This is the presentation for Public Open House 6 being conducted for the Ted Stevens Anchorage International Airport Master Plan Update. It is being delivered at 6:15 PM on Thursday, September 12th at the Coast International Inn in Anchorage, Alaska. The presenter is Evan Pfahler, Project Manager with Reynolds Smith, and Hills, Inc. (RS&H).

- The presentation will last approximately 45 minutes.
- The presentation will be followed by an open question-and-answer session.
- The audience will be asked to hold questions until the question-and-answer session.

Prior to the presentation, an Open House was held from 5:30 PM to 6:15 PM during which attendees could view Master Plan Update information and speak with representatives of the Master Plan Update Team.
The Master Plan Update Team wants to ensure the audience is reminded what an airport master plan is. United States public commercial service airports are encouraged to prepare airport master plans by the Federal Aviation Administration (FAA). The FAA provides grant funding for airport master plans through the Airport Improvement Program (AIP) and publishes an advisory circular [150/5070-6B, Airport Master Plans] that provides guidance on all elements of the master plan process. The FAA defines an airport master plan as “...a comprehensive study of an airport [that] usually describes the short-, medium-, and long term development plans to meet future aviation demand.” It is important to note that a master plan is intended to prepare an airport to meet future aviation demand, which is estimated through a forecast.
The Airport anticipates growth in landings and takeoffs, passenger boardings, and cargo. The forecast of aviation demand was approved by FAA in 2012. The Master Plan Update provides the Airport with a development plan to meet forecast growth in landings and takeoffs, passenger boardings, and cargo.
The Master Plan Process is cyclical. This Master Plan Update is the seventh update to the Master Plan for Ted Stevens Anchorage International Airport. This Master Plan Update will be updated in another 7 to 10 years. Master Plan Updates are the first step in the planning process, not the last. Prior to implementation of most projects recommended in the Master Plan Update, the Airport would be required to conduct environmental analysis, advanced planning, preliminary and final design, and permitting, and to secure other approvals. Adopting a Master Plan does not constitute unconditional approval to implement the projects recommended in the Master Plan Update.
This flow chart generally outlines the Master Plan Update process and its primary tasks. The tasks with green check marks have been completed for the Ted Stevens Anchorage International Airport Master Plan Update. The red “A” indicates the task that is currently underway.

As a reminder, the FAA has already approved the updated forecast of aviation activity for Anchorage International Airport. The forecast was presented at Open House 2 in September 2012 and is available at [http://dot.alaska.gov/aias/news.shtml#forecasts](http://dot.alaska.gov/aias/news.shtml#forecasts)

The Master Plan Update team is currently working on finalizing the draft plan for airport development.

The Master Plan Update will be adopted by the Airport upon its conclusion at the end of 2013. It is important to recognize that the Master Plan Update process is the first step in the planning process and not the last step. Additional environmental analysis and permitting may be required prior to implementation of actions recommended in the Master Plan Update.
The purpose of this presentation is to share the Airport’s Preferred Plan for Future Development of Ted Stevens Anchorage International Airport.
The agenda will include three elements. First, an update on public involvement will be provided. Second, the results of the evaluation of the five draft alternatives will be presented. Finally, the Draft Plan for Future Development will be presented.
Agenda item 1: Public Involvement Update

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The schedule above illustrates the plan phases, past and tentative future dates for Master Plan Update Public Open House events, Technical Advisory Committee Meetings, and Working Group meetings. Your continued involvement in the Master Plan Update process is both welcome and encouraged.

To date, we have completed Project Initiation, Inventory, and Facility Requirements and alternatives analysis. Past presentations and information on these phases are available online at: www.ancmasterplan.com/library/.

As a reminder, the FAA has already approved the updated forecast of aviation activity for Anchorage International Airport. The forecast is available at http://dot.alaska.gov/aias/news.shtml#forecasts

The Master Plan Update team is currently refining the Draft Plan for Future Airport Development. The Master Plan Update will be adopted by the Airport at the end of 2013. It is important to recognize that the Master Plan Update process is the first step in the planning process and not the last step. Additional environmental analysis and permitting may be required prior to implementation of actions recommended in the Master Plan Update.
We have held six public open house events.
We have held seven Master Plan Update Working Group meetings.
We have held five Master Plan Update Technical Advisory Committee Meetings.
ANC Master Plan Update // Public Open House 6
Public Involvement Overview

In addition to 19 public meetings to date…

- 240,000 postcards mailed
- 19 e-newsletters sent
- 75 stakeholder meetings held

We have held 19 public meetings to date including a public seminar on FAA Grant Assurances held in April 2013. We have mailed over 240,000 post card invitations to our six open house events. We have sent 19 e-newsletters to those individuals who have signed up for ANC Master Plan Update communications who now number more than 600. We have held more than 75 stakeholder meetings.
A Draft Communications Plan was published this week. The Draft Communications Plan was created with the support of the Anchorage Airport Communications Committee (AACC) and articulates a plan for Airport communications with the public and for public communications with the Airport. The Draft Communications Plan defines best practices for Airport-public communication. You may read the plan by visiting www.ancmasterplan.com. Your comments on the draft plan are welcome and encouraged.
Comment-Response Report #1 has been published and is available for review at [www.ancmasterplan.com](http://www.ancmasterplan.com). The report includes all comments received by the Master Plan Update team through April 1, 2013. Every comment in this report has been responded to.

The Master Plan Update team is currently completing responses to every comment received between April 1, 2013 and June 30, 2013. The Master Plan Update team anticipates publishing Comment-Response Report #2 in Fall 2013.

Comment Response Report #3 will be published at the conclusion of the Master Plan Update and will include all comments received after June 30, 2013 through the end of the Master Plan Update project.
Agenda Item #2: Alternatives Overview & Evaluation
The Alternatives Evaluation process is relies on public input received and on technical analysis conducted by the planning team. This information enables airport staff to conduct an evaluation of each draft alternative.
Public input.
The Master Plan Update team has been gathering input from the public.
Through August 2013, over 400 public comments have been received.
The Master Plan Update team has actively listened. In addition to receiving input through comments and through attendance at public meeting, the Master Plan Team has reached out.

The Master Plan Update team visited with Turnagain, Spenard, Sand Lake, Midtown, and Taku/Campbell Community Councils in May, June, August, September, and October 2013. The Master Plan Update team has conducted workshops with Airport staff.

The Master Plan Update team has conducted over 75 stakeholder interviews. The Master Plan Update team has also completed 12 “Listening Post” events. This unique and important effort involved bringing planning team members and staff to community events where Alaskans gather. Alaskans are enabled to learn about the Master Plan Update and provide input without having to attend a regularly scheduled public meeting. Listening Post events were conducted at the March Madness basketball tournament, Slam’n Salmon Derby, 4th Street weekday lunch hour, farmers markets, races and other events.
Technical analysis.
The Master Plan Update team has also been conducting technical analysis to help identify which alternatives best meet the Master Plan Update goals and objectives. Technical analysis included determination of rough order of magnitude cost-estimates, capacity benefits, congestion analysis, and financial benefits.
With public input gathered and technical analysis completed, the Master Plan Update team is able to conduct an alternatives analysis workshop with airport staff.
Alternatives analysis.
The Alternatives Evaluation Workshop was conducted with airport staff in August 2013. Evaluation of alternatives was conducted by Airport staff and department heads. The Master Plan Update team facilitated the evaluation workshop but did not participate in the evaluation.

Each of the five Master Plan Update alternatives was evaluated as to how well it met the Master Plan Update goals at the highest levels of forecast demand.
There are five alternatives for the possible future development of Ted Stevens Anchorage International Airport.
There are five Master Plan Update Goals used for the alternatives evaluation process. The Goals cover five broad topic areas.
Alternative 1 limits investment at ANC to those elements necessary to meet airport design standards while identifying areas for tenants to develop facilities as they see fit.
Alternative 1 Technical Analysis Results:

The estimated cost of airfield development in Alternative 1 is $95 Million. This cost includes upgrades of Runway 15-33, realignment of taxiways, and development of additional cargo parking spots.

The untenable peak delay threshold is the point at which peak hour airplane delays in excess of 30 minutes can be expected to occur at least 10% of the time. In Alternative 1, this threshold would be anticipated to be reached at about 243,000 annual take-offs and landings. Alternative 1 results in slightly reduced efficiency because the required realignment of some taxiways would be expected to lessen airfield efficiency.

Technical analysis showed that at the highest demand levels, airplane takeoff and landing delays would be 10.3 minutes on average. Average annual delay of 10 minutes is typical of more congested U.S. airports.

There are no delay savings associated with Alternative 1 because the Alternative results in increased delay, not reduced delay.
Public input on Alternative 1 was varied. Selected comments regarding Alternative 1 are presented here.
Airport staff evaluation of Alternative 1 is summarized here.
In summary, Alternative 1 meets current demand levels but would not meet long-term forecast demand.
Alternative 2 balances demand between Anchorage International Airport and Fairbanks International Airport, making greater use of existing Alaska International Airport System (AIAS) infrastructure.

Alternative 2 attempts to maintain balance between the airside, terminal, landside, and airport support facilities. Alternative 2 meets the forecast facility requirements with the assumption that half of all “gas-n-go” air cargo flights would utilize Fairbanks International Airport (FAI) instead of Anchorage International Airport. It is anticipated that Alternative 2 would reduce the Anchorage International Airport’s economic benefit to Anchorage but may maintain the economic benefit of aviation in Alaska.

Though Alternative 2 assumes some air cargo demand would be accommodated at Fairbanks International Airport, it should be noted that the ANC and FAI cannot require airlines to utilize a specific airport. Airlines have the right to utilize any public use airport that provides the required facilities.
Alternative 2 Technical Analysis Results:

The estimated cost of airfield development in Alternative 2 is $47 Million. This cost includes upgrades of Runway 15-33, and realignment of taxiways at Anchorage International Airport. This cost does not include costs required to upgrade apron and fueling facilities at Fairbanks International Airport and does not include potential incentives required to encourage greater use of Fairbanks International Airport.

The untenable peak delay threshold is the point at which peak hour airplane delays in excess of 30 minutes can be expected to occur at least 10% of the time. In Alternative 2, this threshold would be anticipated to be reached at about 282,000 annual take-offs and landings. Alternative 2 results in increased efficiency because it relies on both Anchorage and Fairbanks airports.

The AIAS Planning Study did not calculate average annual delay for Alternative 2 but it is estimated to be less than 10 minutes per landing and takeoff on average.

Modest delay savings of about $18 Million per year are estimated for Alternative 2 relative to existing conditions.
Public input on Alternative 2 was varied. Selected comments regarding Alternative 2 are presented here.
Airport staff evaluation of Alternative 2 is summarized here.
In summary, Alternative 2 could meet forecast demand levels. However, airline business decisions would determine the success of Alternative 2.
Alternative 3 utilizes existing airfield infrastructure at Anchorage International Airport to maximize capacity of existing runways by modifying the preferential runway use policy during daytime hours. This policy is currently in effect at all times to reduce noise impacts on residential areas east of Anchorage International Airport. Alternative 3 would result in an increase in noise impacts due to more frequent use of Runway 7L for departures by jet aircraft.

Alternative 3 attempts to meet demand without any substantial investment in new airfield infrastructure. Alternative 3 attempts to balance airside, terminal, landside, and airport support facilities. Alternative 3 meets the forecast facility requirements for terminal, landside, and airport support facilities. However, it does not meet the airside facility requirements in all conditions. The Airport would continue to rely on a single north-south runway, significantly reducing airfield capacity and efficiency during certain weather conditions.
Alternative 3 Technical Analysis Results:

The estimated cost of airfield development in Alternative 3 is $110 Million. This cost includes upgrades of Runway 15-33, realignment of taxiways, and North Airpark development.

The untenable peak delay threshold is the point at which peak hour airplane delays in excess of 30 minutes can be expected to occur at least 10% of the time. In Alternative 3, this threshold would be anticipated to be reached at about 243,000 annual take-offs and landings. This threshold is not increased in Alternative 3 because the Alternative does not increase airport capacity during poor weather which limits airport capacity 10 to 20 percent of the time.

Technical analysis showed that at the highest demand levels, airplane takeoff and landing delays would be 7.2 minutes on average. This is an improvement over Alternative 1 by about 3 minutes.

Alternative 3 delay savings are estimated to be about $89 Million per year. This is a relatively high number reflecting the relative low-cost as compared to the relative reduction in average delay.
Public input on Alternative 3 was varied. Selected comments regarding Alternative 3 are presented here.
Airport staff evaluation of Alternative 3 is summarized here.
In summary, Alternative 3 would increase capacity in good weather but would not meet forecast demand in all weather conditions.
Alternative 4 increases airport capacity by adding a new north-south runway parallel to and west of Runway 15-33. The parallel runways would be separated by 908 feet between runway centerlines. A closely spaced parallel runway provides modest additional capacity. Alternative 4 attempts to balance airside, terminal, landside, and airport support facilities. Alternative 4 is not anticipated to completely meet the forecast facility requirements in all conditions because closely spaced runways cannot be operated independently.
Alternative 4 Technical Analysis Results:

The estimated cost of airfield development in Alternative 4 is $422 Million. This cost includes upgrades of Runway 15-33, realignment of taxiways, Airpark development and the cost of building a new closely-spaced north-south runway and taxiway system.

The untenable peak delay threshold is the point at which peak hour airplane delays in excess of 30 minutes can be expected to occur at least 10% of the time. In Alternative 4, this threshold would be anticipated to be reached at about 243,000 annual take-offs and landings. This threshold is not increased in Alternative 4 because the Alternative does not increase airport capacity during poor weather which limits airport capacity 10 to 20 percent of the time.

Technical analysis showed that at the highest demand levels, airplane takeoff and landing delays would be 8.2 minutes on average. This is an improvement over Alternative 1 by about 2 minutes. It is notable that this is actually less efficient than Alternative 3 which does not include a new runway.

Alternative 4 delay savings are estimated to be about $39 Million per year. This is a relatively low number reflecting the relative high-cost as compared to the relative reduction in average delay.
Public input on Alternative 4 was varied. Selected comments regarding Alternative 4 are presented here.
Airport staff evaluation of Alternative 4 is summarized here.
In summary, Alternative 4 would increase capacity in good weather but would not meet forecast demand in all weather conditions.
Alternative 5 increases airport capacity by adding a new north-south runway parallel to and west of Runway 15-33. The parallel runways would be separated by over 3,000 feet between runway centerlines. A widely spaced parallel runway provides substantial additional capacity. Alternative 5 attempts to balance airside, terminal, landside, and airport support facilities. Alternative 5 is anticipated to completely meet the forecast facility requirements in most conditions because widely spaced runways can be operated independently.
Alternative 5 Technical Analysis Results:

The estimated cost of airfield development in Alternative 5 is $887 Million. This cost includes upgrades of Runway 15-33, realignment of taxiways, Airpark development and the cost of building a new widely-spaced north-south runway and taxiway system.

The untenable peak delay threshold is the point at which peak hour airplane delays in excess of 30 minutes can be expected to occur at least 10% of the time. In Alternative 5, this threshold would be anticipated to be reached at about 323,000 annual take-offs and landings. This threshold is substantially increased relative to Alternatives 1, 3, and 4 reflecting the operational benefit of a widely-spaced runway in all weather conditions.

Technical analysis showed that at the highest demand levels, airplane takeoff and landing delays would be 5.7 minutes on average. This is an improvement over Alternative 1 by about 5 minutes. It is notable that this is the most efficient alternative overall.

Alternative 4 delay savings are estimated to be about $102 Million per year. This is the highest savings evaluated reflecting that Alternative 5 would provide the greatest increase in capacity and reduction in delays and congestion.
Public input on Alternative 5 was varied. Selected comments regarding Alternative 5 are presented here.
Airport staff evaluation of Alternative 5 is summarized here.

<table>
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<tr>
<th>Evaluation</th>
<th>Description</th>
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<tr>
<td><strong>Safety</strong></td>
<td>Meets FAA airport design standards</td>
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<tr>
<td><strong>Efficiency</strong></td>
<td>Meets the highest levels of forecast demand in all weather</td>
</tr>
<tr>
<td><strong>Environmental Awareness</strong></td>
<td>Would impact the Coastal Trail, coast line, expand airport</td>
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<tr>
<td><strong>Fiscal Sustainability</strong></td>
<td>Highest cost, highest revenue potential</td>
</tr>
<tr>
<td><strong>Land Management</strong></td>
<td>Highest and best use of Airport land</td>
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Alternative 5 would meet forecast demand in all weather conditions.
The alternatives evaluation process is complete and relied on public input and technical analysis.
The Airport anticipates growth in landings and takeoffs, passenger boardings, and cargo. The Master Plan Update must provide the Airport with a development plan to meet forecast growth in landings and takeoffs, passenger boardings, and cargo.
The draft plan for development must ensure the airfield can accommodate growth in landings and takeoffs.
Growth in landings and takeoffs will gradually occur over time.
Today, demand levels are a little less than 220,000 annual landings and takeoffs and the airport operates efficiently.

Technical analysis found that if no changes are made to the current airport airfield, delays in excess of 30 minutes per peak hour operation could occur more than 10% of the time when annual landings and takeoffs number about 258,000.
The plan for development must recognize that the Airport operates efficiently today.
The Master Plan must also prepare the airport to accommodate more landings and takeoffs in the future.
The Master Plan must enable the airport to operate efficiently at today’s levels of demand...
...and continue to operate efficiently at the highest levels of forecast demand.
The Draft Plan for Future Airport Development must, therefore, propose a plan that is dependent on demand and provides a series development phases appropriate for future changes in demand levels.
Phase 1 - Minimize Development
The purpose of Phase 1 is to meet current FAA airport design standards and minimize capital expenditures by the Airport. Phase 1 also identifies the most suitable locations for near-term tenant development.
Phase 1 Includes upgrades to the runway and taxiway system to meet FAA standards. Preferred tenant development sites in the North Airpark and South Airpark are identified. A preferred site for a ground run-up enclosure is identified. A ground run-up enclosure is a building used to reduce noise resulting from airplane engine run-ups conducted as part of regular airplane maintenance.

If growth in passengers and landings and takeoffs at Anchorage International Airport continues, additional development would be necessary.
Phase 2: Optimize Anchorage International Airport
Phase 2 includes consolidation of passengers to the south Terminal and optimizes the existing ANC runways by modifying the daytime preferential runway use program.
Phase 2 includes construction of a new concourse on the South Terminal with five new gates. The facility would accommodate both domestic and international passengers and enable all Anchorage air-passengers to arrive and depart from the South Terminal. This would provide a very high customer experience for all airport users.

The passenger concourse on the North Terminal would be demolished and replaced with aircraft parking positions.

The North Terminal lobby building would remain.

The existing parking lot of the North Terminal is the referred location for the tenant development of a future airport hotel.
Phase 2 would provide additional capacity with the existing three-runway system by reducing restrictions on runway use during the hours between 7:00 AM and 10:00 PM. This would increase airplane takeoffs from Runway 7L which would takeoff to the east over Anchorage.

Phase 2 includes development of new cargo parking positions in North Airpark to accommodate cargo activity growth.

A technical analysis of potential noise impacts associated with increased takeoffs using Runway 7L is currently underway and will be published as soon as it is available.

If growth in passengers and landings and takeoffs at Anchorage International Airport continues, additional development would be necessary...
Phase 3 Optimize the Alaska International Airport System (AIAS).
Phase 3 balances demand between Anchorage International Airport and Fairbanks International Airport, making greater use of existing Alaska International Airport System (AIAS) infrastructure.

Unlike Phase 2, which increases the capacity of Anchorage International Airport, Phase 3 would manage demand (e.g. attempt to reduce the growth of flights) at Anchorage International Airport.
Phase 3 would result in the increased use of Fairbanks International Airport to accommodate cargo “gas-n-go” flights which primarily conduct refueling and crew changes in Alaska.

Phase 3’s success would require improvements to facilities at Fairbanks International Airport including AIAS and FAA investments in apron facilities, airline investments in fueling, and other support facilities.

The success of Phase 3 may also depend on financial incentives to encourage airline consideration of Fairbanks International Airport as an alternative to Anchorage.

The technical analysis performed by the AIAS Planning Study found that if half or more of the gas-n-go flights use Fairbanks instead of Anchorage, the both airports could continue to operate efficiently for many years.

However, if growth in landings and takeoffs at Anchorage International Airport continues, additional development would be necessary...
ANC Master Plan Update // Public Open House 6
The Draft Plan for Airport Development

PHASE 4
EXPAND THE AIRPORT

Master Plan Time Frame

219,350
225,280
242,280
261,740
281,940
Phase 4 increases airport capacity by adding a new north-south runway parallel west of Runway 15-33. The parallel runways would be separated by more than 3,000 feet between runway centerlines. A widely spaced parallel runway meets the highest levels of forecast demand.
Phase 4 includes an approximately 8,000-foot-long runway approximately 3,400 feet west of existing Runway 15-33 and a parallel taxiway 520 feet east of the new runway. The wide spacing of the two north-south parallel runways would substantially increase capacity for landings and takeoffs. During poor weather, the two runways would accommodate landings and takeoffs at the same time, providing substantial additional capacity in all weather conditions in which north-south runways are in use.

Phase 4 would have substantial environmental impacts requiring mitigation. A portion of the Tony Knowles Coastal Trail would require realignment but the Airport is committed to providing a contiguous Coastal Trail and is committed to working with trails and recreation representatives to identify an acceptable improvement to maintain the continuity of the Coastal Trail. The Master Plan does not authorize the Airport to implement Phase 4. The Master Plan identifies the Airport’s preferred location for a new runway to accommodate substantial growth in landings and takeoffs if and when they occur. If growth in landings and takeoffs does not occur, the Airport would not be interested in implementing Phase 4. However, if growth in landings and takeoffs does occur, the Airport would seek to further study the potential implementation of Phase 4 in future years.
The demand dependent, phased approach provides the airport with a progressive plan for accommodating an uncertain future.
It is important to understand how the phased approach is anticipated to occur. The Airport would implement Phase 1 immediately. Phase 1 only includes upgrading existing facilities to meet FAA standards and identifies preferred tenant development locations. When existing facilities are in need of rehabilitation, the rehabilitated infrastructure would be required to meet current FAA standards.

These projects will only be undertaken when the facilities would need to be replaced.
Should growth in landing and takeoffs and passengers not occur, the Airport would not implement any further phases.
The Airport would implement Phase 2 only if there is continued growth in landings and takeoffs and growth in passengers. Phase 2 would enhance the efficiency of the Airport in the most fiscally responsible manner possible by making better use of existing assets.
Should growth in landing and takeoffs and passengers not occur, the Airport would not implement any further phases.
The Airport would implement Phase 3 only if there is continued growth in landings and takeoffs. Phase 3 would enhance the efficiency of the AIAS and would require expansion of Fairbanks International Airport and possible airline incentives.
Should growth in landing and takeoffs and passengers not occur, the Airport would not implement any further phases.
The Airport would implement Phase 4 only if there is continued growth in landings and takeoffs. Phase 4 would require a substantial undertaking as the additional runway considered in Phase 4 is very expensive and has substantial impacts. *The Master Plan does not authorize the Airport to implement Phase 4.*

Only if consistent, sustained growth in landings and takeoffs is demonstrated over many years would there be justification to consider building a new runway. The Airport would be required to conduct environmental analysis, evaluate alternatives, seek airline and legislative approvals and permitting before Phase 4 could be implemented.

The Airport must plan proactively to effectively prepare for the eventual, possible need for a new runway.

The Master Plan simply defines the least impactful, most beneficial place to construct a new runway if it is eventually needed.
The demand dependent, phased approach has the following advantages:

1. It is adaptable to future demand levels because the Airport would only implement improvements as necessitated by actual demand.
2. It is financially responsible because it prioritizes low or no cost enhancements protecting Alaska’s major air transportation gateway.
The Master Plan Update is nearing its conclusion. Next steps include:

1. Collecting and responding to comments
2. Refinements and finalization of the plan.
3. Addressing support facilities including deicing facilities and other secondary facilities.
4. Preparation of an implementation plan
5. Hosting of Open House 7 in December to present the final development plan
6. Publication of the completed Master Plan documents
Thank you for viewing the Ted Stevens Anchorage International Airport Master Plan Update Public Open House 6 presentation. You may submit a comment to the Master Plan Update team on the project website at www.ancmasterplan.com or by sending an email to contact@ancmasterplan.com.