ELLIOIT FIELD STATION

BLAST LAB:
ISOLATED SLAB

SPECIFICATIONS:
28-day concrete strength: 5500 psi self compacting
Mild steel: Gr.60
PT steel: Gr.150
PT operation shall follow all applicable manufacturer specifications & recommendations
Specified post-tensioning forces are the jack forces attained immediately after anchorage
Contact engineer prior to post-tensioning for jacking sequence
Lap splices allowed at base of wall
Minimum lap lengths: 4' lap
Minimum clear cover: 2'

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Blast Lab Project
DWG No.: BL-T2
Date: 2004/02/04
Reflected Ceiling Plan of Isolated Slab
(Foundation omitted for clarity)
Section C-C
Wall Cross Section (Plan)

Vertical Steel
15 #9 bars (both sides)
Standard 90° hook top and bottom
Place 3 bars between each pair of
Steel ducts as indicated

Vertical Steel
6 #9 bars (both sides)
Standard 90° Hook top and bottom
Place 3 bars between each pair of
Steel ducts as indicated

2-1/2" ø duct (typ)
Both directions

Vertical Steel
2 #9 in corner (4 places)
Standard 90° hook top and bottom

9 #8 horizontal headed bars
In interior at top of wall

4 layers @ 8" o.c.

Horizontal Steel
#9 each face
Terminate with standard 90° hook
See BL-16 for spacing

12 grouted 2 1/2" ø Gr. 150 PT bar.
Force immediately AFTER seating: 505 kips
(By DS!)
Plan View of Isolated Slab Reinforcement

- #3 bar & 8' ground service opening, extend Min. 4'-0" beyond opening
- Transverse Steel at edge
  - #9 bar top and bottom
  - #8 bar @ 8' in between
- #8 headed bars at marked location
- Transverse Steel (typ)
  - #9 headed bars @ 8" o.c.
  - various lengths
- Typical #5 spirals
  - 9" o.c., 4" pitch at each tie-down hole
- Transverse Steel
  - Additional #9 bar between each PT bar
- 50 #8 headed bars
  - at marked location
- #5 Spirals at PT end not shown for clarity
- Longitudinal Steel
  - 4 layers of #11 headed bars (2 top and 2 bottom) positioned around vertical steel and PT ducts
  - various lengths

Blast Lab Project
DWG No.: BL-S15
Date: 2004/02/04
Section D-D
Wall and Slab Reinforcement (Elevation)

#5 spiral with 2" pitch, 9" Ø, 24" long
at each PT bar, top and bottom of wall
(not shown at the bottom end for clarity)

Layers of 9 #8 horizontal bars.
4 Layers @ 8" o.c.

9 #9 horizontal bars around perimeter @ 12" o.c.

6 #9 horizontal bars around perimeter @ 6" o.c.

20 grouted 2 1/2" Ø Gr. 150 PT bars
Force immediately after seating; 458 kips
(by DSI)

#9 transverse bars

Additional #9 beneath wall and at west end

#11 longitudinal bars @ 8" each face

2 layers #11 longitudinal bars

20" x 20" x 1"
Steel PL see S17
1. 25"x36"x1" steel PL @ corner (galvanized A36 PL)

2. 20"x20"x1" steel PL @ isolator (galvanized Gr. 50 PL)
20" x 20" x 1" EMBEDDED PL

Rubber Bearing
Top PL: 20"x20"x1" (See PL# 1)
Bottom PL: 27"x18"x1-1/2" (See PL# 2)

Isolated Slab

3/4"Ø
(E) Anchor Bolts

(E) Foundation

27" x 27" x 1 1/2" Base Steel PL (see PL# 3)

Isolator Installation (TYP)

(see S19-1 for exploded view)
Base Steel PL: 27" x 27" x 1 1/2" (see PL #3)

Isolator Bottom Steel PL: 27" x 18" x 1 1/2" (See PL #2)

Remove 4 (E) anchor bolts that interfere with this installation

Isolator Top Steel PL: 20" x 20" x 1" (See PL# 1)

Section A-A
Plan View of Isolator (typ)
Exploded view of isolator installation

- Install top bolts after lowering slab
- Install bottom bolts before lowering slab
- Place isolator before lowering slab
- Install base PL (PL #3) before lowering slab

Isolated Slab

Foundation (E)