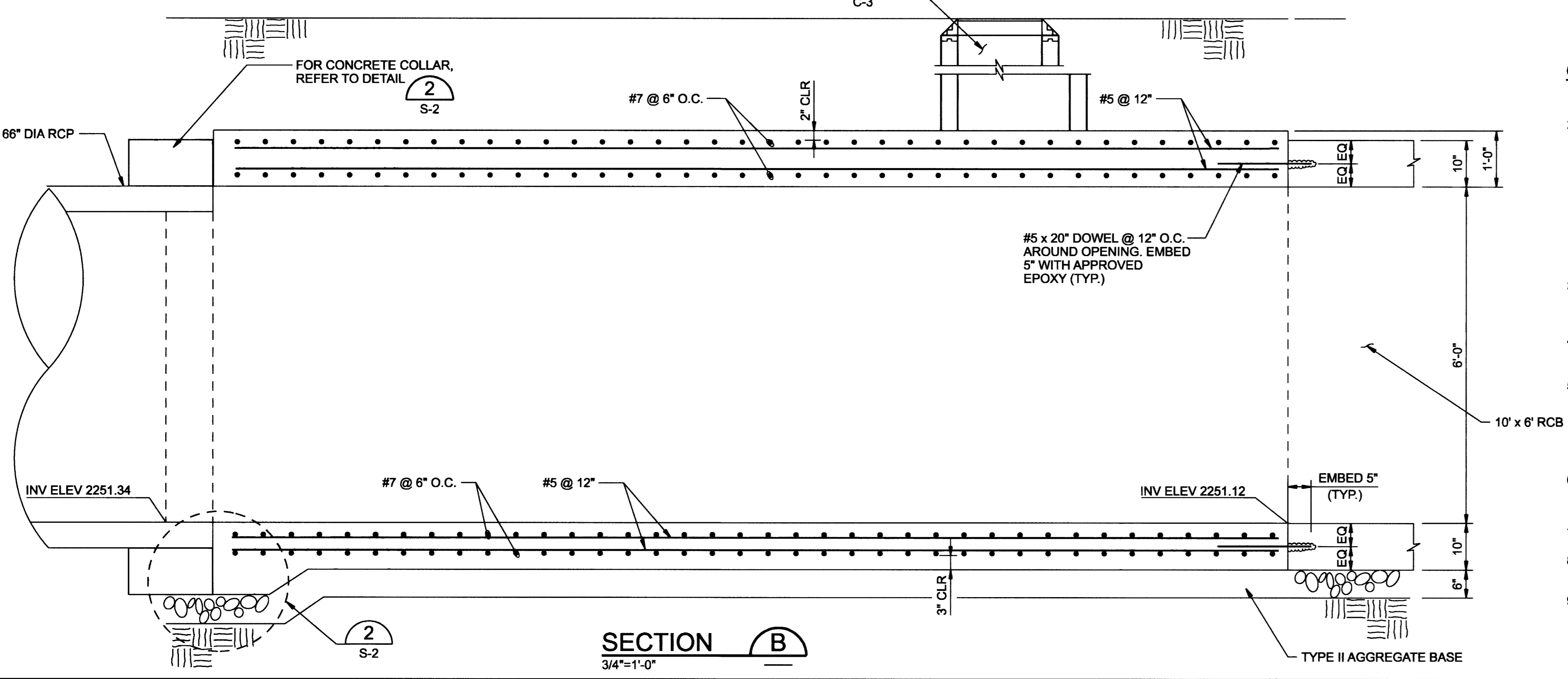
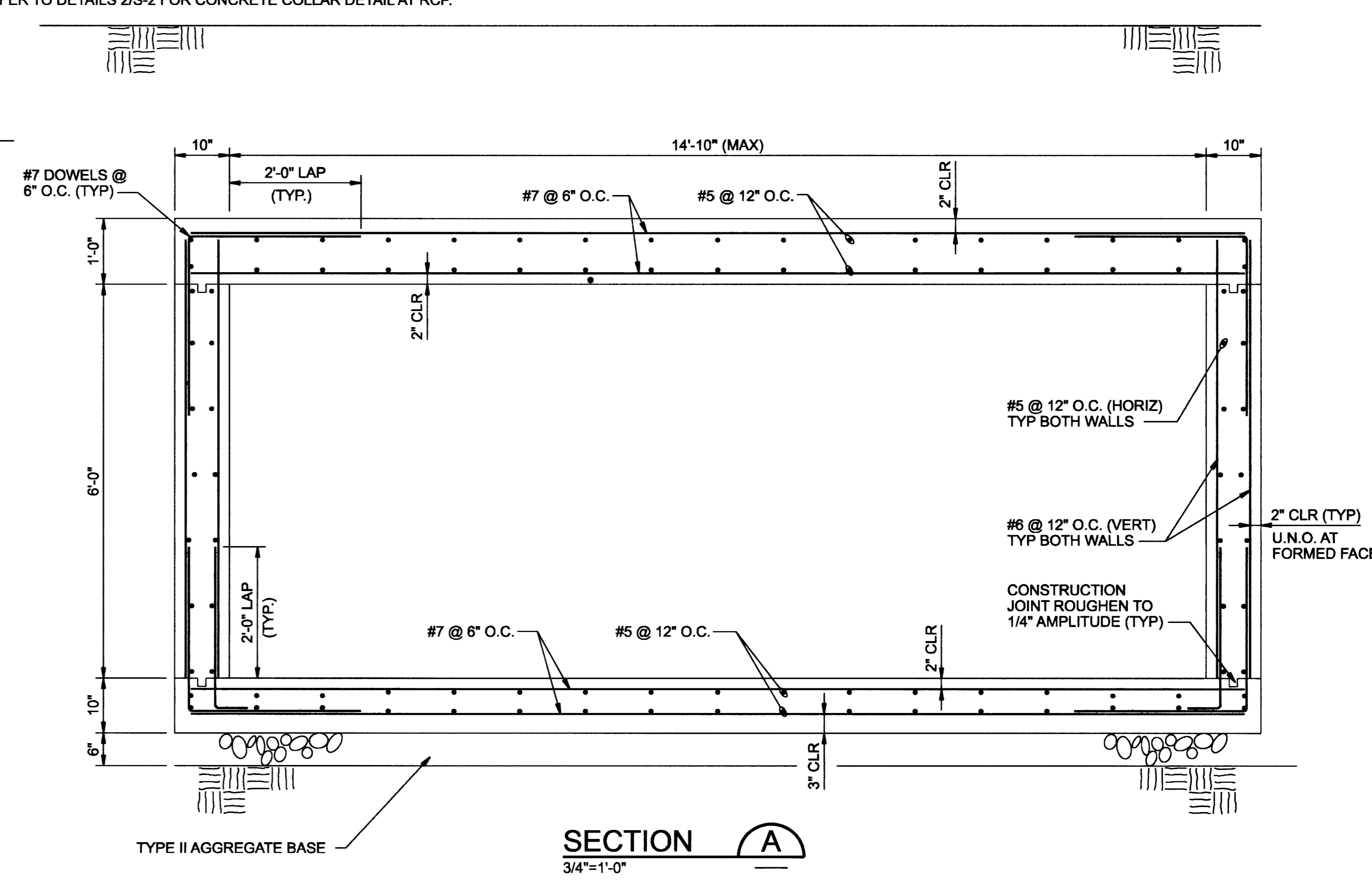


- NOTES:**
- JUNCTION STRUCTURE IS SHOWN AS CAST-IN-PLACE CONSTRUCTION, BUT CONTRACTOR MAY UTILIZE PRECAST CONCRETE BOX STRUCTURES CONFORMING TO ASTM C1433.
  - CONCRETE FOR CAST-IN-PLACE JUNCTION STRUCTURE SHALL BE CLASS D MODIFIED WITH TYPE V PORTLAND CEMENT AND F'C = 5,000 PSI.
  - REFER TO ELEVATION C AND SECTIONS B/S-1, C/S-2, D/S-2 FOR INFORMATION ABOUT CONNECTION DETAILS.
  - REFER TO DETAILS 2/S-2 FOR CONCRETE COLLAR DETAIL AT RCP.



- GENERAL NOTES:**
- DESIGN SPECIFICATIONS:** AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 2002."
  - LOADING:** LIVE LOAD: STANDARD HS20-44 OR ALTERNATE FHWA MILITARY LOADING. IMPACT FOR TOP SLAB IS 30% UP TO 3-FT COVER, NO IMPACT ABOVE 3-FT COVER. NO IMPACT FOR INVERT. NO SURCHARGE FOR WALLS.  
EARTH LOAD: EQUIVALENT FLUID PRESSURE FOR TWO CONDITIONS,  
1) 67 LB./CU.FT. HORIZONTAL AT RESTRAINED WALL  
2) 48 LB./CU.FT. HORIZONTAL AT CANTILEVER WALL  
LOAD FACTORS: 1.3D + 2.2L + 1.5E FOR COVER OF 3-FT OR MORE  
1.3D + 2.82L + 1.5E FOR COVER LESS THAN 3-FT
  - CONCRETE:** CONCRETE SHALL BE CLASS DA FOR JUNCTION WALLS AND CLASS AA FOR JUNCTION INVERTS MODIFIED WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,500 PSI, UNLESS NOTED OTHERWISE.
  - PORTLAND CEMENT** SHALL CONFORM TO ASTM C-150 TYPE V WHERE IN CONTACT WITH EARTH, AND TYPE I OR TYPE II ELSEWHERE.
  - REINFORCING STEEL:** ALL REINFORCING STEEL TO BE ASTM A615 GRADE 60. MAIN REINFORCEMENT IS TO BE PLACED IN THE TRANSVERSE DIRECTION. STAGGER SPLICES NOT SHOWN. HOOKS MAY BE ROTATED OR TILTED AS NECESSARY, FOR CLEARANCE. REINFORCEMENT SHALL HAVE A 3-INCH CLEARANCE ON BOTTOM OF BOTTOM SLAB AND 2-INCH CLEARANCE ON REMAINDER OF STRUCTURE AND ITS APPURTENANCES UNLESS OTHERWISE NOTED ON THE PLANS.
  - GEOTECHNICAL REPORT IS AVAILABLE FOR CONTRACTOR'S STUDY IN THE DESIGN OFFICE OF CITY OF LAS VEGAS PUBLIC WORKS, - NINYO & MOORE PROJECT NO. 301487001, DATED SEPTEMBER 16, 2004. ADDENDUM LETTER DATED AUGUST 15, 2006.
  - REFER TO CIVIL PLANS FOR LIMITS OF EXCAVATIONS.
  - PLACEMENT OF CONCRETE SHALL CONFORM TO ACI STANDARD 301 AND PROJECT SPECIFICATIONS.
  - PRE-CAST REINFORCED CONCRETE BOX CULVERT SHALL CONFORM TO NDOT STANDARD SPECIFICATION 502.03.24.

REVISIONS	NO	DATE	DESCRIPTION	APP'D

**DEPARTMENT OF PUBLIC WORKS**  
**ENGINEERING DESIGN SECTION**  
 CITY ENGINEER: JOSE A. CERVANTES, P.E., P.T.O.E.  
 PROJECT MANAGER: JOE CHRISTENSEN, P.E.  
 DESIGNED BY: J. CHAVEZ  
 CHECKED BY: U. CHAMBERS  
 DRAWN BY: J. CHAVEZ  
 DATE: 17-OCTOBER-2008

**PEAK DRIVE STORM DRAIN**  
 FROM JONES BLVD. TO MICHAEL WAY  
**JUNCTION STRUCTURE**  
**PLAN AND SECTIONS**

TITLE SHEET

CHARLES E. JOSEPH  
 PROFESSIONAL ENGINEER  
 No. 2258  
 EXP. 6-30-09

Sheet **S-1**  
 23 of 33  
 DRAWING NO. 327-V271

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