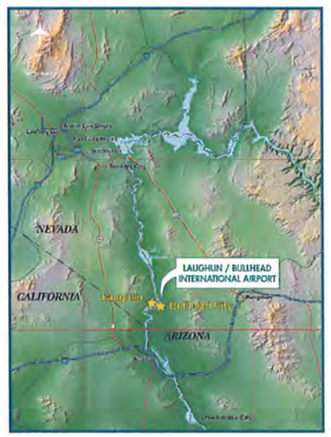
# Appendix B: Airport Layout Drawings

LAUGHLIN BULLHEAD INTERNATIONAL Airport

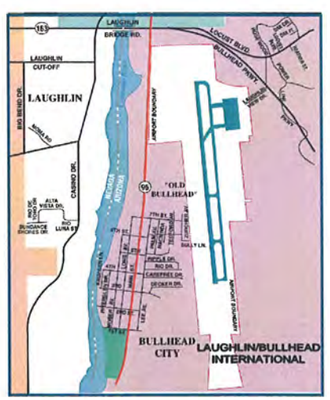
# LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

## AIRPORT LAYOUT PLANS

PREPARED FOR THE
MOHAVE COUNTY AIRPORT AUTHORITY




LOCATION MAP



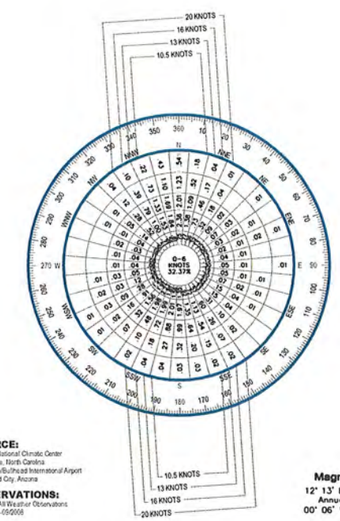

VICINITY MAP

## DRAWING INDEX

1. AIRPORT LAYOUT DRAWING
2. TERMINAL AREA DRAWING
3. AIRPORT AIRSPACE DRAWING I
4. AIRPORT AIRSPACE DRAWING II
5. AIRPORT AIRSPACE APPROACH PROFILE RUNWAY 16L-34R
6. AIRPORT AIRSPACE APPROACH PROFILE RUNWAY 34R
7. AIRPORT AIRSPACE APPROACH PROFILE RUNWAY 16R-34L
8. INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 16L
9. INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 34R
10. INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 16R
11. INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 34L
12. RUNWAY 16L DEPARTURE SURFACE DRAWING
13. RUNWAY 34R DEPARTURE SURFACE DRAWING
14. ON-AIRPORT LAND USE DRAWING
15. AIRPORT PROPERTY MAP
16. INNER APPROACH OFZ DRAWING

**ALL WEATHER WIND COVERAGE**

| Runway | 10.5 Knots | 13 Knots | 16 Knots | 20 Knots |
|---|---|---|---|---|
| Runway 16-34 | 95.04% | 97.87% | 99.19% | 99.71% |




**SOURCE:**
NOAA National Climatic Center
Asheville, North Carolina
Laughlin/Bullhead International Airport
Bullhead City, Arizona

**OBSERVATIONS:**
42,061 All Weather Observations
11/1996-09/2008

**Magnetic Declination**
12° 13' East (February 2009)
Annual Rate of Change
00° 06' West (February 2009)

February 27, 2009

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\projects\LAP\LAUGHLIN\ALP\LP COVER.dwg Printed Date: 3-03-09 11:30:13 AM Dhopkins

## LEGEND

| EXISTING | ULTIMATE | DESCRIPTION |
|---|---|---|
| | | AIRPORT PROPERTY LINE |
| | | SECTION CORNERS |
| | | AIRPORT REFERENCE POINT (ARP) |
| | | AIRPORT ROTATING BEACON |
| | | AVIGATION EASEMENT |
| BRL 35' | | BUILDING RESTRICTION LINE |
| | | STRUCTURES ON AIRPORT |
| N/A | | ABANDON/REMOVE |
| | | STRUCTURE OFF AIRPORT |
| | | FENCING |
| | | AIRPORT PAVEMENT |
| N/A | | GLIDESLOPE ANTENNA & EQUIP. SHELTER |
| | | HELICOPTER PARKING |
| | | HOLD MARKING |
| IFP | | SURVEY MONUMENT WITH IDENTIFIER |
| OFA | OFA(v) | OBJECT FREE AREA |
| RSA | RSA(v) | RUNWAY SAFETY AREA |
| OFZ | OFZ(v) | OBSTACLE FREE ZONE |
| RPZ | RPZ(v) | RUNWAY PROTECTION ZONE |
| | | PAPI-4 |
| | | RUNWAY END IDENTIFIER LIGHTS (REILS) |
| | | LIGHTED WINDSOCK |
| | | TOPOGRAPHY |
| | | ULTIMATE MALSR |

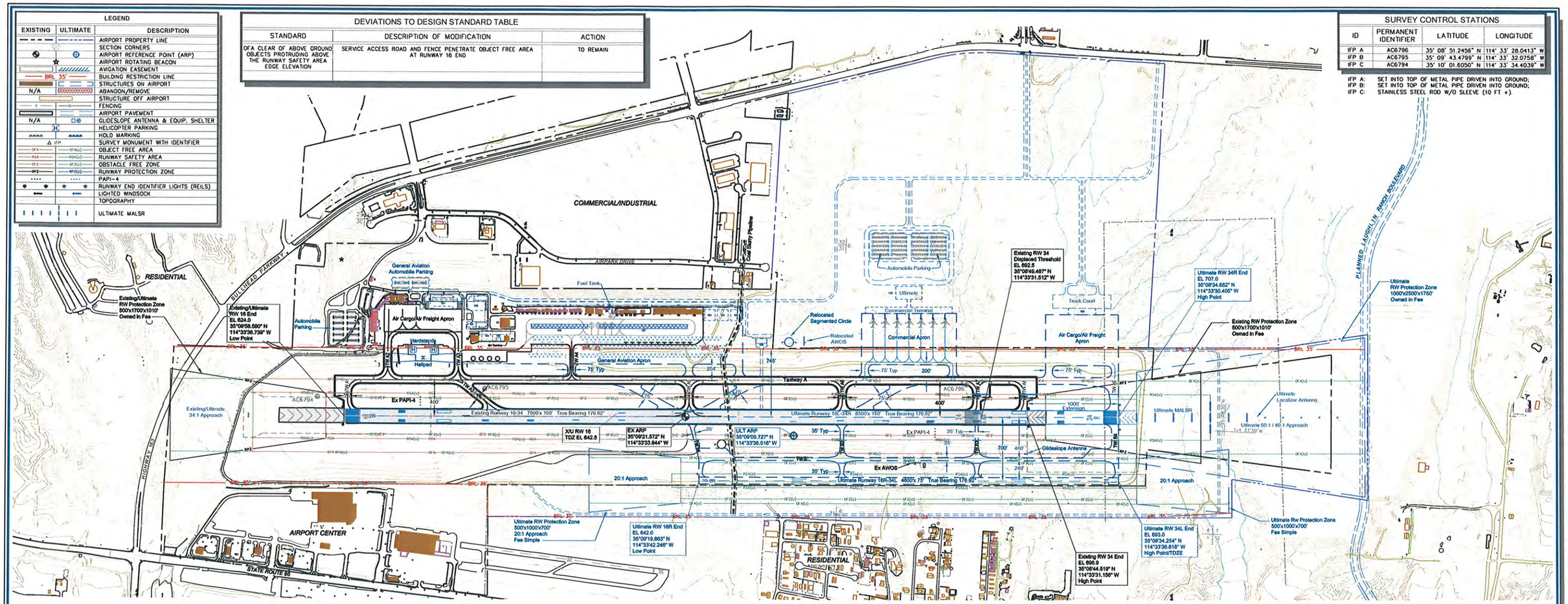
## DEVIATIONS TO DESIGN STANDARD TABLE

| STANDARD | DESCRIPTION OF MODIFICATION | ACTION |
|---|---|---|
| OFA CLEAR OF ABOVE GROUND OBJECTS PROTRUDING ABOVE THE RUNWAY SAFETY AREA EDGE ELEVATION | SERVICE ACCESS ROAD AND FENCE PENETRATE OBJECT FREE AREA AT RUNWAY 16 END | TO REMAIN |

## SURVEY CONTROL STATIONS

| ID | PERMANENT IDENTIFIER | LATITUDE | LONGITUDE |
|---|---|---|---|
| IFP A | AC6796 | 35° 08' 51.2456" N | 114° 33' 28.0413" W |
| IFP B | AC6795 | 35° 09' 43.4799" N | 114° 33' 32.0758" W |
| IFP C | AC6794 | 35° 10' 01.6050" N | 114° 33' 34.4039" W |

IFP A: SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND;
IFP B: SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND;
IFP C: STAINLESS STEEL ROD W/O SLEEVE (10 FT +).




| RUNWAY DATA | RUNWAY 16-34 EXISTING 16 | RUNWAY 16-34 EXISTING 34 | RUNWAY 16-34 ULTIMATE 16L | RUNWAY 16-34 ULTIMATE 34R | RUNWAY 16R-34L ULTIMATE 16R | RUNWAY 16R-34L ULTIMATE 34L |
|---|---|---|---|---|---|---|
| AIRCRAFT APPROACH CATEGORY-DESIGN GROUP | C-III | | D-IV | | B-II | |
| 14 CFR PART 77 CATEGORY | Nonprecision | Nonprecision | Nonprecision | Precision | Visual | Visual |
| APPROACH VISIBILITY MINIMUMS | 1 Mile | 1 Mile | 1 Mile | 1/2 Mile | Visual | Visual |
| DESIGN CRITICAL AIRCRAFT | Boeing 737 | | Boeing 757/G 450 | | Cessna Citation III | |
| WINGSPAN OF DESIGN AIRCRAFT | 112.58' | | 124.83'/77.83' | | 53.5' | |
| UNDERCARRIAGE WIDTH OF DESIGN AIRCRAFT | 18.75' | | 24' | | 9.04' | |
| APPROACH SPEED (KNOTS) OF DESIGN AIRCRAFT | 141 | | 143 | | 114 | |
| MAXIMUM CERTIFIED TAKEOFF WEIGHT (LBS) OF DESIGN AIRCRAFT | 174,200 | | 272,000 | | 22,000 | |
| RUNWAY EFFECTIVE GRADIENT | 1.0% | | 1.0% | | 1.1% | |
| RUNWAY MAXIMUM GRADIENT | 1.0% | | 1.0% | | 1.1% | |
| PAVEMENT DESIGN STRENGTH (in thousand lbs.)[1] | 75(S), 200(D), 400(DTW) | | 75(S), 200(D), 400(DTW) | | 12.5(S) | |
| APPROACH SLOPE | 34:1 | 34:1 | 34:1 | 50:1/40:1 | 20:1 | 20:1 |
| RUNWAY END ELEVATION (MSL) | 624.0' | 696.9' | 624.0' | 707.0' | 642.0' | 693.0' |
| RUNWAY TOUCHDOWN ZONE ELEVATION (MSL) | 644.5' | 696.9' | 644.5' | 707.0' | 677.8' | 693.0' |
| RUNWAY HIGH POINT ELEVATION (MSL) | 696.9' | | 707.0' | | 693.0' | |
| RUNWAY LOW POINT ELEVATION (MSL) | 616.0' | | 616.0' | | 642.0' | |
| LINE OF SIGHT REQUIREMENT MET | YES | | YES | | YES | |
| RUNWAY LENGTH | 7500' | | 8500' | | 4600' | |
| RUNWAY WIDTH | 150' | | 150' | | 75' | |
| RUNWAY BEARING (TRUE) | 176.92° | 356.92° | 176.92° | 356.92° | 176.92° | 356.92° |
| RUNWAY SAFETY AREA LENGTH BEYOND STOP END OF RUNWAY | 1000' | 1000' | 1000' | 1000' | 300' | 300' |
| RUNWAY SAFETY AREA WIDTH | 500' | | 500' | | 150' | |
| RUNWAY OBJECT FREE AREA LENGTH BEYOND STOP END OF RUNWAY | 878' | 1000' | 878' | 1000' | 300' | 300' |
| RUNWAY OBJECT FREE AREA WIDTH | 800' | | 800' | | 500' | |
| RUNWAY OBSTACLE FREE ZONE LENGTH BEYOND RUNWAY END | 200' | 200' | 200' | 200' | 200' | 200' |
| RUNWAY OBSTACLE FREE ZONE WIDTH | 400' | | 400' | | 250' | |
| DISTANCE FROM RUNWAY CENTERLINE TO HOLD BARS AND SIGNS | 250' | | 256.9' | | 125' | |
| RUNWAY MARKING | NP | P | NP | P | V | V |
| STANDARD SEPARATION - RUNWAY CL TO PARALLEL TAXIWAY CL | 400' | | 400' | | 240' | |
| STANDARD SEPARATION - TAXIWAY CL TO FIXED OR MOVABLE OBJECT | 93' | | 129.5' | | 65.5' | |
| RUNWAY THRESHOLD DISPLACEMENT | 0' | 500' | 0' | 0' | 0' | 0' |
| RUNWAY SURFACE/PAVEMENT MATERIAL | Asphalt | | Asphalt | | Asphalt | |
| RUNWAY PAVEMENT SURFACE TREATMENT | None | | None | | None | |
| RUNWAY LIGHTING | MIRL | | HIRL | | MIRL | |
| TAKE-OFF RUN AVAILABLE | 7,500' | 7,500' | 8,500' | 8,500' | 4,600' | 4,600' |
| TAKE-OFF DISTANCE AVAILABLE | 7,500' | 7,500' | 8,500' | 8,500' | 4,600' | 4,600' |
| LANDING DISTANCE AVAILABLE | 7,500' | 7,000' | 8,500' | 8,500' | 4,600' | 4,600' |
| ACCELERATE STOP DISTANCE AVAILABLE | 7,500' | 7,500' | 8,500' | 8,500' | 4,600' | 4,600' |
| TAXIWAY WIDTH | 75' (50' Standard) | | 75' (50' Standard) | | 35' | |
| TAXIWAY SURFACE MATERIAL | Asphalt | | Asphalt | | Asphalt | |
| TAXIWAY OBJECT FREE AREA WIDTH | 186' | | 259' | | 131' | |
| TAXIWAY SAFETY AREA WIDTH | 118' | | 171' | | 79' | |
| TAXIWAY WINGTIP CLEARANCE | 34' | | 44' | | 26' | |
| TAXIWAY MARKING | Enhanced | | Enhanced | | Enhanced | |
| TAXIWAY LIGHTING | MITL | | MITL | | MITL | |
| RUNWAY NAVIGATION AIDS | RNAV GPS (34) VOR (34) | | LPV GPS (34R) ILS (34R) | | None | |
| RUNWAY VISUAL AIDS | Rotating Beacon PAPI-4 (16,34) REIL (16,34) | | Rotating Beacon MALSR (34R) PAPI-4 (16L,34R) REIL (16L,34R) | | Rotating Beacon PAPI-2 (16R,34L) Lighted Wind Indicator REILS | |

## EXISTING BUILDING TABLE

| EXIST | DESCRIPTION | TOP ELEV |
|---|---|---|
| 1 | ARFF/AIRPORT MAINTENANCE | 654.5 |
| 2 | TICKETING/SECURE SCREENING/RENTAL CARS/AIRPORT ADMINISTRATION | 655.3 |
| 3 | RENTAL CAR MAINTENANCE | 670.5 |
| 4 | DEPARTURE HOLDROOM/ LONGTERM GENERAL AVIATION TERMINAL | 655.0 |
| 5 | CHARTER BUS LOADING | 648.4 |
| 6 | OFFICE BUILDING | 647.0 |
| 7 | OFFICE BUILDING | 655.0 |
| 8 | FEDEX | 648.0 |
| 9 | AIR TRAFFIC CONTROL TOWER | 793.8 |
| 10 | CONVENTIONAL HANGAR | 663.5 |
| 11 | CONVENTIONAL HANGAR | 665.8 |
| 12 | FBO | 658.0 |
| 13 | FUEL FARM | 680.0 |
| 14 | T-HANGAR | 643.5 |
| 15 | T-HANGAR | 644.7 |
| 16 | T-HANGAR | 644.3 |
| 17 | T-HANGAR | 643.5 |
| 18 | T-HANGAR | 644.3 |
| 19 | T-HANGAR | 645.8 |
| 20 | T-HANGAR | 647.4 |
| 21 | T-HANGAR | 646.7 |
| 22 | T-HANGAR | 645.8 |
| 23 | T-HANGAR | 646.6 |
| 24 | T-HANGAR | 646.5 |
| 25 | T-HANGAR | 649.4 |
| 26 | T-HANGAR | 647.3 |
| 27 | T-HANGAR | 647.8 |
| 28 | T-HANGAR | 649.6 |
| 29 | CONVENTIONAL HANGAR | 674.8 |
| 30 | CONVENTIONAL HANGAR | 671.9 |
| 31 | OFFICE BUILDING | 662.4 |
| 32 | T-HANGAR | 650.7 |
| 33 | CONVENTIONAL HANGAR | 666.6 |
| 34 | CONVENTIONAL HANGAR | 652.5 |
| 35 | T-HANGAR | 653.1 |
| 36 | CONVENTIONAL HANGAR | 667.4 |
| 37 | CONVENTIONAL HANGAR | 672.6 |
| 38 | CONVENTIONAL HANGAR | 681.7 |
| 39 | CONVENTIONAL HANGAR | 683.3 |
| 40 | CONVENTIONAL HANGAR | 679.8 |
| 41 | GENERAL AVIATION TERMINAL | 679.8 |

## PROPOSED BUILDING TABLE

| ULT | DESCRIPTION |
|---|---|
| 101 | AIR CARGO/AIR FREIGHT BUILDING |
| 102 | CONVENTIONAL HANGAR |
| 103 | CONVENTIONAL HANGAR |
| 104 | CONVENTIONAL HANGAR |
| 105 | AIRCRAFT WASH RACK |
| 106 | T-HANGARS |
| 107 | T-HANGARS |
| 108 | ARFF |
| 109 | AIR CARGO/AIR FREIGHT |
| 110 | COMMERCIAL TERMINAL |

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83;
   VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88. DERIVED FROM SURVEY PERFORMED BY KENNEY AERIAL MAPPING, INC., PHOENIX, ARIZONA; PROVIDED BY STANTEC CONSULTING, INC., PHOENIX, ARIZONA
2. NO OFZ PENETRATIONS
3. SEE SHEETS 8 THROUGH 11 FOR THRESHOLD SITING SURFACE OBJECT PENETRATION DETAILS.
4. THE PROPOSED SITE FOR THE FUTURE AIRCRAFT RESCUE FIRE FIGHTING (ARFF) STATION WILL MEET THE REQUIRED EMERGENCY RESPONSE TIME FOR CERTIFICATED FEDERAL AVIATION REGULATION PART 139 COMMERCIAL SERVICE OPERATIONS.
5. ALL ELEVATIONS IN NAVD 88.

## AIRPORT DATA

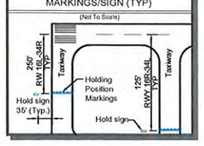
| | | |
|---|---|---|
| OWNER: Mohave County Airport Authority | AIRPORT NPIAS CODE: P | |
| CITY: Bullhead City, Arizona | COUNTY: Mohave, Arizona | |
| RANGE: R 21 W | TOWNSHIP: T 32 S | |
| LAUGHLIN/BULLHEAD INTERNATIONAL (KIFP) | EXISTING | ULTIMATE |
| AIRPORT SERVICE LEVEL | Commercial (P) | Commercial (P) |
| AIRPORT REFERENCE CODE | C-III | D-IV |
| AIRPORT ELEVATION | 696.9' MSL | 707.0' MSL |
| MEAN MAXIMUM TEMPERATURE OF HOTTEST MONTH | 108.2° July | 108.2° July |
| AIRPORT REFERENCE POINT (NAD 83) Latitude | 35° 09' 21.572" N | 35° 09' 09.727" N |
| AIRPORT REFERENCE POINT (NAD 83) Longitude | 114° 33' 33.944" W | 114° 33' 36.016" W |
| AIRPORT INSTRUMENT APPROACH | GPS, VOR | GPS, ILS, VOR |
| NAVAIDS | Airport Beacon PAPI-4 (16,34) REIL (16, 34) | Airport Beacon GPS (16L, 34R) ILS (34R) MALSR (34R) PAPI-4 (16L, 34R) PAPI-2 (16R, 34L) REIL (ALL RW ENDS) |
| GPS AT AIRPORT | Yes | Yes |

## RUNWAY END COORDINATES (NAD 83)

| RUNWAY | LATITUDE | LONGITUDE |
|---|---|---|
| EXISTING RUNWAY 16 | 35° 09' 58.590" N | 114° 33' 36.739" W |
| EXISTING RUNWAY 34 | 35° 08' 44.519" N | 114° 33' 31.153" W |
| EXISTING RUNWAY 34 DISPLACED THRESHOLD | 35° 08' 49.490" N | 114° 33' 31.512" W |
| ULTIMATE RUNWAY 34R | 35° 08' 34.682" N | 114° 33' 30.405" W |
| ULTIMATE RUNWAY 16R | 35° 09' 19.663" N | 114° 33' 42.246" W |
| ULTIMATE RUNWAY 34L | 35° 08' 34.254" N | 114° 33' 38.818" W |

HOLD POSITION MARKINGS/SIGN (TYP)

(Not To Scale)




FOR APPROVAL BY
Mohave County Airport Authority

David C. Gaines
Chief Operating Officer
DATE:

FAA APPROVAL STAMP

Magnetic Declination
11° 35' East (March 2009)
Annual Rate of Change
0° 6' West (March 2009)

0 500 1000
SCALE IN FEET

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| 3 | UPDATED AIRPORT MASTER PLAN | 04/28/00 | MR | SGB |
| 2 | ADDED INTERIM WEST APRON | 05/02/93 | JMH | DT |
| 1 | ADDED PARALLEL TAXIWAY | 09/15/88 | JMH | DT |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

# LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

## AIRPORT LAYOUT DRAWING

DRAFT

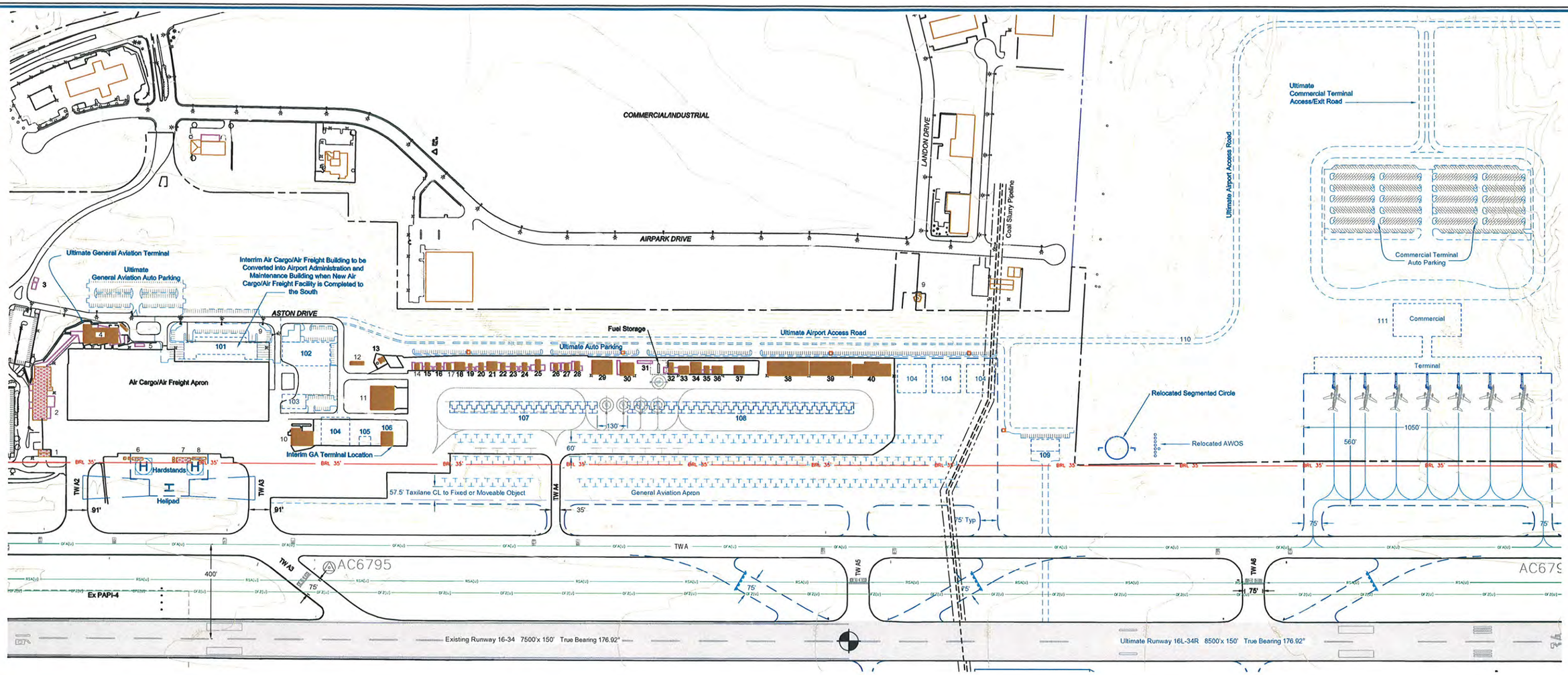
## BULLHEAD CITY, ARIZONA

PLANNED BY: Chris M. Hugunin
DETAILED BY: Diana L. Hopkins
APPROVED BY: James M. Harris

FEBRUARY 27, 2009 SHEET 1 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

JeffPrian Associates R:\CAD\Mapping\BVMPL\LAUGHL\INVALPLT\P ALB.dwg Printed Date 3-23-09 02:17:08 PM Dhopkins




## LEGEND

| EXISTING | ULTIMATE | DESCRIPTION |
|---|---|---|
| | | AIRPORT PROPERTY LINE |
| | | SECTION CORNERS |
| | | AIRPORT REFERENCE POINT (ARP) |
| | | AIRPORT ROTATING BEACON |
| | | AVIGATION EASEMENT |
| BRL 35' | | BUILDING RESTRICTION LINE |
| | | STRUCTURES ON AIRPORT |
| N/A | | ABANDON/REMOVE |
| | | STRUCTURE OFF AIRPORT |
| | | FENCING |
| | | AIRPORT PAVEMENT |
| N/A | | GLIDESLOPE ANTENNA & EQUIP. SHELTER |
| | | HELICOPTER PARKING |
| | | HOLD MARKING |
| | IFP | SURVEY MONUMENT WITH IDENTIFIER |
| OFA | OFA(U) | OBJECT FREE AREA |
| RSA | RSA(U) | RUNWAY SAFETY AREA |
| OFZ | OFZ(U) | OBSTACLE FREE ZONE |
| RPZ | | RUNWAY PROTECTION ZONE |
| | | PAPI-4 |
| | | RUNWAY END IDENTIFIER LIGHTS (REILS) |
| | | LIGHTED WINDSOCK |
| | | TOPOGRAPHY |
| | | ULTIMATE MALSR |

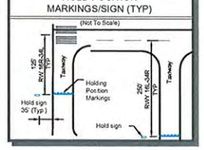
## EXISTING BUILDING TABLE

| EXIST | DESCRIPTION | TOP ELEV |
|---|---|---|
| 1 | ARFF/AIRPORT MAINTENANCE | 654.5 |
| 2 | TICKETING/SECURE SCREENING/RENTAL CARS/AIRPORT ADMINISTRATION | 655.3 |
| 3 | RENTAL CAR MAINTENANCE | 670.5 |
| 4 | DEPARTURE HOLDROOM/ LONGTERM GENERAL AVIATION TERMINAL | 655.0 |
| 5 | CHARTER BUS LOADING | 648.4 |
| 6 | OFFICE BUILDING | 647.0 |
| 7 | OFFICE BUILDING | 655.0 |
| 8 | FEDEX | 648.0 |
| 9 | AIR TRAFFIC CONTROL TOWER | 793.8 |
| 10 | CONVENTIONAL HANGAR | 663.5 |
| 11 | CONVENTIONAL HANGAR | 665.8 |
| 12 | FBO | 658.0 |
| 13 | FUEL FARM | 680.0 |
| 14 | T-HANGAR | 643.5 |
| 15 | T-HANGAR | 644.7 |
| 16 | T-HANGAR | 644.3 |
| 17 | T-HANGAR | 643.5 |
| 18 | T-HANGAR | 644.3 |
| 19 | T-HANGAR | 645.8 |
| 20 | T-HANGAR | 647.4 |

## EXISTING BUILDING TABLE

| EXIST | DESCRIPTION | TOP ELEV |
|---|---|---|
| 21 | T-HANGAR | 646.7 |
| 22 | T-HANGAR | 645.8 |
| 23 | T-HANGAR | 646.6 |
| 24 | T-HANGAR | 646.5 |
| 25 | T-HANGAR | 649.4 |
| 26 | T-HANGAR | 647.3 |
| 27 | T-HANGAR | 647.8 |
| 28 | T-HANGAR | 649.6 |
| 29 | CONVENTIONAL HANGAR | 674.8 |
| 30 | CONVENTIONAL HANGAR | 671.9 |
| 31 | OFFICE BUILDING | 662.4 |
| 32 | T-HANGAR | 650.7 |
| 33 | CONVENTIONAL HANGAR | 666.6 |
| 34 | CONVENTIONAL HANGAR | 652.5 |
| 35 | T-HANGAR | 653.1 |
| 36 | CONVENTIONAL HANGAR | 667.4 |
| 37 | CONVENTIONAL HANGAR | 672.6 |
| 38 | CONVENTIONAL HANGAR | 681.7 |
| 39 | CONVENTIONAL HANGAR | 683.3 |
| 40 | CONVENTIONAL HANGAR | 679.8 |
| 41 | GENERAL AVIATION TERMINAL | 679.8 |

HOLD POSITION MARKINGS/SIGN (TYP)




## PROPOSED BUILDING TABLE

| ULT | DESCRIPTION |
|---|---|
| 101 | AIR CARGO/AIR FREIGHT BUILDING |
| 102 | CONVENTIONAL HANGAR |
| 103 | CONVENTIONAL HANGAR |
| 104 | CONVENTIONAL HANGAR |
| 105 | AIRCRAFT WASH RACK |
| 106 | T-HANGARS |
| 107 | T-HANGARS |
| 108 | ARFF |
| 109 | AIR CARGO/AIR FREIGHT |
| 110 | COMMERCIAL TERMINAL |

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83;
   VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88. DERIVED FROM SURVEY PERFORMED BY KENNEY AERIAL MAPPING, INC., PHOENIX, ARIZONA; PROVIDED BY STANTEC CONSULTING, INC., PHOENIX, ARIZONA
2. EXISTNG BUILDING ELEVATIONS FROM STANTEC CONSULTING, INC., PHOENIX, ARIZONA.
3. THE PROPOSED SITE FOR THE FUTURE AIRCRAFT RESCUE FIRE FIGHTING (ARFF) STATION WILL MEET THE REQUIRED EMERGENCY RESPONSE TIME FOR CERTIFICATED FEDERAL AVIATION REGULATION PART 139 COMMERCIAL SERVICE OPERATIONS.
4. THE BRL BOUNDARY LOCATION OCCURS COINCIDENT WITH THE ULTIMATE OBJECT FREE AREA (OFA) ALONG WEST SIDE OF PLANNED RUNWAY 16R–34L.
5. ALL ELEVATIONS IN NAVD 88.

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

TERMINAL AREA DRAWING

DRAFT

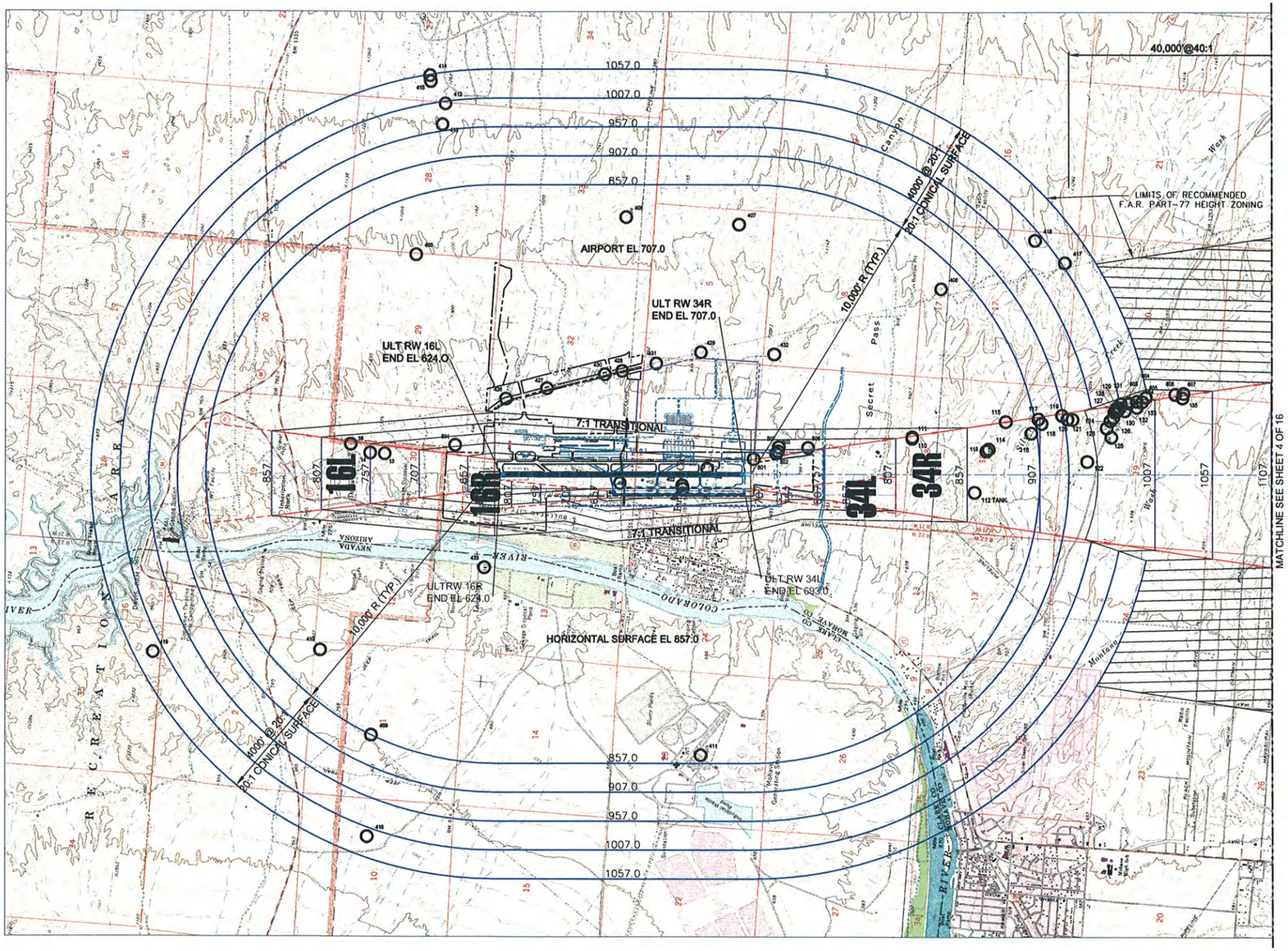
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Hugunin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009 — SHEET 2 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Hopkins\BULMPL\ALP\CAD\BULALP\TP TABpmg Printed Date 3-03-09 02:38:15 PM Dhopkins




AIRSPACE PLAN

| OBSTRUCTION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item # | Description | Top Elevation | Distance from RW End | Offset from Centerline | Part 77 Surface Penetrated | Penetration | Remediation |
| 401 | WIND SOCK | 666.7 | 4350 | 300 | PRIMARY | 4.7 | TO REMAIN |
| 402 | TERRAIN | 693.7 | 2174 | 367 | PRIMARY | 6.7 | TO BE REMOVED |
| 403 | BUSH | 697.3 | 1311 | 189 | PRIMARY | 3.3 | TO BE REMOVED |
| 404 | TERRAIN | 691.8 | 2157 | 507 | PRIMARY | 4.8 | TO BE REMOVED |
| 405 | TANK | 1012.2 | -11438 | 7591 | HORIZONTAL | 155 | REQUEST AERONAUTICAL STUDY |
| 406 | TERRAIN | 1184.0 | -4137 | 8883 | HORIZONTAL | 327 | REQUEST AERONAUTICAL STUDY |
| 407 | TERRAIN | 1135.3 | -207 | 8626 | HORIZONTAL | 278 | REQUEST AERONAUTICAL STUDY |
| 408 | TOWER | 1190.1 | -6791 | 6410 | HORIZONTAL | 333 | REQUEST AERONAUTICAL STUDY |
| 409 | TOWER | 878.6 | -12996 | 9027 | HORIZONTAL | 22 | REQUEST AERONAUTICAL STUDY |
| 410 | TOWER | 928.6 | -14769 | 6088 | HORIZONTAL | 72 | REQUEST AERONAUTICAL STUDY |
| 411 | SMOKE STACK | 1222.5 | -1538 | 9714 | HORIZONTAL | 366 | REQUEST AERONAUTICAL STUDY |
| 428 | UTILITY POLE | 931.7 | -4277 | 3565 | HORIZONTAL | 75 | REQUEST AERONAUTICAL STUDY |
| 429 | UTILITY POLE | 940.8 | -1566 | 4206 | HORIZONTAL | 84 | REQUEST AERONAUTICAL STUDY |
| 430 | UTILITY POLE | 911.4 | -4877 | 3452 | HORIZONTAL | 54 | REQUEST AERONAUTICAL STUDY |
| 431 | UTILITY POLE | 926.2 | -3083 | 3825 | HORIZONTAL | 69 | REQUEST AERONAUTICAL STUDY |
| 432 | UTILITY POLE | 913.8 | -983 | 4143 | HORIZONTAL | 57 | REQUEST AERONAUTICAL STUDY |
| 433 | BUILDING | 877.0 | -9054 | 3221 | HORIZONTAL | 20 | REQUEST AERONAUTICAL STUDY |
| 412 | TERRAIN | 1297.2 | -10414 | 12810 | CONICAL | 294 | REQUEST AERONAUTICAL STUDY |
| 413 | TANK | 1219.0 | -10519 | 12089 | CONICAL | 299 | REQUEST AERONAUTICAL STUDY |
| 414 | BUILDING | 1320.5 | -10952 | 13784 | CONICAL | 265 | REQUEST AERONAUTICAL STUDY |
| 415 | BUILDING | 1314.4 | -10926 | 13581 | CONICAL | 269 | REQUEST AERONAUTICAL STUDY |
| 416 | TOWER | 1025.1 | -13140 | 12539 | CONICAL | 3.0 | REQUEST AERONAUTICAL STUDY |
| 417 | POWER POLE | 1201.1 | 11067 | 7313 | CONICAL | 189 | REQUEST AERONAUTICAL STUDY |
| 418 | TERRAIN | 1192.2 | 10038 | 8090 | CONICAL | 229 | REQUEST AERONAUTICAL STUDY |
| 419 | TERRAIN | 1035.9 | -20542 | 6170 | CONICAL | 11 | REQUEST AERONAUTICAL STUDY |
| 426 | TOWER | 878.0 | -8303 | 2612 | CONICAL | 21 | REQUEST AERONAUTICAL STUDY |
| 427 | POLE | 884.0 | -6890 | 2970 | CONICAL | 27 | REQUEST AERONAUTICAL STUDY |
| 501 | FENCE | 722.0 | 297 | 527 R | INNER TRANSITIONAL | 11 | TO BE REMOVED |
| 502 | VEGETATION | 759.1 | 1054 | 720 R | INNER TRANSITIONAL | 22 | TO BE REMOVED |
| 503 | TERRAIN | 774.6 | 1121 | 795 R | INNER TRANSITIONAL | 27 | REQUEST AERONAUTICAL STUDY |
| 504 | POWER POLE | 727.1 | 1569 | 1000 L | INNER TRANSITIONAL | 16 | REQUEST AERONAUTICAL STUDY |
| 506 | VEGETATION | 733.7 | 2153 | 917 R | INNER TRANSITIONAL | 3 | REQUEST AERONAUTICAL STUDY |
| 507 | VEGETATION | 791.8 | 1142 | 938 R | INNER TRANSITIONAL | 24 | REQUEST AERONAUTICAL STUDY |
| 602 | TREE | 1025.3 | 13006 | 2443 R | TRANSITIONAL | 45 | REQUEST AERONAUTICAL STUDY |
| 603 | TREE | 1034.4 | 13287 | 2480 R | TRANSITIONAL | 49 | REQUEST AERONAUTICAL STUDY |
| 604 | BUILDING | 1031.6 | 13563 | 2533 R | TRANSITIONAL | 37 | REQUEST AERONAUTICAL STUDY |
| 605 | BUILDING | 1038.1 | 13882 | 2668 R | TRANSITIONAL | 23 | REQUEST AERONAUTICAL STUDY |
| 606 | TERRAIN | 1054.4 | 14905 | 2770 R | TRANSITIONAL | 21 | REQUEST AERONAUTICAL STUDY |
| 607 | BUILDING | 1076.7 | 15193 | 2804 R | TRANSITIONAL | 37 | REQUEST AERONAUTICAL STUDY |
| 13 | POWER POLE | 789.2 | 4026 | 708 L | APPROACH 16L | 53 | REQUEST AERONAUTICAL STUDY |
| 14 | POWER POLE | 762.0 | 4526 | 691 L | APPROACH 16L | 11 | REQUEST AERONAUTICAL STUDY |
| 16 | TOWER | 808.9 | 5208 | 1035 L | APPROACH 16L | 38 | REQUEST AERONAUTICAL STUDY |
| 110 | VEGETATION | 886.9 | 5774 | 1242 R | APPROACH 34R | 68 | REQUEST AERONAUTICAL STUDY |
| 111 | TERRAIN | 889.9 | 5774 | 1290 R | APPROACH 34R | 71 | REQUEST AERONAUTICAL STUDY |
| 112 | TANK | 926.6 | 7952 | 620 L | APPROACH 34R | 65 | REQUEST AERONAUTICAL STUDY |
| 113 | VEGETATION | 980.4 | 8361 | 810 R | APPROACH 34R | 110 | REQUEST AERONAUTICAL STUDY |
| 114 | TERRAIN | 980.6 | 8435 | 874 R | APPROACH 34R | 109 | REQUEST AERONAUTICAL STUDY |
| 115 | TERRAIN | 979.0 | 9025 | 1826 R | APPROACH 34R | 96 | REQUEST AERONAUTICAL STUDY |
| 116 | UTILITY POLE | 916.0 | 9905 | 1433 R | APPROACH 34R | 16 | REQUEST AERONAUTICAL STUDY |
| 117 | BUILDING | 960.6 | 10150 | 1918 R | APPROACH 34R | 55 | REQUEST AERONAUTICAL STUDY |
| 118 | VEGETATION | 938.5 | 10260 | 1759 R | APPROACH 34R | 30 | REQUEST AERONAUTICAL STUDY |
| 119 | TERRAIN | 961.7 | 10966 | 2043 R | APPROACH 34R | 36 | REQUEST AERONAUTICAL STUDY |
| 120 | VEGETATION | 959.6 | 11154 | 1914 R | APPROACH 34R | 29 | TSS CLEAR; NAR |
| 121 | VEGETATION | 963.0 | 11328 | 1900 R | APPROACH 34R | 28 | TSS CLEAR; NAR |
| 122 | BUILDING | 979.7 | 11837 | 446 R | APPROACH 34R | 32 | TSS CLEAR; NAR |
| 123 | POWER POLE | 1001.2 | 12511 | 1605 R | APPROACH 34R | 36 | TSS CLEAR; NAR |
| 124 | SIGN | 995.5 | 12640 | 1856 R | APPROACH 34R | 27 | TSS CLEAR; NAR |
| 125 | TREE | 1004.8 | 12674 | 1288 R | APPROACH 34R | 36 | TSS CLEAR; NAR |
| 126 | BUILDING | 997.7 | 12747 | 1970 R | APPROACH 34R | 27 | REQUEST AERONAUTICAL STUDY |
| 127 | POWER POLE | 1029.1 | 12777 | 2159 R | APPROACH 34R | 58 | REQUEST AERONAUTICAL STUDY |
| 128 | TREE | 1006.3 | 12848 | 2176 R | APPROACH 34R | 33 | REQUEST AERONAUTICAL STUDY |
| 129 | TREE | 1010.4 | 12874 | 2306 R | APPROACH 34R | 37 | REQUEST AERONAUTICAL STUDY |
| 130 | TREE | 1029.9 | 12894 | 2214 R | APPROACH 34R | 56 | REQUEST AERONAUTICAL STUDY |
| 131 | BUILDING | 1013.5 | 12962 | 2311 R | APPROACH 34R | 37 | REQUEST AERONAUTICAL STUDY |
| 132 | TREE | 1024.4 | 13142 | 2199 R | APPROACH 34R | 44 | REQUEST AERONAUTICAL STUDY |
| 133 | TREE | 1023.0 | 13562 | 2319 R | APPROACH 34R | 32 | REQUEST AERONAUTICAL STUDY |
| 134 | BUILDING | 1031.8 | 13755 | 2516 R | APPROACH 34R | 36 | REQUEST AERONAUTICAL STUDY |
| 135 | BUILDING | 1076.6 | 15158 | 2648 R | APPROACH 34R | 46 | REQUEST AERONAUTICAL STUDY |

ALL ELEVATIONS AND DISTANCE MEASUREMENTS IN FEET

ALL APPROACH SURFACE OFFSETS DESCRIBED AS RIGHT (R) OR LEFT (L) OF THE EXTENDED RUNWAY CENTERLINE AS SEEN FROM APPROACHING AIRCRAFT

ALL PRIMARY, HORIZONTAL, AND CONICAL SURFACE OFFSETS MEASURED FROM THE END OF RUNWAY 34R.

MAGNETIC NORTH
NORTH

*Magnetic Declination*
*11° 35' East (March 2009)*
*Annual Rate of Change*
*0° 6' West (March 2009)*

0 1000 2000
SCALE IN FEET

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 - NAD 83; VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM - NAVD88. FROM STANTEC, PHOENIX, ARIZONA.
2. THE FOLLOWING USGS QUAD MAPS APPLY AS BACKGROUND: DAVIS, DAVIS DAM SE, AND OATMAN.
4. SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN OBSTRUCTIONS.

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

AIRPORT AIRSPACE DRAWING I

DRAFT

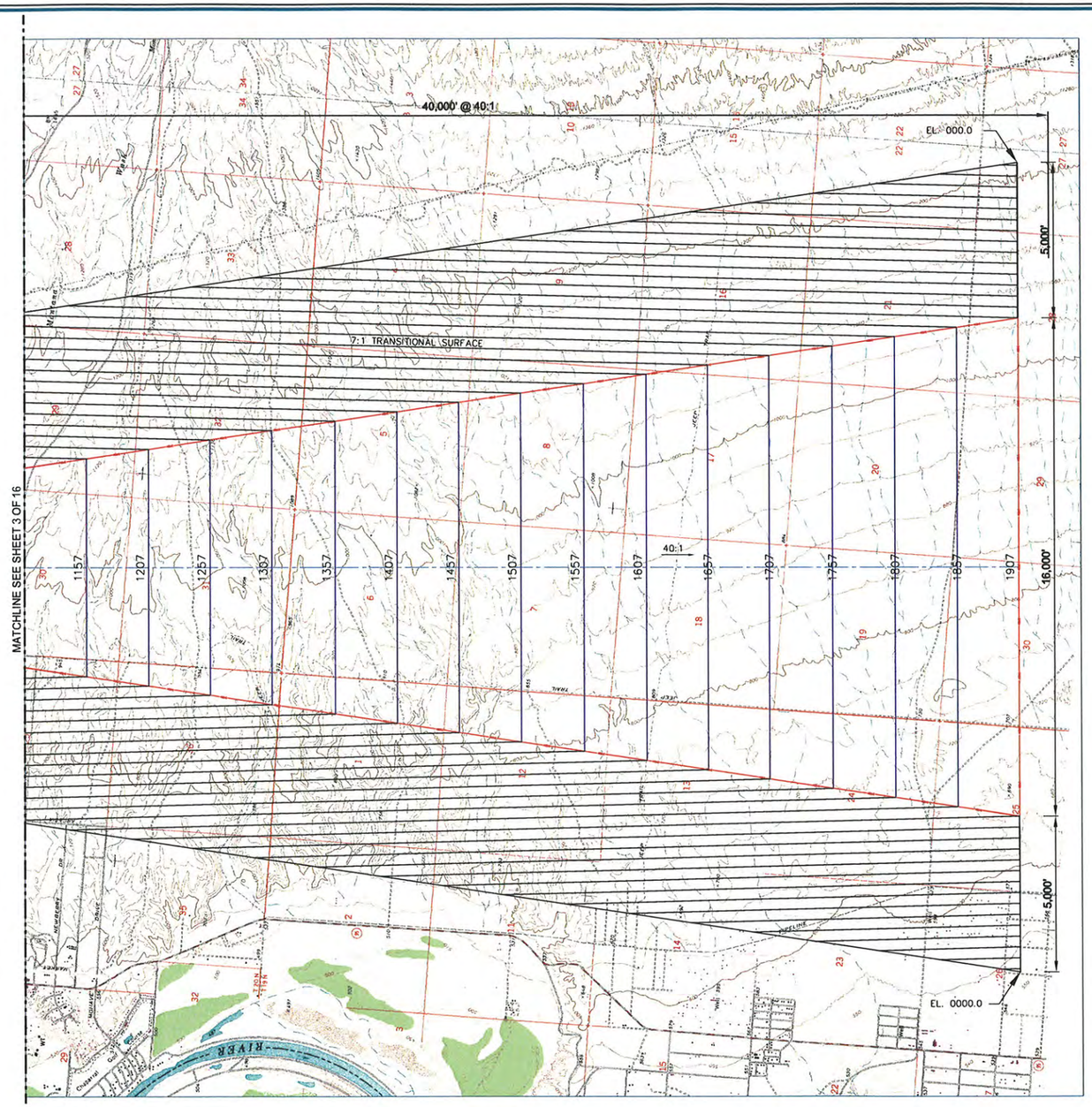
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Hagunin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 21, 2009 SHEET 3 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Projects\ENVP\LAUGHLIN\ALP\ETP A3.dwg Printed Date: 3-03-09 02:10:36 PM Dhopkins




## AIRSPACE PLAN

*Magnetic Declination*
*11° 35' East (March 2009)*
*Annual Rate of Change*
*0° 6' West (March 2009)*

0 1000 2000
SCALE IN FEET

| OBSTRUCTION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | Object Description | Distance From RW End | Offset From RW Centerline | Top Elevation | Surface Penetrated | Penetration | Remediation |
| | NONE FOUND | | | | | | |

NAR – NO ACTION REQUIRED

ALL OFFSETS DESCRIBED AS RIGHT (R) OR LEFT (L) OF THE EXTENDED RUNWAY CENTERLINE AS SEEN FROM APPROACHING AIRCRAFT

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD 83; VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM – NAVD88. FROM STANTEC, PHOENIX, ARIZONA.
2. THE FOLLOWING USGS QUAD MAPS APPLY AS BACKGROUND: DAVIS, DAVIS DAM SE, AND OATMAN.
4. SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN OBSTRUCTIONS.

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

AIRPORT AIRSPACE DRAWING II

DRAFT

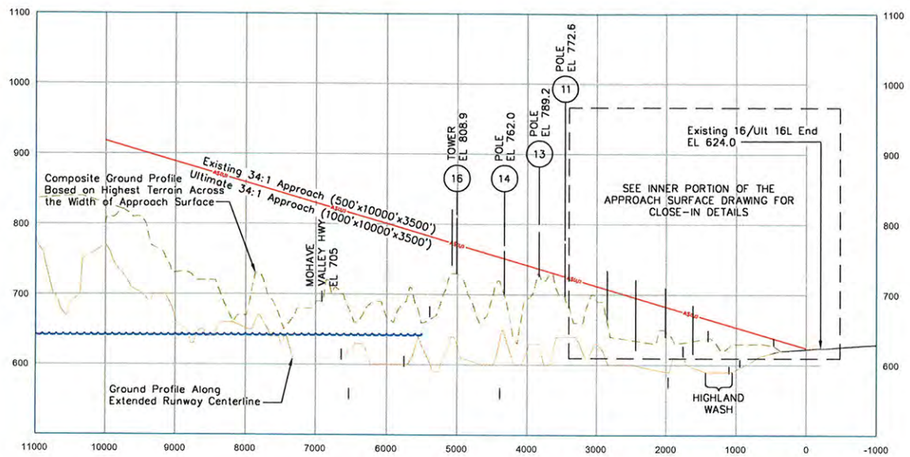
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Hugunin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

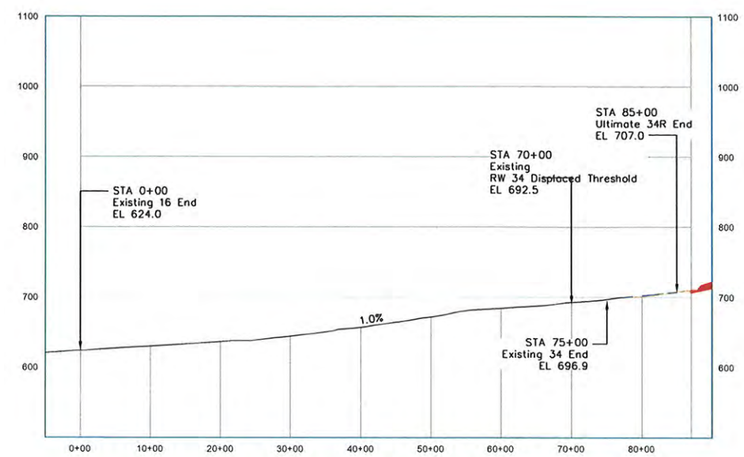
FEBRUARY 27, 2009 | SHEET 4 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Projects\N\PFL\ACDE\IN\ALP\ALP AS.dwg Printed Date 3-03-09 02:12:14 PM Dhopkins




## RUNWAY 16L APPROACH PROFILE




## RUNWAY 16L-34R CENTERLINE PROFILE

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; FROM STANTEC, PHOENIX, ARIZONA. FROM STANTEC, PHOENIX, ARIZONA
2. ALL DISTANCE MEASUREMENTS IN FEET.
3. SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN OBSTRUCTIONS.

EXISTING RW 16/ULTIMATE RW 16L OBSTRUCTION TABLE

| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
|---|---|---|---|---|---|---|
| 11 | POLE | 772.6 | 3662 | 692 L | 47 | REQUEST AERONAUTICAL STUDY |
| 13 | POLE | 789.2 | 4031 | 708 L | 53 | REQUEST AERONAUTICAL STUDY |
| 14 | POLE | 762.0 | 4531 | 691 L | 11 | REQUEST AERONAUTICAL STUDY |
| 16 | TOWER | 808.9 | 5208 | 1035 L | 38 | REQUEST AERONAUTICAL STUDY |

EXISTING RW 34 OBSTRUCTION TABLE

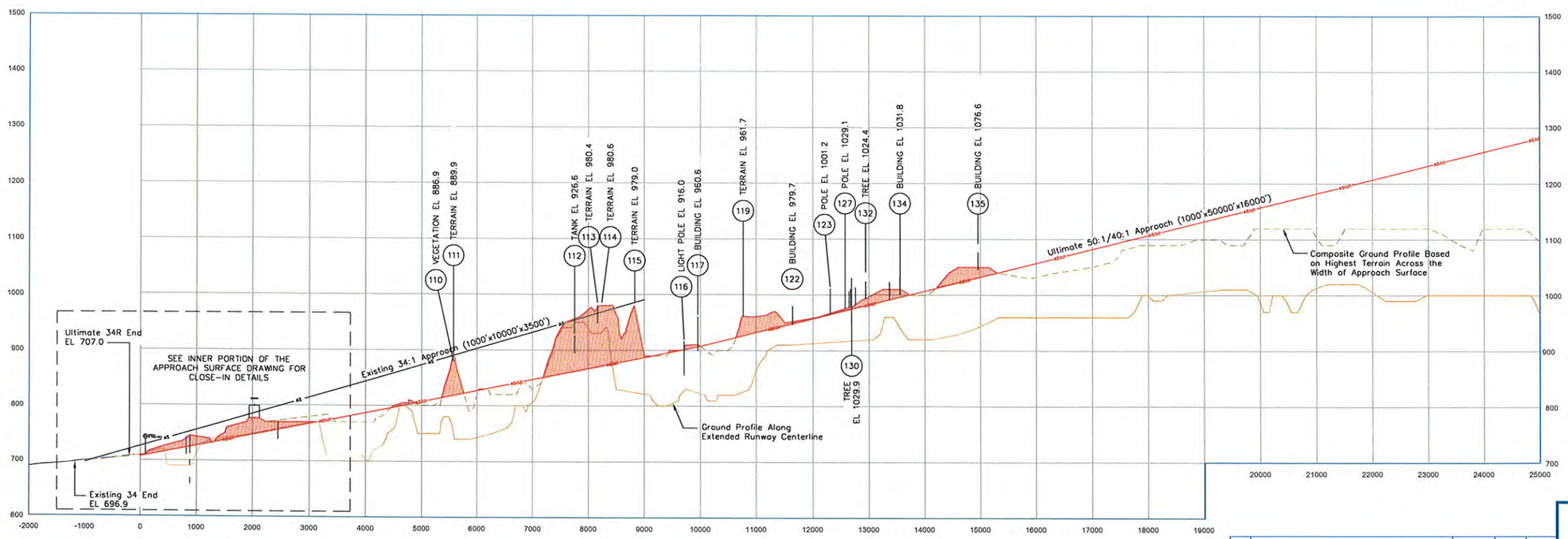
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
|---|---|---|---|---|---|---|
| | TERRAIN | VARIES | SEE PROFILE | VARIES | VARIES | REQUEST AERONAUTICAL STUDY |
| 113 | VEGETATION | 980.4 | 9361 | 810 R | 49 | REQUEST AERONAUTICAL STUDY |
| 114 | TERRAIN | 980.6 | 9435 | 874 R | 12 | REQUEST AERONAUTICAL STUDY |

ULTIMATE RW 34R OBSTRUCTION TABLE

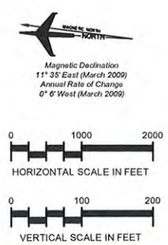
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
|---|---|---|---|---|---|---|
| | TERRAIN | VARIES | SEE PROFILE | VARIES | VARIES | REQUEST AERONAUTICAL STUDY |
| 110 | VEGETATION | 886.9 | 5774 | 1242 R | 68 | REQUEST AERONAUTICAL STUDY |
| 111 | TERRAIN | 889.9 | 5775 | 1290 R | 71 | REQUEST AERONAUTICAL STUDY |
| 112 | TANK | 926.6 | 7952 | 620 L | 65 | REQUEST AERONAUTICAL STUDY |
| 113 | VEGETATION | 980.4 | 8361 | 810 R | 110 | REQUEST AERONAUTICAL STUDY |
| 114 | TERRAIN | 980.6 | 8435 | 874 R | 109 | REQUEST AERONAUTICAL STUDY |
| 115 | TERRAIN | 979.0 | 9025 | 1826 R | 96 | REQUEST AERONAUTICAL STUDY |
| 116 | POLE | 916.0 | 9905 | 1433 R | 16 | REQUEST AERONAUTICAL STUDY |
| 117 | BUILDING | 960.6 | 10150 | 1918 R | 55 | REQUEST AERONAUTICAL STUDY |
| 119 | TERRAIN | 961.7 | 10966 | 2043 R | 36 | REQUEST AERONAUTICAL STUDY |
| 122 | BUILDING | 979.7 | 11837 | 446 R | 32 | REQUEST AERONAUTICAL STUDY |
| 123 | POLE | 1001.2 | 12511 | 1605 R | 36 | REQUEST AERONAUTICAL STUDY |
| 127 | POLE | 1029.1 | 12777 | 2159 R | 58 | REQUEST AERONAUTICAL STUDY |
| 130 | TREE | 1029.9 | 12894 | 2214 R | 56 | REQUEST AERONAUTICAL STUDY |
| 132 | TREE | 1024.4 | 13142 | 2199 R | 44 | REQUEST AERONAUTICAL STUDY |
| 134 | BUILDING | 1031.8 | 13755 | 2516 R | 36 | REQUEST AERONAUTICAL STUDY |
| 135 | BUILDING | 1076.6 | 15158 | 2648 R | 46 | REQUEST AERONAUTICAL STUDY |

ALL ELEVATIONS AND DISTANCE MEASUREMENTS IN FEET

ALL APPROACH SURFACE OFFSETS DESCRIBED AS RIGHT (R) OR LEFT (L) OF THE EXTENDED RUNWAY CENTERLINE AS SEEN FROM APPROACHING AIRCRAFT




## RUNWAY 34R APPROACH PROFILE




| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

AIRPORT AIRSPACE PROFILES
RUNWAY 16L-34R

DRAFT

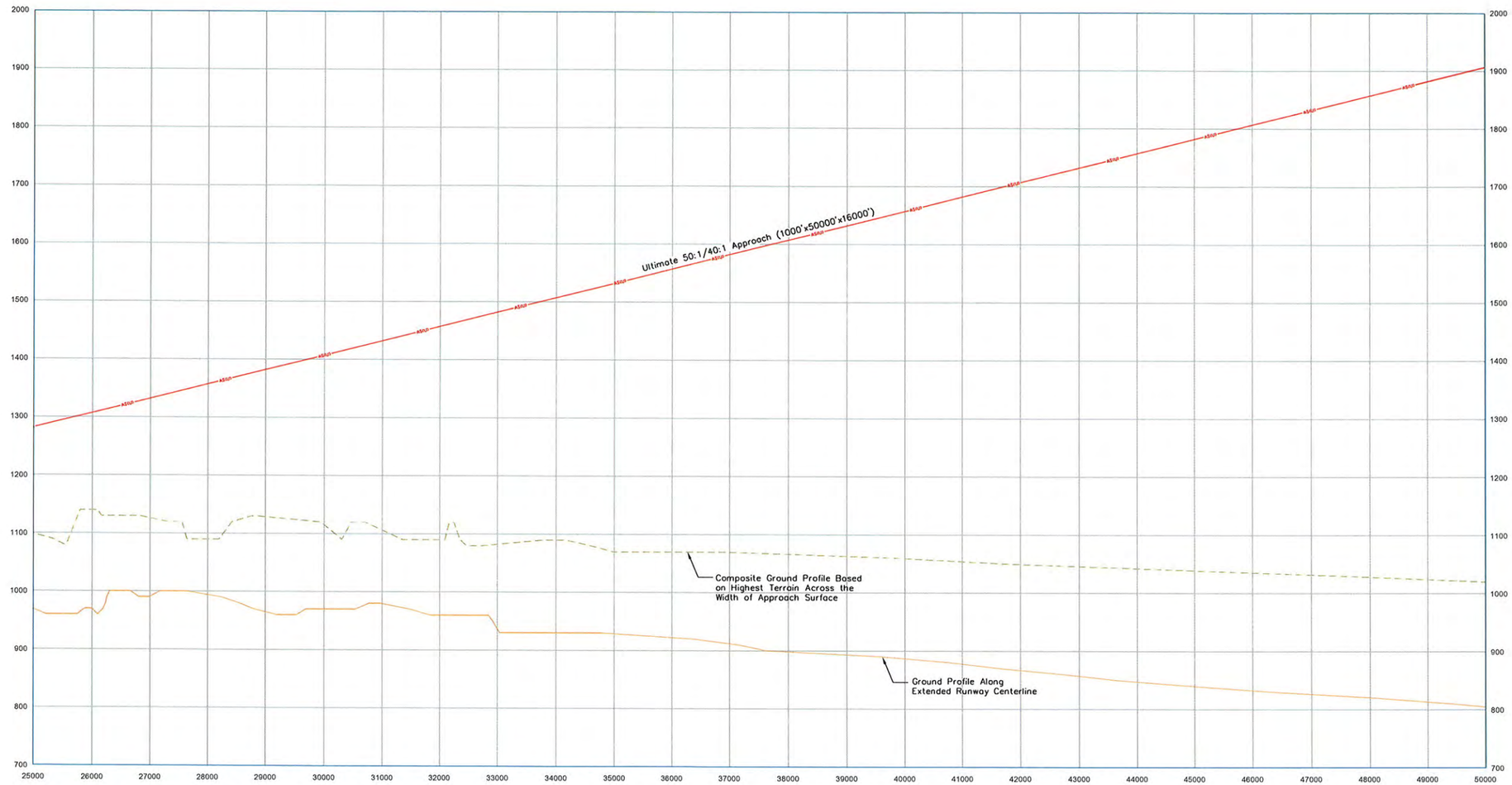
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Hugunin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009 — SHEET 5 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Hopkins\BNR\LAUGHLIN\ALP\LFP ASP 16L-34R.dwg Printed Date 3-03-09 02:39:26 PM Jhopkins



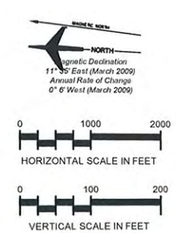

# RUNWAY 34R APPROACH PROFILE

| EXISTING RW 34 OBSTRUCTION TABLE | | | | | | |
|---|---|---|---|---|---|---|
| No. | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
| - | NONE FOUND | - | - | - | - | - |

| ULTIMATE RW 34R OBSTRUCTION TABLE | | | | | | |
|---|---|---|---|---|---|---|
| No. | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
| - | NONE FOUND | - | - | - | - | - |

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; FROM STANTEC, PHOENIX, ARIZONA.




| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

*THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.*

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

AIRPORT AIRSPACE PROFILE
RUNWAY 34R

DRAFT

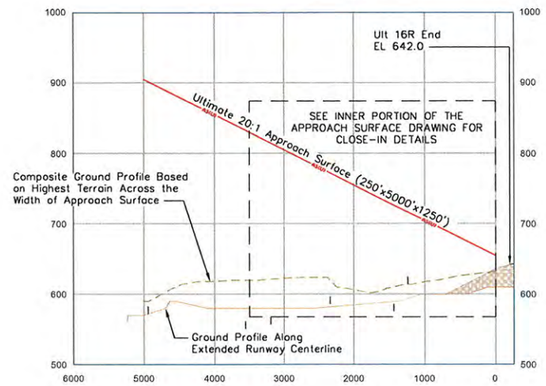
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Huguin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

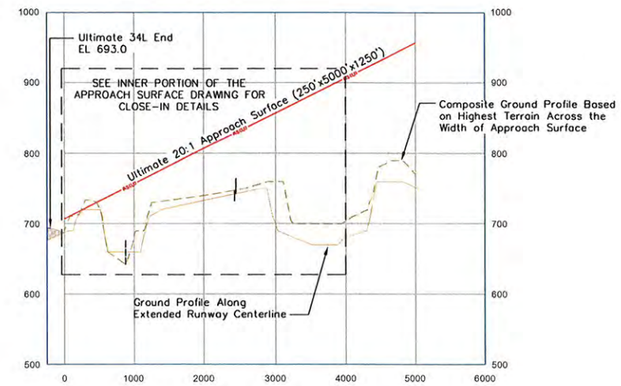
FEBRUARY 27, 2009 — SHEET 6 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Projects\MP\LAUGHLIN\ALP\LFP ASP 16L-34R.dwg Printed Date 3-03-09 02:43:11 PM Dhopkins




## RUNWAY 16R APPROACH PROFILE




## RUNWAY 34L APPROACH PROFILE

ULTIMATE RW 16R OBSTRUCTION TABLE

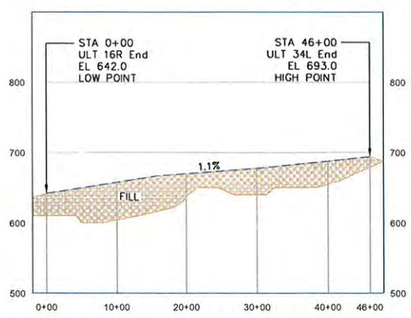
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
|---|---|---|---|---|---|---|
| | NONE FOUND | | | | | |

ULTIMATE RW 34L OBSTRUCTION TABLE

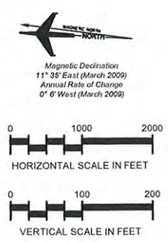
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
|---|---|---|---|---|---|---|
| - | SEE SHEET 11 OF 15 FOR INNER PORTION OF THE APPROACH SURFACE OBSTRUCTIONS | - | - | - | - | - |

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83;
   VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88;
   FROM STANTEC, PHOENIX, ARIZONA.
2. SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN OBSTRUCTIONS.




## RUNWAY 16R-34L CENTERLINE PROFILE




| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

AIRPORT AIRSPACE PROFILES
RUNWAY 16R-34L

DRAFT

**BULLHEAD CITY, ARIZONA**

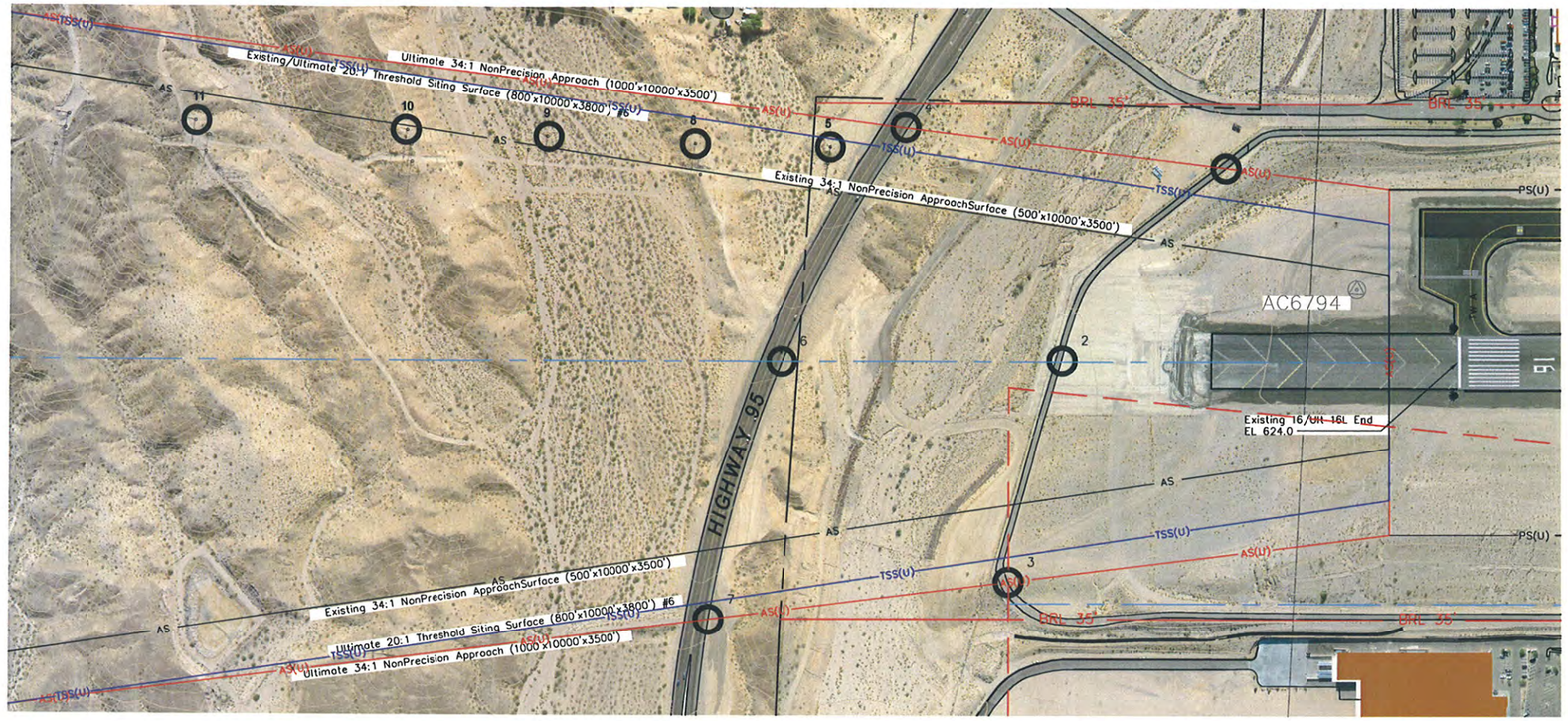
*PLANNED BY:* Chris M. Hugunin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009



Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Hopkins\EWP\LAUGHLIN\ALP\FP ASP 16R-34L.dwg Printed Date 3-03-09 02:48 PM Dhopkins




## RUNWAY 16L PLAN

| EXISTING RUNWAY 16 OBSTRUCTION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Approach Penetration | TSS Penetration | Remediation |
| 5 | UTILITY POLE | 684.9 | 1817 | 621 L | 13 | CLEAR | TSS CLEAR; NAR |
| 8 | UTILTIY POLE | 708.8 | 2212 | 628 L | 26 | CLEAR | TSS CLEAR; NAR |
| 9 | UTILTIY POLE | 725.3 | 2640 | 646 L | 30 | CLEAR | TSS CLEAR; NAR |
| 10 | UTILITY POLE | 735.6 | 3046 | 666 L | 28 | CLEAR | TSS CLEAR; NAR |
| 11 | POWER POLE | 772.6 | 3658 | 692 L | 47 | CLEAR | TSS CLEAR; NAR |

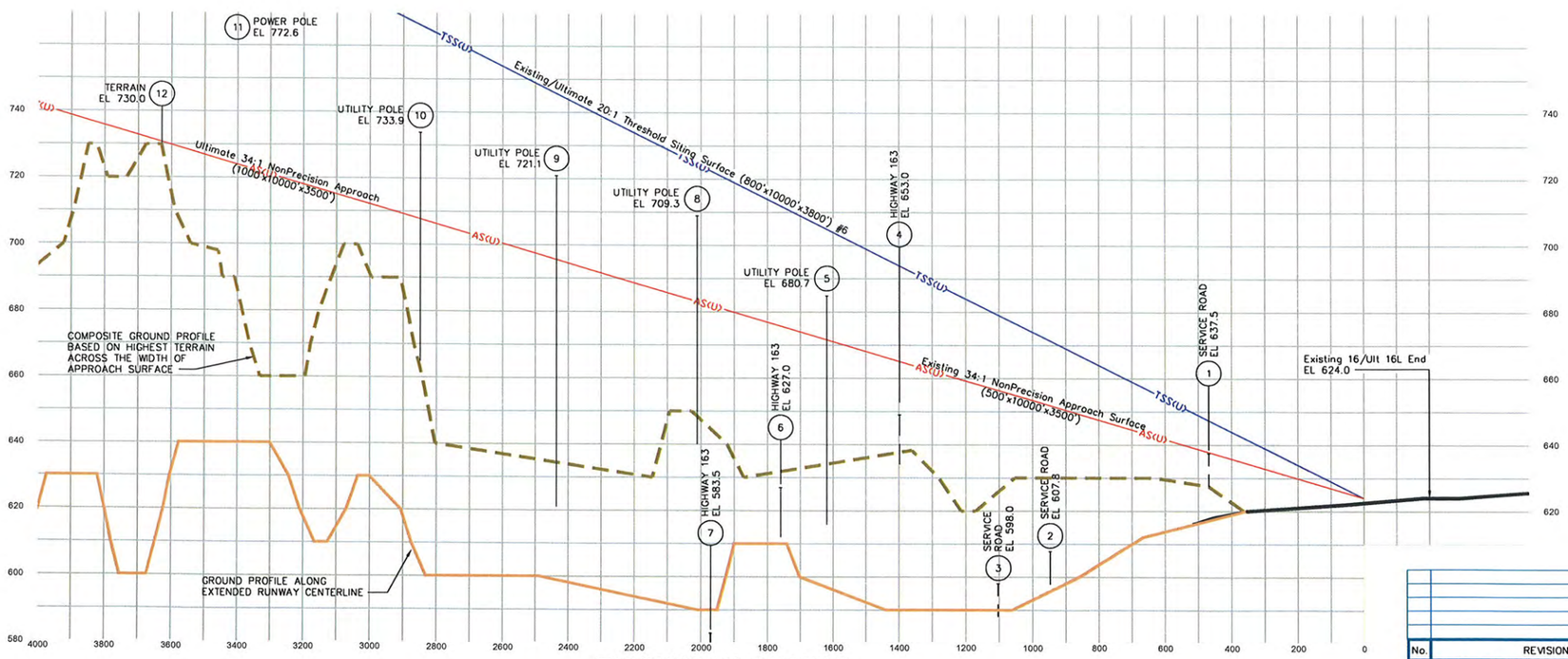
NAR – NO ACTION REQUIRED

| ULTIMATE RUNWAY 16L OBSTRUCTION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Approach Penetration | TSS Penetration | Remediation |
| 5 | UTILTIY POLE | 684.9 | 1817 | 621 L | 13 | CLEAR | TSS CLEAR; NAR |
| 8 | UTILTIY POLE | 708.8 | 2212 | 628 L | 26 | CLEAR | TSS CLEAR; NAR |
| 9 | UTILTIY POLE | 725.3 | 2640 | 646 L | 30 | CLEAR | TSS CLEAR; NAR |
| 10 | UTILITY POLE | 735.6 | 3046 | 666 L | 28 | CLEAR | TSS CLEAR; NAR |
| 11 | POWER POLE | 772.6 | 3658 | 692 L | 47 | CLEAR | TSS CLEAR; NAR |

NAR – NO ACTION REQUIRED

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; FROM STANTEC, PHOENIX, ARIZONA.




## RUNWAY 16L PROFILE

0 200 400
HORIZONTAL SCALE IN FEET

0 20 40
VERTICAL SCALE IN FEET

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 16L

DRAFT

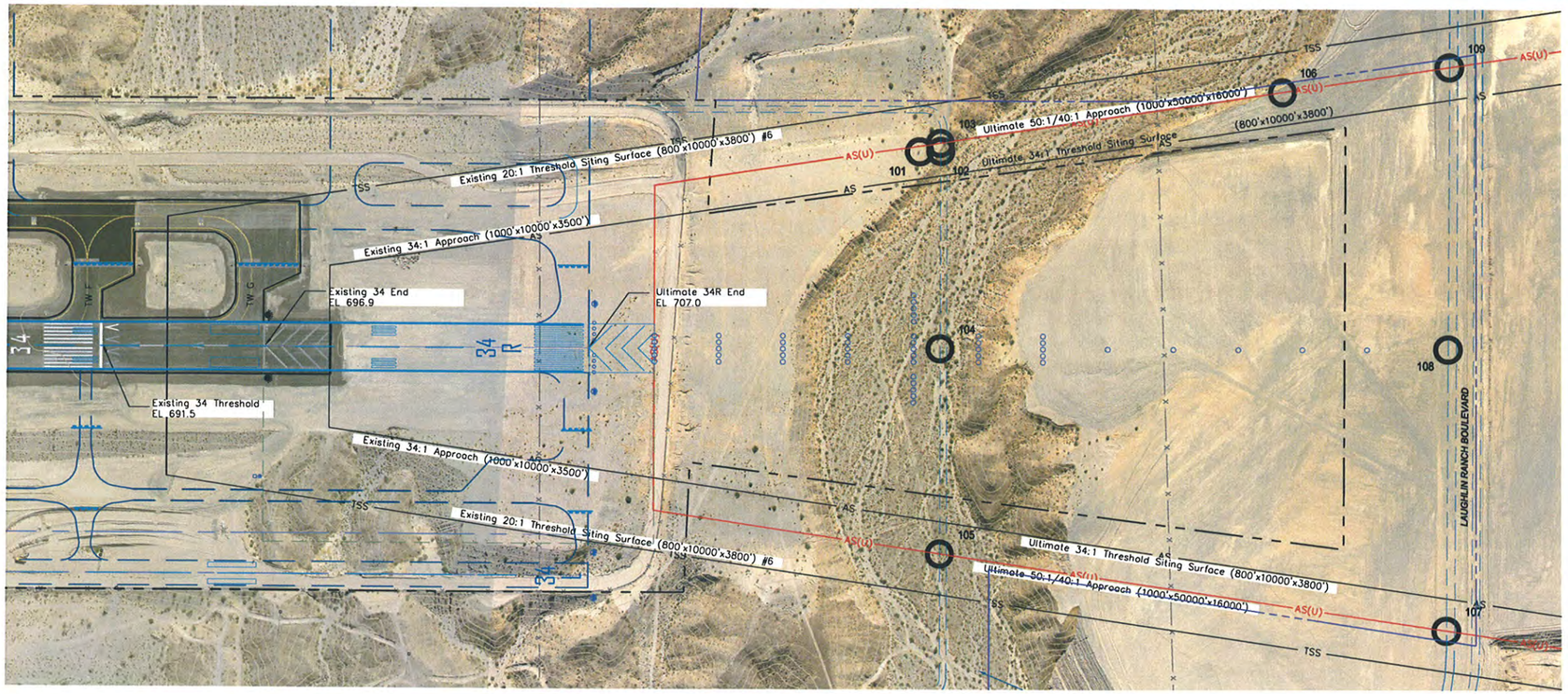
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Huguin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

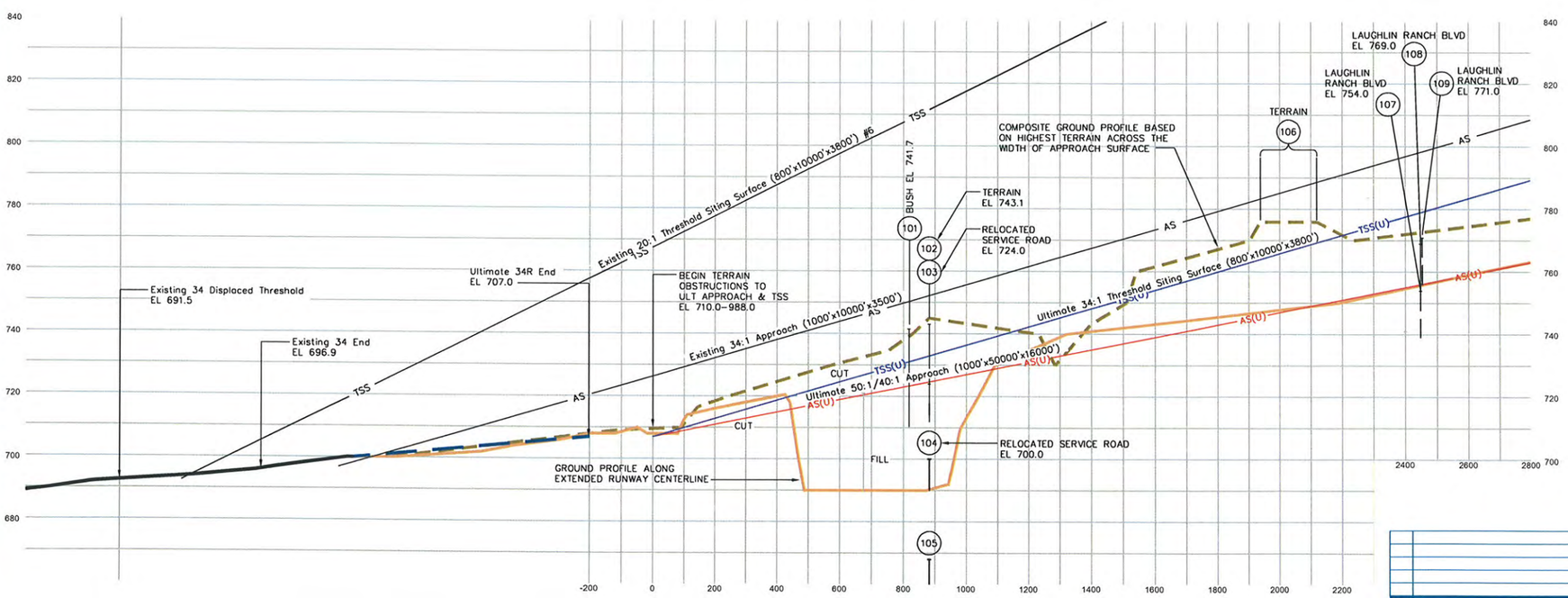
FEBRUARY 27, 2009 | SHEET 8 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Hopkins\CMP\LAUGHLIN\ALP\LFP (PASS 16L.dwg Printed Date: 3-03-09 02:26:33 PM Dhopkins




RUNWAY 34R PLAN




RUNWAY 34R PROFILE

EXISTING RUNWAY 34 OBSTRUCTION TABLE

| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Approach Penetration | TSS Penetration | Remediation |
|---|---|---|---|---|---|---|---|
| | NONE FOUND | | | | | | |

ULTIMATE RUNWAY 34R OBSTRUCTION TABLE

| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Approach Penetration | TSS Penetration | Remediation |
|---|---|---|---|---|---|---|---|
| 101 | VEGETATION | 741.7 | 1518 | 607 R | 18 | 11 | TO BE REMOVED DURING RW EXTENSION CONSTRUCTION |
| 102 | TERRAIN | 743.1 | 1583 | 0 | 18 | 11 | TERRAIN TO BE GRADED DURING RW EXTENSION CONSTRUCTION |
| 106 | TERRAIN | 776.7 | 2138 | 792 R | 31 | 13 | REQUEST AERONAUTICAL STUDY |
| 108 | LAUGHLIN RANCH BLVD | 769.0 | 3148 | 0 | 3 | CLEAR | TSS CLEAR; NAR |
| 109 | LAUGHLIN RANCH BLVD | 771.0 | 3153 | 869 R | 5 | CLEAR | TSS CLEAR; NAR |
| | TERRAIN | VARIES | SEE PROFILE VIEW | VARIES | VARIES | VARIES | REQUEST AERONAUTICAL STUDY |
| 141 | TERRAIN | 718.3 | 582 | 319 L | 4 | <1 | TERRAIN TO BE GRADED DURING RW EXTENSION CONSTRUCTION |
| 142 | TERRAIN | 720.6 | 626 | 34 L | 5 | 1 | TERRAIN TO BE GRADED DURING RW EXTENSION CONSTRUCTION |
| 143 | TERRAIN | 725.4 | 712 | 431 R | 8 | 3 | TERRAIN TO BE GRADED DURING RW EXTENSION CONSTRUCTION |

NAR – NO ACTION REQUIRED

## GENERAL NOTES:

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; FROM STANTEC, PHOENIX, ARIZONA.
2. ALL DISTANCE MEASUREMENTS IN FEET.

Magnetic Declination
11° 35' East (March 2009)
Annual Rate of Change
0° 6' West (March 2009)

HORIZONTAL SCALE IN FEET: 0 200 400

VERTICAL SCALE IN FEET: 0 20 40

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 34R

DRAFT

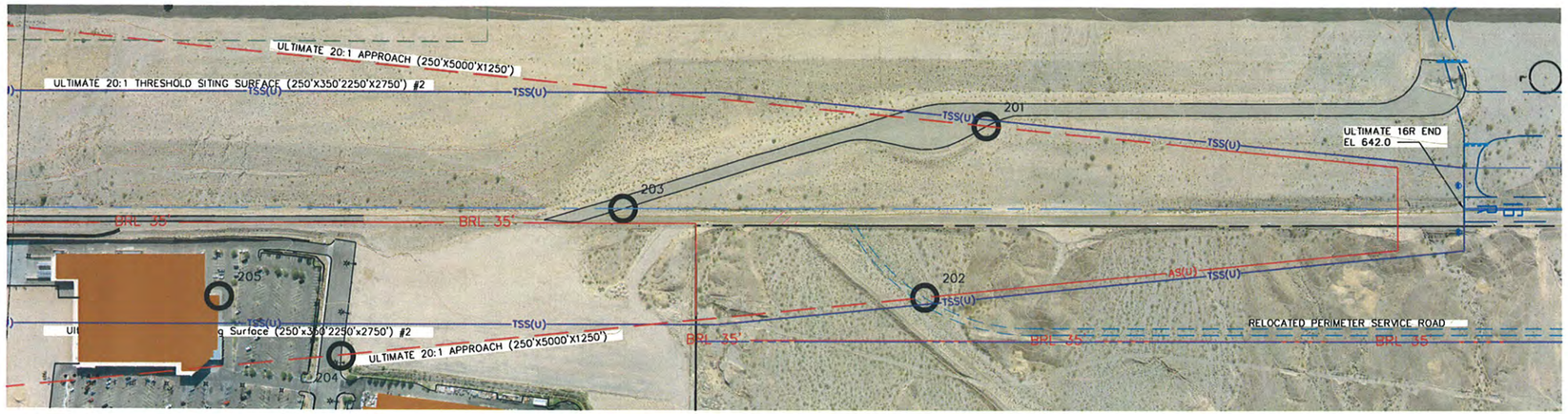
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Huguin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

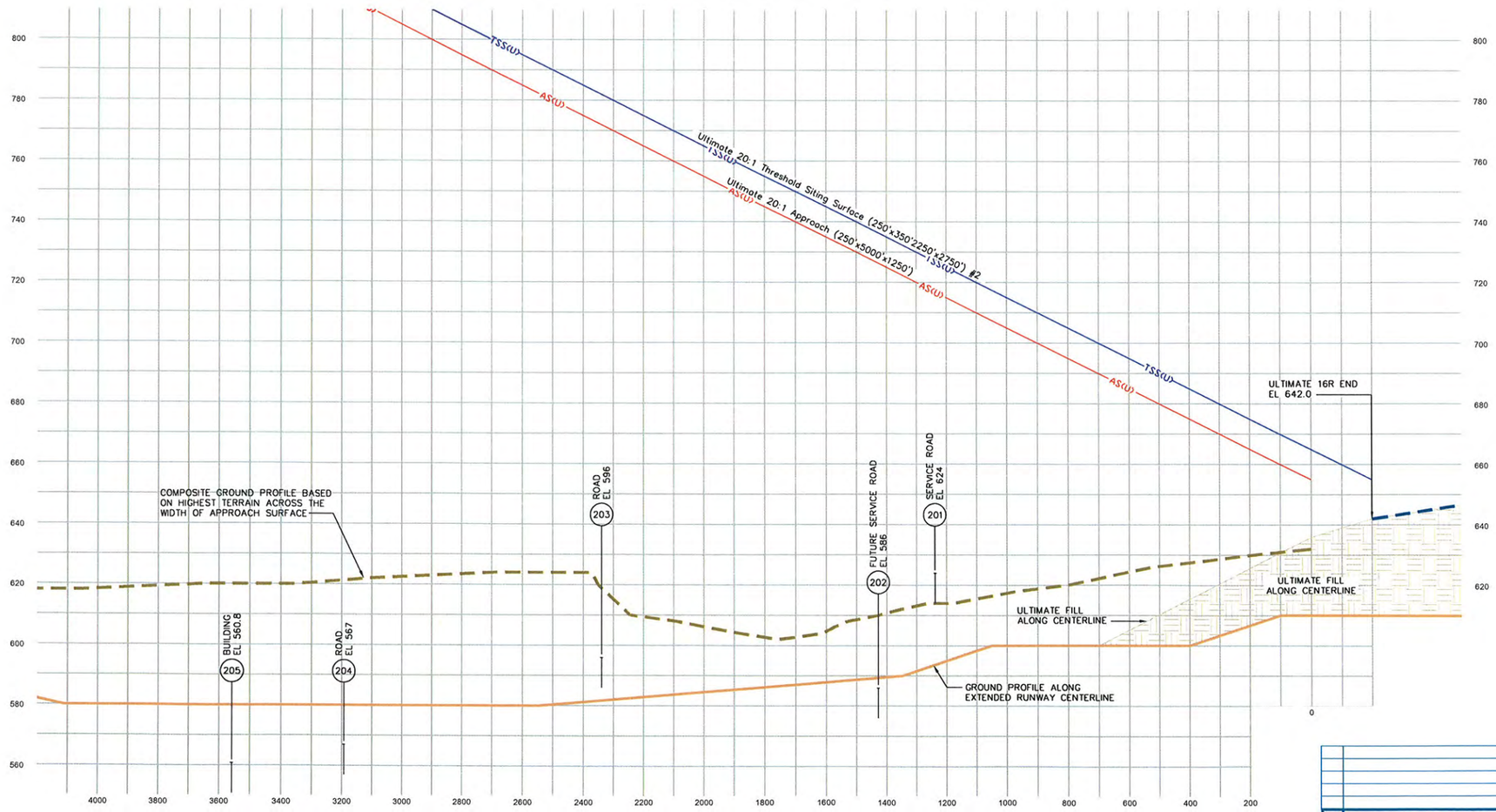
FEBRUARY 27, 2009 SHEET 9 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Projects\PHX\LAUGHLIN\ALP\LIFP (PASS 34R).dwg Printed Date: 3-03-09 02:24:54 PM Dhopkins




## RUNWAY 16R PLAN



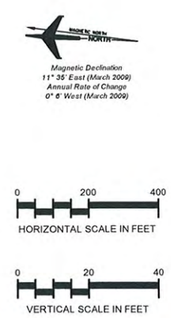

## RUNWAY 16R PROFILE

| EXISTING RUNWAY 16R OBSTRUCTION TABLE | | | | | | |
|---|---|---|---|---|---|---|
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
| | NONE FOUND | | | | | |

| ULTIMATE RUNWAY 16R OBSTRUCTION TABLE | | | | | | |
|---|---|---|---|---|---|---|
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | Penetration | Remediation |
| | NONE FOUND | | | | | |

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; FROM STANTEC, PHOENIX, ARIZONA.
2. ALL DISTANCE MEASUREMENTS IN FEET.




| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 16R

DRAFT

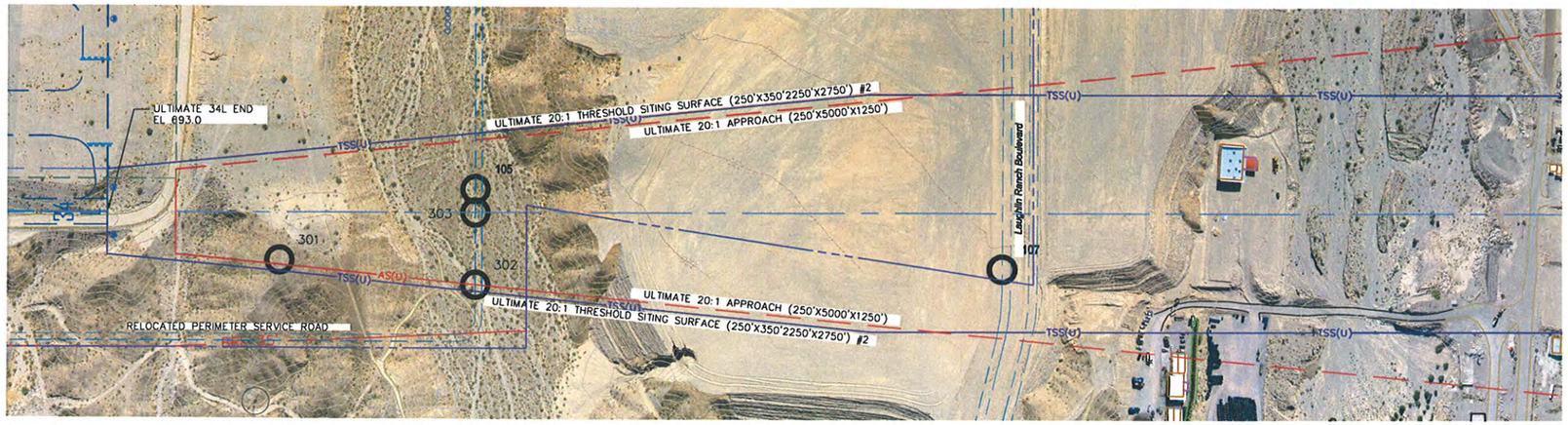
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Huguin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009 — SHEET 10 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Hopkins\MP\LAUGHLIN\ALP\IPASS 168.dwg Printed Date 3-03-09 02:27:45 PM Dhopkins



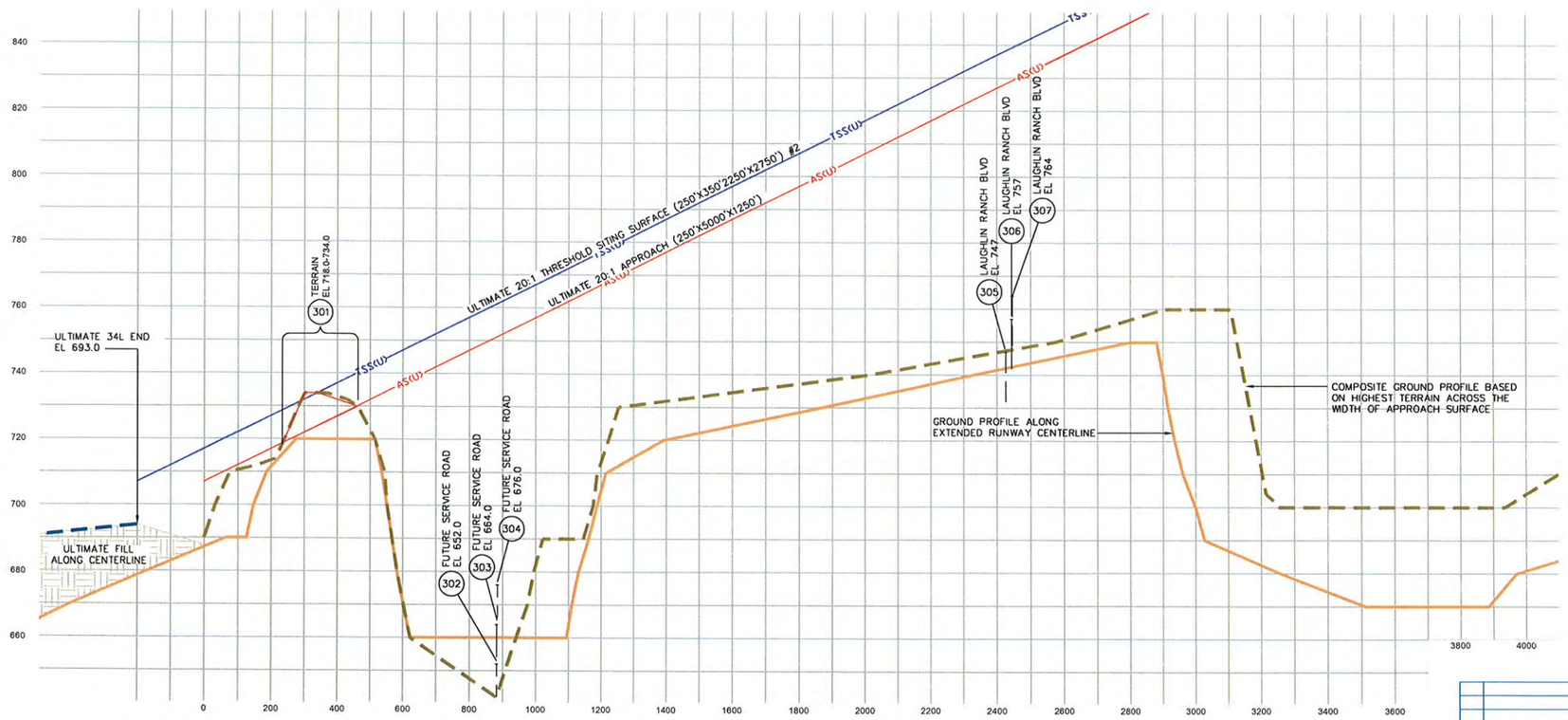

## RUNWAY 34L PLAN

| ULTIMATE RUNWAY 34L OBSTRUCTION TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | Description | Top Elevation | Distance from RW End | Offset from Centerline | 20:1 Approach Penetration | 20:1 TSS Penetration | Remediation |
| 301 | TERRAIN | 734.0 | 503 | 145 L | 26 | 16 | REQUEST AERONAUTICAL STUDY |
| | TERRAIN | VARIES | VARIES | VARIES | VARIES | VARIES | REQUEST AERONAUTICAL STUDY |

ALL DISTANCE MEASUREMENTS IN FEET

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; FROM STANTEC, PHOENIX, ARIZONA.
2. ALL DISTANCE MEASUREMENTS IN FEET.




## RUNWAY 34L PROFILE

0 200 400
HORIZONTAL SCALE IN FEET

0 20 40
VERTICAL SCALE IN FEET

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

INNER PORTION OF THE APPROACH SURFACE DRAWING RUNWAY 34L

DRAFT

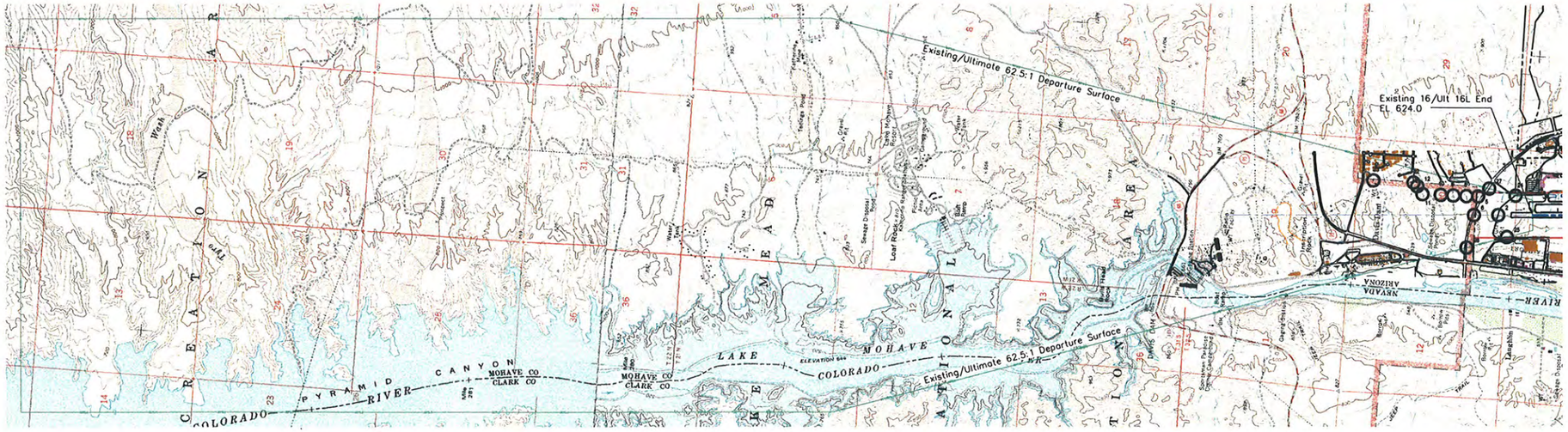
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Hugunin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009 | SHEET 11 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\projects\MPL\LAUGHLIN\ALP\EP IPASD 34L.dwg Printed Date 3-03-09 02:32:38 PM Dhopkins

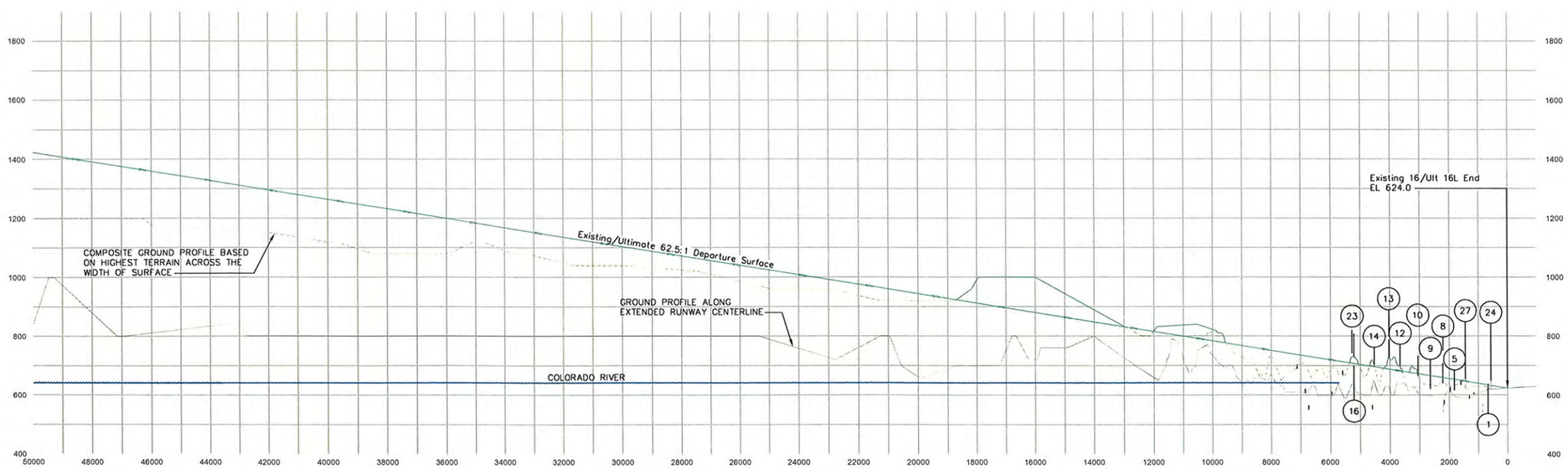



## RUNWAY 16L PLAN

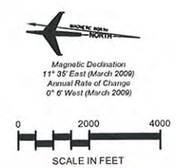
| ULTIMATE RUNWAY 16L OBSTRUCTION TABLE | | | |
|---|---|---|---|
| Item | Description | Top Elevation | Penetration |
| 1 | TBD | 637.5 | 3 |
| 5 | POLE | 684.9 | 32 |
| 8 | POLE | 708.8 | 49 |
| 9 | POLE | 725.3 | 59 |
| 10 | POLE | 735.6 | 63 |
| 11 | POLE | 772.6 | 90 |
| 12 | TERRAIN | 730.0 | 45 |
| 13 | POLE | 789.2 | 101 |
| 14 | POLE | 762.0 | 66 |
| 16 | TOWER | 808.9 | 102 |
| 22 | TERRAIN | 739.6 | 56 |
| 23 | TOWER | 820.7 | 116 |
| 24 | SERVICE ROAD | 648.0 | 15 |
| 27 | HWY 163 | 7.0 | 7 |
| | TERRAIN | VARIES | VARIES |

**GENERAL NOTES:**

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; PROVIDED BY STANTEC, PHOENIX, ARIZONA.




## RUNWAY 16L PROFILE




| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

RUNWAY DEPARTURE SURFACE DRAWING
RUNWAY 16L

DRAFT

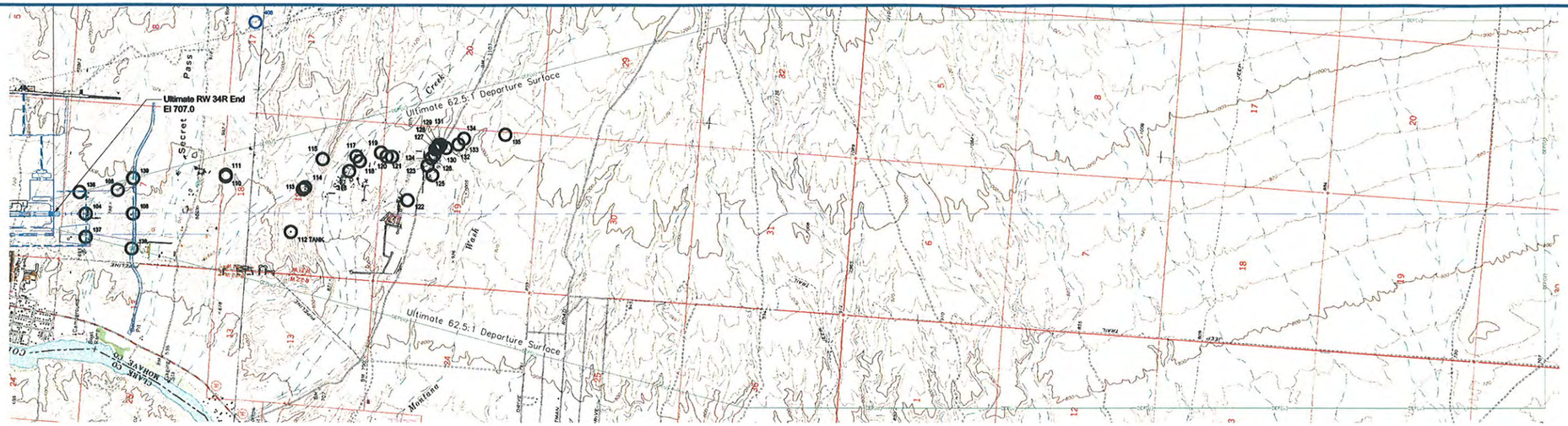
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Hagnin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009 — SHEET 12 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

2effman Associates R:\CAD\Hopkins\BLMP\LAUGHLIN\ALP\TP DEP 16L.dwg Printed Date 3-03-09 02:19:04 PM Dhopkins



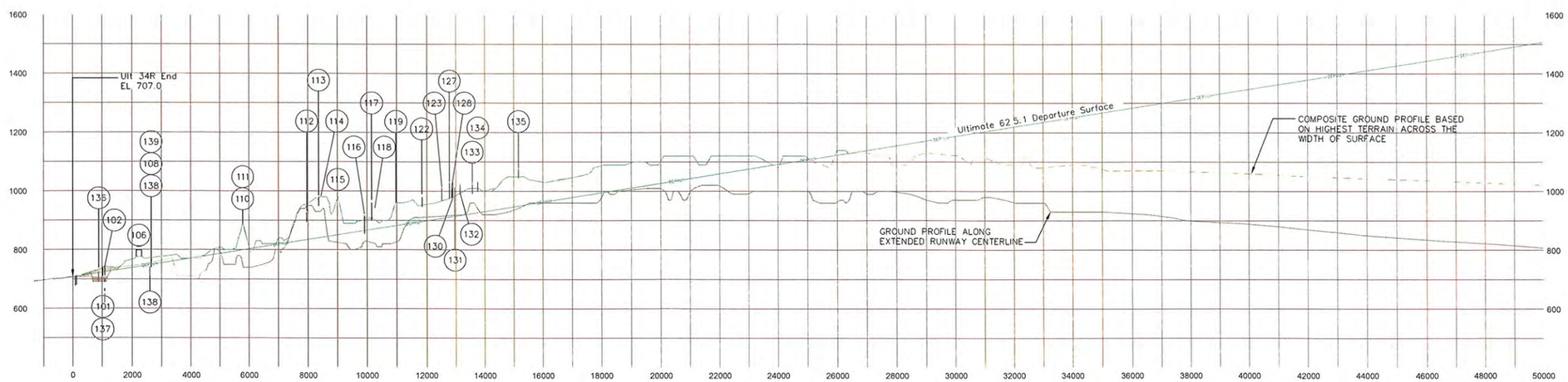

## RUNWAY 34R PLAN

GENERAL NOTES:

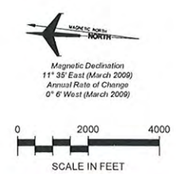
1. HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 – NAD83; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 – NAVD88; PROVIDED BY STANTEC, PHOENIX, ARIZONA.

ULTIMATE RUNWAY 34R OBSTRUCTION TABLE

| Item | Description | Top Elevation | Penetration |
|---|---|---|---|
| 101 | VEGETATION | 741.7 | 18 |
| 102 | TERRAIN | 743.1 | 19 |
| 106 | TERRAIN | 776.7 | 35 |
| 107 | LAUGHLIN RANCH BLVD | 754.0 | 5 |
| 108 | LAUGHLIN RANCH BLVD | 769.0 | 20 |
| 109 | LAUGHLING RANCH BLVD | 771.0 | 22 |
| 110 | VEGETATION | 886.9 | 88 |
| 111 | TERRAIN | 889.9 | 91 |
| 112 | TANK | 926.6 | 92 |
| 113 | VEGETATION | 980.4 | 140 |
| 114 | TERRAIN | 980.6 | 139 |
| 115 | TERRAIN | 979.0 | 128 |
| 116 | POLE | 916.0 | 50 |
| 117 | BUILDING | 960.6 | 91 |
| 118 | VEGETATION | 938.5 | 67 |
| 119 | TERRAIN | 961.7 | 79 |
| 122 | BUILDING | 979.7 | 83 |
| 123 | POLE | 1001.2 | 94 |
| 127 | POLE | 1029.1 | 118 |
| 128 | TREE | 1006.3 | 94 |
| 130 | TREE | 1029.9 | 117 |
| 131 | BUILDING | 1013.5 | 99 |
| 132 | TREE | 1024.4 | 107 |
| 133 | TREE | 1023.0 | 99 |
| 134 | BUILDING | 1031.8 | 105 |
| 135 | BUILDING | 1076.6 | 127 |
| | TERRAIN | VARIES | VARIES |




## RUNWAY 34R PROFILE




| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

RUNWAY DEPARTURE SURFACE DRAWING
RUNWAY 34R

DRAFT

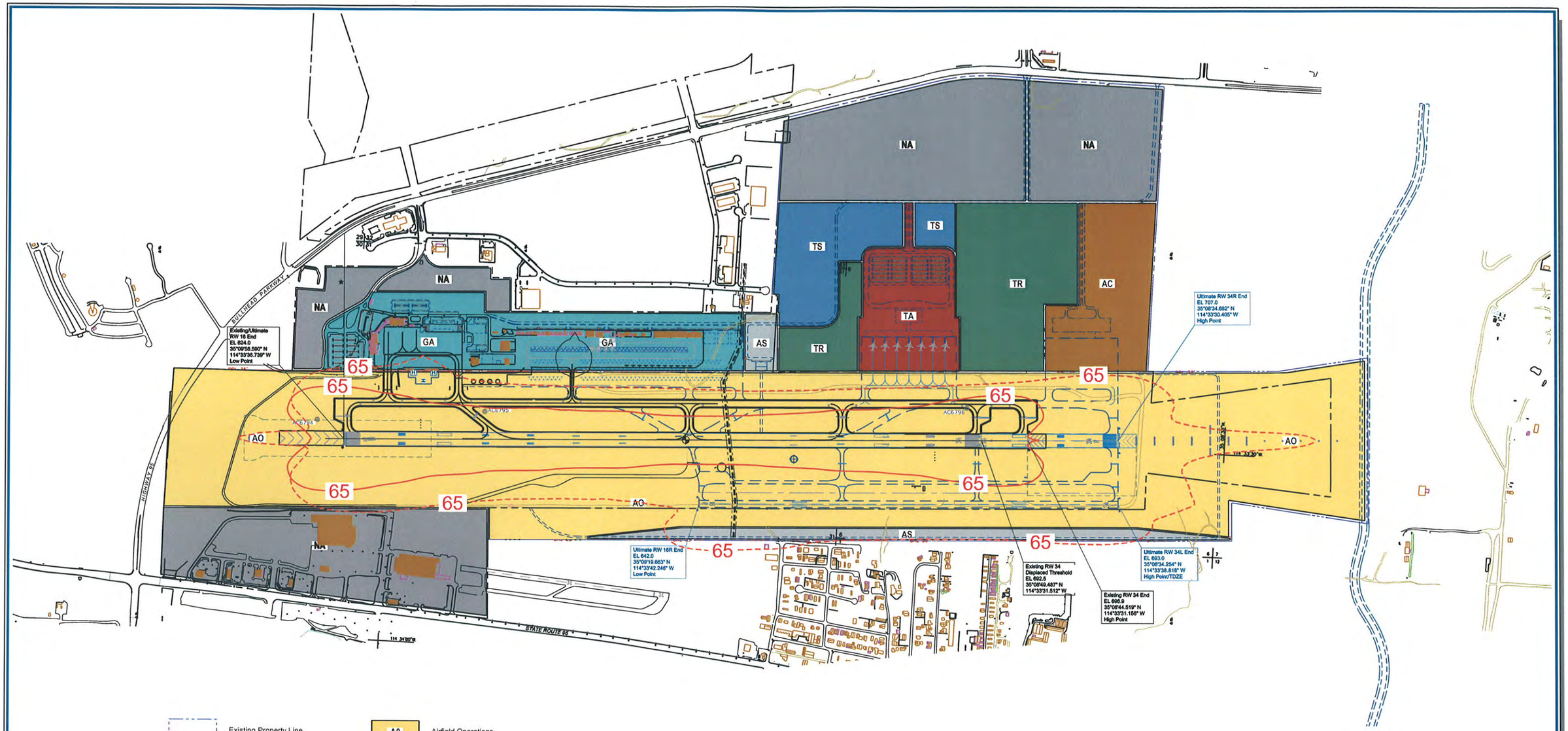
**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Huganin
*DETAILED BY:* Diana L. Hopkins
*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009 — SHEET 13 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD-Hopkins\MP\LAUGHLIN\ALP\LFP RDP 34R.dwg Printed Date: 3-03-09 02:34:41 PM Dhopkins




Existing Property Line

Ultimate Property Line

65 Existing 65 DNL Contour

65 Long Term 65 DNL Contour

AO Airfield Operations

GA General Aviation

TA Terminal Area

TS Terminal Support

TR Terminal Reserve

AC Air Cargo

AS Airfield Support

NA Non-Airfield Access Support

Magnetic Declination
11° 35' East (March 2009)
Annual Rate of Change
0° 6' West (March 2009)

0 500 1000
SCALE IN FEET

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

# LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

## AIRPORT LANDUSE DRAWING

DRAFT

BULLHEAD CITY, ARIZONA

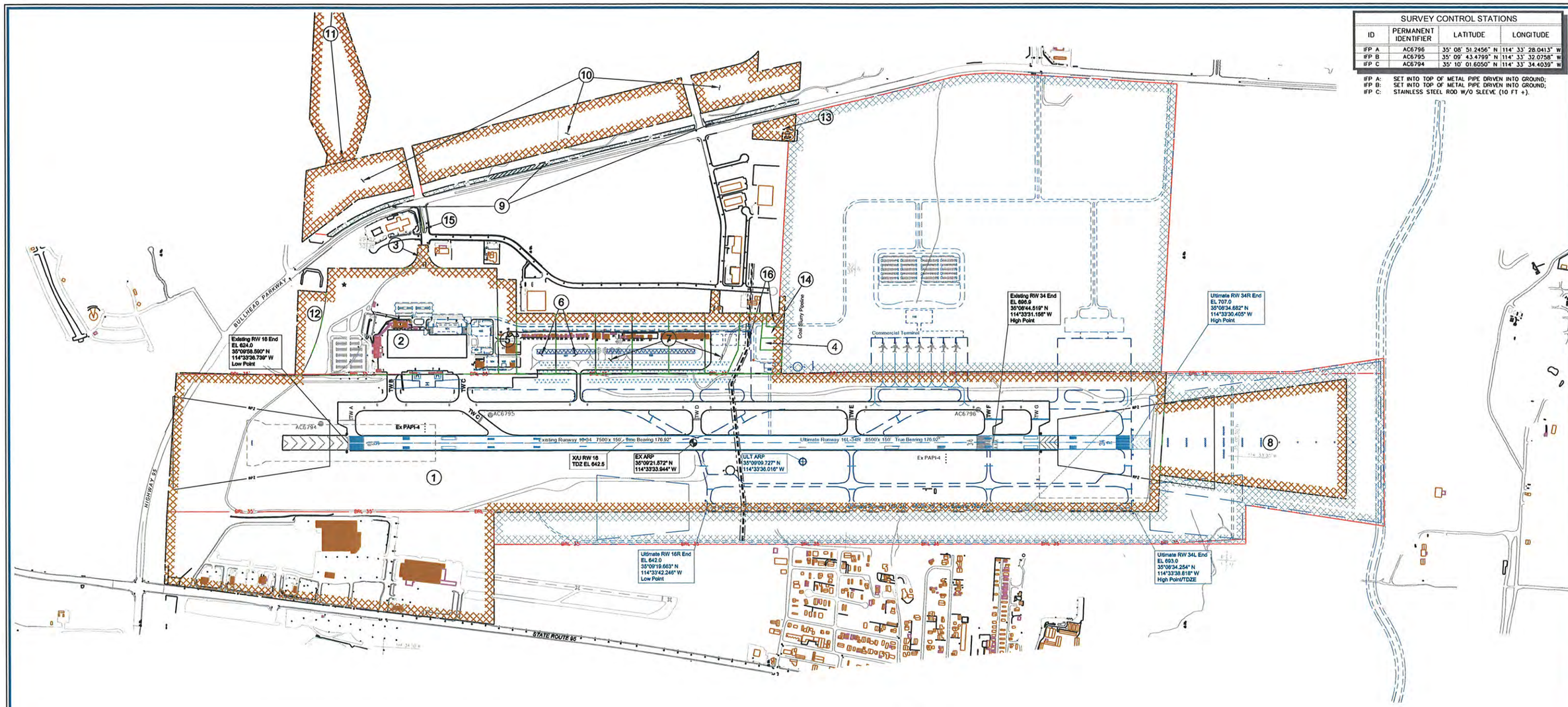
PLANNED BY: Chris M. Huguin
DETAILED BY: Diana L. Hopkins
APPROVED BY: James M. Harris

FEBRUARY 27, 2009

SHEET 14 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Hopkins\BVNP\LAUGHLIN\ALP\LTP.Lland Printed Date: 3-23-09 02:36:27 PM Dhopkins




| SURVEY CONTROL STATIONS | | | |
|---|---|---|---|
| ID | PERMANENT IDENTIFIER | LATITUDE | LONGITUDE |
| IFP A | AC6796 | 35° 08' 51.2456" N | 114° 33' 28.0413" W |
| IFP B | AC6795 | 35° 09' 43.4799" N | 114° 33' 32.0758" W |
| IFP C | AC6794 | 35° 10' 01.6050" N | 114° 33' 34.4039" W |

IFP A: SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND;
IFP B: SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND;
IFP C: STAINLESS STEEL ROD W/O SLEEVE (10 FT +).

RECORDING INFORMATION (County Assessor - Mohave County, Arizona.)

| PARCEL | OWNER: (SEE NOTE 1) | ACREAGE | DATE RECORDED | RECORDING INFORMATION | GRANTOR/METHOD | NOTES: | PARCEL | OWNER: (SEE NOTE 1) | ACREAGE | DATE RECORDED | RECORDING INFORMATION | GRANTOR/METHOD | NOTES: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | County of Mohave, AZ | ±433.30 | 02/18/1987 | Mohave County Official Records Book: 1291 Page: 337-342 | D. J Laughlin Donated | Land Patent from State of Arizona, paid for by D. J. Laughlin | 9 | County of Mohave, AZ | ±4.79 | 12/18/1996 | Mohave County Official Records Book: 2833 Page: 94 | D. J. Laughlin Donated | N/A |
| 2 | County of Mohave, AZ | ±51.05 | 07/23/1991 | Mohave County Official Records Book: 1921 Page: 928 | Condemned | Superior Court Case #30326 | 10 | County of Mohave, AZ | ±53.34 | 12/18/1996 | Mohave County Official Records Book: 2833 Page: 97 | D. J. Laughlin Donated | N/A |
| 3 | County of Mohave, AZ | ±1.04 | 10/07/1991 | Mohave County Official Records Book: Page: | D. J Laughlin Donated | -- | 11 | County of Mohave, AZ | ±41.55 | 08/11/2000 | Mohave County Official Records Book: 3566 Page: 459 | D. J. Laughlin Donated | N/A |
| 4 | County of Mohave, AZ | ±0.72 | 05/15/1996 | -- -- | D. J Laughlin Donated | -- | 12 | County of Mohave, AZ | ±4.36 | 12/18/1996 | Mohave County Official Records Book: 2833 Page: 93 | D. J. Laughlin Donated | N/A |
| 5 | County of Mohave, AZ | ±5.00 | 05/15/1996 | -- -- | D. J Laughlin Donated | -- | 13 | County of Mohave, AZ | ±2.40 | 07/23/1991 | Mohave County Official Records Book: 1921 Page: 929 | Condemned | -- |
| 6 | County of Mohave, AZ | ±13.00 | 02/23/1999 | Mohave County Official Records Book: 1894 Page: 379 | D. J. Laughlin Purchased | -- | 14 | County of Mohave, AZ | ±0.84 | 12/18/1996 | Mohave County Official Records Book: 2833 Page: 100 | D. J. Laughlin Donated | -- |
| 7 | County of Mohave, AZ | ±30.85 | 07/16/1999 | Mohave County Official Records Book: 3341 Page: 915 | D. J. Laughlin Purchased | -- | 15 | County of Mohave, AZ | ±0.08 | 12/18/1996 | Mohave County Official Records Book: 2833 Page: 114 | D. J. Laughlin Donated | -- |
| 8 | County of Mohave, AZ | ±47.73 | 10/23/2000 | Mohave County Official Records Book: 3608 Page: 260 | Condemned | -- | 16 | County of Mohave, AZ | ±6.35 | 02/14/2000 | Mohave County Official Records Book: 3472 Page: 946 | D. J. Laughlin Purchased | -- |
| | | | | | | | | Total Acreage | 696.34 | | | | |

Please note: The total acreage shown in this table is the cumulative sum of the above described parcels, whose individual acreages were obtained from legal description and other legal documents by Mohave County Arizona.

Note 1: The Mohave County Airport Authority operates the Laughlin/Bullhead International Airport under a "master lease" granted by the County of Mohave (original dated 11/4/1991; amended 2/18/1997) See Official Records of Mohave County Recorder: Book: 2002 Page: 66-89 Fee: #92-5295

## LEGEND

- Existing Airport Property
- Property To Be Acquired
- Parcel Boundary

Magnetic Declination
11° 35' East (March 2009)
Annual Rate of Change
0° 6' West (March 2009)

0 500 1000
SCALE IN FEET

| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

# LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

## EXHIBIT "A" PROPERTY MAP

DRAFT

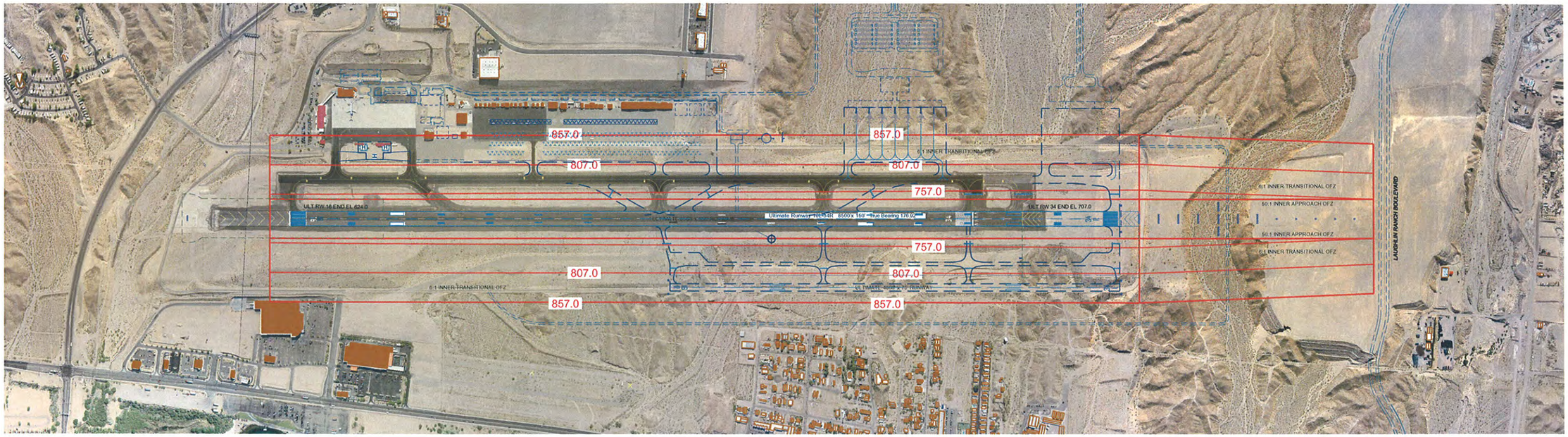
## BULLHEAD CITY, ARIZONA

PLANNED BY: Chris M. Huguin
DETAILED BY: Diana L. Hopkins
APPROVED BY: James M. Harris

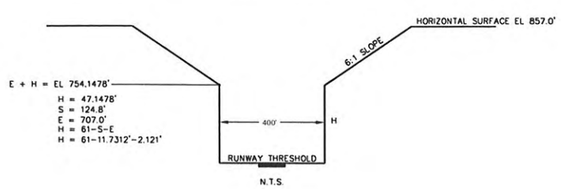
FEBRUARY 27, 2009 SHEET 15 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

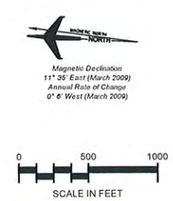
Coffman Associates R:\CAD\Projects\ZVMPO\LAU\DAL\PLN\DLP\EXP APR.dwg Printed Date: 3-03-09 01:50:49 PM Chopkins




## RUNWAY 34 END




| OBSTACLE FREE ZONE (OFZ) OBJECT PENETRATIONS | | |
|---|---|---|
| Object | Penetration | Disposition |
| NONE FOUND | | |




| No. | REVISIONS | DATE | BY | APP'D. |
|---|---|---|---|---|
| | | | | |

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

**LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT**

INNER APPROACH & INNER TRANSITIONAL OFZ DRAWING

DRAFT

**BULLHEAD CITY, ARIZONA**

*PLANNED BY:* Chris M. Hugunin

*DETAILED BY:* Diana L. Hopkins

*APPROVED BY:* James M. Harris

FEBRUARY 27, 2009 — SHEET 16 OF 16

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Coffman Associates R:\CAD\Hopkins\BWP\LAUGHLIN\ALP\TP 16OFZ.dwg Printed Date: 3-03-09 02:25:32 PM Dhopkins

Coffman Associates
Airport Consultants

**KANSAS CITY**
**(816) 524-3500**

237 N.W. Blue Parkway
Suite 100
Lee's Summit, MO 64063

**PHOENIX**
**(602) 993-6999**

4835 E. Cactus Road
Suite 235
Scottsdale, AZ 85254