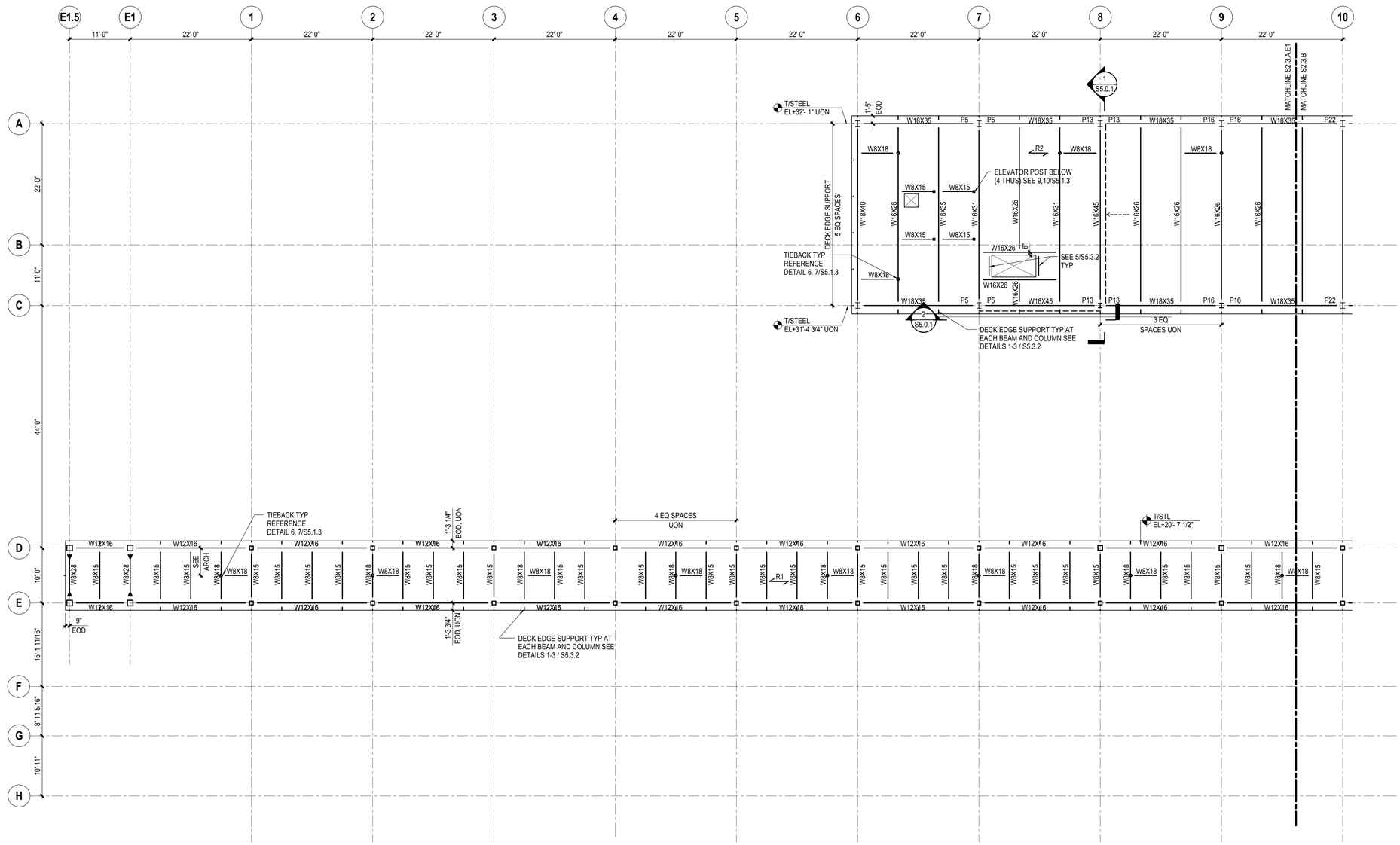


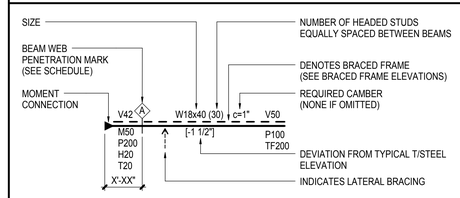

## 1 03 UPPER ROOF FRAMING PLAN A

1/8" = 1'-0"

SHEET NOTES:

1. T/STEEL FRAMING ELEVATIONS VARY, SEE PLAN
2. XX INDICATES DECK SPAN DIRECTION AND ROOF TYPE. SEE SCHEDULE AND TYPICAL DETAILS ON S5.3.1
3. SEE S5.1.2 AND S5.1.3 FOR TYPICAL STEEL DETAILS
4. SEE DECK EDGE DETAILS ON S5.3.2
5. FOR OPENING DIMENSIONS NOT SHOWN, SEE ARCH
6. FOR ROOF DECK OPENING REINFORCEMENT SEE S5.3.2
7. SEE S5.0.1 FOR ELEVATIONS OF BRACED FRAMES. SEE S5.0.2 FOR BRACING DETAILS
8. SEE S3.0.3 FOR LOAD DIAGRAMS
9. INDICATES LATERAL BRACING PER 3/S5.1.4
10. FOR OPENING DIMENSIONS NOT SHOWN, SEE ARCH

### STEEL BEAM LEGEND




V INDICATES FACTORED VERTICAL SHEAR IN KIPS (SEE SCHEDULE ON S5.1.2 IF OMITTED)
M INDICATES FACTORED END MOMENT IN KIP-FEET (SEE SCHEDULE ON S5.1.2 IF OMITTED)
P INDICATES FACTORED END AXIAL FORCE IN KIPS
H INDICATES FACTORED HORIZONTAL SHEAR FORCE IN KIPS
T INDICATES TORSIONAL MOMENT IN KIP-FEET
TF INDICATES AXIAL FORCE TRANSFERRED THROUGH THE CONNECTION JOINT IN KIPS


SMITHGROUP
architecture engineering interiors planning
SMITHGROUP, INC
35 EAST WACKER
SUITE 2200
CHICAGO, IL 60601
T 312.641.0770
F 312.641.6728
www.smithgroup.com

JJR
landscape architecture
planning
urban design
civil engineering
environmental science
JJR, LLC
35 EAST WACKER DRIVE
SUITE 2200
CHICAGO, ILLINOIS 60601
312.641.0510 T
312.641.0668 F
www.jjr-us.com

AEI Affiliated Engineers
Affiliated Engineers, Inc.
5802 Research Park Boulevard
Madison, Wisconsin 53719
Tel 608.238.2616 Fax 608.238.2614

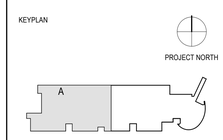
Thornton Tomasetti
Thornton Tomasetti, Inc.
330 N. Wabash Avenue, Suite 1500
Chicago IL 60611-7622
T 312.596.2000 F 312.596.2001

TERRA ENGINEERING LTD.
225 West Ohio Street, 4th Floor
Chicago, Illinois 60654
T:(312)467-0123 F:(312) 467-0220


SEALS AND SIGNATURES

STATE OF ILLINOIS
CAROL A. POST
081-004887
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

KEYPLAN




| REV. NO. | DESCRIPTION | BY | APVD | DATE |
|---|---|---|---|---|
| | ISSUED FOR CONSTRUCTION | | | 07/03/12 |

Argonne NATIONAL LABORATORY

FMS
Facilities Management Services

PROJECT TITLE: ADVANCED PROTEIN CRYSTALLIZATION FACILITY, ARGONNE NATIONAL LABORATORY

PROJECT NO: C10539.00

DRAWING TITLE: 03 UPPER ROOF FRAMING PLAN A

| | | |
|---|---|---|
| DESIGNED: Designer | A/E CADD FILE: S2.3.A.E1 | FACILITY NO(S) |
| DRAWN: Author | A/E DWG. NO.: S2.3.A.E1 | |
| CHECKED: Checker | CAD NO: | |
| PROJECT MANAGER: ANL - JESSE ADAMS DATE - 08/31/11 | DWG STATE | |
| | BIND ORDER | |

FACILITY DOCUMENT NUMBER: J446-101-W- S2.3.A.E1 REV. NO.

Plot Date: 6/27/2012 5:17:56 PM