Appendix

Master Plan

Nephi

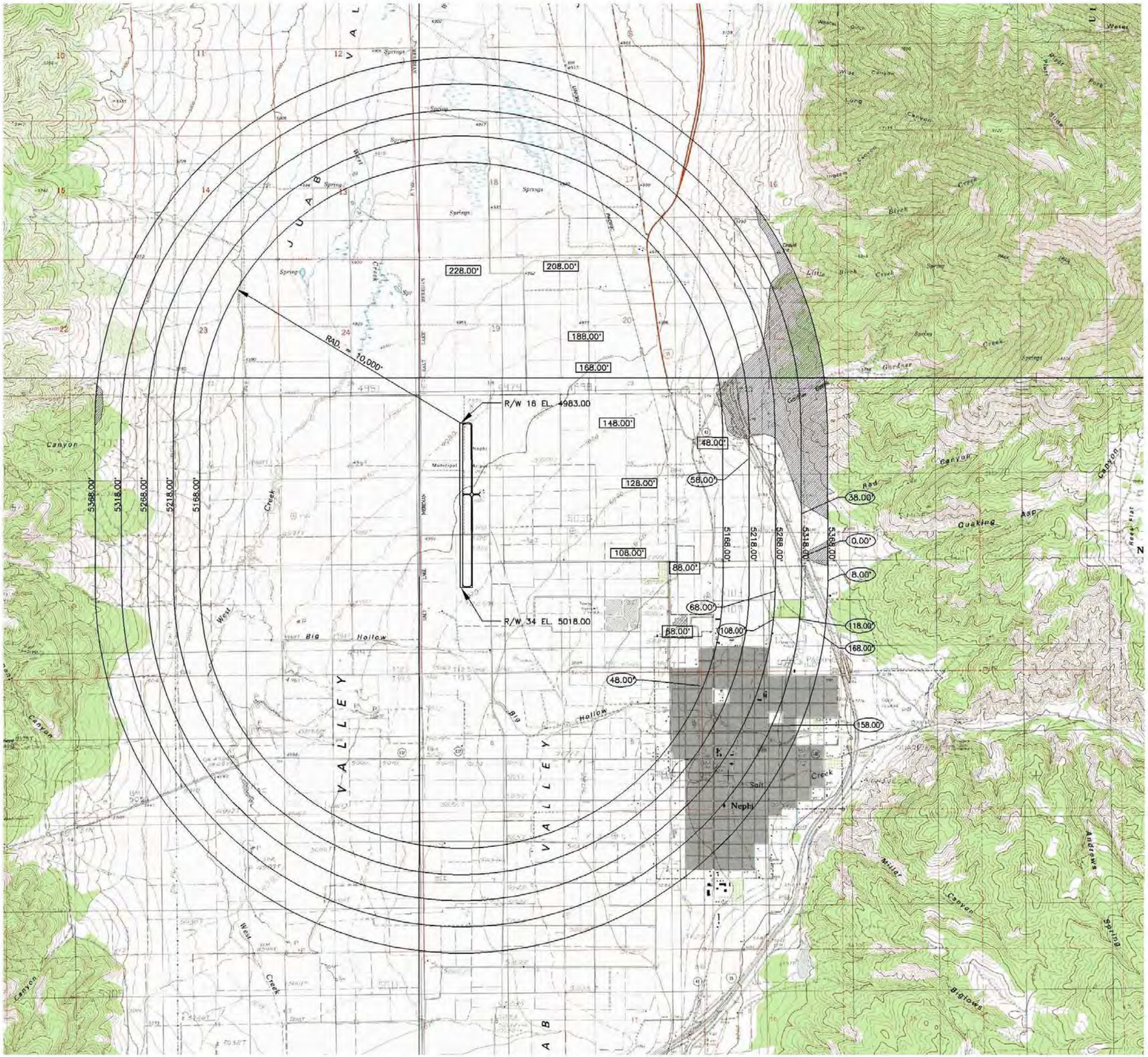
Municipal Airport

Appendix One

> Existing Nephi Municipal Airport Height Hazard Zoning Map
> Juab County Land Use Code/Airport Protection

Master Plan

Nephi Municipal Airport



LEGEND

188.00 – DISTANCE BETWEEN GROUND AND HORIZONTAL SURFACE

– TERRAIN OBSTRUCTION AREA

8.00' – DISTANCE BETWEEN GROUND AND CONICAL SURFACE

N

0 1000 2000 4000

SCALE IN FEET

DESIGNED PG
CHECKED PG
DRAWN DSW

DATE APPROVED 03/03
PROJECT NO.
SCALE AS SHOWN

REVISION DATE
REVISION DATE
REVISION DATE

CREAMER & NOBLE ENGINEERS
ST. GEORGE, UTAH

NEPHI AIRPORT TOPO MAP

AIRPORT AIRSPACE PLAN VIEW

SHEET NO.
1 of 1

Juab County

Land Use Code

July 2, 2007

DISTRICT REGULATIONS

TABLE OF CONTENTS

TITLE 12-1-000 PLANNING AND ZONING

12-1-1 GENERAL PROVISIONS

12-1-101 SHORT TITLE

This Title shall be known as the "Land Use Ordinance of Juab County, Utah" and may be so cited and pleaded.

12-1-102 PURPOSE

This ordinance and the regulations and restrictions contained herein are adopted and enacted for the purpose of promoting the health, safety, morals, convenience, order, prosperity, and welfare of the present and future inhabitants of Juab County, including among other things, the lessening of congestion in the streets or roads, securing safety from fire and other dangers, providing adequate open spaces, light and air, classification of land uses, distribution of land development and utilization, protection of the tax base, securing economy in governmental expenditures, fostering agricultural and other industries, and to promote the development of a more wholesome, serviceable and attractive county resulting from an orderly, planned use of resources.

12-1-103 INTERPRETATION

In interpreting and applying the provisions of this section, the requirements contained herein are declared to be the minimum requirements for the purposes set forth.

12-1-104 CONFLICT

This shall not nullify the more restrictive provisions of covenants, agreements, other ordinances or laws, but shall prevail notwithstanding such provisions which are less restrictive.

12-1-105 EFFECT ON PREVIOUS ORDINANCES AND MAPS

The existing ordinances covering zoning, in their entirety, and including the maps heretofore adopted and made a part of said ordinances, are hereby superseded, amended and re-codified to read as set forth herein; provided, however, that this Ordinance, including the attached map or maps shall be deemed a continuation of previous codes and not a new enactment, insofar as the substance of revisions of previous codes is included in this Ordinance, whether in the same or in different language; and this Ordinance shall be so interpreted upon all questions of construction relating to tenure of officers and boards established by previous codes to questions of conforming or nonconforming uses and buildings and structures, and to questions as to the dates upon which such uses, buildings, or structures became conforming or nonconforming.

12-106 LAND USE APPLICATION ENTITLED TO APPROVAL

An applicant is entitled to approval of a land use application if the application conforms to the requirements of the Juab County land use maps, zoning maps, and applicable land use ordinance in effect when a complete application is submitted and all fees have been paid, unless:

1. the land use authority, on the record, finds that a compelling, countervailing public interest would be jeopardized by approving the application; or
2. in the manner provided by local ordinance and before the application is submitted, the county has formally initiated proceedings to amend its ordinances in a manner that would prohibit approval of the application as submitted.

The county shall process an application without regard to proceedings initiated to amend the counties ordinances if:

1. 180 days have passed since the proceedings were initiated; and
2. The proceedings have not resulted in an enactment that prohibits approval of the application as submitted.

NEPHI MUNICIPAL AIRPORT

12-1-27 AIRPORT PROTECTION

12-1-2701 PURPOSE

This section has been enacted to provide for safe operation of the existing Nephi Municipal Airport and those persons and aircraft that use this airport.

12-1-2702 AIRPORT DEFINITIONS

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1. Airport. The Nephi Municipal Airport

2. Airport Approach, Transitional, Horizontal, and Conical Zones. These zones apply to the area under the approach, transitional, horizontal, and conical surfaces and are defined in this chapter.

3. Airport Elevation. The elevation in feet above mean sea level of the highest point of the landing areas of the airport.

4. Airport Hazard. Any structure or natural growth or use of land which obstructs or restricts the airspace required for the safe flight of aircraft in landing, taking off, or maneuvering at or in the vicinity of the airport, or is otherwise hazardous to such landing, taking off, or maneuvering of aircraft.

5. Airport Runway. A defined area on an airport prepared for landing and take-off of aircraft along its length. For the purpose of this ordinance, the runway length shall be 7200 feet.

6. Airport Primary Surface. A surface longitudinally centered on a runway. When the runway has a specifically prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. The width of the primary surface of a runway will be that width prescribed in Part 77 of the Federal Aviation Regulations (FAR) for the most precise approach existing or planned for either end of that runway. The elevation of any point in the primary surface is the same as the elevation of the nearest point on the runway centerline.

7. Airport Utility Runway. A runway intended solely for the operation of aircraft using visual approach procedures with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan, a military service's approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

8. Airport Non-Precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in, non-precision instrument approach has been approved or planned, and for which no precision approach facilities are planned or indicated on an FAA-planned document or military service's military airport planning document.

9. Airport Precision Instrument Runway. Precision instrument runway means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan; or a military service's approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

12-1-2703 HEIGHT LIMITING ZONES

In order to carry out the provisions of this ordinance, there are hereby created and established certain height limiting zones, which include all the land lying within the utility and non-precision instrument approach zones, transition zones, horizontal zones, and conical zones. Such zones are shown on the Municipal Airport Zoning Map, which is attached to this ordinance and made a part hereof to the same extent as if said map and the information thereon were fully described and set forth herein. The various height limiting zones are hereby established and defined as follows:

1. Runway Non-Precision Instrument Approach Zone. An approach zone is established at the end of Runway 16 based on a 6300 foot runway, for landing and take-offs. The Non-Precision Approach Zone shall have a width of 1000 feet at a distance of 200 feet beyond the end of the runway, widening hereafter uniformly to a width of 3500 feet at a distance of 10,200 feet beyond the end of the runway, its centerline being the continuation of the centerline of the runway. The Approach Zone shall rise 1 foot in height for each 34 feet in horizontal distance beginning at a point 200 feet from and

at the centerline elevation of the runway and extending to a distance of 10,200 feet from the end of the runway.

2. Runway Precision Instrument Approach Zone. An approach zone is established at the end of Runway 34 for landing and take-offs based on a 7200 foot runway. The Precision Approach Zone shall have a width of 1000 feet at a distance of 200 feet beyond the end of the runway, widening hereafter uniformly to a width of 16,000 feet at a distance of 50,200 feet beyond the end of the runway, its centerline being the continuation of the centerline of the runway. The Approach Zone shall rise 1 foot in height for each 50 feet horizontal distance for the first 10,000 feet, beginning at a point 200 feet from and at the centerline elevation of the runway, then shall rise 1 foot in height for each 40 feet horizontal distance for an additional 40,000 feet, extending to a total distance of 50,200 feet from the end of the runway.

3. Transition Zone. Transition zones are hereby established adjacent to each runway and approach zone as indicated on the airport zoning map. Transition zones symmetrically located on either side of runways have variable widths as shown on the airport zoning map. Transition zones extend outward from a line on either side of the centerline of the runway, for the length of such runway plus 200 feet on the end, and are parallel to and level with such runway centerlines. Part The transition zone along such runway slopes upward and outward 7 feet horizontally for each 1 foot vertically to the point where they intersect the surface of the horizontal zone. Further, transition zones are established adjacent to approach zones for the entire length of the approach zone up to the point of intersection with the horizontal zone. These transition zones have variable widths, as shown on the airport zoning map. Such transitions flare symmetrically with either side of the runway approach zone from the base of such zone and slope upward and outward at the rate of 7 feet horizontally for each 1 foot vertically to the points where they intersect the surfaces of the horizontal and conical zones.

4. Horizontal Zone. A horizontal zone is hereby established as the area within arcs of radius from points at the end of the runway at the centerline extension and having a radius of 10,000 feet at 150 feet above the airport elevation. The horizontal zone does not include the utility and non-precision instrument approach zone and the transition zone.

5. Conical Zone. A conical zone is hereby established as the area that commences at the periphery of the horizontal zone and extends outward for a distance of 4,000 feet. The conical zone does not include the utility and non-precision instrument approach zone and transition zone. The conical

zone shall rise 20 feet in height for each 1 foot in horizontal distance beginning at the periphery of the horizontal zone, extending to a height of 350 feet above the airport elevation.

12-1-2704 HEIGHT LIMITATIONS

Except as otherwise provided in this ordinance, no structure or tree shall be erected, altered, allowed to grow, or maintained in any height limiting zone created by this ordinance to a height in excess of the height limit herein established for each of the zones in question as follows:

1. Runway Non-Precision Approach Zone. 1 foot in height for each 34 feet horizontal distance beginning at a point 200 feet from the end of the runway and at the centerline elevation, extending a distance of 10,000 feet.

2. Runway Precision Instrument Approach Zone. 1 foot in height for each 50 feet horizontal distance beginning at a point 200 feet from the end of the runway and at the centerline elevation, extending a distance of 10,000 feet, then 1 foot in height for each 40 feet horizontal distance, extending for an additional 40,000 feet.

3. Transition Zone. Slope 7 feet outward for each 1 foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation. In addition to the foregoing, there are established height limits sloping 7 feet outward for each 1 foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface.

4. Horizontal Zone. 150 feet above the airport elevation.

5. Conical Zone. 20 feet in height for each 1 foot of horizontal distance beginning at the periphery of the horizontal zone, extending to a height of 350 feet above the airport elevation.

6. Accepted Height Limitation. Nothing in this ordinance shall be construed as prohibiting the growth, construction, or maintenance of any tree or structure to a height consistent with the terms of this chapter.

7. **Most Restrictive Limitation Prevails. Where a zone is covered by more than one height limitation, the more restrictive limitations shall prevail.**

12-1-2705 USE REGULATIONS.

1. Notwithstanding any other provisions of this ordinance, no use shall be made of land within any height limiting zone established by this ordinance in such a manner as to do any of the following:

    a. Create electrical interference with radio communication between the airport and aircraft;
    b. Make it difficult for pilots to distinguish between airport lights and other lights;
    c. Result in glare in the eyes of pilots using the airport;
    d. Impair visibility in the vicinity of the airport; or
    e. Otherwise endanger the landing, taking off, or maneuvering of aircraft.

2. Notwithstanding any other provisions of this ordinance, no places of public assembly, including, but without limitation, apartment, barracks, churches, hospital, hotels, mobile home parks, multiple-family dwellings, recreational vehicle parks, schools and theaters, shall be erected or otherwise located within any of the areas established as a runway protection zone on the airport layout plan.

12-1-2706 NONCONFORMING USES

1. Regulations not Retroactive. The regulations prescribed by this ordinance shall not be construed to require the removal, lowering, or other changes or alterations of any structure or tree not conforming to the regulations as of the effective date of this ordinance or otherwise interfere with the continuation of any nonconforming use. Nothing herein contained shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this ordinance and is diligently prosecuted.

2. Marking and Lighting. Notwithstanding the provision of A above, the owner of any nonconforming structure or tree, is hereby required to permit the installation, operation and maintenance thereon of such markers or lights as shall be deemed necessary by the airport manager to indicate to the operators of aircraft in the vicinity of the airport, the presence of such airport hazards.

1. Future Uses. Except as specifically provided in paragraph 1, 2, 3, and 4 hereunder, no material change shall be made in the use of the land and no structures or trees shall be erected, altered, planted, or otherwise established in any zone hereby created unless a permit thereof shall have been applied for and granted by the planning commission. Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient particularity to permit it to be determined whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted.

2. In the territory lying within the limits of the horizontal zone and the conical zone, no permit shall be required for any tree or structure less than 75 feet of vertical height above the ground, except when because of terrain, land contour, or topography features, such tree or structure would extend above the height limits prescribed for such zone.

3. In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than 75 feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.

4. In the territories within the limits of the transition zone beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than 75 feet of vertical height limit prescribed for such transition area except when such tree or structure would extend above the height limits prescribed for such zones.

5. Nothing contained in any of the foregoing exceptions will be construed as permitting or intending to permit any construction, alteration, or growth of any structure or tree in excess of any of the height limits established by this ordinance as set forth in 12-1-2704.

6. Existing Uses. No permit shall be granted that would allow the establishment or creation of an airport hazard or permit a nonconforming use, structure or tree to be made or become higher, or become a greater hazard to air navigation, than it was on the effective date of this ordinance or any amendments thereto or than it is when the application for a permit is made. Except as indicated, all applicants for such a permit shall be granted.

7. Nonconforming Uses Abandoned or Destroyed. Whenever the Building Inspector determines that a nonconforming structure or tree has been abandoned or more than 50% torn down, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the application or otherwise deviate from the ordinance.

8. Special Permit. Any person desiring to erect or increase the height of any structure or permit the growth of any tree or use property not in accordance with the regulations prescribed in this ordinance, may apply to the Legislative Body for a Special Permit from such regulations. Such Special Permit shall be allowed where it is duly found that a literal application or enforcement of the regulations would result in practical difficulty, unnecessary hardship, or a taking, and the relief granted would not be contrary to the public interest but will do substantial justice and be in accordance with the spirit of this ordinance. Upon acceptance by the Legislative Body of any application for a Special Permit, Juab County will provide written notice to Nephi City, as the Airport Sponsor, of said application prior to any hearing or action on the application.

9. Hazard Marking and Lighting. Any regular or special permit granted may, if such action is deemed advisable to effectuate the purpose of this ordinance and be reasonable in the circumstances, as a condition, require the owner of the structure or tree in question at his own expense, to install, operate, and maintain thereon such markers and lights as may be necessary to indicate to flyers the presence of any airport hazard.

12-1-2708 CONFLICTING REGULATIONS

Where there exists a conflict between any of the regulations or limitations prescribed in this ordinance or any other regulations applicable to the same zone, whether the conflict be with respect to the height of structures or trees, the use of the land, or any other matter, the more stringent limitation or requirement shall govern and prevail.

Appendix Two

> 1997 Environmental Assessment Wetlands Mapping for New Runway 16/34 at Nephi Municipal Airport

> Natural Resources Conservation Service Soils Mapping

Master Plan

Nephi

Municipal Airport

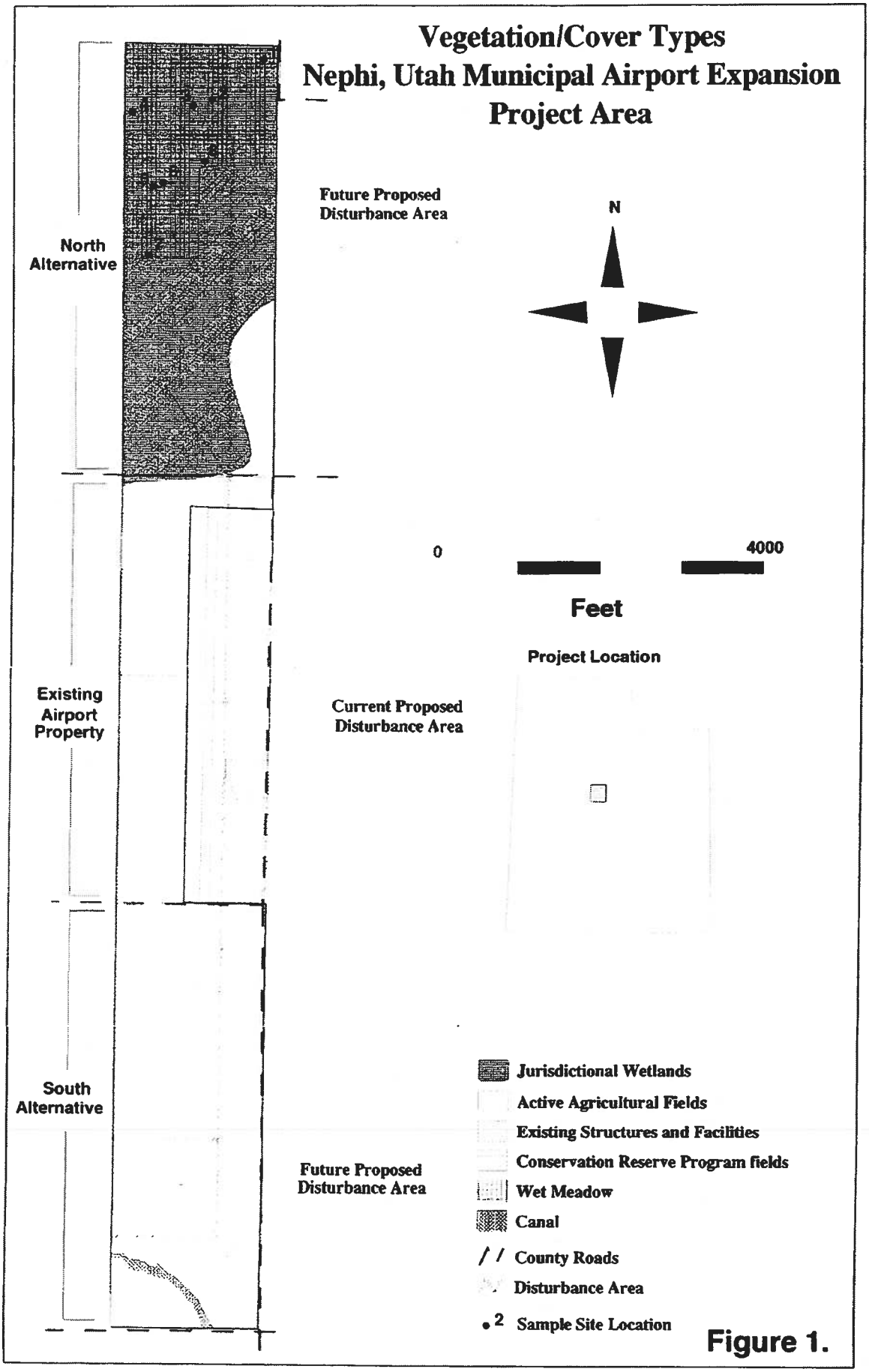
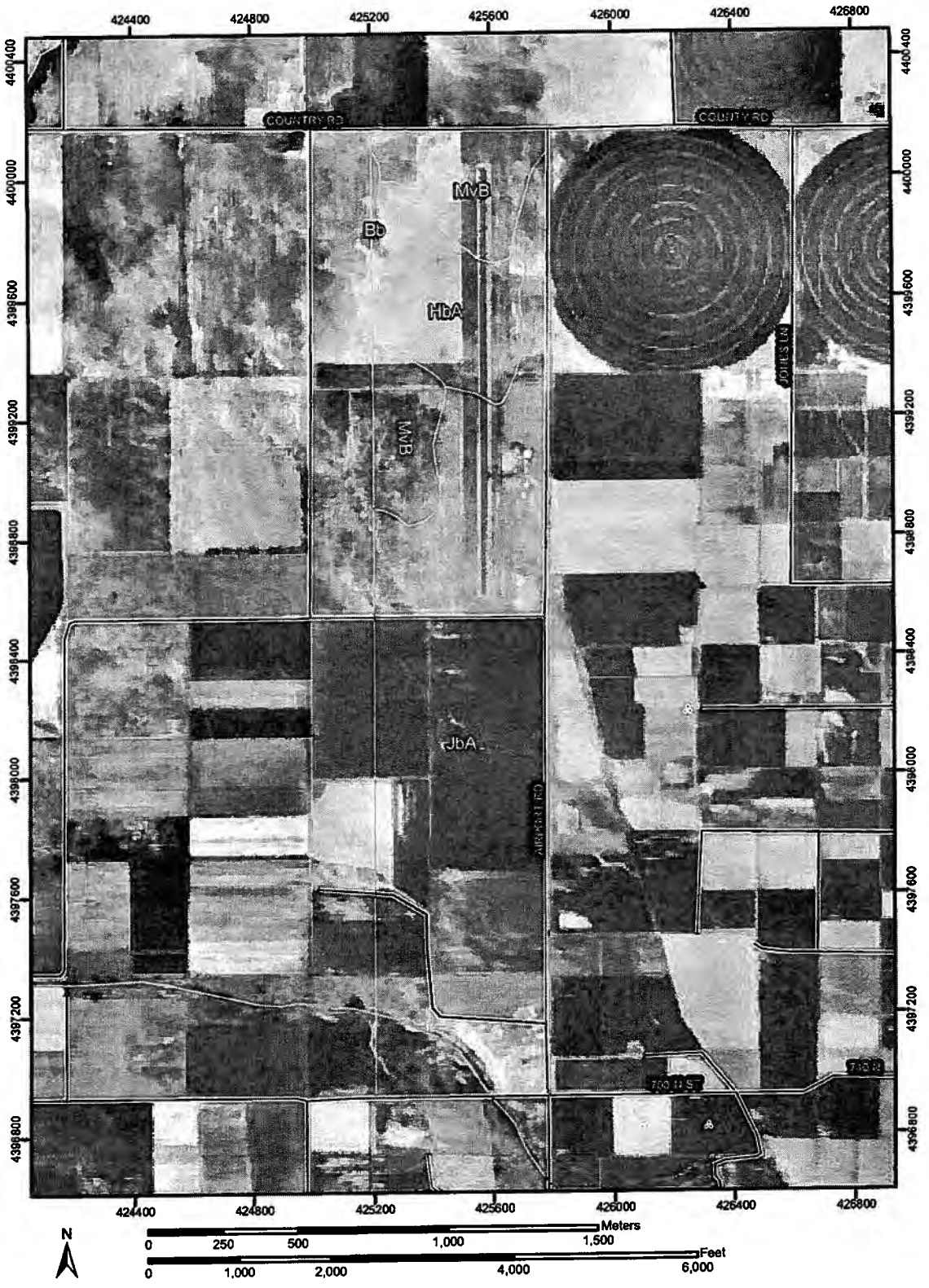

Vegetation/Cover Types
Nephi, Utah Municipal Airport Expansion
Project Area
Future Proposed
Disturbance Area
N
North
Alternative
0
4000
Feet
Project Location
Existing
Airport
Property
Current Proposed
Disturbance Area
South
Alternative
Future Proposed
Disturbance Area
Jurisdictional Wetlands
Active Agricultural Fields
Existing Structures and Facilities
Conservation Reserve Program fields
Wet Meadow
Canal
County Roads
Disturbance Area
2 Sample Site Location

Figure 1.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4398400
4398000
4397600
4397200
4396800
COUNTRY RD
COUNTRY RD
MvB
Bb
HbA
MvB
JbA
JONES LN
700 N ST
N
0
250
500
1,000
1,500
Meters
0
1,000
2,000
4,000
6,000
Feet

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features

Municipalities
- Cities
- Urban Areas

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails

Roads
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 12N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Fairfield-Nephi Area, Utah
Survey Area Data: Version 3, Jan 4, 2007

Date(s) aerial images were photographed: 8/14/1993; 8/17/1993; 9/9/1993; 9/12/1997; 10/1/1997; 8/6/1998

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Fairfield-Nephi Area, Utah (UT608)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Bb	Benjamin silty clay loam	3.0	0.7%
HbA	Hansel silt loam, 0 to 2 percent slopes	59.5	12.8%
JbA	Juab loam, 0 to 2 percent slopes	332.0	71.6%
MvB	Musinia silty clay loam, moist, 0 to 2 percent slopes	69.2	14.9%
Totals for Area of Interest (AOI)		463.8	100.0%

Appendix Three

> Capital Improvement Program (CIP), November 2010

Master Plan

Nephi

Municipal Airport

Utah Division of Aeronautics

Airport Development Plan Project List

	Nephi Municipal	Airport Sponsor:	Nephi City	Present ARC:	C-II	Future ARC:	C-II	
Sponsor Contact:	Randy McKnight	Tele. Ph #	435-623-0822	E-mail:	rmcknight@nephi.utah.gov		Date Submitted:	10-Nov-10
Consultant Contact:	Creamer & Noble / Mel Leseberg	Tele. Ph #	435-673-4677	E-mail:	mleseberg@creamerandnoble.com			

Project Description & Cost Estimate

Proposed Calendar Year to Begin Project	Project Description	Project Identification in ALP/MP	Project Location on ALP	Sponsor Priority Number	Estimated Total Cost of Project	Cost Allocation $		
						Federal Participation	State Participation	Sponsor Participation
Federally Funded Projects						95.00%		5.00%
2011	Snow Removal Equipment (SRE),							
	SRE Building & Pavement Preservaton			1	$ 425,565	$ 404,287		$ 21,278
2012	Bank GA Entitlement							
2013	Expand Apron			2	$ 789,747	$ 750,000	$ 10,000	$ 29,747
2014	Repay borrowed funds							
2015	Bank GA Entitlement							
2016	Apron Expansion			3	$ 473,684	$ 450,000		$ 23,684
2017	Repay borrowed funds							
Participation Totals					**$ 1,688,996**	**$ 1,604,287**	**$ 10,000**	**$ 74,709**
State Funded Projects							90.00%	10.00%
2016	Crack Seal, Seal Coat, & Paint				$ 135,000		$ 121,500	$ 13,500
	Airport Pavements						$ -	$ -
							$ -	$ -
							$ -	$ -
							$ -	$ -
							$ -	$ -
							$ -	$ -
Participation Totals					**$ 135,000**		**$ 121,500**	**$ 13,500**

Note: Attach additional sheets as necessary to fully describe projects or to add information needed for a full understanding of project scope, location and costs.

Appendix Four

> Nephi Municipal Airport Instrument Approach Feasibility Analysis (2002)

Master Plan

Nephi Municipal Airport

Nephi Municipal Airport
Nephi, Utah

Overview

Nephi Municipal Airport currently does not have published instrument approach procedures. This report is published to examine the feasibility of satellite-based Area Navigation (RNAV) procedures. Airspace Safety Analysis Corporation (ASAC) conducted an aeronautical feasibility study to establish a Global Positioning System (GPS) instrument approach procedures (IAP) to support operations into Nephi Municipal Airport, Nephi, Utah. The purpose of the study was to determine the lowest possible weather and descent minimums for RNAV (GPS) approach procedures to **Runway 16/34** at Nephi Municipal Airport. It is expected the conclusions of this study will support Federal Aviation Administration (FAA) acceptance and future publication as an FAA approved procedure to Nephi Municipal Airport.

Data Analysis and Design

This study is based on a navigation facility and obstacle database established on November 15, 2002, for a Scope of Work as requested by Utah Department Of Transportation Aeronautical Division. An obstacle database was compiled from maps/charts/Digital Terrain Elevation Data (DTED) of National Imagery and Mapping Agency (NIMA) and the United States Geological Survey (USGS) origin and from published FAA information. Airport, runway, facility data and additional obstacle data from the FAA's Instrument Approach Procedure Automation (IAPA #2) tool was also incorporated into this study. The IAP design criteria used to complete this study was based on the Federal Aviation Administration Order 8260.3B Change 19 *United States Standard for Terminal Instrument Procedures* and associated IAP guidance. Assumptions that were made in evaluating the procedure to the Runway 16/34 thresholds are as follows:

1. A Runway 16/34 length of 4713 feet was used with runway elevations of 5009 feet above mean sea level (AMSL) for the north end (RWY 16 Threshold), 5009 feet AMSL for the south end (RWY 34 Threshold) and a touchdown zone elevation of 5009 feet AMSL for Runway 16 and a touchdown zone elevation of 5009 feet AMSL for Runway 34.
2. An airport and surrounding area Magnetic Variation (MAGVAR) of fourteen (14) degrees east was applied to the preliminary analysis.
3. Procedures were designed with the assumption that an operational Automated Weather Observing System (AWOS) with an approved altimeter source and reporting capability is installed.
4. An adverse assumption of 100 feet above ground level (AGL) was applied for vegetation in all procedure segments per guidance from the FAA.
5. No adverse assumption for unknown/man-made structures below 200 feet was evaluated in the final/missed approach segments. It is expected that an airborne evaluation by FAA Flight Inspection will be conducted to identify uncharted and potentially unknown obstacles near the runway/airport.

6. No known vegetation/terrain or man-made obstacles exist off the approach end of Runway 16/34 that would penetrate a 34:1 slope beginning at a point 200 feet from the runway landing surface.

RNAV (GPS) Runway 16

Evaluation: As mentioned, the recently approved FAA Order 8260.3B Change 19 *United States Standard for Terminal Instrument Procedures* was used to develop an RNAV (GPS) approach to Runway 16. In the procedure design phase, several obstacle clearing techniques and final approach courses were evaluated to remove the effects of rising terrain and obstacle penetrations to the final and the missed approach segments. The challenge for this IAP is certainly the effects of terrain located in the vicinity of Nephi Municipal Airport. During the development of the Runway 16 procedure the missed approach point was established at 1 nautical mile from the threshold and the Minimum Descent Altitude (MDA) was raised 80 feet to defeat obstacles in the missed approach segment. A standard missed approach segment was constructed back to an initial approach fix with an immediate turnout back to an initial located to the north of the airfield. A complete environmental analysis is the responsibility of the FAA and further coordination with local airport and air traffic authorities may require further evaluation.

Recommendation: The highest probability exists for a standard RNAV (GPS) IAP to Runway 16 at Nephi Municipal Airport. A MDA of 611 feet Height Above Touchdown (HAT) and a visibility requirement of 1 ¼ mile can be expected for category A aircraft, while a MDA of 611 feet HAT and a visibility requirement of 1 ¾ mile can be expected for Category C aircraft. It should be noted that the FAA may require precipitous terrain adjustments in the final approach segment, resulting in higher minimums.

RNAV (GPS) Runway 34

Evaluation: The effects of terrain had a impact on procedure design for procedures to Runway 34 at Nephi Municipal Airport. The final approach segment had to be offset 5 degrees and the intermediate segment offset 25 degrees. The final approach segment was extended to 6.5 nautical miles in length and a stepdown fix added at 2.7 nautical miles from the threshold. The missed approach point (MAP) was established 3000 feet from the threshold. A standard missed approach segment was constructed back to the initial approach fix with an immediate turnout back to the initial approach fix located to the east of the airfield. A complete environmental analysis is the responsibility of the FAA and further coordination with local airport and air traffic authorities may require further evaluation.

Recommendation: An RNAV (GPS) IAP to Runway 34 at Nephi Municipal Airport appears to possible, however, in this case, offsetting the approach course results in a nonstandard circle-to-land approach. A standard circle-to-land procedure that would approach the airfield from a course not aligned with the runway would have the highest possibility of approval by the FAA. A Minimum Descent Altitude (MDA) of 311 feet Height Above Touchdown (HAT) and a visibility requirement of 1 mile can be expected for category A through category C aircraft. It should be noted that the FAA may require precipitous terrain adjustments in the final approach segment, resulting in higher minimums.

Both runways require further analysis prior to any conclusions or finality in the feasibility of these recommendations. Further study would include, but is not limited to, obstacle verification/surveys, additional terrain analysis in the area, interviews with FAA Air Traffic Control facilities, and considerations by the user community (ALPA/AOPA). The establishment of a more efficient missed approach ground track is an area that might need further direct coordination with local airport officials. As discussed in the evaluation, an Environmental Impact Statement (EIS)/Environmental Assessment (EA)/Categorical Exclusion (CATEX) may be required by the FAA. On occasion, the FAA has required additional environmental evaluation on new IAP's or when an IAP final approach course (FAC) has changed from existing IAP's by greater than three (3) degrees. ASAC believes a full CATEX environmental review could be supported for this approach. Significant time involvement can be expected by FAA Flight Standards Division for the approval process.

Conclusion

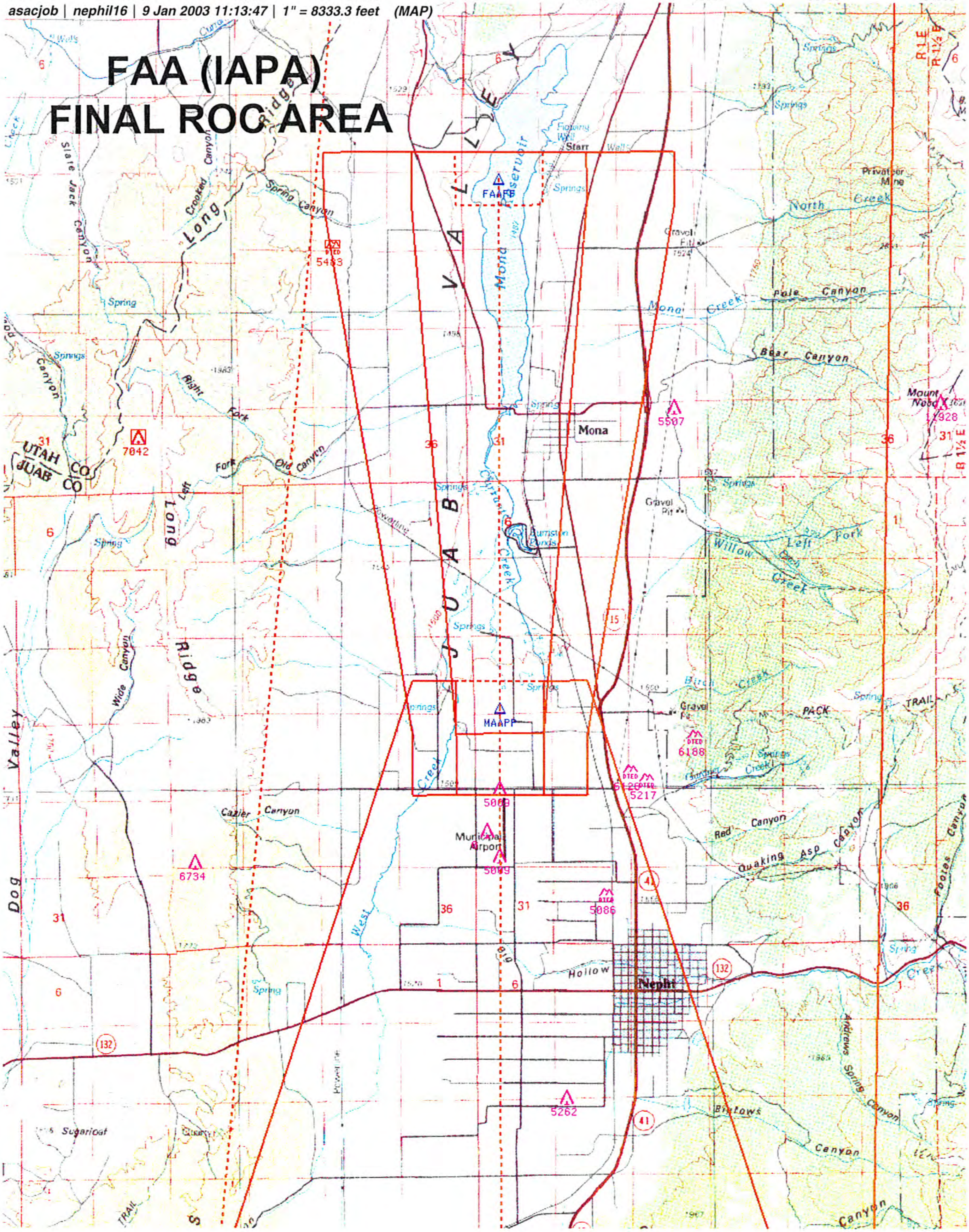
Properly equipped aircraft and satellite-based navigation technology give airports state-of-the-art approach procedures to support safety enhanced operation and airport utilization under IFR conditions. The implementation of the RNAV (GPS) RWY 17 and RNAV (GPS) RWY 35 approach procedures into Nephi Municipal Airport are recommended and would be considered significant tools in support of safe and efficient aircraft operations in the area. With the submission of a complete procedure design package, FAA Airborne Flight Inspection, and approval of the Flight Standards Division, these procedures can be considered very positive solutions to enhanced aviation safety and capacity for Nephi Municipal Airport.

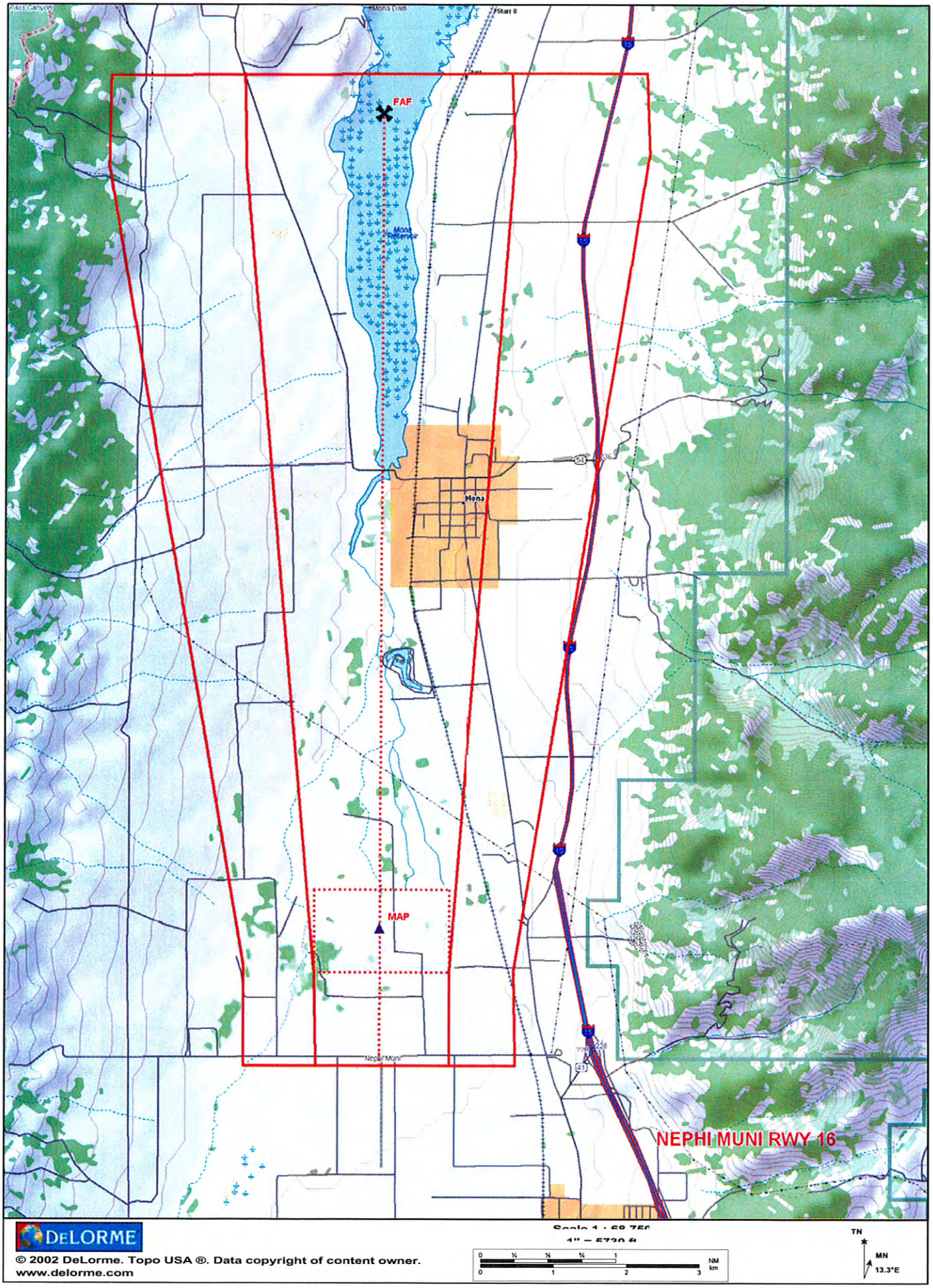
Included as attachments to this Feasibility Study are color drawings of the RNAV (GPS) required obstacle clearance (ROC) areas. These angular areas are supplemented with additional design points for understanding and discussion.

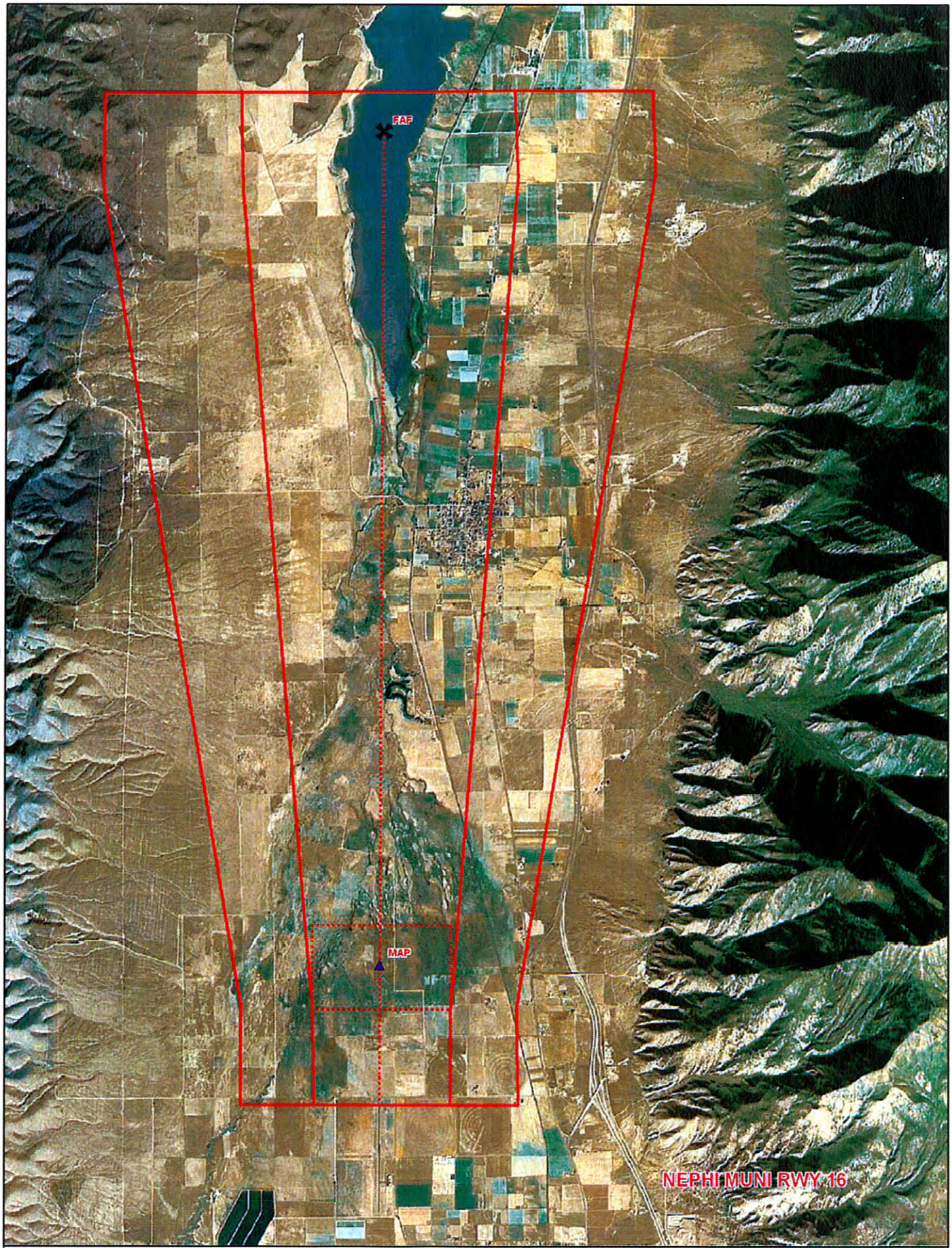
NM 1 2 3 4 5 6 7 8 9 10

FT 8000 16000 24000 32000 40000 48000 56000 64000

asacjob | nephil16 | 9 Jan 2003 11:13:47 | 1" = 8333.3 feet (MAP)




FAF
MAP
Mona
Mona Reservoir
Mona Dam
Nephi Mark
NEPHI MUNI RWY 16
DeLORME
© 2002 DeLorme. Topo USA ®. Data copyright of content owner.
www.delorme.com
TN
MN
13.3°E
NM
km

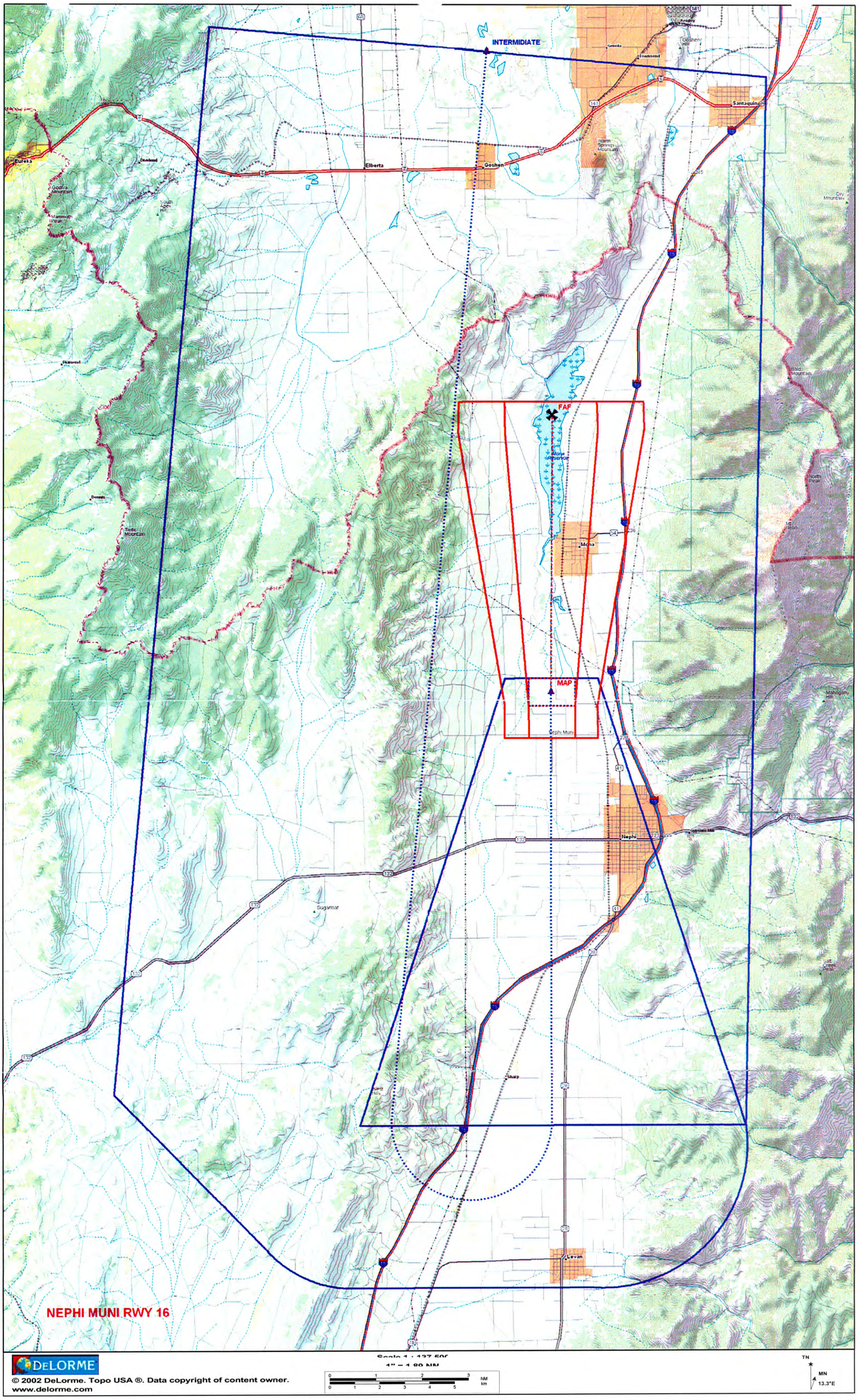


DELORME

Scale 1 : 69,756
1" = 5730 ft

0 ½ ½ ½ 1 NM
0 1 2 3 km

TN
MN
13.3°E



AC 150/5300-13 (CHANGE 6)
TABLE A-16C SUMMARY
NONPRECISION APPROACH REQUIREMENTS

NEPHI (U14)
RNAV (LNAV) RWY 16

VISIBILITY MINIMUMS	1 SM	> 1 SM
Height Above Touchdown (HAT)	Does Not Meet Requirements	Meets Requirements [1]
TERPS Paragraph 251 Surfaces		Data Not Available [2]
Precision Object Free Area (POFA)		Data Not Available [2]
Airport Layout Plan (ALP)		Does Not Meet Requirements [3]
Minimum Runway Length		Meets Requirements [4]
Runway Markings		Does Not Meet Requirements [5]
Holding Position Signs and Markings		Does Not Meet Requirements [6]
Runway Edge Lights		Meets Requirements [7]
Parallel Taxiway/Obstacle Free Zone		Possible [8]
Approach Lighting System (ALS)		Meets Requirements [9]
Runway Design		Data Not Available [2]
Threshold Siting Criteria		Data Not Available [2]
Survey Data Required		Data Not Available [2, 10]
Night Operations		Possible [11]

1 HAT = 611 feet. Remainder of chart requirements based on visibility > 1 SM.

2 Required (minimum runway survey: Type C).

3 Required if obligated in the National Plan of Integrated Airport Systems (NPIAS). ALP exists but requires amendment.

4 4700 feet > 4200 feet.

5 Runway has no markings.

6 See AC 150/5340-1 and AC 150/5340-18.

7 Runway has MIRL.

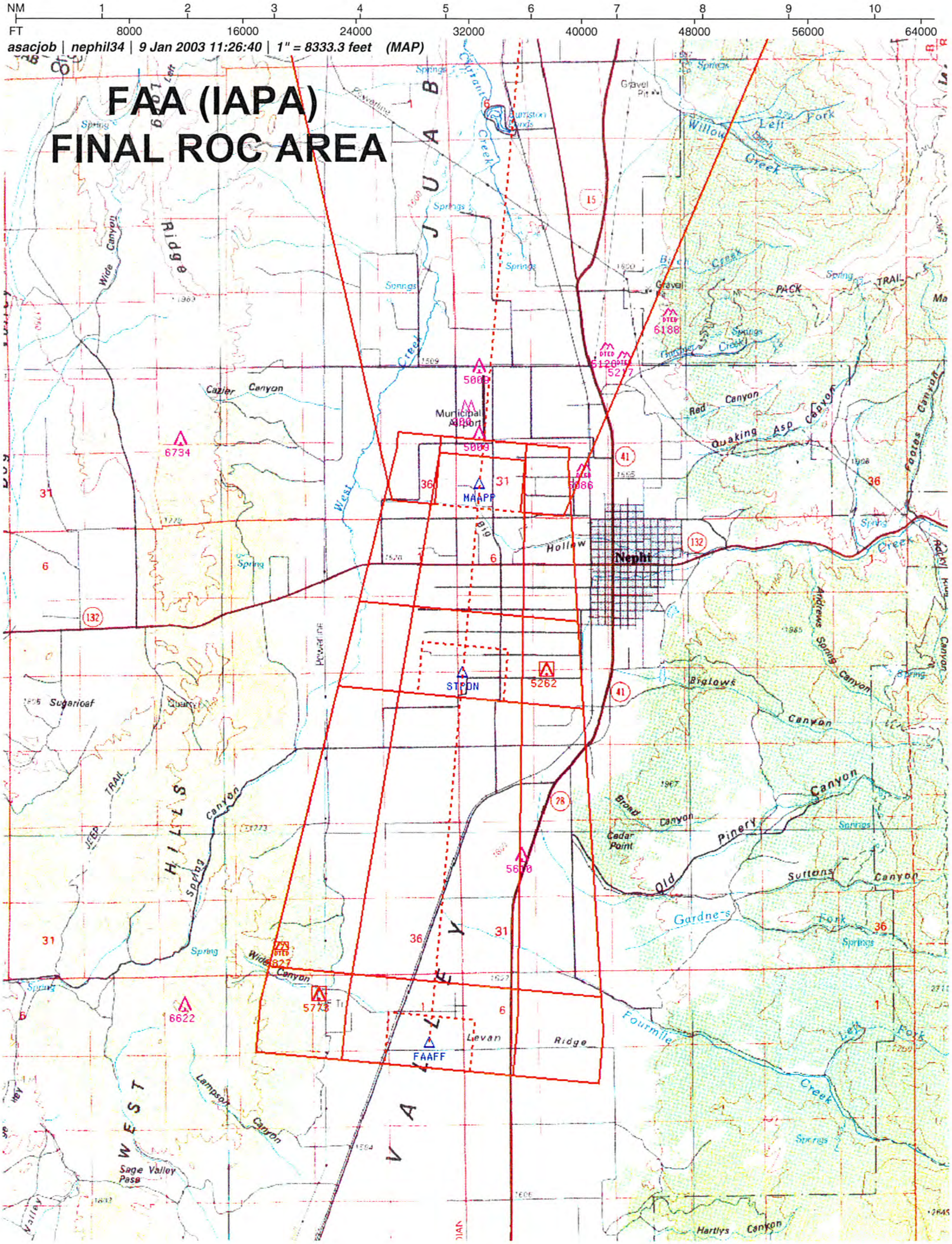
8 Parallel taxiway to runway threshold recommended but not required (minimum runway survey: Type C).

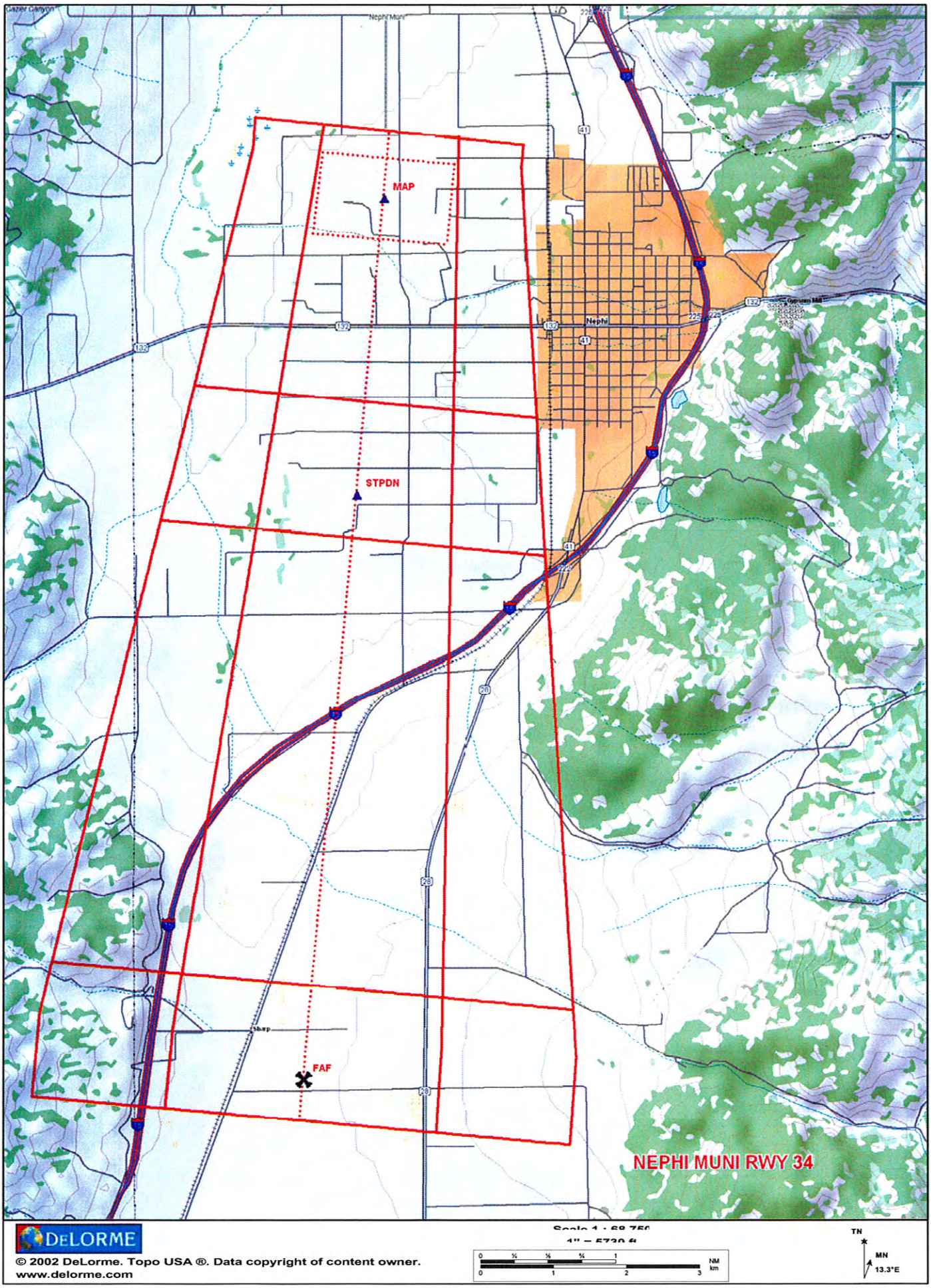
9 ALS not required.

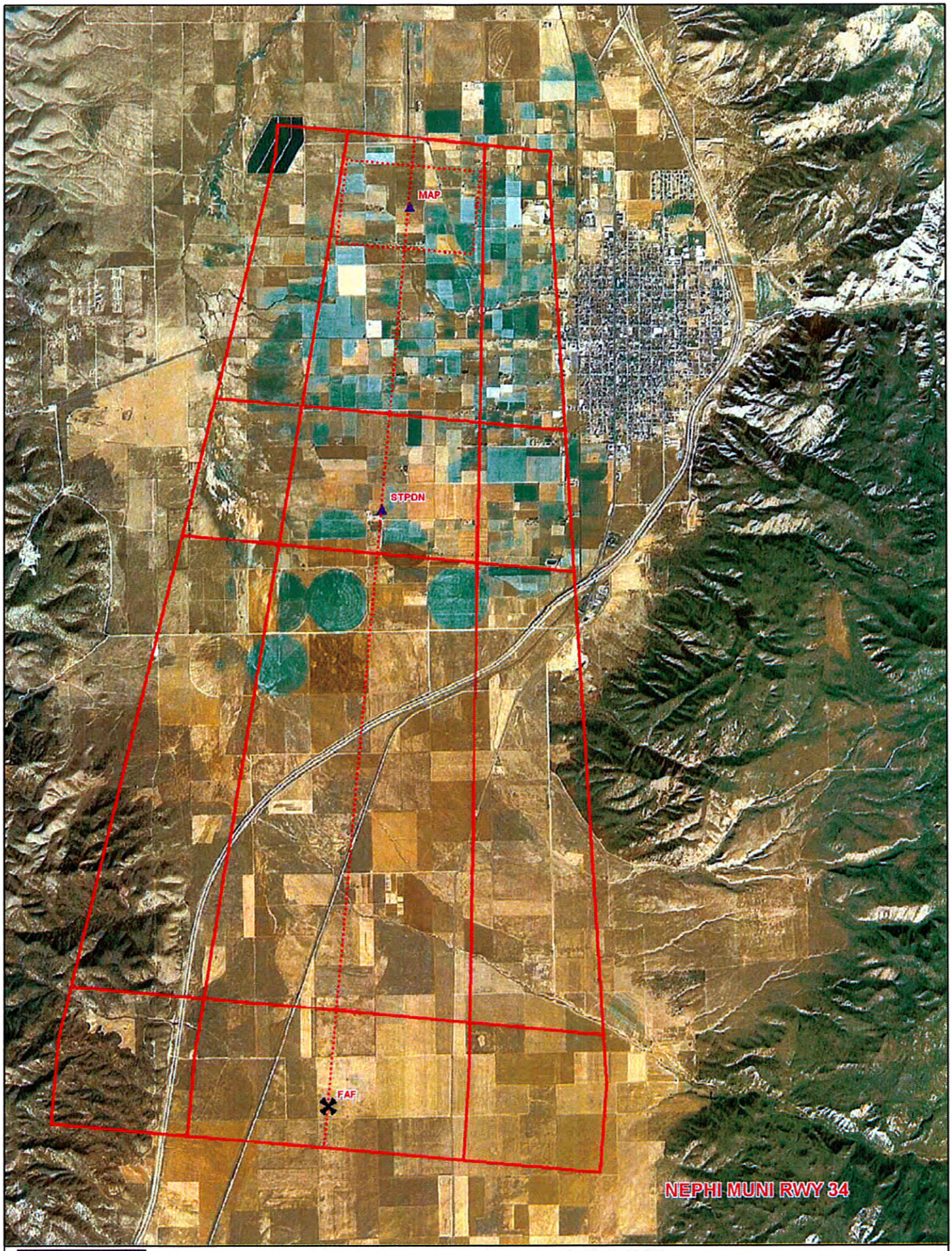
10 Additional requirements to be met. See FAAO 8260.3B, Paragraph 251, and AC 150/5300-13, Appendix 2.

11 Additional requirements to be met. See FAAO 8260.3B, Paragraph 251, and AC 70/7460-1.

ASAC Form A-16C (Proprietary)


NM 1 2 3 4 5 6 7 8 9 10
FT 8000 16000 24000 32000 40000 48000 56000 64000
asacjob | nephil34 | 9 Jan 2003 11:26:40 | 1" = 8333.3 feet (MAP)
FAA (IAPA)
FINAL ROC AREA
JUAB
Nephi
Municipal Airport
MAAPP
STPDN
FAAFF
6734
6188
5262
5773
6622
5608
Willow Creek
Left Fork
Birch Creek
Cazier Canyon
Red Canyon
Quaking Asp Canyon
West Creek
Big Hollow
Biglows Canyon
Andrews Spring Canyon
Sugarloaf
Broad Canyon
Cedar Point
Pinery Canyon
Old
Suttons Canyon
Gardners Fork
Fourmile Creek
Levan Ridge
Wide Canyon
Lampson Canyon
Sage Valley Pass
Hartlys Canyon
Powerline
Ridge
Wide Canyon
PACK TRAIL
JEEP TRAIL
WEST HILLS
VALLEY


MAP
STPDN
FAF
Nephi
NEPHI MUNI RWY 34
DeLORME
© 2002 DeLorme. Topo USA ®. Data copyright of content owner.
www.delorme.com
TN
MN
13.3°E



Scale 1 : 68,750
1" = 5730 ft

0 ¼ ½ ¾ 1 NM
0 1 2 3 km

TN
MN
13.3°E

MISSED

MAP

STPDW

FAF

NEPHI MUNI RWY 34

Scale 1 : 87,500
1" = 1.20 NM

0 ½ 1 1½ 2 NM
0 1 2 3 4 km

TN
MN
13.3°E

AC 150/5300-13 (CHANGE 6)
TABLE A-16C SUMMARY
NONPRECISION APPROACH REQUIREMENTS

NEPHI (U14)
RNAV (LNAV) RWY 34

VISIBILITY MINIMUMS	1 SM	> 1 SM
Height Above Touchdown (HAT)	Meets Requirements [1]	Meets Requirements [1]
TERPS Paragraph 251 Surfaces	Data Not Available [2]	Data Not Available [2]
Precision Object Free Area (POFA)	Data Not Available [2]	Data Not Available [2]
Airport Layout Plan (ALP)	Does Not Meet Requirement [3]	Does Not Meet Requirements [3]
Minimum Runway Length	Meets Requirements [4]	Meets Requirements [4]
Runway Markings	Does Not Meet Requirements [5]	Does Not Meet Requirements [5]
Holding Position Signs and Markings	Does Not Meet Requirements [6]	Does Not Meet Requirements [6]
Runway Edge Lights	Meets Requirements [7]	Meets Requirements [7]
Parallel Taxiway/Obstacle Free Zone	Possible [8]	Possible [8]
Approach Lighting System (ALS)	Meets Requirements [9]	Meets Requirements [9]
Runway Design	Data Not Available [2]	Data Not Available [2]
Threshold Siting Criteria	Data Not Available [2]	Data Not Available [2]
Survey Data Required	Data Not Available [2, 10]	Data Not Available [2, 10]
Night Operations	Possible [11]	Possible [11]

[1] HAT = 311 feet.

[2] Required (minimum runway survey: Type C).

[3] Required if obligated in the National Plan of Integrated Airport Systems (NPIAS). ALP exists but requires amendment.

[4] 4700 feet > 4200 feet.

[5] Runway has no markings.

[6] See AC 150/5340-1 and AC 150/5340-18.

[7] Runway has MIRL.

[8] Parallel taxiway to runway threshold recommended but not required (minimum runway survey: Type C).

[9] ALS not required.

[10] Additional requirements to be met. See FAAO 8260.3B, Paragraph 251, and AC 150/5300-13, Appendix 2.

[11] Additional requirements to be met. See FAAO 8260.3B, Paragraph 251, and AC 70/7460-1.

ASAC Form A-16C (Proprietary)

Categorical Exclusion Checklist

The information you provide below will assist the FAA in making its determination as to whether a Categorical Exclusion is appropriate or further environmental analysis is required for your proposed instrument approach(es)/departure(s). Please place a checkmark in the blank next to the numbered items indicating you have no concerns on that issue. Should you have any remarks that may indicate the need to prepare an EA/EIS, attach a brief explanation of the circumstances so that we can evaluate the issue further.

Airport Name: Nephi Date: Dec 17, 2002

Approach/Departure Requested: Area Navigation (RNAV) Approach/Departure Procedures

NO 1. Section 4(F) of DOT ACT: This procedure will not use federal, state or local parklands nor substantially increase noise over those parklands.

NO 2. Environmental Controversy: The proposed procedure is not highly controversial on environmental grounds. Opposition on environmental grounds has not been received from federal, state or local government agencies, or by a substantial number of persons affected by the proposed action.

NO 3. Natural Environment: The proposed procedure will not have a significant impact on natural, ecological, cultural or scenic resources of national, state, or local significance; will not impact any federally listed or proposed to be listed endangered or threatened species protected by the Endangered Species Act.

NO 4. Noise: The proposed procedure will not have a significant impact on noise sensitive areas. (Normally, no noise analysis is needed if airport operations do no exceed 90,000 propeller operations or 700 jet operations. These numbers of operations generally do not produce a noise contour off airport property.)

NO 5. Cumulative Impacts Considerations: The overall impact of the proposed action and the consequences of subsequent related actions have been considered, and are not considered to be collectively significant.

I certify, to the best of my knowledge, that the information provided above is complete and correct, and that there is no information that indicates the need for further environmental analysis.

Signature: Charles Theobald

Name: CHARLES THEOBALD

Title/Position: AIRPORT PLANNER

Address: 435 EAST TABERNACLE ST.
St. George, Utah

Phone Number: 435-673-4677

Signature: Robert H. Withers SR.

ROBERT H WITHERS, SR.
Manager,
ASAC Airspace Development
Phone: 678-924-8000

CHECKLIST OF EXTRAORDINARY CIRCUMSTANCES IN SUPPORT OF A CATEGORICAL EXCLUSION DETERMINATION

Project/Action: NEPHI MUNI Date: Dec 17, 2002 Preparer: CHARLES THEOBALD

Circumstance	Impact Potential Yes	Impact Potential No	Comments/Follow-Up See attached comments If needed
1. Effect on Section 106 Historic Properties		✓	
2. Effect on Section 4(f) Lands		✓	
3. Controversy on Environmental Grounds		✓	
4. Effect on Natural Systems		✓	
5. Effect on Endangered Species		✓	
6. Effect on Wetland		✓	
7. Effect on Floodplains		✓	
8. Effect on Coastal Zones		✓	
9. Effect on Prime/Unique Farmland		✓	
10. Effect on Energy/Resources		✓	
11. Controversy Regarding Relocation Housing		✓	
12. Community Disruption		✓	
13. Traffic Congestion		✓	
14. Effect on Noise Levels in Noise Sensitive Areas		✓	
15. Effect on Air Quality		✓	
16. Effect on Water Quality		✓	
17. Contains/Affects Hazardous Materials		✓	
18. Land Use Conflicts		✓	
19. Induced Impacts		✓	
20. Wold and Scenic Rivers		✓	
21. Cumulative Impacts		✓	
22. Inconsistent With Other Environmental Laws		✓	
23. Environmental Justice		✓	
24. Helicopter tracks over major thoroughfares		✓	

Rec'd

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AIRPORT MASTER RECORD

PRINT DATE: 01/23/2003
AFD EFF 01/23/2003
Form Approved OMB 2120-0015

> 1 ASSOC CITY: NEPHI
> 2 AIRPORT NAME: NEPHI MUNI
3 CBD TO AIRPORT (NM): 03 NW
4 STATE: UT
6 REGION/ADO: ANM/DEN
LOC ID: U14
5 COUNTY: JUAB UT
7 SECT AERO CHT: LAS VEGAS
FAA SITE NR: 25228.*A

GENERAL

10 OWNERSHIP: PUBLIC
> 11 OWNER: CITY OF NEPHI
> 12 ADDRESS: 21 E 100 NORTH
NEPHI, UT 84648
> 13 PHONE NR: 801-623-0822
> 14 MANAGER: RANDY MC KNIGHT
> 15 ADDRESS: CITY OF NEPHI
NEPHI, UT 84648
> 16 PHONE NR: 801-623-0822
> 17 ATTENDANCE SCHEDULE:

MONTHS	DAYS	HOURS
ALL	MON-FRI	0800-1700

18 AIRPORT USE: PUBLIC
19 ARPT LAT: 39-44-19.836N ESTIMATED
20 ARPT LONG: 111-52-17.764W
21 ARPT ELEV: 5009 SURVEYED
22 ACREAGE: 320
> 23 RIGHT TRAFFIC: NO
> 24 NON-COMM LANDING: NO
25 NPIAS/FED AGREEMENTS: N1
26 FAR 139 INDEX:

SERVICES

> 70 FUEL: 100LL A
> 71 AIRFRAME RPRS: MINOR
> 72 PWR PLANT RPRS: MINOR
> 73 BOTTLE OXYGEN: NONE
> 74 BULK OXYGEN: NONE
75 TSNT STORAGE: HGR
76 OTHER SERVICES:

FACILITIES

> 80 ARPT BCN: CG
> 81 ARPT LGT SKED: DUSK-DAWN
> 82 UNICOM: 122.800
> 83 WIND INDICATOR: YES-L
84 SEGMENTED CIRCLE: NONE
85 CONTROL TWR: NONE
86 FSS: CEDAR CITY
87 FSS ON ARPT: NO
88 FSS PHONE NR: 435-586-3806
89 TOLL FREE NR: 1-800-WX-BRIEF

BASED AIRCRAFT

90 SINGLE ENG:	4
91 MULTI ENG:	2
92 JET:	1
TOTAL:	7
93 HELICOPTERS:	0
94 GLIDERS:	1
95 MILITARY:	0
96 ULTRA-LIGHT:	1

OPERATIONS

100 AIR CARRIER:	0
101 COMMUTER:	0
102 AIR TAXI:	0
103 G A LOCAL:	3,500
104 G A ITNRNT:	1,000
105 MILITARY:	1,000
TOTAL:	5,500

OPERATIONS FOR
MOS ENDING

RUNWAY DATA

> 30 RUNWAY IDENT:		16/34
> 31 LENGTH:		4,700
> 32 WIDTH:		75
> 33 SURF TYPE-COND:		ASPH-F
> 34 SURF TREATMENT:		
35 GROSS WT:	SW	21
36 (IN THSDS)	DW	
37	DTW	
38	DDTW	

LIGHTING/APCH AIDS

> 40 EDGE INTENSITY:	MED
> 42 RWY MARK TYPE-COND	- / -
> 43 VGSI	/
44 THR CROSSING HGT	/
45 VISUAL GLIDE ANGLE	/
> 46 CNTRLN-TDZ	- / -
> 47 RVR-RVV	- / -
> 48 REIL	/
> 49 APCH LIGHTS	/

OBSTRUCTION DATA

50 FAR 77 CATEGORY	A(V) / A(V)
> 51 DISPLACED THR	/
> 52 CTLG OBSTN	ROAD /
> 53 OBSTN MARKED/LGTD	/
> 54 HGT ABOVE RWY END	15 /
> 55 DIST FROM RWY END	375 /
> 56 CNTRLN OFFSET	0B /
57 OBSTN CLNC SLOPE	11:1 / 50:1
58 CLOSE-IN OBSTN	N / Y

DECLARED DISTANCES

> 60 TAKE OFF RUN AVBL (TORA)	/
> 61 TAKE OFF DIST AVBL (TODA)	/
> 62 ACLT STOP DIST AVBL (ASDA)	/
> 63 LNDG DIST AVBL (LDA)	/

(>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY >

110 REMARKS:

A 033 RWY 16/34 CRACKING & LOOSE CHIPS ON APRON & RY.
A 051 RWY 16 THR RELOCATED 200 FT FOR NGT OPERATIONS; RY 34 THR RELOCATED 400 FT FOR NGT OPERATIONS; 4100 FT OF RY AVBL FOR NGT OPERATIONS.
A 058 RWY 34 +15' ROAD 190' FROM THR.
A 070 FUEL AVBL MON-FRI 0800-1700; OTHER TIMES & WEEKENDS WITH PROR NOTICE & $20 CALL OUT FEE.
A 081 ACTVT MIRL RY 16/34 - CTAF.
110-01 EXTENSIVE GLIDER ACTIVITY ON & INVOF ARPT.

111 INSPECTOR: (S)
112 LAST INSP: 02/14/1997
113 LAST INFO REQ:

FAA Form 5010-1 (5-91) SUPERSEDES PREVIOUS

Appendix Five

> Nephi Municipal Airport - 2008 and 2028 Integrated Noise Model (INM) Noise Contour Data

Master Plan

Nephi Municipal Airport

INM 7.0 SCENARIO RUN INPUT REPORT 21-Apr-10 10:39

STUDY: C:\PROGRAM FILES\INM7.0A\NEPHI MP EXISTING\
Created : 15-Dec-09 11:20
Units : English
Airport :
Description :
Nephi Municipal Airport Master Plan

SCENARIO: Existing2008
Created : 15-Dec-09 12:00
Description : Existing INM Noise Contours
Last Run : 16-Dec-09 08:37
Run Duration : 000:00:01

STUDY AIRPORT
Latitude : 39.736583 deg
Longitude : -111.870060 deg
Elevation : 5022.1 ft

CASES RUN:

CASENAME: EXISTING
Temperature : 93.0 F
Pressure : 29.92 in-Hg
AverageWind : 8.0 kt
ChangeNPD : No

STUDY RUNWAYS
16
Latitude : 39.745213 deg
Longitude : -111.870060 deg
Xcoord : 0.0000 nmi
Ycoord : 0.5174 nmi
Elevation : 4987.0 ft
OtherEnd : 34
Length : 6298 ft
Gradient : 0.56 %
TkoThresh : 0 ft
AppThresh : 0 ft

CASENAME: EXISTING
RwyWind : 8.0 kt

CASENAME: EXISTING
RwyWind : 8.0 kt
34
Latitude : 39.727923 deg
Longitude : -111.870000 deg
Xcoord : 0.0028 nmi
Ycoord : -0.5192 nmi
Elevation : 5022.1 ft
OtherEnd : 16
Length : 6298 ft
Gradient : -0.56 %
TkoThresh : 0 ft
AppThresh : 0 ft

CASENAME: EXISTING
RwyWind : 8.0 kt

CASENAME: EXISTING
RwyWind : 8.0 kt

STUDY HELIPADS
16H
Latitude : 39.745213 deg

Longitude : -111.870060 deg
Xcoord : 0.0000 nmi
Ycoord : 0.5174 nmi

34H
Latitude : 39.727923 deg
Longitude : -111.870000 deg
Xcoord : 0.0028 nmi
Ycoord : -0.5192 nmi

STUDY TRACKS

RwyId-OpType-TrkId

Sub	PctSub	TrkType	Delta(ft)
16-APP-L1			
0	100.00	Vectors	0.0
16-DEP-T1			
0	100.00	Vectors	0.0
16-TGO-TG1			
0	100.00	Vectors	0.0
16H-APP-HL1			
0	100.00	Points	0.0
16H-DEP-HT1			
0	100.00	Points	0.0
34-APP-L2			
0	100.00	Vectors	0.0
34-DEP-T2			
0	100.00	Vectors	0.0
34-TGO-TG2			
0	100.00	Vectors	0.0
34H-APP-HL2			
0	100.00	Points	0.0
34H-DEP-HT2			
0	100.00	Points	0.0

STUDY TRACK DETAIL

RwyId-OpType-TrkId-SubTrk

#	SegType	Dist/Angle	Radius(nmi)
16-APP-L1-0			
1	Straight	5.0000 nmi	
16-DEP-T1-0			
1	Straight	5.0000 nmi	
16-TGO-TG1-0			
1	Straight	1.5368 nmi	
2	Left-Turn	90.0000 deg	0.2500
3	Straight	0.7500 nmi	
4	Left-Turn	90.0000 deg	0.2500
5	Straight	2.7868 nmi	
6	Left-Turn	90.0000 deg	0.2500
7	Straight	0.7500 nmi	
8	Left-Turn	90.0000 deg	0.2500
9	Straight	1.2500 nmi	
16H-APP-HL1-0			
1	Points	1.2504 nmi	-0.0063
2	Points	1.2504 nmi	2.0209
3	Points	-0.0016 nmi	2.0164
4	Points	0.0000 nmi	0.5174
16H-DEP-HT1-0			
1	Points	0.0000 nmi	0.5174
2	Points	-0.0038 nmi	1.2639
3	Points	-1.2544 nmi	1.2639
4	Points	-1.2536 nmi	-0.0019
34-APP-L2-0			
1	Straight	5.0000 nmi	
34-DEP-T2-0			
1	Straight	5.0000 nmi	
34-TGO-TG2-0			
1	Straight	1.5368 nmi	
2	Left-Turn	90.0000 deg	0.2500

3	Straight	0.7500 nmi	
4	Left-Turn	90.0000 deg	0.2500
5	Straight	2.7868 nmi	
6	Left-Turn	90.0000 deg	0.2500
7	Straight	0.7500 nmi	
8	Left-Turn	90.0000 deg	0.2500
9	Straight	1.2500 nmi	

34H-APP-HL2-0

1	Points	-1.2536 nmi	-0.0019
2	Points	-1.2421 nmi	-2.0215
3	Points	0.0052 nmi	-2.0186
4	Points	0.0028 nmi	-0.5192

34H-DEP-HT2-0

1	Points	0.0028 nmi	-0.5192
2	Points	0.0073 nmi	-1.2717
3	Points	1.2637 nmi	-1.2628
4	Points	1.2504 nmi	0.0070

AIRCRAFT GROUP ASSIGNMENTS

STUDY AIRPLANES

BEC58P	Standard data
CNA500	Standard data
CNA55B	Standard data
COMSEP	Standard data
DHC6	Standard data
MU3001	Standard data

STUDY SUBSTITUTION AIRPLANES

USER-DEFINED NOISE CURVES

USER-DEFINED METRICS

USER-DEFINED PROFILE IDENTIFIERS

USER-DEFINED PROCEDURAL PROFILES

USER-DEFINED FIXED-POINT PROFILES

USER-DEFINED FLAP COEFFICIENTS

USER-DEFINED JET THRUST COEFFICIENTS

USER-DEFINED PROP THRUST COEFFICIENTS

USER-DEFINED GENERAL THRUST COEFFICIENTS

STUDY MILITARY AIRPLANES

USER-DEFINED MILITARY NOISE CURVES

USER-DEFINED MILITARY PROFILE IDENTIFIERS

USER-DEFINED MILITARY FIXED-POINT PROFILES

STUDY HELICOPTERS

S70	Standard data

USER-DEFINED HELICOPTER PROFILE IDENTIFIERS

USER-DEFINED HELICOPTER PROCEDURAL PROFILES

USER-DEFINED HELICOPTER NOISE CURVES

USER-DEFINED HELICOPTER DIRECTIVITY

CASE FLIGHT OPERATIONS - [EXISTING]

Acft	Op	Profile	Stg	Rwy	Track	Sub	Group		Day	Evening	Night
BEC58P	APP	STANDARD	1	34	L2	0	---		0.7546	0.0000	0.0397
BEC58P	APP	STANDARD	2	16	L1	0	---		1.1319	0.0000	0.0596
BEC58P	DEP	STANDARD	1	16	T1	0	---		1.1319	0.0000	0.0596
BEC58P	DEP	STANDARD	1	34	T2	0	---		0.7546	0.0000	0.0397
CNA500	APP	STANDARD	1	16	L1	0	---		0.0560	0.0000	0.0029
CNA500	APP	STANDARD	1	34	L2	0	---		0.0373	0.0000	0.0020
CNA500	DEP	STANDARD	1	16	T1	0	---		0.0560	0.0000	0.0029
CNA500	DEP	STANDARD	1	34	T2	0	---		0.0373	0.0000	0.0020
CNA55B	APP	STANDARD	1	16	L1	0	---		0.0280	0.0000	0.0015
CNA55B	APP	STANDARD	1	34	L2	0	---		0.0187	0.0000	0.0010
CNA55B	DEP	STANDARD	1	16	T1	0	---		0.0280	0.0000	0.0015
CNA55B	DEP	STANDARD	1	34	T2	0	---		0.0187	0.0000	0.0010
COMSEP	APP	STANDARD	1	16	L1	0	---		0.3714	0.0000	0.0195
COMSEP	APP	STANDARD	1	34	L2	0	---		0.2476	0.0000	0.0130
COMSEP	DEP	STANDARD	1	16	T1	0	---		0.3714	0.0000	0.0195
COMSEP	DEP	STANDARD	1	34	T2	0	---		0.2476	0.0000	0.0130
COMSEP	TGO	STANDARD	1	16	TG1	0	---		1.1728	0.0000	0.0000
COMSEP	TGO	STANDARD	1	34	TG2	0	---		0.7819	0.0000	0.0000
DHC6	APP	STANDARD	1	16	L1	0	---		1.9808	0.0000	0.1043
DHC6	APP	STANDARD	1	34	L2	0	---		1.3205	0.0000	0.0695
DHC6	DEP	STANDARD	1	16	T1	0	---		1.9808	0.0000	0.1043
DHC6	DEP	STANDARD	1	34	T2	0	---		1.3205	0.0000	0.0695
MU3001	APP	STANDARD	1	16	L1	0	---		0.0339	0.0000	0.0018
MU3001	APP	STANDARD	1	34	L2	0	---		0.0226	0.0000	0.0012
MU3001	DEP	STANDARD	1	16	T1	0	---		0.0339	0.0000	0.0018
MU3001	DEP	STANDARD	1	34	T2	0	---		0.0226	0.0000	0.0012
S70	APP	STANDARD	1	16H	HL1	0	---		0.4110	0.0000	0.0000
S70	APP	STANDARD	1	34H	HL2	0	---		0.2740	0.0000	0.0000
S70	DEP	STANDARD	1	16H	HT1	0	---		0.4110	0.0000	0.0000
S70	DEP	STANDARD	1	34H	HT2	0	---		0.2740	0.0000	0.0000

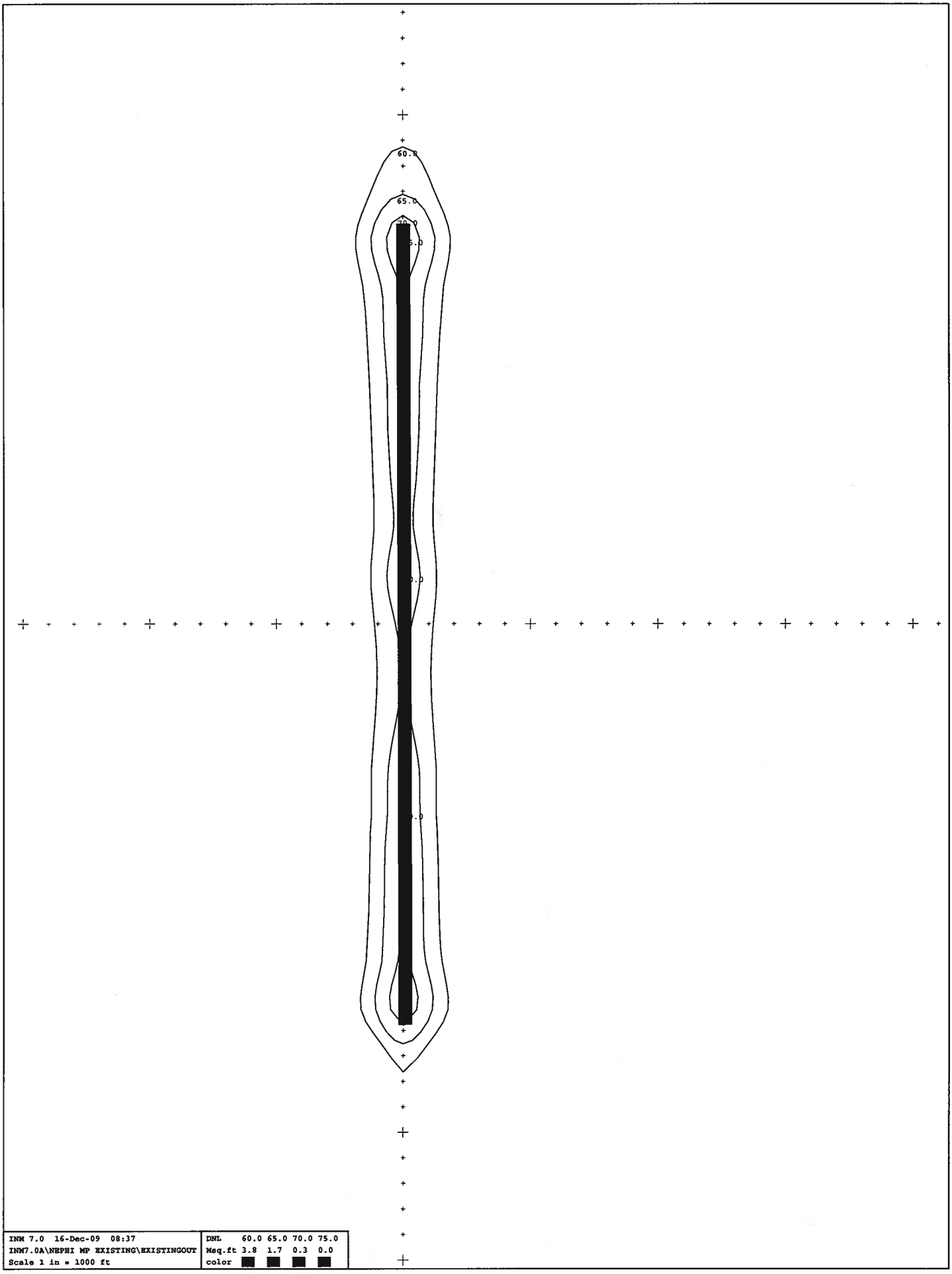
CASE RUNUP OPERATIONS - [EXISTING]

SCENARIO RUN OPTIONS
- Run Type : Single-Metric
- NoiseMetric : DNL
- Do Terrain : No Terrain
- Do Contour : Recursive Grid
- Refinement : 8
- Tolerance : 0.25
- Low Cutoff : 60.0
- High Cutoff : 75.0
- Ground Type : All-Soft-Ground
- Do Population : No
- Do Locations : No
- Do Standard : No
- Do Detailed : No
- Compute System Metrics:
  - DNL : No
  - CNEL : No
  - LAEQ : No
  - LAEQD : No
  - LAEQN : No
  - SEL : No
  - LAMAX : No
  - TALA : No
  - NEF : No
  - WECPNL : No
  - EPNL : No

PNLTM : No
TAPNL : No
CEXP : No
LCMAX : No
TALC : No

SCENARIO GRID DEFINITIONS

Name	Type	X(nmi)	Y(nmi)	Ang(deg)	DisI(nmi)	DisJ(nmi)	NI	NJ	Thrsh	dAmb	(hr)
CONTOUR	Contour	-8.0000	-8.0000	0.0	16.0000	16.0000	2	2	85.0	0.0	0.00


60.0
65.0
INM 7.0 16-Dec-09 08:37
INM7.0A\NEPHI MP EXISTING\EXISTINGOUT
Scale 1 in = 1000 ft
DNL 60.0 65.0 70.0 75.0
Msq.ft 3.8 1.7 0.3 0.0
color

```
INM 7.0 SCENARIO RUN INPUT REPORT  21-Apr-10 10:14

STUDY: C:\PROGRAM FILES\INM7.0A\NEPHI MP FUTURE\
   Created     : 15-Dec-09 11:20
   Units       : English
   Airport     :
   Description :
      Nephi Municipal Airport Master Plan

SCENARIO: Future2028
   Created      : 15-Dec-09 16:14
   Description  : Future INM Noise Contours
   Last Run     : 16-Dec-09 08:31
   Run Duration :  000:00:01

STUDY AIRPORT
   Latitude    : 39.736583 deg
   Longitude   : -111.870060 deg
   Elevation   : 5022.1 ft


CASES RUN:

CASENAME: FUTURE
   Temperature : 93.0 F
   Pressure    : 29.92 in-Hg
   AverageWind : 8.0 kt
   ChangeNPD   : No

STUDY RUNWAYS
   16
      Latitude  : 39.745213 deg
      Longitude : -111.870060 deg
      Xcoord    : 0.0000 nmi
      Ycoord    : 0.5174 nmi
      Elevation : 4987.0 ft
      OtherEnd  : 34
      Length    : 7198 ft
      Gradient  : 0.50 %
      TkoThresh : 0 ft
      AppThresh : 0 ft

CASENAME: FUTURE
      RwyWind   : 8.0 kt

CASENAME: FUTURE
      RwyWind   : 8.0 kt
   34
      Latitude  : 39.725452 deg
      Longitude : -111.869969 deg
      Xcoord    : 0.0042 nmi
      Ycoord    : -0.6673 nmi
      Elevation : 5023.1 ft
      OtherEnd  : 16
      Length    : 7198 ft
      Gradient  : -0.50 %
      TkoThresh : 0 ft
      AppThresh : 0 ft

CASENAME: FUTURE
      RwyWind   : 8.0 kt

CASENAME: FUTURE
      RwyWind   : 8.0 kt

STUDY HELIPADS
   16H
      Latitude  : 39.745213 deg
      Longitude : -111.870060 deg
      Xcoord    : 0.0000 nmi
      Ycoord    : 0.5174 nmi
   34H
      Latitude  : 39.725452 deg
      Longitude : -111.869969 deg
      Xcoord    : 0.0042 nmi
```

Ycoord : -0.6673 nmi

STUDY TRACKS

RwyId-OpType-TrkId

Sub	PctSub	TrkType	Delta(ft)
16-APP-L1			
0	100.00	Vectors	0.0
16-DEP-T1			
0	100.00	Vectors	0.0
16-TGO-TG1			
0	100.00	Vectors	0.0
16H-APP-HL1			
0	100.00	Points	0.0
16H-DEP-HT1			
0	100.00	Points	0.0
34-APP-L2			
0	100.00	Vectors	0.0
34-DEP-T2			
0	100.00	Vectors	0.0
34-TGO-TG2			
0	100.00	Vectors	0.0
34H-APP-HL2			
0	100.00	Points	0.0
34H-DEP-HT2			
0	100.00	Points	0.0

STUDY TRACK DETAIL

RwyId-OpType-TrkId-SubTrk

#	SegType	Dist/Angle	Radius(nmi)
16-APP-L1-0			
1	Straight	5.0000 nmi	
16-DEP-T1-0			
1	Straight	5.0000 nmi	
16-TGO-TG1-0			
1	Straight	1.6849 nmi	
2	Left-Turn	90.0000 deg	0.2500
3	Straight	0.7500 nmi	
4	Left-Turn	90.0000 deg	0.2500
5	Straight	2.9349 nmi	
6	Left-Turn	90.0000 deg	0.2500
7	Straight	0.7500 nmi	
8	Left-Turn	90.0000 deg	0.2500
9	Straight	1.2500 nmi	
16H-APP-HL1-0			
1	Points	1.2504 nmi	-0.0063
2	Points	1.2504 nmi	2.0209
3	Points	-0.0016 nmi	2.0164
4	Points	0.0000 nmi	0.5174
16H-DEP-HT1-0			
1	Points	0.0000 nmi	0.5174
2	Points	-0.0045 nmi	1.2574
3	Points	-1.2533 nmi	1.2726
4	Points	-1.2536 nmi	-0.0019
34-APP-L2-0			
1	Straight	5.0000 nmi	
34-DEP-T2-0			
1	Straight	5.0000 nmi	
34-TGO-TG2-0			
1	Straight	1.6849 nmi	
2	Left-Turn	90.0000 deg	0.2500
3	Straight	0.7500 nmi	
4	Left-Turn	90.0000 deg	0.2500
5	Straight	2.9349 nmi	
6	Left-Turn	90.0000 deg	0.2500
7	Straight	0.7500 nmi	
8	Left-Turn	90.0000 deg	0.2500
9	Straight	1.2500 nmi	
34H-APP-HL2-0			
1	Points	-1.2536 nmi	-0.0019
2	Points	-1.2516 nmi	-2.1749
3	Points	0.0025 nmi	-2.1749
4	Points	0.0032 nmi	-0.6637
34H-DEP-HT2-0			
1	Points	-0.0006 nmi	-0.6675

2	Points	0.0070 nmi	-1.4199
3	Points	1.2673 nmi	-1.4122
4	Points	1.2504 nmi	0.0070

AIRCRAFT GROUP ASSIGNMENTS

STUDY AIRPLANES

BEC58P	Standard data
CNA500	Standard data
CNA55B	Standard data
CNA750	Standard data
COMSEP	Standard data
DHC6	Standard data
MU3001	Standard data

STUDY SUBSTITUTION AIRPLANES

USER-DEFINED NOISE CURVES

USER-DEFINED METRICS

USER-DEFINED PROFILE IDENTIFIERS

USER-DEFINED PROCEDURAL PROFILES

USER-DEFINED FIXED-POINT PROFILES

USER-DEFINED FLAP COEFFICIENTS

USER-DEFINED JET THRUST COEFFICIENTS

USER-DEFINED PROP THRUST COEFFICIENTS

USER-DEFINED GENERAL THRUST COEFFICIENTS

STUDY MILITARY AIRPLANES

USER-DEFINED MILITARY NOISE CURVES

USER-DEFINED MILITARY PROFILE IDENTIFIERS

USER-DEFINED MILITARY FIXED-POINT PROFILES

STUDY HELICOPTERS

S70	Standard data

USER-DEFINED HELICOPTER PROFILE IDENTIFIERS

USER-DEFINED HELICOPTER PROCEDURAL PROFILES

USER-DEFINED HELICOPTER NOISE CURVES

USER-DEFINED HELICOPTER DIRECTIVITY

CASE FLIGHT OPERATIONS - [FUTURE]

Acft	Op	Profile	Stg	Rwy	Track	Sub	Group	Day	Evening
BEC58P	APP	STANDARD	1	16	L1	0	---	1.9387	0.0000
BEC58P	APP	STANDARD	1	34	L2	0	---	1.2925	0.0000
BEC58P	DEP	STANDARD	1	16	T1	0	---	1.9387	0.0000
BEC58P	DEP	STANDARD	1	34	T2	0	---	1.2925	0.0000
CNA500	APP	STANDARD	1	16	L1	0	---	0.2412	0.0000
CNA500	APP	STANDARD	1	34	L2	0	---	0.1608	0.0000
CNA500	DEP	STANDARD	1	16	T1	0	---	0.2412	0.0000
CNA500	DEP	STANDARD	1	34	T2	0	---	0.1608	0.0000
CNA55B	APP	STANDARD	1	16	L1	0	---	0.1206	0.0000
CNA55B	APP	STANDARD	1	34	L2	0	---	0.0804	0.0000
CNA55B	DEP	STANDARD	1	16	T1	0	---	0.1206	0.0000
CNA55B	DEP	STANDARD	1	34	T2	0	---	0.0804	0.0000

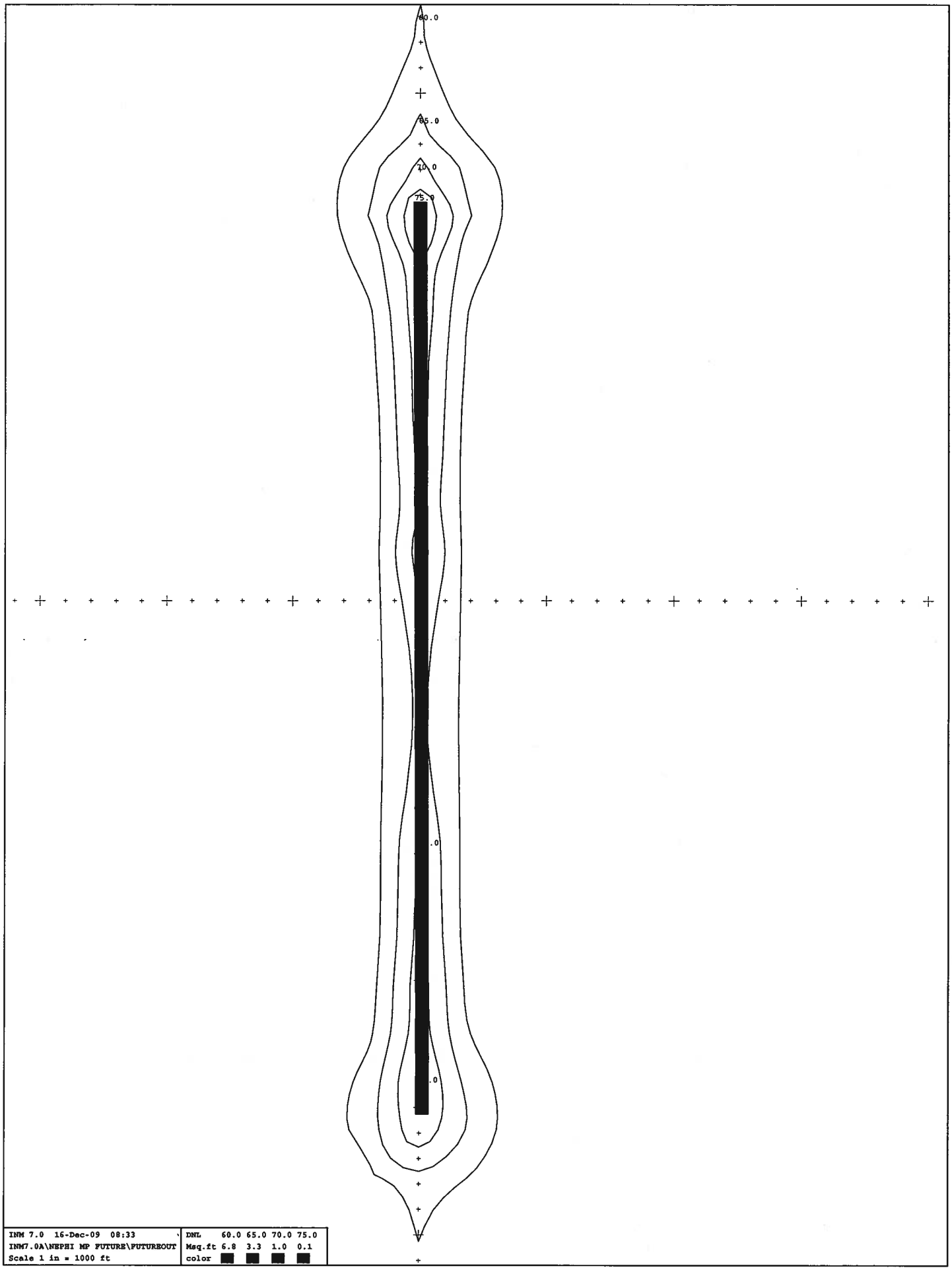
CNA750	APP	STANDARD	1	16	L1	0	---	0.0340	0.0000
CNA750	APP	STANDARD	1	34	L2	0	---	0.0227	0.0000
CNA750	DEP	STANDARD	1	16	T1	0	---	0.0340	0.0000
CNA750	DEP	STANDARD	1	34	T2	0	---	0.0227	0.0000
COMSEP	APP	STANDARD	1	16	L1	0	---	1.2767	0.0000
COMSEP	APP	STANDARD	1	34	L2	0	---	0.8511	0.0000
COMSEP	DEP	STANDARD	1	16	T1	0	---	1.2767	0.0000
COMSEP	DEP	STANDARD	1	34	T2	0	---	0.8511	0.0000
COMSEP	TGO	STANDARD	1	16	TG1	0	---	1.3439	0.0000
COMSEP	TGO	STANDARD	1	34	TG2	0	---	0.8959	0.0000
DHC6	APP	STANDARD	1	16	L1	0	---	4.3975	0.0000
DHC6	APP	STANDARD	1	34	L2	0	---	2.9317	0.0000
DHC6	DEP	STANDARD	1	16	T1	0	---	4.3975	0.0000
DHC6	DEP	STANDARD	1	34	T2	0	---	2.9317	0.0000
MU3001	APP	STANDARD	1	16	L1	0	---	0.1716	0.0000
MU3001	APP	STANDARD	1	34	L2	0	---	0.1144	0.0000
MU3001	DEP	STANDARD	1	16	T1	0	---	0.1716	0.0000
MU3001	DEP	STANDARD	1	34	T2	0	---	0.1144	0.0000
S70	APP	STANDARD	1	16H	HL1	0	---	3.2877	0.0000
S70	APP	STANDARD	1	34H	HL2	0	---	2.1918	0.0000
S70	DEP	STANDARD	1	16H	HT1	0	---	3.2877	0.0000
S70	DEP	STANDARD	1	34H	HT2	0	---	2.1918	0.0000

CASE RUNUP OPERATIONS - [FUTURE]

SCENARIO RUN OPTIONS
- Run Type : Single-Metric
- NoiseMetric : DNL
- Do Terrain : No Terrain
- Do Contour : Recursive Grid
- Refinement : 8
- Tolerance : 0.25
- Low Cutoff : 60.0
- High Cutoff : 75.0
- Ground Type : All-Soft-Ground
- Do Population : No
- Do Locations : No
- Do Standard : No
- Do Detailed : No
- Compute System Metrics:
  - DNL : No
  - CNEL : No
  - LAEQ : No
  - LAEQD : No
  - LAEQN : No
  - SEL : No
  - LAMAX : No
  - TALA : No
  - NEF : No
  - WECPNL : No
  - EPNL : No
  - PNLTM : No
  - TAPNL : No
  - CEXP : No
  - LCMAX : No
  - TALC : No

SCENARIO GRID DEFINITIONS

Name	Type	X(nmi)	Y(nmi)	Ang(deg)	DisI(nmi)	DisJ(nmi)	NI	NJ	Thrsh	dAmb	(hr)
CONTOUR	Contour	-8.0000	-8.0000	0.0	16.0000	16.0000	2	2	85.0	0.0	0.00


60.0
65.0
70.0
75.0
INM 7.0 16-Dec-09 08:33
INM7.0A\NEPHI MP FUTURE\FUTUREOUT
Scale 1 in = 1000 ft
DNL 60.0 65.0 70.0 75.0
Msq.ft 6.8 3.3 1.0 0.1
color