

Belfast Municipal Airport - Runway 15 Partial Parallel Taxiway Extension and Runway 33 Bypass Taxiway

DESCRIPTION:

Belfast Municipal Airport, whose runway (runway 15-33) has a length of 4,000 feet, currently has a partial parallel taxiway which makes accessible only approximately 420 feet of that runway length (or approximately 10.5% of that runway length). The project that is currently being proposed here consists of the following: 1) the construction of an extension to the existing partial parallel taxiway, measuring approximately 2,020 feet long and 25 feet wide, located along the northeastern side of the runway and connecting with the airport's runway 15 end (Lincolnville Avenue end); 2) the construction of a bypass taxiway approximately 500 feet long and 25 feet wide, located along the northeastern side of the runway and near the airport's runway 33 end (Lower Congress Street end); and 3) final design, permitting, and geotechnical work for this project.

Once this project is constructed, the length of runway 15-33 that will now be accessible via parallel taxiway will be increased from approximately 420 feet (or approximately 10.5% of the runway length) to 2,550 feet (or approximately 63.8% of the runway length). (The remaining runway length left not accessible via parallel taxiway would be addressed through a separate, future project; at that point the airport would have a full-length parallel taxiway.)

SAFETY BENEFITS:

The reason for the inclusion and/or extension of a parallel taxiway at an airport, and its major benefit to an airport, is to increase that airport's level of safety. Runways at airports, as much as possible, should be used for actual takeoffs and landings only. An aircraft should minimize how much time it spends on a runway, especially during low-visibility conditions, to reduce the possibility of a collision. Aircraft should avoid travelling down the runway either before taking off or after landing. A parallel taxiway (or a longer parallel taxiway) allows for an aircraft to get onto and off of the runway much faster. The issue is particularly bad at Belfast Municipal Airport because the existing partial parallel taxiway is located at the approximate midpoint of the runway, thus requiring an aircraft to taxi along the runway regardless of which end it chooses to take off from or land at.

One of the Federal Aviation Administration's (FAA's) current highest priorities is to reduce the number and the severity of runway collisions. In its Engineering Brief Number 75, *Incorporation of Runway Incursion Prevention into Taxiway and Apron Design*, the FAA states: "Full parallel taxiways are recommended as a standard airport design element when justified through planning . . . Full parallel taxiways provide a standard routing of aircraft to and from the runway recognizable to the pilots. Parallel taxiways additionally limit direct inadvertent access onto runways for departing aircraft . . . The use of runways as taxiways is not recommended. Use the runway environment only for the landing and takeoff of aircraft. Using runways as taxiways can lead to runway incursions either by a pilot inadvertently attempting to takeoff or land on the runway while someone is taxiing . . ."

Further, the FAA desires to minimize the number of actual crossings of the runway. Again, referring to its Engineering Brief Number 75, *Incorporation of Runway Incursion Prevention into Taxiway and Apron Design*, the FAA states: "When considering changes in taxiway (and airfield) design, consider the following general principles: Limit the number of aircraft crossing an active runway. . . . Limiting the number of aircraft crossing a runway is a priority in the design of the airport to enhance runway safety. . . . Parallel taxiways additionally . . . reduce runway crossings . . ." The current design of the project looks to prevent an increase in runway crossings, as it will be located on the same side of the runway (its northeastern side) as the vast majority of both current and any future airport-related development (essentially everything except for the windcone, the segmented circle, and the weather station).

RELATED/LINKED FAA REQUIREMENTS:

Belfast Municipal Airport received more precise approaches, known as global positioning system localizer performance with vertical guidance approaches, in 2014. These more precise approaches, with their lower approach and visibility minimums, allow aircraft to be able to get closer to the runway before having to obtain visual confirmation of the runway to allow them to land; this has had the effect of improving access to the airport. The downside of having lower minimums is that there is less time for aircraft already on the runway to avoid approaching aircraft. The FAA has established requirements that link visibility minimums with parallel taxiways. Section 405 of the FAA's Advisory Circular 150/5300-13A, *Airport Design*, states: "a full-length parallel taxiway is required for instrument approach procedures with visibility minimums below one mile and is recommended for all other conditions."

One of Belfast Municipal Airport's two runway approaches (runway 15) has a visibility minimum of exactly 1 mile, while its other approach (runway 33) has a visibility minimum of less than 1 mile (7/8 of a mile). Therefore, a full-length parallel taxiway is required for the airport to keep its visibility minimum for the runway 33 approach at 7/8 of a mile. The FAA has previously accepted/endorsed a substantial parallel taxiway extension as meeting this requirement for the time being, though the FAA wants to see the construction of a full parallel taxiway included on the airport's capital plan and to eventually be constructed. Were the City not to construct this proposed parallel taxiway extension, the FAA would increase the visibility minimum for the runway 33 approach from 7/8 of a mile to 1 mile. (Admittedly, the increase of 1/8 of a mile to this visibility minimum is not hugely significant, so meeting this FAA requirement would be considered a secondary reason to construct the proposed project.)

OTHER BENEFITS:

Besides increasing the airport's safety and meeting FAA requirements, building the runway 15 partial parallel taxiway extension and runway 33 bypass taxiway could also have the following additional benefits:

Increased capacity: allowing aircraft to exit the runway quicker and more efficiently means more aircraft can take off and land, therefore increasing the runway's operational capacity.

Increased activity: it is possible that increasing the airport's parallel taxiway system could lead to an increase in the number of aircraft operations, including more corporate aircraft in particular. Marshfield Municipal Airport - George Harlow Field (Marshfield, Massachusetts), an airport similar to Belfast Municipal Airport in terms of size, configuration, and capacity, reported an increase in aircraft operations and more business for its fixed base operator after undertaking a parallel taxiway improvement project (reconstruction and widening only) in 2014.

Lower instrument approach minima: according to LifeFlight, undertaking this project, in conjunction with installing precision approach path indicator lights and making some other improvements, would make the runway eligible for lower instrument approach minima; having lower minima would better ensure LifeFlight and other operators could provide services to the Belfast community in poorer weather/visibility.

OTHER MAINE AIRPORTS:

Other Maine public airports with main runways whose lengths are equal or less than Belfast Municipal Airport and who have full-length parallel taxiways are Wiscasset Airport (runway length 3,397') and Greenville Municipal Airport (runway length 4,000'). Another Maine public airport with a main runway whose length is equal or less than Belfast Municipal Airport and has a significant-length (greater than 50% of the runway length) partial parallel taxiway is Central Maine Airport of Norridgewock (runway length 4,000', taxiway length ~2,345').

Among the 36 public airports in Maine that have a paved runway, Belfast Municipal Airport currently ranks 23rd in terms of runway length percentage made accessible via parallel taxiway, and currently ranks tied for 20th in terms of parallel taxiway system actual length. After the proposed project has been built (and assuming no changes at any other public airports in Maine), Belfast Municipal Airport would then rank 14th in both terms of runway length percentage made accessible via parallel taxiway and in terms of parallel taxiway system actual length.

INCLUSION IN AIRPORT PLANS:

The extension of the partial parallel taxiway/construction of a full parallel taxiway at Belfast Municipal Airport has been included in previous airport plans, including its 1999 airport master plan, the 2006 Maine Aviation Systems Plan Update, its 2008 airport layout plan update, and in the airport's current master plan update (where it was recommended by the project advisory committee and subsequently supported by the City Council).

In the FAA document entitled *Field Formulation of the National Plan of Integrated Airport Systems*, there is a table (Table 3-1) entitled "Fundamental Airport Development," which includes among its elements a "full parallel taxiway." In that same document, the FAA defines fundamental airport development as: ". . . the basic configuration recommended for an airport in the national system . . ." Belfast Municipal Airport is included in the National Plan of Integrated Airport Systems, where it is classified as a *General Aviation* airport.

FINANCIAL CONSIDERATIONS:

The current total estimated cost for this project is **\$6,100,000**. Of this total amount, approximately \$4,928,895 represents the cost for the actual construction of the project, \$492,889.50 represents a contingency (equal to 10% of the amount for the actual construction of the project), and the remaining \$678,215.50 represents final design and construction management services. This project is eligible for FAA and Maine Department of Transportation (MDOT) funding; 90% of the project costs (\$5,490,000) would be covered by the FAA and 5% (\$305,000) would be covered by MDOT, leaving the City to provide the remaining 5% of total project costs, or **\$305,000.00**. The amount of funding that the FAA would be contributing to the project far exceeds the airport's normal allotment of its *entitlement funds* from the FAA's Airport Improvement Program, which are accrued at a rate of \$150,000 per year; the use of significant discretionary funding from the FAA reflects the FAA's current priorities on safety improvements and their strong support of projects such as this.

Previously, the project had an estimated cost of \$2,851,000 (this figure only included construction costs however); this had to be adjusted upwards in light of the discovery of significant amounts of ledge that were identified during the recent environmental assessment, permitting, and preliminary design project for the parallel taxiway, with the runway 15 partial parallel taxiway extension being shifted further away from runway 15-33 to minimize impacts to existing onsite wetlands. The City would receive updated/revised cost estimates in September of 2017 as part of final design process.

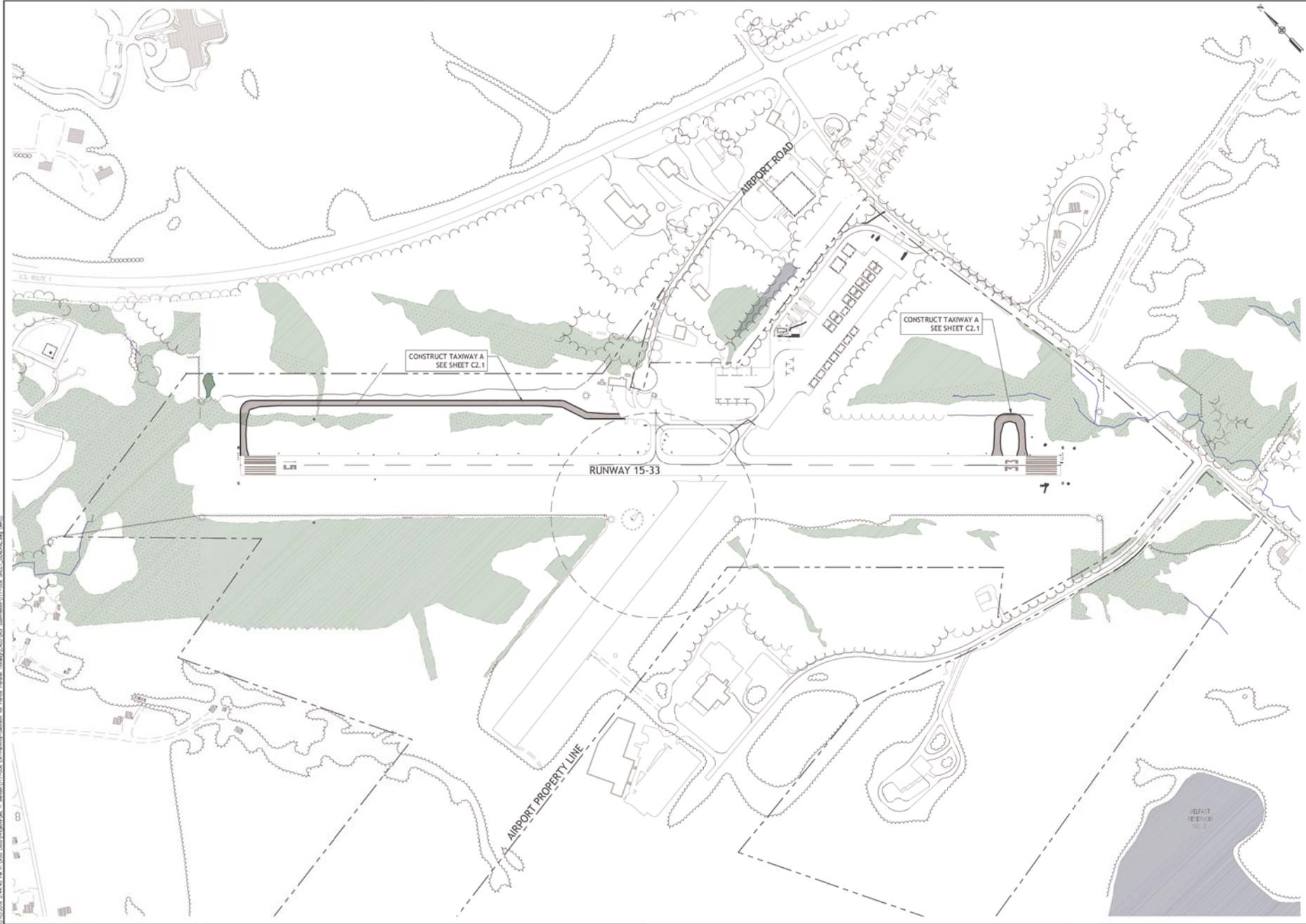
The construction portion of the project is required to go through a bid process, which is currently scheduled for the first quarter of 2018. Were the actual bid received to exceed the current estimated construction cost, the FAA and MDOT would be expected to increase their funding contributions to the project to maintain their combined 95% funding responsibility. The City of Belfast would however be required to still cover 5% of the total project costs. Were the City to decide to back out of the project, there would be no reimbursement for any funds that had been expended (such as consultant costs for final design work).

Some or all of the funding necessary for this project could be taken from the airport runway capital reserve account (640-595; which has a current balance of approximately \$115,000) and/or the account which holds the proceeds from sales of lots of the Belfast Airport Business Park (G 1-2160-00; which has a current balance of approximately \$220,000). (Please note, these same accounts have also been identified as possible funding sources for the airport's fuel system project.) According to the FAA, since Belfast Municipal Airport was initially created with federal funds, has existed uninterrupted as an active airport, and has continued to receive federal funding up to the present day, any funds that have been generated from the sale of property that was at one time part of the airport (such as both phases of the Belfast Airport Business Park) must eventually be spent on the airport (though not necessarily on a parallel taxiway); this would include the funds in account G 1-2160-00.

From now until construction would commence for this project (estimated to be September of 2018), City personnel plan to explore ways for the City to reduce its \$305,000 in costs for this project. Possibilities for reducing the City's costs include: reusing onsite materials; securing donations of materials; securing other grant funds; and doing additional geotechnical investigations, to better quantify ledge removal volumes and suitability of onsite materials for reuse (through the City's Brownfields Assessment Grant). City personnel plan to update the City Manager and the City Council if/when any of these efforts generate worthwhile results.

The City will need to set aside the \$305,000.00 for this project at the start of the 2017-2018 fiscal year for 2 important reasons: 1) the City will need to demonstrate that it is financially able to assume and carry out its duties as an airport sponsor to satisfy FAA project application and grant agreement requirements during the 2nd half of 2017 and after; and 2) the City will need to have funds (approximately \$265,000) to pay its consultant to do final design work beginning in the 3rd quarter of 2017, before it is able to get any reimbursements from the FAA (estimated to be September of 2018).

Though the FAA's ultimate goal for Belfast Municipal Airport is to put in a full-length parallel taxiway, the FAA felt that it would be too financially challenging to do it as one single project, and so a phased approach was adopted. A phased approach for a full-length parallel taxiway is not unusual. However, within this phased approach, the FAA was interested in the project option where the most pavement would be put down; this is reflected in the current design, where the partial parallel taxiway extension extends from the current partial parallel taxiway to the runway 15 end, which is located further away, instead of extending to the runway 33 end, which is located closer.



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NO.	DATE	DESCRIPTION	BY

PROJECT	CONSTRUCT PARTIAL TAXIWAY A
OWNER	BELFAST MUNICIPAL AIRPORT LITTLE HOVER BROOK BELFAST, MAINE 04915

PROJECT NO.	117-006
SHEET GENERAL	
DESIGNED BY	AKO
DRAWN BY	AKO
CHECKED BY	AKO
DATE	MAY 2016
DRAWING SCALE	1" = 200'

SHEET TITLE	GENERAL PLAN
GRAPHIC SCALE	0 100 200 400

DRAWING NO.	G1.3
	3 OF 17

Current Parallel Taxiway Capabilities for Maine Public Airports with Paved Runways (36 airports total)

Airport	Longest Active Runway Length	Parallel Taxiway Length for Longest Active Runway
Stonington Municipal Airport	2,099'	partial: ~250' (~11.9%)
Islesboro Airport	2,400'	partial: ~360' (~15.0%)
Lincoln Regional Airport	2,804'	none
Newton Field Airport (Jackman)	2,900'	none
Sugarloaf Regional Airport (Carrabassett)	2,900'	partial: ~395' (~13.6%)
Machias Valley Airport	2,909'	none
Cutler Regional Airport	2,950'	none
Oxford County Regional Airport (Oxford)	2,997'	partial: ~795' (~26.5%)
Biddeford Municipal Airport	3,000'	none
Dexter Regional Airport	3,008'	none
Steven A. Bean Municipal Airport (Rangeley)	3,201'	partial: ~550' (~17.2%)
Wiscasset Airport	3,397'	full
Deblois Flight Strip	3,520'	none
Bethel Regional Airport	3,818'	partial: ~260' (~6.8%)
Dewitt Field, Old Town Municipal Airport	3,998'	partial: ~560' (~14.0%)
Belfast Municipal Airport	4,000'	partial: ~420' (~10.5%); proposed project would increase length to ~2,550' (~63.8%)
Central Maine Airport of Norridgewock	4,000'	partial: ~2,345' (~58.6%)
Greenville Municipal Airport	4,000'	full
Eastport Municipal Airport	4,002'	none
Caribou Municipal Airport	4,003'	none
Pittsfield Municipal Airport	4,003'	partial: ~390' (~9.7%)
Princeton Municipal Airport	4,005'	partial: ~840' (~21.0%)
Eastern Slopes Regional Airport (Fryeburg)	4,200'	partial: ~1,950' (~46.4%)
Northern Aroostook Regional Airport (Frenchville)	4,600'	partial: ~420' (~9.1%)
Millinocket Municipal Airport	4,713'	partial: ~150' (~3.2%)
Auburn/Lewiston Municipal Airport (Auburn)	5,001'	full
Augusta State Airport	5,001'	partial: ~4,050' (~81.0%)
Knox County Regional Airport (Owls Head)	5,007'	full
Houlton International Airport	5,015'	full
Hancock County-Bar Harbor Airport (Trenton)	5,200'	full
Robert LaFleur Airport (Waterville)	5,500'	full
Sanford Seacoast Regional Airport	6,389'	full
Portland International Jetport	7,200'	full
Northern Maine Regional Airport at Presque Isle	7,439'	full
Brunswick Executive Airport	8,000'	full
Bangor International Airport	11,440'	full

Detailed Engineer's Opinion of Probable Construction Cost (Airport Solutions Group, March 10th, 2016)

Item Number	Description	Estimate d Quantity	Unit Type	Unit Cost	Total Cost
D-701-1	12 Inch RCP Drainage Pipe	380	linear feet	\$55.00	\$20,900.00
D-701-2	24 Inch RCP Drainage Pipe	86	linear feet	\$100.00	\$8,600.00
D-701-3	30 Inch RCP Drainage Pipe	390	linear feet	\$110.00	\$42,900.00
D-705-1	6 Inch PVC Perforated Underdrain Pipe	4,110	linear foot	\$27.00	\$110,970.00
D-751-1	Catch Basin	3	each	\$6,500.00	\$19,500.00
D-751-2	Manhole	1	each	\$6,500.00	\$6,500.00
D-752-1	Concrete Flared End	2	each	\$1,500.00	\$3,000.00
L-108-1	No. 8 AWG 5 kV Cable	10,950	linear feet	\$2.00	\$21,900.00
L-108-2	No. 6 Bare Solid Counterpoise	8,150	linear feet	\$2.00	\$16,300.00
L-108-3	Verification of Existing Circuitry	1	lump sum	\$5,000.00	\$5,000.00
L-108-4	Upgrade Electrical Vault	1	lump sum	\$25,000.00	\$25,000.00
L-110-2	4" - 4 Way Concrete Encased Duct Bank	400	linear feet	\$45.00	\$18,000.00
L-115-1	Electric Handhole	10	each	\$1,500.00	\$15,000.00
L-125-1	Install New Elevated Taxiway Lights	75	each	\$750.00	\$56,250.00
L-125-2	Install New Airfield Guidance Sign	7	each	\$4,000.00	\$28,000.00
M-001-1	Engineer's Field Office	2.5	months	\$20,000.00	\$50,000.00
M-003-1	Saw and Seal	200	linear feet	\$4.50	\$900.00
P-151-1	Clearing, Grubbing and Grading	2.25	acres	\$17,000.00	\$38,250.00
P-152-1	Unclassified Excavation	43,200	cubic yards	\$20.00	\$864,000.00
P-152-2	Rock Excavation	30,000	cubic yards	\$100.00	\$3,000,000.00
P-152-4	Fill	1,350	cubic yards	\$20.00	\$27,000.00
P-154-1	Subbase Course (15" Thick)	3,550	cubic yards	\$30.00	\$106,500.00
P-156-1	Silt Fence	6,470	linear feet	\$2.50	\$16,175.00
P-156-2	Hay Bales	2,175	each	\$11.00	\$23,925.00
P-156-3	Rip Rap	10	cubic yards	\$65.00	\$650.00
P-209-1	Crushed Aggregate Base Course (6" Thick)	1,475	cubic yards	\$75.00	\$110,625.00
P-401-1	Bituminous Surface Course (3" Thick)	1,540	tons	\$115.00	\$177,100.00
P-602-1	Bituminous Prime Coat	2,060	gallons	\$9.00	\$18,540.00
P-603-1	Bituminous Tack Coat	840	gallons	\$8.00	\$6,720.00
P-620-1	Pavement Markings	5,700	square feet	\$1.70	\$9,690.00
T-901-1	Upland Seeding	30,000	square yards	\$1.00	\$30,000.00
T-905-1	Topsoil Re-spread	24,000	square yards	\$1.25	\$30,000.00
T-905-2	Topsoil Borrow	6,000	square yards	\$3.50	\$21,000.00
	Construction Contingency (equal to 10% of all above costs)				\$492,889.50
	Final Design and Construction Management Services				\$678,215.50
TOTAL COSTS					\$6,100,000.00

Project Cash Flow (McFarland Johnson, April 3^d, 2017)

milestone	date	cost	funding	cash flow
City Match Funding			\$305,000	\$305,000
FAA/MDOT Scoping Meeting	July 2017			\$305,000
Survey	July 2017	\$40,000.00		\$265,000
Final Permitting	August 2017	\$65,000.00		\$200,000
Permits Submitted	September 2017	\$5,000.00		\$195,000
Permits In Hand	December 2017			\$195,000
Contract Documents (95% & Final)	January 2018	\$120,000.00		\$75,000
Advertisement for Bid	February 2018	\$5,000.00		\$70,000
Bid Opening	March 2018	\$25,000.00		\$45,000
FAA Grant Application Submitted	April 2018	\$5,000.00		\$40,000
FAA Grant Reimbursement	August 2018		\$238,500	\$278,500
Construction Start	September 2018	\$1,900,000.00		-\$1,621,500
FAA Grant Reimbursement	September 2018		\$1,710,000	\$88,500
Construction	October 2018	\$1,900,000.00		-\$1,811,500
FAA Grant Reimbursement	October 2018		\$1,710,000	-\$101,500
Construction Completion	November 2018	\$2,000,000.00		-\$2,101,500
FAA Grant Reimbursement	November 2018		\$1,800,000	-\$301,500
Project/Grant Closeouts	July 2019	\$35,000.00		-\$336,500
FAA Grant Reimbursement	July 2019		\$31,500	-\$305,000
MDOT Grant Reimbursement	July 2019		\$305,000	\$0
	Total	\$6,100,000.00	\$6,100,000.00	



April 7, 2017

Mr. Thomas Kitteredge
Economic Development Director
City of Belfast Airport Manager

Mr. Kittredge,

As a business owner in Belfast for 20 years, I applaud the City of Belfast's commitment to maintaining and upgrading the municipal airport. As high end, boutique, custom yacht builders, French & Webb draws on a world wide client base. Our customers have utilized the airport with their private aircraft on multiple occasions while visiting our yard. The value to our community, including the convenience and professionalism of having this facility nearby are immeasurable.

I wholeheartedly support any future expansion including a well needed parallel taxiway.

Sincerely,

A handwritten signature in black ink, appearing to read "TF", is written over a light blue horizontal line.

Todd French

French & Webb Inc.
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todd@frenchwebb.com
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March 20, 2017

To: Thomas Kittredge, Economic Development Director, City of Belfast

From: JB Turner, President, Front Street Shipyard

Re: Belfast Municipal Airport

Dear Thomas:

Thank you for reaching out to Front Street regarding the necessity for safety upgrades to Belfast Municipal Airport.

As our competition becomes more and more globally oriented we find that easy access to our yard becomes more important. While we can suggest a 50 minute drive from Bangor or a 45 minute drive from Rockland, or a 1 hour, 45 minute drive from Portland, that is a huge amount of time for our customers when thinking about a round trip timeframe. By and large our customers want and need quick access to their projects. Many have captains, crews and project managers coming and going from the projects ongoing at the yard and excessive travel puts us at a disadvantage as compared to our competition on larger populous areas. We know we are in Maine and that in itself puts us at a disadvantage from a travel point of view, so we need to do whatever we can to make the access that we do have as easy as possible. We therefore support any and all work to expand and make safer our local airport.

As I understand the parallel taxiway project, we certainly support any project which increases the safe takeoff and landing of any plane, whether it be one of our customers or any other persons or companies utilizing the facility.

In summary, Front Street Shipyard's continuing success and growth is related to the access we can provide to our customers and crews. Whatever can be done to expand that access is supported.

Thank you,

JB Turner



March 2, 2017

Mr. Thomas Kittredge

Economic Development Director

City of Belfast Airport Manager

Mr. Kittredge,

My name is Joshua Dickson. I am the Fixed Wing Manager at LifeFlight and am responsible for aviation infrastructure development. I am writing in support of the parallel taxiway project at the Belfast Municipal Airport. Here at LifeFlight of Maine, safety is our number one priority for our crews, our patients, and the public at large. A taxiway would allow for aircraft to access the runway without occupying the runway until their departure. This feature is crucial at non-towered airports such as KBST, especially as they become busier.

In low visibility scenarios, a separate taxiway helps to ensure aircraft do not land on top of one another or collide on the runway. These runway incursions are a top safety priority of the FAA and approximately three occur per day in the United States.

The taxiway would, in conjunction with PAPI lighting and some other improvements, make the runway eligible for lower instrument approach minima. Lower published approaches would ensure LifeFlight and other operators could provide services to your community in poor weather.

Joshua Dickson, FP-C
Fixed Wing Manager
LifeFlight of Maine



March 13, 2017

Mr. Thomas Kittredge
Economic Development Director
City of Belfast Airport Manager

Mr. Kittredge

My name is Kyle Hawthorne. I am the Vice President of Operations at Mathews Brothers Company. I am also an IFR rated Pilot. I am writing this in support of the parallel taxiway project on the Belfast Municipal Airport Master Plan.

As both an operator and a pilot, my number one concern is the safety and wellbeing of myself and those around me. Currently at the Belfast Airport, pilots need to be extremely diligent when taking off and landing. This is due to the fact the only exits/entrances to the ramp are located at the midpoint of the runway requiring planes to "Back-Taxi" on an active runway.

If a parallel taxiway was in use, pilots could "Hold-Short" of inbound air traffic and arriving aircraft could exit the runway immediately after landing. Not only does the parallel taxiway minimize potential runway incursions, it also increases the speed at which departures and arrivals can occur.

Sincerely,

Kyle S. Hawthorne
VP, Operations



September 19, 2016

Mr. Thomas Kittredge
Economic Development Director
City of Belfast Airport Manager

Mr. Kittredge,

My name is Brian Sansiveri, and I am the Director of Operations at Rectrix Aviation. I am writing to support the parallel taxiway project, which is planned to be implemented at the Belfast airport.

When conducting operations in and out of a non-towered airport, safety is always the number one concern. With no air traffic controllers to provide separation between aircraft, crewmembers must be diligent in their visual scan, as well as with constant radio communications to ensure that other aircraft know where they are, and what they are going to do. One of the most hazardous segments of operations at an airport is when there are aircraft on the ground taxiing the opposite direction in which aircraft are landing. This situation occurs when there is no parallel taxi way next to a runway. An aircraft must stop on the runway, turn 180 degrees and taxi back to where one of the runway exit taxiways are located. During this time, the hazard of having one aircraft on the runway and another in the landing phase, each travelling in opposite directions exists.

If a parallel taxiway is available, aircraft land and continue to taxi straight ahead until they approach a taxiway where they can depart the active runway. This eliminates an aircraft spending unnecessary time on an active runway and eliminates the risk of having two aircraft heading in opposite directions while taxiing and landing.

Sincerely,

Brian Sansiveri
Director of Operations