

NEPA Resource Categories	Level of Review
Air Quality	Environmental baseline conditions will be determined by reviewing and referencing the Environmental Protection Agency (EPA) databases on criteria air pollutants. The FAA air quality conformity rules will be reviewed in relation to the existing and forecasted operations at the Airport.
Biological Resources (including fish, wildlife, and plants)	Environmental baseline conditions will be determined by reviewing existing data, conducting literature searches, reviewing databases (e.g. USFWS IPaC and WDFW PHS on the Web), and consulting aerial photography and USGS Quad maps.
Climate	A qualitative description of greenhouse gases (GHGs) and climate will be developed from information obtained and reviewed from the EPA databases. The environmental baseline conditions presented will include a comparison between ongoing and forecasted (20-year) airport operations. Forecasted operations are not anticipated to result in a net change in the GHGs emissions. Will follow FAA 2012 Guidance on Climate/GHG.
Coastal Resources	Not applicable, there are no Coastal Resources in the vicinity of the Airport.
Department of Transportation Act, Section 4(f)	Section 4(f) properties include publicly owned public parks, recreation areas, waterfowl refuges, and any publicly or privately owned historic site listed or eligible for listing on the National Register of Historic Places (NRHP). Information on Section 4(f) properties in the general vicinity of the Airport will be identified by reviewing United States Geological Survey (USGS) topographic maps, Google Earth Imagery (i.e. Parks/Recreation Areas Layer), the area comprehensive planning, the Washington Information System for Architectural & Archaeological Records Data (WISAARD), NRHP Geospatial Database, and any previously completed Cultural Resources Reports.
Farmlands	Environmental baseline conditions will be determined by reviewing and referencing the Natural Resource Conservation Service (NRCS) Farmland Classification Maps.
Hazardous materials, solid waste, and pollution prevention	Environmental baseline conditions will be determined by reviewing existing data and databases. The following Washington State Department of Ecology databases will be checked to determine if there is a documented site listed within a half-mile radius of the identified study area: Voluntary Cleanup Program (VCP); State Cleanup Site (SCS); Independent Cleanup Program (ICP); Underground Storage Tank (UST); Leaking Underground Storage Tank (LUST); and, Confirmed and Suspected and Contaminated Sites List (CSCSL). In addition, an Environmental Records Search (ERS) will be performed for a half-mile radius of the identified study area.

Historical, architectural, and cultural resources	Environmental baseline conditions will be determined by reviewing and referencing information from available comprehensive planning, the Washington Information System for Architectural & Archaeological Records Data (WISAARD), NRHP Geospatial Database, and any previously completed Cultural Resources Reports.
Land use	Existing and future land use maps, plans, and foreseeable development for the defined study area will be gathered from Spokane County and the City of Deer Park. Planned development within a 1-mile radius of the Airport property will be identified to the extent practical.
Natural resources and energy supply	Environmental baseline conditions will be determined by reviewing and referencing information from available comprehensive planning and local energy providers.
Noise and compatible land use	A qualitative noise analysis for existing noise sensitive uses within the Study Area will not be performed. Particular noise sensitive land uses such as schools, parks, libraries, hospitals, and other residential uses will be identified based on a review of Google Earth Imagery. [Note: no quantitative noise analysis is required for projects involving Design Group I and II in Approach Categories A through D operating at airports whose forecast operations do not exceed 90,000 annual propeller operations or 700 jet operations].
Socioeconomics, environmental justice, and children's environmental health and safety risks	Environmental baseline conditions centered on socioeconomics, environmental justice and children's environmental health and safety risks in the study area will be performed. Information pertaining to economic growth and community character (i.e. housing, businesses, traffic patterns, and tax base) will be referenced from the current available comprehensive planning. Environmental justice populations will be determined by reviewing the most current Census data obtained from the following website: http://www.census.gov .
Visual effects (including light emissions)	Environmental baseline conditions focused on visual effects and light emissions will be determined by a review of Google Earth Imagery to identify key features present in the study area. This task does not include any special lighting studies, such as those determining specific intensity of light at receptor sites or aesthetics. This task does not include the production of visual models or rendering of the existing or future environment. Photographs from aerial and land perspectives will be used to provide graphic documentation of the baseline conditions.
Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)	Environmental baseline conditions will be determined by reviewing existing data [e.g. National Wetland Inventory (NWI) Maps, Department of Natural Resources (DNR) Water Typing Maps, Federal Emergency Management Agency (FEMA) Firmette Maps, NRCS Hydric Soil Maps, and Sole Source Aquifer Maps], conducting literature searches, reviewing databases, and consulting aerial photography and USGS Quad maps.

F. Demographics/Economics

Consultant will use Woods and Poole economic data for baseline and history. This information will be used to describe the setting of the existing airport service area and to prepare projection for future airport activity.

G. Collect Existing Operations Data

Consultant has been advised that larger, faster and heavier aircraft (C-III) may be using the field in an increasingly consequential number. Consultant will consider Airport staff input, and the input of those interviewed during the public participation process to estimate operations, along with FAA TMFSC data. TMFSC data will be inventoried, normalized, and assumptions made about baseline activity by type for FAA approval. This approval will be sought for a baseline fleet mix by type, weight, approach capability and approach speed. Attention to those aircraft that are more demanding are of primary importance. Efforts will be made to substantiate operations by those more demanding aircraft via correspondence from operators, log books, or other such means. Basedaircraft.com will be modified as necessary to reflect inventoried based aircraft.

The consultant will perform outreach to existing and potential users of the airport to determine their projected number of operations, should the runway be strengthened and/or widened along with the addition of customs. This will include current airport users, prospective users that are planning to build hangars at the airport, fractional aircraft companies, NBAA, and other identified prospective users. The consultant will develop a user needs survey to form the basis of the outreach effort.

H. Financial Data

Consultant shall collect and document the CLIENT's financial resources, including operating revenues and expenses, and sources and uses of capital funds. Identify sources of funding the CLIENT currently uses for capital improvement and development programs. The information gathered in this inventory will be used to prepare a financial plan for the recommended development program in Element 10.

- Product:*
- 1. Information and understanding of existing facilities and activity will be presented in tabular or graphic formats.*
 - 2. A brief on airport history and its aeronautical role in the NAS, and its role in the State, and community.*
 - 3. Tabulated airport facilities for input and use in Facility Requirements and Alternatives Development and Evaluation Elements.*
 - 4. A summary of the comparison of existing Land Use Ordinances to FAAWSDOT recommendations for land use compatibility and airspace protection.*
 - 5. The Environmental Baseline will also be considered in development of Alternatives Development and Evaluation Chapter, and CIP Development. This effort will be documented as part of the Plan*
 - 6. A summary of the CLIENT's Operating Revenues and Expenses and existing sources of funding for capital improvement projects for use later in the project.*

ELEMENT 6 – AVIATION FORECASTS

Update Existing Forecasts

The Consultant will develop Forecasts from historical data, current activity, and expected change, and provide project levels of activity and guidance on the facilities required to accommodate that activity. Per FAA SOP 2.00 and FAA's *Forecasting by Airport*.

Forecasts will use collected data, user information, and industry trends to develop near-term (5 year), mid-term (10 year), and long-term (20-year) activity forecasts. The collected data, user information and industry trends to be used by the Consultant may include: existing data held by the CLIENT and collected by the CLIENT from tenants, such as a hangar survey to be conducted by the Consultant and CLIENT, data held by the FAA such as 5010 Master Record, TMFSC data, and data collected as part of the 2009 Washington Analysis of Airport Needs to establish existing based aircraft and existing operations.

The base year for forecasting will be FY2020. FAA forecasting data, methodology, forms, tables, and formats will be used as guidance, in addition to regional and industry trends. Data may include the historic compounded annual growth rate in the City or region, per capita income, operations per based aircraft, total

U.S. based aircraft, and total U.S. operations from FAA Aerospace Forecasts. Consultant will transmit forecast data to FAA using a Microsoft Excel spreadsheet template provided by the FAA for comparison to the Terminal Area Forecasts (TAF).

Forecasts will be developed for annual operations and broken down into local and itinerant general aviation operations, itinerant non-scheduled air-taxi operations, and based aircraft. Based aircraft forecasts will differentiate between single-engine piston, multi-engine piston, jet, and helicopter aircraft. The Plan will not consider scheduled passenger service and air cargo forecasting. Reference will be made to proposed Runway Design Codes (RDC) and critical aircraft, which will be identified (by approach category, by wingspan, and/or by weight, for different airport components for runway 16/34 ends). The critical aircraft must conduct approximately 500 annual itinerant and local operations, excluding touch-and-gos.

Forecasts scenarios will be developed using statistical analysis, tying aviation activity at the airport to local and national socioeconomic and aviation trends, such as shifts in employment, local business markets and housing trends. Forecast methodologies will be compared to each other and to the current available FAA TAF. A preferred forecast methodology for general aviation operations, non-scheduled air-taxi operations, and based aircraft will be selected by the CLIENT with Consultant input.

The preferred forecasts will be delivered to the FAA by the Consultant for review and approval. The Consultant will document and justify variations from the FAA TAF.

Product: 1. *Preparation of general aviation based and Total operations forecasts in 5-year, 10-year, 15-year and 20-year intervals for the planning period. Identify existing and future critical aircraft. The critical aircraft and forecast will be submitted to the FAA for approval prior to proceeding with subsequent related tasks.*

ELEMENT 7– FACILITY REQUIREMENTS

Identify Airport Facility Requirements

Based on information from other tasks, the consultant will prepare facility requirements. The determination of additional facilities to address meeting design standards will be based on the forecasted demand, compliance with governmental regulations including environmental issues and facilities necessary to accommodate projected demand. Recommendations will result from an analysis of FAA design criteria, knowledge of conditions at the airport and the desires of the CLIENT. Note: Runway 5/23 facility requirements will remain as previously stated in the current Master Plan and ALP.

New facilities may include the following:

1. New or Improved Instrument Approach Procedures (IAPs)
2. Additional runway length and width, Runway 16/34 only.
3. New or expanded apron, taxiway and hangar areas, and lease lot layouts
4. Review of problematic taxiway geometry and potential for runway incursions
5. Planning-level Automobile access circulation and parking requirements
6. Planning-level subsurface utility considerations for development

A table listing all deviations from all current FAA design standards will be provided in the report as well as on the ALP drawing, including proposed disposition of the deviations and obstructions to FAR Part 77 airspace based upon the current airspace configuration. Disposition would entail recommended development and/or recommended FAA approval of modifications to standards. Procedure and rationale will be included for determining recommended runway lengths per AC 150/5325-4B as needed. Airport standards to be met will be defined as consistent with FAA Advisory Circular 150-5300-13A Chg1 A five-step process will be followed should a runway length change become a recommendation based on critical/penalized aircraft operations.

Product: 1. *Provide a table comparing existing facility components to FAA design standards.*
2. *List of deficiencies, and a briefing of the inadequacy, and new facility requirements.*

ELEMENT 8 – ALTERNATIVES DEVELOPMENT AND EVALUATION

The Consultant will develop alternative layouts for the runway length and width/instrument approach capability and landside development, and each alternative will be graphically depicted. Alternatives will be developed and evaluated for airfield improvements expected to include: airfield pavements (runway 16/34 only and taxiway extensions, taxilanes, and apron expansion); navigational aids and associated procedures; hangars and aircraft storage and parking; fixed base operators, fueling, and aircraft service facilities; automobile access roads and parking; wildlife and security fencing and gates, and on-airport businesses and facilities. Improvement alternatives will not be developed for facilities in working order that are not impacted by planned development. The layouts will be based upon the anticipated 20-year development needs; however, the estimated land needs for the 50-year airport development may also be evaluated. The Consultant will develop planning-level cost estimates for improvements identified in each alternative.

New facility requirements will be prioritized based on the forecasts prepared at the time of the study. Improvements will be correlated with forecasted volumes of activity that would trigger an increase or decrease in RDC or change in critical aircraft that will require construction of the recommended improvement. The alternatives analysis will include a discussion on approach procedures as they relate to safety and to select items within the project understanding.

Through ongoing coordination and accomplishment of the previous project elements, airport property development alternatives will be formulated which meet the 5-, 10-, and 20-year needs of the airport. Development alternative plans will take into consideration how policy determinations made previously will affect land use on the airport property. Each alternative will satisfy and preserve land necessary for long-range airfield needs of the airport and preservation of the wastewater sprayfield pursuant to the 1980's era FAA coordination.

Alternatives Analysis will be completed specific to air and landside needs, such as developable area and potential land uses. With respect to airside important considerations are: a. runway length and width, b. instrument approach capability, and c. Meeting airport design standards for the existing and future Airport Reference Code and weight. With respect to landside important considerations for analysis are: a. ease of access, b. land availability and price, c. City and stakeholder prerogative, d. design standards compliance, e. environmental impact and f. political sensitivities. Perhaps most importantly, analysis will be conducted specific to the interplay between selection of a given airside alternative and its likely effect on another given landside alternative.

As noted in the Project Understanding, the wastewater spray field compatibility analysis will evaluate modifications to the runway alignment, modifications to the spray field layout, or a combination of both. This analysis will include evaluation of the existing spray field equipment and operations relative to existing and potential future RSAs and ROFAs. The Consultant will evaluate frangible spray head options and retractable spray heads, evaluate existing and potential future RSA and ROFA grading standards. The Consultant will meet with WA Department of Ecology to identify agency issues or concerns relative to the operations, and meet with the farmer who harvests the crops to identify operational issues or concerns relative to FAA.

The alternative analysis will focus on the selection of improvements that meet the Airport needs as identified in the facilities requirement chapter. A brief environmental analysis will be completed for each series of alternatives to identify the level of resource analysis and resource surveys which may be required for the implementation of each alternative. This analysis will compare the alternatives to the baseline environmental data and include the identification of critical resources which may be impacted by the various alternatives

With comments obtained at various meetings, local planning departments and the general public, alternatives will be refined and a matrix prepared showing each option. A ranking system will be developed for the technical evaluation of the alternatives, including such factors as infrastructure and phasing costs, marketability, overall benefits to airport utilization, maintenance costs and off-site physical and operational

impacts. All comments and recommendations will be considered, and where appropriate, incorporated into the subsequent development phases of the planning. On the basis of this selection process and review, the preferred program will be further refined and developed prior to upcoming elements.

Product:

1. Two (2) graphically-depicted airside layouts, each with a preliminary cost estimate.
2. Two (2) graphically-depicted landside layouts, each with a preliminary cost estimate for FAA-eligible improvements
3. Evaluation of Recommended Facility Requirements.
4. Creation, synthesis for the Preferred Alternative, feasible projects and priority for implementation.

ELEMENT 9 – FACILITIES IMPLEMENTATION PLAN AND FINANCIAL FEASIBILITY ANALYSIS

The purpose of this study element is to establish a financial implementation program to provide the airport development requirements necessary to meet the projected aviation activity demands established via the previous elements.

Financial Plan, Phased Development

The Consultant will prepare a phased development program which will include a financially-constrained short-term (0-5 year) plan (potentially dissimilar to current Capital Improvement Plan {CIP}) and a financially un-constrained intermediate-term (6-10 year), and a financially un-constrained long-term (11-20 year) plan. Exhibits will visualize planned development as contemplate in the previous element as the preferred alternative(s). Improvements and cost estimates for each improvement will be found thereon, along with a program implementation/funding plan. The CIP will include estimates of the amount of funding eligible from FAA grant-in-aid programs, as well as other funding sources. AIP funding defines financially-constrained as used in this paragraph.

The financial plan for the projected CIP projects will identify steps toward implementation including land needs, environmental reviews, permitting, and stakeholder coordination. An evaluation of the airport's historic and projected expenses and revenues will be conducted and opportunities for revenue enhancement will be explored. Traditional and non-traditional funding sources will be explored in order to meet the anticipated financial needs of the phased development.

A brief environmental analysis will be completed for each short-term (0-5 years) project to recommend the level of resource analysis and potential resource surveys associated with each potential improvement. Planning-level environmental discussion for the remaining phased development periods (intermediate-term, long-term) will be accomplished.

- Product:*
1. *Phased Development Exhibits (0-5; Short-Term, 6-10; intermediate-term; and, 11-20; Long-Term)*
 2. *An evaluation of airport expenses and revenues for a 5-year and a 20-year period will be compared to the CIP in order to identify a balanced approach for executing the program.*

ELEMENT 10 – AIRPORT LAYOUT PLANS

The existing Airport Layout Plan (ALP) drawings will be updated and will reflect existing and future land and facilities necessary for operation and development of the airport, per CLIENT prerogative. The ALP drawing files will be prepared based on the mapping data collected as part of the Aerial Imagery, Mapping and AGIS task and other off-the shelf digital data products such as the existing ALP. For ALP drawing elements pertaining to Runway 5/23, information from the existing ALP will be used. All of the major development proposed in the preferred alternative will be shown on the ALP in schematic form.

Drawings specified within FAA SOP 2.00 Appendix A Checklist 1-9 will be produced with the exception of the Airport Property Inventory Map/Exhibit A which will be subject of FAA SOP 3.00. An FAA ALP Checklist will be used to prepare the ALP drawings for this project, FAA AC 150/5070-6B, Airport Master Plan, and

FAA Standard Operating Procedure, Standard Procedures for FAA Review and Approval of Airport Layout Plans. A completed checklist will be submitted to the FAA and WSDOT along with the ALP drawings when they are submitted for coordination. Similarly, the FAA Exhibit A checklist and table templates will be used to prepare the Property Map drawings for this project and a completed checklist will be submitted to FAA and WSDOT.

A. Cover, Data Sheet and Airport Layout Plan (3 Sheets)

The ALP will be prepared to reflect updated physical features, location of airfield facilities (runway, taxiways, NAVAIDs) and existing development areas. Development of alternatives and ultimate airfield facilities will be based on short, intermediate, and long-range requirements which incorporate both airside and landside requirements. Appropriate wind rose data based on historical conditions will be identified on the Data Sheet.

B. Building Area Plan (2 Sheets)

A Building Area Plan will be developed that reflects recommended detailed development of future general aviation needs on the airport, including utilities and airport access at the appropriate scale.

C. Airport Airspace Drawing (2 Sheets)

This drawing shows a plan and profile view of all FAR Part 77 imaginary surfaces. Obstructions will be identified for Runway 16/34, the amount of penetration determined, and their proposed disposition identified. USGS "Quad Maps" will be used. Fifty-foot contour intervals and FAR Part 77 imaginary surfaces will be developed for the full length of approach surfaces, Runway 16/34. Analysis of the approach surfaces will be based on the aerial survey element. USGS quadrangle maps will be used to provide off-airport information. Airport airspace information for Runway 5/23 will be included "as is" from existing ALP drawings.

D. Inner Approach Surface Drawings (Sheets)

A drawing will be prepared that shows the plan and profile of the inner approach surfaces and the Runway Protection Zones (RPZs) for runway 16/34. Obstructions within the inner approach surfaces will be identified and a recommended disposition will be provided. Aerial survey information will be used to develop these drawings. Inner approach drawings for Runway 5/23 will be included "as is" from existing ALP drawings.

E. Runway Departure Surface Drawings (2 Sheets)

Drawings will be prepared that show the plan and profile of the 40:1 departure surface for Runway 16 and 34. Any obstructions within the inner approach surfaces will be identified and a recommended disposition will be provided. Aerial survey information will be used to develop these drawings, supplemented with off-the shelf terrain modeling.

F. Airport {Exhibit A}

An Airport Property Inventory Map (APIM) will be created to depict existing/proposed ownership. As much information will be obtained as is available from the local records office or current exhibit to meet the minimum requirements of FAA SOP 3.00, its related Exhibit A Checklist including existing and future property, released property and current and future encumbrances. Parcel metes and bounds will be drawn from legal descriptions or from within the software. Documentation herewith will be made available on the GIS platform specified per Element 3(G). Title reports will be gathered; however, neither title insurance, legal opinion, abstraction, nor title examination is of subject for this effort.

Consultant will prepare this drawing's plan view and tabulations Per SOP 3.00 which instructs inventory and documentation of current and proposed properties: Parcel ID and any related AIP/FAAP/ADAP or WSDOT grant number, acreage, purpose, grantee/grantor, type/date and

form/rights of conveyance instrument, Tax number. Released/sold property itemizations include the items in the previous sentence, plus type/date of release and recorded document number of the release from FAA. Clarifying notes will be necessary for many itemizations. The related SOP 3.00 Exhibit A Checklist will be filed.

- Product:*
1. *Cover sheet, Airport Data Sheet, and ALP Drawing will be created from AGIS and formatted into CAD/GIS. Existing and future conditions will be shown on one (1) ALP sheet.*
 2. *A new building area plan projecting development of building areas at the airport, surface access, perimeter fencing, future T-hangar and building locations.*
 3. *An Inner Approach Surface drawing that shows the approach areas for runway 16/34 at the airport, both existing and future. The Inner Approach Surface drawing for runway 5/23 will be included "as is" from the existing ALP.*
 4. *FAR Part 77 drawings for the airport to include plan/profile of the obstruction/approach zones for future conditions.*
 5. *Airport Property Inventory Map (Exhibit A) showing existing land and proposed acquisitions, pursuant to SOP 3.00 and related checklist.*

ELEMENT 11 – AIRPORT RECYCLING PLAN

In accordance with the state and local laws, and as required by FAA AIP Handbook, Table E-1.g and E-2.c(5), a solid waste pollution prevention plan will be developed in coordination with the CLIENT and in accordance with FAA Memorandum "Guidance on Airport Recycling, Reuse, and Waste Reductions Plans dated September 30, 2014, specifically, Sections 6.a.1, 6.a.2, 6.a.3, 6.c, 6.d, 6.3, 6.f and 6.g.

A. Facility Description, Background and Waste Audit

Process will include interviewing the CLIENT to validate scope of existing efforts including estimated percentages of various waste streams (waste generating sources, composition, quantities) and their final destinations. This will consist of a verbal interview and site review.

B. Verification of Opportunities

This will include review and verification of the following items through discussions with local staff, and discussions if possible with local waste providers:

1. Feasibility of solid waste recycling at the airport
2. Minimizing the generation of solid waste at the airport
3. Operation and maintenance requirements
4. The review of waste management contracts
5. The potential for cost savings or the generation of revenue

C. Development of Solid Waste Reduction and Recycling Plan

Information gathered above will be incorporated into a Solid Waste Reduction and Recycling Plan for the airport. The plan will include the following:

1. Recommendations to implement a recycling program for paper, plastic bottles and plastic cups, etc.
2. Establish goals and objectives for the CLIENT to reduce the amount of waste being disposed of in landfills
3. Opportunities to update existing contracts and leases with tenants, develop new specifications for business practices, and updates to purchasing policies
4. Identify if any recommendations will conflict with existing plans and programs

5. Identify ways recycling and waste reduction will be implemented as part of new development projects
6. How the CLIENT will track and report the recommendations in the plan
7. Describe opportunities and efforts for education and outreach to employees, tenants and traveling public on recycling

Product: 1. A solid waste reduction and recycling plan to minimize solid waste generation will be included as an appendix to the Narrative Report. A Draft of the appendix will be forwarded to FAA for review with the Draft Plan.

ELEMENT 12 – REPORTS AND DOCUMENTATION

To maintain proper coordination of the planning effort and confirm project and airport goals between the consultant and the CLIENT, draft chapters containing the results of the inventory and environmental overview, forecast, facility requirements, alternatives, phased development and ALP plans will be prepared and sent to FAA for review prior to detailed development of the Airport Layout Plan set. The Airport Layout Plan Set and Narrative Report chapters will be presented in narrative and graphic form. The Airport Layout Plan Set will be submitted to the FAA for review and approval. The Narrative Report chapters will be submitted to the FAA for review and comment. Project deliverables and documentation follow project schedule and milestones per Element 4 Public Involvement and Stakeholder Coordination:

Scoping Meeting:

1. Meeting Presentation for Staff (5 copies, ±15 Pages) and Draft Scoping

Kick-off and Project Initiation Deliverables:

1. Project Initiation Presentation for Airport Board(10 copies, ±10 Pages)
2. Project Initiation Presentation for TAC Committee (20 copies, ±10 Pages)
3. Project Initiation Presentation for Open-House (1 .pptx)
4. Project Initiation Boards for Open-House (±8 Full-Size Boards)
5. Project Initiation Materials for Stations for Open-House (±6 Stations, 50 copies ea.)
6. Project Initiation Leave-Behinds for Open-House (1 Stations, 50 copies)

Working Paper No. 1 Deliverables:

(Working Paper No. 1: Chapter One: Introduction, Chapter Two; Inventory, Chapter Three; Forecasts of Aviation Activity)

1. Working Paper No. 1 Narrative Chapters 1, 2 and 3 (20 copies, ±80 Pages)
2. Working Paper No. 1 Boards (±6 Full-Size Boards)
3. Working Paper No. 1 Presentation for TAC Committee (10 copies, ±20 Pages)

Working Paper No. 2 Deliverables:

(Working Paper No. 2: Working Paper No. 1 Chapter Plus, Chapter Four: Facility Requirements, Chapter Five; Alternatives Analysis)

1. Working Paper No. 2 Narrative Chapters 1-6 (30 copies, ±130 Pages)
2. Working Paper No. 2 Presentation for Airport Staff (10 copies, ±30 Pages)
3. Working Paper No. 2 Presentation for Open-House (1 .pptx)
4. Working Paper No. 2 Boards for Open-House (±16 Full-Size Boards)
5. Working Paper No. 2 Station Materials for Open-House (±6 Stations, 50 copies ea.)
6. Working Paper No. 2 Leave-Behinds for Open-House (1 Station, 50 copies)
7. Working Paper No. 2 Presentation for Airport Board (10 copies, ±30 Pages)

Draft Report and ALP Drawing Set

Based upon comments provided on the draft chapters, revisions will be made and a Draft Airport Layout Plan Set and Updated Narrative Report will be prepared for CLIENT review and submittal to the FAA and WSDOT for coordination and approval. 24 inch by 36 inches sheets will be produced.

Draft ALP Update Deliverables:

(Draft ALP: All Chapters, Executive Summary Plus Appendices)

1. Draft Airport Layout Plan Narrative Chapters (20 copies, ±200 Pages)
2. Draft Airport Layout Plan Presentation for Airport Staff (10 copies, ±40 Pages)
3. Draft Airport Layout Plan Presentation for TAC Committee (10 copies, ±40 Pages)
4. FAA SOP 2.00 and 3.00 Checklists
5. Pre-Draft (1 copy) and Draft Airport Layout Plan (ALP) Drawing Set (3 copies) for Airspacing and SOP 2.00 and 3.00 Checklist

Final ALP Deliverables:

1. Final Airport ALP Narrative Chapters (20 copies, ±200 Pages)
2. Final Airport ALP and Narrative Presentation for City Council (10 copies, ±30 Pages)
3. Executive Summary per FAA SOP 2.00
4. Final Airport Layout Plan Drawing Set (6 copies)

PART 3 - TASKS NOT INCLUDED IN THIS SCOPE OF WORK

1. Establishing of Airport Primary and Secondary Control Points (PACs and SACs)
2. Environmental Assessment or Environmental Impact Statement
3. Noise Analyses
4. Electronic ALP
5. Public Hearings beyond the Public Information Meetings/Open Houses
6. SMS Review
7. SHPO/Tribal Coordination (By FAA)
8. Planning for Compliance
9. Boundary Survey
10. No Cultural Resource Survey
11. RPZ Technical Memorandum
12. Existing Title Encumbrance research and identification
13. CLIENT will pay for advertising

ATTACHMENT 1B

ALP Update and Narrative Report Deer Park Municipal City of Deer Park, Washington 6/25/2020													
TASK NO	Principal	Rate:	Proj. Mgr/ Sr Engr	Planning Mgr	Proj. Engr.	Planner/ Designer	GIS Manager	HOURS AND FEES					TASK COSTS
								Survey PLS	Survey Crew	Sr. Enviro Specialist	Public Inv. Spec	Designer	
Element 1 - Study Initiation													
	Conduct Pre-Planning Scoping Meeting with FAA/Client		3		3	3							\$495.00
	Draft Scope of Work - Review with FAA/Client		40	4	8	4	8	2	1	2	8	2	\$4,506.00
	Final Scope of Work		8	2	4	4	4	1		1	2	2	\$1,345.00
	Revised Final Scope of Work		4		4							2	\$630.00
	Assist Client with submittal of Sponsor Certifications		4		4							2	\$140.00
	Create Blank breakdown of Costs for IPE		1		1							1	\$70.00
Element 2 - Project Management													
	Monthly team briefings (12)		6	12	6	12	4	2	4	2	2	2	\$2,340.00
	Client/FAA briefings (3)		2	3	2	3							\$492.00
	Client meetings (2)		4	4	4	8							\$956.00
	Prepare Quarterly FAA Performance Reports (4)		4		4	8					4		\$584.00
	Assist Client with preparation of Grant Application		1		2						4		\$255.00
	Assist Client with Record of Negotiations documentation		1		2						2		\$205.00
	Prepare Professional Services Agreement		2		2						2		\$247.00
	Assist Client with Monthly RFR submittals (9)		4		4	18					18		\$1,500.00
Element 3 - Airport Data & Information Portal (ADIP)													
	ADIP setup and plans						1	1					\$104.00
	Statement of Work (2)			2			2	2					\$312.00
	Survey & Quality Control Plan (2)						3	24					\$1,404.00
	Imagery Plan (1)						2	8			2		\$594.00
	Aerial mapping and photography Coordination (Geoterra Subcontractor)			2			10						\$624.00
Element 4 - Public Involvement Program													
	Field surveys and reconnaissance												
	Interviews & site reconnaissance		2		2		4					7	\$878.00
	Recover/document geodetic control (PACS/SACS)						2					2	\$232.00
	Observe geodetic control points							2				12	\$946.00
	Photo Control Points (16) & OPUS Check Points (5)							4				67	\$4,866.00
	Provide ground base station											8	\$549.00
	RW end points, centerline & Navoids							2			4		\$1,532.00
	Surveyed features / planimetric data												\$0.00
	Process the field data, attribute and structure AGIS format					36	6	2					\$2,154.00
	Develop the Final Survey Report						2	16				2	\$1,428.00
	Submit Final Reports & upload data to FAA ADIP						6	8					\$728.00
Element 5 - Inventory & Existing Conditions													
	PI Project Design						2					4	\$288.00
	Scoping/Staff Meetings (3)		4	6	8	6						6	\$1,180.00
	TAC meetings (3)		4	30	8	8						18	\$3,196.00
	Open House (2)		5	20	5	5	16					14	\$3,771.00
	Airport Board/City Council Meetings (3)		4	30	8	8						18	\$3,196.00
Element 6 - Inventory & Existing Conditions													
	Evaluate existing documents		4	6	6							2	\$1,526.00
	Inventory airport facilities, inventory exhibit		2		12		8					22	\$1,960.00
	Review existing airspace & analyze		1	4	8							8	\$941.00
	Wind & weather analysis			1	1	10						2	\$506.00
	Land use controls		4	6	1							8	\$985.00
	Environmental baseline		2	2	2							6	\$1,632.00

ATTACHMENT 1B

PROJECT TITLE: ALP Update and Narrative Report Deer Park Municipal City of Deer Park, Washington 6/25/2020													
TASK NO	Principal	Rate	Proj. Mgr/ Sr Engr	Planning Mgr	Proj. Engr.	Planner/ Designer	HOURS AND FEES					Enviro/ Admin	TASK COSTS
							GIS Manager	Survey PLS	Survey Crew	Sr. Enviro Specialist	Public Inv. Spec		
			2	12		\$38.00	\$52.00	\$64.00	\$54.00	\$40.00	\$37.00	\$24.00	\$802.00
	Collect & analyze demographics & socio-economic data												\$976.00
	Collect existing operations data												\$1,520.00
	User Outreach												\$468.00
	Gather and review existing financial & agreements data												
	Element 6 - Aviation Forecasts												
	Projections/Methodologies, Baseline Establishment	1	2	45	18								\$3,247.00
	Aviation Operations Forecasting	1	4	41									\$2,509.00
	Based Aircraft Forecasting	1	4	38			2						\$2,433.00
	Element 7 - Facility Requirements												
	Identify Airport facility requirements	5	6	22									\$1,879.00
	Identify Facility Deficiencies	5		26							15		\$2,252.00
	Current Obstruction Exhibit/Tabulation (1 Sheet)			2		6	2				31		\$1,583.00
	Element 8 - Alternatives Development & Evaluation												
	Alternatives Development/Analysis		2	4	2		2				2		\$608.00
	'Airsides' Alternative Layouts (2) and Analyses		2	6	4						16		\$1,186.00
	'Landside' Alternative Layouts (2) and Analyses		2	8	4						16		\$1,290.00
	Preferred Alternative Identification and Analysis	2	2	4	4		4				8		\$1,132.00
	Evaluate FAA eligible grading and drainage		2		4						2		\$494.00
	Evaluate frangible/erectable spray heads				4								\$184.00
	Evaluate spray field to remain in RSA/OFA as a MOS		3	2	4								\$451.00
	Estimate demolition and grading costs for Alts		2		4								\$282.00
	Meeting with WSDOE to determine agency concerns	2	4	2									\$502.00
	Meeting with farmer to identify concerns with potential spray field layout(s)	2	2	2							2		\$372.00
	Identify impact and replacement area needs		2	2	2								\$346.00
	Evaluate and identify impacts to farming practices and wildlife concerns	1		2	4								\$325.00
	Develop alternatives (3) to evaluate shifting the runway, spray field relocation and a combination of both		2	4	6						15		\$1,597.00
	Brief Environmental Analysis of Alternatives								10				\$540.00
	Element 9 - Land-Use-Compatibility												
	Element 9 - Facilities Implementation Plan												
	Financial Plan, Phased Development	1	3	8			1				2	2	\$946.00
	Phased Development Exhibits (3)	2	8	16	6		8				20	2	\$2,970.00
	Brief Environmental Analysis of Short Term Projects												\$1,080.00
	Element 10 - Airport Layout Plans (ALP Sheets)												
	Cover/Data Sheet (2 Sheets)		1	1							4		\$265.00
	Airport Layout Plan Drawing	1	2	16	4						22		\$2,029.00
	Building Area Plan (2 Sheets)	1	2	8	4						20		\$1,539.00
	Airport Airspace Drawing (2 Sheets)	1	1	4	4						20		\$1,266.00
	Inner Apronch Surface Drawings (2)			4	2						28		\$1,336.00
	Departure Surface Drawings (2)			4	2						18		\$966.00
	Exhibit A Property Map	1	1	5	4		2				12		\$1,334.00
	Element 11 - Airport Recycling Plan												
	Facility Description, Background, and Waste Audit				1	4							\$198.00
	Verification of Opportunities				1	4							\$198.00
	Develop Solid Waste Reduction & Recycling Plan		2	2	4	2							\$494.00
	Element 12 - Reports and Documentation												
	Interim Report & Draft ALP drawings	2	2	20	4						20	40	\$3,192.00
	Final Report and ALP drawings	1	1	16	2						12	20	\$1,982.00
	Project Closeout Documentation & Grant Closeout		1	1	4							4	\$345.00

ATTACHMENT 1B

PROJECT TITLE: ALP Update and Narrative Report
AIRPORT: Deer Park Municipal
CLIENT: City of Deer Park, Washington
DATE: 6/25/2020

TASK NO	HOURS AND FEES										TASK COSTS	
	Principal	Proj. Mgr/ Sr Engr	Planning Mgr	Proj. Engr.	Planner/ Designer	GIS Manager	Survey PLS	Survey Crew	Sr. Enviro Specialist	Public Inv. Spec		CAD Designer
	40	171	474	158	224	101	88	116	53	65	396	181
Rate:	\$69.00	\$65.00	\$52.00	\$46.00	\$38.00	\$52.00	\$52.00	\$64.00	\$54.00	\$40.00	\$37.00	\$24.00
Labor Subtotal												

Direct Overhead: 174.13% \$167,187.44
 Fixed Fee: 15.00% \$39,480.07
Subtotal Labor + Fixed Fee: \$302,680.50

EXPENSES:	Cost Per Unit	Air		Ground		Trip		Packages	Days/Hours	Markup	
		Trips	Trips	Miles	Miles	Days	Days/Hours				
Air Travel & Rental Vehicle	\$600.00	8								1.0	
Mileage	\$0.575		50							1.0	
Per Diem	\$61.00			30						1.0	
Lodging	\$108.00			30						1.0	
GPS Survey Unit/Base Station	\$20.54						100			1.0	
Photo Control Target Material	\$500.00									1.0	
Shipping / UPS / FedEx	\$55.00						8			1.0	
Plotting Plans & Printing Report Pages	\$1,500.00									1.0	
Expenses Subtotal:											
SUBCONSULTANTS:											
1 Aerial Survey Subconsultant (GeoTerra)	\$48,610.00										
2 Woods and Poole SocioEconomics	\$445.00										
Subconsultants Subtotal:											
TOTAL:											

J-U-B TOTAL - MASTER PLAN UPDATE ENGINEERING & PLANNING SERVICES:
 \$48,610.00
 \$445.00
 \$0.00
 \$0.00
 \$49,055.00
\$367,537.00

Attachment 1.1 AGIS Survey Feature and Attribute Collection List

Deer Park Airport, Deer Park, WA

Feature Type	Attribute Name	Responsible for Collection
AIRFIELDLIGHT	GEOMETRY/PLANNING METRICS	GT
	NAME	GT
	DESCRIPTION	
	LIGHTINGTYPE	JUB
	COLOR	JUB
	LUMINESCENCE	
	PILOTCONTROLFREQUENCY	
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
AIRPORTSIGN	GEOMETRY/PLANNING METRICS	JUB
	NAME	JUB
	DESCRIPTION	
	SIGNTYPE	JUB
	HEIGHT	JUB
	MESSAGE	JUB
	STATUS	JUB
	ALTERNATIVE	
USERFLAG		
APRON	GEOMETRY/PLANNING METRICS	GT
	NAME	JUB
	DESCRIPTION	
	APRONTYPE	JUB
	NUMBEROFTIEDOWNS	
	STATUS	JUB
	SURFACETYPE	
	SURFACEMATERIAL	

	PAVEMENTCLASSIFICATIONNUMBER	
	SURFACECONDITION	
	FUEL	
	ALTERNATIVE	
	USERFLAG	
DEIÖINGAREA	GEOMETRY/PLANIMETRICS	JUB
	NAME	JUB
	DESCRIPTION	
	STATUS	JUB
	USERFLAG	
	ALTERNATIVE	
MARKINGAREA	GEOMETRY/PLANIMETRICS	GT
	NAME	JUB
	DESCRIPTION	
	MARKINGFEATURETYPE	JUB
	COLOR	GT
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
MARKINGLINE	GEOMETRY/PLANIMETRICS	GT
	NAME	JUB
	DESCRIPTION	
	MARKINGFEATURETYPE	JUB
	COLOR	GT
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
MOVEMENTAREA	GEOMETRY/PLANIMETRICS	JUB
	NAME	JUB
	DESCRIPTION	
	STATUS	JUB

	ALTERNATIVE	
	USERFLAG	
RUNWAY	GEOMETRY/PLANI METRICS	GT (RW 16/34 only)
	NAME	JUB
	DESCRIPTION	
	RUNWAYDESIGNAT OR	JUB
	STATUS	JUB
	WIDTH	GT
	LENGTH	GT
	SURFACETYPE	JUB
	SURFACEMATERIA L	JUB
	PAVEMENTCLASSIF ICATIONNUMBER	
	SURFACECONDITIO N	JUB
	ALTERNATIVE	
	USERFLAG	
RUNWAYCENTERLINE	GEOMETRY/PLANI METRICS	JUB (RW 16/34 only)
	NAME	JUB
	DESCRIPTION	
	RUNWAYDESIGNAT OR	JUB
	ISDERIVED	
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
RUNWAYELEMENT	GEOMETRY/PLANI METRICS	GT (RW 16/34 only)
	NAME	JUB
	DESCRIPTION	
	STATUS	JUB
	SURFACETYPE	
	SURFACEMATERIA L	
	PAVEMENTCLASSIF ICATIONNUMBER	
	SURFACECONDITIO N	
	ALTERNATIVE	
	RUNWAYDESIGNAT OR	JUB
	USERFLAG	

RUNWAYEND	GOMETRY/PLANI METRICS	
		JUB (RW 16/34 only)
	NAME	JUB
	DESCRIPTION	
	ELLIPSOIDHEIGHT	JUB
	STATUS	JUB
	APPROACHCATEG ORY	JUB
	APPROACHGUIDAN CE	JUB
	ACCELERATESTOP DISTANCEAVAIL	JUB
	MAGNETICBEARIN G	JUB
	TRUEBEARING	JUB
	DESIGNGROUP	
	DISPLACEDDISTAN CE	JUB
	LANDINGDISTANCE AVAILABLE	JUB
	RUNWAYENDESIG NATOR	JUB
	RUNWAYSLOPE	
	TAKEOFFDISTANCE AVAILABLE	JUB
	TAKEOFFRUNWAY AVAILABLE	JUB
	TOUCHDOWNZONE SLOPE	
	TOUCHDOWNZONE ELEVATION	JUB
	THRESHOLDTYPE	JUB
	ALTERNATIVE	
	USERFLAG	
RUNWAYLABEL	GOMETRY/PLANI METRICS	JUB
	NAME	JUB
	DESCRIPTION	
	RUNWAYENDESIG NATOR	JUB
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
SHOULDER	GOMETRY/PLANI METRICS	GT
	NAME	JUB
	DESCRIPTION	
	SHOULDERTYPE	JUB
	STATUS	JUB

	LENGTH	
	WIDTH	JUB
	RESTRICTED	JUB
	SURFACEMATERIAL	JUB
	SEQUENCE	JUB
	ALTERNATIVE	
	SURFACECONDITION	
	SURFACTYPE	JUB
	USERFLAG	
TAXIWAYELEMENT	GEOMETRY/PLANIMETRICS	GT
	NAME	JUB
	DESCRIPTION	
	TAXIWAYID	JUB
	TAXIWAYTYPE	JUB
	STATUS	JUB
	SURFACEMATERIAL	JUB
	PAVEMENTCLASSIFICATIONNUMBER	
	SURFACECONDITION	JUB
	DIRECTIONALITY	JUB
	SEQUENCE	
	SURFACTYPE	
	DESIGNGROUP	
	ALTERNATIVE	
	LENGTH	
	WIDTH	GT
	MAXIMUMSPEED	JUB
	WINGSPAN	JUB
	USERFLAG	
TAXIWAYHOLDINGPOSITION	GEOMETRY/PLANIMETRICS	GT
	NAME	JUB
	DESCRIPTION	
	RUNWAYDESIGNATOR	JUB
	TAXIWAYDESIGNATOR	JUB
	LOWVISIBILITYCATEGORY	JUB
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	

TAXIWAYINTERSECTION	GEOMETRY/PLANI METRICS	GT
	NAME	JUB
	DESCRIPTION	
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
LANDMARKSEGMENT	GEOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	LANDMARKTYPE	GT
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
OBSTACLE	GEOMETRY/PLANI METRICS	GT (RW 16/34 only)
	NAME	GT
	DESCRIPTION	GT
	OBSTACLETYPE	GT
	OBSTACLESOURCE	GT
	OBSTRUCTIONNUM BER	
	ABOVEGROUNDLE VEL	
	DISPOSITION	
	DISTANCEFROMDIS PLACEDTHRESHOL D	
	DISTANCEFROMRU NWAYCENTERLINE	
	OISSURFACECOND ITION	
	FAACORDINATIO NCODE	
	FRANGIBLE	
	DISTANCEFROMRU NWAYEND	
	GROUPCODE	GT
	HEIGHTABOVEAIRP ORT	GT
	HEIGHTABOVERUN WAY	GT

	HEIGHTABOVETOUCHDOWNZONE	
	LIGHTCODE	JUB
	MARKINGFEATURETYPE	JUB
	PENVALSPECIFIED	GT
	PENVALSUPPLEMENTAL	
	ELLIPSOIDHEIGHT	GT
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
OBSTRUCTIONAREA	GEOMETRY/PLANIMETRICS	GT (RW 16/34 only)
	NAME	GT
	DESCRIPTION	GT
	OBSTACLETYPE	GT
	OBSTACLESOURCE	GT
	ABOVEGROUNDLEVEL	
	DISTANCEFROMDISPLACEDTHRESHOLD	
	DISTANCEFROMRUNWAYCENTERLINE	
	DISTANCEFROMRUNWAYEND	
	GROUPCODE	GT
	HEIGHTABOVEAIRPORT	GT
	HEIGHTABOVERUNWAY	GT
	HEIGHTABOVETOUCHDOWNZONE	
	LIGHTCODE	NA
	MARKINGFEATURETYPE	
	PENVALSPECIFIED	
	PENVALSUPPLEMENTAL	
	OBSTRUCTIONNUMBER	
	OBSTRUCTIONAREATYPE	GT
	DISPOSITION	
	OISSURFACECONDITION	
	LENGTH	

	WIDTH	
	FRANGIBLE	
	FAACORDINATIO N CODE	
	ELLIPSOIDHEIGHT	GT
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
OBSTRUCTIONIDSURFACE	GEOMETRY/PLANI METRICS	GT (RW 16/34 only)
	NAME	GT
	DESCRIPTION	GT
	OISSURFACETYPE	GT
	OISZONETYPE	
	OISSURFACECOND ITION	
	SAFETYREGULATIO N	
	ZONEUSE	
	APPROACHGUIDAN CE	JUB
	SLOPE	GT
	STATUS	GT
	ALTERNATIVE	
	RUNWAYDESIGNAT OR	
	RUNWAYENDDESIG NATOR	
	USERFLAG	
RUNWAYPROTECTAREA	GEOMETRY/PLANI METRICS	JUB (RW 16/34 only)
	NAME	JUB
	DESCRIPTION	
	LENGTH	JUB
	TYPE	JUB
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
AIRPORTBOUNDARY	GEOMETRY/PLANI METRICS	JUB
	NAME	JUB
	DESCRIPTION	
	FAASITENUMBER	
	FAALOCATIONID	JUB

	IATACODE	
	ICAOCODE	
	AIRPORTFACILITYTYPE	JUB
	OPERATIONSTYPE	JUB
	OWNER	JUB
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
AIRPORTCONTROLPOINT	GEOMETRY/PLANIMETRICS	JUB
	NAME	JUB
	DESCRIPTION	
	PERMANENTID	
	POINTTYPE	JUB
	MONUMENTTYPE	
	ELLIPSOIDHEIGHT	JUB
	YEAROFSURVEY	
	DATERECOVERED	
	RECOVEREDCONDITION	
	FIELDBOOK	
	GLOBALPOSITIONSYSTEMSUITABLE	
	COORDINATEZONE	
	STAMPEDDESIGNATION	
	EPOCH	
	STATUS	JUB
	ALTERNATIVE	
	RUNWAYDESIGNATOR	
	RUNWAYENDDESIGNATOR	
	USERFLAG	
COORDINATEGRIDAREA	GEOMETRY/PLANIMETRICS	JUB
	NAME	
	DESCRIPTION	
	GRIDTYPE	
	STATUS	
	ALTERNATIVE	
	USERFLAG	

ELEVATIONCONTOUR	GEOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	LENGTH	
	CONTOURVALUE	GT
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
IMAGEAREA	GEOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	FRAMEID	
	PHOTDATE	GT
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
BUILDING:	GEOMETRY/PLANI METRICS	GT
	NAME	JUB
	DESCRIPTION	
	BUILDINGNUMBER	JUB
	STRUCTURETYPE	JUB
	STATUS	JUB
	NUMBERCURRENT OCCUPANTS	
	AREAINSIDE	
	STRUCTUREHEIGH T	GT
	AREAFLOOR	
	LIGHTINGTYPE	
	MARKINGFEATURE TYPE	
	COLOR	
	ALTERNATIVE	
	USERFLAG	
FENCE	GEOMETRY/PLANI METRICS	GT

	NAME	GT
	DESCRIPTION	
	TYPE	GT
	HEIGHT	GT
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
GATE	GEOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	TYPE	JUB
	LENGTH	
	HEIGHT	GT
	ATTENDED	
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
ROOF	GEOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	BUILDINGNUMBER	
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
TOWER	GEOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	STRUCTUREHEIGH T	GT
	VERTICALSTRUCTU RE MATERIAL	
	LIGHTCODE	JUB
	LIGHTINGTYPE	JUB
	MARKINGFEATURE TYPE	

	COLOR	
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	
NAVAIDEQUIPMENT	GEOMETRY/PLANNING METRICS	JUB
	NAME	JUB
	DESCRIPTION	
	FAAFACILITYID	JUB
	NAVAIDEQUIPMENT TYPE	JUB
	NAVIGATIONALAID SYSTEMTYPE	JUB
	USECODE	
	ANTENNA TO THRESHOLD DISTANCE	JUB
	CENTERLINE DISTANCE	JUB
	STOP END DISTANCE	
	OFFSET DISTANCE	JUB
	OFFSET DIRECTION	JUB
	LIGHTING TYPE	JUB
	STATUS	JUB
	OWNER	
	RUNWAY END ID	
	REFERENCE POINT ELLIPSOID HEIGHT	
	REFERENCE POINT THRESHOLD	
	THRESHOLD CROSSING HEIGHT	
	HIGH ANGLE	
	ELLIPSOID ELEVATION	JUB
	ALTERNATIVE	
	USERFLAG	
DRIVEWAY AREA	GEOMETRY/PLANNING METRICS	GT
	NAME	GT
	DESCRIPTION	
	SURFACE MATERIAL	JUB
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	

DRIVEWAYCENTERLINE	GOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
PARKINGLOT	GOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	PARKINGLOTUSE	
	TOTALNUMBERSPA CES	
	NUMBERHANDICAP SPACES	
	OWNER	
	SURFACETYPE	
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
ROADCENTERLINE	GOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	STATUS	GT
	ALTERNATIVE	
	COLOR	GT
	USERFLAG	
ROADPOINT	GOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
ROADSEGMENT	GOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	

	ALTERNATENAME	
	ROUTE1NAME	JUB
	ROUTE1TYPE	
	ROUTE2NAME	
	ROUTE2TYPE	
	ROUTE3NAME	
	ROUTE3TYPE	
	NUMBEROFLANES	GT
	LENGTH	
	WIDTH	
	ISBRIDGE	
	ISTUNNEL	
	DIRECTIONALITY	GT
	SEGMENTTYPE	GT
	SURFACETYPE	
	SURFACEMATERIA L	
	STATUS	GT
	ALTERNATIVE	
	USERFLAG	
SIDEWALK	GEOMETRY/PLANI METRICS	GT
	NAME	GT
	DESCRIPTION	
	WALKUSE	GT
	AMERICANDISABILI TIESACT	
	LENGTH	
	WIDTH	GT
	SURFACEMATERIA L	JUB
	SEGMENTTYPE	
	STATUS	
	ALTERNATIVE	
	USERFLAG	
TANKSITE	GEOMETRY/PLANI METRICS	GT
	NAME	JUB
	DESCRIPTION	

	TANKTYPE	
	TOPELEVATION	GT
	LIGHTCODE	
	VERTICALSTRUCTU REMATERIAL	
	LIGHTINGTYPE	
	MARKINGFEATURE TYPE	
	COLOR	
	STATUS	JUB
	ALTERNATIVE	
	USERFLAG	