E. Refined Development Concept

The purpose of this chapter is to provide a screening of the terminal phasing concepts from the previous chapter and to present a refined development concept for the Grand Junction Regional Airport's terminal area. Again for the purposes of this study, the "terminal area" is defined as the property that surrounds the terminal building including the vehicle and aircraft parking areas and the property inside of and adjacent to the terminal loop roadway system.

The chapter is divided into two separate sections, the first section focusing on the terminal building and the selection of the recommended terminal phasing option, while the second section focuses on the entire terminal area including the proposed airport administration building concept.

Selection of Recommended Terminal Phasing Option

Some of the various strengths and weaknesses of each of the preliminary options presented in the previous chapter are summarized in the following table, entitled *TERMINAL OPTIONS MATRIX*. With input from the study committee and airport staff, Terminal Phasing Concept A was viewed most favorably and thus, after evaluating the options, Concept A was chosen as the recommended direction for future expansion and replacement of the terminal building at the Grand Junction Regional Airport. The primary reason for the selection of Option A and its associated linear concourse was that it provided for phased development of the replacement terminal and that is easily expandable. The proposed linear type concourse also takes advantage of the existing commercial aircraft parking apron available at GJT. It is also anticipated that the existing terminal footprint can be converted into vehicle parking and potentially include a vehicle parking structure. This vehicle parking structure is a revenue generating opportunity for the Airport and the location for the parking structure would not obstruct the terminal building as drivers approach the facility. The parking structure would also not block views from the terminal building to the Colorado National Monument to the southwest or views of the Bookcliffs and Mount Garfield to the northeast.



Table E1
TERMINAL OPTIONS MATRIX

	Concept A	Concept B	Concept C
Meets programmatic requirements and addresses existing deficiencies	+	+	+
Takes full advantage of the existing commercial aircraft parking apron.	+		0
Allows for both passenger boarding bridges and/or walkout gates	+	+	+
Allows for construction of a parking structure in the existing terminal footprint	+	+	
Does not require construction of additional aircraft parking apron	+		+
Provides a centrally located terminal and concourse	+	+	
Allows for deicing pad expansion to the east	+	+	
Protects views of Bookcliffs and Colorado National Monument	+	+	0

Source: BARNARD DUNKELBERG & COMPANY.

Note: + Strength of the Option.

0 Neither a Strength nor a Weakness of the Option.

-- Weakness of the Option.

It is also important to note, that the replacement terminal may not be constructed exactly as indicated in Terminal Phasing Concept A. However, this concept provides a development envelope for the potential replacement terminal that can accommodate even long-term development in a logical and functional manner. Once the Airport selects an architect for the projects, this concept will likely be further modified and refined.

Recommended Terminal Option

The terminal development alternative labeled Concept A is the preferred concept. Concept A locates the replacement landside building on the east side of the existing terminal with the intention of the full phased build-out to be centrally located to the existing support facilities. The phasing allows the final terminal footprint to overlap the existing terminal while maintaining full operations during each construction phase.



As noted in previous chapters, Concept A includes a linear, single loaded concourse running parallel to the taxiway, generally east to west. The concourse can house six holdrooms with contact gates and loading bridges. The additional remain-over-night (RON) positions would also be in a linear configuration east and west of the concourse accessed by 10-foot wide covered walkways. These can be converted to contact gates as needed and additional RONs added. The proposed concourse is sited at an elevation similar to the existing concourse.

A second level connector bridge ties the terminal with the concourse. The connector will house concessions/restroom/support facility node on the concourse level. A portion of the connector bridge will contain a lower level at the terminal elevation. The ground level will house terminal support functions and a public side loading dock accessed from the west. The Ground Service Equipment (GSE) vehicle ramps will be reconstructed to access both the east and west ends of the proposed concourse and will pass under the connector bridge.

As discussed in earlier chapters, the construction phasing plan is designed to minimize disruption to airport operations during construction. A detailed description of the phasing plan follows. It is also anticipated that the construction of the airport administration building will be Phase I of the terminal area redevelopment with Phase II being the first phase of the construction of the replacement terminal building. The proposed airport administration building is discussed further in the following sections of this chapter.

Landside

- Phase I. Construct the airport administration building and associated vehicle access, parking and landscaping improvements.
- **Phase II.** Construct the check-in lobby, airlines operations/offices/bag make-up, vertical core, and connector. The existing terminal would remain in operation during construction. Airline vehicle access to aircraft continues via existing west ramp.
 - Open phase 1 building for departing passenger functions. Continue to use existing bag claims.
- Phase III. Demolish the single story airline operations portion of the existing terminal. Construct first replacement bag claim unit and partial RAC counters. This would require some sharing of RAC counters on temporary basis.
 - Open replacement bag claim unit #1. All terminal functions are now in the replacement building.
- Phase IV. Demolish remainder of existing terminal. Construct second bag claim and



finish out the replacement landside building.

• **Post-Planning.** Longer term expansion of the check-in lobby for Planning Activity Level (PAL IV/V) or beyond would occur as needed on the east side of the terminal. Additional bag claims beyond the forecast period can occur as needed on the west side of the terminal.

Airside

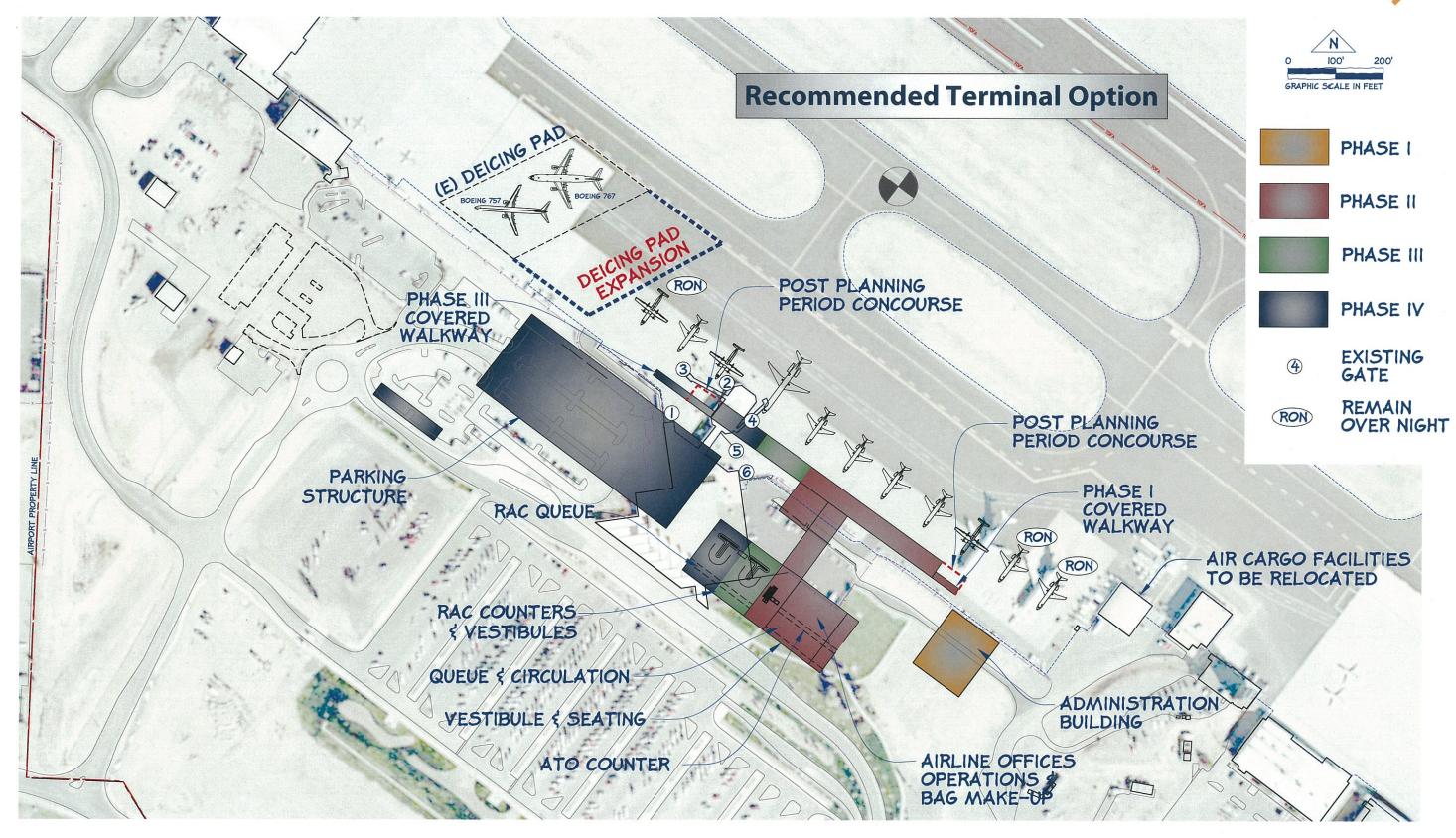
- **Phase I.** Construct vehicle parking for the proposed airport administration building (near the existing air cargo staging area).
- **Phase II.** Construct the eastern four gates of the replacement concourse, and a temporary connection to the existing terminal through Gate #6. Gate #4 would continue to be used during construction.
 - Open new gates. These would be accessed from the replacement terminal for departures but use existing bag claim units via the temporary connection to Gate #6.
- **Phase III.** Use four replacement gates and continue to use existing Gates #1-3 until replacement bag claim unit is completed (Phase 2 landside). Close Gate #4, and extend concourse to the west.

Open fifth gate.

- **Phase IV.** Continue replacement linear concourse to the west. There is an option of either replacing existing holdroom (Gates #2-4), or continuing to use this space and connecting to the replacement concourse. A replacement concourse is shown on the plan.
- Post Planning. Concourse expansions to the east and west could be constructed as needed.

The conceptual recommended plan configuration of Concept A is depicted in the following illustration, entitled *RECOMMENDED TERMINAL OPTION*.





Preferred Concept – Terminal Area and Supporting Facilities

The terminal area and supporting facilities include; airside operations, the proposed airport administration building with associated parking, terminal access roads, passenger curbside drop-off/pick-up, pedestrian connections, terminal area parking, rental car facilities, and landscaped areas.

Airside Operations

A paved service area at ground level behind the main terminal building allows for secured handling of baggage. Two sloped access ramps connect the east and west ends of the aircraft parking apron on the upper level, with the lower level service area in a similar fashion as the existing ramps. The structure connecting the lower level terminal with the upper level concourse will bridge over the service area to allow for east/west flow of airport operation vehicles.

A security fence will delineate the separation of activities on the airside (secured side), from landside (non-secured side). A paved surface located northwest of the terminal, on the landside, will accommodate a loading dock for terminal facilities and other service vehicles. An access road runs west from the service area along the base of the baggage tug ramp connecting to Walker Field Drive and Falcon Way near the rental car facilities.

The de-ice apron will remain in its present location west of the terminal. Future expansion, as identified on the previous illustration entitled *RECOMMENDED TERMINAL OPTION* is identified to the east of the existing de-ice apron.

Proposed Administration Building

The airport administration building is proposed east of the future terminal at an elevation similar to the aircraft parking apron. The "Administrative Facility Space Requirements" document identified the need for approximately 12,000 square feet for administration office and support space. In addition to airport staff, the administration building could house regional TSA offices and other commercial tenants. A building footprint of 120 feet wide by 100 feet deep is indicted on the plan. The building is oriented east west to take advantage of solar aspect, capture views to the Colorado National Monument to the southwest and the Bookcliffs and Mount Garfield to the northeast, and to preserve the landscaped space east of the terminal.

The administration office has direct pedestrian access to the aircraft apron via secured access doors on the north facade. Employee parking, approximately 50 spaces can be located adjacent

¹ Administrative Facility Space Requirements, 2010. Jviation and Reno Smith Architects, L.L.C.



to the proposed structure within the secured operation area, at the elevation of the apron. Depending on circumstances at the time of construction, the employee parking spaces may be best located in a non-secured area. Visitor/guest parking, 10 spaces, is located east of the building outside of the security fence. Additional landside parking, if needed, can be accommodated adjacent to the existing parking lot serving the outdoor plaza and airplane static displays.

A 20-foot wide landscape zone separates the drop-off loop and parking from the proposed security gate access. This area will be planted with trees and shrubs to create an oasis feeling for the landscape surrounding the building.

There is potential for two additional floors of leasable commercial/office space below the administration floor. This section of the building slides 30 feet to the south to break up the building massing. The shift creates an open corridor under the administration floor allowing airport vehicles to drive through this "tunnel" and access the back side of the terminal building. The shift also creates the opportunity for a rooftop garden and terrace walkout for the administration floor.

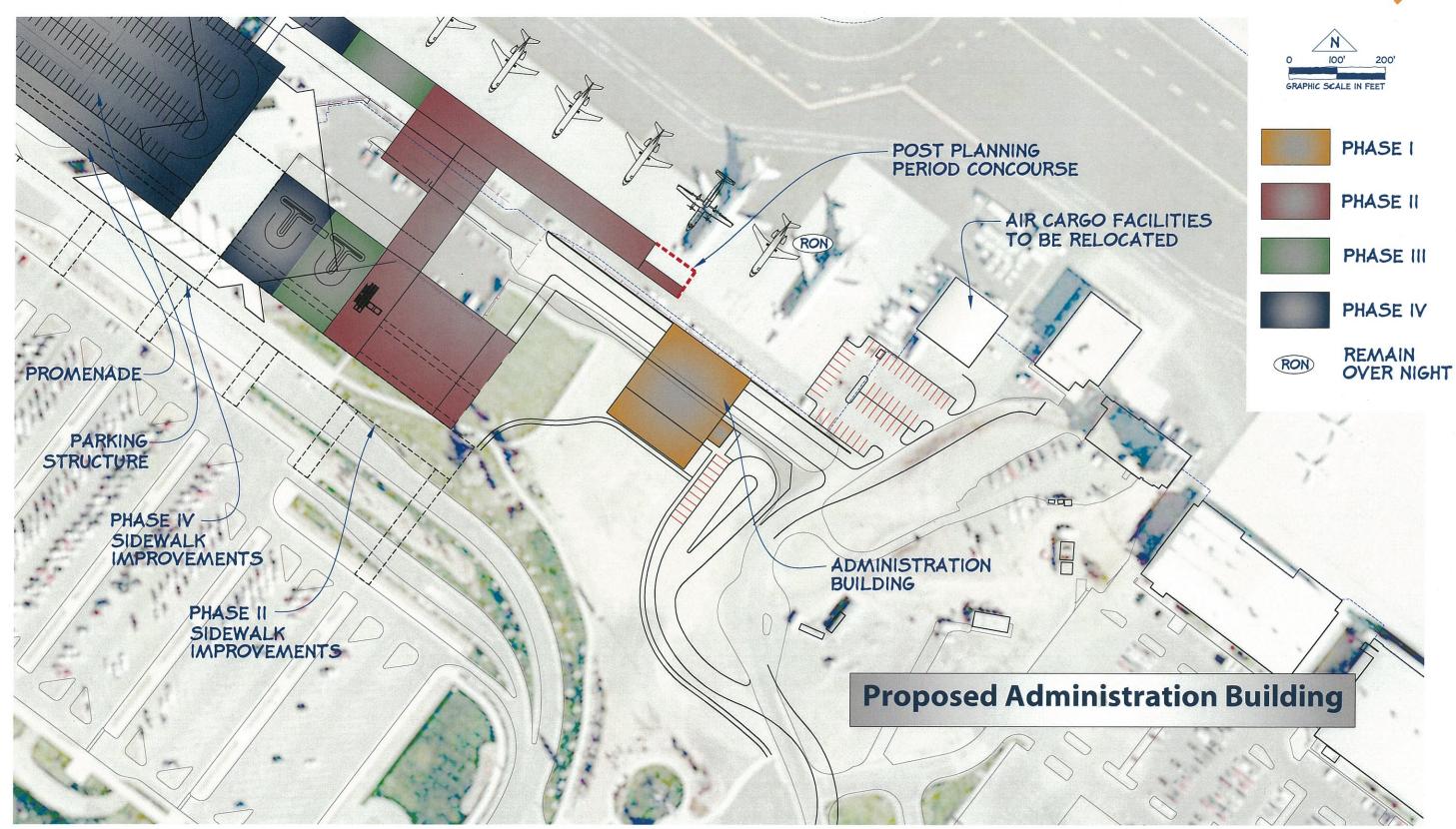
Pedestrian connections will be provided between the administration building, parking, the plaza, and the terminal building. The location and configuration of the administration building and its associated access and vehicular parking is illustrated in the following figure entitled *PROPOSED AIRPORT AMINISTRATION BUILDING*.

Terminal Access Roads, Curbside Drop-Off/Pick-Up, Pedestrian Connections

The existing airport access roads and curbside drop-off/pick-up area are well designed and constructed. These elements should be preserved and enhanced. The preferred development concept proposes to create a curbside plaza with a covered promenade, street trees and outdoor furnishings to create a vibrant pedestrian space. The curbside plaza extends to the east just beyond the proposed terminal, and to the west in line with the furthest parking bay. The plaza will also create a welcoming front to the terminal and shorten the walking distances between the terminal and parking lot.

The existing pedestrian crosswalks between the parking lot and the terminal work well and are aesthetically pleasing. The proposed plan indicates additional crosswalks to serve the expanded curbside plaza and parking expansion to the west. The preferred concept identifies a new bus stop location further west to accommodate the expanded curbside plaza.





Terminal Area Parking

Recent improvements to the parking layout, parking surface, pedestrian circulation, and plantings within the parking lot are very well done and should be protected and maintained. The preferred concept illustrates how the overflow parking area, presently a gravel lot, could be improved to compliment the recent parking improvements. This will accommodate 160 additional permanent parking spaces for a total of 810 spaces. The airport also has approximately 260 existing parking spaces in the rental car ready/return lot. The forecasted demand (including rental car space demand) during the planning period of this study is approximately 1,840 spaces.

Further expansion of the existing surface parking lot is not desirable. The parking area is constrained by the terminal loop road on the north, east, and west sides. Expanding to the south creates undesirable walking distances to the terminal and encroaches on the recently installed landscape buffer adjacent to the lot.

The preferred concept identifies an opportunity to create structured parking near the terminal. When the old terminal is removed, a large open space will be left for re-development. This location is ideal for facilities directly supporting terminal activities.

A three story parking structure is identified in this location. It will have direct access to the terminal building without the need for pedestrians to cross Walker Field Drive. Rental car parking will be located one story below grade with a separate entrance to keep the general public from entering. Public parking will be available on the ground level and second floor. The structure is proposed to accommodate approximately 300 parking spaces per level or a total of 900 spaces.

Rental Car Facilities

As stated above, the rental ready parking lot will be located on the lower level of the parking structure. The recently constructed rental storage lot and car wash facility will remain in its present location. The rental car counters are programmed to be located in the terminal near the baggage claim. The preferred concept also studies the opportunity to construct an interior promenade along the south façade of the parking structure. The promenade allows the rental counters to be placed closer to the rental ready lot. The promenade also introduces pedestrian activity to the western portion of the curbside plaza and creates shorter walking distances between the parking lot and sheltered interior space. The promenade would be utilized to create an active façade that will screen the parking structure to the north.



Landscaped Spaces

Recent enhancements to the landscape on the airport campus are very well conceived and implemented. These areas should be protected, enhanced, and complimented with additional landscape installations. The Design Intent Guidelines² identify an "oasis theme" for the terminal area. Vegetation such as trees, shrubs, grasses, and perennials should be used to further support the oasis theme of the terminal area. The greenspace east of the terminal should be protected and enhanced to create a welcoming visitor approach. The greenspace and street tree plantings along Walker Field Drive should also be protected and expanded.

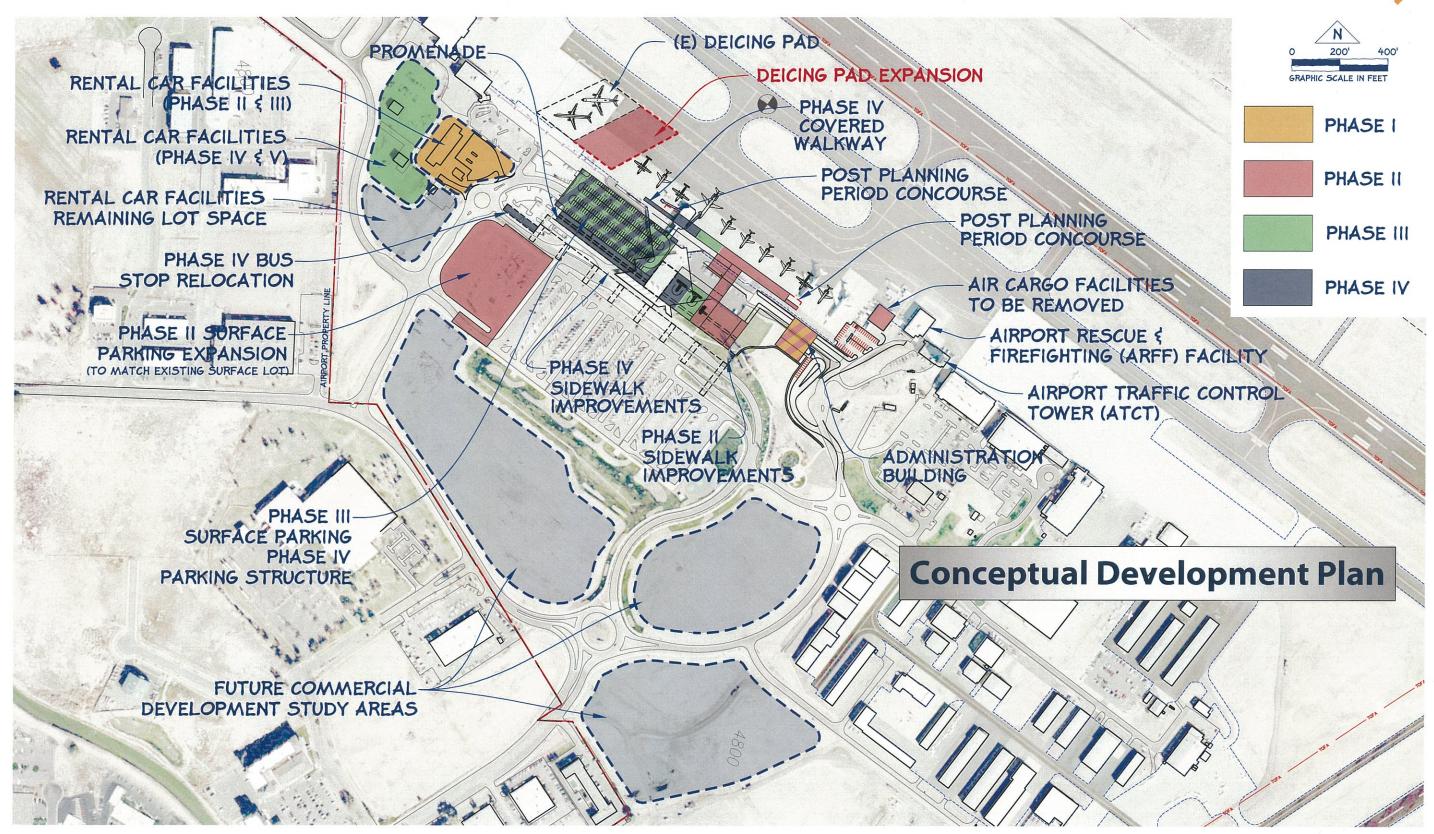
Conceptual Development Plan Summary

The following illustration entitled *CONCEPTUAL DEVELOPMENT PLAN* presents an overall view of the proposed campus and redevelopment of the Grand Junction Regional Airport terminal area. This illustration also shows the proposed construction phasing including the Phase I, the airport administration building, Phases II and III, the construction of the replacement terminal and Phase IV, the expansion of the terminal and concourse as well as the construction of a parking structure.

Following input from the Study Committee and the Airport Board on the CDP, the concept was revised and refined. Refinements to the previously presented Conceptual Development Plan for the terminal area include the split of the airport administration building into two phases, revisions to the future rental car facilities parcel based on an existing detailed expansion plan for this area, and the consideration of potential surface parking in the existing terminal building footprint prior to the potential construction of a parking structure. Finally, consideration has been given to the type of non-aviation development that might be appropriate in the three non-aviation commercial development parcels within the terminal area boundaries.

² Design Intent Guidelines 2010. Jviation, Reno-Smith Architects, L.L.C., RTA Architects, Coover-Clark& Associates, Inc., Ciavonne Roberts & Associates, Inc.





Non-Aviation Commercial Development Areas

The purpose of this section is to explore the opportunity to include commercial development within the study area. Commercial development could create revenue for the Airport, provide a link to adjacent commercial land uses, and encourage patronage of the commercial uses by airport visitors and employees. The preceding Conceptual Development Plan identified three parcels that could be considered for commercial activity. These include the parcel between the passenger terminal parking lot and H Road (Commercial Area A), the parcel east of Walker Field Drive (Commercial Area B), and the parcel east of the entrance round-about at Horizon Drive (Commercial Area C).

Development Strategies

Commercial development in the study area should be used to enhance the visitor's experience of the Airport. Landscaped greenways should be preserved along all existing Airport roads and included in the new commercial road system. A 70-foot wide greenway is preserved on each side of Walker Field Drive. Fifty foot wide greenways are preserved on each side of secondary airport roads, such as Aviators Way, Navigators Way, and Eagle Drive. A view corridor toward the terminal building should also be preserved along the entrance drive with potential buildings located to the edges of the viewplane. The existing landscape buffer south of the terminal parking lot should be maintained to delineate airport functions and discourage airline passengers from parking in the commercial zone.

A "streetscape" atmosphere is proposed in the commercial parcels, with on street parking, sidewalks, street trees, and storefront building facades. This atmosphere will activate the space, encourage interaction between businesses such as office uses and cafés, and invite airport visitors and employees to visit the commercial area. Parking lots are proposed to be tucked behind buildings or adjacent to greenways to further enhance the pedestrian connections between commercial uses.

Access to commercial development should complement the existing road and sidewalk layouts with traffic flow internally focused within each parcel. Road alignments should minimize the introduction of commercial visitors onto the one-way loop road in front of the terminal building. Sidewalk connections should encourage pedestrian flow within each commercial pod as well as to the surrounding neighborhood businesses.

The following figure entitled *CONCEPTUAL COMMERCIAL AREA DEVELOPMENT PLAN* indicates potential landscaped greenways, streetscape plazas, on-street parking, parking lots, and building footprints in each commercial parcel. The land-use patterns, development themes, and design



details should remain consistent through each parcel to create continuity within the study area. Each parcel should have a unique blend of commercial uses that create complimentary relationships with airport facilities and the surrounding neighborhood. Commercial opportunities for each commercial area are discussed below:

Area A- Between the Terminal Parking Lot and H Road

- Good visibility from H Road, the Horizon Drive round-about, Walker Field Drive, and Falcon Way.
- The linear orientation of the parcel creates a great opportunity for a continuous "streetscape" atmosphere.
- The landscaped green buffer south of the terminal parking lot should be incorporated as a design feature with the commercial buildings looking into the park like space.
- Surface parking should be located on the southern edge of the parcel to discourage airline passengers from parking in this commercial area.
- Medium sized structures compatible with business offices and supporting functions should be encouraged in this zone.
- Large scale buildings and industrial uses should be discouraged in this zone because of the potential to negatively impact the terminal area.
- Potential development breakdown: approximately 200,000 square feet commercial space and approximately 500 parking spaces.

Area B- East of Walker Field Drive

- This is the most visible parcel for airport guests arriving on Walker Field Drive. It is also visible from the Horizon Drive round-about, Eagle Drive, and Aviators Way.
- The high visibility and proximity to the terminal building creates an opportunity for a hotel offering features not available at other neighboring hotels. Hotel guests could walk directly to the terminal building through the tree lined park. Additionally, airport visitors could walk to the hotel to use conference facilities or other amenities.
- Medium sized structures compatible with the hotel could house supporting businesses such as restaurants, or small scale retail.
- Large scale buildings and industrial uses should be discouraged in this zone because of the potential to negatively impact the terminal area.



• Potential development breakdown: approximately 180,000 square feet commercial space and approximately 450 parking spaces.

Area C- East of the Horizon Drive Round-About

- This is the least visible parcel for Airport guests arriving on Walker Field Drive. It is visible from the Horizon Drive round-about, Eagle Drive, and Aviators Way.
- Large scale buildings and industrial uses could be considered in this zone because of the limited impacts on the terminal area and the opportunity to transition to neighboring "big box" land use patterns.
- Potential development breakdown: approximately 85,000 square feet commercial space and approximately 450 parking spaces.

Finally, the last figure entitled *CONCEPTUAL COMMERCIAL LAYOUT PLAN* shows the potential interrelationship of the commercial parcels with the rest of the study area including the potential future terminal building and potential future airport administration building.

