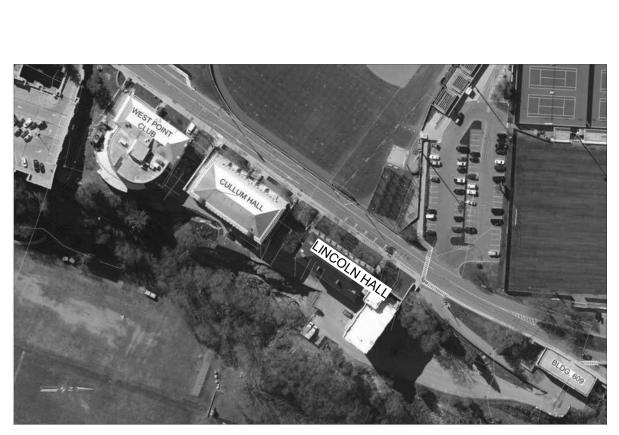


WEST POINT, NY USMA BUILDING 607 LINCOLN HALL RENOVATION

D3296400

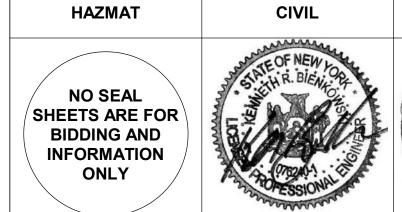


SOLICITATION NUMBER: W912DS-19-R-0014

CONTRACT NUMBER: W912DS-19-C-0031-L

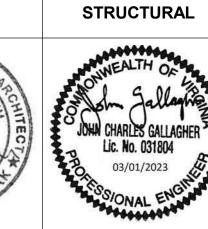
ISSUE DATE: 01 MARCH 2023

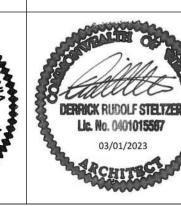
VOLUME ONE







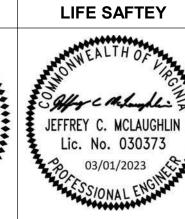


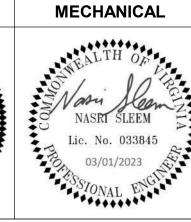


ARCHITECTURE

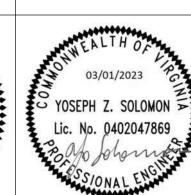


INTERIORS

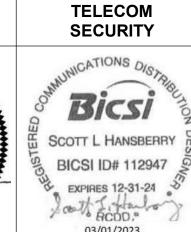




PLUMBING

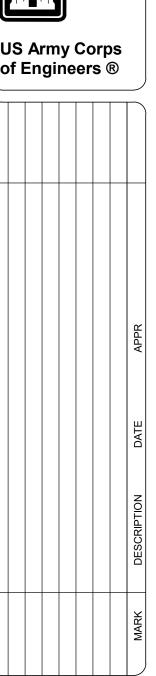


ELECTRICAL





REVISED RTA SUBMISSION 03/01/2023



SHEET ID

G-011

INDEX OF DRAWINGS - VOLUME ONE

NUMBER	DRAWING NAME	
GENERAL		
G-011	COVER SHEET - VOLUME ONE	
G-012	INDEX OF DRAWINGS - VOLUME ONE AND TWO	
G-013	INDEX OF DRAWINGS - VOLUME THREE AND FOUR	

DRAWING NAME

NUMBER	DRAWING NAME
LIFE SAFETY	
LS001	LIFE SAFETY CODE SUMMARY
LS101	LEVEL B3 FLOOR PLAN - LIFE SAFETY
LS102	LEVEL B2 FLOOR PLAN - LIFE SAFETY
LS103	LEVEL B1 FLOOR PLAN - LIFE SAFETY
LS104	LEVEL 1 FLOOR PLAN - LIFE SAFETY
LS105	LEVEL 2 FLOOR PLAN - LIFE SAFETY
LS106	LEVEL 3 FLOOR PLAN - LIFE SAFETY
LS100	LEVEL 4 FLOOR PLAN - LIFE SAFETY
	LEVEL 4 FLOOR PLAN - LIFE SAFETT
HAZARDOUS	1
H-101	LEVEL B3 HAZMAT PLAN
H-102	LEVEL B2 HAZMAT PLAN
H-103	LEVEL B1 HAZMAT PLAN
H-104	LEVEL 1 HAZMAT PLAN
H-105	LEVEL 2 HAZMAT PLAN
H-106	LEVEL 3 HAZMAT PLAN
H-107	LEVEL 4 HAZMAT PLAN
CIVIL	
C-001	GENERAL NOTES
C-002	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
BB501	SOIL BORING LOG
C-101	EXISTING CONDITIONS PLAN
CD101	DEMOLITION PLAN
CS101	SITE PLAN
CS102	TRUCK ACCESS PLAN
CS103	CONSTRUCTION LOGISTICS PLAN
CG101	GRADING AND DRAINAGE PLAN
CG102	SOIL EROSION PLAN
CU101	UTILITY PLAN
C-201	DRAINAGE PROFILE
C-501	CONSTRUCTION DETAILS
C-502	CONSTRUCTION DETAILS
C-502	CONSTRUCTION DETAILS CONSTRUCTION DETAILS
	CONSTRUCTION DETAILS
C-504	
C-505	CONSTRUCTION DETAILS
C-506	CONSTRUCTION DETAILS
LANDSCAPE	
L-101	LANDSCAPE PLAN
L-501	LANDSCAPE DETAILS
L-502	LANDSCAPE DETAILS
STRUCTURAL	
S-001	GENERAL STRUCTURAL NOTES
S-002	STRUCTURAL ABBREVIATIONS, SYMBOLS, LEGEND
S-010	LOAD PLANS
S-011	SNOW AND WIND LOADING PLANS
SD101	LEVEL B3 DEMOLITION PLAN
SD102	LEVEL B2 DEMOLITION PLAN
SD102	LEVEL B1 DEMOLITION PLAN
SD104	LEVEL 1 DEMOLITION PLAN
SD105	LEVEL 2 DEMOLITION PLAN
SD106	LEVEL 3 DEMOLITION PLAN
SD107	LEVEL 4/ROOF DEMOLITION PLAN - SOUTH WING
SD108	ROOF DEMOLITION PLAN - NORTH WING AND TOWER
SD401	LARGE SCALE VIEWS
SD402	LARGE SCALE VIEWS
S-101	LEVEL B3 FLOOR PLAN
S-102	LEVEL B2 FLOOR PLAN
S-103	LEVEL B1 FLOOR PLAN
S-104	LEVEL1 FLOOR PLAN
S-104 S-105	LEVEL2 FLOOR PLAN
S-105 S-106	
	LEVEL3 FLOOR PLAN COUTLINING
S-107	LEVEL 4/ROOF PLAN - SOUTH WING
S-108	ROOF PLAN - NORTH WING AND TOWER
S-201	ELEVATIONS
S-401	LARGE SCALE VIEWS
S-402	LARGE SCALE VIEWS
S-403	LARGE SCALE VIEWS
S-404	LARGE SCALE VIEWS
S-501	TYPICAL DETAILS - FOUNDATIONS, WALLS, SLABS-ON-GRADE, SLABS
S-502	TYPICAL DETAILS - DEVELOPMENT LENGTHS, POST-INSTALLED ANCHORS, STEEL BEAMS
S-502	TYPICAL DETAILS - STEEL BEAMS AND LINTELS
S-503 S-504	TYPICAL DETAILS - STEEL BEAMS AND LINTELS TYPICAL DETAILS - STEEL BEAMS AND LINTELS
S-505	TYPICAL DETAILS - STEEL DETAILS

INDEX OF DRAWINGS - VOLUME TWO

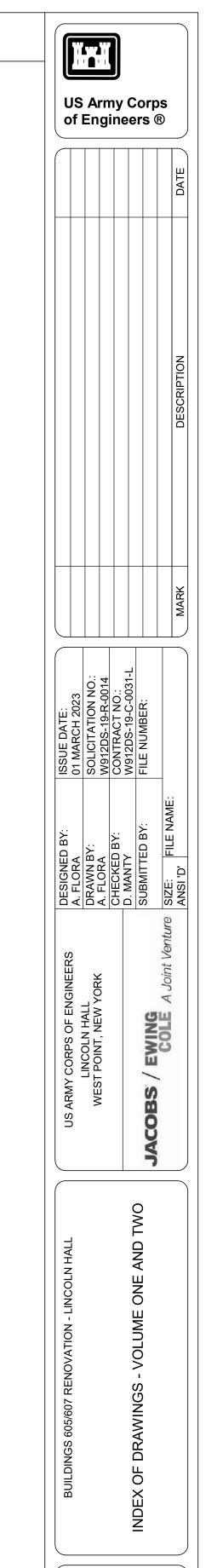
COVER SHEET - VOLUME TWO

DRAWING NAME

NUMBER

NUMBER	DRAWING NAME
ADCUITECT	IDAL
ARCHITECTU A-001	ABBREVIATIONS, MOUNTING HEIGHTS, AND SYMBOLS
AD101	LEVEL B3 DEMOLITION PLAN
AD102	LEVEL B2 DEMOLITION PLAN
AD103	LEVEL B1 DEMOLITION PLAN
AD104	LEVEL 2 DEMOLITION PLAN
AD105 AD106	LEVEL 2 DEMOLITION PLAN LEVEL 3 DEMOLITION PLAN
AD107	LEVEL 4 DEMOLITION PLAN
AD108	ROOF DEMOLITION PLAN
A-101	LEVEL B3 FLOOR PLAN
A-102	LEVEL B2 FLOOR PLAN
A-103 A-104	LEVEL B1 FLOOR PLAN
A-104 A-105	LEVEL 2 FLOOR PLAN
A-106	LEVEL 3 FLOOR PLAN
A-107	LEVEL 4 FLOOR PLAN
A-108	ROOF PLAN
A-111	LEVEL B3 REFLECTED CEILING PLAN
A-112 A-113	LEVEL B2 REFLECTED CEILING PLAN LEVEL B1 REFLECTED CEILING PLAN
A-113 A-114	LEVEL 1 REFLECTED CEILING PLAN
A-115	LEVEL 2 REFLECTED CEILING PLAN
A-116	LEVEL 3 REFLECTED CEILING PLAN
A-117	LEVEL 4 REFLECTED CEILING PLAN
A-201	SOUTH WING ELEVATIONS
A-202 A-203	SOUTH WING ELEVATIONS NORTH WING AND TOWER ELEVATIONS
A-203 A-204	NORTH WING AND TOWER ELEVATIONS NORTH WING AND TOWER ELEVATIONS
A-205	ENLARGED ELEVATIONS - PENTHOUSE AND SALLY PORT
A-206	ENLARGED EXTERIOR ELEVATIONS, RETAINING WALLS
A-211	EXTERIOR WALL TYPICAL CONDITION PHOTOS
A-212	EXTERIOR WALL TYPICAL CONDITIONS PHOTOS
A-301 A-302	SOUTH WING BUILDING SECTION SOUTH AND NORTH WING BUILDING SECTIONS
A-302 A-303	NORTH WING BUILDING SECTIONS
A-311	PARTIAL BUILDING SECTIONS
A-321	EXTERIOR WALL/ROOF SECTIONS PENTHOUSE
A-322	SHAFT SECTIONS
A-401	ENLARGED RESTROOM FLOOR PLANS
A-402 A-403	LEVEL B2 - ENLARGED CENTRAL STAIR FLOOR PLANS LEVEL 1 AND 2 - ENLARGED CENTRAL STAIR FLOOR PLANS
A-404	LEVEL 3 AND 4 - ENLARGED CENTRAL STAIR FLOOR PLANS
A-405	ENLARGED CENTRAL STAIR RCPS
A-406	INTERIOR STAIRS ENLARGED PLANS & SECTIONS
A-407	ELEVATOR FLOOR PLANS, SECTIONS AND ELEVATIONS
A-411 A-412	CENTRAL STAIR TOWER SECTIONS/ELEVATIONS CENTRAL STAIR LOBBY ELEVATIONS
A-412 A-413	CENTRAL STAIR LOBBY ELEVATIONS CENTRAL STAIR LOBBY ELEVATIONS
A-414	CENTRAL STAIR LOBBY ELEVATIONS
A-415	CENTRAL STAIR LOBBY ELEVATIONS
A-421	CAFE ENLARGED PLANS AND ELEVATIONS
A-423	RETAIL STORE ENLARGED PLANS
A-424 A-425	RETAIL STORE ENLARGED PLANS RETAIL STORE ELEVATIONS
A-425 A-426	RETAIL STORE ELEVATIONS RETAIL STORE ELEVATIONS AND DETAILS
A-427	RETAIL STORE DISPLAY WINDOW ELEVATIONS
A-428	RETAIL STORE PERSPECTIVE VIEWS AND DETAILS
A-429	ENLARGED BRIEFING ROOM PLANS AND ELEVATIONS
A-430	ENLARGED TV STUDIO PLANS
A-431 A-432	ENLARGED TV STUDIO SECTIONS/ELEVATIONS INTERIOR ELEVATIONS - TV STUDIO
A-432 A-433	ENLARGED BREAK ROOM PLANS AND ELEVATIONS
A-434	ENLARGED CONFERENCE ROOM PLANS AND ELEVATIONS
A-435	ENLARGED CONFERENCE ROOM PLANS AND ELEVATIONS
A-436	OPEN OFFICE ENLARGED EXTERIOR WALL ELEVATIONS
A-437	OPEN OFFICE ENLARGED EXTERIOR WALL ELEVATIONS
A-439 A-440	ENLARGED PHOTO STUDIO PLANS AND ELEVATIONS ENLARGED CHANGING ROOM PLANS AND ELEVATIONS

NUMBER	DRAWING NAME	
A-511	EXTERIOR DETAILS	
A-512	EXTERIOR DETAILS	
A-513	EXTERIOR DETAILS	
4-514 4-521	EXTERIOR DETAILS WINDOW DETAILS	
4-521 4-522	WINDOW DETAILS WINDOW DETAILS	
A-523	WINDOW DETAILS	
A-531	ROOF DETAILS	
A-532	ROOF DETAILS	
A-533	STAIR TOWER ATTIC ACCESS DETAILS	
A-541 A-542	EXTERIOR GUARDRAIL AND HANDRAIL DETAILS RETAIL STORE STAIR DETAILS	
A-543	RETAIL STORE STAIR DETAILS	
4-545	INTERIOR STAIR DETAILS	
A-546	INTERIOR STAIR DETAILS	
A-551	CEILING DETAILS	
A-552 A-553	TV STUDIO CEILING AND PARTITION DETAILS TV STUDIO CEILING DETAILS	
1-555 1-554	TV STUDIO CEILING DETAILS TV STUDIO CEILING DETAILS	
A-561	MILLWORK DETAILS - CAFE	
A-562	MILLWORK DETAILS - BRIEFING ROOM	
A-563	MILLWORK DETAILS - TYPICAL	
\-564	MILLWORK DETAILS - TYPICAL	
\-601	PARTITION TYPES	
\-602 \-604	PARTITION TYPES DOOR SCHEDULE AND DETAILS	
\-605	DOOR SCHEDULE AND DETAILS DOOR SCHEDULE AND DETAILS	
√ -606	GLAZED PARTITION AND DOOR DETAILS	
\ -607	DOOR DETAILS	
A-608	DOOR DETAILS	
\-609	EXTERIOR DOOR DETAILS	
\-610 \-615	EXTERIOR DOOR DETAILS	
\-615 \-620	WINDOW TYPES AND SCHEDULE INTERIOR ALUMINUM FRAME SYSTEM	
N-620 N-621	INTERIOR ALUMINUM FRAME SYSTEM INTERIOR ALUMINUM FRAME SYSTEM	
\-901	EXTERIOR RESTORATION ELEVATIONS	
∖-902	EXTERIOR RESTORATION ELEVATIONS	
\-903	EXTERIOR RESTORATION ELEVATIONS	
\-904	EXTERIOR RESTORATION ELEVATIONS	
A-905	EXTERIOR RESTORATION ELEVATIONS	
4-906 4-907	EXTERIOR RESTORATION ELEVATIONS EXTERIOR RESTORATION ELEVATIONS	
	RAL SIGNAGE	
AG001	SITE SIGNAGE PLAN	
AG101	LEVEL B3 FLOOR PLAN -SIGNAGE	
AG102	LEVEL B2 FLOOR PLAN - SIGNAGE	
AG103	LEVEL B1 FLOOR PLAN - SIGNAGE	
AG104 AG105	LEVEL 1 FLOOR PLAN - SIGNAGE LEVEL 2 FLOOR PLAN - SIGNAGE	
4G105 4G106	LEVEL 3 FLOOR PLAN - SIGNAGE LEVEL 3 FLOOR PLAN - SIGNAGE	
AG107	LEVEL 4 FLOOR PLAN - SIGNAGE	
AG201	SIGNAGE - EXTERIOR SIGN ELEVATIONS	
AG202	SIGNAGE - INTERIOR SIGN ELEVATIONS	
AG203	SIGNAGE - INTERIOR SIGN ELEVATIONS	
AG501	SIGNAGE LAYOUTS	
AG502 AG601	SIGNAGE LAYOUTS SIGNAGE SCHEDULE	
NTERIOR	0.0.0.000000000000000000000000000000000	
-101	LEVEL B3 FLOOR PLAN - FINISH	
-102	LEVEL B2 FLOOR PLAN - FINISH	
-103	LEVEL B1 FLOOR PLAN - FINISH	
-104	LEVEL 1 FLOOR PLAN - FINISH	
-105 -106	LEVEL 2 FLOOR PLAN - FINISH LEVEL 3 FLOOR PLAN - FINISH	
-106 -107	LEVEL 3 FLOOR PLAN - FINISH LEVEL 4 FLOOR PLAN - FINISH	
-10 <i>1</i> -111	LEVEL 47 LOOK FLAN - FINISH LEVEL B3 FLOOR PLAN - FURNITURE	
-112	LEVEL B2 FLOOR PLAN - FURNITURE	
-113	LEVEL B1 FLOOR PLAN - FURNITURE	
-114	LEVEL 1 FLOOR PLAN - FURNITURE	
-115	LEVEL 2 FLOOR PLAN - FURNITURE	
-116 -117	LEVEL 3 FLOOR PLAN - FURNITURE LEVEL 4 FLOOR PLAN - FURNITURE	
-11 <i>7</i> -400	ENLARGED FINISH FLOOR PLANS - CORRIDORS	
- 4 00 -401	ENLARGED FINISH FLOOR PLANS - CORRIDORS, CAFE, RESTROOMS	
-402	ENLARGED FINISH FLOOR PLANS - RETAIL STORE, CORRIDOR	
-403	ENLARGED FINISH FLOOR PLANS - CORRIDORS	
-404	ENLARGED FINISH FLOOR PLANS - CENTRAL STAIR	
-405	ENLARGED FINISH FLOOR PLANS - CENTRAL STAIR, BREAK ROOMS	
-406	ENLARGED FINISH FLOOR PLANS - PHOTO STUDIO	
-500 -501	INTERIOR DETAILS	
-501 -600	INTERIOR DETAILS COLOR MATERIAL LEGEND	
-600 -601	COLOR MATERIAL LEGEND COLOR MATERIAL LEGEND	
-602	FINISH MATERIAL SCHEDULE	
-603	FINISH MATERIAL SCHEDULE	
-604	FINISH MATERIAL SCHEDULE	
001		



SHEET ID

G-012

INDEX OF DRAWINGS - VOLUME THREE

NUMBER	DRAWING NAME	
GENERAL		
G-031	COVER SHEET - VOLUME THREE	
G-032	INDEX OF DRAWINGS - VOLUME ONE AND TWO	
G-033	INDEX OF DRAWINGS - VOLUME THREE AND FOUR	

NUMBER	DRAWING NAME
FIRE ALARM	
FA001	FIRE ALARM - SYMBOLS, ABBREVIATIONS, GENERAL NOTES, AND MASS NOTIFICATION
FD101	LEVEL B3 DEMOLITION PLAN - FIRE ALARM
FD102	LEVEL B2 DEMOLITION PLAN - FIRE ALARM
FD103	LEVEL B1 DEMOLITION PLAN - FIRE ALARM
FD104	LEVEL 1 DEMOLITION PLAN - FIRE ALARM
FD105	LEVEL 2 DEMOLITION PLAN - FIRE ALARM
FD106	LEVEL 3 DEMOLITION PLAN - FIRE ALARM
FD107	LEVEL 4 DEMOLITION PLAN - FIRE ALARM
FA101	LEVEL B3 FLOOR PLAN - FIRE ALARM AND MASS NOTIFICATION
FA102	LEVEL B2 FLOOR PLAN - FIRE ALARM AND MASS NOTIFICATION
FA103	LEVEL B1 FLOOR PLAN - FIRE ALARM AND MASS NOTIFICATION
FA104	LEVEL 1 FLOOR PLAN - FIRE ALARM AND MASS NOTIFICATION
FA105	LEVEL 2 FLOOR PLAN - FIRE ALARM AND MASS NOTIFICATION
FA106	LEVEL 3 FLOOR PLAN - FIRE ALARM AND MASS NOTIFICATION
FA107	LEVEL 4 FLOOR PLAN - FIRE ALARM AND MASS NOTIFICATION
FA108	ROOF PLAN - FIRE ALARM PLAN AND MASS NOTIFICATION
FA701	FIRE ALARM AND MASS NOTIFICATION DETAILS
FA702	FIRE ALARM AND MASS NOTIFICATION DETAILS
FA703	FIRE ALARM AND MASS NOTIFICATION DETAILS
FIRE SUPPR	
FX001	FIRE SUPPRESSION - SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES
FD111	LEVEL B3 DEMOLITION PLAN - FIRE SUPPRESSION
FD112	LEVEL B2 DEMOLITION PLAN - FIRE SUPPRESSION
FD113	LEVEL B1 DEMOLITION PLAN - FIRE SUPPRESSION
FD114	LEVEL 1 DEMOLITION PLAN - FIRE SUPPRESSION
FD115	LEVEL 2 DEMOLITION PLAN - FIRE SUPPRESSION
FD116	LEVEL 3 DEMOLITION PLAN - FIRE SUPPRESSION
FD117	LEVEL 4 DEMOLITION PLAN - FIRE SUPRESSION
FX101	LEVEL B3 FLOOR PLAN - FIRE SUPPRESSION
FX102	LEVEL B2 FLOOR PLAN - FIRE SUPPRESSION
FX103	LEVEL B1 FLOOR PLAN - FIRE SUPPRESSION
FX104	LEVEL 1 FLOOR PLAN - FIRE SUPPRESSION
FX105	LEVEL 2 FLOOR PLAN - FIRE SUPPRESSION
FX106	LEVEL 3 FLOOR PLAN - FIRE SUPPRESSION
FX107 FX108	LEVEL 4 FLOOR PLAN - FIRE SUPPRESSION ROOF PLAN - FIRE SUPPRESSION PLAN
FX501	FIRE SUPPRESSION DETAILS
FX502 PLUMBING	FIRE SUPPRESSION DETAILS
	DILIMPING APPRICATIONS SYMPOLS AND SENERAL NOTES
P-001	PLUMBING ABBREVIATIONS, SYMBOLS AND GENERAL NOTES
PD101	LEVEL B3 DEMOLITION PLAN - PLUMBING
PD102	LEVEL B2 DEMOLITION PLAN - PLUMBING
PD103	LEVEL B1 DEMOLITION PLAN - PLUMBING
PD104	LEVEL 1 DEMOLITION PLAN - PLUMBING
PD105	LEVEL 2 DEMOLITION PLAN - PLUMBING
PD106	LEVEL 3 DEMOLITION PLAN - PLUMBING
PD107	LEVEL 4 DEMOLITION PLAN - PLUMBING
PD108	ROOF DEMOLITION PLAN - PLUMBING
P-101	LEVEL B3 FLOOR PLAN - PLUMBING
P-102	LEVEL B2 FLOOR PLAN - PLUMBING
P-103	LEVEL B1 FLOOR PLAN - PLUMBING
P-104	LEVEL 1 FLOOR PLAN - PLUMBING
P-105	LEVEL 2 FLOOR PLAN - PLUMBING
P-106	LEVEL 3 FLOOR PLAN - PLUMBING
P-107	LEVEL 4 FLOOR PLAN - PLUMBING
P-108	ROOF PLAN - PLUMBING
P-401	TOILET ENLARGED PLANS
P-402	TOILET ENLARGED PLANS
P-403	ENLARGED PLANS
P-501	PLUMBING DETAILS
P-502	PLUMBING DETAILS
P-503	PLUMBING DETAILS
P-604	SCHEDULES
P-701	DOMESTIC WATER RISER DIAGRAMS
P-702	SANITARY AND VENT RISER DIAGRAMS
P-703	STORM WATER RISER DIAGRAMS

NUMBER	DRAWING NAME
IAOINIDEK	Drawing Ivalvie
MECHANICAL	•
M-001	HVAC LEGEND
M-002	HVAC LEGEND
MD101	LEVEL B3 DEMOLITION PLAN - HVAC
MD102 MD103	LEVEL B2 DEMOLITION PLAN - HVAC LEVEL B1 DEMOLITION PLAN - HVAC
MD103 MD104	LEVEL 1 DEMOLITION PLAN - HVAC
MD105	LEVEL 2 DEMOLITION PLAN - HVAC
MD106	LEVEL 3 DEMOLITION PLAN - HVAC
MD107	LEVEL 4 DEMOLITION PLAN - HVAC
MD108	ROOF DEMOLITION PLAN - HVAC
MH101	LEVEL B3 FLOOR PLAN - DUCTWORK
MH102	LEVEL B2 FLOOR PLAN - DUCTWORK
MH103	LEVEL 4 FLOOR PLAN - DUCTWORK
MH104 MH105	LEVEL 1 FLOOR PLAN - DUCTWORK LEVEL 2 FLOOR PLAN - DUCTWORK
MH106	LEVEL 3 FLOOR PLAN - DUCTWORK
MH107	LEVEL 4 FLOOR PLAN - DUCTWORK
MH108	ROOF PLAN - DUCTWORK
MP101	LEVEL B3 FLOOR PLAN - PIPING
MP102	LEVEL B2 FLOOR PLAN - PIPING
MP103	LEVEL B1 FLOOR PLAN - PIPING
MP104	LEVEL 1 FLOOR PLAN - PIPING
MP105	LEVEL 2 FLOOR PLAN - PIPING
MP106	LEVEL 3 FLOOR PLAN - PIPING
MP107 MP108	ROOF PLAN - PIPING
MP108 M-301	MECHANICAL SECTIONS - HVAC SHAFTS
M-302	MECHANICAL SECTIONS - HVAC SHAFTS MECHANICAL SECTIONS
M-303	MECHANICAL SECTIONS MECHANICAL SECTIONS
M-401	HVAC ENLARGED PLANS
M-402	HVAC ENLARGED PLANS
M-501	HVAC DETAILS
M-502	HVAC DETAILS
M-503	HVAC DETAILS
M-504	HVAC DETAILS
M-505 M-506	HVAC DETAILS HVAC DETAILS
M-507	HVAC DETAILS HVAC DETAILS
M-601	HVAC SCHEDULES
M-602	HVAC SCHEDULES
M-603	HVAC SCHEDULES
M-604	HVAC SCHEDULES
M-605	HVAC SCHEDULES
M-701	STEAM AND HOT WATER FLOW DIAGRAM
M-702	CHILLED WATER FLOW DIAGRAMS - CAMPUS CHW AND CHILLED BEAM LOOP
M-703	HYDRONIC FLOW DIAGRAM - LEVEL B2 AND B3
M-704	HYDRONIC FLOW DIAGRAM - LEVEL B1
M-705 M-706	HYDRONIC FLOW DIAGRAM - LEVEL 1 HYDRONIC FLOW DIAGRAM - LEVEL 2
M-707	HYDRONIC FLOW DIAGRAM - LEVEL 3
M-708	HYDRONIC FLOW DIAGRAM - LEVEL 4 AND ROOF
M-709	AIRFLOW RISER DIAGRAM - DOAS-1
M-710	AIRFLOW RISER DIAGRAM - DOAS-2
M-711	AIRFLOW RISER DIAGRAM - MAU-1
M-801	CONTROL SCHEMATIC SYMBOLS, ABBREVIATIONS AND ACRONYMS
M-802	HVAC CONTROL DIAGRAM
M-803	HVAC CONTROL DIAGRAM
M-804	HVAC CONTROL DIAGRAM
M-805 M-806	HVAC CONTROL DIAGRAM HVAC CONTROL DIAGRAM
M-807	HVAC CONTROL DIAGRAM HVAC CONTROL DIAGRAM
M-808	HVAC CONTROL DIAGRAM
M-809	HVAC CONTROL DIAGRAM
M-810	HVAC CONTROL DIAGRAM
M-811	HVAC CONTROL DIAGRAM
M-812	HVAC CONTROL DIAGRAM
M-813	HVAC CONTROL DIAGRAM
M-814	HVAC CONTROL DIAGRAM
M-815	HVAC CONTROL DIAGRAM
M-816	HVAC CONTROL DIAGRAM
M-817 M-818	HVAC CONTROL DIAGRAM
M-818 M-819	HVAC CONTROL DIAGRAM HVAC CONTROL DIAGRAM
M-819 M-820	HVAC CONTROL DIAGRAM HVAC CONTROL DIAGRAM
M-821	HVAC CONTROL DIAGRAM
M-822	HVAC CONTROL DIAGRAM
M-823	HVAC CONTROL DIAGRAM
M-824	HVAC CONTROL POINTS SCHEDULE
M-825	HVAC CONTROL POINTS SCHEDULE
M-826	HVAC CONTROL POINTS SCHEDULE
M-827	HVAC CONTROL POINTS SCHEDULE
M-828 M-820	HVAC CONTROL POINTS SCHEDULE
M-829 M-830	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE
M-830 M-831	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE
M-832	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE
M-833	HVAC CONTROL POINTS SCHEDULE
M-834	HVAC CONTROL POINTS SCHEDULE
M-835	HVAC CONTROL POINTS SCHEDULE
M-836	HVAC CONTROL POINTS SCHEDULE
M-837	HVAC CONTROL POINTS SCHEDULE
	HVAC CONTROL POINTS SCHEDULE
M-838	HVAC CONTROL POINTS SCHEDULE
M-839	
M-839 M-840	HVAC CONTROL POINTS SCHEDULE
M-839 M-840 M-841	HVAC CONTROL POINTS SCHEDULE
M-839 M-840 M-841 M-842	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE
M-839 M-840 M-841 M-842 M-843	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE
M-839 M-840 M-841 M-842 M-843 M-844	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE
M-839 M-840 M-841 M-842 M-843 M-844 M-845	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE UMCS SCHEDULES
M-838 M-839 M-840 M-841 M-842 M-843 M-844 M-845 M-846 M-847	HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE HVAC CONTROL POINTS SCHEDULE

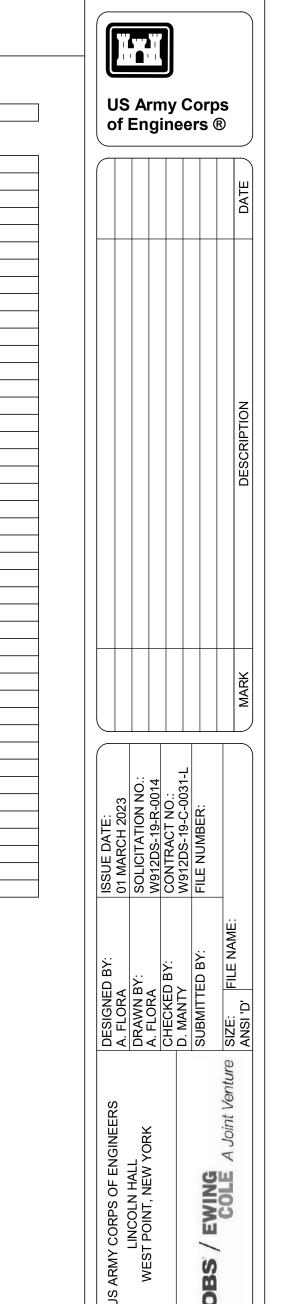
INDEX OF DRAWINGS - VOLUME FOUR

DRAWING NAME

NUMBER

GENERAL	COVED SHEET MOLLIME FOUR
G-041	COVER SHEET - VOLUME FOUR INDEX OF DRAWINGS - VOLUME ONE AND TWO
G-042 G-043	INDEX OF DRAWINGS - VOLUME ONE AND TWO INDEX OF DRAWINGS - VOLUME THREE AND FOUR
3-043	INDEX OF DRAWINGS - VOLUME THREE AND FOOR
NUMBER	DRAWING NAME
ELECTRICAL	OFNEDAL NOTES, AND ADDREWATIONS
E-001 E-002	GENERAL NOTES, AND ABBREVIATIONS SYMBOLS
E-002 ED100	SITE DEMOLITION PLAN
ED101	LEVEL B3 DEMOLITION PLAN
ED102	LEVEL B2 DEMOLITION PLAN
ED103	LEVEL B1 DEMOLITION PLAN
ED104	LEVEL 1 DEMOLITION PLAN
ED105 ED106	LEVEL 2 DEMOLITION PLAN
ED106 ED107	LEVEL 3 DEMOLITION PLAN LEVEL 4 DEMOLITION PLAN
ED107	ROOF DEMOLITION PLAN
ED601	DEMOLITION - RISER DIAGRAM
EL101	LEVEL B3 LIGHTING PLAN
EL102	LEVEL B2 LIGHTING PLAN
EL103	LEVEL B1 LIGHTING PLAN
EL104 EL105	LEVEL 1 LIGHTING PLAN LEVEL 2 LIGHTING PLAN
EL 105 EL 106	LEVEL 2 LIGHTING PLAN
EL107	LEVEL 4 LIGHTING PLAN
EL108	ROOF LIGHTING PLAN
EL701	LUMINAIRE SCHEDULE
EL702	LIGHTING CONTROL SCHEDULES
EL703	LIGHTING CONTROL SCHEDULES
ES100 EP101	SITE PLAN LEVEL B3 POWER PLAN
EP102	LEVEL B2 POWER PLAN
EP103	LEVEL B1 POWER PLAN
EP104	LEVEL 1 POWER PLAN
EP105	LEVEL 2 POWER PLAN
EP106 EP107	LEVEL 3 POWER PLAN LEVEL 4 POWER PLAN
EP107 EP108	ELECTRICAL ROOF POWER PLAN
EP401	ELARGED POWER PLANS
EP402	ENLARGED POWER PLANS
EM101	ELECTRICAL LEVEL B3 EQUIPMENT PLAN
EM102	ELECTRICAL LEVEL B2 EQUIPMENT PLAN
EM103 EM104	ELECTRICAL LEVEL B1 EQUIPMENT PLAN ELECTRICAL LEVEL 1 EQUIPMENT PLAN
EM105	ELECTRICAL LEVEL 2 EQUIPMENT PLAN
EM106	ELECTRICAL LEVEL 3 EQUIPMENT PLAN
EM107	ELECTRICAL LEVEL 4 EQUIPMENT PLAN
EM108	ELECTRICAL ROOF EQUIPMENT PLAN
EM701 EG101	MECHANICAL EQUIPMENT SCHEDULE LEVEL B1 GROUNDING PLAN
EG101 EG102	ROOF LIGHTNING PROTECTION PLAN
EG102 EG601	GROUNDING RISER DIAGRAM
E-501	DETAILS
E-502	DETAILS
E-503	DETAILS
E-504	DETAILS
E-505 E-601	DETAILS SINGLE LINE DIAGRAM
E-602	POWER RISER DIAGRAM
E-700	ELECTRICAL PANEL SCHEDULE INDEX
E-701	ELECTRICAL PANEL SCHEDULES
E-702	ELECTRICAL PANEL SCHEDULES
E-703 E-704	ELECTRICAL PANEL SCHEDULES ELECTRICAL PANEL SCHEDULES
E-70 4 E-705	ELECTRICAL PANEL SCHEDULES ELECTRICAL PANEL SCHEDULES
E-706	ELECTRICAL PANEL SCHEDULES
E-707	ELECTRICAL PANEL SCHEDULES
E-708	ELECTRICAL PANEL SCHEDULES
E-709	ELECTRICAL PANEL SCHEDULES
E-710 E 711	ELECTRICAL PANEL SCHEDULES ELECTRICAL PANEL SCHEDULES
E-711 F-712	
E-712 E-713	ELECTRICAL PANEL SCHEDULES ELECTRICAL PANEL SCHEDULES
E-714	ELECTRICAL PANEL SCHEDULES

NUMBER	DRAWING NAME
TELECOMMU	INICATIONS
T-001	SYMBOLS, ABBREVIATIONS AND GENERAL NOTES
TD101	LEVEL B3 COMMUNICATION DEMOLITION PLAN
TD102	LEVEL B2 COMMUNICATIONS DEMOLITION PLAN
TD102	LEVEL B1 COMMUNICATIONS DEMOLITION PLAN
TD104	LEVEL 1 - COMMUNICATIONS DEMOLITION PLAN
TD105	LEVEL 2 - COMMUNICATIONS DEMOLITION PLAN
TD106	LEVEL 3 - COMMUNICATIONS DEMOLITION PLAN
TD107	LEVEL 4 - COMMUNICATIONS DEMOLITION PLAN
TS101	PARTIAL TELECOM SITE PLAN
TS102	PARTIAL TELECOM SITE PLAN
T-101	LEVEL B3 FLOOR PLAN - COMMUNICATIONS
T-102	LEVEL B2 FLOOR PLAN - COMMUNICATIONS
T-102	LEVEL B1 FLOOR PLAN - COMMUNICATIONS
T-103	LEVEL 1 FLOOR PLAN - COMMUNICATIONS
T-10 4	LEVEL 2 FLOOR PLAN - COMMUNICATIONS
T-105	LEVEL 3 FLOOR PLAN - COMMUNICATIONS
T-107	LEVEL 4 FLOOR PLAN - COMMUNICATIONS
TY101	LEVEL B3 FLOOR PLAN - SECURITY
TY102	LEVEL B2 FLOOR PLAN - SECURITY
TY103	LEVEL B1 FLOOR PLAN - SECURITY
TY104	LEVEL 1 FLOOR PLAN - SECURITY
TY105	LEVEL 2 FLOOR PLAN - SECURITY
TY106 TY107	LEVEL 3 FLOOR PLAN - SECURITY LEVEL 4 FLOOR PLAN - SECURITY
	SECURITY DOOR AND CAMERA DETAILS
TY501	
TY601	SECURITY PATHWAY DIAGRAM
T-201	RACK ELEVATIONS
T-202	RACK ELEVATIONS
T-203	RACK ELEVATIONS
T-204	RACK ELEVATIONS
T-401	ENLARGED TELECOM ROOM PLANS
T-402	ENLARGED TELECOM ROOM PLANS
T-403	ENLARGED TELECOM ROOM PLANS
T-404	ENLARGED TELECOM ROOM PLANS
T-501	COMMUNICATIONS OUTLET DETAILS
T-502	COMMUNICATIONS DETAILS
T-503	GROUNDING AND BONDING DETAILS
T-504	CABLE TRAY DETAILS
T-600	VOICE AND DATA OSP ONE-LINE DIAGRAM
T-601	NIPR VOICE AND DATA ONE-LINE DIAGRAM
T-602	WREN AND WAP DATA ONE-LINE DIAGRAM
T-603	F-DAS, C-DAS AND CLOCK ONE-LINE DIAGRAM
T-604	TELECOM BONDING AND GROUNDING ONE-LINE DIAGRAM



G-013

THE FOLLOWING IS A LIST OF APPLICABLE CODES AND STANDARDS AT THE TIME THIS REPORT WAS PREPARED:

- UFC 1-200-01: DOD BUILDING CODE (GENERAL BUILDING REQUIREMENTS), CHANGE 1, 8 OCTOBER 2019 UFC 3-600-01: FIRE PROTECTION ENGINEERING FOR FACILITIES, CHANGE 4, FEBRUARY 2020
- UFC 4-021-01: DESIGN AND O&M: MASS NOTIFICATION SYSTEMS, CHANGE 1, JANUARY 2010 INTERNATIONAL BUILDING CODE (IBC), 2018 (AS ADOPTED BY UFC 1-200-01)
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 13: STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2019 NFPA 14: STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS, 2019
- NFPA 20: STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION, 2016
- NFPA 70: NATIONAL ELECTRICAL CODE, 2017
- NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE, 2019
- NFPA 101: LIFE SAFETY CODE, 2018 NFPA 220: STANDARD ON TYPES OF BUILDING CONSTRUCTION, 2018

FIRE SUPPRESSION WATER SUPPLY

THE BASE WATER SUPPLY IS A GRAVITY FEED SYSTEM SUPPLIED FROM THE LUSK RESERVOIR. WATER FLOW TESTING WAS CONDUCTED ON MARCH 12, 2019 AND PRODUCED THE FOLLOWING RESULTS:

STATIC PRESSURE: 60 PSI RESIDUAL PRESSURE: 56 PSI

THE FIRE SUPPRESSION SPRINKLER SYSTEMS SHALL BE SUPPLIED BY THE EXISTING FIRE PUMP LOCATED IN THE MECHANICAL YARD BETWEEN LINCOLN AND CULLUM HALLS. THE EXISTING FIRE PUMP IS AN ELECTRIC DRIVE, HORIZONTAL SPLIT CASE TYPE PUMP RATED FOR 750 GPM AT 75 PSI.

THE FIRE PUMP IS NOT INTENDED TO SUPPORT FIRE DEPARTMENT HOSE STREAM APPLICATIONS FROM THE STANDPIPES. PER UFC 3-600-01, SECTION 9-10.1, RESIDUAL PRESSURE REQUIREMENTS SPECIFIED IN NFPA 14 MAY BE OMITTED FOR BUILDINGS UNDER 150 FEET IN HEIGHT WHERE FIRE DEPARTMENT APPARATUS ARE EXPECTED TO BOOST PRESSURE IN STANDPIPE SYSTEMS. PRESSURE FOR HOSE STREAM DEMAND WILL BE SUPPLEMENTED THROUGH FIRE DEPARTMENT PUMPER TRUCKS CONNECTED TO THE FIRE DEPARTMENT INLET CONNECTION. COMBINED SPRINKLER/MANUAL STANDPIPES WILL BE ADEQUATELY SIZED TO ALLOW THE REQUIRED FLOW AND PRESSURE (WHEN SUPPLIED BY FIRE DEPARTMENT APPARATUS) AT EACH HOSE CONNECTION.

ALL PIPING AND FITTINGS, REGARDLESS OF PIPE SIZE, FOR THE FIRE SUPPRESSION SYSTEM SHALL BE SCHEDULE 40 BLACK STEEL ASTM A53/A53M WITH THREADED OR ROLL-GROOVED JOINTS. CUT-GROOVED AND PLAIN-END JOINTS WILL NOT BE PERMITTED. CPVC PLASTIC PIPE AND FITTINGS WILL NOT BE PERMITTED.

FIRE SUPPRESSION SYSTEMS

A COMBINATION AUTOMATIC WET-PIPE FIRE SUPPRESSION SPRINKLER AND MANUAL CLASS I STANDPIPE SYSTEM IS REQUIRED TO PROTECT THE ENTIRE BUILDING. THE SYSTEM WILL BE INSTALLED IN ACCORDANCE WITH UFC 3-600-01, NFPA 13 AND NFPA 14.

THE FIRE SUPPRESSION SYSTEM WILL BE DESIGNED IN ACCORDANCE WITH UFC 3-600-01 REQUIREMENTS FOR AREAS AND DENSITIES. THE HAZARD CLASSIFICATIONS AND DESIGN CRITERIA ANTICIPATED FOR THIS BUILDING ARE AS FOLLOWS:

LIGHT HAZARD: 0.1 GPM/SF OVER 1,500 SF: OFFICES, CORRIDORS, CONFERENCE ROOMS ORDINARY HAZARD: 0.20 GPM/SF OVER 2,500 SF: MECHANICAL SPACES, STORAGE SPACES THE AUTOMATIC WET-PIPE SPRINKLER/STANDPIPE SYSTEM WITHIN THE BUILDING WILL BE ZONED IN A HORIZONTAL (FLOOR-BY-FLOOR) ARRANGEMENT. EACH STANDPIPE WILL BE PROVIDED WITH A CONTROL VALVE AT THE BASE OF EACH RISER. EACH FLOOR CONNECTION TO THE COMBINATION RISER WILL BE PROVIDED WITH A WATER FLOW SWITCH, CHECK VALVE, CONTROL VALVE WITH TAMPER SWITCH AND A COMBINATION TEST AND DRAIN ASSEMBLY (FLOOR CONTROL VALVE ASSEMBLY). THIS WILL ALLOW FOR MONITORING THROUGH THE FIRE ALARM SYSTEM ON A FLOOR BY FLOOR BASIS. A 2-1/2" FIRE HOSE VALVE WILL BE PROVIDED ON THE MAIN LANDING OF EACH EGRESS STAIR PER APPROVAL FROM THE WEST POINT FIRE DEPARTMENT. HOSE VALVES WILL

QUICK RESPONSE SPRINKLERS, LISTED FOR EACH SPECIFIC HAZARD CLASSIFICATION PROTECTED, WILL BE PROVIDED THROUGHOUT ALL AREAS OF THE FACILITY.

INCLUDE 2-1/2" ANGLE VALVES WITH CAPS ON CHAINS FOR FIRE DEPARTMENT USE.

A NEW FIRE DEPARTMENT STORZ CONNECTION (FDSC) WITH A 4" CONNECTION WILL BE INSTALLED OUTSIDE OF THE BUILDING IN THE SAME LOCATION IT IS CURRENTLY INSTALLED.

SPRINKLER PIPING WILL BE SCHEDULE 40 BLACK STEEL. GALVANIZED PIPING WILL ONLY BE USED ON THE DRY PORTION OF THE PIPING CONNECTING THE FDSC TO THE SPRINKLER MAIN PIPING.

PORTABLE FIRE EXTINGUISHERS

GENERAL PURPOSE FIRE EXTINGUISHERS WILL BE INSTALLED THROUGHOUT THE FACILITY IN ACCORDANCE WITH UFC 3-600-01 SECTION 9-17 AND NFPA 101 SECTION 38.3.5. CLEAN AGENT OR CO2 TYPE FIRE EXTINGUISHERS WILL BE PROVIDED IN AREAS WITH SENSITIVE ELECTRICAL EQUIPMENT. FIRE EXTINGUISHERS WILL BE INSTALLED IN RECESSED CABINETS ON EVERY FLOOR NEAR EXIT STAIRS. PORTABLE FIRE EXTINGUISHERS WILL BE INSTALLED TO MEET THE SPACING REQUIREMENTS OF NFPA 10.

<u>FIRE ALARM AND MASS NOTIFICATION SYSTEM</u>

HE BUILDING WILL BE EQUIPPED THROUGHOUT WITH A NEW ANALOG ADDRESSABLE COMBINED FIRE ALARM AND MASS NOTIFICATION SYSTEM (FAMNS) IN ACCORDANCE WITH NFPA 72, UFC 3-600-01 AND UFC 4-021-01. THE FAMNS CONTROL PANEL WILL BE SPECIFIED AS A MONACO MAAP X ANALOG ADDRESSABLE INTEGRATED RADIO TRANSCEIVER AND FIRE ALARM CONTROL PANEL. THIS PANEL TYPE IS THE WEST POINT POST STANDARD AND DEVIATION FROM THIS SOLE SOURCE EQUIPMENT IS NOT PERMITTED DUE TO THE COMPATIBILITY REQUIREMENTS FOR THE EXISTING POST FIRE REPORTING SYSTEM. THE MNS AUTONOMOUS CONTROL UNIT (ACU) AND FIRE ALARM CONTROL PANEL (FACP) WILL BE A SINGLE UNIT THAT PERFORMS BOTH FUNCTIONS. THE SYSTEM SHALL BE COMPATIBLE WITH THE EXISTING CAMPUS FIRE ALARM NETWORKING EQUIPMENT.

ALL FIRE ALARM DEVICES WILL BE ADDRESSABLE, PROVIDING SPECIFIC DEVICE IDENTIFICATION BY DEVICE TYPE, LOCATION AND ADDRESS NUMBER. THIS ARRANGEMENT WILL ASSIST EMERGENCY RESPONDERS IN QUICKLY DETERMINING THE LOCATION OF THE PROBLEM WITHIN THE FACILITY.

MANUAL PULL STATIONS WILL BE INSTALLED ADJACENT TO EACH EXIT. MONITORING OF THE AUTOMATIC FIRE SUPPRESSION SYSTEMS AND FIRE PUMP WILL BE PROVIDED THROUGH THE FAMNS USING ADDRESSABLE MODULES.

CARBON MONOXIDE DETECTION WILL BE PROVIDED IN ALL AREAS WHERE FUEL BURNING EQUIPMENT WILL BE UTILIZED SUCH AS THE MECHANICAL ROOM. THE SYSTEM MUST BE DESIGNED IN ACCORDANCE WITH NFPA 720 AND UFC 3-600-01, SECTION 9-19.

NOTIFICATION OF ALARM CONDITIONS WILL BE PROVIDED WITH VISUAL AND AUDIBLE NOTIFICATION APPLIANCES. VISUAL NOTIFICATION WILL BE PROVIDED WITH CLEAR STROBES MARKED "FIRE" FOR FIRE CONDITIONS AND AMBER STROBES MARKED "ALERT" FOR MASS NOTIFICATION CONDITIONS WITHIN A SINGLE/COMBINATION, WALL MOUNTED DEVICE. AUDIBLE NOTIFICATION WILL BE PROVIDED USING SPEAKERS. BOTH FIRE ALARM AND MASS NOTIFICATION ALARM CONDITIONS WILL BE TRANSMITTED OVER THE SAME SPEAKER SYSTEM. THE FAMNS WILL BE CAPABLE OF PROVIDING BOTH LIVE AND PRE- RECORDED VOICE MESSAGES OVER THE SPEAKER SYSTEM. PER THE INSTALLATION FIRE MARSHAL, NO LED SCROLLING SIGNS WILL BE REQUIRED FOR THE FAMNS.

NOTIFICATION APPLIANCES SHALL BE WHITE, WALL-MOUNTED, COMBINATION DEVICES WITH BOTH CLEAR AND AMBER COLORED STROBES IN A SINGLE UNIT. ADDITIONAL SPEAKERS ARE REQUIRED TO BE INSTALLED WITHIN THE HALLWAYS TO MEET INTELLIGIBILITY REQUIREMENTS.

THE FAMNS WILL BE PROVIDED WITH AN OUTPUT SIGNAL TO SHUT DOWN ALL BUILDING HVAC SYSTEMS, UPON ALARM FROM ANY MANUAL PULL STATION, COMMON AREA SMOKE DETECTOR OR FIRE SUPPRESSION SYSTEM WATER FLOW ALARM SWITCH.

LOCAL OPERATING CONSOLES (LOCS) SHALL BE INSTALLED AT THE REMOTE ANNUNCIATOR AND ON EACH LEVEL OF THE BUILDING IN ACCORDANCE WITH UFC 4-021-01. LOCS WILL BE LOCATED TO BE ACCESSED WITHIN 200 FEET OF TRAVEL FROM ANY SPACE IN THE BUILDING.

NOTIFICATION APPLIANCE CIRCUITS (NAC) WILL BE CLASS "A", SURVIVABILITY LEVEL "1". SIGNALING LINE CIRCUITS (SLC) WILL BE CLASS "A", SURVIVABILITY LEVEL "1". INITIATING DEVICE CIRCUITS (IDC) WILL BE CLASS "A", SURVIVABILITY LEVEL "1".

ALL FIRE ALARM CIRCUITS WILL BE INSTALLED IN CONDUIT. CONDUIT WILL BE MINIMUM OF 34-INCH AND WILL BE MARKED WITH RED STRIPES EVERY 10 FEET AND ALL JUNCTION BOXES WILL BE PROVIDED WITH RED COVER PLATES.

BATTERIES FOR BACK-UP POWER WILL BE SIZED IN ACCORDANCE WITH UFC 3-600-01 AND UFC 4-021-01. BATTERY CAPACITY MUST BE THE GREATER OF 48 HOURS OF STANDBY FOLLOWED BY 15 MINUTES OF ALARM OR 60 MINUTES OF ALARM.

SIGNALS FROM THE FAMNS SYSTEM WILL BE TRANSMITTED TO THE WEST POINT FIRE DEPARTMENT VIA THE MONACO RADIO ALARM TRANSMITTER SYSTEM. ALSO, BASE WIDE "ALERT" SIGNALS WILL BE RECEIVED BY THE FAMNS FOR TRANSMISSION OF THE INFORMATION THROUGHOUT THE BUILDING.

EMERGENCY RESPONDER IN-BUILDING RADIO REPEATER SYSTEM

PROVIDE A P-25 DIGITAL REPEATER IN THE BUILDING TO ALLOW FOR TWO-WAY RADIO USE WITHIN THE BUILDING IN COMPLIANCE WITH NFPA 1. NFPA 72. AND NFPA 1221. UFC WILL TAKE PRECEDENCE WHEN CONFLICTS ARISE BETWEEN CRITERIA, CODES, AND STANDARDS.

THE IN-BUILDING REPEATER SYSTEM WILL NEED TO OPERATE ON THE SAME FREQUENCIES AS THE CURRENT MOBILE DIGITAL VOICE RADIO (DVR) EQUIPMENT THAT THE WEST POINT FIRE DEPARTMENT CURRENTLY USES. REPEATER MUST BE LIMITED TO ACCESS BY THE FIRE DEPARTMENT VIA USE OF A MOTOROLA NETWORK ACCESS CODE (NAC).

THE TWO-WAY RADIO SYSTEM MUST HAVE THE ABILITY TO TIE AND LINK INTO THE EXTERNAL LAND MOBILE RADIO (LMR) TRUNKED SYSTEM USING A SECONDARY TRUNKED ADVANCED ENCRYPTION STANDARD (AES) RADIO THAT IS CAPABLE OF BEING RE-KEYED OVER THE AIR THROUGH THE MOTOROLA 7.13 LAND MOBILE RADIO SYSTEM. THIS LINK PROVIDES A PATHWAY INTO THE LMR SYSTEM TO RECORD ALL TRANSMITTED AND RECEIVED EMERGENCY SERVICE AUDIO THROUGH THE IN-BUILDING REPEATER NETWORK.

THE TWO-WAY RADIO SYSTEM WILL NEED A BATTERY BACK-UP SYSTEM TO PROVIDE POWER TO THE EQUIPMENT IF THE FACILITIES PRIMARY ELECTRIC SOURCE IS NOT AVAILABLE.

COVERAGE MAPS WILL BE PROVIDED TO THE UNITED STATES GOVERNMENT PRIOR TO TWO-WAY RADIO WORK COMMENCING. CRITICAL AREAS WILL HAVE A MINIMUM COVERAGE OF 99 PERCENT FLOOR AREA RADIO COVERAGE AS DEFINED IN NFPA 72. GENERAL BUILDING AREAS WILL HAVE A MINIMUM COVERAGE OF 95 PERCENT RADIO COVERAGE.

ALL CABLE WILL BE PLENUM RATED. IN-BUILDING COVERAGE ANTENNAS WILL BE OF A LOW VISUAL IMPACT, HAVE THE ABILITY TO MOUNT ON WALLS OR CEILINGS AND HAVE THE ABILITY TO BE PAINTED TO MATCH SURROUNDING AESTHETICS. DESIGNER AND INSTALLERS WILL BE REQUIRED TO PROVIDE PROOF TO THE UNITED STATES GOVERNMENT THAT THEY HAVE WORKED ON A SYSTEM OF SIMILAR MAGNITUDE PRIOR TO TWO-WAY RADIO WORK COMMENCING.

REFER TO THE TELECOMMUNICATION DRAWINGS FOR SYSTEM LAYOUT AND ASSOCIATED DETAILS.

<u>LIFE SAFETY AND MEANS OF EGRESS</u>

THE SCOPE OF THE PROJECT IS CLASSIFIED AS AN ALTERATION LEVEL 3 PER IBC AND DOES NOT INCLUDE THE ADDITION OF ANY AREA. THEREFORE, THE HEIGHT AND AREA OF THE BUILDING WILL REMAIN UNCHANGED. ADDITIONALLY, THE BUILDING OCCUPANCY WILL REMAIN UNCHANGED. NEW PARTITIONS CREATED TO RECONFIGURE THE SPACE WILL BE CONSTRUCTED TO MEET THE REQUIREMENTS FOR NEW

THE BUILDING AS IT IS CURRENTLY USED CONTAINS BUSINESS (B) AND MERCANTILE (M) OCCUPANCIES AS CLASSIFIED PER IBC AND NFPA 101.

PER NFPA 220 THE CONSTRUCTION TYPE THAT BEST REPRESENTS THE EXISTING CONSTRUCTION IS TYPE II (111). THIS CONSTRUCTION TYPE IS EQUIVALENT TO IBC TYPE IIA. FURTHER INVESTIGATION AND ANALYSIS OF THE MASONRY WALL THICKNESS AND STRUCTURAL FLOOR THICKNESS SHOULD BE VERIFIED TO CONFIRM THE CONSTRUCTION TYPE.

IN GENERAL, UFC 3-600-01 REQUIRES LIFE SAFETY CONSIDERATIONS FOR THIS FACILITY TO COMPLY WITH NFPA 101, WITH THE BALANCE OF BUILDING CONSTRUCTION PER THE INTERNATIONAL BUILDING CODE

THE CONSTRUCTION TYPE OF THE EXISTING BUILDING UNDER PRESENT CODE (IBC 2018) IS TYPE IIA. THE CONSTRUCTION TYPE DESCRIBED BY THE BUILDING ELEMENTS LISTED IN THE TABLE BELOW ARE NONCOMBUSTIBLE MATERIALS EXCEPT AS PERMITTED BY IBC SECTION 603 AND ELSEWHERE IN THE

THE CONSTRUCTION TYPE OF SPACES UNDER RENOVATION WILL MATCH THIS CONSTRUCTION TYPE.

PRIMARY STRUCTURAL FRAME	
(SEE SECTION 202)	1 HOUR
BEARING WALLS	
EXTERIOR	1 HOUR
INTERIOR	1 HOUR
NONBEARING WALLS AND PARTITIONS	
EXTERIOR	1 HOUR
NONBEARING WALLS AND PARTITIONS	
INTERIOR	0 HOURS
FLOOR CONSTRUCTION AND	
ASSOCIATED SECONDARY MEMBERS	
(SEE SECTION 202)	1 HOUR
ROOF CONSTRUCTION AND	
ASSOCIATED SECONDARY MEMBERS	
(SEE SECTION 202)	1 HOUR

THE ALLOWABLE HEIGHT FOR A FULLY SPRINKLERED TYPE IIA GROUP B OCCUPANCY IS 85 FT/6 STORIES AND 85 FT/5 STORIES FOR GROUP M. THE ALLOWABLE AREA PER FLOOR IS 112.500 SF FOR GROUP B AND 64,500 SF FOR GROUP M. THE ACTUAL HEIGHT OF THE BUILDING IS APPROXIMATELY 43 FT FROM GRADE TO THE TOP OF LEVEL 4 / 7 STORIES. THE MAXIMUM BUILDING IS MEASURED FROM CULLUM ROAD TO THE TOP OF LEVEL 4. THE TOTAL NUMBER OF STORIES INCLUDES THREE BASEMENT LEVELS. WHILE THESE LEVELS ARE DESIGNATED AS BASEMENTS, DUE TO THE TOPOGRAPHY OF THE SITE, NONE OF THE LEVELS ARE COMPLETELY BELOW GRADE. THE LOWEST LEVEL OF THE BUILDING HAS DIRECT ACCESS TO THE BUILDING EXTERIOR VIA A SERVICE ROAD THAT IS NOT ACCESSIBLE VIA FIRE TRUCK APPARATUS. THE LARGEST FLOOR AREA IS APPROXIMATELY 11,430 SF.

THE FOLLOWING LIST REPRESENTS THE FIRE RESISTANCE RATINGS FOR THE VARIOUS BUILDING ELEMENTS AND THEIR REQUIRED PROTECTIVE OPENINGS. THE COLLECTION OF THESE FIRE RESISTANCE RATINGS AND PROTECTIVE OPENINGS ARE BASED ON THE CONSTRUCTION TYPE, VERTICAL OPENING AND INCIDENTAL USE SEPARATIONS (TYPE IIA, FULLY SPRINKLERED BUILDING).

MINIMUM REQUIRED FIRE RESISTANCE RATINGS (HOURS):

STRUCTURAL ELEMENTREQUIREDPROPOSEDPRIMARY STRUCTURAL ELEMENTS FLOOR CONSTRUCTION AND SECONDARY MEMBERS ROOF CONSTRUCTION AND SECONDARY MEMBERS INTERIOR LOAD-BEARING WALLS INTERIOR NON-LOAD-BERAING WALLS SHAFTS (CONNECTING 4 STORIES OR MORE) SHAFTS (CONNECTING 4 STORIES OR LESS) EXIT STAIR (CONNECTING 3 STORIES OR LESS) ELEVATOR SHAFTS ELEVATOR MACHINE ROOMS ELECTRIC ROOMS2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 4 4 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 <th></th> <th></th> <th></th>			
FLOOR CONSTRUCTION AND SECONDARY MEMBERS ROOF CONSTRUCTION AND SECONDARY MEMBERS REPARATIONS SHAFTS (CONNECTING 3 STORIES OR MORE) RESTRUCTION AND SECONDARY MEMBERS REQUIRED REQUIRED REQUIRED REQUIRED REQUIRED REQUIRED REQUIRED REQUIRED REQUIRED RESTRUCTION AND SECONDARY MEMBERS REQUIRED REQUIRED REQUIRED RESTRUCTION AND SECONDARY MEMBERS REQUIRED REQUIRED REQUIRED REQUIRED RESTRUCTION AND SECONDARY MEMBERS REQUIRED REQUIRED REQUIRED RESTRUCTION AND SECONDARY MEMBERS REQUIRED REQUIRED REQUIRED REQUIRED RESTRUCTION AND SECONDARY MEMBERS RESTRUCTION AND	STRUCTURAL ELEMENT	REQUIRED	PROPOSED
SHAFTS (CONNECTING 4 STORIES OR MORE) 2 2 SHAFTS (CONNECTING 3 STORIES OR LESS) 1 1 EXIT STAIR (CONNECTING 4 STORIES OR MORE) 2 2 EXIT STAIR (CONNECTING 3 STORIES OR LESS) 1 1 ELEVATOR SHAFTS 2 2 ELEVATOR MACHINE ROOMS 2 2 ELECTRIC ROOMS 1 1 OPENING PROTECTIVES REQUIRED PROPOSED EXIT STAIR ENCLOSURES (2-HOUR RATED) 1.5 1.5 EXIT STAIR ENCLOSURES (1-HOUR RATED) 1 1 1 SHAFT ENCLOSURES (2-HOUR RATED) 1.5 1.5 1.5 OTHER FIRE BARRIERS (2-HOUR RATED) 1.5 1.5 1.5 OTHER FIRE BARRIERS (1-HOUR RATED) 1 1 1	FLOOR CONSTRUCTION AND SECONDARY MEMBERS ROOF CONSTRUCTION AND SECONDARY MEMBERS INTERIOR LOAD-BEARING WALLS	1 1 1 1 0	1 1 1 1 0
EXIT STAIR ENCLOSURES (2-HOUR RATED) 1.5 1.5 EXIT STAIR ENCLOSURES (1-HOUR RATED) 1 1 1 SHAFT ENCLOSURES (2-HOUR RATED) 1.5 1.5 OTHER FIRE BARRIERS (2-HOUR RATED) 1.5 1,5 OTHER FIRE BARRIERS(1-HOUR RATED) 1 1	SHAFTS (CONNECTING 4 STORIES OR MORE) SHAFTS (CONNECTING 3 STORIES OR LESS) EXIT STAIR (CONNECTING 4 STORIES OR MORE) EXIT STAIR (CONNECTING 3 STORIES OR LESS) ELEVATOR SHAFTS ELEVATOR MACHINE ROOMS	1 2	1 2 1 2
EXIT STAIR ENCLOSURES (1-HOUR RATED) 1 1 1 SHAFT ENCLOSURES (2-HOUR RATED) 1.5 1.5 OTHER FIRE BARRIERS (2-HOUR RATED) 1.5 1,5 OTHER FIRE BARRIERS(1-HOUR RATED) 1 1 1	OPENING PROTECTIVES	REQUIRED	PROPOSED
	EXIT STAIR ENCLOSURES (1-HOUR RATED) SHAFT ENCLOSURES (2-HOUR RATED) OTHER FIRE BARRIERS (2-HOUR RATED) OTHER FIRE BARRIERS(1-HOUR RATED)	1 1.5 1.5	1 1.5

EXITS MUST BE ADEQUATE IN NUMBER, ARRANGEMENT, AND CAPACITY.

MEANS OF EGRESS FOR THE BUILDING ARE TO COMPLY WITH THE REQUIREMENTS OF NFPA 101 - LIFE SAFETY CODE (LSC) 2018 EDITION.

EGRESS WIDTH PER OCCUPANT SERVED (WITH SPRINKLER SYSTEM) AS INDICATED THE LSC IS TO BE PROVIDED AS FOLLOWS: 0.3 INCHES PER OCCUPANT FOR STAIRS AND 0.2 INCHES PER OCCUPANT FOR OTHER EGRESS COMPONENTS.

EXIT ARRANGEMENT LIMITATIONS ARE PROVIDED HERE AS LISTED IN TABLE A.7.6 IN THE LSC:

MAXIMUM TRAVEL DISTANCE: 300 FT MAXIMUM COMMON PATH OF TRAVEL: 100 FT MAXIMUM DEAD END: 50 FT

MAXIMUM TRAVEL DISTANCE: 250 FT MAXIMUM COMMON PATH OF TRAVEL: 100 FT MAXIMUM DEAD END: 50 FT

THE OCCUPANT LOADS IN THE BUILDING ARE INDICATED ON THE LIFE SAFETY DRAWINGS. UTILIZING THE OCCUPANT LOAD FACTORS (SF/OCCUPANT) AS INDICATED IN THE LSC.

A MINIMUM OF TWO EXITS ARE REQUIRED FORM EACH FLOOR. NO OCCUPANT WILL BE FURTHER THAN THE 250-FT MAXIMUM TRAVEL DISTANCE TO AN EXIT FORM ANY SPACE IN THE BUILDING.

THE CONVENIENCE STAIR OPENING IN RETAIL STORE MUST COMPLY WITH NFPA 101 SECTION 8.6.9.1.

HISTORIC / EXISTING BUILDING REQUIREMENTS

AS OUTLINED IN UFC 3-600-01, SECTION 4-18.1, HISTORIC BUILDINGS MUST MEET THE REQUIREMENTS OF CHAPTER 34. PER UFC 3-600-01 SECTION 34-1.1, FACILITIES, AS THEY EXIST, MUST MEET THE REQUIREMENTS OF THE LSC, FOR EXISTING OCCUPANCIES. FACILITIES THAT DO NOT MEET THE REQUIREMENTS OF THE LSC MUST CONFORM TO ONE OF THE FOLLOWING:

- UPGRADE THE DEFICIENCY TO MEET THE EXISTING OCCUPANCY REQUIREMENTS; OR
- ESTABLISH MANAGEMENT PROTOCOLS TO PROVIDE A LEVEL OF SAFETY EQUIVALENT TO THAT REQUIRED BY THE LSC FOR EXISTING OCCUPANCIES, UNTIL AN UPGRADE PROJECT CAN BE COMPLETED.

SINCE THIS RENOVATION IS A MAJOR PROJECT, DEFICIENCIES WITH THE MEANS OF EGRESS WILL BE UPGRADED TO THE GREATEST EXTENT POSSIBLE TO CONFORM TO EXISTING BUILDING REQUIREMENTS. ANY NEW CONSTRUCTION ELEMENTS WILL BE DESIGNED AND CONSTRUCTED TO MEET THE REQUIREMENTS FOR NEW CONSTRUCTION.

UFC 3-600-01 SECTION 34-1.2 REQUIRES WORK IN EXISTING FACILITIES TO CONFORM TO THE REQUIREMENTS OF CHAPTER 43, BUILDING REHABILITATION IN THE LSC FOR DESIGN AND CONSTRUCTION PROJECTS IN EXISTING BUILDINGS FOR

MODIFICATIONS AS DEFINED BY THE LSC. ADDITIONAL REQUIREMENTS OUTLINED IN THE UFC ARE AS FOLLOWS:

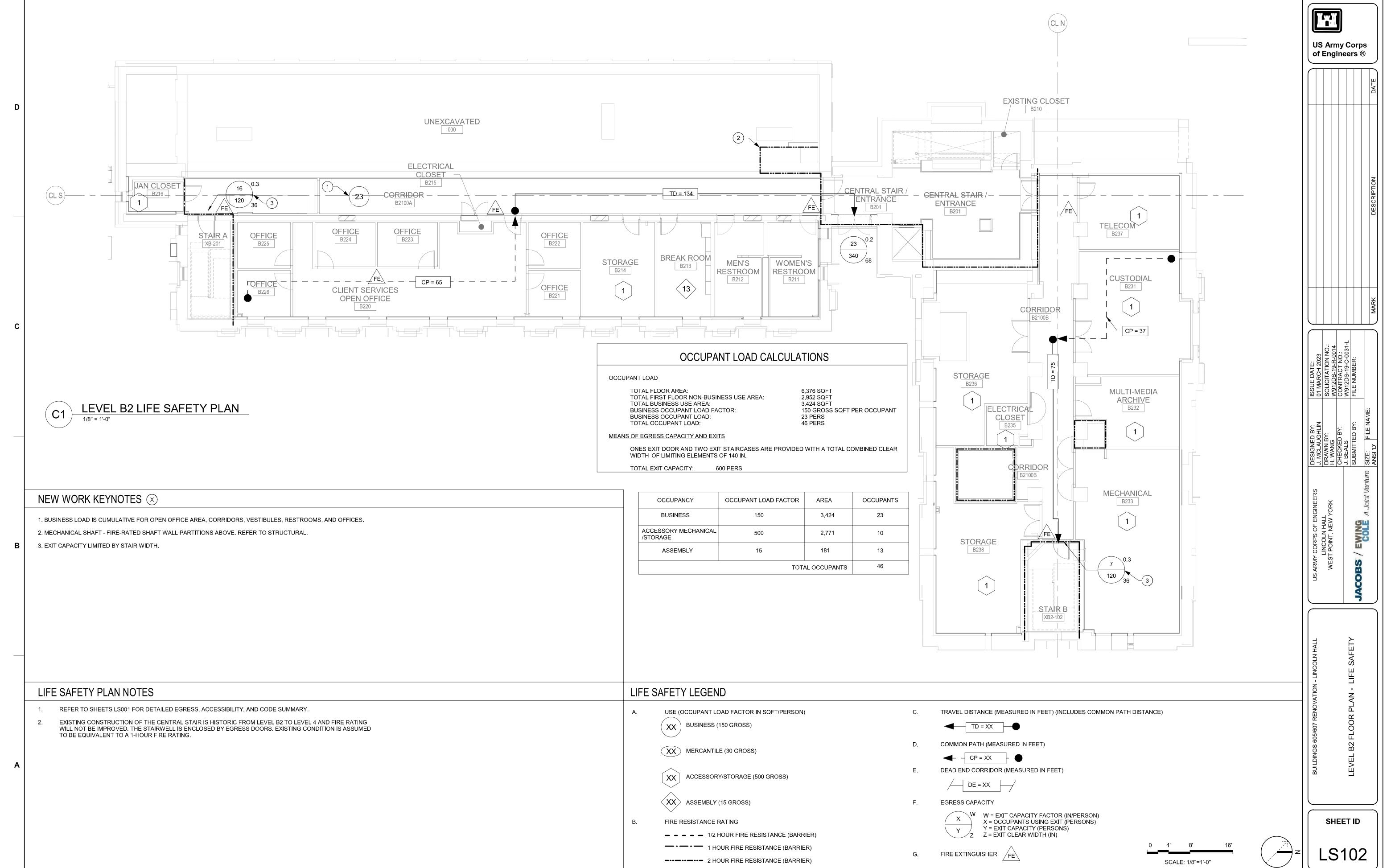
- 34-1.5.1 ALL WORK MUST CONFORM TO UFC 3-600-01 AND THE LSC FOR NEW CONSTRUCTION. 34-1.5.2 – MODIFICATIONS IN HISTORIC STRUCTURES MUST COMPLY WITH EITHER THE FULL REQUIREMENTS FOR MODIFICATIONS AS OUTLINED IN UFC 3-600-01 OR AS SPECIFICALLY MODIFIED FOR HISTORIC BUILDINGS IN SECTION 43.10 OF THE LSC.
- THE FOLLOWING ITEMS FROM LSC 43.10 SPECIFICALLY APPLY TO THE LINCOLN HALL RENOVATION PROJECT:
- 43.10.4.1 HISTORIC BUILDINGS UNDERGOING MODIFICATIONS SHALL COMPLY WITH THE APPLICABLE MODIFICATION
- REQUIREMENTS OUTLINED IN SECTION 43.5 EXCEPT AS SPECIFICALLY PERMITTED IN SECTION 43.10.4. 43.10.4.6.1 – EXISTING INTERIOR WALL AND CEILING FINISHES, IN OTHER THAN EXITS, SHALL BE PERMITTED TO REMAIN
- IN PLACE WHERE IT IS DEMONSTRATED THAT SUCH FINISHES ARE THE HISTORIC FINISH. 43.10.4.6.2 – INTERIOR WALL AND CEILING FINISHES IN EXITS, SHALL MEET TONE OF THE FOLLOWING CRITERIA:
- THE MATERIAL SHALL BE CLASS A, CLASS B, OR CLASS C IN ACCORDANCE WITH SECTION 10.2 OF THE LSC. EXISTING MATERIALS NOT MEETING THE MINIMUM CLASS C FLAME SPREAD INDEX SHALL BE SURFACED WITH
- AN APPROVED FIRE-RETARDANT PAINT OR FINISH. EXISTING MATERIALS NOT MEETING THE MINIMUM CLASS C FLAME SPREAD INDEX SHALL BE PERMITTED TO BE CONTINUED IN USE, PROVIDED THAT THE BUILDING IS PROTECTED THROUGHOUT BY AN APPROVED AUTOMATIC SPRINKLER SYSTEM.
- 43.10.4.7.1 STAIRWAYS SHALL BE PERMITTED TO BE UNENCLOSED IN HISTORIC BUILDINGS WHERE SUCH STAIRWAYS
- SERVE ONLY 1 ADJACENT FLOOR. 43.10.4.8 – EXISTING WALLS AND CEILINGS SHALL BE EXEMPT FROM THE MINIMUM 1-HOUR FIRE RESISTANCE-RATED CONSTRUCTION REQUIREMENTS OF OTHER SECTIONS OF THE SC WHERE THE EXISTING WALL AND CEILING ARE OF
- WOOD LATH AND PLASTER CONSTRUCTION IN GOOD CONDITION. 43.10.4.9.1 – EXISTING GRAND STAIRWAYS SHALL BE EXEMPT FOR THE HANDRAIL AND GUARD REQUIREMENTS OF

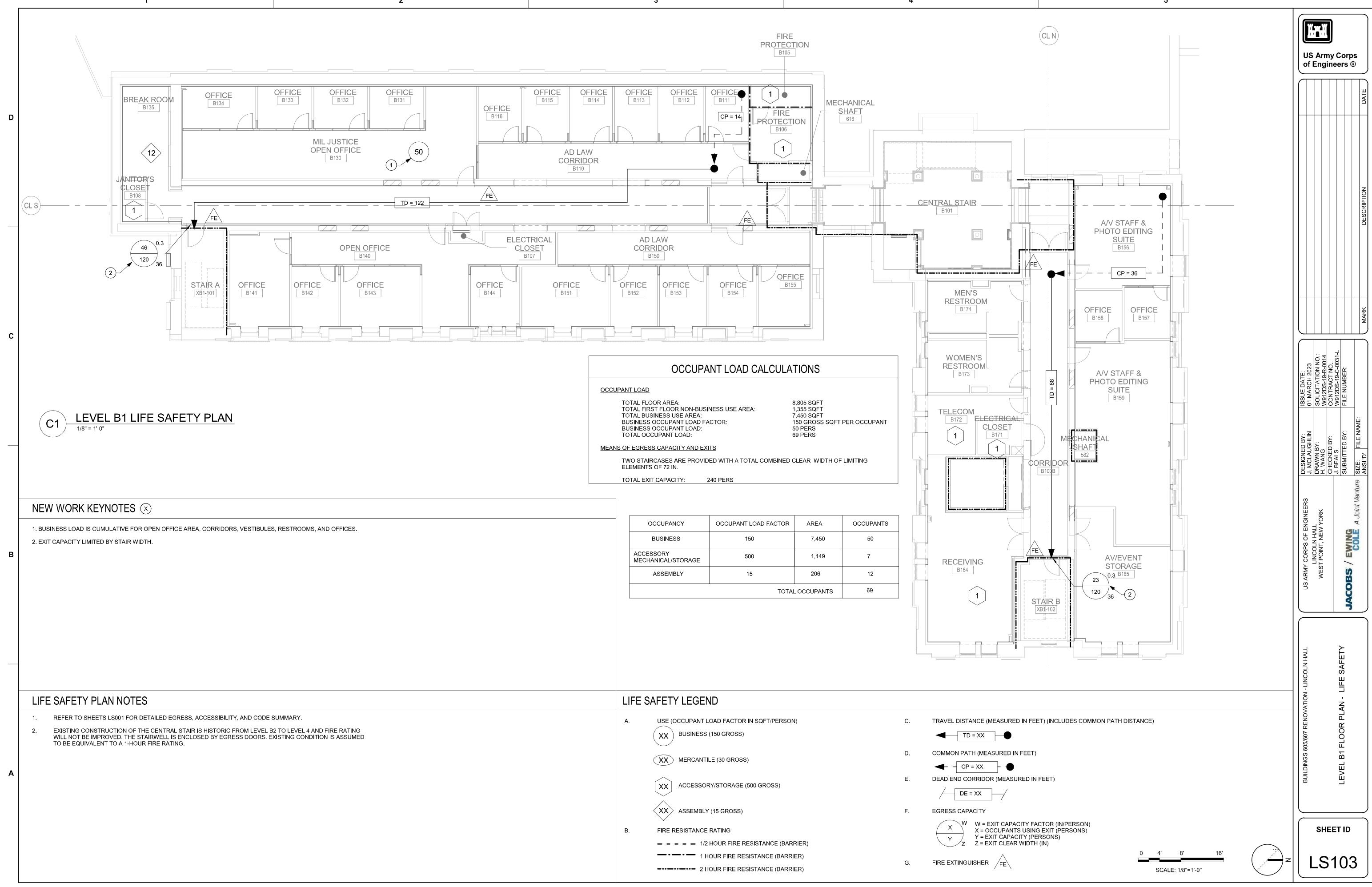
PROVIDED THAT THEY ARE NOT STRUCTURALLY DANGEROUS.

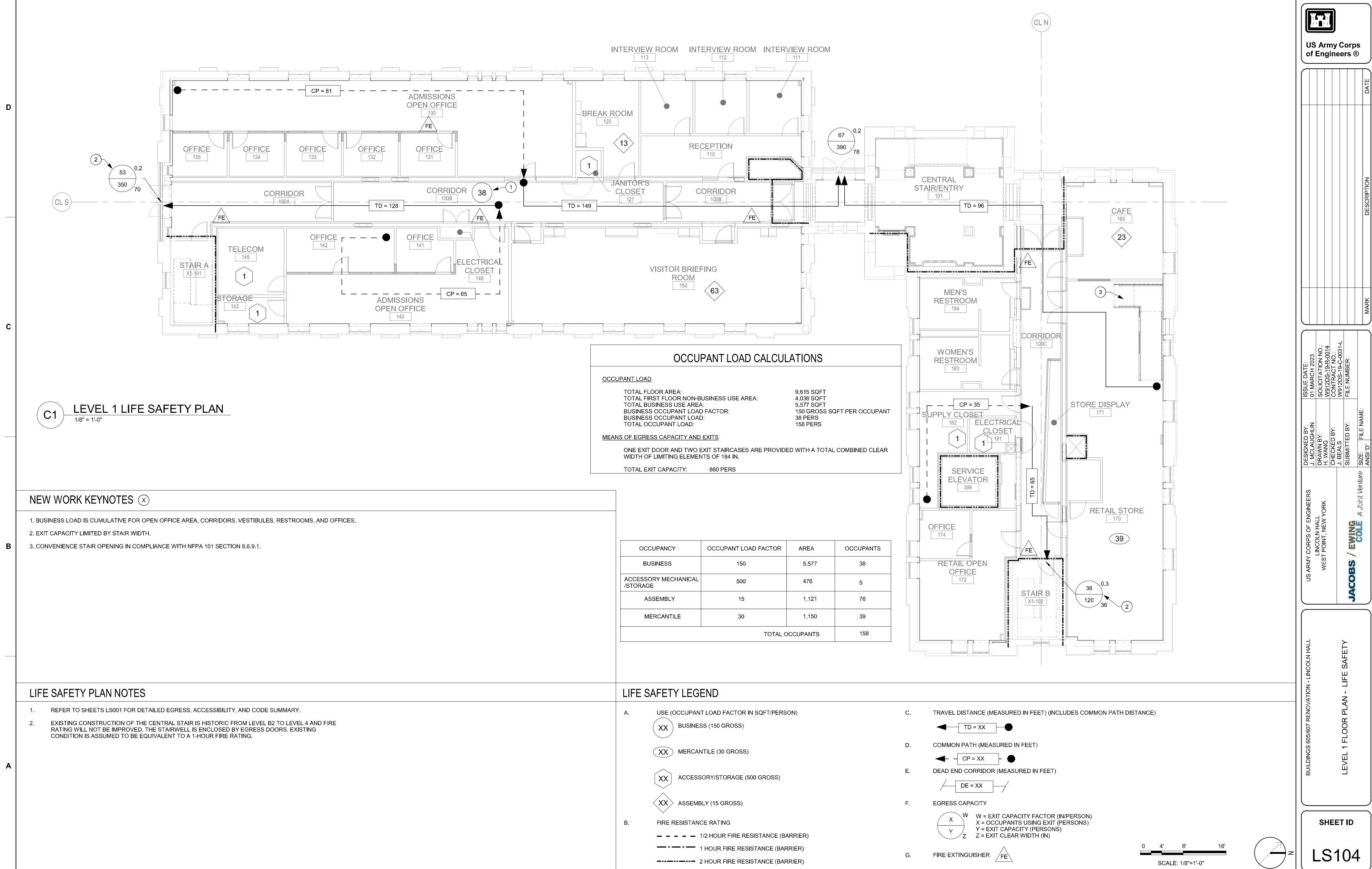
OTHER SECTIONS OF THE LSC. 43.10.4.9.2 - EXISTING HANDRAILS AND GUARDS ON GRAND STAIRCASES SHALL BE PERMITTED TO REMAIN IN USE,

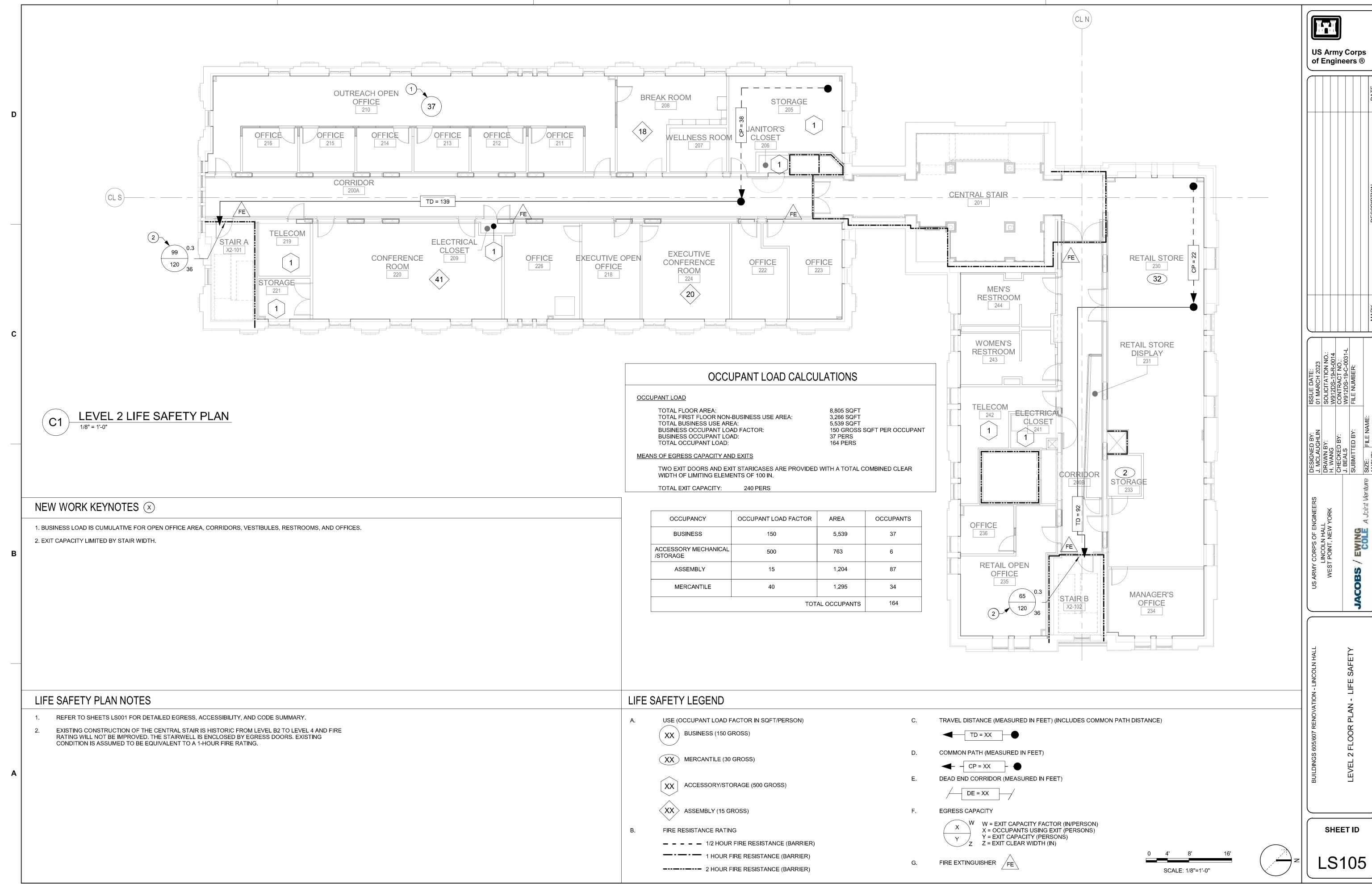
US Army Corps of Engineers ®

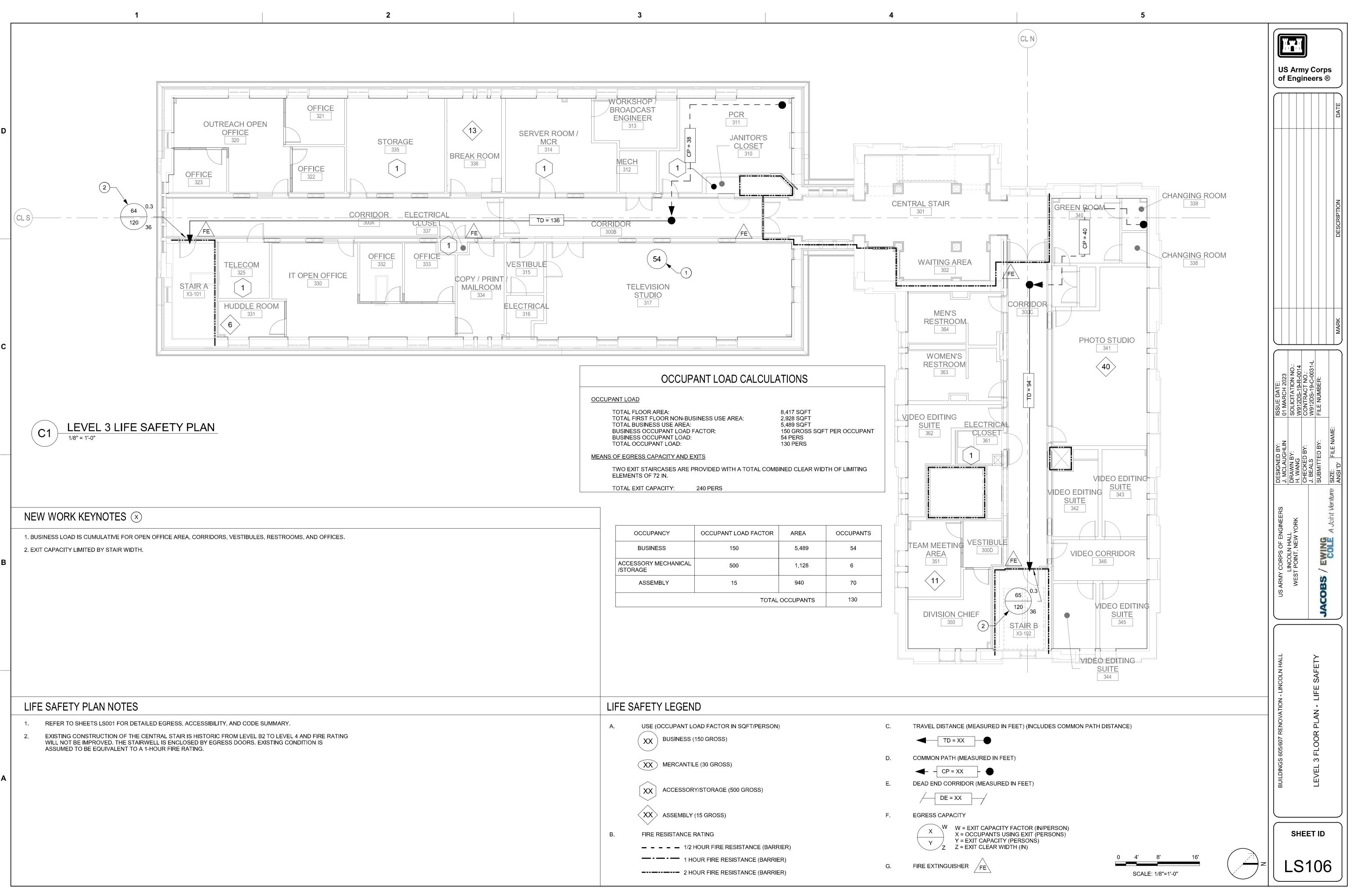
SHEET ID

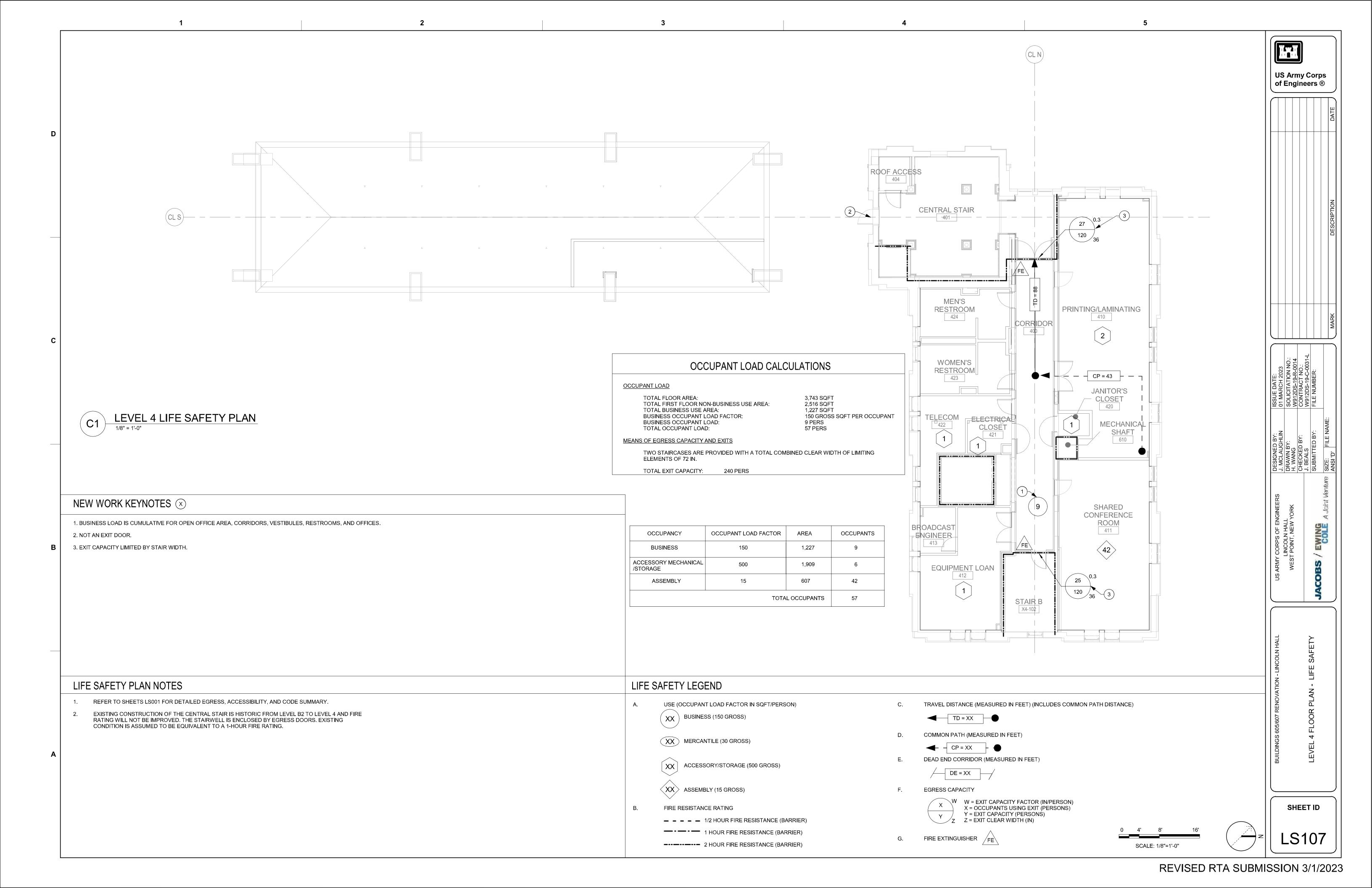


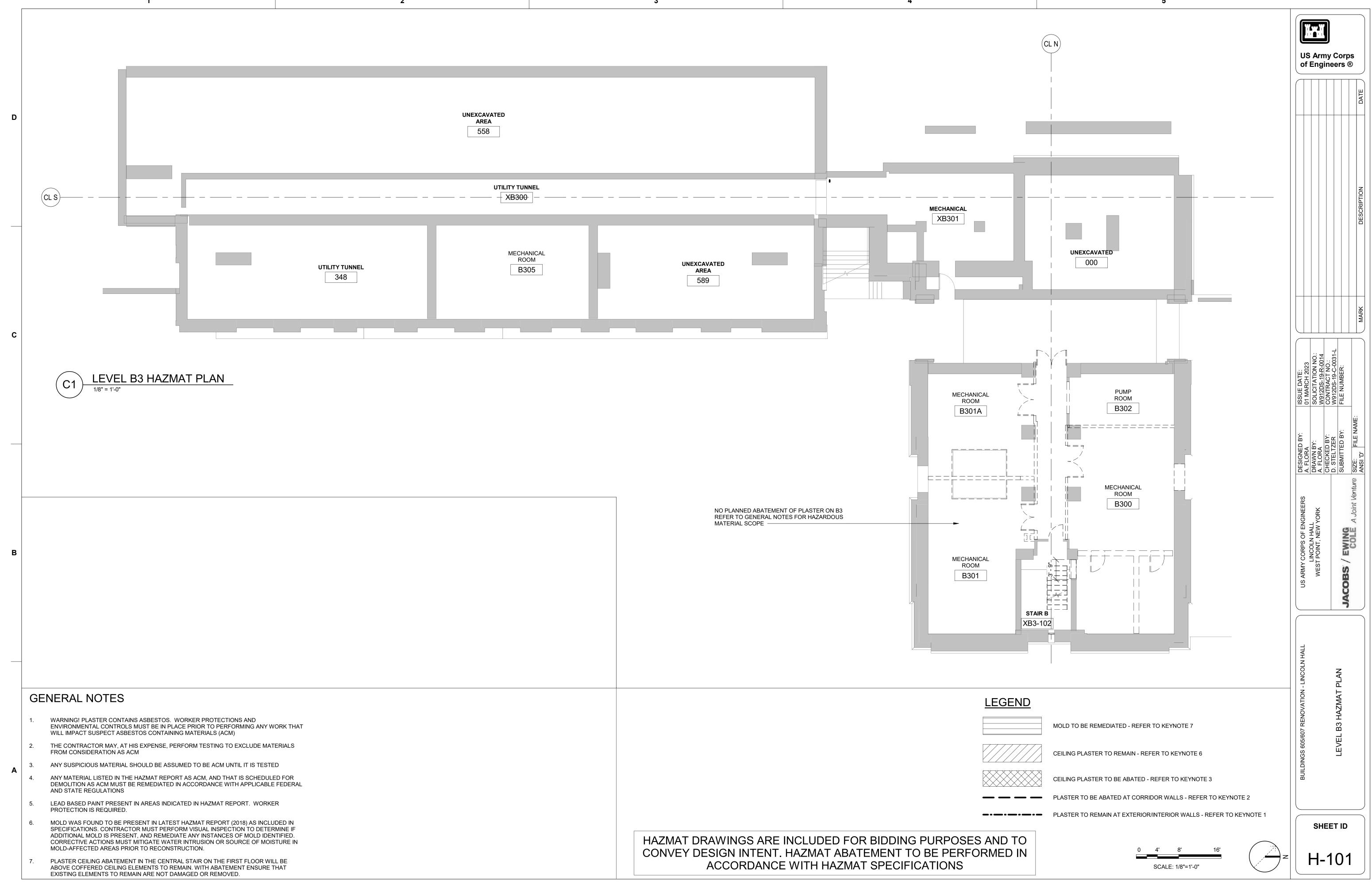


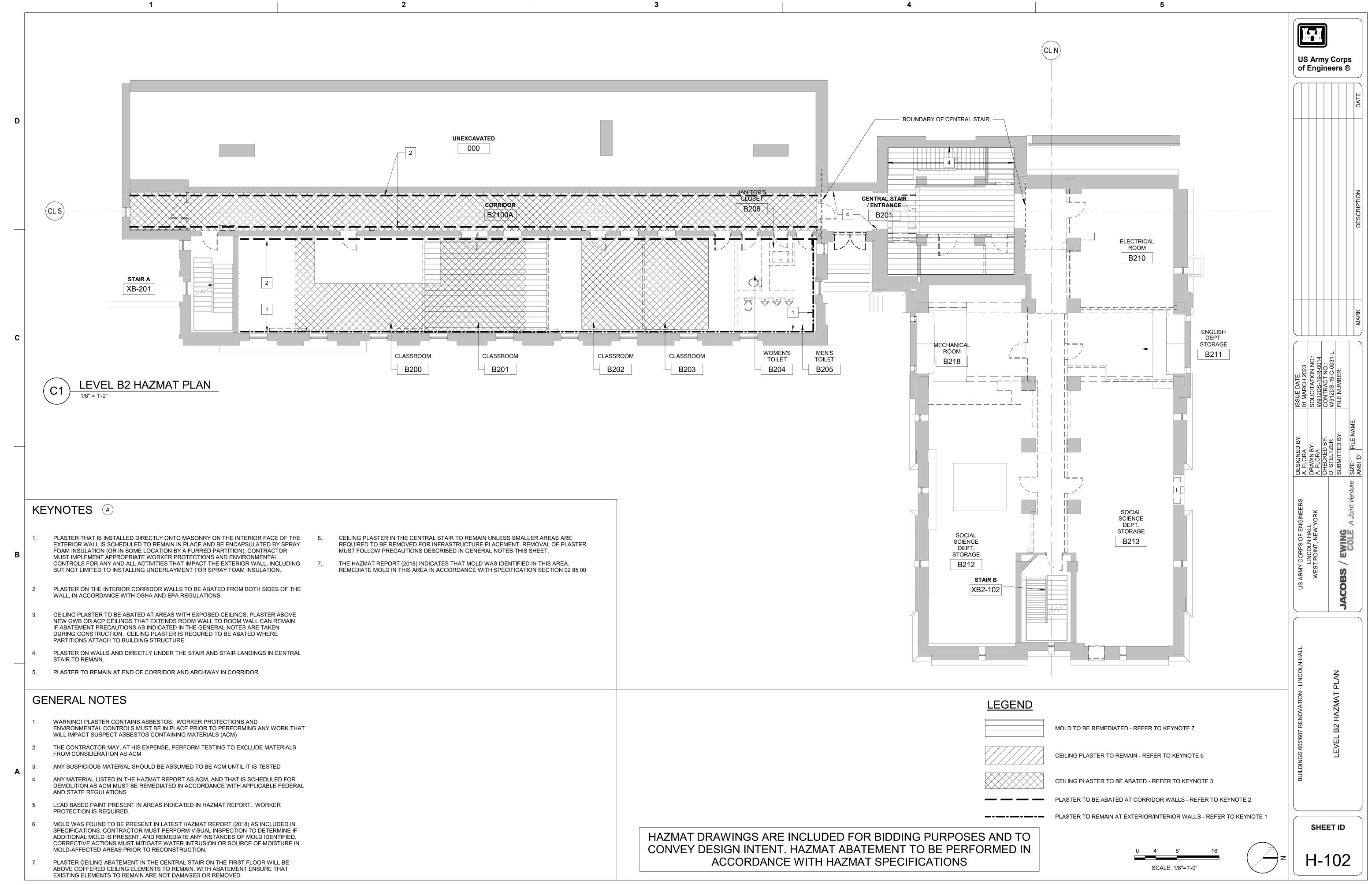


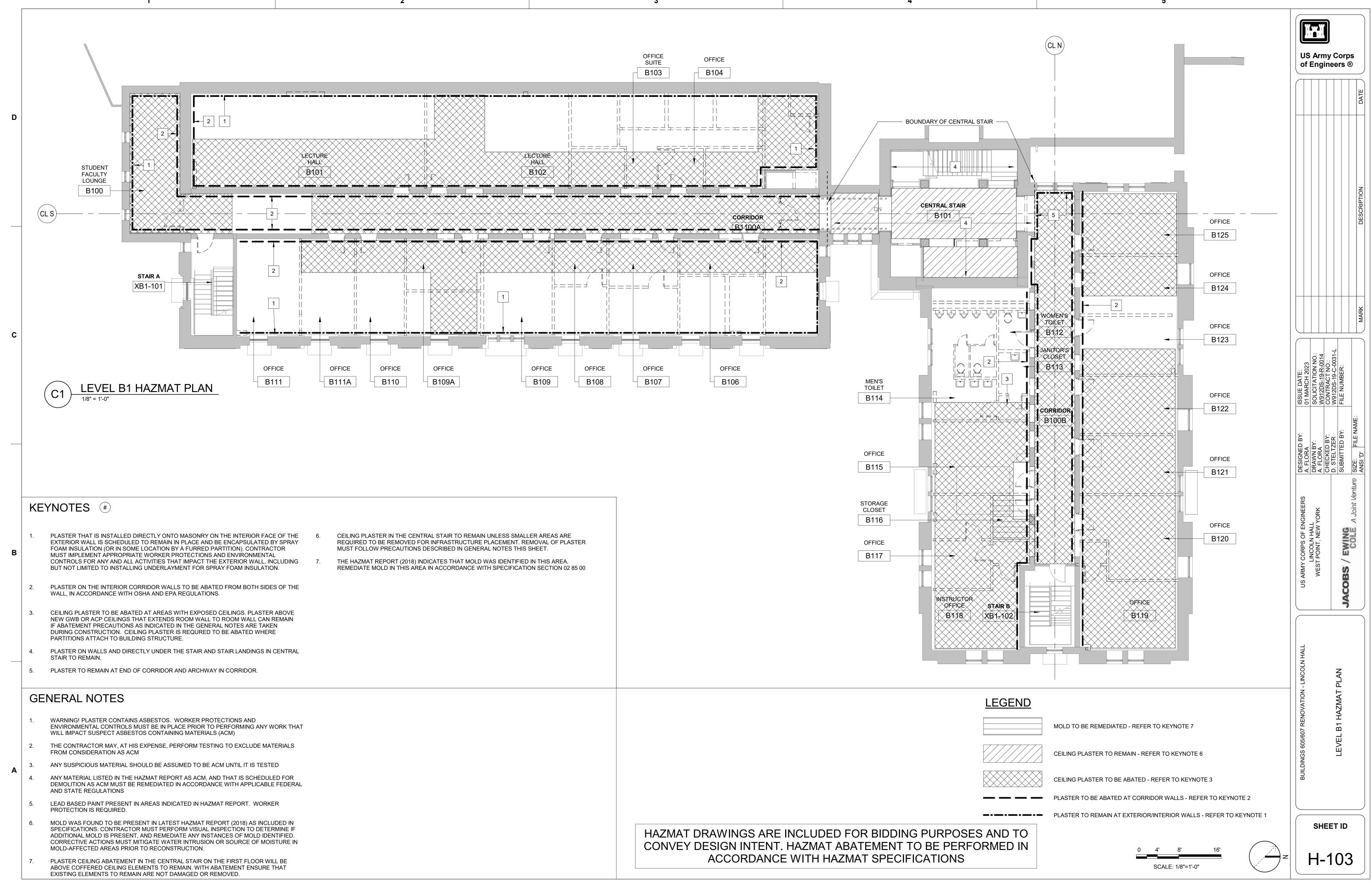


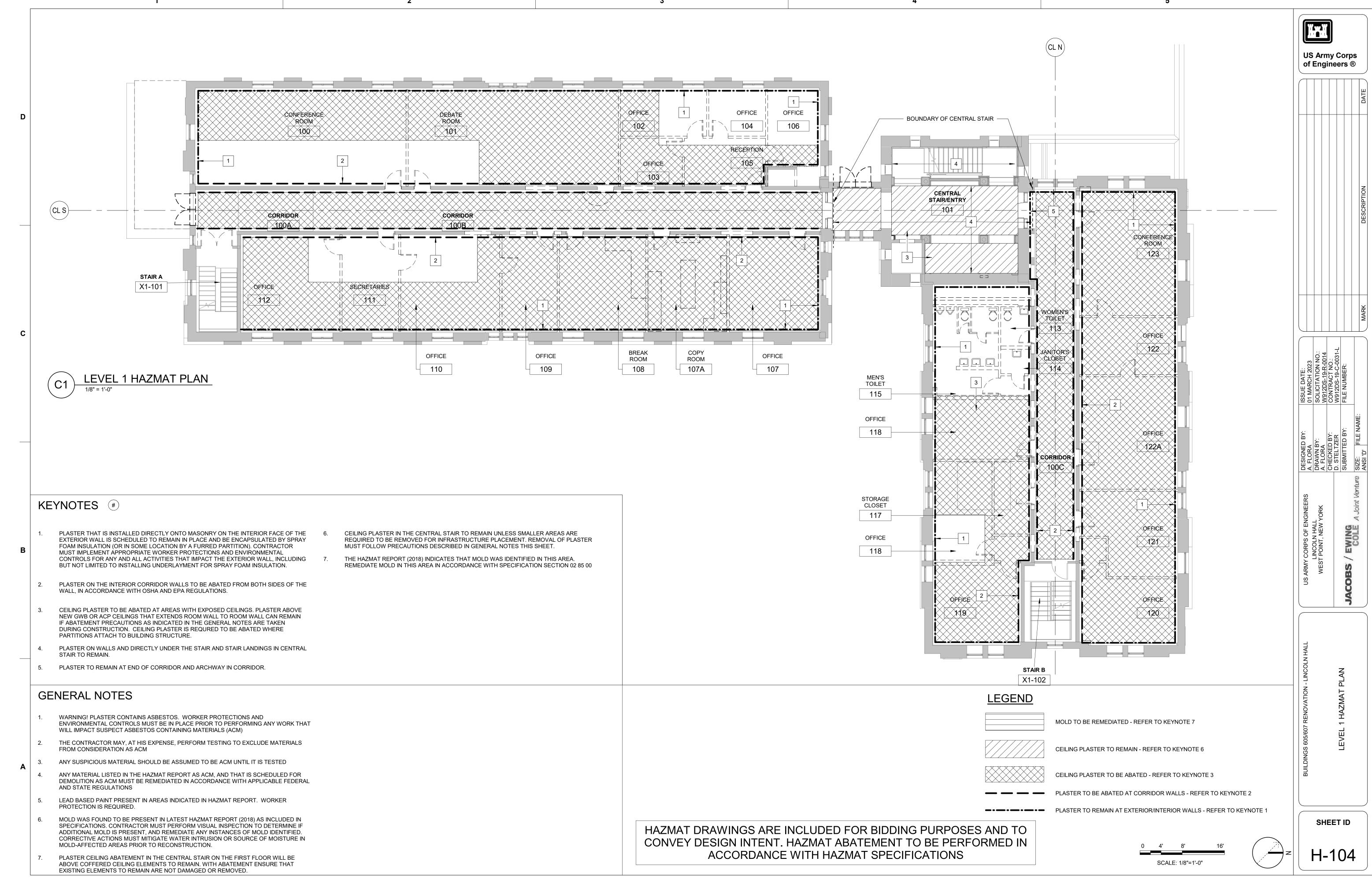


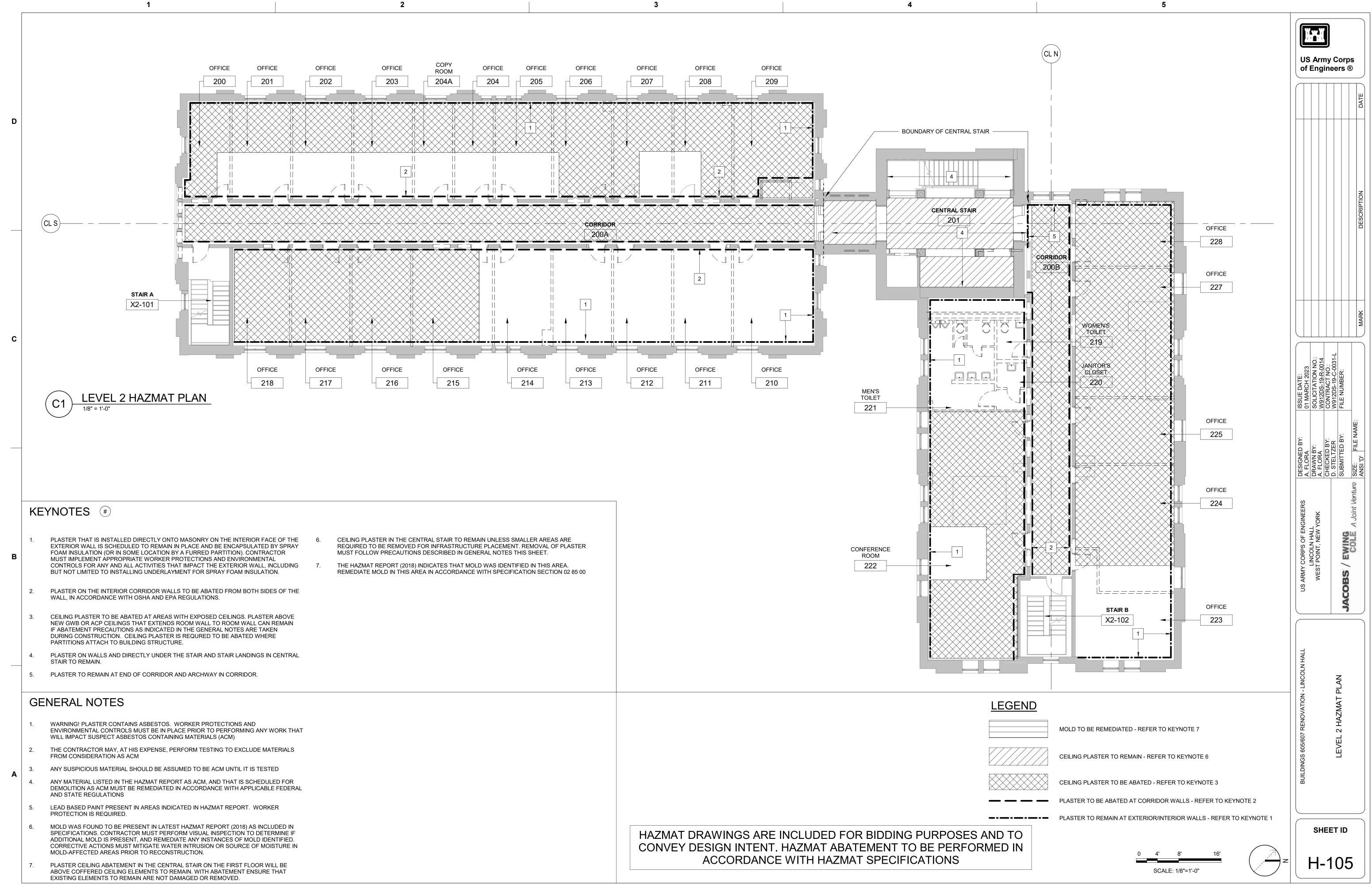


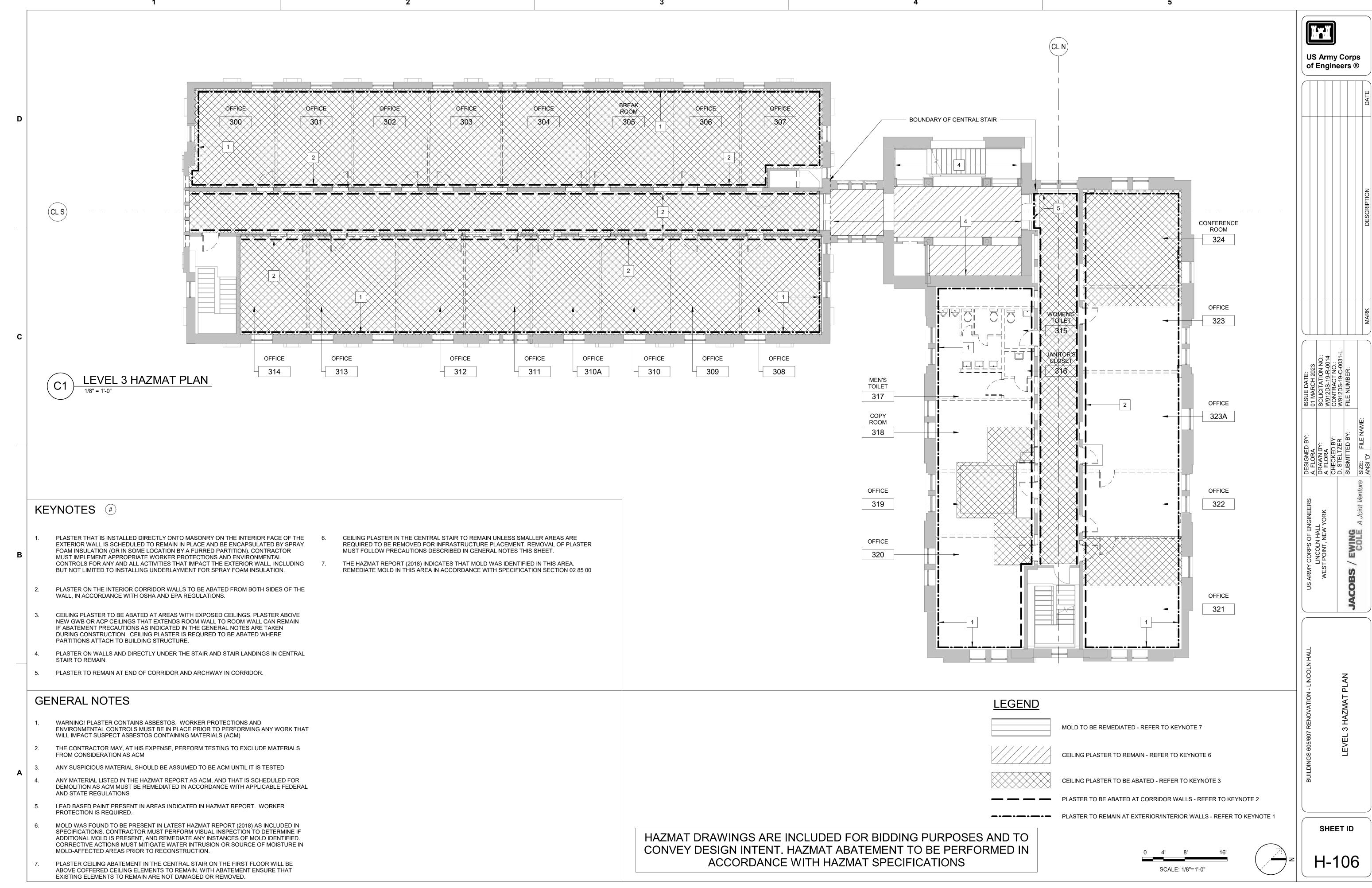


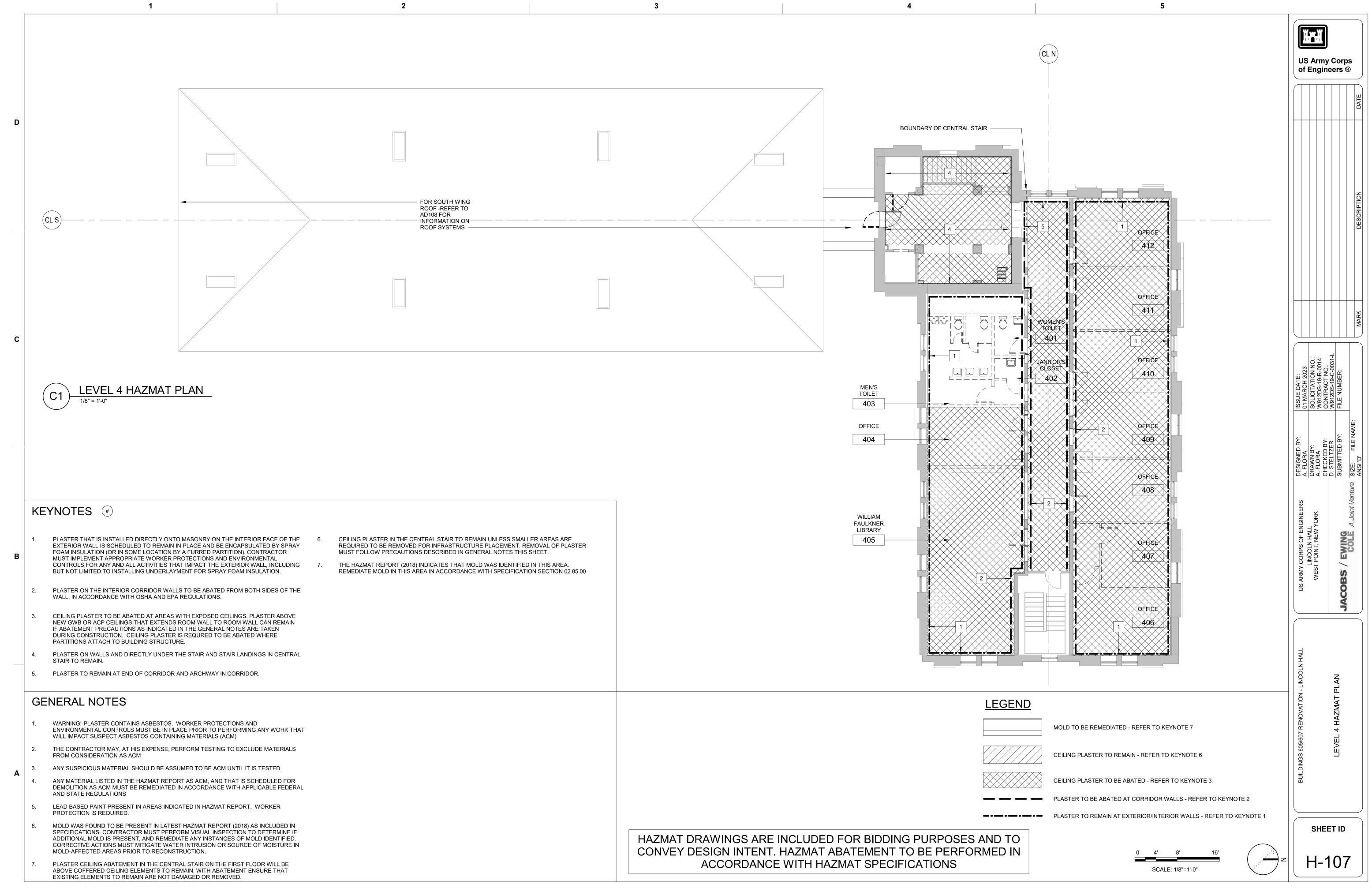












CIVIL/SITE CONSTRUCTION GENERAL NOTES:

1. THESE PLANS REFERENCE LOCATION AND TOPOGRAPHIC SURVEY PREPARED BY:

E: MJ ENGINEERING AND LAND SURVEYING, P.C.

1533 CRESCENT ROAD CLIFTON PARK, NY 12065

PHONE: (518) 371-0799 DATED: 01/16/2020

HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 (NAD83) PROJECTED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM (EAST ZONE)

VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
REFERENCE CONTROL POINT IS CONTINUOUSLY OPERATING REFERENCE STATION (CORS) NEWBURGH CORS ARP (NYNB)

- 2. PROVIDE IMPROVEMENTS IN ACCORDANCE WITH THE UNIFIED FACILITIES GUIDE SPECIFICATIONS AND AS SPECIFIED IN THE CONTRACT DOCUMENTS, DRAWINGS, AND APPENDICES.
- PRIOR TO ANY CONSTRUCTION, PROVIDE A PHASING PLAN INCLUSIVE OF A WRITTEN SEQUENCE OF CONSTRUCTION AND PLANS SHOWING PHASED WORK AREAS, STOCKPILE AREAS, WORKER PARKING AREAS, TRAILER LOCATION, MATERIAL STORAGE AREAS, MAINTAINED SITE ENTRANCE LOCATION, PORTABLE SANITARY STATIONS, HAUL ROUTES AND ALL OTHER NECESSARY CONTRACTOR CONSTRUCTION AREAS. ALL MATERIAL STORAGE AND CONTRACTOR OPERATIONS MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE IDENTIFIED ON THE PLANS. SUBMIT PHASING PLAN TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL. CONTRACTOR MUST FOLLOW THE HAUL ROUTE AS DEPICTED ON SHEET CS102 "TRUCK ACCESS PLAN".
- 4. PROVIDE PROPER AND SUFFICIENT CONSTRUCTION PROTECTION TO THE WORKERS AND ALL PERSONNEL ONSITE. OSHA EM 385-1-1, AND OTHER FEDERAL, STATE, AND LOCAL CODES MUST BE FOLLOWED.
- 5. WORK AND MATERIAL MUST MEET THE REQUIREMENTS OF THE UNITED FACILITIES CRITERIA (UFC), LOCAL, STATE, AND FEDERAL LAWS, STATUTES, RULES, AND REGULATIONS.
- 6. PERFORM WORK IN A SAFE AND CAUTIOUS MANNER IN ACCORDANCE WITH EM 385-1-1.
- 7. QUANTITIES SHOWN HEREIN ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY. VERIFY ALL QUANTITIES AND PROVIDE SUPERINTENDENCE, MATERIAL, LABOR, SURVEYING, AND COORDINATION NECESSARY TO CONSTRUCT THE PROJECT COMPLETE AND AS GENERALLY INTENDED IN THE CONTRACT DOCUMENTS. CONTRACTOR MUST PROVIDE COORDINATION WITH CONTRACTING OFFICER, USMA AUTHORITIES, AND UTILITIES FOR ALL INTERFACING REQUIRED BY THE PROJECT.
- 8. AT NO COST TO THE GOVERNMENT, DISTURBED AREAS MUST BE RESTORED AS INDICATED ON THE CONTRACT DRAWINGS AND COMPLY WITH THE CONTRACT SPECIFICATIONS.
- 9. IMPLEMENT AND MAINTAIN ALL SOIL EROSION CONTROL STRUCTURES AND MEASURES THROUGHOUT CONSTRUCTION. FOLLOW NYSDEC SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS. MODIFICATIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW AND PROCESSING FOR APPROVAL. MODIFICATIONS WILL INCUR ADDITIONAL REVIEW PERIODS AS REQUIRED TO PROCESS APPROVALS. REFERENCE SPECIFICATION SECTIONS AND SOIL EROSION NOTES.
- 10. IN CASE OF DISCREPANCIES BETWEEN THESE PLANS AND THE PROJECT SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT MUST APPLY.
- 11. SUBMISSIONS REQUIRED FOR DOCUMENTATION OF CONFORMANCE TO THE CONTRACT PLANS, DOCUMENTS, AND SPECIFICATIONS MUST BE PROVIDED TO THE CONTRACTING OFFICER FOR DISTRIBUTION TO THE APPROPRIATE REVIEWER.
- 12. INGRESS AND EGRESS TO AND FROM THE CONSTRUCTION SITE MUST BE KEPT READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES. CONSTRUCTION EQUIPMENT MUST NOT OBSTRUCT ROADWAYS AND/OR PASSAGEWAYS UNLESS PRE-APPROVAL IS REQUESTED AND APPROVED FROM THE COR 14 DAYS PRIOR TO NEED (FOR ITS SUBMISSION TO USMA AN DPW). NO PARKING OR STOPPING ALONG INGRESS-EGRESS ROUTE MUST BE PERMITTED.
- 13. MAINTAIN THE CONSTRUCTION SITE AND THE AREAS OF WORK DAILY WHILE PERFORMING THIS CONTRACT. CONSTRUCTION DEBRIS MUST BE REMOVED FROM THE CONSTRUCTION SITE ON A DAILY BASIS. NO BURNING OF DEBRIS OR USE OF EXPLOSIVES MUST BE PERMITTED.
- 14. PREPARE, LAYOUT, AND INSTALL WORK IN SUCH A MANNER AS NOT TO DELAY OR INTERFERE WITH THE PROGRESS OF OTHER INSTALLATION CONTRACT WORK AND/OR ANY WORK DESIGNATED TO BE PERFORMED UNDER ANY OTHER CONTRACT ON THE INSTALLATION AND/OR ANY OTHER WORK IN PROGRESS ON THE INSTALLATION.
- 15. THE CONTRACTOR MUST PROVIDE ALL TESTING SERVICES AND SUBMIT, TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL, A LIST OF ALL TESTS TO BE PERFORMED BY EACH TESTING SERVICE.
- 16. QUALITY CONTROL INSPECTION AND TESTING MUST BE MADE BY A USACE-APPROVED LABORATORY UNDER CONTRACT TO THE CONTRACTOR. COPIES OF REPORTS AND TESTING RESULTS ASSOCIATED WITH THE CONTRACTOR'S QUALITY CONTROL PROGRAM MUST BE SUBMITTED TO THE CONTRACTING OFFICER.
- 17. ILLUMINATE AND PROTECT ALL ELEMENTS COMPLETED OR PARTIALLY COMPLETED AND ALSO APPLY THE SAME TO EXCAVATED TRENCHES AND OPENINGS DURING PERIODS OF LOW LIGHT TO PROTECT AGAINST INJURY TO WORKERS, PEDESTRIANS, WILDLIFE, ETC. CONSTRUCTION LIGHTING MUST BE KEPT TO A MINIMUM ALL DAY AND ALL NIGHT.
- 18. DO NOT SCALE DRAWINGS. DETAILS. NOTES, AND THE LIKE ARE TYPICAL AND APPLY IN GENERAL TO SIMILAR CONDITIONS.
- 19. BY SUBMITTING A PROPOSAL OR AGREEMENT TO PERFORM WORK, THE CONTRACTOR AGREES THAT THEY ARE SKILLED AND EXPERIENCED IN THE USE AND INTERPRETATION OF PLANS AND SPECIFICATIONS, THEY HAVE CAREFULLY REVIEWED THE PLANS AND SPECIFICATIONS FOR THIS PROJECT AND HAVE FOUND THEM TO BE FREE OF AMBIGUITIES AND SUFFICIENT FOR BID AND CONSTRUCTION PURPOSES. FURTHER, THEY HAVE CAREFULLY EXAMINED THE SITE OF THE WORK AND FROM THEIR OWN OBSERVATIONS ARE SATISFIED AS TO THE NATURE AND LOCATION OF THE WORK; THE CHARACTER, QUALITY, AND QUANTITY OF MATERIALS; THE DIFFICULTIES LIKELY TO BE ENCOUNTERED, AND OTHER ITEMS WHICH MAY AFFECT THE PERFORMANCE OF WORK OTHERWISE, COMPLY WITH NYSDEC AND NYSDOT REQUIREMENTS.
- 20. WORK MUST BE SCHEDULED AND FULLY COORDINATED IN ADVANCE OF PERFORMANCE WITH THE CONTRACTING OFFICER.
- 21. ALL CURB/EDGE OF PAVEMENT RADII ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
- 22. PROVIDE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS. COORDINATE WITH THE CONTRACTING OFFICER.
- 23. THE CONTRACTOR MUST FOLLOW ALL LIFE SAFETY MEASURES APPLICABLE TO THE PROJECT. FIRE TRUCK ACCESS TO LINCOLN HALL AND THE SURROUNDING BUILDINGS MUST BE MAINTAINED AT ALL TIMES. THE CONTRACTOR MUST NOTIFY WEST POINT FIRE DEPARTMENT AND DPW 14-DAYS PRIOR TO ANY ACTIVITY THAT PREVENTS FIRE TRUCK ACCESS TO THE PROJECT AREA.
- 24. STRICTLY OBSERVE POLICE AND FIRE PREVENTION CODES AND REGULATIONS AT ALL TIMES.
- 25. THE CONTRACTOR MUST MAINTAIN OPEN TWO-WAY TRAFFIC ROUTES ALONG CULLUM ROAD FOR VEHICLES AT ALL TIMES. THE CONTRACTOR MUST SUBMIT A TRAFFIC SAFETY PLAN OR ROADWAY CLOSURE PLAN TO WEST POINT DPW FOR APPROVAL, 14-DAYS PRIOR TO ANY LANE OR ROADWAY CLOSURE.
- 26. CLEANING/WASHOUT OF CONCRETE DELIVERY VEHICLES MUST BE LIMITED TO CLEANING THE CHUTES WITH AS LITTLE WATER AS POSSIBLE. THE WATER MUST BE DISCHARGED INTO CONTAINERS AS APPROVED BY THE CONTRACTING OFFICER. THE CONTRACTOR MUST HIRE AN APPROVED LOCAL SERVICE TO PERFORM CLEANING AND DISPOSAL OF EXCESS CONCRETE. SUBMIT SHOP DRAWINGS OF THE PROPOSED WASHOUT CONTAINER AND LOCATION FOR COR APPROVAL PRIOR TO ANY CONCRETE DELIVERY.
- 27. THE CONTRACTOR MUST DESIGNATE A VEHICLE TIRE WASH AREA AND COORDINATE THE LOCATION WITH THE CONTRACTING OFFICER. ALL VISIBLY DIRTY CONSTRUCTION VEHICLES MUST BE WASHED PRIOR TO LEAVING THE PROJECT SITE. THE WASH AREA MUST BE SWEPT CLEAN DAILY AND ACCEPTED BY THE CONTRACTING OFFICER. THE CONTRACTOR MUST CLEAN SOIL AND DEBRIS FROM THE ROADWAY.

DEMOLITION NOTES:

- 1. BEFORE THE EXECUTION OF WORK, REVIEW PLANS AND REQUIREMENTS AND ARRANGE FOR MARK-OUT, REMOVAL OR RELOCATION OF THE ITEMS AS REQUIRED TO COMPLETE THE WORK. CONTRACTOR MUST CONTACT " DIG SAFELY NY" AT 811 PRIOR TO CONSTRUCTION. NOTIFY NYS ONE-CALL AND ALL LOCAL UTILITY COMPANIES/PURVEYORS OWNING OR HAVING JURISDICTION CONCERNING UTILITIES.
- THE INTENT OF THE DEMOLITION SHOWN ON THE DRAWINGS IS TO GENERALLY OUTLINE THE TYPES OF MATERIALS TO BE REMOVED AND THE LIMITS OF THE REMOVALS. THE QUANTITY OF ITEMS TO BE REMOVED WITHIN THE LIMIT OF DEMOLITION MAY VARY FROM THOSE DEPICTED ON THE PLANS. THE INTENT AND REQUIREMENT IS FOR THE CONTRACTOR TO REMOVE THE EXISTING VEGETATION AND IMPROVEMENTS AND REGRADE AS REQUIRED TO CONSTRUCT THE PROPOSED DEVELOPMENT. ALL MEANS AND METHODS INCLUDING SAFETY REQUIREMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE GOVERNMENT.
- 3. SURFACE AND SUBGRADE DISTURBANCE BELOW THE PAVEMENT DGA MUST NOT EXCEED 0.99 AC. WITHIN THE PROJECT LIMIT OF DISTURBANCE. CONTRACTOR MUST NOTIFY CONTRACTING OFFICER IF THE DISTURBANCE THRESHOLD WILL BE EXCEEDED PRIOR TO ANY EXCAVATION.
- 4. AS IDENTIFIED FOR DEMOLITION, REMOVE SIGNS, STRUCTURES, FENCES, AND EXISTING IMPROVEMENTS FROM THE CONSTRUCTION SITE. THE SITE MUST BE LEFT IN AN ORDERLY AND NEAT CONDITION. COMPLETED CONDITIONS MUST BE APPROVED BY THE CONTRACTING OFFICER AND AT NO ADDITIONAL COST TO THE GOVERNMENT.
- 5. REMOVE EXISTING UTILITY SERVICES, WHERE SHOWN ON PLANS AND UNCOVERED BY DEMOLITION, CONSISTENT WITH THE DRAWINGS AND TO THE EXTENT AND MANNER SATISFACTORY TO THE CONTRACTING OFFICER AND UTILITY COMPANIES INVOLVED.

DEMOLITION NOTES:

- 6. PIPES, CULVERTS, ETC. WITHIN AND NEAR THE AREA OF WORK MUST BE KEPT FREE FROM MATERIAL ENTERING THE DRAINAGE SYSTEMS DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, REMOVE ALL ACCUMULATED SEDIMENT. DISPOSE OF ALL UNSUITABLE OR EXCESS EXCAVATED MATERIALS OFF OF GOVERNMENT PROPERTY.
- 7. EXERCISE CARE TO PREVENT DAMAGE TO AND PROTECT ANY MATERIALS OR STRUCTURES THAT ARE TO REMAIN IN PLACE. THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS IN EXCAVATING AND MUST HAND EXCAVATE AS DEEMED NECESSARY TO PROTECT SUBSURFACE UTILITIES. DAMAGE TO EXISTING UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS MUST BE IMMEDIATELY REPAIRED TO THE SATISFACTION OF THE UTILITY OWNER, AT NO ADDITIONAL COST TO THE GOVERNMENT. THE UTILITY OWNER MAY REQUIRE REPAIR OPERATIONS TO BE PERFORMED CONTINUOUSLY UNTIL WORKS ARE ACCEPTABLE, AT NO ADDITIONAL COST TO THE GOVERNMENT.
- 8. DESIGN TEMPORARY CLOSURES, BARRICADES, RAILINGS, AND TEMPORARY PROTECTION USED TO PROTECT THE WORK, AND PERSONNEL IN ACCORDANCE WITH EM 385, CHAPTER 23. IF REQUESTED, PROVIDE DRAWINGS INDICATING THE LOCATIONS, EXTENT, AND CONSTRUCTION DETAILS OF SAME. ALL TEMPORARY CONSTRUCTION STRUCTURES MUST BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.
- 9. PROTECT ALL AREAS OUTSIDE THE LIMIT OF DISTURBANCE WHICH ARE ADJACENT TO CONSTRUCTION ACTIVITY. ALL AREAS OUTSIDE THE LIMIT OF DISTURBANCE WHICH ARE DAMAGED BY THE CONTRACTOR, MUST BE RESTORED TO THEIR ORIGINAL CONDITION AND THAT OF THE SURROUNDING AREA. THE RESTORATION MUST BE DONE AT NO ADDITIONAL COST TO THE GOVERNMENT AND MUST BE APPROVED BY CONTRACTING OFFICER.
- 10. HAUL EXCAVATED SOIL, DEMOLISHED MATERIAL, RUBBISH AND DEBRIS OFF-SITE AND OFF INSTALLATION EXCEPT ITEMS DIRECTED BY THE CONTRACTING OFFICER TO BE SALVAGED. DEMOLISHED MATERIAL TO BE MANAGED ACCORDING TO THE PROJECT ENVIRONMENTAL CONTROLS SPECIFICATIONS. ITEMS FROM THE SITE MUST BE LEGALLY DISPOSED OF WITHOUT DISRUPTING VEHICULAR OR PEDESTRIAN FLOW.
- 11. RE-USE/PROCESSING OF ASPHALT/CONCRETE WILL NOT BE ALLOWED ON SITE.
- 12. PREVENT CONTAMINATED WATER, GASOLINE, OR ANY OTHER CONTAMINANTS FROM ENTERING THE PROJECT AREAS. FOLLOW REQUIREMENTS FOR SPILL RESPONSE.
- 13. MANAGEMENT OF WASTES GENERATED FROM THIS PROJECT AS WELL AS UNKNOWN CONTAMINATION IS ADDRESSED IN THE CONTRACT DOCUMENTS.
- 14. CONTROL DUST BY PERIODICALLY SPRAYING WORK AREA WITH WATER, PER NYS SOIL EROSION AND SEDIMENT CONTROL STANDARDS
- 15. EXISTING INLETS, STORMWATER PIPING AND/OR SWALES IMMEDIATELY BELOW THE DISTURBED AREAS MUST HAVE EROSION CONTROL WORKS INSTALLED TO PREVENT ENTRY OF SEDIMENT DURING CONSTRUCTION. DISTURBED AREAS MUST BE STABILIZED IN ACCORDANCE WITH THE SOIL EROSION CONTROL PLAN. AN UPDATED SEQUENCE OF CONSTRUCTION SCHEDULE MUST BE SUBMITTED AND APPROVED BY THE CONTRACTING OFFICER PRIOR TO START OF WORK.
- 16. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT, AND UNUSED MATERIALS FROM GOVERNMENT PROPERTY.
- 17. THE CONTRACTOR MUST FOLLOW THE GUIDELINES OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY FOR SHORT TERM NOISE STANDARDS.
- 18. THE ABATEMENT OF HAZARDOUS MATERIALS MUST BE COMPLETED, IN ACCORDANCE WITH THE PROJECT DOCUMENTS AND AT THE SATISFACTION OF THE GOVERNMENT, PRIOR TO COMMENCEMENT OF DEMOLITION.

GRADING NOTES:

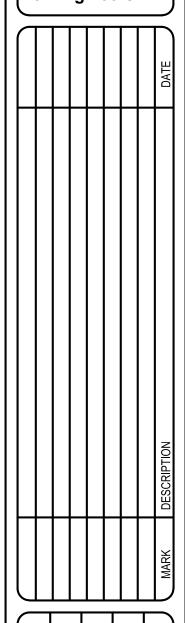
- 1. THE GEOTECHNICAL INVESTIGATION REPORT PREPARED FOR THIS PROJECT, LOCATED IN THE PROJECT SPECIFICATIONS, MUST BE REVIEWED THOROUGHLY PRIOR TO BID SUBMISSION / CONSTRUCTION. SEE THE GEOTECHNICAL REPORT THAT IS AN ATTACHMENT TO THESE SPECIFICATIONS.
- 2. DESIGN TEMPORARY CONSTRUCTION STRUCTURES SUCH AS SHEETING & SHORING FOR EXCAVATIONS. PROVIDE DESIGN CALCULATIONS AND DRAWINGS SHOWING LOCATION, EXTENT, AND CONSTRUCTION DETAILS OF SAID TEMPORARY STRUCTURES AND SUPPORTS PROPOSED. DOCUMENTS MUST BE PREPARED AND SEALED BY A NYS LICENSED PROFESSIONAL ENGINEER. CONTRACTOR MUST SUBMIT A TASK SPECIFIC EXCAVATION AND SHORING PLAN TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL PRIOR TO ANY SITE EXCAVATION.
- 3. GRADE: MAXIMUM SLOPE OF UTILITY EXCAVATIONS, DISTURBED, AND LANDSCAPE RESTORED AREAS MUST BE 3:1, UNLESS OTHERWISE NOTED. ALL EXPOSED EXCAVATIONS SHALL BE STABILIZED IN ACCORDANCE WITH NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (BLUE BOOK), LATEST EDITION.
- 4. ALL SUBBASE AND SUBBASES MATERIAL MUST BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. PROVIDE CERTIFICATION BY A PROFESSIONAL GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF NEW YORK THAT ALL SUBBASE AND SUBBASES BELOW AND AGAINST STRUCTURAL IMPROVEMENTS INCLUDING FOUNDATIONS, PAVEMENT, BELOW GRADE STRUCTURES, SIDEWALKS, WALLS, AND OTHER PROJECT COMPONENTS HAVE BEEN COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 5. NOTIFY THE CONTRACTING OFFICER OF ANY BASES, SUBBASES, AND SUBGRADES NOT MEETING THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. PROVIDE THE CONTRACTING OFFICER WITH RECOMMENDATIONS FOR REMOVAL LIMITS.
- 6. ALL IMPORTED FILL MATERIAL MUST BE OBTAINED FROM AN APPROVED OFF-POST BORROW AREA. ALL EXCAVATED MATERIAL FROM THE PROJECT SITE MUST BE DISPOSED OFF-POST AS WASTE. REFER TO THE PROJECT SPECIFICATIONS FOR SATISFACTORY MATERIAL REQUIREMENTS.
- 7. REFER TO GEOTECHNICAL REPORT IN THE PROJECT SPECIFICATIONS FOR CLASSIFICATION OF SUBGRADE MATERIALS. THE INTERPRETATIONS AND ASSUMPTIONS MADE FOR RECOMMENDATIONS IN THE GEOTECHNICAL REPORT MUST BE USED AT THE CONTRACTORS OWN RISK.
- BORROW OR SELECT FILL MUST BE SELECT GRANULAR FILL PURCHASED FROM AN APPROVED SAND AND GRAVEL COMPANY AND BROUGHT TO THE LINCOLN HALL SITE. THE SAND AND GRAVEL COMPANY MUST SUBMIT A CERTIFICATE OF COMPLIANCE WITH CONTRACT SPECIFICATIONS. CONTRACTOR MUST SUBMIT DOCUMENTATION THAT BORROW/SELECT FILL COMPLY WITH THE CONTRACT DOCUMENTS, FEDERAL, STATE AND LOCAL REQUIREMENTS. CONTRACTOR MUST SUBMIT BORROW SITE AND TESTING DATA PER THE PROJECT SPECIFICATIONS.
- 9. THE BOTTOM OF ALL EXCAVATIONS OR FOUNDATIONS MUST BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACT AS INDICATED WITHIN THE CONTRACT DOCUMENTS.
- 10. ALL SURPLUS OR UNSATISFACTORY EXCAVATED MATERIAL MUST BE HAULED OFF-SITE AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
- 11. PROPOSED SPOT ELEVATIONS AND CONTOURS SHOWN ARE FINISHED GRADE UNLESS OTHERWISE NOTED.
- 12. ALL EXISTING GRADES MUST BE VERIFIED PRIOR TO CONSTRUCTION.
- 13. PROVIDE GRADE SHEETS TO THE CONTRACTING OFFICER FOR REVIEW PRIOR TO PAVEMENT/CURBING/SIDEWALK INSTALLATION.
- 14. THE MAXIMUM GRADE WITHIN ACCESSIBLE PARKING STALLS/ACCESS AISLES MUST BE 2.0%.
- 15. ACCESSIBLE ACCESS WAYS AND IMPROVEMENTS MUST BE IN ACCORDANCE WITH FEDERAL REQUIREMENTS.

CIVIL CONCRETE AND REINFORCEMENT NOTES:

- DESIGN IS BASED ON THE FOLLOWING MATERIAL STRENGTHS USING NORMAL WEIGHT CONCRETE: A. 28-DAY CONCRETE CYLINDER STRENGTH: SLABS ON GRADE, SIDEWALKS, SITE RETAINING WALLS, TOPPING SLABS, CURBS, RAMPS, EXTERIOR STAIRS, EXTERIOR EQUIPMENT PADS 5,000 PSI FOOTINGS AND BELOW GRADE STRUCTURES (UNLESS OTHERWISE NOTED IN THE DRAWINGS) 4,000 PSI B. DEFORMED BAR REINFORCEMENT 60,000 PSI C. WELDED WIRE REINFORCEMENT 65,000 PSI 2. PROVIDE THE FOLLOWING MINIMUM COVER FOR REINFORCEMENT: A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH B. CONCRETE EXPOSED TO WEATHER. NO. 6 THROUGH NO. 18 BARS NO. 5 BARS AND SMALLER
- PROVIDE ½" PRE-FORMED EXPANSION JOINTS AGAINST ALL HARD SURFACES INCLUDING BUT NOT LIMITED TO OTHER CONCRETE STRUCTURES, MASONRY OF ANY KIND, METALS OF ANY KIND, ETC.



10



	U.S. ARMY CORPS OF FNGINEERS	DESIGNED BY:	ISSUE DATE:
		J. KURNATH	01 MARCH 2023
	WEST POINT, NEW YORK	DRAWN BY: D. PATEL	SOLICITATION NO.: W912DS-19-R-0014
		CHECKED BY:	CONTRACT NO.:
		M. McKEEVER	W912DS-19-C-0031-L
	IACOBS / EWING	SUBMITTED BY:	FILE NUMBER:
)			
	SIZE:	SIZE: FILE NAME:	
ر		ANSID	

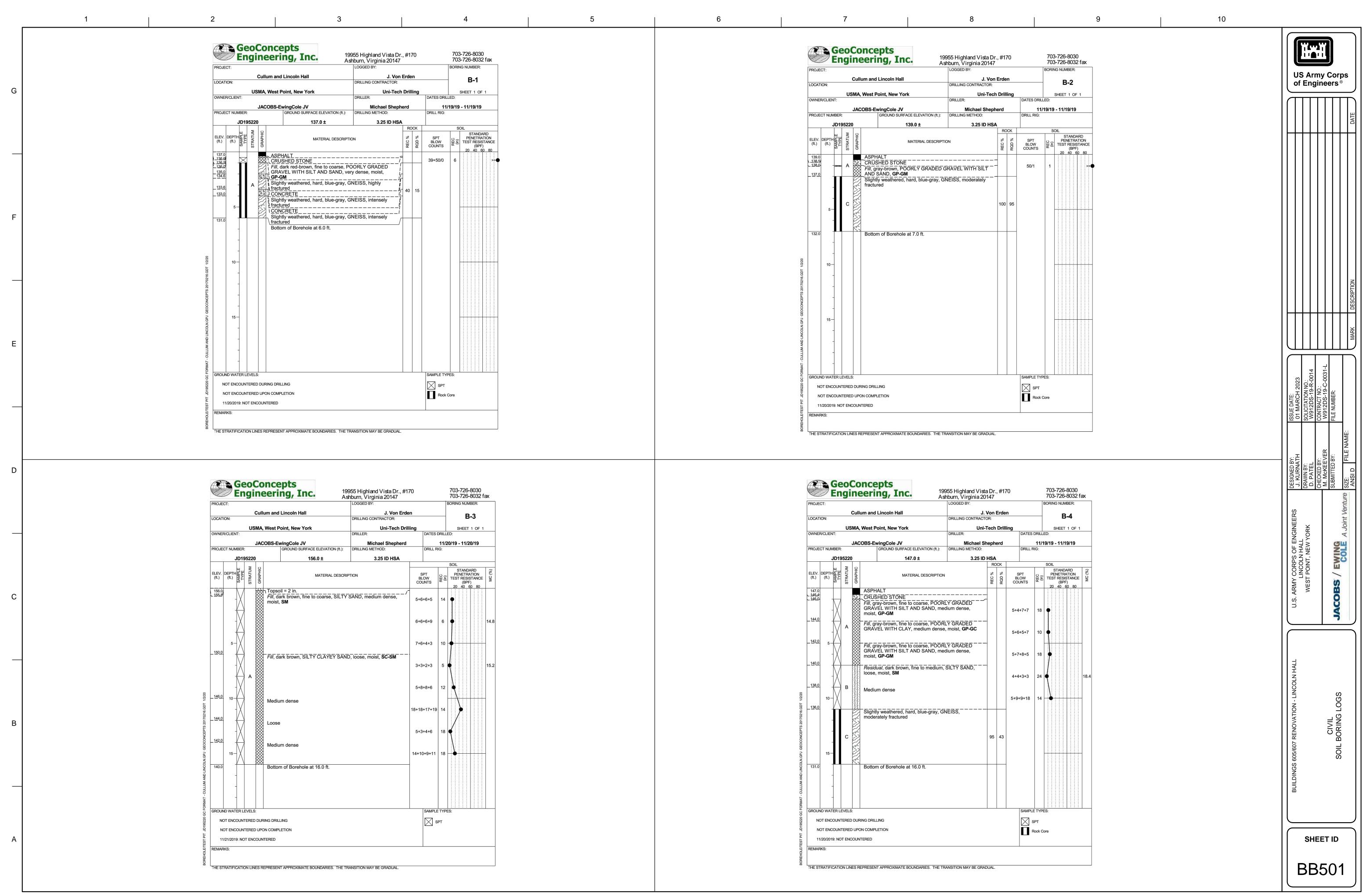
CIVIL GENERAL NOTES

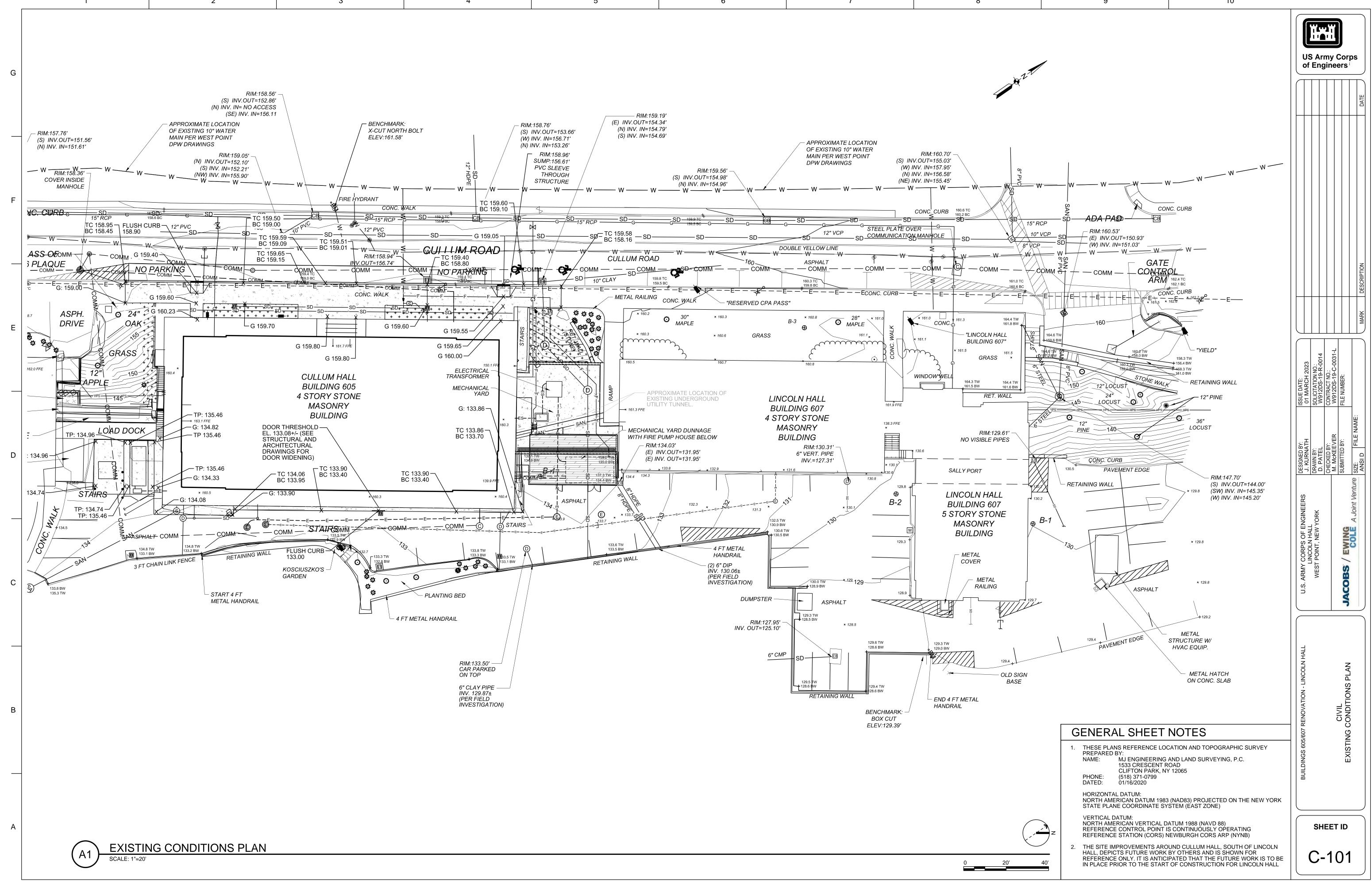
C-001

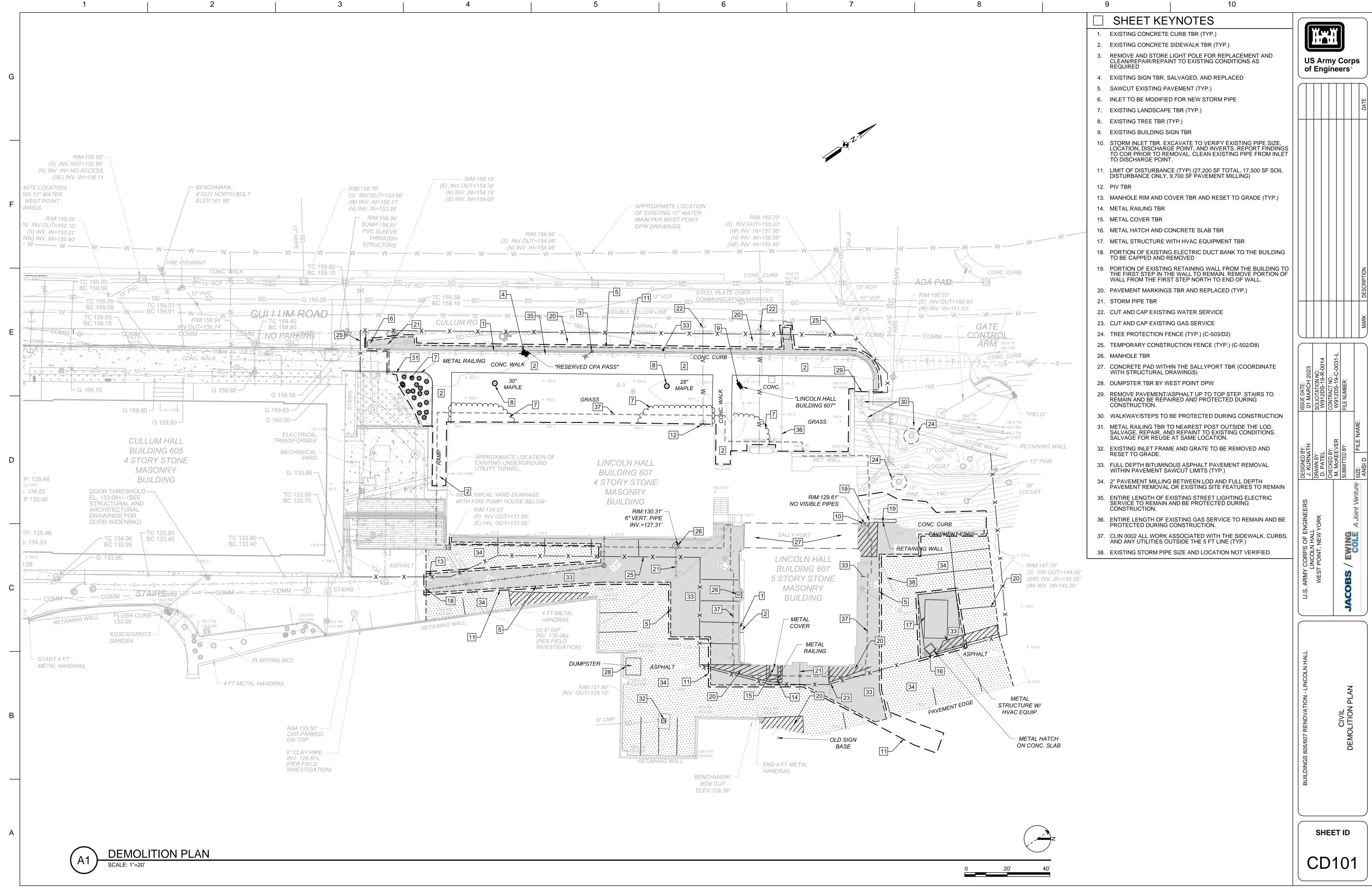
SHEET ID

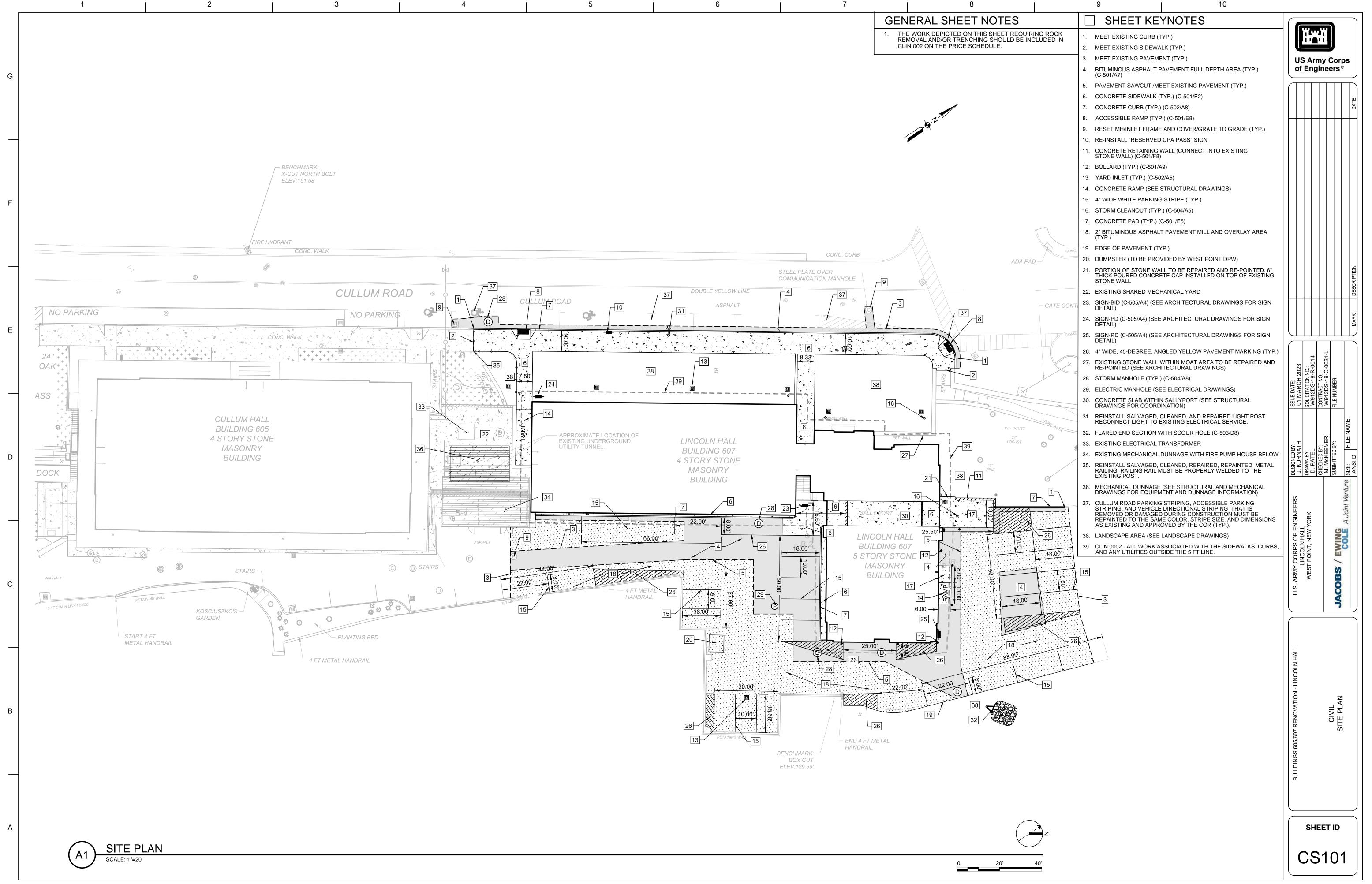
DRAINAGE & UTILITY NOTES: LEGEND LIST OF ABBREVIATIONS **US Army Corps** NOTIFY AND COORDINATE WITH WEST POINT DPW AND/OR UTILITY COMPANIES FOR CONNECTIONS TO EXISTING UTILITY SERVICES. of Engineers® ARCHITECTURAL BARRIERS ACT REFER TO ALL CONTRACT DRAWINGS FOR LOCATION AND SIZES OF NEW ELECTRICAL, TELECOMMUNICATIONS, STORM, WATER, AND SANITARY CONNECTIONS TO THE ITEM **EXISTING PROPOSED** AGGREGATE BASE COURSE **ACRES** LOCATION OF EXISTING UTILITIES AND SERVICES ARE APPROXIMATE. THE CONTRACTOR MUST REVIEW AND FOLLOW THE USMA DPW DIG SAFE GUIDELINES WITHIN THE ADA AMERICAN WITH DISABILITIES ACT PROJECT DIG SAFE PERMIT AND CONFIRM THE UTILITY LOCATIONS AND SERVICE CONNECTION POINTS INDEPENDENTLY WITH THE WEST POINT DPW / CONTRACTING CURB APPROX. APPROXIMATE OFFICER / TEST PITS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. DISCREPANCIES MUST BE REPORTED IMMEDIATELY IN WRITING TO THE CONTRACTING OFFICER. **EDGE OF PAVEMENT** AMERICAN SOCIETY FOR TESTING AND MATERIALS CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH AMERICAN WATER TREE LINE EXISTING UNDERGROUND UTILITIES MUST BE FIELD VERIFIED BY TEST PIT(S) PRIOR TO COMMENCEMENT OF CONSTRUCTION. **BOTTOM OF CURB FENCE** THE SIZE OF ALL EXISTING / PROPOSED UTILITIES MUST BE VERIFIED PRIOR TO THE PURCHASE OF ANY STRUCTURES OR MATERIAL ACCEPTABLE TO THAT UTILITY. BITUMINOUS BLDG BUILDING **GUIDE RAIL** THE CONTRACTOR MUST PROTECT ADJACENT UTILITIES DURING CONSTRUCTION TO AVOID DAMAGE AND MUST TAKE ALL NECESSARY PRECAUTIONS IN EXCAVATING. CATCH BASIN HAND EXCAVATE AS DEEMED NECESSARY TO PROTECT SUBSURFACE UTILITIES. DAMAGE TO ANY EXISTING UTILITY RESULTING FROM THE CONTRACTOR'S OPERATIONS METAL RAIL MUST BE IMMEDIATELY REPAIRED IN A MANNER AS APPROVED BY THE CONTRACTING OFFICER AT NO ADDITIONAL COST TO THE GOVERNMENT. IF THE CONTRACTING CHAIN LINK FENCE OFFICER DEEMS IT IS NECESSARY, THE CONTRACTING OFFICER CAN REQUIRE REPAIR OPERATIONS TO BE PERFORMED CONTINUOUSLY UNTIL WORKS ARE ACCEPTABLE CLEAN OUT UNDERGROUND TO THE CONTRACTING OFFICER AND AT NO ADDITIONAL COST TO THE GOVERNMENT. — — COMM — — — --COMM--COMMUNICATION LINE COMMUNICATION UTILITY MANHOLE / VALVE COVERS, RIMS, GRATES, VENTS, AND OTHER COMPONENTS WHICH ARE NOT BEING REMOVED AND ARE WITHIN AREAS OF DISTURBANCE MUST CONC CONCRETE UNDERGROUND ELECTRIC (PRIMARY) BE RESET TO GRADE. CONTINUOUSLY OPERATING REFERENCE CORS UNDERGROUND ELECTRIC (SECONDARY) STATION CONCRETE THRUST BLOCKS MUST BE INSTALLED ON ALL WATER LINE BENDS, TEES, CROSSES, ELBOWS, VALVES, CAPS, ETC. IN ACCORDANCE WITH THE THRUST BLOCK CHILLED WATER DETAIL. RESTRAINED JOINTS MAY BE SUBSTITUTED IN LIEU OF THRUST BLOCKS. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF THE JOINT FITTINGS TO THE STORM LINE CONTRACTING OFFICER FOR REVIEW AND APPROVAL DEPRESSED CURB DENSE GRADED AGGREGATE NEW WATER MAIN SERVICE CONNECTIONS MUST BE OF A MATERIAL CONFORMING TO AW SPECIFICATIONS AND MUST BE INSTALLED WITH A MINIMUM OF 54" OF COVER SANITARY LINE DIA. DIAMETER FROM FINISHED GRADE TO TOP OF THE PIPE. DISINFECTION, HYDROSTATIC TESTING, AND BACTERIOLOGICAL TESTING MUST BE PERFORMED IN ACCORDANCE WITH UFC / AWWA / AW SPECIFICATIONS. DUCTILE IRON PIPE WATER LINE DIMENSION THE LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE. THE FOLLOWING MUST BE GAS LINE DRAINAGE MANHOLE PERFORMED: VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR TO CONSTRUCTION. EXCAVATE TEST PITS AS REQUIRED; DPW DIRECTORATE OF PUBLIC WORKS STEAM LINE B. EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING STORM, SANITARY, GAS, STEAM SYSTEMS, POWER, COMMUNICATIONS OR WATER LINES TO DWG DRAWING PREVENT DAMAGE. INSTALL SUPPORTS AND BRACES AS REQUIRED. THE DESIGN AND CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED CHILLED WATER SUPPLY lΕΑ EACH IN THE STATE OF NEW YORK, MUST BE SUBMITTED TO THE COR FOR REVIEW AND APPROVAL PRIOR TO EXCAVATION. IMMEDIATELY REPAIR ANY DAMAGE TO THE EXISTING UTILITIES RESULTING FROM CONSTRUCTION AT NO ADDITIONAL COST TO THE GOVERNMENT. ELEC. ELECTRIC CHILLED WATER RETURN MAINTAIN UTILITIES IN ACTIVE OPERATION AT ALL TIMES UNLESS THEY ARE TO BE ABANDONED OR REMOVED; EL./ELEV. ELEVATION NOTIFY AND OBTAIN APPROVALS FROM UTILITY COMPANY/WEST POINT DPW/CONTRACTING OFFICER, PRIOR TO PERFORMING WORK. UNKNOWN MANHOLE F. UTILITIES THAT ARE TO BE ABANDONED/REMOVED MUST REQUIRE REVIEW AND APPROVAL BY THE CONTRACTING OFFICER FOR THE CONTINUED SERVICES ADJACENT **ENGINEERS MANUAL** TO THE CONTRACT WORK. SANITARY MANHOLE EDGE OF PAVEMENT ETC ET CETERA 11. PRE-CAST CONCRETE STRUCTURES AND REINFORCING STEEL WITHIN PRE-CAST STRUCTURES MUST BE DESIGNED BY THE STRUCTURE MANUFACTURER. REINFORCING STORM MANHOLE STEEL WITHIN POURED-IN-PLACE DRAINAGE STRUCTURES MUST BE DESIGNED BY A NYS LICENSED ENGINEER AND SUBMITTED TO THE CONTRACTING OFFICER FOR EX./EXIST. EXISTING REVIEW. ELECTRIC MANHOLE/HANDHOLE FES FLARED END SECTION FINISHED FLOOR SHOP DRAWINGS FOR ALL STRUCTURES, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, MUST BE SUBMITTED FOR REVIEW TELE. PED. AND APPROVAL BY CONTRACTING OFFICER. WATER VALVE HDPE HIGH DENSITY POLYETHYLENE 13. SANITARY SEWER PIPE MUST BE SDR 35 PVC AND MUST BE TESTED FOR COMPLIANCE WITH ASTM STANDARDS FOR INFILTRATION / EXFILTRATION. **UNKNOWN JUNCTION BOX** HOT MIX ASPHALT 14. DEWATER TRENCHES AS REQUIRED FOR INSTALLATION OF THE IMPROVEMENTS. THE CONTRACTOR MUST MAINTAIN THE WATER TABLE 2-FEET BELOW THE BOTTOM OF **CATCH BASIN** HIGH POINT TRENCH D CLEANOUT 15. ALL STORMWATER INLETS MUST BE EQUIPPED WITH A BICYCLE SAFE ECO GRATE AND CAST WITH "NO DUMPING - DRAINS TO RIVER OR WATERWAY". INVERT **ROUND CATCH BASIN** LINEAR FEET 16. CURB STORMWATER INLETS MUST HAVE A 6" FACE AND TYPE N CURB BOX. LIMIT OF DISTURBANCE COMMUNICATION MANHOLE 17. EXISTING STORM PIPING TO REMAIN, MUST BE CLEANED TO THE NEAREST INLET / MANHOLE AND/OR DISCHARGE POINT. MAX. MAXIMUM B-4 ⊗ SOIL BORING LOCATION **MANHOLE** ELECTRICAL, FIBER OPTIC, AND COMMUNICATION CONDUIT UNDER AND WITHIN 20' OF VEHICLE TRAVEL WAYS MUST BE ENCASED IN CONCRETE. MINIMUM **GUY WIRE** 19. REFER TO ELECTRIC AND COMMUNICATION PLANS FOR NUMBER AND ARRANGEMENT OF ELECTRICAL AND COMMUNICATION CONDUIT WITHIN DUCT BANKS. MANUAL ON UNIFORM TRAFFIC CONTROL POST/ BOLLARD DEVICES 20. PROVIDE TEMPORARY ELECTRIC POWER AS NEEDED FOR ALL CONSTRUCTION OPERATIONS UNTIL ELECTRIC IS EXTENDED TO THE SITE AND SUITABLE FOR USE. REFER TO NORTH AMERICAN DATUM NAD ROCK/BOULDER C:3 NAVD NORTH AMERICAN VERTICAL DATUM 21. ALL OPEN EXCAVATIONS WITHIN VEHICULAR TRAVEL AND PARKING AREAS MUST BE COVERED WITH A STEEL PLATE, RATED FOR HS-25 LOADING. NEW YORK STATE DEPARTMENT OF SHRUB NYSDEC ENVIRONMENTAL CONSERVATION **CONIFEROUS TREE** NEW YORK STATE DEPARTMENT OF 22. NOTIFY THE CONTRACTING OFFICER AND WEST POINT DPW 14-DAYS PRIOR TO ANY TEMPORARY CLOSURES. NYSDOT TRANSPORTATION **DECIDUOUS TREE** O.C. ON CENTER 23. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE CONTRACTING OFFICER OF ANY CONFLICTS WITH UNEXPECTED UTILITIES OR STRUCTURES ENCOUNTERED DURING OUTSIDE DIAMETER TREE STUMP PERF. PERFORATED SIGN POST INDICATOR VALVE 24. ALL UTILITY BEDDING MUST BE WRAPPED IN GEOTEXTILE FILTER FABRIC. STEAM MANHOLE PROP PROPOSED 25. AMERICAN WATER (AW) IS THE OWNER AND OPERATOR OF ALL SANITARY SEWER AND DOMESTIC/FIRE WATER MAINS AT WEST POINT, UP TO THE POINT OF DEMARCATION. POUNDS PER SQUARE INCH **ELECTRICAL JUNCTION BOX** ANY SEWER MAIN /SERVICE AND/OR DOMESTIC / FIRE WATER MAIN REPLACEMENT OR MODIFICATION MUST BE COORDINATED WITH AW AND THE COR. POLYVINYL CHLORIDE LIGHT POLE RADIUS 26. THE CONTRACTOR MUST NOTIFY AND COORDINATE WITH THE COR AND AMERICAN WATER PRIOR TO THE SHUT-OFF OF ANY WATER MAIN OR BUILDING SERVICE. **UNKNOWN VENT** RCP REINFORCED CONCRETE PIPE 27. ALL NEW BELOW-GRADE STRUCTURES MUST BE DESIGNED TO SUPPORT HS-25 LOADING. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS, SIGNED AND SEALED BE A REIN. REINFORCED GAS VALVE PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL PRIOR TO THE PURCHASE OF ALL REQ'D REQUIRED STRUCTURES. FIRE HYDRANT SANITARY SAN STANDARD DIMENSION RATIO CONCRETE (POURED IN PLACE) PRIOR TO DISCONNECTION, CUTTING, REMOVAL OR ANY UTILITY SERVICE WORK, EXCAVATION OR INTERRUPTION, COORDINATE WITH THE CONTRACTING OFFICER, WEST SQUARE FEET POINT DPW AND PRIVATE UTILITY PURVEYOR TO ENSURE UNINTERRUPTED SERVICE TO SURROUNDING FACILITIES. SUBMIT TEMPORARY SERVICE PLANS FOR APPROVAL SANITARY MANHOLE PRIOR TO ANY UTILITY WORK. **BOLLARD** STA. STATION TO BE REMOVED **INLET PROTECTION** TOP OF CURB TOP OF CONCRETE PAD LIMIT OF DISTURBANCE TOP OF WALL TYP. TYPICAL HAND EXCAVATION/EXCAVATE UFC UNIFIED FACILITIES CRITERIA WITH CAUTION TO FACE OF WALL/CURB USMA UNITED STATES MILITARY ACADEMY PAVEMENT SAWCUT WELDED WIRE FABRIC SHEET ID

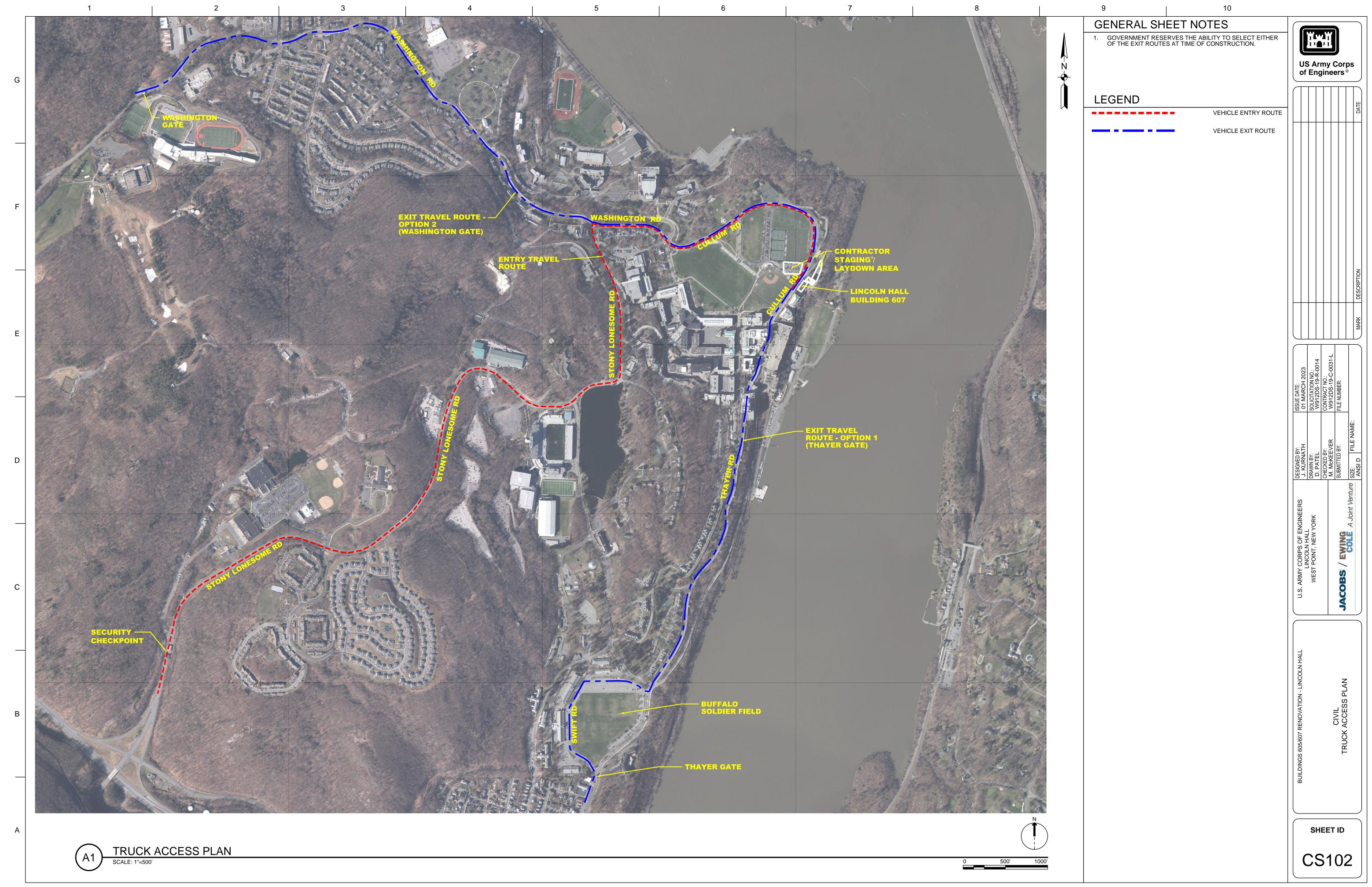
10

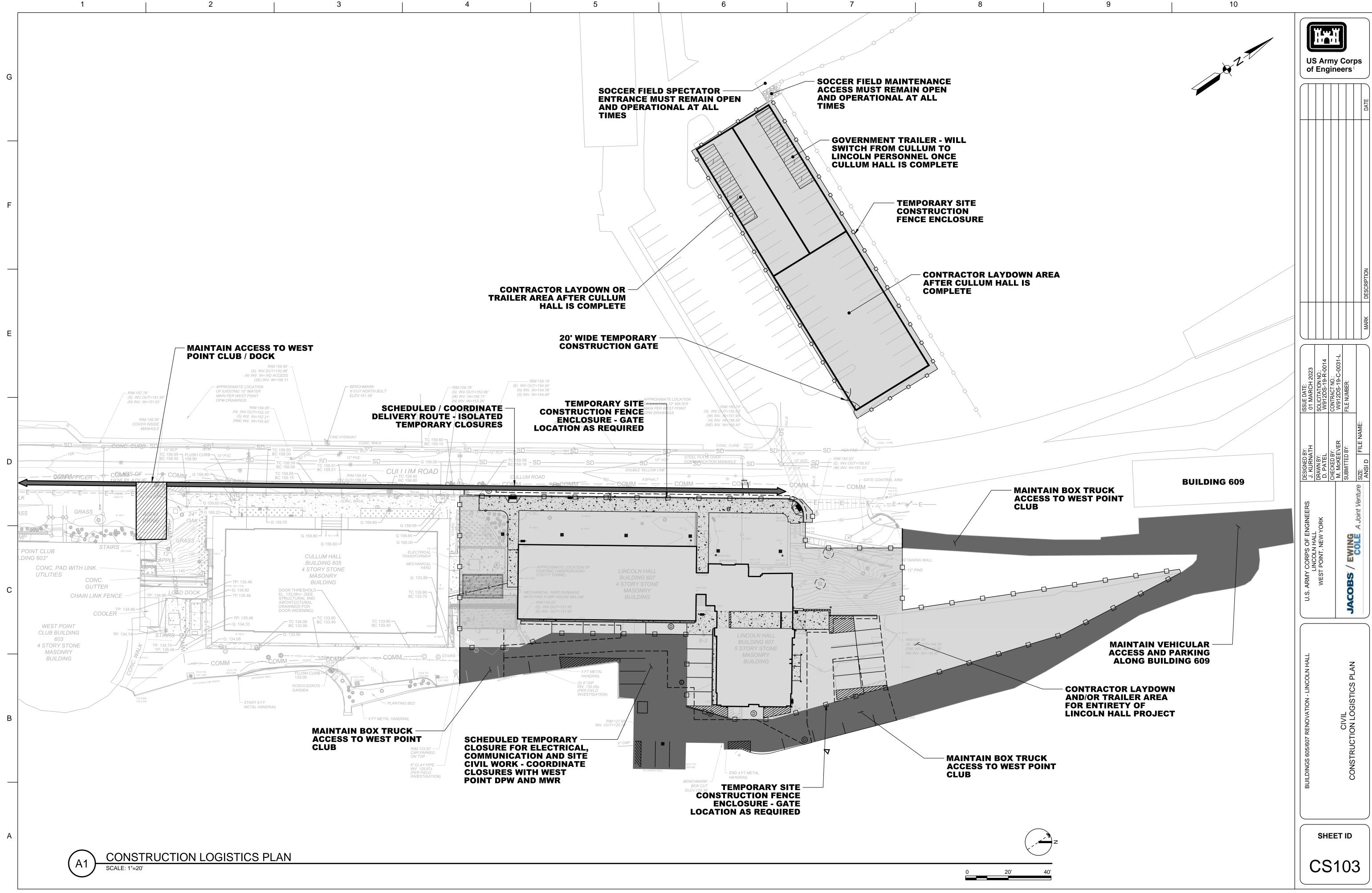


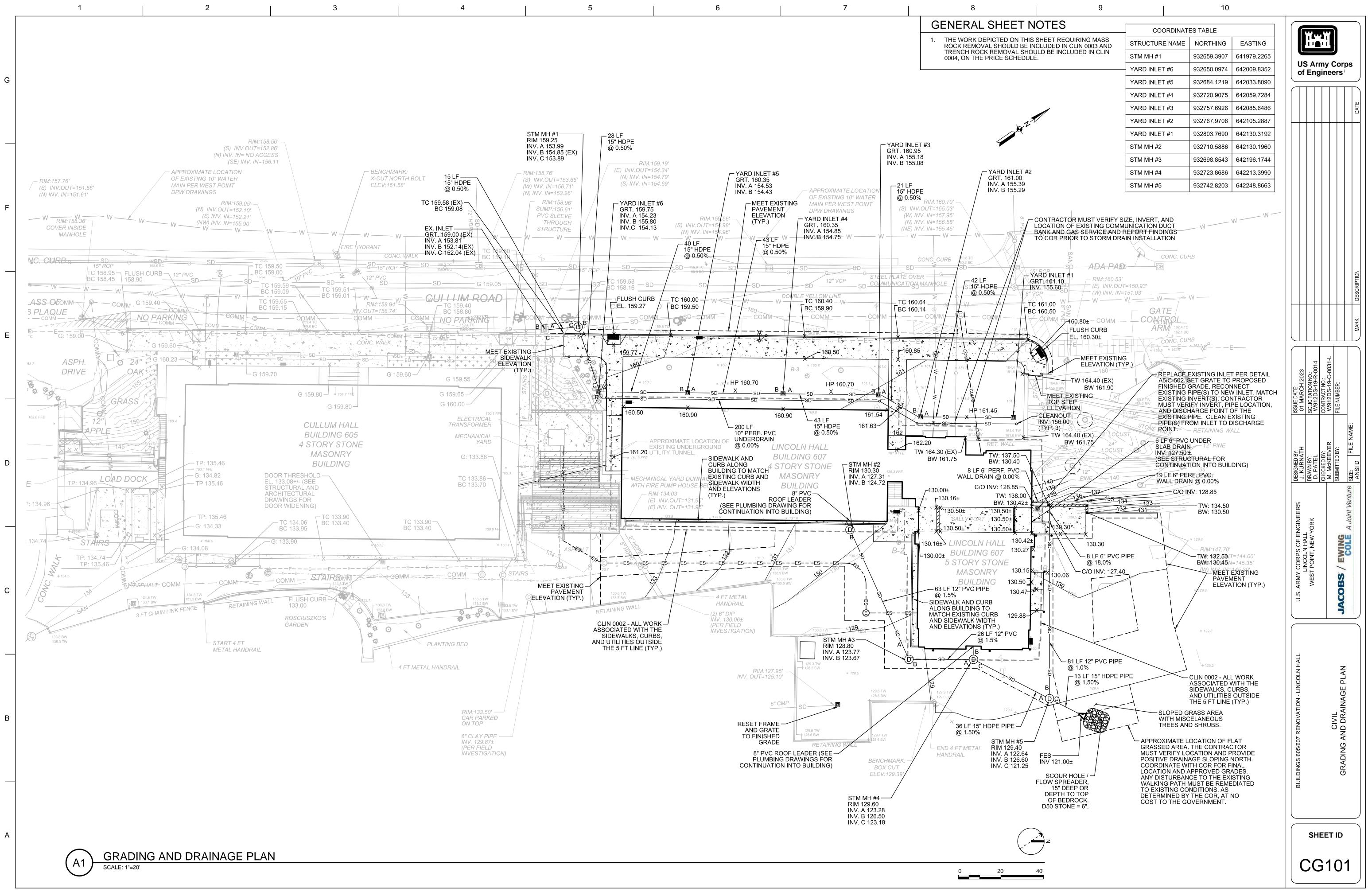


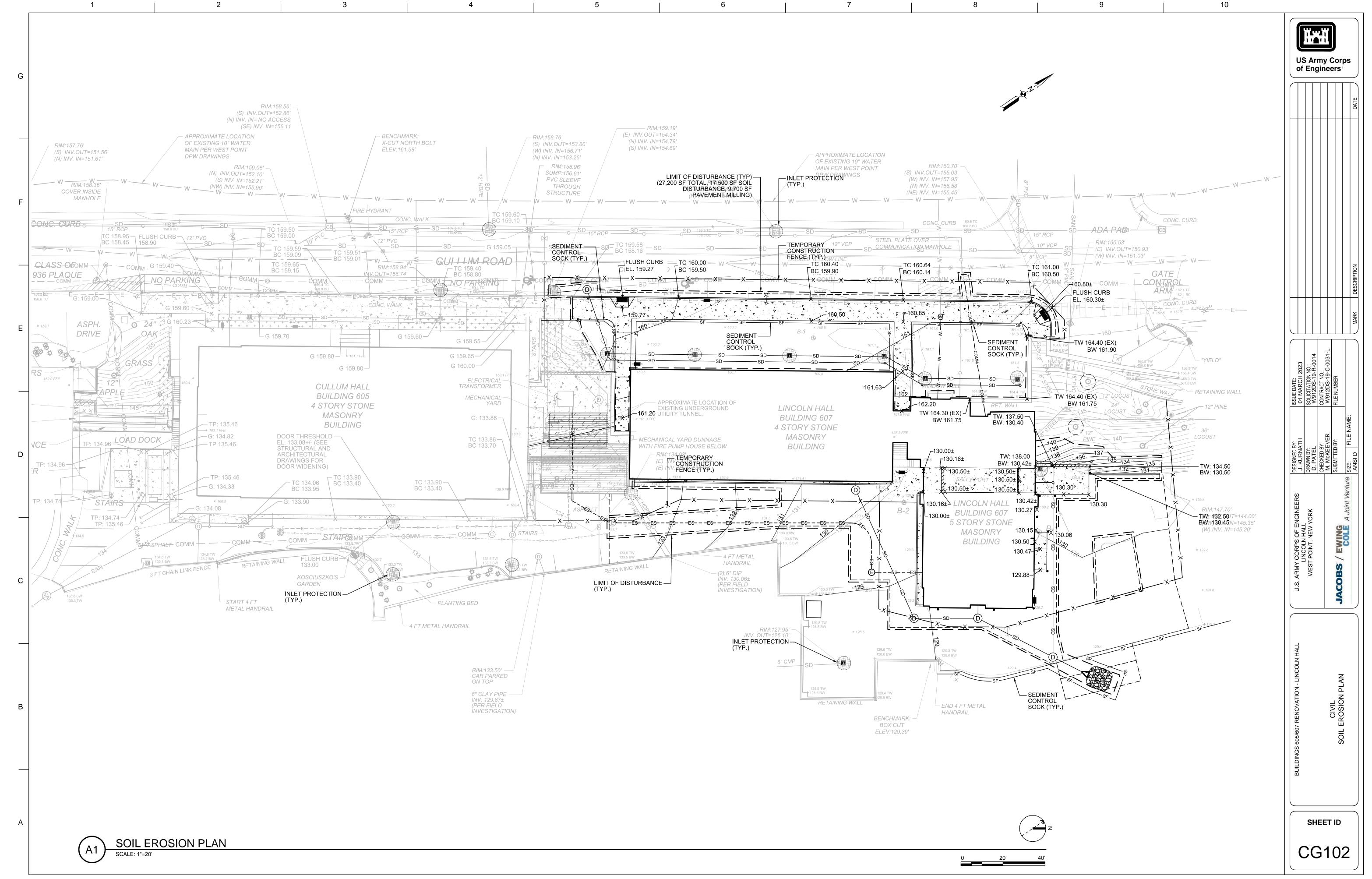


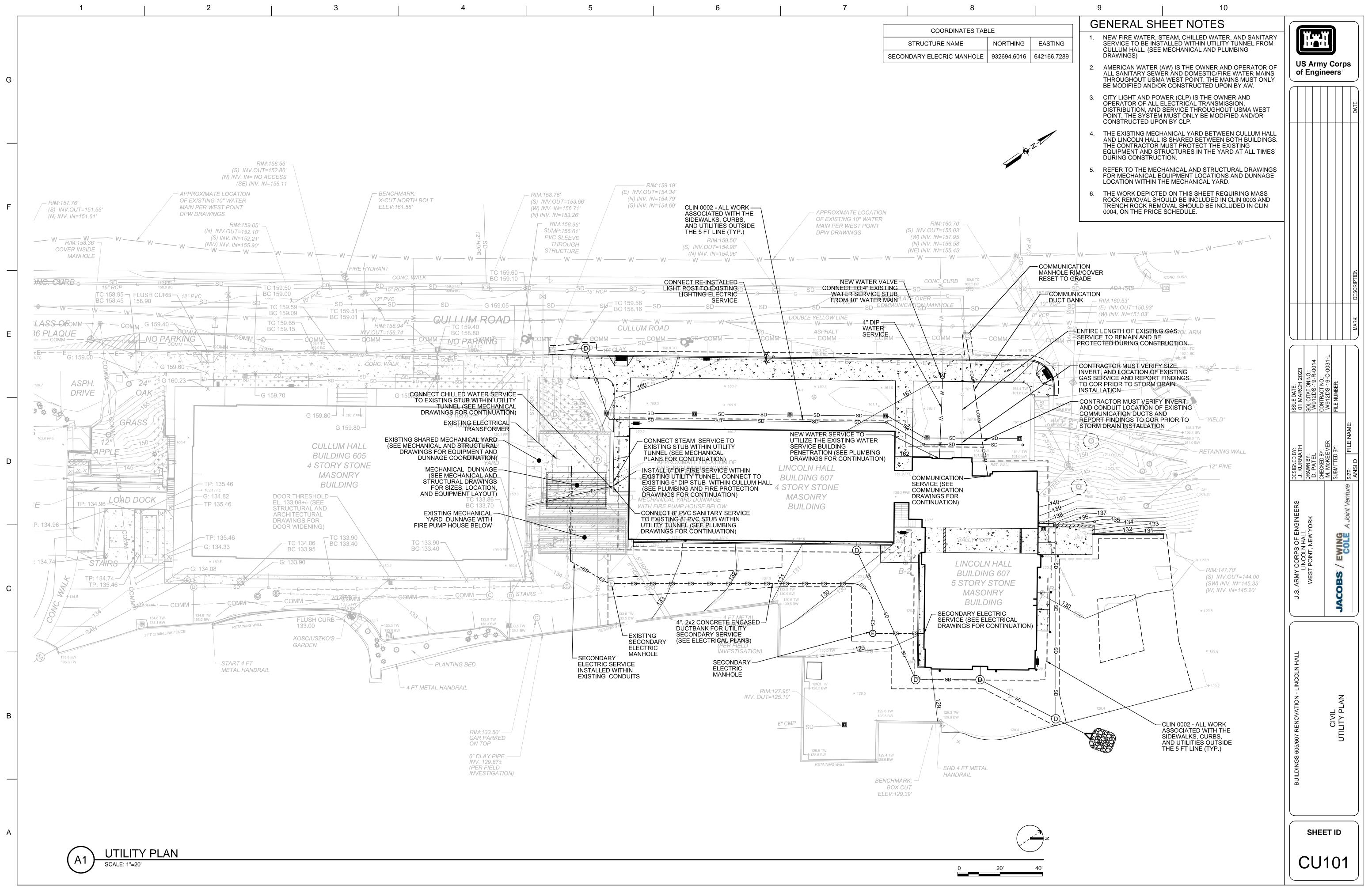


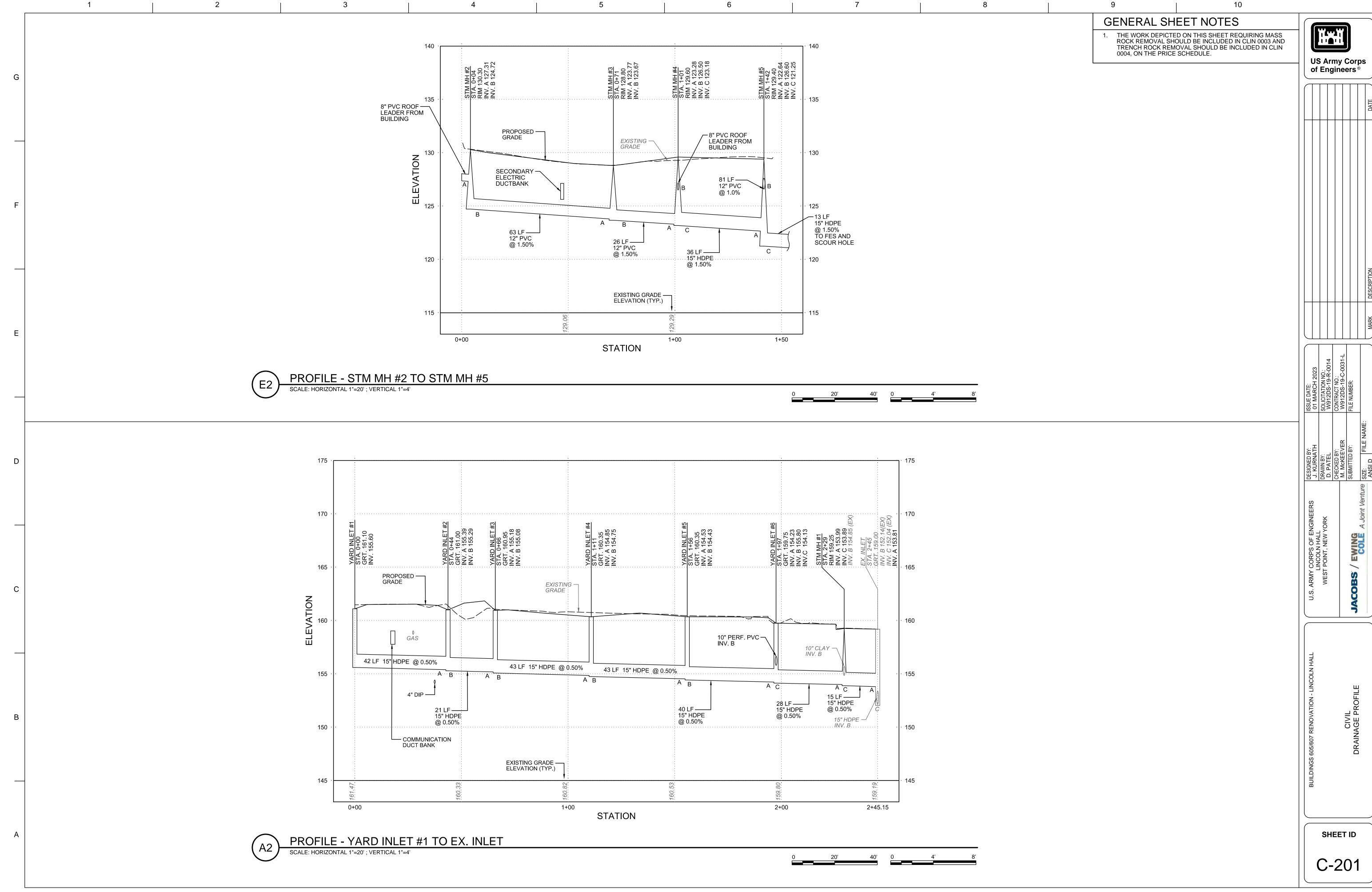


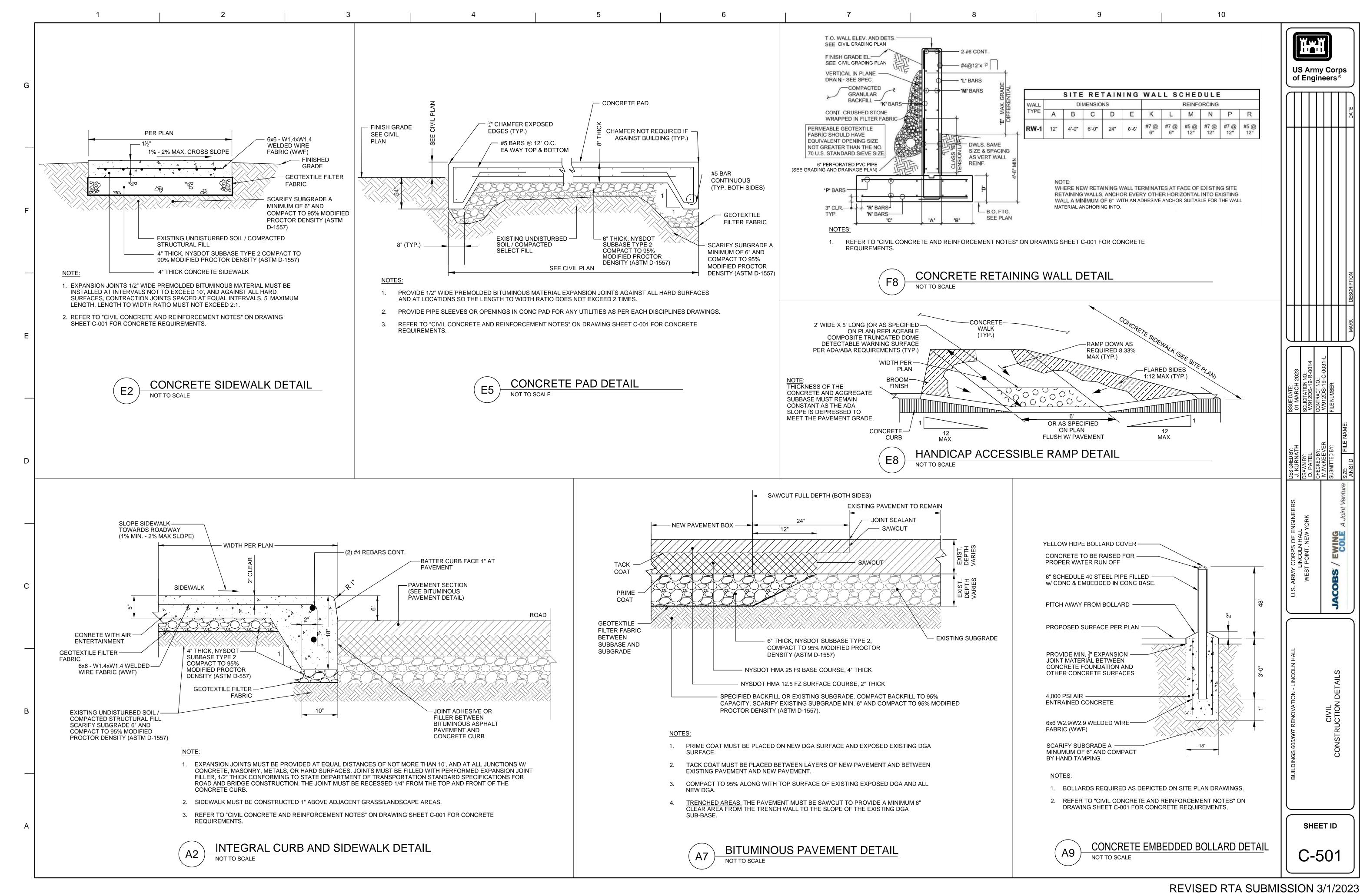


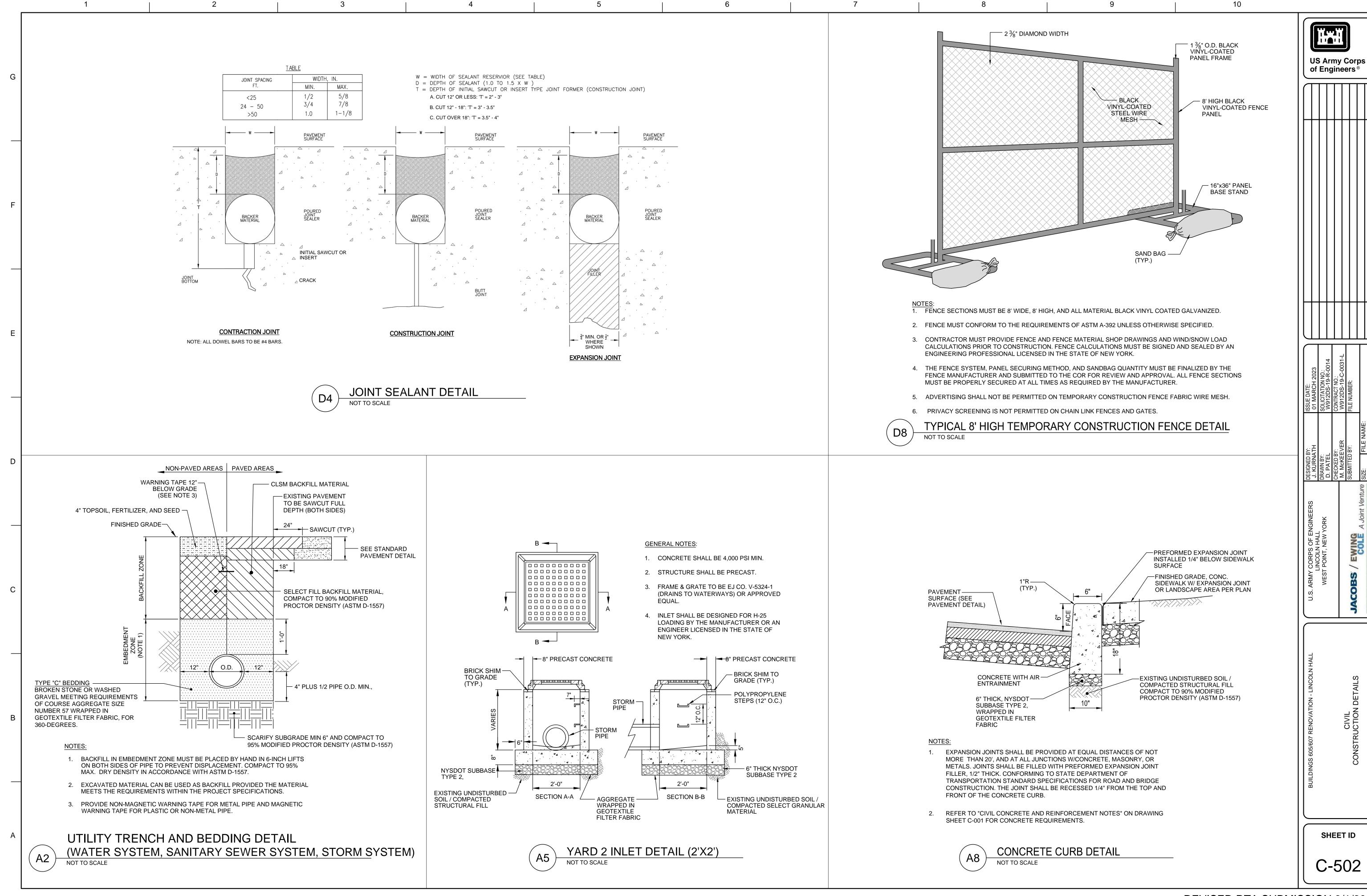


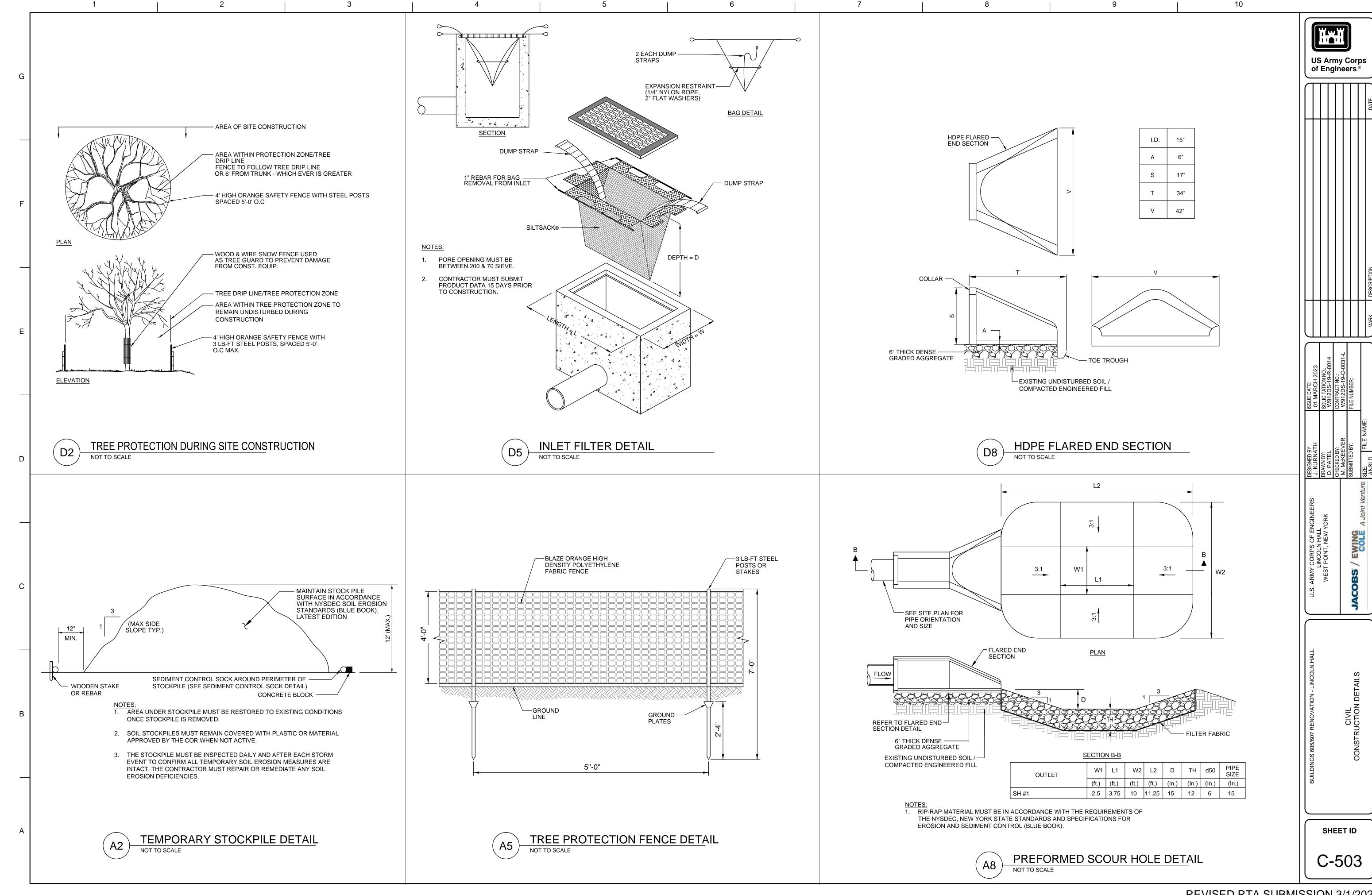


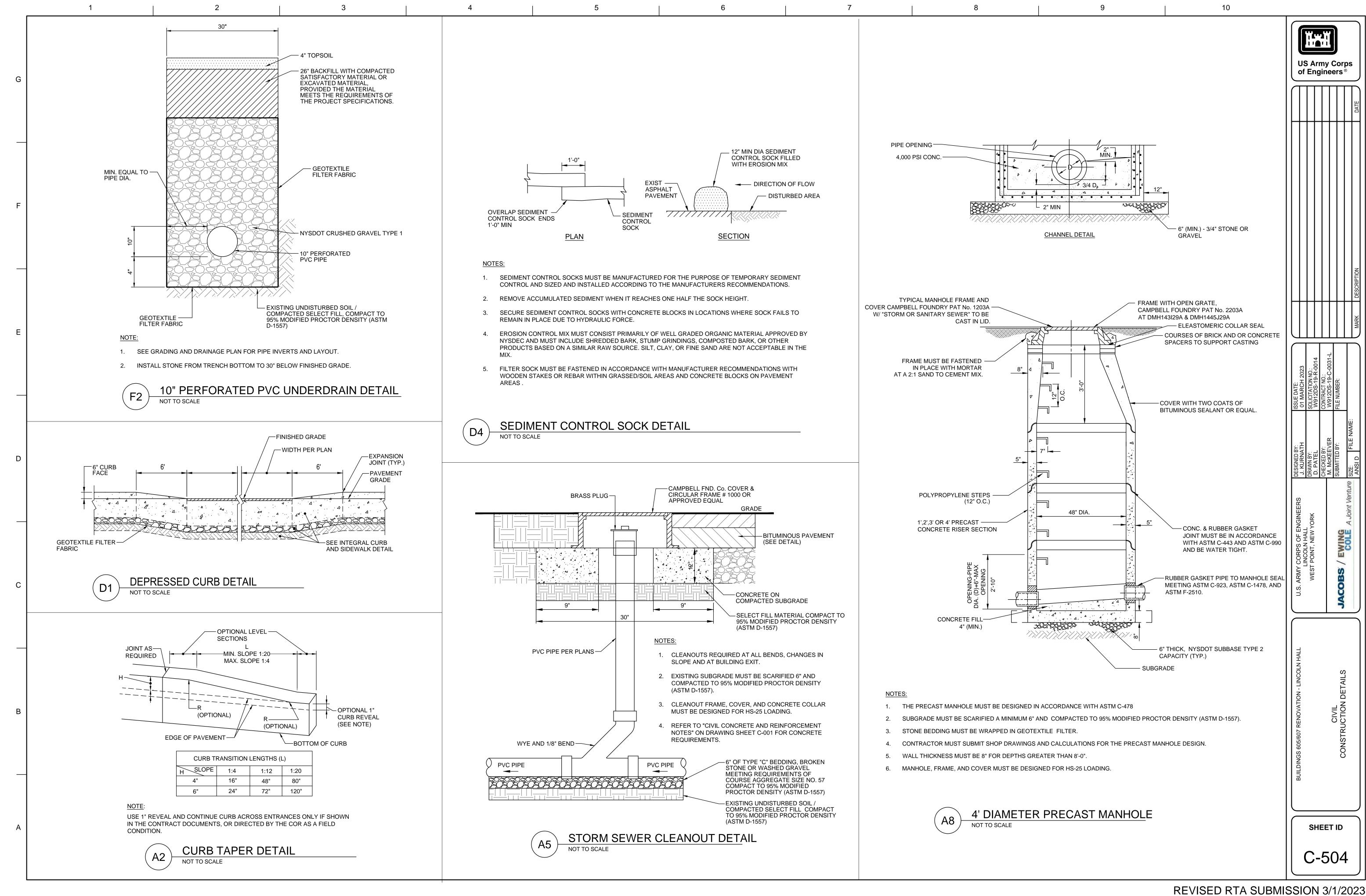


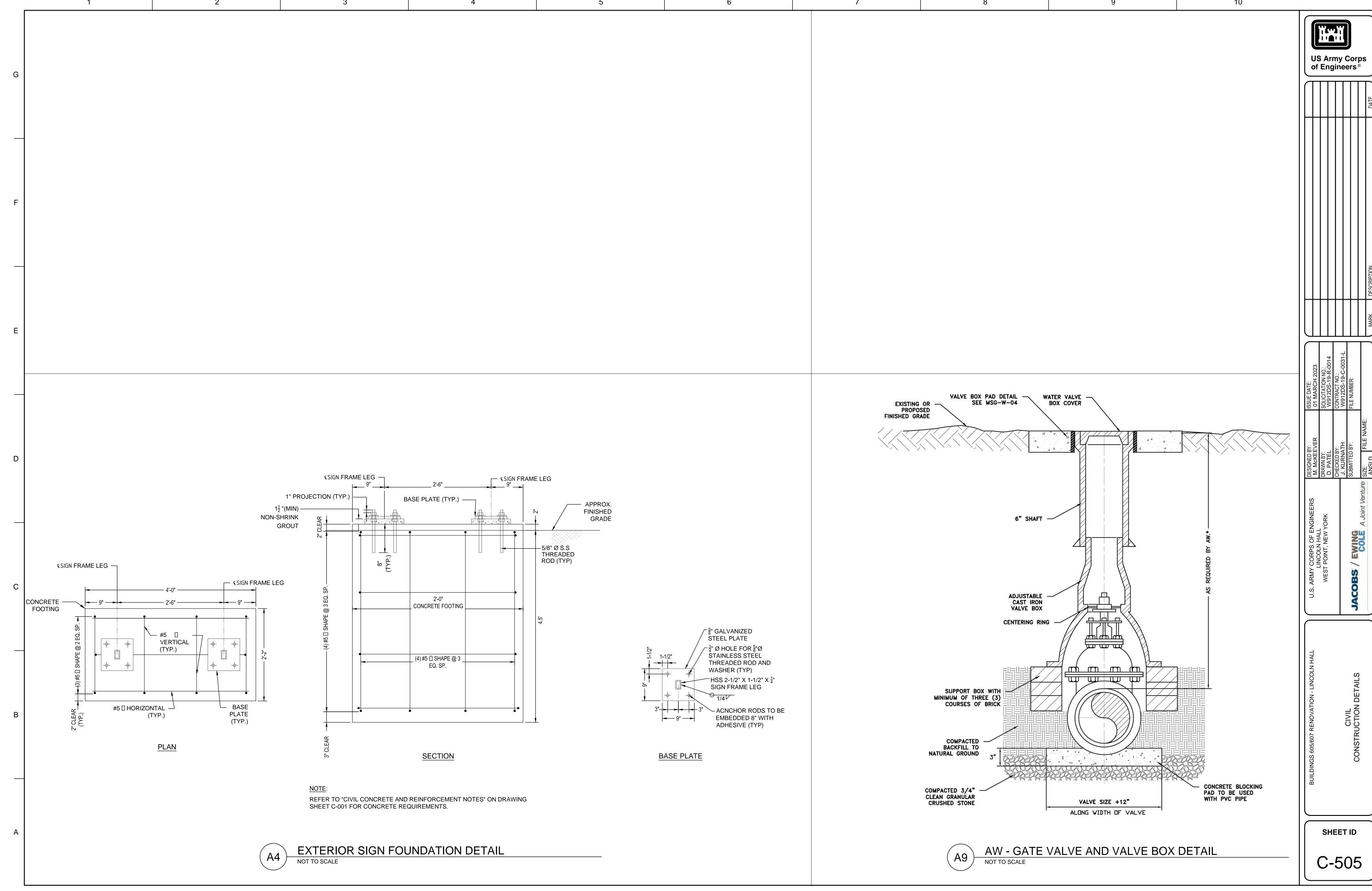


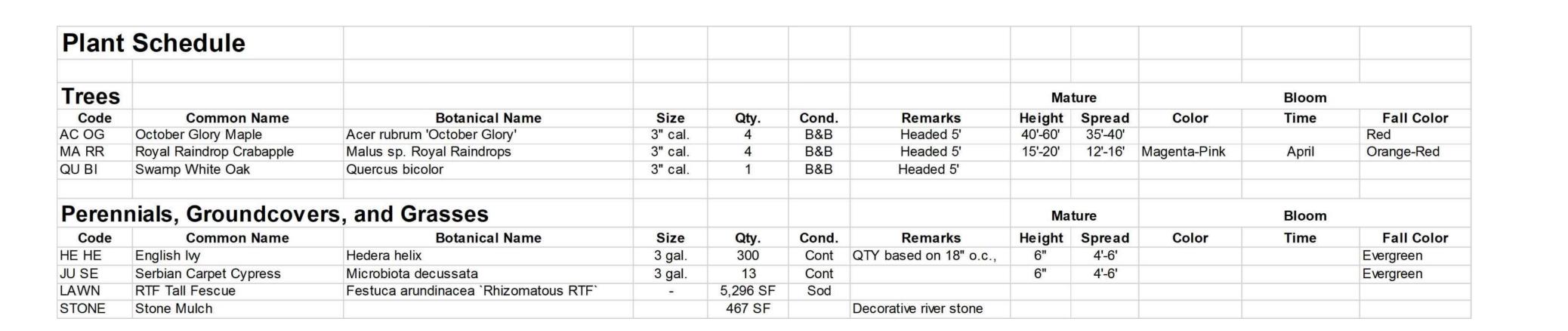


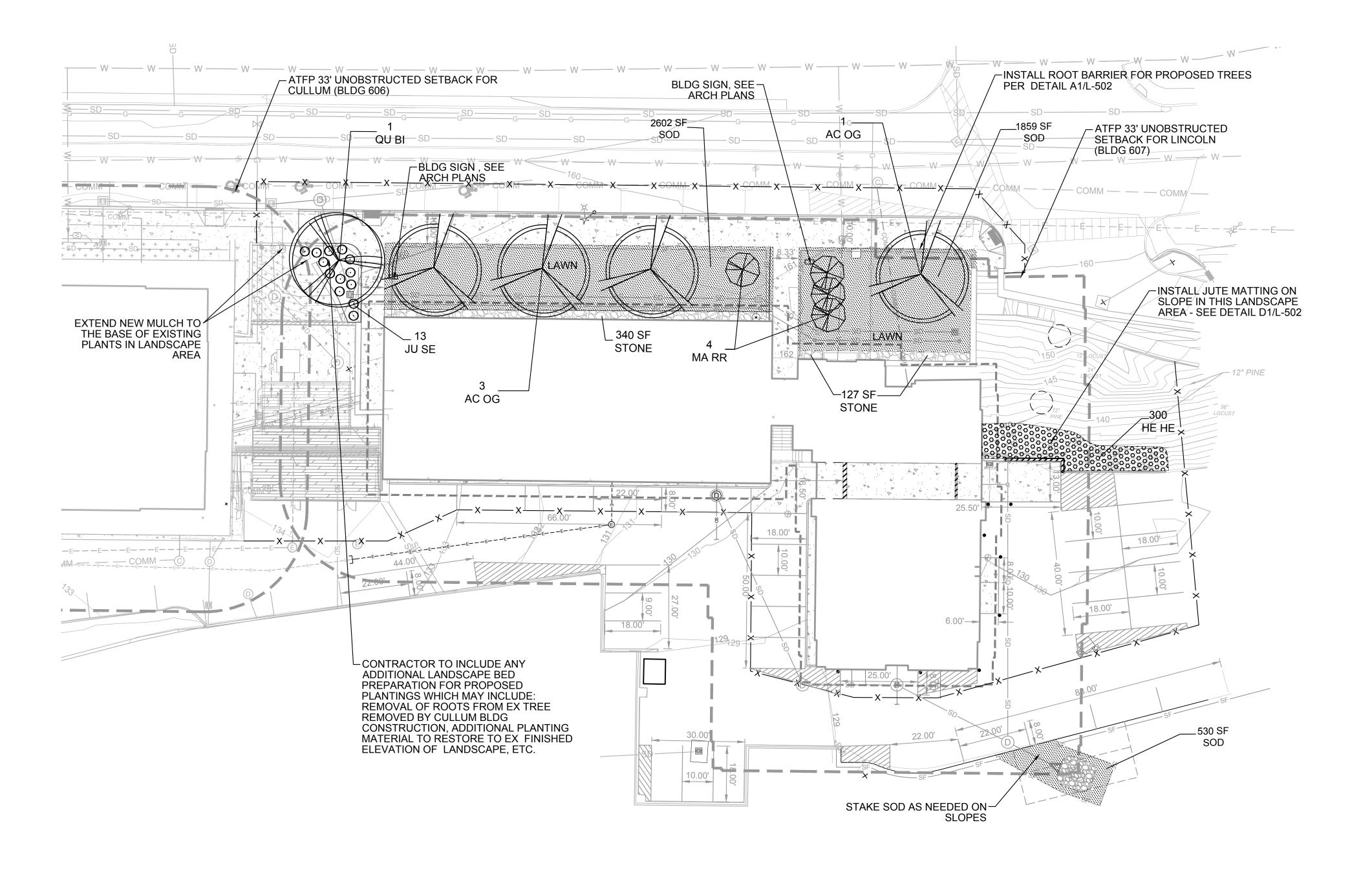


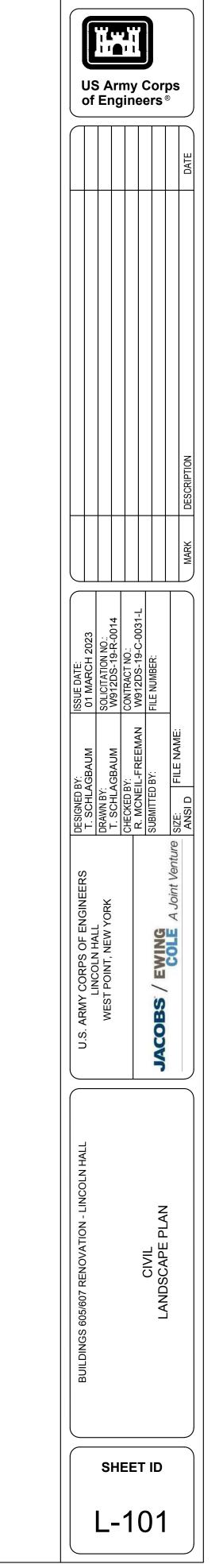




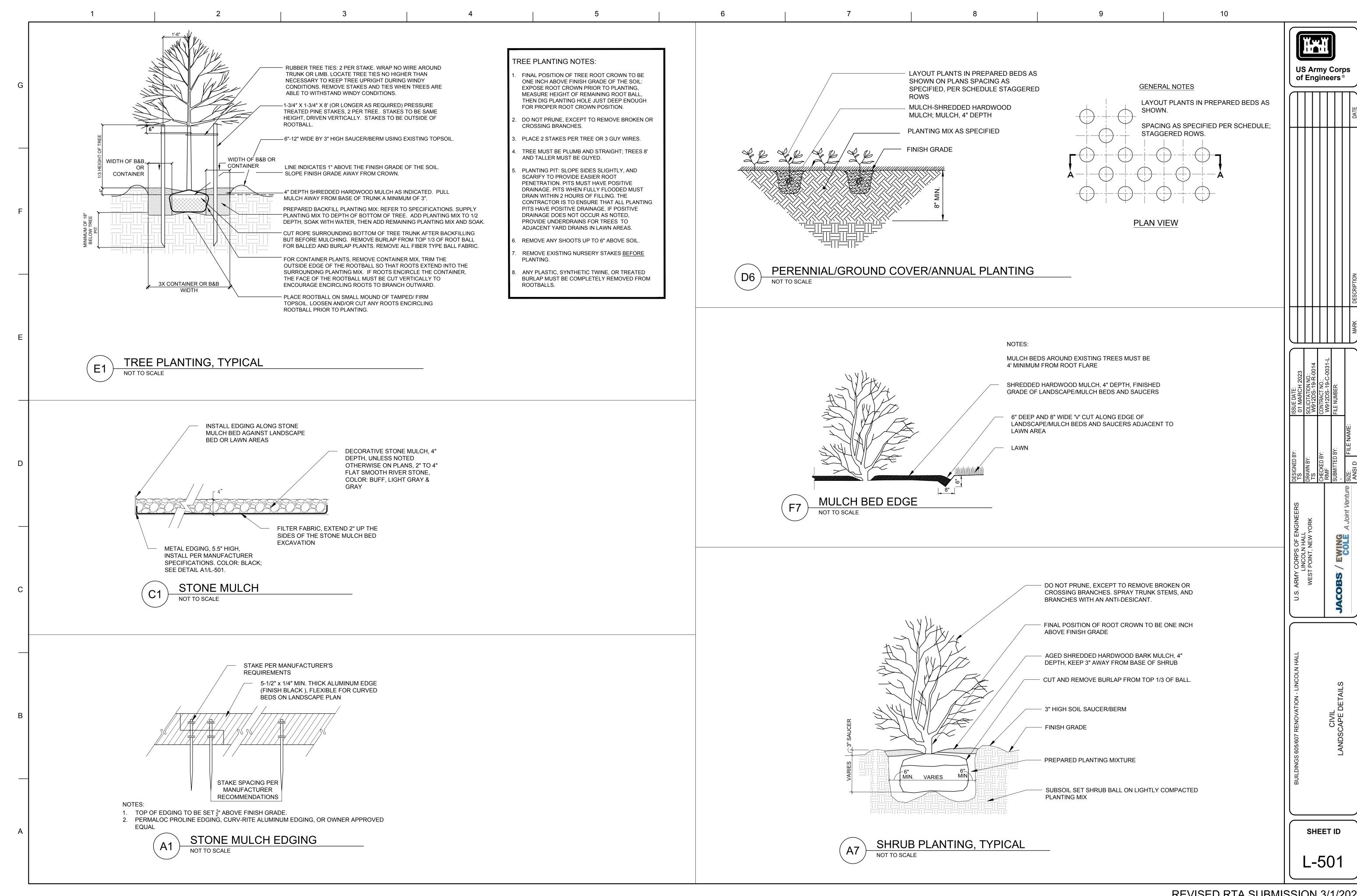








10



DESIGN CRITERIA

THE STRUCTURAL DESIGN CONFORMS TO THE FOLLOWING CODES/STANDARDS:

- 1. UFC 1-200-01 GENERAL BUILDING REQUIREMENTS (8 OCT 2019) 2. UFC 3-301-01 STRUCTURAL ENGINEERING (1 OCT 2019). WIND, SNOW AND SEISMIC LOAD PARAMETERS ARE FROM THE WEBSITE REFERENCED BY UFC 3-301-01 (https://www.wbdg.org/additionalresources/tools/ufcsldt)
- 3. ASCE/SEI 7–16 MINIMUM DESIGN LOADS AND CRITERIA FOR BUILDINGS AND OTHER STRUCTURES, AS MODIFIED BY THE UFC
- 4. 2018 INTERNATIONAL BUILDING CODE, AS MODIFIED BY THE UFC 5. 2018 INTERNATIONAL EXISTING BUILDING CODE, AS MODIFIED BY THE

DRAWING ORGANIZATION

1. ELEVATIONS NOTED ON THE STRUCTURAL DRAWINGS ARE RELATIVE TO TOP OF FIRST/GROUND FLOOR SLAB. SEE CIVIL FOR ACTUAL TOP OF FIRST/GROUND FLOOR ELEVATION (MEAN SEA LEVEL DATUM). 2. DETAILS LABELED "TYPICAL DETAILS" OR DETAILS ON "TYPICAL DETAILS" SHEETS APPLY TO SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS AND DIMENSIONS APPLY WHETHER OR NOT DETAILS ARE REFERENCED

AT EACH LOCATION. 3. SLOPING DECK PLANES ARE USUALLY DEFINED BY A WORK POINT ELEVATION AND A SLOPE. STEEL MEMBERS SUPPORTING A SLOPING DECK PLANE HAVE THEIR TOP OF STEEL COINCIDENT WITH THE BOTTOM OF DECK. EXCEPTIONS TO THIS ARE STEEL BEAMS THAT SUPPORT JOISTS THAT SUPPORT SLOPING DECK--IN THIS CASE, THE STEEL BEAMS ARE OFFSET DOWNWARD BY THE JOIST SEAT DEPTH.

CONSTRUCTION REQUIREMENTS

1. REVIEW AND VERIFY AS-BUILT CONDITIONS AND ACTUAL EQUIPMENT DIMENSIONS USING APPROVED MANUFACTURER/ VENDOR DRAWINGS PRIOR TO SUBMISSION OF SHOP DRAWINGS.

2. REVIEW AND VERIFY LOCATION OF CHASES, INSERTS, OPENINGS, SLEEVES, FINISHES, DEPRESSIONS, PADS, AND WALL OPENINGS. COORDINATE WITH OTHER DISCIPLINE SHEETS.

3. DO NOT SCALE DRAWINGS FOR THE PURPOSE OF ESTABLISHING

4. DO NOT STORE OR STACK CONSTRUCTION MATERIALS ON FLOORS/ROOFS IN EXCESS OF 80 PERCENT OF LIVE LOAD.

5. PROVIDE BRACING AND SHORING TO MAINTAIN THE STABILITY OF, AND TO AVOID OVER-LOADING THE STRUCTURE DURING CONSTRUCTION. THE STRUCTURE IS DESIGNED FOR THE COMPLETED CONDITION ONLY. PROVIDE TEMPORARY SUPPORT TO MAINTAIN STABILITY/AVOID OVER-LOADING BEFORE COMPLETION. THE CONTRACTOR FOR THIS WORK MUST EMPLOY A PROFESSIONAL STRUCTURAL ENGINEER, LICENSED IN THE STATE OF NEW YORK, TO DESIGN TEMPORARY SHORING, BRACING, GUYS, AND PROTECTION OF THE EXISTING STRUCTURE, UNDERPINNING AND SHEETING DURING INSTALLATION OF THE NEW WORK. THESE SHORING SYSTEMS MUST BE PART OF THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION. THE ENGINEER EMPLOYED BY THIS CONTRACTOR MUST DEVELOP THE SPECIFIC SEQUENCE OF INSTALLATION OF EACH COMPONENT INCLUDING STEEL LINTEL ELEMENTS. THE CONTRACTOR'S ENGINEER MUST BE PRESENT DURING INSTALLATION TO ENSURE THE OPERATION IS IN COMPLIANCE WITH HIS DESIGN INTENT.

6. CUT NO HOLES IN STRUCTURAL MEMBERS WITHOUT APPROVAL FROM THE COR.

DESIGN LOADS FLOOR LIVE LOAD

A. FLOOR LIVE LOAD: SEE LOAD PLANS

ROOF LIVE LOAD A. ROOF LIVE LOAD: 20 PSF

3. COLLATERAL LOAD

CEILING, LIGHTS, PIPING, DUCTS: 10 PSF B. EXISTING FLOOR SUBSTRATES AND FINISHES: 40 PSF

4. SNOW A. GROUND SNOW LOAD: 30 PSF

B. FLAT-ROOF SNOW LOAD: 17 PSF

MINIMUM SNOW LOAD: 20 PSF

D. SLOPED ROOF SNOW LOAD: 13.1 PSF E. SNOW LOAD IMPORTANCE FACTOR: 1.0

F. THERMAL FACTOR: 1.0

A. ULTIMATE DESIGN WIND SPEED: 113 MPH

RISK CATEGORY: II WIND EXPOSURE: D

D. INTERNAL PRESSURE COEFFICIENT: +/-0.18

EARTHQUAKE A. RISK CATEGORY: II

SEISMIC IMPORTANCE FACTOR: 1.0

C. S_S: 0.261g S₁: 0.059g D. SITE CLASS: C

E. Sps: 0.208q Sp1: 0.067q

SEISMIC DESIGN CATEGORY: B G. AS IS ALLOWABLE BY APPLICABLE CODES, THE SEISMIC FORCE-RESISTING SYSTEM WAS NOT EVALUATED DUE TO SEISMIC

LOADS NOT INCREASING BY MORE THAN 10%. H. DESIGN BASE SHEAR: NOT APPLICABLE

SEISMIC RESPONSE COEFFICIENT. Cs: NOT APPLICABLE RESPONSE MODIFICATION COEFFICIENT, R: NOT APPLICABLE K. ANALYSIS PROCEDURE USED: NOT APPLICABLE

7. FROST PENETRATION: 54 INCHES **GEOTECHNICAL**

1. FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY TERRACON, ENTITLED "GEOTECHNICAL ENGINEERING REPORT -CULLUM AND LINCOLN HALL", DATED 14 JAN 2020. THE REPORT RECOMMENDS:

A. 3000 PSF ALLOWABLE BEARING CAPACITY FOR FOOTINGS BEARING ON FILL. 2. BELOW SLABS-ON-GRADE PROVIDE: TEMPORARY AND PERMANENT

SUBDRAINAGE. 3. CONCRETE-SOIL COEFFICIENT OF FRICTION: 0.35

1. CONCRETE DESIGN CONFORMS TO ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, AS MODIFIED BY THE

2. REINFORCING BARS: ASTM A615, GRADE 60, DEFORMED. 3. MINIMUM 28-DAY COMPRESSIVE STRENGTHS:

A. FOOTINGS: 4000 PSI B. FOUNDATION WALLS: 5000 PSI

C. SLABS-ON-GRADE: 3500 PSI

D. ELEVATED SLABS: 4000 PSI TOPPING SLAB: 5000 PSI

SMALLER, 1 INCH.

F. CONCRETE FILLED METAL DECK: 3000 PSI LIGHTWEIGHT 4. COVER FOR CONCRETE REINFORCEMENT:

A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3

B. EXPOSED TO EARTH OR WEATHER WHERE FORMS ARE USED: #6

AND LARGER, 2 INCHES; #5 AND SMALLER 1-1/2 INCHES. C. NOT EXPOSED TO EARTH OR WEATHER: 1. SLABS AND WALLS: #14 AND LARGER, 1-1/2 INCHES; #11 AND

2. BEAMS, GIRDERS AND COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS AND SPIRALS: 1-1/2 INCHES. 5. UNLESS NOTED OTHERWISE, PROVIDE WWR 6x6-W4.5xW4.5 WITH 3/4" TOP COVER IN CONCRETE FILLED METAL DECKS. WWR MUST

CONFORM WITH ASTM A1064. 6. WELDED WIRE REINFORCEMENT SHALL BE ASTM A 185 (65 KSI YIELD STRESS) 6x6-W1.4xW1.4 WITH 3/4" TOP COVER.

1. MASONRY DESIGN CONFORMS TO TMS 402-2016 BUILDING CODE FOR MASONRY STRUCTURES, AS MODIFIED BY THE UFC.

MASONRY NET AREA COMPRESSIVE STRENGTH AT 28-DAYS: 1500 PSI. REINFORCING BARS: ASTM A615, GRADE 60, DEFORMED.

4. GROUT: PROVIDE GROUT CONFORMING TO ASTM C476, FINE. PROVIDE MINIMUM GROUT STRENGTH OF 2000 PSI AT 28 DAYS, AS TESTED IN ACCORDANCE ASTM C1019.

5. MORTAR: PROVIDE TYPE N OR S MORTAR FOR NON-LOAD-BEARING, NON-SHEAR-WALL INTERIOR MASONRY. PROVIDE TYPE N UNLESS SPECIFIED OTHERWISE.

6. UNLESS NOTED OTHERWISE, MASONRY BOND BEAMS MUST BE 8" DEEP WITH 1#5.

7. MASONRY WALL OPENINGS: PROVIDE MINIMUM OF 0.2IN^2 VERTICAL REINFORCEMENT AT CORNERS WITH A MAXIMUM SPACING OF 16 IN UNLESS REINFORCEMENT IS INTERRUPTED. HORIZONTAL REINFORCEMENT IS REQUIRED AT THE TOP AND BOTTOM OF WALL OPENINGS AND SHALL EXTEND AT LEAST 24 IN BUT NOT LESS THAN 40 BAR DIAMETERS PAST THE OPENING. VERTICAL AND HORIZONTAL REINFORCEMENT NEED NOT BE REQUIRED FOR OPENINGS SMALLER THAN 16 IN.

1. STRUCTURAL STEEL DESIGN CONFORMS TO AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AS MODIFIED BY THE UFC.

2. STRUCTURAL STEEL MATERIALS: A. W-SHAPES: ASTM A992, GRADE 50

B. CHANNELS: ASTM A 36

C. PLATE AND BAR: ASTM A572, GRADE 50

D. COLD-FORMED HOLLOW STRUCTURAL SECTIONS: ASTM A500

E. STEEL PIPE: ASTM A53, TYPE E OR S, GRADE B F. WELDING ELECTRODES: COMPLY WITH AWS REQUIREMENTS. PROVIDE FILLER METAL WITH A MINIMUM TENSILE STRENGTH OF

3. BOLTS, CONNECTORS AND ANCHORS: A. HIGH-STRENGTH BOLTS: ASTM A325, TYPE 1, HEAVY-HEX

STRUCTURAL STEEL BOLTS B. NUTS: ASTM A563, GRADE C, HEAVY-HEX CARBON STEEL NUTS C. WASHERS: ASTM F436, TYPE 1, HARDENED CARBON-STEEL

WASHERS; ALL WITH PLAIN FINISH D. THREADED RODS: ASTM A36

E. TENSION-CONTROL, HIGH-STRENGTH BOLT-NUT-WASHER ASSEMBLIES: ASTM F1852, TYPE 1, CONSISTING OF STEEL STRUCTURAL BOLTS WITH SPLINED ENDS, HEAVY-HEX CARBON-STEEL NUTS, AND HARDENED CARBON-STEEL WASHERS.

F. FOR THE BOLTED CONNECTIONS DESIGNED AND DETAILED ON THESE DRAWINGS, BOLTS ARE A325N, SNUG TIGHTENED, UNLESS NOTED OTHERWISE.

4. DESIGN ALL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS. UNLESS REACTIONS ARE INDICATED ON THE DRAWINGS. PROVIDE SHEAR CONNECTIONS WITH A FACTORED CAPACITY OF AT LEAST 30 KIPS. IN ADDITION TO THE REQUIREMENTS ABOVE, USE AT LEAST THE MINIMUM NUMBER OF BOLTS PER CONNECTION SHOWN IN THE FOLLOWING TABLE:

NOMINAL BEAM DEPTH MINIMUM BOLT ROWS 8, 10, 12 14, 16, 18 21, 24 27, 30

FIREPROOFING

 THE EXITING STEEL BEAMS ON PLAN SHOULD BE ENTIRELY FIREPROOFED. IF UPON INSPECTION FIREPROOFING IS DAMAGED. REPAIR WITH SIMILAR FIREPROOFING MATERIAL. IF FIREPROOFING IS NON-EXISTENT, PROVIDE CEMENTITIOUS FIREPROOFING.

2. THE ATTIC SPACE OF THE SOUTH WING CONSISTS OF ROOF TRUSSES. THESE ROOF TRUSSES SHOULD BE FIREPROOFED. IF THEY ARE NOT FIREPROOFED PROVIDE CEMENTITIOUS FIREPROOFING. IF UPON INSPECTION FIREPROOFING IS DAMAGED.

REPAIR WITH SIMILAR FIREPROOFING MATERIAL. 3. THE SOUTH WING ROOF TRUSS AREA THAT IS ABOVE THE TV STUDIO IN THE SOUTH WING IS TO BE FIREPROOFED WITH CEMENTITIOUS FIREPROOFING, IF CEMENTITIOUS FIREPROOFING EXISTS, INSPECT AND REPAIR AS NEEDED. IF ANY OTHER TYPE OF FIREPROOFING EXISTS, REMOVE AND REPLACE WITH CEMENTITIOUS FIREPROOFING. REFER TO ARCH FOR THE SOUTH WING TV STUDIO AREA.

4. REFER TO ARCH FOR AREAS OF INTUMESCENT FIREPROOFING

STEEL JOIST FRAMING

1. SJI 100–15 44TH EDITION STANDARD SPECIFICATION LOAD TABLES AND WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS K-SERIES, LH- SERIES, DLH-SERIES, JOIST GIRDERS, AS MODIFIED BY

2. PROVIDE JOIST BRIDGING PER SJI REQUIREMENTS.

STEEL DECKING

1. NONCOMPOSITE DECK DESIGN CONFORMS WITH SDI NC-2017 STANDARD FOR NONCOMPOSITE STEEL FLOOR DECK, AS MODIFIED BY THE UFC

2. ROOF DECK DESIGN CONFORMS WITH SDI RD-2017 STANDARD FOR STEEL ROOF DECK, AS MODIFIED BY THE UFC

3. COMPOSITE DECK DESIGN CONFORMS WITH SDI-C-2017 STANDARD FOR COMPOSITE STEEL FLOOR DECK SLABS, AS MODIFIED BY THE

COLD-FORMED METAL FRAMING

1. COLD-FORMED METAL FRAMING DESIGN MUST CONFORM TO AISI S100-16 NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AS MODIFIED BY THE

POST-INSTALLED ANCHORS

MATERIALS:

A. CARBON STEEL WEDGE ANCHOR STUDS: ASTM A 510 OR ASTM A

B. NUT & WASHER: COMPATIBLE WITH STUD MATERIAL & FINISH.

C. CARBON STEEL THREADED ROD: ISO 898 CLASS 5.8. D. CONCRETE REINFORCING DOWELS: ASTM A 615, GRADE 60 E. MESH SCREEN TUBE: CYLINDRICAL SHAPE WITH ONE END

CLOSED MANUFACTURED FROM ZINC PLATED LOW CARBON

LENGTH AS SPECIFIED BY ADHESIVE MANUFACTURER. 2. MECHANICAL ANCHORS AND THREADED INSERTS MUST BE CARBON STEEL WITH ZINC PLATING IN ACCORDANCE WITH ASTM B 633, TYPE III

STEEL OR STAINLESS STEEL. MESH SIZE, DIAMETER, AND

Fe/Zn 5 (SC1), UNLESS NOTED OTHERWISE. 3. POST-INSTALLED ANCHORS MANUFACTURED BY HILTI, INC. ARE SPECIFIED AS A BASIS OF DESIGN AND TO ESTABLISH THE DESIRED QUALITY AND PERFORMANCE OF THE WORK. OTHER APPROVED MANUFACTURERS ARE: A. SIMPSON STRONG TIE.

B. POWERS FASTENERS.

4. ANCHORING TO CONCRETE: TYPE AND SIZE AS INDICATED.

A. MECHANICAL ANCHORS:

a. MECHANICAL ANCHORS USED IN CONCRETE MUST HAVE BEEN TESTED AND PREQUALIFIED FOR PERFORMANCE IN CRACKED AND UNCRACKED CONCRETE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193, INCLUDING SEISMIC SHEAR AND TENSION.

b. EXPANSION ANCHORS: WEDGE TYPE, TORQUE CONTROLLED ANCHORS.

B. ADHESIVE ANCHORS:

a. ANCHORS CONSISTING OF AN INSERT AND CARTRIDGE TYPE TWO COMPONENT, EPOXY OR HYBRID ADHESIVE DISPENSED AND MIXED THROUGH A STATIC MIXING NOZZLE PROVIDED BY THE ADHESIVE MANUFACTURER.

b. ADHESIVE MUST HAVE BEEN TESTED AND PREQUALIFIED FOR PERFORMANCE IN CRACKED AND UNCRACKED CONCRETE IN ACCORDANCE WITH ICC-ES AC308, INCLUDING SEISMIC SHEAR & TENSION, HORIZONTAL AND OVERHEAD INSTALLATIONS, AND LONG TERM CREEP.

5. ANCHORING TO GROUTED FILLED CONCRETE MASONRY: TYPE AND

SIZE AS INDICATED. A. EXPANSION ANCHORS MUST BE WEDGE TYPE, TORQUE CONTROLLED ANCHORS AND SHALL HAVE BEEN TESTED AND PREQUALIFIED IN ACCORDANCE WITH ICC-ES AC01, INCLUDING

SEISMIC SHEAR AND TENSION. B. SCREW ANCHORS USED IN GROUT FILLED CONCRETE MASONRY MUST HAVE BEEN TESTED AND PREQUALIFIED IN ACCORDANCE WITH ICC-ES AC106, INCLUDING SEISMIC SHEAR AND TENSION.

a. ANCHORS CONSISTING OF AN INSERT AND CARTRIDGE TYPE TWO COMPONENT, EPOXY OR HYBRID ADHESIVE DISPENSED AND MIXED THROUGH A STATIC MIXING NOZZLE PROVIDED BY THE ADHESIVE MANUFACTURER.

b. ADHESIVE MUST HAVE BEEN TESTED AND PREQUALIFIED IN ACCORDANCE WITH ICC-ES AC58, INCLUDING SEISMIC SHEAR AND TENSION, FREEZE-THAW CONDITIONS, CRITICAL AND MINIMUM EDGE DISTANCE AND SPACING, AND LONG TERM

6. ANCHORING TO HOLLOW CONCRETE MASONRY: TYPE AND SIZE AS INDICATED.

A. ADHESIVE ANCHORS: a. ANCHORS CONSISTING OF AN INSERT AND CARTRIDGE TYPE, TWO COMPONENT, EPOXY OR HYBRID ADHESIVE DISPENSED AND MIXED THROUGH A STATIC MIXING NOZZLE PROVIDED BY THE ADHESIVE MANUFACTURER.

b. PROVIDE A MESH SCREEN TUBE WHEN ANCHORING TO HOLLOW CONCRETE MASONRY.

c. ADHESIVE MUST HAVE BEEN TESTED AND PREQUALIFIED IN ACCORDANCE WITH ICC-ES AC58, INCLUDING FREEZE-THAW CONDITIONS, CRITICAL AND MINIMUM EDGE DISTANCE AND SPACING, AND LONG TERM CREEP. 7. IDENTIFY POSITION OF REINFORCING STEEL AND OTHER EMBEDDED

DRILLING TO AVOID DAMAGING EXISTING REINFORCING OR EMBEDDED ITEMS. STOP DRILLING AND NOTIFY THE COR IF REINFORCING STEEL OR OTHER EMBEDDED ITEMS ARE ENCOUNTERED DURING DRILLING. 8. INSTALL ANCHORS IN DRY HOLES IN ACCORDANCE WITH

ITEMS PRIOR TO DRILLING HOLES FOR ANCHORS. EXERCISE CARE IN

MANUFACTURER'S PRINTED INSTRUCTIONS. EMBED ANCHORS INTO THE SUBSTRATE AS INDICATED IN THE POST-INSTALLED ANCHOR SCHEDULE UON.

DEFERRED SUBMITTALS 1. STRUCTURAL STEEL CONNECTIONS

STRUCTURAL TESTS AND INSPECTIONS

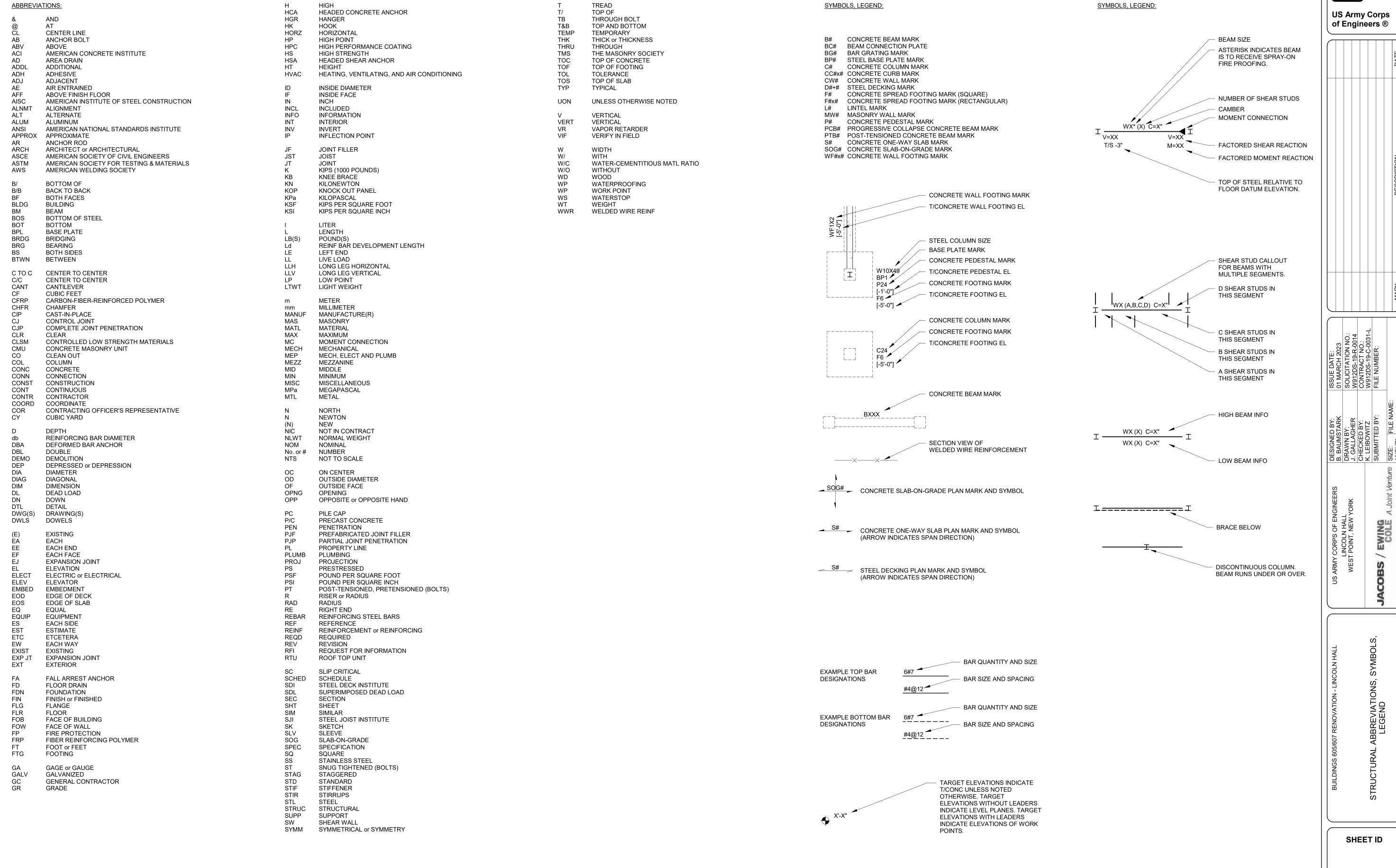
1. STRUCTURAL TESTS AND INSPECTIONS SHALL COMPLY WITH THE REQUIREMENTS OF UFC 3-301-01, IBC 2018, CHAPTER 17, AND PROJECT SPECIFICATIONS.

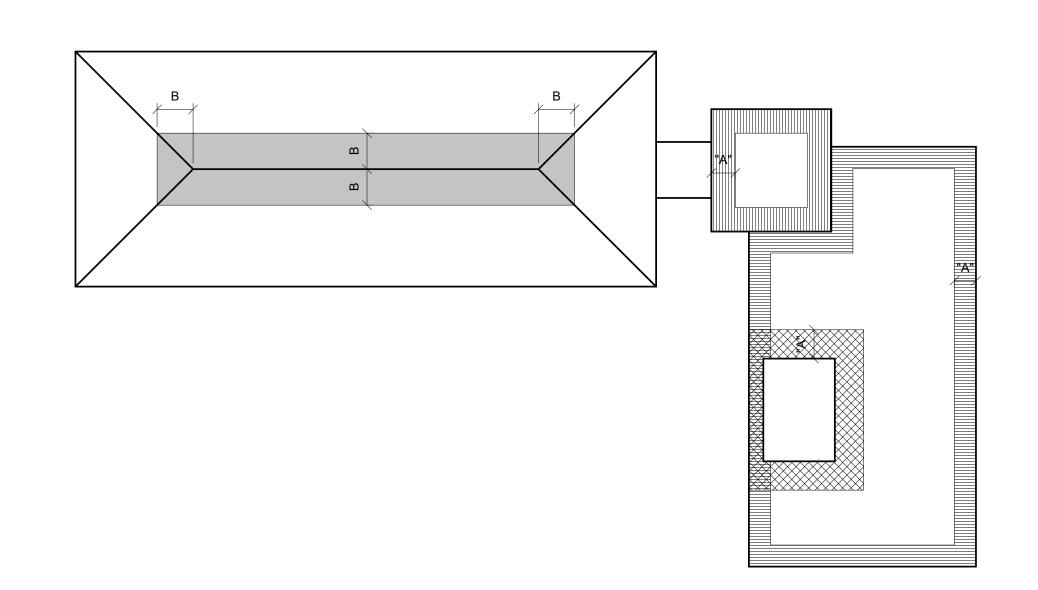
US Army Corps of Engineers ®

교육교교

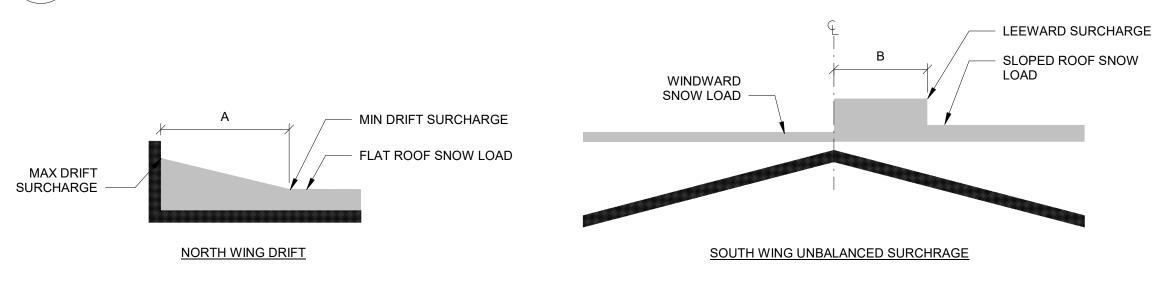
S-00[°]

SHEET ID







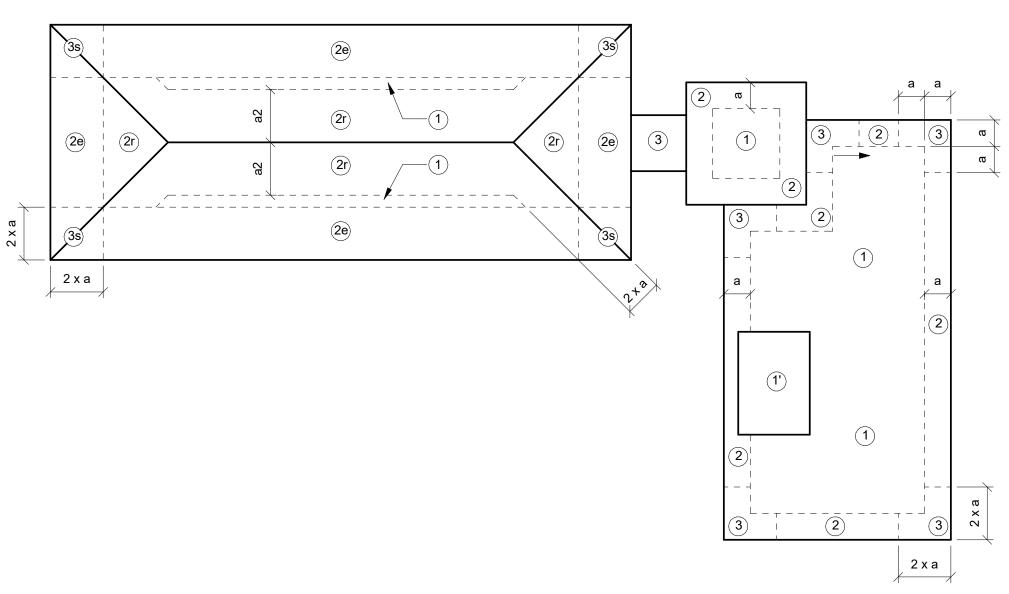


	BUILDING SNOW DRIFT	SURCHARGE LOAD	S (PSF) - NORTH WING			
		SNOW DRIFT SURCHARGE				
LOAD TYPE	HATCH	MAX	MIN	А		
DRIFT A		26.9	0	6' - 0"		
DRIFT B		10.1	0	4' - 6"		
DRIFT C		21.7	0	5' - 0"		

BUILDING UNBALANCED SNOW LOADS (PSF) - SOUTH WING									
LOAD TYPE	HATCH	LEEWARD SURCHARGE	WINDWARD LOAD	В					
UNBALANCED		17.0	3.9	7' - 6"					

SNOW DRIFT NOTES:

- 1. SURCHARGE LOADS LISTED IN THE ABOVE TABLE ARE TO BE ADDED TO THE FLAT ROOF SNOW LOAD. REFER TO DESIGN LOADS FOR ADDITIONAL SNOW LOAD CRITERIA.
- 2. THE MINIMUM SNOW LOAD IS A SEPARATE UNIFORM LOAD CASE AND IT NEED NOT BE USED IN DETERMINING OR IN COMBINATION WITH DRIFT, SLIDING, UNBALANCED, OR PARTIAL LOADS.
- 3. THE MAX SNOW DRIFT LOAD INDICATED IS THE PEAK VALUE ADJACENT TO THE VERTICAL FACE OF THE WALL. IF THE DRIFT WIDTH EXCEEDS THE WIDTH OF THE LOWER ROOF, THE DRIFT SHALL TAPER LINEARLY TO ZERO AT THE FAR END OF THE LOWER ROOF.
- 4. IN AREAS WITH MULTIPLE SNOW SURCHARGE LOADS, USE THE LARGER SNOW LOAD.



C3 COMPONENTS AND CLADDING WIND PRESSURE ZONES

		EFFECTIVE WIND AREA (SF)							
ZONE	ZONE	10	20	50	100	>=200			
	1	N/A / -59.4	N/A / -55.6	N/A / -51.8	N/A / -48.1	N/A / -44.3			
	1'	N/A / -59.4	N/A / -55.6	N/A / -51.8	N/A / -48.1	N/A / -44.3			
ROOF	2	N/A / -93.3	N/A / -89.4	N/A / -81.9	N/A / -76.6	N/A / -72.9			
	3	N/A / -127	N/A / -121.7	N/A / -113.8	N/A / -107.4	N/A / -100.7			
\A/A11.C	4	+41.3 / -40.6	+41.3 / -40.6	+37.5 / -38.7	+39.4 / -36.8	+32.5 / -35.7			
WALLS	5	+41.3 / -74.4	+41.3 / -74.4	+37.5 / -64.6	+39.4 / -59.4	+32.5 / -53.3			
	2, CASE A	+41.3 / -93.3	+41.3 / -89.4	+37.5 / -81.9	+39.4 / -76.6	+32.5 / -72.9			
	3, CASE A	+41.3 / -127	+41.3 / -121.7	+37.5 / -113.8	+39.4 / -107.4	+32.5 / -100.7			
PARAPET	2, CASE B	+41.3 / -40.6	+41.3 / -40.6	+37.5 / -38.7	+39.4 / -36.8	+32.5 / -35.7			
	3, CASE B	+41.3 / -74.4	+41.3 / -74.4	+37.5 / -64.6	+39.4 / -59.4	+32.5 / -53.3			

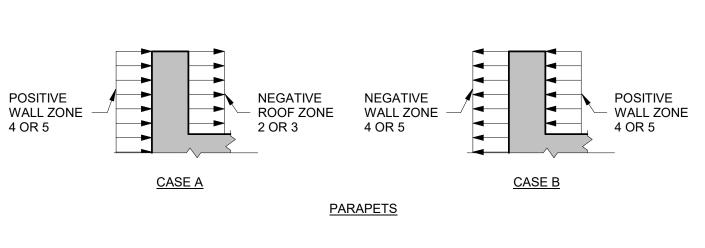
		EFFECTIVE WIND AREA (SF)						
ZONE	ZONE	10	20	50	100	>=200		
	1s	+32.3 / -72.6	+28.6 / -72.6	+21.3 / -54.2	17.6 / -43.2	17.6 / -43.2		
LUD DOOF	2r	+32.3 / -94.6	+28.6 / -83.6	+21.3 / -72.6	17.6 / -63.4	17.6 / -54.2		
HIP ROOF	2e	+32.3 / -101.9	+28.6 / -90.9	+21.3 / -78.4	17.6 / -68.2	17.6 / -57.9		
	3s	+32.3 / -101.9	+28.6 / -90.9	+21.3 / -78.4	17.6 / -68.2	17.6 / -57.9		
WALLS	4	+39.6 / -39.6	+39.6 / -39.6	+35.9 / -37.7	+37.7 / -35.9	+31.2 / -34.8		
WALLS	5	+39.6 / -72.6	+39.6 / -72.6	+35.9 / -63	+37.7 / -57.9	+31.2 / -52.0		
OVERHANIOO	2e	N/A / -120.2	N/A / -114.7	N/A / -105.5	N/A / -101.9	N/A / -94.6		
OVERHANGS	3s	N/A / -142.2	N/A / -127.5	N/A / -105.5	N/A / -90.9	N/A / -76.2		

TYPICAL NORTH WING TOWER BUILDING CORNER 2 2 2 3 4 5 - 6 - TIPARAPET AROOF LEVEL AROOF

EDGE DISTANCE

COMPONENTS AND CLADDING WIND PRESSURE NOTES

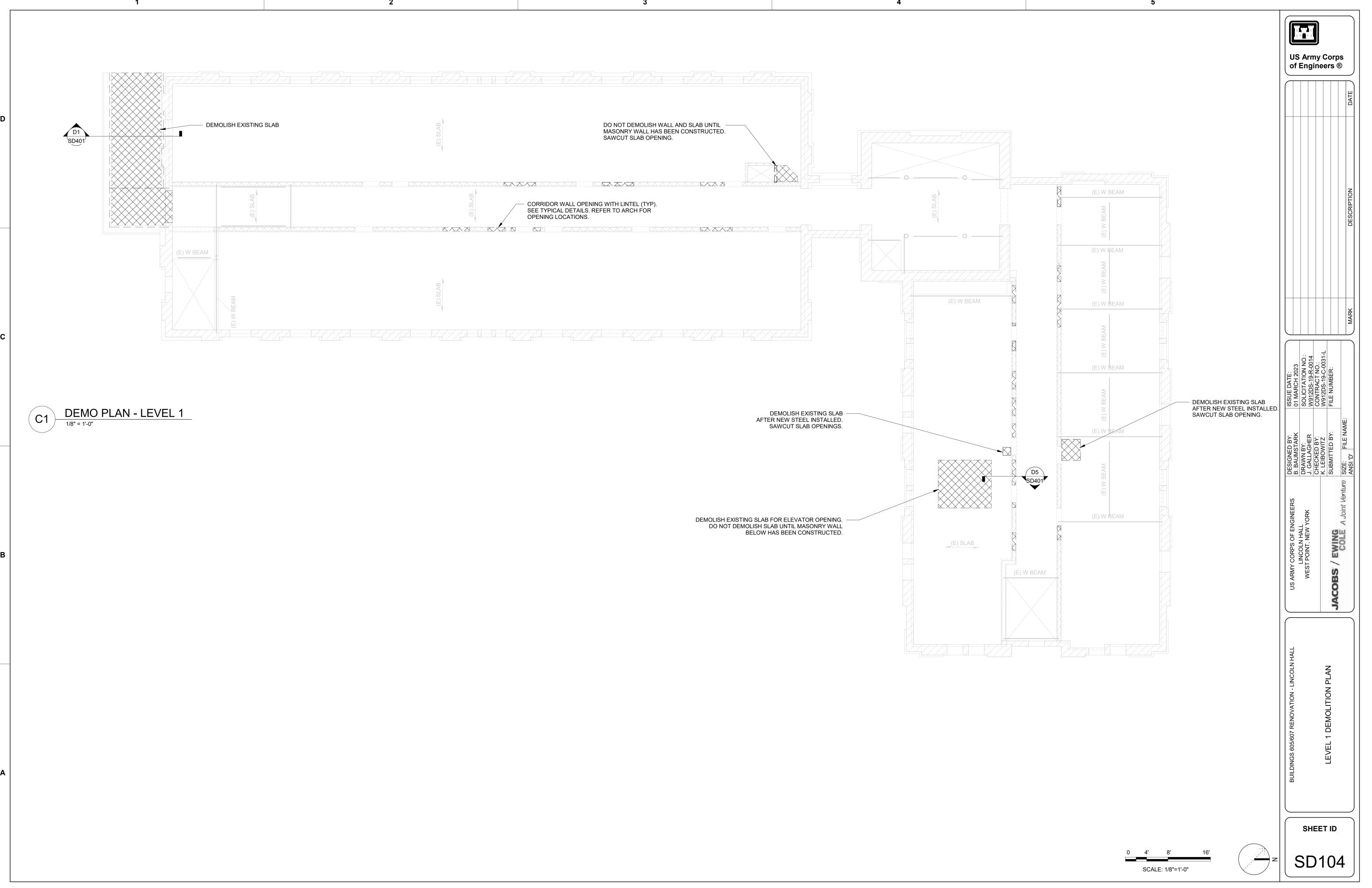
- 1. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHAL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.
- 2. WIND PRESSURES ARE THE GROSS WIND PRESSURE FOR COMPONENTS AND CLADDING (SUM OF THE INTERNAL AND EXTERNAL PRESSURES) APPLIED NORMAL TO THE CLADDING SURFACE. THE MAGNITUDES DO NOT INCLUDE COMPONENT SELF WEIGHTS.
- 3. WIND PRESSURE MAGNITUDES ARE FACTORED/ULTIMATE LRFD VALUES.
- 4. POSITIVE VALUES INDICATE PRESSURE TOWARDS THE SURFACE AND NEGATIVE VALUES INDICATE PRESSURE AWAY FROM THE SURFACE.
- 5. POSITIVE PARAPET VALUES INDICATE PRESSURE ON THE WINDWARD FACE OF THE PARAPET, NEGATIVE PARAPET VALUES INDICATE PRESSURE ON THE LEEWARD FACE OF THE PARAPET. THE TOTAL LOAD ON THE PARAPET SHALL BE CALCULATED BY ADDING THE TWO VALUES.

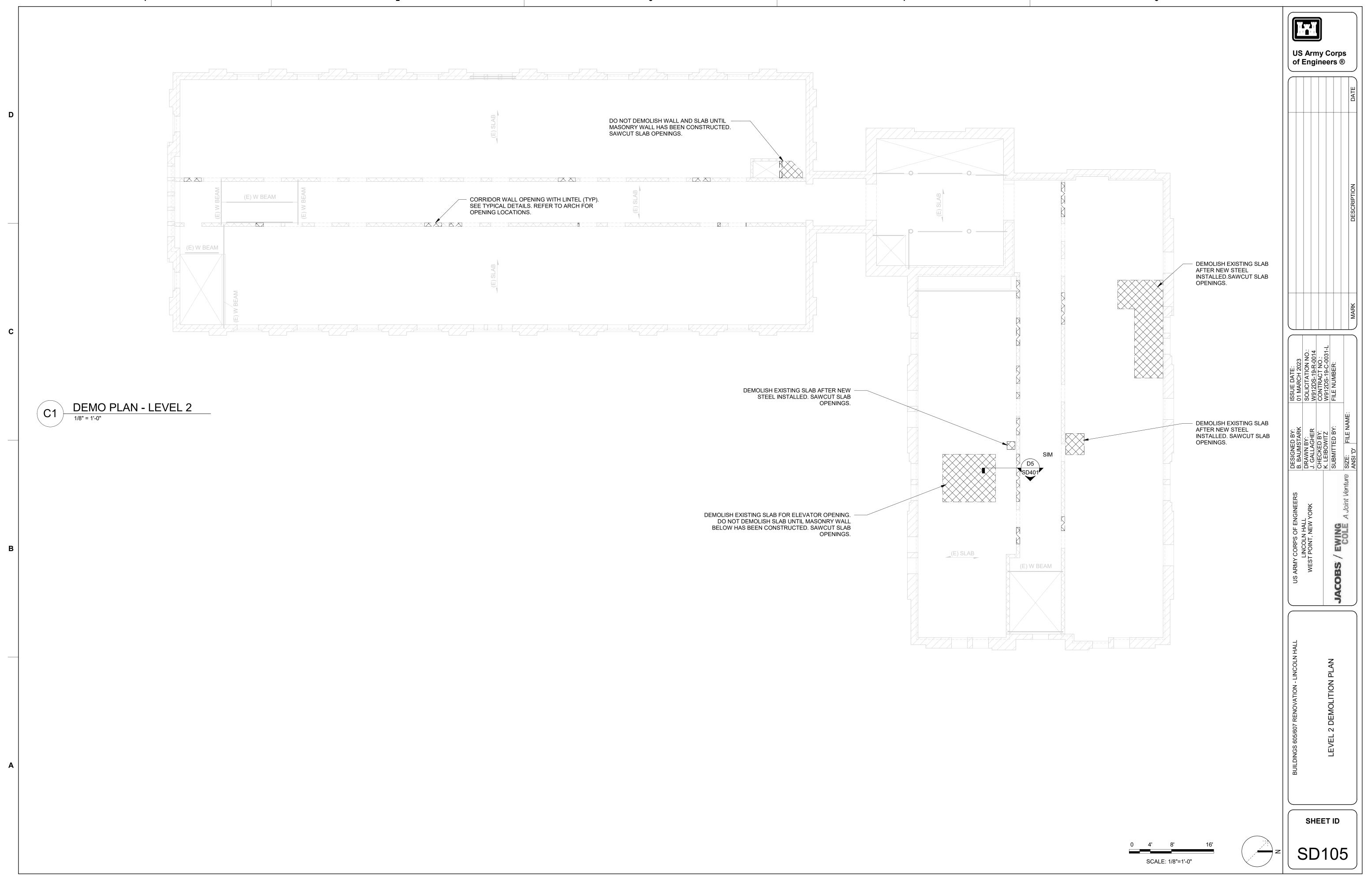


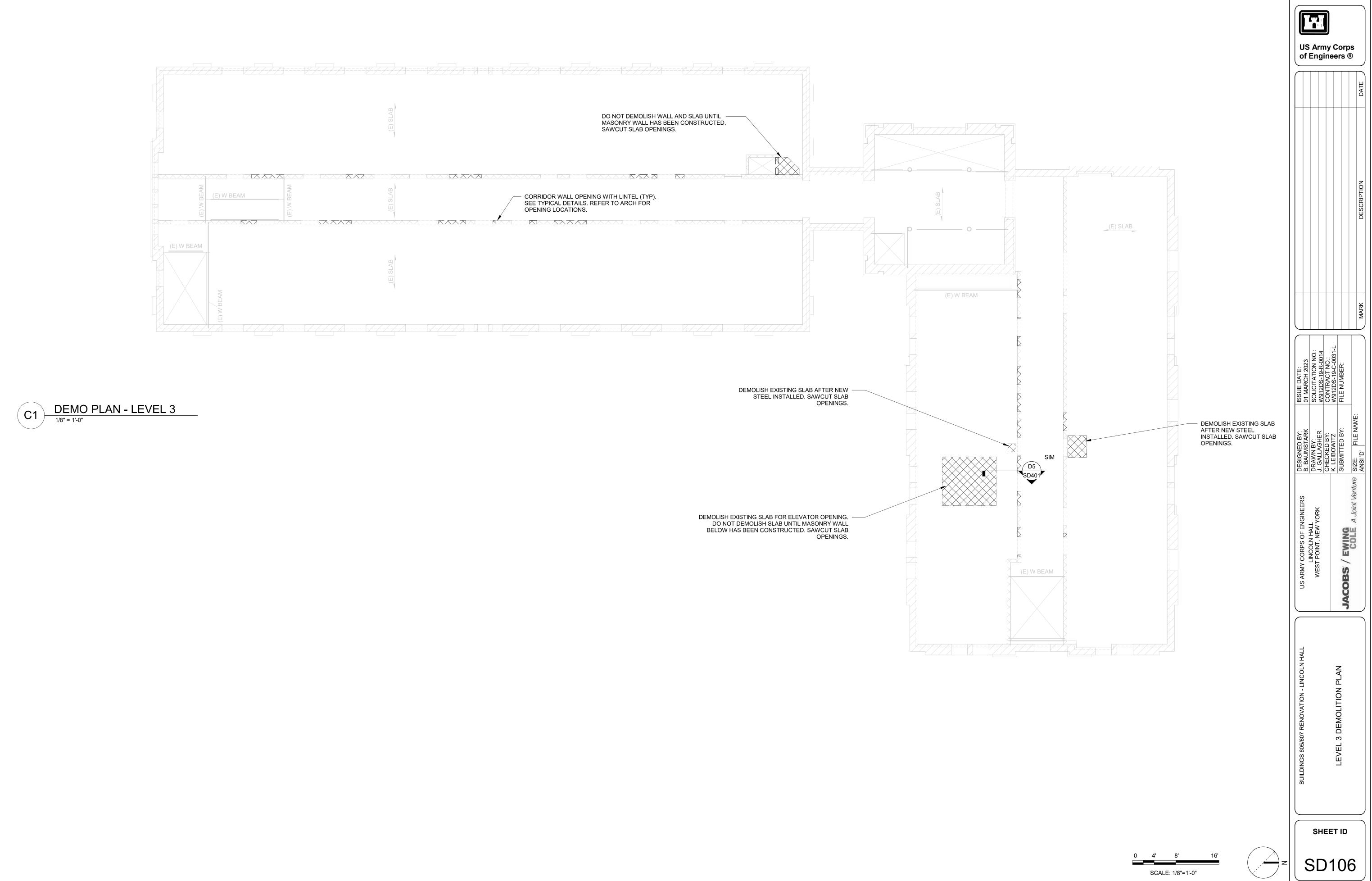
POSITIVE WALL ZONE 4 OR 5

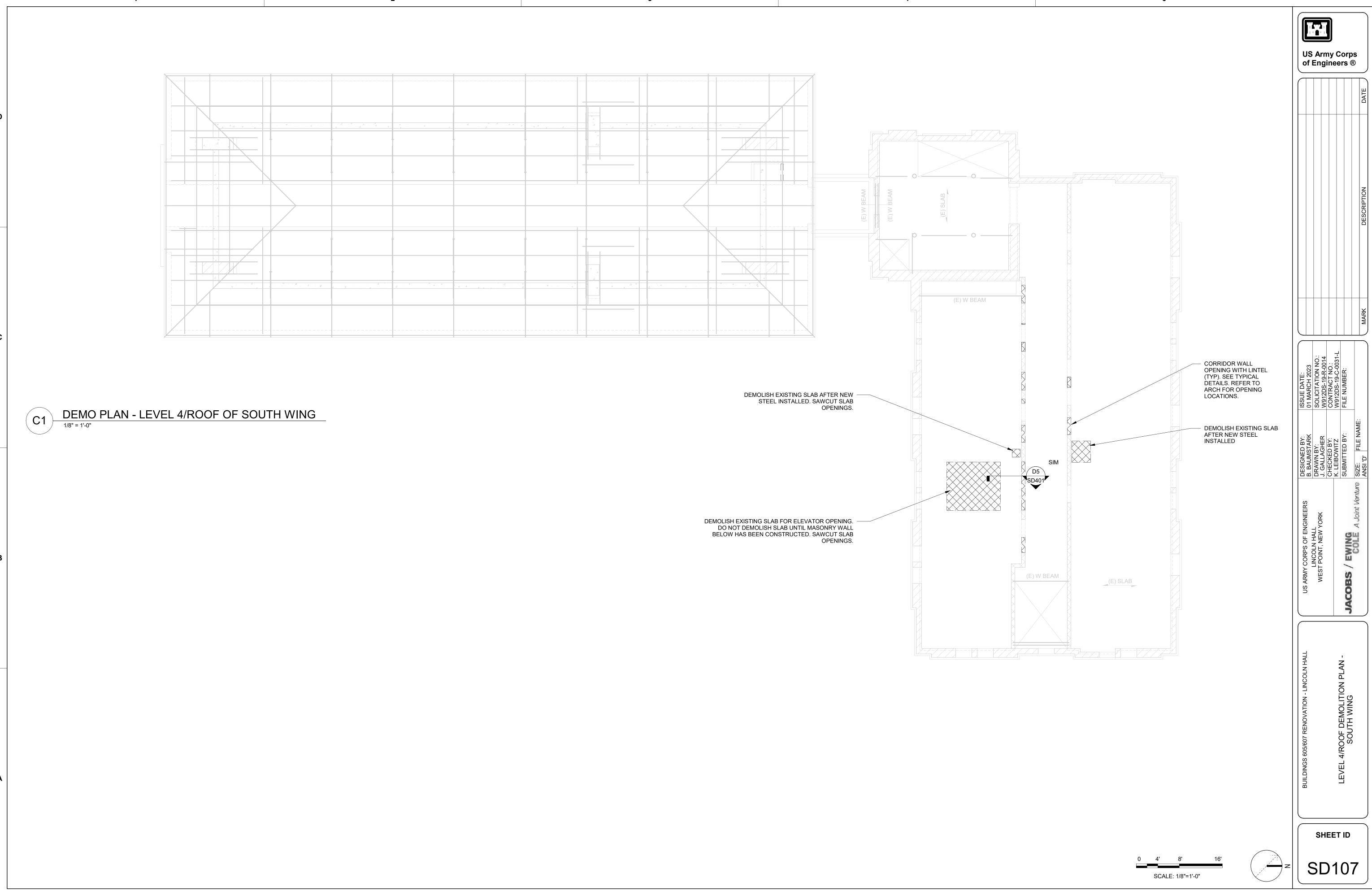
SHEET ID

S-011

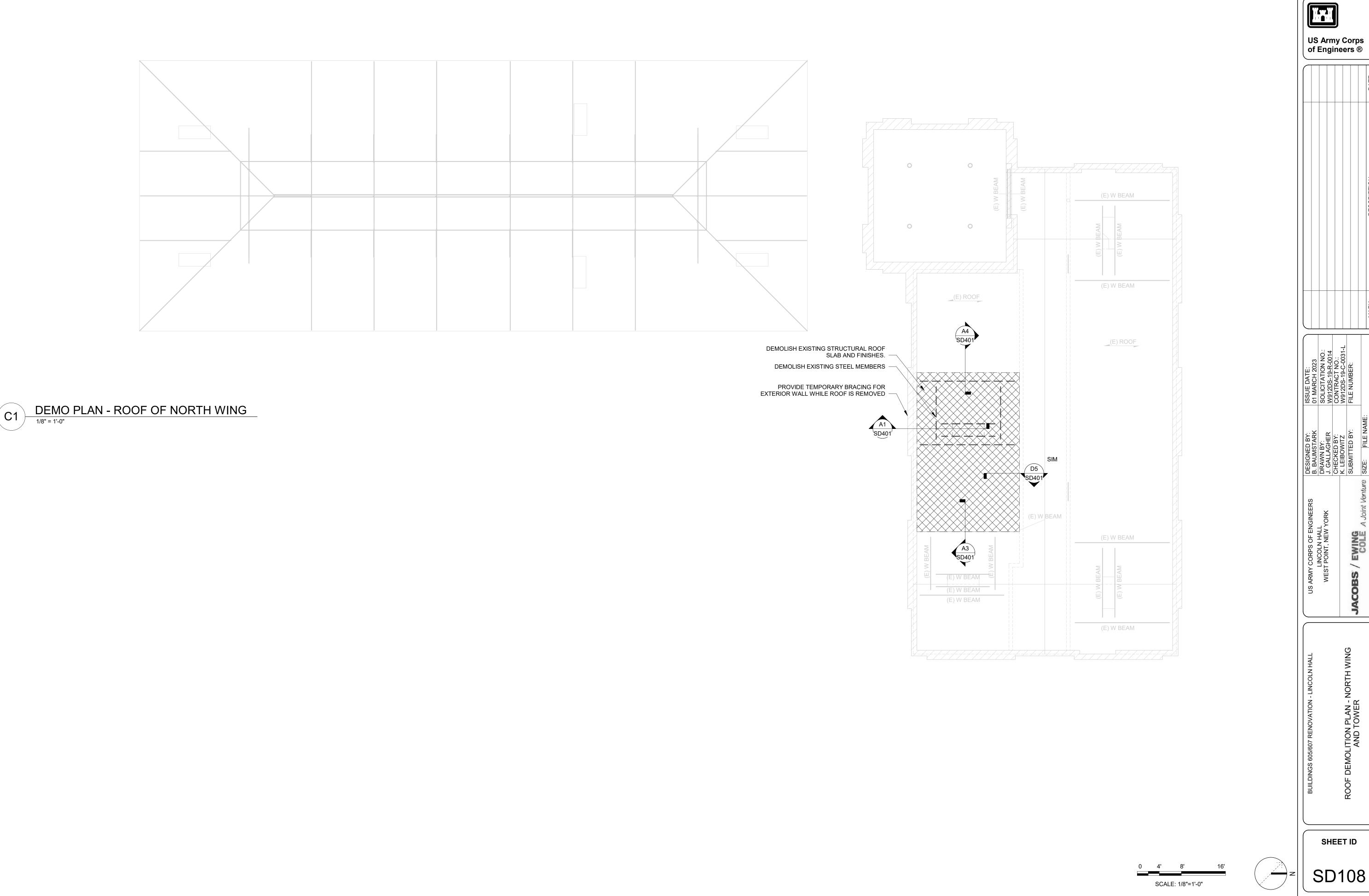


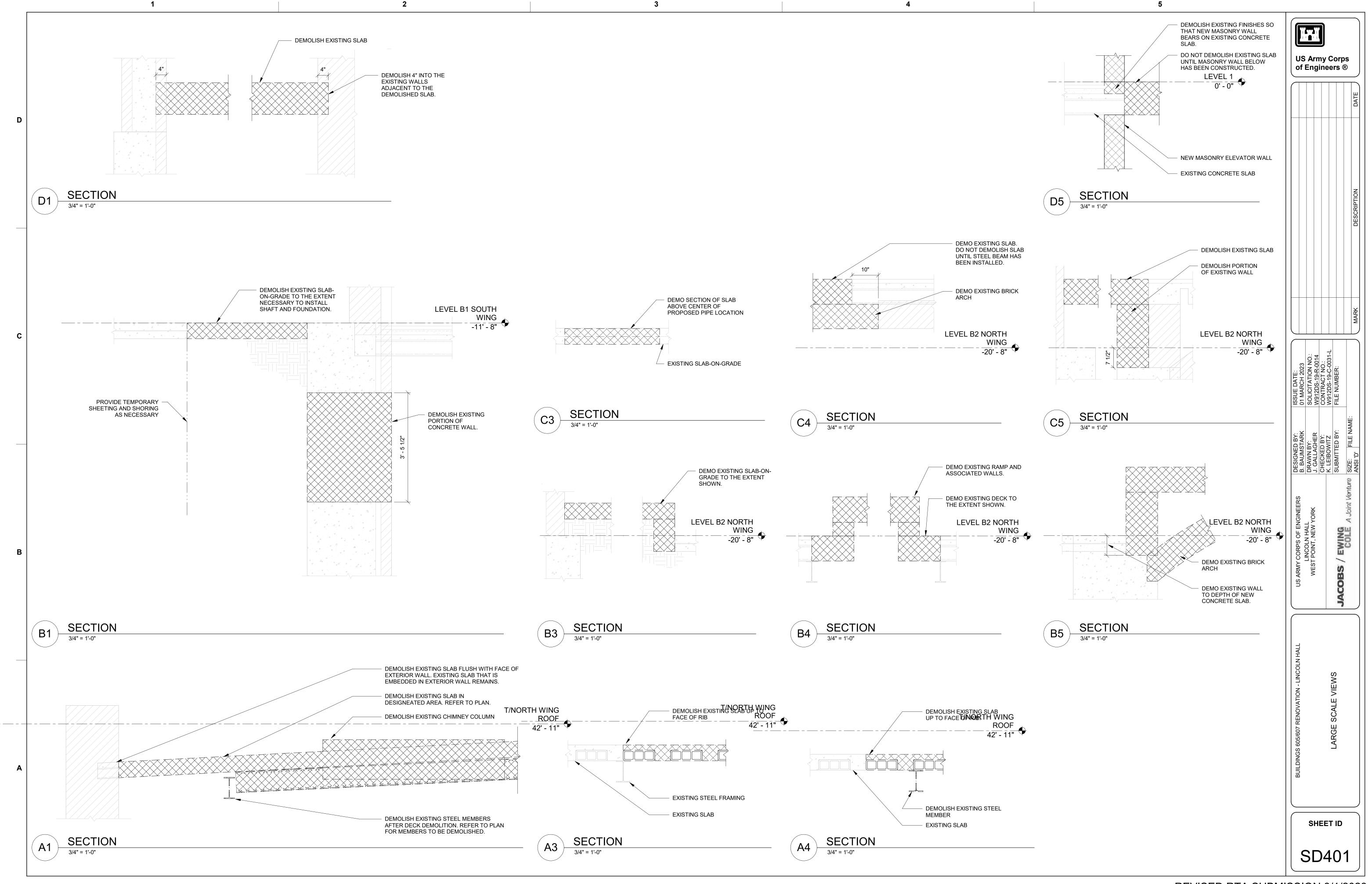


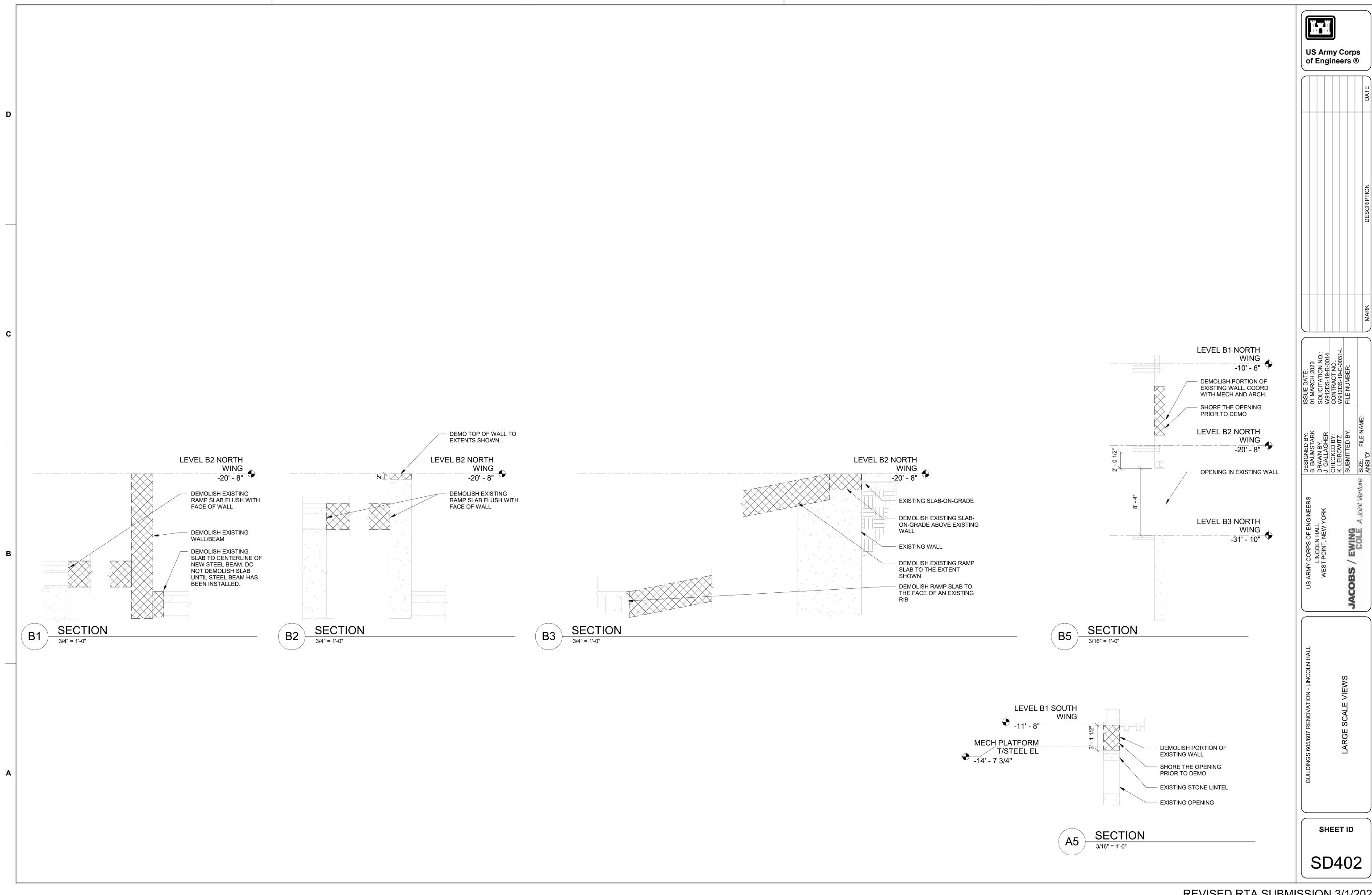


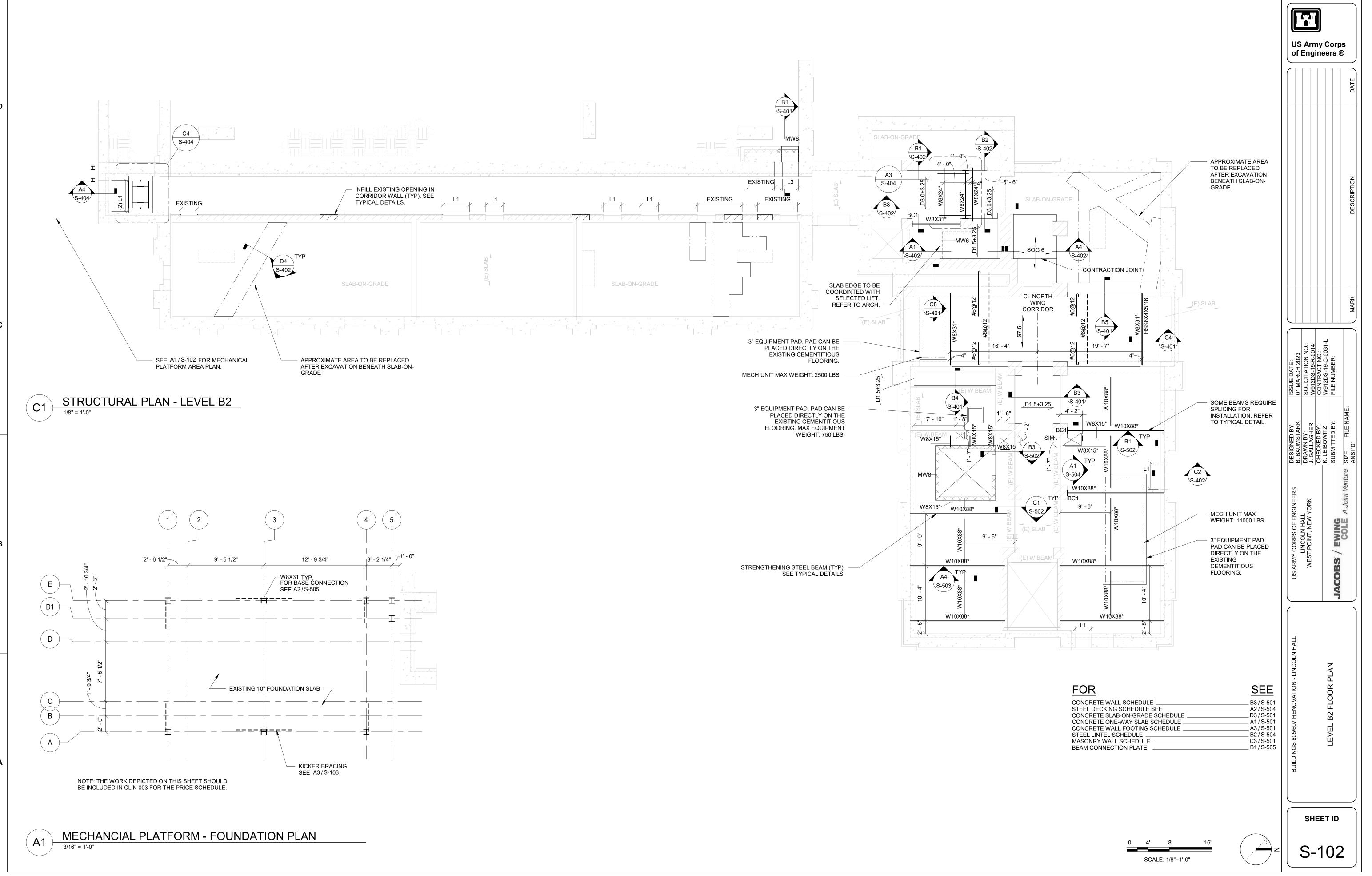


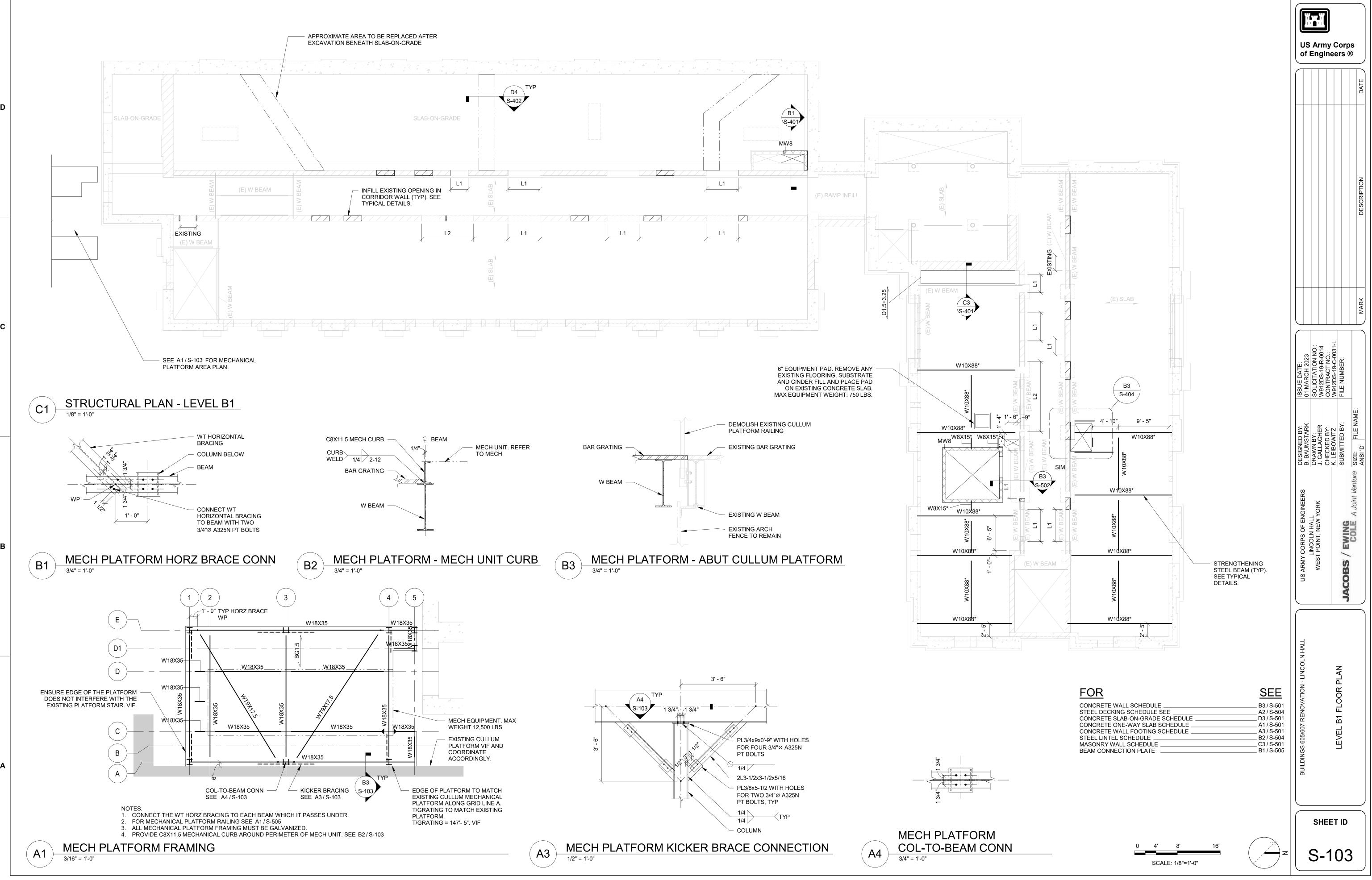
/ EWING

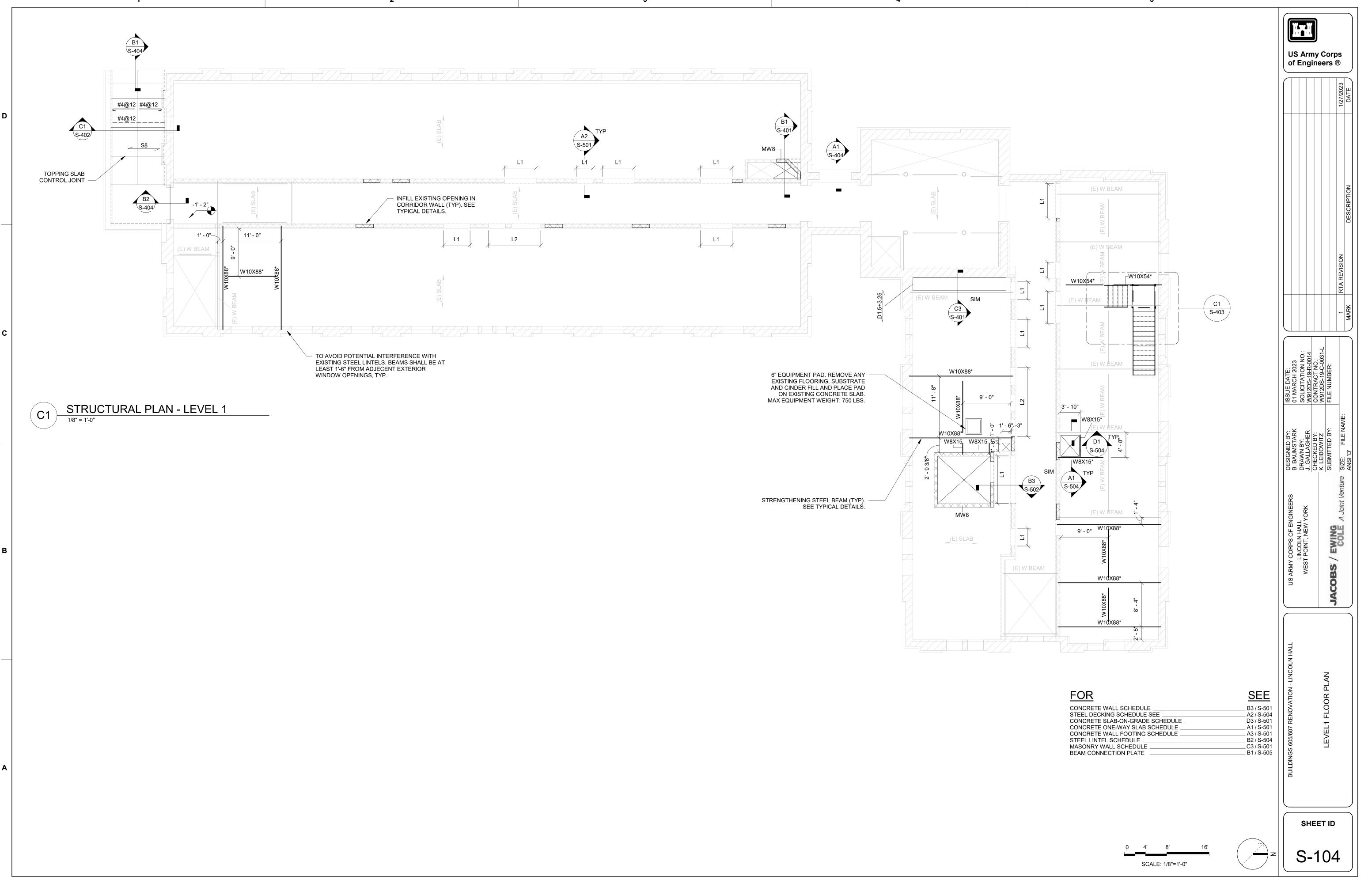


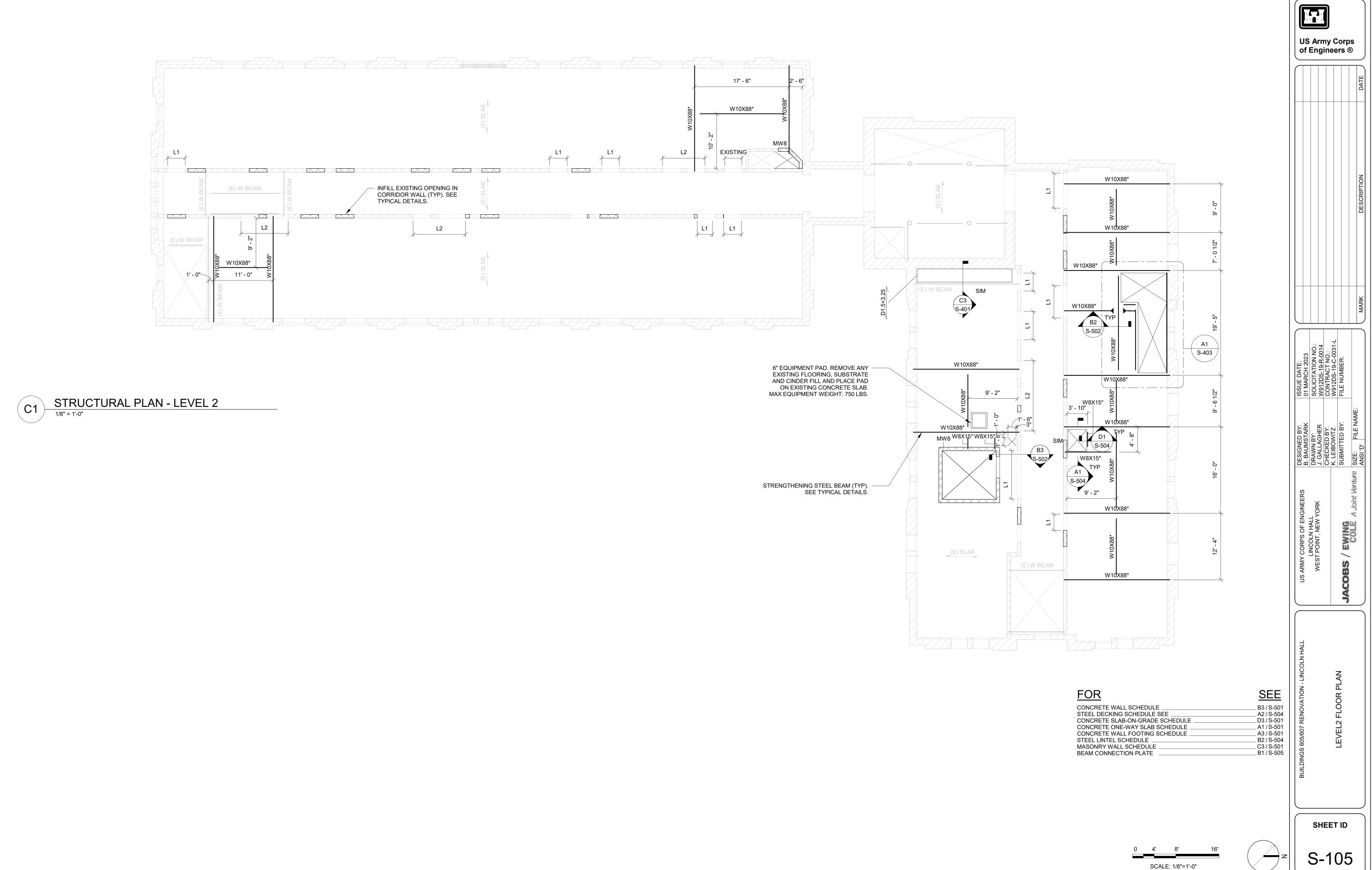


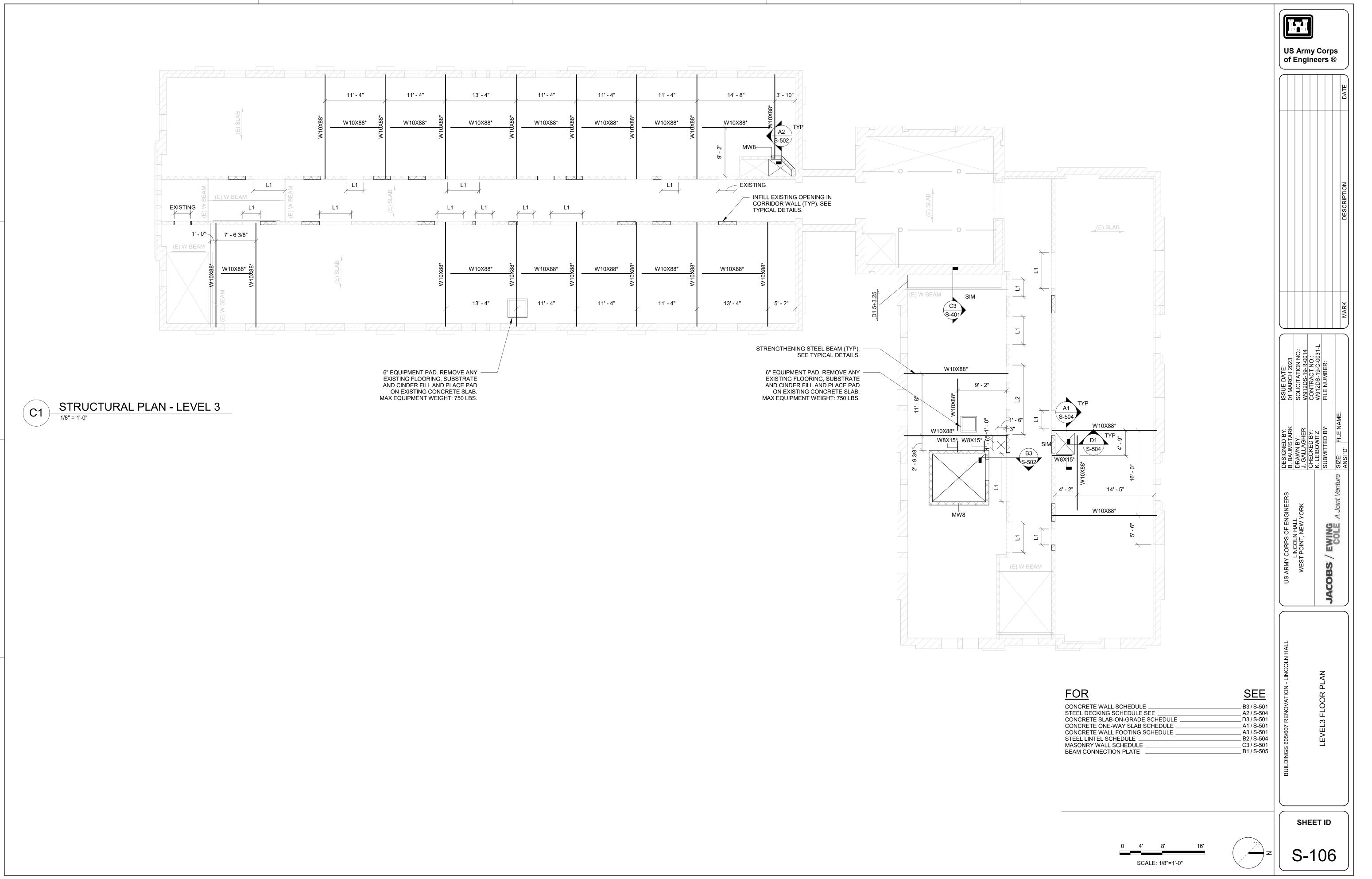


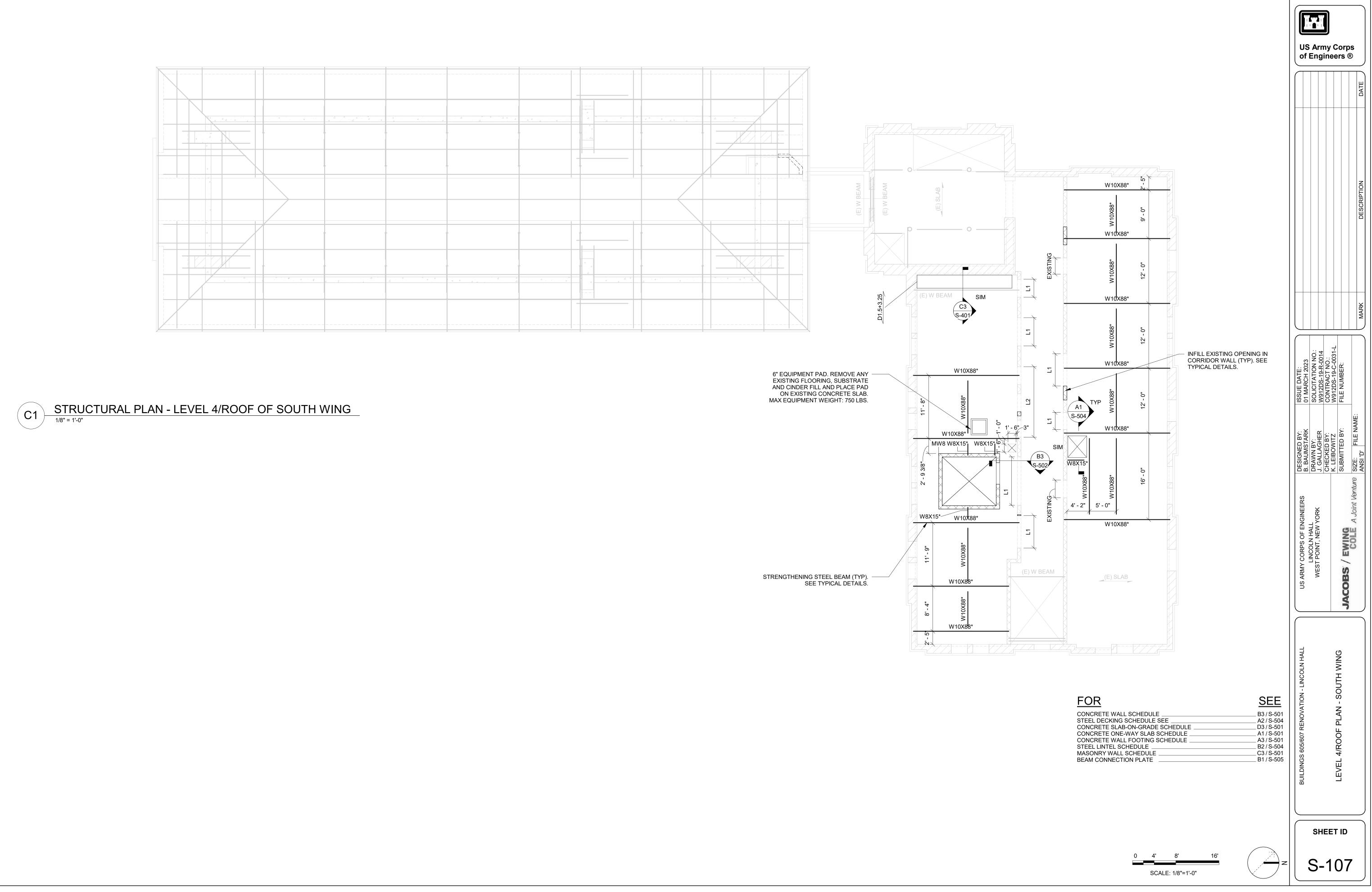


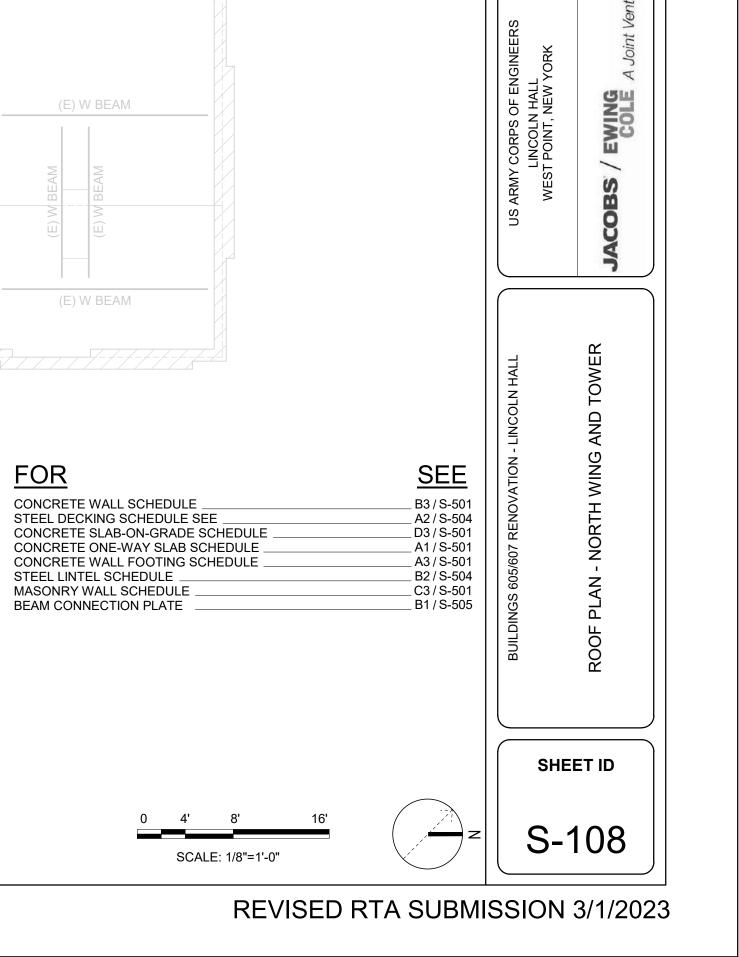


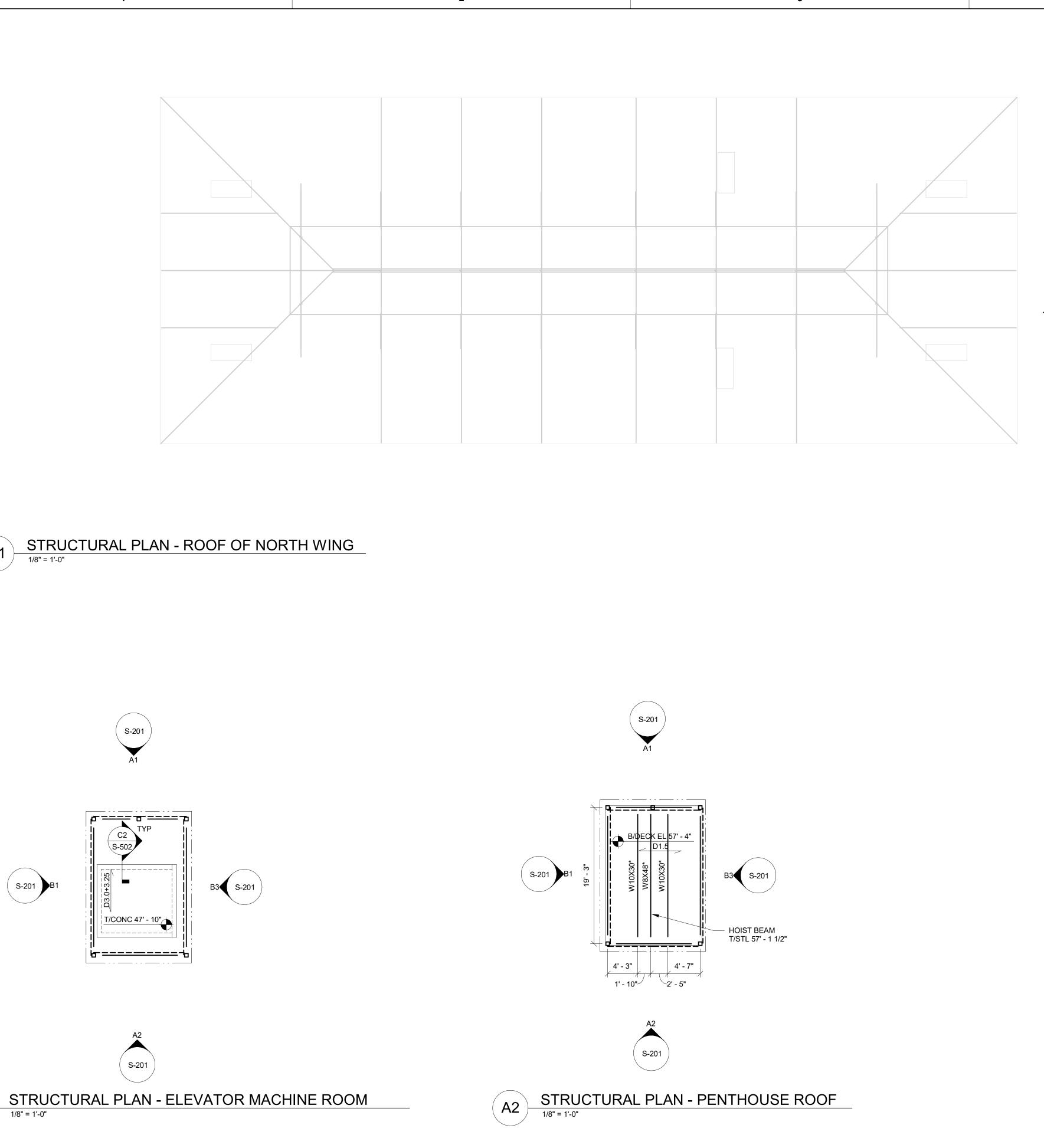










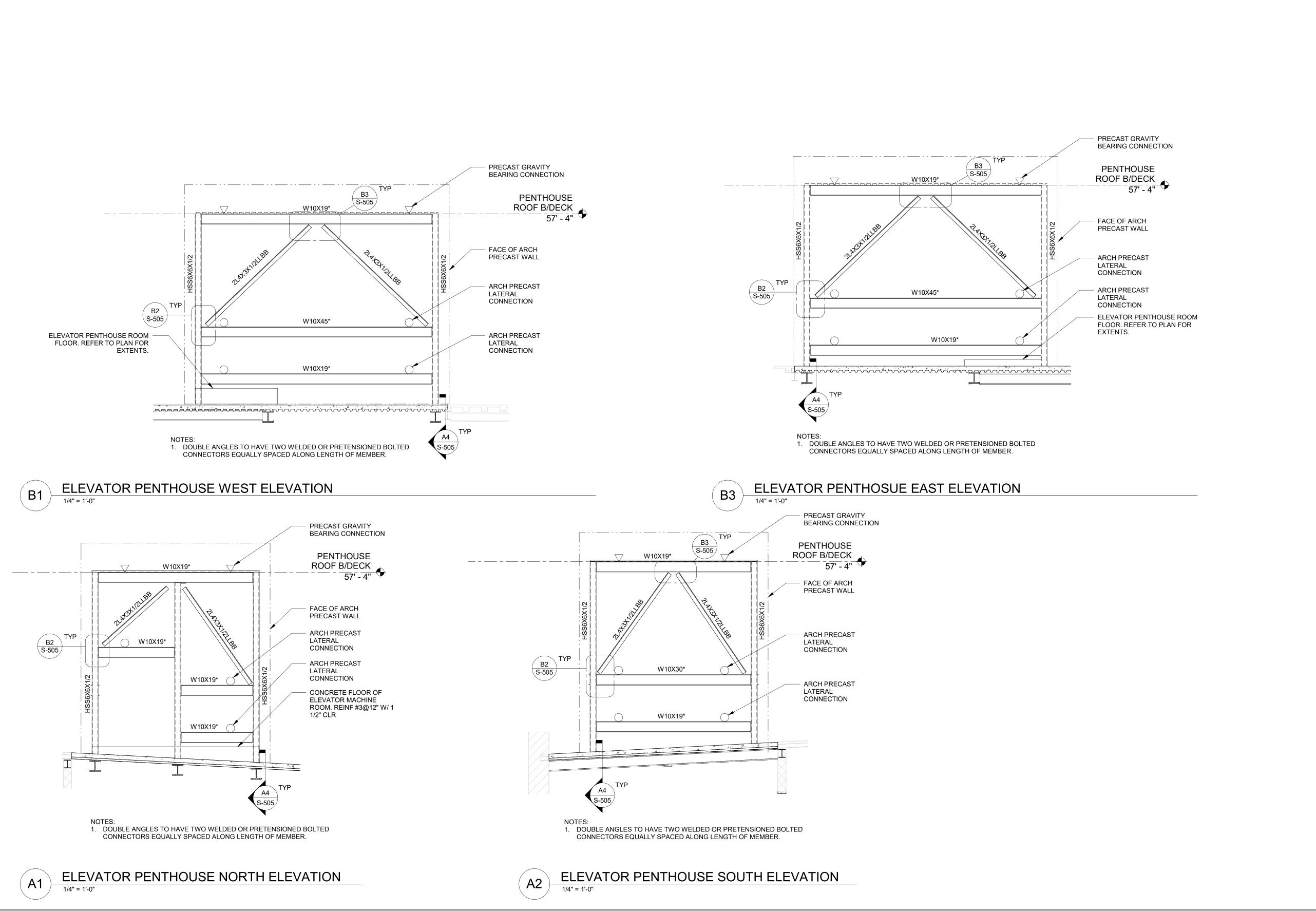


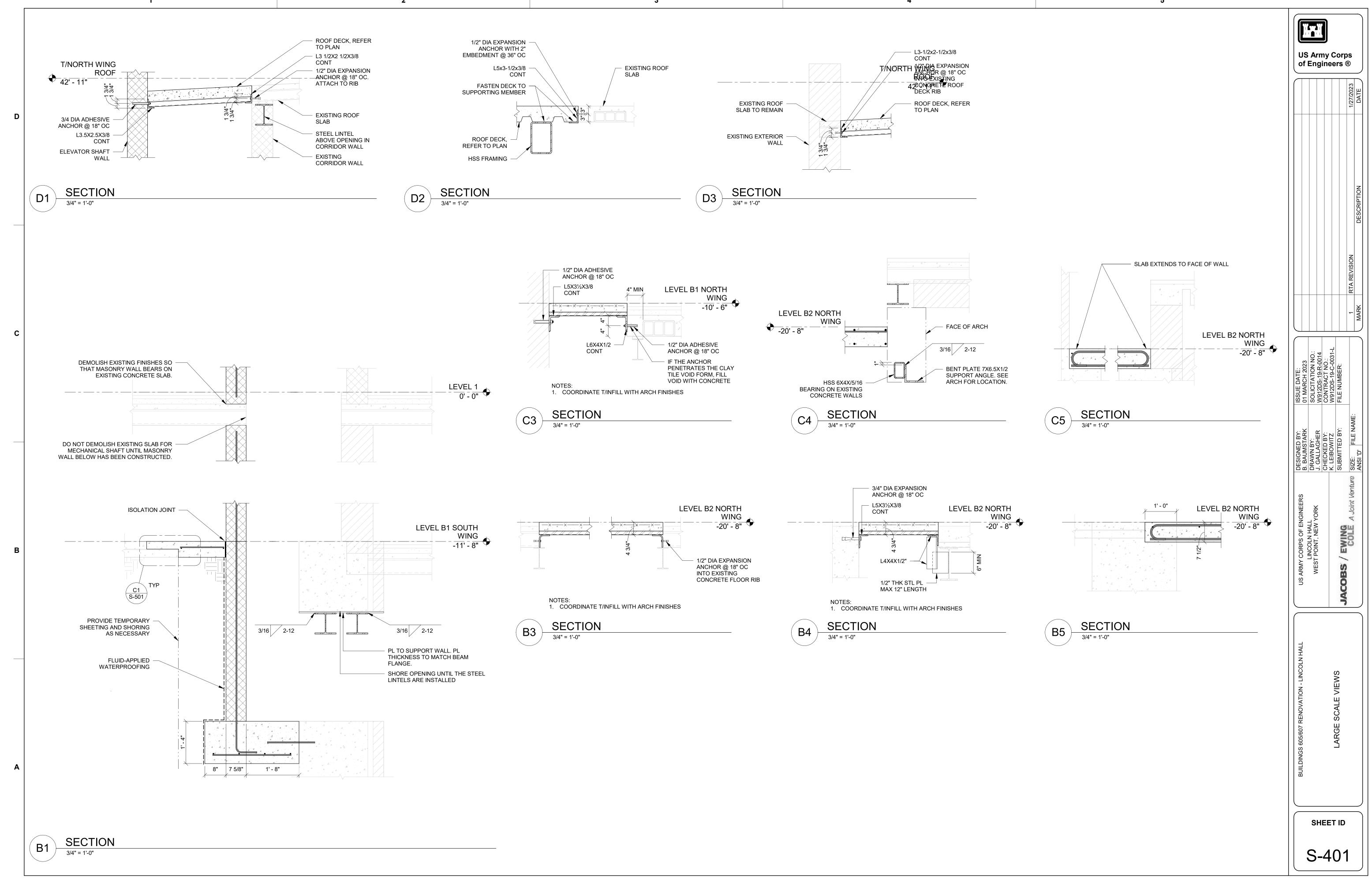
S-201 B1

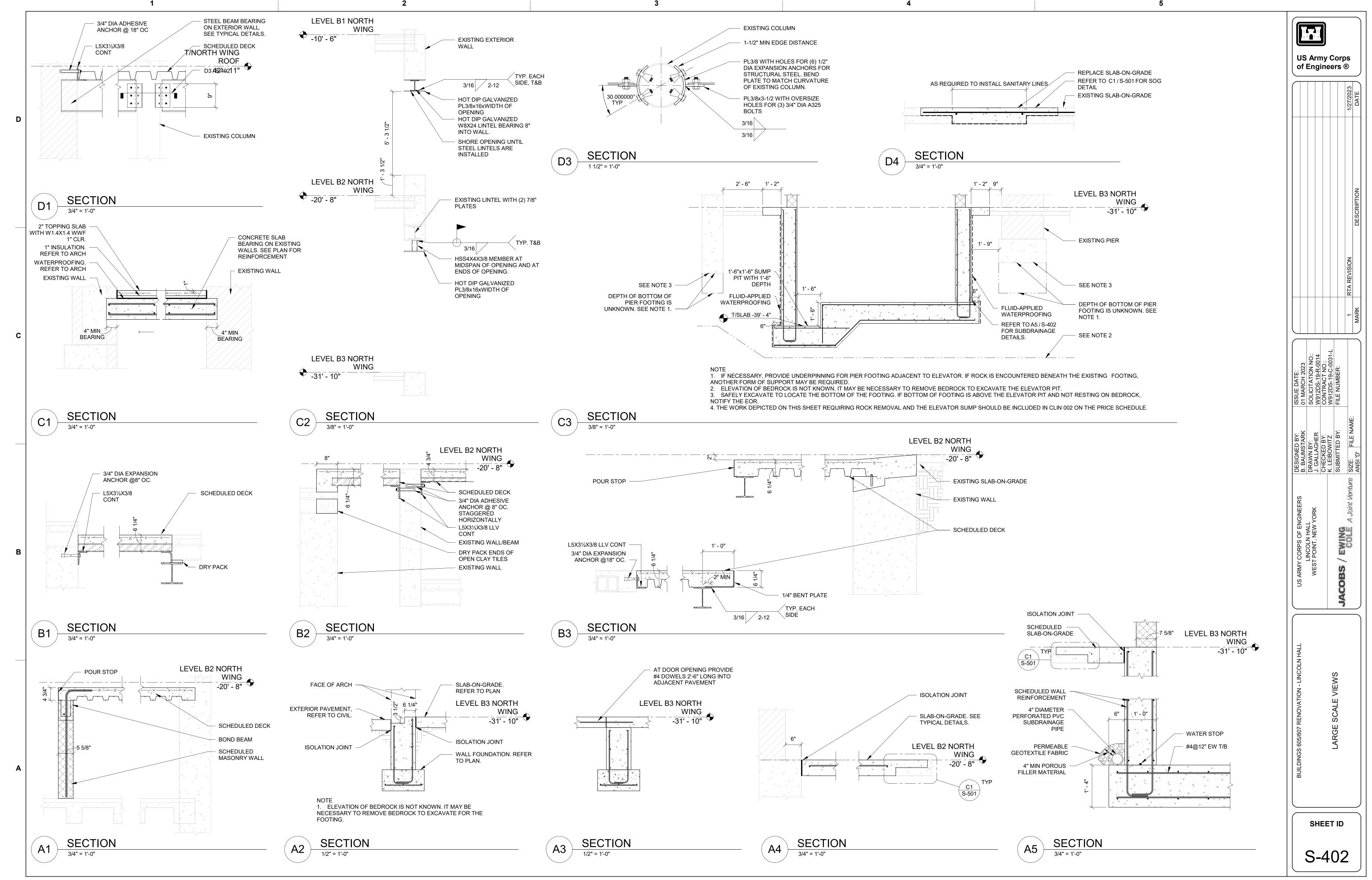


SHEET ID

S-201



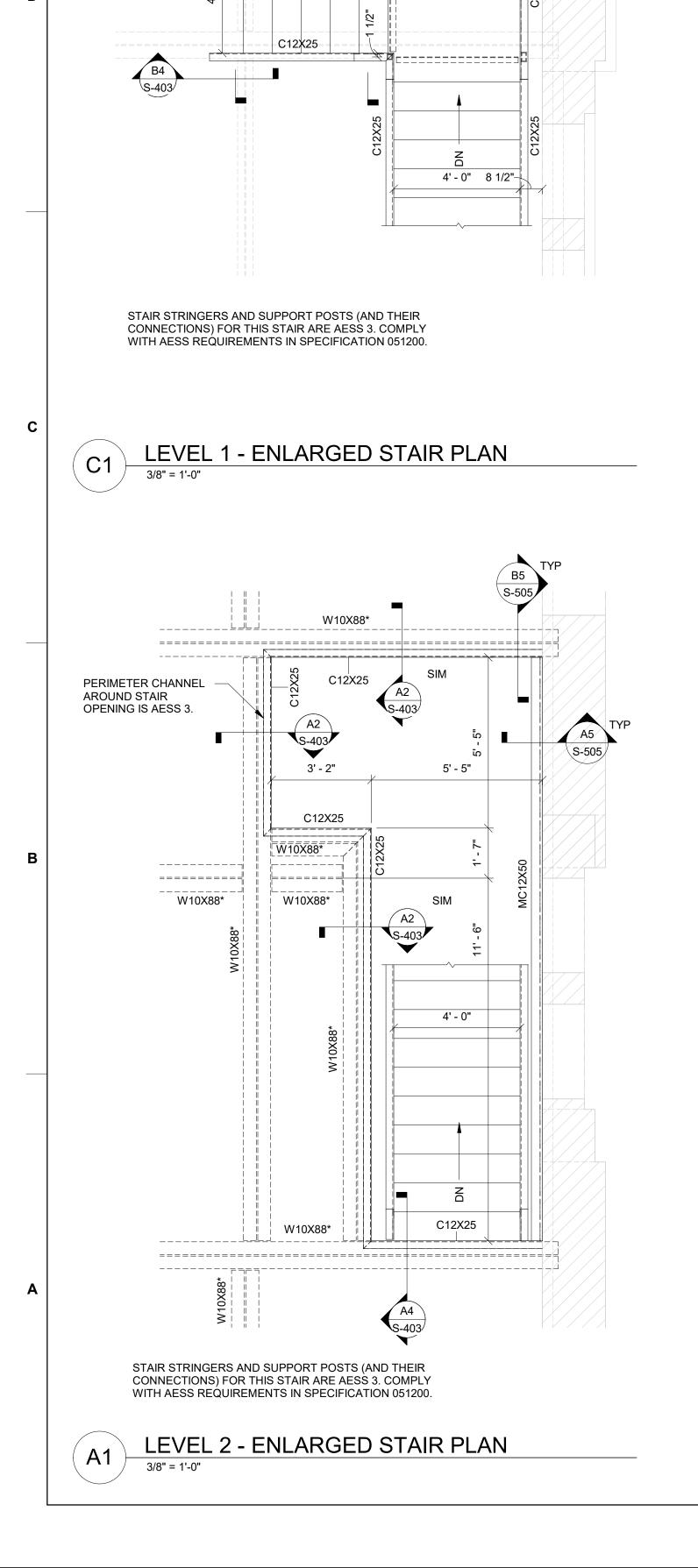






US Army Corps

of Engineers ®



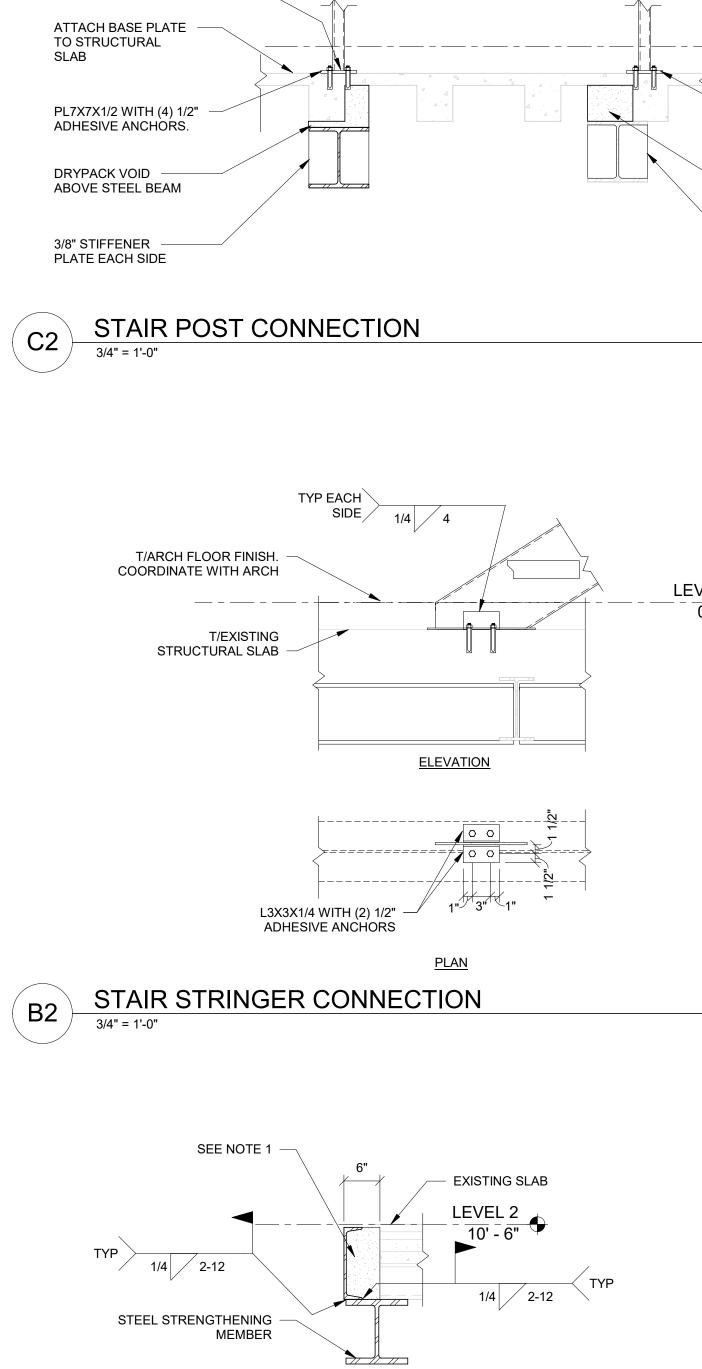
4' - 1 1/2" 1 1/2"

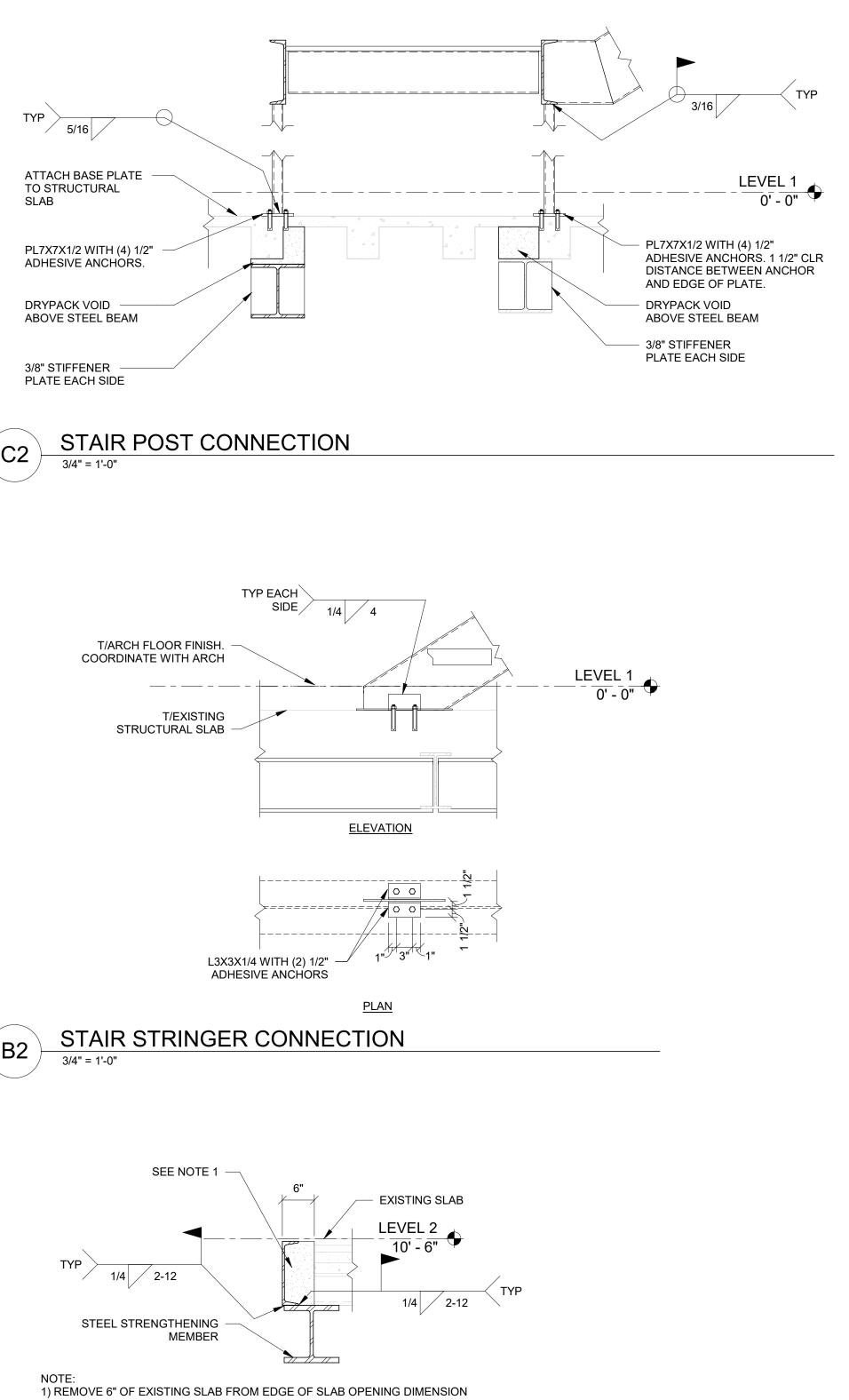
---- C12X25----

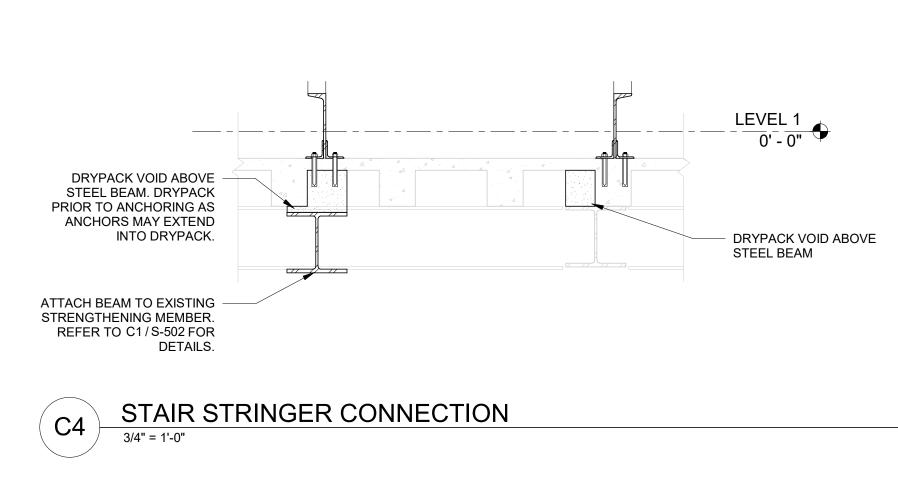
W10X54*

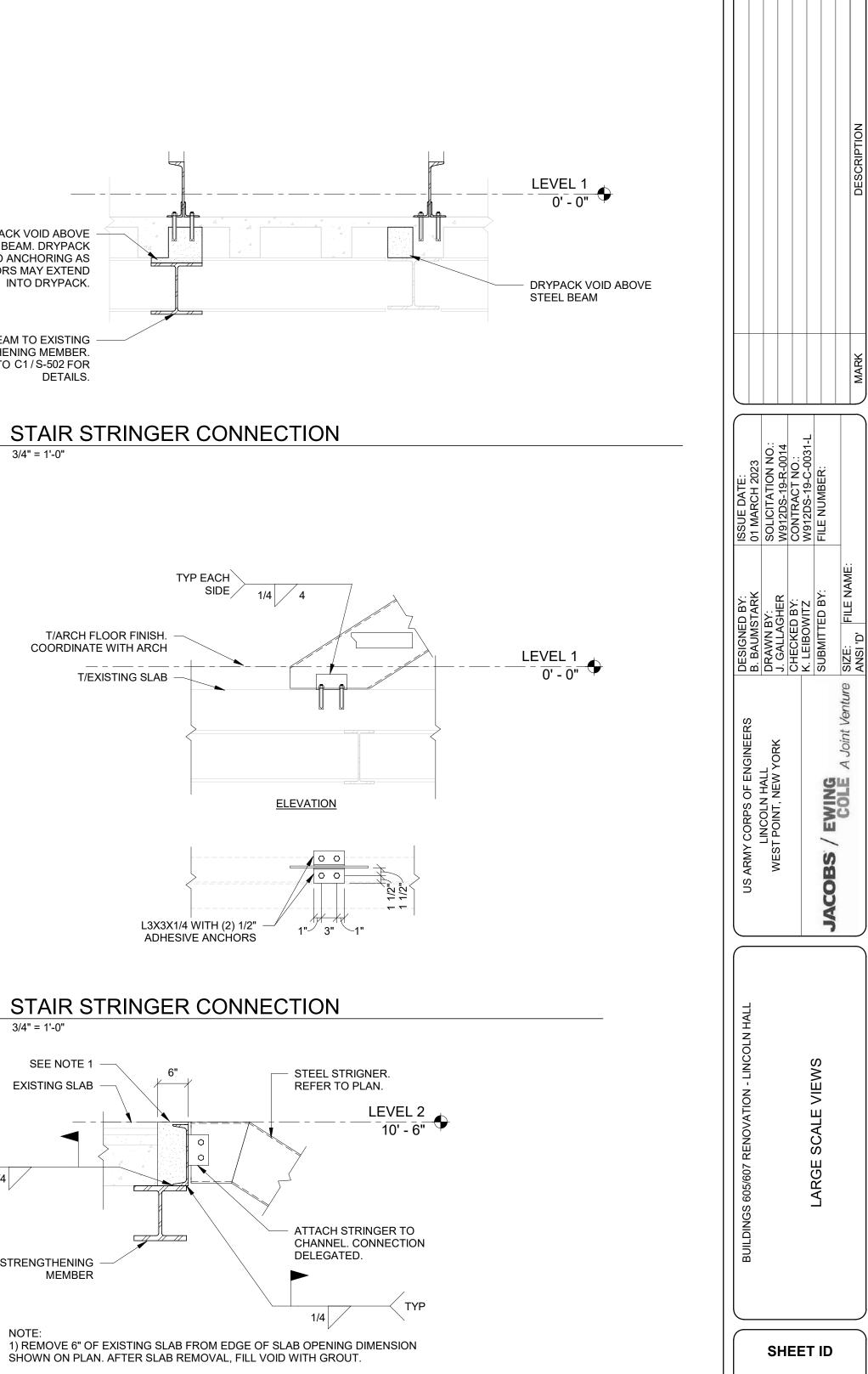
B2 S-403

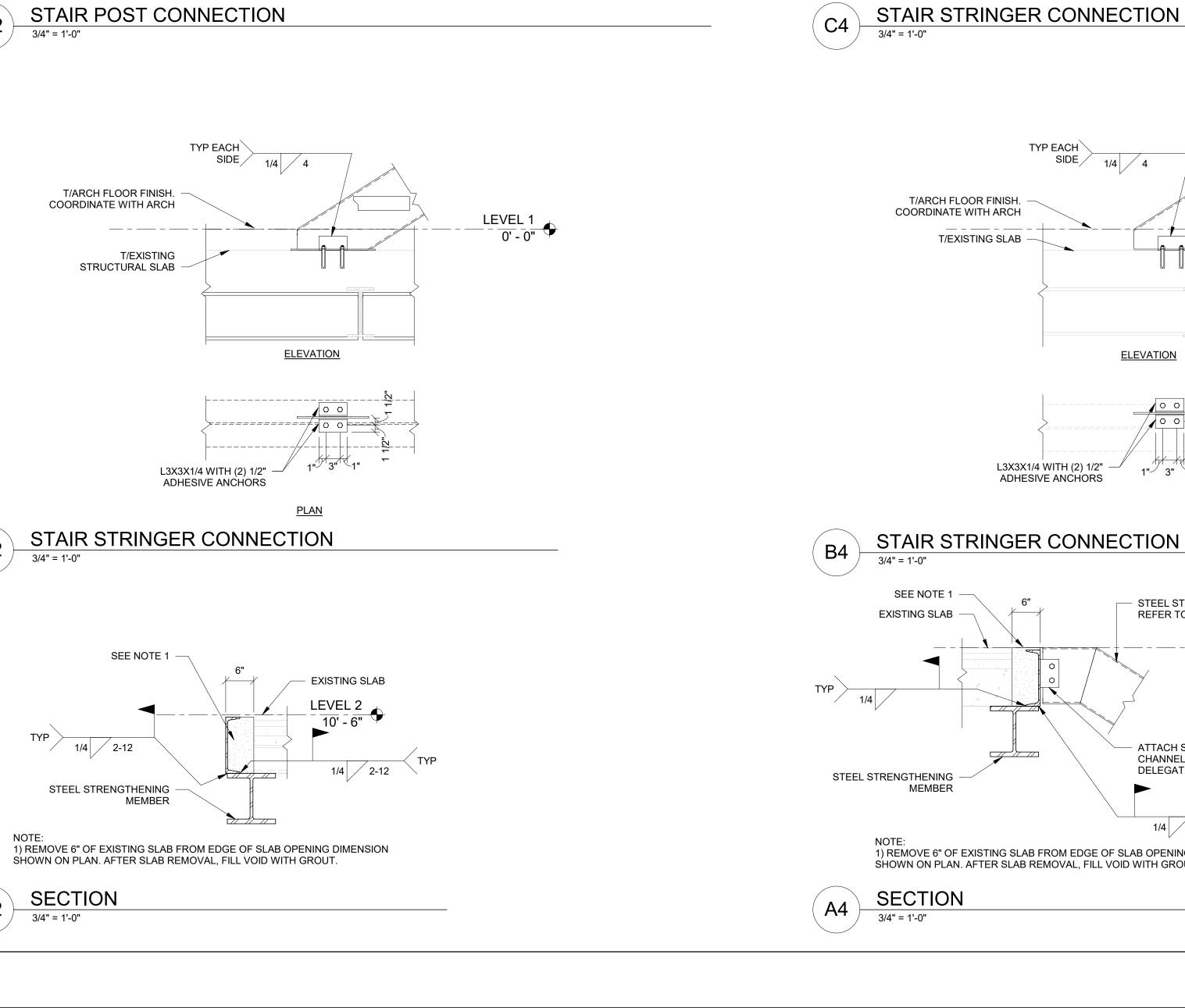
W10X54*

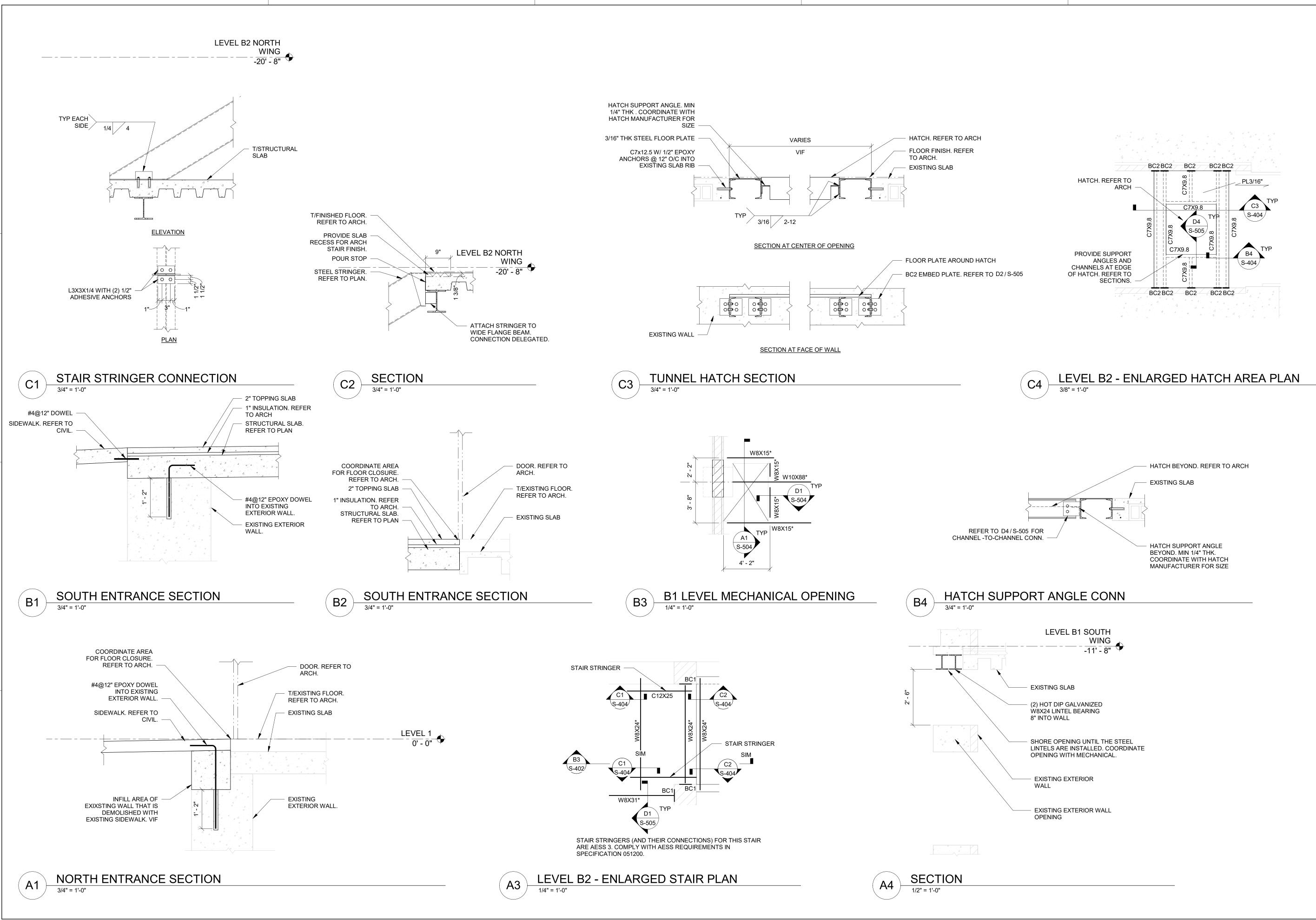


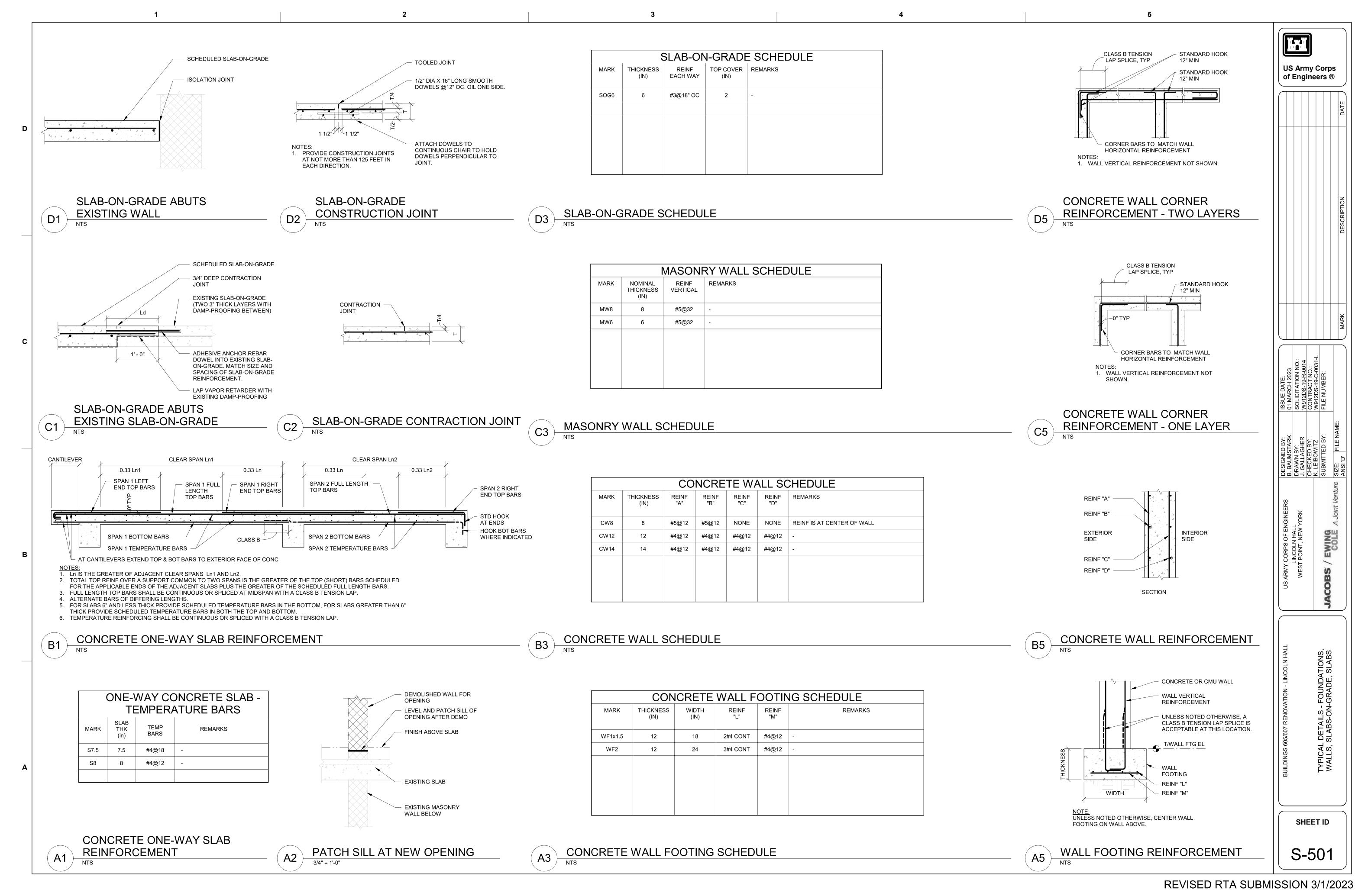


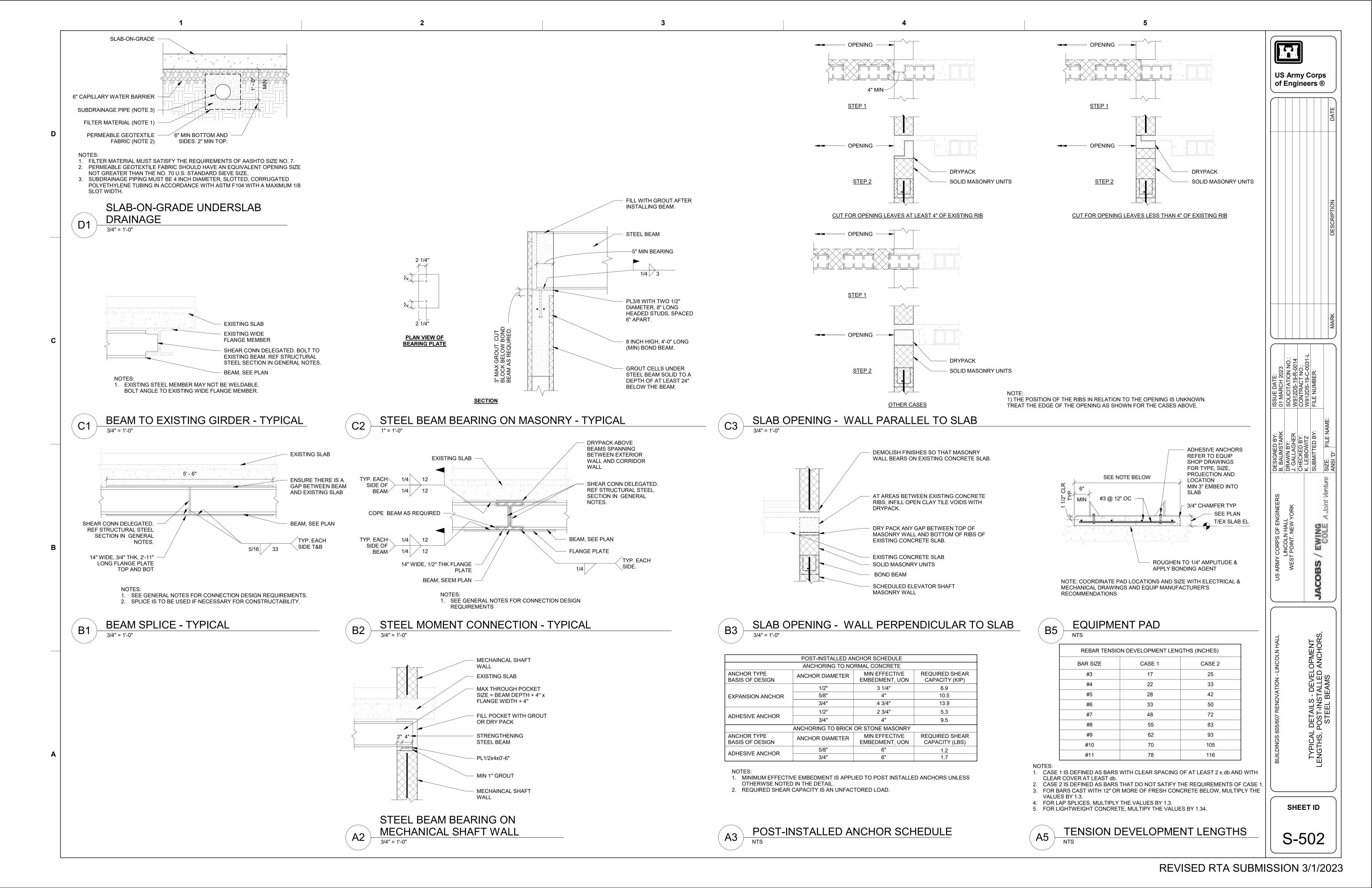












DRYPACK

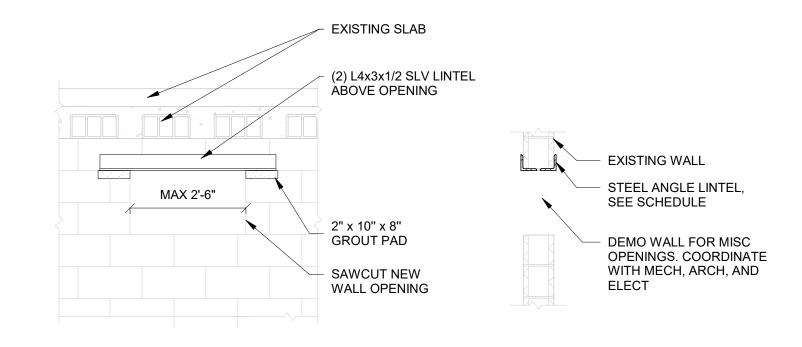
1) THE POSITION OF THE RIBS IN RELATION TO THE OPENING IS UNKNOWN. TREAT THE EDGE OF THE OPENING AS SHOWN FOR THE CASES ABOVE.

INFILL ABOVE STRENGTHENING ADJACENT TO OPENING - SECTION

STEP 2

OTHER CASES

OPENING -

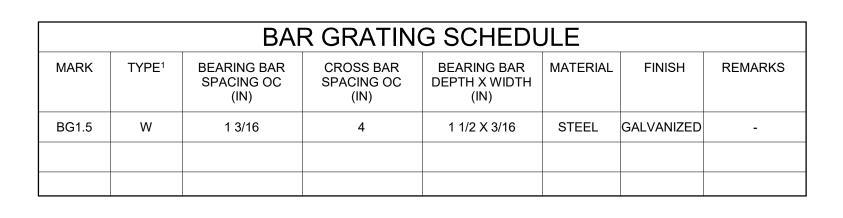


NOTE: LINTEL IS REQUIRED FOR OPENINGS WITH A WIDTH GREATER THAN 16" OR ANY OPENING UNDER A RIB.

PARTIAL CORRIDOR WALL OPENING WITH LINTEL - ELEVATION

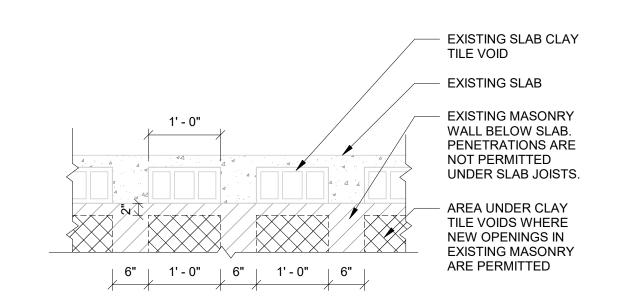
		S	TEEL	LINTEL	SCHE	DULE				
		BASEPLATE							GROUT PAD	
MARK	MEMBER	END OF LINTEL			MULTI SPAN LINTEL OVER WALL			MIN	MIN	
		WIDTH [IN]	LENGTH [IN]	THICKNESS [IN]	WIDTH [IN]	LENGTH [IN]	THICKNESS [IN]	WIDTH [IN]	LENGTH [IN]	
L1	W8X24	6	8	0.5	N/A	N/A	N/A	8	10	
L2	W8X24	6	8	0.5	6	10	0.5	8	10	
L3	W8X31	6	9	0.5	N/A	N/A	N/A	8	11	

STEEL LINTEL SCHEDULE



1) W = WELDED, P = PRESSURE LOCKED, R = RIVETED 2) GALVANIZED FINISH SHALL BE HOT DIPPED WITH A COATING WEIGHT OF NOT LESS THAN 1.8 OUNCES PER SQUARE FOOT





OPENINGS IN EXISTING MASORY WALL BELOW SLAB

	STEEL DECKING SCHEDULE											
MARK ¹	DECKING DEPTH (IN)	DECKING RIB WIDTH	MIN I (IN^4/FT)	MIN S (IN^3/FT)	MIN YIELD STRESS (KSI)	MIN UNCOATED SHEET THICKNESS	SPAN CONDITION	CONCRETE TOPPING THICKNESS ² (IN)	FASTENER PATTERN			
			(,	(*** ******)				(,	AT SUPPORTS	AT EDGE RIBS	AT SIDELAPS	
D3.0	3	WIDE	1.807	0.944	33	0.0598	TRIPLE	-	5/8" PUDDLE WELD WITH 24/4 PATTERN	5/8" PUDDLE WELD WITH 24/4 PATTERN	3 #10 SCREWS PER SPAN	
D1.5+3.25	1.5	N/A	0.295	0.324	50	0.0474	SINGLE	3.25	5/8" PUDDLE WELD WITH 36/4 PATTERN	5/8" PUDDLE WELD WITH 36/4 PATTERN	3 #10 SCREWS PER SPAN	
D2.0+4.0	2	N/A	0.704	0.653	40	0.0598	TRIPLE	4	5/8" PUDDLE WELD WITH 36/4 PATTERN	5/8" PUDDLE WELD WITH 36/4 PATTERN	3 #10 SCREWS PER SPAN	
D1.5	1.5	WIDE	0.295	0.324	50	0.0474	TRIPLE	-	5/8" PUDDLE WELD WITH 36/4 PATTERN	5/8" PUDDLE WELD WITH 36/4 PATTERN	3 #10 SCREWS PER SPAN	
D3.0+3.25	3	N/A	1.58	1.013	50	0.0598	TRIPLE	3.25	5/8" PUDDLE WELD WITH 36/4 PATTERN	5/8" PUDDLE WELD WITH 36/4 PATTERN	3 #10 SCREWS PER SPAN	

- 1. THE ORIENTATION OF THE MARK ON THE PLAN INDICATES THE DIRECTION OF THE DECK SPAN.
- 2. CONCRETE TOPPING THICKNESS IS THICKNESS ABOVE TOP OF DECKING. 3. DECKS THAT RECIEVE CONCRETE TOPPING MUST BE COMPOSITE DECKS.

STEEL DECKING SCHEDULE

DESIGNED BY:
B. BAUMSTARK
DRAWN BY:
J. GALLAGHER
CHECKED BY:
K. LEIBOWITZ
SUBMITTED BY:

SHEET ID

S-504

