

Facilities Implementation Plan



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Section 1 – Introduction

The Facilities Implementation Plan is a chapter of the South Suburban Airport (SSA) Master Plan that provides direction on how to implement the findings and recommendations of the planning effort. Implementation plans vary based on the complexity of the airport development studied. The SSA Facilities Implementation Plan includes a detailed listing of key project descriptions, timing and scheduling of projects and estimated development costs.

Guidelines contained in the Federal Aviation Administration’s (FAA) Advisory Circular (AC) 150/5070-6B, *Airport Master Plans*¹ state that a key element of an implementation plan is the airport’s Capital Improvement Program (CIP). AC 150/5070-6B states that: *The facilities implementation plan must balance funding constraints; project sequencing limitations; environmental processing requirements; agency and tenant approvals and coordination processes; business issues, such as leases and property acquisition; and sponsor preferences. The plan must also be coordinated with the master plan ALP and the airport’s financial plan.* This chapter addresses these items. Project funding options are discussed in the SSA Financial Feasibility Report.

The Facilities Implementation Plan includes a CIP for the development of SSA. The Airport Layout Plan (ALP) illustrates airport facilities over a broad time frame (5, 10 and 20 years), those descriptions are refined into specific projects for the SSA Inaugural Airport Program (IAP) CIP. The Inaugural CIP is projected over a Date of Beneficial Occupancy (DBO) to Date of Beneficial Occupancy-Five Years After Opening Day (DBO+5) time frame. Project sequencing and phasing is also contained in this report.

¹ http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/22329

Section 2 – Inaugural Airport Development Plan

Major components of bringing the IAP to completion include physical airfield construction, installation of utilities, development of adequate roadways to support the new airport and surrounding communities and potential environmental mitigation. These actions are discussed herein. The Illinois Department of Transportation-Division of Aeronautics (IDOT) is the airport owner and Sponsor of SSA. IDOT may consider the possibility of teaming with a local government entity as a co-sponsor of SSA.

2.1 Sponsor's Proposed Action

The initial step in the creation of an implementation plan is to review the airfield development depicted on the ALP of the master plan. The IAP encompasses the facilities needed for the initial construction and operation of a new commercial airport near Peotone, Illinois. These facilities are depicted on the Inaugural ALP Drawing.² The following is the Sponsor's Proposed Action list of items needed to construct and operate SSA.³

1. Acquire approximately 5,800 acres of land in fee simple title, including relocation assistance, as applicable. This action includes the incorporation of Bult Field and its continued use as a General Aviation (GA)/corporate aviation airport.
2. Closure of the following public access roadways to allow for airfield construction:
 - a. Eagle Lake Road west of Egyptian Trail Road to Western Avenue;
 - b. Crawford Avenue from the southern airfield boundary to the northern airfield boundary;
 - c. Kedzie Avenue from the southern airfield boundary to the northern airfield boundary; and
 - d. Western Avenue from the southern airfield boundary to the northern airfield boundary.
3. Construction of Runway 9R-27L, 9,500 feet x 150 feet, to serve commercial aircraft, including a complete parallel taxiway system.
4. Construct a connecting Taxiway "A" from Runway 9R-27L to the Air Passenger Terminal.
5. Construct a connecting Taxiway "C" from Runway 9R-27L to 9L-27R.
6. Install High Intensity Runway Lights on Runway 9R-27L.
7. Construct Medium Intensity Taxiway Lights for Taxiways "A", "B", "C" and "D."
8. Install a Localizer Antenna Array over 1,000 feet beyond the threshold of Runway 9R; install a Glide Slope Antenna adjacent to the threshold of Runway 27L; and install a Medium Intensity Approach Light System with Runway Alignment Indicator Lights (MALSR). These combined facilities allow for the creation of a Category I Standard Instrument Approach Procedure for Runway 27L.
9. Install Precision Approach Path Indicator (PAPI) Lights for both thresholds of Runway 9L-27R.
10. Construct a secure airport service roadway around Runway 9L-27R.
11. Construct public access roadways that connect the air passenger terminal, interim air cargo facility, Airport Traffic Control Tower (ATCT), Aircraft Rescue and Fire Fighting (ARFF),⁴ Snow Removal Equipment (SRE) building, GA/corporate aviation facilities, fuel farm, permanent air cargo area and Airfield Maintenance building. This development includes relocation of portions of Kedzie Avenue and closure of portions of Western Avenue outside of the Runway 9L-27R Runway Safety Area.
12. Re-designation of Runway 9-27 GA/corporate to Runway 9L-27R.
13. Construct Air Passenger Terminal building, aircraft parking apron and associated auto parking facilities.
14. Construct an airport access road and interchanges at Interstate 57 (I-57) and Illinois Route 50 (IL-50) to the air passenger terminal.
15. Construct interim air cargo facilities adjacent to the Air Passenger Terminal apron.
16. Construct permanent air cargo facilities in the eastern airfield quadrant.
17. Construct on-airport access roadways within the Airport Operations Area (AOA).
18. Construct ATCT.
19. Construct an ARFF facility.

² <http://www.southsuburbanairport.com/MasterPlan/reports/ALP/03-ING-ALP.pdf> Exhibit 4-3, pg. 35

³ This list is consistent with the Sponsor's Proposed Action presented within the SSA Environmental Considerations Report.

⁴ http://www.faa.gov/airports/airport_safety/aircraft_rescue_fire_fighting/

20. Construct Airfield Maintenance building and SRE building.
21. Construct an airfield fuel farm.
22. Install a Rotating Beacon.
23. Install an Automated Weather Observation System (AWOS).
24. Install a Low Level Wind Shear Alert System (LLWAS).
25. Install appropriate wind indicators and associated segmented circle.
26. Install an airfield electrical vault.
27. Install an on-site Airport Surveillance Radar (ASR).
28. Relocate the existing Peotone Very High Frequency Omni-directional Rangefinder (VOR) to the airport.
29. Install perimeter and security fencing.
30. Install appropriate utilities including: water, sanitary, stormwater, electrical, natural gas and telecommunications.
31. Identify any potential borrow and fill areas, as applicable.
32. Mitigate any potential wetland and/or floodplain impacts, as applicable.
33. Revise existing Standard Instrument Approach Procedures (SIAP) and initiate new SIAPs for all runway ends.
34. Approve the SSA ALP.
35. Impose and use a Passenger Facility Charge (PFC).

2.2 Utilities

Installation of electric power, natural gas, water, sewer and telecommunications are necessary for the construction and operation of SSA. The following is a brief synopsis of expected utility development.

Electrical - Preliminary engineering concept drawings, design criteria and electrical load calculations for electrical power service and distribution for SSA has been prepared. These documents have been coordinated with Exelon Corporation,⁵ a major power company in the Chicago region. Discussions with Exelon note that reliable, redundant and code compliant electrical power service to SSA could include the following system characteristics and components:

- Two 34.5 kilovolts (kV) electrical power supply lines originating from two individual ComEd power distribution substations;
- A new electrical substation on IAP property site;
- Outdoor 34.5 kV switchgear within the new electrical substation;
- Four network centers with 34.5 kV – 480V, 3-phase, 4 watt power transformation within each network center;
- 34.5 kV feeder cables in underground concrete encased duct banks from their 35 kV switchgear located at the new electrical substation at the airport site to each of the four network centers; and
- Multiple metering at 480V at each of SSA's switchgears.

Natural Gas - Natural gas is expected to be required for heating, food preparation and vehicle fuel at various locations throughout SSA. Nicor Gas,⁶ a major provider of natural gas in the Chicago region, has a 10-inch main line located along the I-57 right of way, and an eight-inch main line that extends along Western Avenue from Offner to Peotone-Beecher Road.⁷ It is anticipated that adequate natural gas capacity and adjacent distribution systems exist to serve the IAP through DBO+5.

Telecommunications - It is expected that the IAP could utilize traditional dedicated telecommunication services as well as a shared, integrated internet protocol telecommunications and an information technology system at DBO. An integrated telecommunications/information technology system may be optically based and have a fiber optic backbone distribution system. Telecommunication and information technology systems could be a shared common use environment and would accommodate all telecommunications and information technology

⁵ <http://www.exeloncorp.com/Pages/home.aspx>

⁶ <http://aglresources.com/nicor/index.html>

⁷ [http://www.southsuburbanairport.com/MasterPlan/reports/Existing_Conditions/Existing%20Conditions%20Report-12-14-11\[1\].pdf](http://www.southsuburbanairport.com/MasterPlan/reports/Existing_Conditions/Existing%20Conditions%20Report-12-14-11[1].pdf)

requirements of the airport, airlines, other airport tenants/concessionaires and users of the airport. The system could encompass multiple airport activities including building management and control, safety and security, telephone, paging, airport information, flight information displays, baggage information displays, master clock, wireless internet access, etc. Telecommunications may also accommodate all voice, data, video and wireless systems throughout the airport including building management and control, safety and security, telephone, paging, airport information, flight information displays, baggage information displays and master clock.

Water Supply - The water supply for SSA must be reliable and of sufficient quantity and quality to support airport operations. The water supply would initially be provided by three, on-site 500-foot deep wells with an elevated 500,000 gallon storage tank. As the airport grows over time, there is the potential that the airport water supply could become part of a larger municipal or regional system.

Wastewater Treatment - Operation of SSA requires the treatment of sanitary wastewater. Sanitary wastewater includes wastewater from all airport facilities and aircraft lavatories. Aircraft sanitary wastewater has a pretreatment requirement due to the chemicals used. The estimated volume of sanitary wastewater to be treated during the IAP is approximately 44,000 gallons per day. Will County prepared a comprehensive examination of the existing wastewater (sanitary sewer) facilities and future needs for its eastern six townships: Green Garden, Monee, Crete, Peotone, Will and Washington. The 2008 study, entitled *Eastern Will County Wastewater Study*⁸ was prepared for the Will County Land Use Department by the Farnsworth Group. Initially, wastewater generated from SSA would be treated on-site and have an Illinois Environmental Protection Agency (IEPA) permitted discharge to Black Walnut Creek. The covered-lagoon system would handle up to 100,000 gallons per day. Over time, the airport could participate in a municipal or regional wastewater treatment program.

Stormwater - Most of the AOA of the IAP property would be mown grass areas and areas of development with formal stormwater collection facilities. IDOT's proposed action would require a National Pollutant Discharge Elimination System (NPDES) permit from the IEPA for construction of the Inaugural Airport. Stormwater discharges from construction activities (such as clearing, grading, excavating and stockpiling) that disturb one or more acres, or smaller sites that are part of a larger common plan of development or sale, are regulated NPDES stormwater activities. Prior to discharging stormwater, construction operators must obtain coverage under an NPDES permit. A separate NPDES permit, a Stormwater Pollution Prevention Plan (SWPPP) and a Spill Prevention, Control and Countermeasure Plan (SPCC) would be required for the operation of the airport.

Potential SWPPP requirements for airport tenants could include: complete an initial and annual stormwater pollution prevention survey; implement best management practices; participate in an airport stormwater pollution prevention team; attend annual training; educate employees about stormwater pollution prevention; and submit to periodic stormwater pollution prevention facility inspections. Some of the best management practices that would be considered as part of the SWPPP include: preparation and use of a SPCC; prevention of non-stormwater discharges into drains; proper oversight of aircraft, ground vehicle and equipment maintenance repair, fueling, washing/steam cleaning and degreasing; aircraft anti-icing and de-icing actions; waste handling and disposal; building and grounds maintenance; lavatory service operations; and oil-water separators.

2.3 Ground Access

Primary access to SSA would be through an integrated network of state, county and local roads. These reports include: the *Airport Access Report, July 31, 2012* and the *Access Justification Report, May 2012*. The *Airport Access Report, July 31, 2012* reviewed local roadways and the effects the construction and operation of SSA would have on users.⁹ The *Access Justification Report, May 2012* is a specific report that analyzes the construction of a new interchange on I-57 and a new airport access road to IL-50. It is anticipated that the airport access road from IL-50 to the air passenger terminal complex would be open on DBO. It is also expected that the new interchange on I-57 would be opened by DBO+5.

⁸ <http://willcountylanduse.com/resource/document/eastern-will-county-wastewater-study>

⁹ <http://www.southsuburbanairport.com/MasterPlan/reports/Access-Report-Plan2012-07-31.pdf> pg .20

2.4 Environmental Mitigation

Major public works projects, subject to an Environmental Impact Statement (EIS) review, could require the issuance of certain Federal, state and local permits and the preparation of stormwater, pollution control and environmental system plans. Some of the anticipated permits required include: Section 404 (Clean Water Act) authorization from the United States Department of the Army, Corps of Engineers, Chicago District (USACE), Section 401 (Clean Water Act) certification from the IEPA, Section 7 (Federal Endangered Species Act) consultation from the U.S. Fish and Wildlife Service and conformance from the IEPA regarding the State Implementation Plan for air quality.

Section 3 – Inaugural Airport Development Phasing

FAA's *Airport Master Plan* AC states that an implementation plan should contain a sequencing of airport development projects. The phasing of the IAP is divided into three phases: Project Formulation, Project Pre-Construction and Inaugural Airport Construction.

Below is a work breakdown structure that has been established for each airport development phase. This numbering scheme allows for the airfield development to be tracked consistently through phasing, scheduling and funding sections of the Facilities Implementation Plan. This numbering system allows projects to be added as they are identified.

Project Formulation

- IAP No. 10 Master Plan, Tier 2 EIS and Joint Permit Application Process
- IAP No. 20 Land Acquisition, Relocation and Property Management
- IAP No. 30 Survey and Testing

Project Pre-Construction

- IAP No. 100 Program Management and Administration
- IAP No. 200 Marketing
- IAP No. 300 Design
- IAP No. 400 Permitting
- IAP No. 500 Project Financing
- IAP No. 600 Maintain Existing Airport Operations
- IAP No. 700 Property Management

Inaugural Airport Construction

- IAP No. 1000 Site Preparation
- IAP No. 2000 Airport Infrastructure (Utilities)
- IAP No. 3000 Landside Facilities
- IAP No. 4000 Airfield Infrastructure
- IAP No. 5000 Passenger Terminal Complex
- IAP No. 6000 Aviation Support Facilities
- IAP No. 7000 Cargo and General Aviation Facilities
- IAP No. 8000 Ground Access: I-57 Interchange and Airport Access Roads
- IAP No. 9000 Environmental Mitigation

3.1 Project Formulation

Project Formulation includes activities required to complete the Airport Master Plan, preparation of the Tier 2 EIS, Record of Decision (ROD), Inaugural Airport land acquisition and airfield surveying, testing and site management.

3.1.1 IAP Number 10 – Master Plan, Tier 2 EIS and Joint Permit Application Process

Preparation of the Airport Master Plan is guided by the FAA's AC 150/5070-6B, *Airport Master Plans*. Prior to the preparation of this Facilities Implementation Plan report, IDOT submitted and received approval or acceptance from the FAA on the *SSA Forecasts 2009: Verification of 2004 Forecasts, March 23, 2011*,¹⁰ (Forecast), *Facility Requirements Report, October 25, 2011*,¹¹ *SSA Existing Conditions Report, December 14, 2011*,¹² and *Alternatives Development and Evaluation Report, June 29, 2012*.¹³ Subsequent reports that are in production or have been submitted for review are: *SSA Airport Layout Plan*,¹⁴ *SSA Airport Plans Report*,¹⁵ *SSA*

¹⁰ http://www.southsuburbanairport.com/MasterPlan/reports/2009_Forecast_Update_Approved.pdf

¹¹ http://www.southsuburbanairport.com/MasterPlan/reports/Approved_SSA_Facility_Requirements_Report.pdf

¹² [http://www.southsuburbanairport.com/MasterPlan/reports/Existing_Conditions/Existing%20Conditions%20Report-12-14-11\[1\].pdf](http://www.southsuburbanairport.com/MasterPlan/reports/Existing_Conditions/Existing%20Conditions%20Report-12-14-11[1].pdf)

¹³ http://www.southsuburbanairport.com/MasterPlan/reports/Alternatives/AlternativesReport_2012-06-29.pdf

¹⁴ http://www.southsuburbanairport.com/MasterPlan/reports/ALP/DRAFT_AirportPlansReport-September27-2012.pdf

¹⁵ <http://www.southsuburbanairport.com/MasterPlan/reports/Access-Report-Plan2012-07-31.pdf>

Airport Access Plan,¹⁶ SSA Environmental Considerations Report, December 5, 2012, SSA Floodplain Report, January 25, 2013, SSA Airport Sustainability Report and SSA Financial Feasibility Report.

FAA is preparing a Tier 2 EIS in accordance with Orders 1050.1E: *Environmental Impacts: Policies and Procedures*; and 5050.4B *National Environmental Policy Act Implementing Instructions for Airport Actions*. The Tier 2 EIS identifies potential environmental impacts that may occur as a result of the construction and operation of the IAP.

Concurrent with preparation of the Tier 2 EIS, IDOT can submit a Section 404 permit application to the USACE. This request would initiate a Joint Permit Application (JPA) process with the USACE. Other agencies may also be contacted during the JPA including: the U.S. Environmental Protection Agency, the U.S. Department of the Interior-Fish and Wildlife Service, the Federal Emergency Management Agency, the IEPA, the Illinois Department of Natural Resources, the Illinois Department of Agriculture and the Illinois Historic Preservation Agency. The JPA process is designed to streamline the application process by consolidating the Federal and state permit process concerning activities involving the placement of fill materials within wetlands or waters of the United States. Other development actions that may require permits include but are not limited to: utility installations, bridge crossings, stream restoration projects, etc. Each agency is responsible for their particular statutes, regulations and issuance of their particular permits.

3.1.2 IAP Number 20 – Land Acquisition, Relocation and Property Management

On July 12, 2002, the FAA issued a ROD for the SSA Tier 1 EIS. The Tier 1 ROD stated FAA's "Approval that the preservation of the Will County site is reasonably necessary for potential operation and maintenance of air navigation facilities and for use in air commerce." IDOT initiated a land acquisition program to preserve the SSA site for future development. IDOT and the contracted land acquisition/property management firm maintain an on-site office at an acquired farmstead. Presently, the IAP land acquisition program is focusing on the acquisition of a site consisting of approximately 5,800 acres. This site is expected to accommodate all airside and landside facilities and any noise mitigation needs for the IAP. Management of airfield properties is a continuing endeavor.

3.1.3 IAP Number 30 – Survey and Testing

Surveys needed to support the preparation of the Airport Master Plan have either been accomplished or are underway. A detailed wetland delineation study was prepared and provided to the USACE for their jurisdictional determination of wetlands within the IAP site. A Light Detection and Ranging (LiDAR) survey was conducted to determine the level and extent of floodplains and floodways that cross the IAP site. A review of biotic communities on the site has been conducted and compared to present Federal and/or state-listed threatened and endangered species of flora and fauna. The Illinois State Archaeological Survey is conducting an ongoing Section 106 cultural resource study of archaeological, historic and architectural sites.

3.2 Project Pre-Construction

Project Pre-Construction involves actions required to execute a Program Management Plan, and pursue agency coordination, permitting, initiate project design, establish project financing and develop an airport marketing plan. This phase is expected to commence upon publication of the Tier 2 EIS by the FAA.

3.2.1 IAP Number 100 – Program Management and Administration

As part of this task, a Program Management Plan would be developed. It is anticipated that the services of a Program Management Firm (PMF) would be procured to act as IDOT's agent. The PMF can supplement existing airport staff with tasks that include management of planning and design, development of an SSA sustainable design and construction manual, selection of design teams, establishment of costs, budget and time parameters, preparation of bid packages, value engineering and cost analysis. The PMF may also assist in the awarding of contracts, managing construction, coordinating subcontractor activities, managing material

¹⁶ <http://www.southsuburbanairport.com/MasterPlan/reports/MP-Report-access.htm>

procurement, monitoring costs and schedules, establishing quality control standards, pursuing Leadership in Energy and Environmental Design (LEED)¹⁷ certification, providing on-going status reports and monitoring of contractor safety programs.

3.2.2 IAP Number 200 – Marketing

In this work element IDOT would establish an airport stakeholder partnership with local municipal corporations and economic development groups to develop community support, thereby leveraging resources to market the airport. IDOT could contract with a marketing firm to develop an airport marketing plan. The marketing plan should be initiated with a familiarization strategy to inform the stakeholders of the assets and opportunities present within the IAP. This strategy includes creation of a marketing approach that can perform direct outreach to passenger and cargo airlines, freight forwarders and aviation-related businesses such as maintenance repair and overhaul companies, fixed-based operators and corporate aviation departments. Research can be conducted to identify markets that focus on the airport's primary service area.

SSA would also be defined as a supplemental facility for the region that compliments existing aeronautical services and could relieve restrictions on capacity. With numerous intermodal operations near the airfield, the IAP could be marketed as an incubator operation that is flexible to accommodate multi-modal transportation businesses.

3.2.3 IAP Number 300 – Design

IDOT's procurement process will be initiated to select a firm(s) to complete the design activities necessary to construct the IAP including: site preparation, airport infrastructure (utilities), landside facilities, airfield infrastructure, passenger terminal complex, aviation support facilities, airport support facilities, ground access and environmental mitigation, as required.

3.2.4 IAP Number 400 – Permitting

This task notes IDOT's continuing documentation support to FAA in the preparation of the Tier 2 EIS. Coordination with resource agencies regarding permitting activities would also continue under this monitoring endeavor. It is anticipated that specific mitigation actions would be an integral part of the FAA's Tier 2 EIS.

3.2.5 IAP Number 500 – Project Financing

The Airport Master Plan includes the preparation of the SSA financial plan. The SSA financial plan will include an IAP funding program, which could utilize a combination of funding sources, including FAA Airport Improvement Program entitlement and discretionary grants, FAA Facilities and Equipment funds, Transportation Security Administration¹⁸ grants, Passenger Facility Charges, Illinois Series "B" bonds, the sale of general airport revenue bonds, airport lease revenue and private funding.

3.2.6 IAP Number 600 – Maintain Existing Airport Operations

The existing GA/corporate aviation runway, taxiway, apron and hangar facilities would continue in operation during the construction of the IAP. In an effort to bring the GA facility up to Federal standards, there would be occasions when construction requires the periodic displacement of runway thresholds. These displacements would be brought about by:

- Closure of Western Avenue and the grading of the Runway Safety Area (RSA) and Runway Object Free Area (ROFA) for Runway End 27R;
- Relocation of Kedzie Avenue and the grading of the RSA and ROFA for Runway End 9L;
- Repainting of runway numerals and striping; and
- Installation and updating of airfield signage.

¹⁷ LEED is the nationally accepted benchmark developed by the U.S. Green Buildings Council for the design, construction and operation of high performance green buildings. <http://www.usgbc.org/>

¹⁸ <http://www.tsa.gov/>

These procedural changes and revisions would be included in any design plans and coordinated with FAA.

3.2.7 IAP Number 700 – Property Management

In 2001 IDOT acquired the first parcel of land for the IAP. Since that time, IDOT has continued to purchase additional property and manage/maintain state-owned lands. Land management activities include the leasing of residential and agricultural properties, routine maintenance, site security and as necessary, demolition of structures.

3.3 Inaugural Airport Construction

Inaugural Airport Construction involves all construction activities, commissioning and certification needed to complete the facilities identified on the Inaugural ALP Drawing and associated mitigation. It is expected that this phase would commence upon the issuance of a signed ROD for FAA's Tier 2 EIS.

3.3.1 IAP Number 1000 – Site Preparation

Exhibit 3-1: IAP 1000 - Site Preparation depicts the areas of ground clearing, grubbing and earthwork located on the IAP. This includes the removal of existing underground utilities, residential and commercial buildings and vegetation, as required.

3.3.2 IAP Number 2000 – Airport Infrastructure (Utilities)

Exhibit 3-2: IAP 2000 - Airport Infrastructure (Utilities) depicts the areas where utility installations would occur. A number of utility lines cross the IAP site including natural gas, petroleum and telecom. Electric, natural gas and telecom would be provided to the Inaugural Airport by existing service providers. It is anticipated that utility agreements would be negotiated and completed during the Project Pre-Construction phase. Upgrades to existing utilities and/or new facilities such as electrical, (including the airfield electrical vault), telecom, natural gas, water, wastewater and stormwater management systems should be constructed under this task.

3.3.3 IAP Number 3000 – Landside Facilities

Exhibit 3-3: IAP 3000 - Landside Facilities depicts the areas where tasks such as the temporary construction access road, auto parking lot, security check points, airport signage, landscaping, sidewalks, curb fronts lighting and greenways would be installed.

3.3.4 IAP Number 4000 – Airfield Infrastructure

Exhibit 3-4: IAP 4000 - Airfield Infrastructure depicts the location of the footprint of these facilities. This task includes the construction of a new Runway 09R-27L that would be 9,500 feet long by 150 feet wide and a full-length parallel taxiway and connecting taxiways. Installation of appropriate visual and electronic navigational aids such as a Localizer Antenna Array, Glide Slope Antenna, MALSR, PAPI, ASR, ATCT and a VOR are also included in this task.

3.3.5 IAP Number 5000 – Passenger Terminal Complex

Exhibit 3-5: IAP 5000 - Passenger Terminal Complex depicts the footprint of the passenger terminal building, aircraft apron and public/employee parking. Construction of the air passenger terminal complex would include a variety of disciplines to accomplish. Terminal and gate facilities can be correlated to airline requirements.

3.3.6 IAP Number 6000 – Aviation Support Facilities

Exhibit 3-6: IAP 6000 - Aviation Support Facilities depicts the ARFF, SRE building and fuel farm. These facilities would be constructed as part of IAP construction activities.

3.3.7 IAP Number 7000 – Cargo and General Aviation Facilities

Exhibit 3-7: IAP 7000 – Cargo and General Aviation Facilities depicts the location of the landside access roads and airside service roads, the location of the rental car parking, cargo and GA airport support facilities to be

maintained or constructed. This work includes modifications to existing GA/corporate facilities to meet FAA standards. These modifications would include construction of a connecting taxiway between the existing GA/corporate runway, the new commercial runway and the AOA perimeter fence.

3.3.8 IAP Number 8000 – Ground Access: I-57 Interchange and Airport Access Roads

Exhibit 3-8: IAP 8000 - Ground Access: I-57 Interchange and Airport Access Roads depicts the location of the Inaugural Airport, I-57 and IL-50 interchanges, the airport access road and associated local roadway improvements. Ground access to SSA requires roadwork modifications including the construction of a new I-57 interchange and a dedicated airport access roadway. Roadwork for SSA also includes the removal of specific local roads and improvements to existing roads.

3.3.9 IAP Number 9000 – Environmental Mitigation

It is anticipated that specific mitigation actions would be an integral part of an approved ROD of the FAA's Tier 2 EIS. This task would monitor the implementation of these actions.

Section 4 – Inaugural Airport Program Implementation Schedule

The IAP Project Formulation Schedule is contained below in **Table 4-1: Inaugural Airport Program - Project Formulation Schedule**. The schedule is presented in Federal fiscal year from October 1 through September 30.

Table 4-1: Inaugural Airport Program-Project Formulation Schedule		
Project Formulation		
IAP No.	Item	Federal Fiscal Year
10	Master Plan, Tier 2 EIS and Joint Permit Application Process	Ongoing-2015
20	Land Acquisition, Relocation and Property Management	Ongoing
30	Survey and Testing	Ongoing-2015

The IAP Project Implementation Schedule at DBO is presented in **Table 4-2: Inaugural Airport Program - Project Implementation Schedule**. This schedule is based on the estimated durations of the various elements described in **Section 2 – Inaugural Airport Development Plan** and shows the work flow from completion of the Master Plan through DBO+5. Based on this schedule, DBO is projected to be in Federal fiscal year 2019.

Table 4-2: Inaugural Airport Program-Project Implementation Schedule		
Pre-Construction		
IAP No.	Item	Federal Fiscal Year
100	Program Management and Administration	Continuous
200	Marketing	2014-Ongoing
300	Design	2014-2018
400	Permitting	2013-2018
500	Project Financing	Continuous
600	Maintain Existing Airport Operations	Continuous
700	Property Management	Continuous
Construction		
IAP No.	Item	Federal Fiscal Year
1000	Site Preparation	2016-2018
2000	Airport Infrastructure (Utilities)	2017-2018
3000	Landside Facilities	2018-2019
4000	Airfield Infrastructure	2016-2017
5000	Passenger Terminal Complex	2017-2019
6000	Aviation Support Facilities	2017-2018
7000	Cargo and General Aviation Facilities	2017-2021
8000	Ground Access: I-57 Interchange and Airport Access Roads	2017-2021
9000	Environmental Mitigation	2015-Ongoing

Section 5 – Inaugural Airport Capital Improvement Program

5.1 Development of Planning Level Cost Estimates

Planning level cost estimates have an inherent variability confidence level, especially for large, long-term public infrastructure project such as SSA. It should be noted that planning level cost estimates contained herein are an approximate “order of magnitude” and are subject to change. The CIP is based on IDOT’s preferred airport plan as described in the ALP and *Airport Plans Report, September 27, 2012*.¹⁹ The CIP includes pre-construction, construction and commissioning of SSA. The construction cost estimate includes a construction contingency considered appropriate for a planning-level cost estimate. Cost estimates presented in this CIP were developed in 2012 dollars and are based on the SSA Master Plan and ALP. The estimates are based on a level of detail suitable for planning purposes. Actual costs will vary from these estimates when detailed design is completed.

The IAP CIP illustrates the multi-year monies needed to complete the Pre-Construction and Construction phases of the project. For reference, IDOT and FAA monies dedicated to Project Formulation are presented in **Appendix C – Inaugural Airport Program - Project Formulation Cost Summary**. The individual phases are based on the work breakdown structure contained in **Section 3 – Inaugural Airport Development Phasing. Table 5-1: Inaugural Capital Improvement Program - Pre-Construction** is a summary of the planning level cost estimates for the IAP CIP.

IAP #	Pre-Construction	Cost
100	Program Management and Administration	\$43,641,990
200	Marketing	1,000,000
300	Design	37,407,420
400	Permitting	Included in IAP #300
500	Project Financing	Included in IAP #100
600	Maintain Existing Airport	8,100,000
700	Property Management	13,500,000
Pre-Construction Subtotal		\$103,649,410

As a part of this Facilities Implementation Plan report, a planning level construction cost estimate was developed for the IAP. The construction costs are based on estimating policy and guidance from the U.S. Department of Transportation and from IDOT.²⁰ **Table 5-2: Inaugural Capital Improvement Program - Construction** presents a summary of probable construction costs. The work breakdown structure tasks are consistent to those outlined in **Section 3 – Inaugural Airport Development Phasing** of this Facilities Implementation Plan report.

The estimated construction costs were determined by conceptually defining the facilities to be built and the systems to be installed. The probable facilities expenditures were created using estimated quantities of materials and applying current unit costs. Unit costs were obtained from recent similar airfield construction programs and

¹⁹ <http://www.southsuburbanairport.com/MasterPlan/reports/MP-Report-Plans.htm>

²⁰ Federal Aviation Administration (FAA has adopted the following GAO reference as its cost estimating guidelines.) United States Government Accountability Office, Applied Research and Methods, *GAO Cost Estimating and Assessment Guide – Best Practices for Developing and Managing Capital Program Costs, GAO-09-35P*, March 2009. Web. <http://www.gao.gov/assets/80/7175.pdf>
 United States Department of Transportation, Federal Highway Administration, *Major Project Program Cost Estimating Guidance*, January, 2007. Web. http://www.fhwa.dot.gov/ipd/pdfs/project_delivery/major_project_cost_guidance.pdf
 United States Department of Transportation, Federal Highway Administration, Innovative Program Delivery, *Tools and Programs, Cost Estimating*, March, 2013. Web. http://www.fhwa.dot.gov/ipd/project_delivery/tools_programs/cost_estimating/index.htm
 United States Department of Transportation, Federal Highway Administration, Innovative Program Delivery, *Financial Plans: Contingency Fund Management for Major Projects*, March, 2013. Web. http://www.fhwa.dot.gov/ipd/project_delivery/resources/financial_plans/contingency_fund.htm
 State of Illinois, Department of Transportation, Bureau of Design and Environment, *Bureau of Design and Environment Manual, Chapter 65, Cost Estimating* – 2010. Web. <http://dot.state.il.us/desenv/bdmanual.html>

from published industry cost databases.²¹ For example, unit costs for earthwork and airfield pavements were determined from recent actual payments to contractors for similar construction within the Chicago region.²² Similarly, navigation aids costs were determined using a similar method. In some cases, lump sum allowances have been used.

IAP #	Construction	Cost	Commissioning (2%)	Contingency (25%)	Total Cost
1000	Site Preparation	\$93,879,000	\$1,877,580	\$23,469,750	\$119,226,330
2000	Airport Infrastructure	27,806,000	556,120	6,951,500	35,313,620
3000	Landside Facilities	3,002,000	60,040	750,500	3,812,540
4000	Airfield Infrastructure	137,057,860	2,741,157	34,264,465	174,063,482
5000	Passenger Terminal Area	91,712,400	1,834,248	22,928,100	116,474,748
6000	Aviation Support Facilities	25,164,850	503,297	6,291,213	31,959,360
7000	Cargo and GA Facilities	27,961,760	559,235	6,990,440	35,511,435
8000	Ground Access	64,327,404	1,286,548	16,081,851	81,695,803
9000	Environmental Mitigation	20,000,000	400,000	5,000,000	25,400,000
Construction Subtotal		\$490,911,000	\$9,818,000	\$122,728,000	\$623,457,000

Note: The Construction Subtotal has been rounded.

In determining a complete planning level estimate of construction costs, two additional estimation actions were performed: commissioning and contingencies.

Commissioning is a systematic process of ensuring that the airport facilities, systems and equipment are designed, constructed, fabricated, installed and tested in accordance with the Airport Sponsor’s operational requirements. It is anticipated that IAP facilities would be U.S. Green Buildings Council LEED certified.²³ At a minimum, all landside and airside facilities and systems would be commissioned according to the requirements of LEED for New Construction 3.0 Fundamental and Advanced Commissioning.²⁴ Commissioning plans/specifications would be developed for airport facilities and systems and commissioning data would be prepared according to established guidelines of the FAA;²⁵ U.S. Department of Energy; IDOT; American Society of Heating, Refrigerating and Air-Conditioning Engineers;²⁶ and the Institute of Electrical and Electronics Engineers.²⁷

Contingencies have been included in the estimate due to the uncertainties inherent with planning level program development cost estimates. Some of those uncertainties could include: geotechnical site conditions that could affect design of structures and pavements; earthwork final design for grading and drainage; specific environmental regulatory requirements; future economic conditions that could affect labor and material costs; detailed

²¹ RS Means, A Division of Reed Construction Data, Construction Publishers and Consultants, *Heavy Construction Cost Data, 26th Annual Edition, 2012*. Print.

Engineering News Record, McGraw – Hill Construction, New York, New York; *Quarterly Cost Reports - Building Cost Index and Construction Cost Index, 2000 to 2012*. Web. http://enr.construction.com/economics/quarterly_cost_reports/

Engineering News Record, McGraw – Hill Construction, New York, New York; *ENR Construction Cost Index History (1908-2013) - As of March 2013*. Web. http://enr.construction.com/economics/historical_indices/construction_cost_index_history.asp

²² City of Chicago, Department of Aviation, O’Hare Modernization Program, Construction Payment Tracking, *Runway 9L-27R Paving, Lighting and Signing ; Runway 9L-27R Nav aids*, 2007 – 2011. <http://67.98.128.14/Default.aspx>

City of Chicago, Department of Aviation, O’Hare Modernization Program, Construction Payment Tracking, *Runway 10 L-28R Extension Runway and Taxiway; Runway 10 L Mass Grading*. <http://67.98.128.14/Default.aspx>

City of Chicago, Department of Aviation, O’Hare Modernization Program, Construction Payment Tracking, *Runway 10 C-28C East, Center, West; 10C-28C Mass Grading*. <http://67.98.128.14/Default.aspx>

City of Chicago, Department of Aviation, O’Hare Modernization Program, Construction Payment Tracking, *Low-level Wind Shear Alarm System*, <http://67.98.128.14/Default.aspx>

²³ <http://new.usgbc.org/leed>

²⁴ <http://new.usgbc.org/credits/ea21>

²⁵ <http://www.ipa.faa.gov/Tasks.cfm?PageName=Cost%20Analysis>

²⁶ <https://www.ashrae.org/>

²⁷ <http://www.ieee.org/index.html>

commission requirements; costs associated with airport certification; governmental actions that may affect project scope and schedule; utility agreements, etc. The contingency amount used in the estimate has been established in accordance with Federal, state and industry guidance regarding planning level cost estimation. Currently the contingency is estimated at 25 percent of projected construction costs for IAP Items #1000 through #9000. Contingencies are not considered additional or optional amounts and it is expected that the contingency amounts would be expended during actual construction.

Appendix D – Detailed Breakdown of Inaugural Capital Improvement Program contains a detailed review of costs assumed for development of the IAP. Each project in the CIP will be examined in the SSA Financial Feasibility Report to determine eligibility for Federal funding. The Federal and state share of funds will be estimated based on the relevant legislation and program guidance, and a potential source of funding will be identified for each project.

Appendix A – Acronyms

AC	Advisory Circular
ALP	Airport Layout Plan
AOA	Airport Operations Area
ARFF	Aircraft Rescue and Fire Fighting
ASR	Airport Surveillance Radar
ATCT	Airport Traffic Control Tower
AWOS	Automated Weather Observation System
CIP	Capital Improvement Program
DBO	Date of Beneficial Occupancy-Opening Day
DBO+5	Date of Beneficial Occupancy-Five Years after Opening Day
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
GA	General Aviation
HMA	Hot Mix Asphalt
I-57	Interstate 57
IAP	Inaugural Airport Program
IDOT	Illinois Department of Transportation-Division of Aeronautics
IL-50	Illinois Route 50
IEPA	Illinois Environmental Protection Agency
JPA	Joint Permit Application
LEED	Leadership in Energy and Environmental Design
LLWAS	Low Level Wind Shear Alert System
MALSR	Medium Intensity Approach Light System with Runway Alignment Indicator Lights
MoT	Maintenance of Traffic
NPDES	National Pollutant Discharge Elimination System
PAPI	Precision Approach Path Indicator
PMF	Program Management Firm
ROD	Record of Decision
ROFA	Runway Object Free Area
RSA	Runway Safety Area
SIAP	Standard Instrument Approach Procedure
SRE	Snow Removal Equipment
SSA	South Suburban Airport
SPCC	Spill Prevention, Control and Countermeasure Plan
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Department of the Army, Corps of Engineers, Chicago District
VOR	Very High Frequency Omni-directional Rangefinder

Appendix B – Exhibits

Exhibit 3-1: IAP 1000 – Site Preparation

Exhibit 3-2: IAP 2000 – Airport Infrastructure (Utilities)

Exhibit 3-3: IAP 3000 – Landside Facilities

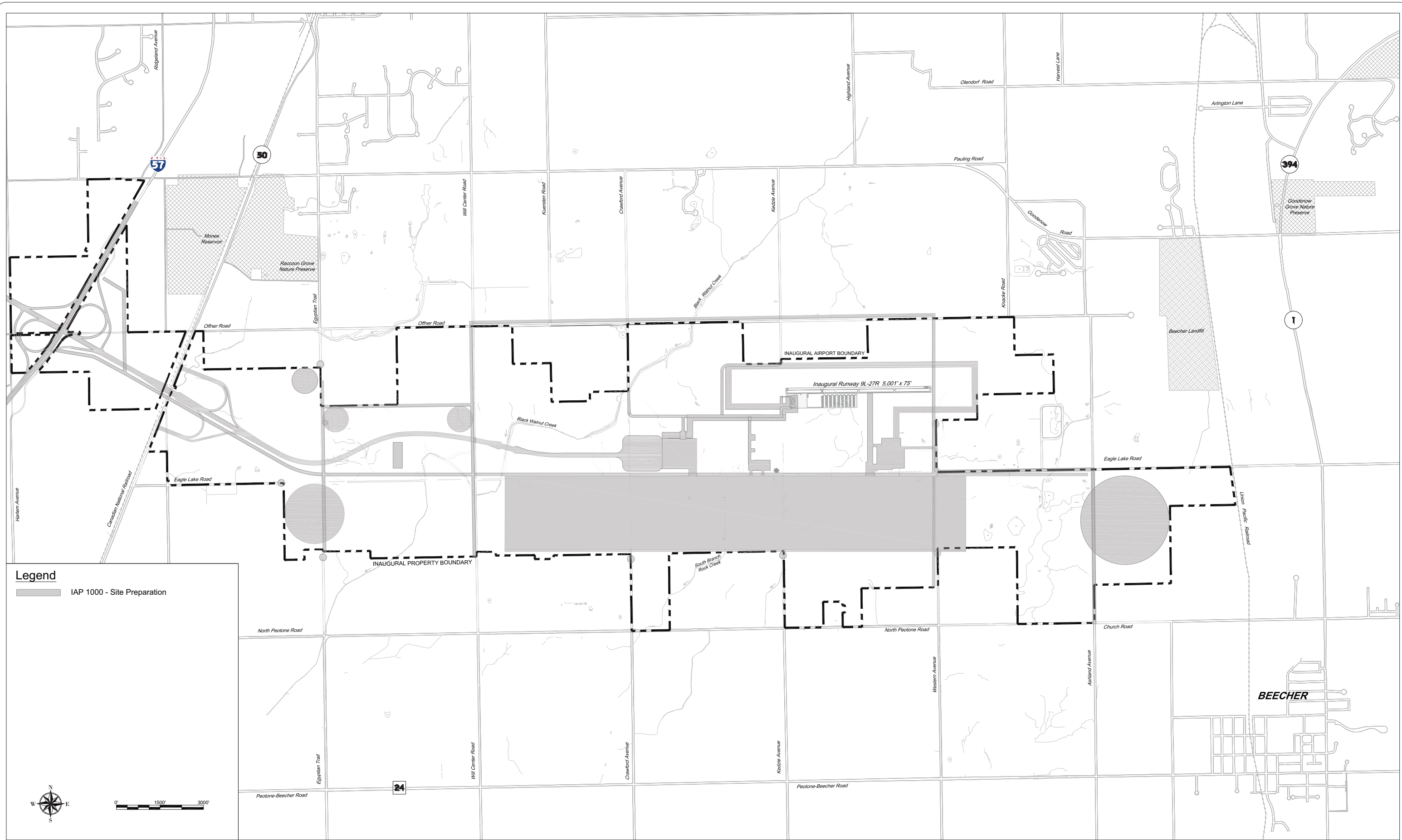
Exhibit 3-4: IAP 4000 – Airfield Infrastructure

Exhibit 3-5: IAP 5000 – Passenger Terminal Complex

Exhibit 3-6: IAP 6000 – Aviation Support Facilities

Exhibit 3-7: IAP 7000 – Cargo and General Aviation Facilities

Exhibit 3-8: IAP 8000 – Ground Access: I-57 Interchange and Airport Access Roads

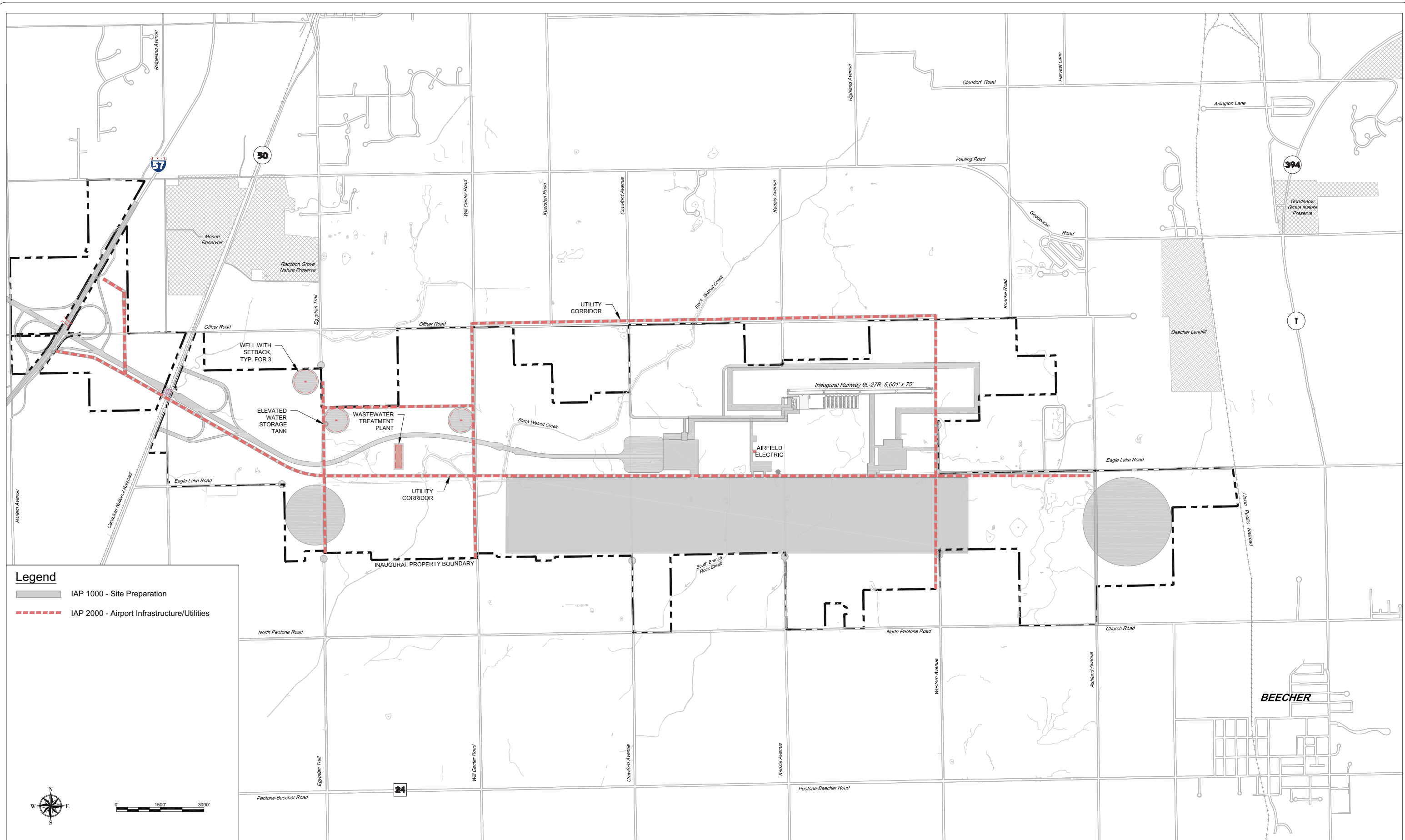


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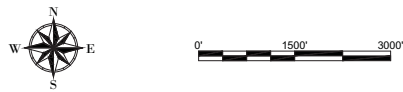
DATE	SOURCE



SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
EXHIBIT 3-1
IAP 1000 - SITE PREPARATION



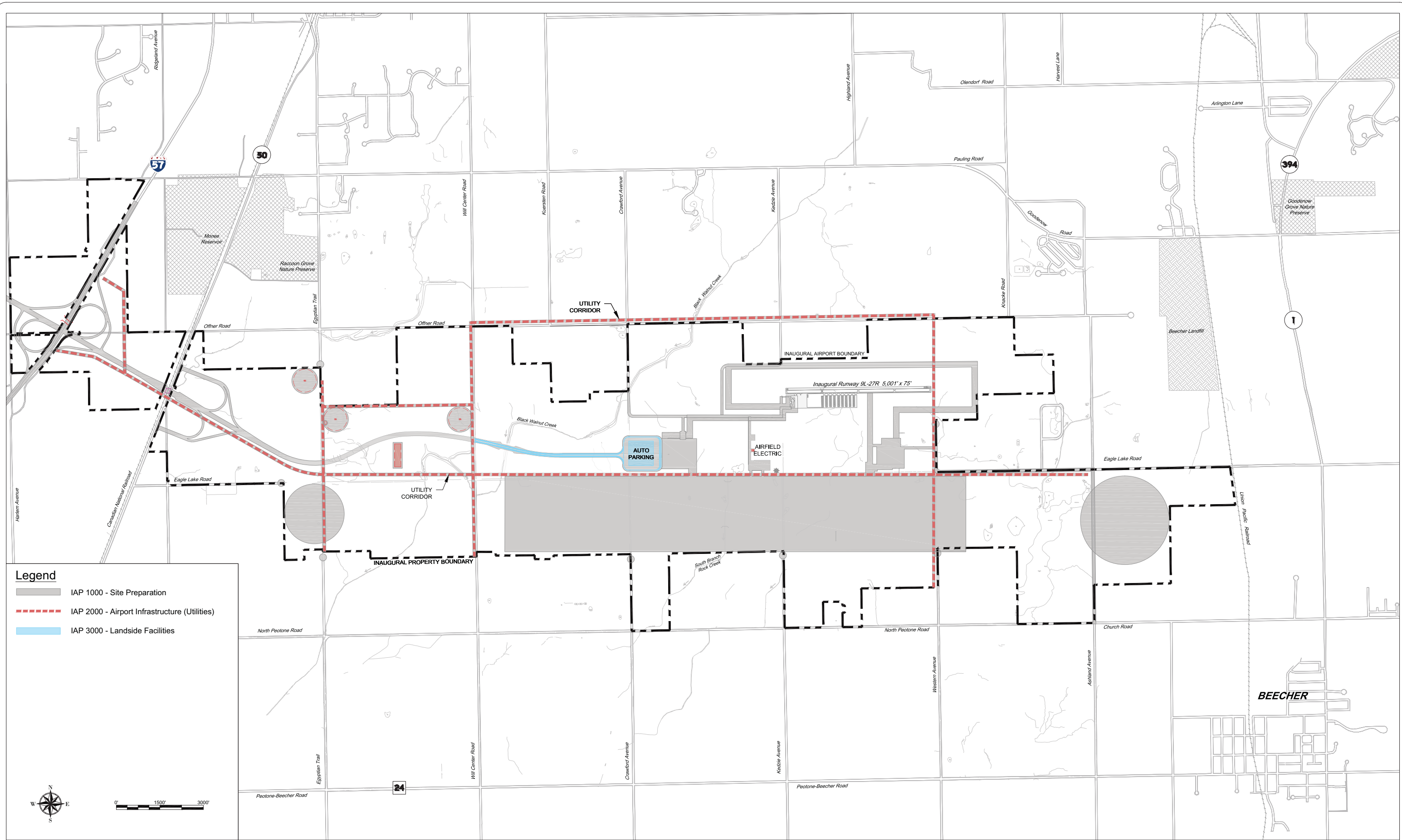
- Legend**
- IAP 1000 - Site Preparation
 - IAP 2000 - Airport Infrastructure/Utilities



DATE	SOURCE



SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
EXHIBIT 3-2
IAP 2000 - AIRPORT INFRASTRUCTURE (UTILITIES)



- Legend**
- IAP 1000 - Site Preparation
 - IAP 2000 - Airport Infrastructure (Utilities)
 - IAP 3000 - Landside Facilities

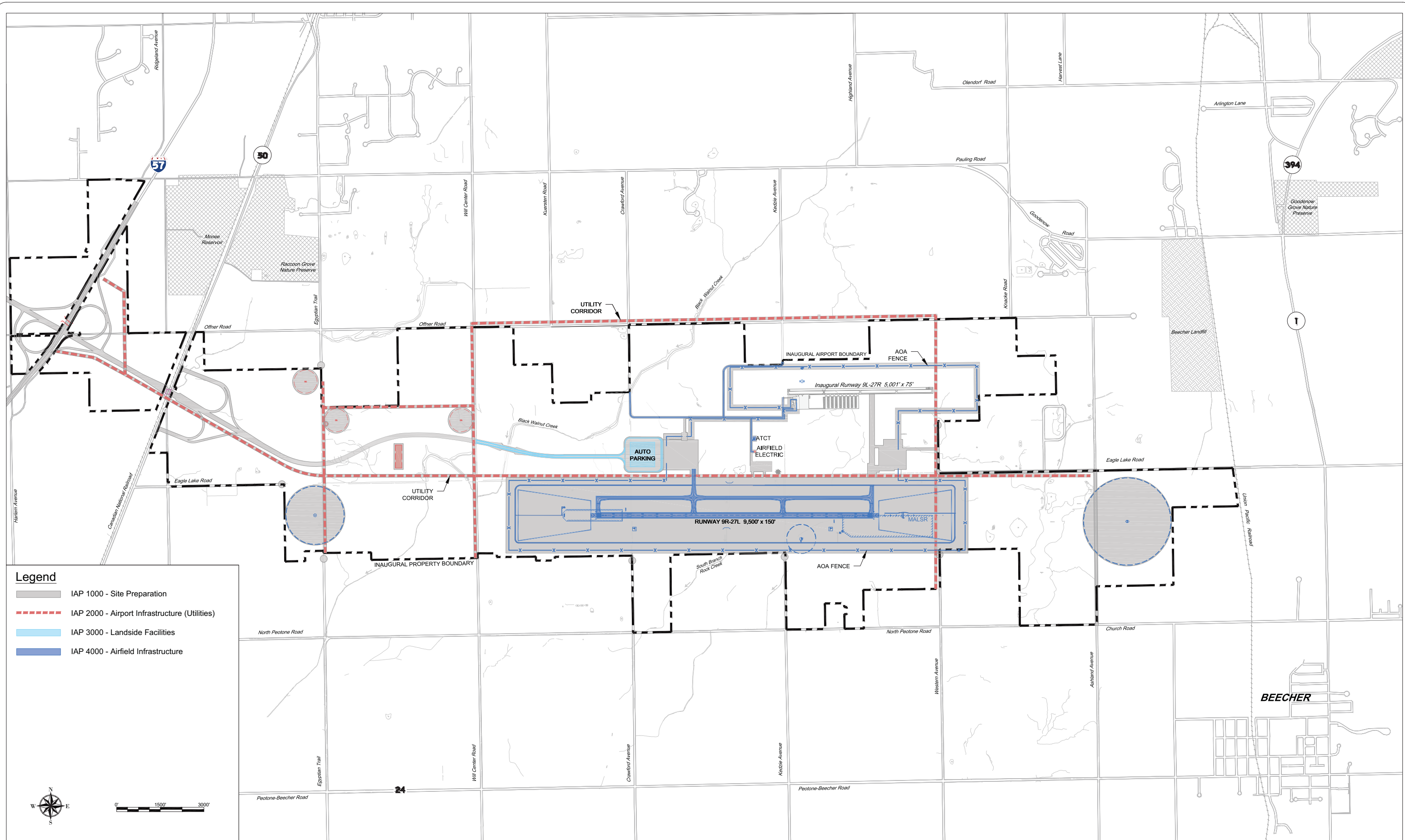


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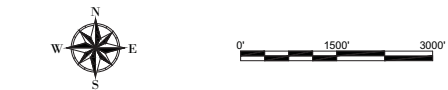


SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
EXHIBIT 3-3
IAP 3000 - LANDSIDE FACILITIES

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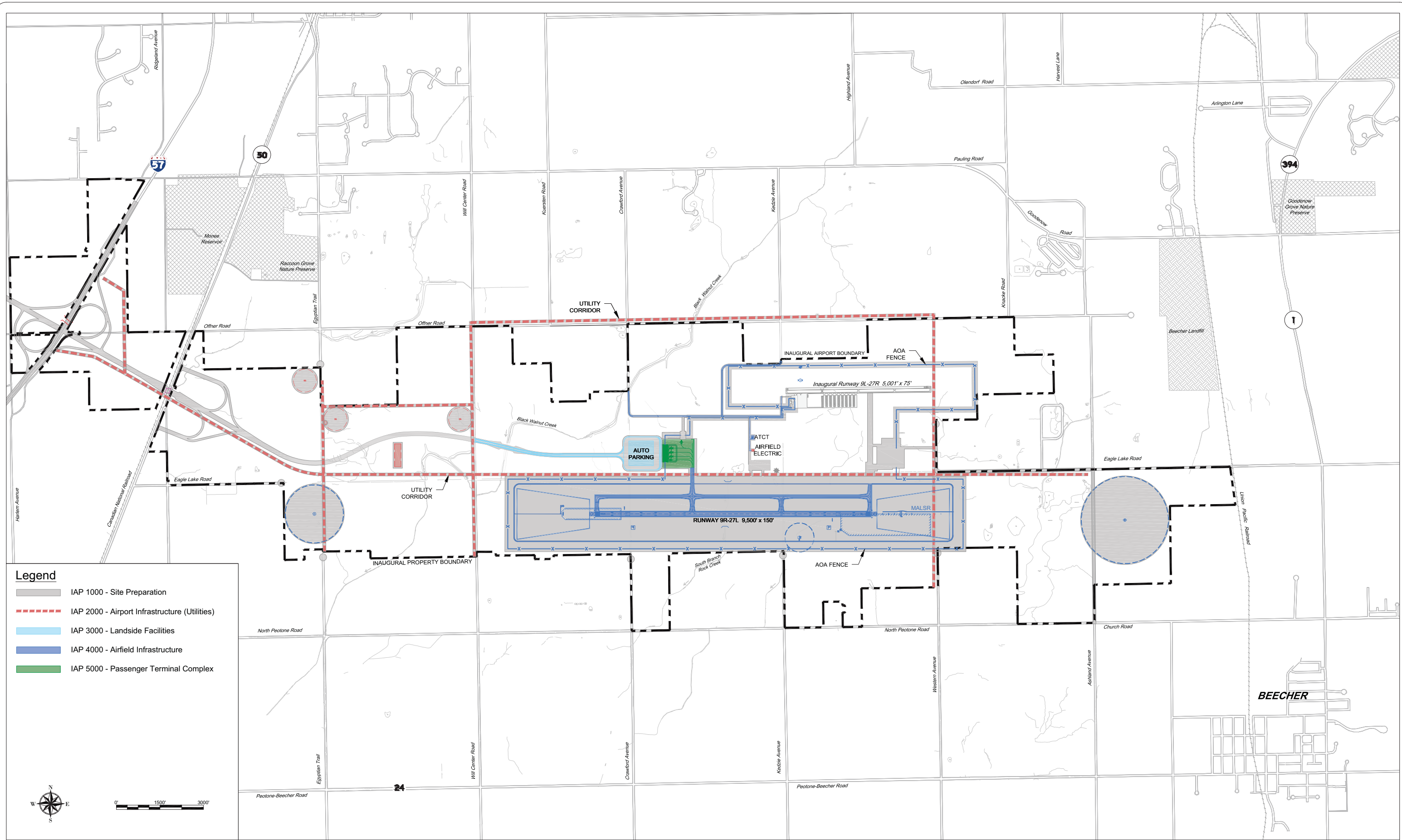
- Legend**
- IAP 1000 - Site Preparation
 - IAP 2000 - Airport Infrastructure (Utilities)
 - IAP 3000 - Landside Facilities
 - IAP 4000 - Airfield Infrastructure



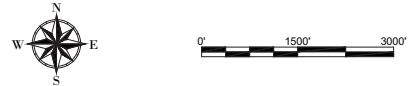
DATE	SOURCE



SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
 EXHIBIT 3-4
 IAP 4000 - AIRFIELD INFRASTRUCTURE



- Legend**
- IAP 1000 - Site Preparation
 - IAP 2000 - Airport Infrastructure (Utilities)
 - IAP 3000 - Landside Facilities
 - IAP 4000 - Airfield Infrastructure
 - IAP 5000 - Passenger Terminal Complex

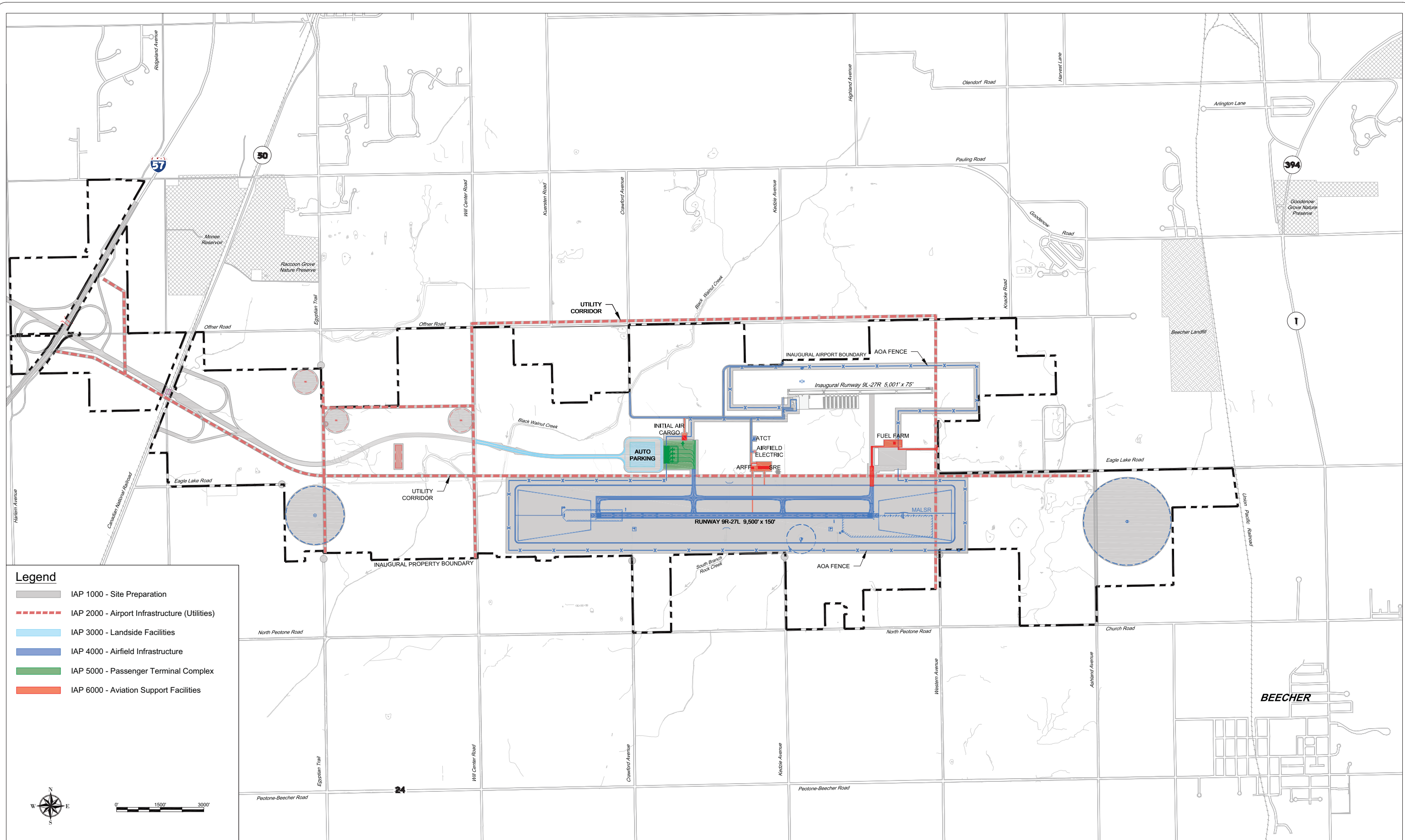


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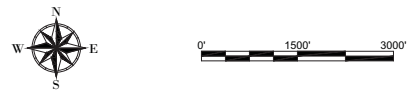


SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
 EXHIBIT 3-5
 IAP 5000 - PASSENGER TERMINAL COMPLEX

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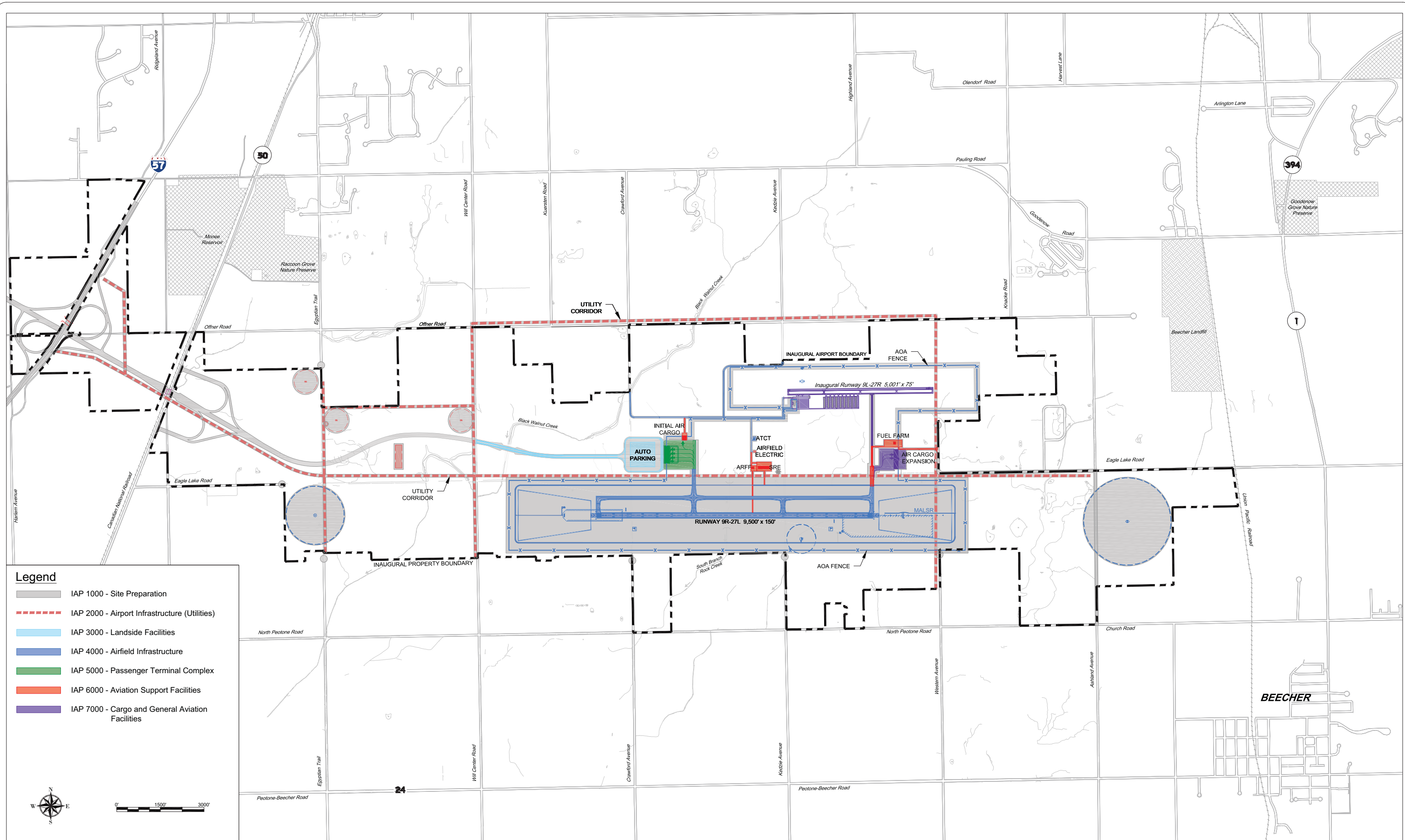
- Legend**
- IAP 1000 - Site Preparation
 - IAP 2000 - Airport Infrastructure (Utilities)
 - IAP 3000 - Landside Facilities
 - IAP 4000 - Airfield Infrastructure
 - IAP 5000 - Passenger Terminal Complex
 - IAP 6000 - Aviation Support Facilities



DATE	SOURCE



SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
 EXHIBIT 3-6
 IAP 6000 - AVIATION SUPPORT FACILITIES

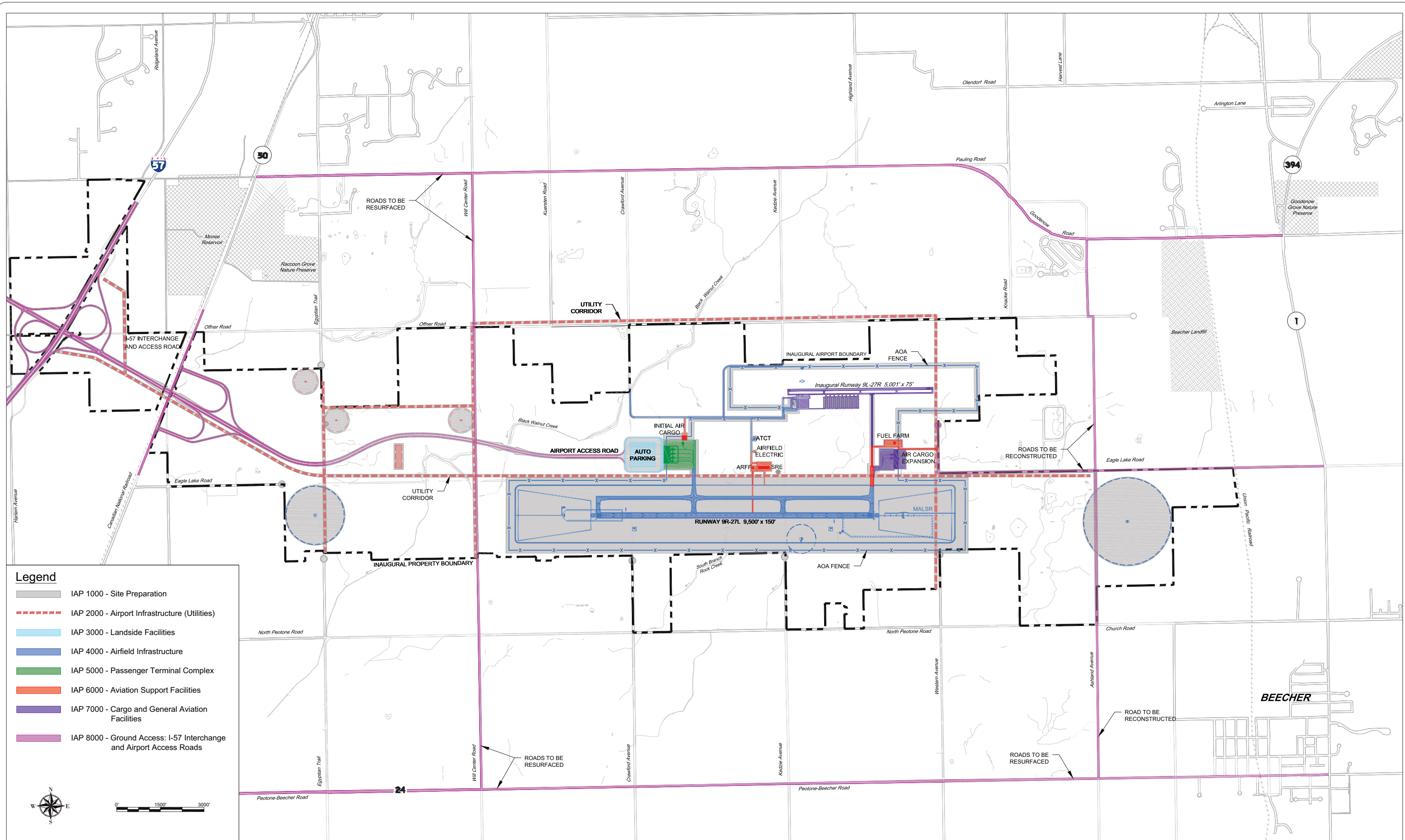


- Legend**
- IAP 1000 - Site Preparation
 - IAP 2000 - Airport Infrastructure (Utilities)
 - IAP 3000 - Landside Facilities
 - IAP 4000 - Airfield Infrastructure
 - IAP 5000 - Passenger Terminal Complex
 - IAP 6000 - Aviation Support Facilities
 - IAP 7000 - Cargo and General Aviation Facilities

DATE	SOURCE



SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
 EXHIBIT 3-7
 IAP 7000 - CARGO AND GENERAL AVIATION FACILITIES



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DATE	SOURCE



SSA MASTER PLAN - FACILITIES IMPLEMENTATION PLAN
EXHIBIT 3-8
 IAP 8000 - GROUND ACCESS: I-57 INTERCHANGE AND AIRPORT ACCESS ROADS

Appendix C – Inaugural Airport Program-Project Formulation Cost Summary

Inaugural Airport Program-Project Formulation Cost Summary		
IAP #	Project Formulation	Cost
10	Master Plan, Tier 2 EIS and Joint Permit Application Process	\$14,500,000*
20	Land Acquisition, Relocation and Property Management	185,500,000**
30	Survey and Testing	Included in IAP #20
Project Formulation Subtotal		\$200,000,000

*Total Contract Value.

**Total authorized state funds.

Appendix D – Detailed Breakdown of Inaugural Capital Improvement Program

IAP#	DEVELOPMENT TASKS	COST ESTIMATE THROUGH DBO+5	REMARKS
PRE-CONSTRUCTION			
100	Program Management – Pre EIS ROD	\$13,092,597	
101	Program Management – Post EIS ROD	30,549,393	
	Program Management - Subtotal	\$43,641,990	Items 100
200	Marketing – Pre EIS ROD	\$300,000	
201	Marketing – Post EIS ROD	700,000	
	Marketing – Subtotal	\$1,000,000	Items 200
300	Design – Pre EIS ROD	\$11,222,226	
301	Design – Post EIS ROD	26,185,194	
	Design – Subtotal	\$37,407,420	Items 300
400	Permitting	0	Included in IAP #300-301
500	Project Financing	0	Included in #100-101
600	Maintain Existing Airport Operation	\$8,100,000	
700	Property Management	\$13,500,000	
800	Reserved	0	
900	Reserved	0	
	Pre EIS ROD Subtotal	24,614,823	IAP# 100 + 200 + 300
	Post EIS ROD Subtotal	79,034,587	IAP# 101 + 201 + 301
	Pre-Construction Total	\$103,649,410	Items 100-900
CONSTRUCTION			
1000s	Site Preparation		
1001	Off Site Roadways	0	Included in #8002-8003
1006	Site Storm Drainage	\$8,495,000	
1010	Airport Perimeter Fence	7,550,000	
1020	Utility Removals	1,495,000	10 foot
1040	Off Airport Replacement of Existing Facilities	689,000	
1050	Structure Demolition	511,000	
1060	Clearing and Grubbing	889,000	
1061	Earthwork	74,250,000	
	Site Preparation Subtotal	\$93,879,000	Items 1000
2000s	Airport Infrastructure		
2001	Airfield Lighting Vault & Network Center	\$1,278,000	
2002	ComEd Network Center	2,311,000	
2003	Electric Service Transmission Trunk Lines	13,809,000	
2004	Emergency Generators	1,185,000	
2010	Water Supply and Pumping Station	1,654,000	
2011	Water Main Extensions	249,000	
2012	Fire Fighting Water Supply Reservoir	1,071,000	
2020	Sewage Treatment Plant Steel Packaged Aeration	504,000	
2021	Sanitary Sewer Main Extensions	1,200,000	
2023	Deice System	817,000	
2024	Airfield Detention Pond Oil/Water Separator	178,000	
2030	Gas Distribution Pipe From Western/Offner	1,843,000	
2040	Telephone System	1,707,000	
	Airport Infrastructure Subtotal	\$27,806,000	Items 2000

IAP#	DEVELOPMENT TASKS	COST ESTIMATE THROUGH DBO+5	REMARKS
3000s	Landside Facilities		
3001	Seeding and Mulching	\$2,795,000	
3002	Back Access Checkpoint for Construction	86,000	
3003	West Access Road	0	Included in #8001
3004	Site Signage	93,000	
3005	Sidewalks and Curbfront Lighting	28,000	
	Landside Facilities Subtotal	\$3,002,000	Items 3000
4000s	Airfield Infrastructure		
4001	Airfield Paving, Lighting and Grading	\$81,938,000	
4006	Approach Lights	2,874,000	
4007	Navigational Aids	5,554,000	
4008	Airport Surveillance Radar	16,055,000	
4009	Automated Weather Observation Station	300,000	
4010	Airport Traffic Control Tower	18,437,860	
4011	Low Level Wind Shear Alert System	1,850,000	
4012	Fiber Optic Duct Bank	3,319,000	
4020	Airfield Service Roads	563,000	
4030	Airport Operations Area Fence/Entry Portals	6,167,000	
	Airfield Infrastructure Subtotal	\$137,057,860	Items 4000
5000s	Passenger Terminal Area		
5001	Foundation & Excavation	\$1,083,000	
5002	Structure & Enclosure	14,635,000	
5003	Mechanical/Electrical/Plumbing/Fire Protection	9,477,000	
5004	Interior Architectural Systems and Finishes	5,098,000	
5005	Baggage Check In and Baggage Claim conveyors	1,000,000	
5005	Baggage Inline Security Screening	1,500,000	
5006	Elevators/Escalators	1,914,000	
5007	Telecom/Security/LAN/FIDS/BIDS System	3,146,000	
5008	Gate Management Equipment (PC Air, 400 Hz, GP)	1,667,000	
5009	Furniture	1,881,000	
5010	Signage	0	Included in #5004
5011	Sustainable Design – LEED Certification – (15-20%)	14,785,400	
5012	Miscellaneous Items such as: As built vs. plan Quantities; Permit and scope revisions	4,047,000	
5013	Security Operation Control Room	1,014,000	
5014	Security Equipment Room	1,941,000	
5015	On-Site Renewable Energy-Geothermal System	3,000,000	
5020	Terminal Apron	17,415,000	
5021	Oil/Water Separator At Terminal Apron	178,000	
5022	Apron Gate Equipment	1,880,000	
5030	Terminal Entrance Road Curbside Facilities	823,000	
5031	Terminal Entrance Road Lighting & Signage	178,000	
5036	Terminal Parking Areas	5,050,000	
	Passenger Terminal Area Subtotal	\$91,712,400	Items 5000
6000s	Aviation Support Facilities		
6001	Fuel Farm Storage	\$943,000	
6002	Fuel Farm Parking Lot & Entrance Road	119,000	
6003	Fuel Storage Perimeter Security	303,000	
6010	Maintenance Facility Structure	4,568,410	
6011	Maintenance Facility Equipment	3,196,000	
6012	Maintenance Facility Parking Lot	35,000	
6021	ARFF Facility – Building and Site Development	4,612,440	

IAP#	DEVELOPMENT TASKS	COST ESTIMATE THROUGH DBO+5	REMARKS
6022	ARFF Equipment and Furnishings Fit Out	80,000	
6022	ARFF Emergency Vehicles	2,000,000	
6023	ARFF Parking Lot	15,000	
6030	Terminal and Cargo Area Security Equipment	9,293,000	
	Aviation Support Facilities Subtotal	\$25,164,850	Items 6000
7000s	Cargo and General Aviation Facilities		
7001	Rental Car Parking Lot	\$207,000	
7020	Cargo Terminal (DBO) Initial Temporary Facility	1,277,822	
7021	Cargo Terminal (DBO) Apron (Shared)	0	Included in #5020
7022	Cargo Terminal (DBO) Oil/Water Separator (Shared)	0	Included in #5021
7023	Cargo Terminal (DBO) Parking	34,573	
7023	Cargo Terminal (DBO) Landside Dock	113,925	
7030	Cargo/Mail Terminal Complex (DBO+5)	16,036,440	
7031	Cargo Apron (DBO+5)	5,708,000	
7032	Cargo Facility Apron Oil/Water Separator (DBO+5)	178,000	
7033	Cargo/Mail Terminal Parking/Landside Docks (DBO+5)	654,000	
7040	General Aviation FBO/Administration Bldg. Conversion	2,025,000	
7041	General Aviation Apron	0	
7042	General Aviation Apron Oil/Water Separator System	178,000	
7043	General Aviation Access and Security	500,000	
7050	Secondary Airside Service Roads	350,000	
7053	Secondary Landside Service Roads	699,000	
	Cargo and General Aviation Facilities Subtotal	\$27,961,760	Items 7000
8000s	Ground Access		
8001	IL-50 to Passenger Terminal Access Road Earthwork	\$200,000	
8001	IL-50 to Passenger Terminal Access Road Paving	10,395,238	
8001	Bridge Structure Over Black Walnut Creek	1,676,700	
8001	Signage	48,750	
8001	Mobilization, Drainage, MoT, Lighting	1,540,086	
	IL-50 to Passenger Terminal Access Road Subtotal	\$13,860,774	Items 8001
8002	Local Road HMA Reconstruction	\$8,397,420	Ashland, Eagle Lake, IL50
8002	Mobilization, Drainage, MoT, Lighting	1,049,678	Widening
	Local Road HMA Reconstruction Subtotal	\$9,447,098	Items 8002
8003	Local Road HMA Resurfacing	\$5,013,460	Peotone-Beecher, Pauling &
8003	Mobilization, Drainage, MoT, Lighting	626,683	Will Center Roads
	Local Road HMA Resurfacing Subtotal	\$5,640,143	Items 8003
8004	I-57 Interchange Earthwork	5,750,000	
8004	Pavement and Shoulders	9,138,915	
8004	Mainline HMA Shoulder Reconstruction	596,314	
8004	Structure Over I-57, CN and IL-50	12,326,250	
8004	Structure Over Rock Creek	272,700	
8004	Signage	217,500	
8004	Mobilization, Drainage, MoT, Lighting	3,537,710	
	I-57 Interchange & Ancillary Improvements Subtotal	\$31,839,389	Items 8004
	Road Improvements Subtotal	\$60,787,404	Items 8001, 8002 & 8003
8005	Airport Shuttle Bus Planning	\$900,000	METRA To SSA Terminal
8005	Airport Shuttle Bus Facilities	1,140,000	
8005	Airport Shuttle Bus Route Development	500,000	Signage, Lighting, Marking
8005	Airport Shuttle Bus Route Vehicles	1,000,000	32 pax, low emissions
	Airport Shuttle Bus Subtotal	\$3,540,000	Items 8005
	Ground Access Subtotal	\$64,327,404	Items 8000

IAP#	DEVELOPMENT TASKS	COST ESTIMATE THROUGH DBO+5	REMARKS
9000s	Environmental Mitigation		
9001	Wetland and Floodplain Mitigation	20,000,000	
Environmental Mitigation Subtotal		\$20,000,000	Items 9000
Construction Costs Subtotal		\$490,911,000	Items 1000-9000
Commissioning		\$9,818,000	2% of Construction Subtotal
Contingency		122,728,000	25% of Construction Subtotal
Construction Total		\$623,457,000	Items 1000-9000 Plus Factors
TOTAL ESTIMATED CIP FOR THE IAP		\$702,491,000*	Pre-Construction Post EIS ROD Subtotal + Construction Total

*The Total Estimated CIP for the IAP is rounded to the nearest thousand.