



AGREEMENT AND AUTHORIZATION FOR CONSULTING SERVICES

By this Agreement dated 10/05/10, **Kittitas County** (Client) authorizes **Century West Engineering Corporation** (Consultant) to carry out and complete the following Services in consideration of the mutual covenants set forth in this Agreement, the *ENGINEERING CONSULTING TERMS AND CONDITIONS*, and the following additional attachments:
"Scope of Work - Kittitas County Bowers Field Airport Layout Plan Update & Airfield Needs Assessment" dated July 2010
and "Fee Estimate - Kittitas County Bowers Field Airport ALP Update and Airfield Needs Assessment" dated July 2010.

Project: Bowers Field Airport ALP Update and Airfield Needs Assessment

Project No.: 12436.001.01

Scope of Services: See Attached "Scope of Work - Kittitas County Bowers Field Airport Layout Plan Update & Airfield Needs Assessment" dated July 2010.

Fees: Consultant fee will be billed on a time and materials basis not to exceed \$139,750 without prior authorization from the Client. See Attached "Fee Estimate - Kittitas County Bowers Field Airport ALP Update and Airfield Needs Assessment" dated July 2010.

Kittitas County

By: [Signature]

Title: Bore Chair

Date: 10/05/10

Century West Engineering Corporation

By: [Signature]

Title: Vice President

Date: 10/15/10

ENGINEERING CONSULTING ♦ TERMS AND CONDITIONS

1. SERVICES: Engineer agrees to perform the Scope of Services (Services) under the following terms and conditions. Additional Services will be provided only by written amendment to this Agreement.

2. TIMES OF PAYMENTS: Engineer will submit invoices on a monthly basis for the unbilled portion of Services actually completed. Client will pay the invoice within 30 days of the invoice date. Accounts remaining unpaid after said 30 days will be considered delinquent and assessed a late payment charge (currently at the rate of 1% per month) calculated each month from the date of the invoice. Engineer reserves the right to suspend all Services until account delinquencies have been remedied.

3. OPINIONS OF COST: Because Engineer has no control over the cost of labor, materials, equipment or Services furnished by others, or over contractors' methods of determining prices, or other competitive bidding or market conditions, any cost estimates provided by Engineer will be made on the basis of experience and judgment. Engineer cannot and does not guarantee that proposals, bids or actual Project construction costs will not vary from opinions of probable costs prepared by Engineer.

4. CLIENT-PROVIDED INFORMATION: Client will make available to Engineer, all information readily available to Client regarding existing and proposed conditions of the site which will aid Engineer in its performance of Services. Engineer shall be entitled to rely, without further inquiry or investigation, on all information furnished to Engineer by Client. Client agrees to advise Engineer of any hazardous substances or any condition existing in, on or near the site presenting a potential danger to human health, the environment, or equipment. Client will immediately transmit to Engineer any new information which becomes available to Client which may have a bearing on Engineer's performance of Services or which relates to information Engineer has requested from Client. If any hazards, not disclosed to Engineer, are discovered after the Services are undertaken, Client and Engineer agree that the Scope of Services, time schedule and rate schedule shall be modified accordingly.

5. STANDARD OF PERFORMANCE: Engineer represents that Services will be performed within the limits prescribed by Client, and that its findings, recommendations, specifications and/or professional advice provided hereunder will be prepared and presented in a manner consistent with the level of care and skill ordinarily exercised by other professionals under similar circumstances at the time the Services are performed.

6. ACCESS, APPROVALS, PERMITS: Client shall arrange for access to and make all provisions for Engineer to enter onto public and private property as required for Engineer to perform the Services. Unless otherwise agreed, Client will be solely responsible for applying for and obtaining such permits and approvals as may be necessary for Engineer to perform the Services.

7. REUSE OF DOCUMENTS: All documents, including computer files, drawings and specifications, prepared by Engineer pursuant to this Agreement shall remain the property of

Engineer and are instruments of service with respect to the Project. They are not intended or represented to be suitable for reuse by Client or others on extensions of the Services provided for the Project under this Agreement or on any other project. Any reuse without written authorization, certification or adaptation by Engineer for the specific purpose intended will be at Client's sole risk and without liability to Engineer.

8. ASBESTOS/PCBs: All asbestos/PCB related Services are excluded from Engineer's Scope of Services. Client shall notify Engineer at the start of the Project if the presence of asbestos/PCBs on the project is suspected. If asbestos/PCBs are suspected or encountered, Engineer will stop its own work to permit proper testing and evaluation. If requested as an additional Service, Engineer will assist Client in contacting regulatory agencies and/or identifying appropriate testing laboratories.

9. SUBMITTAL REVIEW: Review of submittals by Engineer is only for general conformance with the design concept of the Project and general compliance with the information given in the Contract Documents. The review does not affect the contractor's responsibility to perform all contract requirements with no change in contract price or time. Any action taken by the Engineer is subject to the requirements of the plans, specifications and other Contract Documents. Client shall indemnify Engineer against any claim by any contractor based on the review.

10. ENGINEER AT CONSTRUCTION SITE: The presence or duties of Engineer's personnel at the construction site, whether as on-site representatives or otherwise, do not make Engineer or its personnel in any way responsible for those duties that belong to the Owner and/or the construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties and responsibilities, including but not limited to, all construction methods, means, techniques, sequences and procedures necessary for coordinating and completing all portions of the construction work in accordance with the Contract Documents and any health or safety precautions required by such construction work. Engineer and its personnel have no authority to exercise control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions and have no duty for inspecting, noting, observing, correcting or reporting on health or safety deficiencies of the construction contractor or other entity or any other persons at the site except Engineer's own personnel.

11. INDEMNIFICATION AND INSURANCE:

(a) Client agrees to indemnify, hold harmless and defend Engineer, its directors, officers, agents and employees, from and against any and all liabilities, claims, penalties, forfeitures, suits and the cost and expenses incidental thereto, including but not limited to reasonable attorney fees, which Engineer may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment or any violation of governmental laws, regulations or orders caused by Client's (1) breach of any term or provision of this Agreement; (2) any negligent or wrongful act or omission in the performance of this Agreement; or (3) Client's generation of waste products.

(b) Engineer agrees to indemnify, hold harmless and defend Client, its directors, officers, agents and employees, from and against any and all liabilities, claims, penalties, forfeitures, suits and the cost and expenses incidental thereto, including but not limited to reasonable attorney fees, which Client may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment or any violation of governmental laws, regulations or orders caused by Engineer's (1) breach of any term or provision of this Agreement; or (2) any negligent or wrongful act or omission in the performance of this Agreement.

(c) In the event any claim arises as a result of the concurrent negligence of Engineer and Client, liability will be determined on the basis of the doctrine of comparative negligence. Each party shall promptly notify the other party, in writing, of any threatened or actual claim, action, or proceeding. Engineer and Client shall jointly control the defense.

(d) Notwithstanding any other provision contained in this Agreement, neither party shall be liable to the other party for any indirect, incidental, special or consequential damages of any kind, including without limitation, lost profits or loss of use, regardless of the cause, including negligence.

(e) Upon request, Engineer will provide Client with Certificates of Insurance for Worker's Compensation, General, Auto and Professional Liability coverage. Client agrees to maintain, during the performance of Services, general liability and automobile liability insurance in the amount of one million dollars (\$1,000,000).

(f) Engineer agrees to the insurance requirements as detailed in Exhibit A, and Exhibit A is incorporated into this agreement.

12. TERMINATION: Either party may terminate this Agreement upon thirty (30) days written notice to the other. Either party may terminate this Agreement immediately in the event of a material breach by the other party to perform in accordance with the terms hereof but only if said breach is through no fault of the terminating party and said breach is not corrected before the date of termination. If this Agreement terminates for Force Majeure, Client shall pay Engineer for all Services authorized and performed prior to the termination date including, if applicable, a prorated lump sum fee.

13. SUCCESSORS AND ASSIGNS: Neither Engineer nor Client may assign this Agreement without the prior written consent of the other. Engineer may, however, employ any other party or entity it deems necessary or proper for any part of the Services required to be performed by Engineer under the terms of this Agreement. The covenants, conditions and terms of this

Agreement shall extend to and be binding upon and inure to the benefit of the heirs, personal representatives, successors and assigns of the parties hereto.

14. MISCELLANEOUS:

(a) In the event that any litigation should arise concerning the construction or interpretation of any of the terms of this Agreement, the venue of such action of litigation shall be in the Superior Court of the State of Washington in and for the County of Kittitas. This Agreement shall be governed by the law of the State of Washington.

(b) Any claim brought by Client against Engineer must be brought no later than two years after the date of substantial completion of the Services hereunder or the expiration of the appropriate statute of limitations, whichever is earlier.

(c) In the event this Agreement should be referred to an attorney at law or agent for collection, Client agrees to pay such reasonable attorney's or agent's fees and costs as Engineer may incur to any attorney or agent in such collection even if no action is instituted.

(d) No waiver by either party of any provision of this Agreement shall be construed or deemed to be a waiver of (a) any other provision of this Agreement or (b) a subsequent breach of the same provision, unless such waiver be so expressed in writing and signed by the party to be bound.

(e) The terms and conditions of this Agreement contain a series of separate agreements. If in any proceeding a court or arbitrator shall refuse to enforce any of the separate agreements, any unenforceable agreement shall be deemed reduced or eliminated from the terms and conditions for the purpose of such proceeding, but only to the extent necessary to permit the remaining agreements to be enforced in such proceeding.

(f) This Agreement constitutes the entire agreement between Client and Engineer regarding the Services and supersedes all prior or contemporaneous oral or written representations or agreements. This Agreement shall not be modified except by a written document signed by both parties.

15. TERMINATION DUE TO CHANGE IN FUNDING

If the funds upon which the County relied to establish this agreement are withdrawn, reduced, or limited, or if additional or modified conditions are placed on such funding, the County may terminate this Agreement by providing at least five (5) business days' written notice to the Engineer. The termination shall be effective on the date specified in the notice of termination. On termination, the Engineer will be paid for all authorized work performed up to the termination date.

16. ASSIGNMENT AND SUBCONTRACTING:

No portion of this Agreement may be assigned or subcontracted to any other individual, firm or entity without the express and prior written approval of the County.

17. INDEPENDENT CONTRACTOR:

The Engineer's services shall be furnished by the Engineer as an independent Contractor and nothing herein contained shall be construed to create a relationship of employer-employee or master-servant, but all payments made hereunder and all services performed shall be made and performed pursuant to this Agreement by the Engineer as an independent Contractor.

The Engineer acknowledges that the entire compensation for this Agreement is specified in the Fee Estimate and the Engineer is

not entitled to any County benefits including, but not limited to: vacation pay, holiday pay, sick leave pay, medical, dental, or other insurance benefits, or any other rights or privileges afforded to Kittitas County employees.

Engineer will defend, indemnify and hold harmless the County, its Additional Insured's, officers, agents or employees from any loss or expense, including but not limited to settlements, judgments, setoffs, attorneys' fees or costs incurred by reason of claims or demands because of breach of the provisions of this paragraph.

18. NO GUARANTEE OF EMPLOYMENT:

The performance of all or part of this Agreement by the Engineer shall not operate to vest any employment rights whatsoever and shall not be deemed to guarantee any employment of the Engineer or any employee of the Engineer or any sub-Contractor or any employee of any sub-Contractor by the County at the present time or in the future.

19. TAXES:

The Engineer understands and acknowledges that the County will not withhold Federal or State income taxes. Where required by State or Federal law, the Engineer authorizes the County to make withholding for any taxes other than income taxes (i.e. Medicare). All compensation received by the Engineer will be reported to the Internal Revenue Service at the end of the calendar year in accordance with the applicable IRS regulations.

It is the responsibility of the Engineer to make the necessary estimated tax payments throughout the year, if any, and the Engineer is solely liable for any tax obligation arising from the Engineer's performance of this Agreement. The Engineer hereby agrees to indemnify the County against any demand to pay taxes arising from the Engineer's failure to pay taxes on compensation earned pursuant to this Agreement.

The County will pay sales and use taxes imposed on goods or services acquired hereunder as required by law. The Engineer must pay all other taxes including, but not limited to: Business and Occupation Tax, taxes based on the Engineer's gross or net income, or personal property to which the County does not hold title. The County is exempt from Federal Excise Tax.

20. RIGHT TO REVIEW:

This contract is subject to review by any Federal or State auditor.

The County or its designee shall have the right to review and monitor the financial and service components of this program by whatever means are deemed expedient by the County. Such review may occur with or without notice, and may include, but is not limited to, on-site inspection by County agents or employees, inspection of all records or other materials which the County deems pertinent to the Agreement and its performance, and any and all communications with or evaluation by service recipients under this Agreement. The Engineer shall preserve and maintain all financial records and records relating to the performance of work under this Agreement for 6 years after contract termination, and shall make them available for such review, within Kittitas County, State of Washington, upon request.

21. Nondiscrimination:

The County is an equal opportunity employer.

Nondiscrimination in Employment

In the performance of this Agreement, the Engineer will not discriminate against any employee or applicant for employment on the grounds of race, creed, color, national origin, sex, sexual orientation, marital status, age or the presence of any sensory, mental or physical handicap; provided that the prohibition against discrimination in employment because of handicap shall not apply if the particular disability prevents the proper performance of the particular worker involved. The Engineer shall ensure that applicants are employed, and that employees are treated during employment without discrimination because of their race, creed, color, national origin, sex, sexual orientation, marital status, age or the presence of any sensory, mental or physical handicap. Such action shall include, but not be limited to: employment, upgrading, demotion or transfers, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and programs for training including apprenticeships. The Engineer shall take such action with respect to this Agreement as may be required to ensure full compliance with local, state and federal laws prohibiting discrimination in employment.

SCOPE OF WORK
AIRPORT LAYOUT PLAN UPDATE and AIRFIELD NEEDS ASSESSMENT
BOWERS FIELD AIRPORT
FAA AIP Grant Number: 3-53-0028-10

The objective of the Airfield Needs Assessment is to review, validate and revise, as needed the facility development recommendations provided by the current Airport Master Plan, adopted in 2004. The 2004 Airport Layout Plan (ALP) drawing set will be updated/revise to reflect changes in existing conditions and FAA standards, and changes in the future or ultimate airfield configuration reflected in the preferred alternative from the Airfield Needs Assessment.

The Airfield Needs Assessment will be developed as a stand-alone supplement to the 2004 Airport Master Plan. The data contained in the 2004 master plan will provide basic facility data for the study. Current conditions and anticipated changes in activity will be identified to provide the basis for a new analysis of facility requirements and the assessment of airfield needs, including recommendations for runway length and capabilities that can be justified to the FAA. When approved by Kittitas County and FAA, the preferred alternative contained in the Airfield Needs Assessment will replace the preferred development alternative from the 2004 Airport Master Plan, which will then be reflected in the updated ALP drawings. Kittitas County will provide the Consultant with electronic (AutoCAD) files for the 2004 ALP drawing set.

The 2004 master plan aviation activity forecasts and associated facility requirements will be reviewed and updated as needed to reflect actual activity that has occurred during the initial ten years of the forecasts (2000-2010). Activity data (based aircraft, aircraft operations, etc.) will be projected through 2030. If the master plan forecasts are found to be tracking closely to actual activity, the projections may be updated through extrapolation by ten years. However, if significant changes in activity are identified, new forecast projections based on established methodologies (e.g., market share, population, trend analysis, etc.) will be prepared. The purpose of the forecast review is to support the facility requirements analysis required to conduct the airfield needs assessment. The airport's facility requirements analysis will be updated to reflect activity-driven and other airside and landside facility needs.

The effort described above will result in a new ALP drawing set that will replace the existing ALP plan set. The Airfield Needs Assessment narrative report will supplement the 2004 Master Plan until the next complete master plan update is conducted.

Technical Evaluation

The technical evaluation required for the airport needs assessment will include several key elements:

- Review and update aviation activity forecasts as needed;
- Identify current and future design aircraft and airport reference code (ARC) for Runways 11/29 and 7/25;
- Translate forecast demand into specific facility requirements;
- Conduct a detailed alternatives evaluation that addresses facility requirements;
- Select the preferred alternative;
- Identify project costs, property acquisition needs, changes in local surface roads and potential areas of concern (land use, etc.);
- Develop an updated capital improvement program (CIP) that defines project prioritization, timeline, costs, and FAA funding eligibility for all related projects; and
- Update the airport layout plan, airspace plan, and other applicable drawings to reflect changes in facility planning.
- Public Involvement – Airport Advisory Committee Meetings, Board of County Commissioner Briefings, Public Meetings.
- Airfield Needs Assessment Technical Report

The project work elements, in general, will be completed as outlined in FAA Advisory Circulars 150/5070-6A, Airport Master Plans and 150/5300-13, Airport Design. The project will also be completed in conformance with the FAA-ANM Airport Layout Plan Checklist (from AC 150/5070.6B, Appendix F) and the Airport Master Plan Narrative Checklist.

Completion of the work elements will result in:

1. A schedule of airport improvements correlated with an identified specific volume of activity, which would mandate action to accomplish the needed improvement.
2. A realistic and workable CIP that identifies items necessary to maintain/expand airport facilities.
3. Current ALP drawings that graphically depict existing conditions at the airport as well as proposed capital improvements.

ELEMENT 1 - STUDY INITIATION

Work Element 1.1 - Refine Scope of Work, Budget and Schedule

Century West Engineering (Century West) will develop a detailed scope of work, budget, and schedule to be made a part of the project contract fee negotiations. A detailed task-by-task itemization of the project budget and schedule will be provided.

Product: The final scope of work which will be used to obtain an independent cost estimate for the project for use in contract negotiations. A breakdown of project costs for each work element will be provided.

Work Element 1.2 - Project Management

Century West will assist the airport sponsor, Kittitas County, in identifying agencies and individuals that need to be contacted and informed of the study process and will provide background and technical information. Kittitas County will utilize the existing Bowers Field Airport Advisory Committee to provide local review and input during the study. The advisory committee includes representatives from the airport FBO, CWU Aviation Department, airport users, and residents of the community, in addition to a representative from the City of Ellensburg (City Council liaison). The Sponsor will coordinate meetings of the Airport Advisory Committee and will provide facilities for such meetings. The consultant will ensure that the meetings are consistent with the guidelines of the FAA and Kittitas County. Graphic displays and pertinent handout material necessary to describe the evaluations and findings of the interim submittals will be prepared. The Consultant will attend one public hearing or presentation to the general public as required by Kittitas County (see below).

Kittitas County, as Sponsor for this Airfield Needs Assessment and ALP, will manage, through its consultant the administrative grant and fiscal aspects of the project. Additional responsibilities include consultant/airport coordination, facilitation of meetings, timely product review and supply of existing plans, report and electronic files relating to the airport layout, land use, property ownership, approaches, pavement and facility conditions, and previous planning studies and current development desires.

The Consultant will attend up to three (3) project meetings with the Sponsor, and on the Sponsor's behalf, with the Airport Advisory Committee and associated community and one (1) public meeting to present the final ALP plan set and report to County Commissioners as identified in Work Element 9.2. Kittitas County will advertise the date and time of the meeting to allow public attendance as desired.

The Consultant will also prepare monthly status reports, FAA grant reimbursement request forms, and update the project scheduled, as required.

Product: Attendance at four (4) project coordination/presentation meetings as identified. Communication with agencies and individuals involved during the study. Consultant will be responsible for preparing and distributing meeting minutes, periodic project updates, and responses to review comments provided by members of the Airport Advisory Committee or general public.

Work Element 1.3 - Travel to Airport

It is anticipated that trips to the airport will be required to complete the studies. Up to four (4) trips will be made to the airport by the project manager. Two additional trips will be budgeted to be used on an as needed basis for project coordination. The Century West Senior Airport Planner is located in Ellensburg and does not require travel. Trips will be scheduled as follows:

1. To conduct a project kickoff meeting(s), conduct airport inventory and data collection.
2. Presentation of the draft inventory, forecasts and facility requirements chapters. The inventory and forecast chapters will be submitted to the FAA prior to development of the facility requirements. Preliminary development issues identified during the first phase of the project will be presented for discussion.
3. A presentation of preliminary airport development alternatives.
4. A presentation of the preferred development alternative, draft financial plan (including the proposed 20-year ACIP), and draft Airport Layout Plan (ALP) drawing set to the County Commissioners.

ELEMENT 2 - INVENTORY EXISTING CONDITIONS

Work Element 2.1 - Evaluate Existing Documents

Consultant will evaluate all existing documents from previous planning studies and airport records, as provided by airport management, including data pertaining to based aircraft, historic aviation activity, construction programs, FAA Grants and financial information. The data contained in the 2004 Airport Master Plan Report will be updated. The updated information generated during this study will be summarized in a stand-alone supplementary report that will reference the current Master Plan. The ALP drawings will be updated to reflect changes identified (see Project Element 5).

The Consultant will request wind data (post January 2001) from the National Climatic Data Center for Bowers Field to confirm the Wind Rose included in the Airport Master Plan.

Product: Review of existing documents and summary chapter identifying any substantive changes that have occurred since the previous Airport Master Plan project that could impact future development alternatives identified through this study.

Work Element 2.2 - Obtain Aerial Photography

Consultant will provide a current plan view aerial photo of the airport and surrounding area for the purpose of planning evaluations. Consultant will provide the photography in an electronic format and will provide one scaled enlarged print. The aerial photography will not be controlled.

Product: Aerial photo for the airport.

Work Element 2.3 - Inventory Airport Facilities

Consultant will review existing documents and airfield facilities to confirm conditions and/or identify any changes in existing conditions since the 2004 Master Plan.

Product: Updated Airport Facility Inventory working paper documenting changes or new data.

Work Element 2.4 - Socioeconomic Data

Consultant will review available population, employment, and other socioeconomic data, including updated Kittitas County and City of Ellensburg population forecasts. This data may include state and regional economic data, tourism activity and trends.

Product: Updated socioeconomic information to support subsequent forecast analyses and related work elements.

Work Element 2.5 - Surveying, Elevations and Profiles

Existing topographic maps will be used for development of all plans. Objects inside the RPZ and the Runway Object Free Area (OFA) will be identified from existing maps and survey data. Obstruction and/or field surveying will not be included. Profiles along runway centerlines and extended centerlines will be taken from existing construction documents or other available information.

Field surveying is not included in this work scope.

Product: Obtain existing maps and plans for use as described.

ELEMENT 3 - AVIATION FORECASTS

Updating the forecasts of aviation activity is a critical element in the process of demonstrating need to FAA. The current airport master plan forecast horizon is defined from 2000 to 2020. As the master plan forecasts have now reached their midpoint, this study provides an opportunity to evaluate the forecasts and determine if specific adjustments are required.

The current airport master plan forecasts will be reviewed to determine their accuracy against actual activity and trends, and their potential for use in this study as baseline projection. In particular, the master plan forecast's relevancy in relation to anticipated changes in aircraft fleet mix and possibly the design aircraft will be evaluated. Recent historical airport traffic data, where available, will be assembled and analyzed. Extending the forecast horizon to twenty years (2010-2030) will support the updated facility requirements assessment and updated 20-year CIP.

If the master plan forecasts appear to be tracking reasonably well with actual activity, a minor adjustment, such as extrapolation may be adequate. However, if there are indications of changes in activity or specific trends within activity segments not anticipated in the forecasts, a more comprehensive update would be appropriate. Updated forecasts should reflect current and recent historic airport activity and long term factors such as local and county population forecasts, current and projected trends within the general aviation industry, and other local conditions.

Based aircraft and aircraft operations forecasts will be updated, with particular focus on the design aircraft and other large aircraft. Forecasts of other factors such as activity peaking and instrument approaches will also be updated. The forecast update will be submitted for FAA review and approval prior to conducting the evaluation of facility needs.

Product: Updated Airport Activity Forecasts working paper.

Work Element 3.1 –Define Critical Aircraft

Of particular importance for the Airport Needs Assessment is the forecast of design aircraft and other similar aircraft. The master plan forecasts identified Aircraft Approach Category B and Airplane Design Group II (ADG II) as the existing and future airport reference code (ARC) for Bowers Field's primary runway. ARC B-II is consistent with a wide range of turboprops and small/medium business jets. The ARC recommended for the airport's secondary runway was B-I (small single engine and multi-engine aircraft).

Based on a review of FlightAware™ data for Bowers Field from 2008, it appears that B-II turboprop and business jet activity represents the most demanding aircraft use that meets the FAA's "substantial use" requirement for use as design aircraft. It also appears that the airport accommodates a smaller amount of Approach Category C or D aircraft activity, which includes a variety of larger or more complex business jets. A review of Approach Category C and D aircraft activity and the previous forecasts will be conducted to determine the impact of these aircraft in future airport planning.

While it is not anticipated that C&D activity has reached the level needed to meet the FAA's threshold for use as a design aircraft, an updated assessment is required to determine if the activity has the potential or reaching the FAA substantial use threshold within the updated planning horizon or shortly thereafter. Bowers Field's longer term need and ability to upgrade facilities to accommodate C&D aircraft should be considered when planning major changes to either Runway 11/29 or 7/25.

This historical data, combined with the specific needs of business aircraft operators, will provide the basis for forecasting demand and demonstrating both physical need and timing for runway improvements. In a scenario where changes in aircraft fleet mix are expected within the initial five-year planning horizon, annual projections may be used to illustrate an active trend.

The Consultant will determine the existing critical aircraft by ARC and aircraft type based on gathered inventory information. The existing/future critical aircraft will be reflected in updated forecasts and will require FAA approval (See Task 3.2).

Product: Identify existing/future critical aircraft.

Work Element 3.2 - Update Existing Forecasts and Prepare New Forecast

The 2004 master plan forecasts will be updated to reflect current conditions and updated forecast assumptions.

Forecasts of future aviation demand levels will be developed by the Consultant, using extrapolation, trend analysis, market share analysis or similar methodologies (specific method will depend on validity of original projections). Socioeconomic and airport activity data collected during the inventory will be analyzed for input into the forecasting analyses. Forecasts from Phase II of the Washington State Department of Transportation (WSDOT) Aviation Division's Long-Term Air Transportation Study (LATS) and the FAA Terminal Area Forecasts (TAF) will be reviewed for comparison with the updated forecasts and summarized in the forecast narrative.

Based on a review of the updated master plan forecasts and the LATS and TAF projections, the Consultant will recommend a "preferred forecast" for the Airfield Needs Assessment. Forecasts will be submitted to the FAA for approval prior to proceeding with subsequent forecast-dependent work elements. The consultant shall complete an FAA forecast summary spreadsheet for the airport. The Spreadsheets, "Comparison to TAF" and "Forecast Summary" will be included in the forecast chapter or report appendix.

Forecasts of aviation activity projected for the airport will be prepared in 5-year intervals for a 20-year planning period as follows:

1. Number of based aircraft, (in terms of ARC; and single engine, multi-engine piston, multi-engine turbine, business jets, and helicopters).
2. Number of annual general aviation operations, (in terms of military operations, and annual instrument approaches; itinerant and local operations; and VFR and IFR operations).
3. Mix of local vs. itinerant general aviation operations, (in terms of approach category and design group and aircraft weight).

4. Identification of the fleet mix of general aviation aircraft expected to be based at or use the airport during the planning period.
5. Identification of existing and future critical aircraft, in terms of aircraft and ARC.
6. Update forecast base year (2010) based on most current data available.

Product: Preparation of general aviation fleet mix and operations forecasts in 5-year intervals for the 20 year planning period. The critical aircraft will be submitted for FAA approval prior to proceeding with subsequent related work elements. Prepare FAA TAF spreadsheets.

ELEMENT 4 - FACILITY REQUIREMENTS

Work Element 4.1 –Define Airside Facility Requirements

The current airport master plan's evaluation of critical aircraft and the ARC recommended for Runway 11/29 and 7/25 be reviewed to determine what, if any changes in planning assumptions are required based on the updated activity forecasts or are otherwise justified based on the updated analyses. The basic FAA criterion for selection of a design aircraft requires demonstrating a minimum of 500 annual itinerant operations, which would translate into less than one arrival per day of a particular aircraft type.

Reference will be made to proposed ARC and critical aircraft that will be identified for each runway (by approach category, by wingspan, and/or by weight. Print-outs from the current version of the FAA Airport Design computer program for runway length requirements and dimensional design standards will be submitted to the FAA and included as an appendix to the draft and final reports as appropriate. The runway length and declared distances modules from the FAA Airport Design program will be used during the evaluation of runway configuration options.

The evaluation of runway length requirements will be a central consideration used in translating forecast demand into a specific need for facility improvements. Key factors include:

- Local conditions such as airfield elevation, runway gradient, temperature and wind, including seasonal variations;
- Runway-taxiway configuration including the use of declared distances, displaced thresholds, stopways, clearways, etc.; instrument approach capabilities and other factors that affect runway use by specific aircraft; and
- Design aircraft operating weights based on stage lengths, payloads, aircraft fueling practices, etc.

A key factor in the evaluation is determining the ability of the existing runways to accommodate both existing and forecast aircraft activity. The evaluation of both runways will be conducted to determine overall capabilities and potential constraints (current and future). The capabilities currently provided by

Runway 7/25 and 11/29 provide a baseline of existing conditions. Any operational limitations created by the master plan recommended runway reconfiguration will be quantified as part of the overall evaluation.

The runway length requirements of specific aircraft will be determined through consultation with aircraft operators, aircraft manufacturers, and a review of aircraft operating handbooks based on the specific characteristics found at Bowers Field. As indicated above, any variation in aircraft performance caused by seasonal conditions will be reflected in the evaluation.

The existing pavement strength and condition of the runways and main taxiways will be evaluated based on forecast demand of large aircraft (above 12,500 pounds).

In addition, any items affected by a runway reconfiguration such as protected areas (safety area, object free area, obstacle free zone, runway protection zone, etc.); FAR Part 77 imaginary surfaces, runway-taxiway lighting; approach lighting; visual guidance indicators; signage; and existing instrument approach equipment and procedures will be included in the evaluation.

Existing and previously planned improvements to the airport's taxiway system will be reviewed in the context of the runway configuration evaluation. The location of existing and future aircraft hold, run-up areas, or turnarounds will be reviewed.

Product: Updated facility requirements analysis to support assessment of runway-taxiway development alternatives.

Work Element 4.2 - Define Landside Facility Requirements

The existing and previously planned landside facilities will be reviewed to identify potential improvements or changes in configuration that could improve function and capacity. The review of parking requirements will include based and itinerant aircraft, including business aircraft and helicopters, passenger loading/unloading areas adjacent to the FBO, and the aircraft fueling area. The configuration of hangar development within the south flight line will be reviewed.

Product: Updated landside facility requirements analysis to support assessment of landside development alternatives.

Work Element 4.3 - Demand Capacity Assessment

Based on the updated activity forecasts, a reassessment of airfield capacity may also be warranted. The potential impact on capacity associated with changes in runway-taxiway configuration, including the addition of a parallel taxiway on Runway 11/29 and the previously recommended changes in runway configuration will be reviewed.

Product: Summary of Airfield Capacity

Work Element 4.4 – Summarize New Airport Facility Requirements and Airfield Capacity

Based on information from other work elements, the consultant will prepare a preliminary list of new facility requirements. The determination of additional facilities will be based on maintenance of the existing airport, 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 airport sponsor. The facility requirements will focus mainly on the runway and taxiway system, run up areas, apron capacity and functional layout, transient parking, hangar layouts to accommodate current demand, aircraft wash rack, and consistency with the existing airport utilities master plan.

New facilities may include the following:

1. Primary and Secondary Runways
2. Taxiway System
3. Approach area requirements; 40:1 departure surface for any future designated instrument runway, if appropriate.
4. General aviation needs.
5. Hangar and tie-down needs.
6. Future landside taxiway/taxilane improvements.
7. Lighting and navigational aids (includes runway, taxiway, Approach Lighting, PAPIs, REILS, etc.).
8. Airport access roads and utilities – including access to developable landside areas on south side of airfield
9. An evaluation statement on the capacity of the existing runways will be made under the assumptions that the current main runway meets capacity requirements.
10. The feasibility of improving or upgrading existing instrument approach capabilities.

Projected facility requirements will be prioritized based on the forecasts prepared at the time of the study. Improvements will be correlated with a specific volume of activity or change in the level of service that will require construction of the recommended improvement.

The FAA ADO will review the facility requirements with the appropriate FAA divisions (Air Traffic, Flight Procedures, etc.) and provide the consultant with comments prior to the consultant's meeting with the Sponsor for the facility requirements presentation.

Product: Detailed description of new facilities required to meet aviation demand through the year 2030.

ELEMENT 5 – DEVELOPMENT ALTERNATIVES

Work Element 5.1- Identify Preliminary Development Alternatives

Airport development alternatives will be graphically depicted that correspond to the projected facility needs. Up to three (3) separate landside development alternatives and two (2) landside development alternatives will be prepared, excluding the “2004 Master Plan Preferred Alternative”. The alternatives will include sufficient detail and dimensioning to illustrate critical FAA dimensional standards, development setbacks and improvements required to meet FAA standards. Preliminary ‘planning level’ cost assessments will be prepared for each alternative to allow uniform comparison.

Product: Preliminary Development Alternatives Working Paper.

Work Element 5.2 - Select Preferred Development Alternative

Using the facility requirements defined in Work Element 4, the preliminary alternatives prepared in Work Element 5.1 will be evaluated on the basis of their efficiency in meeting the recommended requirement, estimated cost and ease of implementation, engineering difficulty, ability to comply with FAA airport design criteria, and environmental impacts. A Preferred Alternative will be recommended with a description of the basis for the preference of the alternative over the others.

Product: A preferred development alternative that is consistent with FAA standards and is capable of meeting current and future facility needs. The elements of the preferred development alternative will be incorporated into the updated ALP drawings set.

ELEMENT 6 - AIRPORT LAYOUT PLAN DRAWINGS

The ALP drawings from the 2004 Airport Master Plan will be updated as needed to reflect the changes identified through the study. The ALP drawings will be revised to reflect existing and future facilities necessary for operation and development of the airport. All of the major development projects included in the updated CIP will be depicted on the ALP in schematic form. FAA-ANM Airport Layout Plan Checklist (from AC 150/5070.6B, Appendix F) defines those items to be included in this scope of work. A completed ALP checklist will be submitted to the FAA, along with the ALP drawings for review and coordination. Kittitas County will provide the Consultant with electronic (AutoCAD) files for the 2004 ALP drawing set.

All drawings will be prepared using AutoCAD Version 2010, unless another version is requested by the County. Electronic files named consistently with the ALP drawing set (.DWG and PDF) will be included in final project deliverables. A CD will also be provided to WSDOT Aviation.

Work Element 6.1 - Airport Layout Plan Title Sheet (Sheet 1 of 11)

The ALP title sheet will be revised to reflect updated work products.

Product: Updated ALP Title Sheet Drawing

Work Element 6.2 - Airport Layout Plan (Sheet 2 of 11)

The ALP will be revised to reflect any changes in the future or ultimate runway-taxiway configuration and landside facilities that result from the Airfield Needs Assessment. The drawing will depict physical features, airfield facilities (runway, taxiways, NAVAIDs), existing terminal area development, etc. The components of the preferred development alternative and ultimate airfield facilities will be based on short, intermediate, and long-range requirements which incorporate both airside and landside requirements.

Product: Updated ALP Drawing for the airport.

Work Element 6.3 - Airport Airspace Drawing (FAR Part 77) (Sheet 3 of 11)

The FAR Part 77 drawing will be updated to reflect the plan view of the ultimate runway configuration and the associated FAR Part 77 imaginary surfaces for the airport. Any obstructions located within the defined airspace surfaces will be depicted and listed in tabular form; the amount of penetration (estimated if survey data not available) and their proposed disposition will be identified. Recent airspace reviews performed by FAA for development in the vicinity of the airport (submitted 7460 forms) will be reviewed and incorporated into the airspace plan, as needed. Fifty-foot contour intervals will be shown for all FAR Part 77 imaginary surfaces. Field surveys to accurately identify specific elevations or heights of obstructions are not a part of this study. USGS quadrangle maps will be utilized for the base layer on the Part 77 plan view.

Product: Updated FAR Part 77 airspace plan drawing for the airport.

Work Element 6.4 - Runway 11 Inner Approach Surface Drawing (Sheet 4 of 11)

The existing and future approach plan and profile views for Runway 11 will be revised based on the preferred runway configuration. The drawing will also depict the existing and future Runway Protection Zone(s) (RPZ). Any obstructions within the inner approach and items within the RPZ will be identified and a recommended disposition will be provided. Aerial photography may be used to develop these drawings.

Product: An updated Inner Approach Plan and Profile drawing with RPZ for Runway 11.

Work Element 6.5 - Runway 29 Inner Approach Surface Drawing (Sheet 5 of 11)

The existing and future approach plan and profile views for Runway 29 will be revised based on the preferred runway configuration. The drawing will also depict the existing and future RPZs. Any obstructions within the inner approach and items within the RPZ will be identified and a recommended disposition will be provided. Aerial photography may be used to develop these drawings.

Product: An updated Inner Approach Plan and Profile drawing with RPZ for Runway 29.

Work Element 6.6 - Runway 7 Inner Approach Surface Drawing (Sheet 6 of 11)

The existing and future approach plan and profile views for Runway 7 will be revised based on the preferred runway configuration. The drawing will also depict the existing and future RPZs. Any obstructions within the inner approach and items within the RPZ will be identified and a recommended disposition will be provided. Aerial photography may be used to develop these drawings.

Product: An updated Inner Approach Plan and Profile drawing with RPZ for Runway 7.

Work Element 6.7 - Runway 25 Inner Approach Surface Drawing (Sheet 7 of 11)

The existing and future approach plan and profile views for Runway 25 will be revised based on the preferred runway configuration. The drawing will also depict the existing and future RPZs. Any obstructions within the inner approach and items within the RPZ will be identified and a recommended disposition will be provided. Aerial photography may be used to develop these drawings.

Product: An updated Inner Approach Plan and Profile drawing with RPZ for Runway 25.

Work Element 6.8 – Runway 11-29 & 7-25 Centerline Profile Drawing (Sheet 8 of 11)

The existing and future centerline profiles for both runways will be revised based on the preferred runway configuration.

Product: An updated Runway Centerline Profile drawing for Runway 11/29 and 7/25.

Work Element 6.9 – Terminal Area Plan and Industrial Area Plan (Sheet 9 of 11)

The terminal area plan will be revised based on the preferred landside facility configuration.

Product: An updated Terminal Area Plan drawing that depicts existing and future facilities (existing buildings, surface access, perimeter fencing, future hangar locations, other buildings, etc.). This information will be consistent with the ALP drawing, but presented in greater detail.

Work Element 6.10 - Land Use Drawing (Sheet 10 of 11)

The land use plan drawing will be updated to depict existing and recommended zoning and land uses within the ultimate airport property boundary as well as land that is impacted by aircraft traffic patterns. The existing airport overlay zone will be depicted on the drawing. Any required changes to the existing airport overlay zone that would be created by changes in existing or ultimate runway configuration will be noted.

Product: Updated airport land use plan drawing depicting existing and recommended use of all land within the ultimate airport property line and in the vicinity of the airport by zoning classifications, use types, and general use categories (e.g. agricultural, recreational, industrial, commercial, aeronautical, etc.) as well as guidance for establishing appropriate zoning in the vicinity of the airport. This information will be utilized to provide the airport sponsor with recommendations regarding the update of existing zoning ordinances currently in place on land around the airport.

Work Element 6.11 – Exhibit A – Airport Property Map (Sheet 11 of 11)

An updated Exhibit “A” drawing will be prepared depicting property ownership and future land acquisition. All existing property information including parcel ownership, property line location, parcel line location, and all other background data to produce the Exhibit “A” drawing will be provided to the Consultant by the Sponsor. The Exhibit “A” will be prepared in accordance with the requirements contained in the FAA ALP Checklist.

Product: Updated Exhibit “A” Property Map

ELEMENT 7 - FINANCIAL EVALUATION

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.

Work Element 7.1 - Capital Improvement Program

The Consultant will prepare an updated airport CIP, which will include a detailed 20-year CIP with recommended phases of development, estimates of cost for each improvement, possible funding sources, and a separate evaluation of the airport’s predicted available grant funding in tabular form. The short term portion of the CIP (years 1-5) will provide an annual breakdown of projects. The remainder of the 20-year planning period will be divided into intermediate (years 6-10) and long term (years 11-20) project groupings. Approximate airport revenue will be reviewed and sponsor ability to fund projects will be discussed. This information will be used to develop a feasible CIP.

Product: A 6-year and 20-year CIP (in spreadsheet form) and a funding source evaluation spreadsheet, with associated text.

ELEMENT 8 - REPORTS AND DOCUMENTATION

Work Element 8.1 – “Preliminary” Draft Working Papers

Consultant shall prepare draft working papers (chapters) for each major element of the study including inventory, forecasts, facility requirements, development alternatives, airport financial plan and airport layout plan. Each draft chapter will be distributed to the County and FAA for internal review, prior to distribution to the planning advisory committee and general public. Revisions to the draft chapters will be made during consolidation into the draft Airfield Needs Assessment report.

Product: Fourteen Advisory Committee notebooks and copies of the Preliminary Draft Working Papers will be submitted to Kittitas County, One (1) copy will be provided to the FAA for preliminary review by the ADO and One (1) copy will be submitted to the WSDOT Aviation.

Work Element 8.1 – “Preliminary” Draft ALP Set

In order to address any concerns from Kittitas County or the FAA prior to the public meeting for the ALP presentation, a draft ALP set will be prepared for FAA and Sponsor preliminary review and comment. Formal reviews will be conducted (as described in Work Element 8.2) following the preliminary coordination.

Product: Two (2) copies of the “Preliminary” Airport Layout Plan Set will be provided to the FAA for preliminary review by the ADO and One (1) copy will be submitted to Kittitas County.

Work Element 8.2 - Draft Airfield Needs Assessment Report and Draft ALP Drawing Set

To insure proper coordination of the planning effort and assure agreement between the consultant and the Sponsor, a Draft Airfield Needs Assessment Report and Draft ALP drawing set will be submitted for formal review. The draft report will contain all preliminary chapters (revised based on comments provided on original drafts), ALP drawings and the financial evaluation. The draft documents and plans will be submitted to the FAA for review and coordination with the appropriate FAA divisions (Air Traffic, etc.). Forecasts will be submitted to FAA prior to formulation of the Draft Report.

Product: A maximum three (3) copies of the “Draft” Airport Layout Plan Set and fourteen (14) copies of the Draft Airfield Needs Assessment Report will be provided to Kittitas County; WSDOT Aviation will receive one (1) copy of each; FAA deliverables defined in Work Element 8.4.

Work Element 8.3 - Final Report and ALP Drawing Set

The Final Airfield Needs Assessment Report and ALP drawings set will be prepared and distributed based on comments received from the FAA final coordination/review process and any subsequent comments received from the Sponsor. This will be the final publication of the report and plans set.

Product: Three (3) copies of the "Final" Airport Layout Plan Set and fifteen (15) copies "Final" Airfield Needs Assessment Report will be provided to Kittitas County. WSDOT Aviation will receive one (1) copy of the final report; FAA deliverables defined in Work Element 8.4.

Work Element 8.4 – Summary of Products to FAA

TASK	Number of Sets
Product:	
Internal Review Draft Chapters	1 - Electronic
Working Paper/Draft Chapters	2
Draft Final Airfield Needs Assessment Report	2
Draft ALP Print Sets & FAA Checklist	2 - (checklist confirms work)
Final Draft ALP Prints & FAA Checklist	6 - (FAA Airspace coordination)
Final ALP Prints (bond)	3 - (Sponsor/FAA approval set;)
CADD File and PDF (final ALP set)	1
Final Airfield Needs Assessment Report	2
Electronic Copy of Final Report	1 (PDF format)

Work Element 8.5 - Checklist

FAA-ANM Airport Layout Plan Checklist (from AC 150/5070.6B, Appendix F) shall be completed and submitted to FAA with the draft ALP drawings.

Scope Assumptions/Clarifications:

1. The Consultant will coordinate and schedule all meetings between the Sponsor, FAA, and the Advisory Committee established for this planning effort.
2. The scope of work requires the Consultant to develop up to three (3) airside and two (2) landside alternatives, excluding a "no action" alternative, based on the defined facility requirements. The airport sponsor (Kittitas County) shall select a preferred alternative to be depicted on the ALP. The preferred alternative may include selected elements from different preliminary options, depending on the preferences of the sponsor. No additional alternative development or review is included in this scope of work.

3. Kittitas County and the FAA will provide the Consultant with a maximum of one round of comments for each project element. The Consultant shall receive review comments from both groups within three (3) weeks of the submittal or presentation. The consultant shall then address and resolve their comments prior to proceeding with the next scope of work element.

4. The Consultant will provide the estimated total project costs for the ACIP and the CIP. Cost estimate spreadsheets with planning level detail will be provided. "Planning level" detail includes cost estimates based on unit costs and approximate quantities; data is sufficient for planning evaluations, although less detailed than "design-based" engineering cost estimates.

**FEE ESTIMATE
KITITITAS COUNTY
BOWERS FIELD AIRPORT
ALP UPDATE and AIRFIELD NEEDS ASSESSMENT
July 2010**

KITITITAS COUNTY - BOWERS FIELD AIRPORT		Century West Engineering Corp.								
ALP Update & Airfield Needs Assessment		Principal in Charge	Project Manager	Senior Airport Planner	Airport Engineer	Assistant Planner	CADD Technician	Admin. Support	Hours	Total Labor
Charge Rates		\$170.00	\$150.00	\$115.00	\$85.00	\$95.00	\$80.00	\$60.00		
Task	Task Description									
Element 1	Study Initiation									
1.1	Refine Scope of Work, Budget and Schedule	2	4	4	0	0	0	4	14	\$1,640.00
1.2	Project Management	2	48	12	0	0	0	32	94	\$10,840.00
1.3	Travel to Airport	0	48	0	0	0	0	0	48	\$7,200.00
	Task Budget:	4	100	16	0	0	0	36	156	\$19,680.00
Element 2	Inventory Existing Conditions									
2.1	Evaluate Existing Documents	0	2	8	0	8	4	4	26	\$2,540.00
2.2	Obtain Aerial Photography	0	2	1	0	0	2	0	5	\$575.00
2.3	Inventory Airport Facilities	0	0	16	0	8	8	0	32	\$3,240.00
2.4	Socioeconomic Data	0	0	8	0	8	0	0	16	\$1,680.00
2.5	Surveying, Elevations, and Profiles	0	2	8	8	0	0	0	18	\$1,900.00
	Draft Inventory Chapter	1	2	16	0	0	2	2	23	\$2,590.00
	Task Budget:	1	8	57	8	24	16	6	120	\$12,525.00
Element 3	Aviation Forecasts									
3.1	Define Critical Aircraft	0	0	12	0	4	0	2	18	\$1,880.00
3.2	Update Existing Forecasts & Prepare New Forecasts	0	0	36	0	4	0	2	42	\$4,640.00
	Draft Forecast Chapter	1	2	16	0	0	0	2	21	\$2,430.00
	Task Budget:	1	2	64	0	8	0	6	81	\$8,950.00
Element 4	Facility Requirements									
4.1	Define Airside Facility Requirements	0	2	24	0	16	16	0	58	\$5,860.00
4.2	Define Landside Facility Requirements	0	2	16	0	8	16	0	42	\$4,160.00
4.3	Demand Capacity Analysis	0	2	12	0	8	0	0	22	\$2,440.00
4.4	Summarize New Airport Facility Req & Airfield Capacity	1	2	20	0	0	0	0	23	\$2,770.00
	Task Budget:	1	6	72	0	32	32	0	145	\$16,250.00
Element 5	Development Alternatives									
5.1	Identify Development Alternatives	0	4	40	0	4	40	0	88	\$8,780.00
5.2	Select Preferred Development Alternative	1	4	16	0	4	24	0	48	\$4,910.00
	Task Budget:	1	8	56	0	8	64	0	137	\$13,690.00
Element 6	Airport Layout Plan Drawings									
6.1	Airport Layout Plan Title Sheet	0	0	2	0	0	8	2	12	\$990.00
6.2	Airport Layout Plan	0	4	24	0	0	60	0	68	\$8,160.00
6.3	Airport Airspace Drawing (Part 77)	0	0	10	0	0	48	0	64	\$5,680.00
6.4	Runway 11 Inner Approach Surface Drawing	0	0	4	0	0	24	0	28	\$2,380.00
6.5	Runway 20 Inner Approach Surface Drawing	0	0	4	0	0	24	0	28	\$2,380.00
6.6	Runway 7 Inner Approach Surface Drawing	0	0	4	0	0	24	0	28	\$2,380.00
6.7	Runway 25 Inner Approach Surface Drawing	0	0	4	0	0	24	0	28	\$2,380.00
6.8	Runway 11-29 & 7-25 Centerline Profile Drawing	0	0	4	0	0	24	0	28	\$2,380.00
6.9	Terminal Area Plan & Industrial Area Plan	0	0	16	0	0	24	0	40	\$3,760.00
6.10	Land Use Drawing	0	0	8	0	4	16	0	28	\$2,580.00
6.11	Exhibit A - Airport Property Map	0	0	4	0	4	8	0	16	\$1,480.00
	Task Budget:	0	4	80	0	8	284	2	388	\$34,550.00
Element 7	Financial Evaluation									
7.1	Capital Improvement Program	0	4	16	16	4	4	4	48	\$4,740.00
	Draft CIP Chapter	2	4	16	0	0	0	2	24	\$2,900.00
	Task Budget:	2	8	32	16	4	4	6	72	\$7,640.00
Element 8	Reports and Documentation									
8.1	Draft Working Papers (Budget included previously)	0	0	0	0	0	0	0	0	\$0.00
8.2	Draft Airport Needs Assessment Report & ALP Set	2	4	8	0	0	8	40	62	\$4,900.00
8.3	Final Report and ALP Drawing Set	2	2	8	0	0	16	40	68	\$5,240.00
8.4	Summary of Products to FAA	0	1	0	0	0	1	1	3	\$260.00
8.5	Checklist	0	0	2	0	0	0	0	2	\$230.00
	Task Budget:	4	7	18	0	0	25	81	135	\$10,660.00
Totals		14	145	405	24	84	425	137	1234	\$ 122,945
Century West										
In-House Plots; project graphics		\$ 9,135.00								
Travel Mileage - 4 Trips (2160 Miles) RT @ \$0.60		\$ 1,056.00								
Travel Expenses - 6 Person Days @ \$120 per Day		\$ 720.00								
Aerial Photography		\$ 4,600.00								
Other expenses (communication, postage, etc.)		\$ 1,400.00								
Total CWEC Reimbursable Expenses		\$ 10,805.00								
Total Project Estimate \$ 138,750										

**KITTITAS COUNTY - BOWERS FIELD AIRPORT
ALP UPDATE & AIRFIELD NEEDS ASSESSMENT
Document Production Expenses Summary
July 2010**

Summary of Products to FAA

	Quantity
Working Paper/Draft Chapters	2
Final Draft Chapters with Track Changes	1 - Electronic
Draft Final Airfield Needs Assessment Report	2
Draft ALP Prints & FAA Checklist (FAA Airspace coordination)	2
Final Draft ALP Prints & FAA Checklist (FAA Airspace coordination)	6
Final ALP Prints (Sponsor/FAA approval set;)	3
CADD File and PDF (final ALP set)	1
Final Airfield Needs Assessment Report	2
Electronic Copy of Final Report	1 - Electronic

Summary of Products to WSDOT Aviation

	Quantity
Working Paper/Draft Chapters	1
Final Draft Chapters with Track Changes	1 - Electronic
Draft Final Airfield Needs Assessment Report	1
Draft ALP Prints & FAA Checklist (FAA Airspace coordination)	1
Final Draft ALP Prints & FAA Checklist (FAA Airspace coordination)	1
Final ALP Prints (Sponsor/FAA approval set;)	1
Final Airfield Needs Assessment Report	1

Summary of Products to Sponsor

	Quantity
Working Paper/Draft Chapters	14
Final Draft Chapters with Track Changes	1 - Electronic
Draft Final Airfield Needs Assessment Report	14
Draft ALP Print Sets	3
Final ALP Prints (bond)	3
CADD File and PDF (final ALP set)	1
Final Airfield Needs Assessment Report	15
Electronic Copy of Final Report	1 - Electronic

Summary - All Products (Including two additoinal CWEC copies)

	Quantity	Unit Cost	Total
Working Paper/Draft Chapters	20	\$35	\$700
Final Draft Chapters with Track Changes	2	\$35	\$70
Draft Final Airfield Needs Assessment Report	20	\$35	\$700
Draft ALP Prints & FAA Checklist (FAA Airspace coordination)	2	\$400	\$800
Final Draft ALP Prints & FAA Checklist (FAA Airspace coordination)	6	\$400	\$2,400
Final ALP Prints (Sponsor/FAA approval set;)	3	\$400	\$1,200
CADD File and PDF (final ALP set)	1	\$60	\$60
Final Airfield Needs Assessment Report	21	\$45	\$945
Electronic Copy of Final Report	1	\$60	\$60
Total Document Costs			\$6,935

Meeting Boards & Handouts

	Quantity	Unit Cost	Total
Boards - Laminated or Mounted (assume 3 per meeting)	12	\$100	\$1,200
Handouts (assume 20 handouts per public meeting)	80	\$2.75	\$220
PowerPoint (assume PP for Council Presentation)	1	\$600	\$600
PowerPoint Handouts (Assume 20 copies)	20	\$9	\$180
Total Document Costs			\$2,200

Total Production Expenses \$9,135

Sponsor Deliverable Distribution List

	Quantity
PAC	10
Airport Manager/County Staff	4
WSDOT Aviation	1
Century West	3
TOTAL	18

Distribution List for Draft Chapters/Books

	Quantity
Sponsor*	18
FAA	2
TOTAL	20