

Program	Tactical Infrastructure
FM&E # & Project Title	RGV-1
Date	Thursday, June 1, 2017
Project Manager	(b) (6), (b) (7)(C)
Project Base Cost Est.	\$ (b) (5)
PBC + Est. Impact	\$ (b) (5)

Border Patrol Facilities and Tactical Infrastructure



Risk Register

RISK MANAGEMENT SUMMARY RESULTS (planned)

3 Point Impact Estimate		
Low	Medium	High
(b) (5)		
Total Expected Impact - Dollars		\$ (b) (5)
Total Expected Impact - Days		80
Impact to Critical Path - Total Days		215

ID #	Month/FY	Risk May Affect Critical Path	Milestone Affected	Risk Category	Detailed Description of Risk (Specific, Measurable, Attainable, Relevant, Timebound)	Mitigation of Risk	Estimated Impact - Days	Probability (%)	\$ Impact	Estimated Impact (\$)	Risk Level
(b) (7)(E)		Yes		Construction	Flood conditions in the Rio Grande river occur while construction is underway	Require contractor to be able to ensure levee/levee wall flood protection is fully functional within 48 hrs notice by gov't	20	60%	High	(b) (5)	Y
		Yes		Construction	Protesters try to stop construction activities	Prior to construction RFP release develop protest mitigation plan with Border Patrol & other local, State and Federal agencies as appropriate	5	30%	Medium	(b) (5)	G
		Yes		Design	Design is not completed on time due to the aggressive schedule needed to complete and advertise the RFP	Bring the A/E firm in on project meeting discussions. Internally to CBP and USACE, prioritizing design review over other work, and strong controls over changes and "great ideas" during the design phase.	0	10%	Low	(b) (5)	G
		No		Design	Change in engineering design from approved plans and specs, resulting in changes to cost and schedule, inclusive of: - Changes due to errors and omissions, - Ambiguity in RFP	Conduct design/constructability reviews in the field w/ technical design/construction SMEs	15	25%	Medium	(b) (5)	G
		No		Environmental	Unforeseen archaeological and/or environmental impacts are encountered during construction.	Conduct comprehensive NEPA analysis prior to completing design including consultations with SHPO, USFWS and U.S. Army Corps of Engineers.	15	30%	High	(b) (5)	Y
		Yes		External Entity Compliance	External 3rd party public and/or congressional opposition causes delay.	Keep public and congressional reps updated and pro-actively communicate project updates.	0	10%	Medium	(b) (5)	G
		Yes		Latent Conditions	Encountering unforeseen sub-surface conditions resulting in project delays and adding cost	Conduct comprehensive geotechnical analysis of project footprint	10	25%	High	(b) (5)	Y
		No		Scope	If Border Patrol or IBWC requests changes to the project's scope or design, this will add delays to the schedule.	Include Border Patrol and IBWC in the design reviews.	15	5%	High	(b) (5)	G
		Yes	Real Estate - Real Estate Certified CW370	Real Estate	Lack of timely issuance of s1 waiver	Verify with DoI that waiver target date of October won't potentially impact whatever we need to do/accomplish with FWS relative to real estate and environmental activities/schedule.	180	5%	Very High	(b) (5)	Y
										\$ -	
										\$ -	
										\$ -	
										\$ -	

Border Patrol Facilities Tactical Infrastructure PMO Risk Categories

Category	Definition	Examples
Construction	Any non-design related issues occurring during the performance period of the Construction contract that could affect project cost and/or schedule. Risks with potential impact due to weather. This also includes risks related to border activity that impact construction execution.	<ul style="list-style-type: none"> * Weather delays * Border violence * Encountering tunnels
Contractor Performance	Risks with potential impact to project cost or schedule due to unanticipated performance on the contractor's behalf. This also includes bid risk. Specific risks related lack of resources.	<ul style="list-style-type: none"> * Underestimation of cost * Underestimation of schedule * Lack of material, human, or capital resources
Design	Any required change in the architectural and/or engineering design from approved plans and specs, resulting in changes to cost and schedule, inclusive of: <ul style="list-style-type: none"> - Discrepancies/conflicts with the design standards, - Changes due to errors and omissions, - Ambiguity in RFP - Any required change that reasonably should have been accounted for during initial design 	<ul style="list-style-type: none"> * Modification of irrigation structures * Changes to gates * Design errors * Necessary enhancements in road materials * Meeting LEED related goals * Internal Affairs (IA) requirements * Office of Information Technology (OIT) requirements
Environmental	Unforeseen archaeological and/or environmental findings requiring some level of mitigation. <u>NOTE:</u> State Historic Preservation Office (SHPO), U.S. Fish and Wildlife Service (USFWS) and other government agency coordination directly resulting from unforeseen archaeological and/or environmental findings should be considered here. <u>DOES NOT INCLUDE</u> mitigation due to hazardous waste.	<ul style="list-style-type: none"> * Additional surveying support requirements * Additional costs related to archaeological investigations * Biological monitoring requirements
External Entity Compliance	Risks related to requirements of additional analysis and negotiations with Tribal Nations, international, federal, state, and local regulatory agencies. Addresses the risk of not accounting for requirements during the Planning phase. This is also inclusive of any permitting that must be obtained/granted. Also includes specific changes in project scope due to pressure/influence outside of the CBP mission.	<ul style="list-style-type: none"> * Labor regulations * International Boundary & Water Commission (IBWC) * U.S. Fish and Wildlife Service (USFWS) * Bureau of Land Management (BLM) * Department of Transportation (DOT) * Congressional direction * State or municipal government interference
Latent Conditions	Encountering unforeseen sub-surface water/public/private underground structures/ underground rock/Latent Conditions resulting in project delays and adding cost. Also includes changes in cost or schedule that are related to mitigation of unanticipated hazardous waste issues (including cost for storage, testing and disposal.)	<ul style="list-style-type: none"> * Government-Furnished Material (GFM) corrosion * Terrain modifications * Unstable soil conditions * Dewatering operations * Hazardous Waste * Heavy metals * Hydrocarbons * Polychlorinated biphenyl (PCB)
Real Estate	Results in additional real estate and land acquisition or condemnation actions or events not originally planned impacting cost, resources required, and schedule durations. Includes price volatility (appraised, listed, negotiated) for land	<ul style="list-style-type: none"> * Change in construction location * Change in size of plot * Change in ROE or ROW access requirement
Scope	Addresses a change in scope that was never intended to be considered and was not included in the original project plan. Activities outside of the overall parameters of the agreed to solution. <u>DOES NOT INCLUDE</u> changes in scope due to design related issues.	<ul style="list-style-type: none"> * Increase in fence length * Additional gates * Change in alignment * Changes in operational requirements

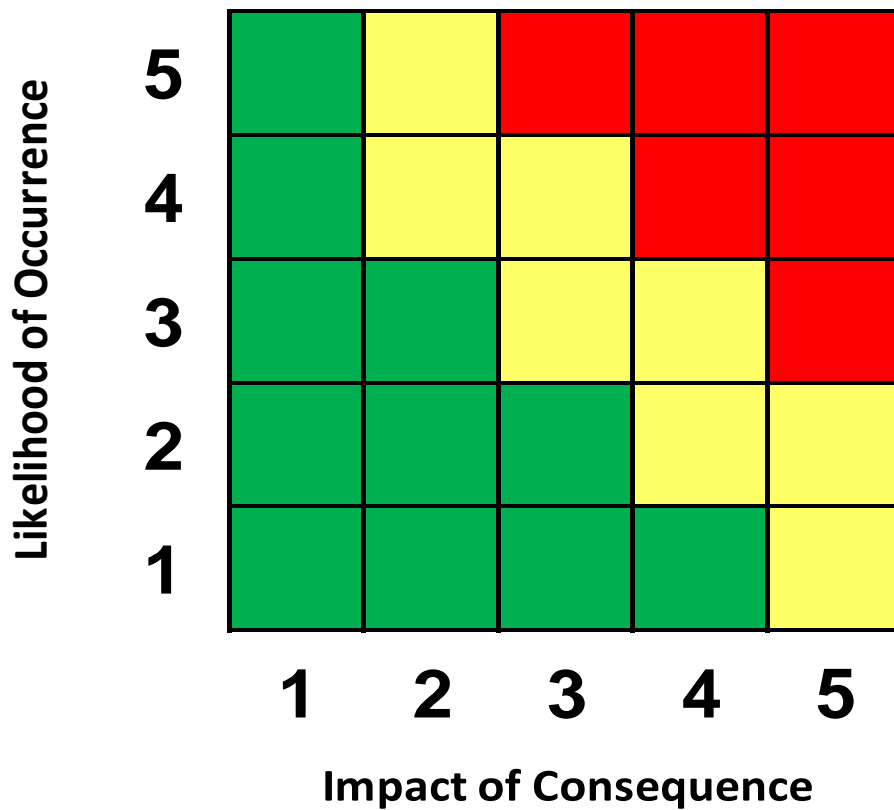
Risk Level

A 5x5 risk matrix represents the product of likelihood and consequence. It is an effective tool for communicating the results of analyses and the interrelationship among risks.

Risk levels are frequently portrayed with familiar “stoplight colors”, with high risk as red, moderate risk as yellow, and low risk as green. Example risk matrix is provided in Figure 1 below:

5 - Near
4 - High
3 - Possi
2 - Unlik
1 - Very

Figure 1. Risk Matrix



1 - Very Lo
2 - Low
3 - Medium
4 - High
5 - Very Hi

Risk Likelihood (Probability %)

Likelihood is defined as the probability that a risk will occur.

Risk Likelihood Levels	
Certainty	Most always encountered; practically unavoidable risk (100%-81%)
Very Likely	Expected to occur; typically occurs in efforts of a similar nature (80%-61%)
Likely	Even likelihood of occurrence; often encountered in similar efforts (60%-41%)
Unlikely	Hypothetically possible, but uncommon in programs of similar type (40%-21%)
Very Unlikely	Rarely encountered; standard practices will effectively avoid risk (20%-1%)

Risk Consequence (\$ Impact)

Evaluate each risk in terms of its possible consequence.

Consequence is defined as an unfavorable result of a risk.

Each risk should be categorized by type for consequence to the programs' cost, schedule and/or technical requirements.

Impact of Consequence Levels			
	Cost	Schedule	Performance
Low	Minor cost increase; absorbable within budget	Minor schedule variance; no milestone impacts	Minimal reduction in technical performance; all operational requirements met
	Cost increase may exceed authorized budget; sufficient funds available	Some schedule slips that are recoverable at program level; no major program delivery impacted	Minimum or slight reduction in technical performance; all operational requirements still met
Medium	Cost increase exceeds authorized budget; funding increase may be necessary	Significant schedule slip partially recoverable at program level; program delivery may be impacted	Decrease in technical performance; some operational requirements may not be met
	Cost increase exceeds authorized budget; funding increase necessary	Significant schedule slip may not be recoverable at program level; program delivery likely to be impacted	Decrease in technical performance; some operational requirements will not be met; mission success questionable
High	Cost increase greatly exceeds authorized budget; large funding increase necessary	Major impact to schedule; program delivery will be impacted	Significant shortfall in technical performance; critical operational requirements not achieved; mission success unattainable