

Item No.	7a_supp
Date of Meeting	January 24, 2017

Sea-Tac International Airport



NorthSTAR Program

**Fourth Quarter 2016 Program
and North Satellite Project Update**



NorthSTAR Program

The **North Sea-Tac Airport Renovation (NorthSTAR)** Program is being planned and delivered in collaboration with Alaska Airlines (AS) to better serve passengers and improve operational efficiency. This program consists of modernizing and expanding the north satellite, refurbishing the north satellite baggage system, and new exterior walkways, stairs and elevators at Concourse C. The baggage system and Concourse C exterior walkway projects are complete. The north main terminal project is currently on hold.

Purpose:

- Improve the travel experience from airport drop-off to flight departure and working environment for employees

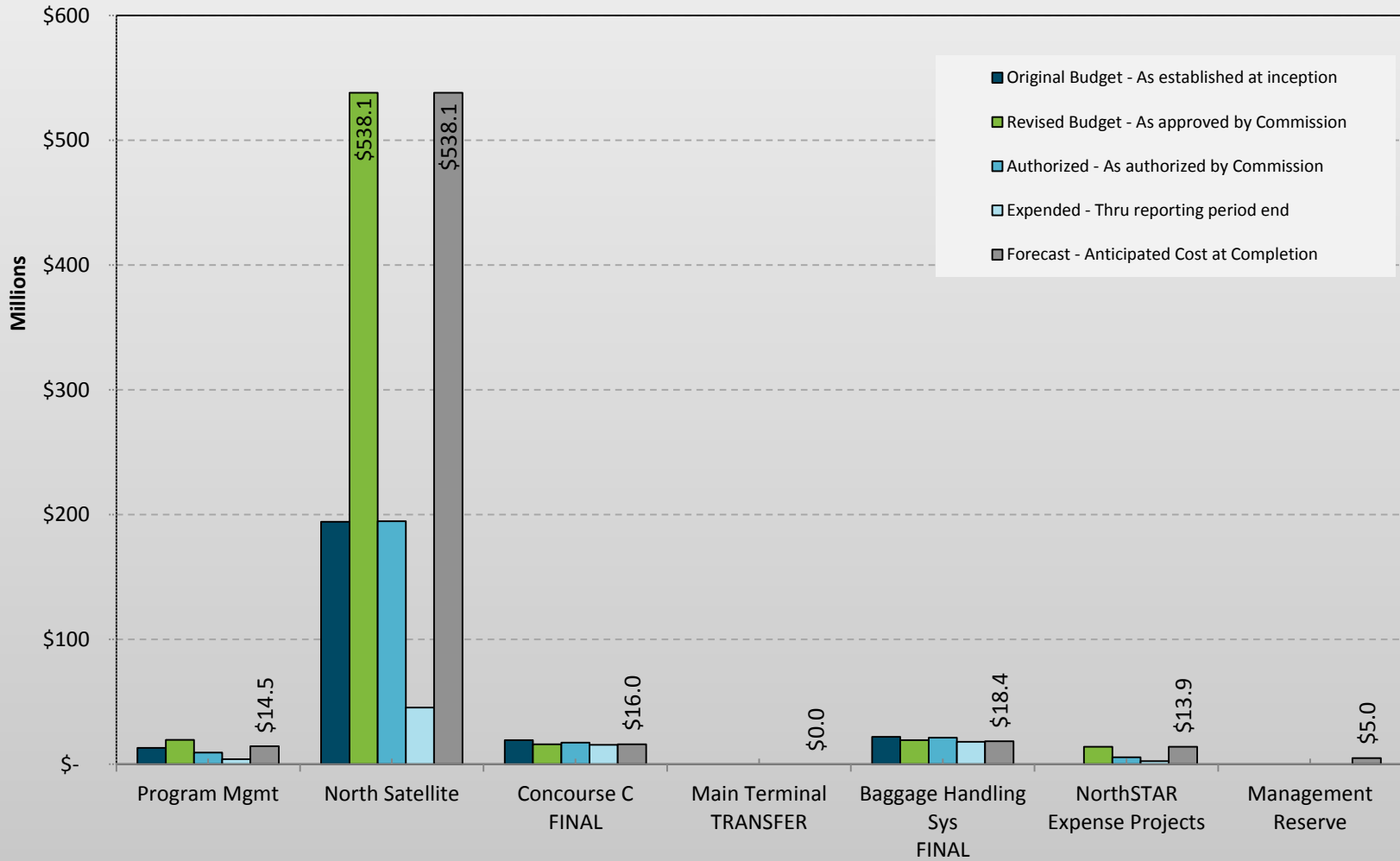
Outcome:

- Facility modernization; seismic reinforcement; enhanced traveler amenities; new contact gates; long-term energy savings; and operational efficiencies

Mission Statement

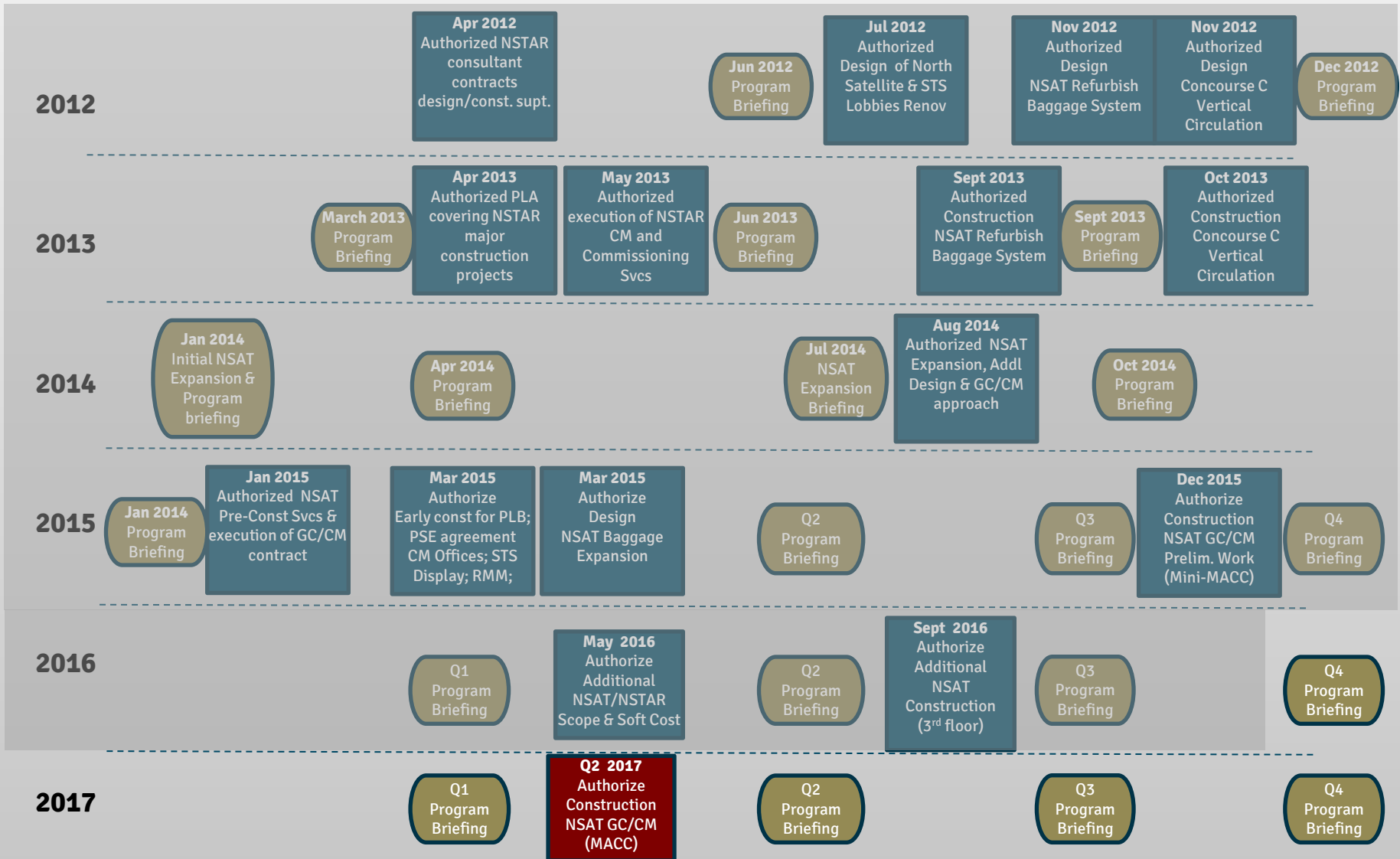
Approved Program: \$607 million

NorthSTAR Program Overall Budget



Q4 2016–Main Terminal Impvmts transferred from NorthSTAR

NorthSTAR Program Commission Action



Commission Schedule – Past & Future

NorthSTAR Program Management

CIP: C800554 – NorthSTAR Program Management

 Project Status Good

Purpose:

- Overall management of the program; programmatic oversight, coordination and controls for consistency; support between stakeholders and projects; and efficient and successful execution of the entire program's objectives

Accomplishments:

- Decision to transfer Main Terminal Improvements (MTI) project to Planning

Progress:

- Updated overall program master schedule to remove MTI & update NSAT project schedule in design/construction

Issues:

- Maintaining project scope and budget as directed by Commission on 9/14/16

Program Mgmt – Purpose, Accomplishments & Progress

NorthSTAR Program Management

Risks:

- Communication and coordination between multiple teams, stakeholders and people
- Maintain the current scope & baseline schedule as agreed to by all stakeholders
- Future design change requests could have budget and schedule implication
- AS may delay concurrence or Port/AS may choose to proceed without concurrence

Metrics:

Project Metrics	Budget/Planned	Actual
Overall Schedule Progress	51%	51%
SCS Participation (Program Management)	27.0%	26.8%*

* denotes % of Prime Contractor Budget to date.

Financial Metrics	Budget/Planned	Actual	Remaining
Estimated Total Costs *	\$19.5M	\$4.1M	\$15.4M
Estimated Contingency (including Mgmt Reserve)	\$0.94M		\$9.4M
Q4 Cashflow	\$160k	\$150k	

* Contingency included;
M = millions; k = thousands

Program Mgmt – Risks, Metrics

NSAT Renovation & NSTS Lobbies

CIP: C800556 - NSAT Renovation & NSTS Lobbies

 Project Status Good

Purpose:

Renovate and expand the satellite, including infrastructure, seismic reinforcement, gate relocations, north loop Satellite Transit System station (NSTS) lobbies, and new penthouse shell. Provide improved travel experience for customers, improved working environment for employees and long-term energy savings and operational efficiencies

Accomplishments:

- Installed time-elapsd cameras to record NSAT construction
- Successfully completed all preliminary work gate relocations, including N12 ground board gates
- Temporary wall construction, graphics, & project monitors installed
- Emergency generator cabinet relocated
- Successfully completed 100 system shut downs to date

North Satellite – Purpose and Accomplishments

NSAT Renovation & NSTS Lobbies

Accomplishments (Continued):

- Received 90% Base Building Design Documents
- Finalized schedule of major activities to complete & authorize final MACC (Maximum Allowable Construction Cost)
- Completed reviews of emergency generator and baggage expansion in preparation for 90% design
- Three FAA Construction Authorization Airspace applications submitted for review: 1) revised base building, 2) drill rig & crane, and 3) jet bridge relocations.
- NEPA updated to include Taxiway A/B/L/Q scope
- Decision to transfer NSAT Taxiway A scope, authorization and budget to 2018 Airfield Taxiway A/B/L/Q project
- Held second regular dispute resolution board meeting and agreed to standard operating procedures

North Satellite – Accomplishments

NSAT Renovation & NSTS Lobbies

Progress

- Delayed PWP #2 bid opening for Vertical Circulation package due to the limited response from interested bidders
- Conducting lessons learned on gate activations to apply during Phase I construction
- Continuing to refine and monitor critical path schedule progress to complete & authorize final MACC
- Reviewing base building 90% design submittal and 30+ draft bid packages
- Refining construction schedule, bid package scopes of work, final cost and Engineers estimates, and construction phasing in finalizing the MACC
- Final contract MACC amendment language being drafted
- Met with procurement team on Procurement Excellence implications to project
- Begin transfer of Taxiway A scope to 2018 Airfield Taxiway A/B/L/Q project

NSAT Renovation & NSTS Lobbies

ID	Task Name	2016				2017				2018				2019				2020				2021	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
1	Commission Authorization Preliminary Work	◆																					
2	100% Design - Prelim Work Pkg #1	◆																					
3	100% Design – Prelim Work Pkg #2			◆																			
4	100% Design – Base Building						◆																
5	Construction – Prelim Work Pkg #1			■																			
6	Construction – Prelim Work Pkg #2					■																	
7	Commission Authorization - MACC							◆															
8	Construction – Base Building Phase 1								■														
9	Construction – Base Building Phase 2																				■		

North Satellite – key milestone

NSAT Renovation & NSTS Lobbies

Metrics:

Financial Metrics	Budget/ Planned	Actual	Remaining
Estimated Total Costs (including Contingency)	\$538.1M *	\$45.4M	\$492.7M
Estimated Contingency	\$38.5M		\$28.5M
Q4 Cashflow	\$11.5M	\$11.9M	

Participation Metrics	Planned	Actual
SCS Participation (Design)	3.3%	2.3%
SBE Participation (Construction)	16.0%	26.4% ¹
SCS Participation (Construction)	5.5%	4.6% ¹
MWMBE Participation (Const.)	3.6%	4.1% ¹
Apprenticeship Utilization	15.0%	17.5% ¹
Minority Utilization (% of apprenticeship)	15.0%	38.73% ¹
Women Utilization (% of apprenticeship)	10.0%	19.0% ¹
Preferred Entry Apprentices	1 in 5	No Data ²

¹ Represents SCS participation for PWP #1 effort Only

² No information available yet – Too early to report

*Does not include pending scope/budget transfers

M = million; k = thousand

Project Metrics	Budget/ Planned	Actual
Overall Schedule Progress	10 %	8 %
Delayed Outbound Bags	0	0
Delayed Outbound Flights	0	0
Safety Hazard Reports (Level 2+)	0	0
Customer Complaints Rec'd	< 5 / mo	0
Construction Change Orders Processed	0	39

North Satellite – Q4 2016 Metrics

NSAT Renovation & NSTS Lobbies

Issues

- Signage updates and holdroom gate counter overhead task lighting replacement delayed by abatement work scope (PWP #1)
- Revising constructed ground board walkway to provide improved passenger experience, customer service, wayfinding and weather protection
- Continue discussing with AS a letter revising final concurrence points for base building from original Letter of Understanding
- Continuing alternatives investigation on Phase II ground board operations to eliminate potential need for a temporary apron level holdroom facility
- Continuing interior project phasing transition investigations to ensure balanced gate capacity with reasonable customer level of service during construction
- Coordinating NSAT gate activation requirements with additional Taxiway A/B/L/Q improvements to mitigate FAA runway incursion concerns
- Final definition and agreement continues for AS cost sharing items

North Satellite – Issues

NSAT Renovation & NSTS Lobbies

Issues (continued):

- Working with GCCM on schedule improvements to maintain agreed upon project substantial completion date (currently April 2021)

Risks

- Weatherproofing improvements to ground board walkway may require temporary closures
- Potential cost increases on remaining PWP #2 bid items (vertical conveyance) due to strong local construction market conditions
- Budget growth due to bid results during the strong local construction market, limited resource availability and lack of interest
- Cost and schedule impacts of needed terminal/airside modifications to transition from Phase I to Phase II construction to minimize impacts to level of service and operations

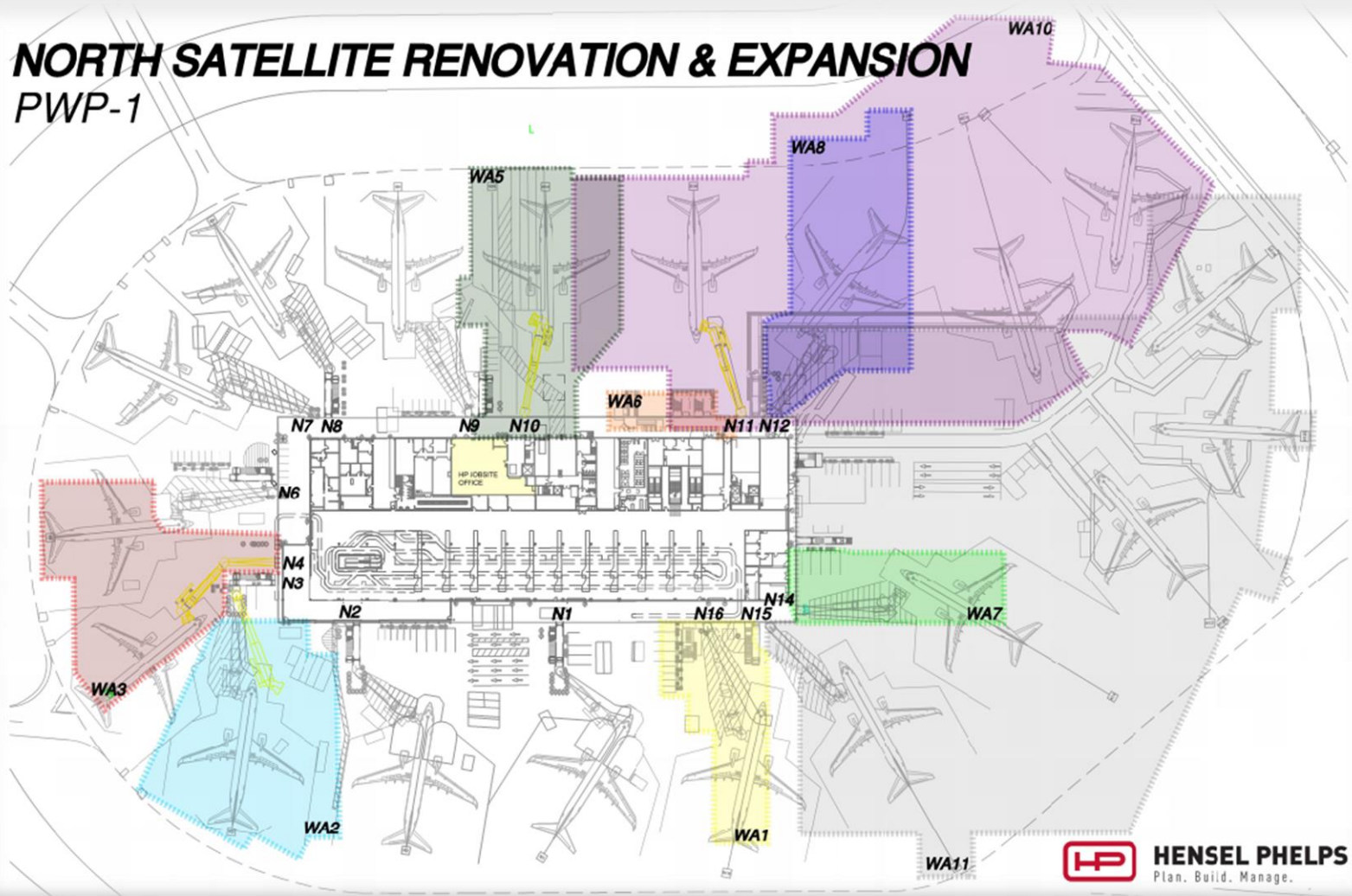
NSAT Renovation & NSTS Lobbies

Risks (continued)

- Accommodating further Port/AS scope changes or detailed analysis that potentially impacts design and construction schedule
- Impacts accommodating the number of operating gates (12 vs 14) in Phase II
- Resolution of open issues that impact final design and construction
- Complying with FAA Passenger Facility Charges submission requirements
- Schedule impacts due to delayed bidding, final MACC negotiations & Commission approval
- FAA approvals for NSAT construction authorization applications and taxiway intersection realignment that mitigates potential runway incursions and meets Aircraft Movement Area (AMA) wingtip separation requirements
- AS concurrence and continued collaboration with tenant

NORTH SATELLITE RENOVATION & EXPANSION

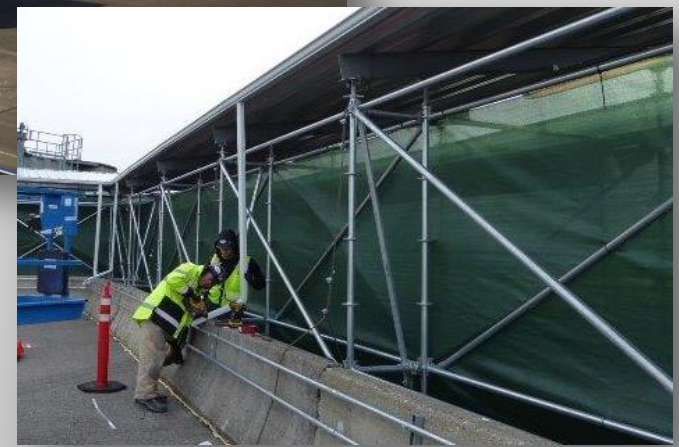
PWP-1



PWP #1 - Construction Work Areas



PWP #1 - Stairs & Walkway Work Area 8



PWP #1 - Ground Board Walkway



PWP #1 - Relocated Generator Cabinet Work Area 8



PWP #1 - Building Demolition Begins – Ripping Apart NSAT



PWP #1 - Electrical Shutdown of NSAT with TAG out



PWP #1 – Before & After Building Demolition - North End

Relocated N12



PWP #1 - Gate N12 & Construction Wall Graphics



PWP #1 - Time Elapse Camera