

Appendix F
CIP Data Sheets

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CIP DATASHEET

Airport Name: Birchwood Airport **Grant Year:** 2028
LOCID: BCV **Date Submitted:** _____

CIP Work Code			Project Description	Cost in Dollars (\$)
Purpose	Component	Type		
SA	TW	IM	Remove Existing Parallel Taxiway "A"	415,000
SA	TW	CO	Construct New Taxiway "A"	715,500
RC	TW	SH	Reconfigure Existing Connecting Taxiway "D"	1,123,500
ST	TW	OT	Remove Existing Connecting Taxiway "E"	181,500
CA	TW	CO	Construct Connecting Taxiway "F"	972,500
ST	EQ	WX	Install Supplemental Wind Cone	116,500
SA	RW	IM	Reconstruct Runway 03G/21G (1,800'x60')	2,731,000
CA	AP	EX	Expand Northeast Apron	2,903,000
CA	AP	CO	Construct Summer Tie-Down/Winter Snow Storage Area	752,500
ST	LA	DV	RPZ Land Acquisition	190,500
ST	OT	OB	Trim Trees in Avigation Easements That Are Existing Obstructions	191,500
ST	EQ	PA	Construct New Perimeter Fencing	381,000
RE	RW	LI	Rehabilitate Runway 03/21 Edge Lighting	2,712,500
ST	RW	VI	Install PAPIs on Runway 03/21	539,500
			Total Cost:	13,926,000
			Sponsor Share:	870,375
			Federal Share:	13,055,625

Project Description and Justification:

Near-term improvement projects include the following: relocation and reconfiguration of existing Taxiways "A" and "D" (BCV-NT-1, 2, 3); removal of existing Taxiway "E" (BCV-NT-4); construction of new Taxiway "F" (BCV-NT-5); installation of new supplemental wind cone (BCV-NT-6); reconstruction of gravel Runway 03G/21G (BCV-NT-7); expansion of the existing northeast apron (BCV-NT-8); acquisition of approximately 9.5 acres of land within the Runway 03/21 RPZs that currently lies outside the airport boundary (BCV-NT-9); obstruction removal (tree trimming) within the Runway 03/21 RPZs (BCV-NT-10); removal of a section of existing fence which lies within the Runway 03 RPZ (BCV-NT-11); construction of new fencing around the Runway 03 RPZ perimeter (BCV-NT-12); rehabilitation of the Runway 03/21 edge lighting and controls (BCV-NT-13); and installation of 4-box PAPI systems for both Runway 03/21 approaches (BCV-NT-14).

BCV-NT-1: Remove Existing Parallel Taxiway "A"

This project includes the removal of portions of Taxiway "A" that are in line with Runway 03G/21G.

Justification: The existing Taxiway "A" is directly in line with Runway 03G/21G and connects at either runway end. This layout goes against current FAA standards and presents a number of safety hazards including possible pilot confusion with runway limits, increased potential for conflict between taxiing aircraft and landing/departing aircraft, and increased potential for aircraft to taxi in the OFZ and RSA of an active runway.

BCV-NT-2: Construct New Taxiway "A"

This project includes the construction of approximately 700 feet of new Taxiway "A" which will connect existing Taxiway "G" to the Southeast Apron.

Justification: The current configuration of Taxiway "A" does not meet FAA standards and is anticipated to be removed to increase airport safety. This reconfiguration will remove access from the Southeast Apron to Runway 03. Constructing a new Taxiway "A" with an alignment offset from the Runway 03G/21G alignment will bring the taxiway into compliance with FAA standards, increasing airport operational safety allowing aircraft access between Runway 03 and the Southeast Apron.

BCV-NT-3: Reconfigure Existing Connecting Taxiway "D"

This project includes removal of the existing Taxiway "D" and construction of a new Taxiway "D".

Justification: Current access to Runway 03G/21G is through Taxiway "A" which is anticipated to be removed to meet FAA standards and increase operational safety. The proposed relocation and reconfiguration of Taxiway "D" will shift the taxiway's alignment towards existing Taxiway "C" and will connect parallel Taxiway "B" to the Northeast Apron via three taxiway segments: Taxiway "B" to Runway 03/21 (asphalt-surfaced), Runway 03/21 to Runway 21G (gravel-surfaced), and Runway 21G to the Northeast Apron (gravel-surfaced). The three segments of the taxiway will provide access to the Runway 21G threshold from Taxiway "B" and from the Northeast Apron. The addition of Taxiway "D" will increase airport operational safety by reducing the amount of runway crossings required to access Runway 03G/21G.

BCV-NT-4: Remove Existing Connecting Taxiway "E"

This project includes the removal of Taxiway "E".

Justification: The existing Taxiway "E" connects to the approximate mid-point of Runway 03/21. It is anticipated that, along with the reconfiguration of Runway 03G/21G, new Taxiways "F" and "D" will be constructed and will function as both crossing taxiways on Runway 03/21 and entrance taxiways for 03G/21G, making Taxiway E unnecessary and redundant. Removing Taxiway "E" will increase airport operational safety and decrease the potential for conflict occurring between taxiing aircraft and landing/departing aircraft using Runway 03/21.

BCV-NT-5: Construct Connecting Taxiway "F"

This project includes the construction of a new Taxiway "F".

Justification: Runway 03G threshold is currently accessed by Taxiway "A", which is anticipated to be removed. A new Taxiway "F" would provide access to the Runway 03G threshold, as well as access from the Southeast Apron to Runway 03G/21G, Runway 03/21, Taxiway "B", and the Northeast Apron.

BCV-NT-6: Install Supplemental Wind Cone

This project includes the installation of a new supplemental wind cone on the eastern side of Runway 03G/21G.

Justification: Birchwood Airport does not currently have a standard supplemental wind cone. Installing a new supplemental wind cone will increase Runway 03G/21G operational safety by providing accurate wind information compliant with FAA standards to pilots operating on the Runway 03G threshold.

BCV-NT-7: Reconstruct Runway 03G/21G (1,800'x60')

This project includes the reconstruction of Runway 03G/21G to bring it in compliance with FAA standards. This will include resurfacing and installation of new edge markings.

Justification: The current width, surfacing, and other design features of Runway 03G/21G do not meet FAA design standards. Reconstruction of the runway will increase airport operational safety by meeting standards that are familiar and more predictable to pilots.

BCV-NT-8: Expand Northeast Apron

This project includes expanding the Northeast Apron by construction of approximately 119,000 square feet of new paved apron area and 13 new tie-down spaces with electrical outlets.

Justification: Currently the Northeast Apron is used as a public apron to park aircraft. Expanding the apron will increase airport capacity and allow additional public aircraft to park and utilize the airport.

BCV-NT-9: Construct Summer Tie-Down/Winter Snow Storage Area

This project includes construction of approximately 33,000 square feet of new gravel apron south of the Northeast Apron including 8 new tie-downs for summer parking. The area will be used for snow storage during the winter.

Justification: Currently the Northeast Apron is used as a public apron to park aircraft. Expanding the apron will increase airport capacity and allow additional public aircraft to park and utilize the airport during the busy summer season. Additionally the airport currently struggles to find adequate storage for snow removed from airport surfaces during the winter. The gravel pad will increase snow storage capacity, and provide a designated area closer to airport facilities, reducing time required to perform snow removal and wear on snow removal equipment.

BCV-NT-10: RPZ Land Acquisition

This project includes the acquisition of approximately 9.5 acres of land to be included in airport property. The proposed acquisition includes approximately 8.3 acres of land within the Runway 03 RPZ and 1.2 acres of land within the Runway 21 RPZ.

Justification: The acquisition of the land area within the Runway 03/21 RPZs that lies outside the current airport boundary will provide the airport with control of land use within the RPZs.

BCV-NT-11: Trim Trees in Avigation Easements That Are Existing Obstructions

This project includes the trimming of trees that are obstructing airport airspace.

Justification: There are a number of trees identified in the aeronautical survey as an obstruction to the airport airspace. Trimming these trees will remove the obstruction and will increase the operational safety of the airspace for pilots.

BCV-NT-12: Construct New Perimeter Fencing

This project includes the removal of portions of existing perimeter fencing and construction of new perimeter fencing in a new location.

Justification: Currently the existing perimeter fencing is an obstruction to Runway 03 runway safety area surfaces. Removing the obstructing fence and constructing new fencing outside the runway surfaces will increase operational safety of the primary airport runway. Constructing new fencing will allow the anticipated expanded airport area to be secured properly with continuous fencing around the new airport property.

BCV-NT-13: Rehabilitate Runway 03/21 Edge Lighting

This project includes the rehabilitation of existing Runway 03/21 edge lighting and the construction of a new electrical equipment building (EEB).

Justification: The Runway 03/21 edge lighting is at the end of its useful life and due for replacement. Additionally, the existing electrical equipment building is inadequate to handle existing electrical loads and contains failing equipment past its life expectancy and due for replacement. Installing new runway edge lights will increase the operational safety of the runway and a new electrical equipment building will increase the reliability of the airport electrical system increasing airport operational safety and decrease maintenance efforts.

BCV-NT-14: Install PAPIs on Runway 03/21

This project includes the removal of the existing VASI on Runway 21 and the installation of new PAPIs on both Runways 03 and 21.

Justification: Runway 21 has existing VASI lights that are reaching the end of their functional life and not the preferred visual-glide slope system of the FAA. Installation of PAPIs for both runway approaches will provide visual-glide slope indicators of higher precision than what currently exists, increasing airport operational safety.

CIP DATASHEET

Airport Name: Birchwood Airport **Grant Year:** 2033
LOCID: BCV **Date Submitted:** _____

CIP Work Code			Project Description	Cost in Dollars (\$)
Purpose	Component	Type		
CA	AF	CO	Construct Glider Staging Area / Aircraft Run-Up Area	533,500
SA	TW	IM	Pave Apron Area Between Taxiway "B" and Lease Lots	794,500
ST	AR	IM	Realign Access Road	1,583,500
OT	OT	PA	Construct Northeast Apron Vehicle Parking Area	752,000
OT	OT	PA	Construct Southeast Apron Vehicle Parking Area	228,500
			Total Cost:	3,892,000
			Sponsor Share:	243,250
			Federal Share:	3,648,750

Project Description and Justification:

Mid-term improvement projects include the following: construction of a glider staging/aircraft run-up area adjacent to Runway 03/21 (BCV-MT-1); paving of an apron area between existing lease lots and Taxiway "B" (BCV-MT-2); realignment of a segment of the existing Southeast Apron Access Road (BCV-MT-3); and construction of two vehicle parking lots adjacent to existing aircraft aprons (BCV-MT-4 and 5).

BCV-MT-1: Construct Glider Staging Area / Aircraft Run-Up Area

This project includes construction of a 75-foot wide staging/run-up area south of the intersection between Taxiway "B" and Taxiway "G".

Justification: Taxiway "G" is frequently utilized for aircraft run-ups and glider staging operations. When Runway 03L/21R landings coincide with these activities, landing aircraft are unable to exit the runway via Taxiway "G". Additionally, congestion on Taxiway "G" has the potential to occur when a queue forms in the area due run-up/staging activities being performed. A run-up/staging area is needed at this location to allow gliders and aircraft to prepare for take-off safely without blocking entrance or exit taxiways.

BCV-MT-2: Pave Apron Area Between Taxiway "B" and Lease Lots

This project includes the paving of a 50-foot wide section of the existing gravel area between the southern portion of Taxiway "B" and the lease lot areas directly to the west.

Justification: Paving this area will reduce maintenance efforts required to maintain the existing apron area, especially during winter. Additionally, paving this area will decrease the potential for aircraft moving from the lease areas to track foreign object debris (FOD) onto the paved Taxiways "B" and "G".

BCV-MT-3: Realign Access Road

This project includes shifting approximately 1,500 feet of the existing access road alignment to the south.

Justification: Currently a portion of the airport access road lies within the Runway 03G/21G OFZ, presenting a hazard to pilots operating on Runway 03G/21G. Shifting the alignment of this road will remove it from the OFZ. This will increase operation safety of the airport.

BCV-MT-4: Construct Northeast Apron Vehicle Parking Area

This project includes construction of new parking spaces and a portable restroom facility adjacent to the Northeast Apron. The parking area will be accessible via the Southeast Apron Access Road.

Justification: Currently there are no designated parking spaces near the Northeast Apron. Airport users utilizing the apron currently park on or near the apron. This presents opportunities for improper vehicle parking, potentially impacting aircraft travel along the apron. Providing a designated parking area near the apron will remove the safety hazard of vehicles traveling and parking on the apron.

BCV-MT-5: Construct Southeast Apron Vehicle Parking Area

This project includes construction of new parking spaces and a portable restroom facility adjacent to the Southeast Apron. The parking area will be accessible via the Southeast Apron Access Road.

Justification: Currently there are no designated parking spaces near the Southeast Apron. Airport users utilizing the apron currently park on or near the apron. This presents opportunities for improper vehicle parking, potentially impacting aircraft travel along the apron. Providing a designated parking area near the apron will remove the safety hazard of vehicles traveling and parking on the apron.

CIP DATASHEET

Airport Name: Birchwood Airport **Grant Year:** 2038
LOCID: BCV **Date Submitted:** _____

CIP Work Code			Project Description	Cost in Dollars (\$)
Purpose	Component	Type		
ST	LA	DV	Land Acquisition	1,280,500
CA	AP	CO	Construct New General Aviation Apron	13,490,500
ST	TW	EX	Construct Taxiway "A" Extension	525,000
CA	AF	CO	Develop Access to New Hangar Lease Lot Area	8,624,000
CA	AR	AC	Extend SE Apron Access Road to New GA Apron and Lease Lot Area	5,546,000
OT	OT	PA	Develop GA Apron Vehicle Parking Area	1,181,500
CA	AR	AC	Construct Access Road Improvements	4,425,500
ST	EQ	PA	Construct New Perimeter Fencing	1,370,500
ST	EQ	WX	Relocate Weather Station	599,000
RE	RW	IM	Rehabilitate Runway 03/21	13,175,500
Total Cost:				50,218,000
Sponsor Share:				3,138,625
Federal Share:				47,079,379

Project Description and Justification:

Long-term improvement projects include the following: acquisition of approximately 38.7 acres of land adjacent to the new airport boundary and acquiring aviation easements within the Runway 03/21 inner approach surfaces beyond the newly acquired land (BCV-LT-1); construction of a new general aviation (GA) apron (BCV-LT-2); extension of new Taxiway "A" (BCV-LT-3); hangar lease lot development adjacent to the new GA apron (BCV-LT-4); extension of the existing Southeast Apron Access Road (BCV-LT-5); development of a new vehicle parking area adjacent to the new GA apron (BCV-LT-6); construction of new segment of access roadway (BCV-LT-7); construction of new perimeter fencing around newly acquired land (BCV-LT-8); relocation of the existing weather station (BCV-LT-9); and the rehabilitation of Runway 03/21 (BCV-LT-10).

BCV-LT-1: Land Acquisition

This project includes the acquisition of approximately 38.7 acres of land surrounding the new airport boundary adjacent to the Runway 03 RPZ (see BCV-NT-10) and the establishment of aviation easements in the area of the Runway 03/21 inner approaches that lie outside the newly acquired land.

Justification: The land acquisition will provide additional airport property to accommodate future planned development.

BCV-LT-2: Construct New General Aviation Apron

This project includes the construction of an approximately 940-foot by 330-foot general aviation (GA) apron including up to 52 additional small aircraft tie-downs.

Justification: Construction of a new GA apron will increase airport capacity by offering more aircraft parking areas for airport users.

BCV-LT-3: Construct Taxiway "A" Extension

This project includes the extension of new Taxiway "A" (see BCV-NT-2) by approximately 700 feet to connect Taxiway "G" to the new GA apron.

Justification: Extending new Taxiway "A" will provide the newly constructed GA apron with access to airside facilities.

BCV-LT-4: Develop Access to New Hangar Lease Lot Area

This project includes the construction of new taxilanes, driveways, and utility access in the new lease lot development area adjacent to the new GA apron.

Justification: This project will provide airside and landside access and extension of utilities to 16 acres of land reserved for future private development of aviation-related buildings and businesses.

BCV-LT-5: Extend SE Apron Access Road to New GA Apron and Lease Lot Area

This project includes extending the existing Southeast Apron Road by approximately 3,360 feet. The roadway extension will connect at the southern terminus of the existing road and end at the new parking area for the GA Apron (see BCV-LT-6).

Justification: The access road extension will allow vehicle traffic to access the GA Apron without crossing/utilizing active taxiways.

BCV-LT-6: Develop GA Apron Vehicle Parking Area

This project includes the construction of a new vehicle parking lot consisting of 44 perpendicular parking spaces with portable restroom facilities adjacent to the newly extended Southeast Apron Access Road (see BCV-LT-5) and the new GA apron (see BCV-LT-2).

Justification: In addition to expediting snow removal operations, development of dedicated vehicle parking and rest facilities for airport users will greatly reduce the potential for conflict between aircraft and vehicles on the apron.

BCV-LT-7: Construct Access Road Improvements

This project includes the further extension of the new Southeast Apron Access Road from its terminus at the new GA Apron Parking Area to connect to the existing terminus of Birchwood Spur Road.

Justification: The new GA Apron Parking Area will not be directly accessible from the western side of the airport. Further extension of the access road will allow GA apron access and vehicle-pedestrian circulation from the southeast side to the northeast side of the airport.

BCV-LT-8: Construct New Perimeter Fencing

This project includes the removal of the existing southeastern and southwestern segments of perimeter fencing, including the fencing installed around the Runway 03 RPZ perimeter (see BCV-NT-12), and construction of new perimeter fencing around the new airport boundary (see BCV-LT-1).

Justification: Constructing new perimeter fencing will allow the expanded airport area to be properly secured with continuous fencing around the new airport boundary.

BCV-LT-9: Relocate Weather Station

This project includes the relocation of the existing weather station from its current location on the Transient Apron to a new location adjacent to the Runway 03 RPZ boundary, approximately 350 feet southwest of Taxiways "G" and "B".

Justification: The AWOS is currently located within a congested transient apron area. Reconstructing the AWOS in a location isolated from taxiing aircraft and vehicle traffic will limit the risk of the AWOS sustaining damage and will provide additional space for tie down development on the transient apron.

BCV-LT-10: Rehabilitate Runway 03/21

This project includes rehabilitation of the asphalt surface of Runway 03/21. The rehabilitation scope will not include any alterations to the existing runway dimensions or layout.

Justification: The existing asphalt surfacing on Runway 03/21 will be nearing the end of its functional life and is anticipated to be due for rehabilitation within the next 10 to 20 years. Rehabilitation will provide safer airport operations and reduce maintenance efforts.

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