6 ALTERNATIVES

6.1 INTRODUCTION

The previous chapter identified a number of facilities that were determined necessary for Southwest Florida International Airport (RSW) to adequately accommodate the aviation demands expected over the course of the twenty-year planning period. The alternatives section analyzes both the viability of meeting the identified needs as well as how best to undertake the improvements from an operational, environmental, and construction perspective. This chapter will identify potential concepts for meeting each major facility enhancement needed and will evaluate the positive and negative aspects of each concept.

A number of primary components of the airport are addressed in the alternative analysis that follows. These airport components include:

- ✈ Airside Alternatives
  - Runway Rehabilitation
  - All-Cargo and General Aviation
  - Aircraft Maintenance
  - Aircraft Rescue and Fire Fighting (ARFF)
  - Air Traffic Control Tower (ATCT)
- ✈ Landside Alternatives
  - Terminal
  - Rental Cars

The alternatives review not only considers these key elements of the airport individually, but also must factor the interrelationships between these elements of the airport and the options for development within each component. One key consideration when addressing the location and configuration of future facilities at RSW is the near term relocation of passenger activities from the north side of Runway 6/24 to the midfield location. The relocation will not only change the operational characteristics of the airport, but areas previously occupied by the terminal operation will now become available for development. To determine whether the existing terminal facilities should be maintained or modified to accommodate another use, a terminal disposition study (**Appendix A**) was commissioned. This study concluded that it was not feasible to reuse the existing terminal structure or facilities. Demolition of the existing passenger terminal will provide considerable development opportunities and flexibility for accommodating expansion of non-passenger functions.

Defining the future development configuration of facilities at the airport must also consider the phasing of development activities within the areas that are available, both in the present and in the future. Proper development phasing to avoid unnecessary or premature construction of costly infrastructure must be considered in the planning process. Location and infrastructure service related considerations also play a large part in the alternatives analysis. Other factors against which the alternatives are reviewed include:

- Utilization of existing property;
- Ability to serve projected demand with existing facilities;
- Impacts to terminal area navigation aids and their associated critical areas;
- Conformance with FAA airport design standards;
- Provisions for expandability and flexibility;
- Capital costs;
- Operational efficiency;
- Phasing and constructability;
- Stormwater and drainage considerations;
- Environmental compatibility;
- Landside accessibility.

In completion of this chapter, each alternative, or component thereof, that is recommended for implementation will be modified to their final form to provide a comprehensive development plan.

6.2 AIRSIDE ALTERNATIVES

6.2.1 Runway Rehabilitation

In reviewing the facility requirements, it is apparent that the existing runway will require major structural rehabilitation before the new parallel runway becomes available. To determine the best means of accomplishing this while maintaining ongoing operations a detailed alternatives analysis was conducted. This analysis was the subject of an independent report and its results are presented separately.

6.2.2 All-Cargo and General Aviation

Both the existing all-cargo and general aviation facilities are located adjacent each other at the west end of the airfield north of the runway. Constraints to the west of the cargo facility include a 16 acre retention pond. Constraints to the east of the general aviation facility include the existing ARFF and air traffic control tower. Since the all-cargo and general aviation facilities are located adjacent each other with constraints on each side, expansion of either of the facilities has the potential to directly affect the other. Therefore, for the purpose of ultimately developing a cost effective overall approach to future development, alternatives addressing both all-cargo and general aviation facilities were identified.

To provide for development through the 20 year period, future all-cargo facilities will need to provide approximately 37,000 square feet of building space. This is roughly a fifty percent increase from the existing area of 24,000 square feet. However, it is anticipated that cargo aircraft parking, currently providing for six narrow body aircraft during peak periods, will not require a major increase by the end of the planning period. It is anticipated that any additional aircraft parking demand can be staged from the soon to be vacated existing terminal ramp.

Future general aviation facilities will need to provide for a considerable increase in hangar storage area. The addition of four large hangars should be adequate to provide for the 75,000

square feet projected hangar shortfall. Assuming the hangar space is provided, minimal additional hangar space will be required.

Alternatives for the required all-cargo and general aviation development include the following:

Alternative 1: GA Expansion West and Cargo Expansion in the old Terminal Area
This alternative includes GA hangar development eastward adjacent the existing GA apron (**See Exhibit 6-1**). This requires demolition of the existing general aviation terminal. Subsequent expansion would occur to the west immediately adjacent the all-cargo apron. This would result in the displacement of the all-cargo facilities or locating new cargo tenants in the old air carrier terminal area. As the need for the additional GA hangars grows, the entire cargo operation would eventually be relocated to the western half of the existing terminal apron. The all-cargo relocation would free up considerable expansion potential for GA while allowing considerable all-cargo facility expansion westward from its new location.

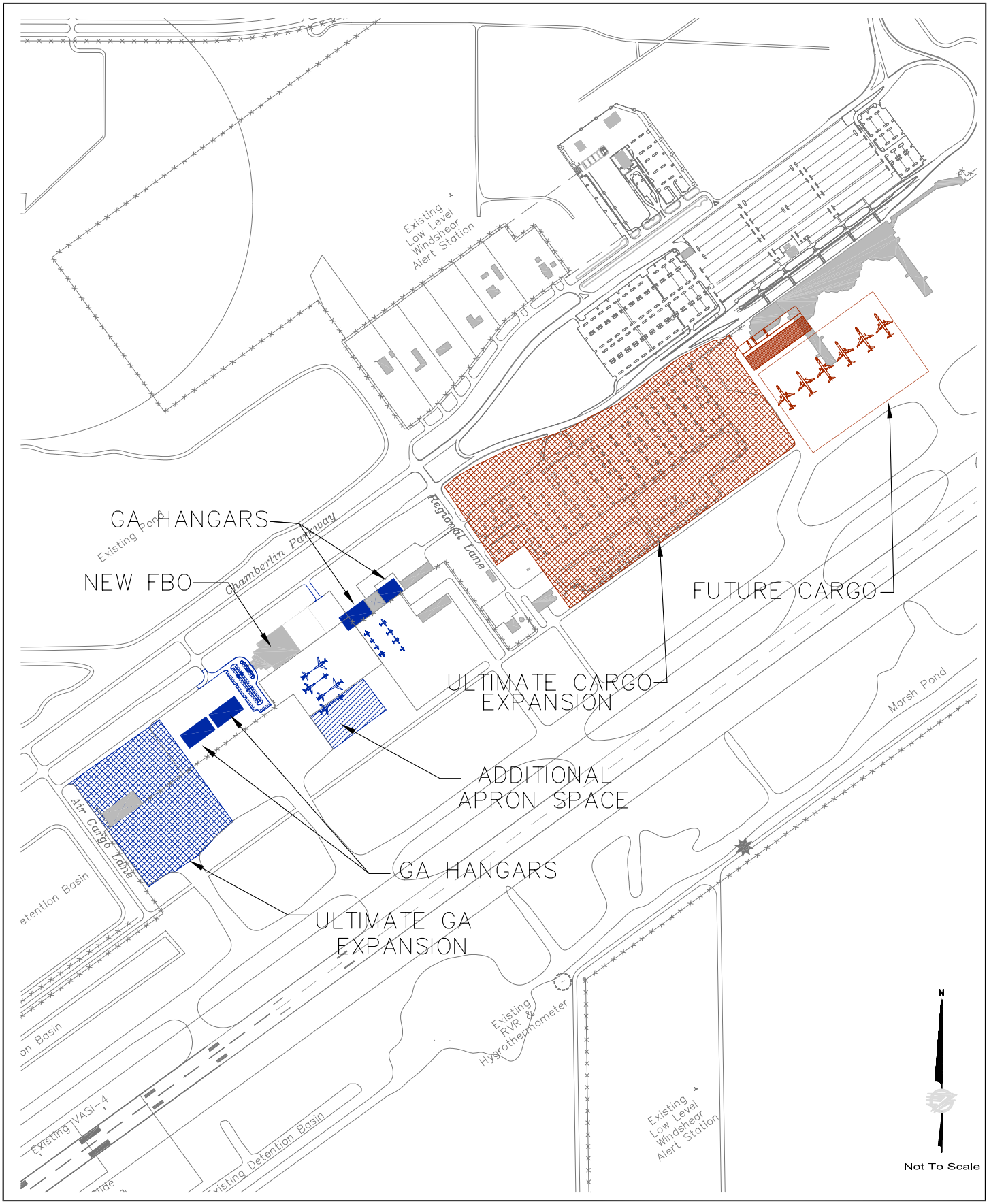
Pros

- GA stays in its existing location in keeping with the pending plans to expand westward with the flexibility to expand both west and slightly to the east.
- Reuses existing terminal apron for cargo relocation.
- Provides ample space for additional expansion beyond 2020 for both GA and cargo.
- All-cargo relocation fits well with a potential multi modal facility located just to the north of the existing terminal building.
- May require a split cargo operation for a period of time but not GA operations.
- Existing all-cargo apron provides good depth for expansion of GA facilities.
- Offers opportunity for second FBO operation from the existing all-cargo building.

Cons

- Demolition of existing FBO building is required to construct new aircraft hangars.
- Access and parking in the terminal area would need to be modified to allow for large trucks, truck parking, and a docking area for loading and unloading of cargo.
- Cargo expansion would be limited until the passenger terminal operation is relocated.
- Requires relocation of two dry detention ponds located to the west of the terminal area to provide for ultimate cargo expansion.

Exhibit 6-1



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Alternative 2: GA Expansion West and Cargo Relocation to Parking Area

Alternative 2 consists of hangar development to the east in the immediate proximity of the existing GA apron and former FBO terminal (**See Exhibit 6-2**). As with Alternative 1 this would require demolition of the existing general aviation terminal. Additional GA hangars would be added along the north side of the existing all-cargo apron. This would result in the displacement of the all-cargo facilities. Alternative 2 differs from Alternative 1 in that it offers the potential for all-cargo development prior to the relocation of the existing terminal operation. The all-cargo relocation would free up considerable expansion potential for GA while allowing considerable all-cargo facility expansion both eastward and westward from its new location. This option would be especially attractive if a new operator expressed a near term desire to develop a new facility at the airport.

Pros

- Ultimately has the potential to reuse a portion of the existing terminal area apron.
- Provides considerable all-cargo and GA growth potential.
- Cargo could be relocated in the short term without impacting terminal operations at the existing terminal building.
- The ultimate all-cargo relocation fits well with a potential multi modal facility located just to the north of the existing terminal building.
- Does not require split cargo or GA operations.
- Existing all-cargo apron provides good depth for expansion of GA facilities.
- Offers opportunity for second FBO operation from the existing all-cargo building.

Cons

- Access and parking will need to be modified to accommodate larger trucks and a docking area for trucks will need to be designed.
- Does not reuse terminal apron in the first phase of development.
- Demolition of existing FBO building is necessary to construct new aircraft hangars with this alternative.
- Requires adding a new taxiway for improving traffic flow into the G.A. area.
- Requires relocation of two dry detention ponds located to the east of the ARFF station.

Alternative 3: Cargo Expansion West and Split GA Expansion

This alternative would expand the all–cargo building to the east with ultimate cargo ramp and additional facility expansion to the west (**See Exhibit 6-3**). This would displace the 16 acre pond located immediately west of the existing cargo facility. Prior to the westward expansion, cargo aircraft exceeding the peak capacity of six on the existing ramp could be staged from the existing terminal area.

Alternative 3 consists of a split GA operation. Initially, hangar expansion would take place in the existing GA area. Upon relocation of the terminal operation to the midfield, future GA hangars would be constructed in the general area of the existing west concourse. This also offers the opportunity to add a second FBO operation through conversion of the existing FIS facilities.

Exhibit 6-2

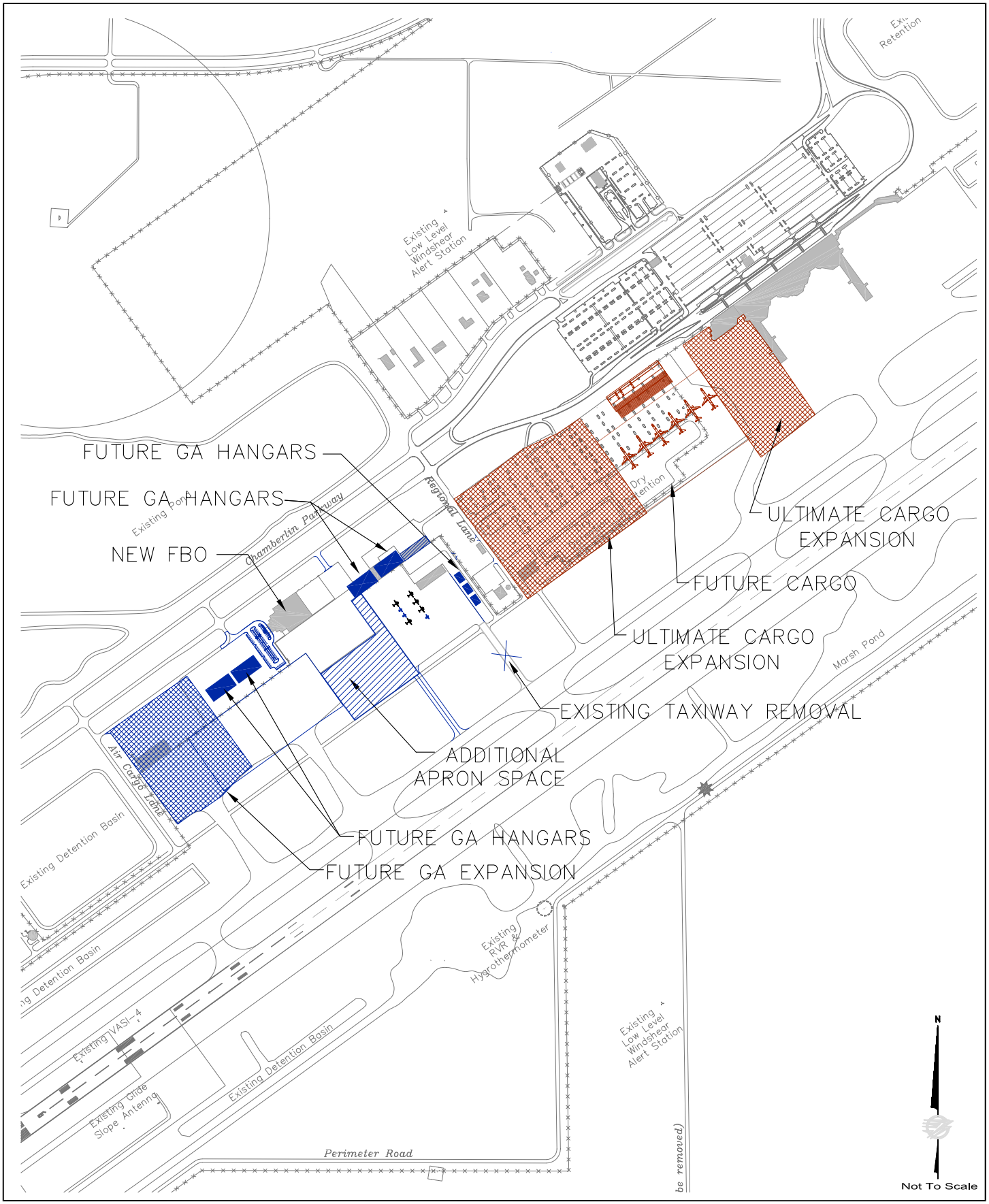

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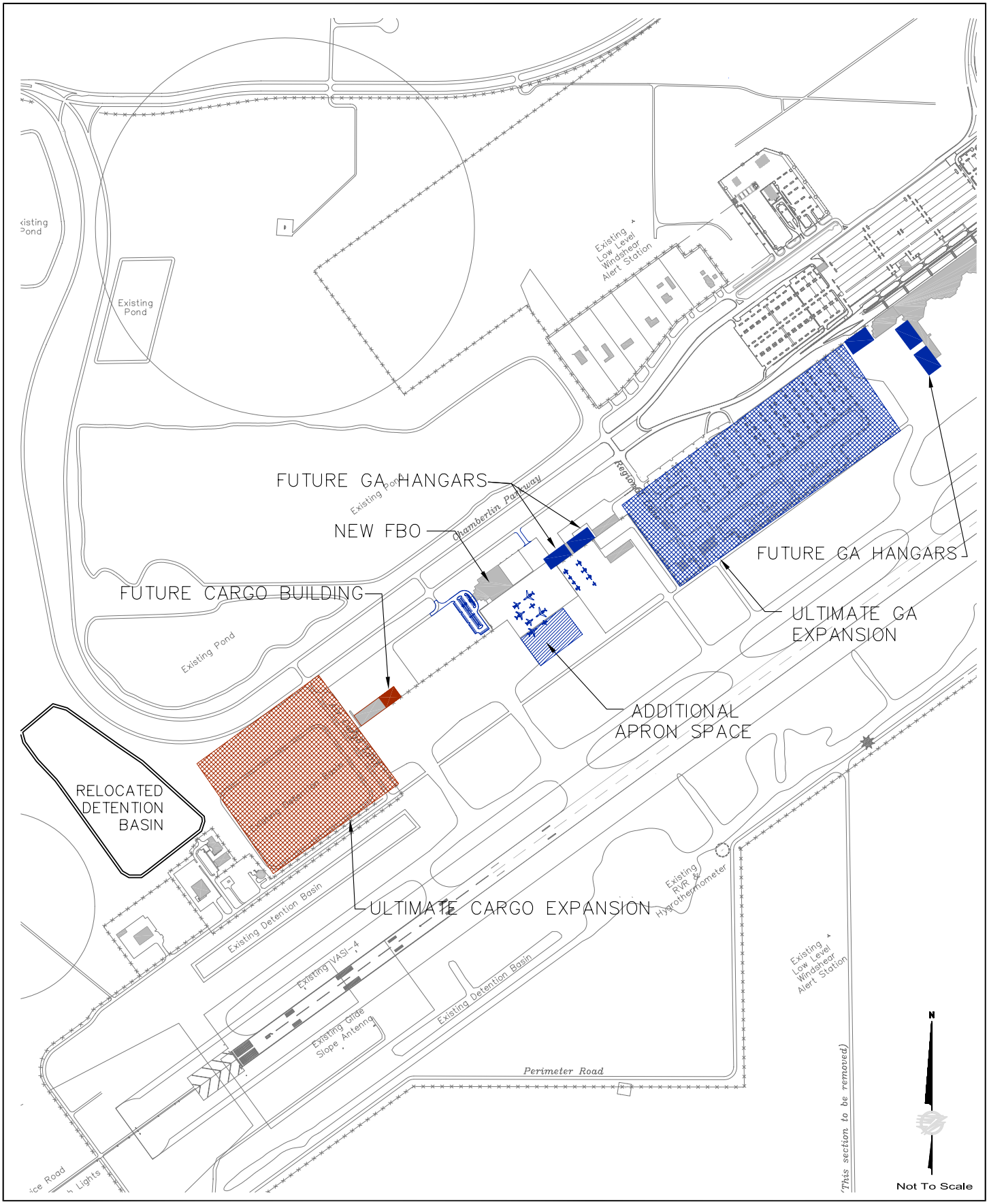
Exhibit 6-3



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Pros

- GA expansion would not impact the existing cargo area.
- Construction of additional GA hangars could begin as soon as the midfield terminal operations are relocated.
- Expands existing infrastructure for both GA and cargo.
- Provides opportunity for an additional FBO operator from the existing international arrivals building.

Cons

- Cargo expansion is limited if tremendous growth is experienced in cargo traffic.
- Existing FBO building requires demolition for future aircraft hangars.
- Requires relocation of detention pond to allow for cargo expansion.
- Potential multi modal facility locations are not as desirable in relation to the cargo facility as they are in Alternative 1 and 2.
- If cargo outgrows this location, further facility development would result in splitting the cargo operation.

Recommended GA and All- Cargo Alternative

With the desire to provide maximum flexibility in developing additional air cargo service for the region, Alternatives 1 and 2 appear to provide the greatest potential all-cargo development area. While neither of the alternatives maintain ultimate long term use of the existing cargo facilities, both provide consolidated cargo and GA areas with considerable expansion potential. Although implementing either of these alternatives will result in additional capital costs, both will allow the airport to aggressively market new operators. The consolidation of land uses reflected in each will ensure that the associated development can be implemented efficiently thereby minimizing the potential for 'dead' areas or areas with limited long term development potential.

The selection of the exact alternative will greatly depend on the timing of the required development. For the most part, Alternative 1 should be adequate to meet demand upon relocation of the passenger terminal operation and takes advantage of the existing terminal apron. However, in the case of considerable short-term demand, Alternative 2 provides the ability to develop facilities prior to the completion of the midfield complex. This may prove advantageous in attracting a given operator and may warrant consideration if the opportunity was attractive enough.

Alternative 3, while maintaining the existing cargo operation, remains limited in its ultimate expansion of cargo unless the cargo operation is split. With this alternative GA would end up accounting for a large portion of the north airfield unless it were also split. The more the similar land uses are separated the less likely that the use of the overall land area will be maximized. Based on this, Alternative 3 was generally considered the least desirable alternative.

Finally, based the information outlined herein, it is recommended that GA and All-Cargo Alternative 1 be included in the preferred development plan.

6.2.3 Aircraft Maintenance

No large aircraft maintenance facilities currently exist at the airport. However, a 7.78 acre land lease does exist for the development of such facilities in a location east of the existing terminal adjacent the roughly 5 acre L-shaped detention pond. This location currently has no other identified use and provides considerable expansion capability to the west upon relocation of the terminal operation to the midfield. While the site is somewhat restricted in the short term, no other location on the airport offers better short-term development or long-term expansion potential. In consideration of this, all of the alternatives considered for aircraft maintenance generally incorporate the existing leasehold area and expand westward to provide for potential demand through the 20-year period.

Alternative 1: Maximum use of "L" Pond Area

Alternative 1 provides maximum use of the area in the vicinity of the existing leasehold through the relocation of the L-shaped detention pond (**See Exhibit 6-4**). This area would allow adequate space for at least two, and possibly three, large aircraft hangars. An engine run-up area equipped with a blast fence or similar type of noise attenuation device would be located on the existing terminal apron. By coordinating its use, this facility could be used without impact to the existing terminal operation.

Pros

- Could be constructed and used prior to relocation of the terminal operation to the midfield.
- Allows flexibility for between one and three large aircraft hangars in the short term.
- Provides considerable growth potential to the west.
- Does not reuse the existing terminal building.

Cons

- Requires relocation of the existing detention pond.
- In the short term, employees and delivery vehicles would be required to use the terminal's primary loop roadway system.
- Requires additional apron to be constructed for maneuvering of aircraft.
- Reduces the potential for reuse of the existing apron.

Alternative 2: Utilize Terminal B Addition and Maintain Retention Pond – Consolidated Facility

In this alternative the retention pond impact would be minimized. A single hangar and associated ramp would be constructed in the short term. Upon relocation of the terminal operation to the midfield, a larger maintenance operation would be constructed in the proximity of east end of the old terminal. The maintenance bays would be configured to take advantage of the existing pavement gradient. This configuration could be mirrored around the workshops and storage areas to ultimately provide for two additional maintenance bays. The Terminal B addition would be used for offices in support of the maintenance operation. The original hangar could ultimately be converted to a hush house or an engine run-up area could be constructed as in Alternative 1 to provide for noise attenuation (**See Exhibit 6-5**).

Exhibit 6-4

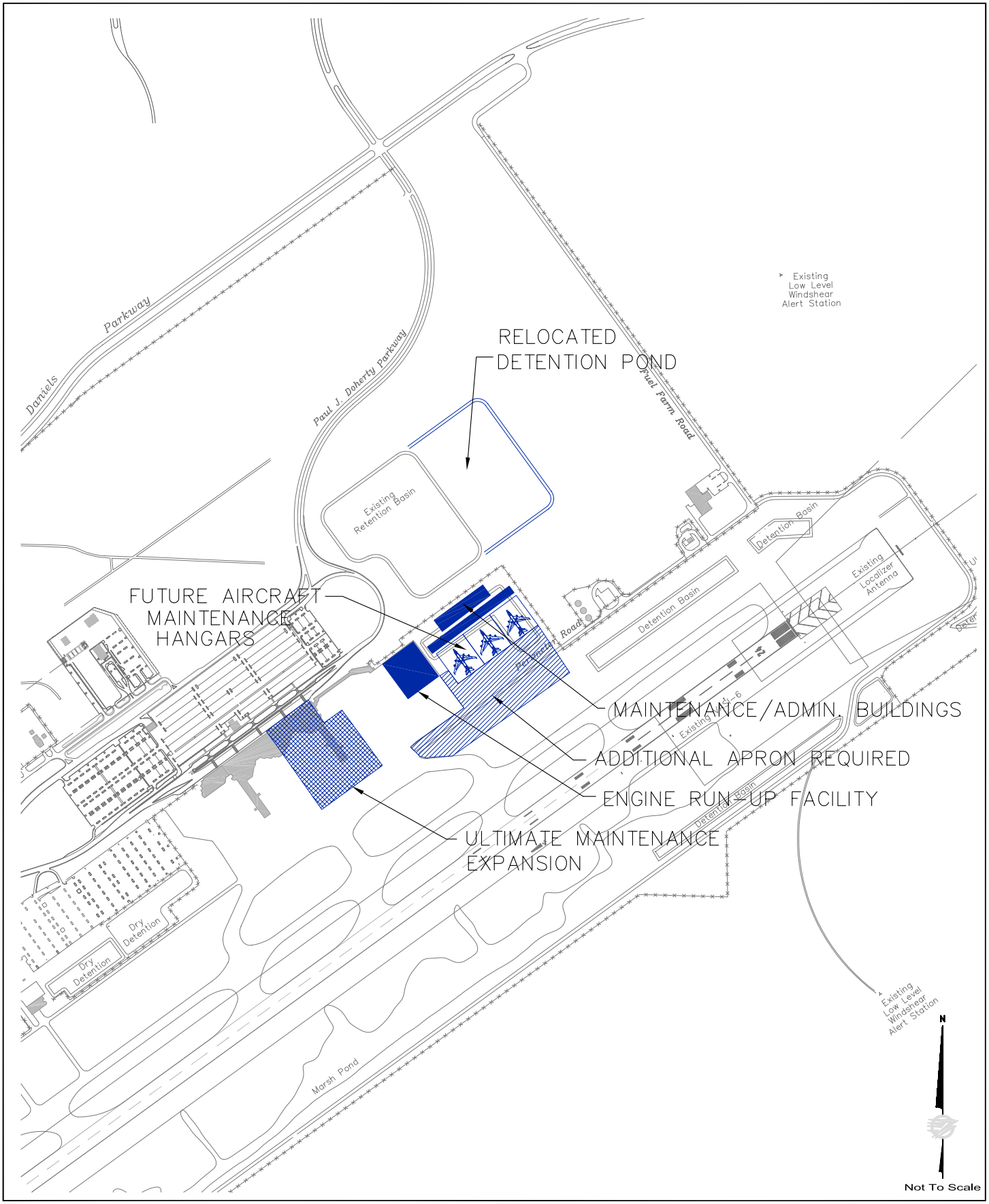

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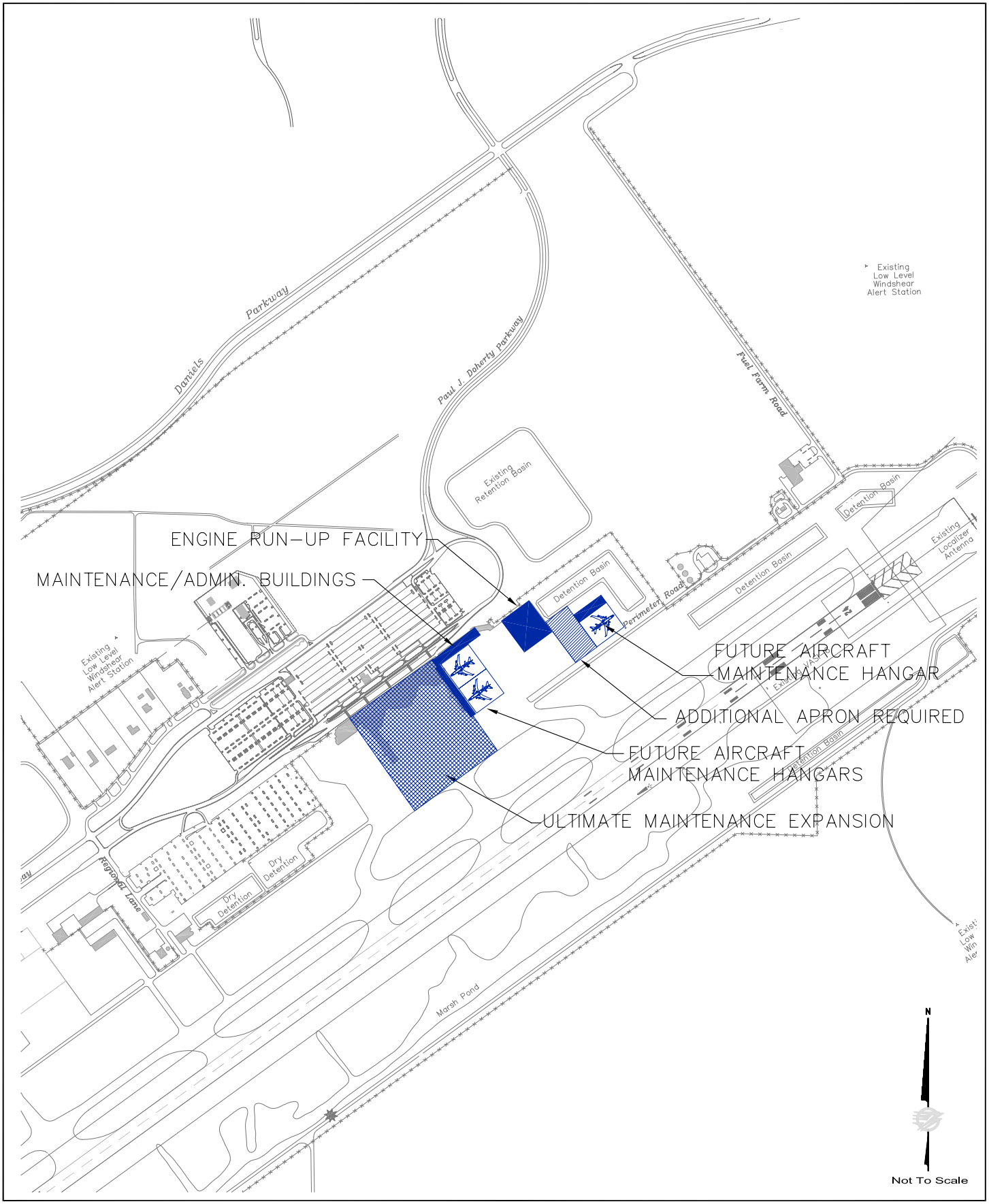
Exhibit 6-5



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Pros
- Best fit within the description of the existing lease envelope.
- Minimal impacts to the existing detention pond.
- Good reuse of the aircraft apron.
- Good potential for expansion to the west.

Cons
- Requires additional apron to be constructed.
- Requires rehab of a portion of the existing terminal.
- Minimal space for offices and parts storage without impacting maintenance stall.
- Access may be difficult without impacting pond.
- Limited first phase development potential.
- In the short term, employees and delivery vehicles would be required to use the terminal's primary loop roadway system.

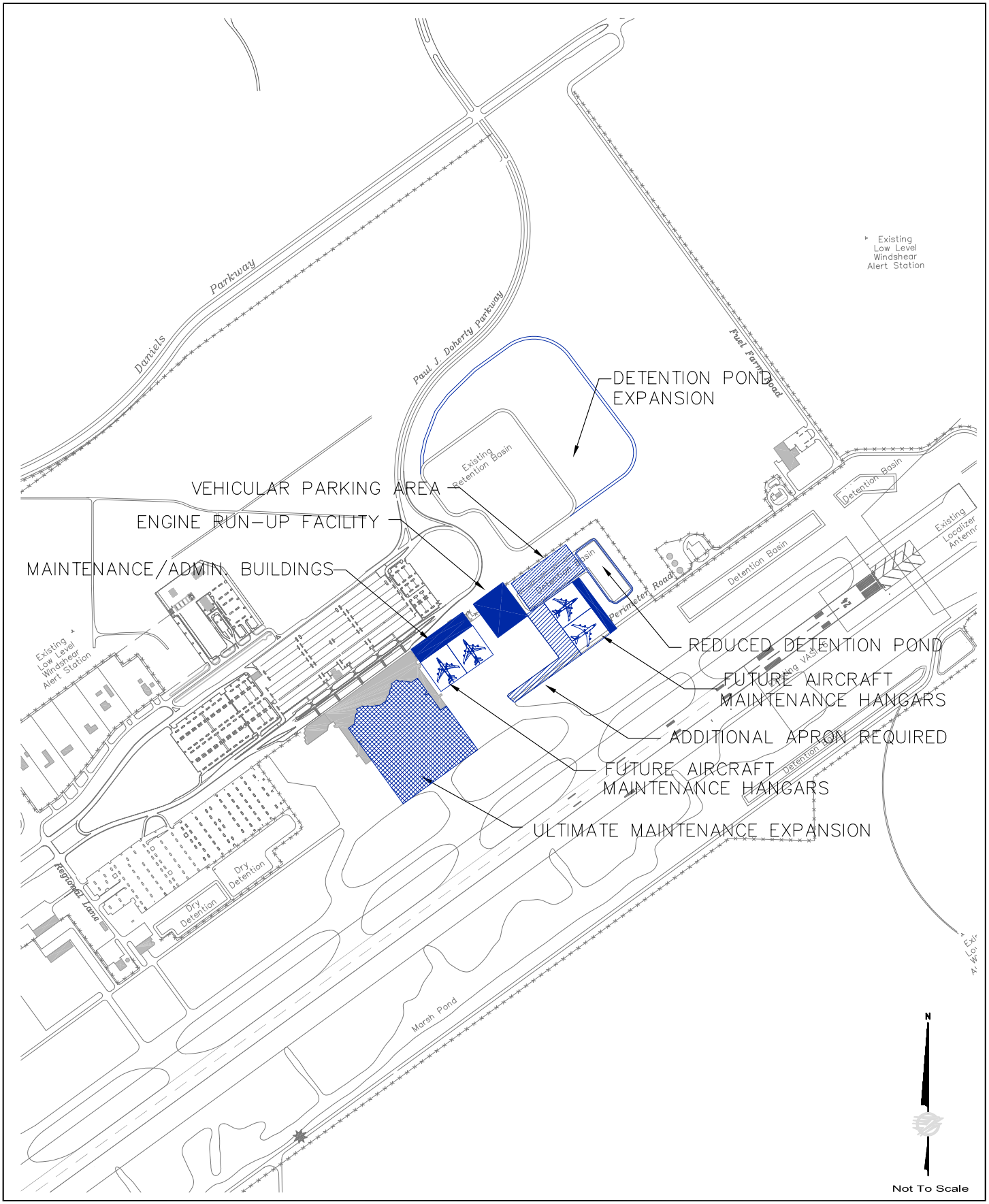
Alternative 3: Utilize Terminal B Addition and Maintain Retention Pond – Split Facility

In this alternative two hangars will be constructed to the east utilizing the existing apron and minimizing potential impacts to the detention pond. Maintenance offices could be constructed with this alternative adjacent to those hangars. A hush house or engine run-up area would be located just west of the existing detention pond. This alternative also has the potential to reuse a portion of the terminal concourse for offices or storage of aircraft spare parts. Adjacent to the proposed offices, two additional hangars sized to accommodate 747 type aircraft could be constructed with minimal rework of the existing site (**See Exhibit 6-6**).

Pros
- Matches well with existing leasehold description.
- Provides space for additional expansion to the west.
- Provides efficient reuse of apron.
- Provides plenty of space for maintenance offices.

Cons
- Requires additional apron to be constructed.
- Impacts a portion of the existing detention pond.
- Requires rehab of a portion of the existing terminal.
- In the short term, employees and delivery vehicles would be required to use the terminal's primary loop roadway system.
- Requires relocation of service road.

Exhibit 6-6



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Recommended Aircraft Maintenance Alternative
Providing the greatest short-term development potential, Alternative 1 appears the most desirable alternative for a large aircraft maintenance facility. This alternative also provides the most efficient use of airside land which an asset that will grow increasingly scarce as the airport development continues. While Alternatives 1 and 2 impact the existing detention basin to a lesser extent, they neither provide for the most efficient use of the land nor the best short term development potential. The latter of which may prove critical to the attractiveness and feasibility of such a facility to a private operator. Based on this and the recommendation of the terminal disposition study not to reuse the existing terminal building (**See Appendix A**), it is recommended that Aircraft Maintenance Alternative 1 be included in the preferred development plan.

6.2.4 Aircraft Rescue and Fire Fighting (ARFF)

With the construction of a new parallel runway, a new ARFF facility will be required to provide adequate emergency response capabilities to all areas of the new runway. Options include 'satellite' supplemental facilities or development of a new more centrally located primary facility.

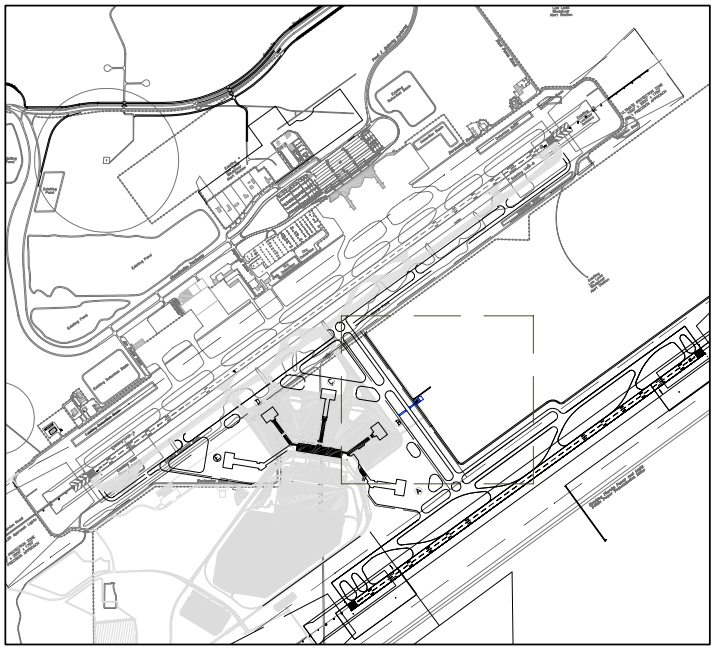
Alternative 1: Central Midfield Satellite
ARFF Alternative 1 consists of a supplemental satellite facility located centrally between the runways to the east of the midfield connector taxiways (**See Exhibit 6-7**). This facility would be capable of housing two vehicles and associated personnel.

Pros
- Provides good ARFF proximity to terminal area and airfield.
- Could potentially be expanded to serve as primary facility.
- Would provide improved response times to emergencies in terminal and the south airfield.
- Good location for surveillance of the air operations area.

Cons
- Primary facility constrains GA and cargo expansion options.
- Requires circuitous access.
- Cheaper initial facility cost but higher overall operation cost.
- Requires crossing active taxiways to get to terminal and terminal apron.

Alternative 2: South Midfield Satellite
Similar to Alternative 1, Alternative 2 consists of a supplemental satellite facility located between the runways to the east of the midfield connector taxiways. However, this alternative would locate the facility near the intersection of the east parallel connector taxiway and the parallel taxiway serving the future parallel runway (**See Exhibit 6-8**). Again, this facility would be capable of housing two vehicles and associated personnel.

Exhibit 6-7



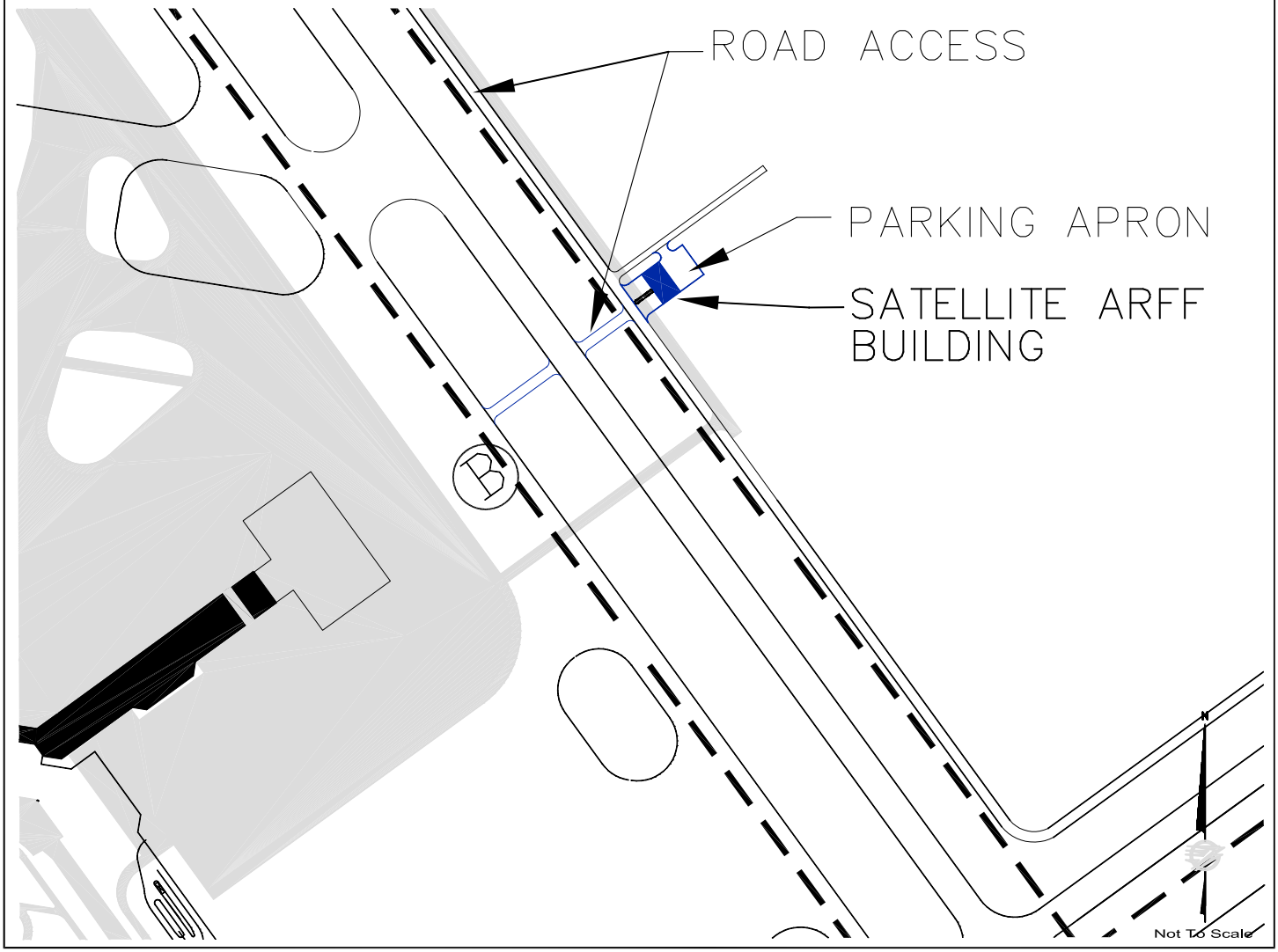


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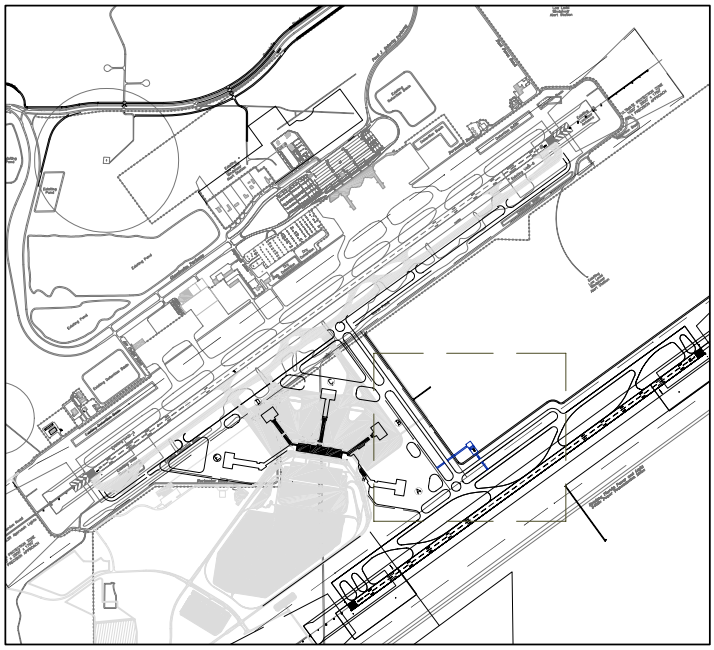
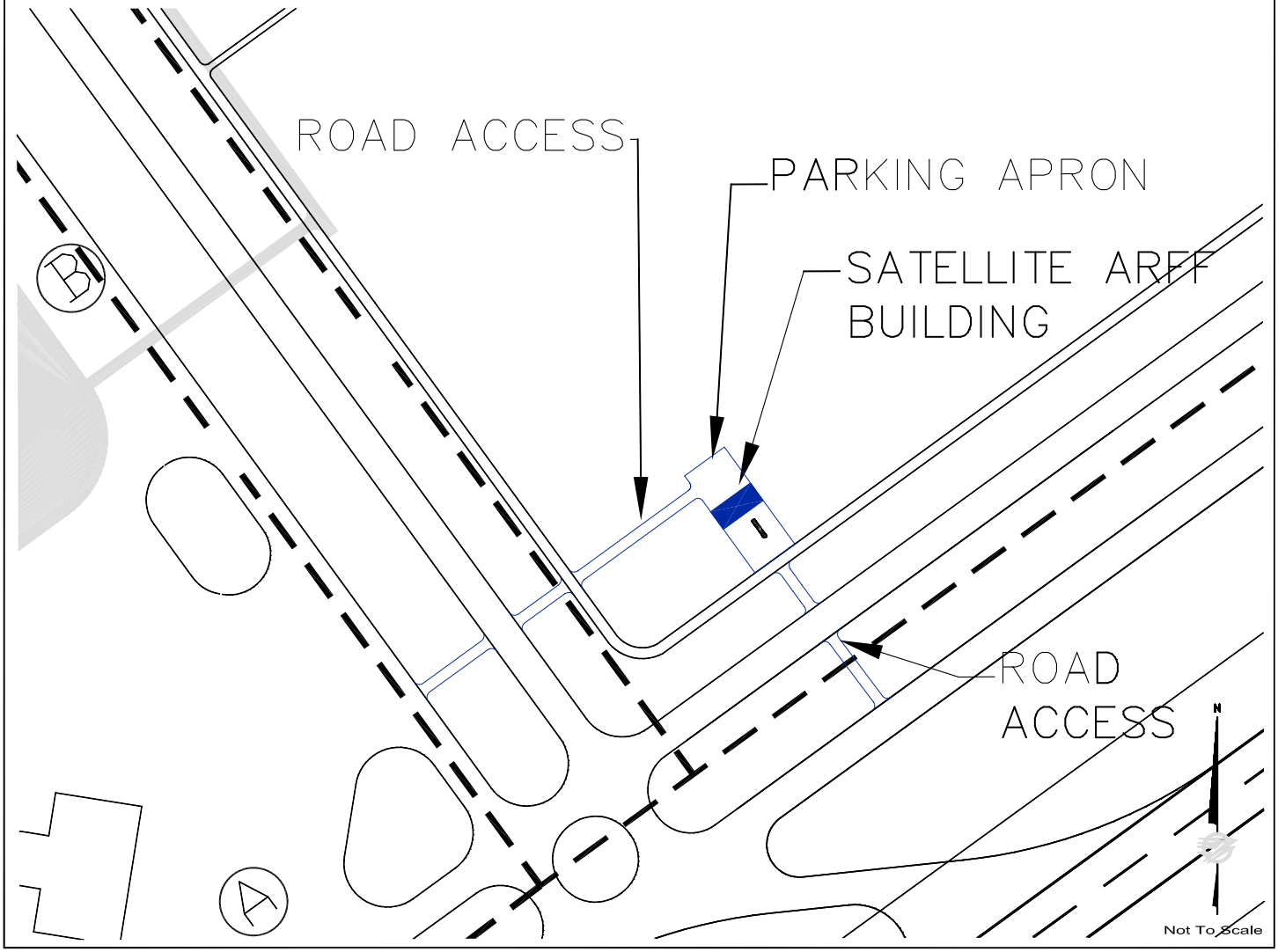
Exhibit 6-8





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Pros
- Good proximity to the midfield terminal.
- Improved response times to the terminal and new south runway.
- Straight access to the terminal apron and proposed south runway.

Cons
- Primary facility constrains GA and cargo expansion options.
- Requires circuitous access.
- Cheaper initial facility cost but higher overall operation cost.
- Not as centrally located compared to Alternative 1 and 3.
- Would be difficult to convert to the primary ARFF station in the future because of longer response times to the North airfield.
- Requires crossing active taxiways to get to terminal and terminal apron.

Alternative 3: Central Midfield Primary

ARFF Alternative 3 consists of a new primary facility in the same central midfield location as Alternative 1. However, Alternative 3 would result in complete closure and relocation of all ARFF operations to the new primary site (**See Exhibit 6-9**). This facility would be capable of housing up to five large ARFF vehicles and associated personnel.

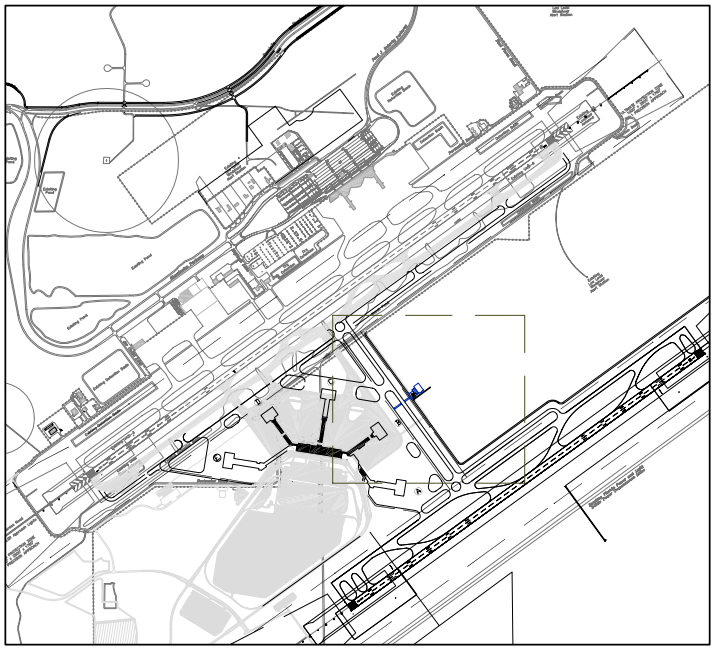
Pros
- Minimizes staffing and equipment requirements.
- Provides good ARFF proximity to terminal area and airfield.
- Provides for additional future expansion of G.A. or cargo on the north side of the airport.
- Most centrally located of all the alternatives considering full build out of the airport.
- Great location for surveillance of the air operations area.

Cons
- Requires circuitous access.
- More expensive initial facility cost.
- Would require crossing active taxiways and runway to reach north side of the airfield.

Recommended ARFF Alternative

Each of the alternatives provide attractive options for ARFF development as required by the addition of the future runway. Alternative 2 provides the best response capability to the new runway while Alternatives 1 and 3 provide the best response capabilities to the future terminal area. Alternatives 1 and 2 are supplemental facilities and maintain the existing ARFF facility, while Alternative 3 consolidates the ARFF activities in a single centrally located facility. Alternative 3, by consolidating the future ARFF requirements into a single facility, results in the lowest equipment and personnel requirement while at the same time freeing up land to the east of the GA facilities. Balancing long term operating costs with accessibility, Alternative 3 is recommended as the preferred development option.

Exhibit 6-9



PARKING APRON

PRIMARY ARFF BUILDING

ROAD ACCESS

B

N

Not To Scale

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6.2.5 Air Traffic Control Tower (ATCT)

Construction of a new parallel runway will require development of a new air traffic control tower (ATCT) that provides adequate line of sight to both runways and their approaches as well as designated taxiway 'movement' areas. This will require development of a facility that is more centrally located. Options for a new ATCT include sites centrally located both east and west of the future connector taxiways.

Alternative 1: West Midfield - Terminal Top

The terminal top ATCT would be located in the future midfield terminal at the base of Concourse C (**See Exhibit 6-10**). The estimated minimum controller eye height required for Alternative 1 based on a concourse headhouse elevation of 70 feet above ground level (agl) is approximately 340 feet agl. This assumes that the visibility of no part of a taxiway or runway can be obstructed by the location of a fixed object. In this case the most critical view would be from the tower over Concourse B to the west parallel connector taxiway. It is important to note that aircraft parked around the concourse may result in a further increase in controller eye height requirements.

Pros

- Provides good accessibility.
- Is centrally located.
- Provides good utility access.

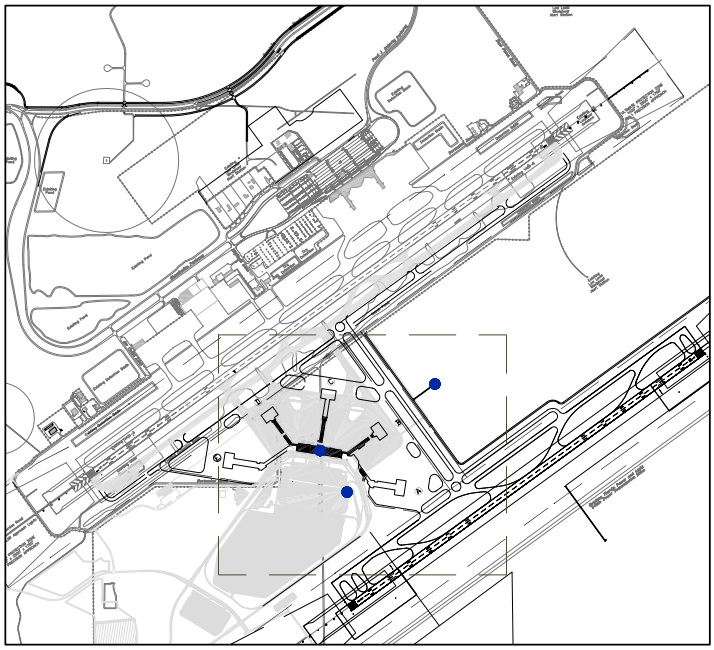
Cons

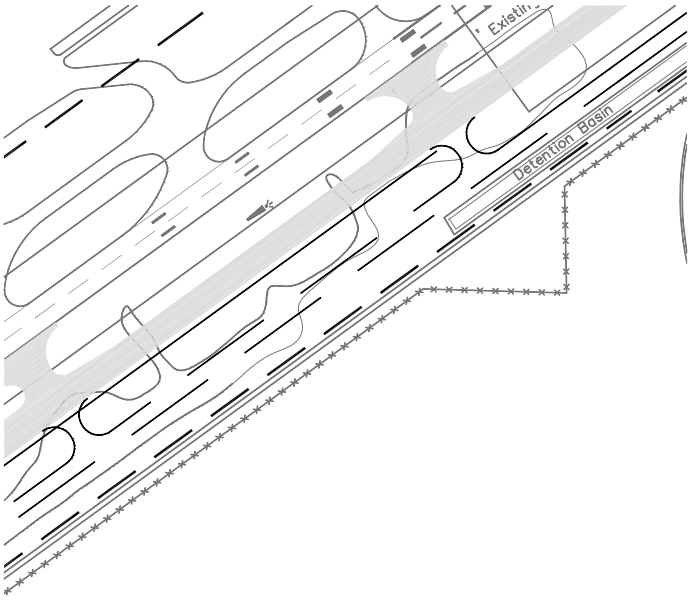
- Has a number of potential security concerns.
- Would require modifications to the terminal to support the design of the tower.
- Requires higher controller workload.
- Must act immediately to incorporate into midfield terminal design.
- Requires the second highest tower.
- Detracts from architectural features of the terminal complex.

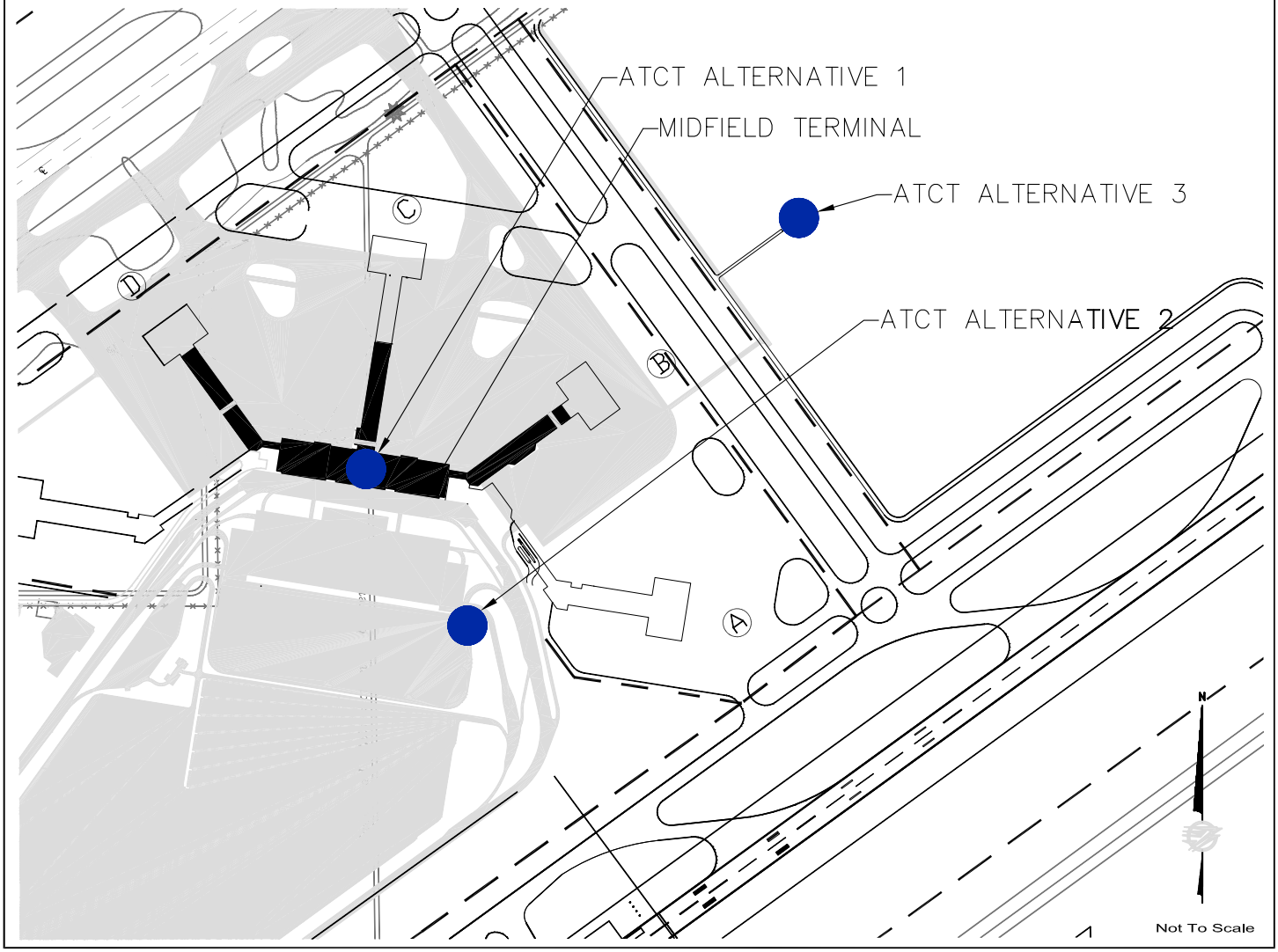
Alternative 2: West Midfield – Southeast of Terminal

ATCT Alternative 2 consists of a new tower located south of the Phase 1 midfield terminal and east of the existing parking garage (**See Exhibit 6-10**). This terminal area alternative minimizes the development conflicts with the terminal while still providing a fairly central terminal area location. Applying the same criteria as Alternative 1, the estimated minimum controller eye height required for Alternative 2 is approximately 540 feet agl. In this case the most critical view would be from the tower location over Concourse D to the south dual parallel NLA taxiway. Again, it is important to note that aircraft parked around the concourse may result in a further increase in controller eye height requirements.

Exhibit 6-10







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Pros
- Easily accessible from landside.
- Independent structure not part of another building (see Alternative 1).
- Provides good utility access.

Cons
- Has potential security concerns.
- Requires high controller workload.
- Requires the highest tower.
- Potentially inhibits future flexibility of future terminal area expansion.
- Must act immediately to incorporate into midfield terminal design.
- Detracts from architectural features of the terminal complex.

Alternative 3: East Midfield

ATCT Alternative 3 is located centrally between the runways to the east of the midfield connector taxiways. This alternative minimizes conflicts with the midfield facilities with a remote location (**See Exhibit 6-10**). Applying the same criteria as Alternative 1, the estimated minimum controller eye height required for Alternative 3 is approximately 260 feet agl. The most critical view would be from the tower location over Concourse E to the south dual parallel NLA taxiway. Once again, it is important to note that aircraft parked around the concourse may result in a further increase in controller eye height requirements.

Pros
- Provides the most secure location.
- Requires lowest controller workload.
- Appears to requires the lowest tower height.
- Best overall alternative for viewing entire airport.
- The most centrally located of all the alternatives.
- Allows related facilities to be collocated with facility.

Cons
- Requires circuitous access.
- Utilities would have to be extended into area from the midfield complex.
- Would require all employees to have security access to the airside to get to facility.

Recommended Air Traffic Control Tower Alternative

The ideal ATCT facility location provides good line of sight to all operational areas of an airport with a minimal controller workload. While access is also important, it must be balanced with security which is an increasingly important aspect of air traffic facilities. While both Alternatives 1 and 2 provide good access to the towers, they also result in the highest controller workload and present development and security challenges within the future terminal area. They also have the greatest controller eye height requirements. ATCT Alternative 3, likely requiring the shortest tower, would result in the lowest controller workload and most secure site with minimal chance of impacting future development. By sharing infrastructure with the recommended ARFF alternative, costs

associated with Alternative 3's infrastructure can be spread between the two facilities. Therefore, based on the functional benefits of each proposed tower location and those factors reviewed herein, ATCT Alternative 3 is recommended for inclusion in the preferred development plan.

6.3 LANDSIDE ALTERNATIVES

6.3.1 Terminal

The Phase 1 Midfield Terminal Project includes development of over 760,000 square feet of building space including a main terminal and three concourses. Although each concourse has been planned with the ability to expand to add gates, by the end of the 2020 period there will be shortages in terminal space as well. The activity levels projected for 2020 indicate the need for an additional 205,000 square feet of terminal and concourse space as well as an additional 15 to 19 gates. This will require the next major phase of terminal development. Options for this development based on the current midfield concept include expansion of the terminal and either development of a new concourse to the west or to the east. In each case a 4-5 gate headhouse expansion to Concourse C is planned by 2010. Alternatives providing for the balance of the facility shortfalls are further addressed below:

Alternative 1: West Concourse

The west concourse expansion would consist of expansion of the terminal building westward, addition of a connector, and a new concourse. This concourse, designated Concourse E by the midfield conceptual development program, would have the nearest proximity to the departure end of the existing runway (**See Exhibit 6-11**).

Pros

- Does not depend on development of new runway.
- Provides shortest taxi times to Runway 6.
- Would not require future parallel connector taxiway.
- Provides close proximity to airline cargo building.

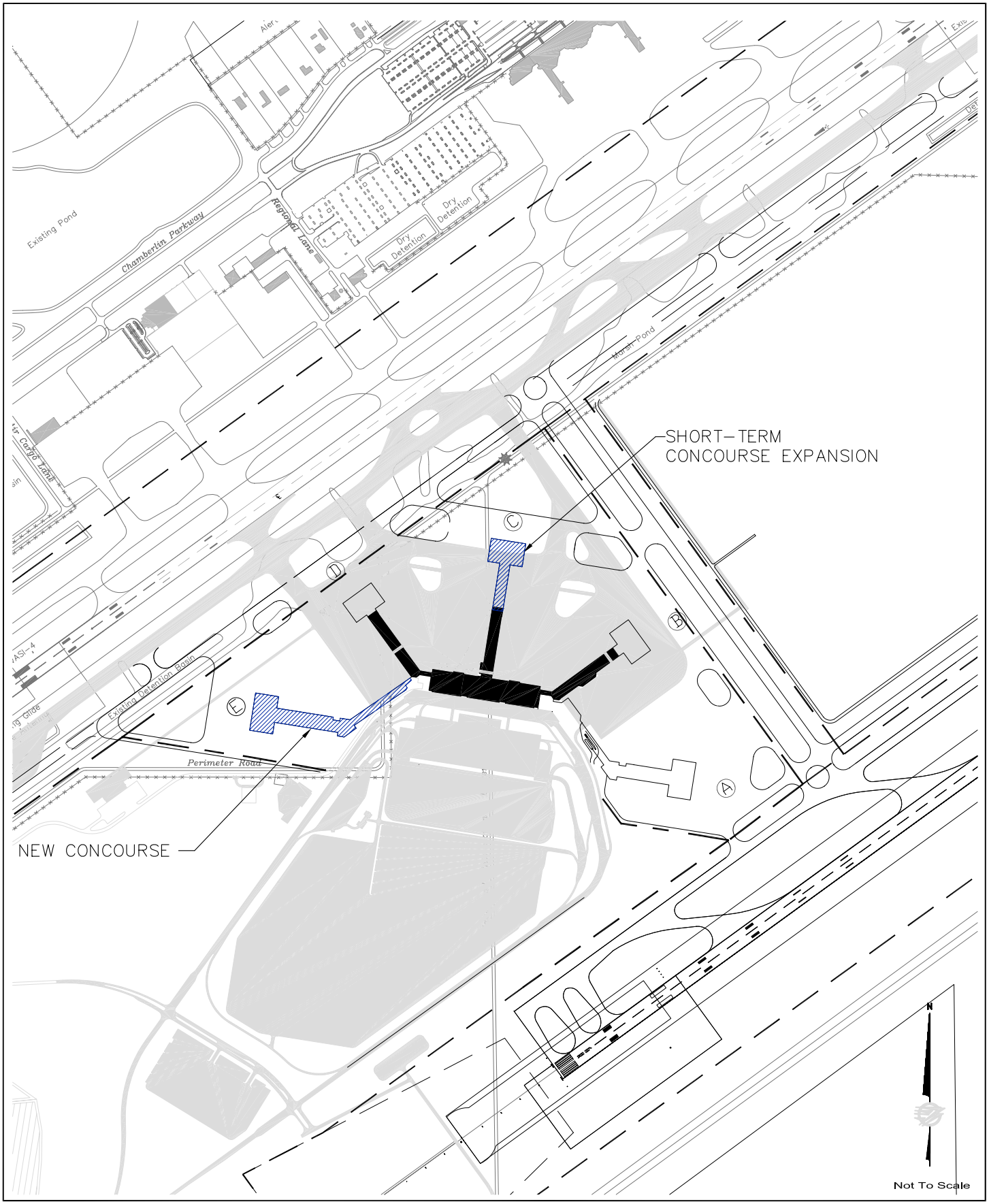
Cons

- May require partial dual parallel taxiway to reduce potential for queuing conflicts at the existing Runway 6 departure end.
- Requires long taxi distance to future Runway 6R end.
- Requires long walking distances to main terminal.
- Appears to require more apron than Concourse A expansion.
- Aircraft tail height restrictions for positions at the end of the concourse may be required due to potential for penetrations to Part 77 surfaces.

Alternative 2: East Concourse

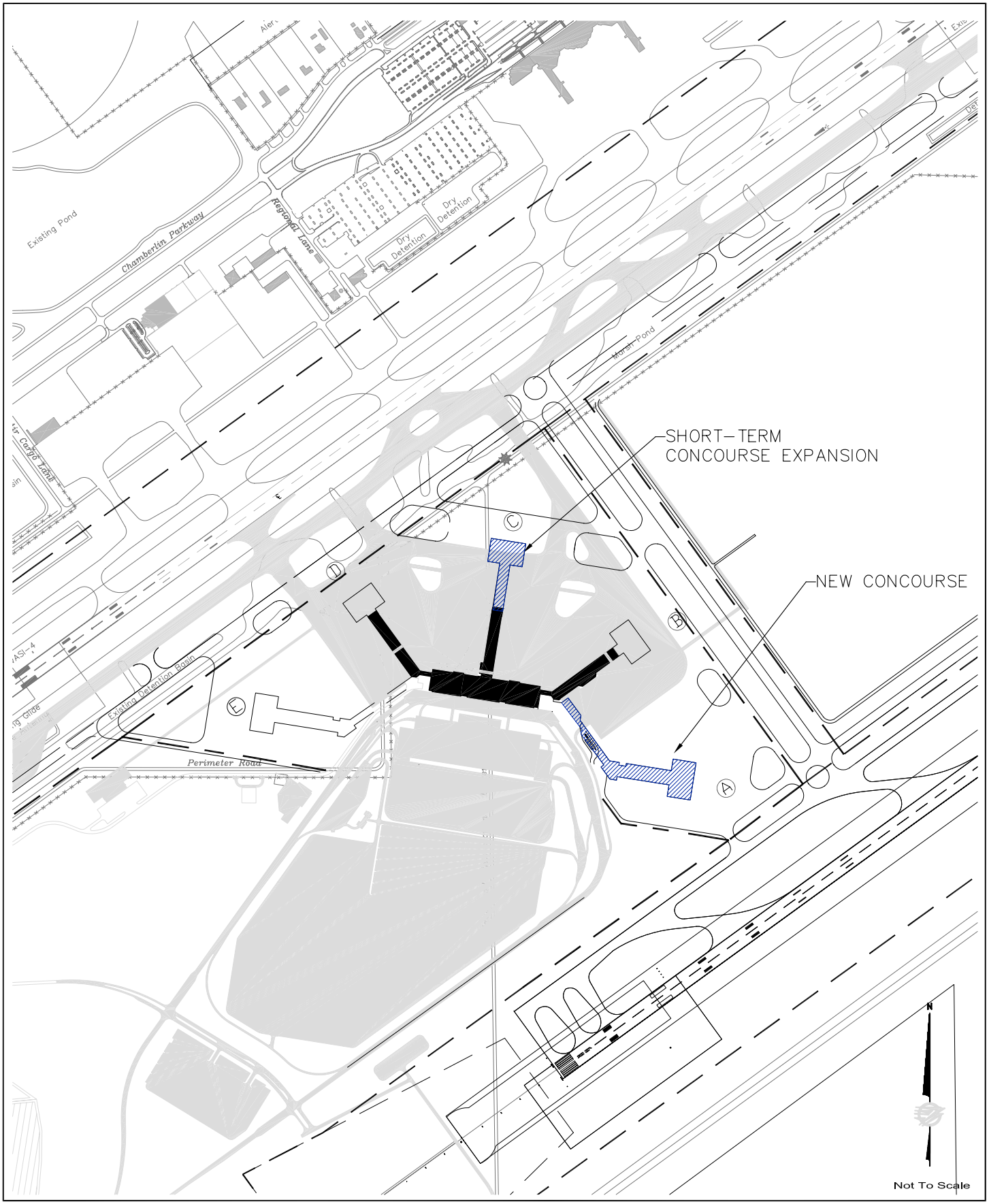
Similar to Concourse E, addition of an east concourse would consist of expansion of the terminal building eastward, addition of a connector and a new concourse. This concourse, designated Concourse A by the midfield conceptual development program, would have the nearest proximity to the departure end of the future parallel runway (**See Exhibit 6-12**).

Exhibit 6-11



Lee County Port Authority	Birk Hillman Orlando · Miami · Atlanta	DMJM Aviation	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT FORT MYERS, FLORIDA MASTER PLAN UPDATE	MIDFIELD TERMINAL ALTERNATIVE 1	EXHIBIT 6-11

Exhibit 6-12



Lee County Port Authority	Birk Hillman Orlando · Miami · Atlanta	DMJM Aviation	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT FORT MYERS, FLORIDA MASTER PLAN UPDATE	MIDFIELD TERMINAL ALTERNATIVE 2	EXHIBIT 6-12

Pros
- ✈ Provides good airfield balance with new runway.
- ✈ Provides shortest taxi times to the new Runway 6 end.
- ✈ Appears to require less apron than Concourse E expansion.

Cons
- ✈ Requires long taxi distance to existing Runway 6 end.
- ✈ Requires long walking distances to main terminal.
- ✈ Aircraft tail height restrictions for positions at the end of the concourse may be required due to potential for penetrations to Part 77 surfaces.

Recommended Terminal Alternative

The recommended terminal alternative will largely depend on the timing of development of the new parallel runway. Based on a review of the projected activity, it is anticipated that the new runway will become operational near the end of the 10-year timeframe. With this in mind, the east concourse, Alternative 2, is ideally positioned to take advantage of the added airfield capacity. However, if for some unforeseen reason the new runway development is delayed until well beyond the anticipated period, the west concourse development, Alternative 1, may be more desirable as it provides the shortest taxi distance to the existing runway. Conversely, it also results in the greatest potential for congestion near the Runway 6 end and would likely require the addition of a dual parallel taxiway section. Therefore, with the addition of the new parallel runway anticipated prior to the construction of the new concourse, Terminal Alternative 2 is the preferred development alternative.

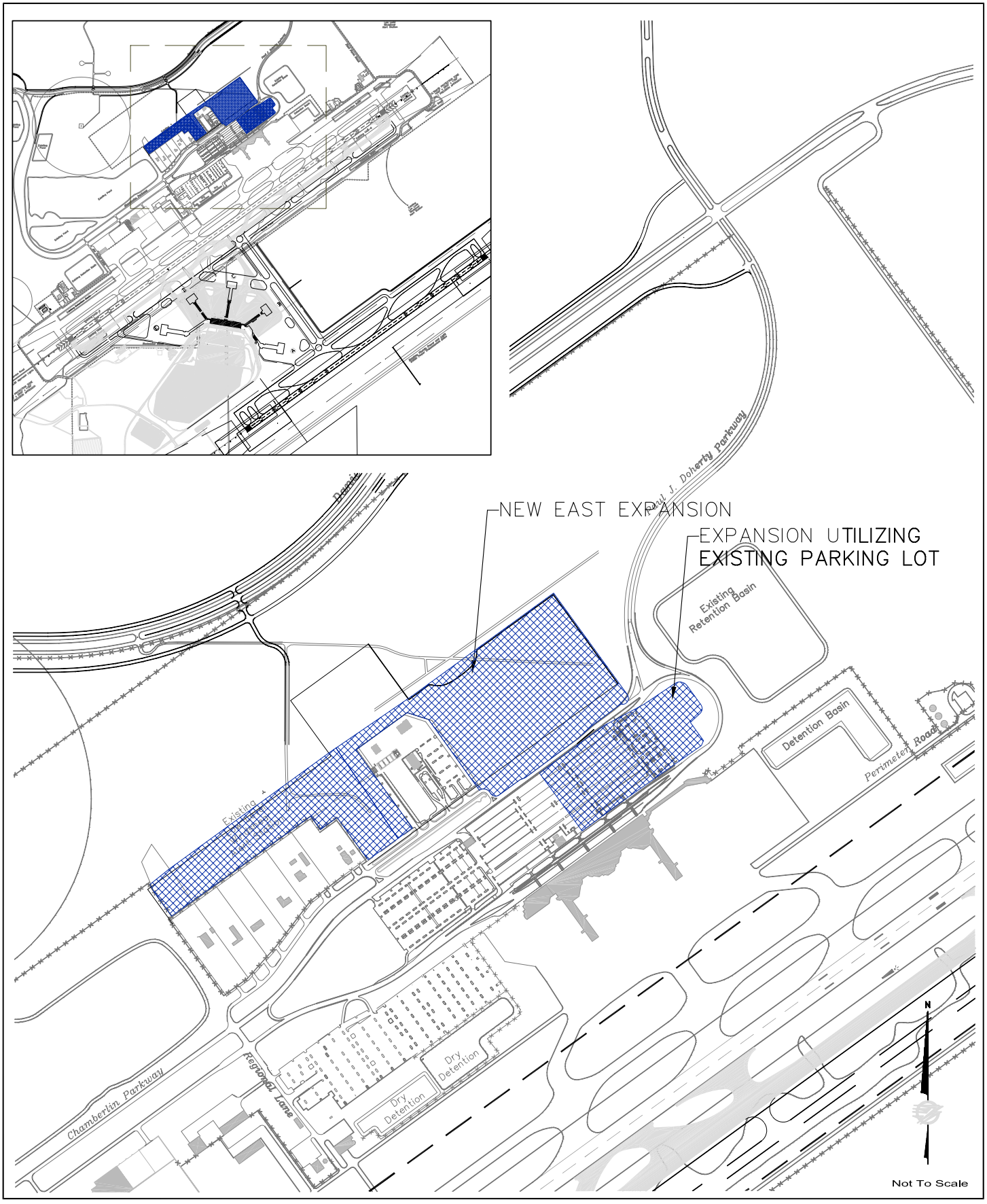
6.3.2 Rental Cars

Rental car activity is a key revenue growth area at many of Florida's airports including RSW. The existing rental car storage and maintenance facilities are located adjacent the terminal area loop road just north of the automobile parking area. With the relocation of passenger operations to the midfield terminal area considerable parking area in the northern airfield will become available for alternative use. However, these facilities may not provide the most operationally efficient location for rental car activities due to the distance between them and the new terminal facilities. The following alternatives explore a number of locations for future rental car development that either focus on reuse of existing facilities, operational efficiency, or some combination thereof.

Alternative 1: Existing Expansion and Vacated Parking

Rental Car Alternative 1 continues the planned expansion of the existing facilities and provides for additional expansion in the existing terminal parking area (**See Exhibit 6-13**). This alternative reduces the depth of the Alamo leasehold to provide for consistent frontage on Daniels Parkway for non-aviation use.

Exhibit 6-13



Lee County Port Authority	Birk Hillman Orlando · Miami · Atlanta	DMJM Aviation	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT FORT MYERS, FLORIDA MASTER PLAN UPDATE	RENTAL CAR ALTERNATIVE 1	EXHIBIT 6-13

Pros
- ✈ Maintains use of existing rental car facilities.
- ✈ This option requires the least initial capital investment.
- ✈ Maintains good off-site access.
- ✈ Utilizes part of terminal parking lot for additional rental car expansion.
- ✈ Minimizes potential leases with current rental car tenants.

Cons
- ✈ Operationally inefficient - long distance from new terminal facilities.
- ✈ Restricts potential long-term non-aeronautical development along Daniels.
- ✈ This option requires the greatest ongoing operational cost.

Alternative 2: Complete Relocation to New Terminal Area and Nearby Remote

Alternative 2 includes the complete relocation of the existing rental car operations to the west terminal area. This alternative splits the rental car function between the immediate terminal area and a location bordering the Treeline Avenue extension (**See Exhibit 6-14**). By placing all of the rental car operations in the proximity of the terminal area, this alternative provides a considerable operational advantage.

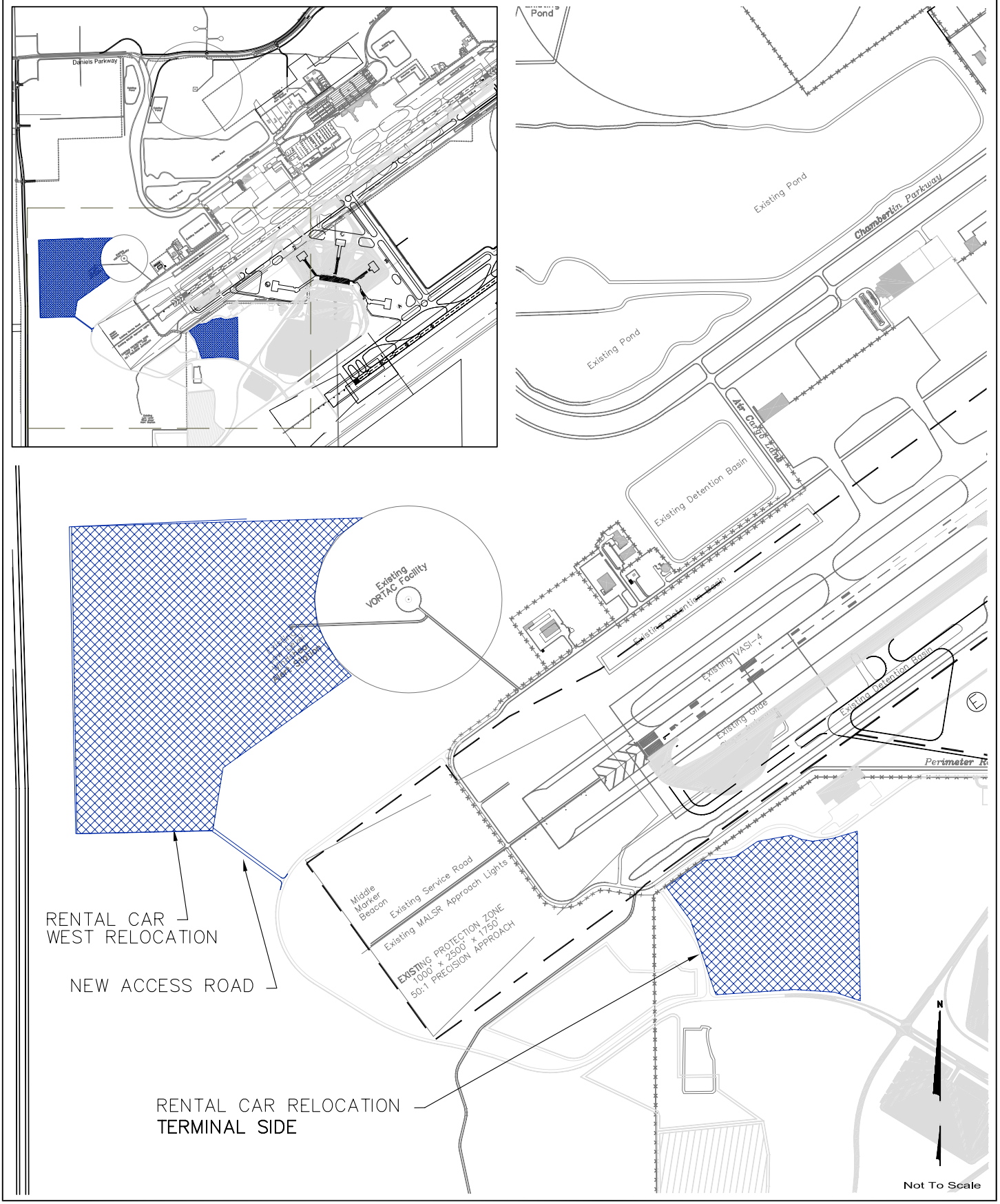
Pros
- ✈ Most operationally efficient – very short distance to terminal area.
- ✈ Accessible from planned access roads.
- ✈ Reduces traffic flow through the north side facilities.
- ✈ Considerably increases the depth of the non-aviation developable land with frontage to Daniels.
- ✈ Reduces the congestion of rental car shuttles on access road around runway.

Cons
- ✈ Does not maintain use of existing facilities.
- ✈ Likely one of the highest initial capital costs.
- ✈ Would require breaking or modifying existing leases with tenants.
- ✈ Reduces the potential area available for surface auto parking at midfield.

Alternative 3: Maintain Existing, Expand to both Vacated Parking and West Remote

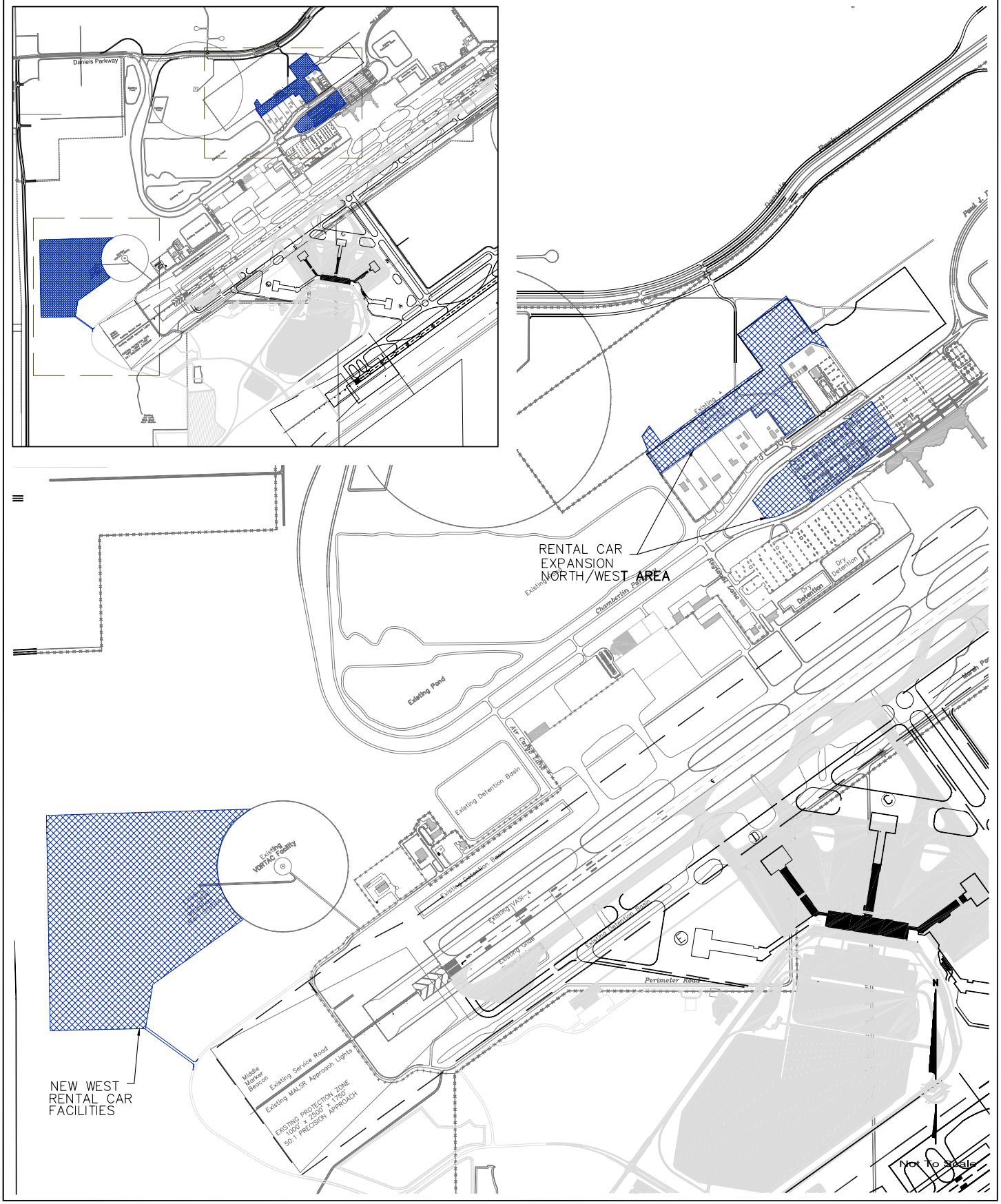
Alternative 3 offers a combination of areas to meet the future rental car needs. It maintains the existing operations and takes advantage of a portion of the soon to be vacated north terminal parking area. Additionally, it provides expansion at a location bordering the Treeline Avenue extension (**See Exhibit 6-15**). This option balances the use of existing facilities with some enhancement to operational efficiency for some rental car operators.

Exhibit 6-14



Lee County Port Authority	Birk Hillman Orlando · Miami · Atlanta	DMJM Aviation	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT FORT MYERS, FLORIDA MASTER PLAN UPDATE	RENTAL CAR ALTERNATIVE 2	EXHIBIT 6-14

Exhibit 6-15



Lee County Port Authority	Birk Hillman Orlando · Miami · Atlanta	DMJM Aviation	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT FORT MYERS, FLORIDA MASTER PLAN UPDATE	RENTAL CAR ALTERNATIVE 3	EXHIBIT 6-15

Pros

- ✈ Improves operational efficiency – reduces distance for some operators.
- ✈ Reuses a portion of existing terminal parking area for additional rental car expansion.
- ✈ Would not require Airport to break existing leases with rental car tenants.

Cons

- ✈ Does not provide similar level of service to all operators.
- ✈ Reduces development flexibility for area between existing terminal area and Daniels.
- ✈ Still results in considerable traffic between the new midfield and the old terminal area.

Recommended Rental Car Alternative

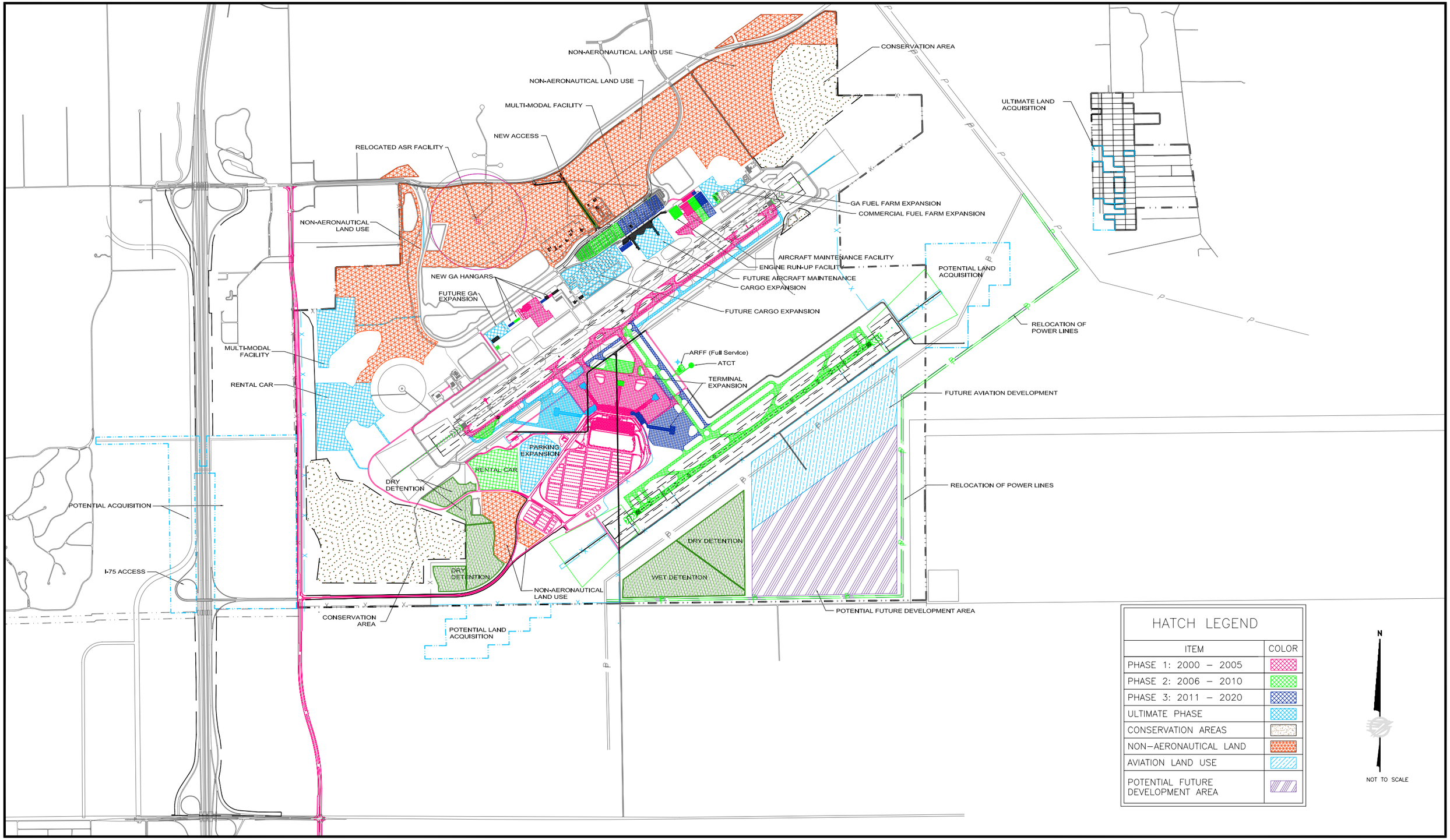
The three rental car alternatives include a range of options that include simply expanding existing facilities to full rental car relocation. Expanding the existing facilities has an obvious capital cost advantage while relocation of the facilities has a long-term operational cost advantage. With the relocation of the midfield complex a considerable distance from the existing rental car area both rental car Alternative 2, full rental car relocation, and Alternative 3, partial rental car relocation, were considered the most desirable. In reviewing the future revenue generation potential for the north side of the airport, it is apparent that full relocation of the rental car facilities provides the most flexibility for revenue enhancement. Based on this and the analysis included above, it is recommended that the rental car facilities ultimately be fully relocated as outlined in Alternative 2.

6.4 RECOMMENDED DEVELOPMENT PLAN

The recommended development program is outlined in **Exhibit 6-16**. The program can be summarized as follows:

- ✈ Upon relocation of the midfield terminal, the north airfield is reconfigured to maximize potential cargo, general aviation, and aircraft maintenance activities.
- ✈ With relocation of the rental car facilities to the proximity of the new midfield terminal area, considerable land becomes available along the north side of the airport to support non-aviation revenue enhancing development.
- ✈ The projected passenger demand throughout the 20 year development period is handled in the new midfield terminal complex through the expansion of one of the concourse headhouses and the development of Concourse A and associated terminal area.
- ✈ A new 9,100'parallel runway is added along with a new central primary aircraft rescue and fire fighting facility and air traffic control tower.
- ✈ Primary landside access will shift from Treeline Avenue to a direct connection with I-75.
- ✈ The land south of and adjacent to the new runway is preserved for ultimate aviation related development.

Exhibit 6-16



HATCH LEGEND

ITEM	COLOR
PHASE 1: 2000 – 2005	
PHASE 2: 2006 – 2010	
PHASE 3: 2011 – 2020	
ULTIMATE PHASE	
CONSERVATION AREAS	
NON–AERONAUTICAL LAND	
AVIATION LAND USE	
POTENTIAL FUTURE DEVELOPMENT AREA	

N

NOT TO SCALE

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RS&H

SOUTHWEST FLORIDA INTERNATIONAL AIRPORT
FORT MYERS, FLORIDA

MASTER PLAN UPDATE

RECOMMENDED DEVELOPMENT PLAN

DATE:	MARCH 2004
PROJECT NO:	C06901
FILE NAME:	
DESIGNED BY:	F.B.B
DRAWN BY:	F.B.B
CHECKED BY:	S.R

EXHIBIT

6-16