

MEMO



To **Carson City Airport Authority**
From **Jim Clague**
Date **August 11, 2016**

Subject Carson City Airport Authority Meeting for 8-17-2016

The following is a status summary of the projects in which ATKINS is involved:

1. North Apron Reconstruction AIP No. 3-32-0004-30

The pre-construction meeting for this project was held on July 22nd and was attended by Airport personnel, representatives for the North Apron tenants, Granite Construction, and Atkins. During that meeting, Granite indicated that they could reduce the overall contract period by two weeks if they were allowed to combine Phase 1 and Phase 2. It was decided that this would be a favorable change to the project and will reduce the overall contract period from 119 calendar days to 105 calendar days. During the meeting it was tentatively scheduled to start construction on July 30th, however the grant offer was not received until August 11th and consequently, the Notice to Proceed has now been issued for construction to begin on Monday, August 15th. Assuming construction will take 105 calendar days to complete, the project is scheduled to conclude on November 28th.

ACTION ITEM : Attached is Change Order No. 1 which will officially reduce the construction contract period by 14 calendar days at no change in contract price. This is an action item that requires the Airport Authority approval before the Chairperson is authorized to sign.

The following are the various costs associated with the grant offer. The costs include an approximate cost for airport administration during construction, the not-to-exceed cost for construction management, the cost associated with performing the AGIS survey in 2012/2013, and the construction cost based on Granite's bid.

CATEGORY	COST
Airport Administration (includes single audit)	\$20,245
Construction Management (Atkins)	\$297,500
AGIS Survey	\$74,903
Construction Cost (Granite Construction Co.)	\$2,352,352
TOTAL	\$2,745,000
FAA SHARE (93.75%)	\$2,573,438
SPONSOR'S SHARE (6.25%)	\$171,562

2. 2018-2022 Airport Capital Improvement Program

For review and approval, attached is a preliminary spreadsheet for the 2017 project and the 2018-2022 ACIP with the accompanying exhibit that indicates the location of the projects on the airport. It is important that the Airport Authority concur with the ACIP so that we can officially present it to the FAA. We will meet with the FAA later in the year to discuss these projects and confirm support from the FAA Staff to fund these projects. Also attached is last year's ACIP spreadsheet for comparison. There are no major changes to the ACIP, however some of the project costs have been revised to reflect more recent construction costs.

2017 Airport Master Plan Update

Attached is the draft Scope of Services for the Airport Master Plan Update. The proposed fee has not been finalized, but it is anticipated to increase from last year's estimated cost to include some additional items. Specifically, it has been decided to include the preparation of the Exhibit A Property Map, a recycling plan which is a new requirement for master plans, and extensive aerial mapping of the entire airport property. The previous estimate for the preparation of the Airport Master Plan Update was \$300,000 (\$281,250 FAA and \$18,750 Airport), but is now estimated to cost as much as \$440,000 (\$412,500 FAA and \$27,500 Airport).

REHABILITATE NORTH APRON

CONTRACT CHANGE ORDER

ORDER NO. 1
DATE 8/15/2016
STATE Nevada
COUNTY Carson City

AIP No. **3-32-0004-30**

CONTRACT FOR **REHABILITATE NORTH APRON**

OWNER **CARSON CITY AIRPORT AUTHORITY**

TO **GRANITE CONSTRUCTION**
(Contractor)

You are hereby requested to comply with the following changes from the plans and specifications:

BID ITEM:	Description of Changes	DECREASE in Contract Price	INCREASE in Contract Price
N/A	The overall contract period has been changed from 119 calendar days to 105 calendar days at no change in contract price.		\$ -
TOTALS for this Change Order		\$ -	\$ -
NET CHANGE in contract price for this Change Order			\$ -

BID ITEM:	JUSTIFICATION:
N/A	It has been decided to combine Phase 1 and Phase 2 to expedite the overall construction period. In accordance with the original contract, Phase 1 had 28 calendar days and Phase 2 had 21 calendar days. By combining the two phases, it will be possible to complete that work in 35 calendar days. Liquidated damages for Phase 1 and Phase 2 combined will be \$1,000 per day should the work extend beyond 35 calendar days. Therefore, the overall project is now scheduled for completion on November 28, 2016.

The original contract period awarded was 119 calendar days.
This Change Order will decrease the contract period by 14 calendar days for a total of 105 calendar days.

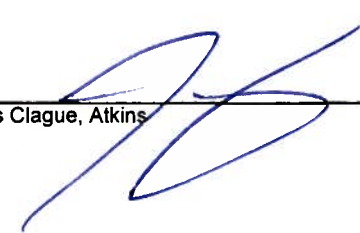
The Original Contract Sum:	Dollars	\$ 2,352,352.00
Net Changes by Previously Authorized Change Order(s)	Dollars	\$ -

The amount of the Contract will be increased by the sum of:	Dollars	\$ -
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The Contract Total Including This and Previous Change Order(s) Will Be:	Dollars	\$ 2,352,352.00
Two Million Three Hundred Fifty Two Thousand Three Hundred Fifty Two and xx/100		

The Funding Total from the FAA Will Be:	Dollars	\$ 2,205,330.00
Two Million Two Hundred Five Thousand Three Hundred Thirty and 00/100		

The Funding Total from the Carson City Airport Authority Will Be:	Dollars	\$ 147,022.00
One Hundred Forty Seven Thousand Twenty Two and xx/100		

Requested	Karl Hutter, Carson City Airport Authority Chairman	(Date)
Recommended	 James Clague, Atkins	8/11/16 (Date)
Accepted	Matt Cates, Granite Construction	(Date)

ARROWHEAD DRIVE

N:14744906.55 E:2295494.49	N:14744888.37 E:2295518.84
N:14744880.14 E:2295469.88	N:14744879.57 E:2295518.49
N:14744855.14 E:2295469.78	N:14744854.86 E:2295493.39
N:14744830.14 E:2295469.87	N:14744829.57 E:2295517.90
N:14744805.17 E:2295469.97	N:14744804.23 E:2295487.74
N:14744780.17 E:2295469.97	N:14744779.89 E:2295490.91
N:14744755.17 E:2295469.97	N:14744739.93 E:2295486.91
N:14744730.17 E:2295469.97	N:14744719.24 E:2295490.91
N:14744705.17 E:2295469.97	N:14744704.57 E:2295517.19

SAW CUT CONTROL JOINT

AC SAW CUT	PHASE 1	PHASE 2	PHASE 3
PCC SAW CUT	3,282 LF	7,707 LF	3,257 LF
			4,040 LF

CUBIX

EL AERO

EL AERO

SHADETREE

CLICK BOND

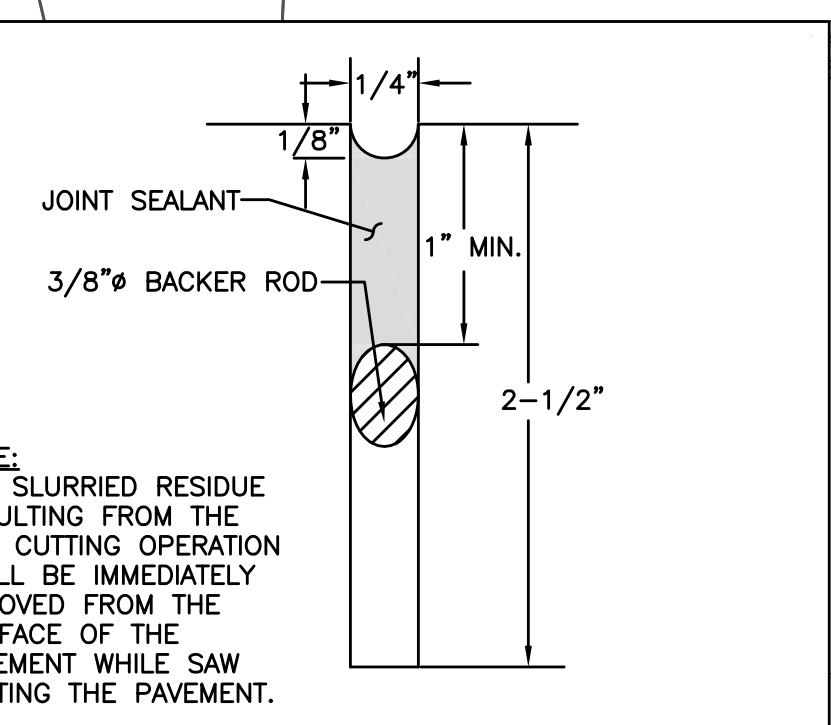
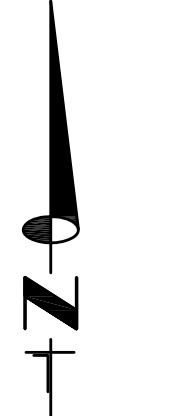
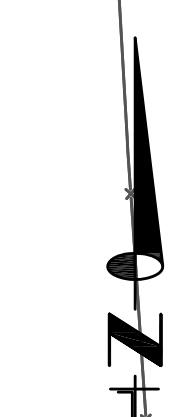
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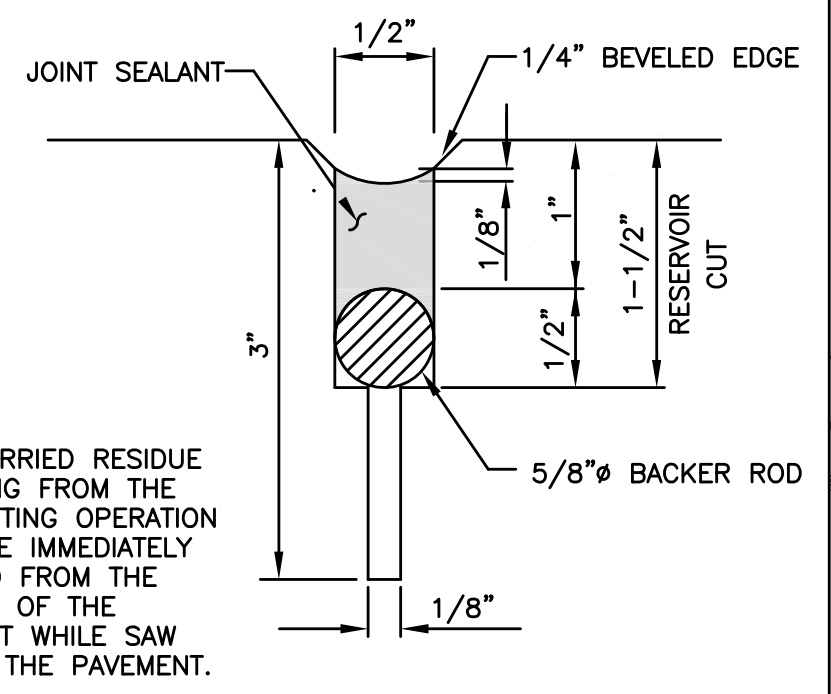
CLICK BOND

TW D

PERIMETER ROAD



TYPICAL ASPHALT CONCRETE SAW CUT CONTROL JOINT N.T.S. GM-101

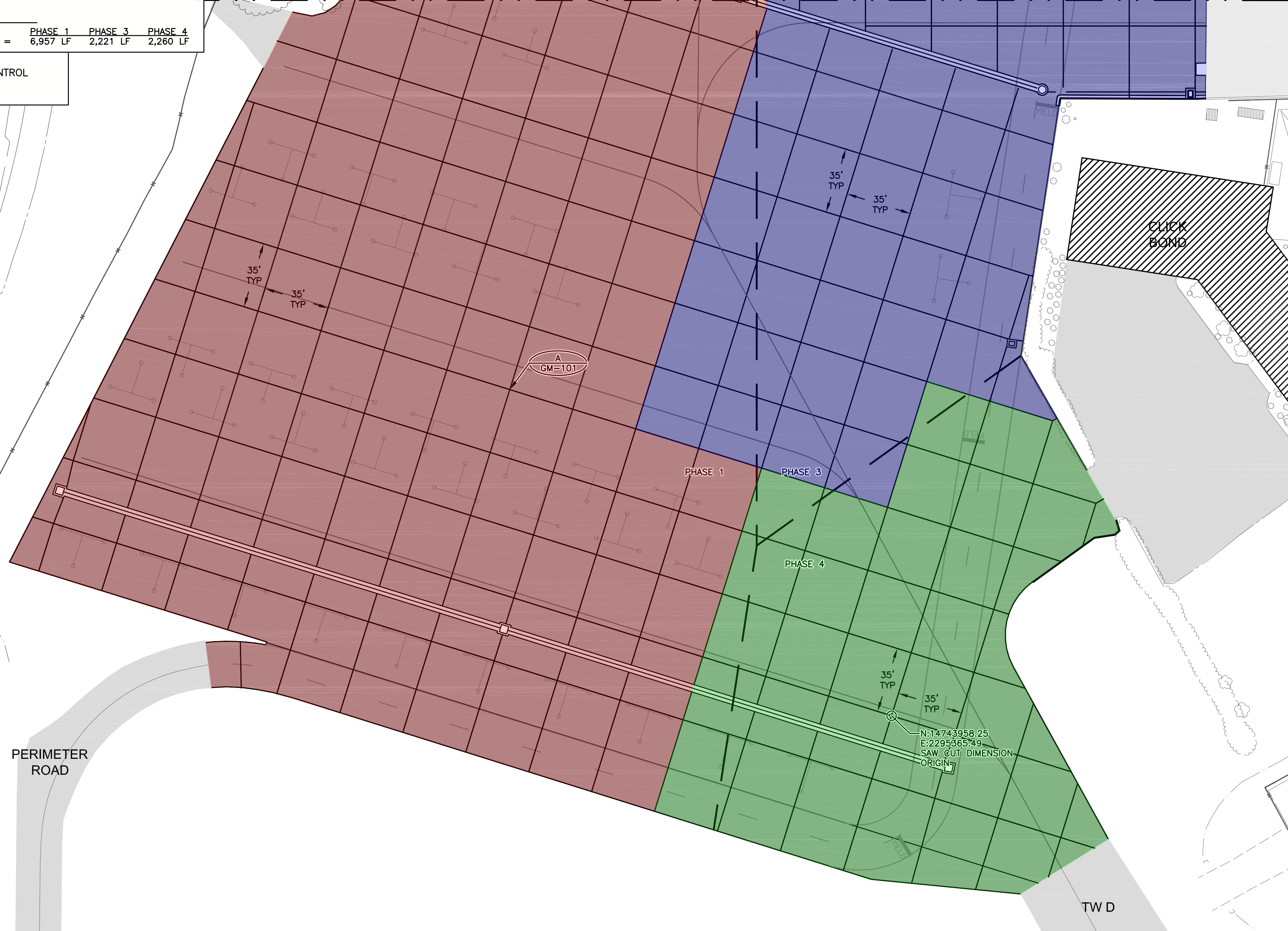


TYPICAL PCC SAW CUT CONTROL JOINT N.T.S. GM-101

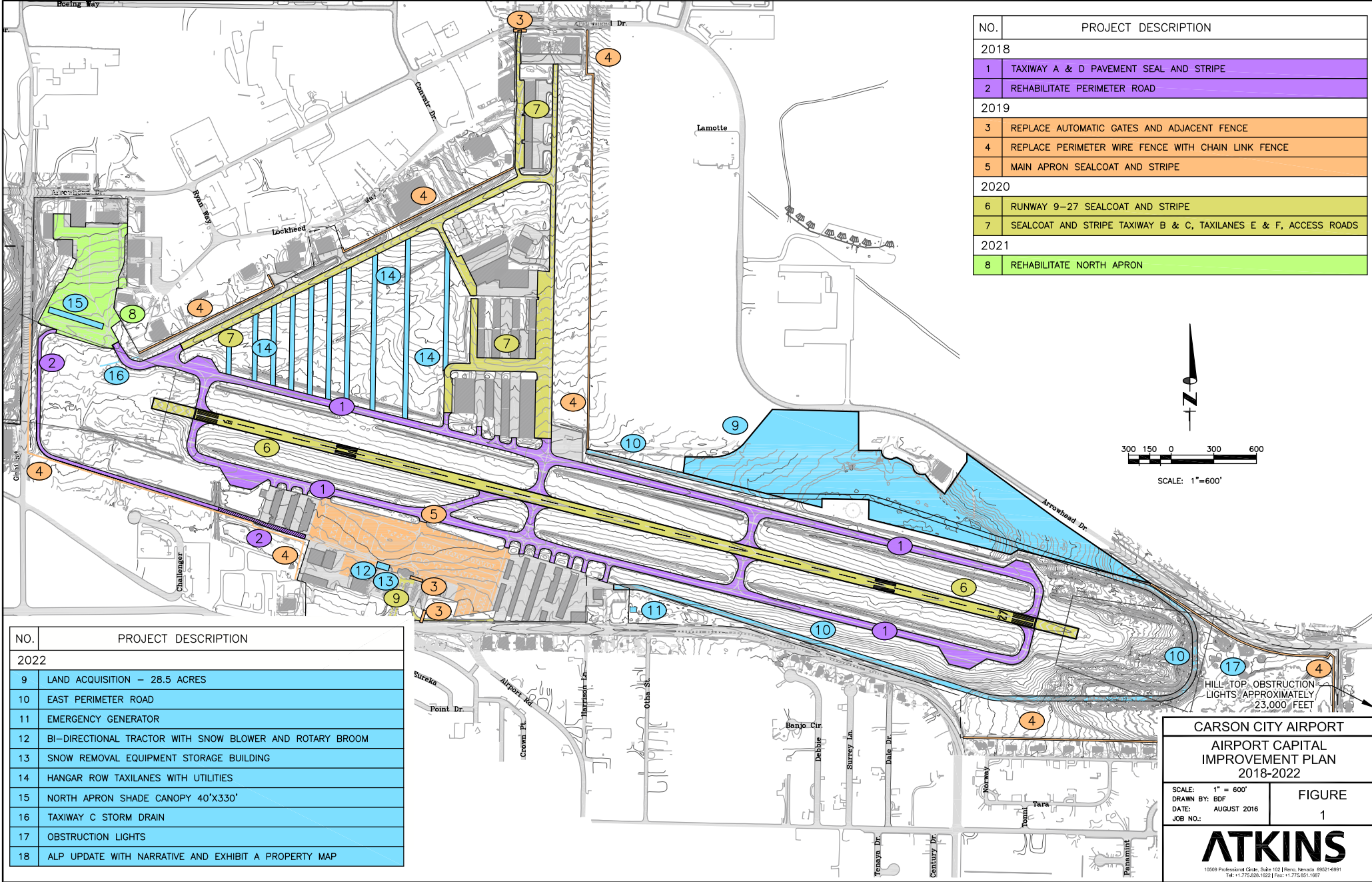
QUANTITIES

SAW CUT CONTROL JOINT =	PHASE 1	PHASE 3	PHASE 4
	6,957 LF	2,221 LF	2,260 LF

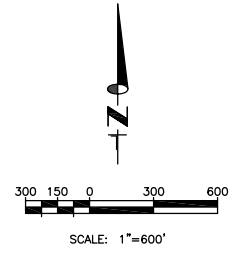
SAW CUT CONTROL JOINT



**2017 PROJECT
AND
2018-2022 ACIP**



NO.	PROJECT DESCRIPTION
2018	
1	TAXIWAY A & D PAVEMENT SEAL AND STRIPE
2	REHABILITATE PERIMETER ROAD
2019	
3	REPLACE AUTOMATIC GATES AND ADJACENT FENCE
4	REPLACE PERIMETER WIRE FENCE WITH CHAIN LINK FENCE
5	MAIN APRON SEALCOAT AND STRIPE
2020	
6	RUNWAY 9-27 SEALCOAT AND STRIPE
7	SEALCOAT AND STRIPE TAXIWAY B & C, TAXILANES E & F, ACCESS ROADS
2021	
8	REHABILITATE NORTH APRON



NO.	PROJECT DESCRIPTION
2022	
9	LAND ACQUISITION - 28.5 ACRES
10	EAST PERIMETER ROAD
11	EMERGENCY GENERATOR
12	BI-DIRECTIONAL TRACTOR WITH SNOW BLOWER AND ROTARY BROOM
13	SNOW REMOVAL EQUIPMENT STORAGE BUILDING
14	HANGAR ROW TAXILANES WITH UTILITIES
15	NORTH APRON SHADE CANOPY 40'X330'
16	TAXIWAY C STORM DRAIN
17	OBSTRUCTION LIGHTS
18	ALP UPDATE WITH NARRATIVE AND EXHIBIT A PROPERTY MAP

HILL-TOP OBSTRUCTION LIGHTS APPROXIMATELY 23,000 FEET

CARSON CITY AIRPORT
AIRPORT CAPITAL IMPROVEMENT PLAN
2018-2022

SCALE: 1" = 600'
 DRAWN BY: BDF
 DATE: AUGUST 2016
 JOB NO.:

FIGURE
 1



AIRPORT CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2022

AIRPORT NAME: CARSON CITY AIRPORT
SPONSOR: CARSON CITY
CITY & STATE: CARSON CITY, NEVADA

DATE: 8/11/2016
NPIAS No. 32-0004
PAGE: 1 OF 1

FUNDING YEAR	PROJECT DESCRIPTION	FEDERAL SHARE	LOCAL SHARE	PROJECT TOTAL
2017	1 Airport Master Plan Update	\$ 412,500	\$ 27,500	\$ 440,000
GRANT				
	TOTAL	\$ 412,500	\$ 27,500	\$ 440,000
2018	1 Rehabilitate Taxiway A & D	\$ 225,000	\$ 15,000	\$ 240,000
	2 Reconstruct Perimeter Road	\$ 337,500	\$ 22,500	\$ 360,000
	TOTAL	\$ 562,500	\$ 37,500	\$ 600,000
2019	3 Replace Automatic Gates	\$ 112,500	\$ 7,500	\$ 120,000
	4 Replace Perimeter Wire Fence with Chain Link Fence	\$ 609,375	\$ 40,625	\$ 650,000
	5 Rehabilitate Main Apron	\$ 206,250	\$ 13,750	\$ 220,000
	TOTAL	\$ 928,125	\$ 61,875	\$ 990,000
2020	6 Rehabilitate Runway 9-27	\$ 196,875	\$ 13,125	\$ 210,000
	7 Rehabilitate Taxiways B & C, Taxilanes E & F, and North Access Road	\$ 206,250	\$ 13,750	\$ 220,000
	TOTAL	\$ 403,125	\$ 26,875	\$ 430,000
2021	8 Rehabilitate North Apron	\$ 173,438	\$ 11,563	\$ 185,000
	TOTAL	\$ 173,438	\$ 11,563	\$ 185,000
2022	9 Land Acquisition - 28.5 Acres	\$ 5,625,000	\$ 375,000	\$ 6,000,000
	10 Construct East Perimeter Road - 9,120 LF	\$ 2,400,000	\$ 160,000	\$ 2,560,000
	11 Emergency Generator	\$ 93,750	\$ 6,250	\$ 100,000
	12 Bi-directional Tractor with snow blower and rotary broom	\$ 206,250	\$ 13,750	\$ 220,000
	13 Snow Removal Equipment Storage Building 60'X60'	\$ 1,415,625	\$ 94,375	\$ 1,510,000
	14 Construct Hangar Row Taxilanes with utilities	\$ 12,525,000	\$ 835,000	\$ 13,360,000
	15 North Apron Shade Canopy 40'x330'	\$ 478,125	\$ 31,875	\$ 510,000
	16 Taxiway C Storm Drain	\$ 131,250	\$ 8,750	\$ 140,000
	17 Obstruction Lights	\$ 37,500	\$ 2,500	\$ 40,000
	18 ALP Update with Narrative and Exhibit A Property Map	\$ 150,000	\$ 10,000	\$ 160,000
	TOTAL	\$ 23,062,500	\$ 1,537,500	\$ 24,600,000
	2018 - 2022 TOTAL	\$25,129,688	\$1,675,313	\$26,805,000

AIRPORT CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021

AIRPORT NAME: CARSON CITY AIRPORT
SPONSOR: CARSON CITY
CITY & STATE: CARSON CITY, NEVADA

DATE: 12/10/2015
NPIAS No. 32-0004
PAGE: 1 OF 1

FUNDING YEAR	PROJECT DESCRIPTION	FEDERAL SHARE	LOCAL SHARE	PROJECT TOTAL
2016	1 North Apron Reconstruction - Construction	\$ 2,892,188	\$ 192,813	\$ 3,085,000
GRANT				
	TOTAL	\$ 2,892,188	\$ 192,813	\$ 3,085,000
2017	1 Airport Master Plan Update	\$ 281,250	\$ 18,750	\$ 300,000
	TOTAL	\$ 281,250	\$ 18,750	\$ 300,000
2018	2 Taxiway A & D Sealcoat and Stripe	\$ 210,938	\$ 14,063	\$ 225,000
	3 Rehabilitate Perimeter Road	\$ 328,125	\$ 21,875	\$ 350,000
	TOTAL	\$ 539,063	\$ 35,938	\$ 575,000
2019	4 Replace Automatic Gates	\$ 225,000	\$ 15,000	\$ 240,000
	5 Replace Perimeter Wire Fence with Chain Link Fence	\$ 440,625	\$ 29,375	\$ 470,000
	6 Main Apron Sealcoat and Stripe	\$ 207,188	\$ 13,813	\$ 221,000
	TOTAL	\$ 872,813	\$ 58,188	\$ 931,000
2020	7 Runway 9-27 Sealcoat and Stripe	\$ 194,063	\$ 12,938	\$ 207,000
	8 Sealcoat and Stripe Taxiways B & C, Taxilanes E & F, and North Access Road	\$ 173,438	\$ 11,563	\$ 185,000
	TOTAL	\$ 367,500	\$ 24,500	\$ 392,000
2021	9 North Apron Sealcoat and Stripe	\$ 164,063	\$ 10,938	\$ 175,000
	10 Land Acquisition - 28.5 Acres	\$ 6,562,500	\$ 437,500	\$ 7,000,000
	11 East Perimeter Road - 9,120 LF	\$ 2,475,000	\$ 165,000	\$ 2,640,000
	12 Emergency Generator	\$ 93,750	\$ 6,250	\$ 100,000
	13 Bi-directional Tractor with snow blower and rotary broom	\$ 187,500	\$ 12,500	\$ 200,000
	14 Snow Removal Equipment Storage Building	\$ 3,750,000	\$ 250,000	\$ 4,000,000
	15 Hangar Row Taxilanes with utilities	\$ 12,525,000	\$ 835,000	\$ 13,360,000
	16 North Apron Shade Canopy 40'x330'	\$ 375,000	\$ 25,000	\$ 400,000
	17 Taxiway C Storm Drain	\$ 131,250	\$ 8,750	\$ 140,000
	18 Obstruction Lights	\$ 33,750	\$ 2,250	\$ 36,000
	TOTAL	\$ 26,297,813	\$ 1,753,188	\$ 28,051,000
	2017 - 2021 TOTAL	\$28,358,438	\$1,890,563	\$30,249,000

EXHIBIT A

**SCOPE OF SERVICES
FOR AN
AIRPORT MASTER PLAN UPDATE
FOR THE
CARSON CITY AIRPORT
CARSON CITY, NEVADA**

Introduction

The Carson City Airport Master Plan Scope of Services is being prepared pursuant to initiation of the study, to establish the goals of the project and framework from which all parties to the project may participate. The objective of the Airport Master Plan is to provide the community and public officials with proper guidance for future development which will satisfy aviation demands and be wholly compatible with the environment. Additionally, this study has the specific objective of re-examining the recommended direction from the previous Master Plan while incorporating subsequent changes when conditions and circumstances may have invalidated previous recommendations. Still-valid concepts may be retained, while new concepts will be developed for those alternatives no longer valid or considered to be unacceptable or unworkable. Coordination between the Carson City (Sponsor), Regional, State, and Federal agencies, and the Consultant will be essential to bringing together all facts and data relevant to the project and to developing a mutual agreement regarding future development of the airport.

The goal of this Master Plan Update is to provide the framework needed to guide future airport development that will cost-effectively satisfy aviation demand, while considering potential environmental and socioeconomic impacts. The master plan will meet the following general objectives.

- Document the issues that the proposed development will address.
- Justify the proposed development through the technical, economic, and environmental investigation of concepts and alternatives.
- Provide an effective graphic presentation of the development of the airport and anticipated land uses in the vicinity of the airport.
- Establish a realistic schedule for the implementation of the development proposed in the plan, particularly the short-term capital improvement program.
- Propose an achievable financial plan to support the implementation schedule.
- Provide sufficient project definition and detail for subsequent environmental evaluations that may be required before the project is approved.

- Present a plan that adequately addresses the issues and satisfies local, state, and Federal regulations.
- Document policies and future aeronautical demand to support municipal or local deliberations on spending, debt, land use controls, and other policies necessary to preserve the integrity of the airport and its surroundings.
- Set the stage and establish the framework for a continuing planning process. Such a process should monitor key conditions and permit changes in plan recommendations as required.

Other specific objectives to be addressed in this Scope include:

- To research and evaluate socioeconomic factors likely to affect the air transportation demand in the region.
- To determine the projected facility needs of airport users through the year 2036, by which to support airport development alternatives.
- To recommend improvements that will enhance the airport’s safety capabilities to the maximum extent possible.
- To recommend improvements that will enhance airport capacity to the maximum extent.
- To produce current and accurate airport base maps and Airport Layout Plans.
- To establish a schedule of development priorities and a program for the improvements proposed in the Master Plan.
- To prioritize the airport capital improvement program and develop a detailed financial plan.
- To develop a robust and productive public involvement throughout the planning process.

This Master Plan will provide recommendations from which the Sponsor may take action to improve the airport and all associated services important to public needs, convenience, and economic growth. The plan will benefit all residents of the area by providing a single comprehensive plan which supports and balances continued growth of aviation activities and the environmental preservation of the surrounding environs.

ELEMENT 1 - INITIATION

Task 1.1 – Prepare Scope of Services and Budget

Description: Detailed descriptions of each item of work required for completion of the Airport Master Plan for Carson City Airport will be prepared. Guidelines provided by Sponsor and those

drawn from the FAA will be integrated into the Scope of Services. Initial and final draft copies of the work program will be prepared and delivered to the Sponsor for comments. The final product of this task will be the scope of services which will be attached and made a part of the project contract documents. Each item of work outlined under this Task will be evaluated to estimate the number of person-days necessary to accomplish the work efforts and the cost per person-day based on the billing classifications of the planning professionals assigned. Expenses for travel, subsistence, materials, computer time, reproduction and printing, and miscellaneous study-related costs will also be estimated. When estimated person-days have been established, they will provide input to the development of a project schedule identifying allowable time frames for major phases of the study. This schedule will also identify milestones for deliverables of each element to be submitted for review. A task-by-task itemization of project person-days and costs with a final project time schedule in graphic form will be attached to all copies of the final Scope of Services.

Responsibilities:

Consultant: Develop the Scope of Services, budget, and schedule from which contract terms will be based.

Sponsor: Review and negotiate the Scope of Services, budget and schedule to ensure proper attention is paid to critical areas.

Product: A detailed Scope of Services and task-by-task itemization of the project person-days, costs and project schedule.

Task 1.2 - Establish Planning Advisory Committee

Description: Potential members will be identified and asked to serve on a Planning Advisory Committee (PAC) for the master plan. The PAC will be composed of a) representatives of FAA and NDOT, as well as other local, regional, state, or federal agencies; b) airport users and tenants; and c) local community representatives. The PAC, which is a non-voting body, will advise the Consultant on the content and recommendations of the Master Plan study through meetings and review of Working Papers. The PAC will not exceed twenty (20) members.

Responsibilities:

Consultant: Assist Sponsor in the identification of potential PAC members. Prepare a “draft” invitation letter for the Sponsor to send to potential committee members.

Sponsor: Establish a final list of names and addresses of chosen PAC members. Send an invitation to each member.

Product: A non-voting Planning Advisory Committee (not to exceed 20 members) which will meet during the course of the Master Plan Study.

Task 1.3 - Prepare Study Workbooks

Description: Provide up to twenty-five (25) standard three-ring notebooks for distribution to the PAC and Sponsor for their use during the Master Plan study. A workbook cover will be designed and the workbook format will be developed with sections for inserting working papers, notes, and other pertinent information.

Responsibilities:

Consultant: Design and prepare workbooks for the Planning Advisory Committee.

Sponsor: Review and comment prior to distribution.

Product: Twenty-five (25) Study Workbooks.

Task 1.4 – General Background Information

Description: General background information summarizing why the Master Plan Study is being conducted will be prepared and outlined in the introduction section of the study.

Responsibilities:

Consultant: Develop an introduction section which provides background information and the basis for conducting the Master Plan Study.

Sponsor: Review and comment.

Product: Background information for inclusion in the study’s introduction section.

Task 1.5 – Document the Goals and Objectives

Description: Prepare a list of goals and objectives for the Master Plan Study that clearly identifies the primary expectations of the master plan process. The list will be included in the introduction section of the study and will be presented to PAC at the first committee meeting. The goals and objectives may be modified or revised based on input provided by the PAC. This overview will be important in determining such agenda as the role of the airport and level of service provided to the public. The listing will also be used to make sure the Study adequately covers the key issues associated with the future development of the airport.

Responsibilities:

Consultant: Organize and coordinate the development of a listing of the goals and objectives.

Sponsor: Assist the consultant in identifying and coordinating the primary goals and objectives of the Study.

Product: Goals and objectives for the master plan.

Task 1.6 – Outline Baseline Assumptions and Specific Master Plan Issues

Description: General assumptions that will be utilized for the study effort will be developed and outlined. These assumptions will be coordinated with the Sponsor, and FAA, and included in the introduction section of the study. Specific master planning issues will also be identified.

Responsibilities:

Consultant: Prepare a list of study assumptions and master planning issues.

Sponsor: Review and comment.

Product: A list of general study assumptions and issues.

ELEMENT 2 - INVENTORY

Description: The purpose of this Study Element is to assemble and organize relevant information, data and mapping to be used throughout the study in support of various analyses. This element will maximize the use of existing information and will prepare new data and documentation only when existing information is unavailable, incomplete or outdated. Narrative prepared as part of this element will highlight the changes since the completion of the existing Master Plan.

Task 2.1 - Evaluate Existing Documents

Description: Evaluate existing documents and previous planning efforts for their adaptability or use in the Master Plan process. These documents will include previous master plans, area development plans, terminal area plans and such other documentation as available. Where possible, revise or adapt existing documents or working formats for the Master Plan.

Responsibilities:

Consultant: Review and evaluation of existing planning documents.

Sponsor: The Sponsor staff shall assist the Consultant in the procurement of existing documents.

Product: Compilation of previous study efforts and existing documents for input to future tasks.

Task 2.2 - Obtain New Color Aerial Photograph

Description: The Consultant will assemble new digital electronic color aerial photography of the

Airport and its environs. The digital color aerial photography will be used for base mapping and exhibits. The existing Airports Geographic Information System (AGIS) survey and mapping will be utilized for topographic/planimetric information

Responsibilities:

Consultant: Obtain new digital color aerial photography.

Sponsor: Coordinate with the Consultant.

Product: New digital color aerial photography for use in preparing base maps and exhibits.

Task 2.3 - Inventory Airport Physical Facilities

Description: Perform an inventory of physical facilities and land use which presently exist within the boundaries of the airport. The inventory will include an examination of plans and documents as well as a thorough on-site inspection of each physical facility to determine its type and size and use. The work effort will make maximum use of existing information available in the airport and Sponsor offices. The following relevant areas are included as a minimum:

Airfield: Record of pavement strengths (including PCN's), conditions, and dates of rehabilitations or overlays (all runways, taxiways, and aprons); lighting and navaid systems.

Terminal Complex: Overview of functional areas in the terminal building with square footage allocations to tenants.

FBO/GA Services Complex: Square footage of structures and use; fuel storage capacity (by fuel grade) and location of tanks.

Ancillary Facilities: Other businesses on airport (define type of business and building size); ARFF and maintenance facilities and description of equipment.

Responsibilities:

Consultant: Conduct an inventory of the airport facilities to accumulate pertinent data.

Sponsor: Provide the Consultant access to the airport property and airport records as necessary.

Product: Tabulated airport facilities inventory for input to later tasks, highlighting changed conditions since the last master plan.

Task 2.4 - Inventory Airport Access and Parking

Description: Making maximum use of existing information, perform an inventory of airport access system with special emphasis on ease of circulation and use of the Airport and vicinity

roadway system. A series of inventory subtasks will be conducted to obtain the following information, as a minimum. As appropriate, this information will be presented in map form.

- a) Roadway system circulation and traffic flow, including number of lanes and turn lanes.
- b) Automobile parking lots (location, condition, and number of spaces).
- c) Bus, taxi and limo use, access and parking
- d) Perimeter and Ancillary roadway systems.

Responsibilities:

Consultant: Conduct an inventory of the airport access and parking to accumulate pertinent data.

Sponsor: Assist the Consultant in obtaining existing available airport data relating to access and parking.

Product: Base data input to subsequent tasks.

Task 2.5 - Inventory Air Traffic Activity, Airspace and Air Traffic Control

Description: Air traffic activity data for the airport will be assembled and organized from various sources. Relevant data on commercial, general aviation (private and corporate), air taxi, and military activity will be collected. Data will be obtained from the Sponsor, the FAA Regional and District Offices, and Fixed Base Operators. The assembled data will include, as available:

- a) Historical operations, including local (touch-and-go) and itinerant operational splits.
- b) Based aircraft by type, as available.
- c) Estimated use (by percentage) of each runway (9 versus 27).

Review and perform inventories of airspace and air traffic procedures at the Carson City Airport. Conduct interviews with airport officials, FAA representatives, airlines, pilots, and others as necessary or appropriate to develop a complete description of the existing airspace environment and current airport traffic procedures. Basic inventory items will include:

- a) Airport traffic patterns.
- b) Approach and departure procedures.
- c) Military airspace near the Airport.
- d) National Parks/Wilderness Areas.

Responsibilities:

Consultant: Assemble data.

Sponsor: Assist Consultant in obtaining available airport records. Assist in arranging interviews as necessary.

Product: Input to subsequent tasks.

Task 2.6 - Inventory Socioeconomic Data

Description: Obtain available statistical data on historical and forecast socioeconomic factors for the Carson City Airport area. These factors will include, at a minimum, employment, income, and population, with emphasis placed upon the identification of specific socioeconomic characteristics of the developed areas in the local environs, as well as trends that have been established for future development and habitation.

Responsibilities:

Consultant: Assemble data based on latest available information. Identify data source in master plan documents.

Sponsor Assist in collection of data.

Product: Input to later analysis.

Task 2.7 - Obtain Tabulated Wind Data

Description: The Consultant will obtain the most current ten years of wind data for the Carson City Airport, from the National Oceanic and Atmospheric Administration, National Climatic Center for use in preparing an updated wind rose for the airport layout plan.

Responsibilities:

Consultant: Obtain tabulated wind data.

Sponsor: Coordinate with the Consultant as necessary.

Product: Tabulated wind data for use in preparing updated wind rose.

Task 2.8 - Inventory Vicinity Land Use and Controls

Description: Review existing local, regional, and state planning and land use regulations, including the existing local comprehensive land use plans, in order to (1) ensure that the resultant Airport Master Plan will be compatible with local, regional, and state long-range planning goals, objectives, and policies; and (2) determine the strengths and weaknesses of local and state regulatory controls with regards to ensuring compatibility of the surrounding area with the airport.

Responsibilities:

Consultant: Assemble data based on latest information available.

Sponsor: Assist in collection of data.

Product: Input to later analysis.

Task 2.9 - Inventory Airport Financial Data

Description: In consultation with airport staff, develop a detailed understanding of the type, format and level of detail that will be most beneficial as a part of the economic and financial analyses conducted in the master plan. Identify the specific financial data and information necessary to provide adequate financial evaluations of any proposed development resulting from the planning process. This information will pertain primarily to the following, as it is available:

- a) Legislation and ordinances.
- b) Airport management policies and guidelines.
- c) Financial statistics of the airport.
- d) Monthly and Annual financial reports (5 years).
- e) Airport leases, user fees, and other sources.
- f) Capital improvement projects planned or in progress.
- g) Debt service and depreciation requirements.
- h) Operational costs and revenues.
- i) Previous FAA or state grants.

Responsibilities:

Consultant: Assemble data.

Sponsor: Provide and review available financial data with Consultant.

Product: Input data to subsequent tasks.

Task 2.10 - Prepare Inventory Working Paper

Description: Prepare a working paper which will provide up-to-date information in tabular, narrative, and graphic format. This will include information on the airport facilities, applicable air traffic activity, access and parking data, present planning efforts, an overview of airspace, air traffic characteristics, and an operations data summary describing aircraft activity for use in subsequent analyses. This task involves the use of existing data for the airport.

Responsibilities:

Consultant: Develop complete narrative and graphics for the working paper. Distribute working papers to the PAC members.

Sponsor: Review and Comment.

Product: Twenty-five (25) copies of a working paper covering the items outlined in the Inventory element. This working paper will become a chapter in the final report.

ELEMENT 3 - FORECASTS

Description: This study element is intended to determine an estimate of future levels of air traffic by quantity and by characteristics that will identify the demand that must be met by the Carson City Airport. The forecast models will be conducted in conformance with forecasting standards outlined in Chapter 7 of FAA Advisory Circular 150/5070-6B. The FAA will approve the 5 and 10 year forecasts as part of the Airport Master Plan Study. The work tasks to be carried out as part of the element include the following:

Task 3.1 - Review Regional and Airport Area Socioeconomic Forecasts

Description: Review and analyze current local and regional socioeconomic forecasts obtained in the inventory element. In consultation with state, regional, and local planning agencies and other local agency participants, select the forecasts which seem most representative of expected future trends.

Responsibilities:

Consultant: Review all socioeconomic material pertaining to the study and the region.

Sponsor: Identify potential sources of information and assist the Consultant in obtaining socioeconomic material.

Product: Forecasts of expected socioeconomic trends.

Task 3.2 - Prepare General Aviation Demand Forecasts

Description: Develop general aviation demand forecasts using both simple and more complex methodologies taking into consideration forecasts from other sources such as the FAA. Historical general aviation activity statistics for the airport will be organized to evaluate airport peaking characteristics and fleet mix ratios. The methodology used in this analysis will involve a variety of techniques that will factor in national general aviation transportation statistics, local socioeconomic factors as well as the independent airport data. Correlation analysis techniques will include relative simple graphical comparisons as well as more complex regression analysis. A final refinement of activity forecasts will be conducted to integrate the effects of changing technology in general aviation and will result in estimates of general aviation demand for five, ten, and twenty year periods which will be presented as follows:

- < Based aircraft totals and mix.
- < Annual general aviation operations (local vs. itinerant).
- < Peak hour operations.
- < Annual instrument approaches (AIA's).

Responsibilities:

Consultant: Prepare General Aviation demand forecasts.

Sponsor: Assist Coffman Associates in obtaining available airport records.

Product: Complete general aviation forecasts for five, ten, and twenty year periods. These forecasts will be coordinated with Airport, FAA, State, and other interests at this point to ensure that the study proceeds on the basis of generally supported assumptions.

Task 3.3 – Other Aviation Activity Forecasts

Description: Develop cargo, military, and aerial firefighting demand forecasts using simple methodologies and taking into consideration forecasts from other sources such as the FAA. Historical cargo, military, and aerial firefighting activity statistics for the airport will be organized to evaluate fleet mix ratios. A final refinement of cargo, military, and aerial firefighting activity forecasts will be prepared and will result in estimates of activity for five, ten, and twenty year periods.

Responsibilities:

Consultant: Prepare other aviation activity forecasts.

Sponsor: Review Data.

Product: Cargo, military, and aerial firefighting forecasts for five, ten, and twenty year periods.

Task 3.4 - Prepare Forecasts Working Paper

Description: A working paper detailing the results of the forecasts (based aircraft and operations) will be compiled. The forecasts will also be compared to FAA’s current 5 and 10 year forecasts as presented in the FAA’s Terminal Area Forecasts (TAF). Since this data will become an important parameter for input into the remaining elements of the study, it will be submitted to representatives of the airport, the FAA, and the State for review and approval before dependent tasks will be finalized.

Responsibilities:

Consultant: Develop complete graphics and narrative for the working paper. Distribute working papers to the PAC members.

Sponsor: Review and Comment. The Sponsor will formally transmit the completed forecast of aviation demand chapter to FAA for their review and approval.

Product: Twenty-five (25) copies of a working paper covering the items outlined in the Forecast element. This working paper will become a chapter in the final report.

ELEMENT 4 - FACILITY REQUIREMENTS

Description: The purpose of this study element is to convert basic capacity needs into types and volumes of actual physical facilities required to meet forecast demands in aviation activity, and to identify short-term corrective strategies for problems that demand immediate attention.

Task 4.1 - Establish Airport Physical Planning Criteria

Description: Identify physical facility planning criteria for use in assessing the adequacy of various airport facilities to meet forecast demands. These criteria shall be based upon the latest FAA requirements and standards as they apply to the level of activity identified, new technology, and role of the airport. These criteria shall include dimensional standards for safety including runway length, runway separation, height restrictions, etc. In addition, these criteria shall include requirements to maintain airspace/air traffic control including approach and runway protection zones, safety areas, and other general physical area requirements such as apron, terminal/operations, access circulation and parking, hangar and services, administrative, ARFF, rent-a-car, cargo and other airport service and support facilities.

Responsibilities:

Consultant: Identify physical planning criteria to meet forecast demands.

Sponsor: Review.

Product: Detailed criteria for airport physical planning.

Task 4.2 - Prepare Airfield Facility Requirements

Description: Using the results of the forecasts (Element 3), as well as relevant information from other tasks, determine and prepare a list of facility requirements needed to meet projected demands for the airport for existing, short term, intermediate term, and long term time frames. These facility requirements will be used in the later comparative evaluations and will be based upon both the airport physical planning criteria and the aviation forecasts.

Facility requirements to meet aviation demand for the airfield will include (but not be limited to) runways, taxiways, lighting, navigational aids, and marking and signage. These facility requirements will be developed in the form of gross areas and basic units and will be compared to those that presently exist to identify the future development items needed to maintain adequate service, function and operations of the airport. In addition, airfield design standards deficiencies will be identified and corrective actions evaluated and recommended. In subsequent tasks, the above facility requirements will be translated into alternative plans for further evaluation in relation to established planning criteria.

Responsibilities:

Consultant: Identify specific airfield facility needs.

Sponsor: Review.

Product: Detailed description of all airfield facilities required to meet aviation demands at the airport through the twenty-year planning period.

Task 4.3 - Prepare Landside Area Facility Requirements

Description: Using information provided by the aviation planning criteria established under preceding tasks, develop a set of facility requirements addressing the landside facilities necessary to support the airfield and its related activity. Requirements for facilities such as fuel/fuel farm areas, ARFF, airport maintenance, general aviation terminal facilities, hangars, FBO areas, general aviation terminal facilities, and automobile parking lots (public and rental cars) will be developed under this task.

Responsibilities:

Consultant: Identify specific landside area facility needs.

Sponsor: Review.

Product: Detailed description of facility requirements necessary for landside development to support forecast aviation demand through the twenty-year planning period.

Task 4.4 - Prepare Working Paper

Description: Organize background information, analysis, and findings of the facility requirements work effort and prepare a detailed working paper in narrative and graphical format. Up to 25 copies of the working paper will be prepared for distribution.

Responsibilities:

Consultant: Develop complete graphics and narrative for the working paper. Distribute working papers to the PAC members.

Sponsor: Review and comment.

Product: Twenty-five (25) copies of a working paper covering the items outlined in the Facility Requirements element. This working paper will become a chapter in the final report.

ELEMENT 5 - AIRPORT ALTERNATIVES

Description: Using the Facility Requirements determined under the previous element, alternative development scenarios, including the “no-build” scenario, for the Carson City Airport will be identified. These scenarios must take into account the development needs of the airport to meet projected aviation demand levels as determined in the forecasting element and meet airfield, passenger terminal building, cargo area, general aviation area, revenue support area and other airport capacity needs established under the demand/capacity element. Upon completion of preliminary development scenarios, a PAC meeting will be held to determine the most feasible development alternatives and the resulting concepts for development of airfield, passenger terminal building, cargo, general aviation, revenue support and other airport areas will be refined. Throughout the analyses of alternatives, the highest and best use of various parcels of land will be considered when two or more functional areas may be well-applied to a specific piece of property.

Task 5.1 - Identify Alternative Development Issues

Description: Based on the results of the demand/capacity relationships and the facility requirements necessary to meet those demands, identify the various issues which will impact the development of alternatives for the various functional areas of the airport. This task will provide insights into the potentials for and policies constraining the development of specific land uses within the existing or future airport boundaries, including those areas which are unconstrained and meet current functional potential, thereby requiring no additional development.

Responsibilities:

Consultant: Identify and compile issues relating to airport development.

Sponsor: Provide input as to any airport policies and issues affecting airport development.

Product: A listing of the various policies and guidelines impacting the development and placement of various airport alternatives.

Task 5.2 - Identify Potential Airfield Alternatives

Description: On the basis of the airport facility requirements established in preceding elements, formulate preliminary airfield development alternatives. These alternatives will be based on concepts for development within existing airport boundaries or with the expansion of airport boundaries which show all necessary development during the planning period and beyond. This task will be conducted simultaneously with following tasks and result in a series of overall development options for the airport.

Responsibilities:

Consultant: Develop up to three (3) airfield development options, one being the “no-build” concept alternatives.

Sponsor: Review.

Product: A series of development options, each of which meets the forecast airfield facility demands.

Task 5.3 - Identify Potential Landside Alternatives

Description: Based on the facility requirements determined under the previous element, formulate preliminary development alternatives. These alternatives will be based on concepts for development within or beyond existing airport boundaries which show all necessary development during the planning period and beyond. This task will be conducted simultaneously with other tasks in this Element and result in a series of overall development options for the airport.

Responsibilities:

Consultant: Develop up to three (3) landside development options, one being the “no-build” concept alternative.

Sponsor: Review.

Product: A series of landside alternatives which fulfill the facility requirements to meet forecast demand levels.

Task 5.4 - Prepare Working Paper

Description: A working paper describing the various airfield and landside development alternatives will be prepared for submission to the PAC for review and comment. The Working Paper will detail the analysis involved in the assessment of the alternatives and outline the advantages and disadvantages of each to enable the logical and systematic evaluation of each alternative concept. Up to 25 copies of the working paper will be prepared for distribution.

Responsibilities:

Consultant: Develop complete graphics and narrative for the working paper. Distribute working papers to the PAC members.

Sponsor: Review and comment.

Product: Twenty-five (25) copies of a working paper covering the items outlined in the Airport Alternatives element. This working paper will become a chapter in the final report.

ELEMENT 6 - RECOMMENDED MASTER PLAN CONCEPT AND CAPITAL FINANCIAL PLAN

Description: The purpose of this study element is to establish a capital implementation program to provide the airport development requirements necessary to meet aviation activity demands during the forecast period.

Task 6.1 - Recommended Master Plan Concept

Description: Based on the information developed in Element 6 as well as comments provided by the PAC members, a single recommended Master Plan concept for development of the airport facilities will be prepared. The recommendation for the most prudent and feasible Master Plan concept will become the basis for the development of airport plans, costs, and scheduling.

Responsibilities:

Consultant: Develop a refined master plan concept for review by the Sponsor, PAC and other interested parties.

Sponsor: Review.

Product: A recommended master plan concept.

Task 6.2 - Prepare Airport Development Schedules

Description: Based upon the previous evaluations and technical meetings, prepare the airport development schedules to reflect economic feasibility and operational requirements of the recommended airport concept. The developments schedules will include the Short Term (1-5 years), Intermediate Term (6-10 years), and Long Term (11-20 years). The schedule for each airport development project will be identified.

Responsibilities:

Consultant: Prepare an airport development schedule.

Sponsor: Review.

Product: Development schedules for the improvements proposed as a part of the selected master plan concept.

Task 6.3 - Prepare Airport Development Cost Estimates

Description: Based upon the previous evaluations and technical meetings, prepare airport development cost estimates to reflect the requirements and schedule of development associated with the recommended airport concept.

Responsibilities:

Consultant: Prepare airport development cost estimates.

Sponsor: Review.

Product: Cost estimates for the improvements proposed as a part of the selected master plan concept.

Task 6.4 - Prepare Capital Improvement/Financial Program

Description: Prepare a recommended airport capital improvement program which includes estimates of the amount of funds available from federal and state grant-in-aid programs to determine the net amount of capital funds required by the Sponsor to accomplish each proposed stage of improvements for the airport. Analyze alternative financing strategies that may be available for implementing the proposed development program. Analyze the sources and uses of all airport funds that will be required to finance designated improvements

Responsibilities:

Consultant: Develop a capital improvement/financial program.

Sponsor: Provide review and input.

Product: Capital Improvement/Financial Program for the selected master plan concepts.

Task 6.5 - Prepare Working Paper

Description: Prepare a working paper which outlines the overall airport capital improvement program for the selected airport master plan concept. Organize narrative and graphical presentations of the information in this working paper to allow for a final review and adjustment of the overall master plan concept. Up to 25 copies of the working paper will be prepared for distribution.

Responsibilities:

Consultant: Develop complete graphics and narrative for the working paper. Distribute working papers to the PAC members.

Sponsor: Review and comment.

Product: Twenty-five (25) copies of a working paper covering the items outlined in the Capital Improvement Program element. This working paper will become a chapter in the final report.

ELEMENT 7 - AIRPORT PLANS

Description: The purpose of this study element is to prepare a new set of Airport Plans for the Carson City Airport. All plans will be prepared in a format which complies with the content contained within FAA’s current guidelines for the preparation of an airport layout plan as defined by the FAA Airports ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans (October 1, 2013)*, and which is readily acceptable to the FAA and can be utilized by the Sponsor staff in carrying out implementation. All plans will be produced utilizing AutoCAD software. The AutoCAD drawings, in a version acceptable to the Sponsor, will be a deliverable item to the Sponsor at the completion of this project. The Airport Plans will be included as an appendix in the “Draft” Master Plan documents. A narrative will also be included in the appendix to better describe the intended functions of the proposed development items. *(Note: This effort does not include the development of an electronic Airport Layout Plan (eALP)).*

Task 7.1 – Airport Layout Plan

Description: Following the Recommended Airport Master Plan Concept developed under the preceding element, and FAA AC 150/5070.6A, "Airport Master Plan", an Airport Layout Plan (ALP) for the airport will be prepared utilizing AutoCAD Software. The ALP will reflect updated physical features, location of airfield facilities (runways, taxiways, nav aids), and existing landside development. Development of recommended landside and airfield facilities, including runways and taxiways; property and runway protection zone boundaries; and revenue support areas will also be shown. Guidelines for the preparation of an airport layout plan as defined by the FAA Airports ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans (October 1, 2013)* will be followed. A Title Sheet and Airport Data Sheet will also be prepared and included with the full Airport Layout Plan set.

Responsibilities:

Consultant: Prepare a new ALP for the airport.

Sponsor: Review and comment.

Product: A new ALP drawing for the airport which meets federal guidelines.

Task 7.2 - General Aviation Area Plan(s)

Description: Prepare General Aviation Area Plan(s) reflecting development resulting from the recommendations of this study. Depending on the future recommended development for the general aviation areas, more than one drawing may be required to adequately reflect the detail of development within the area. The plan(s) will include detailed planning level information such as access taxiways, apron areas, hangar layouts, aircraft tie-down areas, customer and employee parking areas, and vehicular circulation and access for the short, intermediate, and long-term planning periods.

Responsibilities:

Consultant: Prepare general aviation area plans.

Sponsor: Review.

Product: General aviation area plan drawings reflecting the selected development alternative for these facilities at the airport.

Task 7.3 – Part 77, Approach and Inner Approach Surface Plans

Description: Prepare Part 77, Approach and Inner Approach Surface plans in conformance with FAR Part 77 and FAA Airports ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans (October 1, 2013)*. As necessary, height of potential obstructions will be researched and identified on the drawing along with an obstruction chart/table indicating the obstruction description, their top elevation, affected Part 77 surface, the penetration, and disposition or corrective action to eliminate or mitigate the obstruction.

Responsibilities:

Consultant: Prepare a new Part 77, Approach and Inner Approach Surface plans for the airport.

Sponsor: Review.

Product: Part 77, Approach and Inner Approach Surface plans for the airport to meet federal guidelines. Product will include aerial photography of the inner approach surfaces and runway protection zones.

Task 7.4 – Departure Surface Drawings

Description: Prepare new departure surface drawings in accordance with guidelines as defined by the FAA Airports ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans (October 1, 2013)*. Obstruction information will be obtained from existing the obstruction surveys in Task 2.2, approach plans, and the current Airport Obstruction (OC) chart (as available).

Responsibilities:

Consultant: Prepare new departure surface drawings for the airport.

Sponsor: Review and comment.

Product: Departure surface drawings for the airport which meet federal guidelines.

Task 7.5– Airport Property Map – Exhibit A

Description: Update the Exhibit A - Airport Property Map, including the appropriate graphics and information to indicate the type of acquisition (i.e., federal funds, surplus property, local funds only, etc.) of various land areas within the airport's boundaries. The primary intent of the drawing is to identify and/or delineate all designated airport property owned or to be acquired by the airport owner. The drawing will inventory all of the parcels, which currently make up the airport, or are proposed for acquisition by the airport sponsor. In addition, the drawing will also show any property that has been disposed of by the District in the past. Details will be limited to the depiction of existing and future facilities (i.e., runways, taxiways, runway protection zones, and terminal facilities) which would indicate aeronautical need for airport property. This work effort will utilize information obtained from the current "Exhibit A - Property Map" as well as other sources. The Property Map will be updated in conformance with the guidelines outlined in FAA Airports ARP SOP 3.00 *Standard Operating Procedure (SOP) for FAA Review of Exhibit 'A' Airport Property Inventory Maps (October 1, 2013)*. The City will provide historical information regarding the acquisition of existing airport property and easements, as well as boundary surveys, if needed.

Responsibilities:

Consultant: Update the Airport Property Map (Exhibit A) for the airport.

Sponsor: Provide appropriate historical data and review property map.

Product: Updated Airport Property Map (Exhibit A) for the airport.

Task 7.6 – On-Airport Land Use Plan/Off-Airport Land Use Plan

Description: A land use plan for the area within the boundaries of the airport will be developed based on the identified overall development concept. This will include general aviation areas, terminal complex, ground access and vehicular circulation system service areas, industrial/commercial development areas, and distinctions between aeronautical and non-aeronautical uses. An Off-Airport Land Use Plan will also be prepared for property in the immediate vicinity of the Airport. The plan will depict existing and planned land uses.

Responsibilities:

Consultant: Prepare On-Airport Land Use Plan and Off-Airport Land Use Plan

Sponsor: Review

Product: On-Airport Land Use Plan and Off-Airport Land Use Plan

Task 7.7 - Preparation of Draft ALP and Draft ALP Drawing Set

Description: Preparation of up to twelve (12) copies of the “Draft” ALP drawing set for submission to the Sponsor, and subsequent comprehensive agency review by FAA and NDOT.

The ALP Drawing Set will be prepared in conformance with FAA Airports ARP SOP 2.00 *Standard Procedure for FAA Review and Approval of Airport Layout Plans (October 1, 2013)*. Drawings will be a minimum size of 24” x 36”. NDOT and FAA reviews will be concurrent. Drawings will be submitted with or prior to publication of the Draft Master Plan report.

Responsibilities:

Consultant: Provide up to twelve (12) copies of the full Airport Layout Plan drawing sets, depicting the sponsor selected “Recommended Plan”.

Sponsor: Provide up to ten (10) unsigned copies of ALP drawing set to FAA for review. Include signed transmittal letter indicating the changes from the last approved ALP drawing. Provide one (1) full set of drawings to NDOT for review.

Product: Up to twelve (12) copies of the full ALP drawing set as well as a completed FAA ALP Checklist.

Task 7.8 - Preparation of Final ALP and Final ALP Drawing Set

Description: Revise the Draft Airport Layout Plans and Drawings prepared in Task 7.8 to reflect comments received from the FAA and NDOT review. Upon approval from the Sponsor, provide up to ten (10) copies of the revised full ALP drawing sets to the Sponsor for their signature. The Sponsor will forward the signed drawings to the FAA for final approval.

Responsibilities:

Consultant: Provide up to ten (10) revised copies of the full Airport Layout Plan drawing sets.

Sponsor: Review and sign all drawings. Forward all drawings to the FAA for final approval.

Product: Up to ten (10) copies of full ALP drawing set.

ELEMENT 8 – ENVIRONMENTAL EVALUATION

Description: The objective of the Environmental Evaluation is to provide the Sponsor (Sponsor), community, and public officials with proper guidance regarding NEPA environmental documentation for the future development as outlined in the Airport Master Plan.

Task 8.1 - Environmental Inventory (NEPA)

Description: The purpose of this inventory is to (1) obtain the existing conditions in order to provide baseline data for future NEPA analysis of the master plan and to facilitate FAA review of any NEPA issues, and (2) identify potential environmental issues that may require consideration in developing Master Plan alternatives, including mitigation measures proposed as part of the Master Plan. Concurrent with the preparation of the Airport Master Plan Inventory Working

Paper, known existing environmental conditions at Carson City Airport and its immediate vicinity (area of potential affect) will be inventoried. The purpose of this task is to obtain information regarding environmental sensitivities on or near airport property. Sources of information will include past environmental documents, agency maps, existing literature, and the internet. The inventory for the Environmental Overview will address all of the resource categories contained within FAA Orders 1050.1F and 5050.4B. Examples of information to be gathered include wetlands, riparian areas, threatened or endangered species and/or their habitat, sensitive biological species, floodplains, air quality, and parks and natural resource areas. Informal consultation with various federal and state agencies will occur only if needed information is not available through the resources listed above. This task will identify environmental resources prior to the alternatives evaluation process in order to lessen or eliminate environmental requirements for potential project development. Results of this environmental inventory will be included either in the Inventory Chapter or as an appendix to the Master Plan Report.

Responsibilities:

Consultant: Develop narrative and graphics to outline the results of the environmental reconnaissance inventory to be included within the alternative analysis as well as an appendix or chapter of the Master Plan Report.

Sponsor: Provide and/or assist in collection of data.

Product: Input to Master Plan Environmental Overview.

Task 8.2 - Environmental Overview (NEPA)

Description: Using data collected in previous tasks, a preliminary environmental overview will be conducted to identify any potential environmental concerns that must be addressed prior to program implementation. This evaluation will be structured in a table format and will include an analysis of potential impacts on environmental resources as defined within FAA’s Order 5050.4B, *Airport Environmental Handbook*. Projects which may require further NEPA analysis (i.e., Environmental Assessment or Environmental Impact Statement) will be identified at this time. The Environmental Overview is not intended to serve as a formal Environmental Assessment under the National Environmental Policy Act (NEPA).

Responsibilities:

Consultant: Evaluate potential for environmental effect, prepare environmental overview.

Sponsor: Provide review and input.

Product: Environmental overview of the proposed improvements identified in the Airport Master Plan

Task 8.3 – Airport Recycling, Reuse, and Waste Reduction Plan

Description: Prepare a solid waste recycling plan for the airport which meets the requirements of Section 133 of the FAA Modernization and Reform Act, ensuring that the Master Plan addresses issues related to solid waste recycling at the airport. Consistent with Section 133, an airport master plan must address issues relating to solid waste recycling, including:

- a) The feasibility of solid waste recycling at the airport;
- b) Minimizing the generation of solid waste at the airport;
- c) Operation and maintenance requirements;
- d) A review of waste management contracts; and
- e) The potential for cost savings or the generation of revenue.

The Sponsor currently uses City services for the disposal of both solid waste material and recycled material. Recycling at the airport will be addressed by identifying current recycling programs available in the area, landfill requirements, logical problems, or local ordinances that impose additional requirements. An analysis of operational and maintenance requirements will address local responsibilities for waste management, responsibilities for funding and maintenance of equipment, and general roles and responsibilities for parties involved in recycling/waste management at the airport. Current waste management contracts will be reviewed and potential costs for adding solid waste recycling to current contracts will be reviewed. Goals for the Sponsor to reduce solid waste to landfills, leasing requirements for tenants, approach to tracking future goals for solid waste recycling, and potential costs/savings will be identified in the recycling plan. A waste audit, if required, will be conducted by the Sponsor.

Responsibilities:

Consultant: Develop a solid waste recycling plan for the airport which incorporates a review of waste management contracts, recycling feasibility, a plan to minimize solid waste generation, operational and maintenance requirements, and potential for cost savings or revenue generation.

Sponsor: Provide copies of existing waste management contracts. Review and comment.

Product: Airport Recycling, Reuse, and Waste Reduction Plan

ELEMENT 9 - PUBLIC COORDINATION AND COMMUNICATION

Task 9.1 - Planning Advisory Committee (PAC) Meetings

Description: Prepare graphic displays and handout materials as necessary to describe the evaluations and findings of working papers prepared for the Master Plan Study. Meet with the PAC to review working papers and to discuss study findings. Comments received during these meetings will be considered in preparing the final documents. The goals and objectives of the study will be presented and discussed at the initial PAC meeting.

Responsibilities:

Consultant: Distribute meeting notices to PAC. Provide presentations and necessary graphics at the meetings.

Sponsor: Arrange for meeting room. Coordinate jointly with Consultant.

Product: Four (4) PAC Meetings

Task 9.2 - Coordination Meetings

Description: Meet with and give presentations to the Sponsor, Sponsor Officials, FAA or other local groups as directed by the Sponsor. Meetings are expected to involve status reports on the study and presentations of final recommendations. Up to two (2) coordination meetings have been budgeted over the course of the study including meetings with the Sponsor and FAA.

Responsibilities:

Consultant: Attend meetings and/or provide presentations and necessary graphics at the meetings.

Sponsor: Coordinate jointly with Consultant.

Product: Two (2) local coordination meetings.

Task 9.3 - Public Workshops

Description: The working papers prepared for the Master Plan will be presented to the general public in public workshops. The workshops will be held after the PAC meetings (on the same day). Advertising for the workshops will be accomplished using press releases, newspaper advertising, and direct mailings to neighborhood associations. Two (2) workshops have been budgeted over the course of the study.

Responsibilities:

Consultant: Provide background, technical presentations and necessary graphics for the meetings, prepare mock-ups of newspaper ads.

Sponsor: Advertise and arrange for workshop location as well as provide refreshments. Coordinate jointly with Consultant.

Product: Two (2) public information workshops.

Task 9.4 - Airport Master Plan Web Site

Description: Each working paper (draft chapter) will be hosted on the Consultant’s web page until the “Draft” Final Master Plan is prepared. At that time the working papers will be removed and the “Draft” Final Master Plan report hosted on the Consultant’s web page. The Draft Final Master Plan Report will be removed from the Consultant’s web page once final master plan acceptance/approvals are obtained from the Sponsor.

Responsibilities:

Consultant: Host the working papers and “Draft” Final Master Plan Report on its web page.

Sponsor: Review and comment.

Product: Web page access to the Master Plan working papers and “Draft” Final Report.

ELEMENT 10 - FINAL REPORTS AND APPROVALS

Description: The purpose of this element is to provide documents which depict all the findings of the study effort and to present the study and its recommendations to appropriate local organizations.

Task 10.1 - Draft Final Master Plan Report

Description: Upon completion of a review of all draft working papers and the incorporation of appropriate revisions, a draft final master plan report will be printed. Up to thirty (30) copies of the draft final plan will be submitted.

Responsibilities:

Consultant: Prepare and print copies of the draft final master plan report.

Sponsor: Review and comment prior to printing.

Product: Draft Final Master Plan Report (30 copies).

Task 10.2 - Final Master Plan Report

Description: Upon completion of review of the draft final report and the incorporation of appropriate revisions, a final master plan report will be printed. Up to forty (40) copies of the final plan will be submitted. In addition, computer disk(s) containing the Master Plan text and exhibits and airport plans drawing files will be provided to the Sponsor.

Responsibilities:

Consultant: Prepare and print copies of the final master plan report.

Sponsor: Coordinate distribution of final report to appropriate Sponsor, State and federal officials.

Product: Final Master Plan Report (40 copies).

Task 10.3 - Prepare Master Plan Summary Brochure

Description: Prepare a summary brochure that provides a brief overview of the Master Plan report. The brochure will be prepared in color with graphics intended to summarize the study process and its findings and recommendations. It will be designed to be printed on two-sided 11 x 17 brochure stock with either a bi-fold or tri-fold. Provide a mock-up brochure for client review, and incorporate comments before final printing. Up to 500 copies of the summary report will be submitted to the Sponsor for their distribution.

Responsibilities:

Consultant: Prepare 500 copies of the summary brochure.

Sponsor: Review and comment prior to distribution.

Product: Master Plan Summary Brochure (500 copies)

Task 10.4 - Obtain Master Plan Approvals

Description: The Master Plan will be presented to the Sponsor for approval. This task includes attendance at one (1) meeting. Attendance at each meeting will be pre-approved by the Sponsor.

Responsibilities:

Consultant: Attend one (1) meeting as outlined above.

Sponsor: Approve the Airport Layout Plan and Master Plan. Authorize the Consultant to attend each meeting as necessary.

Product: Approved Airport Layout Plan and Master Plan.