Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		**Revision**	2
Original Date	7-Apr-2023	**Revision Date**	25-Apr-2023
Assumed Bid Opening Date		**Connico PN**	4977.23.03
Project Lead	CJN / CJC	**Checked by**	IDK

LANDSIDE MASTERPLAN UPDATE

SUMMARY

PROJECT COMPONENTS			TOTAL
NEAR-TERM PROJECTS:			
1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS		$	4,918,000
1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION		$	270,322,000
1-3 - TAXIWAY EDGE GEOMETRY		$	1,220,000
1-4 - RUNWAY 12L-30R OUTBOARD TAXIWAY AND TAXIWAY P3 RECONFIGURATION		$	65,665,000
1-5 - GRE RELOCATION AND RON APRON CONSTRUCTION		$	76,512,000
1-6 - USPS SITE REDEVELOPMENT		$	600,353,000
1-7 - ORANGE RAMP NORTH EXPANSION AND OUTRIGGER EXPANSIONS			TBD
MID—TERM PROJECTS:			
2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B		$	161,779,000
2-2 - RECONSTRUCT CONCOURSE F		$	297,621,000
2-3 - CENTRAL CARGO APRON EXPANSION		$	29,469,000
2-4 - RUNWAY 30L RON APRON AND DEICE PAD RECONFIGURATION		$	4,457,000
2-5 - WEST CARGO APRON AND FACILITY		$	107,524,000
2-6 - FBO RELOCATION		$	177,000,000
2-7 - RUNWAY 12R-30L TUNNEL RECONSTRUCTION AND TAXIWAY B REALIGNMENT		$	14,150,000
2-8 - RUNWAY 30R DEICE PAD RECONFIGURATION		$	1,689,000
2-9 - TERMINAL 1 TWO-LEVEL ROADWAY RECONSTRUCTION			TBD
2-10 - GREEN/GOLD RAMP REDEVELOPMENT WITH NEW FIS FACILITY			TBD
2-10 PARKING STRUCTURE & ELEVATED ROADWAY	Excluded		
2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G		$	740,544,000
2-10 DEMOLITION	Excluded		
LONG—TERM PROJECTS:			
3-1 - NEW T2 NORTH EXPANSION		$	331,536,000

LANDSIDE MASTERPLAN UPDATE

SUMMARY

PROJECT COMPONENTS		TOTAL
3-2 - CONCOURSE G SOUTH EXPANSION	$	256,894,000
3-3 - RECONSTRUCT CONCOURSE E	$	232,323,000
3-4 - T2 CURB FRONTAGE IMPROVEMENTS	$	23,558,000
3-5 - T1-T2 APM TUNNEL CONSTRUCTION	$	317,715,000
3-6 - RUNWAY 4-22 TUNNEL RECONFIGURATION AND DEICE PAD CONSTRUCTION	$	65,607,000
3-7 - NEW SOUTH RON CONSTRUCTION	$	86,331,000
3-8 - RUNWAY 12R END AROUND TAXIWAY CONSTRUCTION	$	68,664,000
3-10A - 34TH AVENUE AND EAST 70TH STREET RECONSTRUCTION		TBD
Opinion of Probable Program Cost	**$**	**3,935,851,000**

The following markups are included in the project costs:		
Estimating Design Evolution		25.0%
General Contractors Markups		
Project Logistics / Phasing & Labor Factor		5.0%
General Requirements & Temporary Construction		5.0%
General Conditions		8.0%
General Contractors Overhead & Profit		5.0%
Insurance		2.0%
Payment & Performance Bonds		1.0%
Sustainability Requirements		0.0%
Escalation		0.0%
Owner's Soft Costs	21.3%	
Construction Manager / Program Management		0.0%
Planning & Preconstruction		0.2%
Architectural / Engineering Design		10.0%
Architectural / Engineering Construction Admin		2.0%
Airport Staff		4.0%
Materials Testing / Inspection / Commissioning		2.5%
Plan Check Services		0.1%
Cost Estimating & Scheduling		0.5%
Miscellaneous Owner Costs (i.e. Legal)		1.0%
Artwork		1.0%
Owner's / Project Construction Contingency		0.0%

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

LANDSIDE MASTERPLAN UPDATE

SUMMARY

PROJECT COMPONENTS		TOTAL
NEAR-TERM PROJECTS:		
1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS	$	4,918,000
1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION	$	270,322,000
1-6 - USPS SITE REDEVELOPMENT	$	600,353,000
MID—TERM PROJECTS:		
2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B	$	161,779,000
2-2 - RECONSTRUCT CONCOURSE F	$	297,621,000
2-9 - TERMINAL 1 TWO-LEVEL ROADWAY RECONSTRUCTION		TBD
2-10 - GREEN/GOLD RAMP REDEVELOPMENT WITH NEW FIS FACILITY	$	740,544,000
LONG—TERM PROJECTS:		
3-1 - NEW T2 NORTH EXPANSION	$	331,536,000
3-2 - CONCOURSE G SOUTH EXPANSION	$	256,894,000
3-3 - RECONSTRUCT CONCOURSE E	$	232,323,000
3-4 - T2 CURB FRONTAGE IMPROVEMENTS	$	23,558,000
3-5 - T1-T2 APM TUNNEL CONSTRUCTION	$	317,715,000
Opinion of Probable Program Cost	**$**	**3,237,563,000**

The following markups are included in the project costs:

Estimating Design Evolution	25.0%
General Contractors Markups	
Project Logistics / Phasing & Labor Factor	5.0%
General Requirements & Temporary Construction	5.0%
General Conditions	8.0%

LANDSIDE MASTERPLAN UPDATE

SUMMARY

PROJECT COMPONENTS		TOTAL
General Contractors Overhead & Profit		5.0%
Insurance		2.0%
Payment & Performance Bonds		1.0%
Sustainability Requirements		0.0%
Escalation		0.0%
Owner's Soft Costs	21.3%	
Construction Manager / Program Management		0.0%
Planning & Preconstruction		0.2%
Architectural / Engineering Design		10.0%
Architectural / Engineering Construction Admin		2.0%
Airport Staff		4.0%
Materials Testing / Inspection / Commissioning		2.5%
Plan Check Services		0.1%
Cost Estimating & Scheduling		0.5%
Miscellaneous Owner Costs (i.e. Legal)		1.0%
Artwork		1.0%
Owner's / Project Construction Contingency		0.0%

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

SUMMARY

	CONSTRUCTION SYSTEM			COST PER SQUARE FOOT		TOTAL
A	**Substructure**			$	32.93	$ 135,000
	Standard Foundations	$	-			
	Special Foundations	$	135,000			
	Slab on Grade	$	-			
B	**Shell**			$	-	$ -
	Superstructure	$	-			
	Exterior Closure	$	-			
	Roofing	$	-			
C	**Interiors**			$	148.17	$ 607,480
	Interior Construction	$	93,480			
	Stairs	$	105,000			
	Interior Finishes	$	409,000			
D	**Services**			$	377.86	$ 1,549,238
	Conveying	$	570,000			
	Baggage Handling System	$	-			
	Plumbing	$	63,550			
	HVAC	$	346,860			
	Fire Protection	$	37,925			
	Electrical	$	386,911			
	Communications	$	94,874			
	Electronic Safety & Security	$	49,118			
E	**Equipment & Furnishings**			$	15.26	$ 62,550
	Equipment	$	10,250			
	Passenger Boarding Bridges	$	-			
	Furnishings	$	52,300			
F	**Special Construction & Demolition**			$	40.00	$ 164,000
	Special Construction	$	-			
	Selective Building Demolition	$	164,000			
	Hazardous Material Abatement	$	-			
G	**Building Sitework**			$	-	$ -
	Site Mobilization	$	-			
	Site Preparation	$	-			
	Site Improvements	$	-			
	Site Mechanical Utilities	$	-			
	Site Electrical Utilities	$	-			
	Subtotal			***$***	***614.21***	***$ 2,518,268***
25.0%	Estimating Design Evolution					$ 629,567

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 767.76***	***$ 3,147,835***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 157,392
5.0%	General Requirements & Temporary Construction		$ 165,261
8.0%	General Conditions		$ 277,639
5.0%	General Contractors Overhead & Profit		$ 187,406
2.0%	Insurance		$ 78,711
1.0%	Payment & Performance Bonds		$ 40,142
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 988.87***	***$ 4,054,387***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 988.87***	***$ 4,054,387***
21.3%	Owner's Soft Costs		$ 863,584
	Opinion of Probable Project Cost	***$ 1,199.51***	***$ 4,917,971***

The
Terminal 1
FIS

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL

AREA ANALYSIS

1-1 - Existing T1 FIS Expansion			
Departure Level 02	4,100 sf		
FIS Addition		2,600 sf	
Sterile Corridor		600 sf	
Vertical Circulation		900 sf	
Total Area	**4,100 sf**	**4,100 sf**	

A SUBSTRUCTURE

A10 Foundations

A1010 Standard Foundations					
A1011 Standard Foundations					Existing
A1030 Special Foundations					
A1031 PBB Foundation					Not Required
A1050 Slab on Grade					
A1051 Elevator Pits - New Pits Allowance	3	ea	$ 45,000.00	$	135,000
Subtotal - Substructure				***$***	***135,000***

B SHELL

B10 Superstructure

B1010 Floor Construction	
B1011 Floor Construction	Existing
B1030 Roof Construction	
B1031 Roof Construction	Existing

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
B20	**Exterior Closure**					
	B2010	Exterior Closure				
	B2011	Exterior Closure				Existing
B30	**Roofing**					
	B3010	Roof Coverings				
	B3011	Roof Coverings				Existing
		Subtotal - Shell				***$ -***
C	***INTERIORS***					
C10	**Interior Construction**					
	C1010	Partitions				
	C1011	Interior Partitions	4,100	sf	$ 7.50	$ 30,750
	C1012	Rough Carpentry & Blocking	4,100	sf	$ 2.50	$ 10,250
	C1013	Caulking, Sealants & Firestopping	4,100	sf	$ 2.75	$ 11,275
	C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	4,100	sf	$ 2.25	$ 9,225
	C1030	Interior Doors				
	C1031	Interior Doors - Allowance	4,100	sf	$ 2.00	$ 8,200
	C1050	Specialties				
	C1051	Fire Extinguishers & Cabinets	4,100	sf	$ 0.05	$ 205
	C1052	Code Signage	4,100	sf	$ 0.25	$ 1,025
	C1053	Interior Wayfinding Signage	4,100	sf	$ 3.50	$ 14,350
	C1054	Miscellaneous Specialties	4,100	sf	$ 2.00	$ 8,200
C20	**Stairs**					
	C2010	Stair Construction				
	C2011	Stair - Vertical Core	3	flts	$ 35,000.00	$ 105,000
C30	**Interior Finishes**					
	C3010	Interior Finishes				
	C3011	*Departure Level 02*				
	C3012	FIS Addition	2,600	sf	$ 75.00	$ 195,000
	C3013	Sterile Corridor	600	sf	$ 65.00	$ 39,000
	C3014	Vertical Circulation	900	sf	$ 50.00	$ 45,000
	C3015	Relocate Existing Spaces - Allowance	2,600	sf	$ 50.00	$ 130,000

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

DETAIL

	DESCRIPTION		QUANTITY	UNIT	UNIT COST		TOTAL
	Subtotal - Interiors					***$***	***607,480***
D	***SERVICES***						
D10	**Conveying System**						
D1010	Elevators & Lifts						
D1011	Hydraulic Passenger Elevator		6	stps	$ 95,000.00	$	570,000
D1020	Escalators & Moving Walks						
D1021	Escalator					Not Required	
D1022	Moving Walks					Not Required	
D1030	Baggage Handling Equipment						
D1031	Baggage Handling Equipment Allowance					Not Required	
D20	**Plumbing**						
D2010	Plumbing Systems						
D2011	Departure Level 02		4,100	sf	$ 15.50	$	63,550
D30	**HVAC**						
D3010	HVAC Systems						
D3011	Departure Level 02		4,100	sf	$ 74.00	$	303,400
D3050	Controls and Instrumentation						
D3051	1-1 - Existing T1 FIS Expansion		4,100	sf	$ 8.50	$	34,850
D3060	Systems Testing & Balancing						
D3061	1-1 - Existing T1 FIS Expansion		4,100	sf	$ 2.10	$	8,610
D40	**Fire Protection**						
D4010	Sprinkler Systems						
D4011	Departure Level 02		4,100	sf	$ 9.25	$	37,925
D50	**Electrical**						
D5010	Electrical Systems						
D5011	Distribution Equipment		4,100	sf	$ 3.50	$	14,350
D5012	Feeders		4,100	sf	$ 3.75	$	15,375
D5013	Grounding and Lightning Protection		4,100	sf	$ 2.00	$	8,200
D5014	*TSA Screening Line*						
D5015	TDC/CAT Power		2	ea	$ 1,908.00	$	3,816
D5016	WTMD Power		1	ea	$ 2,245.00	$	2,245
D5017	AIT Power		1	ea	$ 2,261.00	$	2,261
D5018	STSO Podium Power		1	ea	$ 1,908.00	$	1,908

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	D5019	AVS/BLS Power	1	ea	$	2,095.00	$	2,095
	D5020	ETD @ AIT	1	ea	$	1,857.00	$	1,857
	D5021	Front X-Ray Power	1	ea	$	3,927.00	$	3,927
	D5022	Rear X-Ray Power	1	ea	$	3,927.00	$	3,927
	D5023	Branch Circuit Homeruns	5	ea	$	1,890.00	$	9,450
	D5024	*Departure Level 02*						
	D5025	FIS Addition	2,600	sf	$	49.00	$	127,400
	D5026	Sterile Corridor	600	sf	$	49.00	$	29,400
	D5027	Vertical Circulation	900	sf	$	37.00	$	33,300
	D5028	Relocate Existing Spaces - Allowance	2,600	sf	$	49.00	$	127,400
D6010	Communications							
	D6011	Telecomm Room Buildout	4,100	sf	$	4.15	$	17,015
	D6012	Backbone Cabling	4,100	sf	$	2.50	$	10,250
	D6013	Communications	4,100	sf	$	3.35	$	13,735
	D6014	EVIDS Cabling and Installation	4,100	sf	$	1.55	$	6,355
	D6015	Public Address System	4,100	sf	$	2.64	$	10,824
	D6016	DAS	4,100	sf	$	6.25	$	25,625
	D6017	Common Use System	4,100	sf	$	2.70	$	11,070
D7010	Electronic Safety & Security							
	D7011	Video Surveillance System	4,100	sf	$	2.90	$	11,890
	D7012	Security Access Control	4,100	sf	$	4.08	$	16,728
	D7013	Fire Alarm	4,100	sf	$	5.00	$	20,500
		Subtotal - Services					***$***	***1,549,238***

E EQUIPMENT & FURNISHINGS

E10 Equipment

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
E1010	Equipment							
	E1011	Concessions Equipment - Not in Scope					Excluded	
	E1012	Security Equipment - Not in Scope					Excluded	
	E1013	FIS Equipment - Not in Scope					Excluded	
	E1014	FIDS, BIDS, MUFIDS	4,100	sf	$	2.00	$	8,200
	E1015	Dynamic Signage					Excluded	
	E1016	Misc. Equipment Allowance	4,100	sf	$	0.50	$	2,050
E1030	Passenger Boarding Bridges							
	E1031	New Passenger Boarding Bridge					Not Required	

E20 Furnishings

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
E2010	Fixed Furnishings							
	E2011	Misc. Seating	1	alw	$	40,000.00	$	40,000
	E2012	Misc. Casework Allowance	4,100	sf	$	3.00	$	12,300

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		Subtotal - Equipment & Furnishings				***$ 62,550***
F	***SPECIAL CONSTRUCTION & DEMOLITION***					
F10	**Special Construction**					
F1010	Special Construction					
	F1011	Special Construction				Not Required
F20	**Selective Building Demolition**					
F2010	Building Elements Demolition					
	F2011	Demolish Existing Interior Spaces	4,100	sf	$ 35.00	$ 143,500
	F2012	Misc. Demolition	1	alw	$ 20,500.00	$ 20,500
F30	**Hazardous Material Abatement**					
F3010	Hazardous Material Abatement					
	F3011	Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 164,000***
G	***BUILDING SITEWORK***					
G00	**Site Mobilization**					
G0010	Site Mobilization					
	G0011	Site Mobilization				Not Required
G10	**Site Preparation**					
G1010	Site Demolition					
	G1011	Demolish Existing Apron Paving				Not Required
G20	**Site Improvements**					
G2010	Pavement / Roadways etc.					
	G2011	Pavement / Roadways etc.				Not Required
G30	**Site Mechanical Utilities**					
G3010	Site Mechanical Utilities					
	G3011	Site Mechanical Utilities				Not Required
G40	**Site Electrical Utilities**					
G4010	Site Electrical Utilities					
	G4011	Site Electrical Utilities				Not Required

1-1 - EXISTING T1 FIS FACILITY ENHANCEMENTS

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	Subtotal - Building Sitework				***$ -***
	Subtotal			***$ 614.21***	***$ 2,518,268***
25.0%	Estimating Design Evolution				$ 629,567
	Subtotal - Cost of Work			***$ 767.76***	***$ 3,147,835***
	General Contractors Markups				
5.0%	Project Logistics / Phasing & Labor Factor				$ 157,392
5.0%	General Requirements & Temporary Construction				$ 165,261
8.0%	General Conditions				$ 277,639
5.0%	General Contractors Overhead & Profit				$ 187,406
2.0%	Insurance				$ 78,711
1.0%	Payment & Performance Bonds				$ 40,142
0.0%	Sustainability Requirements				$ -
	Subtotal			***$ 988.87***	***$ 4,054,387***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 988.87***	***$ 4,054,387***
21.3%	Owner's Soft Costs				$ 863,584
	Opinion of Probable Project Cost			***$ 1,199.51***	***$ 4,917,971***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

SUMMARY

	CONSTRUCTION SYSTEM		COST PER SQUARE FOOT	TOTAL
A	**Substructure**		$ 37.39	$ 8,224,939
	Standard Foundations	$ 3,175,000		
	Special Foundations	$ 3,578,551		
	Slab on Grade	$ 1,471,389		
B	**Shell**		$ 136.95	$ 30,129,248
	Superstructure	$ 19,959,870		
	Exterior Closure	$ 8,230,128		
	Roofing	$ 1,939,250		
C	**Interiors**		$ 80.77	$ 17,769,125
	Interior Construction	$ 3,757,125		
	Stairs	$ 250,000		
	Interior Finishes	$ 13,762,000		
D	**Services**		$ 202.46	$ 44,541,650
	Conveying	$ 650,000		
	Baggage Handling System	$ -		
	Plumbing	$ 3,190,000		
	HVAC	$ 18,612,000		
	Fire Protection	$ 2,035,000		
	Electrical	$ 12,328,250		
	Communications	$ 5,090,800		
	Electronic Safety & Security	$ 2,635,600		
E	**Equipment & Furnishings**		$ 57.40	$ 12,627,500
	Equipment	$ 330,000		
	Passenger Boarding Bridges	$ 10,000,000		
	Furnishings	$ 2,297,500		
F	**Special Construction & Demolition**		$ 0.72	$ 158,000
	Special Construction	$ -		
	Selective Building Demolition	$ 158,000		
	Hazardous Material Abatement	$ -		
G	**Building Sitework**		$ 113.50	$ 24,969,035
	Site Mobilization	$ 4,178,600		
	Site Preparation	$ 1,074,740		
	Site Improvements	$ 19,540,695		
	Site Mechanical Utilities	$ 125,000		
	Site Electrical Utilities	$ 50,000		
	Subtotal		***$ 629.18***	***$ 138,419,497***
25.0%	Estimating Design Evolution			$ 34,604,874

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 786.47***	***$ 173,024,371***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 8,651,219
5.0%	General Requirements & Temporary Construction		$ 9,083,779
8.0%	General Conditions		$ 15,260,750
5.0%	General Contractors Overhead & Profit		$ 10,301,006
2.0%	Insurance		$ 4,326,422
1.0%	Payment & Performance Bonds		$ 2,206,475
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 1,012.97***	***$ 222,854,023***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 1,012.97***	***$ 222,854,023***
21.3%	Owner's Soft Costs		$ 47,467,907
	Opinion of Probable Project Cost	***$ 1,228.74***	***$ 270,321,930***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL

AREA ANALYSIS

1-2 - New South Conc. H/Expanded T2 FIS			
Apron Level 01	110,000 sf		
Airport Support		48,750 sf	
Airline Support		48,000 sf	
Mechanical		5,000 sf	
Storage		2,500 sf	
Tug Lanes		5,750 sf	
Departure Level 02	110,000 sf		
Concessions (Shell Space)		3,000 sf	
Holdrooms		60,000 sf	
Circulation		41,000 sf	
Restrooms - Public		6,000 sf	
Total Area	**220,000 sf**	**220,000 sf**	

A	***SUBSTRUCTURE***					
A10	**Foundations**					
A1010	Standard Foundations					
A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	110,000	sf	$ 27.50	$ 3,025,000
A1012	Extra for Rock Excavation				Not Required
A1013	Perimeter Drainage	2,400	lf	$ 25.00	$ 60,000
A1014	Dewatering	1	ls	$ 30,000.00	$ 30,000
A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 60,000.00	$ 60,000
A1030	Special Foundations				
A1031	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	110,000	sf	$ 30.00	$ 2,868,551
A1032	Jetway Foundations (36"' Dia - 35' Deep Concrete Pile)	10	ea	$ 60,000.00	$ 600,000
A1033	Dewatering	1	ls	$ 110,000.00	$ 110,000

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	A1050	Slab on Grade				
	A1051	Slab on Grade	110,000	sf	$ 10.00	$ 1,100,000
	A1052	Elevator Pits	5	ea	$ 15,000.00	$ 75,000
	A1053	Misc. Trenches, Pits & Bases	102	cy	$ 750.00	$ 76,389
	A1054	Under-slab Drainage & Insulation	110,000	sf	$ 2.00	$ 220,000
		Subtotal - Substructure				***$ 8,224,939***
B	***SHELL***					
B10	**Superstructure**					
	B1010	Floor Construction				
	B1011	Steel Floor Structure	1,265	tns	$ 6,500.00	$ 8,222,500
	B1012	Steel Floor Deck	110,000	sf	$ 7.50	$ 825,000
	B1013	Concrete Fill to Steel Floor Deck	110,000	sf	$ 7.75	$ 852,500
	B1014	Supplemental Framing at Exterior Closure	73	tns	$ 7,000.00	$ 508,620
	B1015	Miscellaneous Steel (5%)	63	tns	$ 7,000.00	$ 442,750
	B1016	Elevated Floor Slab Fireproofing	110,000	sf	$ 7.00	$ 770,000
	B1017	Expansion Joint at Existing Structure	120	lf	$ 150.00	$ 18,000
	B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$ 30,000.00	$ 30,000
	B1030	Roof Construction				
	B1031	Steel Roof Structure	990	tns	$ 6,500.00	$ 6,435,000
	B1032	Steel Roof Deck	110,000	sf	$ 6.50	$ 715,000
	B1033	Miscellaneous Steel (5%)	50	tns	$ 7,000.00	$ 346,500
	B1034	Roof Fireproofing	110,000	sf	$ 7.00	$ 770,000
	B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$ 24,000.00	$ 24,000
B20	**Exterior Closure**					
	B2010	Exterior Walls				
	B2011	CMU Walls, incl. Back-up System	39,300	sf	$ 40.00	$ 1,572,000
	B2012	Precast Concrete, incl. Back-up System	4,570	sf	$ 45.00	$ 205,650
	B2013	Metal Wall Panel, incl. Back-up System	4,570	sf	$ 65.00	$ 297,050
	B2014	Edge Detail at Roof	2,285	lf	$ 75.00	$ 171,375
	B2015	Caulking & Sealant to Exteriors	86,830	sf	$ 1.75	$ 151,953
	B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$ 30,000.00	$ 30,000
	B2030	Exterior Windows				
	B2031	Curtain Wall System	34,280	sf	$ 165.00	$ 5,656,200
	B2050	Exterior Doors				

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

			DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		B2051	Exterior Doors - Allowance	1	alw	$ 80,900.00	$ 80,900
		B2052	PBB Exit Doors	10	ea	$ 3,500.00	$ 35,000
		B2052	Exit Doors - Apron Paving Access	10	ea	$ 2,500.00	$ 25,000
		B2053	Extra for Access Control	10	lvs	$ 500.00	$ 5,000
	B2070	Exterior Soffits					
		B2071	Exterior Soffits				Not Required
B30	**Roofing**						
	B3010	Roof Coverings					
		B3011	SBS Modified Bitumen Roof Assembly	110,000	sf	$ 16.50	$ 1,815,000
		B3012	Parapet Detail	2,285	lf	$ 50.00	$ 114,250
		B3013	Add Allowance for Junction to Existing Roof	1	alw	$ 10,000.00	$ 10,000
	B3030	Roof Openings					
		B3031	Skylight				Not Required
		B3032	Roof Hatch				Not Required
			Subtotal - Shell				***$ 30,129,248***
C	***INTERIORS***						
C10	**Interior Construction**						
	C1010	Partitions					
		C1011	Interior Partitions	214,250	sf	$ 5.00	$ 1,071,250
		C1012	Rough Carpentry & Blocking	214,250	sf	$ 1.50	$ 321,375
		C1013	Caulking, Sealants & Firestopping	220,000	sf	$ 1.75	$ 385,000
		C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	220,000	sf	$ 1.25	$ 275,000
	C1030	Interior Doors					
		C1031	Interior Doors - Allowance	214,250	sf	$ 2.00	$ 428,500
	C1050	Specialties					
		C1051	Fire Extinguishers & Cabinets	220,000	sf	$ 0.05	$ 11,000
		C1052	Code Signage	220,000	sf	$ 0.25	$ 55,000
		C1053	Interior Wayfinding Signage	220,000	sf	$ 3.50	$ 770,000
		C1054	Miscellaneous Specialties	220,000	sf	$ 2.00	$ 440,000
C20	**Stairs**						
	C2010	Stair Construction					
		C2011	Stair - Exit - PBB	10	flts	$ 25,000.00	$ 250,000

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
C30		**Interior Finishes**						
C3010		Interior Finishes						
	C3011	*Apron Level 01*						
	C3012	Airport Support	48,750	sf	$	45.00	$	2,193,750
	C3013	Airline Support	48,000	sf	$	45.00	$	2,160,000
	C3014	Mechanical	5,000	sf	$	35.00	$	175,000
	C3015	Storage	2,500	sf	$	25.00	$	62,500
	C3016	Tug Lanes	5,750	sf	$	10.00	$	57,500
	C3017	*Departure Level 02*						
	C3018	Concessions (Shell Space)	3,000	sf	$	25.00	$	75,000
	C3019	Holdrooms	60,000	sf	$	75.00	$	4,500,000
	C3020	Circulation	41,000	sf	$	85.00	$	3,485,000
	C3021	Restrooms - Public	6,000	sf	$	165.00	$	990,000
	C3022	Allowance for Renovation to Existing Concourse for New Expansion Connection	1,150	sf	$	55.00	$	63,250
		Subtotal - Interiors					***$***	***17,769,125***
D		***SERVICES***						
D10		**Conveying System**						
D1010		Elevators & Lifts						
	D1011	Hydraulic Passenger Elevator	10	stps	$	65,000.00	$	650,000
D1020		Escalators & Moving Walks						
	D1021	Escalator					Not Required	
	D1022	Moving Walks					Not Required	
D1030		Baggage Handling Equipment						
	D1031	Baggage Handling Equipment Allowance					Excluded	
D20		**Plumbing**						
D2010		Plumbing Systems						
	D2011	Apron Level 01	110,000	sf	$	13.50	$	1,485,000
	D2012	Departure Level 02	110,000	sf	$	15.50	$	1,705,000
D30		**HVAC**						
D3010		HVAC Systems						
	D3011	Apron Level 01	110,000	sf	$	74.00	$	8,140,000
	D3012	Departure Level 02	110,000	sf	$	74.00	$	8,140,000
D3050		Controls and Instrumentation						
	D3051	1-2 - New South Conc. H/Expanded T2 FIS	220,000	sf	$	8.50	$	1,870,000

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
D3060		Systems Testing & Balancing				
	D3061	1-2 - New South Conc. H/Expanded T2 FIS	220,000	sf	$ 2.10	$ 462,000
D40		**Fire Protection**				
D4010		Sprinkler Systems				
	D4011	Apron Level 01	110,000	sf	$ 9.25	$ 1,017,500
	D4012	Departure Level 02	110,000	sf	$ 9.25	$ 1,017,500
D50		**Electrical**				
D5010		Electrical Systems				
	D5011	Distribution Equipment	220,000	sf	$ 6.00	$ 1,320,000
	D5012	Feeders	220,000	sf	$ 8.75	$ 1,925,000
	D5013	Grounding and Lightning Protection	220,000	sf	$ 3.00	$ 660,000
	D5014	Jetway/GPU/PCA Feeders	10	ea	$ 65,000.00	$ 650,000
	D5015	Roof Mounted Apron Light	10	ea	$ 30,000.00	$ 300,000
	D5016	*Apron Level 01*				
	D5017	Airport Support	48,750	sf	$ 25.00	$ 1,218,750
	D5018	Airline Support	48,000	sf	$ 25.00	$ 1,200,000
	D5019	Mechanical	5,000	sf	$ 18.00	$ 90,000
	D5020	Storage	2,500	sf	$ 18.00	$ 45,000
	D5021	Tug Lanes	5,750	sf	$ 10.00	$ 57,500
	D5022	*Departure Level 02*				
	D5023	Concessions (Shell Space)	3,000	sf	$ 15.00	$ 45,000
	D5024	Holdrooms	60,000	sf	$ 49.00	$ 2,940,000
	D5025	Circulation	41,000	sf	$ 37.00	$ 1,517,000
	D5026	Restrooms - Public	6,000	sf	$ 60.00	$ 360,000
D6010		Communications				
	D6011	Telecomm Room Buildout	220,000	sf	$ 4.15	$ 913,000
	D6012	Backbone Cabling	220,000	sf	$ 2.50	$ 550,000
	D6013	Communications	220,000	sf	$ 3.35	$ 737,000
	D6014	EVIDS Cabling and Installation	220,000	sf	$ 1.55	$ 341,000
	D6015	Public Address System	220,000	sf	$ 2.64	$ 580,800
	D6016	DAS	220,000	sf	$ 6.25	$ 1,375,000
	D6017	Common Use System	220,000	sf	$ 2.70	$ 594,000
D7010		Electronic Safety & Security				
	D7011	Video Surveillance System	220,000	sf	$ 2.90	$ 638,000
	D7012	Security Access Control	220,000	sf	$ 4.08	$ 897,600
	D7013	Fire Alarm	220,000	sf	$ 5.00	$ 1,100,000
		Subtotal - Services				***$ 44,541,650***
E		***EQUIPMENT & FURNISHINGS***				
E10		**Equipment**				

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
E1010	Equipment				
E1011	Concessions Equipment - Not in Scope				Excluded
E1012	Security Equipment - Not in Scope				Excluded
E1013	FIS Equipment - Not in Scope				Excluded
E1014	FIDS, BIDS, MUFIDS	110,000	sf	$ 2.00	$ 220,000
E1015	Dynamic Signage				Excluded
E1016	Misc. Equipment Allowance	220,000	sf	$ 0.50	$ 110,000
E1030	Passenger Boarding Bridges				
E1031	New Passenger Boarding Bridge	10	ea	$1,000,000.00	$ 10,000,000
E20	**Furnishings**				
E2010	Fixed Furnishings				
E2011	Gate Podiums & Backscreens	10	ea	$ 35,000.00	$ 350,000
E2012	Recharge Stations				w/Electrical
E2013	Holdroom Seating	1,250	ea	$ 1,000.00	$ 1,250,000
E2014	Holdroom Seating Table	625	ea	$ 700.00	$ 437,500
E2015	Misc. Seating	1	alw	$ 40,000.00	$ 40,000
E2016	Kiosks				Excluded
E2017	Window Shades				Excluded
E2018	Misc. Casework Allowance	220,000	sf	$ 1.00	$ 220,000
	Subtotal - Equipment & Furnishings				***$ 12,627,500***
F	***SPECIAL CONSTRUCTION & DEMOLITION***				
F10	**Special Construction**				
F1010	Special Construction				
F1011	Special Construction				Not Required
F20	**Selective Building Demolition**				
F2010	Building Elements Demolition				
F2011	Demolish Exterior Closure at Existing Building	4,200	sf	$ 35.00	$ 147,000
F2012	Misc. Demolition	1	alw	$ 11,000.00	$ 11,000
F30	**Hazardous Material Abatement**				
F3010	Hazardous Material Abatement				
F3011	Hazardous Material Abatement				Excluded
	Subtotal - Special Construction & Demolition				***$ 158,000***
G	***BUILDING SITEWORK***				

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
G00		**Site Mobilization**				
G0010		Site Mobilization				
	G0011	Mobilization				Incl. In M/UPS
	G0012	Safety and Security (3%)	1	ls	$ 727,300.00	$ 727,300
	G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$1,372,200.00	$ 1,372,200
	G0014	Drainage and Utility Allowance	1	alw	$2,079,100.00	$ 2,079,100
G10		**Site Preparation**				
G1010		Site Demolition				
	G1011	Demolish Existing Apron Paving	6,510	sy	$ 25.00	$ 162,750
	G1012	Demolish Existing Asphalt Parking Paving	29,250	sy	$ 15.00	$ 438,750
	G1013	Demolish Existing Maintenance Building (Flight Kitchen)	8,800	sf	$ 20.00	$ 176,000
	G1014	Demolish / Remove Existing Concrete Barriers	1,722	lf	$ 20.00	$ 34,440
	G1015	Demolish / Remove Existing Blast Wall	752	lf	$ 150.00	$ 112,800
	G1016	Allowance for Misc. Site Demolition	1	alw	$ 150,000.00	$ 150,000
	G1017	Demolish / Remove Existing QTA				Excluded
G20		**Site Improvements**				
G2010		Pavement / Roadways etc.				
	G2011	*Apron Paving*				
	G2012	Excavation	24,400	cy	$ 18.00	$ 439,200
	G2013	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.)	48,800	sy	$ 275.00	$ 13,420,000
	G2014	Pavement Markings - Service Road and Striping	21,958	sf	$ 2.50	$ 54,895
	G2015	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required
	G2016	*Fuel Systems*				
	G2017	New Underground Fuel Vaults	5	ea	$ 250,000.00	$ 1,250,000
	G2018	Fuel Branch Lines: 12" dia Steel Pipe Epoxy Lining, ext Coated, Welded	1,800	lf	$ 656.00	$ 1,180,800
	G2019	Fuel Branch Lines: 8" dia Steel Pipe Epoxy Lining, ext Coated, Welded	250	lf	$ 612.00	$ 153,000
	G2020	Fuel Branch Lines: 6" dia Steel Pipe Epoxy Lining, ext Coated, Welded	150	lf	$ 590.00	$ 88,500
	G2021	Radiographic Testing of Pipe Welds	2,200	lf	$ 19.00	$ 41,800
	G2022	Fuel Valves	10	ea	$ 25,000.00	$ 250,000
	G2023	Branch Line Low & High Point Drain Pit	5	ea	$ 32,500.00	$ 162,500
	G2024	Hydrant Pits and Connectors	10	ea	$ 25,000.00	$ 250,000
G2050		Landscaping				
	G2051	Landscaping Allowance				Excluded

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
G2060		Miscellaneous Buildings and Structures				
	G2061	Allowance for Relocation of Loading Dock	1	alw	$ 50,000.00	$ 50,000
	G2062	Allowance for Relocation of Maintenance Building	8,800	sf	$ 250.00	$ 2,200,000
G30		**Site Mechanical Utilities**				
G3010		Site Mechanical Utilities				
	G3011	Site Mechanical Utilities	1	alw	$ 125,000.00	$ 125,000
G40		**Site Electrical Utilities**				
G4010		Site Electrical Utilities				
	G4011	Site Electrical Utilities	1	alw	$ 25,000.00	$ 25,000
G4030		Site Lighting				
	G4031	Site Lighting	1	alw	$ 25,000.00	$ 25,000
		Subtotal - Building Sitework				***$ 24,969,035***
		Subtotal			***$ 629.18***	***$ 138,419,497***
25.0%		Estimating Design Evolution				$ 34,604,874
		Subtotal - Cost of Work			***$ 786.47***	***$ 173,024,371***
		General Contractors Markups				
5.0%		Project Logistics / Phasing & Labor Factor				$ 8,651,219
5.0%		General Requirements & Temporary Construction				$ 9,083,779
8.0%		General Conditions				$ 15,260,750
5.0%		General Contractors Overhead & Profit				$ 10,301,006
2.0%		Insurance				$ 4,326,422
1.0%		Payment & Performance Bonds				$ 2,206,475
0.0%		Sustainability Requirements				$ -
		Subtotal			***$ 1,012.97***	***$ 222,854,023***
0.0%		Escalation				$ -
		Opinion of Probable Construction Cost			***$ 1,012.97***	***$ 222,854,023***
21.3%		Owner's Soft Costs				$ 47,467,907

1-2 - NEW T2 FIS SOUTH TERMINAL EXPANSION

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
Opinion of Probable Project Cost			*$ 1,228.74*	*$ 270,321,930*

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

1-6 - USPS SITE REDEVELOPMENT

SUMMARY

	CONSTRUCTION SYSTEM		COST PER SQUARE FOOT	TOTAL
A	**Substructure**		$ 7.53	$ 17,373,350
	Standard Foundations	$ 6,645,175		
	Special Foundations	$ 8,128,317		
	Slab on Grade	$ 2,599,858		
B	**Shell**		$ 61.98	$ 142,980,268
	Superstructure	$ 141,524,701		
	Exterior Closure	$ 1,437,593		
	Roofing	$ 17,975		
C	**Interiors**		$ 5.72	$ 13,184,935
	Interior Construction	$ 447,435		
	Stairs	$ 210,000		
	Interior Finishes	$ 12,527,500		
D	**Services**		$ 27.62	$ 63,713,956
	Conveying	$ 3,900,000		
	Baggage Handling System	$ -		
	Plumbing	$ 3,345,150		
	HVAC	$ 363,100		
	Fire Protection	$ 4,037,250		
	Electrical	$ 47,615,946		
	Communications	$ 2,952,960		
	Electronic Safety & Security	$ 1,499,550		
E	**Equipment & Furnishings**		$ 7.71	$ 17,778,550
	Equipment	$ 17,778,550		
	Passenger Boarding Bridges	$ -		
	Furnishings	$ -		
F	**Special Construction & Demolition**		$ 20.18	$ 46,550,000
	Special Construction	$ 46,400,000		
	Selective Building Demolition	$ 150,000		
	Hazardous Material Abatement	$ -		
G	**Building Sitework**		$ 2.53	$ 5,831,833
	Site Mobilization	$ 976,000		
	Site Preparation	$ 4,330,833		
	Site Improvements	$ -		
	Site Mechanical Utilities	$ 150,000		
	Site Electrical Utilities	$ 375,000		
	Subtotal		***$ 133.25***	***$ 307,412,893***
25.0%	Estimating Design Evolution			$ 76,853,223

1-6 - USPS SITE REDEVELOPMENT

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 166.57***	***$ 384,266,116***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 19,213,306
5.0%	General Requirements & Temporary Construction		$ 20,173,971
8.0%	General Conditions		$ 33,892,271
5.0%	General Contractors Overhead & Profit		$ 22,877,283
2.0%	Insurance		$ 9,608,459
1.0%	Payment & Performance Bonds		$ 4,900,314
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 214.53***	***$ 494,931,721***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 214.53***	***$ 494,931,721***
21.3%	Owner's Soft Costs		$ 105,420,457
	Opinion of Probable Project Cost	***$ 260.23***	***$ 600,352,177***

Project Title	Landside Masterplan Update			
Location	Saint Paul International Airport			
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate			
Client Name				
Client Project No.		Revision	2	
Original Date	7-Apr-2023	Revision Date	25-Apr-2023	
Assumed Bid Opening Date		Connico PN	4977.23.03	
Project Lead	CJN / CJC	Checked by	IDK	

1-6 - USPS SITE REDEVELOPMENT

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	AREA ANALYSIS				
	New Parking Structure	2,307,000	sf		
	Basement Level (Existing)			73,000 sf	
	Level 1			73,000 sf	
	Level 2			73,000 sf	
	Level 3 - At Grade - Rental Car			232,000 sf	
	Level 4 - Rental Car			232,000 sf	
	Level 5 - Rental Car			232,000 sf	
	Level 6 - Public Parking - 1			232,000 sf	
	Level 7 - Public Parking - 2			232,000 sf	
	Level 8 - Public Parking - 3			232,000 sf	
	Level 8 - Public Parking - 4			232,000 sf	
	Level 10 - Public Parking - 5			232,000 sf	
	Level 11 - Public Parking - 6			232,000 sf	
	Total Area	**2,307,000**	**sf**	**2,307,000 sf**	
A	***SUBSTRUCTURE***				
A10	**Foundations**				
A1010	Standard Foundations				
A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	232,000	sf	$ 28.00	$ 6,496,000
A1012	Extra for Rock Excavation				Not Required
A1013	Perimeter Drainage	1,967	lf	$ 25.00	$ 49,175
A1014	Dewatering	1	ls	$ 40,000.00	$ 40,000
A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 60,000.00	$ 60,000
A1030	Special Foundations				
A1031	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	232,000	sf	$ 34.00	$ 7,888,317
A1032	Dewatering	1	ls	$ 240,000.00	$ 240,000

1-6 - USPS SITE REDEVELOPMENT

DETAIL

			DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
		A1050	Slab on Grade						
		A1051	Slab on Grade	159,000	sf	$	10.00	$	1,590,000
		A1052	Elevator Pits	4	ea	$	15,000.00	$	60,000
		A1053	*Washbays:*						
		A1054	Topping Slab	10,500	sf	$	3.50	$	36,750
		A1055	Concrete Islands	2,100	sf	$	15.00	$	31,500
		A1056	Extra Over SOG for Sloping Floor Slab to Drainage Trench	10,500	sf	$	2.50	$	26,250
		A1057	Trench Drain and Cover Cast into Concrete	700	lf	$	350.00	$	245,000
		A1058	Waterproofing SOG and Trench Drain	10,500	sf	$	6.50	$	68,250
		A1059	Pipe Bollards	112	ea	$	950.00	$	106,400
		A1060	Misc. Trenches, Pits & Bases	157	cy	$	750.00	$	117,708
		A1061	Under-slab Drainage & Insulation	159,000	sf	$	2.00	$	318,000
			Subtotal - Substructure					***$***	***17,373,350***
B	***SHELL***								
B10	**Superstructure**								
		B1010	Floor Construction						
		B1011	Concrete Floor Structure	2,307,000	sf	$	55.00	$	126,885,000
		B1012	Concrete Shear Walls	175,327	sf	$	65.00	$	11,396,233
		B1013	Cable Railing	12,480	lf	$	215.00	$	2,683,200
		B1014	Concrete Wall Structure - Perimeter Walls 4' Hi	7,868	sf	$	65.00	$	511,420
		B1030	Roof Construction						
		B1031	Steel Roof Structure	6	tns	$	6,500.00	$	38,025
		B1032	Steel Roof Deck	650	sf	$	6.50	$	4,225
		B1033	Miscellaneous Steel (5%)	0.3	tns	$	7,000.00	$	2,048
		B1034	Roof Fireproofing	650	sf	$	7.00	$	4,550
B20	**Exterior Closure**								
		B2010	Exterior Walls						
		B2011	CMU Walls, incl. Back-up System	26,390	sf	$	40.00	$	1,055,600
		B2012	Metal Wall Panel, incl. Back-up System	2,639	sf	$	65.00	$	171,535
		B2013	Edge Detail at Roof	145	lf	$	75.00	$	10,875
		B2014	Caulking & Sealant to Exteriors	26,390	sf	$	1.75	$	46,183
		B2030	Exterior Windows						
		B2031	Punch Out Windows - Stair Tower	1,040	sf	$	85.00	$	88,400
		B2050	Exterior Doors						
		B2051	Elevator / Stairs Lobby Doors	26	ea	$	2,500.00	$	65,000

1-6 - USPS SITE REDEVELOPMENT

DETAIL

			DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	B2070	Exterior Soffits							
		B2071	Exterior Soffits					Not Required	
B30	**Roofing**								
	B3010	Roof Coverings							
		B3011	SBS Modified Bitumen Roof Assembly	650	sf	$	16.50	$	10,725
		B3012	Parapet Detail	145	lf	$	50.00	$	7,250
	B3030	Roof Openings							
		B3031	Skylight					Not Required	
		B3032	Roof Hatch					Not Required	
			Subtotal - Shell					***$***	***142,980,268***
C	***INTERIORS***								
C10	**Interior Construction**								
	C1010	Partitions							
		C1011	Interior Partitions	18,950	sf	$	5.00	$	94,750
		C1012	8" CMU Bash Bay Walls	5,250	sf	$	30.00	$	157,500
		C1013	Rough Carpentry & Blocking	18,950	sf	$	1.50	$	28,425
		C1014	Caulking, Sealants & Firestopping	18,950	sf	$	1.75	$	33,163
		C1015	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	18,950	sf	$	1.25	$	23,688
	C1030	Interior Doors							
		C1031	Interior Doors - Allowance					Not Required	
	C1050	Specialties							
		C1051	Fire Extinguishers & Cabinets	18,950	sf	$	0.05	$	948
		C1052	Code Signage	18,950	sf	$	0.25	$	4,738
		C1053	Interior Wayfinding Signage	18,950	sf	$	3.50	$	66,325
		C1054	Miscellaneous Specialties	18,950	sf	$	2.00	$	37,900
C20	**Stairs**								
	C2010	Stair Construction							
		C2011	Stair Construction	28	flts	$	7,500.00	$	210,000
C30	**Interior Finishes**								
	C3010	Interior Finishes							
		C3011	*New Parking Structure*						

1-6 - USPS SITE REDEVELOPMENT

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	C3012	Basement Level (Existing) - Dewatering System Upgrade (Waterproofing / Equipment)	73,000	sf	$ 15.00	$ 1,095,000
	C3013	Washbays - Special Waterproofing wall and floor Finishess	10,500	sf	$ 25.00	$ 262,500
	C3014	Level 1	73,000	sf	$ 5.00	$ 365,000
	C3015	Level 2	73,000	sf	$ 5.00	$ 365,000
	C3016	Level 3 - At Grade - Rental Car	232,000	sf	$ 5.00	$ 1,160,000
	C3017	Level 4 - Rental Car	232,000	sf	$ 5.00	$ 1,160,000
	C3018	Level 5 - Rental Car	232,000	sf	$ 5.00	$ 1,160,000
	C3019	Level 6 - Public Parking - 1	232,000	sf	$ 5.00	$ 1,160,000
	C3020	Level 7 - Public Parking - 2	232,000	sf	$ 5.00	$ 1,160,000
	C3021	Level 8 - Public Parking - 3	232,000	sf	$ 5.00	$ 1,160,000
	C3022	Level 8 - Public Parking - 4	232,000	sf	$ 5.00	$ 1,160,000
	C3023	Level 10 - Public Parking - 5	232,000	sf	$ 5.00	$ 1,160,000
	C3024	Level 11 - Public Parking - 6	232,000	sf	$ 5.00	$ 1,160,000
		Subtotal - Interiors				***$ 13,184,935***
D	***SERVICES***					
D10	**Conveying System**					
D1010	Elevators & Lifts					
	D1011	Hydraulic Passenger Elevator	52	stps	$ 75,000.00	$ 3,900,000
D1020	Escalators & Moving Walks					
	D1021	Escalator				Not Required
D20	**Plumbing**					
D2010	Plumbing Systems					
	D2011	New Parking Structure	2,307,000	sf	$ 1.45	$ 3,345,150
D30	**HVAC**					
D3010	HVAC Systems					
	D3011	Rental Car - Heating and Ventilation	6,000	sf	$ 7.00	$ 42,000
	D3012	Stair Cores	8,450	sf	$ 38.00	$ 321,100
D40	**Fire Protection**					
D4010	Sprinkler Systems					
	D4011	New Parking Structure	2,307,000	sf	$ 1.75	$ 4,037,250
D50	**Electrical**					
D5010	Electrical Systems					
	D5011	*EV Charging*				
	D5012	Level 3 Charger	110	ea	$ 39,900.00	$ 4,389,000

1-6 - USPS SITE REDEVELOPMENT

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	D5013	Level 2 Charger	130	ea	$ 13,500.00	$ 1,755,000
	D5014	Distribution Equipment	2,307,000	sf	$ 6.00	$ 13,842,000
	D5015	Feeder Conduit & Wire	2,307,000	sf	$ 8.75	$ 20,186,250
	D5016	Wiring Devices	2,307,000	sf	$ 0.15	$ 346,050
	D5017	Equipment Power and Connection	2,307,000	sf	$ 0.30	$ 692,100
	D5018	Lighting	2,307,000	sf	$ 2.00	$ 4,614,000
	D5019	Grounding and Lightning Protection	2,307,000	sf	$ 0.20	$ 461,400
	D5020	*Car Wash Equipment Power Wiring and Connection*				
	D5021	CWUH, Unit Heater	48	ea	$ 2,298.00	$ 110,304
	D5022	RO Pump	12	ea	$ 7,748.00	$ 92,976
	D5023	Reclaim Pump	24	ea	$ 10,938.00	$ 262,512
	D5024	Rinse Pump	12	ea	$ 9,341.00	$ 112,092
	D5025	Vacuum Blower	18	ea	$ 11,237.00	$ 202,266
	D5026	RO Purification Unit	9	ea	$ 14,362.00	$ 129,258
	D5027	Pressure Washer	12	ea	$ 5,769.00	$ 69,228
	D5028	Blower Control Panel	24	ea	$ 5,769.00	$ 138,456
	D5029	Machine Control Panel	24	ea	$ 6,680.00	$ 160,320
	D5030	Maintenance Receptacles at Pumps	51	ea	$ 1,034.00	$ 52,734
D6010	Communications					
	D6011	MDF/IDF Rooms	2,307,000	sf	$ 0.15	$ 346,050
	D6012	Voice/Data Devices	2,307,000	sf	$ 0.23	$ 530,610
	D6013	PA/Code Blue/DAS Systems	2,307,000	sf	$ 0.90	$ 2,076,300
D7010	Electronic Safety & Security					
	D7011	Access Control/CCTV	2,307,000	sf	$ 0.50	$ 1,153,500
	D7012	Fire Alarm	2,307,000	sf	$ 0.15	$ 346,050
		Subtotal - Services				***$ 63,713,956***

E EQUIPMENT & FURNISHINGS

E10 Equipment

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
E1010	Equipment					
	E1011	Parking Equipment	1,392,000	sf	$ 0.30	$ 417,600
	E1012	Parking Occupancy Equipment	1,392,000	sf	$ 1.80	$ 2,505,600
	E1046	Signage	2,307,000	sf	$ 0.75	$ 1,730,250
	E1014	Misc. Equipment Allowance	2,307,000	sf	$ 0.50	$ 1,153,500
E1030	Vehicular Equipment					
	E1031	*Vehicle Washing Equipment*				
	E1032	Vehicle Wash Tunnel Equipment	28	ea	$ 117,300.00	$ 3,284,400
	E1033	Fresh Water Piping System, Valves, Connection to Domestic Water System	1	ls	$2,001,000.00	$ 2,001,000
	E1034	RO Water System; Purification Units, Storage Tanks, Piping, etc.	1	ls	$ 845,000.00	$ 845,000
	E1035	Reclaim Water System; Clarifiers, Pumps, Storage Tanks, Piping, etc.	1	ls	$ 664,000.00	$ 664,000

1-6 - USPS SITE REDEVELOPMENT

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	E1036	Car Wash Control System; Controls and Instrumentation Cabling	1	ls	$ 174,400.00	$ 174,400
	E1037	*Windshield Washing Fluid (WWF)*				
	E1038	Windshield Washing (WWF) AST; 6000 gal, w/ Vents, Gauges and Accessories	4	ea	$ 89,700.00	$ 358,800
	E1039	WWF Pneumatic Pumps, SS Piping, Hose Reels, etc.	4	ls	$ 483,000.00	$ 1,932,000
	E1040	WWF Controls System w/ Interface to E-Stop System	4	ls	$ 138,000.00	$ 552,000
	E1041	*Vacuum*				
	E1042	Vacuum Producers; 25hp w/ Speed Controllers, Separators, Pipe Connections to Outside and Exhaust Air	24	ea	$ 90,000.00	$ 2,160,000
	E1043	Vacuum System				Not Required
	E1044	Compressed Air Equipment				Not Required
	E1045	Fueling Positions				Not Required
E20	**Furnishings**					
E2010	Fixed Furnishings					
	E2011	Fixed Furnishings				Not Required
		Subtotal - Equipment & Furnishings				***$ 17,778,550***
F	***SPECIAL CONSTRUCTION & DEMOLITION***					
F10	**Special Construction**					
F1010	Special Construction					
	F1011	Protection of Existing Industrial Building	83,000	sf	$ 50.00	$ 4,150,000
	F1012	Extend Underground Tunnel - Silver Ramp to New Elvator Core	65,000	sf	$ 650.00	$ 42,250,000
F20	**Selective Building Demolition**					
F2010	Building Elements Demolition					
	F2021	Misc. Demolition	1	alw	$ 150,000.00	$ 150,000
F30	**Hazardous Material Abatement**					
F3010	Hazardous Material Abatement					
	F3011	Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 46,550,000***
G	***BUILDING SITEWORK***					
G00	**Site Mobilization**					
G0010	Site Mobilization					

1-6 - USPS SITE REDEVELOPMENT

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	G0011	Mobilization				Incl. In M/UPS
	G0012	Safety and Security (3%)	1	ls	$ 169,900.00	$ 169,900
	G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$ 320,500.00	$ 320,500
	G0014	Drainage and Utility Allowance	1	alw	$ 485,600.00	$ 485,600
G10	**Site Preparation**					
G1010	Site Demolition					
	G1011	Demolish Existing Concrete Strcuture - Over Existing Industrial Building	83,000	sf	$ 25.00	$ 2,075,000
	G1012	Demolish Existing Customer Service Building	12,000	sf	$ 15.00	$ 180,000
	G1013	Demolish Existing Industrial Building	73,000	sf	$ 20.00	$ 1,460,000
	G1014	Demolish Existing Asphalt Pavement	13,333	sy	$ 25.00	$ 333,333
	G1015	Demolish / Remove Existing Security Gates	2	ea	$ 2,500.00	$ 5,000
	G1016	Provide Security Barrie Around Basement	1,500	lf	$ 85.00	$ 127,500
	G1017	Allowance for Misc. Site Demolition	1	alw	$ 150,000.00	$ 150,000
G20	**Site Improvements**					
G2010	Pavement / Roadways etc.					
	G2011	Pavement / Roadways etc.				W/Civil
G30	**Site Mechanical Utilities**					
G3010	Site Mechanical Utilities					
	G3011	Site Mechanical Utilities	1	alw	$ 150,000.00	$ 150,000
G40	**Site Electrical Utilities**					
G4010	Site Electrical Utilities					
	G4011	Site Electrical Utilities	1	alw	$ 250,000.00	$ 250,000
G4030	Site Lighting					
	G4031	Site Lighting	1	alw	$ 125,000.00	$ 125,000
		Subtotal - Building Sitework				***$ 5,831,833***
		Subtotal			***$ 133.25***	***$ 307,412,893***
25.0%		Estimating Design Evolution				$ 76,853,223
		Subtotal - Cost of Work			***$ 166.57***	***$ 384,266,116***
		General Contractors Markups				
5.0%		Project Logistics / Phasing & Labor Factor				$ 19,213,306
5.0%		General Requirements & Temporary Construction				$ 20,173,971

1-6 - USPS SITE REDEVELOPMENT

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
8.0%	General Conditions				$ 33,892,271
5.0%	General Contractors Overhead & Profit				$ 22,877,283
2.0%	Insurance				$ 9,608,459
1.0%	Payment & Performance Bonds				$ 4,900,314
0.0%	Sustainability Requirements				$ -
	Subtotal			***$ 214.53***	***$ 494,931,721***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 214.53***	***$ 494,931,721***
21.3%	Owner's Soft Costs				$ 105,420,457
	Opinion of Probable Project Cost			***$ 260.23***	***$ 600,352,177***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

SUMMARY

	CONSTRUCTION SYSTEM		COST PER SQUARE FOOT	TOTAL
A	**Substructure**		$ 31.11	$ 4,284,157
	Standard Foundations	$ 1,977,450		
	Special Foundations	$ 1,372,695		
	Slab on Grade	$ 934,013		
B	**Shell**		$ 147.86	$ 20,359,934
	Superstructure	$ 12,479,449		
	Exterior Closure	$ 6,642,460		
	Roofing	$ 1,238,025		
C	**Interiors**		$ 80.59	$ 11,096,660
	Interior Construction	$ 2,321,660		
	Stairs	$ 200,000		
	Interior Finishes	$ 8,575,000		
D	**Services**		$ 200.74	$ 27,642,019
	Conveying	$ 650,000		
	Baggage Handling System	$ -		
	Plumbing	$ 1,688,000		
	HVAC	$ 11,353,320		
	Fire Protection	$ 1,241,350		
	Electrical	$ 7,873,325		
	Communications	$ 3,186,378		
	Electronic Safety & Security	$ 1,649,646		
E	**Equipment & Furnishings**		$ 72.73	$ 10,014,250
	Equipment	$ 206,550		
	Passenger Boarding Bridges	$ 8,000,000		
	Furnishings	$ 1,807,700		
F	**Special Construction & Demolition**		$ 0.94	$ 129,500
	Special Construction	$ -		
	Selective Building Demolition	$ 129,500		
	Hazardous Material Abatement	$ -		
G	**Building Sitework**		$ 67.63	$ 9,312,887
	Site Mobilization	$ 1,558,600		
	Site Preparation	$ 2,872,000		
	Site Improvements	$ 4,707,287		
	Site Mechanical Utilities	$ 125,000		
	Site Electrical Utilities	$ 50,000		
	Subtotal		***$ 601.59***	***$ 82,839,407***
25.0%	Estimating Design Evolution			$ 20,709,852

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT		TOTAL
	Subtotal - Cost of Work	***$ 751.99***	***$***	***103,549,259***
	General Contractors Markups			
5.0%	Project Logistics / Phasing & Labor Factor		$	5,177,463
5.0%	General Requirements & Temporary Construction		$	5,436,336
8.0%	General Conditions		$	9,133,045
5.0%	General Contractors Overhead & Profit		$	6,164,805
2.0%	Insurance		$	2,589,218
1.0%	Payment & Performance Bonds		$	1,320,501
0.0%	Sustainability Requirements		$	-
	Subtotal	***$ 968.56***	***$***	***133,370,628***
0.0%	Escalation		$	-
	Opinion of Probable Construction Cost	***$ 968.56***	***$***	***133,370,628***
21.3%	Owner's Soft Costs		$	28,407,944
	Opinion of Probable Project Cost	***$ 1,174.86***	***$***	***161,778,571***

Project Title	Landside Masterplan Update			
Location	Saint Paul International Airport			
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate			
Client Name				
Client Project No.		**Revision**	2	
Original Date	7-Apr-2023	**Revision Date**	25-Apr-2023	
Assumed Bid Opening Date		**Connico PN**	4977.23.03	
Project Lead	CJN / CJC	**Checked by**	IDK	

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST		TOTAL	
		AREA ANALYSIS						
2-1 - Reconstruct Concourse A, Demolish Concourse B								
	Apron Level 01		68,850	sf				
		Airport Support			30,500 sf			
		Airline Support			30,050 sf			
		Mechanical			3,200 sf			
		Storage			1,600 sf			
		Tug Lanes			3,500 sf			
	Departure Level 02		68,850	sf				
		Concessions (Shell Space)			1,800 sf			
		Hold rooms			38,000 sf			
		Circulation			26,000 sf			
		Restrooms - Public			3,050 sf			
		Total Area	**137,700**	**sf**	**137,700 sf**			

A SUBSTRUCTURE

A10 Foundations

A1010		Standard Foundations						
	A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	68,850	sf	$	27.00	$	1,858,950
	A1012	Extra for Rock Excavation					Not Required	
	A1013	Perimeter Drainage	1,940	lf	$	25.00	$	48,500
	A1014	Dewatering	1	ls	$	20,000.00	$	20,000
	A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$	50,000.00	$	50,000
A1030		Special Foundations						
	A1031	PBB Foundation	8	ea	$	60,000.00	$	480,000
	A1032	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	68,850	sf	$	15.00	$	862,695
	A1033	Dewatering	1	ls	$	30,000.00	$	30,000

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
A1050	Slab on Grade					
	A1051	Slab on Grade	68,850	sf	$ 10.00	$ 688,500
	A1052	Elevator Pits	4	ea	$ 15,000.00	$ 60,000
	A1053	Misc. Trenches, Pits & Bases	64	cy	$ 750.00	$ 47,813
	A1054	Under-slab Drainage & Insulation	68,850	sf	$ 2.00	$ 137,700
		Subtotal - Substructure				***$ 4,284,157***
B	***SHELL***					
B10	**Superstructure**					
B1010	Floor Construction					
	B1011	Steel Floor Structure	792	tns	$ 6,500.00	$ 5,146,538
	B1012	Steel Floor Deck	68,850	sf	$ 7.50	$ 516,375
	B1013	Concrete Fill to Steel Floor Deck	68,850	sf	$ 7.75	$ 533,588
	B1014	Supplemental Framing at Exterior Closure	41	tns	$ 7,000.00	$ 289,800
	B1015	Miscellaneous Steel (5%)	40	tns	$ 7,000.00	$ 277,121
	B1016	Elevated Floor Slab Fireproofing	68,850	sf	$ 7.00	$ 481,950
	B1017	Expansion Joint at Existing Structure	100	lf	$ 150.00	$ 15,000
	B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$ 25,000.00	$ 25,000
B1030	Roof Construction					
	B1031	Steel Roof Structure	620	tns	$ 6,500.00	$ 4,027,725
	B1032	Steel Roof Deck	68,850	sf	$ 6.50	$ 447,525
	B1033	Miscellaneous Steel (5%)	31	tns	$ 7,000.00	$ 216,878
	B1034	Roof Fireproofing	68,850	sf	$ 7.00	$ 481,950
	B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$ 20,000.00	$ 20,000
B20	**Exterior Closure**					
B2010	Exterior Walls					
	B2011	CMU Walls, incl. Back-up System	31,650	sf	$ 40.00	$ 1,266,000
	B2012	Precast Concrete, incl. Back-up System	3,680	sf	$ 45.00	$ 165,600
	B2013	Metal Wall Panel, incl. Back-up System	3,680	sf	$ 65.00	$ 239,200
	B2014	Edge Detail at Roof	1,840	lf	$ 75.00	$ 138,000
	B2015	Caulking & Sealant to Exteriors	69,920	sf	$ 1.75	$ 122,360
	B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$ 40,000.00	$ 40,000
B2030	Exterior Windows					
	B2031	Curtain Wall System	27,600	sf	$ 165.00	$ 4,554,000

DESCRIPTION		QUANTITY	UNIT	UNIT COST	TOTAL
B2050	Exterior Doors				
B2051	Exterior Doors - Allowance	1	alw	$ 65,300.00	$ 65,300
B2052	PBB Exit Doors	8	ea	$ 3,500.00	$ 28,000
B2052	Exit Doors - Apron Paving Access	8	ea	$ 2,500.00	$ 20,000
B2053	Extra for Access Control	8	lvs	$ 500.00	$ 4,000
B2070	Exterior Soffits				
B2071	Exterior Soffits				Not Required
B30	**Roofing**				
B3010	Roof Coverings				
B3011	SBS Modified Bitumen Roof Assembly	68,850	sf	$ 16.50	$ 1,136,025
B3012	Parapet Detail	1,840	lf	$ 50.00	$ 92,000
B3013	Add Allowance for Junction to Existing Roof	1	alw	$ 10,000.00	$ 10,000
B3030	Roof Openings				
B3031	Skylight				Not Required
B3032	Roof Hatch				Not Required
	Subtotal - Shell				***$ 20,359,934***
C	***INTERIORS***				
C10	**Interior Construction**				
C1010	Partitions				
C1011	Interior Partitions	134,200	sf	$ 5.00	$ 671,000
C1012	Rough Carpentry & Blocking	134,200	sf	$ 1.50	$ 201,300
C1013	Caulking, Sealants & Firestopping	134,200	sf	$ 1.75	$ 234,850
C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	134,200	sf	$ 1.25	$ 167,750
C1030	Interior Doors				
C1031	Interior Doors - Allowance	134,200	sf	$ 2.00	$ 268,400
C1050	Specialties				
C1051	Fire Extinguishers & Cabinets	134,200	sf	$ 0.05	$ 6,710
C1052	Code Signage	134,200	sf	$ 0.25	$ 33,550
C1053	Interior Wayfinding Signage	134,200	sf	$ 3.50	$ 469,700
C1054	Miscellaneous Specialties	134,200	sf	$ 2.00	$ 268,400
C20	**Stairs**				
C2010	Stair Construction				

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	C2011	Stair - Exit - PBB	8	flts	$ 25,000.00	$ 200,000
C30		**Interior Finishes**				
C3010		Interior Finishes				
	C3011	*Apron Level 01*				
	C3012	Airport Support	30,500	sf	$ 45.00	$ 1,372,500
	C3013	Airline Support	30,050	sf	$ 45.00	$ 1,352,250
	C3014	Mechanical	3,200	sf	$ 35.00	$ 112,000
	C3015	Storage	1,600	sf	$ 25.00	$ 40,000
	C3016	Tug Lanes	3,500	sf	$ 10.00	$ 35,000
	C3017	*Departure Level 02*				
	C3018	Concessions (Shell Space)	1,800	sf	$ 25.00	$ 45,000
	C3019	Hold rooms	38,000	sf	$ 75.00	$ 2,850,000
	C3020	Circulation	26,000	sf	$ 85.00	$ 2,210,000
	C3021	Restrooms - Public	3,050	sf	$ 165.00	$ 503,250
	C3022	Allowance for Renovation to Existing Concourse for New Expansion Connection	1,000	sf	$ 55.00	$ 55,000
		Subtotal - Interiors				***$ 11,096,660***
D		***SERVICES***				
D10		**Conveying System**				
D1010		Elevators & Lifts				
	D1011	Hydraulic Passenger Elevator	10	stps	$ 65,000.00	$ 650,000
D1020		Escalators & Moving Walks				
	D1021	Escalator				Not Required
	D1022	Moving Walks				Not Required
D1030		Baggage Handling Equipment				
	D1031	Baggage Handling Equipment Allowance				Excluded
D20		**Plumbing**				
D2010		Plumbing Systems				
	D2011	Apron Level 01	65,350	sf	$ 9.50	$ 620,825
	D2012	Departure Level 02	68,850	sf	$ 15.50	$ 1,067,175
D30		**HVAC**				
D3010		HVAC Systems				
	D3011	Apron Level 01	65,350	sf	$ 74.00	$ 4,835,900
	D3012	Departure Level 02	68,850	sf	$ 74.00	$ 5,094,900
D3050		Controls and Instrumentation				

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		D3051 2-1 - Reconstruct Concourse A, Demolish Con	134,200	sf	$ 8.50	$ 1,140,700
	D3060	Systems Testing & Balancing				
		D3061 2-1 - Reconstruct Concourse A, Demolish Con	134,200	sf	$ 2.10	$ 281,820
D40	**Fire Protection**					
	D4010	Sprinkler Systems				
		D4011 Apron Level 01	65,350	sf	$ 9.25	$ 604,488
		D4012 Departure Level 02	68,850	sf	$ 9.25	$ 636,863
D50	**Electrical**					
	D5010	Electrical Systems				
		D5011 Distribution Equipment	137,700	sf	$ 6.00	$ 826,200
		D5012 Feeders	137,700	sf	$ 8.75	$ 1,204,875
		D5013 Grounding and Lightning Protection	137,700	sf	$ 3.00	$ 413,100
		D5014 Jetway/GPU/PCA Feeders	8	ea	$ 65,000.00	$ 520,000
		D5015 Roof Mounted Apron Light	8	ea	$ 30,000.00	$ 240,000
		D5016 *Apron Level 01*				
		D5017 Airport Support	30,500	sf	$ 25.00	$ 762,500
		D5018 Airline Support	30,050	sf	$ 25.00	$ 751,250
		D5019 Mechanical	3,200	sf	$ 18.00	$ 57,600
		D5020 Storage	1,600	sf	$ 18.00	$ 28,800
		D5021 Tug Lanes	3,500	sf	$ 10.00	$ 35,000
		D5022 *Departure Level 02*				
		D5023 Concessions (Shell Space)	1,800	sf	$ 15.00	$ 27,000
		D5024 Hold rooms	38,000	sf	$ 49.00	$ 1,862,000
		D5025 Circulation	26,000	sf	$ 37.00	$ 962,000
		D5026 Restrooms - Public	3,050	sf	$ 60.00	$ 183,000
	D6010	Communications				
		D6011 Telecomm Room Buildout	137,700	sf	$ 4.15	$ 571,455
		D6012 Backbone Cabling	137,700	sf	$ 2.50	$ 344,250
		D6013 Communications	137,700	sf	$ 3.35	$ 461,295
		D6014 EVIDS Cabling and Installation	137,700	sf	$ 1.55	$ 213,435
		D6015 Public Address System	137,700	sf	$ 2.64	$ 363,528
		D6016 DAS	137,700	sf	$ 6.25	$ 860,625
		D6017 Common Use System	137,700	sf	$ 2.70	$ 371,790
	D7010	Electronic Safety & Security				
		D7011 Video Surveillance System	137,700	sf	$ 2.90	$ 399,330
		D7012 Security Access Control	137,700	sf	$ 4.08	$ 561,816
		D7013 Fire Alarm	137,700	sf	$ 5.00	$ 688,500
		Subtotal - Services				***$ 27,642,019***

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
E	***EQUIPMENT & FURNISHINGS***					
E10	**Equipment**					
E1010	Equipment					
	E1011	Concessions Equipment - Not in Scope				Excluded
	E1012	Security Equipment - Not in Scope				Excluded
	E1013	FIS Equipment - Not in Scope				Excluded
	E1014	FIDS, BIDS, MUFIDS	68,850	sf	$ 2.00	$ 137,700
	E1015	Dynamic Signage				Excluded
	E1016	Misc. Equipment Allowance	137,700	sf	$ 0.50	$ 68,850
E1030	Passenger Boarding Bridges					
	E1031	New Passenger Boarding Bridge	8	ea	$1,000,000.00	$ 8,000,000
E20	**Furnishings**					
E2010	Fixed Furnishings					
	E2011	Gate Podiums & Backscreens	8	ea	$ 35,000.00	$ 280,000
	E2012	Recharge Stations				w/Electrical
	E2013	Holdroom Seating	1,000	ea	$ 1,000.00	$ 1,000,000
	E2014	Holdroom Seating Table	500	ea	$ 700.00	$ 350,000
	E2015	Misc. Seating	1	alw	$ 40,000.00	$ 40,000
	E2016	Kiosks				Excluded
	E2017	Window Shades				Excluded
	E2018	Misc. Casework Allowance	137,700	sf	$ 1.00	$ 137,700
		Subtotal - Equipment & Furnishings				***$ 10,014,250***
F	***SPECIAL CONSTRUCTION & DEMOLITION***					
F10	**Special Construction**					
F1010	Special Construction					
	F1011	Special Construction				Not Required
F20	**Selective Building Demolition**					
F2010	Building Elements Demolition					
	F2011	Demolish Exterior Closure at Existing Building	3,500	sf	$ 35.00	$ 122,500
	F2012	Misc. Demolition	1	alw	$ 7,000.00	$ 7,000
F30	**Hazardous Material Abatement**					
F3010	Hazardous Material Abatement					
	F3011	Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 129,500***

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
G		***BUILDING SITEWORK***				
G00		**Site Mobilization**				
G0010		Site Mobilization				
	G0011	Mobilization				Incl. In M/UPS
	G0012	Safety and Security (3%)	1	ls	$ 271,300.00	$ 271,300
	G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$ 511,800.00	$ 511,800
	G0014	Drainage and Utility Allowance	1	alw	$ 775,500.00	$ 775,500
G10		**Site Preparation**				
G1010		Site Demolition				
	G1011	Demolish Existing Apron Paving	6,580	sy	$ 25.00	$ 164,500
	G1012	Demolish Existing Concourse A	65,000	sf	$ 15.00	$ 975,000
	G1013	Demolish Existing Concourse B	65,000	sf	$ 15.00	$ 975,000
	G1014	Demolish Existing PBB Foundations	19	ea	$ 5,000.00	$ 95,000
	G1015	Demolish Existing PBB - Bridge & Equipment	19	ea	$ 25,000.00	$ 475,000
	G1016	Demolish / Remove Existing Blast Wall	250	lf	$ 150.00	$ 37,500
	G1017	Allowance for Misc. Site Demolition	1	alw	$ 150,000.00	$ 150,000
	G1018	Demolish / Remove Existing QTA				Excluded
G20		**Site Improvements**				
G2010		Pavement / Roadways etc.				
	G2011	*Apron Paving*				
	G2012	Excavation	3,290	cy	$ 18.00	$ 59,220
	G2013	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	6,580	sy	$ 275.00	$ 1,809,500
	G2014	Pavement Markings - Service Road and Striping	2,958	sf	$ 2.50	$ 7,394
	G2015	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required
	G2016	*Fuel Systems*				
	G2017	Sawcut Existing Apron Paving for New Fuel Lines	3,120	lf	$ 8.00	$ 24,960
	G2018	Demo Existing Apron Paving	693	sy	$ 35.00	$ 24,267
	G2019	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	693	sy	$ 350.00	$ 242,667
	G2020	New Underground Fuel Vaults	4	ea	$ 250,000.00	$ 1,000,000
	G2021	Fuel Branch Lines: 12" dia Steel Pipe Epoxy Lining, ext Coated, Welded	1,200	lf	$ 656.00	$ 787,200
	G2022	Fuel Branch Lines: 8" dia Steel Pipe Epoxy Lining, ext Coated, Welded	200	lf	$ 612.00	$ 122,400

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST		TOTAL
	G2023	Fuel Branch Lines: 6" dia Steel Pipe Epoxy Lining, ext Coated, Welded	120	lf	$ 590.00	$	70,800
	G2024	Radiographic Testing of Pipe Welds	1,520	lf	$ 19.00	$	28,880
	G2025	Fuel Valves	8	ea	$ 25,000.00	$	200,000
	G2026	Branch Line Low & High Point Drain Pit	4	ea	$ 32,500.00	$	130,000
	G2027	Hydrant Pits and Connectors	8	ea	$ 25,000.00	$	200,000
G2050	Landscaping						
	G2051	Landscaping Allowance				Not Required	
G2060	Miscellaneous Buildings and Structures						
	G2061	Miscellaneous Buildings and Structures				Not Required	
G30	**Site Mechanical Utilities**						
G3010	Site Mechanical Utilities						
	G3011	Site Mechanical Utilities	1	alw	$ 125,000.00	$	125,000
G40	**Site Electrical Utilities**						
G4010	Site Electrical Utilities						
	G4011	Site Electrical Utilities	1	alw	$ 25,000.00	$	25,000
G4030	Site Lighting						
	G4031	Site Lighting	1	alw	$ 25,000.00	$	25,000
		Subtotal - Building Sitework				***$***	***9,312,887***
		Subtotal			***$ 601.59***	***$***	***82,839,407***
25.0%		Estimating Design Evolution				$	20,709,852
		Subtotal - Cost of Work			***$ 751.99***	***$***	***103,549,259***
		General Contractors Markups					
5.0%		Project Logistics / Phasing & Labor Factor				$	5,177,463
5.0%		General Requirements & Temporary Construction				$	5,436,336
8.0%		General Conditions				$	9,133,045
5.0%		General Contractors Overhead & Profit				$	6,164,805
2.0%		Insurance				$	2,589,218
1.0%		Payment & Performance Bonds				$	1,320,501
0.0%		Sustainability Requirements				$	-
		Subtotal			***$ 968.56***	***$***	***133,370,628***

2-1 - RECONSTRUCT CONCOURSE A, DEMOLISH CONCOURSE B

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 968.56***	***$ 133,370,628***
21.3%	Owner's Soft Costs				$ 28,407,944
	Opinion of Probable Project Cost			***$ 1,174.86***	***$ 161,778,571***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

2-2 - RECONSTRUCT CONCOURSE F

SUMMARY

	CONSTRUCTION SYSTEM			COST PER SQUARE FOOT	TOTAL
A	**Substructure**			$ 22.19	$ 5,546,750
	Standard Foundations	$	2,037,667		
	Special Foundations	$	2,089,639		
	Slab on Grade	$	1,419,444		
B	**Shell**			$ 143.30	$ 35,826,056
	Superstructure	$	23,219,130		
	Exterior Closure	$	10,032,593		
	Roofing	$	2,574,333		
C	**Interiors**			$ 84.25	$ 21,062,950
	Interior Construction	$	4,264,450		
	Stairs	$	475,000		
	Interior Finishes	$	16,323,500		
D	**Services**			$ 194.52	$ 48,629,275
	Conveying	$	650,000		
	Baggage Handling System	$	-		
	Plumbing	$	3,241,750		
	HVAC	$	17,928,900		
	Fire Protection	$	2,592,625		
	Electrical	$	15,436,000		
	Communications	$	5,785,000		
	Electronic Safety & Security	$	2,995,000		
E	**Equipment & Furnishings**			$ 93.95	$ 23,486,250
	Equipment	$	325,000		
	Passenger Boarding Bridges	$	19,000,000		
	Furnishings	$	4,161,250		
F	**Special Construction & Demolition**			$ 0.64	$ 160,000
	Special Construction	$	-		
	Selective Building Demolition	$	160,000		
	Hazardous Material Abatement	$	-		
G	**Building Sitework**			$ 70.75	$ 17,686,426
	Site Mobilization	$	2,959,900		
	Site Preparation	$	4,935,750		
	Site Improvements	$	9,615,776		
	Site Mechanical Utilities	$	125,000		
	Site Electrical Utilities	$	50,000		
	Subtotal			***$ 609.59***	***$ 152,397,707***
25.0%	Estimating Design Evolution				$ 38,099,427

2-2 - RECONSTRUCT CONCOURSE F

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 761.99***	***$ 190,497,133***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 9,524,857
5.0%	General Requirements & Temporary Construction		$ 10,001,099
8.0%	General Conditions		$ 16,801,847
5.0%	General Contractors Overhead & Profit		$ 11,341,247
2.0%	Insurance		$ 4,763,324
1.0%	Payment & Performance Bonds		$ 2,429,295
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 981.44***	***$ 245,358,802***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 981.44***	***$ 245,358,802***
21.3%	Owner's Soft Costs		$ 52,261,425
	Opinion of Probable Project Cost	***$ 1,190.48***	***$ 297,620,227***

Project Title	Landside Masterplan Update				
Location	Saint Paul International Airport				
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate				
Client Name					
Client Project No.		Revision	2		
Original Date	7-Apr-2023	Revision Date	25-Apr-2023		
Assumed Bid Opening Date		Connico PN	4977.23.03		
Project Lead	CJN / CJC	Checked by	IDK		

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL

AREA ANALYSIS

2-2 - Reconstruct Concourse F			
Apron Level 01	100,000 sf		
Airport Support			44,750 sf
Airline Support			44,750 sf
Mechanical			4,000 sf
Vertical Circulation			1,000 sf
Storage			2,000 sf
Tug Lanes			3,500 sf
Departure Level 02	100,000 sf		
Concessions (Shell Space)			2,500 sf
Hold rooms			50,000 sf
Vertical Circulation			1,000 sf
Circulation			41,500 sf
Restrooms - Public			5,000 sf
Secure Corridor Level 03	50,000 sf		
Secure Corridor			49,000 sf
Vertical Circulation			1,000 sf
Total Area	**250,000 sf**		**250,000 sf**

A SUBSTRUCTURE

A10 Foundations

A1010	Standard Foundations				
A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	100,000	sf	$ 19.00	$ 1,900,000
A1012	Extra for Rock Excavation				Not Required
A1013	Perimeter Drainage	1,907	lf	$ 25.00	$ 47,667
A1014	Dewatering	1	ls	$ 30,000.00	$ 30,000
A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 60,000.00	$ 60,000
A1030	Special Foundations				
A1031	PBB Foundation	19	ea	$ 60,000.00	$ 1,140,000
A1032	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	100,000	sf	$ 9.20	$ 919,639

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	A1033	Dewatering	1	ls	$	30,000.00	$	30,000
A1050	Slab on Grade							
	A1051	Slab on Grade	100,000	sf	$	10.00	$	1,000,000
	A1052	Elevator Pits	10	ea	$	15,000.00	$	150,000
	A1053	Misc. Trenches, Pits & Bases	93	cy	$	750.00	$	69,444
	A1054	Under-slab Drainage & Insulation	100,000	sf	$	2.00	$	200,000
		Subtotal - Substructure					***$***	***5,546,750***
B	***SHELL***							
B10	**Superstructure**							
B1010	Floor Construction							
	B1011	Steel Floor Structure	1,725	tns	$	6,500.00	$	11,212,500
	B1012	Steel Floor Deck	150,000	sf	$	7.50	$	1,125,000
	B1013	Concrete Fill to Steel Floor Deck	150,000	sf	$	7.75	$	1,162,500
	B1014	Supplemental Framing at Exterior Closure	68	tns	$	7,000.00	$	478,380
	B1015	Miscellaneous Steel (5%)	86	tns	$	7,000.00	$	603,750
	B1016	Elevated Floor Slab Fireproofing	150,000	sf	$	7.00	$	1,050,000
	B1017	Expansion Joint at Existing Structure	120	lf	$	150.00	$	18,000
	B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$	30,000.00	$	30,000
B1030	Roof Construction							
	B1031	Steel Roof Structure	900	tns	$	6,500.00	$	5,850,000
	B1032	Steel Roof Deck	100,000	sf	$	6.50	$	650,000
	B1033	Miscellaneous Steel (5%)	45	tns	$	7,000.00	$	315,000
	B1034	Roof Fireproofing	100,000	sf	$	7.00	$	700,000
	B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$	24,000.00	$	24,000
B20	**Exterior Closure**							
B2010	Exterior Walls							
	B2011	CMU Walls, incl. Back-up System	31,980	sf	$	40.00	$	1,279,200
	B2012	Precast Concrete, incl. Back-up System	6,070	sf	$	45.00	$	273,150
	B2013	Metal Wall Panel, incl. Back-up System	6,070	sf	$	65.00	$	394,550
	B2014	Edge Detail at Roof	1,787	lf	$	75.00	$	134,000
	B2015	Caulking & Sealant to Exteriors	92,910	sf	$	1.75	$	162,593
	B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$	50,000.00	$	50,000
B2030	Exterior Windows							
	B2031	Curtain Wall System	45,560	sf	$	165.00	$	7,517,400

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
B2050		Exterior Doors						
	B2051	Exterior Doors - Allowance	1	alw	$	98,200.00	$	98,200
	B2052	PBB Exit Doors	19	ea	$	3,500.00	$	66,500
	B2052	Exit Doors - Apron Paving Access	19	ea	$	2,500.00	$	47,500
	B2053	Extra for Access Control	19	lvs	$	500.00	$	9,500
B2070		Exterior Soffits						
	B2071	Exterior Soffits						Not Required
B30		**Roofing**						
B3010		Roof Coverings						
	B3011	SBS Modified Bitumen Roof Assembly	150,000	sf	$	16.50	$	2,475,000
	B3012	Parapet Detail	1,787	lf	$	50.00	$	89,333
	B3013	Add Allowance for Junction to Existing Roof	1	alw	$	10,000.00	$	10,000
B3030		Roof Openings						
	B3031	Skylight						Not Required
	B3032	Roof Hatch						Not Required
		Subtotal - Shell					***$***	***35,826,056***
C		***INTERIORS***						
C10		**Interior Construction**						
C1010		Partitions						
	C1011	Interior Partitions	246,500	sf	$	5.00	$	1,232,500
	C1012	Rough Carpentry & Blocking	246,500	sf	$	1.50	$	369,750
	C1013	Caulking, Sealants & Firestopping	246,500	sf	$	1.75	$	431,375
	C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	246,500	sf	$	1.25	$	308,125
C1030		Interior Doors						
	C1031	Interior Doors - Allowance	246,500	sf	$	2.00	$	493,000
C1050		Specialties						
	C1051	Fire Extinguishers & Cabinets	246,500	sf	$	0.05	$	12,325
	C1052	Code Signage	246,500	sf	$	0.25	$	61,625
	C1053	Interior Wayfinding Signage	246,500	sf	$	3.50	$	862,750
	C1054	Miscellaneous Specialties	246,500	sf	$	2.00	$	493,000
C20		**Stairs**						
C2010		Stair Construction						

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	C2011	Stair - Exit - PBB	19	flts	$	25,000.00	$	475,000
C30		**Interior Finishes**						
C3010		Interior Finishes						
	C3011	*Apron Level 01*						
	C3012	Airport Support	44,750	sf	$	45.00	$	2,013,750
	C3013	Airline Support	44,750	sf	$	45.00	$	2,013,750
	C3014	Mechanical	4,000	sf	$	35.00	$	140,000
	C3015	Vertical Circulation	1,000	sf	$	55.00	$	55,000
	C3016	Storage	2,000	sf	$	25.00	$	50,000
	C3017	Tug Lanes	3,500	sf	$	10.00	$	35,000
	C3018	*Departure Level 02*						
	C3019	Concessions (Shell Space)	2,500	sf	$	25.00	$	62,500
	C3020	Hold rooms	50,000	sf	$	75.00	$	3,750,000
	C3021	Vertical Circulation	1,000	sf	$	55.00	$	55,000
	C3022	Circulation	41,500	sf	$	85.00	$	3,527,500
	C3023	Restrooms - Public	5,000	sf	$	165.00	$	825,000
	C3024	*Secure Corridor Level 03*						
	C3025	Secure Corridor	49,000	sf	$	75.00	$	3,675,000
	C3026	Vertical Circulation	1,000	sf	$	55.00	$	55,000
	C3027	Allowance for Renovation to Existing Concourse for New Expansion Connection	1,200	sf	$	55.00	$	66,000
		Subtotal - Interiors					***$***	***21,062,950***
D		***SERVICES***						
D10		**Conveying System**						
D1010		Elevators & Lifts						
	D1011	Hydraulic Passenger Elevator	10	stps	$	65,000.00	$	650,000
D1020		Escalators & Moving Walks						
	D1021	Escalator					Not Required	
	D1022	Moving Walks					Not Required	
D1030		Baggage Handling Equipment						
	D1031	Baggage Handling Equipment Allowance					Excluded	
D20		**Plumbing**						
D2010		Plumbing Systems						
	D2011	Apron Level 01	96,500	sf	$	9.50	$	916,750
	D2012	Departure Level 02	100,000	sf	$	15.50	$	1,550,000
	D2013	Secure Corridor Level 03	50,000	sf	$	15.50	$	775,000
D30		**HVAC**						

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

DESCRIPTION			QUANTITY	UNIT	UNIT COST	TOTAL
D3010	HVAC Systems					
	D3011	Apron Level 01	96,500	sf	$ 74.00	$ 7,141,000
	D3012	Departure Level 02	100,000	sf	$ 74.00	$ 7,400,000
	D3013	Secure Corridor Level 03	50,000	sf	$ 74.00	$ 775,000
D3050	Controls and Instrumentation					
	D3051	2-2 - Reconstruct Concourse F	246,500	sf	$ 8.50	$ 2,095,250
D3060	Systems Testing & Balancing					
	D3061	2-2 - Reconstruct Concourse F	246,500	sf	$ 2.10	$ 517,650
D40	**Fire Protection**					
D4010	Sprinkler Systems					
	D4011	Apron Level 01	96,500	sf	$ 9.25	$ 892,625
	D4012	Departure Level 02	100,000	sf	$ 9.25	$ 925,000
	D4013	Secure Corridor Level 03	50,000	sf	$ 9.25	$ 775,000
D50	**Electrical**					
D5010	Electrical Systems					
	D5011	Distribution Equipment	250,000	sf	$ 6.00	$ 1,500,000
	D5012	Feeders	250,000	sf	$ 8.75	$ 2,187,500
	D5013	Grounding and Lightning Protection	250,000	sf	$ 3.00	$ 750,000
	D5014	Jetway/GPU/PCA Feeders	19	ea	$ 65,000.00	$ 1,235,000
	D5015	Roof Mounted Apron Light	19	ea	$ 30,000.00	$ 570,000
	D5016	*Departure Level 02*				
	D5017	Airport Support	44,750	sf	$ 25.00	$ 1,118,750
	D5018	Airline Support	44,750	sf	$ 25.00	$ 1,118,750
	D5019	Mechanical	4,000	sf	$ 18.00	$ 72,000
	D5020	Vertical Circulation	1,000	sf	$ 37.00	$ 37,000
	D5021	Storage	2,000	sf	$ 18.00	$ 36,000
	D5022	Tug Lanes	3,500	sf	$ 10.00	$ 35,000
	D5023	*Apron Level 01*				
	D5024	Concessions (Shell Space)	2,500	sf	$ 15.00	$ 37,500
	D5025	Hold rooms	50,000	sf	$ 49.00	$ 2,450,000
	D5026	Vertical Circulation	1,000	sf	$ 37.00	$ 37,000
	D5027	Circulation	41,500	sf	$ 37.00	$ 1,535,500
	D5028	Restrooms - Public	5,000	sf	$ 60.00	$ 300,000
	D5029	*Secure Corridor Level 03*				
	D5030	Secure Corridor	49,000	sf	$ 49.00	$ 2,401,000
	D5031	Vertical Circulation	1,000	sf	$ 15.00	$ 15,000
D6010	Communications					
	D6011	Telecomm Room Buildout	250,000	sf	$ 4.15	$ 1,037,500
	D6012	Backbone Cabling	250,000	sf	$ 2.50	$ 625,000
	D6013	Communications	250,000	sf	$ 3.35	$ 837,500

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	D6014	EVIDS Cabling and Installation	250,000	sf	$ 1.55	$ 387,500
	D6015	Public Address System	250,000	sf	$ 2.64	$ 660,000
	D6016	DAS	250,000	sf	$ 6.25	$ 1,562,500
	D6017	Common Use System	250,000	sf	$ 2.70	$ 675,000
D7010	Electronic Safety & Security					
	D7011	Video Surveillance System	250,000	sf	$ 2.90	$ 725,000
	D7012	Security Access Control	250,000	sf	$ 4.08	$ 1,020,000
	D7013	Fire Alarm	250,000	sf	$ 5.00	$ 1,250,000
		Subtotal - Services				***$ 48,629,275***
E	***EQUIPMENT & FURNISHINGS***					
E10	**Equipment**					
E1010	Equipment					
	E1011	Concessions Equipment - Not in Scope				Excluded
	E1012	Security Equipment - Not in Scope				Excluded
	E1013	FIS Equipment - Not in Scope				Excluded
	E1014	FIDS, BIDS, MUFIDS	100,000	sf	$ 2.00	$ 200,000
	E1015	Dynamic Signage				Excluded
	E1016	Misc. Equipment Allowance	250,000	sf	$ 0.50	$ 125,000
E1030	Passenger Boarding Bridges					
	E1031	New Passenger Boarding Bridge	19	ea	$1,000,000.00	$ 19,000,000
E20	**Furnishings**					
E2010	Fixed Furnishings					
	E2011	Gate Podiums & Backscreens	19	ea	$ 35,000.00	$ 665,000
	E2012	Recharge Stations				w/Electrical
	E2013	Holdroom Seating	2,375	ea	$ 1,000.00	$ 2,375,000
	E2014	Holdroom Seating Table	1,188	ea	$ 700.00	$ 831,250
	E2015	Misc. Seating	1	alw	$ 40,000.00	$ 40,000
	E2016	Kiosks				Excluded
	E2017	Window Shades				Excluded
	E2018	Misc. Casework Allowance	250,000	sf	$ 1.00	$ 250,000
		Subtotal - Equipment & Furnishings				***$ 23,486,250***
F	***SPECIAL CONSTRUCTION & DEMOLITION***					
F10	**Special Construction**					
F1010	Special Construction					
	F1011	Special Construction				Not Required
F20	**Selective Building Demolition**					

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
F2010		Building Elements Demolition				
	F2011	Demolish Exterior Closure at Existing Building	4,200	sf	$ 35.00	$ 147,000
	F2012	Misc. Demolition	1	alw	$ 13,000.00	$ 13,000
F30		**Hazardous Material Abatement**				
F3010		Hazardous Material Abatement				
	F3011	Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 160,000***
G		***BUILDING SITEWORK***				
G00		**Site Mobilization**				
G0010		Site Mobilization				
	G0011	Mobilization				Incl. In M/UPS
	G0012	Safety and Security (3%)	1	ls	$ 515,200.00	$ 515,200
	G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$ 972,000.00	$ 972,000
	G0014	Drainage and Utility Allowance	1	alw	$1,472,700.00	$ 1,472,700
G10		**Site Preparation**				
G1010		Site Demolition				
	G1011	Demolish Existing Apron Paving	12,230	sy	$ 25.00	$ 305,750
	G1012	Demolish Existing Concourse F (2 and Partial 3 Story)	240,000	sf	$ 15.00	$ 3,600,000
	G1013	Demolish Existing PBB Foundations	16	ea	$ 5,000.00	$ 80,000
	G1014	Demolish Existing PBB - Bridge & Equipment	16	ea	$ 50,000.00	$ 800,000
	G1015	Allowance for Misc. Site Demolition	1	alw	$ 150,000.00	$ 150,000
	G1016	Demolish / Remove Existing QTA				Excluded
G20		**Site Improvements**				
G2010		Pavement / Roadways etc.				
	G2011	*Apron Paving*				
	G2012	Excavation	4,930	cy	$ 18.00	$ 88,740
	G2013	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	9,860	sy	$ 275.00	$ 2,711,500
	G2014	Pavement Markings - Service Road and Striping	4,434	sf	$ 2.50	$ 11,086
	G2015	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required
	G2016	*Fuel Systems*				
	G2017	Sawcut Existing Apron Paving for New Fuel Lines	5,930	lf	$ 8.00	$ 47,440

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	G2018	Demo Existing Apron Paving	1,318	sy	$ 35.00	$ 46,122
	G2019	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	1,318	sy	$ 350.00	$ 461,222
	G2020	New Underground Fuel Vaults	10	ea	$ 250,000.00	$ 2,500,000
	G2021	Fuel Branch Lines: 12" dia Steel Pipe Epoxy Lining, ext Coated, Welded	2,965	lf	$ 656.00	$ 1,945,040
	G2022	Fuel Branch Lines: 8" dia Steel Pipe Epoxy Lining, ext Coated, Welded	475	lf	$ 612.00	$ 290,700
	G2023	Fuel Branch Lines: 6" dia Steel Pipe Epoxy Lining, ext Coated, Welded	285	lf	$ 590.00	$ 168,150
	G2024	Radiographic Testing of Pipe Welds	3,725	lf	$ 19.00	$ 70,775
	G2025	Fuel Valves	19	ea	$ 25,000.00	$ 475,000
	G2026	Branch Line Low & High Point Drain Pit	10	ea	$ 32,500.00	$ 325,000
	G2027	Hydrant Pits and Connectors	19	ea	$ 25,000.00	$ 475,000
G2050	Landscaping					
	G2051	Landscaping Allowance				Not Required
G2060	Miscellaneous Buildings and Structures					
	G2061	Miscellaneous Buildings and Structures				Not Required
G30	**Site Mechanical Utilities**					
G3010	Site Mechanical Utilities					
	G3011	Site Mechanical Utilities	1	alw	$ 125,000.00	$ 125,000
G40	**Site Electrical Utilities**					
G4010	Site Electrical Utilities					
	G4011	Site Electrical Utilities	1	alw	$ 25,000.00	$ 25,000
G4030	Site Lighting					
	G4031	Site Lighting	1	alw	$ 25,000.00	$ 25,000
		Subtotal - Building Sitework				***$ 17,686,426***
		Subtotal			***$ 609.59***	***$ 152,397,707***
25.0%		Estimating Design Evolution				$ 38,099,427
		Subtotal - Cost of Work			***$ 761.99***	***$ 190,497,133***
		General Contractors Markups				

2-2 - RECONSTRUCT CONCOURSE F

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
5.0%	Project Logistics / Phasing & Labor Factor				$ 9,524,857
5.0%	General Requirements & Temporary Construction				$ 10,001,099
8.0%	General Conditions				$ 16,801,847
5.0%	General Contractors Overhead & Profit				$ 11,341,247
2.0%	Insurance				$ 4,763,324
1.0%	Payment & Performance Bonds				$ 2,429,295
0.0%	Sustainability Requirements				$ -
	Subtotal			***$ 981.44***	***$ 245,358,802***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 981.44***	***$ 245,358,802***
21.3%	Owner's Soft Costs				$ 52,261,425
	Opinion of Probable Project Cost			***$ 1,190.48***	***$ 297,620,227***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

SUMMARY

	CONSTRUCTION SYSTEM		COST PER SQUARE FOOT	TOTAL
A	**Substructure**		$ 9.01	$ 7,297,750
	Standard Foundations	$ 3,746,500		
	Special Foundations	$ 1,747,500		
	Slab on Grade	$ 1,803,750		
B	**Shell**		$ 134.91	$ 109,280,710
	Superstructure	$ 78,587,070		
	Exterior Closure	$ 28,363,140		
	Roofing	$ 2,330,500		
C	**Interiors**		$ 73.80	$ 59,778,000
	Interior Construction	$ 14,013,000		
	Stairs	$ 1,050,000		
	Interior Finishes	$ 44,715,000		
D	**Services**		$ 212.15	$ 171,839,700
	Conveying	$ 9,480,000		
	Baggage Handling System	$ -		
	Plumbing	$ 11,745,000		
	HVAC	$ 68,526,000		
	Fire Protection	$ 7,492,500		
	Electrical	$ 48,336,000		
	Communications	$ 16,556,400		
	Electronic Safety & Security	$ 9,703,800		
E	**Equipment & Furnishings**		$ 3.25	$ 2,632,500
	Equipment	$ 1,822,500		
	Passenger Boarding Bridges	$ -		
	Furnishings	$ 810,000		
F	**Special Construction & Demolition**		$ 35.02	$ 28,370,000
	Special Construction	$ 28,370,000		
	Selective Building Demolition	$ -		
	Hazardous Material Abatement	$ -		
G	**Building Sitework**		$ -	$ -
	Subtotal		***$ 468.15***	***$ 379,198,660***
25.0%	Estimating Design Evolution			$ 94,799,665
	Subtotal - Cost of Work		***$ 585.18***	***$ 473,998,325***
	General Contractors Markups			
5.0%	Project Logistics / Phasing & Labor Factor			$ 23,699,916

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT		TOTAL
5.0%	General Requirements & Temporary Construction		$	24,884,912
8.0%	General Conditions		$	41,806,652
5.0%	General Contractors Overhead & Profit		$	28,219,490
2.0%	Insurance		$	11,852,186
1.0%	Payment & Performance Bonds		$	6,044,615
0.0%	Sustainability Requirements		$	-
	Subtotal	***$ 753.71***	***$***	***610,506,097***
0.0%	Escalation		$	-
	Opinion of Probable Construction Cost	***$ 753.71***	***$***	***610,506,097***
21.3%	Owner's Soft Costs		$	130,037,799
	Opinion of Probable Project Cost	***$ 914.25***	***$***	***740,543,895***

Project Title	Landside Masterplan Update				
Location	Saint Paul International Airport				
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate				
Client Name					
Client Project No.		**Revision**	2		
Original Date	7-Apr-2023	**Revision Date**	25-Apr-2023		
Assumed Bid Opening Date		**Connico PN**	4977.23.03		
Project Lead	CJN / CJC	**Checked by**	IDK		

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
AREA ANALYSIS				
FIS And Offices & Kyway To Concourse C & G				
Level 01 - Baggage Claim	135,000	sf		
Airport Support			33,750 sf	
Airline Support			33,750 sf	
Bagged Claim Area			61,500 sf	
Restrooms - Public			6,000 sf	
Level 02 - Ticketing	135,000	sf		
Ticketing Area			67,500 sf	
Circulation			61,500 sf	
Restrooms - Public			6,000 sf	
Level 03 - FIS	135,000	sf		
Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.			135,000 sf	
Level 04 - Offices	135,000	sf		
Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.			135,000 sf	
Level 05 - Offices	135,000	sf		
Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.			135,000 sf	
Level 06 - Offices	135,000	sf		
Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.			135,000 sf	
Total Area	**810,000**	**sf**	**810,000 sf**	

A SUBSTRUCTURE

A10 Foundations

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
A1010 Standard Foundations				
A1011 Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	135,000	sf	$ 26.00	$ 3,510,000
A1012 Extra for Rock Excavation				Not Required
A1013 Perimeter Drainage	1,860	lf	$ 25.00	$ 46,500
A1014 Dewatering	1	ls	$ 40,000.00	$ 40,000

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

			DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 150,000.00	$ 150,000
	A1030		Special Foundations				
		A1031	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	135,000	sf	$ 12.50	$ 1,687,500
		A1032	Dewatering	1	ls	$ 60,000.00	$ 60,000
	A1050		Slab on Grade				
		A1051	Slab on Grade	135,000	sf	$ 10.00	$ 1,350,000
		A1052	Elevator Pits	6	ea	$ 15,000.00	$ 90,000
		A1053	Misc. Trenches, Pits & Bases	125	cy	$ 750.00	$ 93,750
		A1054	Under-slab Drainage & Insulation	135,000	sf	$ 2.00	$ 270,000
			Subtotal - Substructure				***$ 7,297,750***
B	***SHELL***						
B10	**Superstructure**						
	B1010		Floor Construction				
		B1011	Steel Floor Structure	7,290	tns	$ 6,500.00	$ 47,385,000
		B1012	Steel Floor Deck	810,000	sf	$ 7.50	$ 6,075,000
		B1013	Concrete Fill to Steel Floor Deck	810,000	sf	$ 7.75	$ 6,277,500
		B1014	Supplemental Framing at Exterior Closure	193	tns	$ 7,000.00	$ 1,347,570
		B1015	Miscellaneous Steel (5%)	365	tns	$ 7,000.00	$ 2,551,500
		B1016	Elevated Floor Slab Fireproofing	810,000	sf	$ 7.00	$ 5,670,000
		B1017	Expansion Joint at Existing Structure	100	lf	$ 150.00	$ 15,000
		B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$ 25,000.00	$ 25,000
	B1030		Roof Construction				
		B1031	Steel Roof Structure	1,080	tns	$ 6,500.00	$ 7,020,000
		B1032	Steel Roof Deck	135,000	sf	$ 6.50	$ 877,500
		B1033	Miscellaneous Steel (5%)	54	tns	$ 7,000.00	$ 378,000
		B1034	Roof Fireproofing	135,000	sf	$ 7.00	$ 945,000
		B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$ 20,000.00	$ 20,000
B20	**Exterior Closure**						
	B2010		Exterior Walls				
		B2011	CMU Walls, incl. Back-up System	25,670	sf	$ 40.00	$ 1,026,800
		B2012	Precast Concrete, incl. Back-up System	64,170	sf	$ 45.00	$ 2,887,650
		B2013	Metal Wall Panel, incl. Back-up System	38,500	sf	$ 65.00	$ 2,502,500
		B2014	Edge Detail at Roof	0	lf	$ 75.00	$ -

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

			DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		B2015	Caulking & Sealant to Exteriors	256,680	sf	$ 1.75	$ 449,190
		B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$ 40,000.00	$ 40,000
	B2030	Exterior Windows					
		B2031	Curtain Wall System	128,340	sf	$ 165.00	$ 21,176,100
	B2050	Exterior Doors					
		B2051	Exterior Doors - Allowance	1	alw	$ 280,900.00	$ 280,900
	B2070	Exterior Soffits					
		B2071	Exterior Soffits				Not Required
B30	Roofing						
	B3010	Roof Coverings					
		B3011	SBS Modified Bitumen Roof Assembly	135,000	sf	$ 16.50	$ 2,227,500
		B3012	Parapet Detail	1,860	lf	$ 50.00	$ 93,000
		B3013	Add Allowance for Junction to Existing Roof	1	alw	$ 10,000.00	$ 10,000
	B3030	Roof Openings					
		B3031	Skylight				Not Required
		B3032	Roof Hatch				Not Required
			Subtotal - Shell				***$ 109,280,710***
C	***INTERIORS***						
C10	**Interior Construction**						
	C1010	Partitions					
		C1011	Interior Partitions	810,000	sf	$ 5.00	$ 4,050,000
		C1012	Rough Carpentry & Blocking	810,000	sf	$ 1.50	$ 1,215,000
		C1013	Caulking, Sealants & Firestopping	810,000	sf	$ 1.75	$ 1,417,500
		C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	810,000	sf	$ 1.25	$ 1,012,500
	C1030	Interior Doors					
		C1031	Interior Doors - Allowance	810,000	sf	$ 2.00	$ 1,620,000
	C1050	Specialties					
		C1051	Fire Extinguishers & Cabinets	810,000	sf	$ 0.05	$ 40,500
		C1052	Code Signage	810,000	sf	$ 0.25	$ 202,500

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	C1053	Interior Wayfinding Signage	810,000	sf	$ 3.50	$ 2,835,000
	C1054	Miscellaneous Specialties	810,000	sf	$ 2.00	$ 1,620,000
C20	**Stairs**					
C2010	Stair Construction					
	C2011	Stair - Six Stair Shafts	42	flts	$ 25,000.00	$ 1,050,000
C30	**Interior Finishes**					
C3010	Interior Finishes					
	C3011	*Level 01 - Baggage Claim*				
	C3012	Airport Support	33,750	sf	$ 35.00	$ 1,181,250
	C3013	Airline Support	33,750	sf	$ 35.00	$ 1,181,250
	C3014	Bagged Claim Area	61,500	sf	$ 55.00	$ 3,382,500
	C3015	Restrooms - Public	6,000	sf	$ 135.00	$ 810,000
	C3016	*Level 02 - Ticketing*				
	C3017	Ticketing Area	67,500	sf	$ 75.00	$ 5,062,500
	C3018	Circulation	61,500	sf	$ 75.00	$ 4,612,500
	C3019	Restrooms - Public	6,000	sf	$ 135.00	$ 810,000
	C3020	*Level 03 - FIS*				
	C3021	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 55.00	$ 7,425,000
	C3022	*Level 04 - Offices*				
	C3023	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 50.00	$ 6,750,000
	C3024	*Level 05 - Offices*				
	C3025	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 50.00	$ 6,750,000
	C3026	*Level 06 - Offices*				
	C3027	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 50.00	$ 6,750,000
		Subtotal - Interiors				***$ 59,778,000***
D	***SERVICES***					
D10	**Conveying System**					
D1010	Elevators & Lifts					
	D1011	Hydraulic Passenger Elevator	42	stps	$ 65,000.00	$ 2,730,000
D1020	Escalators & Moving Walks					
	D1021	Escalator				Not Required
	D1022	Moving Walks				Not Required
D1030	Baggage Handling Equipment					
	D1031	Baggage Handling Equipment Allowance	135,000	sf	$ 50.00	$ 6,750,000

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
D20	**Plumbing**					
D2010	Plumbing Systems					
	D2011	Level 01 - Baggage Claim	135,000	sf	$ 9.50	$ 1,282,500
	D2012	Level 02 - Ticketing	135,000	sf	$ 15.50	$ 2,092,500
	D2013	Level 03 - FIS	135,000	sf	$ 15.50	$ 2,092,500
	D2014	Level 04 - Offices	135,000	sf	$ 15.50	$ 2,092,500
	D2015	Level 05 - Offices	135,000	sf	$ 15.50	$ 2,092,500
	D2016	Level 06 - Offices	135,000	sf	$ 15.50	$ 2,092,500
D30	**HVAC**					
D3010	HVAC Systems					
	D3011	Level 01 - Baggage Claim	135,000	sf	$ 74.00	$ 9,990,000
	D3012	Level 02 - Ticketing	135,000	sf	$ 74.00	$ 9,990,000
	D3013	Level 03 - FIS	135,000	sf	$ 74.00	$ 9,990,000
	D3014	Level 04 - Offices	135,000	sf	$ 74.00	$ 9,990,000
	D3015	Level 05 - Offices	135,000	sf	$ 74.00	$ 9,990,000
	D3016	Level 06 - Offices	135,000	sf	$ 74.00	$ 9,990,000
D3050	Controls and Instrumentation					
	D3051	FIS And Offices & Kyway To Concourse C & G	810,000	sf	$ 8.50	$ 6,885,000
D3060	Systems Testing & Balancing					
	D3061	FIS And Offices & Kyway To Concourse C & G	810,000	sf	$ 2.10	$ 1,701,000
D40	**Fire Protection**					
D4010	Sprinkler Systems					
	D4011	Level 01 - Baggage Claim	135,000	sf	$ 9.25	$ 1,248,750
	D4012	Level 02 - Ticketing	135,000	sf	$ 9.25	$ 1,248,750
	D4013	Level 03 - FIS	135,000	sf	$ 9.25	$ 1,248,750
	D4014	Level 04 - Offices	135,000	sf	$ 9.25	$ 1,248,750
	D4015	Level 05 - Offices	135,000	sf	$ 9.25	$ 1,248,750
	D4016	Level 06 - Offices	135,000	sf	$ 9.25	$ 1,248,750
D50	**Electrical**					
D5010	Electrical Systems					
	D5011	Distribution Equipment	810,000	sf	$ 6.00	$ 4,860,000
	D5012	Feeders	810,000	sf	$ 8.75	$ 7,087,500
	D5013	Grounding and Lightning Protection	810,000	sf	$ 3.00	$ 2,430,000
	D5014	*Level 01 - Baggage Claim*				
	D5015	Airport Support	33,750	sf	$ 25.00	$ 843,750
	D5016	Airline Support	33,750	sf	$ 25.00	$ 843,750
	D5017	Bagged Claim Area	61,500	sf	$ 37.00	$ 2,275,500
	D5018	Restrooms - Public	6,000	sf	$ 60.00	$ 360,000
	D5019	*Level 02 - Ticketing*				
	D5020	Ticketing Area	67,500	sf	$ 40.00	$ 2,700,000

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	D5021	Circulation	61,500	sf	$ 37.00	$ 2,275,500
	D5022	Restrooms - Public	6,000	sf	$ 60.00	$ 360,000
	D5023	*Level 03 - FIS*				
	D5024	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 45.00	$ 6,075,000
	D5025	*Level 04 - Offices*				
	D5026	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 45.00	$ 6,075,000
	D5027	*Level 05 - Offices*				
	D5028	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 45.00	$ 6,075,000
	D5029	*Level 06 - Offices*				
	D5030	Offices / Board Rooms / Corridors / Rest Rooms / Storage / Kitchen Etc.	135,000	sf	$ 45.00	$ 6,075,000
D6010		Communications				
	D6011	Telecom Room Buildout	810,000	sf	$ 4.15	$ 3,361,500
	D6012	Backbone Cabling	810,000	sf	$ 2.50	$ 2,025,000
	D6013	Communications	810,000	sf	$ 3.35	$ 2,713,500
	D6014	EVIDS Cabling and Installation	810,000	sf	$ 1.55	$ 1,255,500
	D6015	Public Address System	810,000	sf	$ 2.64	$ 2,138,400
	D6016	DAS	810,000	sf	$ 6.25	$ 5,062,500
D7010		Electronic Safety & Security				
	D7011	Video Surveillance System	810,000	sf	$ 2.90	$ 2,349,000
	D7012	Security Access Control	810,000	sf	$ 4.08	$ 3,304,800
	D7013	Fire Alarm	810,000	sf	$ 5.00	$ 4,050,000
		Subtotal - Services				***$ 171,839,700***

E EQUIPMENT & FURNISHINGS

E10 Equipment

E1010		Equipment				
	E1011	Concessions Equipment - Not in Scope				Excluded
	E1012	Security Equipment - Not in Scope				Excluded
	E1013	FIS Equipment - Not in Scope				Excluded
	E1014	Signage	810,000	sf	$ 1.50	$ 1,215,000
	E1015	Misc. Equipment Allowance	810,000	sf	$ 0.75	$ 607,500

E20 Furnishings

E2010		Fixed Furnishings				
	E2011	Misc. Casework Allowance	810,000	sf	$ 1.00	$ 810,000
		Subtotal - Equipment & Furnishings				***$ 2,632,500***

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
F		***SPECIAL CONSTRUCTION & DEMOLITION***				
F10		**Special Construction**				
F1010		Special Construction				
	F1011	Construct Skyway From G Concourse to New FIS	7,000	sf	$ 725.00	$ 5,075,000
	F1012	Construct Skyway From C Concourse to New FIS	11,000	sf	$ 725.00	$ 7,975,000
	F1013	Sterile Corridor - Concourse C	440	lf	$ 6,500.00	$ 2,860,000
	F1014	Sterile Corridor - Concourse G	440	lf	$ 6,500.00	$ 2,860,000
	F1015	Vertical Circulation South of Concourse G (Two Stories)	6,000	sf	$ 800.00	$ 4,800,000
	F1016	Vertical Circulation North of Concourse C (Two Stories)	6,000	sf	$ 800.00	$ 4,800,000
F20		**Selective Building Demolition**				
F2010		Building Elements Demolition				
	F2011	Building Elements Demolition				Not Required
F30		**Hazardous Material Abatement**				
F3010		Hazardous Material Abatement				
	F3011	Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 28,370,000***
G		***BUILDING SITEWORK***				Excluded
		Subtotal - Building Sitework				***$ -***
		Subtotal			***$ 468.15***	***$ 379,198,660***
25.0%		Estimating Design Evolution				$ 94,799,665
		Subtotal - Cost of Work			***$ 585.18***	***$ 473,998,325***
		General Contractors Markups				
5.0%		Project Logistics / Phasing & Labor Factor				$ 23,699,916
5.0%		General Requirements & Temporary Construction				$ 24,884,912
8.0%		General Conditions				$ 41,806,652
5.0%		General Contractors Overhead & Profit				$ 28,219,490
2.0%		Insurance				$ 11,852,186
1.0%		Payment & Performance Bonds				$ 6,044,615
0.0%		Sustainability Requirements				$ -

2-10 FIS AND OFFICES & KYWAY TO CONCOURSE C & G

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	Subtotal			***$ 753.71***	***$ 610,506,097***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 753.71***	***$ 610,506,097***
21.3%	Owner's Soft Costs				$ 130,037,799
	Opinion of Probable Project Cost			***$ 914.25***	***$ 740,543,895***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-1 - NEW T2 NORTH EXPANSION

SUMMARY

	CONSTRUCTION SYSTEM			COST PER SQUARE FOOT	TOTAL
A	**Substructure**			$ 24.86	$ 6,797,388
	Standard Foundations	$	2,906,500		
	Special Foundations	$	2,012,207		
	Slab on Grade	$	1,878,681		
B	**Shell**			$ 135.46	$ 37,034,933
	Superstructure	$	24,589,048		
	Exterior Closure	$	10,040,835		
	Roofing	$	2,405,050		
C	**Interiors**			$ 80.44	$ 21,991,890
	Interior Construction	$	4,658,890		
	Stairs	$	225,000		
	Interior Finishes	$	17,108,000		
D	**Services**			$ 197.00	$ 53,858,913
	Conveying	$	650,000		
	Baggage Handling System	$	-		
	Plumbing	$	3,378,550		
	HVAC	$	22,782,780		
	Fire Protection	$	2,491,025		
	Electrical	$	14,954,750		
	Communications	$	6,326,476		
	Electronic Safety & Security	$	3,275,332		
E	**Equipment & Furnishings**			$ 42.27	$ 11,557,250
	Equipment	$	410,100		
	Passenger Boarding Bridges	$	9,000,000		
	Furnishings	$	2,147,150		
F	**Special Construction & Demolition**			$ 33.05	$ 9,036,250
	Special Construction	$	8,887,500		
	Selective Building Demolition	$	148,750		
	Hazardous Material Abatement	$	-		
G	**Building Sitework**			$ 107.85	$ 29,487,528
	Site Mobilization	$	4,934,700		
	Site Preparation	$	6,192,850		
	Site Improvements	$	18,184,978		
	Site Mechanical Utilities	$	125,000		
	Site Electrical Utilities	$	50,000		
	Subtotal			***$ 620.94***	***$ 169,764,151***
25.0%	Estimating Design Evolution				$ 42,441,038

3-1 - NEW T2 NORTH EXPANSION

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 776.17***	***$ 212,205,189***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 10,610,259
5.0%	General Requirements & Temporary Construction		$ 11,140,772
8.0%	General Conditions		$ 18,716,498
5.0%	General Contractors Overhead & Profit		$ 12,633,636
2.0%	Insurance		$ 5,306,127
1.0%	Payment & Performance Bonds		$ 2,706,125
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 999.70***	***$ 273,318,607***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 999.70***	***$ 273,318,607***
21.3%	Owner's Soft Costs		$ 58,216,863
	Opinion of Probable Project Cost	***$ 1,212.64***	***$ 331,535,470***

Project Title	Landside Masterplan Update				
Location	Saint Paul International Airport				
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate				
Client Name					
Client Project No.		**Revision**	2		
Original Date	7-Apr-2023	**Revision Date**	25-Apr-2023		
Assumed Bid Opening Date		**Connico PN**	4977.23.03		
Project Lead	CJN / CJC	**Checked by**	IDK		

3-1 - NEW T2 NORTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		AREA ANALYSIS				
3-1 - New T2 North Expansion						
	Apron Level 01		136,700	sf		
		Airport Support			62,000 sf	
		Airline Support			61,000 sf	
		Mechanical			5,500 sf	
		Vertical Circulation			1,400 sf	
		Storage			2,700 sf	
		Tug Lanes			4,100 sf	
	Departure Level 02		136,700	sf		
		Concessions (Shell Space)			2,400 sf	
		Hold rooms			68,000 sf	
		Vertical Circulation			1,500 sf	
		Circulation			60,000 sf	
		Restrooms - Public			4,800 sf	
		Total Area	**273,400**	**sf**	**273,400 sf**	

A SUBSTRUCTURE

A10 Foundations

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
A1010	Standard Foundations					
	A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	136,700	sf	$ 20.00	$ 2,734,000
	A1012	Extra for Rock Excavation				Not Required
	A1013	Perimeter Drainage	2,900	lf	$ 25.00	$ 72,500
	A1014	Dewatering	1	ls	$ 40,000.00	$ 40,000
	A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 60,000.00	$ 60,000
A1030	Special Foundations					
	A1031	PBB Foundation	9	ea	$ 60,000.00	$ 540,000
	A1032	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	136,700	sf	$ 10.40	$ 1,422,207
	A1033	Dewatering	1	ls	$ 50,000.00	$ 50,000

3-1 - NEW T2 NORTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
A1050		Slab on Grade				
	A1051	Slab on Grade	136,700	sf	$ 10.50	$ 1,435,350
	A1052	Elevator Pits	5	ea	$ 15,000.00	$ 75,000
	A1053	Misc. Trenches, Pits & Bases	127	cy	$ 750.00	$ 94,931
	A1054	Under-slab Drainage & Insulation	136,700	sf	$ 2.00	$ 273,400
		Subtotal - Substructure				***$ 6,797,388***
B	***SHELL***					
B10	**Superstructure**					
B1010		Floor Construction				
	B1011	Steel Floor Structure	1,572	tns	$ 6,500.00	$ 10,218,325
	B1012	Steel Floor Deck	136,700	sf	$ 7.50	$ 1,025,250
	B1013	Concrete Fill to Steel Floor Deck	136,700	sf	$ 7.75	$ 1,059,425
	B1014	Supplemental Framing at Exterior Closure	63	tns	$ 7,000.00	$ 439,425
	B1015	Miscellaneous Steel (5%)	79	tns	$ 7,000.00	$ 550,218
	B1016	Elevated Floor Slab Fireproofing	136,700	sf	$ 7.00	$ 956,900
	B1017	Expansion Joint at Existing Structure	110	lf	$ 150.00	$ 16,500
	B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$ 28,000.00	$ 28,000
B1030		Roof Construction				
	B1031	Steel Roof Structure	1,230	tns	$ 6,500.00	$ 7,996,950
	B1032	Steel Roof Deck	136,700	sf	$ 6.50	$ 888,550
	B1033	Miscellaneous Steel (5%)	62	tns	$ 7,000.00	$ 430,605
	B1034	Roof Fireproofing	136,700	sf	$ 7.00	$ 956,900
	B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$ 22,000.00	$ 22,000
B20	**Exterior Closure**					
B2010		Exterior Walls				
	B2011	CMU Walls, incl. Back-up System	47,990	sf	$ 40.00	$ 1,919,600
	B2012	Precast Concrete, incl. Back-up System	5,580	sf	$ 45.00	$ 251,100
	B2013	Metal Wall Panel, incl. Back-up System	5,580	sf	$ 65.00	$ 362,700
	B2014	Edge Detail at Roof	2,790	lf	$ 75.00	$ 209,250
	B2015	Caulking & Sealant to Exteriors	106,020	sf	$ 1.75	$ 185,535
	B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$ 50,000.00	$ 50,000
B2030		Exterior Windows				
	B2031	Curtain Wall System	41,850	sf	$ 165.00	$ 6,905,250

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
B2050	Exterior Doors					
	B2051	Exterior Doors - Allowance	1	alw	$ 98,900.00	$ 98,900
	B2052	PBB Exit Doors	9	ea	$ 3,500.00	$ 31,500
	B2052	Exit Doors - Apron Paving Access	9	ea	$ 2,500.00	$ 22,500
	B2053	Extra for Access Control	9	lvs	$ 500.00	$ 4,500
B2070	Exterior Soffits					
	B2071	Exterior Soffits				Not Required
B30	**Roofing**					
B3010	Roof Coverings					
	B3011	SBS Modified Bitumen Roof Assembly	136,700	sf	$ 16.50	$ 2,255,550
	B3012	Parapet Detail	2,790	lf	$ 50.00	$ 139,500
	B3013	Add Allowance for Junction to Existing Roof	1	alw	$ 10,000.00	$ 10,000
B3030	Roof Openings					
	B3031	Skylight				Not Required
	B3032	Roof Hatch				Not Required
		Subtotal - Shell				***$ 37,034,933***
C	***INTERIORS***					
C10	**Interior Construction**					
C1010	Partitions					
	C1011	Interior Partitions	269,300	sf	$ 5.00	$ 1,346,500
	C1012	Rough Carpentry & Blocking	269,300	sf	$ 1.50	$ 403,950
	C1013	Caulking, Sealants & Firestopping	269,300	sf	$ 1.75	$ 471,275
	C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	269,300	sf	$ 1.25	$ 336,625
C1030	Interior Doors					
	C1031	Interior Doors - Allowance	269,300	sf	$ 2.00	$ 538,600
C1050	Specialties					
	C1051	Fire Extinguishers & Cabinets	269,300	sf	$ 0.05	$ 13,465
	C1052	Code Signage	269,300	sf	$ 0.25	$ 67,325
	C1053	Interior Wayfinding Signage	269,300	sf	$ 3.50	$ 942,550
	C1054	Miscellaneous Specialties	269,300	sf	$ 2.00	$ 538,600
C20	**Stairs**					
C2010	Stair Construction					

3-1 - NEW T2 NORTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	C2011	Stair - Exit - PBB	9	flts	$ 25,000.00	$ 225,000
C30		**Interior Finishes**				
C3010		Interior Finishes				
	C3011	*Apron Level 01*				
	C3012	Airport Support	62,000	sf	$ 45.00	$ 2,790,000
	C3013	Airline Support	61,000	sf	$ 45.00	$ 2,745,000
	C3014	Mechanical	5,500	sf	$ 35.00	$ 192,500
	C3015	Vertical Circulation	1,400	sf	$ 55.00	$ 77,000
	C3016	Storage	2,700	sf	$ 25.00	$ 67,500
	C3017	Tug Lanes	4,100	sf	$ 10.00	$ 41,000
	C3018	*Departure Level 02*				
	C3019	Concessions (Shell Space)	2,400	sf	$ 25.00	$ 60,000
	C3020	Hold rooms	68,000	sf	$ 75.00	$ 5,100,000
	C3021	Vertical Circulation	1,500	sf	$ 55.00	$ 82,500
	C3022	Circulation	60,000	sf	$ 85.00	$ 5,100,000
	C3023	Restrooms - Public	4,800	sf	$ 165.00	$ 792,000
	C3024	Allowance for Renovation to Existing Concourse for New Expansion Connection	1,100	sf	$ 55.00	$ 60,500
		Subtotal - Interiors				***$ 21,991,890***
D		***SERVICES***				
D10		**Conveying System**				
D1010		Elevators & Lifts				
	D1011	Hydraulic Passenger Elevator	10	stps	$ 65,000.00	$ 650,000
D1020		Escalators & Moving Walks				
	D1021	Escalator				Not Required
	D1022	Moving Walks				Not Required
D1030		Baggage Handling Equipment				
	D1031	Baggage Handling Equipment Allowance				Excluded
D20		**Plumbing**				
D2010		Plumbing Systems				
	D2011	Apron Level 01	132,600	sf	$ 9.50	$ 1,259,700
	D2012	Departure Level 02	136,700	sf	$ 15.50	$ 2,118,850
D30		**HVAC**				
D3010		HVAC Systems				
	D3011	Apron Level 01	132,600	sf	$ 74.00	$ 9,812,400
	D3012	Departure Level 02	136,700	sf	$ 74.00	$ 10,115,800

3-1 - NEW T2 NORTH EXPANSION

DETAIL

DESCRIPTION			QUANTITY	UNIT	UNIT COST	TOTAL
	D3050	Controls and Instrumentation				
	D3051	3-1 - New T2 North Expansion	269,300	sf	$ 8.50	$ 2,289,050
	D3060	Systems Testing & Balancing				
	D3061	3-1 - New T2 North Expansion	269,300	sf	$ 2.10	$ 565,530
D40	**Fire Protection**					
	D4010	Sprinkler Systems				
	D4011	Apron Level 01	132,600	sf	$ 9.25	$ 1,226,550
	D4012	Departure Level 02	136,700	sf	$ 9.25	$ 1,264,475
D50	**Electrical**					
	D5010	Electrical Systems				
	D5011	Distribution Equipment	273,400	sf	$ 6.00	$ 1,640,400
	D5012	Feeders	273,400	sf	$ 8.75	$ 2,392,250
	D5013	Grounding and Lightning Protection	273,400	sf	$ 3.00	$ 820,200
	D5014	Jetway/GPU/PCA Feeders	9	ea	$ 65,000.00	$ 585,000
	D5015	Roof Mounted Apron Light	9	ea	$ 30,000.00	$ 270,000
	D5016	*Departure Level 02*				
	D5017	Airport Support	62,000	sf	$ 25.00	$ 1,550,000
	D5018	Airline Support	61,000	sf	$ 25.00	$ 1,525,000
	D5019	Mechanical	5,500	sf	$ 18.00	$ 99,000
	D5020	Vertical Circulation	1,400	sf	$ 37.00	$ 51,800
	D5021	Storage	2,700	sf	$ 18.00	$ 48,600
	D5022	Tug Lanes	4,100	sf	$ 10.00	$ 41,000
	D5023	*Departure Level 02*				
	D5024	Concessions (Shell Space)	2,400	sf	$ 15.00	$ 36,000
	D5025	Hold rooms	68,000	sf	$ 49.00	$ 3,332,000
	D5026	Vertical Circulation	1,500	sf	$ 37.00	$ 55,500
	D5027	Circulation	60,000	sf	$ 37.00	$ 2,220,000
	D5028	Restrooms - Public	4,800	sf	$ 60.00	$ 288,000
	D6010	Communications				
	D6011	Telecomm Room Buildout	273,400	sf	$ 4.15	$ 1,134,610
	D6012	Backbone Cabling	273,400	sf	$ 2.50	$ 683,500
	D6013	Communications	273,400	sf	$ 3.35	$ 915,890
	D6014	EVIDS Cabling and Installation	273,400	sf	$ 1.55	$ 423,770
	D6015	Public Address System	273,400	sf	$ 2.64	$ 721,776
	D6016	DAS	273,400	sf	$ 6.25	$ 1,708,750
	D6017	Common Use System	273,400	sf	$ 2.70	$ 738,180
	D7010	Electronic Safety & Security				
	D7011	Video Surveillance System	273,400	sf	$ 2.90	$ 792,860
	D7012	Security Access Control	273,400	sf	$ 4.08	$ 1,115,472
	D7013	Fire Alarm	273,400	sf	$ 5.00	$ 1,367,000

3-1 - NEW T2 NORTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		Subtotal - Services				***$ 53,858,913***
E	***EQUIPMENT & FURNISHINGS***					
E10	**Equipment**					
E1010	Equipment					
	E1011	Concessions Equipment - Not in Scope				Excluded
	E1012	Security Equipment - Not in Scope				Excluded
	E1013	FIS Equipment - Not in Scope				Excluded
	E1014	FIDS, BIDS, MUFIDS	136,700	sf	$ 2.00	$ 273,400
	E1015	Dynamic Signage				Excluded
	E1016	Misc. Equipment Allowance	273,400	sf	$ 0.50	$ 136,700
E1030	Passenger Boarding Bridges					
	E1031	New Passenger Boarding Bridge	9	ea	$1,000,000.00	$ 9,000,000
E20	**Furnishings**					
E2010	Fixed Furnishings					
	E2011	Gate Podiums & Backscreens	9	ea	$ 35,000.00	$ 315,000
	E2012	Recharge Stations				w/Electrical
	E2013	Holdroom Seating	1,125	ea	$ 1,000.00	$ 1,125,000
	E2014	Holdroom Seating Table	563	ea	$ 700.00	$ 393,750
	E2015	Misc. Seating	1	alw	$ 40,000.00	$ 40,000
	E2016	Kiosks				Excluded
	E2017	Window Shades				Excluded
	E2018	Misc. Casework Allowance	273,400	sf	$ 1.00	$ 273,400
		Subtotal - Equipment & Furnishings				***$ 11,557,250***
F	***SPECIAL CONSTRUCTION & DEMOLITION***					
F10	**Special Construction**					
F1010	Special Construction					
	F1011	Elevated Bridge Structure (Enclosed & Airconditioned)	19,750	sf	$ 450.00	$ 8,887,500
F20	**Selective Building Demolition**					
F2010	Building Elements Demolition					
	F2011	Demolish Exterior Closure at Existing Building	3,850	sf	$ 35.00	$ 134,750
	F2012	Misc. Demolition	1	alw	$ 14,000.00	$ 14,000
F30	**Hazardous Material Abatement**					

3-1 - NEW T2 NORTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
F3010		Hazardous Material Abatement				
	F3011	Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 9,036,250***
G		***BUILDING SITEWORK***				
G00		**Site Mobilization**				
G0010		Site Mobilization				
	G0011	Mobilization				Incl. In M/UPS
	G0012	Safety and Security (3%)	1	ls	$ 858,900.00	$ 858,900
	G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$1,620,500.00	$ 1,620,500
	G0014	Drainage and Utility Allowance	1	alw	$2,455,300.00	$ 2,455,300
G10		**Site Preparation**				
G1010		Site Demolition				
	G1011	Demolish Existing Apron Paving	40,890	sy	$ 40.00	$ 1,635,600
	G1012	Demolish Existing Asphalt Paving	27,070	sy	$ 25.00	$ 676,750
	G1013	Demolish Existing FBO Campus	248,700	sf	$ 15.00	$ 3,730,500
	G1014	Allowance for Misc. Site Demolition	1	alw	$ 150,000.00	$ 150,000
	G1015	Demolish / Remove Existing QTA				Excluded
G20		**Site Improvements**				
G2010		Pavement / Roadways etc.				
	G2011	*Apron Paving*				
	G2012	Excavation	22,500	cy	$ 18.00	$ 405,000
	G2013	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	45,000	sy	$ 275.00	$ 12,375,000
	G2014	Pavement Markings - Service Road and Striping	20,250	sf	$ 2.50	$ 50,625
	G2015	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required
	G2016	*Surface Parking*				
	G2017	Grading	5,560	sy	$ 18.00	$ 100,080
	G2018	Asphalt on Grade Parking and Roads	11,120	sy	$ 115.00	$ 1,278,800
	G2019	Pavement Markings - Service Road and Striping	5,000	sf	$ 1.25	$ 6,250
	G2020	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required
	G2021	*Fuel Systems*				
	G2022	Sawcut Existing Apron Paving for New Fuel Lines	1,760	lf	$ 8.00	$ 14,080
	G2023	Demo Existing Apron Paving	391	sy	$ 35.00	$ 13,689

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	G2024	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	391	sy	$ 350.00	$ 136,889
	G2025	New Underground Fuel Vaults	5	ea	$ 250,000.00	$ 1,250,000
	G2026	Fuel Branch Lines: 12" dia Steel Pipe Epoxy Lining, ext Coated, Welded	2,545	lf	$ 656.00	$ 1,669,520
	G2027	Fuel Branch Lines: 8" dia Steel Pipe Epoxy Lining, ext Coated, Welded	225	lf	$ 612.00	$ 137,700
	G2028	Fuel Branch Lines: 6" dia Steel Pipe Epoxy Lining, ext Coated, Welded	135	lf	$ 590.00	$ 79,650
	G2029	Radiographic Testing of Pipe Welds	2,905	lf	$ 19.00	$ 55,195
	G2030	Fuel Valves	9	ea	$ 25,000.00	$ 225,000
	G2031	Branch Line Low & High Point Drain Pit	5	ea	$ 32,500.00	$ 162,500
	G2032	Hydrant Pits and Connectors	9	ea	$ 25,000.00	$ 225,000
G2050	Landscaping					
	G2051	Landscaping Allowance				Not Required
G2060	Miscellaneous Buildings and Structures					
	G2061	Miscellaneous Buildings and Structures				Not Required
G30	**Site Mechanical Utilities**					
G3010	Site Mechanical Utilities					
	G3011	Site Mechanical Utilities	1	alw	$ 125,000.00	$ 125,000
G40	**Site Electrical Utilities**					
G4010	Site Electrical Utilities					
	G4011	Site Electrical Utilities	1	alw	$ 25,000.00	$ 25,000
G4030	Site Lighting					
	G4031	Site Lighting	1	alw	$ 25,000.00	$ 25,000
		Subtotal - Building Sitework				***$ 29,487,528***
		Subtotal			***$ 620.94***	***$ 169,764,151***
25.0%		Estimating Design Evolution				$ 42,441,038
		Subtotal - Cost of Work			***$ 776.17***	***$ 212,205,189***
		General Contractors Markups				
5.0%		Project Logistics / Phasing & Labor Factor				$ 10,610,259

3-1 - NEW T2 NORTH EXPANSION

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
5.0%	General Requirements & Temporary Construction				$ 11,140,772
8.0%	General Conditions				$ 18,716,498
5.0%	General Contractors Overhead & Profit				$ 12,633,636
2.0%	Insurance				$ 5,306,127
1.0%	Payment & Performance Bonds				$ 2,706,125
0.0%	Sustainability Requirements				$ -
	Subtotal			***$ 999.70***	***$ 273,318,607***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 999.70***	***$ 273,318,607***
21.3%	Owner's Soft Costs				$ 58,216,863
	Opinion of Probable Project Cost			***$ 1,212.64***	***$ 331,535,470***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-2 - CONCOURSE G SOUTH EXPANSION

SUMMARY

	CONSTRUCTION SYSTEM		COST PER SQUARE FOOT	TOTAL
A	**Substructure**		$ 25.23	$ 5,268,549
	Standard Foundations	$ 2,337,600		
	Special Foundations	$ 1,545,649		
	Slab on Grade	$ 1,385,300		
B	**Shell**		$ 135.02	$ 28,192,115
	Superstructure	$ 18,789,605		
	Exterior Closure	$ 7,565,010		
	Roofing	$ 1,837,500		
C	**Interiors**		$ 80.66	$ 16,841,690
	Interior Construction	$ 3,603,690		
	Stairs	$ 175,000		
	Interior Finishes	$ 13,063,000		
D	**Services**		$ 198.50	$ 41,447,136
	Conveying	$ 520,000		
	Baggage Handling System	$ -		
	Plumbing	$ 2,610,000		
	HVAC	$ 17,664,480		
	Fire Protection	$ 1,931,400		
	Electrical	$ 11,388,200		
	Communications	$ 4,831,632		
	Electronic Safety & Security	$ 2,501,424		
E	**Equipment & Furnishings**		$ 43.05	$ 8,988,250
	Equipment	$ 313,200		
	Passenger Boarding Bridges	$ 7,000,000		
	Furnishings	$ 1,675,050		
F	**Special Construction & Demolition**		$ 67.94	$ 14,185,750
	Special Construction	$ 14,040,000		
	Selective Building Demolition	$ 145,750		
	Hazardous Material Abatement	$ -		
G	**Building Sitework**		$ 79.60	$ 16,620,153
	Site Mobilization	$ 2,781,400		
	Site Preparation	$ 1,250,000		
	Site Improvements	$ 12,413,753		
	Site Mechanical Utilities	$ 125,000		
	Site Electrical Utilities	$ 50,000		
	Subtotal		***$ 630.00***	***$ 131,543,643***
25.0%	Estimating Design Evolution			$ 32,885,911

3-2 - CONCOURSE G SOUTH EXPANSION

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 787.50***	***$ 164,429,553***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 8,221,478
5.0%	General Requirements & Temporary Construction		$ 8,632,552
8.0%	General Conditions		$ 14,502,687
5.0%	General Contractors Overhead & Profit		$ 9,789,313
2.0%	Insurance		$ 4,111,512
1.0%	Payment & Performance Bonds		$ 2,096,871
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 1,014.29***	***$ 211,783,965***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 1,014.29***	***$ 211,783,965***
21.3%	Owner's Soft Costs		$ 45,109,985
	Opinion of Probable Project Cost	***$ 1,230.34***	***$ 256,893,950***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	AREA ANALYSIS				
	3-2 - Concourse G South Expansion				
	Apron Level 01	104,400	sf		
	Airport Support			48,000 sf	
	Airline Support			48,000 sf	
	Mechanical			6,000 sf	
	Vertical Circulation			500 sf	
	Storage			1,000 sf	
	Tug Lanes			900 sf	
	Departure Level 02	104,400	sf		
	Concessions (Shell Space)			3,000 sf	
	Hold rooms			50,000 sf	
	Vertical Circulation			500 sf	
	Circulation			48,000 sf	
	Restrooms - Public			2,900 sf	
	Total Area	**208,800**	**sf**	**208,800 sf**	
A	***SUBSTRUCTURE***				
A10	**Foundations**				
A1010	Standard Foundations				
A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	104,400	sf	$ 21.00	$ 2,192,400
A1012	Extra for Rock Excavation				Not Required
A1013	Perimeter Drainage	2,208	lf	$ 25.00	$ 55,200
A1014	Dewatering	1	ls	$ 30,000.00	$ 30,000
A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 60,000.00	$ 60,000
A1030	Special Foundations				
A1031	PBB Foundation	7	ea	$ 60,000.00	$ 420,000
A1032	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	104,400	sf	$ 10.40	$ 1,085,649
A1033	Dewatering	1	ls	$ 40,000.00	$ 40,000

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST		TOTAL
A1050	Slab on Grade						
	A1051	Slab on Grade	104,400	sf	$	10.00	$ 1,044,000
	A1052	Elevator Pits	4	ea	$	15,000.00	$ 60,000
	A1053	Misc. Trenches, Pits & Bases	97	cy	$	750.00	$ 72,500
	A1054	Under-slab Drainage & Insulation	104,400	sf	$	2.00	$ 208,800
		Subtotal - Substructure					***$ 5,268,549***
B	***SHELL***						
B10	**Superstructure**						
B1010	Floor Construction						
	B1011	Steel Floor Structure	1,201	tns	$	6,500.00	$ 7,803,900
	B1012	Steel Floor Deck	104,400	sf	$	7.50	$ 783,000
	B1013	Concrete Fill to Steel Floor Deck	104,400	sf	$	7.75	$ 809,100
	B1014	Supplemental Framing at Exterior Closure	47	tns	$	7,000.00	$ 330,435
	B1015	Miscellaneous Steel (5%)	60	tns	$	7,000.00	$ 420,210
	B1016	Elevated Floor Slab Fireproofing	104,400	sf	$	7.00	$ 730,800
	B1017	Expansion Joint at Existing Structure	110	lf	$	150.00	$ 16,500
	B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$	28,000.00	$ 28,000
B1030	Roof Construction						
	B1031	Steel Roof Structure	940	tns	$	6,500.00	$ 6,107,400
	B1032	Steel Roof Deck	104,400	sf	$	6.50	$ 678,600
	B1033	Miscellaneous Steel (5%)	47	tns	$	7,000.00	$ 328,860
	B1034	Roof Fireproofing	104,400	sf	$	7.00	$ 730,800
	B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$	22,000.00	$ 22,000
B20	**Exterior Closure**						
B2010	Exterior Walls						
	B2011	CMU Walls, incl. Back-up System	36,090	sf	$	40.00	$ 1,443,600
	B2012	Precast Concrete, incl. Back-up System	4,200	sf	$	45.00	$ 189,000
	B2013	Metal Wall Panel, incl. Back-up System	4,200	sf	$	65.00	$ 273,000
	B2014	Edge Detail at Roof	2,098	lf	$	75.00	$ 157,350
	B2015	Caulking & Sealant to Exteriors	79,720	sf	$	1.75	$ 139,510
	B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$	50,000.00	$ 50,000
B2030	Exterior Windows						
	B2031	Curtain Wall System	31,470	sf	$	165.00	$ 5,192,550

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
B2050		Exterior Doors				
	B2051	Exterior Doors - Allowance	1	alw	$ 74,500.00	$ 74,500
	B2052	PBB Exit Doors	7	ea	$ 3,500.00	$ 24,500
	B2052	Exit Doors - Apron Paving Access	7	ea	$ 2,500.00	$ 17,500
	B2053	Extra for Access Control	7	lvs	$ 500.00	$ 3,500
B2070		Exterior Soffits				
	B2071	Exterior Soffits				Not Required
B30		**Roofing**				
B3010		Roof Coverings				
	B3011	SBS Modified Bitumen Roof Assembly	104,400	sf	$ 16.50	$ 1,722,600
	B3012	Parapet Detail	2,098	lf	$ 50.00	$ 104,900
	B3013	Add Allowance for Junction to Existing Roof	1	alw	$ 10,000.00	$ 10,000
B3030		Roof Openings				
	B3031	Skylight				Not Required
	B3032	Roof Hatch				Not Required
		Subtotal - Shell				***$ 28,192,115***
C		***INTERIORS***				
C10		**Interior Construction**				
C1010		Partitions				
	C1011	Interior Partitions	207,900	sf	$ 5.00	$ 1,039,500
	C1012	Rough Carpentry & Blocking	207,900	sf	$ 1.50	$ 311,850
	C1013	Caulking, Sealants & Firestopping	207,900	sf	$ 1.75	$ 363,825
	C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	207,900	sf	$ 1.25	$ 259,875
C1030		Interior Doors				
	C1031	Interior Doors - Allowance	208,800	sf	$ 2.00	$ 417,600
C1050		Specialties				
	C1051	Fire Extinguishers & Cabinets	208,800	sf	$ 0.05	$ 10,440
	C1052	Code Signage	208,800	sf	$ 0.25	$ 52,200
	C1053	Interior Wayfinding Signage	208,800	sf	$ 3.50	$ 730,800
	C1054	Miscellaneous Specialties	208,800	sf	$ 2.00	$ 417,600
C20		**Stairs**				

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	C2010	Stair Construction						
		C2011 Stair - Exit - PBB	7	flts	$	25,000.00	$	175,000
C30	**Interior Finishes**							
	C3010	Interior Finishes						
		C3011 *Apron Level 01*						
		C3012 Airport Support	48,000	sf	$	45.00	$	2,160,000
		C3013 Airline Support	48,000	sf	$	45.00	$	2,160,000
		C3014 Mechanical	6,000	sf	$	35.00	$	210,000
		C3015 Vertical Circulation	500	sf	$	55.00	$	27,500
		C3016 Storage	1,000	sf	$	25.00	$	25,000
		C3017 Tug Lanes	900	sf	$	10.00	$	9,000
		C3018 *Departure Level 02*						
		C3019 Concessions (Shell Space)	3,000	sf	$	25.00	$	75,000
		C3020 Hold rooms	50,000	sf	$	75.00	$	3,750,000
		C3021 Vertical Circulation	500	sf	$	55.00	$	27,500
		C3022 Circulation	48,000	sf	$	85.00	$	4,080,000
		C3023 Restrooms - Public	2,900	sf	$	165.00	$	478,500
		C3024 Allowance for Renovation to Existing Concourse for New Expansion Connection	1,100	sf	$	55.00	$	60,500
		Subtotal - Interiors					***$***	***16,841,690***
D	***SERVICES***							
D10	**Conveying System**							
	D1010	Elevators & Lifts						
		D1011 Hydraulic Passenger Elevator	8	stps	$	65,000.00	$	520,000
	D1020	Escalators & Moving Walks						
		D1021 Escalator					Not Required	
		D1022 Moving Walks					Not Required	
	D1030	Baggage Handling Equipment						
		D1031 Baggage Handling Equipment Allowance					Excluded	
D20	**Plumbing**							
	D2010	Plumbing Systems						
		D2011 Apron Level 01	104,400	sf	$	9.50	$	991,800
		D2012 Departure Level 02	104,400	sf	$	15.50	$	1,618,200
D30	**HVAC**							
	D3010	HVAC Systems						
		D3011 Apron Level 01	104,400	sf	$	74.00	$	7,725,600

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	D3012	Departure Level 02	104,400	sf	$	74.00	$	7,725,600
D3050		Controls and Instrumentation						
	D3051	3-2 - Concourse G South Expansion	208,800	sf	$	8.50	$	1,774,800
D3060		Systems Testing & Balancing						
	D3061	3-2 - Concourse G South Expansion	208,800	sf	$	2.10	$	438,480
D40		**Fire Protection**						
D4010		Sprinkler Systems						
	D4011	Apron Level 01	104,400	sf	$	9.25	$	965,700
	D4012	Departure Level 02	104,400	sf	$	9.25	$	965,700
D50		**Electrical**						
D5010		Electrical Systems						
	D5011	Distribution Equipment	208,800	sf	$	6.00	$	1,252,800
	D5012	Feeders	208,800	sf	$	8.75	$	1,827,000
	D5013	Grounding and Lightning Protection	208,800	sf	$	3.00	$	626,400
	D5014	Jetway/GPU/PCA Feeders	7	ea	$	65,000.00	$	455,000
	D5015	Roof Mounted Apron Light	7	ea	$	30,000.00	$	210,000
	D5016	*Departure Level 02*						
	D5017	Airport Support	48,000	sf	$	25.00	$	1,200,000
	D5018	Airline Support	48,000	sf	$	25.00	$	1,200,000
	D5019	Mechanical	6,000	sf	$	18.00	$	108,000
	D5020	Vertical Circulation	500	sf	$	37.00	$	18,500
	D5021	Storage	1,000	sf	$	18.00	$	18,000
	D5022	Tug Lanes	900	sf	$	10.00	$	9,000
	D5023	*Departure Level 02*						
	D5024	Concessions (Shell Space)	3,000	sf	$	15.00	$	45,000
	D5025	Hold rooms	50,000	sf	$	49.00	$	2,450,000
	D5026	Vertical Circulation	500	sf	$	37.00	$	18,500
	D5027	Circulation	48,000	sf	$	37.00	$	1,776,000
	D5028	Restrooms - Public	2,900	sf	$	60.00	$	174,000
D6010		Communications						
	D6011	Telecomm Room Buildout	208,800	sf	$	4.15	$	866,520
	D6012	Backbone Cabling	208,800	sf	$	2.50	$	522,000
	D6013	Communications	208,800	sf	$	3.35	$	699,480
	D6014	EVIDS Cabling and Installation	208,800	sf	$	1.55	$	323,640
	D6015	Public Address System	208,800	sf	$	2.64	$	551,232
	D6016	DAS	208,800	sf	$	6.25	$	1,305,000
	D6017	Common Use System	208,800	sf	$	2.70	$	563,760
D7010		Electronic Safety & Security						
	D7011	Video Surveillance System	208,800	sf	$	2.90	$	605,520

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	D7012	Security Access Control	208,800	sf	$ 4.08	$ 851,904
	D7013	Fire Alarm	208,800	sf	$ 5.00	$ 1,044,000
		Subtotal - Services				***$ 41,447,136***
E		***EQUIPMENT & FURNISHINGS***				
E10		**Equipment**				
E1010		Equipment				
	E1011	Concessions Equipment - Not in Scope				Excluded
	E1012	Security Equipment - Not in Scope				Excluded
	E1013	FIS Equipment - Not in Scope				Excluded
	E1014	FIDS, BIDS, MUFIDS	104,400	sf	$ 2.00	$ 208,800
	E1015	Dynamic Signage				Excluded
	E1016	Misc. Equipment Allowance	208,800	sf	$ 0.50	$ 104,400
E1030		Passenger Boarding Bridges				
	E1031	New Passenger Boarding Bridge	7	ea	$1,000,000.00	$ 7,000,000
E20		**Furnishings**				
E2010		Fixed Furnishings				
	E2011	Gate Podiums & Backscreens	7	ea	$ 35,000.00	$ 245,000
	E2012	Recharge Stations				w/Electrical
	E2013	Holdroom Seating	875	ea	$ 1,000.00	$ 875,000
	E2014	Holdroom Seating Table	438	ea	$ 700.00	$ 306,250
	E2015	Misc. Seating	1	alw	$ 40,000.00	$ 40,000
	E2016	Kiosks				Excluded
	E2017	Window Shades				Excluded
	E2018	Misc. Casework Allowance	208,800	sf	$ 1.00	$ 208,800
		Subtotal - Equipment & Furnishings				***$ 8,988,250***
F		***SPECIAL CONSTRUCTION & DEMOLITION***				
F10		**Special Construction**				
F1010		Special Construction				
	F1011	Connector - Elevated Bridge Structure (Enclosed & Airconditioned)	31,200	sf	$ 450.00	$ 14,040,000
F20		**Selective Building Demolition**				
F2010		Building Elements Demolition				
	F2011	Demolish Exterior Closure at Existing Building	3,850	sf	$ 35.00	$ 134,750
	F2012	Misc. Demolition	1	alw	$ 11,000.00	$ 11,000

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
F30	**Hazardous Material Abatement**					
F3010	Hazardous Material Abatement					
	F3011	Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 14,185,750***
G	***BUILDING SITEWORK***					
G00	**Site Mobilization**					
G0010	Site Mobilization					
	G0011	Mobilization				Incl. In M/UPS
	G0012	Safety and Security (3%)	1	ls	$ 484,100.00	$ 484,100
	G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$ 913,400.00	$ 913,400
	G0014	Drainage and Utility Allowance	1	alw	$1,383,900.00	$ 1,383,900
G10	**Site Preparation**					
G1010	Site Demolition					
	G1011	Demolish Existing Apron Paving - Building Footprint	11,600	sy	$ 25.00	$ 290,000
	G1011	Demolish Existing Apron Paving - New Pavement	17,800	sy	$ 25.00	$ 445,000
	G1012	Demolish Existing Concourse End	10,000	sf	$ 20.00	$ 200,000
	G1013	Demolish Existing PBB Foundations	3	ea	$ 5,000.00	$ 15,000
	G1014	Demolish Existing PBB - Bridge & Equipment	3	ea	$ 50,000.00	$ 150,000
	G1015	Allowance for Misc. Site Demolition	1	alw	$ 150,000.00	$ 150,000
G20	**Site Improvements**					
G2010	Pavement / Roadways etc.					
	G2011	*Apron Paving*				
	G2012	Excavation	5,800	cy	$ 18.00	$ 104,400
	G2013	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	11,600	sy	$ 275.00	$ 3,190,000
	G2013	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.)	17,800	sy	$ 275.00	$ 4,895,000
	G2014	Pavement Markings - Service Road and Striping	13,229	sf	$ 2.50	$ 33,073
	G2015	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required
	G2016	*Surface Parking*				
	G2017	Grading	5,560	sy	$ 18.00	$ 100,080
	G2018	Asphalt on Grade Parking and Roads	11,120	sy	$ 115.00	$ 1,278,800

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	G2019	Pavement Markings - Service Road and Striping	5,000	sf	$ 1.25	$ 6,250
	G2020	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required
	G2021	*Fuel Systems*				
	G2022	Sawcut Existing Apron Paving for New Fuel Lines	2,672	lf	$ 8.00	$ 21,376
	G2023	Demo Existing Apron Paving	594	sy	$ 35.00	$ 20,782
	G2024	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	594	sy	$ 350.00	$ 207,822
	G2025	New Underground Fuel Vaults	4	ea	$ 250,000.00	$ 1,000,000
	G2026	Fuel Branch Lines: 12" dia Steel Pipe Epoxy Lining, ext Coated, Welded	1,336	lf	$ 656.00	$ 876,416
	G2027	Fuel Branch Lines: 8" dia Steel Pipe Epoxy Lining, ext Coated, Welded	175	lf	$ 612.00	$ 107,100
	G2028	Fuel Branch Lines: 6" dia Steel Pipe Epoxy Lining, ext Coated, Welded	105	lf	$ 590.00	$ 61,950
	G2029	Radiographic Testing of Pipe Welds	1,616	lf	$ 19.00	$ 30,704
	G2030	Fuel Valves	7	ea	$ 25,000.00	$ 175,000
	G2031	Branch Line Low & High Point Drain Pit	4	ea	$ 32,500.00	$ 130,000
	G2032	Hydrant Pits and Connectors	7	ea	$ 25,000.00	$ 175,000
G2050	Landscaping					
	G2051	Landscaping Allowance				Not Required
G2060	Miscellaneous Buildings and Structures					
	G2061	Miscellaneous Buildings and Structures				Not Required
G30	**Site Mechanical Utilities**					
G3010	Site Mechanical Utilities					
	G3011	Site Mechanical Utilities	1	alw	$ 125,000.00	$ 125,000
G40	**Site Electrical Utilities**					
G4010	Site Electrical Utilities					
	G4011	Site Electrical Utilities	1	alw	$ 25,000.00	$ 25,000
G4030	Site Lighting					
	G4031	Site Lighting	1	alw	$ 25,000.00	$ 25,000
		Subtotal - Building Sitework				***$ 16,620,153***
		Subtotal			***$ 630.00***	***$ 131,543,643***

3-2 - CONCOURSE G SOUTH EXPANSION

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
25.0%	Estimating Design Evolution				$ 32,885,911
	Subtotal - Cost of Work			***$ 787.50***	***$ 164,429,553***
	General Contractors Markups				
5.0%	Project Logistics / Phasing & Labor Factor				$ 8,221,478
5.0%	General Requirements & Temporary Construction				$ 8,632,552
8.0%	General Conditions				$ 14,502,687
5.0%	General Contractors Overhead & Profit				$ 9,789,313
2.0%	Insurance				$ 4,111,512
1.0%	Payment & Performance Bonds				$ 2,096,871
0.0%	Sustainability Requirements				$ -
	Subtotal			***$ 1,014.29***	***$ 211,783,965***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 1,014.29***	***$ 211,783,965***
21.3%	Owner's Soft Costs				$ 45,109,985
	Opinion of Probable Project Cost			***$ 1,230.34***	***$ 256,893,950***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-3 - RECONSTRUCT CONCOURSE E

SUMMARY

	CONSTRUCTION SYSTEM		COST PER SQUARE FOOT	TOTAL
A	**Substructure**		$ 28.28	$ 5,232,201
	Standard Foundations	$ 1,985,750		
	Special Foundations	$ 1,937,215		
	Slab on Grade	$ 1,309,236		
B	**Shell**		$ 132.57	$ 24,524,525
	Superstructure	$ 16,635,603		
	Exterior Closure	$ 6,266,923		
	Roofing	$ 1,622,000		
C	**Interiors**		$ 82.05	$ 15,178,680
	Interior Construction	$ 3,184,930		
	Stairs	$ 425,000		
	Interior Finishes	$ 11,568,750		
D	**Services**		$ 200.38	$ 37,069,900
	Conveying	$ 1,170,000		
	Baggage Handling System	$ -		
	Plumbing	$ 2,312,500		
	HVAC	$ 15,651,000		
	Fire Protection	$ 1,711,250		
	Electrical	$ 9,727,950		
	Communications	$ 4,280,900		
	Electronic Safety & Security	$ 2,216,300		
E	**Equipment & Furnishings**		$ 113.33	$ 20,966,250
	Equipment	$ 277,500		
	Passenger Boarding Bridges	$ 17,000,000		
	Furnishings	$ 3,688,750		
F	**Special Construction & Demolition**		$ 3.02	$ 557,855
	Special Construction	$ 406,980		
	Selective Building Demolition	$ 150,875		
	Hazardous Material Abatement	$ -		
G	**Building Sitework**		$ 83.42	$ 15,432,462
	Site Mobilization	$ 2,582,600		
	Site Preparation	$ 3,745,500		
	Site Improvements	$ 8,929,362		
	Site Mechanical Utilities	$ 125,000		
	Site Electrical Utilities	$ 50,000		
	Subtotal		***$ 643.04***	***$ 118,961,874***
25.0%	Estimating Design Evolution			$ 29,740,468

3-3 - RECONSTRUCT CONCOURSE E

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 803.80***	***$ 148,702,342***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 7,435,117
5.0%	General Requirements & Temporary Construction		$ 7,806,873
8.0%	General Conditions		$ 13,115,547
5.0%	General Contractors Overhead & Profit		$ 8,852,994
2.0%	Insurance		$ 3,718,257
1.0%	Payment & Performance Bonds		$ 1,896,311
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 1,035.28***	***$ 191,527,442***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 1,035.28***	***$ 191,527,442***
21.3%	Owner's Soft Costs		$ 40,795,345
	Opinion of Probable Project Cost	***$ 1,255.80***	***$ 232,322,787***

Project Title	Landside Masterplan Update			
Location	Saint Paul International Airport			
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate			
Client Name				
Client Project No.		**Revision**	2	
Original Date	7-Apr-2023	**Revision Date**	25-Apr-2023	
Assumed Bid Opening Date		**Connico PN**	4977.23.03	
Project Lead	CJN / CJC	**Checked by**	IDK	

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
AREA ANALYSIS				
3-3 - Reconstruct Concourse E				
Apron Level 01	92,500	sf		
Airport Support			43,000 sf	
Airline Support			42,100 sf	
Mechanical			5,000 sf	
Vertical Circulation			500 sf	
Storage			1,000 sf	
Tug Lanes			900 sf	
Departure Level 02	92,500	sf		
Concessions (Shell Space)			3,000 sf	
Hold rooms			46,000 sf	
Vertical Circulation			500 sf	
Circulation			40,100 sf	
Restrooms - Public			2,900 sf	
Total Area	**185,000**	**sf**	**185,000 sf**	

A	***SUBSTRUCTURE***				
A10	**Foundations**				
A1010	Standard Foundations				
A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	92,500	sf	$ 20.00	$ 1,850,000
A1012	Extra for Rock Excavation				Not Required
A1013	Perimeter Drainage	1,830	lf	$ 25.00	$ 45,750
A1014	Dewatering	1	ls	$ 30,000.00	$ 30,000
A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 60,000.00	$ 60,000
A1030	Special Foundations				
A1031	PBB Foundation	17	ea	$ 60,000.00	$ 1,020,000
A1032	Pile Foundations (36" Dia Drilled Pier @ 35' Deep)	92,500	sf	$ 9.59	$ 887,215
A1033	Dewatering	1	ls	$ 30,000.00	$ 30,000

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
A1050		Slab on Grade				
	A1051	Slab on Grade	92,500	sf	$ 10.00	$ 925,000
	A1052	Elevator Pits	9	ea	$ 15,000.00	$ 135,000
	A1053	Misc. Trenches, Pits & Bases	86	cy	$ 750.00	$ 64,236
	A1054	Under-slab Drainage & Insulation	92,500	sf	$ 2.00	$ 185,000
		Subtotal - Substructure				***$ 5,232,201***
B	***SHELL***					
B10	**Superstructure**					
B1010		Floor Construction				
	B1011	Steel Floor Structure	1,064	tns	$ 6,500.00	$ 6,914,375
	B1012	Steel Floor Deck	92,500	sf	$ 7.50	$ 693,750
	B1013	Concrete Fill to Steel Floor Deck	92,500	sf	$ 7.75	$ 716,875
	B1014	Supplemental Framing at Exterior Closure	39	tns	$ 7,000.00	$ 270,165
	B1015	Miscellaneous Steel (5%)	53	tns	$ 7,000.00	$ 372,313
	B1016	Elevated Floor Slab Fireproofing	92,500	sf	$ 7.00	$ 647,500
	B1017	Expansion Joint at Existing Structure	115	lf	$ 150.00	$ 17,250
	B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$ 29,000.00	$ 29,000
B1030		Roof Construction				
	B1031	Steel Roof Structure	833	tns	$ 6,500.00	$ 5,411,250
	B1032	Steel Roof Deck	92,500	sf	$ 6.50	$ 601,250
	B1033	Miscellaneous Steel (5%)	42	tns	$ 7,000.00	$ 291,375
	B1034	Roof Fireproofing	92,500	sf	$ 7.00	$ 647,500
	B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$ 23,000.00	$ 23,000
B20	**Exterior Closure**					
B2010		Exterior Walls				
	B2011	CMU Walls, incl. Back-up System	29,500	sf	$ 40.00	$ 1,180,000
	B2012	Precast Concrete, incl. Back-up System	3,430	sf	$ 45.00	$ 154,350
	B2013	Metal Wall Panel, incl. Back-up System	3,430	sf	$ 65.00	$ 222,950
	B2014	Edge Detail at Roof	1,715	lf	$ 75.00	$ 128,625
	B2015	Caulking & Sealant to Exteriors	65,170	sf	$ 1.75	$ 114,048
	B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$ 50,000.00	$ 50,000
B2030		Exterior Windows				
	B2031	Curtain Wall System	25,730	sf	$ 165.00	$ 4,245,450
B2050		Exterior Doors				

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	B2051	Exterior Doors - Allowance	1	alw	$ 61,000.00	$ 61,000
	B2052	PBB Exit Doors	17	ea	$ 3,500.00	$ 59,500
	B2052	Exit Doors - Apron Paving Access	17	ea	$ 2,500.00	$ 42,500
	B2053	Extra for Access Control	17	lvs	$ 500.00	$ 8,500
B2070	Exterior Soffits					
	B2071	Exterior Soffits				Not Required
B30	**Roofing**					
B3010	Roof Coverings					
	B3011	SBS Modified Bitumen Roof Assembly	92,500	sf	$ 16.50	$ 1,526,250
	B3012	Parapet Detail	1,715	lf	$ 50.00	$ 85,750
	B3013	Add Allowance for Junction to Existing Roof	1	alw	$ 10,000.00	$ 10,000
B3030	Roof Openings					
	B3031	Skylight				Not Required
	B3032	Roof Hatch				Not Required
		Subtotal - Shell				***$ 24,524,525***
C	***INTERIORS***					
C10	**Interior Construction**					
C1010	Partitions					
	C1011	Interior Partitions	184,100	sf	$ 5.00	$ 920,500
	C1012	Rough Carpentry & Blocking	184,100	sf	$ 1.50	$ 276,150
	C1013	Caulking, Sealants & Firestopping	184,100	sf	$ 1.75	$ 322,175
	C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	184,100	sf	$ 1.25	$ 230,125
C1030	Interior Doors					
	C1031	Interior Doors - Allowance	184,100	sf	$ 2.00	$ 368,200
C1050	Specialties					
	C1051	Fire Extinguishers & Cabinets	184,100	sf	$ 0.05	$ 9,205
	C1052	Code Signage	184,100	sf	$ 0.25	$ 46,025
	C1053	Interior Wayfinding Signage	184,100	sf	$ 3.50	$ 644,350
	C1054	Miscellaneous Specialties	184,100	sf	$ 2.00	$ 368,200
C20	**Stairs**					
C2010	Stair Construction					
	C2011	Stair - Exit - PBB	17	flts	$ 25,000.00	$ 425,000

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
C30		**Interior Finishes**						
C3010		Interior Finishes						
	C3011	*Apron Level 01*						
	C3012	Airport Support	43,000	sf	$	45.00	$	1,935,000
	C3013	Airline Support	42,100	sf	$	45.00	$	1,894,500
	C3014	Mechanical	5,000	sf	$	35.00	$	175,000
	C3015	Vertical Circulation	500	sf	$	55.00	$	27,500
	C3016	Storage	1,000	sf	$	25.00	$	25,000
	C3017	Tug Lanes	900	sf	$	10.00	$	9,000
	C3018	*Departure Level 02*						
	C3019	Concessions (Shell Space)	3,000	sf	$	25.00	$	75,000
	C3020	Hold rooms	46,000	sf	$	75.00	$	3,450,000
	C3021	Vertical Circulation	500	sf	$	55.00	$	27,500
	C3022	Circulation	40,100	sf	$	85.00	$	3,408,500
	C3023	Restrooms - Public	2,900	sf	$	165.00	$	478,500
	C3024	Allowance for Renovation to Existing Concourse for New Expansion Connection	1,150	sf	$	55.00	$	63,250
		Subtotal - Interiors					***$***	***15,178,680***
D		***SERVICES***						
D10		**Conveying System**						
D1010		Elevators & Lifts						
	D1011	Hydraulic Passenger Elevator	18	stps	$	65,000.00	$	1,170,000
D1020		Escalators & Moving Walks						
	D1021	Escalator					Not Required	
	D1022	Moving Walks					Not Required	
D1030		Baggage Handling Equipment						
	D1031	Baggage Handling Equipment Allowance					Excluded	
D20		**Plumbing**						
D2010		Plumbing Systems						
	D2011	Apron Level 01	92,500	sf	$	9.50	$	878,750
	D2012	Departure Level 02	92,500	sf	$	15.50	$	1,433,750
D30		**HVAC**						
D3010		HVAC Systems						
	D3011	Apron Level 01	92,500	sf	$	74.00	$	6,845,000
	D3012	Departure Level 02	92,500	sf	$	74.00	$	6,845,000
D3050		Controls and Instrumentation						

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		D3051 3-3 - Reconstruct Concourse E	185,000	sf	$ 8.50	$ 1,572,500
	D3060	Systems Testing & Balancing				
		D3061 3-3 - Reconstruct Concourse E	185,000	sf	$ 2.10	$ 388,500
D40	**Fire Protection**					
	D4010	Sprinkler Systems				
		D4011 Apron Level 01	92,500	sf	$ 9.25	$ 855,625
		D4012 Departure Level 02	92,500	sf	$ 9.25	$ 855,625
D50	**Electrical**					
	D5010	Electrical Systems				
		D5011 Distribution Equipment	185,000	sf	$ 3.50	$ 647,500
		D5012 Feeders	185,000	sf	$ 3.75	$ 693,750
		D5013 Grounding and Lightning Protection	185,000	sf	$ 2.00	$ 370,000
		D5014 Jetway/GPU/PCA Feeders	17	ea	$ 65,000.00	$ 1,105,000
		D5015 Roof Mounted Apron Light	17	ea	$ 30,000.00	$ 510,000
		D5016 *Departure Level 02*				
		D5017 Airport Support	43,000	sf	$ 25.00	$ 1,075,000
		D5018 Airline Support	42,100	sf	$ 25.00	$ 1,052,500
		D5019 Mechanical	5,000	sf	$ 50.00	$ 250,000
		D5020 Vertical Circulation	500	sf	$ 25.00	$ 12,500
		D5021 Storage	1,000	sf	$ 25.00	$ 25,000
		D5022 Tug Lanes	900	sf	$ 25.00	$ 22,500
		D5023 *Departure Level 02*				
		D5024 Concessions (Shell Space)	3,000	sf	$ 15.00	$ 45,000
		D5025 Hold rooms	46,000	sf	$ 49.00	$ 2,254,000
		D5026 Vertical Circulation	500	sf	$ 15.00	$ 7,500
		D5027 Circulation	40,100	sf	$ 37.00	$ 1,483,700
		D5028 Restrooms - Public	2,900	sf	$ 60.00	$ 174,000
	D6010	Communications				
		D6011 Telecomm Room Buildout	185,000	sf	$ 4.15	$ 767,750
		D6012 Backbone Cabling	185,000	sf	$ 2.50	$ 462,500
		D6013 Communications	185,000	sf	$ 3.35	$ 619,750
		D6014 EVIDS Cabling and Installation	185,000	sf	$ 1.55	$ 286,750
		D6015 Public Address System	185,000	sf	$ 2.64	$ 488,400
		D6016 DAS	185,000	sf	$ 6.25	$ 1,156,250
		D6017 Common Use System	185,000	sf	$ 2.70	$ 499,500
	D7010	Electronic Safety & Security				
		D7011 Video Surveillance System	185,000	sf	$ 2.90	$ 536,500
		D7012 Security Access Control	185,000	sf	$ 4.08	$ 754,800
		D7013 Fire Alarm	185,000	sf	$ 5.00	$ 925,000

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
		Subtotal - Services				***$ 37,069,900***
E	***EQUIPMENT & FURNISHINGS***					
E10	**Equipment**					
E1010	Equipment					
	E1011	Concessions Equipment - Not in Scope				Excluded
	E1012	Security Equipment - Not in Scope				Excluded
	E1013	FIS Equipment - Not in Scope				Excluded
	E1014	FIDS, BIDS, MUFIDS	92,500	sf	$ 2.00	$ 185,000
	E1015	Dynamic Signage				Excluded
	E1016	Misc. Equipment Allowance	185,000	sf	$ 0.50	$ 92,500
E1030	Passenger Boarding Bridges					
	E1031	New Passenger Boarding Bridge	17	ea	$1,000,000.00	$ 17,000,000
E20	**Furnishings**					
E2010	Fixed Furnishings					
	E2011	Gate Podiums & Backscreens	17	ea	$ 35,000.00	$ 595,000
	E2012	Recharge Stations				w/Electrical
	E2013	Holdroom Seating	2,125	ea	$ 1,000.00	$ 2,125,000
	E2014	Holdroom Seating Table	1,063	ea	$ 700.00	$ 743,750
	E2015	Misc. Seating	1	alw	$ 40,000.00	$ 40,000
	E2016	Kiosks				Excluded
	E2017	Window Shades				Excluded
	E2018	Misc. Casework Allowance	185,000	sf	$ 1.00	$ 185,000
		Subtotal - Equipment & Furnishings				***$ 20,966,250***
F	***SPECIAL CONSTRUCTION & DEMOLITION***					
F10	**Special Construction**					
F1010	Special Construction					
	F1011	Allowance For New Exterior Closure - Concourse E Bump Out	4,788	sf	$ 85.00	$ 406,980
F20	**Selective Building Demolition**					
F2020	Building Elements Demolition					
	F2021	Demolish Exterior Closure at Existing Building	4,025	sf	$ 35.00	$ 140,875
	F2022	Misc. Demolition	1	alw	$ 10,000.00	$ 10,000
F30	**Hazardous Material Abatement**					
F3010	Hazardous Material Abatement					
	F3011	Hazardous Material Abatement				Excluded

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST		TOTAL
		Subtotal - Special Construction & Demolition				***$***	***557,855***
G		***BUILDING SITEWORK***					
G00		**Site Mobilization**					
G0010		Site Mobilization					
	G0011	Mobilization				Incl. In M/UPS	
	G0012	Safety and Security (3%)	1	ls	$ 449,500.00	$	449,500
	G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$ 848,100.00	$	848,100
	G0014	Drainage and Utility Allowance	1	alw	$1,285,000.00	$	1,285,000
G10		**Site Preparation**					
G1010		Site Demolition					
	G1011	Demolish Existing Apron Paving	10,280	sy	$ 25.00	$	257,000
	G1012	Demolish Existing Concourse E	109,175	sf	$ 20.00	$	2,183,500
	G1013	Demolish Existing PBB Foundations	21	ea	$ 5,000.00	$	105,000
	G1014	Demolish Existing PBB - Bridge & Equipment	21	ea	$ 50,000.00	$	1,050,000
	G1015	Allowance for Misc. Site Demolition	1	alw	$ 150,000.00	$	150,000
G20		**Site Improvements**					
G2010		Pavement / Roadways etc.					
	G2011	*Apron Paving*					
	G2012	Excavation	6,070	cy	$ 18.00	$	109,260
	G2013	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	12,140	sy	$ 250.00	$	3,035,000
	G2014	Pavement Markings - Service Road and Striping	5,459	sf	$ 2.50	$	13,647
	G2015	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required	
	G2016	*Surface Parking*					
	G2017	Grading	5,560	sy	$ 18.00	$	100,080
	G2018	Asphalt on Grade Parking and Roads	11,120	sy	$ 115.00	$	1,278,800
	G2019	Pavement Markings - Service Road and Striping	5,000	sf	$ 1.25	$	6,250
	G2020	New Apron Edge Lights (cable, conduit, counterpoise included)				Not Required	
	G2021	*Fuel Systems*					
	G2022	Sawcut Existing Apron Paving for New Fuel Lines	4,600	lf	$ 8.00	$	36,800
	G2023	Demo Existing Apron Paving	1,022	sy	$ 35.00	$	35,778

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	G2024	PCC Apron Pavement (17" P-501, 8" Stabilized Base, 16" P-209, Markings, Subgrade Prep.) - Infill of Existing Concourse Buildings	1,022	sy	$ 350.00	$ 357,778
	G2025	New Underground Fuel Vaults	4	ea	$ 250,000.00	$ 1,000,000
	G2026	Fuel Branch Lines: 12" dia Steel Pipe Epoxy Lining, ext Coated, Welded	2,300	lf	$ 656.00	$ 1,508,800
	G2027	Fuel Branch Lines: 8" dia Steel Pipe Epoxy Lining, ext Coated, Welded	425	lf	$ 612.00	$ 260,100
	G2028	Fuel Branch Lines: 6" dia Steel Pipe Epoxy Lining, ext Coated, Welded	255	lf	$ 590.00	$ 150,450
	G2029	Radiographic Testing of Pipe Welds	2,980	lf	$ 19.00	$ 56,620
	G2030	Fuel Valves	17	ea	$ 25,000.00	$ 425,000
	G2031	Branch Line Low & High Point Drain Pit	4	ea	$ 32,500.00	$ 130,000
	G2032	Hydrant Pits and Connectors	17	ea	$ 25,000.00	$ 425,000
G2050	Landscaping					
	G2051	Landscaping Allowance				Not Required
G2060	Miscellaneous Buildings and Structures					
	G2061	Miscellaneous Buildings and Structures				Not Required
G30	**Site Mechanical Utilities**					
G3010	Site Mechanical Utilities					
	G3011	Site Mechanical Utilities	1	alw	$ 125,000.00	$ 125,000
G40	**Site Electrical Utilities**					
G4010	Site Electrical Utilities					
	G4011	Site Electrical Utilities	1	alw	$ 25,000.00	$ 25,000
G4030	Site Lighting					
	G4031	Site Lighting	1	alw	$ 25,000.00	$ 25,000
		Subtotal - Building Sitework				***$ 15,432,462***
		Subtotal			***$ 643.04***	***$ 118,961,874***
25.0%		Estimating Design Evolution				$ 29,740,468
		Subtotal - Cost of Work			***$ 803.80***	***$ 148,702,342***
		General Contractors Markups				
5.0%		Project Logistics / Phasing & Labor Factor				$ 7,435,117

3-3 - RECONSTRUCT CONCOURSE E

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
5.0%	General Requirements & Temporary Construction				$ 7,806,873
8.0%	General Conditions				$ 13,115,547
5.0%	General Contractors Overhead & Profit				$ 8,852,994
2.0%	Insurance				$ 3,718,257
1.0%	Payment & Performance Bonds				$ 1,896,311
0.0%	Sustainability Requirements				$ -
	Subtotal			***$ 1,035.28***	***$ 191,527,442***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost			***$ 1,035.28***	***$ 191,527,442***
21.3%	Owner's Soft Costs				$ 40,795,345
	Opinion of Probable Project Cost			***$ 1,255.80***	***$ 232,322,787***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

SUMMARY

	CONSTRUCTION SYSTEM			COST PER SQUARE FOOT	TOTAL
A	**Substructure**			$ 27.14	$ 380,000
	Standard Foundations	$	180,000		
	Slab on Grade	$	200,000		
B	**Shell**			$ 303.73	$ 4,252,200
	Superstructure	$	1,132,200		
	Exterior Closure	$	3,120,000		
	Roofing	$	-		
C	**Interiors**			$ 93.73	$ 1,312,200
	Interior Construction	$	242,200		
	Stairs	$	100,000		
	Interior Finishes	$	970,000		
D	**Services**			$ 431.72	$ 6,044,080
	Conveying	$	4,120,000		
	Baggage Handling System	$	-		
	Plumbing	$	205,000		
	HVAC	$	618,400		
	Fire Protection	$	129,500		
	Electrical	$	479,500		
	Communications	$	323,960		
	Electronic Safety & Security	$	167,720		
E	**Equipment & Furnishings**			$ 3.50	$ 49,000
	Equipment	$	35,000		
	Passenger Boarding Bridges	$	-		
	Furnishings	$	14,000		
F	**Special Construction & Demolition**			$ 1.79	$ 25,000
	Special Construction	$	-		
	Selective Building Demolition	$	25,000		
	Hazardous Material Abatement	$	-		
G	**Building Sitework**			$ -	$ -
	Site Mobilization				
	Site Preparation				
	Site Improvements				
	Site Mechanical Utilities				
	Site Electrical Utilities				
	Subtotal			***$ 861.61***	***$ 12,062,480***
25.0%	Estimating Design Evolution				$ 3,015,620

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

SUMMARY

	CONSTRUCTION SYSTEM	COST PER SQUARE FOOT	TOTAL
	Subtotal - Cost of Work	***$ 1,077.01***	***$ 15,078,100***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor		$ 753,905
5.0%	General Requirements & Temporary Construction		$ 791,600
8.0%	General Conditions		$ 1,329,888
5.0%	General Contractors Overhead & Profit		$ 897,675
2.0%	Insurance		$ 377,023
1.0%	Payment & Performance Bonds		$ 192,282
0.0%	Sustainability Requirements		$ -
	Subtotal	***$ 1,387.18***	***$ 19,420,474***
0.0%	Escalation		$ -
	Opinion of Probable Construction Cost	***$ 1,387.18***	***$ 19,420,474***
21.3%	Owner's Soft Costs		$ 4,136,561
	Opinion of Probable Project Cost	***$ 1,682.65***	***$ 23,557,035***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL

AREA ANALYSIS

3-4 - T2 Curb Frontage Improvements		
Apron Level 01	2,000 sf	
Vertical Circulation		2,000 sf
Departure Level 02	12,000 sf	
Vertical Circulation		2,000 sf
Curb Access - Infill		10,000 sf
Total Area	**14,000 sf**	**14,000 sf**

A	***SUBSTRUCTURE***						
A10	**Foundations**						
A1010	Standard Foundations						
A1015	Allowance for Foundations Inside Terminal for Level 2 Curb Access Infill	1	alw	$	180,000.00	$	180,000
A1050	Slab on Grade						
A1051	New Elevator Pits - Existing Terminal	4	ea	$	50,000.00	$	200,000
	Subtotal - Substructure					***$***	***380,000***
B	***SHELL***						
B10	**Superstructure**						
B1010	Floor Construction						
B1011	Steel Floor Structure	108	tns	$	7,500.00	$	810,000
B1012	Steel Floor Deck	12,000	sf	$	8.00	$	96,000
B1013	Concrete Fill to Steel Floor Deck	12,000	sf	$	8.25	$	99,000
B1014	Miscellaneous Steel (5%)	5	tns	$	8,000.00	$	43,200
B1015	Elevated Floor Slab Fireproofing	12,000	sf	$	7.00	$	84,000
B20	**Exterior Closure**						

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
B2010	Exterior Walls					
	B2011	Allowance for Exterior Skin Adjustment for New Curb Access	20,000	sf	$ 150.00	$ 3,000,000
B2030	Exterior Windows					
	B2031	Curtain Wall System				Incl. Above
B2050	Exterior Doors					
	B2051	New Entrance Access Doors	4	ea	$ 30,000.00	$ 120,000
B2070	Exterior Soffits					
	B2071	Exterior Soffits				Not Required
B30	**Roofing**					
B3010	Roof Coverings					
	B3011	Roof Coverings				Not Required
		Subtotal - Shell				***$ 4,252,200***
C	***INTERIORS***					
C10	**Interior Construction**					
C1010	Partitions					
	C1011	Interior Partitions	14,000	sf	$ 5.00	$ 70,000
	C1012	Rough Carpentry & Blocking	14,000	sf	$ 1.50	$ 21,000
	C1013	Caulking, Sealants & Firestopping	14,000	sf	$ 1.75	$ 24,500
	C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	14,000	sf	$ 1.25	$ 17,500
C1030	Interior Doors					
	C1031	Interior Doors - Allowance	14,000	sf	$ 2.00	$ 28,000
C1050	Specialties					
	C1051	Fire Extinguishers & Cabinets	14,000	sf	$ 0.05	$ 700
	C1052	Code Signage	14,000	sf	$ 0.25	$ 3,500
	C1053	Interior Wayfinding Signage	14,000	sf	$ 3.50	$ 49,000
	C1054	Miscellaneous Specialties	14,000	sf	$ 2.00	$ 28,000
C20	**Stairs**					
C2010	Stair Construction					
	C2011	Stair - Curb Assess Level	4	flts	$ 25,000.00	$ 100,000

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
C30	**Interior Finishes**				
C3010	Interior Finishes				
C3011	*Apron Level 01*				
C3012	Vertical Circulation	2,000	sf	$ 55.00	$ 110,000
C3013	*Departure Level 02*				
C3014	Vertical Circulation	2,000	sf	$ 55.00	$ 110,000
C3015	Curb Access - Infill	10,000	sf	$ 75.00	$ 750,000
	Subtotal - Interiors				***$ 1,312,200***
D	***SERVICES***				
D10	**Conveying System**				
D1010	Elevators & Lifts				
D1011	Hydraulic Passenger Elevator	8	stps	$ 65,000.00	$ 520,000
D1020	Escalators & Moving Walks				
D1021	Escalator	8	ea	$ 450,000.00	$ 3,600,000
D1022	Moving Walks				Not Required
D1030	Baggage Handling Equipment				
D1031	Baggage Handling Equipment Allowance				Excluded
D20	**Plumbing**				
D2010	Plumbing Systems				
D2011	Apron Level 01	2,000	sf	$ 9.50	$ 19,000
D2012	Departure Level 02	12,000	sf	$ 15.50	$ 186,000
D30	**HVAC**				
D3010	HVAC Systems				
D3011	Apron Level 01	2,000	sf	$ 25.00	$ 50,000
D3012	Departure Level 02	12,000	sf	$ 35.00	$ 420,000
D3050	Controls and Instrumentation				
D3051	3-4 - T2 Curb Frontage Improvements	14,000	sf	$ 8.50	$ 119,000
D3060	Systems Testing & Balancing				
D3061	3-4 - T2 Curb Frontage Improvements	14,000	sf	$ 2.10	$ 29,400
D40	**Fire Protection**				
D4010	Sprinkler Systems				

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	D4011	Apron Level 01	2,000	sf	$	9.25	$	18,500
	D4012	Departure Level 02	12,000	sf	$	9.25	$	111,000
D50	**Electrical**							
D5010	Electrical Systems							
	D5011	Distribution Equipment	14,000	sf	$	3.50	$	49,000
	D5012	Feeders	14,000	sf	$	3.75	$	52,500
	D5013	Grounding and Lightning Protection	14,000	sf	$	2.00	$	28,000
	D5014	*Apron Level 01*						
	D5015	Vertical Circulation	2,000	sf	$	25.00	$	50,000
	D5016	*Departure Level 02*						
	D5017	Vertical Circulation	2,000	sf	$	25.00	$	50,000
	D5018	Curb Access - Infill	10,000	sf	$	25.00	$	250,000
D6010	Communications							
	D6011	Telecomm Room Buildout	14,000	sf	$	4.15	$	58,100
	D6012	Backbone Cabling	14,000	sf	$	2.50	$	35,000
	D6013	Communications	14,000	sf	$	3.35	$	46,900
	D6014	EVIDS Cabling and Installation	14,000	sf	$	1.55	$	21,700
	D6015	Public Address System	14,000	sf	$	2.64	$	36,960
	D6016	DAS	14,000	sf	$	6.25	$	87,500
	D6017	Common Use System	14,000	sf	$	2.70	$	37,800
D7010	Electronic Safety & Security							
	D7011	Video Surveillance System	14,000	sf	$	2.90	$	40,600
	D7012	Security Access Control	14,000	sf	$	4.08	$	57,120
	D7013	Fire Alarm	14,000	sf	$	5.00	$	70,000
		Subtotal - Services					***$***	***6,044,080***
E	***EQUIPMENT & FURNISHINGS***							
E10	**Equipment**							
E1010	Equipment							
	E1011	Signage	14,000	sf	$	2.00	$	28,000
	E1012	Misc. Equipment Allowance	14,000	sf	$	0.50	$	7,000
E20	**Furnishings**							
E2010	Fixed Furnishings							
	E2011	Misc. Casework Allowance	14,000	sf	$	1.00	$	14,000
		Subtotal - Equipment & Furnishings					***$***	***49,000***
F	***SPECIAL CONSTRUCTION & DEMOLITION***							
F10	**Special Construction**							

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	F1010	Special Construction				
		F1011 Special Construction				Not Required
F20	**Selective Building Demolition**					
	F2020	Building Elements Demolition				
		F2021 Demolish Exterior Closure at Existing Building	1	alw	$ 25,000.00	$ 25,000
F30	**Hazardous Material Abatement**					
	F3010	Hazardous Material Abatement				
		F3011 Hazardous Material Abatement				Excluded
		Subtotal - Special Construction & Demolition				***$ 25,000***
G	***BUILDING SITEWORK***					W/Civil
		Subtotal - Building Sitework				***$ -***
		Subtotal			***$ 861.61***	***$ 12,062,480***
	25.0%	Estimating Design Evolution				$ 3,015,620
		Subtotal - Cost of Work			***$ 1,077.01***	***$ 15,078,100***
		General Contractors Markups				
	5.0%	Project Logistics / Phasing & Labor Factor				$ 753,905
	5.0%	General Requirements & Temporary Construction				$ 791,600
	8.0%	General Conditions				$ 1,329,888
	5.0%	General Contractors Overhead & Profit				$ 897,675
	2.0%	Insurance				$ 377,023
	1.0%	Payment & Performance Bonds				$ 192,282
	0.0%	Sustainability Requirements				$ -
		Subtotal			***$ 1,387.18***	***$ 19,420,474***
	0.0%	Escalation				$ -
		Opinion of Probable Construction Cost			***$ 1,387.18***	***$ 19,420,474***
	21.3%	Owner's Soft Costs				$ 4,136,561

3-4 - T2 CURB FRONTAGE IMPROVEMENTS

DETAIL

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
Opinion of Probable Project Cost			*$ 1,682.65*	*$ 23,557,035*

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

SUMMARY

	CONSTRUCTION SYSTEM				TOTAL
A	**Substructure**			$	376,028
	Standard Foundations	$	235,250		
	Special Foundations	$	-		
	Slab on Grade	$	140,778		
B	**Shell**			$	1,927,968
	Superstructure	$	1,173,240		
	Exterior Closure	$	669,478		
	Roofing	$	85,250		
C	**Interiors**			$	1,151,350
	Interior Construction	$	207,600		
	Stairs	$	150,000		
	Interior Finishes	$	793,750		
D	**Services**			$	4,476,240
	Conveying	$	2,190,000		
	Baggage Handling System	$	-		
	Plumbing	$	114,000		
	HVAC	$	1,015,200		
	Fire Protection	$	111,000		
	Electrical	$	657,000		
	Communications	$	245,280		
	Electronic Safety & Security	$	143,760		
E	**Equipment & Furnishings**			$	42,000
	Equipment	$	30,000		
	Passenger Boarding Bridges	$	-		
	Furnishings	$	12,000		
F	**Special Construction & Demolition**			$	31,625
	Special Construction	$	-		
	Selective Building Demolition	$	31,625		
	Hazardous Material Abatement	$	-		
G	**Building Sitework**			$	154,681,645
	Site Mobilization	$	19,752,400		
	Site Improvements	$	134,754,245		
	Site Mechanical Utilities	$	50,000		
	Site Electrical Utilities	$	125,000		
	Subtotal			***$***	***162,686,855***
25.0%	Estimating Design Evolution			$	40,671,714

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

SUMMARY

	CONSTRUCTION SYSTEM		TOTAL
	Subtotal - Cost of Work	***$***	***203,358,569***
	General Contractors Markups		
5.0%	Project Logistics / Phasing & Labor Factor	$	10,167,928
5.0%	General Requirements & Temporary Construction	$	10,676,325
8.0%	General Conditions	$	17,936,226
5.0%	General Contractors Overhead & Profit	$	12,106,952
2.0%	Insurance	$	5,084,920
1.0%	Payment & Performance Bonds	$	2,593,309
0.0%	Sustainability Requirements	$	-
	Subtotal	***$***	***261,924,230***
0.0%	Escalation	$	-
	Opinion of Probable Construction Cost	***$***	***261,924,230***
21.3%	Owner's Soft Costs	$	55,789,861
	Opinion of Probable Project Cost	***$***	***317,714,091***

Project Title	Landside Masterplan Update		
Location	Saint Paul International Airport		
Submittal Stage	Masterplan - Rough Order of Magnitude Estimate		
Client Name			
Client Project No.		Revision	2
Original Date	7-Apr-2023	Revision Date	25-Apr-2023
Assumed Bid Opening Date		Connico PN	4977.23.03
Project Lead	CJN / CJC	Checked by	IDK

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL

AREA ANALYSIS

Description	Quantity		
APM Tunnel and Term 1 & 2 Vertical Circulation			
Tunnel Level	4,000 sf		
Term 1 - Vertical Circulation			2,000 sf
Term 2 - Vertical Circulation			2,000 sf
Apron Level	4,000 sf		
Term 1 - Vertical Circulation			2,000 sf
Term 2 - Vertical Circulation			2,000 sf
Concourse Level	4,000 sf		
Term 1 - Vertical Circulation			2,000 sf
Term 2 - Vertical Circulation			2,000 sf
Total Area	**12,000 sf**		**12,000 sf**

A SUBSTRUCTURE

A10 Foundations

		Description	Quantity	Unit	Unit Cost	Total
A1010		Standard Foundations				
	A1011	Column Foundations, Wall Foundations, Grade Beams, Foundation Wall	4,000	sf	$ 50.00	$ 200,000
	A1012	Extra for Rock Excavation				Not Required
	A1013	Perimeter Drainage	210	lf	$ 25.00	$ 5,250
	A1014	Dewatering	1	ls	$ 10,000.00	$ 10,000
	A1015	Add Allowance for Preparing and Connecting into Existing Foundations	1	alw	$ 20,000.00	$ 20,000
A1030		Special Foundations				
	A1031	Special Foundations				Not Required
A1050		Slab on Grade				
	A1051	Slab on Grade	4,000	sf	$ 10.00	$ 40,000

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

		DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
	A1052	Elevator & Escalator Pits	6	ea	$	15,000.00	$	90,000
	A1053	Misc. Trenches, Pits & Bases	4	cy	$	750.00	$	2,778
	A1054	Under-slab Drainage & Insulation	4,000	sf	$	2.00	$	8,000
		Subtotal - Substructure					***$***	***376,028***
B		***SHELL***						
B10		**Superstructure**						
B1010		Floor Construction						
	B1011	Steel Floor Structure	92	tns	$	6,500.00	$	598,000
	B1012	Steel Floor Deck	8,000	sf	$	7.50	$	60,000
	B1013	Concrete Fill to Steel Floor Deck	8,000	sf	$	7.75	$	62,000
	B1014	Supplemental Framing at Exterior Closure	4	tns	$	7,000.00	$	29,190
	B1015	Miscellaneous Steel (5%)	5	tns	$	7,000.00	$	32,200
	B1016	Elevated Floor Slab Fireproofing	8,000	sf	$	7.00	$	56,000
	B1017	Expansion Joint at Existing Structure	75	lf	$	150.00	$	11,250
	B1018	Add Allowance for Misc. Steel Framing at Junction to Existing Floor Structure	1	alw	$	19,000.00	$	19,000
B1030		Roof Construction						
	B1031	Steel Roof Structure	36	tns	$	6,500.00	$	234,000
	B1032	Steel Roof Deck	4,000	sf	$	6.50	$	26,000
	B1033	Miscellaneous Steel (5%)	2	tns	$	7,000.00	$	12,600
	B1034	Roof Fireproofing	4,000	sf	$	7.00	$	28,000
	B1035	Add Allowance for Misc. Steel Framing at Junction to Existing Roof Structure	1	alw	$	5,000.00	$	5,000
B20		**Exterior Closure**						
B2010		Exterior Walls						
	B2011	CMU Walls, incl. Back-up System	3,180	sf	$	40.00	$	127,200
	B2012	Precast Concrete, incl. Back-up System	370	sf	$	45.00	$	16,650
	B2013	Metal Wall Panel, incl. Back-up System	370	sf	$	65.00	$	24,050
	B2014	Edge Detail at Roof	185	lf	$	75.00	$	13,875
	B2015	Caulking & Sealant to Exteriors	7,030	sf	$	1.75	$	12,303
	B2016	Abutment Detailing at Existing Building - Patch, Repair, Refinish Exterior Walls Where Disturbed by New Construction	1	alw	$	10,000.00	$	10,000
B2030		Exterior Windows						
	B2031	Curtain Wall System	2,780	sf	$	165.00	$	458,700
B2050		Exterior Doors						
	B2051	Exterior Doors - Allowance	1	alw	$	6,700.00	$	6,700

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

			DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
		B2070	Exterior Soffits						
		B2071	Exterior Soffits						Not Required
	B30		**Roofing**						
		B3010	Roof Coverings						
		B3011	SBS Modified Bitumen Roof Assembly	4,000	sf	$	16.50	$	66,000
		B3012	Parapet Detail	185	lf	$	50.00	$	9,250
		B3013	Add Allowance for Junction to Existing Roof	1	alw	$	10,000.00	$	10,000
		B3030	Roof Openings						
		B3031	Skylight						Not Required
		B3032	Roof Hatch						Not Required
			Subtotal - Shell					***$***	***1,927,968***
C			***INTERIORS***						
	C10		**Interior Construction**						
		C1010	Partitions						
		C1011	Interior Partitions	12,000	sf	$	5.00	$	60,000
		C1012	Rough Carpentry & Blocking	12,000	sf	$	1.50	$	18,000
		C1013	Caulking, Sealants & Firestopping	12,000	sf	$	1.75	$	21,000
		C1014	Misc. Metals, Bracing, Countertop Supports, Equipment Supports, etc.	12,000	sf	$	1.25	$	15,000
		C1030	Interior Doors						
		C1031	Interior Doors - Allowance	12,000	sf	$	2.00	$	24,000
		C1050	Specialties						
		C1051	Fire Extinguishers & Cabinets	12,000	sf	$	0.05	$	600
		C1052	Code Signage	12,000	sf	$	0.25	$	3,000
		C1053	Interior Wayfinding Signage	12,000	sf	$	3.50	$	42,000
		C1054	Miscellaneous Specialties	12,000	sf	$	2.00	$	24,000
	C20		**Stairs**						
		C2010	Stair Construction						
		C2011	Stair - Vertical Circulation	6	flts	$	25,000.00	$	150,000
	C30		**Interior Finishes**						
		C3010	Interior Finishes						
		C3011	*Tunnel Level*						
		C3012	Term 1 - Vertical Circulation	2,000	sf	$	65.00	$	130,000

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	C3013	Term 2 - Vertical Circulation	2,000	sf	$ 65.00	$ 130,000
	C3014	*Apron Level*				
	C3015	Term 1 - Vertical Circulation	2,000	sf	$ 65.00	$ 130,000
	C3016	Term 2 - Vertical Circulation	2,000	sf	$ 65.00	$ 130,000
	C3017	*Concourse Level*				
	C3018	Term 1 - Vertical Circulation	2,000	sf	$ 65.00	$ 130,000
	C3019	Term 2 - Vertical Circulation	2,000	sf	$ 65.00	$ 130,000
	C3020	Allowance for Renovation to Existing Concourse for New Expansion Connection	250	sf	$ 55.00	$ 13,750
		Subtotal - Interiors				***$ 1,151,350***
D	***SERVICES***					
D10	**Conveying System**					
D1010	Elevators & Lifts					
	D1011	Hydraulic Passenger Elevator	6	stps	$ 65,000.00	$ 390,000
D1020	Escalators & Moving Walks					
	D1021	Escalator	4	ea	$ 450,000.00	$ 1,800,000
	D1022	Moving Walks				Not Required
D1030	Baggage Handling Equipment					
	D1031	Baggage Handling Equipment Allowance				Excluded
D20	**Plumbing**					
D2010	Plumbing Systems					
	D2011	Vertical Circulation	12,000	sf	$ 9.50	$ 114,000
D30	**HVAC**					
D3010	HVAC Systems					
	D3011	Vertical Circulation	12,000	sf	$ 74.00	$ 888,000
D3050	Controls and Instrumentation					
	D3051	Vertical Circulation	12,000	sf	$ 8.50	$ 102,000
D3060	Systems Testing & Balancing					
	D3061	Vertical Circulation	12,000	sf	$ 2.10	$ 25,200
D40	**Fire Protection**					
D4010	Sprinkler Systems					
	D4011	Vertical Circulation	12,000	sf	$ 9.25	$ 111,000

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
D50		**Electrical**				
D5010		Electrical Systems				
	D5011	Distribution Equipment	12,000	sf	$ 6.00	$ 72,000
	D5012	Feeders	12,000	sf	$ 8.75	$ 105,000
	D5013	Grounding and Lightning Protection	12,000	sf	$ 3.00	$ 36,000
	D5014	*Concourse Level*				
	D5015	Term 1 - Vertical Circulation	2,000	sf	$ 37.00	$ 74,000
	D5016	Term 2 - Vertical Circulation	2,000	sf	$ 37.00	$ 74,000
	D5017	*Apron Level*				
	D5018	Term 1 - Vertical Circulation	2,000	sf	$ 37.00	$ 74,000
	D5019	Term 2 - Vertical Circulation	2,000	sf	$ 37.00	$ 74,000
	D5020	*Concourse Level*				
	D5021	Term 1 - Vertical Circulation	2,000	sf	$ 37.00	$ 74,000
	D5022	Term 2 - Vertical Circulation	2,000	sf	$ 37.00	$ 74,000
D6010		Communications				
	D6011	Telecomm Room Buildout	12,000	sf	$ 4.15	$ 49,800
	D6012	Backbone Cabling	12,000	sf	$ 2.50	$ 30,000
	D6013	Communications	12,000	sf	$ 3.35	$ 40,200
	D6014	EVIDS Cabling and Installation	12,000	sf	$ 1.55	$ 18,600
	D6015	Public Address System	12,000	sf	$ 2.64	$ 31,680
	D6016	DAS	12,000	sf	$ 6.25	$ 75,000
D7010		Electronic Safety & Security				
	D7011	Video Surveillance System	12,000	sf	$ 2.90	$ 34,800
	D7012	Security Access Control	12,000	sf	$ 4.08	$ 48,960
	D7013	Fire Alarm	12,000	sf	$ 5.00	$ 60,000
		Subtotal - Services				***$ 4,476,240***
E		***EQUIPMENT & FURNISHINGS***				
E10		**Equipment**				
E1010		Equipment				
	E1011	FIDS, BIDS, MUFIDS	12,000	sf	$ 2.00	$ 24,000
	E1012	Dynamic Signage				Excluded
	E1013	Misc. Equipment Allowance	12,000	sf	$ 0.50	$ 6,000
E1030		Passenger Boarding Bridges				
	E1031	New Passenger Boarding Bridge				Not Required
E20		**Furnishings**				
E2010		Fixed Furnishings				
	E2011	Misc. Casework Allowance	12,000	sf	$ 1.00	$ 12,000

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

			DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
			Subtotal - Equipment & Furnishings				***$ 42,000***
F	***SPECIAL CONSTRUCTION & DEMOLITION***						
F10	**Special Construction**						
	F1010	Special Construction					
		F1011	Special Construction				Not Required
F20	**Selective Building Demolition**						
	F2020	Building Elements Demolition					
		F2021	Demolish Exterior Closure at Existing Building	875	sf	$ 35.00	$ 30,625
		F2022	Misc. Demolition	1	alw	$ 1,000.00	$ 1,000
F30	**Hazardous Material Abatement**						
	F3010	Hazardous Material Abatement					
		F3011	Hazardous Material Abatement				Excluded
			Subtotal - Special Construction & Demolition				***$ 31,625***
G	***BUILDING SITEWORK***						
G00	**Site Mobilization**						
	G0010	Site Mobilization					
		G0011	Mobilization				Incl. In M/UPS
		G0012	Safety and Security (3%)	1	ls	$ 4,505,300.00	$ 4,505,300
		G0013	Temporary Construction Items and Erosion Control (6%)	1	ls	$ 8,500,600.00	$ 8,500,600
		G0014	Drainage and Utility Allowance	1	alw	$ 6,746,500.00	$ 6,746,500
G20	**Site Improvements**						
	G2010	APM Tunnel					
		G2011	*Demolition*				
		G2012	Demo Existing Apron Paving	27,328	sy	$ 25.00	$ 683,200
		G2013	Excavation and Disposal of Surplus - On Site	688,882	cy	$ 18.50	$ 12,744,317
		G2014	Allowance for Rock Excavation	1	alw	$ 637,215.85	$ 637,216
		G2015	Backfill Sides of Tunnel	276,160	cy	$ 12.50	$ 3,451,997
		G2016	Apron Paving - Trench Fill-in	27,328	sy	$ 300.00	$ 8,198,400
		G2017	*Special Foundations*				
		G2018	Auger Cast Piles 18" Dia; avg 55' depth	32,047	lf	$ 165.00	$ 5,287,755
		G2019	Allowance for Rock Excavation	1	alw	$ 100,000.00	$ 100,000
		G2020	*Tunnel Bottom Slab*				
		G2021	Granular Subbase to U/S of Tunnel Floor	5,503	cy	$ 35.00	$ 192,604
		G2022	24" Thick Concrete in Tunnel Floor - 4.000PSI	22,012	cy	$ 185.00	$ 4,072,193

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	G2023	Reinforcing to Tunnel Floor - #10 @ 10" OC EW T&B	3,068	tn	$ 2,600.00	$ 7,977,260
	G2024	Floor Waterproofing	297,160	sf	$ 8.00	$ 2,377,280
	G2025	Finish Surface Cure & Seal	297,160	sf	$ 3.00	$ 891,480
	G2026	Trench Drain - Water Drain	13,110	lf	$ 250.00	$ 3,277,500
	G2027	Dewatering	1	ls	$ 100,000.00	$ 100,000
	G2028	*Basement Walls*				
	G2029	Formwork for Concrete Wall	943,920	sf	$ 18.00	$ 16,990,560
	G2030	24" Thick Concrete in Walls - 4,000PSI	40,204	cy	$ 185.00	$ 7,437,740
	G2031	Elastomeric Waterproof Poly Guard & Meadows Blindside Waterproofing	235,980	sf	$ 8.50	$ 2,005,830
	G2032	Reinforcing to Concrete Wall - #10 @ 10" OC EW T&B	4,873	ton	$ 2,600.00	$ 12,669,766
	G2033	Rub; Point & patch concrete walls	943,920	sf	$ 3.00	$ 2,831,760
	G2034	Water Stop - 3/8" x 6" PVC Waterstop	17,480	lf	$ 9.62	$ 168,203
	G2035	*Tunnel Roof Slab*				
	G2036	Formwork to Underside of Slab Including Propping	297,160	sf	$ 18.00	$ 5,348,880
	G2037	24" Thick Concrete to Elevated Slab - 4,000PSI	37,123	cy	$ 185.00	$ 6,867,748
	G2038	Reinforcing to Concrete Roof - #10 @ 10" OC EW T&B	3,068	ton	$ 2,600.00	$ 7,977,260
	G2039	Power Float Finish to Concrete Slabs	297,160	sf	$ 2.10	$ 624,036
	G2040	Elastomeric Waterproof Poly Guard & Meadows Blindside Waterproofing	297,160	sf	$ 8.50	$ 2,525,860
	G2041	Electrical, HVAC and Interiors	297,160	sf	$ 65.00	$ 19,315,400
G2050	Landscaping					
	G2051	Landscaping Allowance				Not Required
G2060	Miscellaneous Buildings and Structures					
	G2061	Miscellaneous Buildings and Structures				Not Required
G30	**Site Mechanical Utilities**					
G3010	Site Mechanical Utilities					
	G3011	Site Mechanical Utilities	1	alw	$ 50,000.00	$ 50,000
G40	**Site Electrical Utilities**					
G4010	Site Electrical Utilities					
	G4011	Site Electrical Utilities	1	alw	$ 125,000.00	$ 125,000
G4030	Site Lighting					
	G4031	Site Lighting				Not Required
		Subtotal - Building Sitework				***$ 154,681,645***

3-5 - T1-T2 APM TUNNEL CONSTRUCTION

DETAIL

	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
	Subtotal				***$ 162,686,855***
25.0%	Estimating Design Evolution				$ 40,671,714
	Subtotal - Cost of Work				***$ 203,358,569***
	General Contractors Markups				
5.0%	Project Logistics / Phasing & Labor Factor				$ 10,167,928
5.0%	General Requirements & Temporary Construction				$ 10,676,325
8.0%	General Conditions				$ 17,936,226
5.0%	General Contractors Overhead & Profit				$ 12,106,952
2.0%	Insurance				$ 5,084,920
1.0%	Payment & Performance Bonds				$ 2,593,309
0.0%	Sustainability Requirements				$ -
	Subtotal				***$ 261,924,230***
0.0%	Escalation				$ -
	Opinion of Probable Construction Cost				***$ 261,924,230***
21.3%	Owner's Soft Costs				$ 55,789,861
	Opinion of Probable Project Cost				***$ 317,714,091***

MSP 2040 LONG-TERM PLAN

LANDSIDE ELEMENTS

PROJECTS	SUB-TOTAL CONSTRUCTION	ESTIMATED DESIGN EVOLUTION (25%) [2]	GENERAL CONSTRCTORS MARKUPS (28.8%) [3]	TOTAL CONSTRUCTION COST	ESCALATION (0%)	OWNER'S SOFT COSTS (21.3%) [4]	TOTAL
NEAR-TERM PROJECTS:							
1-6: USPS REDEVELOPMENT	$317,812,893	$79,453,223	$114,412,641	$511,678,758	$0	$108,987,575	**$620,666,333**
SITE DEMOLITION AND MULTI-USE DEVELOPMENT [1]	*$307,412,893*						
RED RAMP LEVEL 1 REDEVELOPMENT	*$10,400,000*						
1-7 - ORANGE RAMP NORTH EXPANSION AND OUTRIGGER EXPANSIONS	$192,200,000	$48,050,000	$69,192,000	$309,442,000	$0	$65,911,146	**$375,353,146**
MID-TERM PROJECTS:							
2-9 - TERMINAL 1 2-LEVEL ROADWAY RECONSTRUCTION	$136,194,500	$34,048,625	$49,030,020	$219,273,145	$0	$46,705,180	**$265,978,325**
2-10 - GREEN/GOLD RAMPS REDEVELOPMENT	$659,783,660	$164,945,915	$237,522,118	$1,062,251,693	$0	$226,259,611	**$1,288,511,303**
GREEN/GOLD RAMPS DEMOLITION	*$41,900,500*						
PARKING AND ROADWAY DEVELOPMENT	*$238,684,500*						
FIS BUILDING AND SKYWAYS DEVELOPMENT [1]	*$379,198,660*						
2-11 - 34TH AVENUE PARKING DEVELOPMENT	$202,800,000	$50,700,000	$73,008,000	$326,508,000	$0	$69,546,204	**$396,054,204**
2-12 - TH 5 INTERCHANGE RECONSTRUCTION	$39,295,750	$9,823,938	$14,146,470	$63,266,158	$0	$13,475,692	**$76,741,849**
LONG—TERM PROJECTS:							
3-4 - T2 CURBFRONTAGE IMPROVEMENTS	$68,627,980	$17,156,995	$24,706,073	$110,491,048	$0	$23,534,593	**$134,025,641**
TERMINAL BUILDING IMPROVEMENTS [1]	*$12,062,480*						
ROADWAY-ENABLING DEMOLITION	*$13,234,000*						
2-LEVEL ROADWAY CONSTRUCTION	*$43,331,500*						
3-9 - ORANGE AND PURPLE RAMPS VERTICAL EXPANSION	$224,304,000	$56,076,000	$80,749,440	$361,129,440	$0	$76,920,571	**$438,050,011**
3-10 34TH AVENUE AND EAST 70TH STREET RECONSTRUCTION	$14,898,000	$3,724,500	$5,363,280	$23,985,780	$0	$5,108,971	**$29,094,751**

NOTES:

[1] *Estimate component prepared by Connico.*
[2] *Design evolution percentage (25%) provided by Connico. Calculated as percent of sub-total for construction.*
[3] *General contractor markup percentage provided by Connico. Contractor's markups are accumulative resulting in a total of approximately 28.8% of the sub-total of construction plus design evolution.*
[4] *Owner's soft costs percentage (21.3%) provided by Connico. Calculated as percent of total construction cost.*