

**Problem 1**

**Given:** Student design project.

**Find:**

1. Design a FR moment connection for beam to column joint on the first level. Provide sketch and details.

**Problem 2**

**Given:** Student design project.

**Find:**

1. Design a Bolted or welded beam splice connection for the long beam/girder used to support columns B2 and B3 on the second floor.

**Problem 3**

**Given:** Student design project.

**Find:**

1. Design the gusset plate and gusset plate interface connections for the first level braces.