# McCarran International Airport Terminal 3 Las Vegas, NV

### PRIMARY PROJECT TEAM

Owner: Clark County Dept. of Aviation

Construction Manager: Bechtel Corporation

Architect: PGAL, LLC Structural: Walter P. Moore

MEP: JBA Consulting Engineers

### PROJECT INFORMATION

Size: 1.8 Million SF

No. of Levels: 5 (Including Basement & Penthouse)
Dates of Construction: April 2007 - Mid 2011 (Projected)

Delivery Method: Design-Bid-Build



### **ARCHITECTURE**

- -Designed as a unit terminal, to be independent of existing terminals.
  -Located on the Northeast portion of the overall airport site.
- -Provides (14) new gates serving domestic and international flights, a significant addition to the existing (95) gates at the airport.
- -Customs and border patrol areas included for international service.
- -A new Automated Transportation System (ATS) station will provide access to the existing Satellite D.
- -(2) separate TSA screening areas provided for access to Terminal 3 gates and Satellite D gates. Satellite D remains a fully secure facility. -Pedestrian access for new parking garage will be provided on Level 1.

### STRUCTURAL

- -(5) Isolation joints divide the building into (6) structures.
- -Foundation made of 3-6' diameter drilled piers 35-75' deep.
- -4.5" thick concrete slab over 3" composite metal deck.
- -Typical grid spacing = 40' with few exceptions at 28' or 48'.
- -Typical girders in the East-West direction will be W33's and Beams spanning North-South will W24's for 40 ft bays
- W27's for 48 ft bays, and W18's for 28 ft bays.
- -Lateral loads are resisted by braced frames.

## **ELECTRICAL**

- -New Nevada power yard at central plant will include (4) 15 kV service entrance switchgear sections and service from (2) separate substations.
- -Service to be provided by (4) 10 MVA main feeders and (4) 10 MVA dedicated back up feeders.
- -(4) 2000 kW/2500kVA, 480/277 V diesel generators with step up transformers are provided with paralleling switchgear for emergencies.

# **MECHANICAL**

- -24 CV AHU's serving electrical substations, 27 SZ VAV AHU's serving concourse and baggage handling/screening, 37 VAV AHU's serving baggage claim, airline operations TSA screening, ticketing, and remaining public spaces.
- -SZ VAV and VAV units include demand controlled ventilation by carbon monoxide / carbon dioxide monitoring.
- -Served by a new central plant consisting of (5) 2,200 ton centrifugal chillers and (6) 21,000 MBH boilers. An additional boiler and chiller of equal capacity are provided as standby.

