.	1	\$50,000.00	\$50,000.00
1.24	Utility Relocations	L.S.	1	\$10,000.00	\$10,000.00
Subtotal					\$751,182.80
15% Contingencies					\$112,677.42
<b>Construction Costs (Including Contingencies)</b>					<b>\$863,860.22</b>

<b>Construct 10-Unit T-Hangar (Like Hangar I)</b>	
Design Phase Services (Estimated):	\$51,840.00
Design Phase Surveying (Estimated):	\$1,500.00
Geotechnical Investigation (Estimated):	\$2,500.00
Construction Phase Services (Estimated):	\$12,970.00
Construction Materials Testing (Estimated):	\$5,000.00
Construction Staking and Grade Verification (Estimated):	\$1,500.00
Construction Inspection (Estimated):	\$38,500.00
Construction Costs (Estimated):	\$863,860.22
<b>Total Estimated Project Cost:</b>	<b>\$977,670.22</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Acquire 51.9 Acres for 1/2 Mile RPZ Rwy 35</b>					
1.01	Purchase Runway 35 Tract of Land for 1/2 Mile RPZ	Acre	51.90	\$1,700.00	\$88,230.00
Subtotal					\$88,230.00
15% Contingencies					\$13,234.50
<b>Costs (Including Contingencies)</b>					<b>\$101,464.50</b>
<b>Acquire 51.9 Acres for 1/2 Mile RPZ Rwy 35</b>					
Exhibits (Estimated):					\$1,500.00
Surveying (Estimated):					\$3,000.00
Costs (Estimated):					\$101,464.50
<b>Total Estimated Project Cost:</b>					<b>\$105,964.50</b>
<b>Acquire 4.11 Acres for 3/4 Mile RPZ Rwy 32</b>					
1.01	Purchase Runway 32 Tract of Land for 3/4 Mile RPZ	Acre	4.11	\$1,700.00	\$6,987.00
Subtotal					\$6,987.00
15% Contingencies					\$1,048.05
<b>Costs (Including Contingencies)</b>					<b>\$8,035.05</b>
<b>Acquire 4.11 Acres for 3/4 Mile RPZ Rwy 32</b>					
Exhibits (Estimated):					\$1,500.00
Surveying (Estimated):					\$2,000.00
Construction Costs (Estimated):					\$8,035.05
<b>Total Estimated Project Cost:</b>					<b>\$11,535.05</b>
<b>Install MALS Rwy 17</b>					
1.01	Furnish and Install EMT MALS Bar	EA.	1	\$4,500.00	\$4,500.00
1.02	Furnish and Install MG-30 LIR Support with MALS Bar	EA.	5	\$14,000.00	\$70,000.00
1.03	Furnish and Install MG-30 LIR Support with Flasher Mount	EA.	3	\$8,200.00	\$24,600.00
1.04	Furnish and Install MG-20 LIR Support with MALS Bar	EA.	3	\$8,200.00	\$24,600.00
1.05	Furnish and Install MG-20 LIR Support with Flasher Mount	EA.	2	\$7,800.00	\$15,600.00
1.06	Furnish and Install Semi-flush, Mounted, FAA-E-9252 Threshold Bar (18 lamps)	EA.	1	\$40,154.00	\$40,154.00
1.07	Install New FAA Supplied MALS Rwy Fixtures and Control System	L.S.	1	\$20,000.00	\$20,000.00
1.08	Furnish and Install New L-823 Connector and Pigtail	EA.	28	\$42.00	\$1,176.00
1.09	Aim and Label Above Ground MALS Fixture	EA.	40	\$15.00	\$600.00
1.10	Furnish and Install Frangible Galvanized Steel Power Pedestal with Meter Base	L.S.	1	\$1,000.00	\$1,000.00
1.11	Furnish and Install 200 Amp NEMA 3R Fused Disconnect Switch	L.S.	1	\$285.00	\$285.00
1.12	Furnish and Install 200 Amp NEMA 3R Transfer Switch with Generator Connector	L.S.	1	\$525.00	\$525.00
1.13	Concrete Pad for Primary Transformer	L.S.	1	\$500.00	\$500.00
1.14	Provide 200 Amp Electrical Service to Shelter	L.S.	1	\$5,000.00	\$5,000.00
1.15	Concrete Foundations, Completed In-Place	C.Y.	50	\$400.00	\$20,000.00
1.16	# 2 AWG Copper Shield wire, Installed in Trench or Duct	L.F.	4,025	\$2.00	\$8,050.00
1.17	New Air Terminal Installed	L.S.	1	\$500.00	\$500.00
1.18	Cable Trench, Backfill, Compaction, etc. in Embankment	L.F.	4,025	\$5.50	\$22,137.50
1.19	8' x 3/4" Copperweld Ground Rod	EA.	24	\$100.00	\$2,400.00
1.20	#1 AWG Type THWN Cable, Installed in Conduit	L.F.	2,430	\$3.10	\$7,533.00
1.21	#2 AWG Type THWN Cable, Installed in Conduit	L.F.	2,584	\$2.20	\$5,684.80
1.22	#4 AWG Type THWN Cable, Installed in Conduit	L.F.	3,756	\$1.90	\$7,136.40
1.23	#6 AWG Type THWN Cable, Installed in Conduit	L.F.	2,316	\$1.20	\$2,779.20
1.24	#10 AWG Type THWN Cable, Installed in Conduit	L.F.	4,032	\$0.55	\$2,217.60

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
1.25	#12 AWG Type THWN Cable, Installed in Conduit	L.F.	3,224	\$0.35	\$1,128.40
1.26	12 Pair, 19 Gauge Overall Shielded Cable, Installed in Conduit	L.F.	1,843	\$2.00	\$3,686.00
1.27	Furnish and Install New FAA Supplied 8' x 14' MALSR Shelter	L.S.	1	\$2,200.00	\$2,200.00
1.28	2" Schedule 40 PVC Electrical Conduit, Installed in Trench or Duct	L.F.	4,910	\$2.75	\$13,502.50
1.29	8' x 3/4" Copperweld Ground Rod	EA.	970	\$100.00	\$97,000.00
1.30	Furnish and Install 1.5' x 3' x 2' Aircraft Rated Electrical Junction Box	EA.	2	\$1,200.00	\$2,400.00
1.31	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.32	Mobilization, Insurance, Etc.	L.S.	1	\$43,000.00	\$43,000.00
1.33	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$2,500.00	\$2,500.00
1.34	FAA Resident Inspector with Per Diem	Days	30	\$300.00	\$9,000.00
1.35	FAA Engineering Inspections	Hrs.	40	\$125.00	\$5,000.00
1.36	Commissioning Flight Inspection	L.S.	1	\$2,600.00	\$2,600.00
Subtotal					\$470,495.40
15% Contingencies					\$70,574.31
<b>Construction Costs (Including Contingencies)</b>					<b>\$541,069.71</b>

**Install MALSR Rwy 17**

Design Phase Services (Estimated):	\$25,990.00
Design Phase Surveying (Estimated):	\$1,280.00
Geotechnical Investigation (Estimated):	\$2,500.00
Construction Phase Services (Estimated):	\$6,500.00
Construction Materials Testing (Estimated):	\$5,000.00
Construction Staking and Grade Verification (Estimated):	\$1,280.00
Construction Inspection (Estimated):	\$10,000.00
Construction Costs (Estimated):	\$541,069.71
<b>Total Estimated Project Cost:</b>	<b>\$593,619.71</b>

**Install MALSR Rwy 35**

1.01	Clearing and Grubbing	Acre	26.25	\$5,500.00	\$144,375.00
1.02	Furnish and Install EMT MALS Bar	EA.	1	\$4,500.00	\$4,500.00
1.03	Furnish and Install MG-30 LIR Support with MALS Bar	EA.	5	\$14,000.00	\$70,000.00
1.04	Furnish and Install MG-30 LIR Support with Flasher Mount	EA.	3	\$8,200.00	\$24,600.00
1.05	Furnish and Install MG-20 LIR Support with MALS Bar	EA.	3	\$8,200.00	\$24,600.00
1.06	Furnish and Install MG-20 LIR Support with Flasher Mount	EA.	2	\$7,800.00	\$15,600.00
1.07	Furnish and Install Semi-flush, Mounted, FAA-E-9252 Threshold Bar (18 lamps)	EA.	1	\$40,154.00	\$40,154.00
1.08	Install New FAA Supplied MALSR Fixtures and Control System	L.S.	1	\$20,000.00	\$20,000.00
1.09	Furnish and Install New L-823 Connector and Pigtail	EA.	28	\$42.00	\$1,176.00
1.10	Aim and Label Above Ground MALS Fixture	EA.	40	\$15.00	\$600.00
1.11	Furnish and Install Frangible Galvanized Steel Power Pedestal with Meter Base	L.S.	1	\$1,000.00	\$1,000.00
1.12	Furnish and Install 200 Amp NEMA 3R Fused Disconnect Switch	L.S.	1	\$285.00	\$285.00
1.13	Furnish and Install 200 Amp NEMA 3R Transfer Switch with Generator Connector	L.S.	1	\$525.00	\$525.00
1.14	Concrete Pad for Primary Transformer	L.S.	1	\$500.00	\$500.00
1.15	Provide 200 Amp Electrical Service to Shelter	L.S.	1	\$5,000.00	\$5,000.00
1.16	Concrete Foundations, Completed In-Place	C.Y.	50	\$400.00	\$20,000.00

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
1.17	# 2 AWG Copper Shield wire, Installed in Trench or Duct	L.F.	4,025	\$2.00	\$8,050.00
1.18	New Air Terminal Installed	L.S.	1	\$500.00	\$500.00
1.19	Cable Trench, Backfill, Compaction, etc. in Embankment	L.F.	4,025	\$5.50	\$22,137.50
1.20	8' x 3/4" Copperweld Ground Rod	EA.	24	\$100.00	\$2,400.00
1.21	#1 AWG Type THWN Cable, Installed in Conduit	L.F.	2,430	\$3.10	\$7,533.00
1.22	#2 AWG Type THWN Cable, Installed in Conduit	L.F.	2,584	\$2.20	\$5,684.80
1.23	#4 AWG Type THWN Cable, Installed in Conduit	L.F.	3,756	\$1.90	\$7,136.40
1.24	#6 AWG Type THWN Cable, Installed in Conduit	L.F.	2,316	\$1.20	\$2,779.20
1.25	#10 AWG Type THWN Cable, Installed in Conduit	L.F.	4,032	\$0.55	\$2,217.60
1.26	#12 AWG Type THWN Cable, Installed in Conduit	L.F.	3,224	\$0.35	\$1,128.40
1.27	12 Pair, 19 Gauge Overall Shielded Cable, Installed in Conduit	L.F.	1,843	\$2.00	\$3,686.00
1.28	Furnish and Install New FAA Supplied 8' x 14' MALSR Shelter	L.S.	1	\$2,200.00	\$2,200.00
1.29	2" Schedule 40 PVC Electrical Conduit, Installed in Trench or Duct	L.F.	4,910	\$2.75	\$13,502.50
1.30	8' x 3/4" Copperweld Ground Rod	EA.	970	\$100.00	\$97,000.00
1.31	Furnish and Install 1.5' x 3' x 2' Aircraft Rated Electrical Junction Box	EA.	2	\$1,200.00	\$2,400.00
1.32	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.33	Mobilization, Insurance, Etc.	L.S.	1	\$58,000.00	\$58,000.00
1.34	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$2,500.00	\$2,500.00
1.35	FAA Resident Inspector with Per Diem	Days	30	\$300.00	\$9,000.00
1.36	FAA Engineering Inspections	Hrs.	40	\$125.00	\$5,000.00
1.37	Commissioning Flight Inspection	L.S.	1	\$2,600.00	\$2,600.00
Subtotal					\$629,870.40
15% Contingencies					\$94,480.56
<b>Construction Costs (Including Contingencies)</b>					<b>\$724,350.96</b>
<b>Install MALSR Rwy 35</b>					
Design Phase Services (Estimated):					\$25,990.00
Design Phase Surveying (Estimated):					\$1,280.00
Geotechnical Investigation (Estimated):					\$2,500.00
Construction Phase Services (Estimated):					\$6,500.00
Construction Materials Testing (Estimated):					\$5,000.00
Construction Staking and Grade Verification (Estimated):					\$1,280.00
Construction Inspection (Estimated):					\$10,000.00
Construction Costs (Estimated):					\$724,350.96
<b>Total Estimated Project Cost:</b>					<b>\$776,900.96</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Install Runway Lights to Runway 14-32</b>					
1.01	# 6 AWG Copper Shield wire, Installed in Trench or Duct	L.F.	12,590	\$2.40	\$30,216.00
1.02	# 8 AWG Cable, 5kV, Type "C" Installed in Conduit	L.F.	16,710	\$1.75	\$29,242.50
1.03	Cable Trench, Backfill, Compaction, etc. in Embankment	L.F.	3,560	\$5.50	\$19,580.00
1.04	Cable Trench, Backfill, Compaction, etc. in Pavement	L.F.	8,690	\$15.00	\$130,350.00
1.05	8' x 3/4" Copperweld Ground Rod	EA.	75	\$100.00	\$7,500.00
1.06	Installation of Vault Equipment and Electrical Improvements	L.S.	1	\$10,000.00	\$10,000.00
1.07	Installation of New 10 kW Constant Current Regulator	EA.	1	\$15,000.00	\$15,000.00
1.08	2" Schedule 40 PVC Electrical Conduit, Installed in Trench or Duct	L.F.	12,590	\$2.75	\$34,622.50
1.09	2" Schedule 80 PVC Electrical Conduit Bored Under Pavement	L.F.	340	\$94.00	\$31,960.00
1.10	Furnish and Install L-867-B Class 1 Concrete Junction Can	EA.	7	\$600.00	\$4,200.00
1.11	Furnish and Install 1.5' x 3' x 2' Aircraft Rated Electrical Junction Box	EA.	2	\$1,200.00	\$2,400.00
1.12	Medium Intensity Runway Base Mounted Edge Lights L-861	EA.	58	\$725.00	\$42,050.00
1.13	Furnish and Install New Internally Lighted L-858, 3 Module, Size 1, Style 2, Class 2 Guidance Sign	EA.	8	\$4,500.00	\$36,000.00
1.14	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.15	Mobilization, Insurance, Etc.	L.S.	1	\$40,000.00	\$40,000.00
1.16	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
Subtotal					\$439,621.00
15% Contingencies					\$65,943.15
<b>Construction Costs (Including Contingencies)</b>					<b>\$505,564.15</b>

<b>Install Runway Lights to Runway 14-32</b>	
Design Phase Services (Estimated):	\$33,540.00
Design Phase Surveying (Estimated):	\$1,500.00
Construction Phase Services (Estimated):	\$9,460.00
Construction Materials Testing (Estimated):	\$3,000.00
Construction Inspection (Estimated):	\$22,000.00
Construction Costs (Estimated):	\$505,564.15
<b>Total Estimated Project Cost:</b>	<b>\$575,064.15</b>

<b>Install REILS to Runway 14-32</b>					
1.01	Furnish and Install REIL System on Rwy 14	L.S.	1	\$12,000.00	\$12,000.00
1.02	Furnish and Install REIL System on Rwy 32	L.S.	1	\$12,000.00	\$12,000.00
1.03	Mobilization, Insurance, Etc.	L.S.	1	\$3,000.00	\$3,000.00
Subtotal					\$27,000.00
15% Contingencies					\$4,050.00
<b>Construction Costs (Including Contingencies)</b>					<b>\$31,050.00</b>

<b>Install REILS to Runway 14-32</b>	
Design Phase Services (Estimated):	\$5,200.00
Design Phase Surveying (Estimated):	\$1,500.00
Construction Phase Services (Estimated):	\$1,640.00
Construction Materials Testing (Estimated):	\$1,500.00
Construction Inspection (Estimated):	\$16,500.00
Construction Costs (Estimated):	\$31,050.00
<b>Total Estimated Project Cost:</b>	<b>\$57,390.00</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Install PAPI-2 to Runway 14-32</b>					
1.01	Furnish and Install PAPI-2 on Rwy 14	L.S.	1	\$27,000.00	\$27,000.00
1.02	Furnish and Install PAPI-2 on Rwy 32	L.S.	1	\$27,000.00	\$27,000.00
1.03	Install New 3 KVA NEMA Type 3 Transformer	EA.	2	\$1,100.00	\$2,200.00
1.04	Furnish and Install Frangible Galvanized Steel Power Pedestal with Meter Base	L.S.	2	\$1,000.00	\$2,000.00
1.05	Furnish and Install 600 Volt - 30 Amp Fused Disconnect	EA.	4	\$250.00	\$1,000.00
1.06	Current Sensor Control for PAPI	EA.	2	\$600.00	\$1,200.00
1.07	Concrete Foundations, Completed In-Place	C.Y.	8	\$400.00	\$3,200.00
1.08	Cable Trench, Backfill, Compaction, etc. in Embankment	L.F.	1,400	\$5.50	\$7,700.00
1.09	# 6 AWG Copper Shield wire, Installed in Trench or Duct	L.F.	1,400	\$2.40	\$3,360.00
1.10	# 2 AWG Copper Shield wire, Installed in Trench or Duct	L.F.	400	\$2.00	\$800.00
1.11	8' x 3/4" Copperweld Ground Rod	EA.	16	\$100.00	\$1,600.00
1.12	#8 AWG Type C 600V Cable, Installed in Conduit	L.F.	2,850	\$1.00	\$2,850.00
1.13	#2 AWG Type C 600V Cable, Installed in Conduit	L.F.	300	\$0.52	\$156.00
1.14	2" Schedule 40 PVC Electrical Conduit, Installed in Trench	L.F.	1,400	\$2.75	\$3,850.00
1.15	Furnish and Install L-867-B Class 1 Concrete Junction Can	EA.	2	\$600.00	\$1,200.00
1.16	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.17	Mobilization, Insurance, Etc.	L.S.	1	\$9,000.00	\$9,000.00
Subtotal					\$95,616.00
15% Contingencies					\$14,342.40
<b>Construction Costs (Including Contingencies)</b>					<b>\$109,958.40</b>

<b>Install PAPI-2 to Runway 14-32</b>	
Design Phase Services (Estimated):	\$9,450.00
Design Phase Surveying (Estimated):	\$500.00
Construction Phase Services (Estimated):	\$2,670.00
Construction Materials Testing (Estimated):	\$1,500.00
Construction Staking and Grade Verification (Estimated):	\$500.00
Construction Inspection (Estimated):	\$16,500.00
Construction Costs (Estimated):	\$109,958.40
<b>Total Estimated Project Cost:</b>	<b>\$141,078.40</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Construct Southbound Airport Access Road to HW 271</b>					
1.01	Unclassified Excavation	C.Y.	2,908	\$2.00	\$5,816.00
1.02	Onsite Borrow Embankment In Place	C.Y.	2,472	\$2.25	\$5,562.00
1.03	Undercut and Replace Unsuitable Subgrade Material with	C.Y.	403	\$20.00	\$8,060.00
1.04	6" Lime Stabilized Subgrade	S.Y.	18,115	\$6.00	\$108,690.00
1.05	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	274	\$170.00	\$46,580.00
1.06	6" PCC Pavement	S.Y.	13,083	\$32.00	\$418,656.00
1.07	Road Markings	L.S.	1	\$4,000.00	\$4,000.00
1.08	36" ASTM C-76, Class III RCP	L.F.	5,033	\$78.00	\$392,574.00
1.09	Standard Curb Inlet	EA.	18	\$3,250.00	\$58,500.00
1.10	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	2,516	\$0.60	\$1,509.60
1.11	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	4,026	\$1.20	\$4,831.20
1.12	Temporary Cool Weather Seeding	S.Y.	6,542	\$0.35	\$2,289.70
1.13	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	13,083	\$3.00	\$39,249.00
1.14	Erosion Control Improvements	L.S.	1	\$10,000.00	\$10,000.00
1.15	Preparing Right-Of-Way	Sta.	4.53	\$1,500.00	\$6,795.00
1.16	Temporary Sediment Control Fence	L.F.	4,529	\$2.00	\$9,058.00
1.17	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.18	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.19	Concrete Curb (Dowel) (Reinf.) (Type II)	L.F.	9,058	\$15.00	\$135,870.00
1.20	Right-Of-Way Markers	EA.	6	\$150.00	\$900.00
1.21	Roadside Signs, Supports, and Assemblies	L.S.	1	\$14,000.00	\$14,000.00
1.22	Mobilization, Insurance, Etc.	L.S.	1	\$132,000.00	\$132,000.00
1.23	Barricades and Markings for Pavement Closures and	L.S.	1	\$5,000.00	\$5,000.00
1.24	Proof Rolling	Hrs.	37	\$55.00	\$2,035.00
1.24	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	302	\$80.00	\$24,160.00
1.25	Right-Of-Way Acquisition	Acre	4.06	\$1,700.00	\$6,902.00
Subtotal					\$1,449,537.50
15% Contingencies					\$217,430.63
<b>Construction Costs (Including Contingencies)</b>					<b>\$1,666,968.13</b>
<b>Construct Southbound Airport Access Road to HW 271</b>					
Design Phase Services (Estimated):					\$80,040.00
Design Phase Surveying (Estimated):					\$2,800.00
Geotechnical Investigation (Estimated):					\$3,000.00
Construction Phase Services (Estimated):					\$20,020.00
Construction Materials Testing (Estimated):					\$13,000.00
Construction Staking and Grade Verification (Estimated):					\$2,800.00
Construction Inspection (Estimated):					\$49,500.00
Construction Costs (Estimated):					\$1,666,968.13
<b>Total Estimated Project Cost:</b>					<b>\$1,838,128.13</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Reconfigure Taxiway A-1 / Rwy 14</b>					
1.01	Concrete Pavement Removal	S.Y.	8,099	\$6.00	\$48,594.00
1.02	Unclassified Excavation	C.Y.	1,250	\$2.00	\$2,500.00
1.03	Onsite Borrow Embankment In Place	C.Y.	1,063	\$2.25	\$2,391.75
1.04	Offsite Material Embankment In Place	C.Y.	1,056	\$3.00	\$3,168.00
1.05	Undercut and Replace Unsuitable Subgrade Material with Suitable Material as Directed by the Engineer	C.Y.	93	\$20.00	\$1,860.00
1.06	8" Lime Stabilized Subgrade	S.Y.	4,165	\$6.00	\$24,990.00
1.07	Hydrated Lime for Lime Stabilized Subgrade (6%)	Ton	84	\$170.00	\$14,280.00
1.08	10" Crushed Aggregate Base Course	S.Y.	3,594	\$20.00	\$71,880.00
1.09	4" HMA Surface Course	Ton	724	\$95.00	\$68,780.00
1.10	Bituminous Prime Coat	Gal.	1,250	\$3.00	\$3,750.00
1.11	Bituminous Tack Coat	Gal.	625	\$3.00	\$1,875.00
1.12	Runway and Taxiway Markings (Reflective)	S.F.	3,000	\$1.00	\$3,000.00
1.13	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	16,026	\$0.60	\$9,615.60
1.14	Bonded Fiber Matrix Mulch, Seed, Lime, and Fertilizer (4' Adjacent to Pavement Perimeter)	S.Y.	762	\$1.20	\$914.40
1.15	Temporary Cool Weather Seeding	S.Y.	16,787	\$0.35	\$5,875.45
1.16	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	3,214	\$3.00	\$9,642.00
1.17	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	8,099	\$4.00	\$32,396.00
1.18	Temporary Sediment Control Fence	L.F.	1,650	\$2.00	\$3,300.00
1.19	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.20	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$3,000.00	\$3,000.00
1.21	Mobilization, Insurance, Etc.	L.S.	1	\$33,000.00	\$33,000.00
1.22	Barricades and Markings for Pavement Closures and Displaced Thresholds	L.S.	1	\$5,000.00	\$5,000.00
1.23	Proof Rolling	Hrs.	40	\$55.00	\$2,200.00
1.24	Remove and Replace Unsuitable Subgrade with Foundation Material as Directed by the Engineer	C.Y.	70	\$80.00	\$5,600.00
Subtotal					\$359,112.20
15% Contingencies					\$53,866.83
<b>Construction Costs (Including Contingencies)</b>					<b>\$412,979.03</b>
<b>Reconfigure Taxiway A-1 / Rwy 14</b>					
Design Phase Services (Estimated):					\$28,920.00
Design Phase Surveying (Estimated):					\$1,500.00
Geotechnical Investigation (Estimated):					\$2,500.00
Construction Phase Services (Estimated):					\$7,240.00
Construction Materials Testing (Estimated):					\$6,500.00
Construction Staking and Grade Verification (Estimated):					\$1,500.00
Construction Inspection (Estimated):					\$22,000.00
Construction Costs (Estimated):					\$412,979.03
<b>Total Estimated Project Cost:</b>					<b>\$483,139.03</b>

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Subtotal
<b>Airfield Drainage</b>					
1.01	Infield Drainage Improvements (North End of 17-35)	L.S.	1	\$100,000.00	\$100,000.00
Subtotal					\$100,000.00
15% Contingencies					\$15,000.00
<b>Construction Costs (Including Contingencies)</b>					<b>\$115,000.00</b>

<b>Airfield Drainage</b>	
Design Phase Services (Estimated):	\$6,540.00
Design Phase Surveying (Estimated):	\$1,200.00
Construction Phase Services (Estimated):	\$3,840.00
Construction Materials Testing (Estimated):	\$2,500.00
Construction Inspection (Estimated):	\$11,000.00
Construction Costs (Estimated):	\$115,000.00
<b>Total Estimated Project Cost: \$140,080.00</b>	

<b>Landside Drainage</b>					
1.01	Replace Headwall and Lengthen Pipe Near Terminal	L.S.	1	\$32,300.00	\$32,300.00
1.02	Improve Drainage on East Side of Hangar S	L.S.	1	\$11,600.00	\$11,600.00
1.03	Improve Trench Drain and Concrete Swales	L.S.	1	\$3,500.00	\$3,500.00
1.04	Install Safety End Treatment North of Hangar D	L.S.	1	\$4,900.00	\$4,900.00
Subtotal					\$52,300.00
15% Contingencies					\$7,845.00
<b>Construction Costs (Including Contingencies)</b>					<b>\$60,145.00</b>

<b>Landside Drainage</b>	
Design Phase Services (Estimated):	\$6,270.00
Design Phase Surveying (Estimated):	\$1,500.00
Construction Phase Services (Estimated):	\$1,570.00
Construction Materials Testing (Estimated):	\$2,500.00
Construction Inspection (Estimated):	\$16,500.00
Construction Costs (Estimated):	\$60,145.00
<b>Total Estimated Project Cost: \$88,485.00</b>	

Item No.	Description	Units	Estimated Quantities	Estimated Unit Price	Estimated Subtotal
<b>ARC C/D-II Runway 17-35 RSA Improvements</b>					
1.01	Clearing	Acre	7.03	\$2,000.00	\$14,060.00
1.02	Unclassified Excavation	C.Y.	26,054	\$2.00	\$52,108.00
1.03	Onsite Borrow Embankment In Place	C.Y.	25,195	\$2.25	\$56,688.75
1.04	Remove Existing Chain-Link Security Fence	L.F.	10,181	\$8.00	\$81,448.00
1.05	Hydromulch, Seed, Lime, and Fertilizer (Slopes < 5%)	S.Y.	7,158	\$0.60	\$4,294.80
1.06	Strip and Stockpile Topsoil from Disturbed Areas	S.Y.	7,158	\$3.00	\$21,474.00
1.07	Furnish and Install 4" Topsoil on Disturbed Areas	S.Y.	7,158	\$4.00	\$28,632.00
1.08	Rock Filter Dam	L.F.	250	\$25.00	\$6,250.00
1.09	Temporary Sediment Control Fence	L.F.	500	\$2.00	\$1,000.00
1.10	Rock Construction Exit	EA.	1	\$1,500.00	\$1,500.00
1.11	Storm Water Pollution Prevention Plan (SWP3) Document	L.S.	1	\$5,000.00	\$5,000.00
1.12	Mobilization, Insurance, Etc.	L.S.	1	\$28,000.00	\$28,000.00
Subtotal					\$300,455.55
15% Contingencies					\$45,068.33
<b>Construction Costs (Including Contingencies)</b>					<b>\$345,523.88</b>

**ARC C/D-II Runway 17-35 RSA Improvements**

Design Phase Services (Estimated):	\$22,130.00
Design Phase Surveying (Estimated):	\$2,800.00
Construction Phase Services (Estimated):	\$5,540.00
Construction Materials Testing (Estimated):	\$3,500.00
Construction Staking and Grade Verification (Estimated):	\$2,800.00
Construction Inspection (Estimated):	\$27,500.00
Construction Costs (Estimated):	\$345,523.88
<b>Total Estimated Project Cost:</b>	<b>\$409,793.88</b>

**Environmental Assessment**

1.01	Environmental Assessment	L.S.	1	\$600,000.00	\$600,000.00
Subtotal					\$600,000.00
15% Contingencies					\$90,000.00
<b>Costs (Including Contingencies)</b>					<b>\$690,000.00</b>



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