DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
					ARK.			
					JOB NO.	040554	1	289

D4 HEADQUARTERS-REMAINING BUILDINGS/DRIVES/PARKING (FORT SMITH)(S)

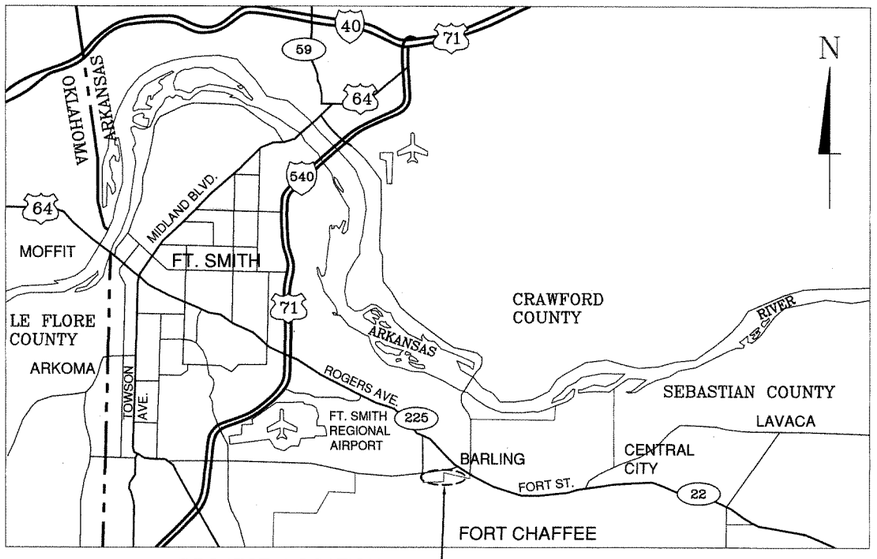
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

D4 HEADQUARTERS-REMAINING BUILDINGS/DRIVES/PARKING (FORT SMITH)(S)

SEBASTIAN COUNTY

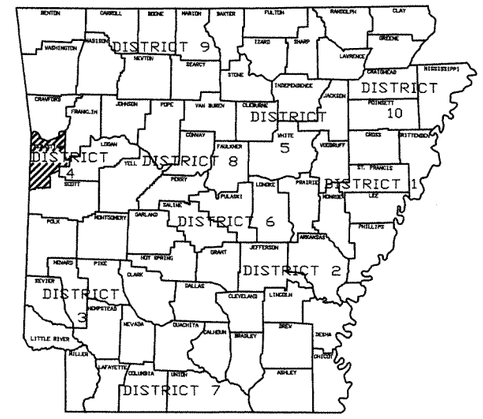
ROUTE 71 SECTION 14

JOB 040554



VICINITY MAP
(NOT TO SCALE)

LOCATION MAP
(NOT TO SCALE)



ARKANSAS HIGHWAY DISTRICT 4

SAIC Energy, Environment & Infrastructure, LLC No. 510 CERTIFICATE OF AUTHORIZATION ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 THOMAS C. GRAHAM II 12/13

REGISTERED ARCHITECT SAIC Energy, Environment, & Infrastructure, LLC No. C-255 ARKANSAS

JOHNNY RAY RAMSEY REGISTERED ARCHITECT No. 2221 ARKANSAS

P.E. JOB 040554
NON-PART.

PROJECT MID-POINT: 35° 19' 15" N LATITUDE, 94° 18' 09" W LONGITUDE

JOB 040554

SHEET	NO.	TITLE	REV. NO.	DATE	BY	APP'D	DESCRIPTION
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GP-003	3	SHEET INDEX					
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GP-005	5	QUANTITY SHEET					
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C-111	13	UTILITY PLAN - SECTOR "A"					
C-112	14	UTILITY PLAN - SECTOR "B"					
C-113	15	UTILITY PLAN - SECTOR "C"					
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C-121	17	GRADING PLAN - SECTOR "A"					
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ES-601	32	SITE ELECTRICAL SCHEDULES					
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TC-1	44	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		11/17/2010	AHTD	AHTD	
TEC-1	45	TEMPORARY EROSION CONTROL DEVICES		11/18/1998	AHTD	AHTD	
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

GENERAL INFORMATION
AHTD JOB NO. 040554
SHEET INDEX

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	GP-002
REV	
	2 OF 289

JOB 040554

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11E-103	189	ELECTRICAL LIGHTING PLAN					
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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GENERAL INFORMATION
AHTD JOB NO. 040554
SHEET INDEX

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	GP-003
REV	

GENERAL NOTES:

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
4. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
5. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
6. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 – UNCLASSIFIED EXCAVATION.
7. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. CONTRACTOR SHALL PROVIDE ALL OF THE FIRE AND DOMESTIC WATER SERVICES NEEDED TO PROVIDE WATER TO THE DISTRICT ADMINISTRATION BUILDING, THE MULTI–CREW BUILDING, THE EQUIPMENT WASH BUILDING, THE BODY AND PAINT SHOP, THE SALT SPREADER STORAGE BUILDING, AND STORAGE BUILDING A. THE SEWER SERVICES TO THE BEFORE MENTIONED BUILDINGS SHALL ALSO BE INCLUDED IN JOB NO. 040554. CONTRACTOR SHALL ALSO PROVIDE THE GAS SERVICES TO THE DISTRICT ADMINISTRATION BUILDING. THE CONTRACTOR SHALL REPROCESS THE EXISTING GRAVEL (BENEATH AREAS THAT WILL RECEIVE ASPHALT PAVING UNDER JOB NO. 040554) AND APPLY ASPHALT PAVING AND PAVEMENT STRIPING TO PAVEMENT AREAS AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE SUBGRADE PREPARATION OF CURRENTLY SEEDED AREAS LOCATED BENEATH PROPOSED BUILDINGS OR PROPOSED PAVED AREAS. ELECTRICAL WORK SHALL INCLUDE ALL SITE LIGHTING AND BUILDING ELECTRICAL SERVICES ON THE EAST SIDE OF THE EAST/WEST DIVISION LINE 'A–A', AND A NEW UNDERGROUND ELECTRICAL SERVICE LINE FROM PANEL 'DP' TO THE SALT SPREADER STORAGE BUILDING. CONTRACTOR SHALL INSTALL ALL CAMERAS AND MOUNTING BRACKETS FOR THE CCTV SYSTEM.

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

ERRATA_____ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS

JOB SP 040554_____BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB SP 040554_____BUILDERS RISK INSURANCE
JOB SP 040554_____COMPETENCY OF BIDDERS
JOB SP 040554_____INTERNET BIDDING
JOB SP 040554_____MEASUREMENT AND PAYMENT
JOB SP 040554_____OFF–SITE RESTRAINING CONDITIONS FOR AMERICAN BURYING BEETLE
JOB SP 040554_____PROJECT MANUAL
JOB SP 040554_____RECONSTRUCTED BASE COURSE
JOB SP 040554_____REQUIREMENTS FOR STORM WATER POLLUTION PREVENTION PLAN
JOB SP 040554_____STANDARD SPECIFICATIONS APPLICABILITY
JOB SP 040554_____SUBGRADE PREPARATION (PARKING AREA AND ROADWAY)
JOB SP 040554_____SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB SP 040554_____UTILITY ADJUSTMENTS
JOB SP 040554_____WARM MIX ASPHALT

SP 108–1_____LIQUIDATED DAMAGES

SS 100–1_____REQUIRED CONTRACT PROVISIONS FOR STATE CONSTRUCTION JOBS
SS 105–1_____CONSTRUCTION CONTROL MARKINGS
SS 105–2_____EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
SS 107–1_____WORKER VISIBILITY
SS 110–1_____PROTECTION OF WATER QUALITY AND WETLANDS
SS 303–1_____AGGREGATE BASE COURSE
SS 404–1_____PRODUCTION VERIFICATION OF ASPHALT CONCRETE HOT MIX
SS 409–1_____MINERAL AGGREGATES
SS 410–3_____DENSITY TESTING FOR ACHM LEVELING COURSES AND BOND BREAKERS
SS 600–1_____WATER FOR VEGETATION
SS 603–1_____MAINTENANCE OF TRAFFIC
SS 604–1_____RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
SS 606–2_____PIPE CULVERTS
SS 718–2_____REFLECTORIZED PAINT PAVEMENT MARKINGS

Owner:

Arkansas State Highway and Transportation Department
P.O. Box 2261
Little Rock, Arkansas 72203–2261
Contact: Ray Gruver, Section Head
Maintenance Division, Facilities Management Sect.
Phone: 501–569–2090
Fax: 501–569–2011

Operator:

Arkansas State Highway and Transportation Department

Architect, Civil and MEP engineer:

S.A.I.C.
1701 Centerview, Suite 207
Little Rock, Arkansas 72211
Phone: 501–228–4420
Fax: 501–228–4410

Structural:

S.A.I.C.
60 East Plato Road
St. Paul, MN 55107
Phone: 651–771–2222
Fax: 651–778–3911

Geotechnical Consultant:

Grubbs, Hoskyn, Barton, and Wyatt, INC.
#1 Trigon Place
Little Rock, Arkansas 72209
Phone: 501–455–2536
Fax: 501–445–4137

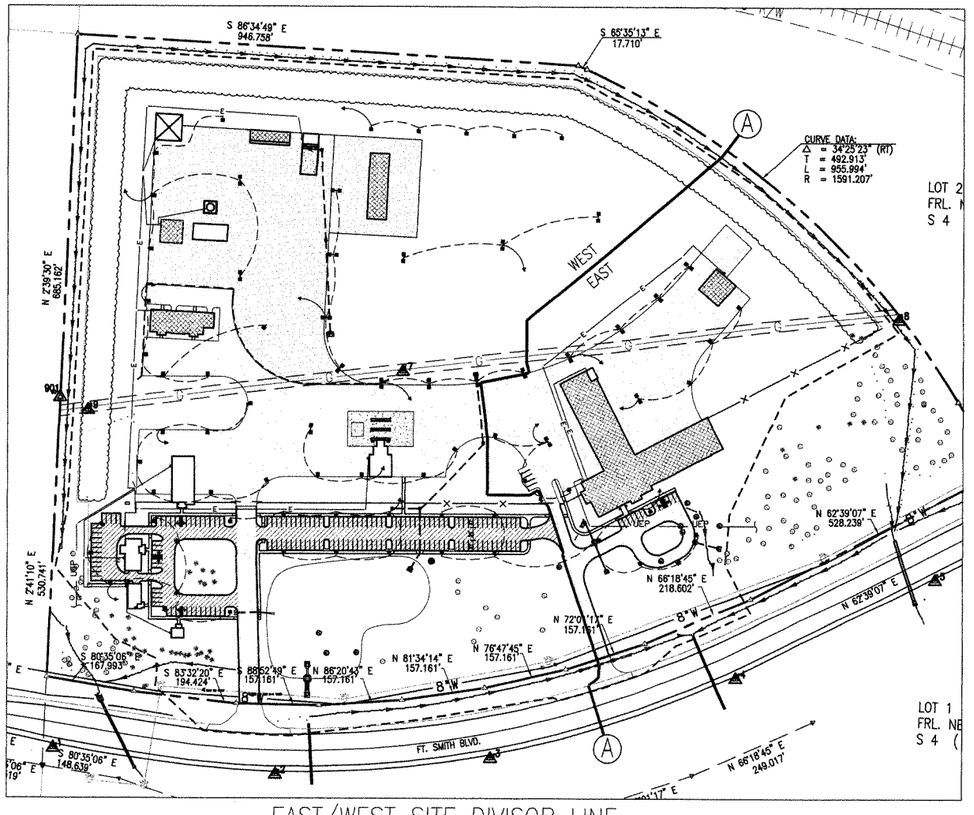
"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

THOMAS C. GRAHAM II, ENGINEER

JOHN RAMSEY, R.A.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER THOMAS C. GRAHAM II No. 10432 10/13/11

JOHNNY RAY RAMSEY REGISTERED ARCHITECT No. 2221 ARKANSAS 10/13/11



EAST/WEST SITE DIVISOR LINE

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(501) 228–4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

GENERAL INFORMATION
AHTD JOB NO. 040554
GOVERNING SPECIFICATIONS & GENERAL NOTES

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	GP–004
REV	
	4 OF 289

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES
AHTD Job No. 040554

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY
SS & 303	AGGREGATE BASE COURSE (CLASS 7)	TON	11,570
SP & 305	RECONSTRUCTED BASE COURSE	SY	35,960
SP & SS & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	TON	5,080
SP & SS & 407	ASPHALT BINDER (PG76-22) IN ACHM SURFACE (1/2")	TON	270
601	MOBILIZATION	LS	1.00
SS & 603	MAINTENANCE OF TRAFFIC	LS	1.00
620	SEEDING	AC	14.10
620	MULCH COVER	AC	14.10
SS & 620	WATER	M.GAL	288.0
621	TEMPORARY SEEDING	AC	14.10
621	SILT FENCE	LF	5,000
621	DROP INLET SILT FENCE	LF	88
621	ROCK DITCH CHECKS	CY	57
621	SAND BAG DITCH CHECKS	BAG	300
621	SEDIMENT REMOVAL AND DISPOSAL	CY	100
633	CONCRETE WALKS	SY	197
634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (2'0")	LF	1335
641	WHEELCHAIR RAMPS (TYPE SPECIAL)	SY	32
SS & 718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (4")	LF	3,532
SS & 718	REFLECTORIZED PAINT PAVEMENT MARKING SYMBOLS (WHEELCHAIR)	EACH	8
SP	SUBGRADE PREPARATION (PARKING AREA AND ROADWAY)	SY	21,450
SP	SITE UTILITIES	LS	1.00
SP	LANDSCAPING	LS	1.00
SP	EXTERIOR AREA LIGHTING	LS	1.00
SP	EXTERIOR AREA CLOSED CIRCUIT TELEVISION	LS	1.00
SP	DISTRICT MULTI-CREW BUILDING	LS	1.00
SP	DISTRICT STORAGE BUILDING A	LS	1.00
SP	DISTRICT ADMINISTRATION BUILDING	LS	1.00
SP	DISTRICT PAINT AND BODY SHOP	LS	1.00
SP	DISTRICT EQUIPMENT WASH BUILDING	LS	1.00
SP	DISTRICT SALT SPREADER STORAGE BUILDING	LS	1.00

FOR INFORMATION ONLY

SITE UTILITIES
AHTD Job No. 040554

ITEM	*TO BE DETERMINED ITEM DESCRIPTION	UNIT	QUANTITY
	6" WATER LINE	LF	30
	3" WATER LINE	LF	32
	2" WATER LINE	LF	676
	1" WATER LINE	LF	19
	3" WATER METER AND VAULT	EA	1
	3" WATER VALVE	EA	2
	2" WATER VALVE	EA	1
	1" WATER VALVE	EA	1
	8" X 3" TEE	EA	1
	6" X 1" TEE	EA	1
	6" X 2" TEE	EA	1
	3" X 3" TEE	EA	1
	2" - 45° BEND	EA	4
	6" P.V.C. SANITARY SEWER SERVICE	LF	337
	6" SANITARY SEWER CLEANOUTS	EA	5
	NATURAL GAS UTILITY LINE	LF	220

EROSION CONTROL PLAN REVISION TABLE

DATE	REVISION

REVISION TABLE

REVISION TABLE
AHTD Job No. 040554

DATE	DESCRIPTION	SHEET NUMBER
11/30/11	Added Fixture & Pump Schedule, Revised Condensing Unit Sched.	S, 175 & 183

EROSION CONTROL TABLE

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL	TEMPORARY EROSION CONTROL							
			SEEDING	TEMPORARY SEEDING	MULCH COVER	WATER	ROCK DITCH CHECKS (E-6)	DROP INLET SILT FENCE (E-7)	BUILDING AREA SILT FENCE	SILT FENCE (E-11)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	ACRE	ACRE	M.GAL.	CU.YD.	LIN.FT.	LIN.FT.	LIN.FT.	CU. YD.
ENTIRE	PROJECT	ENTIRE SITE	14.10	14.10	14.10	288.0	57	88	2941	2059	100
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.											
TOTALS:			14.10	14.10	14.10	288.0	57	88	2941	2059	100

BASIS OF ESTIMATE:
WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING.
ROCK DITCH CHECKS.....3 CU.YD./LOCATION

NOTE: THE TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE AS TO DETER EROSION AND SEDIMENTATION ON U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

*QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

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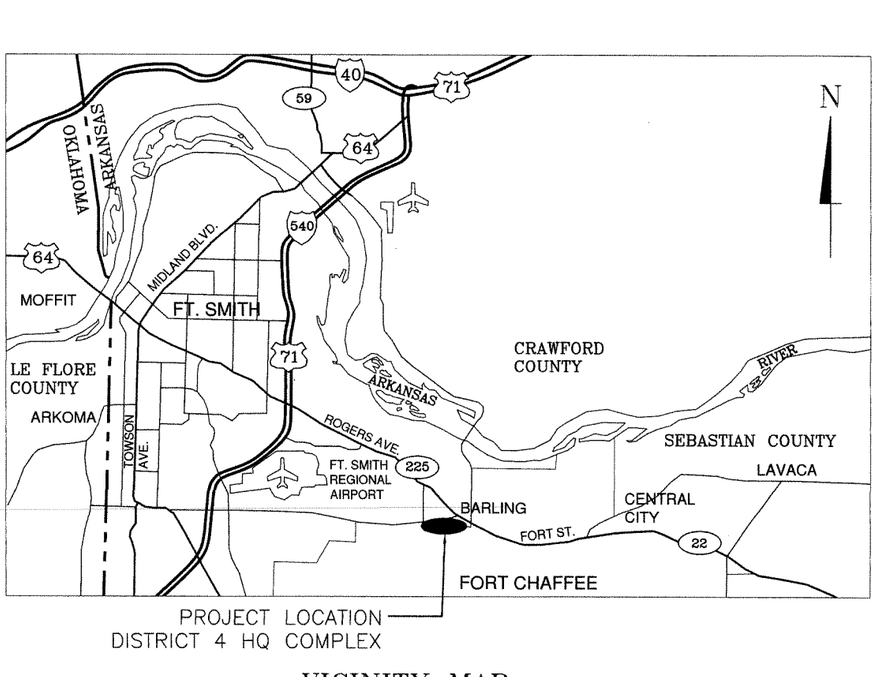
GENERAL INFORMATION
AHTD JOB NO. 040554
QUANTITY SHEET

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

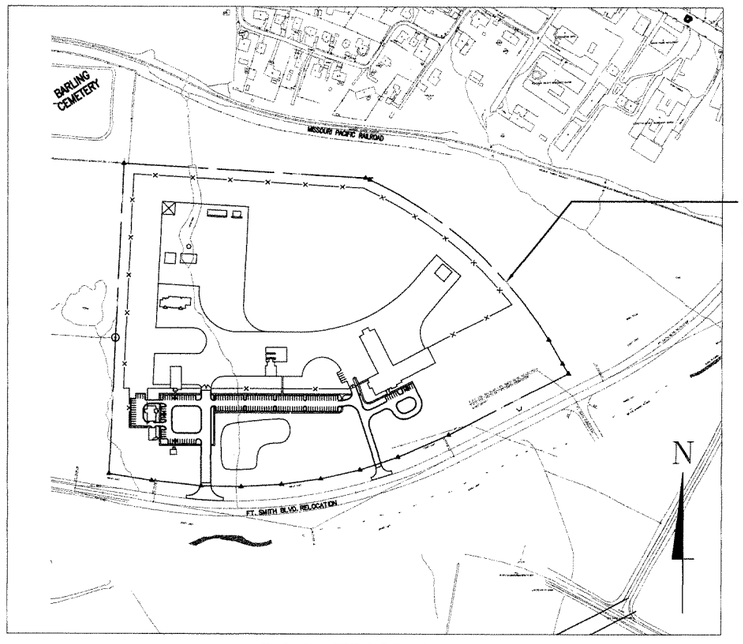
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
GP-005	
5 OF 289	

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
					ARK.			
				JOB NO.		040554	6	289
				SITE PREPARATION				

SITE PREPARATION



VICINITY MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

SURVEY CONTROL POINTS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	366678.65	624539.65	426.81	5/8" REBAR W/ 2" CAP
2	366629.92	624960.77	427.53	5/8" REBAR W/ 2" CAP
3	366660.72	625367.05	427.20	5/8" REBAR W/ 2" CAP
4	366809.37	625829.70	427.35	5/8" REBAR W/ 2" CAP
5	366999.49	626206.48	425.09	5/8" REBAR W/ 2" CAP
6	367163.81	626525.64	427.44	5/8" REBAR W/ 2" CAP
7	367390.23	625199.63	442.28	5/8" REBAR W/ 2" CAP
8	367488.76	626135.75	432.45	5/8" REBAR W/ 2" CAP
9	367317.34	624604.88	441.44	5/8" REBAR W/ 2" CAP
900			416.94	CHISELED SQ. ON HW
901	367338.53	624552.12	442.24	C.O.E. BRASS CAP

EARLING CEMETERY

FORT SMITH RAILROAD CO.
100' R/W

S 86°34'49" E
946.758'

S 65°35'13" E
17.710'

CURVE DATA:
Δ = 34°25'23" (RT)
T = 492.913'
L = 955.994'
R = 1591.207'

LOT 2
FRL. NE1/4
S 4 (T7N R31W)

N 2°39'30" E
685.162'

EXISTING 12" HIGH PRESSURE GAS LINE EASEMENT

N 2°41'10" E
530.741'

S 31°09'49" E
105.801'

S 31°09'49" E
45.832'

SSMH
TOP=425.691
FL IN (W)=407.691

SSMH
TOP=420.931
FL IN (W)=408.086
FL OUT (E)=408.031

S 89°35'06" E
82.590'

S 80°35'06" E
148.639'

S 80°35'06" E
140.519'

S 83°52'26" E
194.824'

N 88°52'49" E
157.161'

N 85°29'43" E
157.161'

N 84°34'14" E
157.161'

N 76°47'45" E
157.161'

N 72°01'17" E
157.161'

N 66°18'45" E
219.602'

N 62°39'07" E

8" W

8" W

8" W

8" W

ST. SMITH BLVD.

SSMH
TOP=423.198
FL OUT (E)=415.798

SSMH
TOP=422.446
FL IN (W)=414.546
FL OUT (E)=414.581

SSMH
TOP=430.220
FL IN (W)=413.684
FL OUT (E)=413.638

SSMH
TOP=422.581
FL IN (W)=410.910
FL OUT (E)=410.781

SSMH
TOP=419.738
FL IN (W)=409.304
FL OUT (E)=409.238

S 71°51'10" E
403.006'

N 86°20'43" E
179.027'

N 81°34'14" E
179.027'

N 76°47'45" E
179.027'

N 72°01'17" E
179.027'

N 66°18'45" E
249.017'

LOT 1
FRL. NE1/4
S 4 (T7N R31W)

FOR INFORMATION ONLY

100' 0 50' 100'
SCALE: 1"=100'

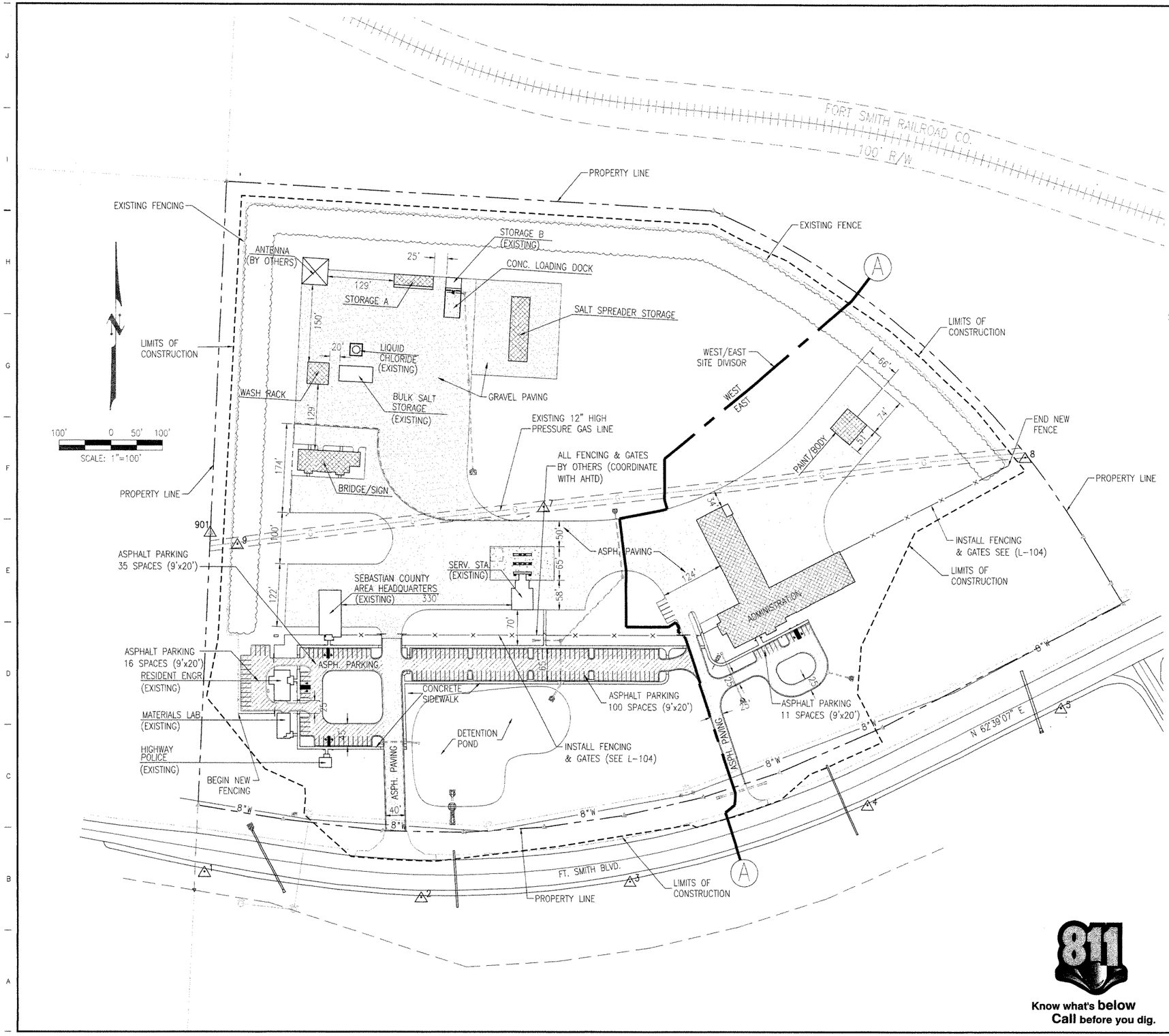
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LITTLE ROCK, AR 72211
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(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
TOPOGRAPHIC SURVEY

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
C-001	
7 OF 289	



LEGEND

- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING TREE
- EXISTING GAS LINE
- EXISTING TREE LINE
- PROPOSED FENCE
- PROPOSED ASPHALT PAVING SEE DETAIL 9/C-502
- PROPOSED ASPHALT PARKING SEE DETAIL 7/C-502
- PROPOSED CONCRETE SEE DETAIL 5/C-502
- PROPOSED GRAVEL PARKING AREA SEE DETAIL 8/C-502
- PROPOSED LIMITS OF CONSTRUCTION
- EXISTING PROPERTY LINE
- SURVEY CONTROL POINT △9

NOTES:

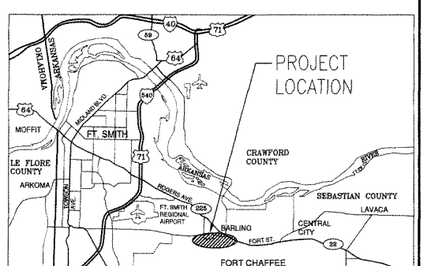
1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-101 THROUGH C-103 FOR COORDINATES AND ADDITIONAL DIMENSIONS.
3. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.
4. SEE SHEET C-103 FOR COORDINATE POINT LIST

SURVEY CONTROL POINTS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	366678.65	624539.65	426.81	5/8" REBAR W/ 2" CAP
2	366629.92	624960.77	427.53	5/8" REBAR W/ 2" CAP
3	366660.72	625367.05	427.20	5/8" REBAR W/ 2" CAP
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9	367317.34	624604.88	441.44	5/8" REBAR W/ 2" CAP
900			416.94	CHISELED SQ. ON HW
901	367338.53	624552.12	442.24	C.O.E. BRASS CAP

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 THOMAS C. GRAHAM II 10/13/11



VICINITY MAP
(NOT TO SCALE)

811 Know what's **below** **Call** before you dig.

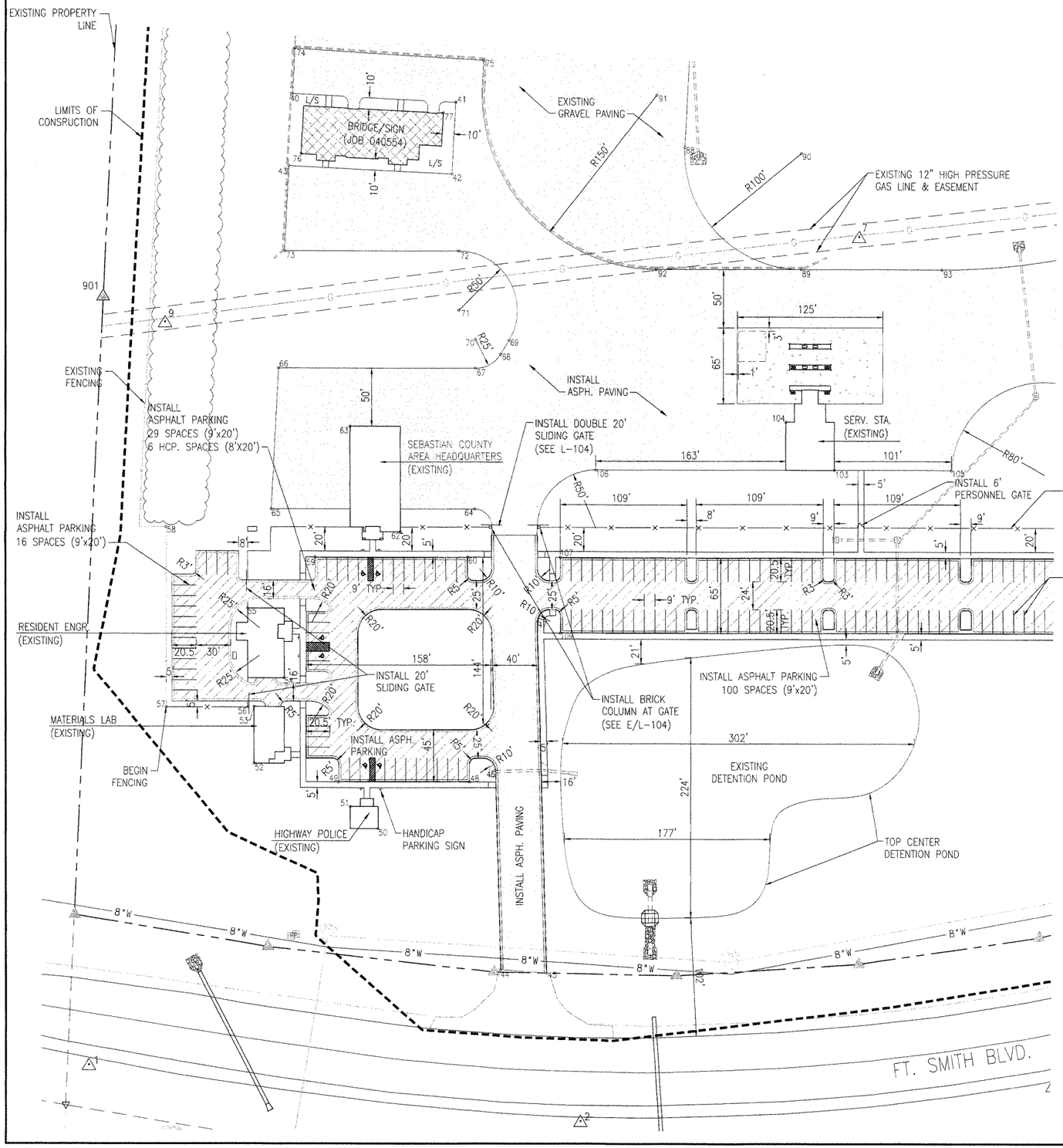
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(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
OVERALL SITE PLAN

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
C-100	
8 OF 289	



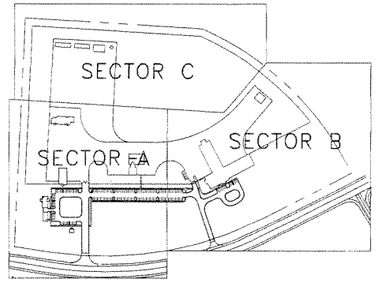
LEGEND

- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING TREE
- EXISTING GAS LINE
- EXISTING TREE LINE
- PROPOSED FENCE
- PROPOSED ASPHALT PAVING SEE DETAIL 9/C-502
- PROPOSED ASPHALT PARKING SEE DETAIL 7/C-502
- PROPOSED CONCRETE SEE DETAIL 5/C-502
- PROPOSED GRAVEL PARKING AREA SEE DETAIL 8/C-502
- PROPOSED LIMITS OF CONSTRUCTION
- EXISTING PROPERTY LINE
- SURVEY CONTROL POINT
- COORDINATE POINT

NOTES:

1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.
3. SEE SHEET C-103 FOR COORDINATE POINT LIST.
4. SEE SHEET C-504 FOR HANDICAP PARKING SPACE DETAILS AND TYPICAL STRIPING DETAILS.

811 Know what's **below** **Call** before you dig.



KEY MAP

50' 0 25' 50'
SCALE: 1"=50'

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 10/13/11 C. GRAHAM II

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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SITE PREPARATION
AHTD JOB NO. 040554
SITE PLAN-SECTOR "A"

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-101
REV	

9 OF 289

EXISTING PROPERTY LINE

EXISTING CHAIN LINK FENCE

END FENCING

LIMITS OF CONSTRUCTION

INSTALL FENCING & GATES (SEE L-104)

EXISTING 12" HIGH PRESSURE GAS LINE & EASEMENT

INSTALL ASPH. PAVING

INSTALL ASPH. PAVING

INSTALL ASPH. PAVING

INSTALL ASPHALT PARKING 5 SPACES (9'x20')

INSTALL 6' PERSONNEL GATE

INSTALL ASPHALT PARKING 9 SPACES (9'x20') 2 HCP. SPACES (8'X20')

INSTALL ASPH. PARKING

INSTALL 24' SLIDING GATE (SLIDE TO LEFT) SEE DETAIL B/L-104

INSTALL BRICK COLUMN AT GATE (SEE E/L-104)

PAINT / BODY (JOB 040554)

ADMINISTRATION (JOB 040554)

R600'

R100'

R80'

R40'

R30'

R25'

R20'

R15'

R5'

R50'

74'

41'

36'

51'

48'

127'

85'

N 62°39'07" E

8"W

LEGEND

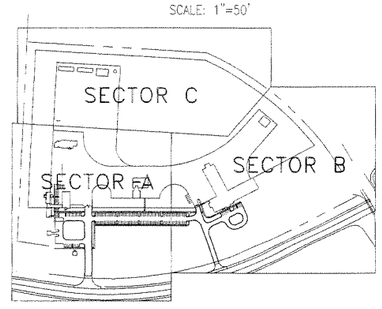
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING TREE
- EXISTING GAS LINE
- EXISTING TREE LINE
- PROPOSED FENCE
- PROPOSED ASPHALT PAVING SEE DETAIL 9/C-502
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- PROPOSED CONCRETE SEE DETAIL 5/C-502
- PROPOSED GRAVEL PARKING AREA SEE DETAIL 8/C-502
- PROPOSED LIMITS OF CONSTRUCTION
- EXISTING PROPERTY LINE
- SURVEY CONTROL POINT
- COORDINATE POINT

NOTES:

1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.
3. SEE SHEET C-103 FOR COORDINATE POINT LIST.
4. SEE SHEET C-504 FOR HANDICAP PARKING SPACE DETAILS AND TYPICAL STRIPING DETAILS.

50' 0 25' 50'

SCALE: 1"=50'



KEY MAP

Know what's **below** **Call** before you dig.

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JAMES C. GRAHAM II No. 10432 10/13/11

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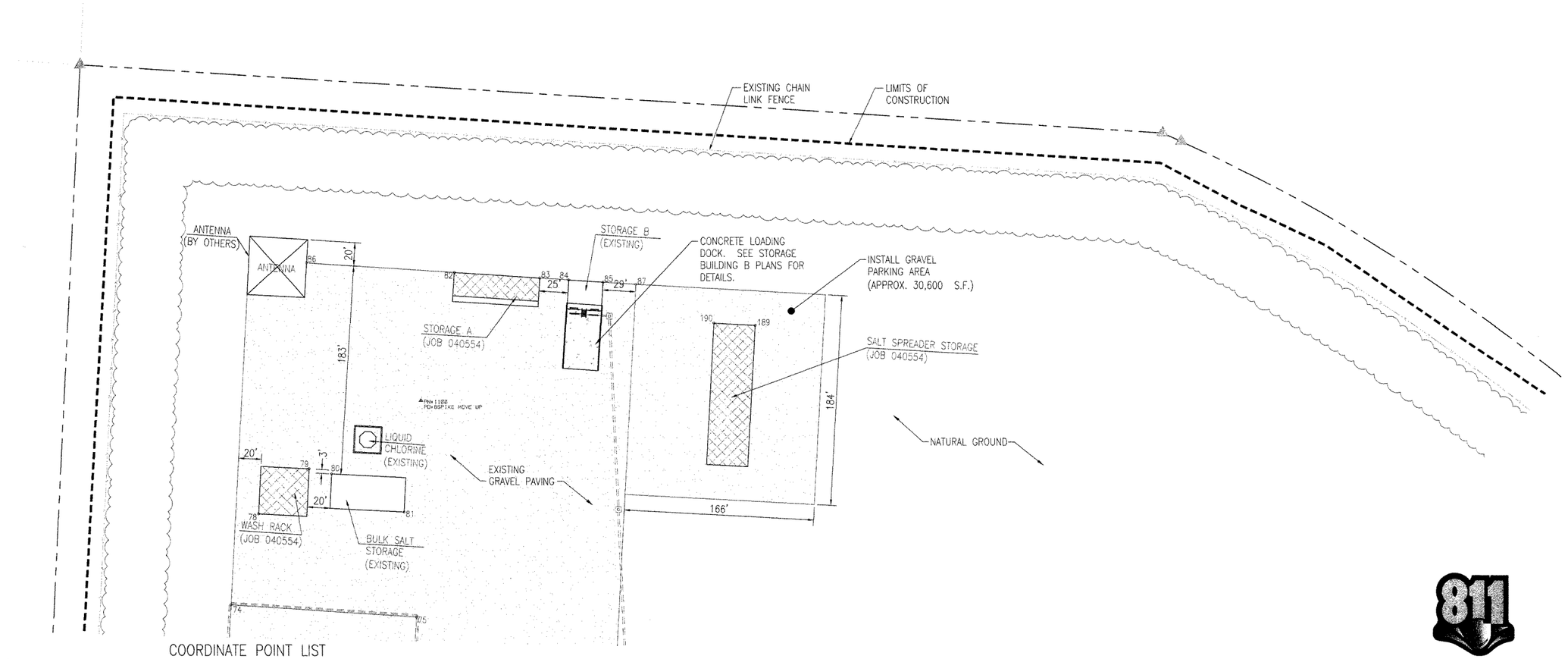
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554

SITE PLAN-SECTOR "B"

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-102
REV	
	10 OF 289



COORDINATE POINT LIST

POINT NUMBER	NORTHING	EASTING	DESCRIPTION	POINT NUMBER	NORTHING	EASTING	DESCRIPTION
40	367513.39	624713.94	EDGE OF ASPHALT	83	367838.25	624984.80	BUILDING CORNER
41	367506.37	624853.62	EDGE OF ASPHALT	84	367836.72	625009.75	BUILDING CORNER
42	367444.10	624850.49	EDGE OF ASPHALT	85	367834.88	625039.70	BUILDING CORNER
43	367451.11	624710.81	EDGE OF ASPHALT	86	367850.75	624781.19	EDGE OF GRAVEL
44	366761.02	624691.87	BACK OF CURB	87	367833.12	625068.51	EDGE OF GRAVEL
45	366757.96	624931.96	BACK OF CURB	88	367467.88	625050.17	EDGE OF GRAVEL
46	366932.46	624887.31	BACK OF CURB	89	367362.87	625150.05	EDGE OF GRAVEL
47	367060.40	624924.18	BACK OF CURB	90	367462.87	625150.05	RADIUS POINT
48	366922.20	624865.33	BACK OF CURB	91	367512.87	625026.12	RADIUS POINT
49	366922.20	624753.33	BACK OF CURB	92	367362.87	625026.12	EDGE OF ASPHALT
50	366882.12	624787.34	BUILDING CORNER	93	367362.87	625270.83	EDGE OF ASPHALT
51	366901.12	624763.34	BUILDING CORNER	94	367571.00	625725.19	EDGE OF ASPHALT
52	366938.05	624680.87	BUILDING CORNER	95	367667.04	625808.02	EDGE OF ASPHALT
53	366986.72	624680.87	BUILDING CORNER	96	367528.35	625855.34	EDGE OF ASPHALT
54	367011.72	624706.87	BUILDING CORNER	97	367426.82	625768.68	EDGE OF ASPHALT
55	367071.40	624675.51	BUILDING CORNER	98	367361.90	625844.74	RADIUS POINT
56	366986.22	624675.51	FENCE CORNER	99	367545.40	625757.41	BUILDING CORNER
57	366986.22	624605.68	FENCE CORNER	100	367513.26	625794.43	BUILDING CORNER
58	367140.67	624605.68	FENCE CORNER	101	367245.92	625805.33	BUILDING CORNER
59	367115.40	624733.28	BACK OF CURB	102	367115.98	625570.17	BUILDING CORNER
60	367115.40	624863.78	BACK OF CURB	103	367190.09	625178.50	BUILDING CORNER
61	367140.67	624675.51	FENCE CORNER	104	367231.78	625136.81	BUILDING CORNER
62	367136.67	624806.36	BUILDING CORNER	105	367190.09	625279.34	EDGE OF ASPHALT
63	367227.68	624763.34	BUILDING CORNER	106	367190.09	624973.68	EDGE OF ASPHALT
64	367155.94	624869.68	EDGE OF PAVING	107	367115.40	624943.18	BACK OF CURB
65	367155.94	624695.99	EDGE OF PAVING	108	367115.40	625423.18	BACK OF CURB
66	367277.68	624702.10	EDGE OF PAVING	109	367050.40	624943.18	BACK OF CURB
67	367277.68	624870.47	EDGE OF PAVING	110	367050.40	625423.18	BACK OF CURB
68	367289.82	624891.91	EDGE OF PAVING	111	367046.86	625501.45	BACK OF CURB
69	367301.97	624899.20	EDGE OF PAVING	112	366832.49	625571.85	BACK OF CURB
70	367302.68	624870.47	RADIUS POINT	113	367110.29	625604.88	BACK OF CURB
71	367327.68	624856.32	RADIUS POINT	114	367167.38	625715.24	BACK OF CURB
72	367377.68	624856.32	EDGE OF ASPHALT	115	367060.03	625714.48	BACK OF CURB
73	367377.68	624707.12	EDGE OF ASPHALT	116	367048.54	625692.27	BACK OF CURB
74	367551.94	624715.87	EDGE OF ASPHALT	117	367058.49	625602.69	BACK OF CURB
75	367542.03	624877.40	EDGE OF ASPHALT	118	367041.22	625568.02	BACK OF CURB
76	367461.60	624721.35	BUILDING CORNER	119	366991.98	625545.78	BACK OF CURB
77	367496.89	624843.13	BUILDING CORNER	120	366840.07	625595.67	BACK OF CURB
78	367631.00	624739.87	BUILDING CORNER	121	366823.06	625544.25	RADIUS POINT
79	367670.54	624783.60	BUILDING CORNER	122	366848.84	625623.49	RADIUS POINT
80	367666.13	624803.40	BUILDING CORNER	123	366783.71	625556.12	EDGE OF ASPHALT
81	367632.92	624866.48	BUILDING CORNER	124	366809.65	625637.13	EDGE OF ASPHALT
82	367842.85	624909.94	BUILDING CORNER	189	367797.84	625172.87	BUILDING CORNER
				190	367799.84	625136.92	BUILDING CORNER

LEGEND

- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING TREE
- EXISTING GAS LINE
- EXISTING TREE LINE
- PROPOSED FENCE
- PROPOSED ASPHALT PAVING SEE DETAIL 9/C-502
- PROPOSED ASPHALT PARKING SEE DETAIL 7/C-502
- PROPOSED CONCRETE SEE DETAIL 5/C-502
- PROPOSED GRAVEL PARKING AREA SEE DETAIL 8/C-502
- PROPOSED LIMITS OF CONSTRUCTION
- EXISTING PROPERTY LINE
- SURVEY CONTROL POINT
- COORDINATE POINT

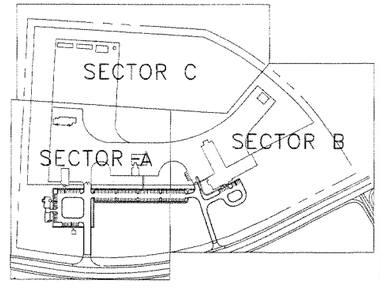
NOTES:

1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.
3. SEE SHEET C-504 FOR HANDICAP PARKING SPACE DETAILS AND TYPICAL STRIPING DETAILS.

50' 0 25' 50'

SCALE: 1"=50'

Know what's **below** **Call** before you dig.



KEY MAP

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 C. GRAHAM, II 10/13/11

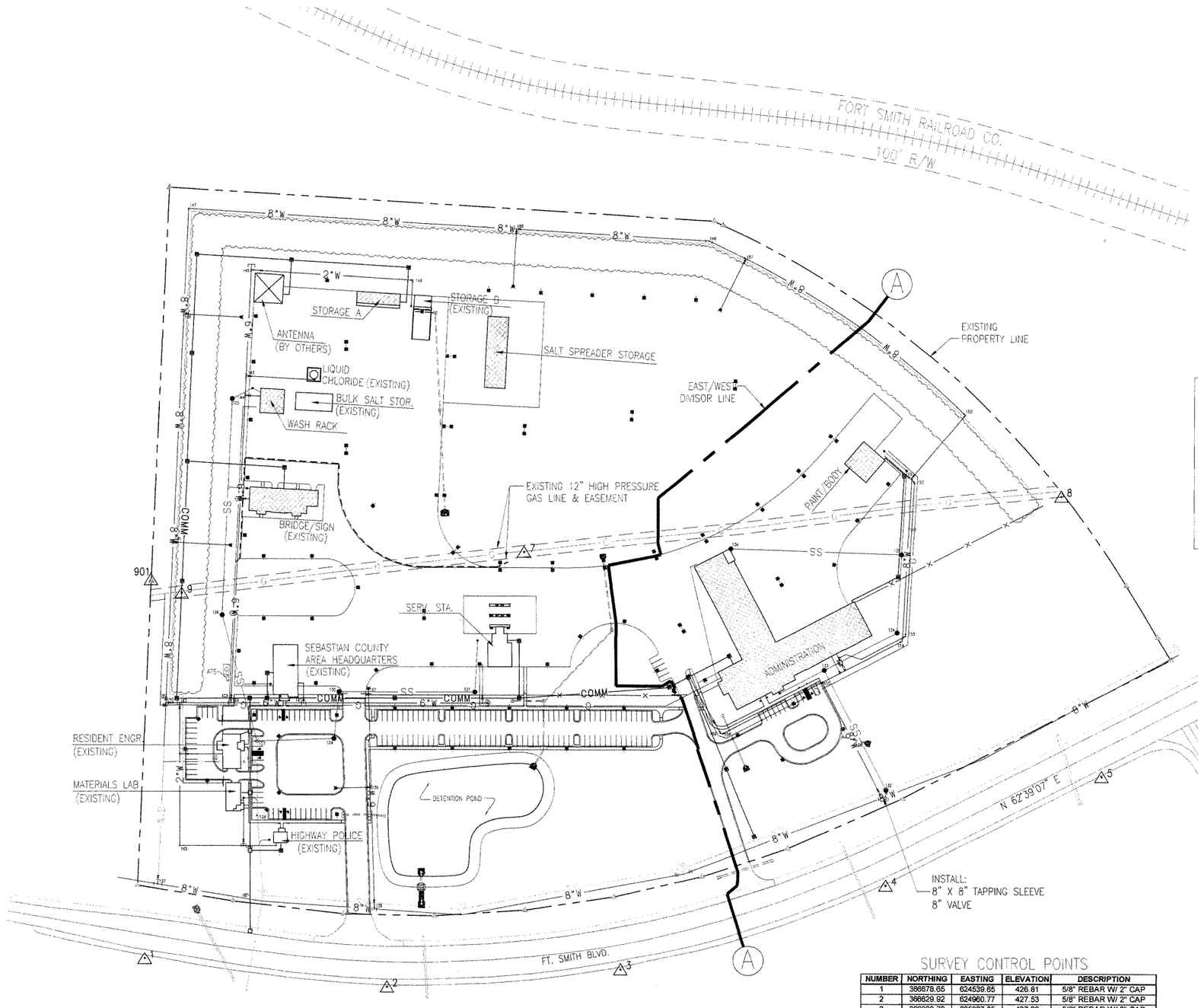
SAIC From Science to Solutions
SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC
1701 CENTERVIEW, STE. 207
LITTLE ROCK, AR 72211
(501) 228-4420 Voice
(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
SITE PLAN-SECTOR "C"

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-103
REV	
11 OF 289	



LEGEND

EXISTING WATER	8"W
EXISTING SANITARY SEWER	SS
EXISTING TREE	
EXISTING GAS LINE	G
PROPOSED WATER	8"W
PROPOSED FIRE HYDRANT	
PROPOSED WATER VALVE	
PROPOSED SANITARY SEWER	SS
PROPOSED SAN. SEWER MANHOLE	
PROPOSED STORM SEWER	
PROPOSED STORM SEWER MANHOLE	
PROPOSED FENCE	
COMM – EXISTING CONDUIT UNO	COMM
HAND HOLE 36X36 QUAZITE ENCLOSURE	HH
SURVEY CONTROL POINT	7
COORDINATE POINT	148

NOTES:
1. COORDINATE BUILDING UTILITY CONNECTIONS WITH APPROPRIATE DISTRICT 4 HQ COMPLEX ARCHITECTURAL BUILDING DRAWINGS/SPECS.
2. SEE SHEET C-500 FOR UTILITY NOTES.
3. SEE SHEETS C-301 AND C-302 FOR SANITARY SEWER PROFILES.
4. SEE SHEET ES-101 FOR SITE ELECTRICAL UTILITIES.
5. SEE SHEET C-113 FOR COORDINATE POINT LIST.
6. SEE SHEET TS-101 FOR CAMERA LAYOUT.

100' 0 50' 100'
SCALE: 1"=100'

811
Know what's **below**
Call before you dig.

SURVEY CONTROL POINTS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	366678.65	624539.65	426.81	5/8" REBAR W/ 2" CAP
2	366629.92	624960.77	427.53	5/8" REBAR W/ 2" CAP
3	366660.72	625367.05	427.20	5/8" REBAR W/ 2" CAP
4	366809.37	625829.70	427.35	5/8" REBAR W/ 2" CAP
5	366999.49	626206.48	425.09	5/8" REBAR W/ 2" CAP
6	367163.81	626525.64	427.44	5/8" REBAR W/ 2" CAP
7	367390.23	625199.63	442.28	5/8" REBAR W/ 2" CAP
8	367488.76	626135.75	432.45	5/8" REBAR W/ 2" CAP
9	367317.34	624604.88	441.44	5/8" REBAR W/ 2" CAP
900			416.94	CHISELED SQ. ON HW
901	367338.53	624552.12	442.24	C.O.E. BRASS CAP

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 10432
10/13/11
JAMES C. GRAHAM II

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LITTLE ROCK, AR 72211
(501) 228-4420 Voice
(501) 228-4410 Fax

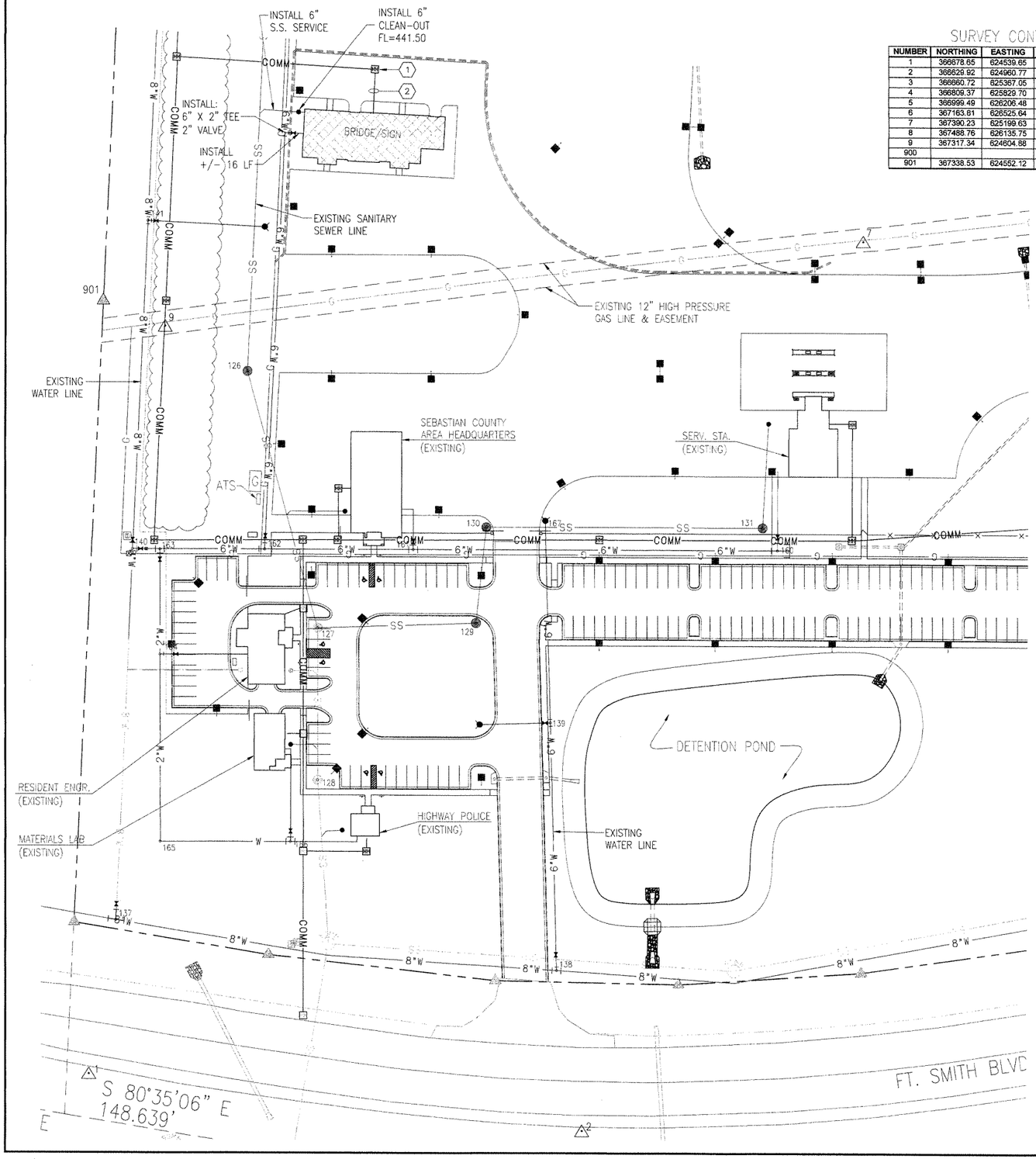
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
OVERALL UTILITY PLAN

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-110
REV	

12 OF 289



SURVEY CONTROL POINTS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	366678.65	624539.65	426.81	5/8" REBAR W/ 2" CAP
2	366629.92	624960.77	427.53	5/8" REBAR W/ 2" CAP
3	366660.72	625367.05	427.20	5/8" REBAR W/ 2" CAP
4	366809.37	625829.70	427.35	5/8" REBAR W/ 2" CAP
5	366999.49	626206.48	425.09	5/8" REBAR W/ 2" CAP
6	367163.81	626525.64	427.44	5/8" REBAR W/ 2" CAP
7	367390.23	625199.63	442.28	5/8" REBAR W/ 2" CAP
8	367488.76	626135.75	432.45	5/8" REBAR W/ 2" CAP
9	367317.34	624604.88	441.44	5/8" REBAR W/ 2" CAP
900			416.94	CHISELED SQ. ON HW
901	367338.53	624552.12	442.24	C.O.E. BRASS CAP

LEGEND

- EXISTING WATER — 8"x
- EXISTING SANITARY SEWER — SS
- EXISTING TREE
- EXISTING GAS LINE — G
- PROPOSED WATER — 8"W
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY SEWER — SS
- PROPOSED SAN. SEWER MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER MANHOLE
- PROPOSED FENCE — x x x
- COMM – EXISTING CONDUIT UNO — COMM
- HAND HOLE 36X36 QUAZITE ENCLOSURE — HH
- SURVEY CONTROL POINT — 7
- COORDINATE POINT — 148

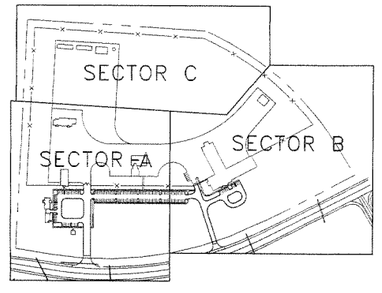
KEY NOTES: THIS SHEET ONLY

(1) EXISTING HANDHOLE WITH EXISTING OPTICAL FIBER CABLE COILED. INSTALL CABLE IN NEW CONDUIT TO "BRIDGE/SIGN" ("MULTI-CREW") BUILDING, TERMINATE WITH "SC" STYLE CONNECTORS AT TELECOMMUNICATIONS RACK/CABINET WITHIN BUILDING AND TEST.

(2) INSTALL TWO (2) 4" SCHEDULE #40 PVC CONDUIT

NOTES:
1. COORDINATE BUILDING UTILITY CONNECTIONS WITH APPROPRIATE DISTRICT 4 HQ COMPLEX ARCHITECTURAL BUILDING DRAWINGS/SPECS.
2. SEE SHEET C-500 FOR UTILITY NOTES.
3. SEE SHEETS C-301 AND C-302 FOR SANITARY SEWER PROFILES.
4. SEE SHEET ES-101 FOR SITE ELECTRICAL UTILITIES.
5. SEE SHEET C-113 FOR COORDINATE POINT LIST.
6. SEE SHEET TS-101 FOR CAMERA LAYOUT.

50' 0 25' 50'
SCALE: 1"=50'



KEY MAP

Know what's **below** **Call** before you dig.

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER G. GRAHAM, II 10432 10/13/11

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LITTLE ROCK, AR 72211
(501) 228-4420 Voice
(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

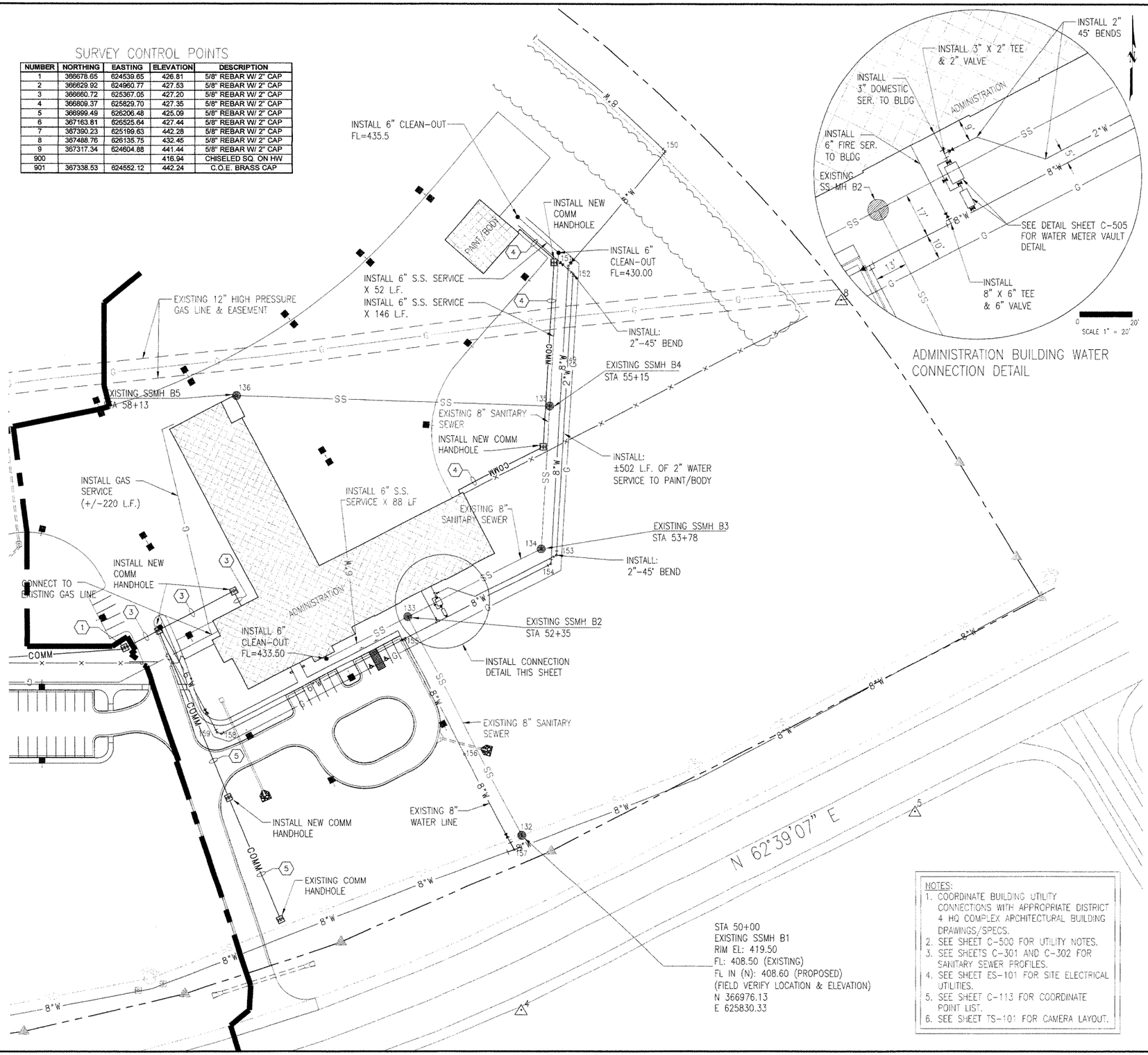
SITE PREPARATION
AHTD JOB NO. 040554
UTILITY PLAN–SECTOR "A"

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-111
REV	
13 OF 289	

SURVEY CONTROL POINTS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	366678.65	624539.65	426.81	5/8" REBAR W/ 2" CAP
2	366629.92	624960.77	427.53	5/8" REBAR W/ 2" CAP
3	366660.72	625367.05	427.20	5/8" REBAR W/ 2" CAP
4	366809.37	625829.70	427.35	5/8" REBAR W/ 2" CAP
5	366999.49	626206.48	425.09	5/8" REBAR W/ 2" CAP
6	367163.81	626525.64	427.44	5/8" REBAR W/ 2" CAP
7	367390.23	625199.63	442.28	5/8" REBAR W/ 2" CAP
8	367488.76	626135.75	432.45	5/8" REBAR W/ 2" CAP
9	367317.34	624604.88	441.44	5/8" REBAR W/ 2" CAP
900			416.94	CHISELED SQ. ON HW
901	367338.53	624552.12	442.24	C.O.E. BRASS CAP



ADMINISTRATION BUILDING WATER CONNECTION DETAIL

LEGEND

- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING TREE
- EXISTING GAS LINE
- PROPOSED WATER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY SEWER
- PROPOSED SAN. SEWER MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER MANHOLE
- PROPOSED FENCE
- COMM – EXISTING CONDUIT UNO
- HAND HOLE 36X36 QUAZITE ENCLOSURE
- SURVEY CONTROL POINT
- COORDINATE POINT

KEY NOTES: THIS SHEET ONLY

1. EXISTING HANDHOLE WITH EXISTING OPTICAL FIBER CABLE COILED. INSTALL CABLE IN NEW CONDUIT TO "ADMINISTRATION" BUILDING – ROOM 116, TERMINATE WITH "SC" STYLE CONNECTORS AT TELECOMMUNICATIONS RACK/CABINET AND TEST.
2. INSTALL NEW HANDHOLE – 36X36 QUAZITE ENCLOSURE.
3. INSTALL FOUR (4) 4" SCHEDULE #40 PVC CONDUITS
4. INSTALL ONE (1) 4" SCHEDULE #40 PVC CONDUIT
5. INSTALL TWO (2) 4" SCHEDULE #40 PVC CONDUITS

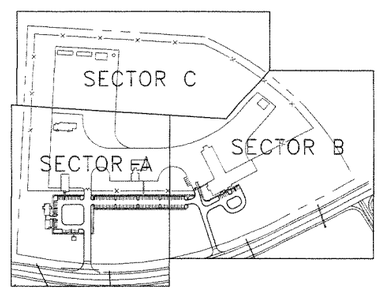
811 Know what's **below** **Call** before you dig.

SCALE: 1"=50'

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 THOMAS C. GRAHAM II 10/13/11

NOTES:
1. COORDINATE BUILDING UTILITY CONNECTIONS WITH APPROPRIATE DISTRICT 4 HQ COMPLEX ARCHITECTURAL BUILDING DRAWINGS/SPECS.
2. SEE SHEET C-500 FOR UTILITY NOTES.
3. SEE SHEETS C-301 AND C-302 FOR SANITARY SEWER PROFILES.
4. SEE SHEET ES-101 FOR SITE ELECTRICAL UTILITIES.
5. SEE SHEET C-113 FOR COORDINATE POINT LIST.
6. SEE SHEET TS-101 FOR CAMERA LAYOUT.



KEY MAP

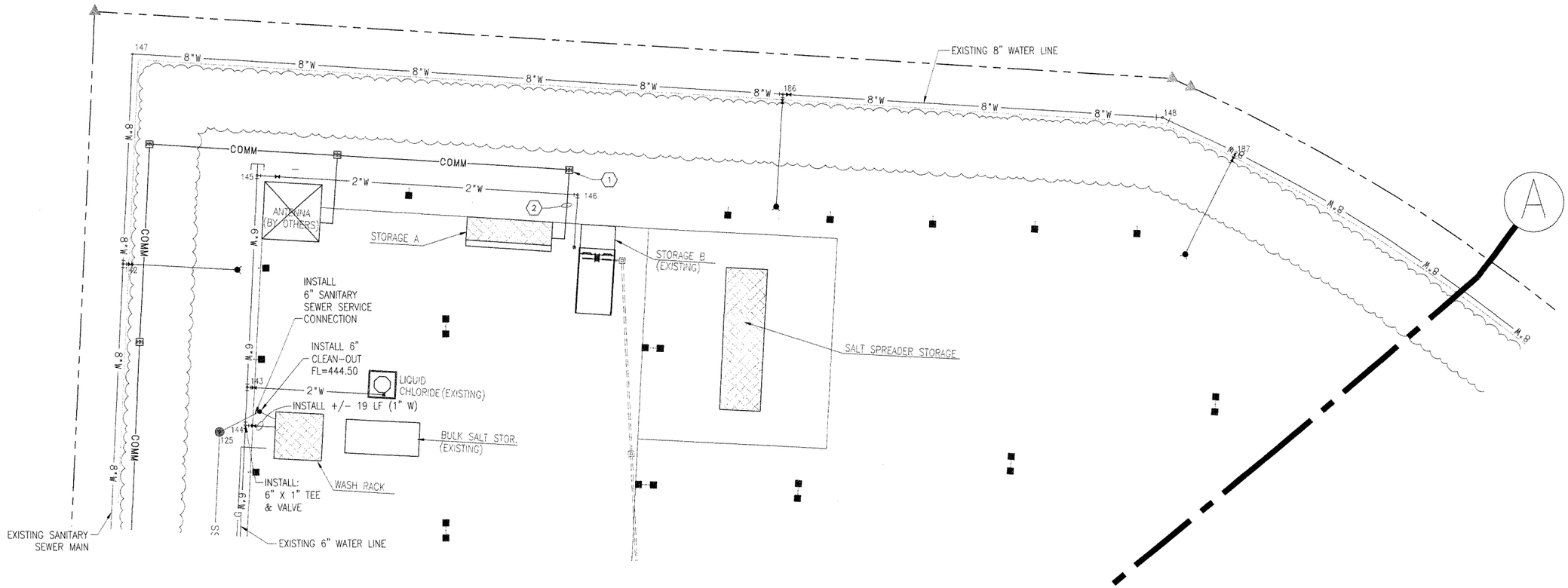
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LITTLE ROCK, AR 72211
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(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
UTILITY PLAN–SECTOR "B"

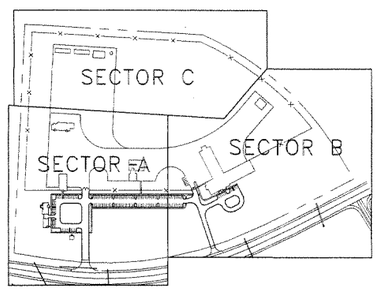
DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-112
REV	

14 OF 289



LEGEND

- EXISTING WATER — 8"W
- EXISTING SANITARY SEWER — SS
- EXISTING TREE
- EXISTING GAS LINE — G
- PROPOSED WATER — 8"W
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY SEWER — SS
- PROPOSED SAN. SEWER MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER MANHOLE
- PROPOSED FENCE — x — x — x —
- COMM – EXISTING CONDUIT UNO — COMM
- HAND HOLE 36X36 QUAZITE ENCLOSURE — HH
- SURVEY CONTROL POINT — 7
- COORDINATE POINT — 148



KEY MAP

NOTES:
1. COORDINATE BUILDING UTILITY CONNECTIONS WITH APPROPRIATE DISTRICT 4 HQ COMPLEX ARCHITECTURAL BUILDING DRAWINGS/SPECS.
2. SEE SHEET C-500 FOR UTILITY NOTES.
3. SEE SHEETS C-301 AND C-302 FOR SANITARY SEWER PROFILES.
4. SEE SHEET ES-101 FOR SITE ELECTRICAL UTILITIES.
5. SEE SHEET TS-101 FOR CAMERA LAYOUT.

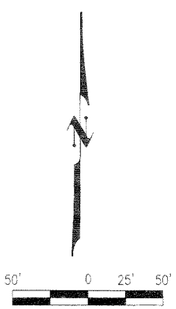
COORDINATE POINT LIST

POINT NUMBER	NORTHING	EASTING	DESCRIPTION
125	367654.75	624692.70	SANITARY SEWER MH
126	367279.19	624674.97	SANITARY SEWER MH
127	367060.02	624734.62	SANITARY SEWER MH
128	366930.02	624734.62	SANITARY SEWER MH
129	367064.41	624869.55	SANITARY SEWER MH
130	367145.94	624878.34	SANITARY SEWER MH
131	367145.94	625114.34	SANITARY SEWER MH
132	366976.13	625830.33	SANITARY SEWER MH
133	367185.17	625722.50	SANITARY SEWER MH
134	367250.50	625849.10	SANITARY SEWER MH
135	367387.20	625857.20	SANITARY SEWER MH
136	367396.99	625559.43	SANITARY SEWER MH
137	366810.33	624562.25	WATER CONNECTION
138	366767.48	624938.71	WATER CONNECTION
139	366979.43	624933.25	TEE
140	367128.67	624577.01	TEE
141	367406.49	624590.06	TEE
142	367801.97	624608.52	TEE
143	367694.01	624716.58	TEE
144	367660.48	624715.00	TEE
145	367879.21	624725.33	TEE
146	367862.41	625006.32	90 DEGREE BEND
147	367985.86	624617.10	90 DEGREE BEND
148	367931.87	625520.12	22.5 DEGREE BEND
149	367433.44	625869.95	TEE
150	367629.55	625968.01	90 DEGREE BEND
151	367520.72	625875.12	22.5 DEGREE BEND
152	367513.43	625879.69	45 DEGREE BEND
153	367244.39	625863.77	45 DEGREE BEND
154	367235.91	625856.26	45 DEGREE BEND
155	367164.00	625719.24	CROSS
156	367053.75	625776.12	TEE
157	366962.41	625823.24	WATER CONNECTION
158	367073.59	625544.46	45 DEGREE BEND
159	367074.85	625540.37	45 DEGREE BEND
160	367126.67	625127.35	TEE
161	367126.67	624816.36	TEE
162	367126.67	624689.79	TEE
163	367126.67	624600.68	TEE
164	367037.31	624600.68	TEE
165	366877.12	624600.68	90 DEGREE BEND
166	366877.12	624711.72	TEE
167	367151.51	624928.81	90 DEGREE BEND
186	367951.83	625186.31	TEE
187	367901.16	625584.83	TEE

KEY NOTES: THIS SHEET ONLY

(1) EXISTING HANDHOLE WITH EXISTING OPTICAL FIBER CABLE COILED. INSTALL CABLE IN NEW CONDUIT TO "STORAGE A" BUILDING, TERMINATE WITH "SC" STYLE CONNECTORS AT TELECOMMUNICATIONS RACK/CABINET WITHIN BUILDING AND TEST.

(2) INSTALL ONE (1) 4" SCHEDULE #40 PVC CONDUIT



CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 THOMAS C. GRAHAM, II 10/13/11

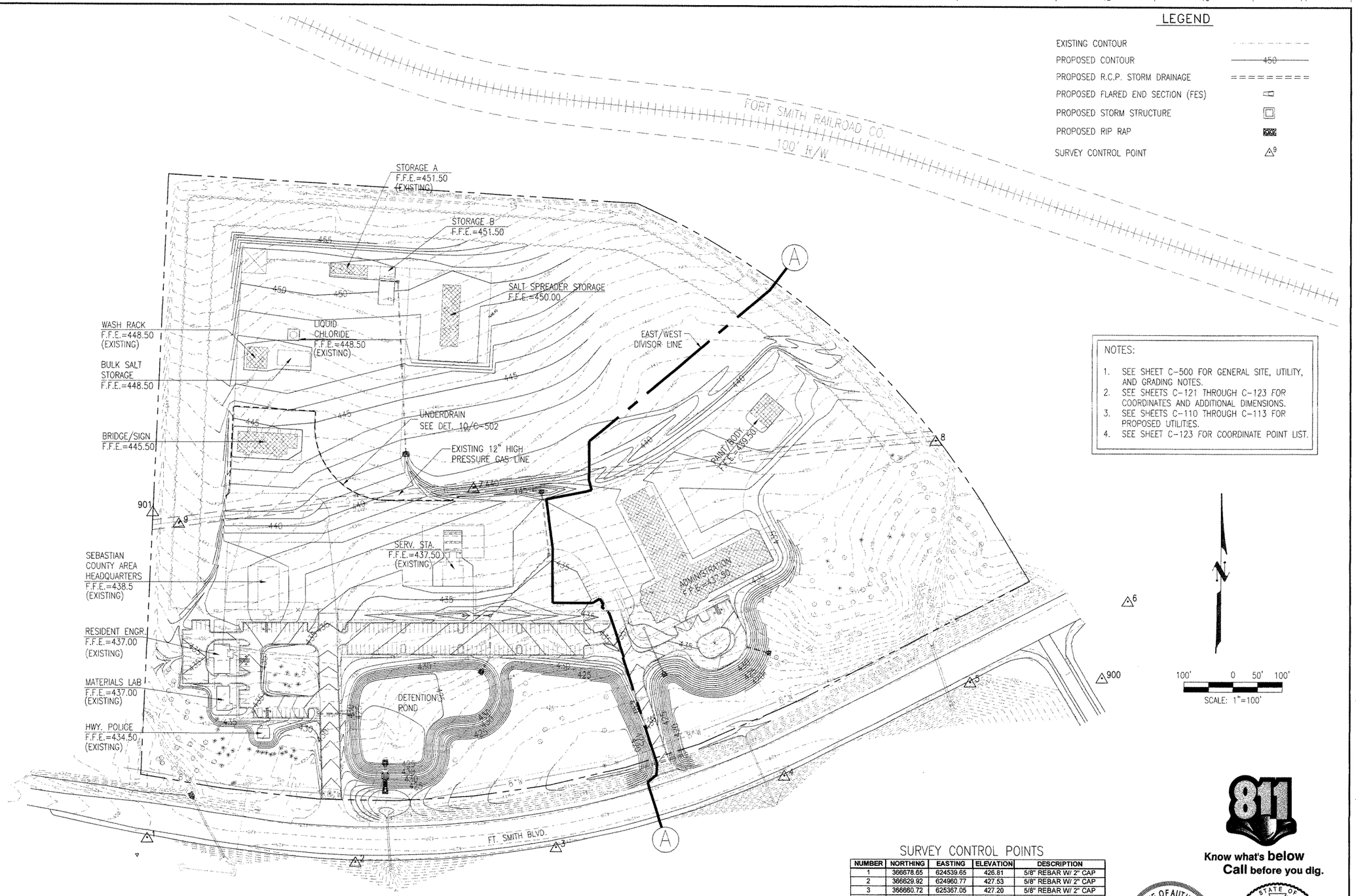
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SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC
1701 CENTERVIEW, STE. 207
LITTLE ROCK, AR 72211
(501) 228-4420 Voice
(501) 228-4410 Fax

NO	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
UTILITY PLAN–SECTOR "C"

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-113
REV	

15 OF 289



LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR — 450
- PROPOSED R.C.P. STORM DRAINAGE
- PROPOSED FLARED END SECTION (FES)
- PROPOSED STORM STRUCTURE
- PROPOSED RIP RAP
- SURVEY CONTROL POINT

NOTES:

1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-121 THROUGH C-123 FOR COORDINATES AND ADDITIONAL DIMENSIONS.
3. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.
4. SEE SHEET C-123 FOR COORDINATE POINT LIST.

N

100' 0 50' 100'

SCALE: 1"=100'

SURVEY CONTROL POINTS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	366678.65	624539.65	426.81	5/8" REBAR W/ 2" CAP
2	366629.92	624960.77	427.53	5/8" REBAR W/ 2" CAP
3	366660.72	625367.05	427.20	5/8" REBAR W/ 2" CAP
4	366809.37	625829.70	427.35	5/8" REBAR W/ 2" CAP
5	356999.49	626206.48	425.09	5/8" REBAR W/ 2" CAP
6	367163.81	626525.64	427.44	5/8" REBAR W/ 2" CAP
7	367390.23	625199.63	442.28	5/8" REBAR W/ 2" CAP
8	367488.76	626135.75	432.45	5/8" REBAR W/ 2" CAP
9	367317.34	624604.88	441.44	5/8" REBAR W/ 2" CAP
900			416.94	CHISELED SQ. ON HW
901	367338.53	624552.12	442.24	C.O.E. BRASS CAP

Know what's **below**
Call before you dig.

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 10432
10/13/11
CHRISTOPHER G. GRAHAM II

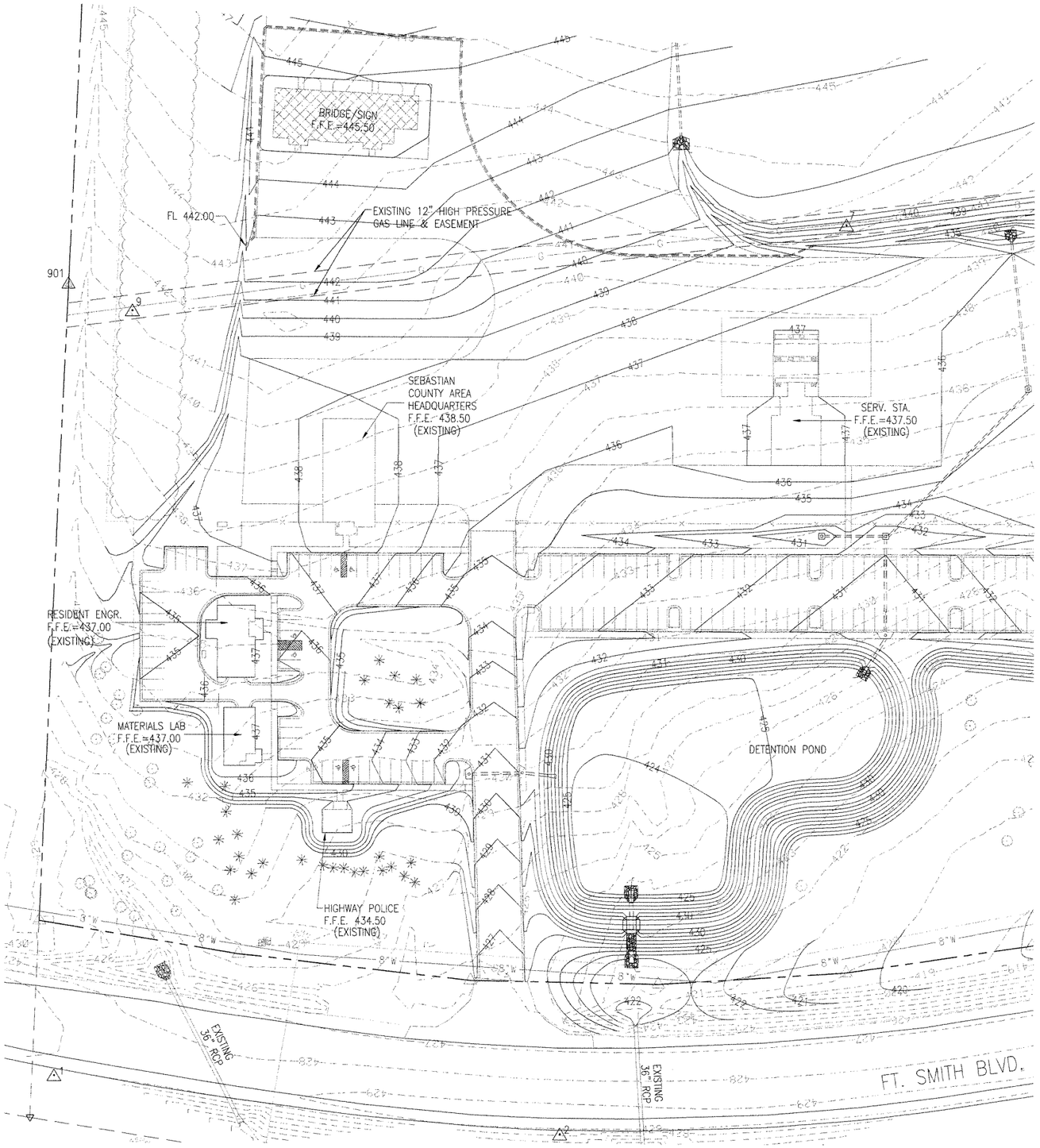
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1701 CENTERVIEW, STE. 207
LITTLE ROCK, AR 72211
(501) 228-4420 Voice
(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
OVERALL GRADING PLAN

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
C-120	
16 OF 289	



(EXISTING)

LEGEND

EXISTING CONTOUR	
PROPOSED CONTOUR	459
PROPOSED R.C.P. STORM DRAINAGE	
PROPOSED FLARED END SECTION (FES)	
PROPOSED STORM STRUCTURE	
PROPOSED RIP RAP	
SURVEY CONTROL POINT	9
COORDINATE POINT	100

NOTES:

1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.
3. SEE SHEET C-123 FOR COORDINATE POINT LIST.
4. STORM DRAINAGE SHOWN ON THIS SHEET IS ALREADY INSTALLED.
5. DETENTION POND IS EXISTING.

N

50' 0 25' 50'

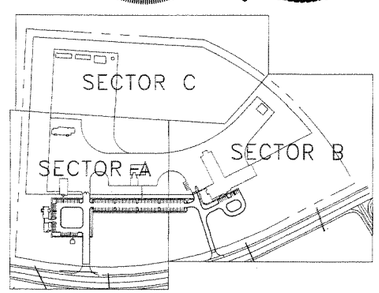
SCALE: 1"=50'

811

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SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 10432
10/13/11
THOMAS C. GRAHAM, II



KEY MAP

SAIC
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1701 CENTERVIEW, STE. 207
LITTLE ROCK, AR 72211
(501) 228-4420 Voice
(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
GRADING PLAN-SECTOR "A"

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-121
REV	
17 OF 289	

NOTES:

1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.
3. SEE SHEET C-123 FOR COORDINATE POINT LIST.

LEGEND

EXISTING CONTOUR	
PROPOSED CONTOUR	450
PROPOSED R.C.P. STORM DRAINAGE	
PROPOSED FLARED END SECTION (FES)	
PROPOSED STORM STRUCTURE	
PROPOSED RIP RAP	
SURVEY CONTROL POINT	9
COORDINATE POINT	100

PAINT / BODY F.F.E.=439.50

ADMINISTRATION F.F.E.=437.50

EXISTING 12" HIGH PRESSURE GAS LINE & EASEMENT

EXISTING 54" RCP

EXISTING 30" RCP

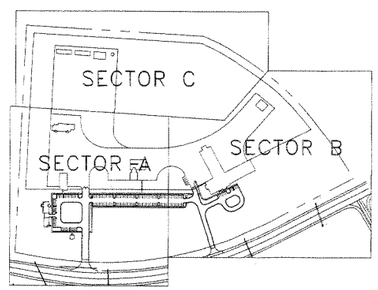
50' 0 25' 50'

SCALE: 1"=50'

Know what's **below** **Call** before you dig.

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 10/19/11 JOSHUA C. GRAHAM II



KEY MAP

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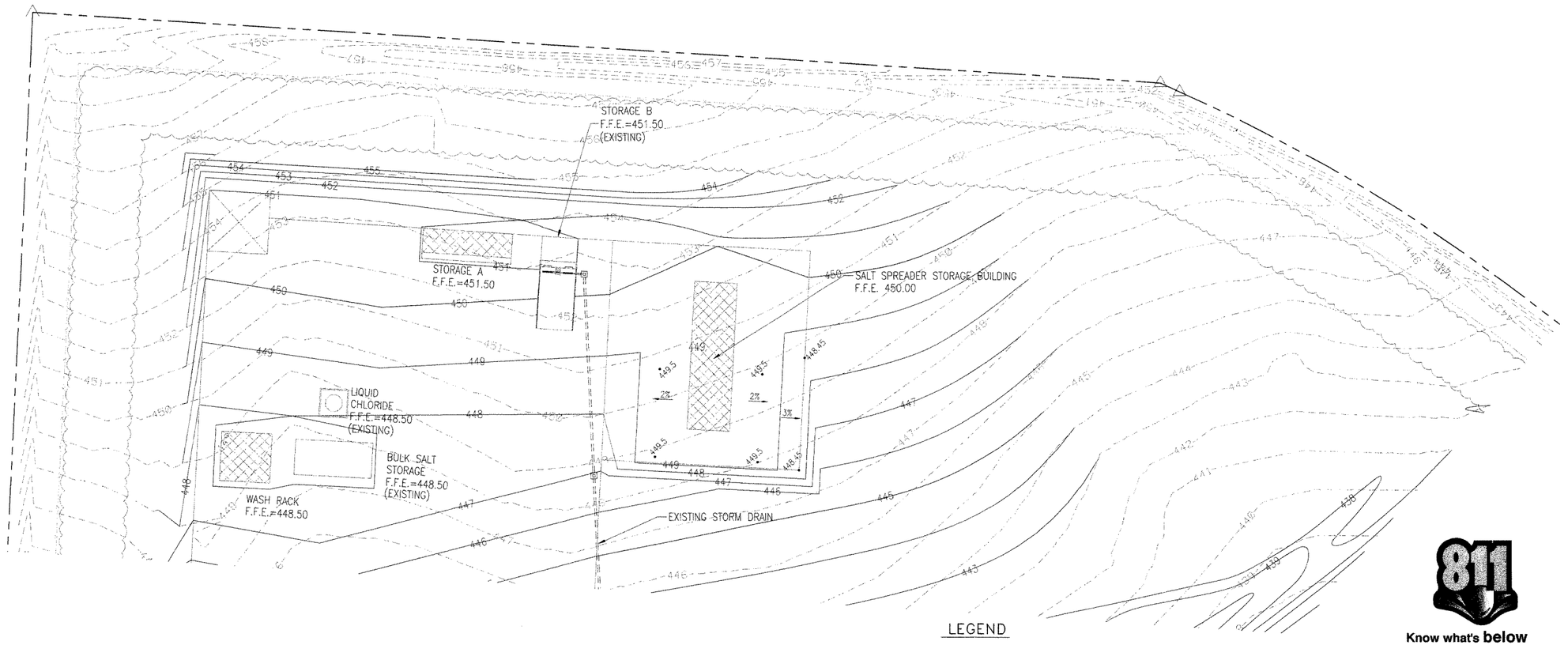
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
GRADING PLAN-SECTOR "B"

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-122
REV	

18 OF 289



LEGEND

EXISTING CONTOUR	
PROPOSED CONTOUR	450
PROPOSED R.C.P. STORM DRAINAGE	
PROPOSED FLARED END SECTION (FES)	
PROPOSED STORM STRUCTURE	
PROPOSED RIP RAP	
SURVEY CONTROL POINT	9
COORDINATE POINT	100

Know what's **below**
Call before you dig.

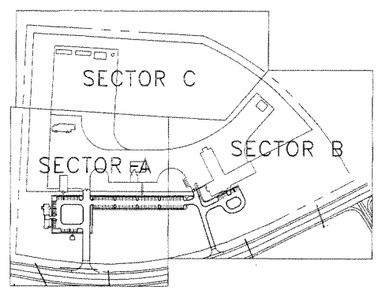
STORM DRAINAGE COORDINATE POINTS

POINT NUMBER	NORTHING	EASTING	DESCRIPTION
168	366773.91	625020.83	FLARED END SECTION
169	366834.47	625020.54	FLARED END SECTION
170	366929.33	624957.62	FLARED END SECTION
171	366932.34	624926.83	CURB INLET
172	367016.05	625214.49	FLARED END SECTION
173	367050.90	625232.68	CURB INLET
174	367130.54	625232.68	AREA INLET
175	367130.54	625179.45	AREA INLET
176	367254.67	625351.57	JUNCTION BOX
177	367382.70	625336.89	FLARED END SECTION
178	367459.10	625061.67	FLARED END SECTION
179	367805.50	625045.08	JUNCTION BOX
180	366822.78	625535.21	FLARED END SECTION
181	366853.81	625632.72	FLARED END SECTION
182	367057.65	625797.24	FLARED END SECTION
183	367333.14	625796.32	FLARED END SECTION
184	367069.75	625750.89	CURB INLET
185	366931.30	624867.84	CURB INLET
188	367635.70	625053.29	JUNCTION BOX

NOTES:

1. SEE SHEET C-500 FOR GENERAL SITE, UTILITY, AND GRADING NOTES.
2. SEE SHEETS C-110 THROUGH C-113 FOR PROPOSED UTILITIES.

50' 0 25' 50'
SCALE: 1"=50'



KEY MAP

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 10432
THOMAS C. GRAHAM II
10/13/11

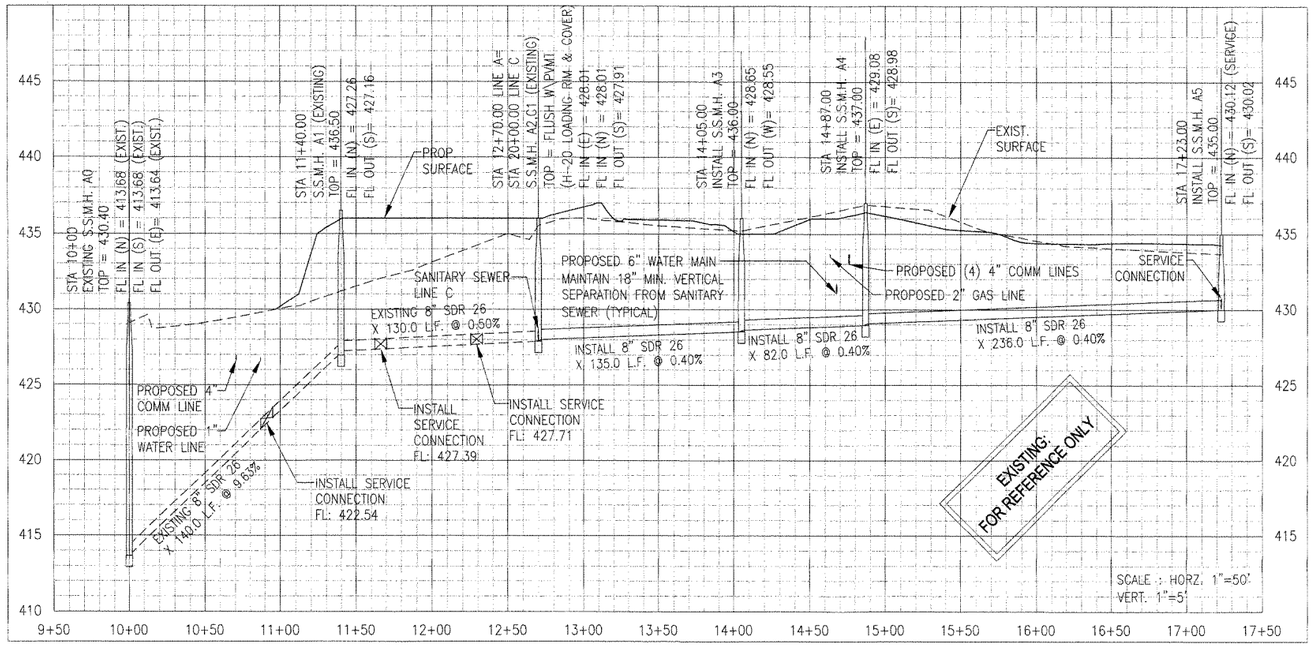
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0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
GRADING PLAN-SECTOR "C"

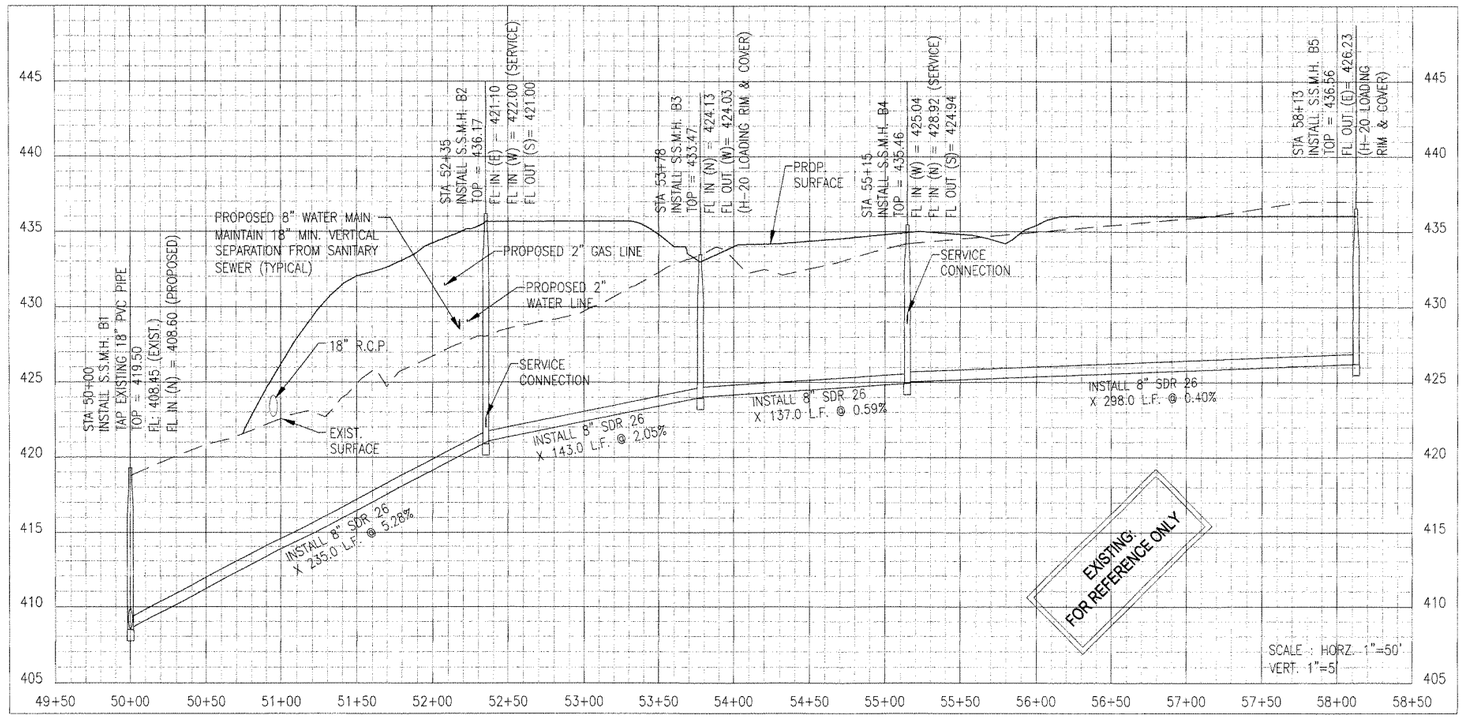
DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-123
REV	

19 OF 289



SANITARY SEWER LINE "A" PROFILE

NOTE:
SEE SHEET C-507
FOR MANHOLE DETAILS



SANITARY SEWER LINE "B" PROFILE

NOTE:
SEE SHEET C-507
FOR MANHOLE DETAILS

Know what's **below**
Call before you dig.

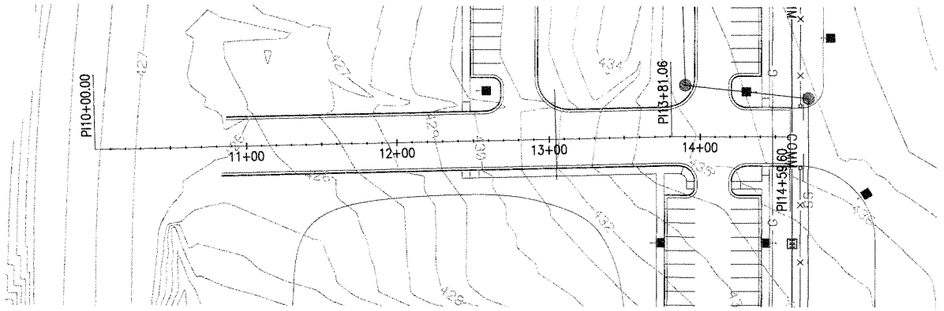
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(501) 228-4420 Voice
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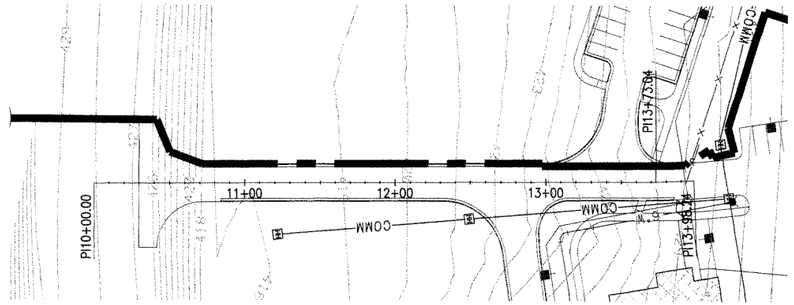
SITE PREPARATION
AHTD JOB NO. 040554
SANITARY SEWER PROFILES

DESIGNED BY	BOL
DRAWN BY	BOL
CHECKED BY	TCG
APPROVED BY	TCG

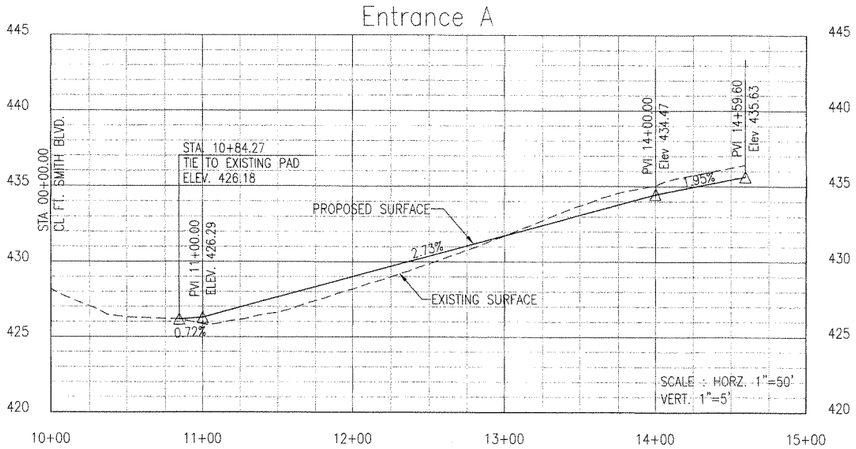
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-301
REV	
20 OF 289	



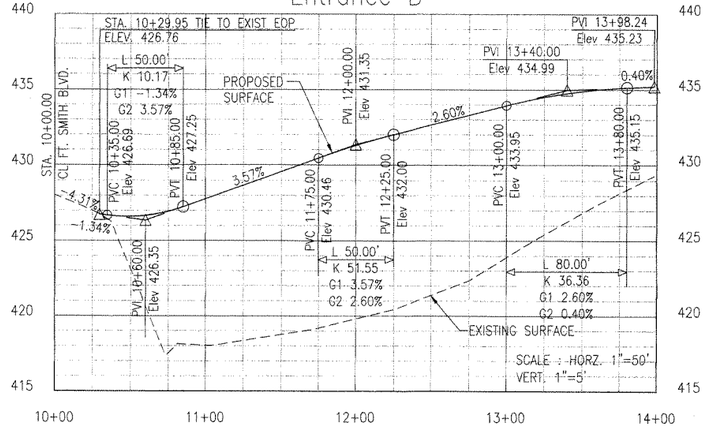
ENTRANCE "A" PLAN
SCALE: 1"=50'



ENTRANCE "B" PLAN
SCALE: 1"=50'



ENTRANCE "A" PROFILE
SCALE: AS SHOWN



ENTRANCE "B" PROFILE
SCALE: AS SHOWN

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Call before you dig.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
JEREMY D. GRAHAM
No. 10432
6/13/11

SAIC
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1701 CENTERVIEW, STE. 207
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/18/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
ENTRANCE PLANS & PROFILES

DESIGNED BY	BOL
DRAWN BY	AWC
CHECKED BY	TCG
APPROVED BY	TCG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-303
REV	
21 OF 289	

GENERAL SITE NOTES:

1. CAUTION: UNDERGROUND UTILITIES LIE WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. AN ATTEMPT HAS BEEN MADE TO LOCATE THESE UTILITIES ON THE PLANS, HOWEVER ALL EXISTING UTILITIES MAY NOT BE SHOWN AND THE ACTUAL LOCATIONS OF THE UTILITIES MAY VARY FROM LOCATIONS SHOWN. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL MARK THE VISIBLE UTILITIES & THE UTILITIES SHOWN ON THE PLANS IN THE FIELD. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKING UNTIL THEY ARE NO LONGER NECESSARY. USE EXTREME CAUTION WHEN EXCAVATING.

2. DIMENSIONS ARE GIVEN TO BACK OF CURB, CENTER OF STRIPE, FACE OF BUILDING, EDGE OF PAVEMENT, OR PROPERTY LINE.

3. COORDINATES GIVEN FOR RADII ARE FROM THE CENTER OF THE RADIUS.

4. THE CONTRACTOR IS RESPONSIBLE FOR THE APPROPRIATE BARRICADES AND SAFETY PRECAUTIONS IN ALL EXCAVATED AREAS. EXCAVATED AREAS SHALL BE ADEQUATELY FILLED OR COVERED BY THE CONTRACTOR BEFORE LEAVING THE JOBSITE EACH DAY.

5. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING STRUCTURES, PAVEMENTS, AND UTILITIES.

6. CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS TO THE SITE DURING CONSTRUCTION.

7. THE CONTRACTOR SHALL MAINTAIN THE SITE IN AN ORDERLY AND CLEAN FASHION.

8. ALL WASTE MATERIALS GENERATED FROM CONSTRUCTION BECOME THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE WASTE MATERIALS FROM THE SITE AND DISPOSE OF IN A LEGAL MANNER.

9. PROVIDE HANDICAP ACCESS FOR ALL SIDEWALK CROSSINGS AT TURNOUTS. SIDEWALK CROSSINGS MUST MEET CURRENT ADA STANDARDS.

10. SEE ARCHITECTURAL PLANS FOR BUILDING ACCESS, GAS METER, AND A/C CONDENSER DETAILS.

11. ALL REINFORCING STEEL SHALL BE GRADE A-60.

GENERAL UTILITY NOTES:

1. CAUTION: UNDERGROUND UTILITIES LIE WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. AN ATTEMPT HAS BEEN MADE TO LOCATE THESE UTILITIES ON THE PLANS; HOWEVER, ALL EXISTING UTILITIES MAY NOT BE SHOWN AND THE ACTUAL LOCATIONS OF THE UTILITIES MAY VARY FROM LOCATIONS SHOWN. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UTILITIES INVOLVED AND MAKE ARRANGEMENTS FOR THE LOCATION OF THE UTILITIES ON THE GROUND. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKING UNTIL THEY ARE NO LONGER NECESSARY.

2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION AND SIZE FOR ALL EXISTING STORM SEWER STRUCTURES, PIPES, AND ALL UTILITIES PRIOR TO CONSTRUCTION.

3. CONTRACTOR TO REMOVE OR RELOCATE WHEN APPLICABLE, ALL EXISTING BUILDINGS, FOUNDATIONS, EASEMENTS, AND CONNECTING IMPROVEMENTS, DRAIN PIPES, SANITARY SEWER PIPE, POWER POLES AND GUY WIRES, WATER METERS AND WATER LINES, WELLS, SIDEWALKS, SIGN POLES, UNDERGROUND GAS, SEPTIC TANKS, AND ASPHALT, SHOWN AND NOT SHOWN, WITHIN CONSTRUCTION LIMITS AND WHERE NEEDED, TO ALLOW FOR FILL MATERIAL, UNLESS OTHERWISE DENOTED, TO BE REMOVED AS UNCLASSIFIED EXCAVATION.

4. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.

5. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, GAS AND COMMUNICATIONS. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH UTILITY REQUIREMENTS AS TO LOCATIONS AND SCHEDULING FOR TIE-INS/CONNECTIONS PRIOR TO CONNECTING EXISTING FACILITIES.

6. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARD OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE, BUT NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH PERFORMANCE CRITERIA FOR OSHA.

7. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS TEN (10) FEET, OR MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS EIGHTEEN (18) INCHES, WITH WATER ABOVE SEWER.

8. CONTRACTOR SHALL ON ALL UTILITIES, COORDINATE INSPECTION WITH THE APPROPRIATE AUTHORITIES PRIOR TO COVERING TRENCHES AT INSTALLATION.

9. CONTRACTOR SHALL COORDINATE UTILITY INSTALLATIONS WITH LOCAL GOVERNING AUTHORITIES. PAYMENT OF FEES REGARDING THE INSTALLATION OF UTILITIES (I.E. TAPPING FEES, PERMIT FEES, ETC.) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

WATER NOTES:

1. DIG THROUGH LOCATOR TAPE SHALL BE BURIED 2 FEET ABOVE LINE.

2. PIPE SIZES 4" AND LARGER SHALL BE PVC C-900 WATER PIPE. ALL FITTINGS 4" AND LARGER SHALL BE PVC CONFORMING TO ANSI AND AWWA STANDARD SPECIFICATIONS.

3. PIPE SIZES 3" AND SMALLER SHALL BE PVC. FITTINGS SHALL BE BRASS. SEE SPECIFICATIONS.

4. WHEN C-900 PVC IS USED, A NO. 8 BARE COPPER WIRE SHALL BE TAPED TO THE TOP SURFACE OF THE PIPE AND CONNECTED TO EACH FIRE HYDRANT BY ATTACHING TO A BOLT, JUST ABOVE GROUND LEVEL.

5. ALL IRON PIPE AND FITTINGS SHALL BE POLYWRAPPED.

6. ALL MAIN LINES SHALL HAVE A MINIMUM OF THREE (3) FEET AND A MAXIMUM OF EIGHT (8) FEET OF COVER.

7. BEDDING, BACKFILL, AND COMPACTION OF WATER LINES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.

8. ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF TWENTY FOUR (24) HOURS IN ADVANCE. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE OWNER.

9. THRUST BLOCKS SHALL BE PROVIDED AT ALL HORIZONTAL BENDS, TEES, AND FIRE HYDRANTS. SEE DETAILS.

10. REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING FIRE SERVICE AND DOMESTIC SERVICE CONNECTION LOCATIONS.

11. CONTRACTOR SHALL CONSTRUCT WATER SERVICES AS SHOWN, AND CONSTRUCT METERS, PITS, AND INSTALL CHECK VALVE. SERVICE LINE GREATER THAN 3/4 " SHALL REQUIRE BACKFLOW PREVENTER.

12. ALL VERTICAL BENDS ON WATER MAIN SHALL BE RESTRAINED WITH A MECHANICAL JOINT FITTING SUPPLIED WITH THE RETAINER GLANDS. ANY JOINTS 25 FEET OR LESS FROM EITHER SIDE OF VERTICAL BEND SHALL BE RESTRAINED WITH A RETAINER GLAND.

13. CONTRACTOR SHALL COORDINATE WITH THE CITY OF BARLING WATER AND SEWER DEPARTMENT FOR SERVICE TO THE SITE. CONTACT STEVE CORE AT (479) 452-1556 FOR COORDINATION.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL APPLICABLE FEES FOR SANITARY SEWER INSTALLATION INCLUDING, BUT NOT LIMITED TO, TAPPING FEES, METER INSTALLATION, ETC. ALL WORK SHALL COMPLY WITH CITY OF BARLING REQUIREMENTS AND STANDARDS.

SANITARY SEWER NOTES:

1. DIG THROUGH LOCATOR TAPE SHALL BE BURIED 2 FEET ABOVE LINE.

2. REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING SERVICE CONNECTION LOCATIONS.

3. ALL STUB-OUTS AND WYE LATERALS SHALL BE PLUGGED WITH A STANDARD TYPE PLUG. TIE SKI ROPE TO A STAKE FOR TIE-IN REFERENCE.

4. COORDINATES OR DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR TO CENTER OF MANHOLE.

5. THE TOP ELEVATION OF ALL MANHOLES IN GRASSED AREAS SHALL BE 6" ABOVE FINISHED GRADE. THE TOP ELEVATION OF ALL MANHOLES IN PAVED AREAS WILL BE SET FLUSH WITH THE PAVEMENT.

6. THE SANITARY SEWER PIPE MATERIAL SHALL BE PVC, SDR-26, SEWER PIPE UNLESS NOTED ON PLAN.

7. CONTRACTOR SHALL COORDINATE WITH THE CITY OF BARLING WATER AND SEWER DEPARTMENT FOR SERVICE TO THE SITE. CONTACT STEVE CORE AT (479) 452-1556 FOR COORDINATION.

8. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL APPLICABLE FEES FOR SANITARY SEWER INSTALLATION INCLUDING, BUT NOT LIMITED TO, TAPPING FEES, ETC.

GAS SERVICE NOTES:

1. CONTRACTOR SHALL COORDINATE WITH THE LOCAL GAS COMPANY (ARKANSAS OKLAHOMA GAS) FOR SERVICE TO THE SITE. CONTACT JIM MASSEY AT (479) 783-3181 FOR COORDINATION. REFERENCE ARCHITECTURAL PLANS FOR BUILDING SERVICE CONNECTIONS AND SIZE OF LINES.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL APPLICABLE FEES FOR GAS LINE INSTALLATION INCLUDING, BUT NOT LIMITED TO, TAPPING FEES, METER INSTALLATION, ETC.

3. REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING SERVICE CONNECTION LOCATIONS.

TELEPHONE AND COMMUNICATIONS NOTES:

1. REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING SERVICE CONNECTIONS.

2. CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE NECESSARY PVC CONDUIT INCLUDING TRENCHING BEDDING, CONDUIT, HANDHOLES, PULL WIRE AND BACKFILLING.

POWER NOTES:

1. REFERENCE ARCHITECTURAL DOCUMENTS FOR ALL BUILDING SERVICE CONNECTIONS.

2. ALL WORK SHALL BE COMPLETED TO OKLAHOMA GAS AND ELECTRIC (OG&E) SPECIFICATIONS AND STANDARDS. CONTACT OGE (RITA GILBREATH) AT 479-649-5323 TO DETERMINE COORDINATION & INSTALLATION REQUIREMENTS.

GENERAL GRADING/DRAINAGE NOTES:

1. PAVEMENT MARKINGS SHALL COMPLY WITH THE STANDARDS SET FORTH IN THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE U. S. DEPARTMENT OF TRANSPORTATION AND THE AHTD STANDARD DRAWINGS & SPECIFICATIONS.

2. THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATE EROSION CONTROL MEASURES. THESE MEASURES WILL SATISFY THE REQUIREMENTS OF THE ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY . EROSION CONTROL DEVICES WILL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

3. HYDROSEED, FERTILIZE AND MULCH AREAS DISTURBED BY CONSTRUCTION. COMPLY WITH THE STANDARDS SET FORTH IN THE THE AHTD STANDARD SPECIFICATIONS, 2003 EDITION.

4. CONTRACTOR SHALL EMPLOY A QUALIFIED MATERIALS TESTING LABORATORY, ACCEPTABLE TO THE ENGINEER, TO PROVIDE TESTING SERVICES DURING CONSTRUCTION. TEST RESULTS SHALL BE PROMPTLY SENT TO THE OWNER/ENGINEER.

5. CONTRACTOR SHALL MAINTAIN BENCHMARKS ON SITE UNTIL THE END OF CONSTRUCTION.

6. ALL CONCRETE PIPE SHALL BE CLASS III REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED.

NOTE:
FOR ARCHITECTURAL PLANS, REFERENCE SPECIFIC BUILDING PACKAGE FOR THE DISTRICT 4 HQ COMPLEX.

UTILITY CONTACT LIST

WATER SERVICES	CITY OF BARLING WATER DEPT.	479-452-1556	STEVE CORE
SANITARY SEWER	CITY OF BARLING SEWER DEPT.	479-452-1556	STEVE CORE
GAS SERVICE	ARKANSAS OKLAHOMA GAS	479-783-3181	JIM MASSEY
ELECTRIC SERVICES	OKLAHOMA GAS AND ELECTRIC	479-649-5323	RETA GILBREATH

811
Know what's **below**
Call before you dig.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 10432
10/13/11
C. GRAHAM, III

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SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC
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LITTLE ROCK, AR 72211
(501) 228-4420 Voice
(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
SITE NOTES

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-500
REV	

STORM WATER POLLUTION PREVENTION NOTES:

1. THE TOTAL AREA OF THE SITE IS APPROXIMATELY 39.46 ACRES. THE AREA DISTURBED BY IMPROVEMENTS IS APPROXIMATELY 35.18 ACRES.

2. GRADING SHALL BE PERFORMED IN ONE CONTINUOUS OPERATION.

3. CUT AND FILL ACTIVITY IS GREATER THAN 6' VERTICAL HEIGHT. SLOPES ARE AS SHOWN ON THE PLANS.

4. COLLECTING AND DISCHARGING SURFACE WATERS WILL BE THROUGH A COMBINED SWALE AND SUB-SURFACE DRAINAGE SYSTEM.

5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR UPON DISTURBANCE OF THE LAND. THESE MEASURES WILL SATISFY THE REQUIREMENTS OF THE ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY AND SHALL INCLUDE AS A MINIMUM:

A. ON DISTURBED SLOPES LEFT OPEN & UNMAINTAINED FOR A PERIOD OF MORE THAN TWO (2) WEEKS, COVER WITH HAY (TACKED, ANCHORED, OR TIED) AT THE RATE OF 1.5 TONS PER ACRE.

B. PROTECT TOES OF SLOPE WITH SILT FENCE WHERE INDICATED. SILT FENCE SHALL BE A MINIMUM OF 24" HIGH AND CONSTRUCTED OF FILTER FABRIC SUPPORTED BY POSTS AT NOT MORE THAN 4'-0" ON CENTER. INTEGRAL REINFORCED FILTER FABRIC OR EXTERNAL WIRE FENCING REINFORCEMENT SHALL BE PROVIDED. TRENCH ALONG BOTTOM OF EDGE OF SILT FENCE AND BURY A MINIMUM OF 4" OF FILTER FABRIC.

C. PROVIDE ROCK DITCH CHECKS AS SHOWN ON PLANS AND AROUND STORM INLETS AND IN SWALES.

D. IN THE OCCASION THAT WIND EROSION BECOMES EVIDENT, THE CONTRACTOR SHALL SPRINKLE THE CONSTRUCTION SITE WITH WATER TO CONTROL DUST.

E. CONTRACTOR SHALL KEEP VEHICLE TRACKING OF SEDIMENT TO A MINIMUM AND SHALL CLEAN HAUL ROUTES IF TRACKING BECOMES EXCESSIVE AS DETERMINED BY THE LOCAL GOVERNMENT OR PROJECT REPRESENTATIVE.

6. PERMANENT VEGETATION COVER WILL BE INSTALLED BY THE CONTRACTOR. COVER WILL BE:

A. ON ALL DISTURBED AREAS NOT TO BE PAVED, SEED WITH APPROPRIATE COVER. SEE SPECIFICATIONS.

B. CONSTRUCTION MEASURES FOR SEDIMENTATION AND EROSION CONTROL WILL BE MAINTAINED UNTIL PERMANENT COVER IS ESTABLISHED.

7. OWNER: ARKANSAS HIGHWAY DEPARTMENT
DISTRICT NO. 4
ATTN: JOE SHIPMAN
P.O. BOX 1424
FT. SMITH, AR 72902-1424
479-646-5501

8. CONTRACTOR: TO BE DETERMINED

9. ANTICIPATED PROJECT SCHEDULE IS FOR CONSTRUCTION TO BEGIN AFTER SELECTION OF CONTRACTOR, AND RECEIPT OF REGULATORY APPROVALS. INSTALLATION OF PERMANENT VEGETATION COVER WILL BEGIN IMMEDIATELY UPON COMPLETION OF CONSTRUCTION ACTIVITIES.

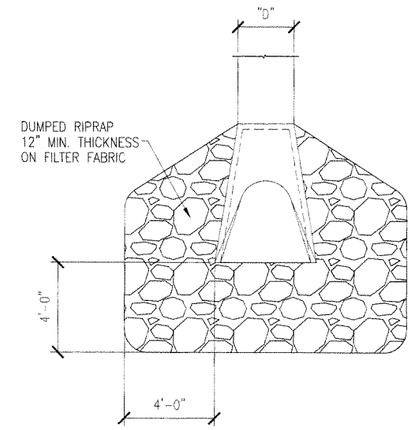
10. CONTRACTOR SHALL OBTAIN ALL GRADING PERMITS FROM THE APPROPRIATE AUTHORITIES HAVING JURISDICTION.

11. RECEIVING STREAM INFORMATION:
AN UNNAMED DITCH LEADING TO LITTLE VACHE GRASS CREEK; THENCE TO THE ARKANSAS RIVER.

SCHEDULE OF WORK

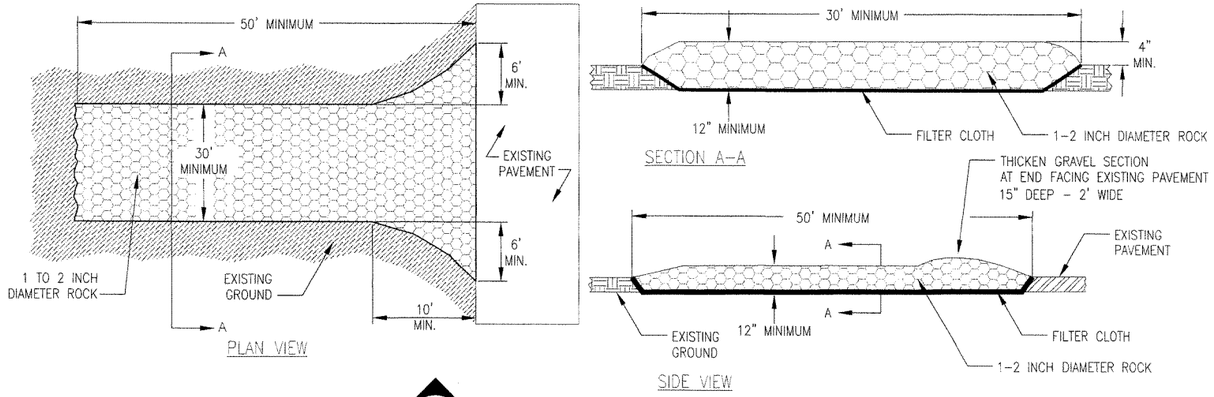
DESCRIPTION

1. INSTALLATION OF TEMPORARY SILT FENCE;
2. CLEARING OF THE SITE AND STRIPPING TOPSOIL;
3. INSTALLATION OF ROCK DITCH CHECKS;
4. ROUGH GRADING SITE AREA;
5. CONSTRUTION OF THE BUILDING, UTILITIES, STORM DRAINAGE, AND PARKING AREAS;
6. FINAL GRADING OF THE SITE;
7. INSTALLATION OF SEEDING AND LANDSCAPING;
8. REMOVAL OF TEMPORARY SILT FENCE AND ROCK DITCH CHECKS.



2 / C-501 **FLARED END SECTION DETAIL*** SCALE: N.T.S.

* WITHIN PROPERTY BOUNDARY ONLY



1 / C-501 **TEMPORARY CONSTRUCTION ENTRANCE** SCALE: N.T.S.

STATE OF ARKANSAS
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10/13/11
W. C. GRAHAM II

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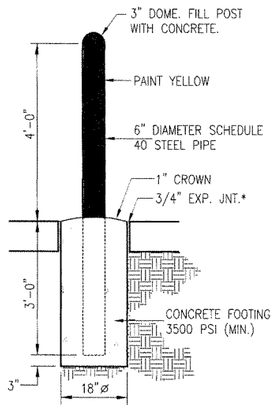
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
EROSION CONTROL DETAILS

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

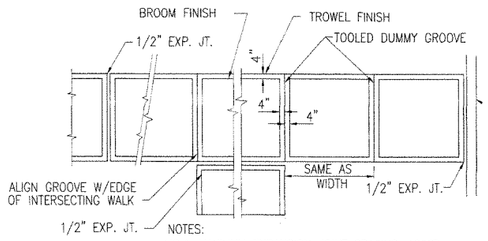
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-501
REV	

23 OF 289

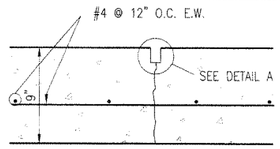


* = PROVIDE EXPANSION JOINT ONLY IF ABUTTING EXISTING OR NEW CONCRETE PAVEMENT.

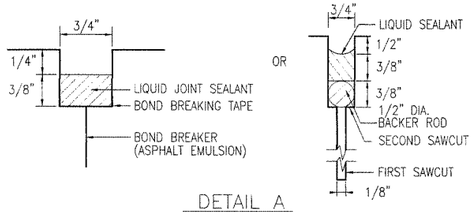
1 C-502 **BOLLARD DETAIL**
SCALE: N.T.S.



2 C-502 **SIDEWALK DETAIL**
SCALE: N.T.S.



SECTION
N.T.S.

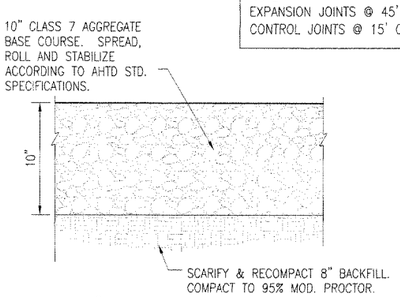


DETAIL A
N.T.S.

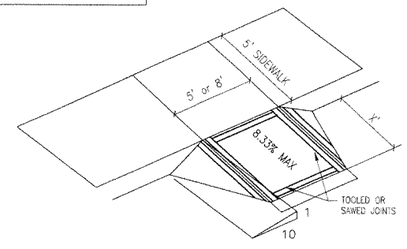
3 C-502 **CONCRETE PAVING CONTROL JOINT**
SCALE: N.T.S.

4 C-502 **NOT USED**
SCALE: N/A

NOTE:
EXPANSION JOINTS @ 45' O.C. E.W. MAXIMUM
CONTROL JOINTS @ 15' O.C. E.W. MAXIMUM



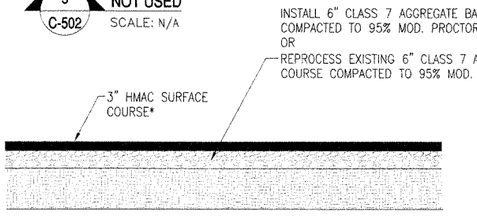
8 C-502 **GRAVEL PAVEMENT SECTION**
SCALE: N.T.S.



NOTES:
1. DETECTABLE WARNING, CONTRASTING COLOR BANDS, SHALL CONTRAST VISUALLY WITH ADJOINING SURFACE, EITHER LIGHT ON DARK, OR DARK ON LIGHT.
2. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
3. CROSS SLOPE OF LANDING AREA DOES NOT EXCEED 2% IN ANY DIRECTION.
4. WHEN X IS LESS THAN 48", THE SLOPE OF THE FANNED OR FLARED SIDES MUST NOT EXCEED 1:12 (8.33%)
5. BUILT UP RAMPS ARE NOT ALLOWED TO ENCROACH INTO LOADING/UNLOADING ZONES PARKING SPACES OR VEHICULAR TRAFFIC LANES.
6. P.C. CONCRETE SHALL BE 3500 PSI MINIMUM & 6" THICK MINIMUM.

11 C-502 **TYP. RAMP AT H.C. SPACES**
SCALE: N.T.S.

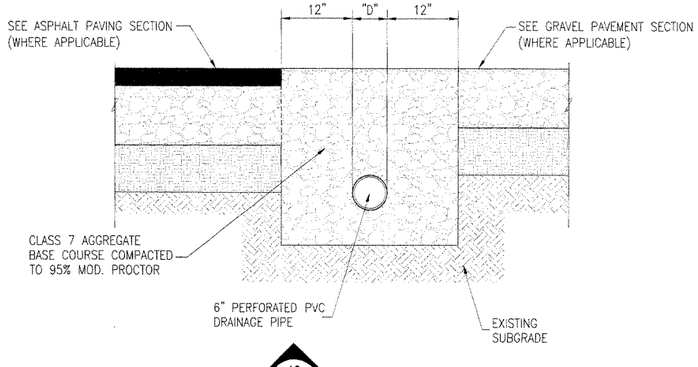
5 C-502 **NOT USED**
SCALE: N/A



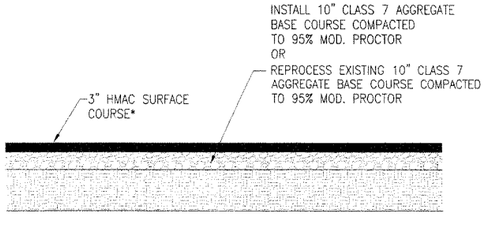
*PG76-22
N_{max} 205

7 C-502 **TYP. SECTION @ ASPHALT PARKING**
SCALE: N.T.S.

6 C-502 **NOT USED**
SCALE: N/A



10 C-502 **TYP. SECTION @ UNDER DRAIN**
SCALE: N.T.S.



*PG76-22
N_{max} 205

9 C-502 **TYP. SECTION @ ASPHALT PAVING**
SCALE: N.T.S.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 10432
10/13/11
CHARLES G. GRAHAM II

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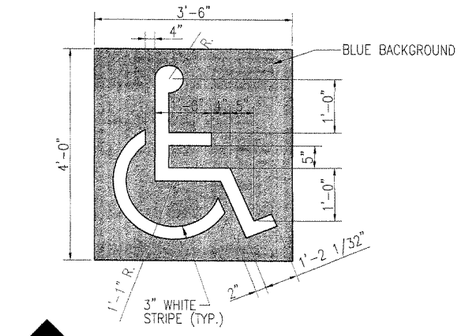
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0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
MISCELLANEOUS DETAILS I

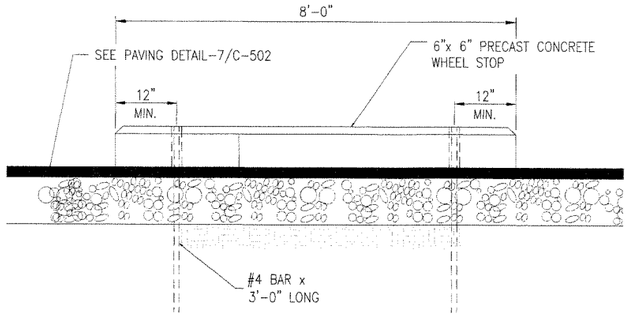
DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-502
REV	

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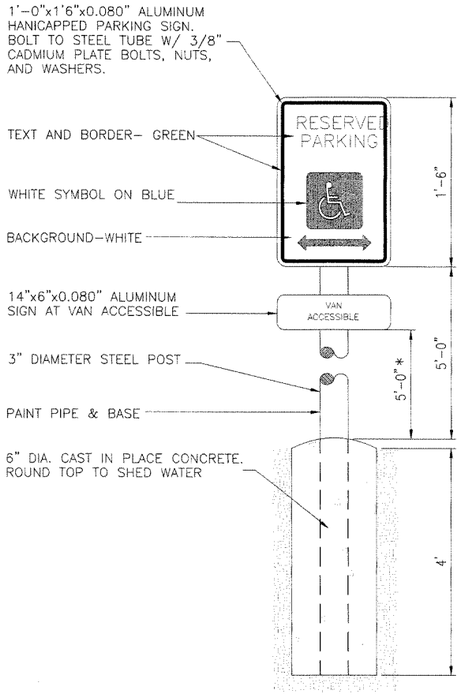


1 C-503 **TYPICAL HANICAPPED PARKING STALL SYMBOL**
SCALE: N.T.S.



3 C-503 **TYPICAL WHEEL STOP**
SCALE: N.T.S.

7 C-503 **NOT USED**
SCALE: N.T.S.



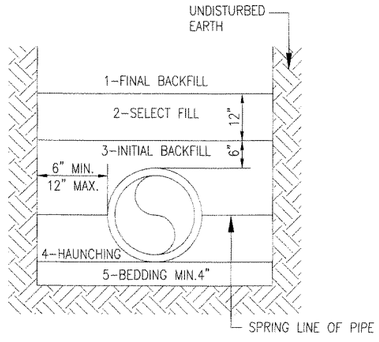
NOTES:

1. HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT CODE AND REGULATIONS.
2. PROVIDE ONE SIGN AT EACH HANDICAPPED SPACE

* AT VAN ACCESSIBLE LOCATIONS ONLY.

2 C-503 **HANDICAPPED PARKING SIGN**
SCALE: N.T.S.

4 C-503 **NOT USED**
SCALE: N.T.S.



NOTES:

1. SELECT FILL CONSISTS OF EXCAVATED MATERIALS CONTAINING NO ROCKS LARGER THAN 2 INCHES.
2. BEDDING REQUIRED FOR ALL STORM SEWER REPLACEMENT PROJECTS, IN ROCK EXCAVATION, AND FOR LEVELING TRENCH IN NEW INSTALLATION.
3. COMPACTION REQUIREMENTS: FOR COHESIVE SOILS.
   B. PAVED AREAS: 95% MAXIMUM MOD. PROCTOR DENSITY FOR COHESIONLESS SOILS.
4. FLOWABLE FILL MAY BE SUBSTITUTED FOR ALL MATERIALS IN ROAD CROSSING.

5 C-503 **STORM PIPE BEDDING DETAIL**
SCALE: N.T.S.

NON-PAVED AREAS		
NO.	PVC	STEEL/D.I.
1	EXCAVATED MATERIAL	EXCAVATED MATERIAL
2	SELECT FILL	SELECT FILL
3	SAND	SAND
4	3/4" WASHED ROCK	3/4" WASHED ROCK
5	3/8" CHIPS OR 3/4" WASHED ROCK	3/8" CHIPS OR 3/4" WASHED ROCK

PAVED AREAS		
NO.	PVC	STEEL/D.I.
1	FLOWABLE FILL	FLOWABLE FILL OR TYPE A ROCK
2	FLOWABLE FILL	FLOWABLE FILL OR TYPE A ROCK
3	FLOWABLE FILL	FLOWABLE FILL OR TYPE A ROCK
4	3/4" WASHED ROCK	3/4" WASHED ROCK
5	3/8" CHIPS	3/8" CHIPS

6 C-503 **NOT USED**
SCALE: N/A

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 10432
THOMAS C. GRAHAM II
10/13/11

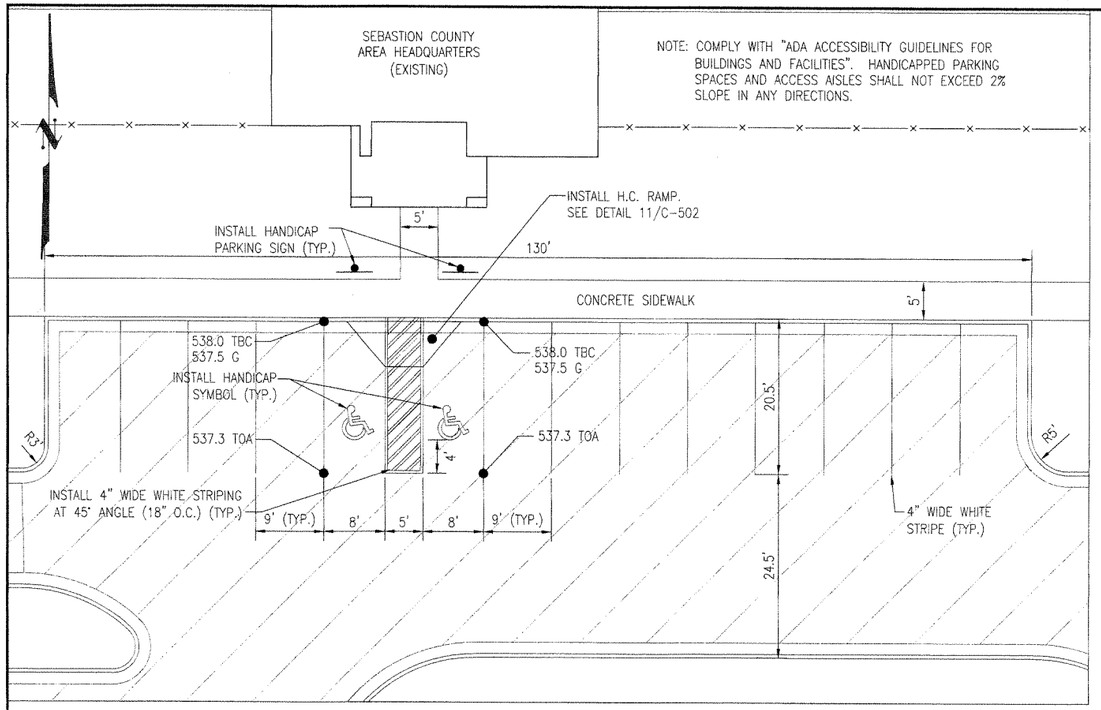
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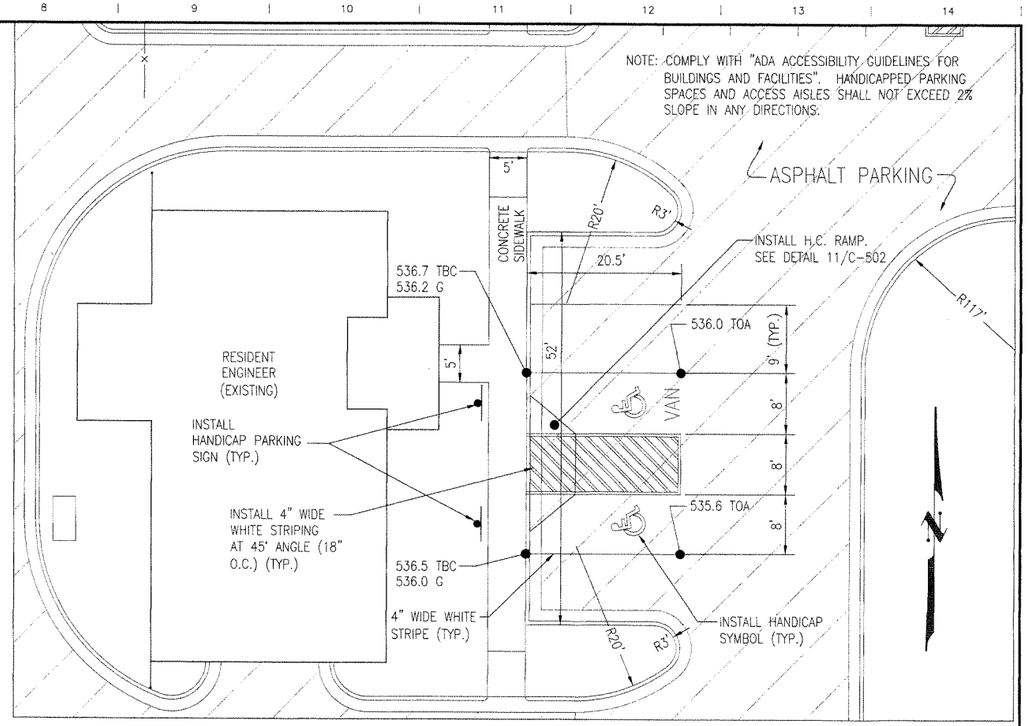
SITE PREPARATION
AHTD JOB NO. 040554
MISCELLANEOUS DETAILS II

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

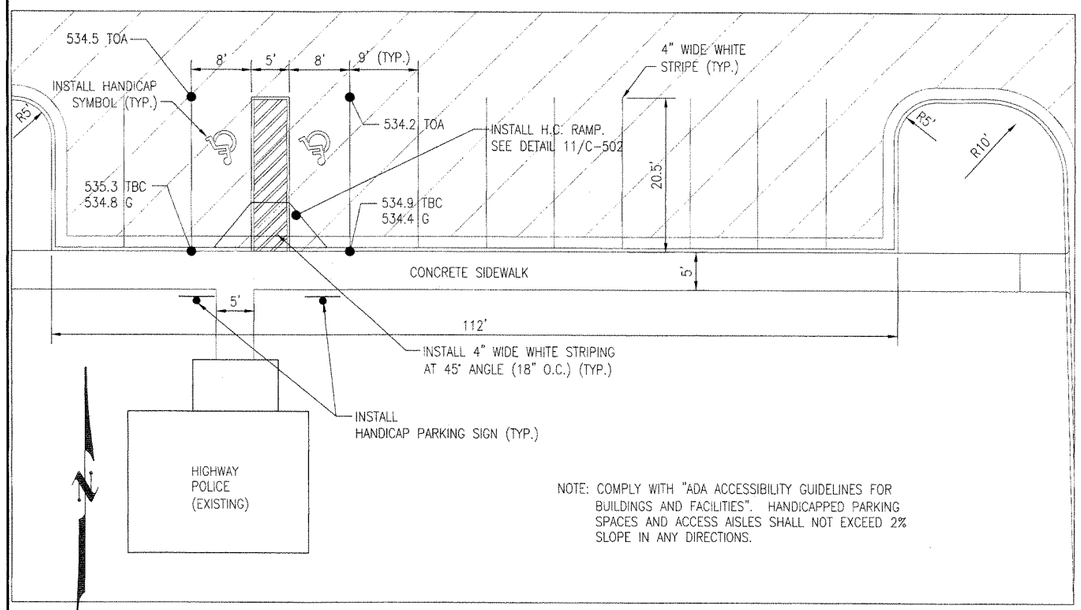
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
C-503	
25 OF 289	



1 C-504 **HANDICAP PARKING @ SEBASTION CO. AREA HQ. BLDG.**
SCALE: 1" = 10'

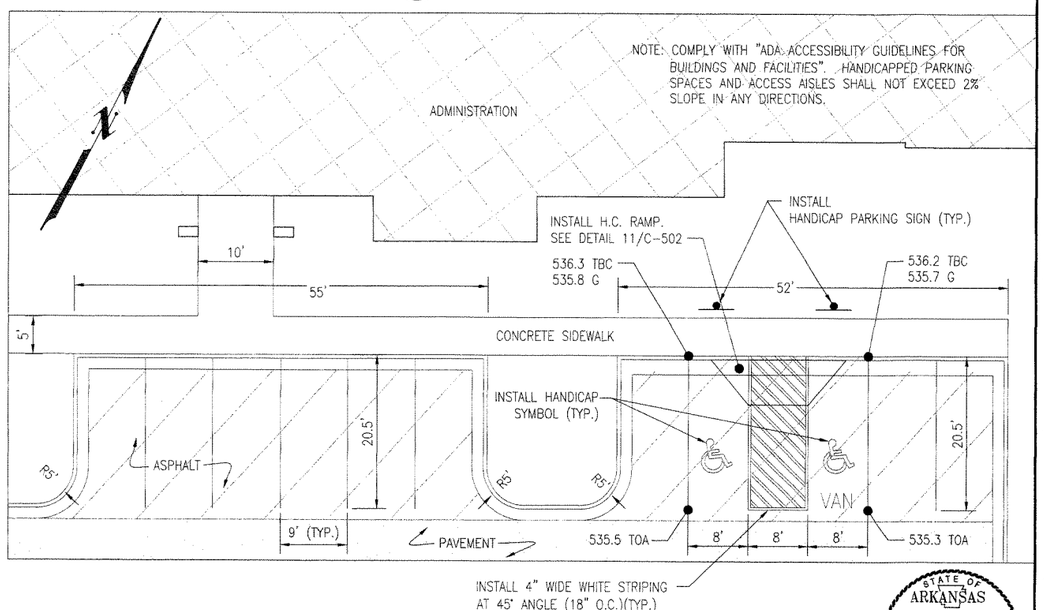


2 C-504 **HANDICAP PARKING @ RESIDENT ENGINEER BLDG.**
SCALE: 1" = 10'



3 C-504 **HANDICAP PARKING @ HIGHWAY POLICE BLDG.**
SCALE: 1" = 10'

GENERAL NOTE:
TBC = TOP BACK OF CURB ELEVATION
G = GUTTER ELEVATION
TOA = TOP OF ASPHALT ELEVATION



4 C-504 **HANDICAP PARKING @ ADMINISTRATION BLDG.**
SCALE: 1" = 10'

STATE OF ARKANSAS
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THOMAS C. GRAHAM II

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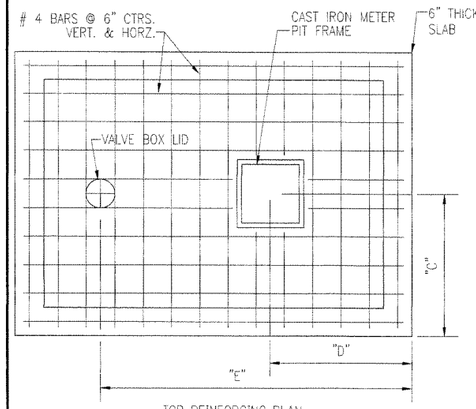
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0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
MISCELLANEOUS DETAILS III

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

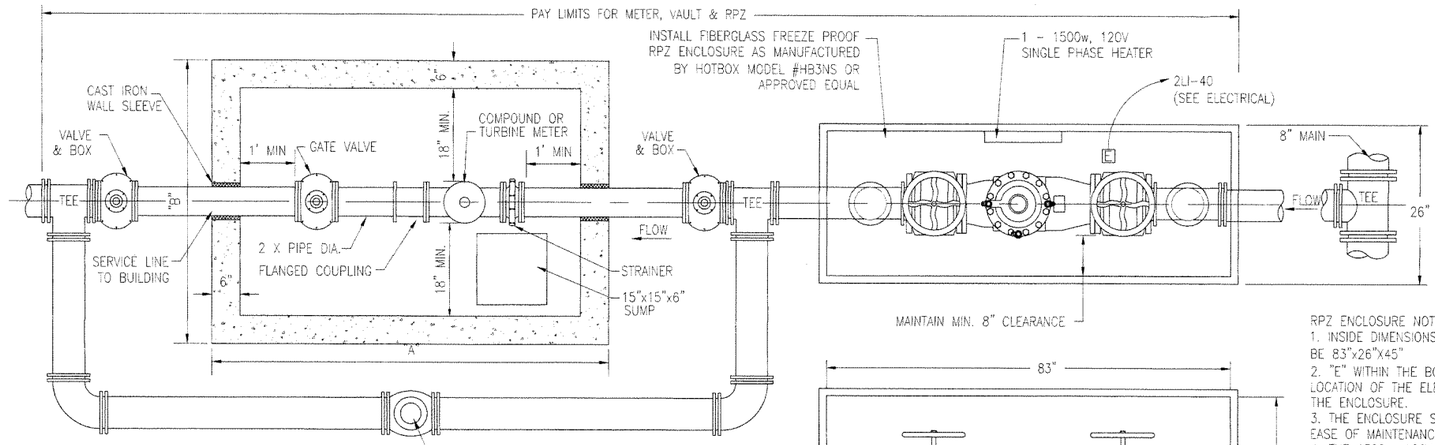
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-504
REV	
	26 OF 289

NOTES:
1. PLACE RPZ BETWEEN WATER MAIN AND NEW WATER METER.
2. RPZ SHALL HAVE A STRAINER ON THE INLET AND A BLOWOFF AFTER 2ND SHUTOFF VALVE.



TOP REINFORCING PLAN

PLAN VIEW

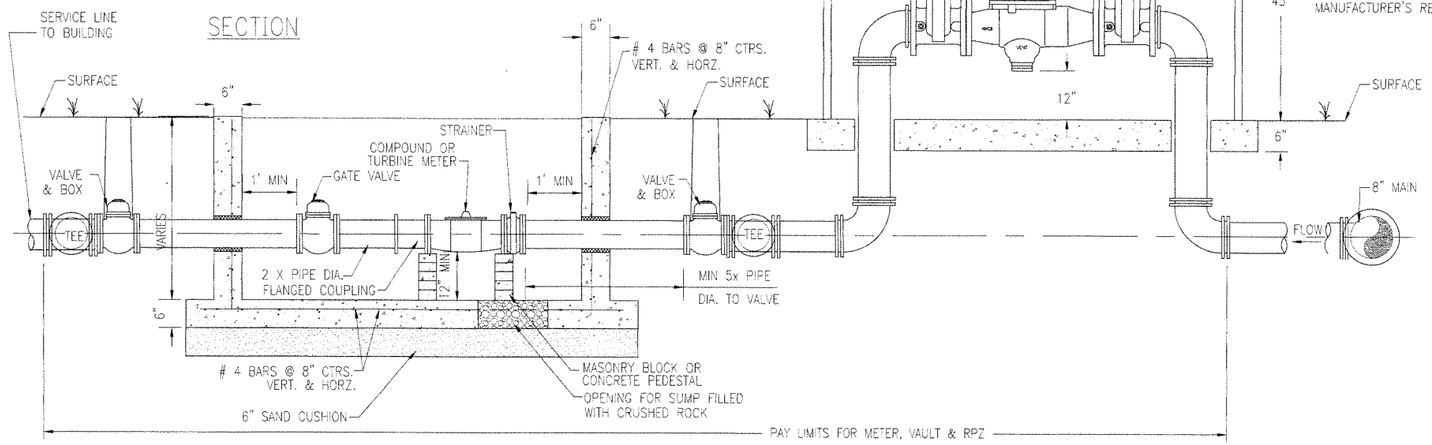


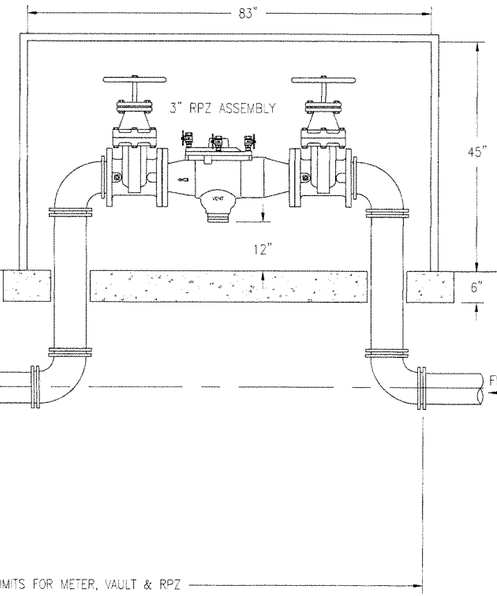
METER VAULT LID

METER PIT	A	B	C	D*	E*
3"	7'-0"	5'-0"	2'-6"	2'-8"	4'-9"

* DIMENSIONS ARE APPROXIMATE. OPENINGS MUST BE CENTERED OVER RESPECTIVE DEVICES.

SECTION





RPZ ENCLOSURE NOTES:
1. INSIDE DIMENSIONS OF RPZ ENCLOSURE SHALL BE 83"x26"x45"
2. "E" WITHIN THE BOX INDICATES THE GENERAL LOCATION OF THE ELECTRICAL RECEPTACLE INSIDE THE ENCLOSURE.
3. THE ENCLOSURE SHOULD BE A FLIP TOP TO EASE OF MAINTENANCE AND ACCESS.
4. THE 1500w, 120V SINGLE PHASE HEATER SHALL HAVE A CORD AND PLUG TO CONNECT TO THE RECEPTACLE.
5. RPZ ENCLOSURE SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

1 C-505 **WATER METER VAULT**
SCALE: N.T.S.

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 10/13/11 THOMAS C. GRAHAM III

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(501) 228-4420 Voice
(501) 228-4410 Fax

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

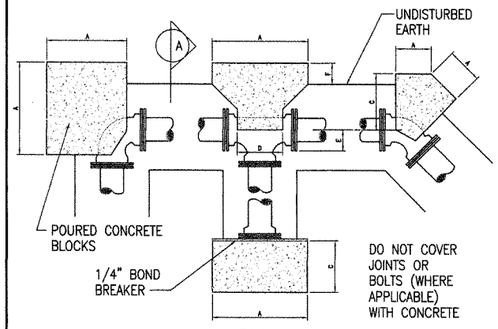
SITE PREPARATION
AHTD JOB NO. 040554
MISCELLANEOUS DETAILS IV

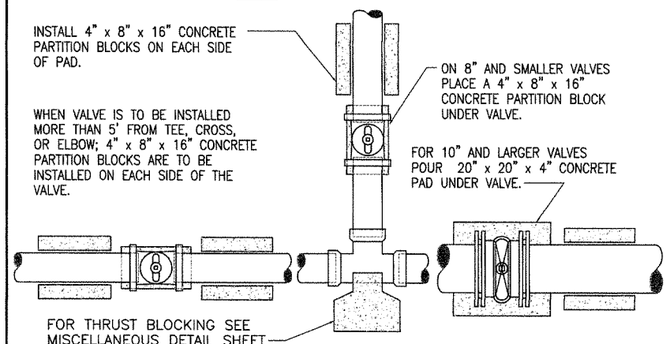
DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-505
REV	
	27 OF 289

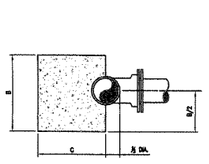
BLOCKING DIMENSIONS																		
PIPE	TEES						PLUG			90° BEND			45° BEND			22.5° BEND		
DIA.	A	B	C	D	E	F	A	B	C	A	B	C	A	B	C	A	B	C
2"	10	12	8	6	–	–	10	12	8	10	12	8	8	10	8	8	10	8
3"	10	18	8	8	–	–	10	18	8	10	18	8	8	10	8	8	10	8
4"	13	22	9	13	–	–	13	22	9	13	22	9	9	12	12	6	12	12
6"	24	30	16	16	6	6	24	30	12	24	30	16	10	24	12	7	18	12
8"	34	32	21	18	7	6	34	32	18	34	32	21	13	36	18	9	24	18
10"	40	42	23	22	8	6	40	42	24	40	42	23	18	38	27	12	30	27
12"	48	52	27	24	9	6	48	52	24	48	52	27	21	48	33	14	36	30

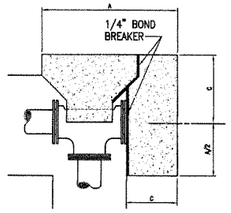
NOTE: ALL DIMENSIONS ARE IN INCHES. BLOCKING DESIGN FOR 200 PSI AND 1500 PSF SOIL BEARING. BLOCKING FOR REDUCED BRANCH TEE SHALL BE AS LISTED UNDER TEES AND BRANCH DIAMETER. MAINTAIN MINIMUM 'F' DIMENSION

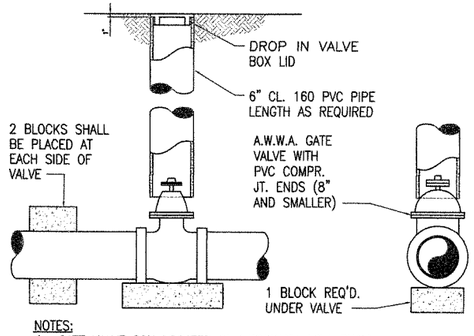




1 C-506 **INTERSECTION AND VALVE BLOCKING DETAILS**
SCALE: N.T.S.

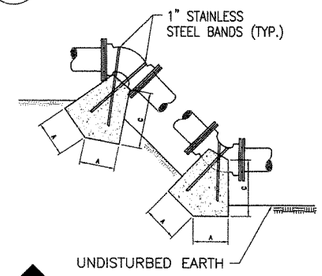






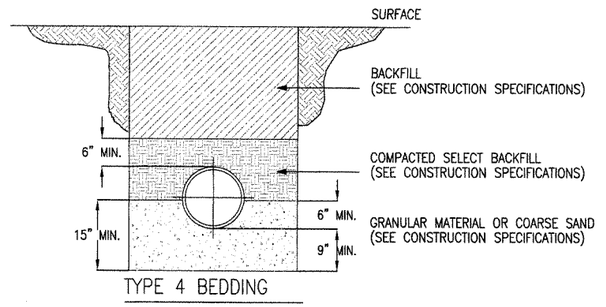
NOTES:
1. GATE VALVE BOX LOCATED IN WASHDOWN AREA SHALL BE FLUSH W/CONCRETE FLOOR SLAB.
2. 4" x 8" x 16" CONCRETE PARTITION BLOCKS SHALL BE PLACED AS SHOWN AT EACH GATE VALVE

2 C-506 **TYPICAL GATE VALVE INSTALLATION**
SCALE: N.T.S.



3 C-506 **CONCRETE BLOCKING DETAILS**
SCALE: N.T.S.

4 C-506 **NOT USED**
SCALE: N/A



5 C-506 **UTILITY BEDDING AND BACKFILL DETAILS**
SCALE: N.T.S.

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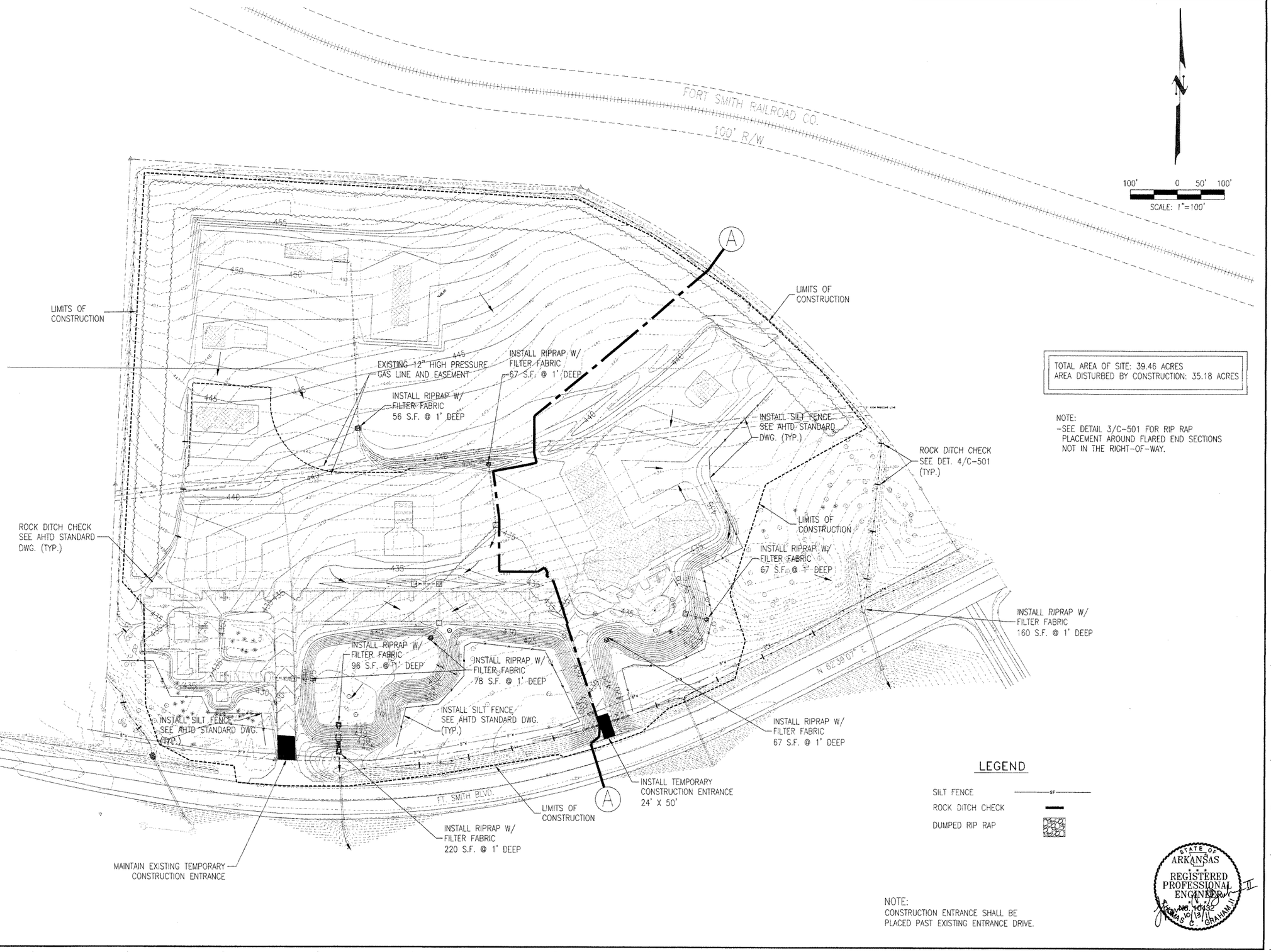
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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SITE PREPARATION
AHTD JOB NO. 040554
MISCELLANEOUS DETAILS V

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-506
REV	
28 OF 289	

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10432 THOMAS C. GRAHAM II 10/13/11



TOTAL AREA OF SITE: 39.46 ACRES
AREA DISTURBED BY CONSTRUCTION: 35.18 ACRES

NOTE:
-SEE DETAIL 3/C-501 FOR RIP RAP PLACEMENT AROUND FLARED END SECTIONS NOT IN THE RIGHT-OF-WAY.

LEGEND

SILT FENCE ——SF——
ROCK DITCH CHECK
DUMPED RIP RAP

NOTE:
CONSTRUCTION ENTRANCE SHALL BE PLACED PAST EXISTING ENTRANCE DRIVE.

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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SITE PREPARATION
AHTD JOB NO. 040554
EROSION CONTROL PLAN

DESIGNED BY	CGL
DRAWN BY	TDB
CHECKED BY	CGL
APPROVED BY	WCS

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	C-700
REV	
	29 OF 289

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 10432
THOMAS C. GRAHAM, II
10/13/11

LEGEND:

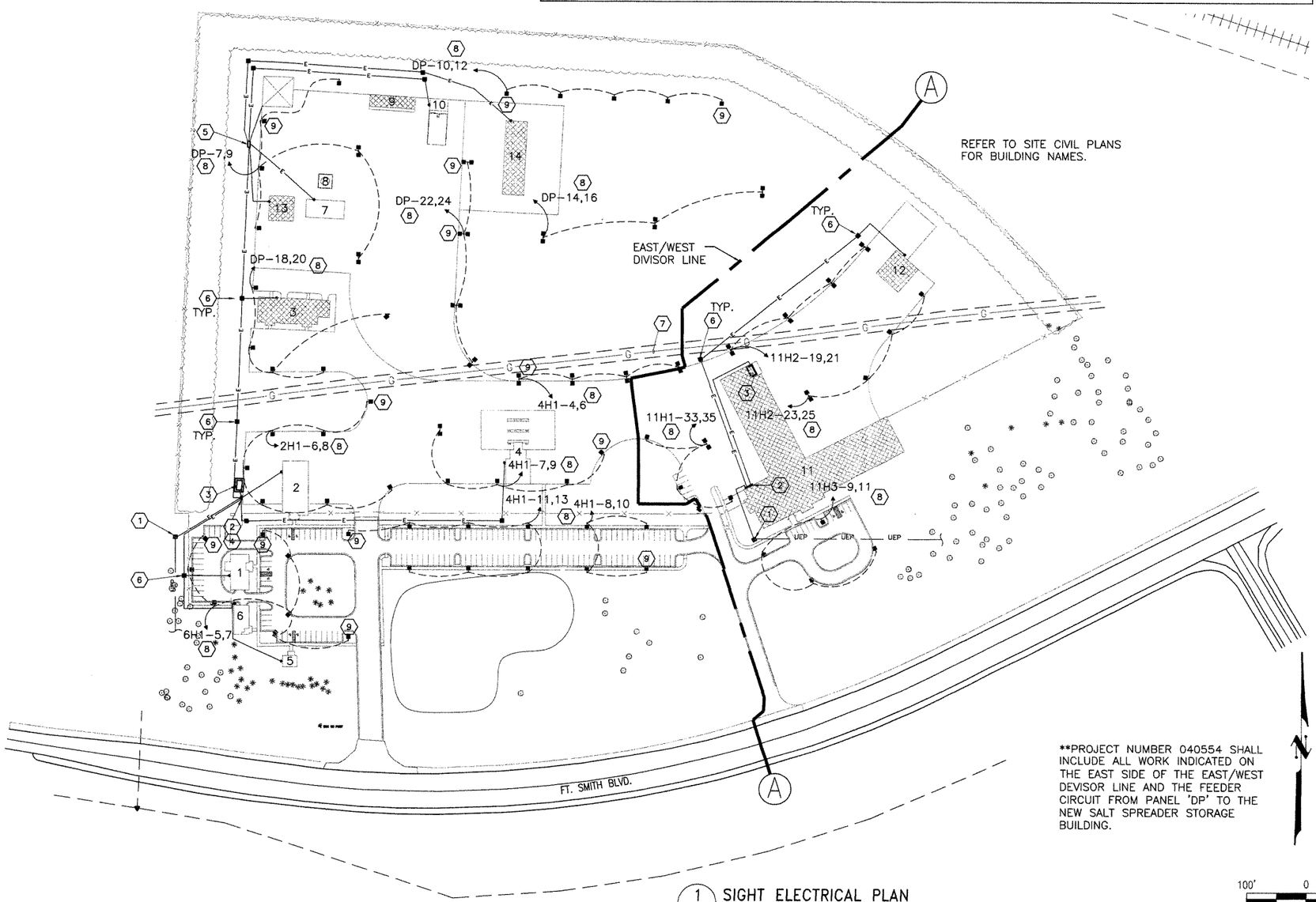
- EXISTING GAS LINE
- PROPOSED FENCE
- HANDHOLE QUAZITE ENCLOSURE
- UEP — UEP — UEP — UNDERGROUND ELECTRICAL PRIMARY
- E — E — E — UNDERGROUND ELECTRICAL FEEDER
- UNDERGROUND ELECTRICAL BRANCH CIRCUIT
- SITE LIGHTING POLE, SINGLE FIXTURE (TYPE 'O', REFER TO LIGHTING FIXTURE SCHEDULE)
- SITE LIGHTING POLE, DOUBLE FIXTURE (TYPE 'O', REFER TO LIGHTING FIXTURE SCHEDULE)

POLE MOUNTED CAMERAS

CCTV CAMERAS WILL BE MOUNTED TO THE SITE LIGHTING POLES INDICATED BY KEYED NOTE #9. AT EACH OF THESE LOCATIONS, PROVIDE THE FOLLOWING ITEMS IN ADDITION TO THE STANDARD SITE LIGHTING POLE AND EQUIPMENT.

1) POLE – PROVIDE KNOCKOUT AND SUITABLE MOUNTING LOCATION FOR CAMERA BRACKET. COORDINATE CAMERA MOUNTING BRACKET HEIGHT WITH CCTV PLANS. THESE POLES SHALL BE DESIGNED TO ACCOUNT FOR THE ADDITIONAL WEIGHT LOADS OF THE CAMERA AND ASSOCIATED MOUNTING BRACKET.
2) POLE BASE BOX – EQUAL TO CARLON 12"X12"X4" CURVED LID POLE BASE JUNCTION BOX WITH BOLT DOWN COVER AND DIVIDER.
3) UNSWITCHED POWER – EXTEND 1"C, 2#12, 1#12(G) STUBBED INTO POLE BASE BOX. CIRCUIT SHALL BE POWERED FROM THE SAME CIRCUIT BREAKER FEEDING THE POLE MOUNTED LIGHTING, BUT SHALL NOT BE SWITCHED WITH THE LIGHTS.
4) TRANSFORMER – WITHIN EACH POLE BASE BOX, PROVIDE A 480V–24VAC TRANSFORMER POWERED FROM UNSWITCHED ELECTRICAL CIRCUIT INDICATED ABOVE. PROVIDE ENOUGH LOW VOLTAGE WIRING COILED WITHIN THE BOX TO REACH THE CAMERA MOUNTING LOCATION.

CAMERAS WILL BE PROVIDED AND INSTALLED AS PART OF PROJECT NUMBER 040554. THE SITE ELECTRICAL CONTRACTOR SHALL PREPARE EACH LOCATION FOR FUTURE CAMERA INSTALLATION. COORDINATE ALL SITE LIGHTING WORK AT THESE POLE LOCATIONS DIRECTLY WITH THE CCTV PLANS.



**PROJECT NUMBER 040554 SHALL INCLUDE ALL WORK INDICATED ON THE EAST SIDE OF THE EAST/WEST DEVISOR LINE AND THE FEEDER CIRCUIT FROM PANEL 'DP' TO THE NEW SALT SPREADER STORAGE BUILDING.

1 ES–101 SIGHT ELECTRICAL PLAN
SCALE: 1:100

100' 0 50' 100'
SCALE: 1"=100'

GENERAL NOTES: (THIS SHEET ONLY)

A. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

B. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

C. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

D. ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL G/02E–402.

E. SITE LIGHTING POLE LOCATIONS ARE BASED ON 90' SPACING. COORDINATE THE EXACT LOCATION OF POLES WITH LANDSCAPE DRAWINGS.

KEY NOTES: (THIS SHEET ONLY)

(1) UTILITY TRANSFORMER, TRANSFORMER PAD, METER, CT'S, AND ELECTRICAL PRIMARY PROVIDED BY OG&E. EXACT ROUTING OF UNDERGROUND ELECTRICAL PRIMARY SHALL BE COORDINATED BETWEEN OG&E AND AHTD. CONTRACTOR SHALL PROVIDE SECONDARY CONDUITS AND CONDUCTORS AS INDICATED BY THE SITE ELECTRICAL POWER RISER DIAGRAM AND AS SHOWN ON THIS SHEET.

(2) SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH IN NEMA 3R ENCLOSURE. REFER TO THE SITE ELECTRICAL POWER RISER DIAGRAM FOR DETAILS.

(3) DIESEL POWERED STANDBY GENERATOR WITH 48 HR SUB–BASE TANK. REFER TO SITE ELECTRICAL POWER RISER DIAGRAM FOR DETAILS.

(4) PANELBOARD 'MDP' (MAIN SITE DISTRIBUTION PANEL), 600A 3 PHASE 4 WIRE, NEMA 3R ENCLOSURE.

(5) PANELBOARD 'DP' (SITE DISTRIBUTION PANEL), 225A 3 PHASE 4 WIRE, NEMA 3R ENCLOSURE.

(6) SITE ELECTRICAL DISTRIBUTION HANDHOLES WITH BOLT DOWN COVER, OPEN BOTTOM AND MINIMUM 18" GRAVEL BASE. REFER TO POWER RISER DIAGRAM FOR HANDHOLE SIZE.

(7) EXISTING GAS PIPE. VERIFY EXACT LOCATION. COORDINATE THE EXACT LOCATION OF SITE ELECTRICAL EQUIPMENT AND LIGHTING IN ORDER TO MAINTAIN PROPER CLEARANCE FROM PIPE.

(8) SITE LIGHTING CIRCUITS SHALL BE A 2#8, 1#10(G) COPPER CONDUCTORS IN 1" SCH. 80 PVC CONDUIT BURIED A MINIMUM 24" BELOW FINISHED GRADE. ALL SITE LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIMECLOCK.

(9) POLE MOUNTED CAMERA LOCATIONS. REFER TO POLE MOUNTED CAMERA NOTE ON THIS SHEET AND SITE TELECOMMUNICATIONS DRAWINGS FOR INFORMATION ON CCTV SYSTEM.

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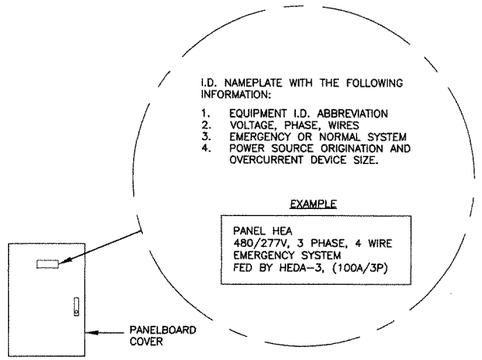
SITE PREPARATION
AHTD JOB NO. 040554
SITE ELECTRICAL PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	JWJ

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	ES–101
REV	
30 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

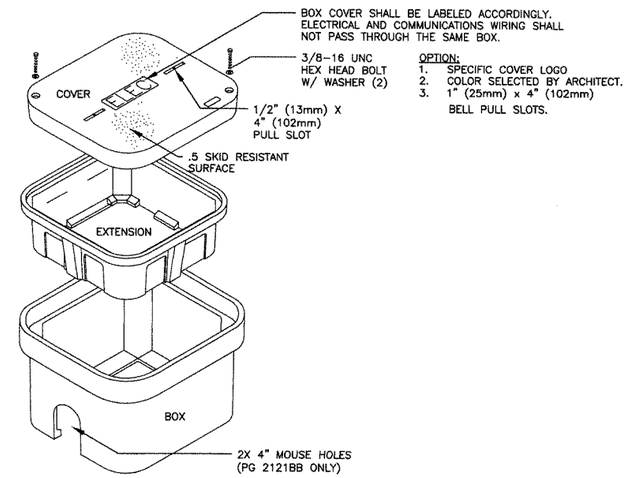
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA W. JOYCE



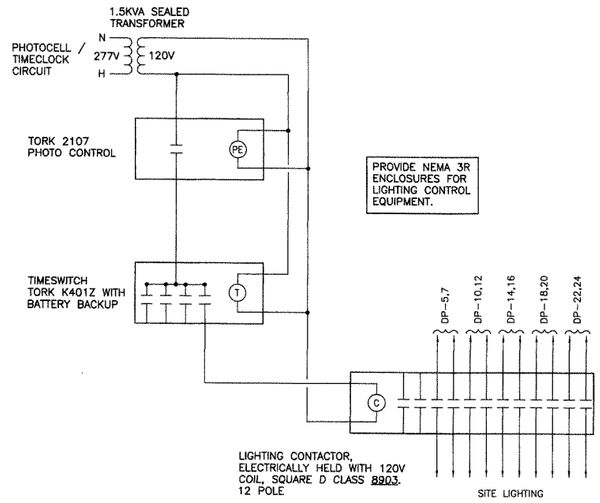
PANEL IDENTIFICATION NOTES:

1. SIMILAR FOR DISCONNECTS, MOTOR CONTROLLERS, TRANSFORMERS, LIGHTING CONTROL PANEL, AUTOMATIC TRANSFER SWITCHES, ETC.

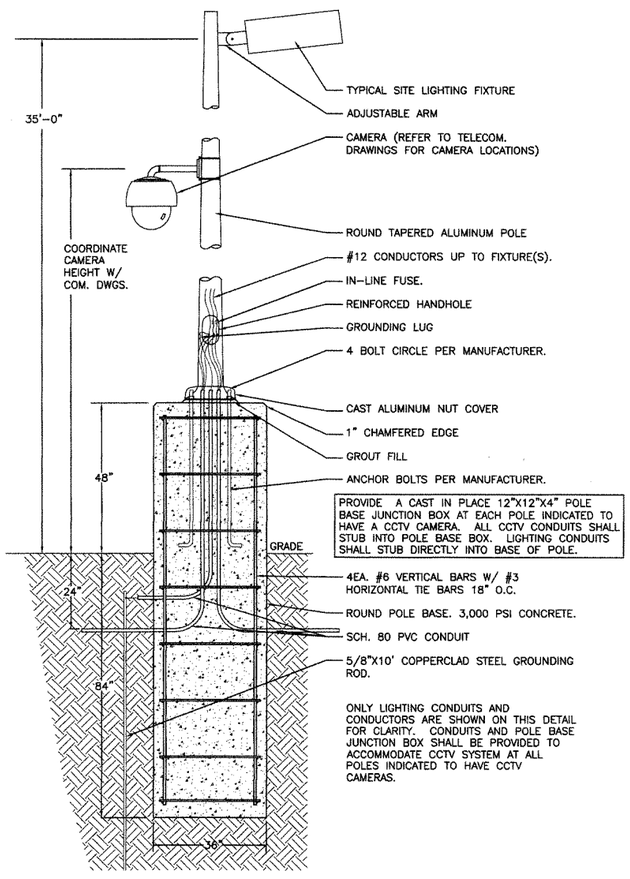
A ES-501 PANEL IDENTIFICATION DETAIL
SCALE: NTS



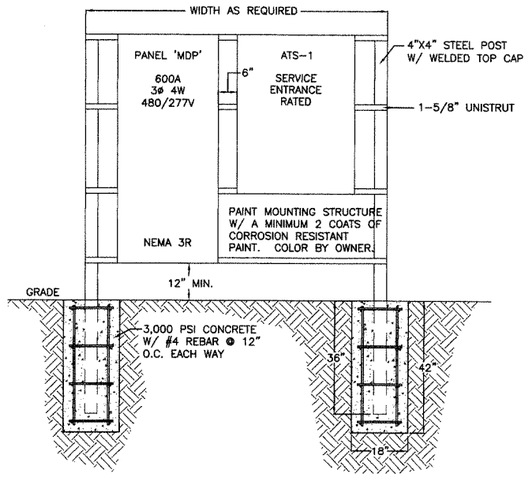
B ES-501 IN-GRADE PULLBOX DETAIL
SCALE: NTS



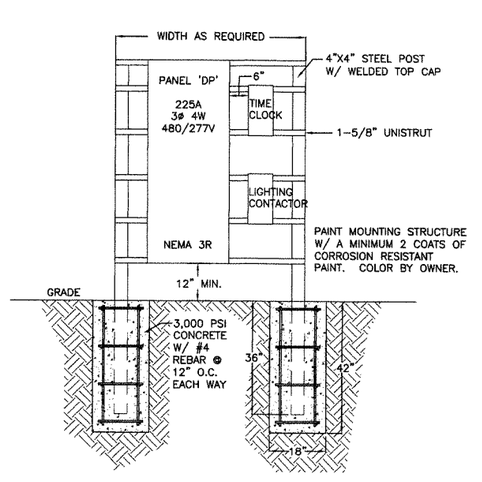
C ES-501 TYPICAL SITE LIGHTING CONTROL DETAIL
SCALE: NTS



D ES-501 TYPICAL POLE BASE DETAIL
SCALE: 1/2" = 1'



E ES-501 RACK MOUNTED ELECTRICAL PANEL DETAIL
SCALE: 1/2" = 1'



F ES-501 RACK MOUNTED ELECTRICAL PANEL DETAIL
SCALE: 1/2" = 1'

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA T. PORTER 10/13/11

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SITE PREPARATION
AHTD JOB NO. 040554
SITE ELECTRICAL DETAILS

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	JWJ
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	ES-501
REV	
31 OF 289	

TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	VOLTS	REMARKS / NOTES
A2	LSI	2LLC-G-2-32-RPW-SS010-VOLT	TWO LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	2	32	48" T8	277*	
A3	LSI	2LLC-G-3-32-RPW-SS010-VOLT	THREE LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	3	32	48" T8	277*	
B2	LSI	LA-2-32-SD-SS010-VOLT	TWO LAMP LENSED FLUORESCENT TROFFER	2	32	48" T8	277*	
B4	LSI	LA-4-32-SD-SS010-VOLT	FOUR LAMP LENSED FLUORESCENT TROFFER	4	32	48" T8	277*	
C	LSI	EG-2-32-SS010-VOLT	TWO LAMP ENCLOSED / GASKETED FLUORESCENT	2	32	48" T8	277*	NOTE 8
D	LSI	F22-2-32-SS010-VOLT	TWO LAMP SUSPENDED FLUORESCENT	2	32	48" T8	277*	NOTES 1,3
E	LSI	TEM-WH-SD2	LOW PROFILE 6V EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
EX	LSI	PRX-R-U-WB-WH-WH-PR50	COMBINATION EXIT / EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
F	LSI	W44-4-2-32-SS010-UE	TWO LAMP WALL MOUNT LINEAR FLUORESCENT	2	32	48" T8	277*	NOTE 2
G	LSI	PTWS-FT-150-MH-F-VOLT-BRZ	EXTERIOR HID WALL SCONCE	1	150	150W MH	277*	NOTES 2,8
H	LSI	IHB-400-MH-MT-IAC22-PM	PENDANT MOUNT HID HIGHBAY FIXTURE	1	400	400W MH	277*	NOTES 1,4,5
I	WF HARRIS	50S-D-26PLC-VOLT	ONE LAMP COMPACT FLUORESCENT	1	26	26W PLC	277*	
J	LSI	208V-CFL-1-42T-UNIV	8" RECESSED DOWNLIGHT	1	42	42W CFT	277*	NOTE 9
K	LPDI	383-C-75-G	EXPLOSION PROOF INCANDESCENT (CEILING MOUNT)	1	60	60W A19	120*	NOTES 10,11
L	LSI	DRM2-MF-400-PSMUR-F-TT-BRZ	HID FLOOD LIGHT W/ VERTICAL WALL MOUNT BRACKET	1	400	400W MH	277*	NOTES 2,8
M	LSI	SOV-RD-175-MH-73-VOLT	LENSED HID	1	175	175W MH	277*	NOTES 9'12
N	ESCO LIGHTING	W26000 SERIES	10" UP/DOWN WALL MOUNT CYLINDER (BRONZE)	2	150	150W MH	277*	
O	SPAULDING	RCL-A-P75-H3P	POLE MOUNTED SITE LIGHT, TYPE III DISTRIBUTION	1	750	750W MH	480*	NOTES 14,15
P	LSI	CHA2-400-PSMV-MT-A25-LMC	PENDANT MOUNT HID LOWBAY FIXTURE	1	400	400W MH	277*	NOTES 5,9
X	LSI	EXC-R- -U-WB-WW-SD2	CAST ALUMINUM LED EXIT SIGN	-	4	-	277*	NOTES 6,7

FIXTURES INDICATED WITHIN THIS LIGHTING FIXTURE SCHEDULE INCLUDE ALL BUILDING AND SITE LIGHTING WITHIN THE AHTD D4 HEADQUARTERS COMPLEX. NOT ALL FIXTURES ARE USED AT EACH BUILDING.

*PROVIDE VOLTAGE INDICATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE LIGHTING PLAN.

NOTES:

1. PROVIDE WIRE GUARD
2. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
3. SUSPEND FIXTURE AT 10'-0" A.F.F.
4. SUSPEND FIXTURE AT 19'-0" A.F.F.
5. PROVIDE TWIST-LOCK TYPE CONNECTOR AT EACH FIXTURE.
6. PROVIDE ARROWS WHERE INDICATED.
7. POWER FIXTURES FROM UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.
8. U.L. LISTED FOR WET LOCATIONS.
9. U.L. LISTED FOR DAMP LOCATIONS.
10. U.L. LISTED EXPLOSION PROOF (CLASS I, DIV I).
11. PROVIDE WITH EXTRA LONG LIFE INCANDESCENT LAMP.
12. TRIM FINISH SHALL MATCH SURROUNDING AREA.
13. PROVIDE EMERGENCY QUARTZ LIGHTING KIT.
14. POLE MOUNTED AT 34'-0" A.F.G.
15. PROVIDE OPTIONAL ADJUSTABLE MOUNTING ARM.

Panel "MDP"	277 Volts L-N 3Ø, 4W 480 Volts L-L 25,000 AIC BRANCH BRKRS			600A3P MAIN LUGS ONLY COPPER BUS EQUIP. GROUNDING BAR			TYPE: I - LINE NEMA 1 ENCLOSURE SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
01 - RE BUILDING	1	1713 2061 2217	110/3		150/3	25100 25783 22356	2	02 - SC AREA HQ
03 - SIGN SHOP	3	36037 36495 31186	200/3		150/3	31633 26219 27368	4	04 - SERVICE STATION
05 - HWY POLICE	5	7651 4893 1800	50/3		70/3	14260 11521 11220	6	06 - MATERIALS LAB
BULK SALT STORAGE, WASH RACK, STORAGE A & B, CHLORIDE TANK, ANTENNA	7	39799 41643 11828	200/3			0 0 0		
MIN. 9" SPACE		0 0 0 0 0 0 0 0 0				0 0 0 0 0 0 0 0 0		MIN. 9" SPACE
PANEL SHALL BE SIZED FOR A MINIMUM 9" ADDITIONAL SPACE ON EACH SIDE OF BUSSING FOR FUTURE PANEL LOADS.		Totals VA AMPS	AØ 156 193 563.9	BØ 148 815 536.5	CØ 107 975 389.8	Totals VA AMPS		

Panel "DP"	277 Volts L-N 3Ø, 4W 480 Volts L-L 25,000 AIC BRANCH BRKRS			200A3P MAIN LUGS ONLY COPPER BUS EQUIP. GROUNDING BAR			TYPE: I - LINE NEMA 1 ENCLOSURE SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
ANTENNA TOWER	1	13850	65/2		50/3	4314	2	9 & 10 - STORAGE A & B
	3	13850				2705	4	
LGTS - SITE	5	3300	20/2			1565	6	
	7	3300			20/1	0	8	LIGHTING CONTROLS
13 - WASH RACK	9	12526	100/3		20/2	2063	10	LGTS - SITE
	11	10806				2063	12	
	13	10000			20/2	2475	14	LGTS - SITE
08 - BULK SALT STORAGE	15	2220	40/3			2475	16	
	17	900			20/2	2063	18	LGTS - SITE
	19	900				2063	20	
14 - SALT SPREADER STORAGE	21	7902	60/3		20/2	3300	22	LGTS - SITE
	23	6634				3300	24	
	25	6094				0	26	
MIN. 4.5" SPACE	27	0				0	28	MIN. 9" SPACE
	29	0				0	30	
	31	0				0	32	
	33	0				0	34	
	35	0				0	36	
	37	0				0	38	
	39	0				0	40	
	41	0				0	42	
PANEL SHALL BE SIZED FOR A MINIMUM 9" ADDITIONAL SPACE ON EACH SIDE OF BUSSING FOR FUTURE PANEL LOADS.		Totals VA AMPS	AØ 42 996 155.2	BØ 47 041 169.8	CØ 30 631 110.6	Totals VA AMPS		

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NO.	DESCRIPTION OF REVISION OR ISSUE	DATE	BY	APP'D
	ISSUED FOR CONSTRUCTION	10/13/11		

SITE PREPARATION
AHTD JOB NO. 040554
SITE ELECTRICAL SCHEDULES

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13426
JOSHUA J. JOYCE
10/13/11

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	JWJ
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	ES-601
REV	

KEY NOTES: (THIS SHEET ONLY)

(1) ELECTRICAL PRIMARY BY OG&E.

(2) SERVICE TRANSFORMER, TRANSFORMER PAD, METER BASE, CT'S BY OG&E.

(3) 670A, 2 SETS 3"C–4#400kcmil, PROVIDE 2 EA. SPARE 2" CONDUITS STUBBED OUT FROM TRANSFORMER PAD FOR FUTURE USE.

(4) GENSET #1, (400kW) 420kW/525kVA @ 150 DEG. RISE, 277/480V DIESEL STANDBY GENERATOR WITH 48 HR SUB–BASE TANK AND STANDARD WEATHER ENCLOSURE. GENSET SHALL BE EQUAL TO KOHLER POWER SYSTEM 400REOZDD WITH 600A OUTPUT CIRCUIT BREAKER.

(5) 620A, 2 SETS 3"C – 4#350kcmil, 1#2AWG(G), PROVIDE ADDITIONAL CONDUITS AND CONDUCTORS BETWEEN ATS AND GENERATOR FOR BATTERY CHARGER, BLOCK HEATER, AND CONTROLS AS RECOMMENDED BY THE GENERATOR MANUFACTURER.

(6) PROVIDE 3/0 BARE GROUNDING ELECTRODE CONDUCTOR IN 3/4" CONDUIT DOWN TO GROUNDING ELECTRODE SYSTEM. GROUNDING ELECTRODES SHALL BE 3/4"x10' COPPERCLAD STEEL. NUMBER AS REQUIRED TO ACHIEVE A MAXIMUM OF 5 OHMS TO GROUND. MINIMUM NUMBER OF GROUNDING ELECTRODES SHALL BE THREE.

(7) 600A, 480V, 3 POLE, SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH. REFER TO DETAIL E/ES–501 FOR ELECTRICAL EQUIPMENT MOUNTING RACK.

(8) 620A, 2 SETS 3"C – 3#350kcmil, 1#350kcmil(N), 1#2AWG(G).

(9) SITE ELECTRICAL DISTRIBUTION PANEL MDP, 600A, 3 PHASE, 4 WIRE, 480/277V, MAIN LUGS ONLY, NEMA 3R ELECTRICAL EQUIPMENT MOUNTING RACK.

(10) FEEDERS:
150A, 2"C – 4#1/0, 1#6(G) (SERVICE STATION)
200A, 2–1/2"C – 4#3/0, 1#6(G) (BRIDGE/SIGN SHOP)
200A, 2–1/2"C – 4#3/0, 1#6(G) (PANEL 'DP')
2 EA. SPARE 2" CONDUITS

(11) 24"x36" QUAZITE POLYMER CONCRETE HANDHOLE. LOOP SLACK CONDUCTORS FROM EACH FEEDER WITHIN BOX A MINIMUM OF ONE LOOP.

(12) 150A, 2"C – 4#1/0, 1#6(G) TO SERVICE STATION. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(13) FEEDERS:
200A, 2–1/2"C – 4#3/0, 1#6(G) (BRIDGE/SIGN SHOP)
200A, 2–1/2"C – 4#3/0, 1#6(G) (PANEL 'DP')
2 EA. SPARE 2" CONDUITS

(14) 24"X24" QUAZITE POLYMER CONCRETE HANDHOLE. LOOP SLACK CONDUCTORS FROM EACH FEEDER WITHIN BOX A MINIMUM OF ONE LOOP.

(15) 200A, 2–1/2"C – 4#3/0, 1#6(G) TO BRIDGE/SIGN SHOP. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(16) 200A, 2–1/2"C – 4#3/0, 1#6(G) TO PANEL 'DP'

(17) SITE ELECTRICAL DISTRIBUTION PANEL 'DP', 225A, 3 PHASE, 4 WIRE, 480/277V, MAIN LUGS ONLY, NEMA 3R ENCLOSURE. REFER TO DETAIL F/ES–501 FOR ELECTRICAL EQUIPMENT MOUNTING RACK.

(18) 70A, 1–1/2"C – 2#4, 1#8(G) FUTURE ANTENNA FEEDER

(19) 25kVA DRY–TYPE SINGLE PHASE TRANSFORMER. 240X480V PRIMARY, 120/240V SECONDARY. NEMA 3R ENCLOSURE. COORDINATE EXACT LOCATION OF TRANSFORMER W/ AHTD. PROVIDE CONCRETE PAD PER MANUFACTURER'S RECOMENDATIONS.

(20) 110A, 1–1/2"C – 2#1, 1#6(G) TO FUTURE ANTENNA LOCATION. COORDINATE STUB–UP LOCATION W/ AHTD. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION BY OWNER.

(21) 55A, 1"C – 3#6, 1#10(G) TO STORAGE BUILDINGS. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(22) 110A, 2"C – 3#1, 1#6(G) TO WASH RACK. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(23) CALCIUM CHLORIDE TANK PUMP CIRCUIT SHALL BE PROVIDED AS PART OF TANK PACKAGE. INDICATED FOR REFERENCE ONLY

(24) 40A, 1"C – 4#6, 1#10(G) TO BULK SALT STORAGE BUILDING. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(25) 150A, 2"C – 4#1/0, 1#6(G) TO SC AREA HQ. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(26) FEEDERS:
110A, 2"C – 4#1, 1#6(G) (RE BUILDING)
85A, 1/1/2"C – 4#3, 1#8(G) (MATERIALS LAB)
70A, 1–1/2"C – 4#4, 1#8(G) (HWY POLICE)
2 EA. SPARE 2" CONDUITS

(27) 18"X24" QUAZITE POLYMER CONCRETE HANDHOLE. LOOP SLACK CONDUCTORS FROM EACH FEEDER WITHIN BOX A MINIMUM OF ONE LOOP.

(28) 110A, 2"C – 4#1, 1#6(G) TO RE BUILDING. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(29) FEEDERS:
70A, 1–1/2"C – 4#4, 1#8(G) (HWY POLICE)
85A, 1/1/2"C – 4#3, 1#8(G) (MATERIALS LAB)
EXTEND MATERIALS LAB FEEDER CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING. CONTINUE HWY POLICE CIRCUIT ON PER KEYED NOTE #30.

(30) 70A, 1–1/2"C – 4#4, 1#8(G) TO HWY POLICE. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

(31) **70A, 1–1/2"C – 4#4, 1#8(G) TO THE SALT SPREADER STORAGE BUILDING. EXTEND CIRCUIT TO A 24"X24" HANDHOLE JUST OUTSIDE OF BUILDING SERVICE ENTRANCE LOCATION. PROVIDE ENOUGH SLACK CONDUCTOR LENGTH FOR FINAL CONNECTION TO BUILDING.

GENERAL NOTES: (THIS SHEET ONLY)

A. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

B. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

C. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

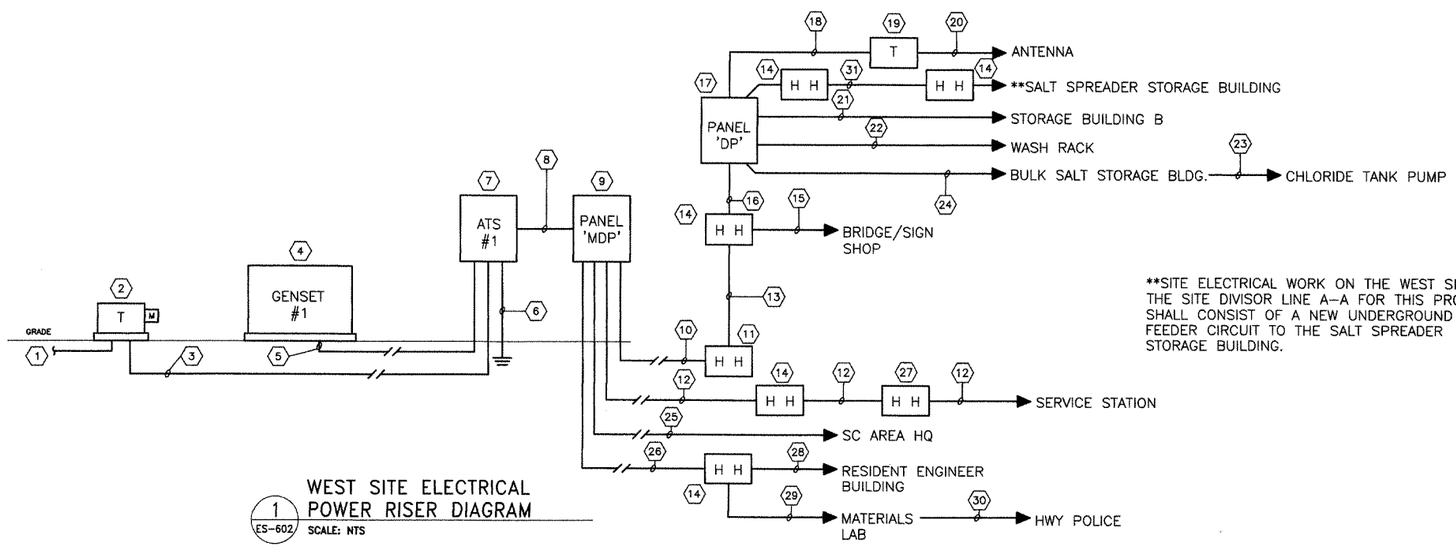
D. POWER RISER DIAGRAM SHALL BE USED IN CONJUNCTION WITH THE SITE ELECTRICAL LAYOUT INDICATED ON SHEET ES–101.

E. THE POWER RISER DIAGRAM SHOWN ON THIS SHEET INDICATE ELECTRICAL SERVICES FROM THE UTILITY TO EACH OF THE BUILDINGS. REFER TO INDIVIDUAL BUILDING POWER RISER DIAGRAMS FOR CONTINUATION.

SITE ELECTRICAL WORK:

THE SITE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING (AT A MINIMUM):

- SITE ELECTRICAL DISTRIBUTION SYSTEM AND ELECTRICAL SERVICE TO EACH BUILDING AS INDICATED BY THE POWER RISER DIAGRAM ON THIS SHEET. EXTEND ELECTRICAL CONDUITS, CONDUCTORS AND HANDHOLES TO EACH BUILDING LOCATION WITH ENOUGH SLACK CONDUCTORS PROVIDED TO MAKE FINAL CONNECTION AT BUILDING DISCONNECT.
- BACKUP GENERATOR SYSTEM AS INDICATED BY THE POWER RISER DIAGRAM ON THIS SHEET.
- SITE LIGHTING, INCLUDING ALL CONDUIT, CONDUCTORS, BASES, POLES, FIXTURES, ETC. AS REQUIRED FOR A COMPLETE AND OPERATIVE SYSTEM. LIGHTING CIRCUITS FED FROM PANEL 'DP' SHALL BE CONNECTED AS INDICATED BY THE SITE ELECTRICAL PLAN. LIGHTING CIRCUITS FED FROM BUILDINGS SHALL BE EXTENDED TO BUILDING LOCATION AND PROVIDED WITH ENOUGH SLACK CONDUCTORS TO MAKE FINAL CONNECTION WITHIN BUILDING BY THE BUILDING ELECTRICAL CONTRACTOR.
- POWER TO SITE CAMERA LOCATIONS.



1 ES–602 WEST SITE ELECTRICAL POWER RISER DIAGRAM
SCALE: NTS

**SITE ELECTRICAL WORK ON THE WEST SIDE OF THE SITE DIVISOR LINE A–A FOR THIS PROJECT SHALL CONSIST OF A NEW UNDERGROUND FEEDER CIRCUIT TO THE SALT SPREADER STORAGE BUILDING.

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554

SITE ELECTRICAL POWER RISER DIAGRAM

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	JWJ
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	ES–602
REV	

33 OF 289

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA W. LOFTIN

KEY NOTES: (THIS SHEET ONLY)

(1) ELECTRICAL PRIMARY BY OG&E.

(2) SERVICE TRANSFORMER, TRANSFORMER PAD, METER BASE, CT'S BY OG&E.

(3) 620A, 2 SETS 3"C – 4#350kcmil, PROVIDE 2 EA. SPARE 2" CONDUITS STUBBED OUT FROM TRANSFORMER PAD FOR FUTURE USE.

(4) GENSET #2, (400kW) 420kW/525kVA @ 150 DEG. RISE, 277/480V DIESEL STANDBY GENERATOR WITH 48 HR SUB-BASE TANK AND STANDARD WEATHER ENCLOSURE. GENSET SHALL BE EQUAL TO KOHLER POWER SYSTEM 400REOZDD WITH 600A OUTPUT CIRCUIT BREAKER.

(5) 620A, 2 SETS 3"C – 4#350kcmil, 1#2AWG(G), PROVIDE ADDITIONAL CONDUITS AND CONDUCTORS BETWEEN ATS AND GENERATOR FOR BATTERY CHARGER, BLOCK HEATER, AND CONTROLS AS RECOMMENDED BY THE GENERATOR MANUFACTURER.

(6) PROVIDE 3/0 BARE GROUNDING ELECTRODE CONDUCTOR IN 3/4" CONDUIT DOWN TO GROUNDING ELECTRODE SYSTEM. GROUNDING ELECTRODES SHALL BE 3/4"X10' COPPERCLAD STEEL. NUMBER AS REQUIRED TO ACHIEVE A MAXIMUM OF 5 OHMS TO GROUND. MINIMUM NUMBER OF GROUNDING ELECTRODES SHALL BE THREE.

(7) 600A, 480V, 3 POLE, SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH.

(8) 620A, 2 SETS 3"C – 3#350kcmil, 1#350kcmil(N), 1#1AWG(G).

(9) 175A, 2"C – 3#2/0, 1#2/0(N), 1#4(G) (PAINT/BODY SHOP FEEDER)

(10) 200A 480V 3ø PAINT/BODY SERVICE DISCONNECT W/ 150A FUSES.

(11) 24"X24" QUAZITE POLYMER CONCRETE HANDHOLE. LOOP SLACK CONDUCTORS A MINIMUM OF ONE LOOP AT EACH HANDHOLE.

GENERAL NOTES: (THIS SHEET ONLY)

A. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

B. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

C. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

D. POWER RISER DIAGRAM SHALL BE USED IN CONJUNCTION WITH THE SITE ELECTRICAL LAYOUT INDICATED ON SHEET ES-101.

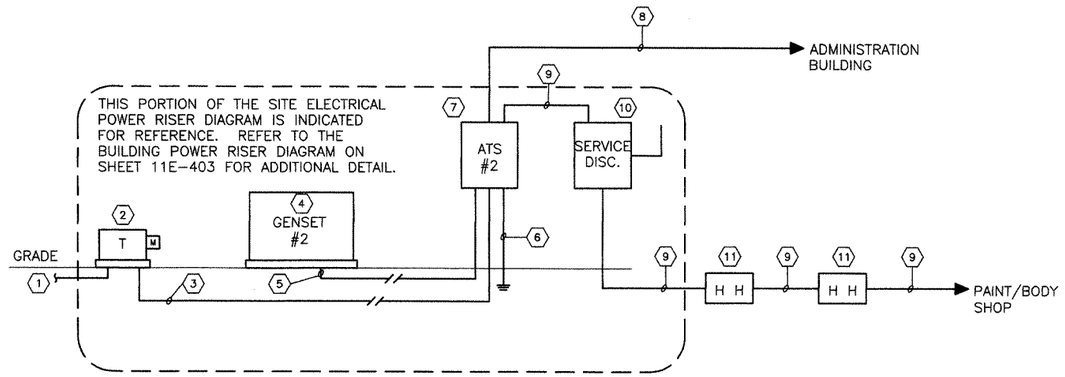
E. THE POWER RISER DIAGRAM SHOWN ON THIS SHEET INDICATE ELECTRICAL SERVICES FROM THE UTILITY TO EACH OF THE BUILDINGS. REFER TO INDIVIDUAL BUILDING POWER RISER DIAGRAMS FOR CONTINUATION.

SITE ELECTRICAL COORDINATION:

THE SITE AND BUILDING ELECTRICAL CONTRACTORS SHALL COORDINATE DIRECTLY TO PROVIDE THE SYSTEM INDICATED ON THIS SHEET.

ADMIN BUILDING:
THE ADMINISTRATION BUILDING ELECTRICAL CONTRACTOR SHALL PROVIDE THE GENERATOR, ATS, SERVICE DISCONNECT, ETC. (I.E. ALL BUILDING MOUNTED EQUIPMENT). THE SITE ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF THE UTILITY TRANSFORMER AND PROVIDE CONNECTION BETWEEN THE SERVICE TRANSFORMER, GENERATOR, AND BUILDING.

PAINT & BODY SHOP:
THE ADMINISTRATION BUILDING ELECTRICAL CONTRACTOR SHALL PROVIDE THE BUILDING MOUNTED SERVICE DISCONNECT.
THE SITE ELECTRICAL CONTRACTOR SHALL PROVIDE CONNECTION BETWEEN THE SERVICE TRANSFORMER, SERVICE DISCONNECT, AND PAINT & BODY SHOP.



1 ES-603 EAST SITE ELECTRICAL POWER RISER DIAGRAM
SCALE: NTS

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
SITE ELECTRICAL POWER RISER DIAGRAM

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13128 JOSHUA W. JOYCE 10/19/2011

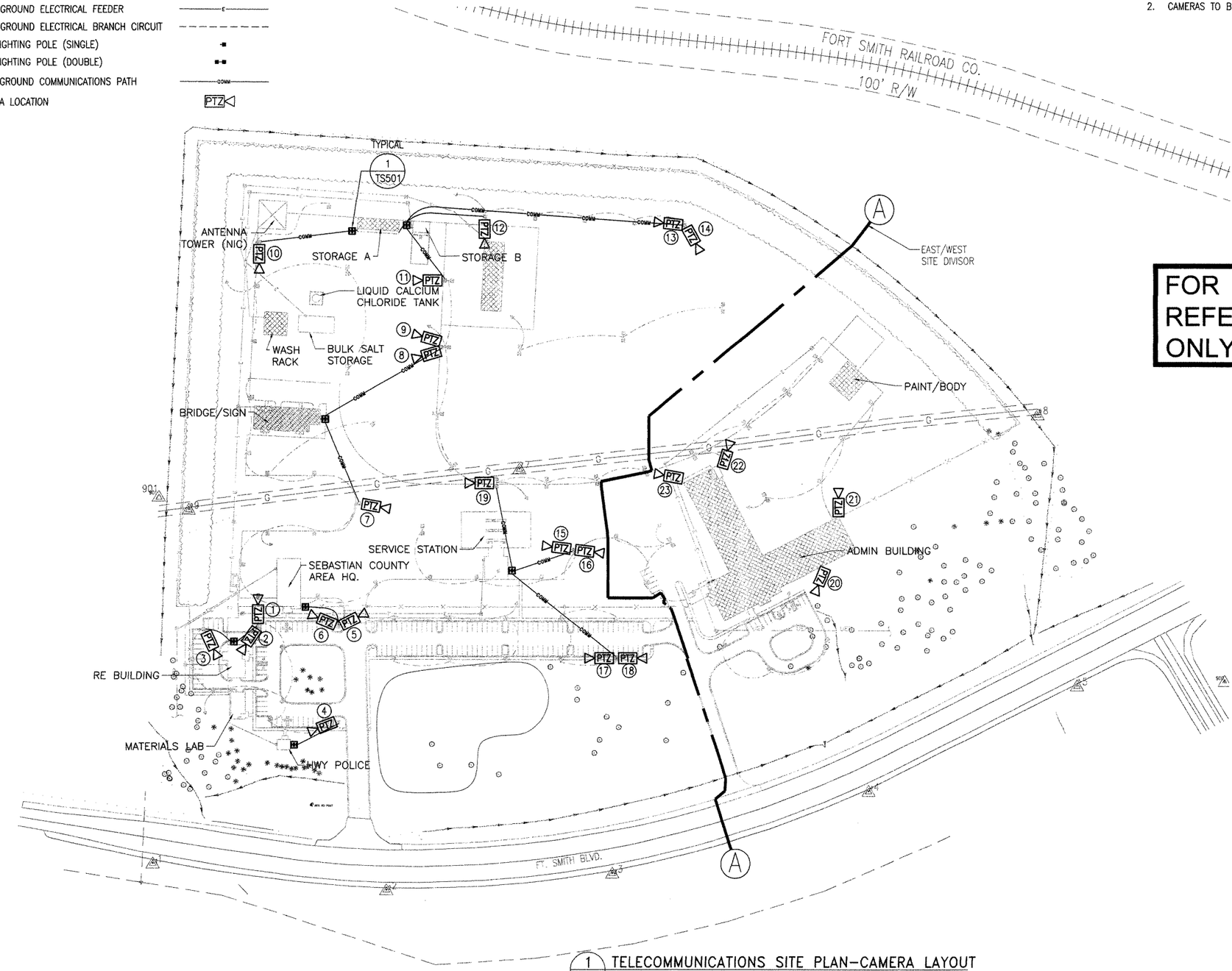
DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	JWJ
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	ES-603
REV	

LEGEND

- EXISTING GAS LINE
- PROPOSED FENCE
- HAND HOLE QUAZITE ENCLOSURE (HH)
- UNDERGROUND ELECTRICAL PRIMARY (UEP)
- UNDERGROUND ELECTRICAL FEEDER (E)
- UNDERGROUND ELECTRICAL BRANCH CIRCUIT
- SITE LIGHTING POLE (SINGLE)
- SITE LIGHTING POLE (DOUBLE)
- UNDERGROUND COMMUNICATIONS PATH (COMM)
- CAMERA LOCATION (PTZ)

GENERAL NOTES:

1. ALL SECURITY CONDUIT TO BE 1" SCH 40 PVC UNO.
2. CAMERAS TO BE AXIS 213 PTZ OR OWNER APPROVED EQUIVALENT.



FOR REFERENCE ONLY

1 TS-101 TELECOMMUNICATIONS SITE PLAN-CAMERA LAYOUT
SCALE: 1:100

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D

SITE PREPARATION
AHTD JOB NO. 040554
TELECOMMUNICATIONS SITE PLAN-CAMERA LAYOUT

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	BMG
APPROVED BY	JWJ

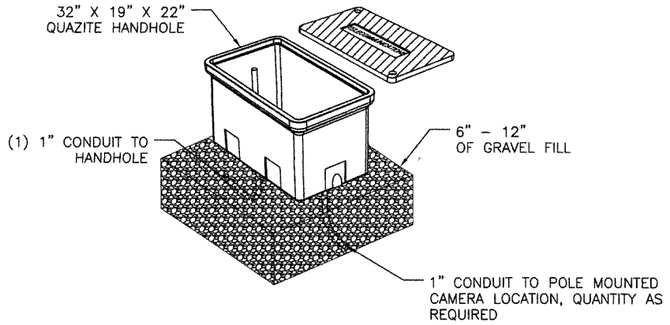
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	TS-101
REV	

35 OF 289

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA W. JOYCE

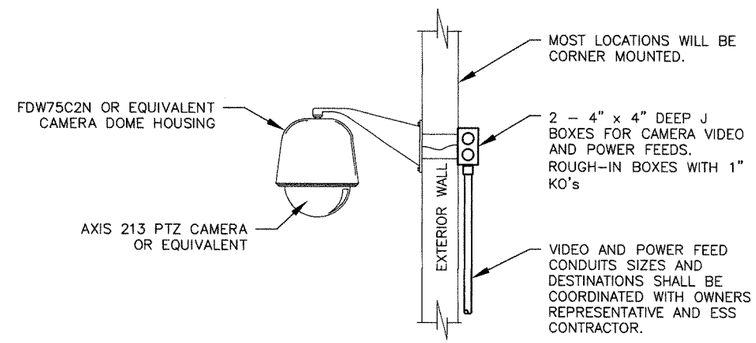
SAIC Energy, Environment & Infrastructure, LLC No. 510 CERTIFICATE OF AUTHORIZATION ARKANSAS

Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\2D_DESGN\40_CAD\8120G-BS01D.dwg

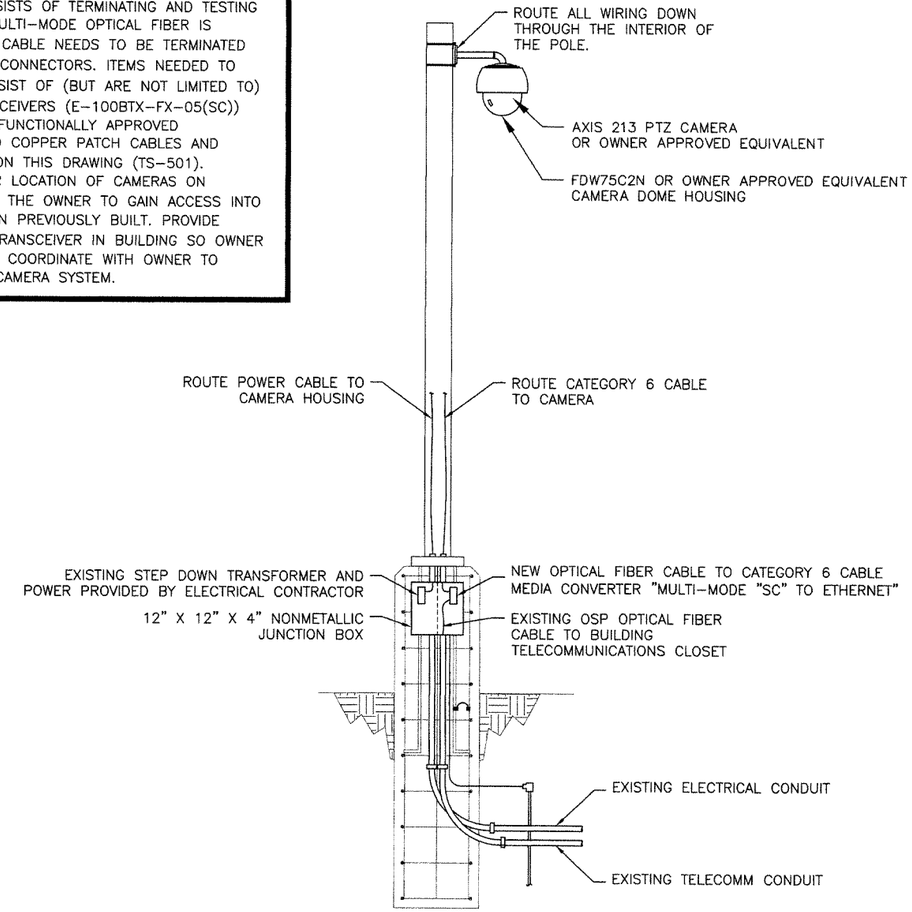


1 / TS-501 HAND HOLE DETAIL
SCALE: NTS

NOTE: CAMERA INSTALLATION CONSISTS OF TERMINATING AND TESTING FROM END TO END. 2–STRAND MULTI–MODE OPTICAL FIBER IS INSTALLED ONLY (EXISTING), THIS CABLE NEEDS TO BE TERMINATED AT BOTH ENDS WITH "SC" STYLE CONNECTORS. ITEMS NEEDED TO COMPLETE THE INSTALLATION CONSIST OF (BUT ARE NOT LIMITED TO) THE FOLLOWING: TWO (2) TRANSCEIVERS (E–100BTX–FX–05(SC)) FROM TRANSITION NETWORKS OR FUNCTIONALLY APPROVED EQUIVALENT, ASSORTED FIBER AND COPPER PATCH CABLES AND ADDITIONAL ITEMS REFERRED TO ON THIS DRAWING (TS–501). REFERENCE DRAWING TS–101 FOR LOCATION OF CAMERAS ON BUILDING/POLE. COORDINATE WITH THE OWNER TO GAIN ACCESS INTO THESE BUILDINGS THAT HAVE BEEN PREVIOUSLY BUILT. PROVIDE COPPER PATCH CABLE(S) FROM TRANSCEIVER IN BUILDING SO OWNER CAN PATCH INTO THEIR NETWORK. COORDINATE WITH OWNER TO PROVIDE A FULLY FUNCTIONALLY CAMERA SYSTEM.



2 / TS-501 EXTERIOR PTZ CAMERA
SCALE: NTS



NOTE:
POLE BASE DETAIL IS DIAGRAMMATIC ONLY, REFERENCE DETAIL D/ES–501 FOR POLE BASE CONSTRUCTION DETAILS.

3 / TS-501 POLE MOUNTED CAMERA DETAIL
SCALE: NTS

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 13428 JOSHUA W. JOYCE 10/13/11

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/30/09	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
TELECOMMUNICATION SITE PLAN DETAILS

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	BMG
APPROVED BY	JWJ
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	TS–501
REV	0

36 OF 289

Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\81206-BS010.dwg

REFER TO SITE UTILITIES PLAN
C-110, C-111, C-112, AND C-113
FOR INTERCONNECTION OF BUILDINGS.

#4 SERVICE STATION TR/ER — NETWORK SWITCH
- EXISTING 2-STRAND OSP-RATED OPTICAL FIBER 62.5/125 LOOSE TUBE GEL FILLED TERMINATED WITH "SC" CONNECTORS IN BUILDING TELECOMMUNICATIONS ROOM
- PTZ (19)
- PTZ (18)
- PTZ (17)
- PTZ (16)
- PTZ (15)

#9 STORAGE BUILDING A TR/ER — NETWORK SWITCH
- EXISTING 2-STRAND OSP-RATED OPTICAL FIBER 62.5/125 LOOSE TUBE GEL FILLED TERMINATED WITH "SC" CONNECTORS IN BUILDING TELECOMMUNICATIONS ROOM
- PTZ (14)
- PTZ (13)
- PTZ (12)
- PTZ (11)
- PTZ (10)

#3 MULTI-CREW BRIDGE/SIGN BUILDING TR/ER — NETWORK SWITCH
- EXISTING 2-STRAND OSP-RATED OPTICAL FIBER 62.5/125 LOOSE TUBE GEL FILLED TERMINATED WITH "SC" CONNECTORS IN BUILDING TELECOMMUNICATIONS ROOM
- PTZ (9)
- PTZ (8)
- PTZ (7)

#2 SEBATIAN COUNTY AREA HQ TR/ER — NETWORK SWITCH
- EXISTING 2-STRAND OSP-RATED OPTICAL FIBER 62.5/125 LOOSE TUBE GEL FILLED TERMINATED WITH "SC" CONNECTORS IN BUILDING TELECOMMUNICATIONS ROOM
- PTZ (6)
- PTZ (5)

#5 HIGHWAY POLICE TR/ER — NETWORK SWITCH
- EXISTING 2-STRAND OSP-RATED OPTICAL FIBER 62.5/125 LOOSE TUBE GEL FILLED TERMINATED WITH "SC" CONNECTORS IN BUILDING TELECOMMUNICATIONS ROOM
- PTZ (4)

#1 RESIDENT ENGINEER BUILDING TR/ER — NETWORK SWITCH
- EXISTING 2-STRAND OSP-RATED OPTICAL FIBER 62.5/125 LOOSE TUBE GEL FILLED TERMINATED WITH "SC" CONNECTORS IN BUILDING TELECOMMUNICATIONS ROOM
- PTZ (3)
- PTZ (2)
- PTZ (1)

#11 ADMINISTRATION BUILDING ROOM 116
- CATEGORY 6 CABLE
- PTZ (23)
- PTZ (22)
- PTZ (21)
- PTZ (20)

EXISTING 36 STRAND OPTICAL FIBER OSP
62.5/125 LOOSE TUBE GEL FILLED
TERMINATED WITH "SC" CONNECTORS

A / TS-601 CAMERA BLOCK DIAGRAM
SCALE: NTS

NOTE: CAMERA INSTALLATION CONSISTS OF TERMINATING AND TESTING FROM END TO END. 2-STRAND MULTI-MODE OPTICAL FIBER IS INSTALLED ONLY (EXISTING), THIS CABLE NEEDS TO BE TERMINATED AT BOTH ENDS WITH "SC" STYLE CONNECTORS. ITEMS NEEDED TO COMPLETE THE INSTALLATION CONSIST OF (BUT ARE NOT LIMITED TO) THE FOLLOWING: TWO (2) TRANSCEIVERS (E-100BTX-FX-05(SC)) FROM TRANSITION NETWORKS OR FUNCTIONALLY APPROVED EQUIVALENT, ASSORTED FIBER AND COPPER PATCH CABLES AND ADDITIONAL ITEMS REFERRED TO ON THIS DRAWING (TS-601). REFERENCE DRAWING TS-101 FOR LOCATION OF CAMERAS ON BUILDING/POLE. COORDINATE WITH THE OWNER TO GAIN ACCESS INTO THESE BUILDINGS THAT HAVE BEEN PREVIOUSLY BUILT. PROVIDE COPPER PATCH CABLE(S) FROM TRANSCEIVER IN BUILDING SO OWNER CAN PATCH INTO THEIR NETWORK. COORDINATE WITH OWNER TO PROVIDE A FULLY FUNCTIONALLY CAMERA SYSTEM.

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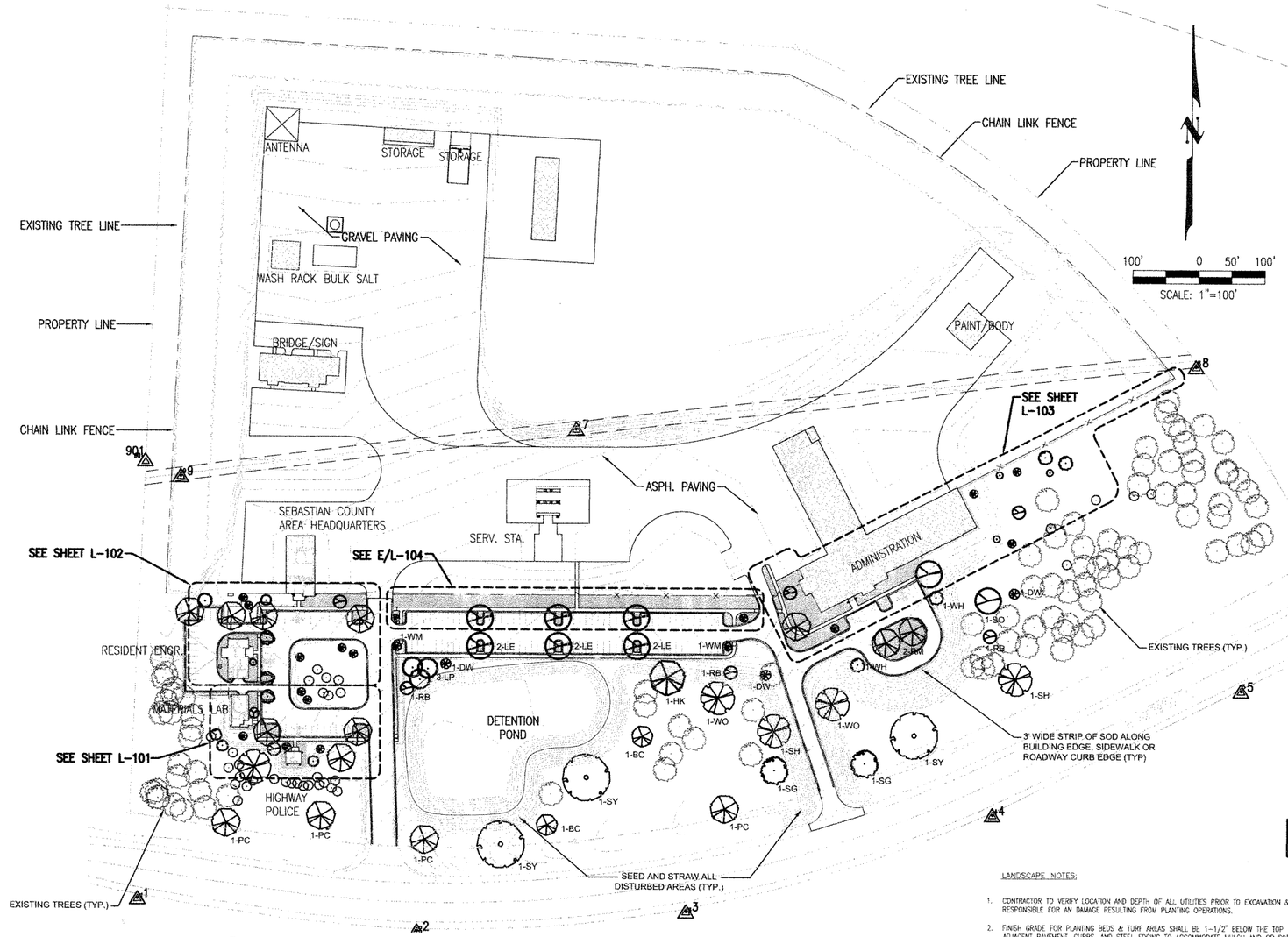
SITE PREPARATION
AHTD JOB NO. 040554
TELECOMMUNICATION CAMERA ONE-LINE DIAGRAM

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

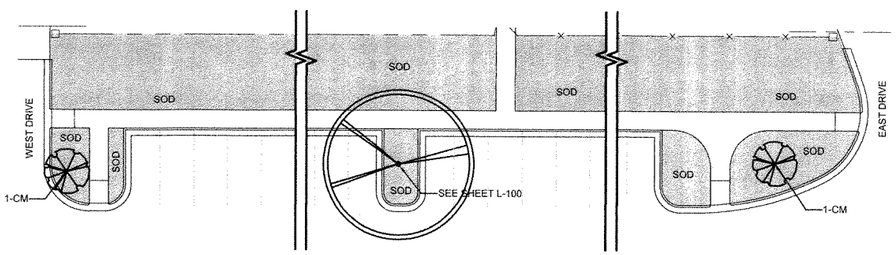
STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13428 — 10/13/11 — JOSHUA W. TAYLOR

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	BMG
APPROVED BY	JWJ
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	TS-601
REV	0
	37 OF 289

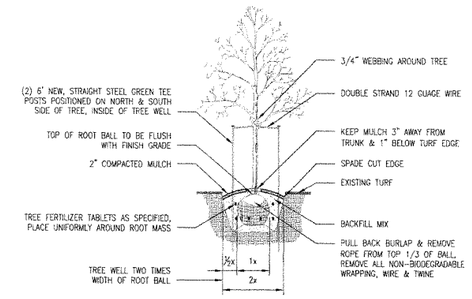
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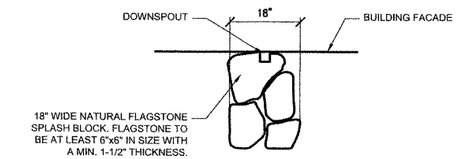
A L-100 LANDSCAPE PLAN
SCALE: 1:100



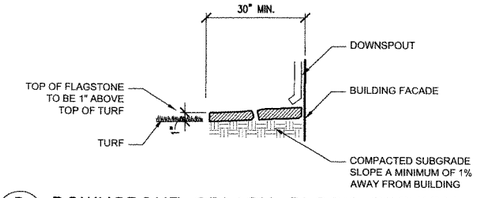
E L-100 CENTER FENCE LANDSCAPE
SCALE: 1" = 10'



B L-100 TREE PLANTING DETAIL
SCALE: N.T.S.



C L-100 DOWNSPOUT SPLASH BLOCK PLAN
SCALE: N.T.S.



D L-100 DOWNSPOUT SPLASH BLOCK SECTION
SCALE: N.T.S.

SEE LANDSCAPE SHEETS L-101 THRU L-104 FOR ENLARGED LANDSCAPE PLANS.

LANDSCAPE NOTES:

1. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO EXCAVATION & BE RESPONSIBLE FOR AN DAMAGE RESULTING FROM PLANTING OPERATIONS.
2. FINISH GRADE FOR PLANTING BEDS & TURF AREAS SHALL BE 1-1/2" BELOW THE TOP ADJACENT PAVEMENT, CURBS, AND STEEL EDGING TO ACCOMMODATE MULCH AND OR SOD THICKNESS.
3. FINISH GRADE FOR ALL LANDSCAPE BEDS. SEEDED AREAS & SODDED AREAS ARE TO BE APPROVED BY OWNER'S REPRESENTATION PRIOR TO PLANTING.
4. INCORPORATE A 2" LAYER OF COMPOSTED COTTON BURRS INTO THE TOP 6" OF THE PLANTING BED.
5. INCORPORATE MICRO NUTRIENT FERTILIZER INTO THE TOP 2" OF THE PLANTING BED AS SPECIFIED.
6. SPREAD SLOW-RELEASE FERTILIZER AND PRE-EMERGENT HERBICIDE OVER FINISHED PLANTING BED PRIOR TO THE APPLICATION OF MULCH.
7. ALL LANDSCAPE BEDS & TREE WELLS ARE TO BE MULCHED AFTER PLANTING WITH A LAYER OF FINELY SHREDDED MULCH TO A THICKNESS OF 2" COMPACTED.
8. ALL LANDSCAPE BEDS THAT ABUT TURF AREAS ARE TO BE BORDERED BY STEEL EDGING.
9. PREPARE LANDSCAPE BEDS, SEEDED & SODDED AREAS AS PER SPECIFICATIONS.
10. QUANTITIES ON THE PLANT LIST ARE FOR CONVENIENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON THE PLANTING PLAN AND COVERAGE OF ALL AREAS DELINEATED. WHEN DISCREPANCIES OCCUR BETWEEN THE PLANT LIST AND PLANTING PLANS, THE PLANS ARE TO SUPERSEDE THE PLANT LIST.
11. CREATE A 18"x18" NATURAL FLAGSTONE SPLASH BLOCK UNDER EACH RAIN GUTTER DOWNSPOUT. FLAGSTONE TO BE AT LEAST 6"x6" IN SIZE WITH A 1-1/2" THICKNESS. (SEE DETAILS D AND E SHEET L-104.
12. LANDSCAPE CONTRACTOR TO PROVIDE 3 ADDITIONAL WATER APPLICATIONS TO THE SHRUB, TREE AND TURF AREAS WITHIN 60 DAYS AFTER THE INITAL INSTALLATION WATERING. WATER APPLICATION SCHEDULE TO BE APPROVED BY THE OWNER AND SHALL BE BASED UPON THE EXISTING PLANT MATERIAL REQUIREMENTS, WEATHER AND MOISTURE CONDITIONS. WATER APPLICATIONS TO CONSIST OF SLOW AND DEEP WATERING AT A RATE SUFFICIENT ENOUGH TO INSURE A THOROUGH WETTING OF THE SOIL TO A DEPTH OF 6" FOR TREES AND SHRUBS AND A 2" DEPTH FOR THE TURF AREAS.

OVERALL PLANT LIST

SYM.	QTY.	COMMON NAME	BOTANICAL NAME	SIZE
TREES				
BC	2	BALD CYPRESS	TAXODIUM DISTICHUM	1 3/4"-2"CAL.
CM	17	RED CREPE MYRTLE	LAGERSTROEMIA INDICA DYNAMITE	6'-7' (#1)
DH	2	DECIDUOUS HOLLY (POSSUM HAW)	IIEX DECIDUA	7'-8' (#1)
DW	3	FLOWERING DOGWOOD	CORNUS FLORIDA	3/4"-1"CAL.
GA	4	PATMORE GREEN ASH	FRAXINUS PENNSYLVANICA 'PATMORE'	1 3/4"-2"CAL.
HK	1	NORTHERN HACKBERRY	CELTIS OCCIDENTALIS	1 3/4"-2"CAL.
LE	6	LACEBARK ELM	ULMUS PARVIFOLIA	1 3/4"-2"CAL.
LP	3	LOBLOLLY PINE	PINUS TAEDA	10'-12'
PC	5	PECAN	CARYA ILLINOINENSIS 'CHOCTAW'	1 1/2"-1 3/4"CAL.
RB	7	REDBUD	CERCIS CANADENSIS	3/4"-1"CAL.
RC	5	CANAERT RED CEDAR	JUNIPERUS VIRGINIANA 'CANAERT'	7'-8'
RE	3	RED ESCORT DECIDUOUS HOLLY	IIEX DECIDUA 'RED ESCORT' (MALE--POLLINATOR)	7'-8' (#1)
RM	9	BURGUNDY BELLE RED MAPLE	ACER RUBRUM 'MAGNIFICENT MAGENTA'	1 3/4"-2"CAL.
SB	2	SWEETBAY MAGNOLIA	MAGNOLIA VIRGINIANA	7'-8' (#1)
SG	1	SWEET GUM	LIQUIDAMBAR STYRACIFLUA	1 3/4"-2"CAL.
SH	2	SHAGBARK HICKORY	CARYA OVATA	1 1/2"-1 3/4"CAL
SO	3	SHUMARD OAK	QUERCUS SHUMARDII	1 3/4"-2"CAL.
SY	3	SYCAMORE	PLATANUS OCCIDENTALIS	1 3/4"-2"CAL.
WH	5	WASHINGTON HAWTHORNE	CRATAEGUS PHAENOPYRUM	8'-10' (#2)
WO	3	WHITE OAK	QUERCUS ALBA	1 3/4"-2"CAL.
WT	1	WITCHHAZEL	HAMAMELIS VIRGINIANA	6'-7' (#1)
PERENNIALS/BEDS BY ALLOWANCE				

NOTES:
#1 MULTI-TRUNK WITH A MIN. OF 3 CANES WITH A MIN. CALIPER OF 3/4" EACH
#2 MULTI-TRUNK WITH A MIN. OF 3 CANES WITH A MIN. CALIPER OF 1" EACH

REGISTERED ARCHITECT — SAIC Energy, Environment, & Infrastructure, LLC No. C-255 — ARKANSAS

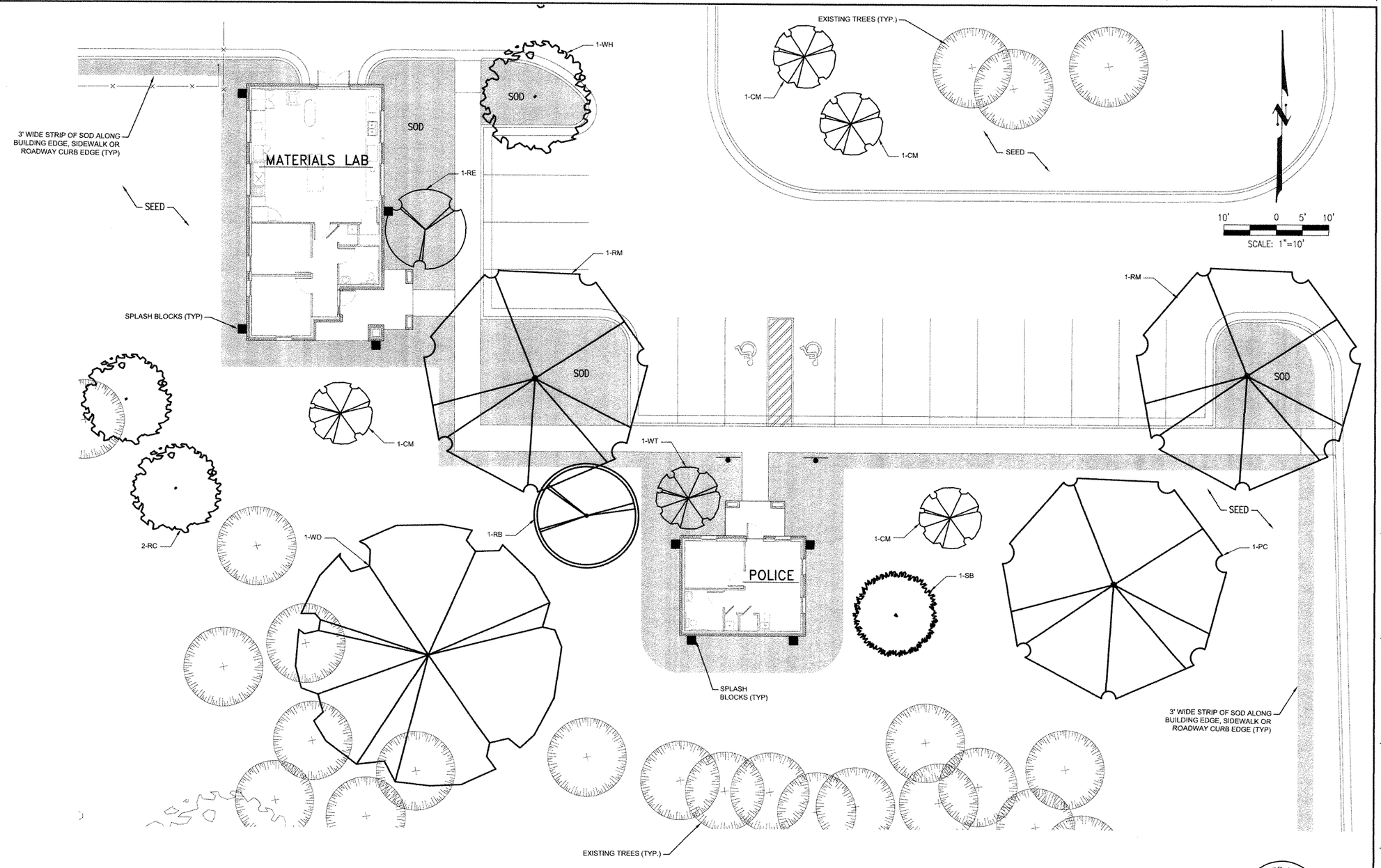
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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SITE PREPARATION
AHTD JOB NO. 040554
OVERALL LANDSCAPE PLAN

DESIGNED BY	RHH
DRAWN BY	DRM
CHECKED BY	RHH
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
L-100	
38 OF 287	



NOTE:
SEE SHEET L-100 FOR OVERALL LANDSCAPE PLAN, PLANT LIST AND LANDSCAPE NOTES.

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

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0	10/13/11	ISSUED FOR CONSTRUCTION		

SITE PREPARATION
AHTD JOB NO. 040554
MATERIALS LAB AND POLICE BUILDING
LANDSCAPE PLAN

DESIGNED BY	RHH
DRAWN BY	DRM
CHECKED BY	RHH
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	L-101
REV	

COUNTY HEADQUARTERS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

1-RC
1-CM
1-SB
1-CM
SEED
SPLASH BLOCKS (TYP)
1-RB
SOD
SOD
SEED
SOD
1-RM
1-RM
3' WIDE STRIP OF SOD ALONG BUILDING EDGE, SIDEWALK OR ROADWAY CURB EDGE (TYP)
3' WIDE STRIP OF SOD ALONG BUILDING EDGE, SIDEWALK OR ROADWAY CURB EDGE (TYP)
1-RM
1-RM
SOD
SOD
SOD
1-WH
SOD
SOD
1-DH
RESIDENT ENGINEER
SOD
SOD
1-WH
SPLASH BLOCKS (TYP)
1-CM
1-CM
1-CM
10' 0 5' 10'
SCALE: 1"=10'

NOTE:
SEE SHEET L-100 FOR OVERALL LANDSCAPE PLAN, PLANT LIST AND LANDSCAPE NOTES.

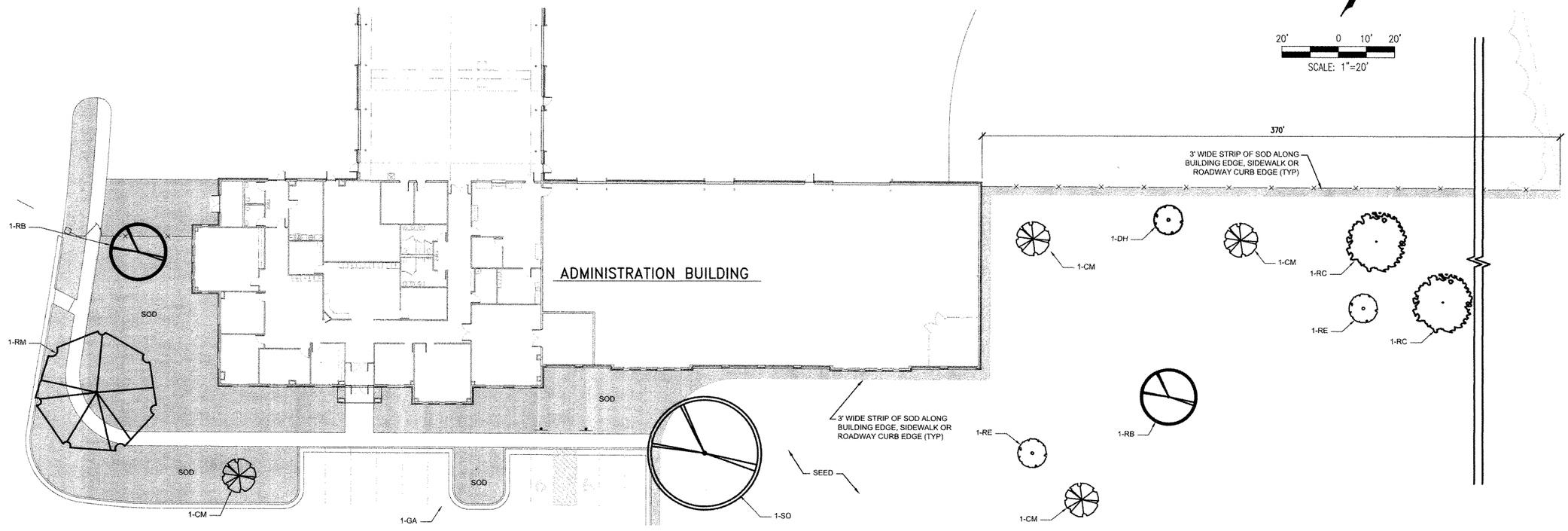
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SITE PREPARATION
AHTD JOB NO. 040554
RESIDENT ENGINEER AND COUNTY HEADQUARTERS
LANDSCAPE PLAN

DESIGNED BY	RHH
DRAWN BY	DRM
CHECKED BY	RHH
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	L-102
REV	



NOTE:
SEE SHEET L-100 FOR OVERALL LANDSCAPE PLAN, PLANT LIST AND LANDSCAPE NOTES.

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No. C-255
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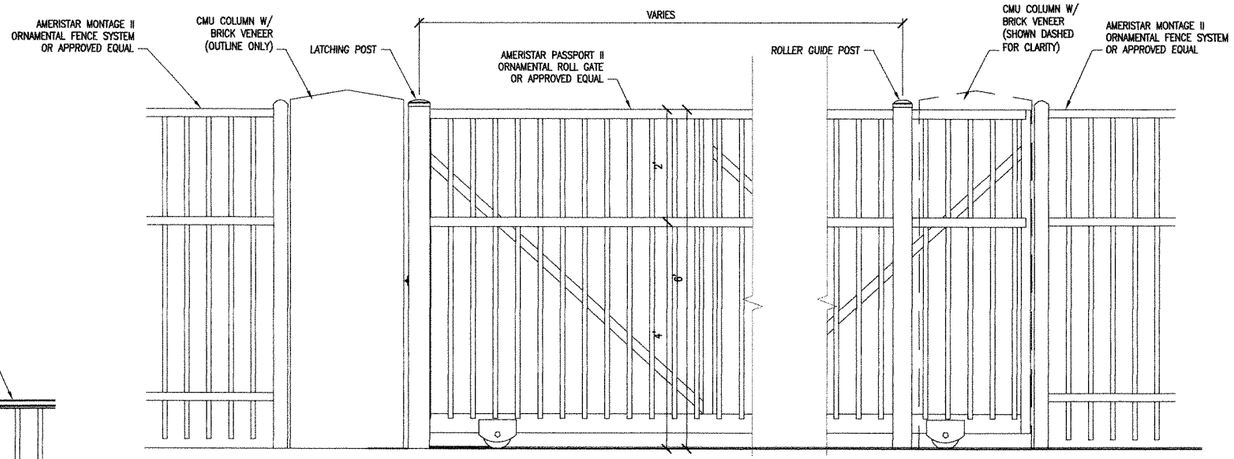
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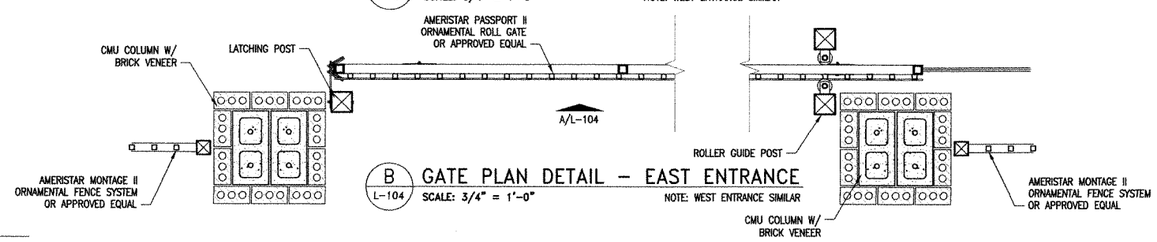
SITE PREPARATION
AHTD JOB NO. 040554
ADMINISTRATION BUILDING
LANDSCAPE PLAN

DESIGNED BY	RHH
DRAWN BY	DRM
CHECKED BY	RHH
APPROVED BY	TBC

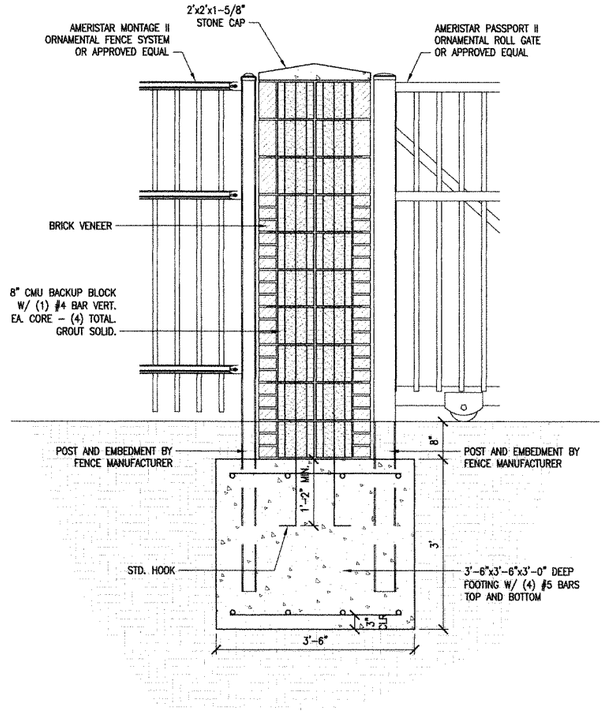
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
L-103	
41 OF 289	



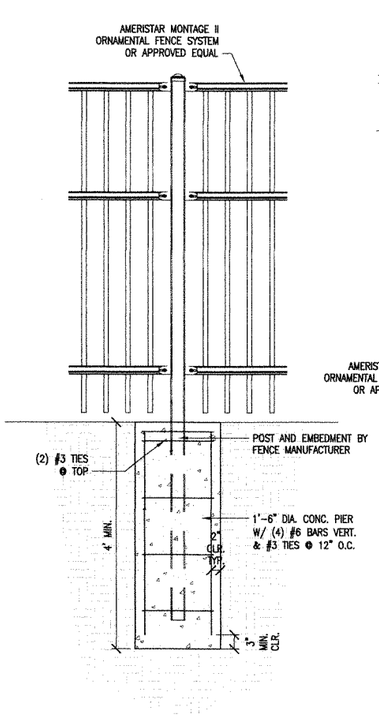
A L-104 **GATE ELEVATION – EAST ENTRANCE**
SCALE: 3/4" = 1'-0" NOTE: WEST ENTRANCE SIMILAR



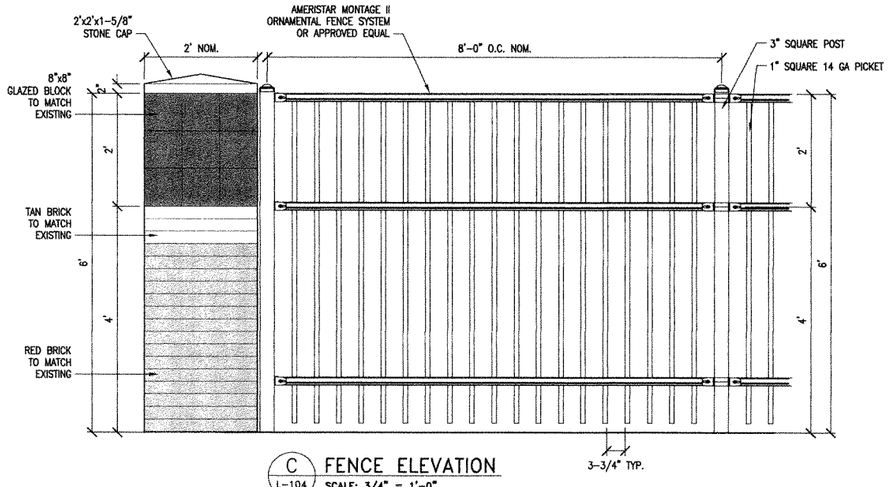
B L-104 **GATE PLAN DETAIL – EAST ENTRANCE**
SCALE: 3/4" = 1'-0" NOTE: WEST ENTRANCE SIMILAR



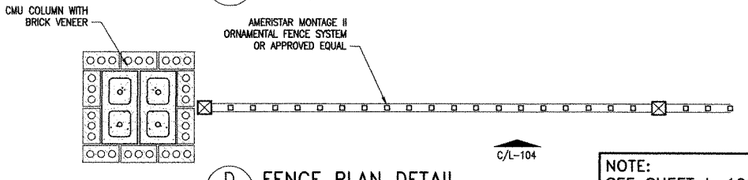
E L-104 **BRICK COLUMN SECTION**
SCALE: 3/4" = 1'-0"



F L-104 **FENCE POST SECTION**
SCALE: 3/4" = 1'-0"



C L-104 **FENCE ELEVATION**
SCALE: 3/4" = 1'-0"



D L-104 **FENCE PLAN DETAIL**
SCALE: 3/4" = 1'-0"

NOTE:
SEE SHEET L-100 FOR OVERALL LANDSCAPE PLAN, PLANT LIST AND LANDSCAPE NOTES.

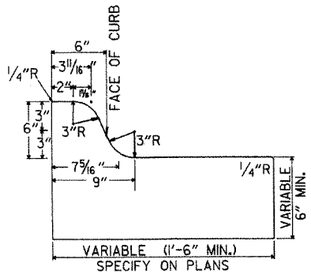
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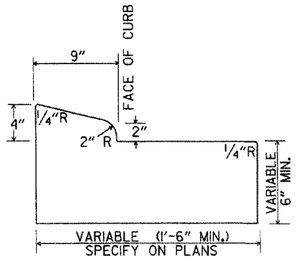
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SITE PREPARATION
AHTD JOB NO. 040554
FENCE AND GATE DETAILS

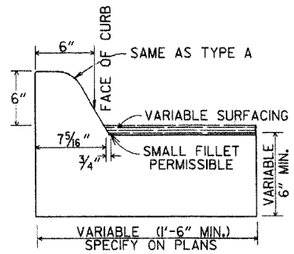
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DRAWN BY	DRM
CHECKED BY	RHH
APPROVED BY	TBC
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	L-104
REV	



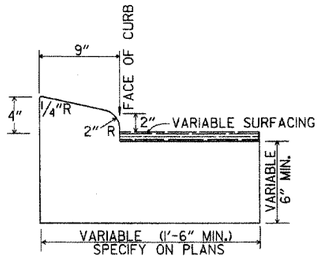
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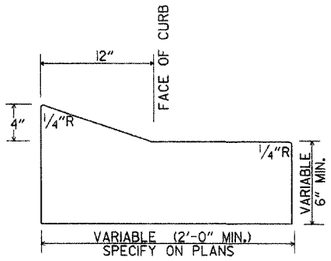
TYPE B-1



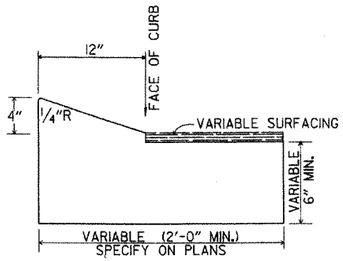
TYPE C



TYPE B-2

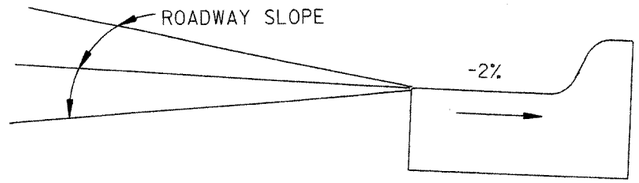


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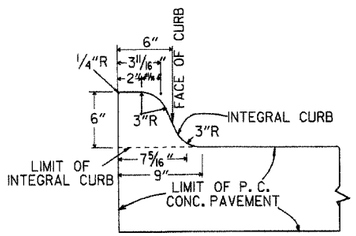
TYPE E-2

CONCRETE COMBINATION CURB AND GUTTER

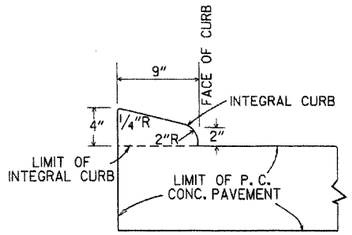


DETAIL OF GUTTER SLOPE

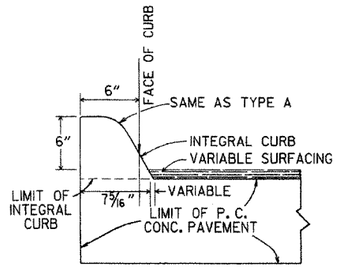
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

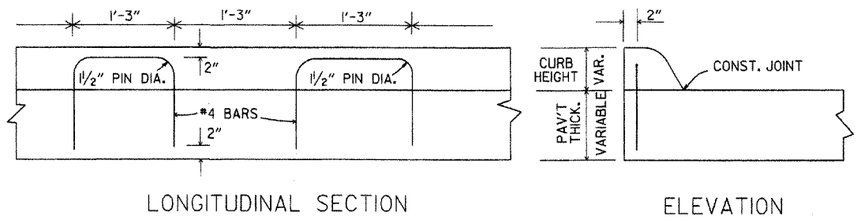


TYPE B



TYPE C

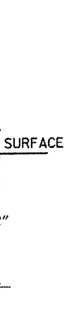
INTEGRAL CURB



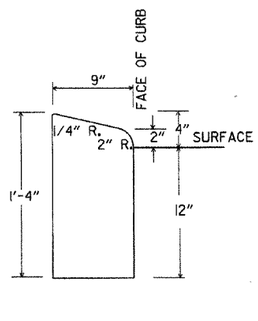
LONGITUDINAL SECTION

ELEVATION

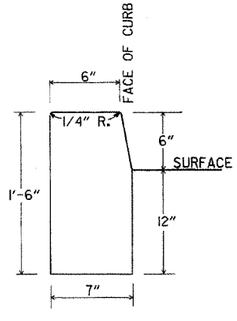
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



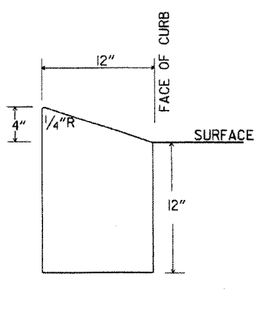
TYPE A



TYPE B

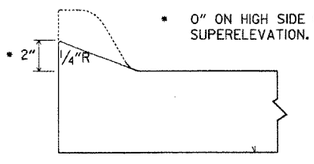


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIBLE DEPTH TYPE A & B	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

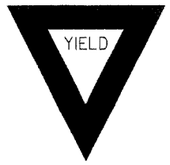
STANDARD DRAWING CG-1

R1-1



STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5A



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5C



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-1



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R5-1



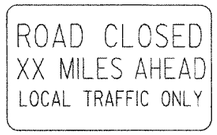
STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

R11-2



48"X30"

R11-3A



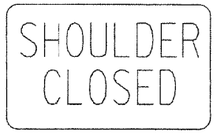
60"X30"

R11-4



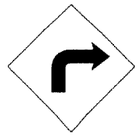
60"X30"

RSP-1



48"X30"

W1-1



STD. 36"X36"
FWY. 48"X48"

W1-2



STD. 36"X36"
FWY. 48"X48"

W1-3



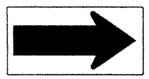
STD. 48"X48"

W1-4



STD. 48"X48"

W1-6



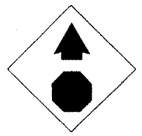
STD. 48"X24"
SPECIAL 60"X30"

W1-8



STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



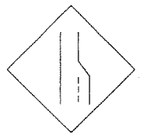
STD. 36"X36"
SPECIAL 48"X48"

W3-2



STD. 36"X36"
SPECIAL 48"X48"

W4-2



STD. 36"X36"
FWY. 48"X48"

W5-1



STD. 36"X36"
SPECIAL 48"X48"

W6-3



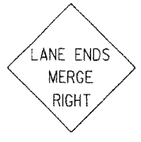
EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7



EXPWY. 36"X36"
FWY. 48"X48"

W9-2



STD. 36"X36"
FWY. 48"X48"

W13-1



STD. 24"X24"

W20-1



STD. 48"X48"

W20-2



STD. 48"X48"

W20-3



STD. 48"X48"

W20-4



STD. 48"X48"

W20-5



STD. 48"X48"

W20-7a



STD. 36"X36"
FWY. 48"X48"

W21-2



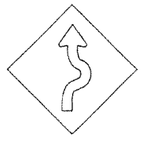
STD. 30"X30"
SPECIAL 36"X36"

W21-5



STD. 30"X30"
SPECIAL 36"X36"

W24-1



STD. 36"X36"

W1-4b



STD. 48"X48"

R56-1



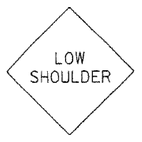
STD. 18"X18"

W8-11



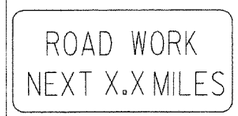
STD. 36"X36"
FWY. 48"X48"

W8-9



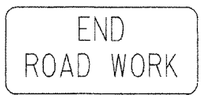
STD. 36"X36"
FWY. 48"X48"

G20-1



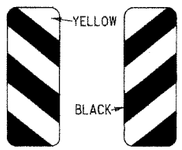
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

M4-9



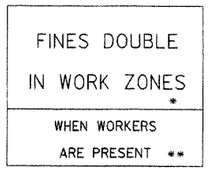
STD. 30"X24"
SPECIAL 48"X36"
SPECIAL 60"X48"

M4-10



48"X18"

R55-1



36"X60"

* USE 6" C LETTERS
** USE 4" D LETTERS

ADVANCE DISTANCES
(XXXX)

500 FT	½ MILE
1000 FT	¾ MILE
1500 FT	1 MILE AHEAD

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

* NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

DATE	REVISION	FILMED
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

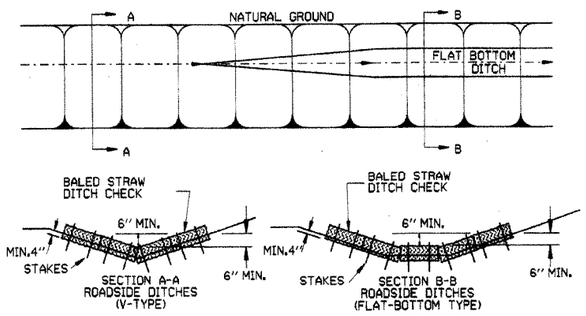
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

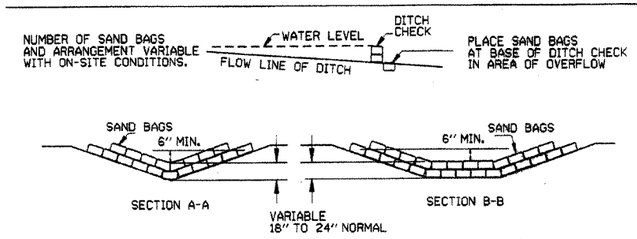
STANDARD DRAWING TC-1

GENERAL NOTES

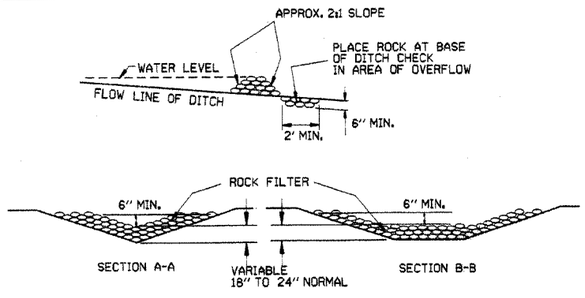
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. STRAW BALES SHALL BE KEYED INTO SOIL A MINIMUM OF 4' AND NO GAPS SHALL BE LEFT BETWEEN BALES.



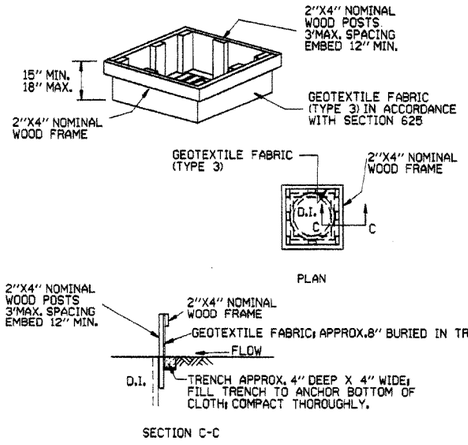
BALED STRAW DITCH CHECK (E-1)



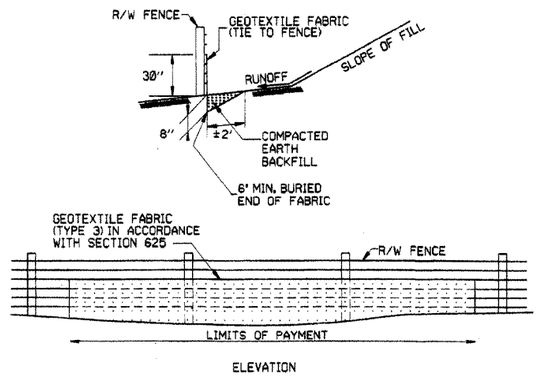
SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



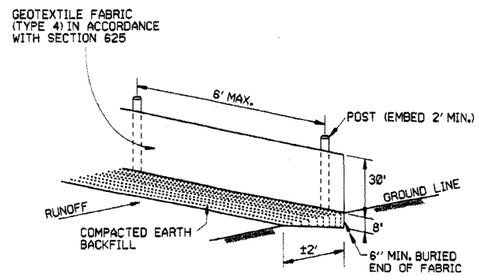
DROP INLET SILT FENCE (E-7)



SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



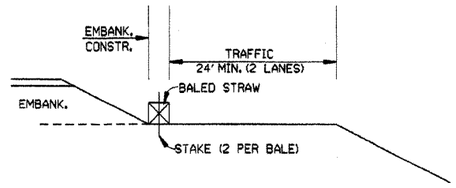
SILT FENCE (E-11)

GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. NO GAPS SHALL BE LEFT BETWEEN BALES.
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



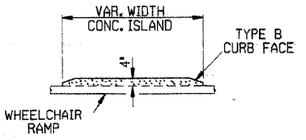
BALED STRAW FILTER BARRIER (E-2)

DATE	REVISION	FILMED
11-18-98	ADDED NOTES	11-18-98
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
7-15-94	Rev. E-4 & E-11 Min. 13" Buried End of Fabric	
6-2-94	Revised E-1, 4, 7, & 11; Deleted E-2 & 3	6-2-94
4-1-93	REDRAWN	
10-1-92	REDRAWN	
8-2-76	ISSUED R.D.M.	298-7-28-76

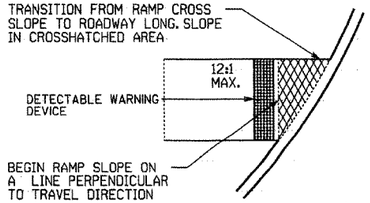
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-1



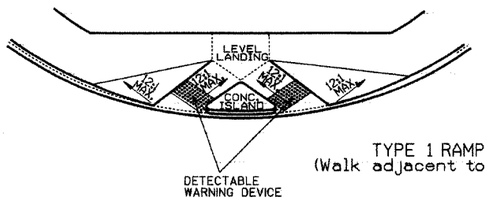
CONCRETE ISLAND DETAIL



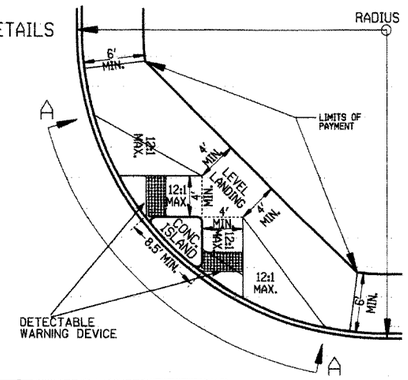
SLOPE TRANSITION DETAILS

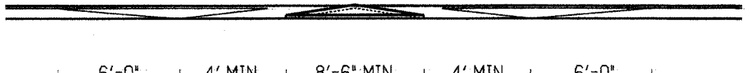
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS "R" FEET	DISTANCE "X" FEET	DISTANCE "Y" FEET	LENGTH "L" FEET	RAMP AREA "A" SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.30
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.36
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80

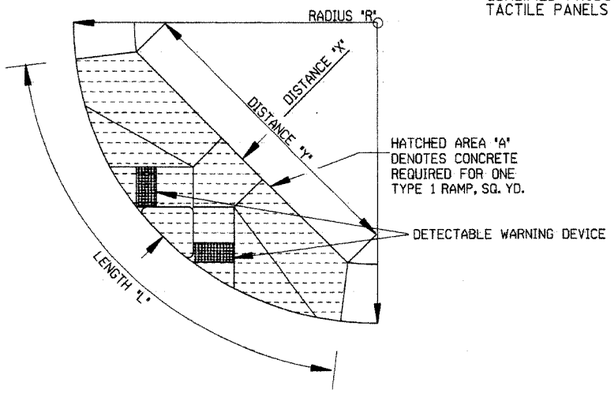


TYPE 1 RAMP
(Walk adjacent to curb)





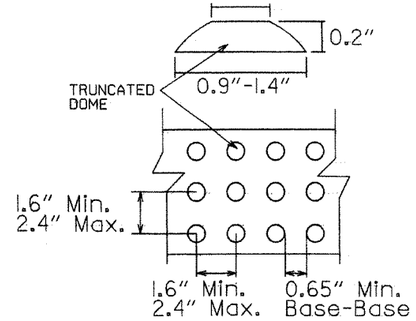
SECTION A-A



NOTE:
THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGTITUDINAL GRADE.

GENERAL NOTES FOR DETECTABLE WARNING DEVICES

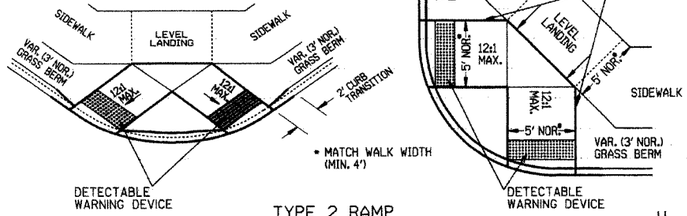
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.
DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
DETECTABLE WARNING DEVICE SHALL BE ON THE AHTD QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



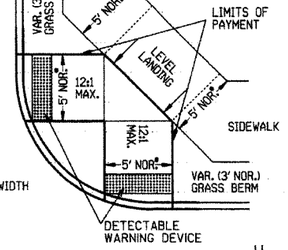
DETECTABLE WARNING DEVICE DETAIL

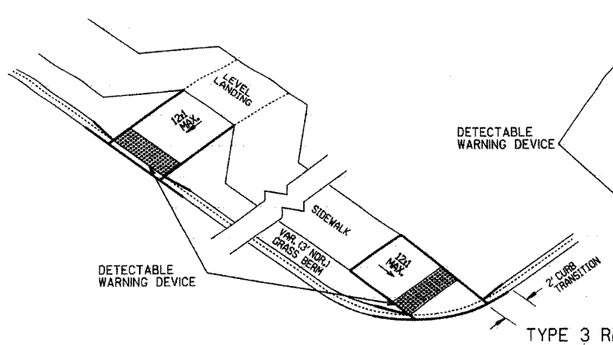
GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS.
IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.
THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.
THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4".
THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER.
RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.
THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

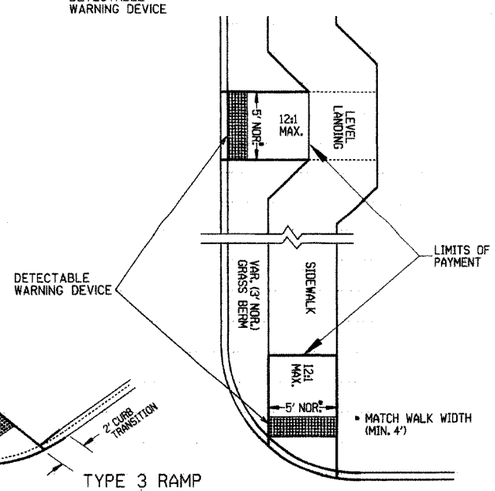


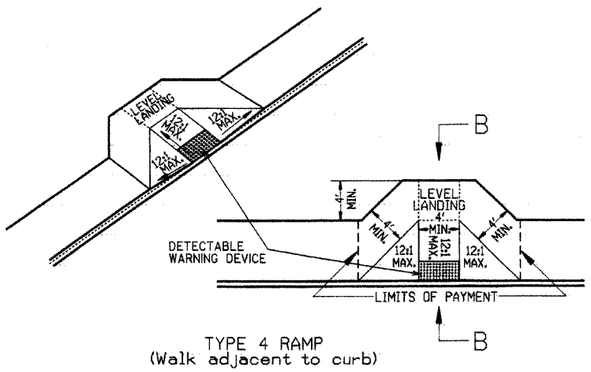
TYPE 2 RAMP



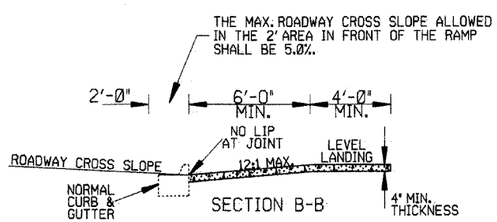


TYPE 3 RAMP





TYPE 4 RAMP
(Walk adjacent to curb)



SECTION B-B

RAMP SELECTION CRITERIA

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.
AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD.SLOPE TRANS. & REV. ISL. DIMS.	
11-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM AHTO2/MAX.SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCLUD."CONC. ISLD."IN PAY ITEM	-------
6-02-76	ISSUED-P.H.D.	299-7-28-76

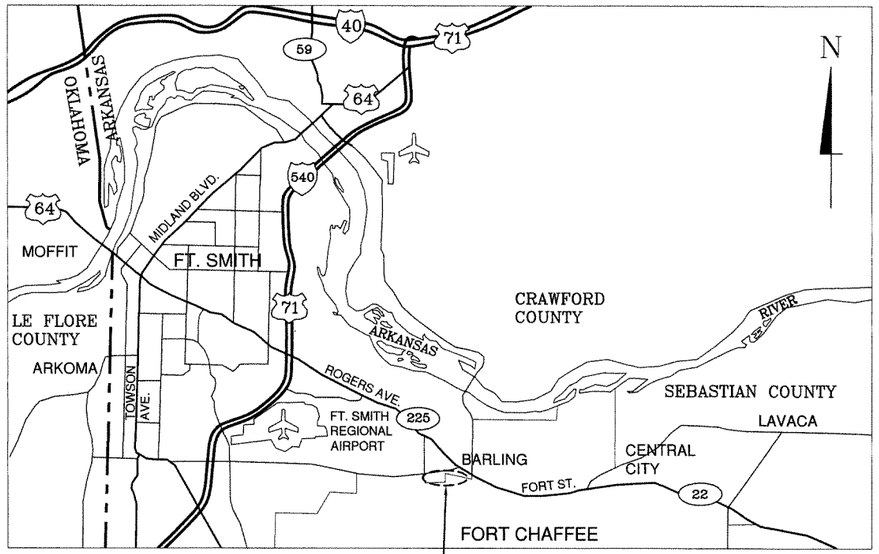
ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS
NEW CONSTRUCTION
AND ALTERATIONS

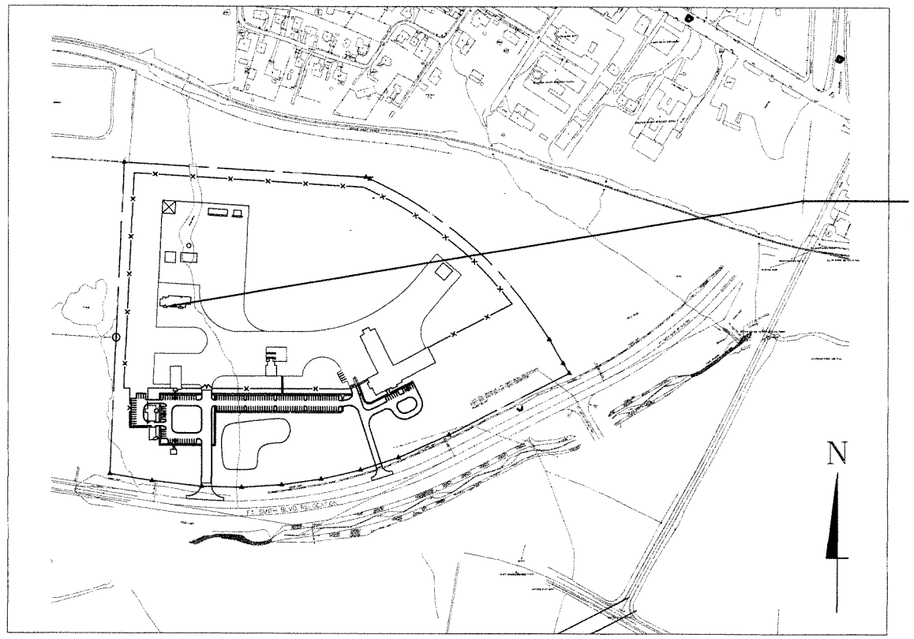
STANDARD DRAWING WR-1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
					ARK.			
				JOB NO.		040554	47	289
				DISTRICT MULTI-CREW BUILDING				

DISTRICT MULTI-CREW BUILDING



VICINITY MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

DISTRICT MULTI-CREW BUILDING			
CODE INFORMATION			
OCCUPANCY:	GROUP A-3, ASSEMBLY		AFPC SECTION 303.1
	NONSEPARATED USES		AFPC SECTION 508.3.2
CONSTRUCTION:	TYPE VB, UNSPRINKLERED, UNPROTECTED		AFPC SECTION 602.5, TABLE 601, TABLE 602
	STRUCTURAL FRAME	0 HOUR	
	BEARING WALLS	0 HOUR	
	NONBEARING WALLS AND PARTITIONS	0 HOUR	
	FLOOR CONSTRUCTION	0 HOUR	
	ROOF CONSTRUCTION	0 HOUR	
	FIRE SEPARATION WALLS	NOT APPLICABLE	
	FIRE PARTITIONS		
	STORAGE/MECHANICAL AREAS	0 HOUR	AFPC TABLE 508.2
	EXIT ACCESS CORRIDORS	0 HOUR	AFPC TABLE 1017.1
	SHAFT ENCLOSURES	NOT APPLICABLE	
	AREA OF EXTERIOR OPENINGS	UNLIMITED	AFPC TABLE 704.8
BUILDING LIMITATIONS FOR F-1 OCCUPANCY			
	HEIGHT AND STORIES	40 FT/1 STORY	AFPC TABLE 503
	ACTUAL HEIGHT AND STORIES	20 FT/1 STORY	
	BASE AREA	6,000 SF/FLOOR	AFPC TABLE 503
	ACTUAL AREA (1 STORY)	4,176 SF	
MEANS OF EGRESS			
	OCCUPANT LOAD, GROUP F-1	4 OCCUPANTS	AFPC TABLE 1004.1.1
	OCCUPANT LOAD, GROUP B	22 OCCUPANTS	AFPC TABLE 1004.1.1
	OCCUPANT LOAD, GROUP A-3	72 OCCUPANTS	AFPC TABLE 1004.1.1
	OCCUPANT LOAD, GROUP S-1	2 OCCUPANTS	AFPC TABLE 1004.1.1
	TOTAL OCCUPANT LOAD	100 OCCUPANTS	
	WIDTH OF EGRESS DOORS		
	EXITS	36" REQUIRED; 36" PROVIDED	AFPC SECTION 1008.1.1
	MINIMUM NUMBER OF EXITS	2 REQUIRED; 4 PROVIDED	AFPC TABLE 1015.1
	EXIT ACCESS TRAVEL DISTANCE	200 FT	AFPC TABLE 1016.1
	EXIT ACCESS CORRIDOR WIDTH	44" REQUIRED 60" PROVIDED	AFPC SECTION 1017.2
	DEAD END CORRIDOR	20 FT NA	AFPC SECTION 1017.3

The Benham Companies, LLC
C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 8221
ARKANSAS
10-13-11

"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

JOHNNY R. RAMSEY, ARCHITECT

ABBREVIATIONS

ABC	AGGREGATE BASE COURSE
ADJ	ADJUSTABLE
A.F.F.	ABOVE FINISH FLOOR
ALUM	ALUMINUM
A.W.C.	ACCESSIBLE WATER CLOSET
BCE	BASE CIVIL ENGINEER
BM	BEAM
BD	BOARD
B.O.	BOTTOM OF
BOT	BOTTOM
BRNG	BEARING
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CU	CONDENSING UNIT
CJ	CONTROL JOINT
DIA	DIAMETER
ø	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DTL	DETAIL
DN	DOWN
EA	EACH
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EXP JT	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
F.E.	FIRE EXTINGUISHER
FFE	FINISHED FLOOR ELEVATION
FIN	FINISH OR FINISHED
FLR	FLOOR
FTG	FOOTING
GA	GAUGE
GEN	GENERAL
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HDF	HIGH DENSITY FIBERBOARD
HMAC	HOT MIX ASPHALTIC CONCRETE
HORIZ	HORIZONTAL
HPL	HIGH PRESSURE LAMINATE
HT	HEIGHT
INSUL	INSULATION
INT	INTERIOR
L	ANGLE
LAV	LAVATORY
LPL	LOW PRESSURE LAMINATE
LVL	LAMINATED VENEER LUMBER
LT	LIGHT
MAS	MASONRY
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MFGR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
OSB	ORIENTED STRAND BOARD
PED	PEDESTRIAN
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
PLCS	PLACES
R	RADIUS
RAD	RADIUS
REF	REFER TO
REINF.	REINFORCING
REQ'D	REQUIRED
RM	ROOM
R.T.U.	ROOF TOP UNIT
SS	SANITARY SEWER OR STAINLESS STEEL
SCHED	SCHEDULE
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STD	STANDARD
STL	STEEL
THK	THICK
T.O.	TOP OF
T.O.BM.	TOP OF BEAM
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
T.P.	TOILET PAPER
TS	TUBE STEEL
TYP.	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V.I.F.	VERIFY IN FIELD
W	WATER MAIN
WD	WOOD
W/	WITH
WC	WATER CLOSET
VCT	VINYL COMPOSITION TILE
VTR	VENT THRU ROOF

REVISION TABLE Fort Smith, Arkansas		
DATE	DESCRIPTION	SHEET NUMBER

SYMBOL INDEX

- E — WALL KEY
- 101 — DOOR NUMBER
- C — WINDOW KEY
- B/A6 — ELEVATION MARKER
- 100'-0" F.F.E. — DATUM MARKER
- X/AX — BUILDING SECTION
- X/AX — PARTIAL SECTION

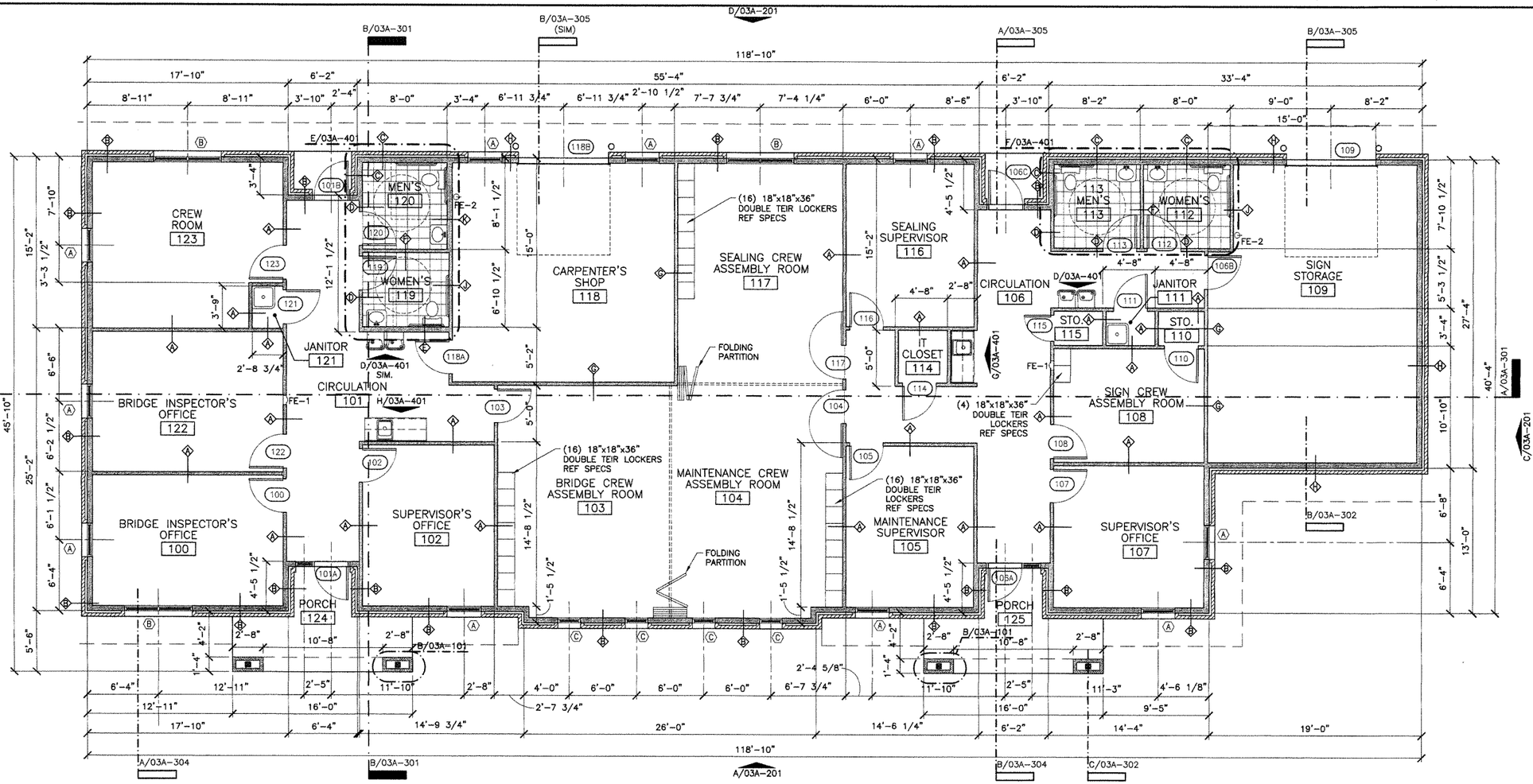
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(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
INDEX & GOVERNING SPECIFICATIONS
QUANTITIES & REVISION TABLE

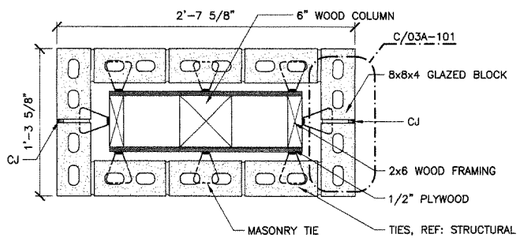
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DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03G-002	
48 OF 289	

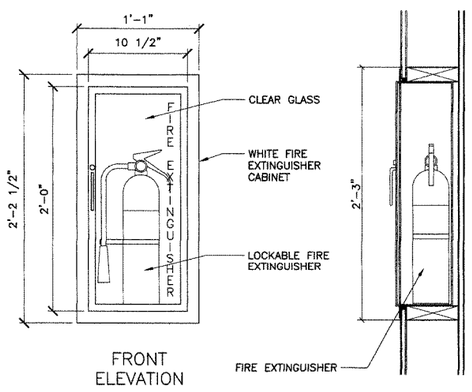


A FLOOR PLAN
03A-101 SCALE: 3/16" = 1'-0"

NORTH

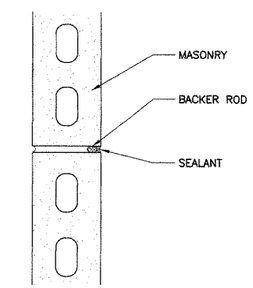


B COLUMN DETAIL
03A-101 SCALE: 1 1/2" = 1'-0"



C FIRE EXTINGUISHER DETAIL (FE-1)
03A-101 SCALE: 1 1/2" = 1'-0"

NOTES:
1. MOUNT WITH HANDLE @ 42" A.F.F.
2. THIS DETAIL IS NOT A RATED CABINET
3. FE-2 FIRE EXTINGUISHER W/BRACKET ONLY, NO CABINET. MOUNT WITH HANDLE @ 42" A.F.F.



D CONTROL JOINT (TYPICAL)
03A-101 SCALE: 3" = 1'-0"

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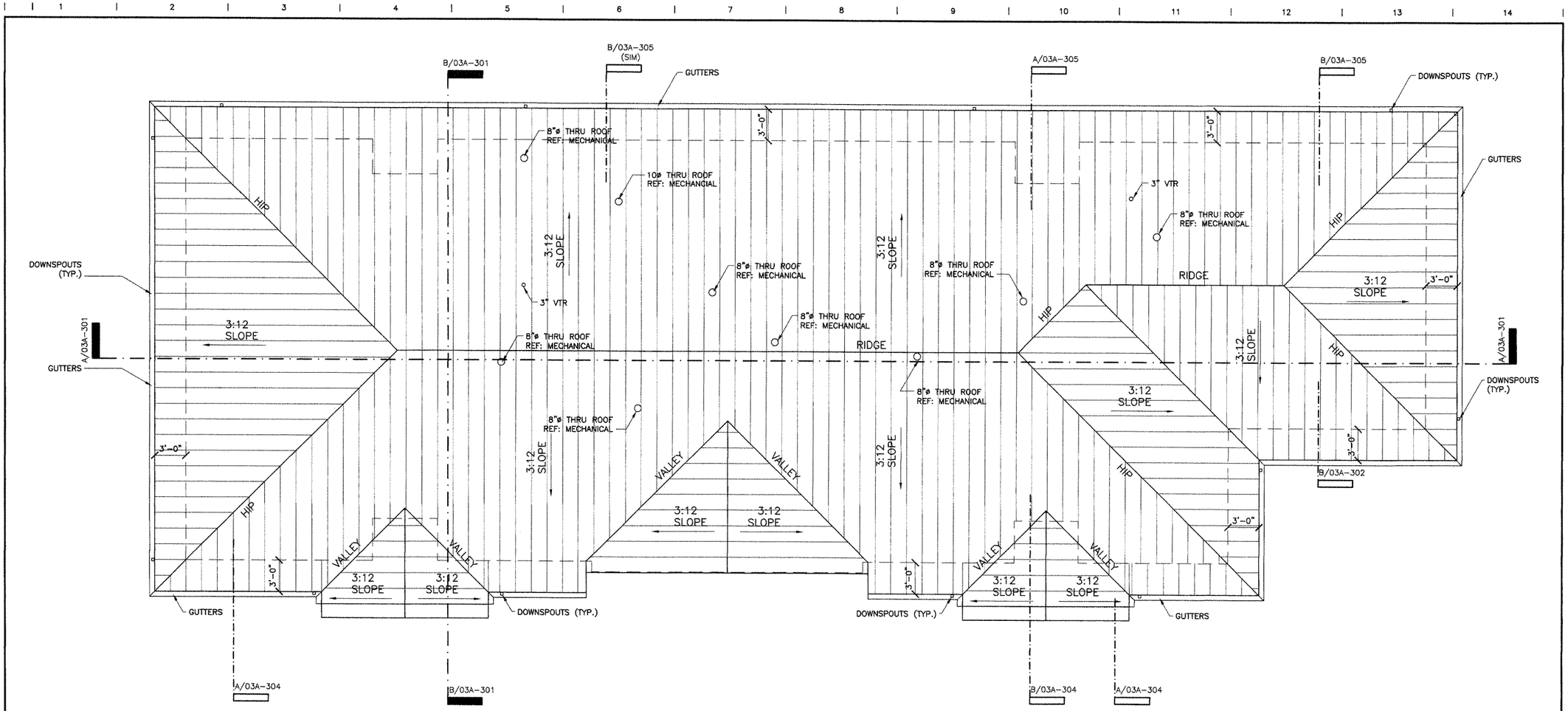
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
FLOOR PLAN

DESIGNED BY	JSR
DRAWN BY	DRM
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03A-101
REV	
49 OF 289	

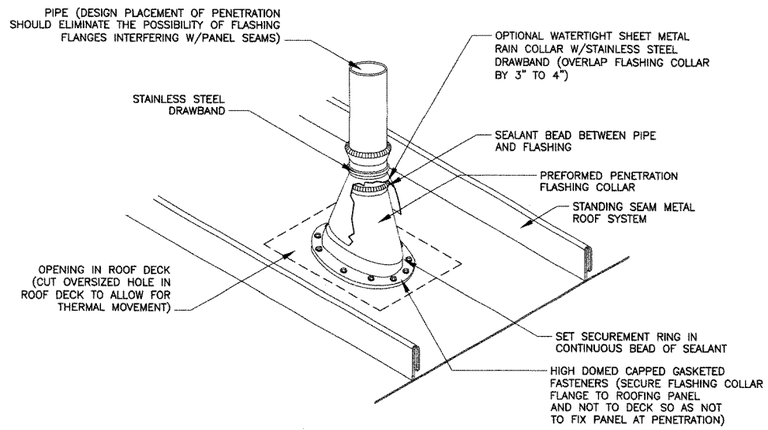
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No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
11-15-11



A ROOF PLAN
03A-102 SCALE: 3/16"= 1'-0"

NORTH



B VENT THRU ROOF DETAIL
03A-102 SCALE: 1 1/2" = 1'-0"

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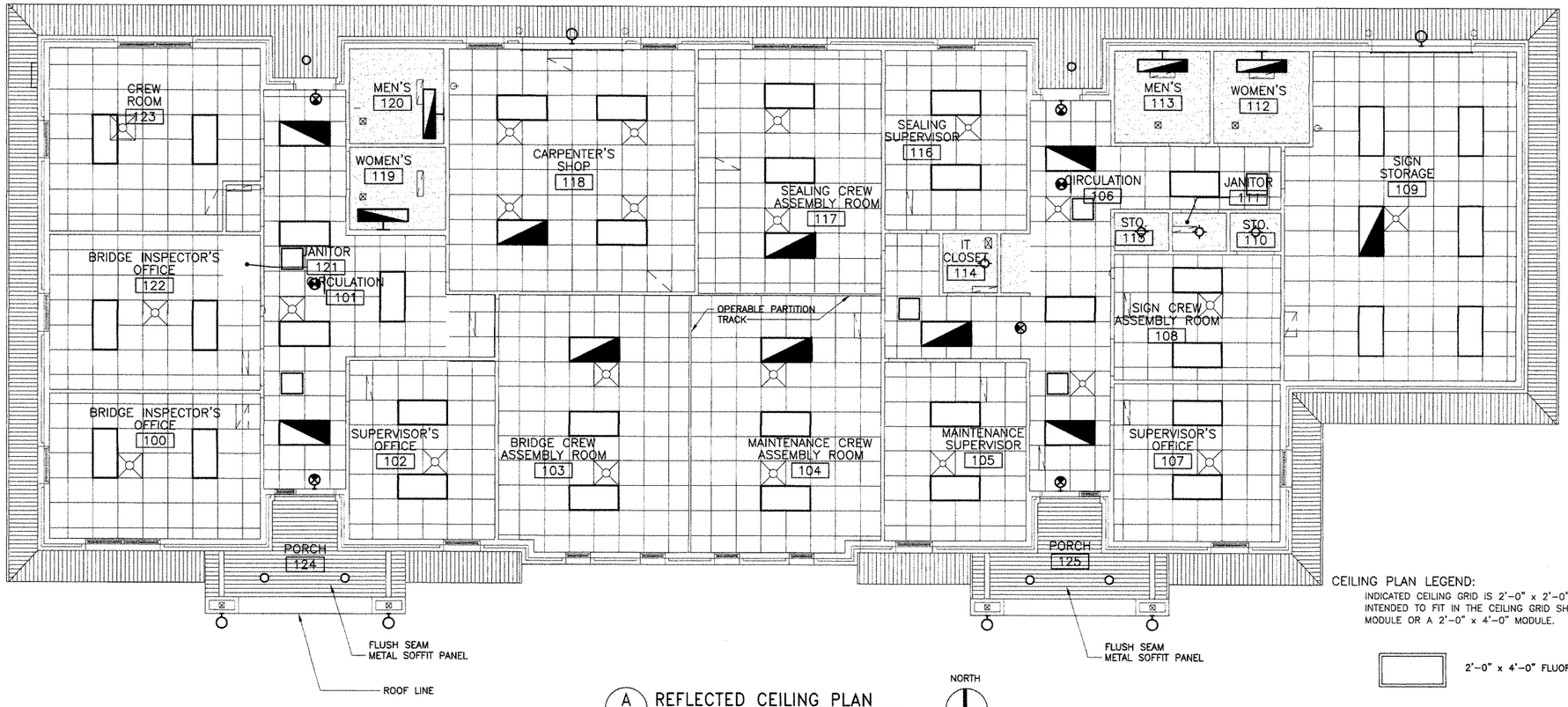
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ROOF PLAN

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03A-102	
50 OF 289	

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 22721
ARKANSAS
10-13-11



A 03A-103 REFLECTED CEILING PLAN
SCALE: 3/16"= 1'-0"

NORTH

CEILING PLAN LEGEND:

INDICATED CEILING GRID IS 2'-0" x 2'-0" SQUARE. ALL ACCESSORIES INTENDED TO FIT IN THE CEILING GRID SHOULD FIT THIS MODULE OR A 2'-0" x 4'-0" MODULE.

- 2'-0" x 4'-0" FLUORESCENT LIGHT FIXTURE
- 2'-0" x 4'-0" FLUORESCENT LIGHT FIXTURE EMERGENCY FIXTURE
- 1'-0" x 4'-0" FLUORESCENT LIGHT FIXTURE
- WALL MOUNTED FLUORESCENT LIGHT FIXTURE
- COMPACT FLUORESCENT SURFACE MOUNTED
- COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE WALL MOUNTED
- COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE RECESSED
- EXIT LIGHT WALL MOUNTED
- EXIT LIGHT RECESSED
- SUPPLY AIR DIFFUSER
- RETURN AIR DIFFUSER
- OCCUPANCY SENSOR, CEILING MOUNTED

NOTE:
REFERENCE ELECTRICAL

NOTE:
EAVE SOFFITS TO BE PRE-FINISHED FLUSH SEAM PANEL

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

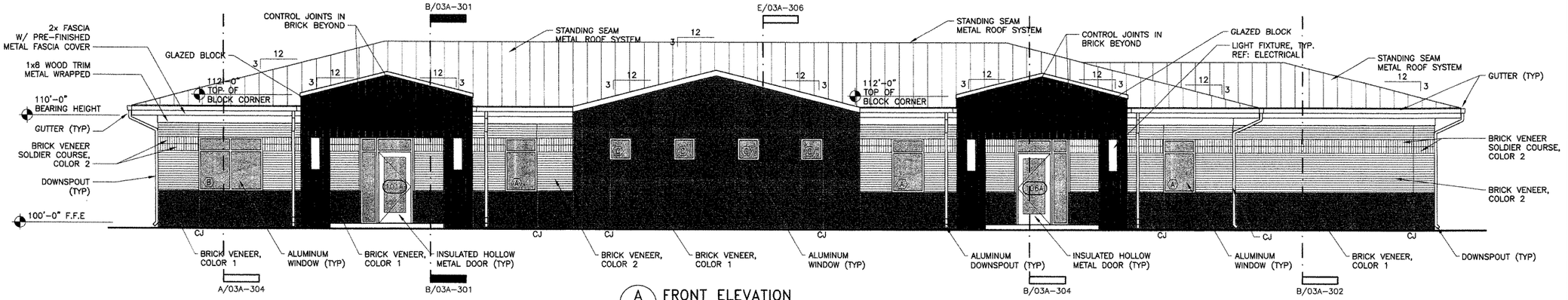
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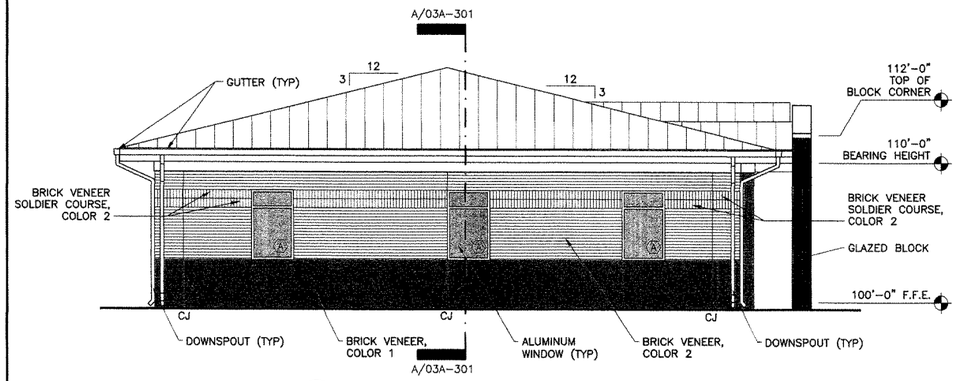
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
REFLECTED CEILING PLAN

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

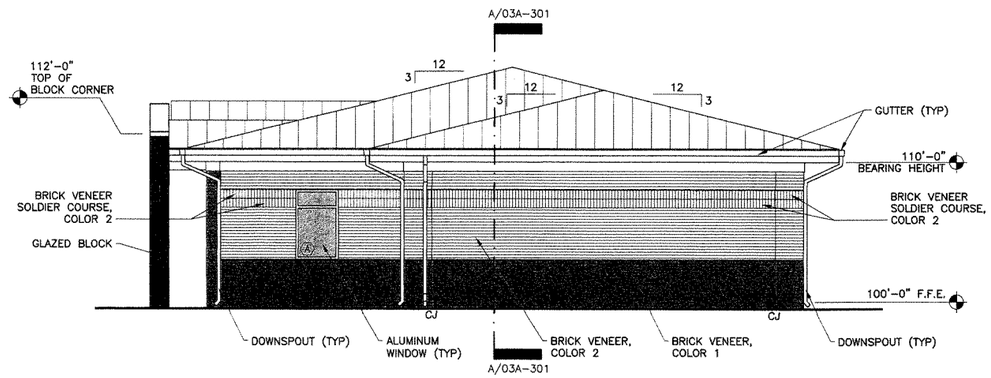
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03A-103	
51 OF 289	



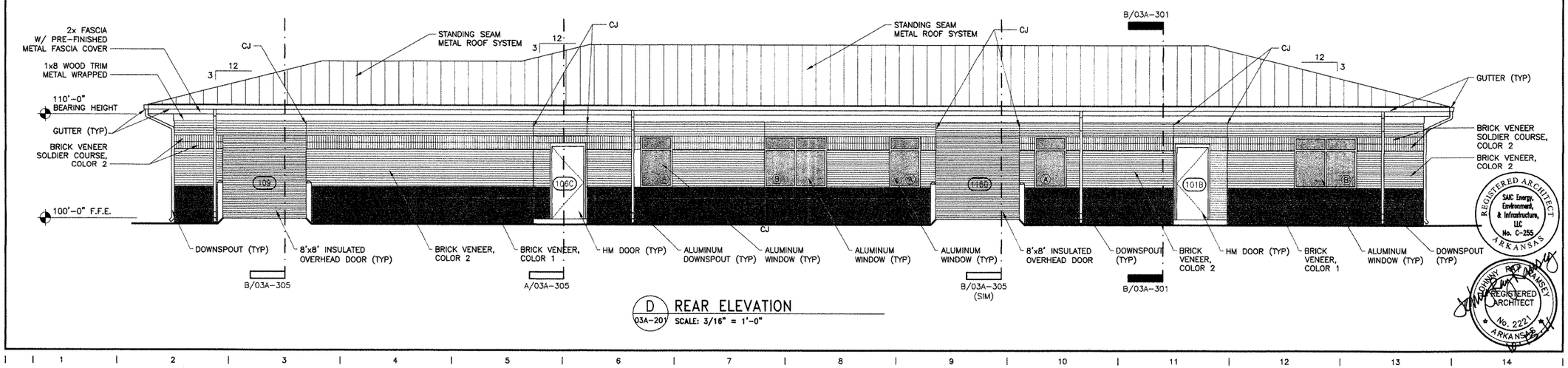
A FRONT ELEVATION
03A-201 SCALE: 3/16" = 1'-0"



B LEFT SIDE ELEVATION
03A-201 SCALE: 3/16" = 1'-0"



C RIGHT SIDE ELEVATION
03A-201 SCALE: 3/16" = 1'-0"



D REAR ELEVATION
03A-201 SCALE: 3/16" = 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
EXTERIOR ELEVATIONS

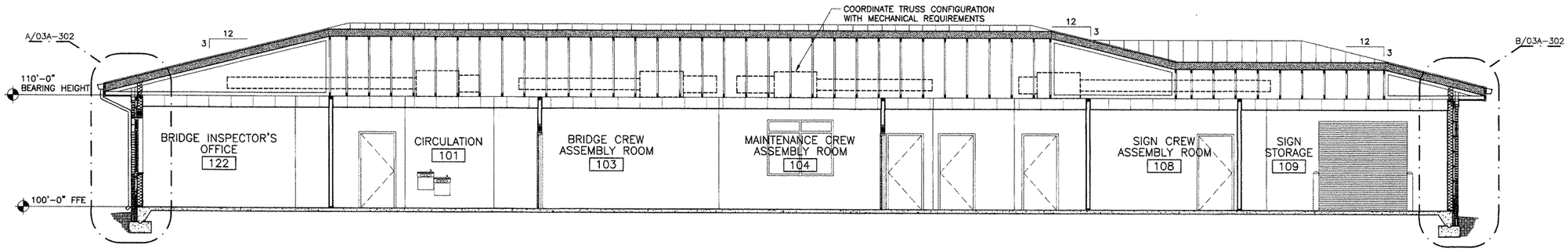
DESIGNED BY	JSR
DRAWN BY	DRM
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03A-201	

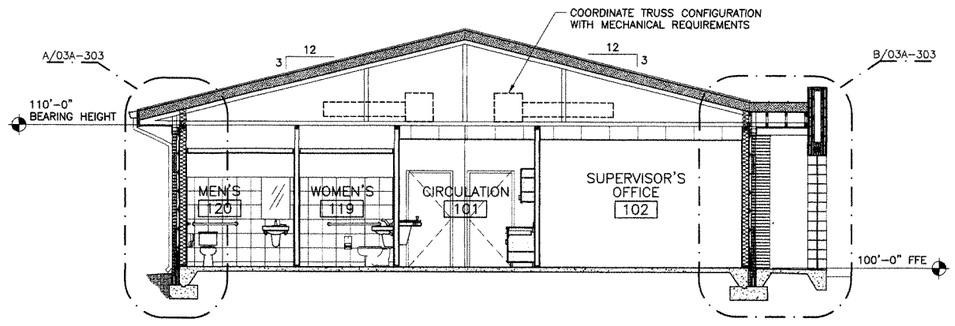
52 OF 289

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY ROY RAMSEY
REGISTERED ARCHITECT
No. 22721
ARKANSAS



A 03A-301 **BUILDING SECTION**
SCALE: 3/16"= 1'-0"



B 03A-301 **BUILDING SECTION**
SCALE: 3/16"= 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

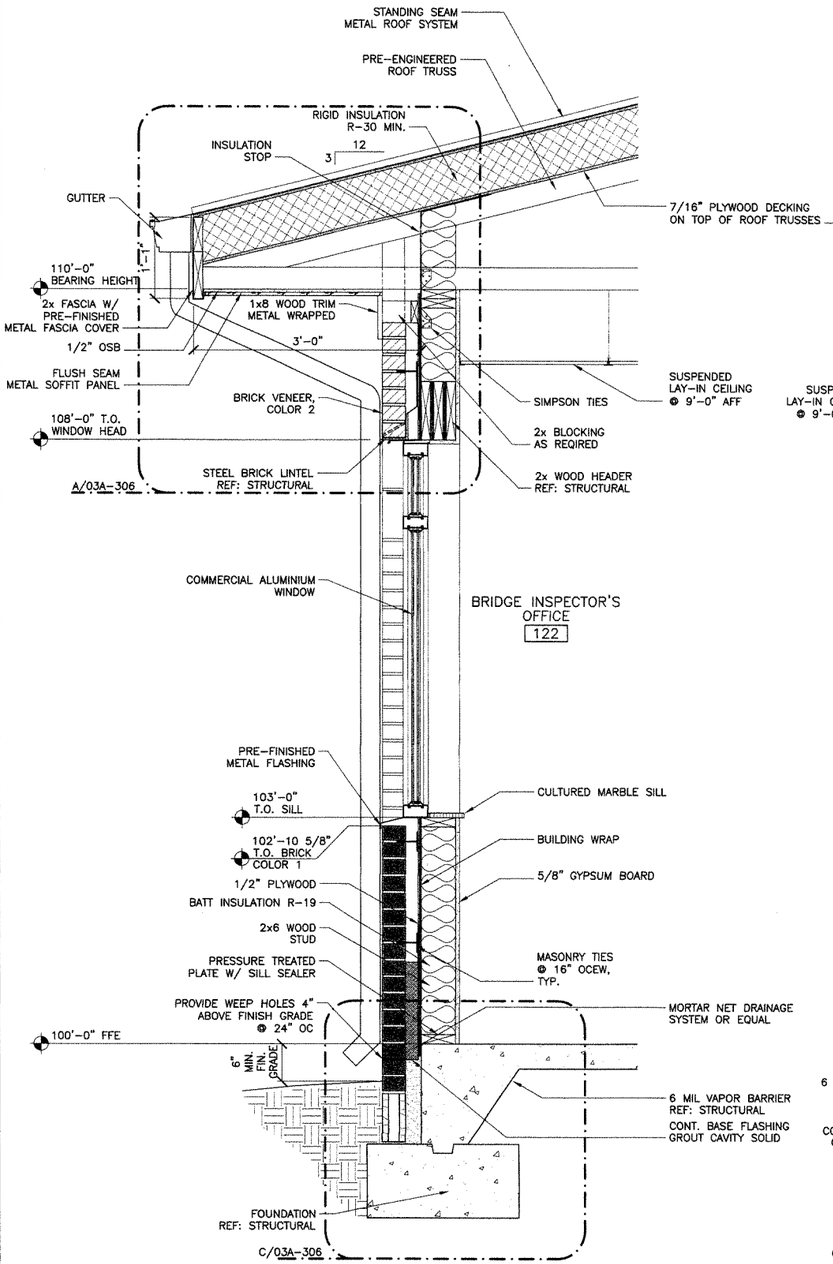
JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-12-11

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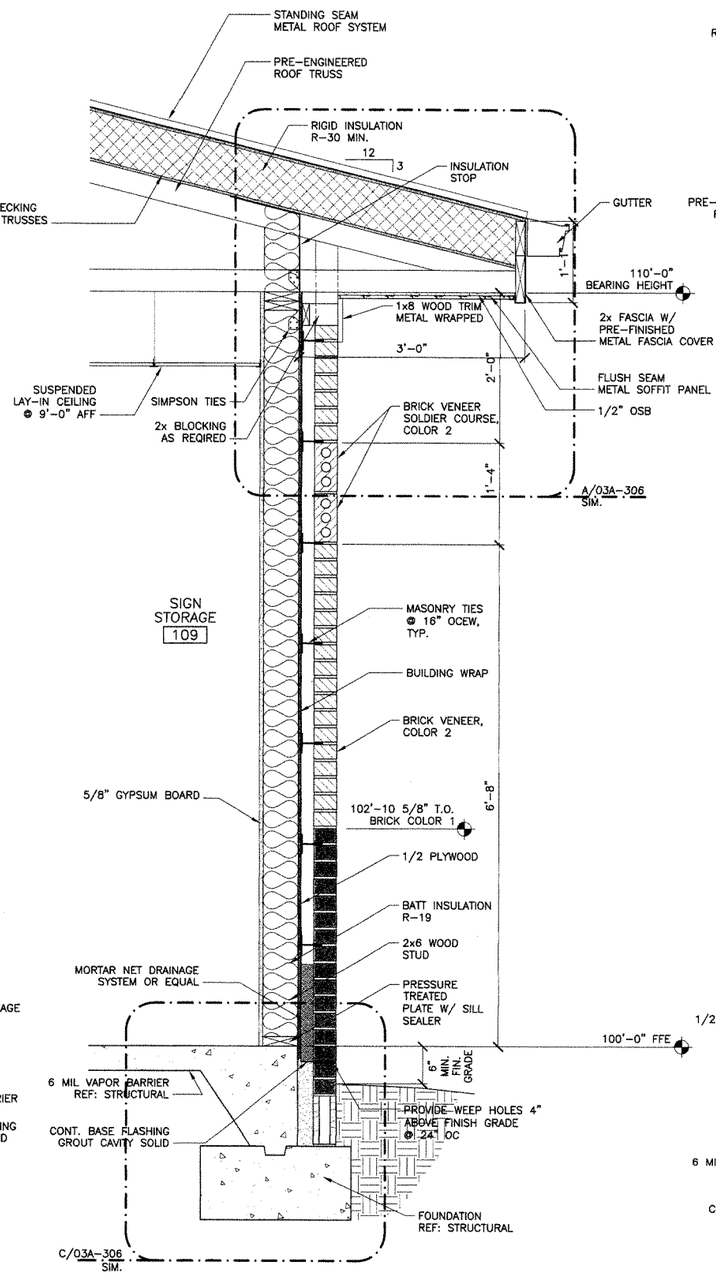
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
BUILDING SECTIONS

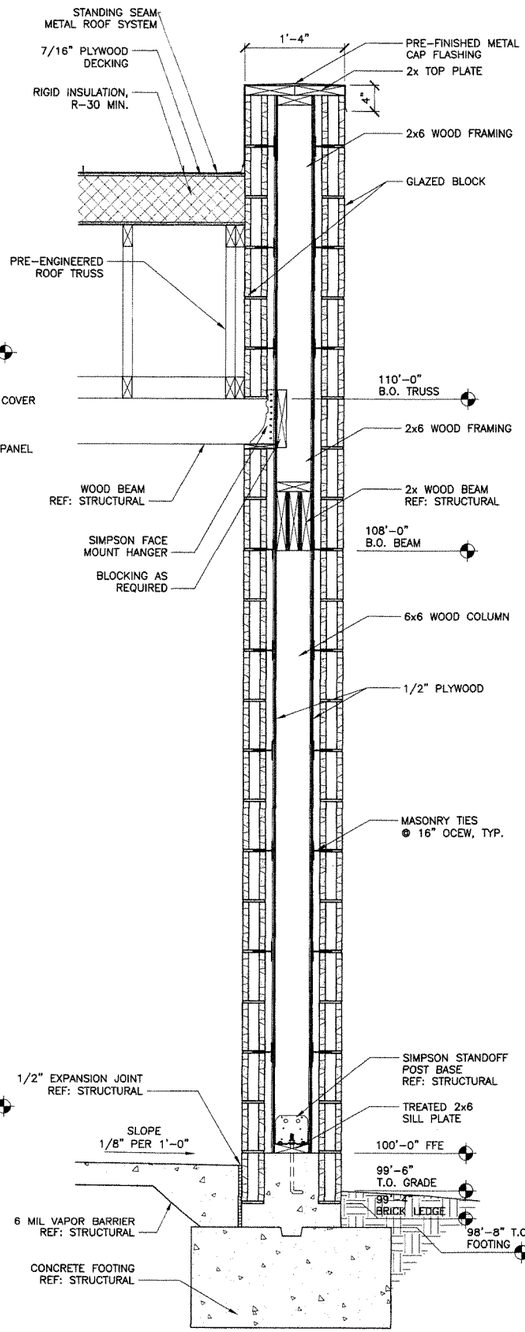
DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03A-301
REV	
	52 OF 289



A WALL SECTION
03A-302 SCALE: 3/4"= 1'-0"



B WALL SECTION
03A-302 SCALE: 3/4"= 1'-0"



C WALL SECTION
03A-302 SCALE: 1"= 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

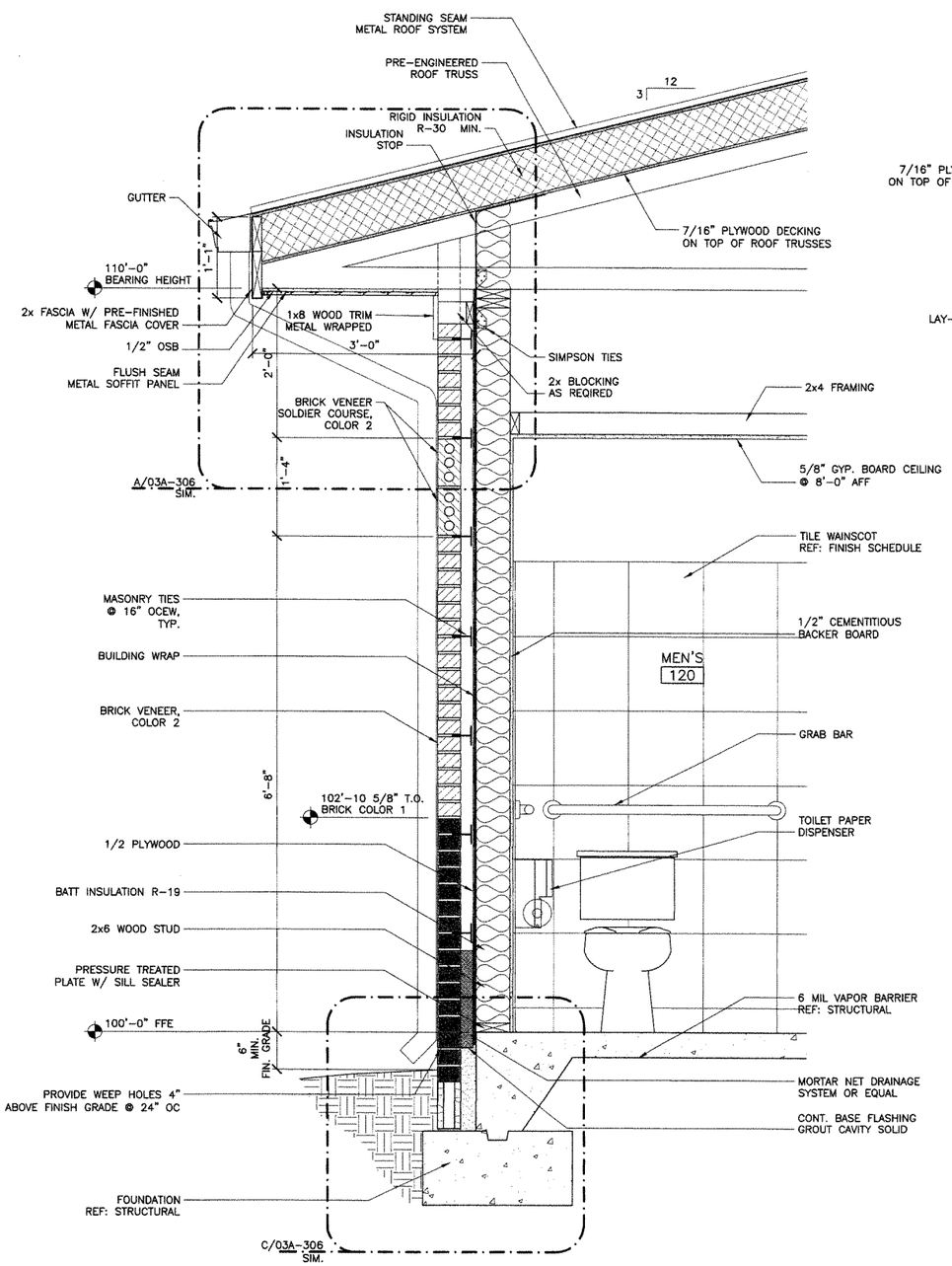
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
WALL SECTIONS

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

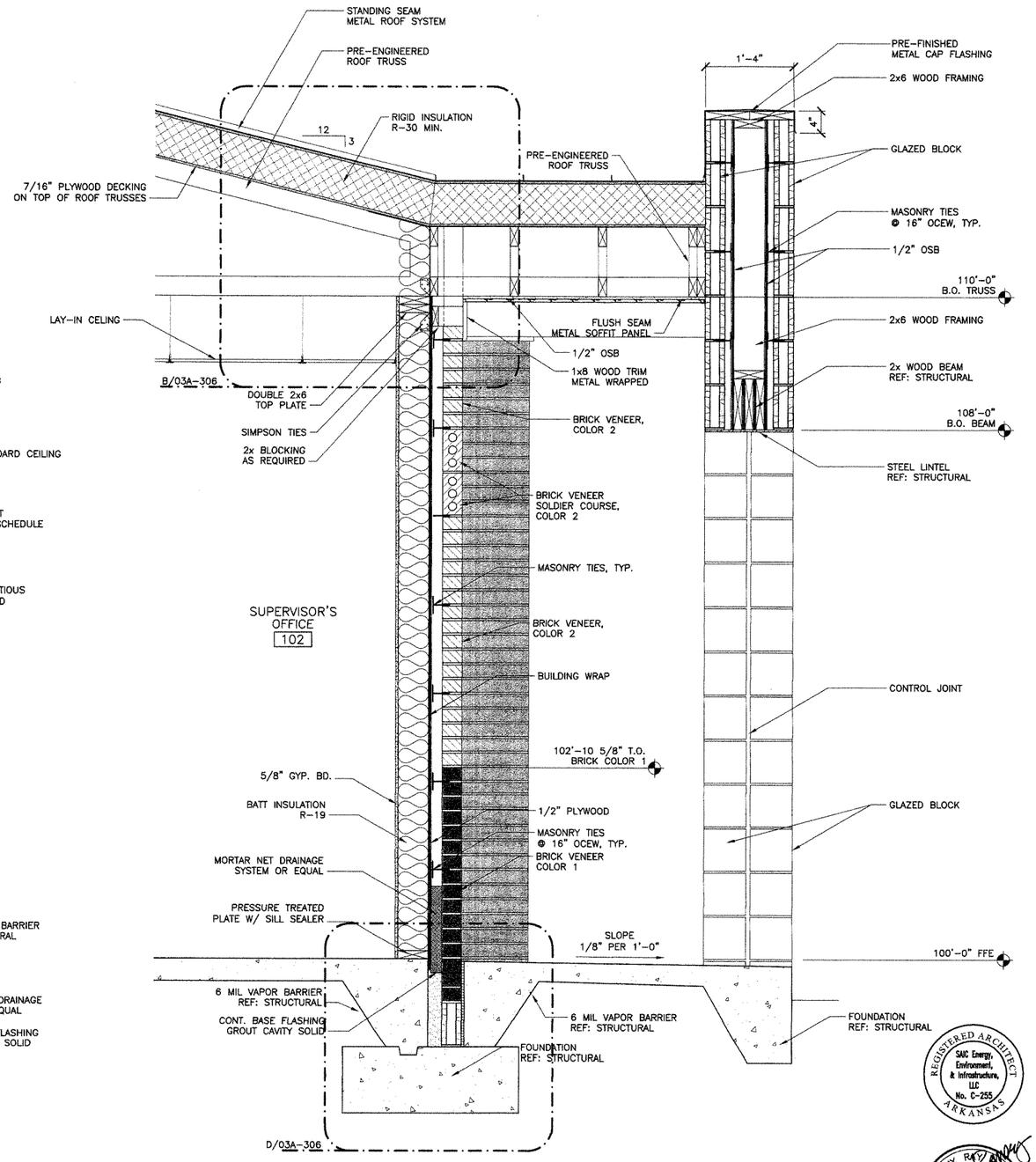
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03A-302
REV	
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REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2271
ARKANSAS



A WALL SECTION
03A-303 SCALE: 1"= 1'-0"



B WALL SECTION
03A-303 SCALE: 1"= 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS

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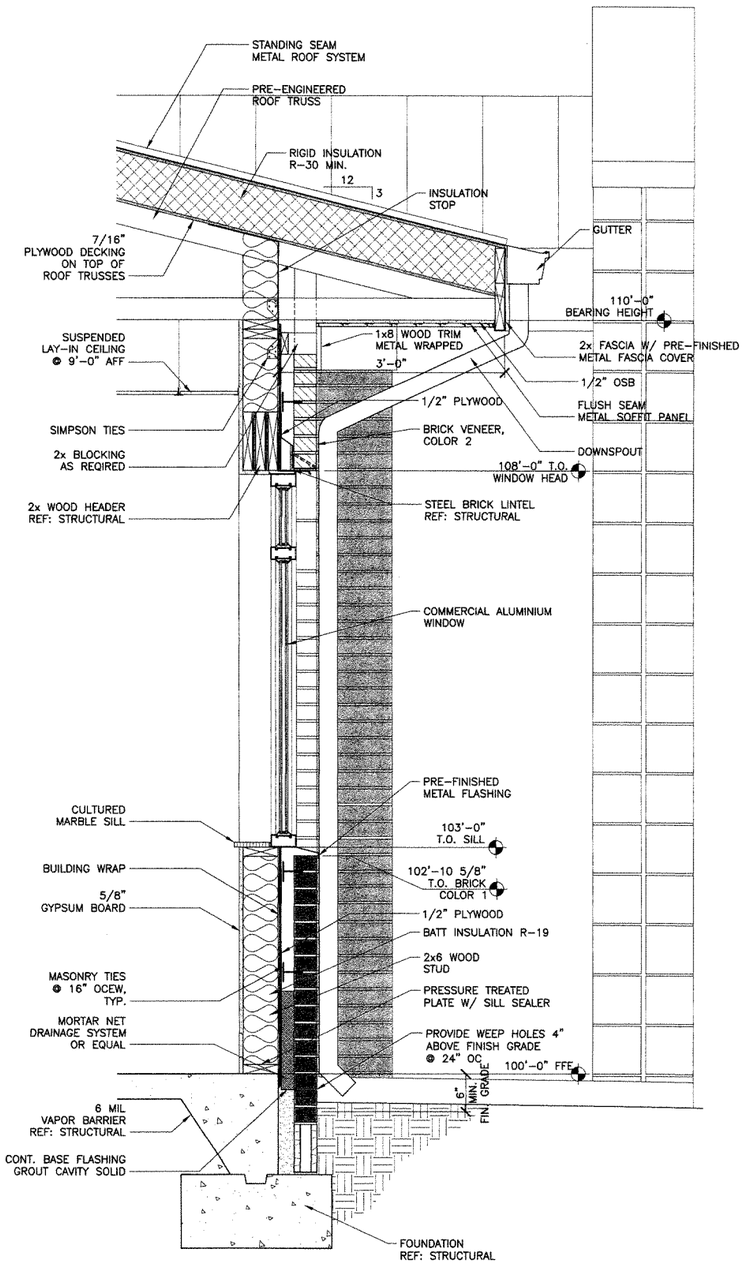
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
WALL SECTIONS

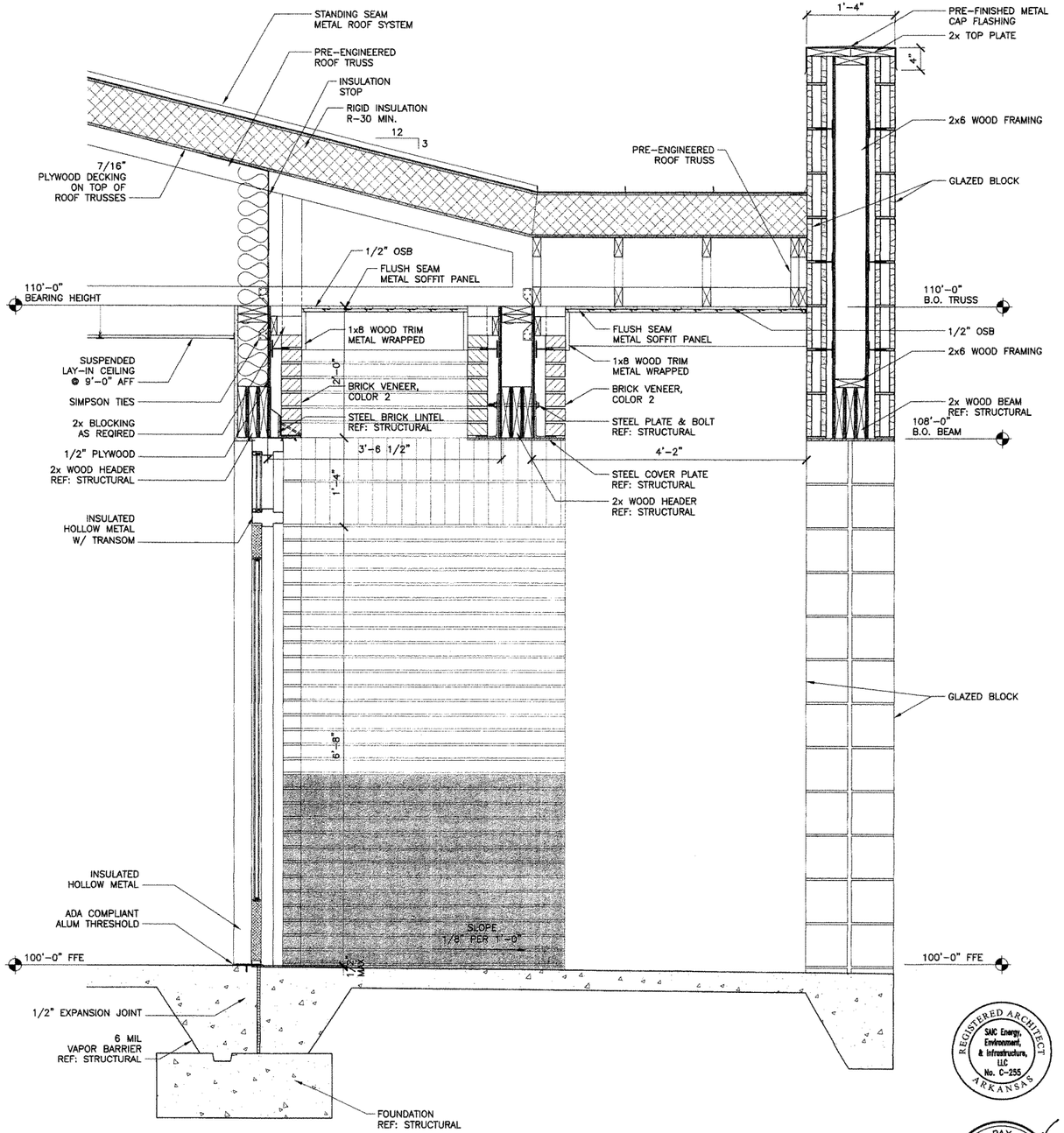
DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03A-303
REV	

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A WALL SECTION
03A-304 SCALE: 1" = 1'-0"



B WALL SECTION
03A-304 SCALE: 1" = 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

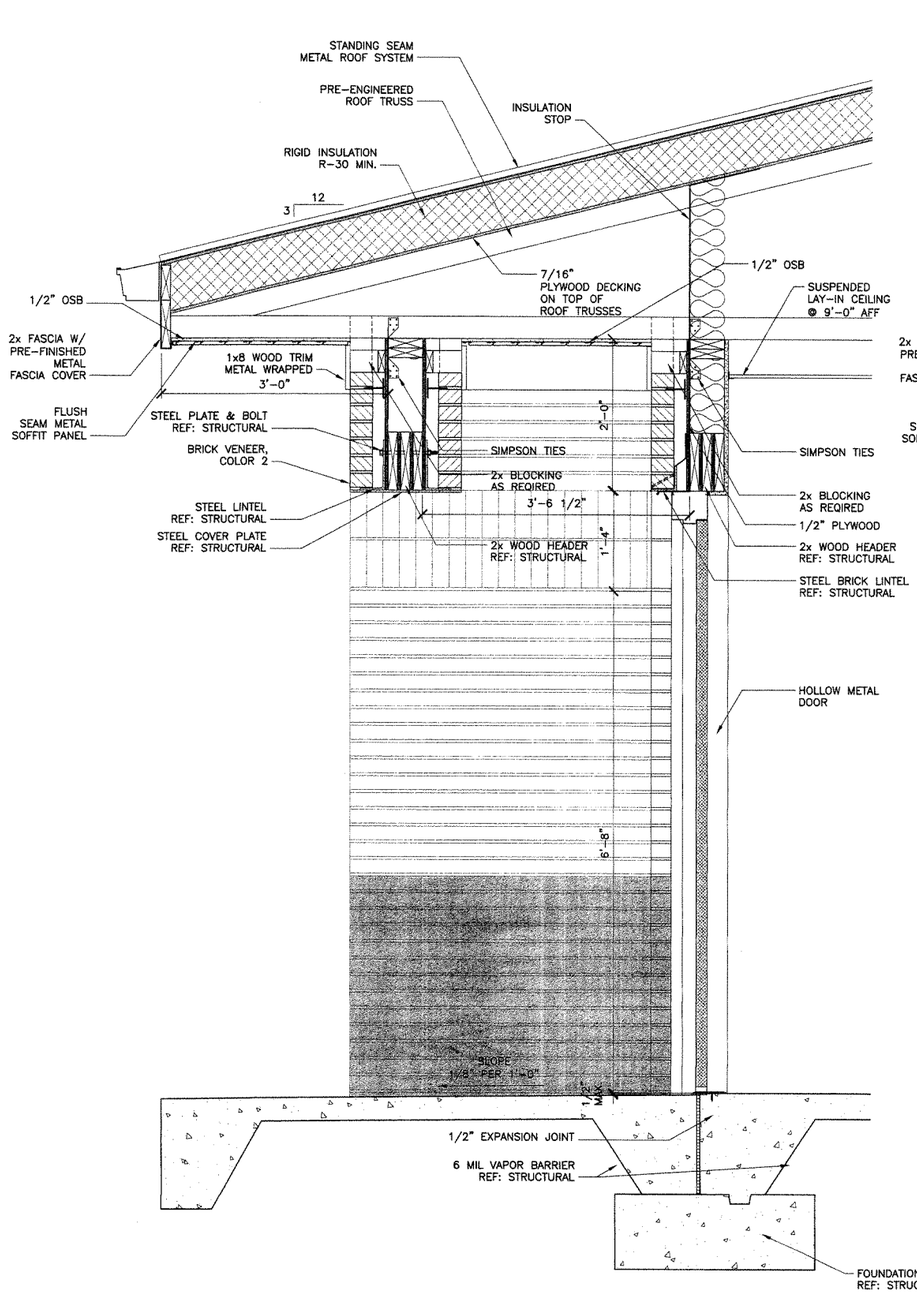
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
WALL SECTIONS

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

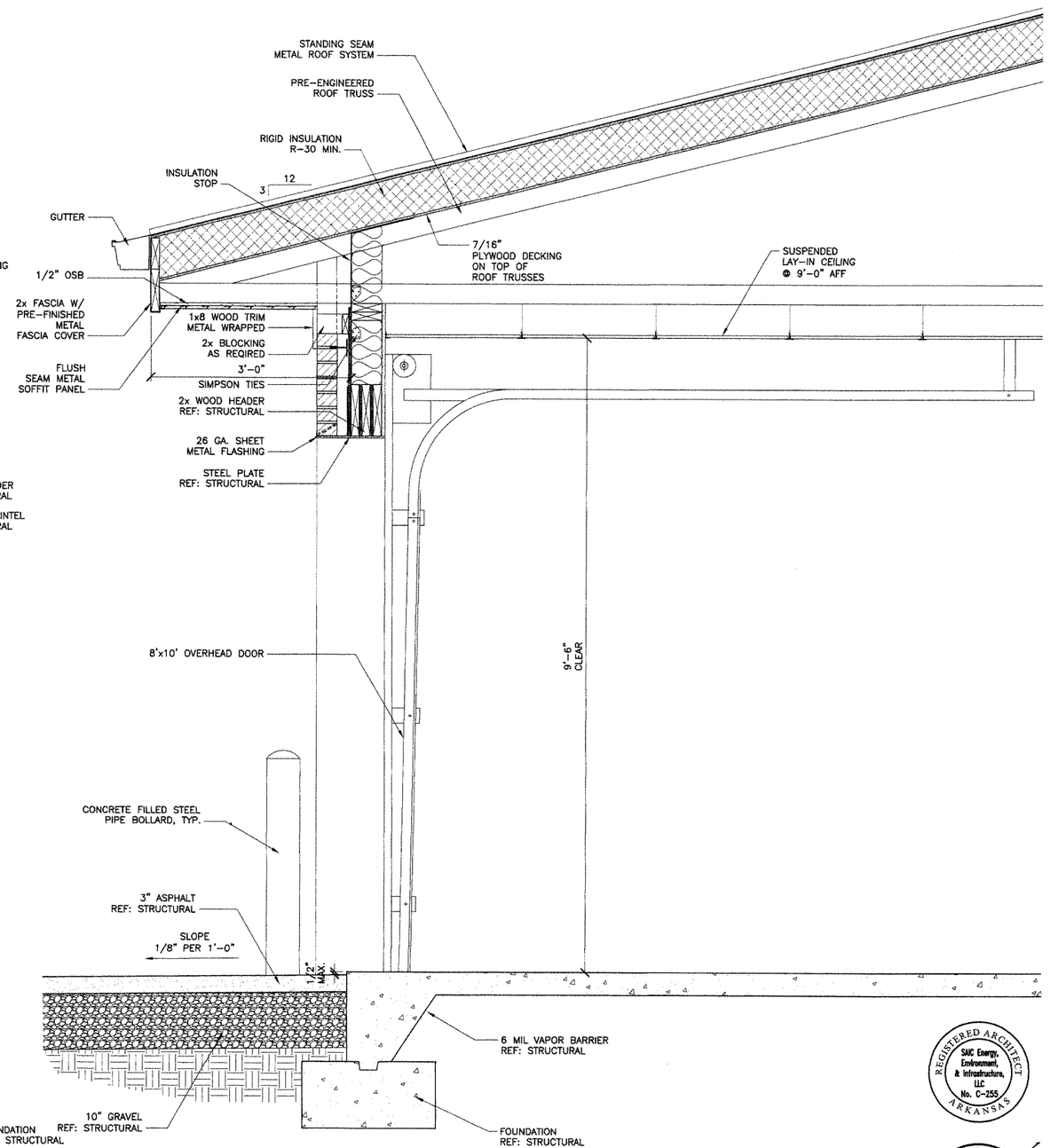
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03A-304
REV	
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REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11



A WALL SECTION
03A-305 SCALE: 1" = 1'-0"



B WALL SECTION
03A-305 SCALE: 1" = 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RUSSELL
REGISTERED ARCHITECT
No. 22721
ARKANSAS
10.13.11

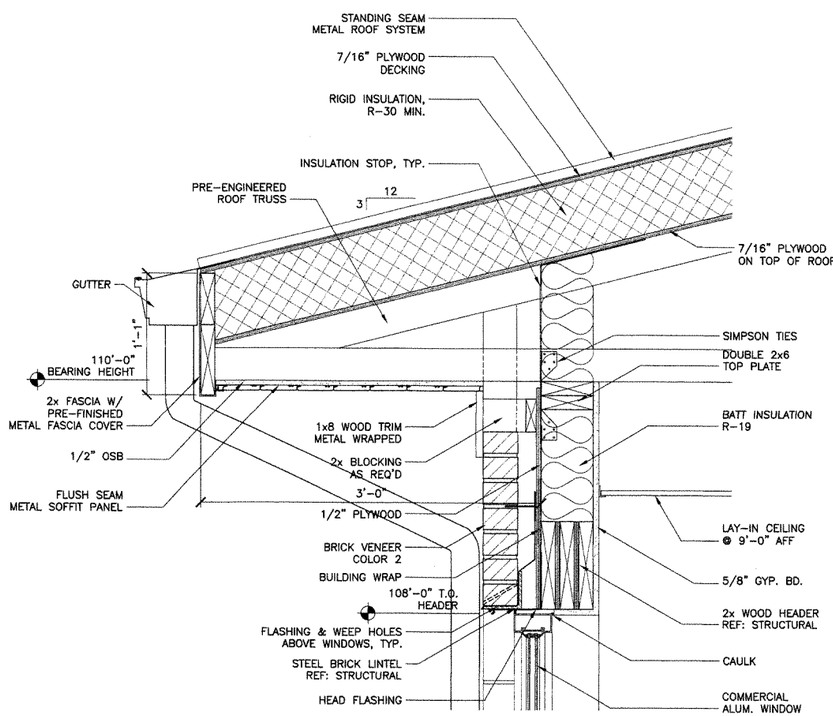
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0	10/13/11	ISSUED FOR CONSTRUCTION		

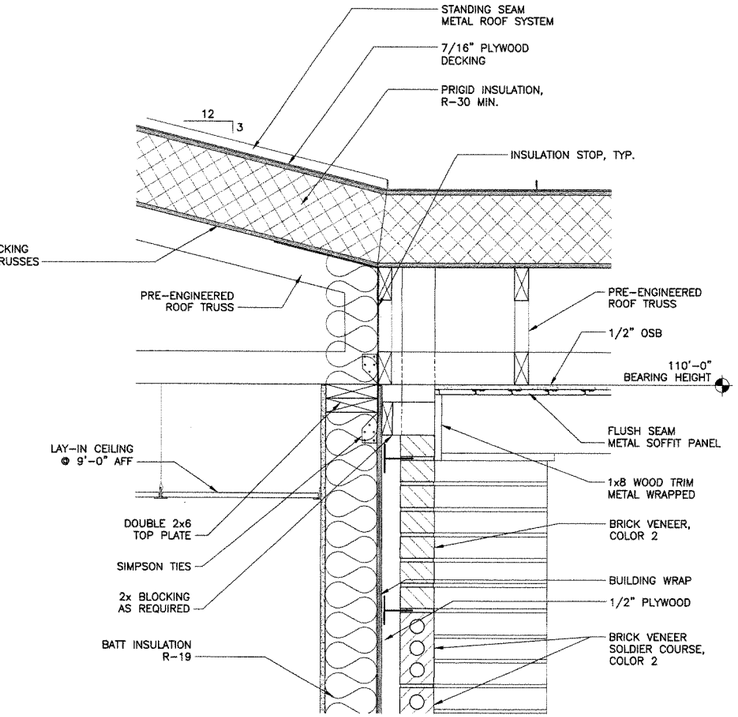
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
WALL SECTIONS

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

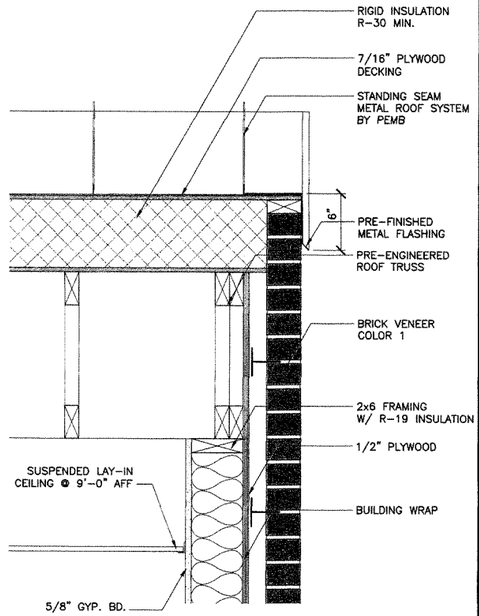
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03A-305	
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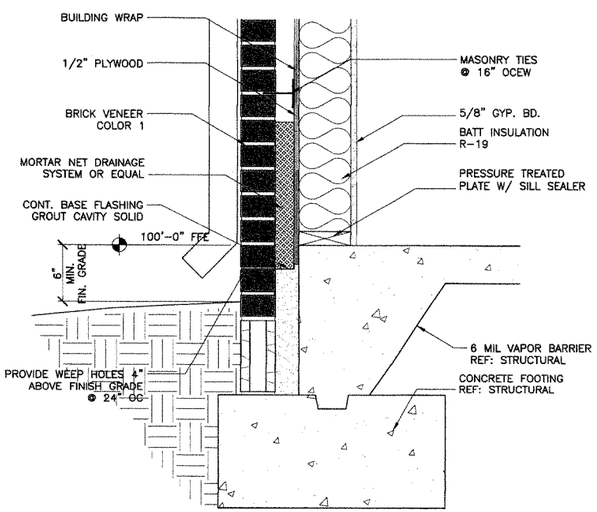
A SECTION DETAIL
03A-306 SCALE: 1 1/2"= 1'-0"



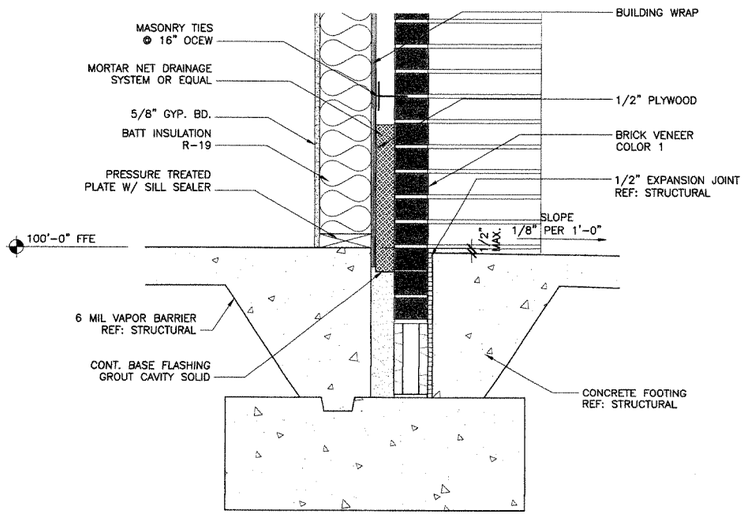
B SECTION DETAIL
03A-306 SCALE: 1 1/2"= 1'-0"



E SECTION DETAIL
03A-306 SCALE: 1 1/2" = 1'-0"



C SECTION DETAIL
03A-306 SCALE: 1 1/2"= 1'-0"



D SECTION DETAIL
03A-306 SCALE: 1 1/2"= 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
SECTION DETAILS

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

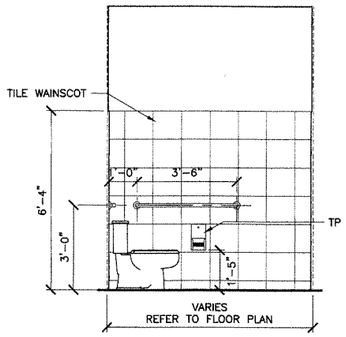
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03A-306	
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REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

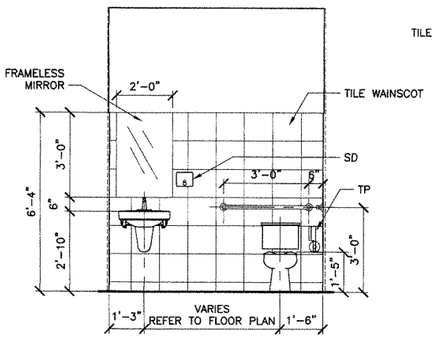
JOHNNY RAY RASSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-12-11

TOILET ACCESSORY SCHEDULE

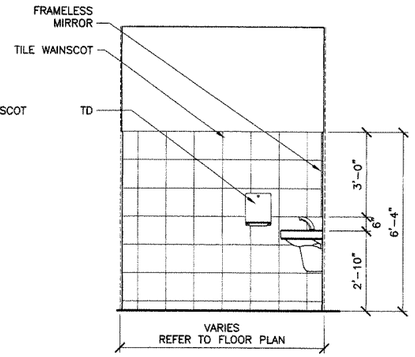
ITEM	MFGR	MODEL #	DESCRIPTION	MOUNTING HEIGHT
TP	BOBRICK	B-4288	CONTURA SERIES SURFACE-MOUNTED MULTI-ROLL TOILET TISSUE DISPENSER	BOTTOM @ 15" MIN. A.F.F. (ADA HEIGHT)
TD	BOBRICK	B-4262	CONTURA SERIES SURFACE-MOUNTED PAPER TOWEL DISPENSER	BOTTOM @ 48" MAX. A.F.F. (ADA HEIGHT)
SD	BOBRICK	B-4112	CONTURA SERIES SURFACE-MOUNTED SOAP DISPENSER	BOTTOM @ 44" MAX. A.F.F. (ADA HEIGHT)



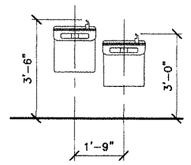
A 03A-401 TYPICAL RESTROOM
SCALE: 3/8" = 1'-0"



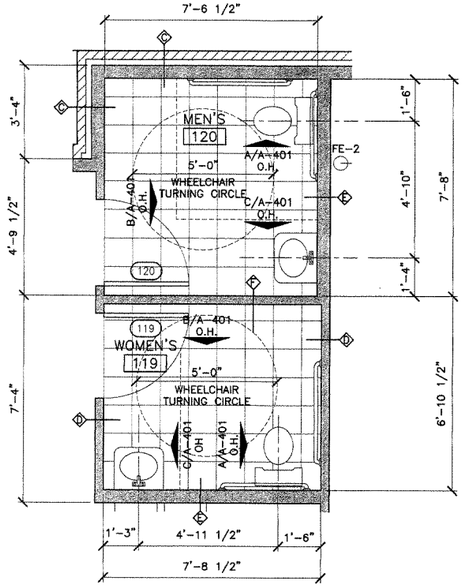
B 03A-401 TYPICAL RESTROOM
SCALE: 3/8" = 1'-0"



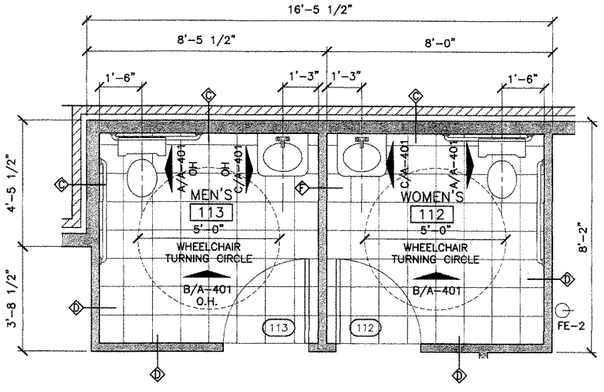
C 03A-401 TYPICAL RESTROOM
SCALE: 3/8" = 1'-0"



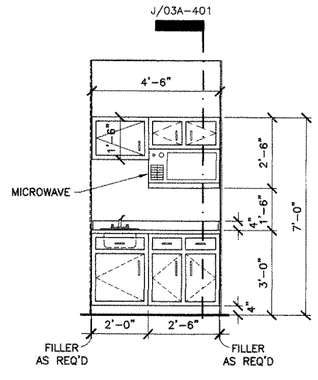
D 03A-401 DRINKING FOUNTAINS
SCALE: 3/8" = 1'-0"



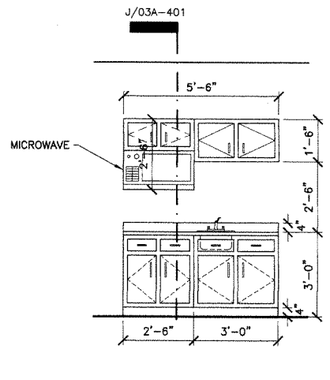
E 03A-401 ENLARGED RESTROOM PLAN
SCALE: 3/8" = 1'-0"



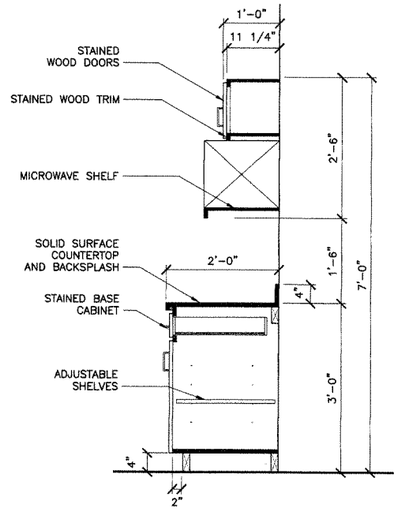
F 03A-401 ENLARGED RESTROOM PLAN
SCALE: 3/8" = 1'-0"



G 03A-401 COFFEE BAR ELEVATION
SCALE: 3/8" = 1'-0"



H 03A-401 COFFEE BAR ELEVATION
SCALE: 3/8" = 1'-0"



J 03A-401 CABINET SECTION
SCALE: 3/4" = 1'-0"

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
INTERIOR ELEVATIONS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY MOSLEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03A-401
REV	
	59 OF 289

DOOR SCHEDULE

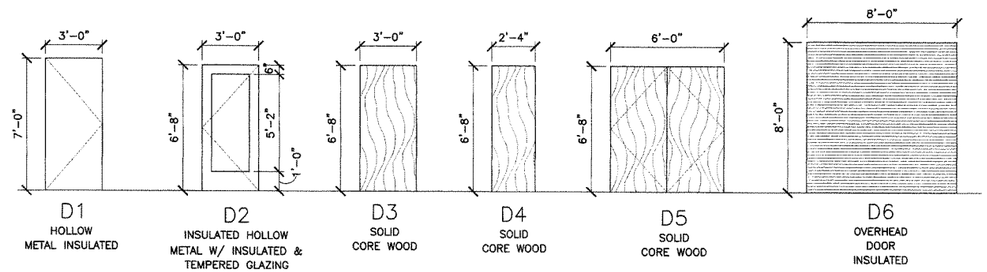
DOOR				FRAME		DETAILS		
DOOR NO.	DOOR SIZE	DOOR DESCRIPTION	DOOR ELEV.	FRAME TYPE	FRAME MATL.	HRDWR SET	DETAIL GROUP	REMARKS
100	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
101A	3'-0" x 6'-8" x 1 3/4"	INSULATED H.M.	D2	F1	HM		E	SIDELITE W/ INSULATED & TEMPERED GLAZING
101B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F2	HM		C	
102	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
103	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
104	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
105	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
106A	3'-0" x 6'-8" x 1 3/4"	INSULATED H.M.	D2	F1	HM		E	
106B	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
106C	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F2	HM		C	
107	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
108	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
109	8'-0" x 8'-0"	OVERHEAD DOOR	D6	–	MTL		F	INSULATED
110	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
111	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
112	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
113	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
114	(PAIR) 3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D5	F5	HM		D	
115	2'-4" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F4	HM		D	
116	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
117	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
118A	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
118B	8'-0" x 8'-0"	OVERHEAD DOOR	D6	–	MTL		F	INSULATED
119	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
120	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
121	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
122	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	
123	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D3	F3	HM		D	

HARDWARE NOTE #1:

REFER TO "SECTION 087100 - DOOR HARDWARE" FOR HARDWARE SETS BY GENERAL DOOR TYPE.

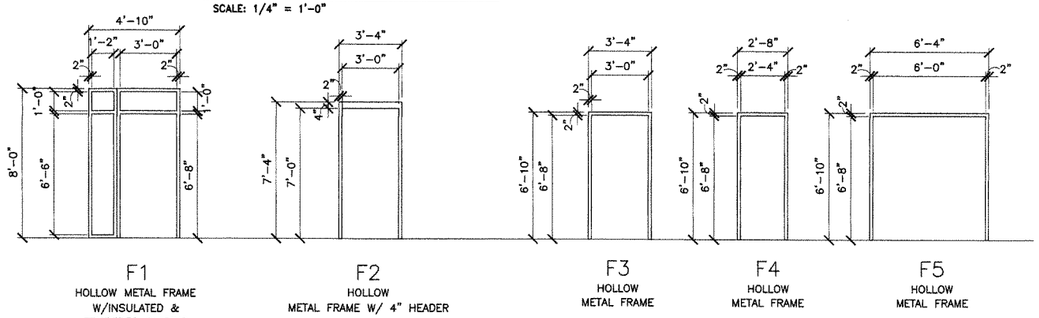
WINDOW SCHEDULE

WINDOW				FRAME	DETAILS	
WINDOW NO.	WINDOW SIZE	WINDOW DESCRIPTION	WINDOW ELEV.	FRAME MATERIAL	DETAIL GROUP	REMARKS
A	3'-0"x5'-0"	COMMERCIAL ALUM FRAME	A	ALUM	A	
B	6'-0"x5'-0"	COMMERCIAL ALUM FRAME	B	ALUM	A	
C	2'-0"x2'-0"	COMMERCIAL ALUM FRAME	C	ALUM	B	



DOOR ELEVATIONS

SCALE: 1/4" = 1'-0"



FRAME ELEVATIONS

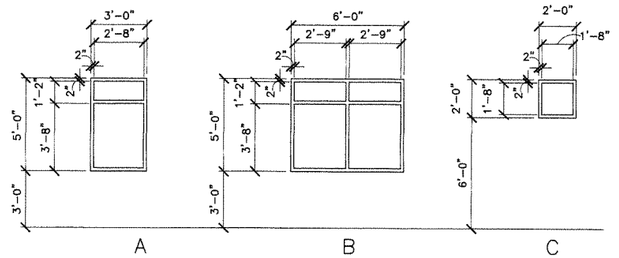
SCALE: 1/4" = 1'-0"

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING			NOTES
				NORTH	EAST	SOUTH	WEST	MATL.	FINISH	HT. A.F.F.	
100	BRIDGE INSPECTOR'S OFFICE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
101	CIRCULATION	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
102	SUPERVISOR'S OFFICE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
103	BRIDGE CREW ASSEMBLY ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
104	MAINTENANCE CREW ASSEMBLY ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
105	MAINTENANCE SUPERVISOR	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
106	CIRCULATION	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
107	SUPERVISOR'S OFFICE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
108	SIGN CREW ASSEMBLY ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
109	SIGN STORAGE	SC	R	PT	PT	PT	PT	ACT	---	9'-6"	PLYWOOD WALL MATERIAL
110	STORAGE	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
111	JANITOR	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
112	WOMEN'S ROOM	CT	CT	PT/CT	PT/CT	PT/CT	PT/CT	GYP	PT	8'-0"	---
113	MEN'S ROOM	CT	CT	PT/CT	PT/CT	PT/CT	PT/CT	GYP	PT	8'-0"	---
114	IT CLOSET	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
115	STORAGE	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
116	SEALING SUPERVISOR	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
117	SEALING CREW ASSEMBLY ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
118	CARPENTER'S SHOP	SC	R	PT	PT	PT	PT	ACT	---	9'-6"	PLYWOOD WALL MATERIAL
119	WOMEN'S	CT	CT	PT/CT	PT/CT	PT/CT	PT/CT	GYP	PT	8'-0"	---
120	MEN'S	CT	CT	PT/CT	PT/CT	PT/CT	PT/CT	GYP	PT	8'-0"	---
121	JANITOR	VCT	R	PT	PT	PT	PT	ACT	---	8'-0"	---
122	INSPECTOR'S OFFICE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
123	CREW ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
124	PORCH	SC	---	---	---	---	---	---	---	---	---
125	PORCH	SC	---	---	---	---	---	---	---	---	---

FINISH LEGEND

ACT ACOUSTICAL CEILING TILE
CT CERAMIC TILE
EXP EXPOSED
GYP GYPSUM BOARD
PLY PLYWOOD
PT PAINT
R RUBBER
SC SEALED CONCRETE
STC STAINED CONCRETE
C CARPET
VCT VINYL COMPOSITION TILE



WINDOW ELEVATIONS

SCALE: 1/4" = 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY JERSEY
REGISTERED ARCHITECT
No. 2271
ARKANSAS

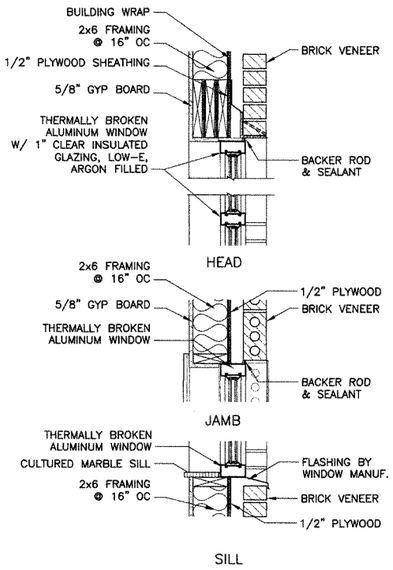
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0	10/13/11	ISSUED FOR CONSTRUCTION		

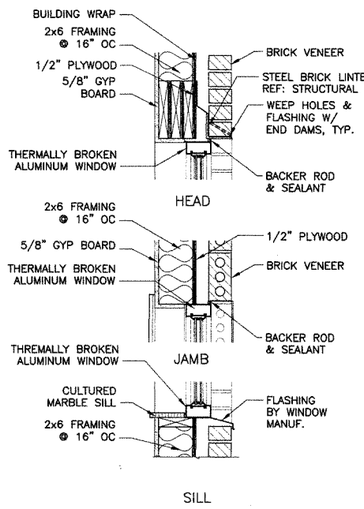
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
DOOR & WINDOW ELEVATIONS & SCHEDULE

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

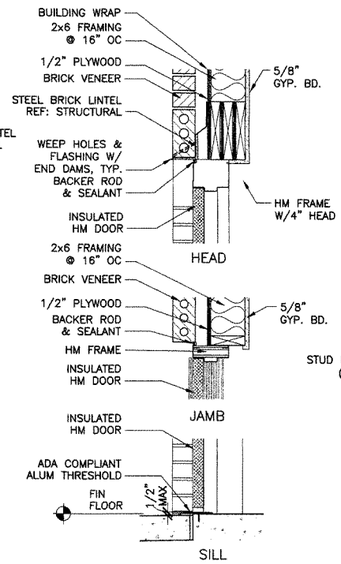
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03A-501	
60 OF 289	



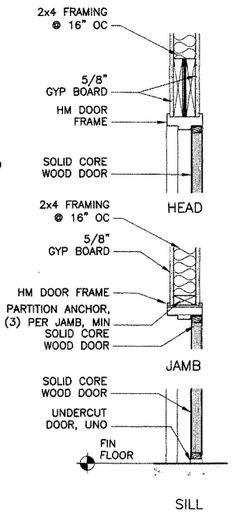
DETAIL GROUP A



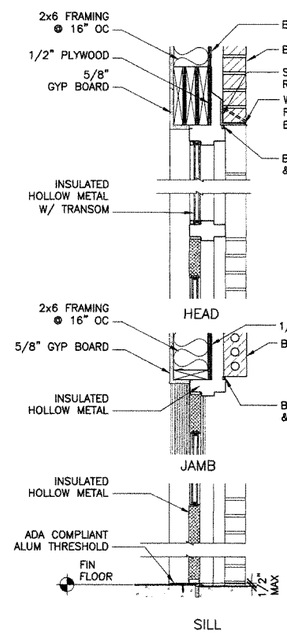
DETAIL GROUP B



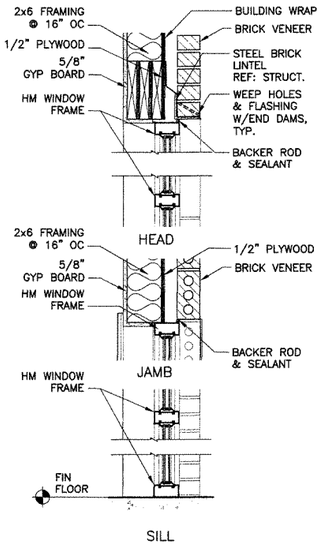
DETAIL GROUP C



DETAIL GROUP D



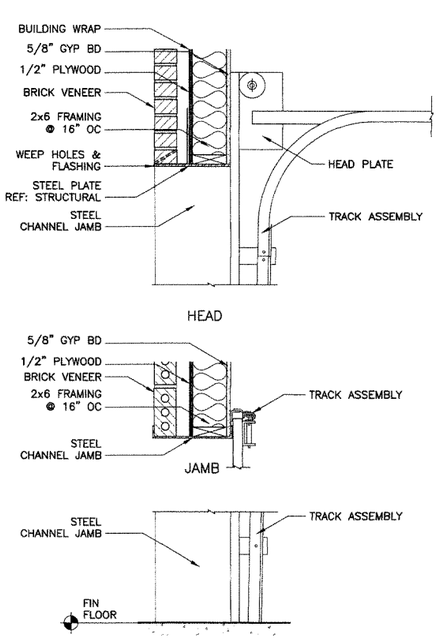
DOOR DETAIL GROUP E



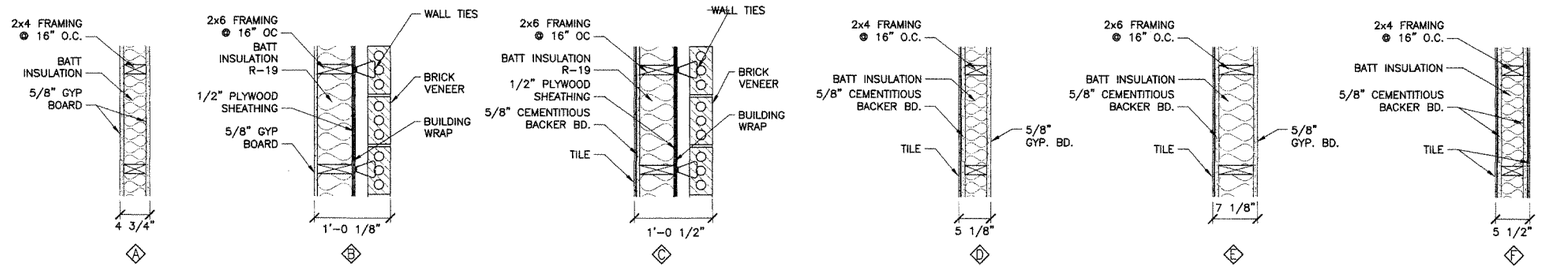
SIDE LITE DETAIL GROUP E

HEAD JAMB & SILL DETAILS

SCALE: 1" = 1'-0"



OVERHEAD DOOR DETAIL GROUP F



PARTITION TYPES

SCALE: 1" = 1'-0"

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
HEAD JAM & SILL DETAILS & PARTITION TYPES

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03A-502
REV	

61 OF 289

REGISTERED ARCHITECT — SAIC Energy, Environment, & Infrastructure, LLC No. C-255 — ARKANSAS

JOHNNY RAY RAMSEY — REGISTERED ARCHITECT — No. 2221 — ARKANSAS

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STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT	GA	GAUGE	S	SOUTH
ACT	ACTUAL	GALV	GALVANIZED	SA	SLAB BOLSTER
ADDN	ADDITIONAL	GL	GLU LAM	SB	SLEEVE ANCHOR
ADH	ADHESIVE	GLB	GLUED LAMINATED BEAM	SCHED	SCHEDULE
ADJ	ADJACENT			SECT	SECTION
AFF	ABOVE FINISHED FLOOR	HC	HIGH CHAIR	SF–	STEP FOOTING
AHU	AIR HANDLING UNIT	HK	HOOK	SIM	SIMILAR
ALUM	ALUMINUM	HORIZ	HORIZONTAL	SPEC	SPECIFICATIONS
ALT	ALTERNATE	HP	HIGH POINT	SP	SPACING,ES
ANCH	ANCHORAGE, ANCHOR	HSA	HEADED STUD ANCHOR	SQ	SQUARE
APPD	APPROVED	HSB	HIGH STRENGTH BOLT	SSL	SHORT SLOTTED HOLES
ARCH	ARCHITECT,(URAL)	HT	HEIGHT	SS	STAINLESS STEEL
				STD	STANDARD
B–	CONC. BEAM	ID	INSIDE DIAMETER	STIFF	STIFFENERS
B/	BOTTOM OF	IF	INSIDE FACE	STL	STEEL
B/B	BACK TO BACK	IN	INCH	STRL	STRUCTURAL
BIT	BITUMINOUS, BITUMASTIC	INCL	INCLUDE, ING	SYMM	SYMMETRICAL
BLDG	BUILDING	INSUL	INSULATE, D, ION		
BM	BEAM	INT	INTERIOR	T	TIES
BOF	BOTTOM OF FOOTING	INTERM	INTERMEDIATE	t	THICKNESS
BOT	BOTTOM			T/	TOP OF
BRDG	BRIDGING	JST	JOIST	TB–	TIE BEAM
BRG	BEARING	JT	JOINT	TC	TIE COLUMN
BLK	BLOCK	k	KIP	T&B	TOP AND BOTTOM
BTWN	BETWEEN			TEMP	TEMPORARY, TEMPERATURE
BSMT	BASEMENT	L–	ANGLE	TERM	TERMINATE
		LB	POUND	TOL	TOLERANCE
C	CHANNEL	LG	LONG	TOF	TOP OF FOOTING
CANT	CANTILEVER	LL	LIVE LOAD	TRAN	TRANSVERSE
CEN	CENTER, ED	LLH	LONG LEG HORIZONTAL	TS	TUBE STEEL
C/C	CENTER TO CENTER	LLV	LONG LEG VERTICAL	TYP	TYPICAL
CHAM	CHAMFER	LONG	LONGITUDINAL		
CIRC	CIRCULAR	LP	LOW POINT	UNO	UNLESS NOTED OTHERWISE
CJ	CONTROL JOINT	LT	LIGHT	U/S	UNDERSIDE
CLR	CLEAR	LSL	LONG SLOTTED HOLES	VERT	VERTICAL
CMU	CONCRETE MASONRY UNITS	LTWT	LIGHTWEIGHT		
COL	COLUMN	LVL	LAMINATED VENEER LUMBER	W	WIDTH, WEST, WIDE FLANGE
CONC	CONCRETE			W/	WITH
CONN	CONNECTION	MAS	MASONRY	W/O	WITHOUT
CONST	CONSTRUCTION	MAX	MAXIMUM	WF–	WALL FOOTING
CONT	CONTINUOUS, ATION	MB	MACHINE BOLT	WP	WORKING POINT
CONTR	CONTRACTOR	MECH	MECHANICAL	WS	WATERSTOP
COORD	COORDINATE, TION	MET	METAL	WT	WEIGHT
CTRD	CENTERED	MEZZ	MEZZANINE	WWF	WELDED WIRE FABRIC
		MFR	MANUFACTURER		
D	DEPTH, DISTANCE	MID	MIDDLE		
DBA	DEFORMED BAR ANCHOR	MIN	MINIMUM		
DBL	DOUBLE	MISC	MISCELLANEOUS		
DBS	DOWEL BAR SPLICER	MJ	MASONRY JOINT		
DET	DETAIL	MO	MASONRY OPENING		
DIA	DIAMETER				
DIAG	DIAGONAL	N	NORTH		
DIM	DIMENSION	NIC	NOT IN CONTRACT		
DL	DEAD LOAD	NO	NUMBER		
DN	DOWN	NS	NEAR SIDE		
DSGN	DESIGN	NTS	NOT TO SCALE		
DWGS	DRAWINGS				
DWL	DOWEL	O/O	OUT TO OUT		
		OC	ON CENTER		
E	EAST	OD	OUTSIDE DIAMETER		
EA	EACH	OF	OUTSIDE FACE		
EB	EXPANSION BOLT	OPNG	OPENING		
EE	EACH END	OPP	OPPOSITE		
EF	EACH FACE	OSL	OUTSTANDING LEG		
EJ	EXPANSION JOINT	OVS	OVERSIZE HOLES		
EL	ELEVATION, ELEVATED				
ELEV	ELEVATOR	PAF	POWDER ACTUATED FASTENER		
ENGR	ENGINEER	PL	PLATE		
EQ	EQUAL	PLF	POUNDS PER LINEAL FOOT		
EQUIP	EQUIPMENT	PROJ	PROJECTION		
ES	EACH SIDE	PSF	POUNDS PER SQUARE FOOT		
EW	EACH WAY	PSI	POUNDS PER SQUARE INCH		
EXP	EXPANSION	PSL	PARALLEL STRAND LUMBER		
EXIST	EXISTING	PT	PRESSURE TREATED		
EXT	EXTERIOR	PVC	POLYVINYL CHLORIDE		
F–	FOOTING MARK	R/W	REINFORCED WITH		
FC	FILLED CELL	RAD	RADIUS		
FF	FINISHED FLOOR	REF	REFERENCE		
FIN	FINISH	REINF	REINFORCE, MENT		
FLG	FLANGE	REQ	REQUIRE, D, MENT		
FLR	FLOOR	RET	RETURN		
FDN	FOUNDATION	REV	REVISION		
FRMG	FRAMING	RP	RADIUS POINT		
FS	FARSIDE	RT	RIGHT		
FT	FOOT, FEET	RTU	ROOF TOP UNIT		
FTG	FOOTING				
FV	FIELD VERIFY				

STANDARDS

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
NFPA	NATIONAL FOREST PRODUCTS ASSOCIATION
PCI	PRESTRESSED CONCRETE INSTITUTE
PTI	POST TENSIONING INSTITUTE
TPI	TRUSS PLATE INSTITUTE
UL	UNDERWRITER'S LABORATORY

SYMBOLS

&	AND
@	AT
℄	CENTERLINE
⌀	DIAMETER
◆	ELEVATION
#	NUMBER, POUNDS
C.J.	CONSTRUCTION JT.
S.J.	SAW CUT JOINT
ℙ	PLATE

STRUCTURAL DESIGN CRITERIA

D–1 CODE – 2006 INTERNATIONAL BUILDING CODE WITH ARKANSAS FIRE PREVENTION CODE, 2002 EDITION

D–2 DESIGN LIVE LOADS:
ROOF 20 PSF
FLOOR SLAB–ON–GRADE

D–3 WIND LOAD: 90 MPH
EXPOSURE 'C'

D–4 SEISMIC: SEISMIC ZONE: 1
OCCUPANCY CATEGORY II, I = 1.0
S_s = 0.212
S_1 = 0.090
SITE CLASS C
S_{DS} = 0.170
S_{D1} = 0.102
DESIGN CATEGORY B
SHEAR WALLS, R = 6.5
Cs = 0.026

D–5 ALLOWABLE SOIL BEARING PRESSURE 2000 PSF (CONT) AND 2500 PSF (SPREAD FOOTINGS).

GENERAL NOTES

G–1 THE GENERAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS, PRIOR TO FABRICATION AND START OF CONSTRUCTION.

G–2 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER.

G–3 THE GENERAL CONTRACTOR SHALL COORDINATE STRUCTURAL AND OTHER DRAWINGS WHICH ARE PART OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS WHICH MAY AFFECT THE STRUCTURAL DRAWINGS.

G–4 ALL DETAILS AND SECTIONS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS SHOWN.

G–5 REPRODUCTION OF THE CONTRACT DOCUMENTS USED FOR THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS WILL NOT BE PERMITTED. REPRODUCED DRAWINGS WILL BE RETURNED UNCHECKED FOR RESUBMITTAL.

G–6 ALL TRUSSES AND WOOD BEAMS SHOWN ON ROOF FRAMING PLANS ARE DIAGRAMMATIC FOR INTENT ONLY. ALL FINAL LOCATIONS, SIZES, ETC. FOR ALL FLOOR AND ROOF MEMBERS SHALL BE FROM TRUSS MANUFACTURER (AND/OR JOIST AND BEAM MANUFACTURER) BEARING THE SEAL, SIGNATURE AND DATE OF THE REGISTERED ENGINEER IN THE STATE OF ARKANSAS.

WOOD TRUSS MANUFACTURER IS RESPONSIBLE FOR FINAL TRUSS LAYOUT AND DESIGN OF ALL ROOF TRUSSES. ALL SIMPSON TRUSS ANCHORS SHOWN ON DRAWINGS SHALL BE VERIFIED FOR LOADS SHOWN ON FINAL WOOD TRUSS DESIGN CALCULATIONS (TO BE PROVIDED BY PRE–ENGINEERED TRUSS MANUFACTURER). THEREFORE, ALL ANCHOR SIZES, TYPES AND LOCATIONS ARE SUBJECT TO CHANGE BY BENHAM COMPANIES, INC.

G–7 DO NOT SCALE DRAWINGS.

SHALLOW FOUNDATIONS

SF–1 SOIL TO BE STRIPPED, COMPACTED AND TESTED IN ACCORDANCE WITH RECOMMENDATIONS OF THE THE SOILS REPORT PREPARED BY GRUBBS, HOSKYN, BARTON & WYATT, INC DATED JULY 3, 2008, AND AMENDMENTS THAT FOLLOW.

SF–2 HORIZONTAL JOINTS IN FOOTINGS WILL NOT BE PERMITTED.

SF–3 EXCAVATING UNDER OR NEAR IN – PLACE FOOTINGS/FOUNDATIONS WHICH DISTURBS THE COMPACTED SOIL BENEATH THE FOOTINGS/ FOUNDATIONS WILL NOT BE PERMITTED.

SF–4 REINFORCING SHALL BE SUPPORTED ON PRECAST PADS. ANCHOR BOLTS AND DOWELS FOR COLUMNS AND FILLED CELLS SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE. USE TEMPLATES FOR SETTING ANCHOR BOLTS.

SF–5 FOUNDATIONS SHALL BEAR ON STIFF TO VERY STIFF CLAY OR COMPETENT WEATHERED SHALE OR LIMESTONE. CONTRACTOR SHALL UNDER CUT FOOTINGS AS REQUIRED TO REACH COMPETENT BEARING MATERIAL. PROVIDE SOLID FILL OR LEAN–FILL AS REQUIRED. OVERSIZE UNDER CUTS LATERALLY ONE HORIZONTAL TO TWO VERTICAL FROM FOOTING EDGE.

SF–6 FOUNDATIONS SHALL BEAR A MINIMUM OF 24" BELOW GRADE.

REINFORCED CONCRETE

RC–1 CONCRETE WORK SHALL COMPLY WITH SECTION 802 OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT 2003 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

RC–2 PROVIDE CLASS OF CONCRETE WITH THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH.

CLASS OF CONCRETE

S	3500 PSI (UNLESS NOTED OTHERWISE)
S (AE)	4000 PSI (EXTERIOR CONCRETE)
LEAN–FILL	1500 PSI

RC–3 ALL PUMPED CONCRETE WITH #57 AGGREGATE IS TO CONTAIN A HIGH RANGE WATER REDUCING AGENT. MINIMUM SIZE OF DISCHARGE TO BE 4" I.D. SEE SPECIFICATIONS FOR REQUIRED MIX DESIGN. A 2" I.D. DISCHARGE MAY BE USED WITH #89 AGGREGATE.

RC–4 ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318 (LATEST EDITION) AND ACI DETAILING MANUAL, ACI–315 LATEST EDITION.

RC–5 REINFORCING STEEL SHALL BE NEW DEFORMED BARS, FREE FROM RUST, SCALE AND OIL, CONFORMING TO ASTM A–615, GRADE 60, WITH MINIMUM YIELD STRENGTH = 60,000 PSI.

RC–6 PROVIDE THE FOLLOWING CONCRETE COVERAGE OVER REINFORCING:

FOOTINGS: BOTTOMS & UNFORMED EDGES 3" CLEAR

RC–7 NO REINFORCING BARS SHALL BE CUT TO ACCOMMODATE THE INSTALLATION OF ANCHORS, EMBEDS OR OTHER ITEMS.

RC–8 USE THE STRUCTURAL DRAWINGS (INCLUDING REVISIONS AND ADDENDA) IN CONJUNCTION WITH REVIEWED SHOP DRAWINGS FOR PLACEMENT OF REINFORCING.

RC–9 AT CHANGES IN DIRECTION OF WALL BEAMS AND STRIP FOOTINGS, PROVIDE CORNER BARS OF SAME SIZE AND QUANTITY (U.N.O.) AS HORIZONTAL STEEL. REFER TO TYPICAL DETAIL 2 ON SHEET 03S–501.

RC–10 ALL EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

MASONRY

M–1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI "SPECIFICATIONS FOR MASONRY STRUCTURES" (ASCE 530.1 LATEST EDITION).

M–2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C–90 (28 DAY STRENGTH = 1900 P.S.I., fm' = 1500 P.S.I.) LAID IN RUNNING BOND WITH FULL MORTAR BEDMENT. ALL MASONRY SHALL BE TYPE 1, GRADE "N" U.N.O.

M–3 USE TYPE "M" OR "S" MORTAR WITH MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.

M–4 PROVIDE LAP SPLICES FOR REINFORCING AS SHOWN ON SCHEDULE.

LAP SPLICE SCHEDULE

BAR SIZE	POSITION	CONCRETE f'c (PSI)		MASONRY f'm=1500
		3000	4000	
#3	ALL	17"	15"	–
#4	ALL	22"	19"	(1) BAR PER CELL = 24" (2) BAR PER CELL = 36"
#5	ALL	28"	24"	(1) BAR PER CELL = 30" (2) BAR PER CELL = 54"
#6	ALL	33"	29"	(1) BAR PER CELL = 52" (2) BAR PER CELL = 108"

STRUCTURAL STEEL:

S–1 STRUCTURAL STEEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE AND AISC SPECIFICATIONS 530–05.

S–2 STRUCTURAL STEEL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS:

TYPE	ASTM	GRADE	F_y MIN. (ksi)
WIDE FLANGE SHAPES	A992		50
OTHER SHAPES AND PLATES	A36		36
PIPE	A53	B	35
HOLLOW STRUCTURAL SHAPES (HSS SHAPES)	A500	B	46
STRUCTURAL BOLTS	A325		92
THREADED (ANCHOR) RODS	F1554		36

S–3 STRUCTURAL STEEL CONNECTIONS:
a. ALL HIGH STRENGTH BOLTED CONNECTIONS SHALL USE TENSION CONTROL BOLTS.
b. ALL WELDING SHALL BE IN ACCORDANCE WITH LATEST AWS CODE. ALL WELDS SHALL USE E70XX ELECTRODES.
c. CONNECTION BOLTS SHOWN IN DRAWINGS ARE 3/4" DIAMETER A325 BEARING TYPE "N", UNLESS NOTED OTHERWISE.

S–4 NO HOLES OR LENGTH ADJUSTMENTS SHALL BE CUT IN STEEL BEAMS IN THE FIELD UNLESS APPROVED BY THE STRUCTURAL ENGINEER.

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

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SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC
201 Presidential Drive
Lowell, Arkansas
(479) 770–5800
(479) 770–5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI–CREW BUILDING
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

DESIGNED BY	TLM
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03S–001
REV	

WOOD

WD-1 ALL WOOD CONSTRUCTION AND CONNECTIONS SHALL CONFORM TO AITC "AMERICAN INSTITUTE OF TIMBER CONSTRUCTION" MANUAL, LATEST EDITION, AND THE "NATIONAL DESIGN SPECIFICATIONS" FOR WOOD CONSTRUCTION, LATEST EDITION.

WD-2 ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.

WD-3 ALL BOLTS OR BOLTED CONNECTIONS SHALL CONFORM TO A307. PROVIDE SIMPSON BP WASHERS UNDER HEADS AND NUTS AT ALL BOLTS. HOLES FOR BOLTS SHALL BE BORED WITH A BIT THE SAME NOMINAL DIAMETER AS THE BOLT PLUS 1/16", UNLESS OTHERWISE NOTED.

WD-4 ALL METAL WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE CO. OR APPROVED EQUAL AND SHALL BE GALVANIZED. THE NAILING PATTERN SPECIFIED IN THE LATEST SIMPSON CATALOG SHALL BE USED.

WD-5 WHERE STUDS OR BEAMS ARE FORMED OF 2 OR MORE MEMBERS THEY SHALL BE FULL LENGTH AND FASTENED TOGETHER WITH 10d NAILS AT 6" O.C. (MAX.) STAGGERED U.N.O.

WD-6 ALL LOAD BEARING AND SHEAR WALL STUDS SHALL BE 2x6 @ 16" O.C. (U.N.O.)

WD-7 ALL FASTENERS MUST BE HOT DIPPED GALVANIZED UNLESS NOTED OTHERWISE.

WD-8 ADEQUATE BRACING SHALL BE PROVIDED TO RESIST ANY LATERAL AND CONSTRUCTION LOADS.

WD-9 MAXIMUM MOISTURE CONTENT OF LUMBER NOT TO EXCEED 19% FOR ALL STRUCTURAL MEMBERS.

WD-10 LOCATE STUDS IN WALLS SUPPORTING ROOF TRUSSES UNDER TRUSSES AND ALIGN FULL HEIGHT. PROVIDE ADDITIONAL STUDS WHERE REQUIRED ON NOTES AND DETAILS.

WD-11 USE A MINIMUM OF (3) STUDS AT CORNER AND INTERSECTION OF ALL WALLS.

WD-12 PROVIDE 2x4 BLOCKING AT ALL RIDGE, HIP AND VALLEYS. PLYWOOD DECKING SHALL BE CONNECTED TO BLOCKING PER DIAPHRAGM NAILING REQUIREMENTS.

WD-13 FOR STRUCTURAL LUMBER (LOAD BEARING AND SHEAR WALLS) 4" AND WIDER, AND 2" TO 4" THICK PROVIDE GRADE #2 OR BETTER AND SPECIES WITH THE FOLLOWING MINIMUM PROPERTIES:
Fb = 875 PSI
Ft = 450 PSI
Fv = 135 PSI
Fc = 1150 (PARALLEL TO GRAIN)
Fc = 425 (PERPENDICULAR TO GRAIN)
E = 1,400,000 PSI

WD-14 ALL BOLTS USED FOR WOOD CONSTRUCTION SHALL BE A MINIMUM OF 1/2" DIAMETER (ASTM A307) U.N.O. ON DETAILS AND PLANS.

WD-15 PROVIDE DIAGONAL BRACING IN STUD FRAMING OF EXTERIOR WALLS. BRACE BOTH WALLS AT EACH EXTERNAL CORNER, FULL STORY HEIGHT WITH PLYWOOD PANELS, 4'-0" WIDE PANELS VERTICALLY.

WD-16 PROVIDE DOUBLE STUDS (NAILED TO EACH OTHER) UNDER (2) PLY TRUSS ENDS AND TRIPLE STUDS UNDER (3) PLY TRUSS ENDS (U.N.O.)

WD-17 WOOD ROOF AND WALL SHEATHING SHALL BE APA EXPOSURE 1 RATED WITH MINIMUM THICKNESS AND SPAN RATINGS AS SHOWN ON THE DRAWINGS.

PRE-ENGINEERED WOOD TRUSSES

WT-1 DESIGN OF METAL CONNECTED ROOF TRUSSES TO COMPLY WITH:
APPLICABLE BUILDING CODE (SEE NOTE D-1).
NFPA'S "NATIONAL DESIGN SPECIFICATION FOR STRESS GRADED LUMBER AND ITS FASTENINGS".
TRUSS PLATE INSTITUTE'S "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED FLOOR TRUSSES".

WT-2 PRE-ENGINEERED PREFABRICATED WOOD TRUSSES AND THEIR CONNECTIONS TO EACH OTHER SHALL BE DESIGNED FOR THE LOADS INDICATED IN NOTE WT-6 BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS.

WT-3 NO WANE, SKIPS OR OTHER DEFECTS SHALL OCCUR IN THE PLATE CONTACT AREA OR SCARFED AREA OF WEB MEMBERS. PLATES SHALL BE CONNECTED WITH ONE REQUIRED EACH SIDE OF TRUSS.

WT-4 NUMBER OF PANELS AND DIRECTION OF WEB MEMBERS TO SUIT CONTINUOUS OR SIMPLE SPAN TRUSS DESIGN REQUIREMENTS. SEE STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR OUTLINE SHAPE AND ANY SPECIAL CONDITIONS/LOCATIONS OF PANEL POINTS.

WT-5 PERMANENT TRUSS BRACING OR BRIDGING MEMBERS SHALL BE 2x4 MINIMUM SOUTHERN PINE WITH MINIMUM LOCATIONS AS NOTED IN WT-8. ADDITIONAL BRACING REQUIRED TO STRENGTHEN TRUSS COMPONENTS SHOULD BE NOTED ON THE ERECTION DRAWINGS IN ACCORDANCE WITH TRUSS MANUFACTURER'S RECOMMENDATIONS.

WT-6 ROOF TRUSS DESIGN LOADS AS FOLLOWS:

SLOPED TOP CHORD TRUSSES, 3:12 (U.N.O.)

TOP CHORD	DEAD LOAD	10 PSF
	LIVE LOAD	20 PSF
BOTTOM CHORD	DEAD LOAD	7 PSF
TOTAL LOAD-DURATION FACTOR		1.25

FABRICATOR TO DESIGN TRUSSES AND SUPPLY ADDITIONAL BRIDGING AS REQUIRED TO RESIST WIND UPLIFT FORCES GENERATED FROM WIND LOAD CRITERIA SHOWN ON D-3. TOTAL DEAD LOAD REDUCTION FOR OBTAINING THE NET UPLIFT SHALL NOT EXCEED 10 PSF.

PROVIDE DESIGN CALCULATIONS, SIGNED AND BEARING THE EMBOSSED SEAL OF AN ENGINEER REGISTERED IN THE STATE OF ARKANSAS, VERIFYING DESIGN FOR ALL LOADS INCLUDING UPLIFT STRESSES.

WT-7 HANDLING, ERECTION AND BRACING OF WOOD TRUSSES SHALL BE IN ACCORDANCE WITH "HANDLING AND ERECTING WOOD TRUSSES" (HET-80) AND "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS" BY THE TRUSS PLATE INSTITUTE, LATEST EDITIONS.

WT-8 MINIMUM PERMANENT BRIDGING CRITERIA FOR PRE-ENGINEERED TRUSSES:

PROVIDE 2x4 CONTINUOUS HORIZONTAL BRIDGING AT TOP AND BOTTOM CHORDS AND INTERMITTENT CROSS BRIDGING AT 8' SPACING AT THE FOLLOWING MINIMUM LOCATIONS

A. AT RIDGES
B. AT 8'-0" O.C. HORIZONTALLY AT PANEL POINT LOCATIONS

PROVIDE CONTINUOUS 2x4 @ 48" O.C. PERPENDICULAR TO TRUSSES AT TOP CHORD WHERE ROOF PLYWOOD IS NOT RIGIDLY ATTACHED TO TOP CHORD OF TRUSS

PROVIDE CONTINUOUS 2x4 @ 48" O.C. AT BOTTOM CHORD WHERE A RIGID CEILING IS NOT FIRMLY ATTACHED TO THE BOTTOM CHORDS.

WOOD JOISTS AND BEAMS

WJ-1 ALL ROOF WOOD JOISTS AND BEAMS SHALL BE DESIGNED FOR DEAD LOADS AND LIVE LOADS SIMILAR TO ROOF TRUSS DESIGN LOADS SHOWN ON WT-6.

WJ-2 ALL WOOD JOISTS, WOOD BEAMS AND THEIR CONNECTIONS TO EACH OTHER AND/OR TO MASONRY (OR WOOD) SUPPORT WALLS SHALL BE DESIGNED BY A ARKANSAS REGISTERED STRUCTURAL ENGINEER. SUBMIT ALL CALCULATIONS AND DRAWINGS (SIGNED AND SEALED) FOR REVIEW.

WJ-3 COORDINATE WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

WJ-4 PROVIDE ALL MANUFACTURERS' STANDARD ITEMS SUCH AS RIM BOARDS, BRIDGING, ETC.

WJ-5 PROVIDE ALL JOIST TO JOIST, BEAM HANGERS AND CONNECTION DEVICES. JOIST HANGERS AND CONNECTION DEVICES SHALL BE DESIGNED FOR ALL GRAVITY AND UPLIFT LOADS.

WJ-6 AT HIGH POINT OF SLOPED TJI JOIST CONNECTION TO WOOD BEAMS AND/OR TRUSSES, PROVIDE SIMPSON LSTA30 OVER TOP CHORD OF TJI'S (IN ADDITION TO JOIST HANGERS).

SOIL TERMITE TREATMENT REQUIREMENTS

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR RE-INSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL.
2. CONDENSATE AND ROOF DOWNSPOUTS SHALL DISCHARGE AT LEAST 1'-0" AWAY FROM BUILDING SIDE WALLS.
3. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE ARKANSAS STATE PLANT BOARD.
4. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL.
5. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN 15'-0" OF ANY BUILDING OR PROPOSED BUILDING.

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No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

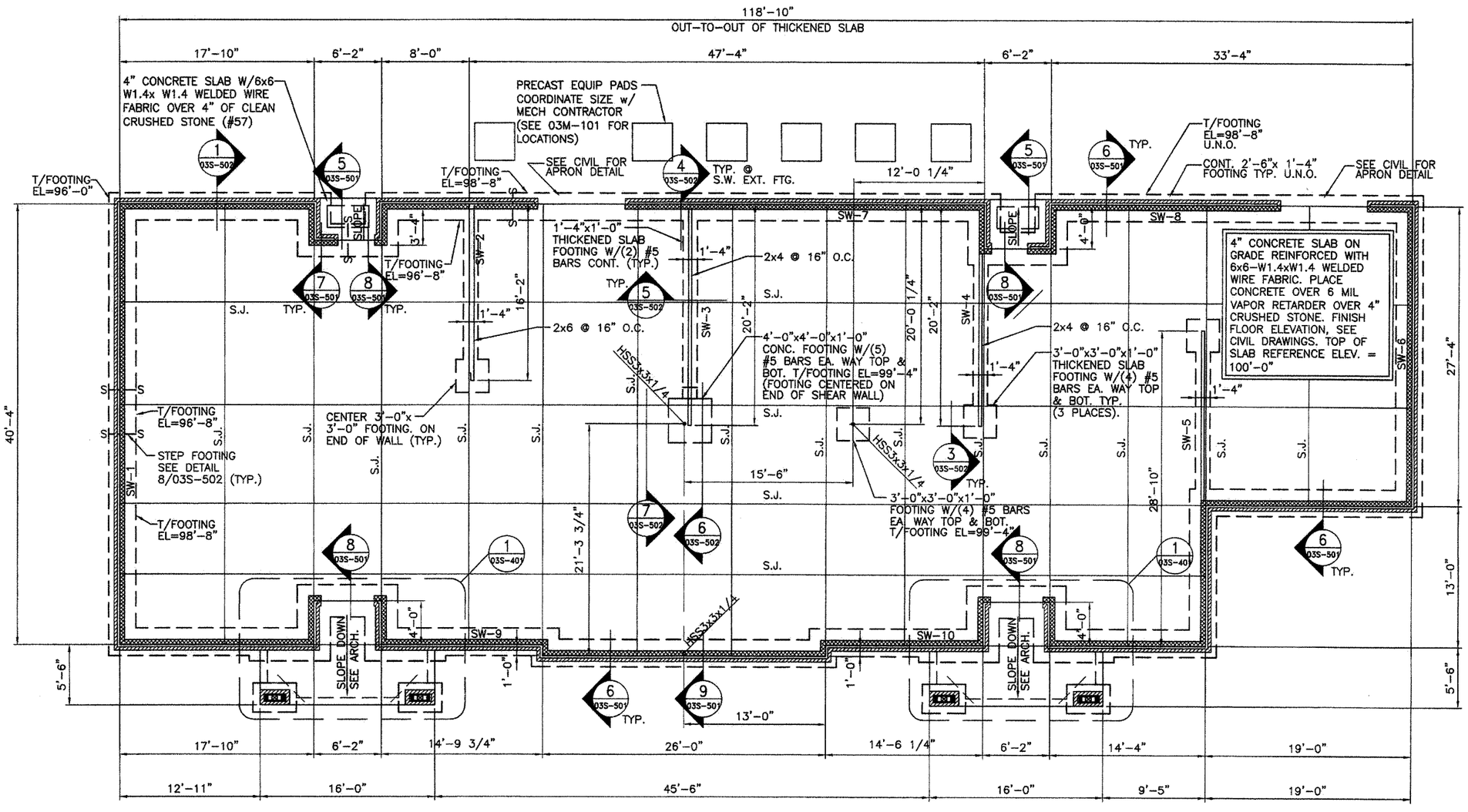
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03S-002	
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1 03S-101 FOUNDATION PLAN
SCALE: 3/16"= 1'-0"

NORTH

LEGEND

- INDICATES NON-LOAD BEARING BRICK VENEER OR BLOCK REFER TO ARCHITECTURAL
- INDICATES 2x6 @ 16" O.C. BEARING STUD WALL
- INDICATES 2x SHEAR WALL SEE WALL SCHEDULE SHEET 03S-503

NOTES:

1. REFER TO DETAIL 3/03S-501 FOR SLAB CONTROL JOINT (S.J.).
2. SEE STRUCTURAL GENERAL NOTES ON SHEET 03S-001 & 03S-002.
3. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDERGROUND UTILITY REQUIREMENTS.
4. ALL DIMENSIONS ARE TO OUT-TO-OUT OF THICKENED SLAB UNLESS NOTED OTHERWISE.
5. REFER TO MECHANICAL DRAWINGS FOR FLOOR DRAIN LOCATION.
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF THICKENED, SLOPED, RAISED, OR DEPRESSED SLABS.
7. CONTRACTOR MAY REPLACE SAW JOINTS (S.J.) WITH CONSTRUCTION JOINTS (C.J.) AT HIS DISCRETION. ALTERNATE FLOOR SLAB JOINT LOCATIONS SHALL BE SUBMITTED FOR APPROVAL.

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10/13/11

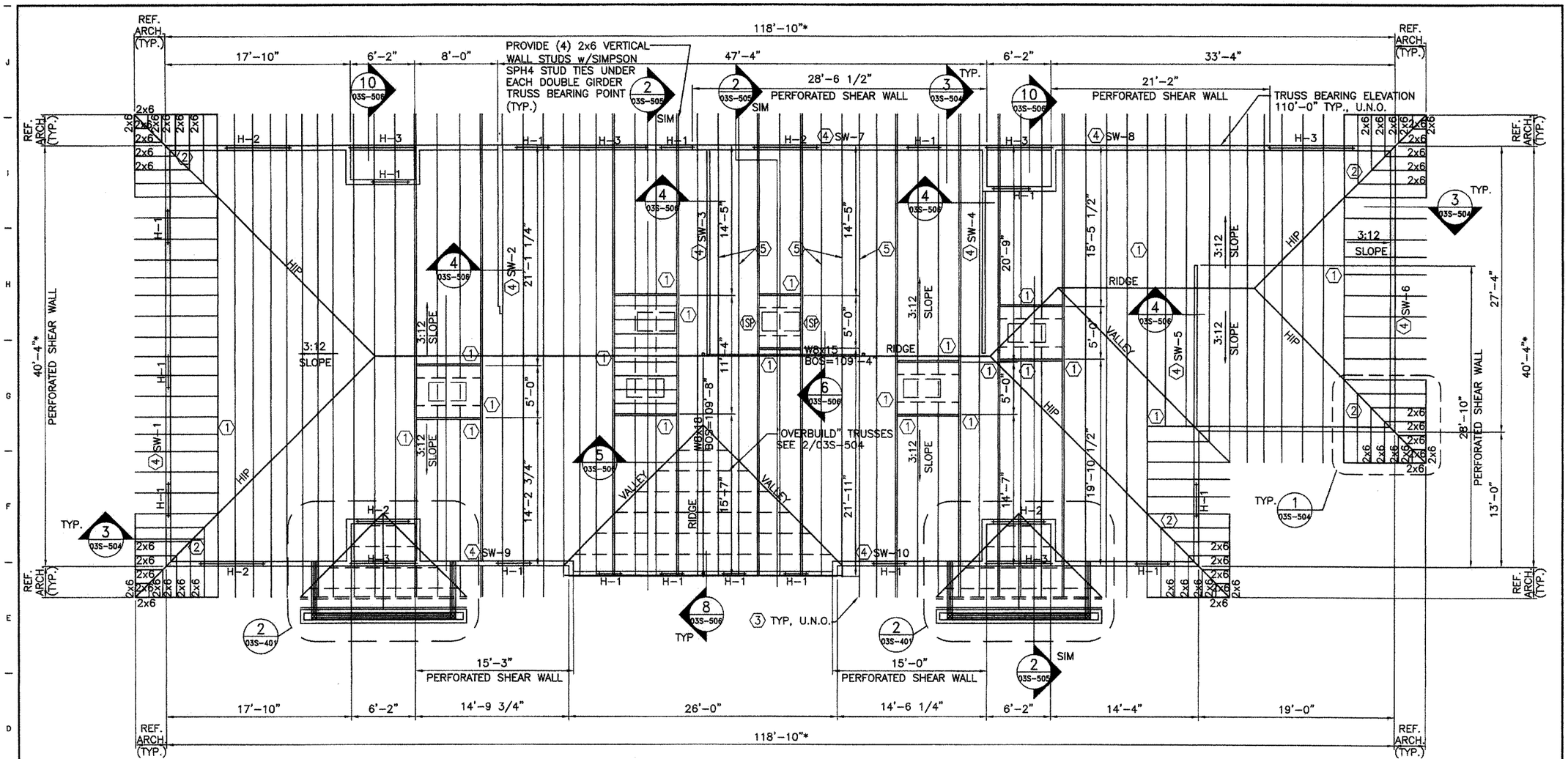
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03S-101	
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KEYED NOTES

1. PRE-ENGINEERED GIRDER TRUSS
2. SPECIAL PRE-ENGINEERED GIRDER TRUSS
3. PRE-ENGINEERED HIP GIRDER TRUSS
4. PRE-ENGINEERED TRUSS @ 24" O.C. MAX.
5. SHEAR WALLS
6. TRUSS SPECIAL (SEE DETAIL 6/03S-506)

1 03S-102 **ROOF FRAMING PLAN** SCALE: 3/16"= 1'-0"

NORTH

NOTES:

1. FOR GENERAL STRUCTURAL NOTES REFER 03S-001 AND 03S-002.
2. * INDICATES DIMENSION IS OUT-TO-OUT OF WALL STUDS.
3. TRUSS BRIDGING TO BE DESIGNED BY MANUFACTURER.
4. PRE-ENGINEERED TRUSS MANUFACTURER/DESIGNER REFER TO MECHANICAL DRAWINGS FOR DUCT WORK LOCATIONS/SIZES OF OPENINGS.
5. TRUSS CONNECTION NOTES:
   A. ALL ROOF TRUSS END TIE DOWNS SHALL BE SIMPSON H10 EXCEPT USE 2-H2.5A (ONE INSIDE AND ONE OUTSIDE) OPPOSITE EACH OTHER WHEN TRUSS IS DIRECTLY OVER STUD.
   B. ALL GIRDER TRUSS TIE DOWNS SHALL BE INVERTED SIMPSON HTT22.
6. SEE SHEETS 03S-503 AND 03S-504 FOR TYPICAL FRAMING DETAILS.
7. VERIFY BOTTOM OF LINTEL ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS.
8. TRUSS BEARING ELEVATION = 110'-0" (U.N.O.).
9. TRUSS LAYOUT PLANS SHOWN ON DRAWINGS ARE DIAGRAMMATIC ONLY. TRUSS ENGINEER SHALL PROVIDE TRUSS LAYOUT W/ GIRDER, HIP AND VALLEY TRUSSES THAT BEST SUIT THE FRAMING. ADDITIONAL SUPPORT COLUMNS, BEAMS AND MINOR FOUNDATION ALTERATIONS MAY BE REQUIRED AFTER REVIEW OF TRUSS SHOP DRAWINGS.
10. REFER TO SCHEDULES ON 03S-503 FOR DIAPHRAGM, SHEAR WALL, AND OTHER TYPICAL FRAMING CONNECTIONS.
11. TRUSS MANUFACTURER SHALL PROVIDE ALL TRUSS-TO-TRUSS CONNECTIONS, INCLUDING TRUSS-TO-GIRDER TRUSS CONNECTIONS.

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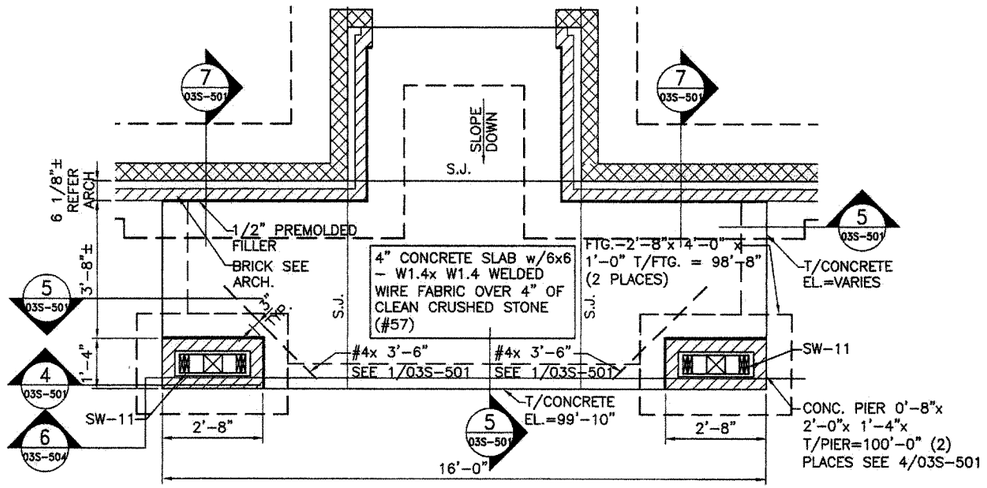
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ROOF FRAMING PLAN

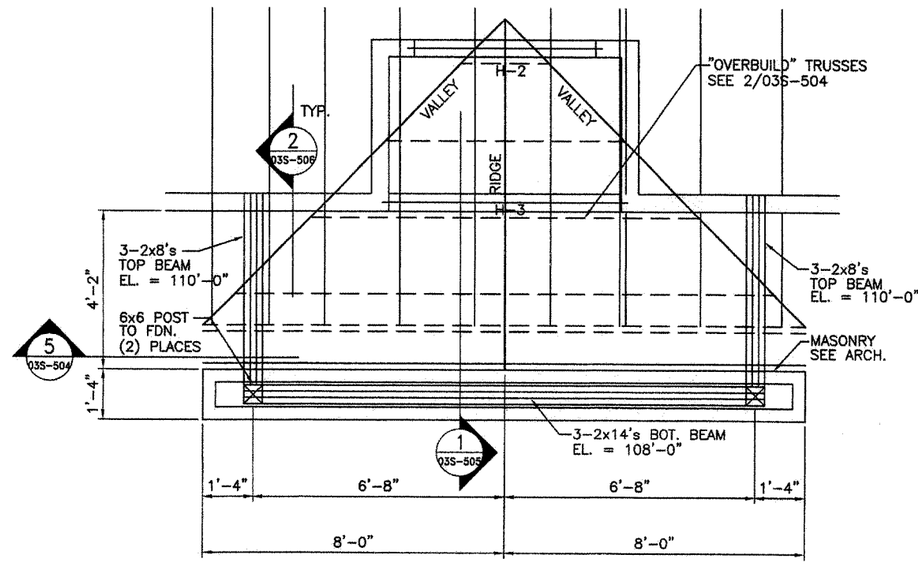
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SHEET	03S-102
REV	

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1 03S-401 ENLARGED PLAN AT ENTRY PORCH
SCALE: 1/2"= 1'-0"



2 03S-401 ENLARGED PLAN AT ENTRY PORCH
SCALE: 1/2"= 1'-0"

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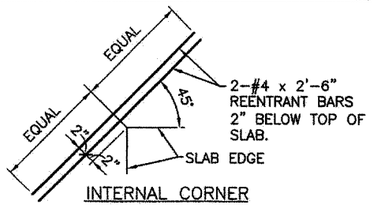
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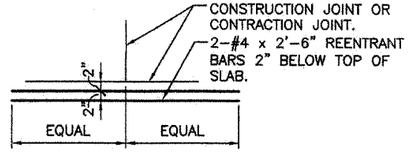
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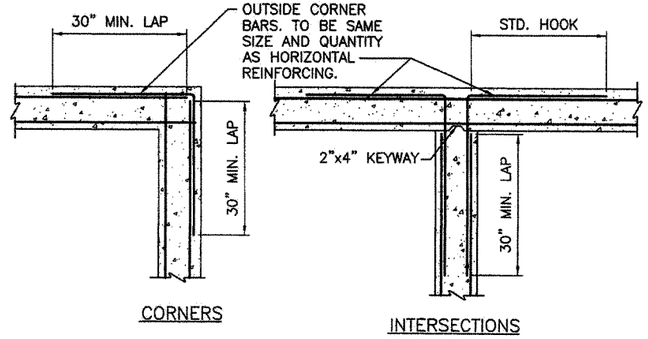


INTERNAL CORNER



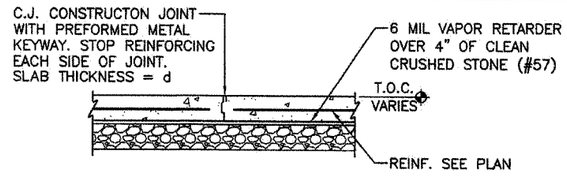
DISCONTINUOUS JOINT INTERSECTION

1 TYPICAL REENTRANT DETAILS
03S–501 SCALE: 3/4"=1'–0"

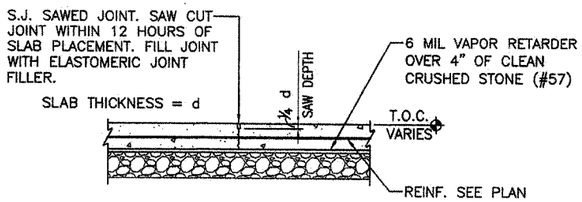


CORNERS INTERSECTIONS

2 TYPICAL CORNER DETAILS
03S–501 SCALE: 3/4"=1'–0"

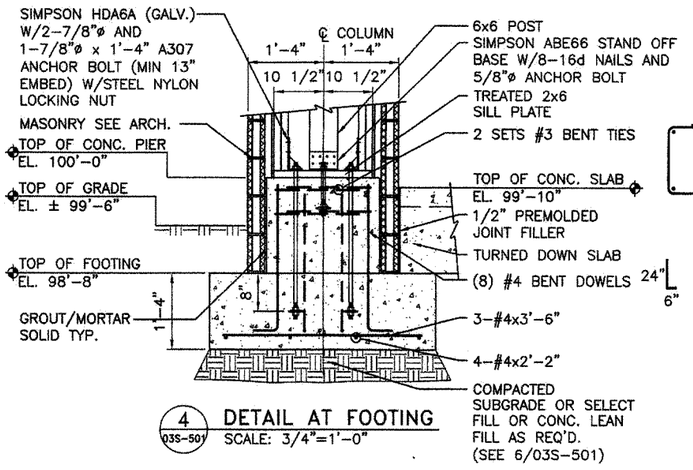


CONSTRUCTION JOINT (C.J.)

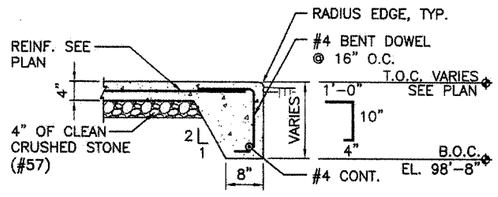


SAWED CONSTRUCTION JOINT (S.J.)

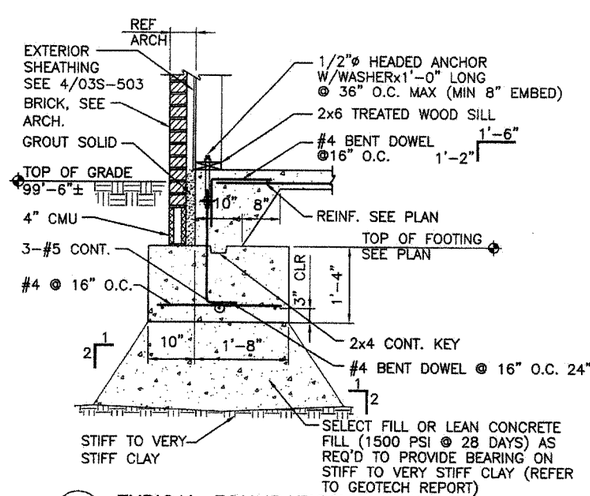
3 TYPICAL CONSTRUCTION JOINT DETAILS
03S–501 SCALE: 1"=1'–0"



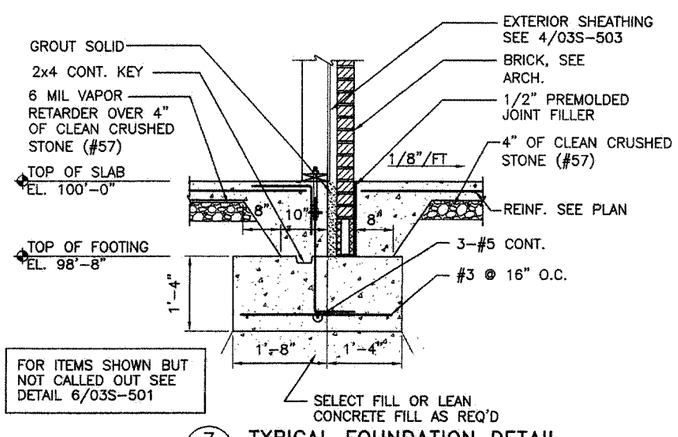
4 DETAIL AT FOOTING
03S–501 SCALE: 3/4"=1'–0"



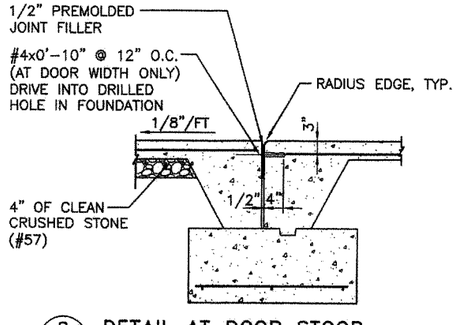
5 TURNED DOWN SLAB DETAIL
03S–501 SCALE: 3/4"=1'–0"



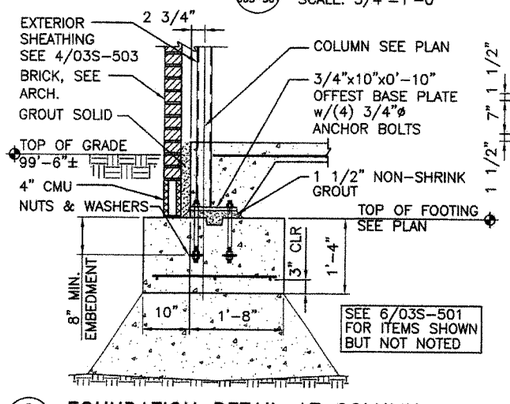
6 TYPICAL FOUNDATION DETAIL
03S–501 SCALE: 3/4"=1'–0"



7 TYPICAL FOUNDATION DETAIL
03S–501 SCALE: 3/4"=1'–0"



8 DETAIL AT DOOR STOOP
03S–501 SCALE: 3/4"=1'–0"



9 FOUNDATION DETAIL AT COLUMN
03S–501 SCALE: 3/4"=1'–0"

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TYPICAL FOUNDATION DETAILS

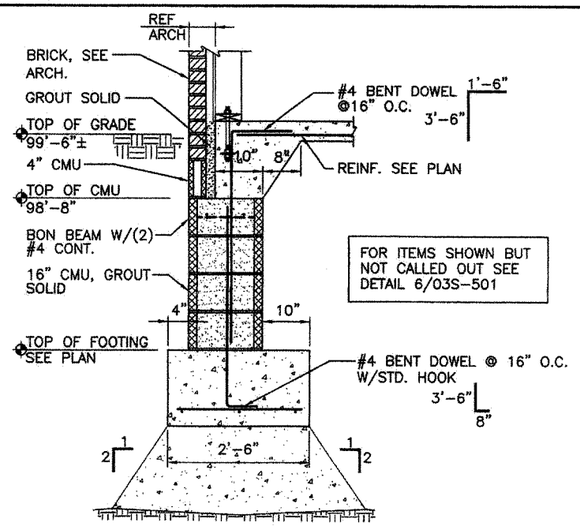
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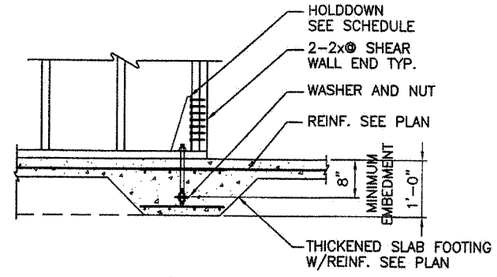
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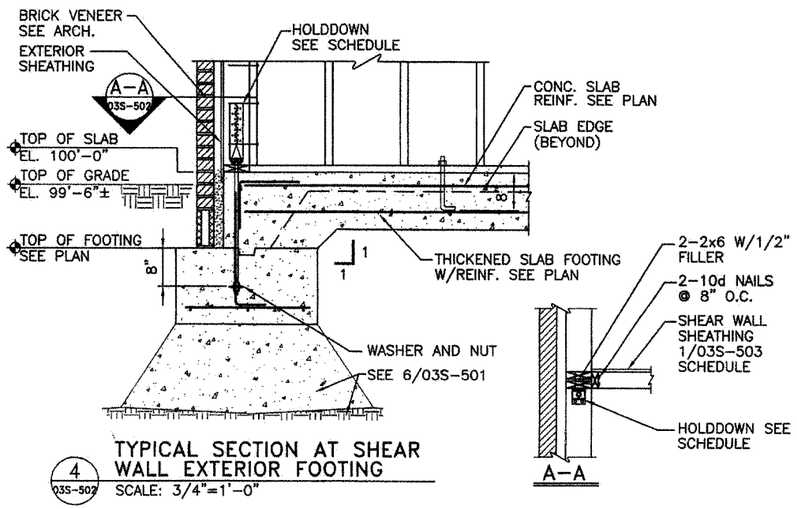


1 03S-502 FOUNDATION DETAIL AT DROPPED FOOTING
SCALE: 3/4"=1'-0"

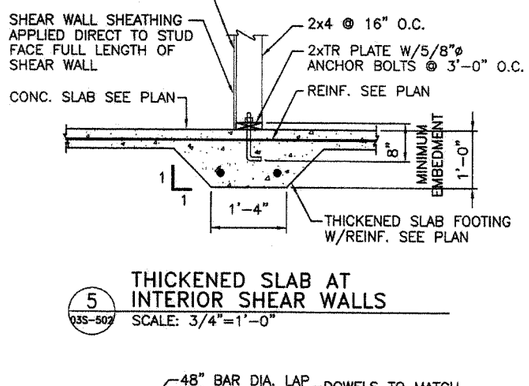
2 03S-502 NOT USED
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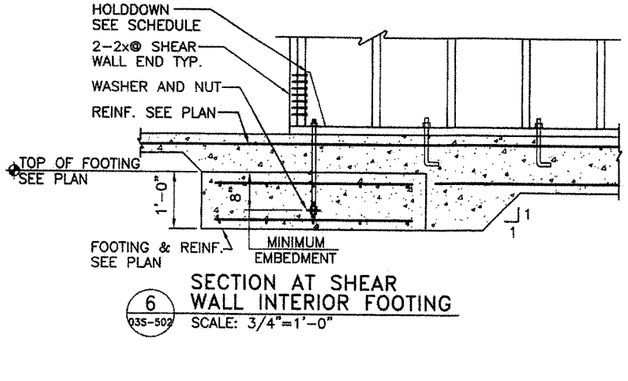
3 03S-502 TYPICAL SECTION AT SHEAR WALL INTERIOR FOOTING
SCALE: 3/4"=1'-0"



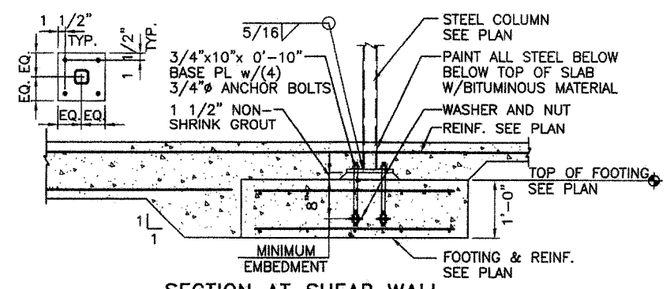
4 03S-502 TYPICAL SECTION AT SHEAR WALL EXTERIOR FOOTING
SCALE: 3/4"=1'-0"



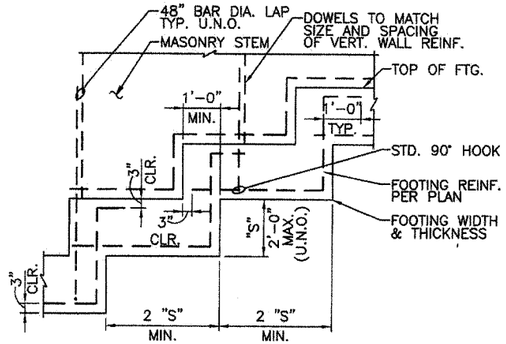
5 03S-502 THICKENED SLAB AT INTERIOR SHEAR WALLS
SCALE: 3/4"=1'-0"



6 03S-502 SECTION AT SHEAR WALL INTERIOR FOOTING
SCALE: 3/4"=1'-0"



7 03S-502 SECTION AT SHEAR WALL FOOTING WITH COLUMN
SCALE: 3/4"=1'-0"



8 03S-502 TYPICAL STEP FOOTING DETAIL
SCALE:1/2"=1'-0"

NOTE: "S" TO BE BLOCK MODULE DIMENSION.

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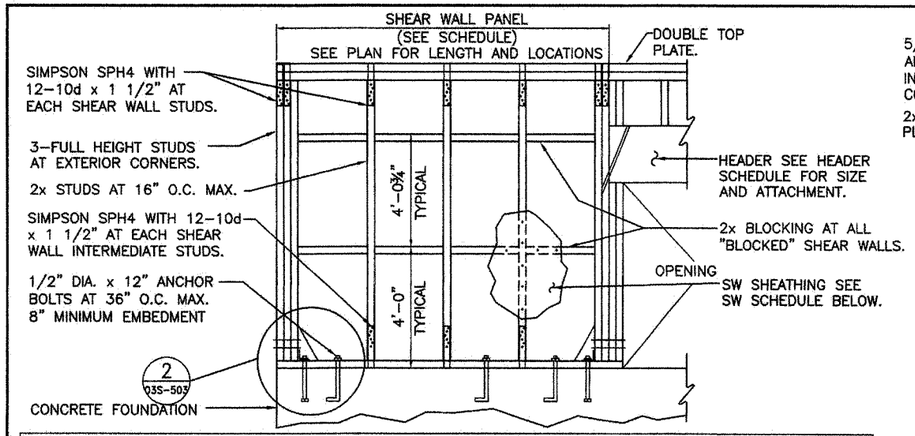
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0	10/13/11	ISSUED FOR CONSTRUCTION		

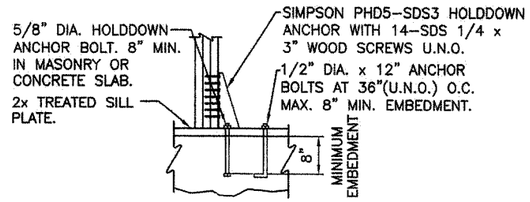
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
FOUNDATION DETAILS

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

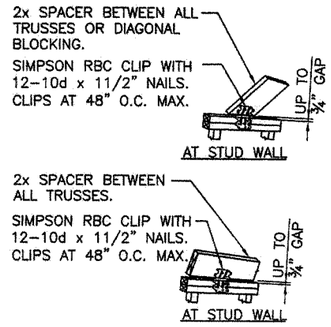
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DESIGNED BY	TLM
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03S-502
REV	

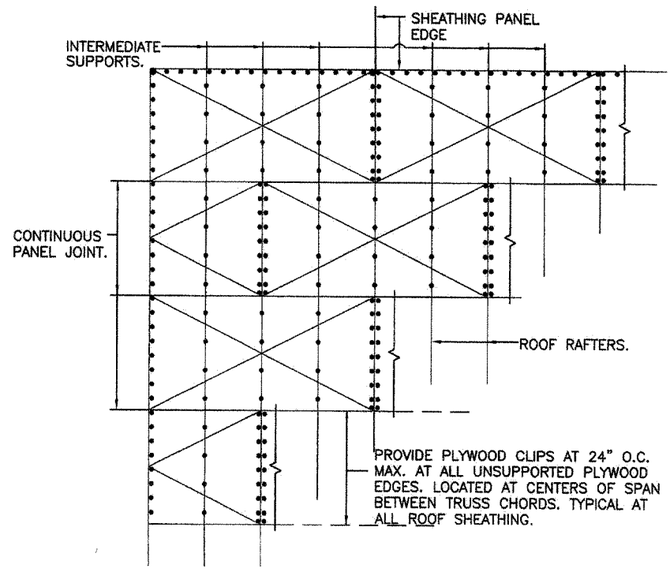




2 03S–503 **TYPICAL SHEAR WALL HOLDDOWN DETAIL**
SCALE: 3/4"=1'–0"



3 03S–503 **ROOF BOUNDARY CLIP (RBC) DETAILS**
SCALE: 1 1/2"=1'–0"



ROOF DIAPHRAGM ATTACHMENT PLAN

SHEAR WALL SCHEDULE					
MARK	L (ft)	SHEATHING CONSTRUCTION	FASTENING PATTERN (EDGE/FIELD)	HOLDDOWN ANCHOR (BY SIMPSON)	HOLDDOWN ANCHOR SIZE AND EMBEDMENT
SW–1	40'–4"	1–SIDE	8d (6"/12")	PDH5	5/8" DIA. w/ 8" MINIMUM EMBEDMENT
SW–2	16'–2"	5/8" GYP. BD. ON 1 SIDE	6d COOLER (4"/4")	PDH5	5/8" DIA. w/ 8" MINIMUM EMBEDMENT
SW–3	20'–2"	5/8" GYP. BD. ON 1 SIDE	6d COOLER (4"/4")	PDH5	5/8" DIA. w/ 8" MINIMUM EMBEDMENT
SW–4	20'–2"	5/8" GYP. BD. ON 1 SIDE	6d COOLER (4"/4")	PDH5	5/8" DIA. w/ 8" MINIMUM EMBEDMENT
SW–5	28'–10"	5/8" GYP. BD. ON 1 SIDE	6d COOLER (4"/4")	NONE REQ'D.	-----
SW–6	27'–4"	1–SIDE	8d (6"/12")	NONE REQ'D.	-----
SW–7	28'–6"	1–SIDE	8d (6"/12")	NONE REQ'D.	-----
SW–8	21'–2"	1–SIDE	8d (6"/12")	NONE REQ'D.	-----
SW–9	15'–3"	1–SIDE	8d (6"/12")	PDH5	5/8" DIA. w/ 8" MINIMUM EMBEDMENT
SW–10	15'–0"	1–SIDE	8d (6"/12")	PDH5	5/8" DIA. w/ 8" MINIMUM EMBEDMENT
SW–11	1'–9"	1–SIDE	8d (6"/12")	HD6A	SEE 4/03S–501

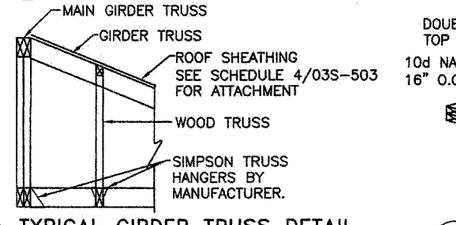
NOTES:
1. BLOCK ALL PANEL EDGES, U.N.O.
2. PROVIDE MIN. OF 2–FULL HEIGHT– 2x AT EACH END OF ALL SHEAR WALLS, TYP. U.N.O. ON DETAILS.
3. HOLD DOWN AT EACH END OF SHEAR WALL U.N.O.
4. SEE SHEATHING SCHEDULE THIS SHEET FOR TYPICAL WALL SHEATHING MATERIAL, U.N.O.

1 03S–503 **TYPICAL SHEAR WALL ELEVATION AND SCHEDULE**
SCALE: 3/4"=1'–0"

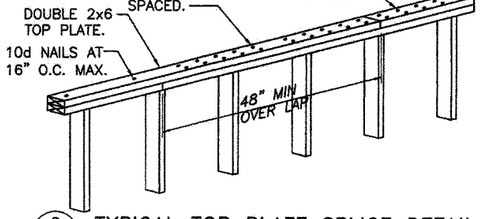
SHEATHING AND FASTENING SCHEDULE					
APA RATED SHEATHING MIN. THICKNESS	SPAN RATING	NAIL SIZES	SUPPORTED PANEL EDGE NAILING	INTERMEDIATE NAILING	NOTES
7/16" (ROOF)	24/16	8d COMMON	6" O.C.	12" O.C.	GLUE ALL SHEATHING WITHIN 5' OF ROOF EDGE
15/32" (EXTERIOR/ SHEAR WALL)	32/16	8d COMMON	6" O.C.	12" O.C.	EXCEPT @ SHEAR WALLS SEE SHEAR WALL SCHEDULE.

NOTES:
1. APA RATED SHEATHING MAY BE OSB, PLYWOOD, OR OTHER WOOD BASED PANEL.

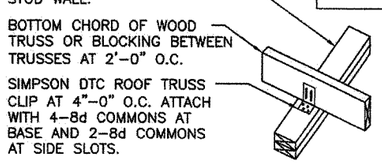
4 03S–503 **SHEATHING ATTACHMENT SCHEDULE AND ROOF DIAPHRAGM PLAN**
SCALE: 3/8"= 1'–0"



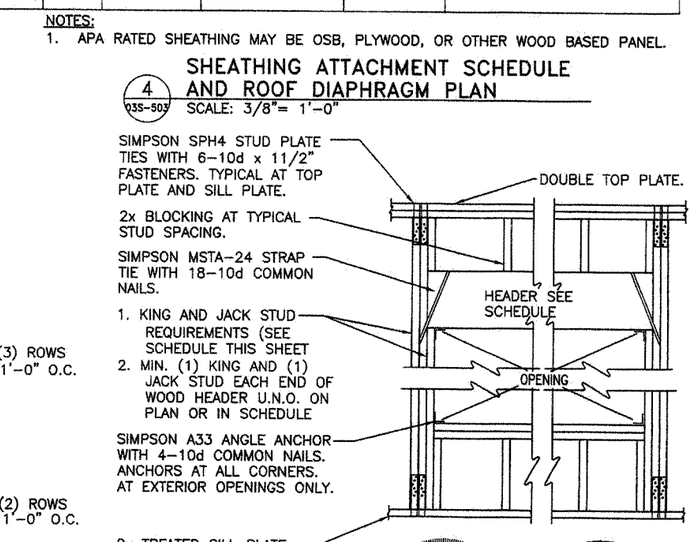
5 03S–503 **TYPICAL GIRDER TRUSS DETAIL**
SCALE: 3/4"=1'–0"



6 03S–503 **TYPICAL TOP PLATE SPLICE DETAIL**
SCALE: 3/4"=1'–0"



7 03S–503 **TYPICAL NO–LOAD BEARING TRUSS DETAIL**
SCALE: 3/4"=1'–0"



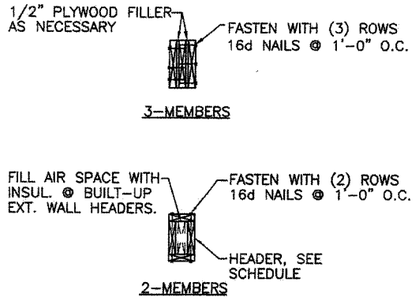
NAILING SCHEDULE	
CONNECTION TYPE	NAILS REQUIRED
BRIDGING TO JOIST, TOENAIL EACH END.	2 – 8d
TOP PLATE TO STUD, END NAIL.	2 – 16d
STUD TO SLOPE PLATE.	4 – 8d TOENAIL (OR) 2 – 16d END NAIL
DOUBLE STUD, FACE NAIL.	16d @ 24" O.C.
DOUBLE TOP PLATE, FACE NAIL.	16d @ 16" O.C.
DOUBLE TOP PLATES, LAP SPLICE.	SEE DETAIL 6/03S–503
BLOCKING OR DIAGONAL BRIDGING BETWEEN JOISTS AND RAFTERS TO TOP PLATE, TOENAIL.	3 – 8d
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL.	2 – 16d
CONTINUOUS HEADER, THREE PIECES.	16d @ 16" O.C. ALONG EACH EDGE
CONTINUOUS HEADER TO STUD, TOENAIL.	4 – 8d
TRUSS OR RAFTER TO PLATE, TOENAIL. PLUS ANCHORS AS SHOWN.	3 – 8d
BUILT UP CORNER STUDS.	16d @ 24" O.C.

NOTE: NAIL ON EACH SIDE FOR THREE PIECE HEADERS.

8 03S–503 **NAILING SCHEDULE**
NO SCALE

WOOD HEADER SCHEDULE				
MARK	HEADER SIZE	JACK STUD	KING STUD	REMARKS
H–1	2–2x8	(2) 2x6	(1) 2x6	
H–2	2–2x12	(2) 2x6	(1) 2x6	
H–3	3–2x12	(2) 2x6	(1) 2x6	

NOTES:
1. SEE ASSEMBLY DIAGRAM ABOVE FOR WOOD HEADER CONSTRUCTION.
2. JACK AND KING STUD REQUIREMENT IS AT EACH END OF WOOD HEADER MEMBER U.N.O.
3. NON–LOAD BEARING INTERIOR WOOD HEADERS ARE AS FOLLOWS:
   A.) SPAN < 6'–0" – (2) 2x6
   B.) SPAN < 8'–0" – (2) 2x8
   C.) SPAN ≥ 8'–0" – SEE PLAN
4. SEE 1/03S–506 FOR BRICK VENEER LOOSE LINTEL SCHEDULE.



9 03S–503 **TYPICAL FRAMED OPENING**
SCALE: 3/4"=1'–0"

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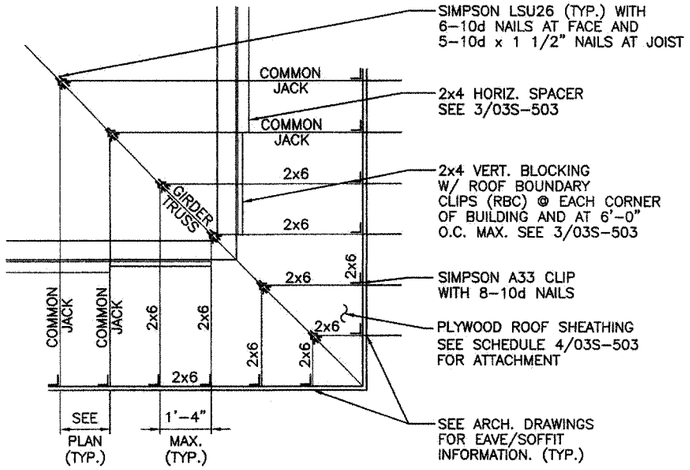
DISTRICT MULTI–CREW BUILDING
AHTD JOB NO. 040554
TYPICAL FRAMING DETAILS

DESIGNED BY	TLM
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR

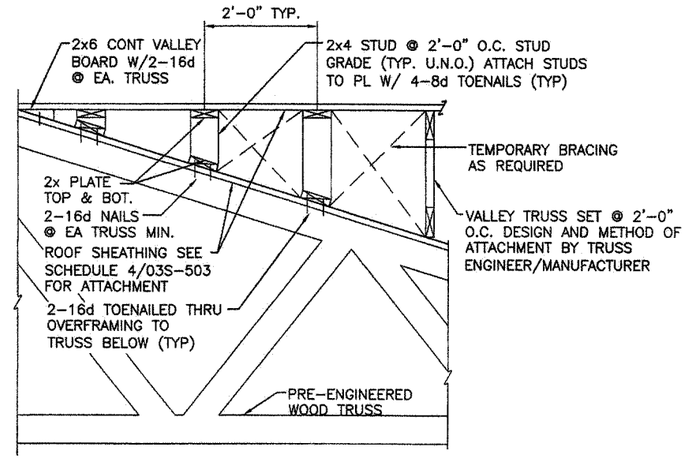
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03S–503
REV	
	69 OF 289

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC No. 510
ARKANSAS

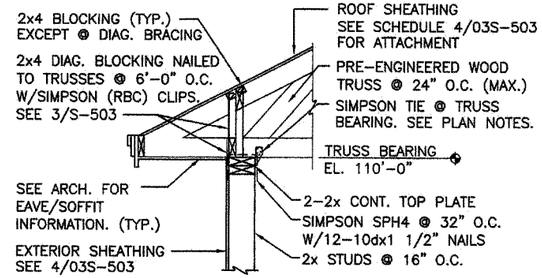
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOSHUA DAVID WESTERHEIDE
10/13/11



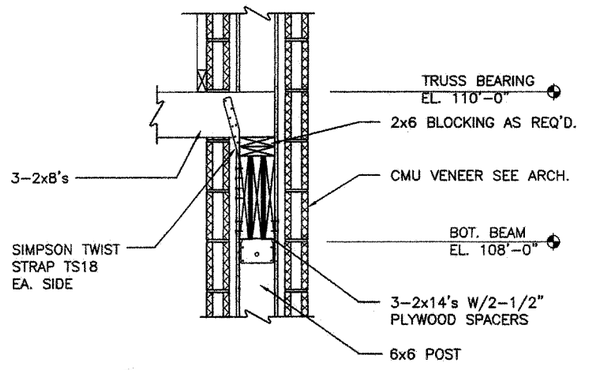
1 03S-504 **TYP. CORNER DETAIL**
SCALE: 1/2"=1'-0"



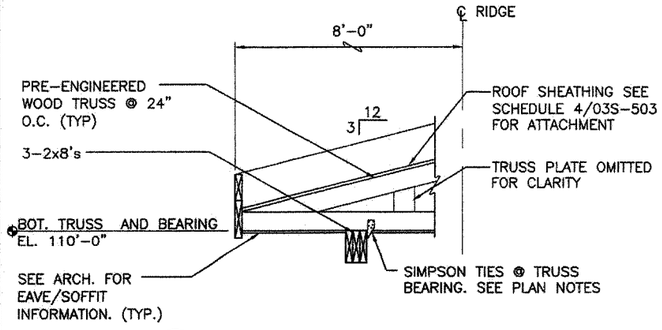
2 03S-504 **FRAMING DETAIL**
SCALE: 3/4"=1'-0"



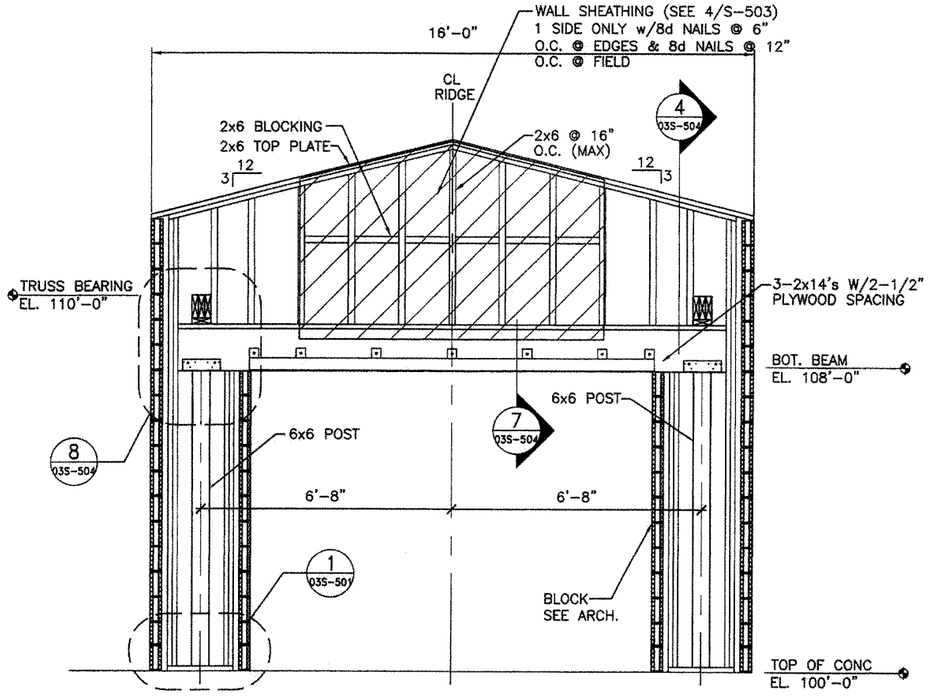
3 03S-504 **FRAMING DETAIL**
SCALE: 3/4"=1'-0"



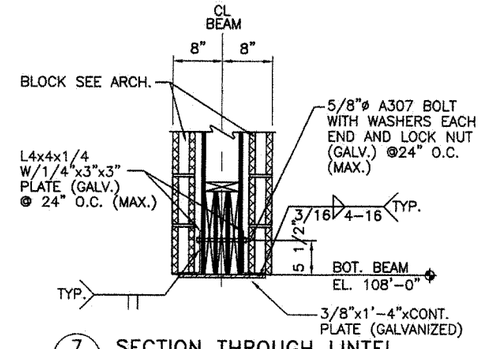
4 03S-504 **ENTRY BEAM DETAIL**
SCALE: 1"=1'-0"



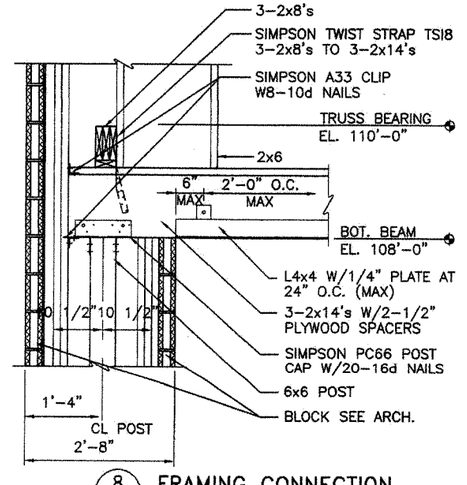
5 03S-504 **PORCH FRAMING DETAIL**
SCALE: 3/4"=1'-0"



6 03S-504 **SECTION AT PORCH CANOPY**
SCALE: 1/2"=1'-0"



7 03S-504 **SECTION THROUGH LINTEL**
SCALE: 1"=1'-0"



8 03S-504 **FRAMING CONNECTION**
SCALE: 3/4"=1'-0"

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 12626 JOHN DAVID WESTERHEIDE 10/13/11

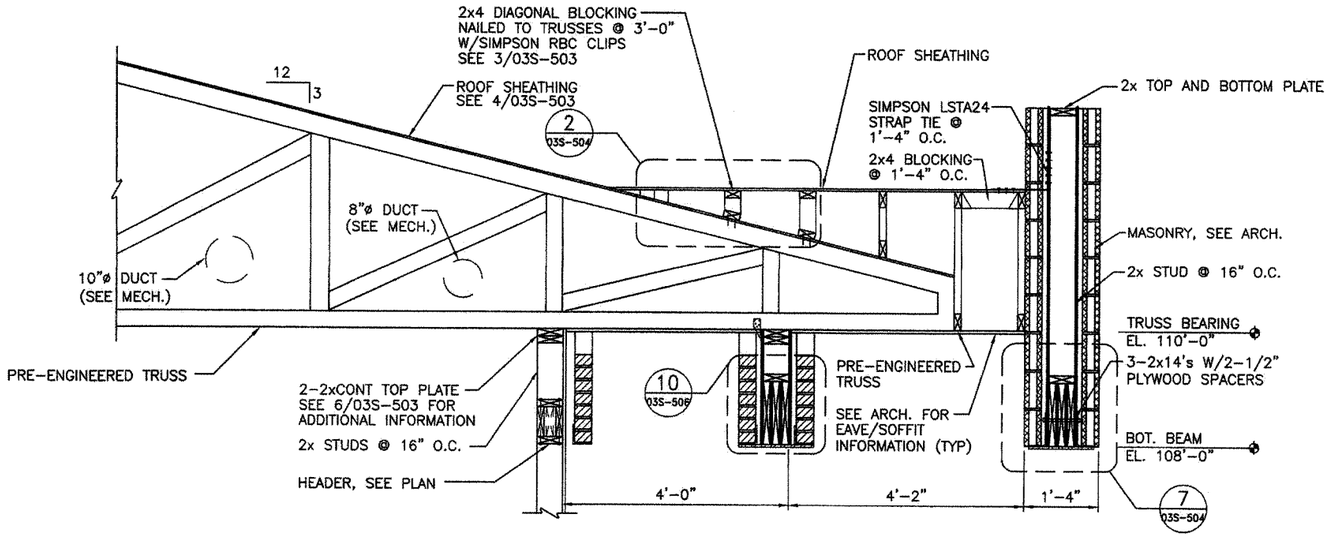
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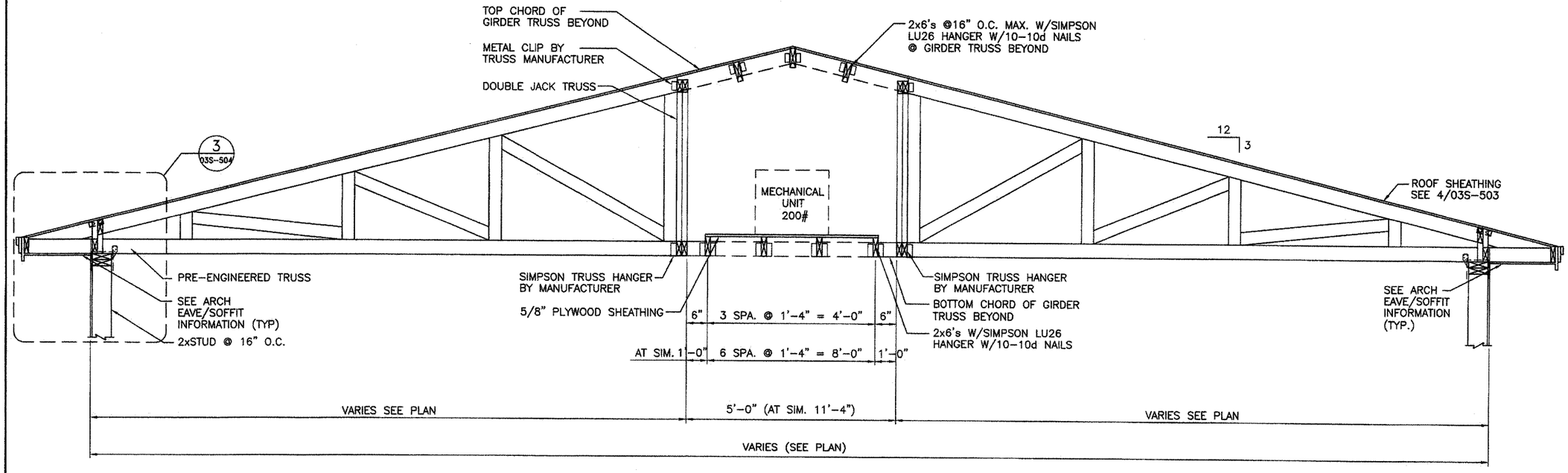
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
TYPICAL FRAMING DETAILS

DESIGNED BY	TLM
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03S-504
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	70 OF 289



1 / 03S-505 SECTION THROUGH PORCH
SCALE: 3/4"=1'-0"



2 / 03S-505 SECTION THROUGH ROOF
SCALE: 3/4"=1'-0"
NOTE:
COORDINATE LOCATIONS OF TRUSS MEMBERS WITH RIGID MECH. DUCTS AS SHOWN ON 03M-101

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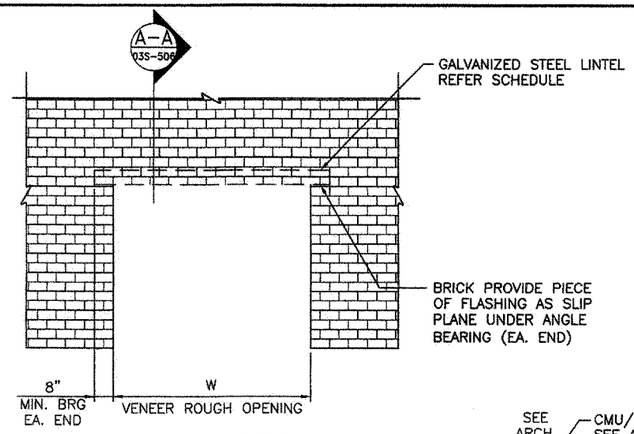
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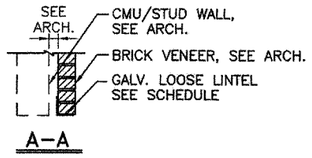
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ROOF FRAMING SECTIONS

DESIGNED BY	TLM
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR

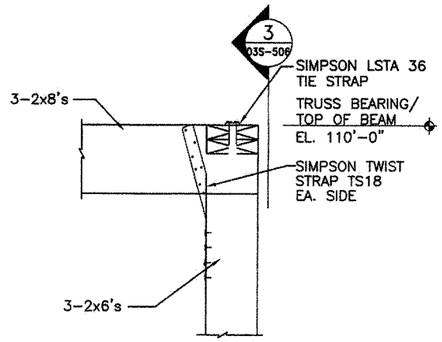
DATE	10/13/11
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SHEET	REV
03S-505	
71 OF 289	



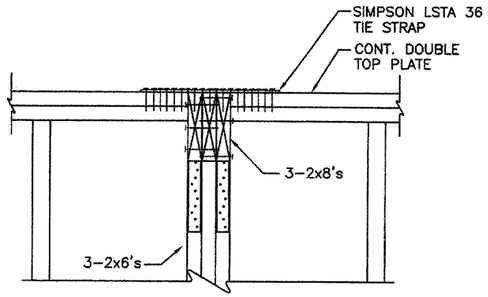
BRICK VENEER LINTEL SCHEDULE	
W	DESCRIPTION
TO 4'-0"	L4x3 1/2x5/16" (LLV)
4'-4" TO 6'-4"	L6x3 1/2x5/16" (LLV)
6'-4" TO 8'-0"	L8x4x1/2" (LLV)



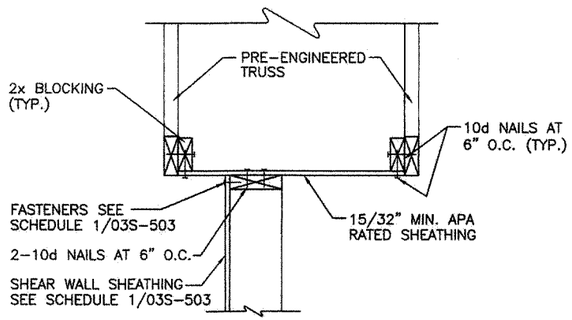
1 03S-506 **BRICK VENEER LOOSE LINTEL SCHEDULE**
SCALE: 3/4"=1'-0"



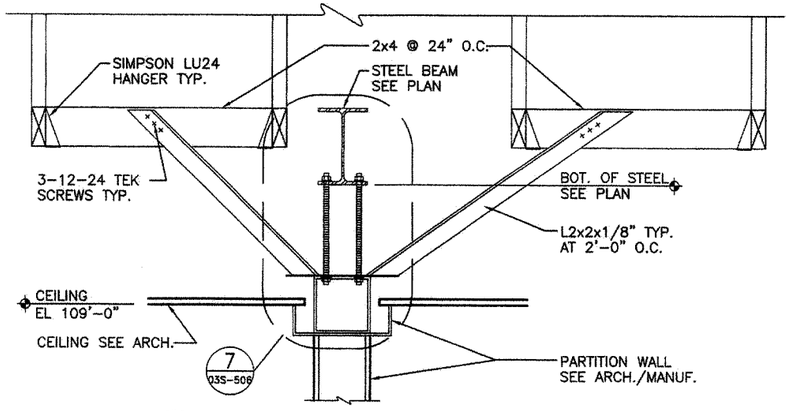
2 03S-506 **SECTION**
SCALE: 1 1/2"=1'-0"



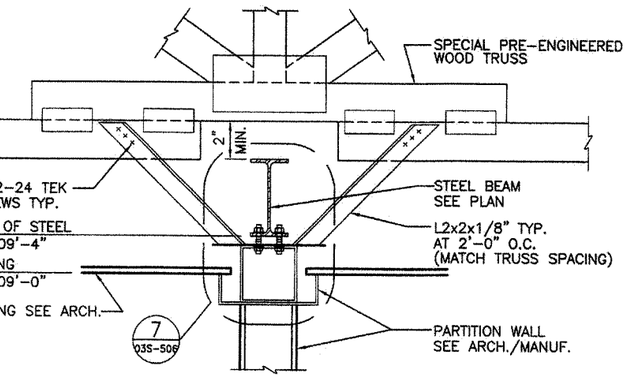
3 03S-506 **SECTION**
SCALE: 1 1/2"=1'-0"



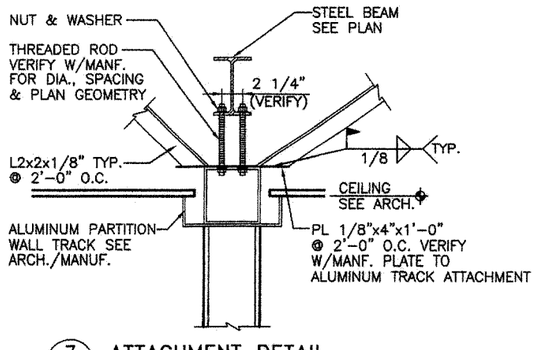
4 03S-506 **FRAMING DETAIL TOP OF INTERIOR SHEAR WALL**
SCALE: 1 1/2"=1'-0"



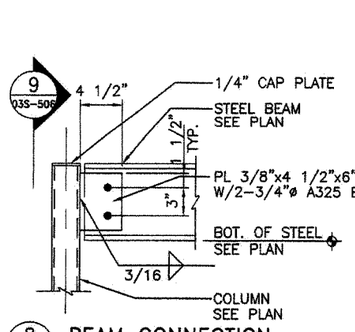
5 03S-506 **PARTITION WALL BRACE DETAIL**
SCALE: 1 1/2"=1'-0"



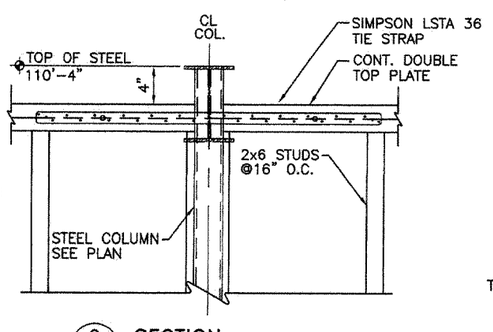
6 03S-506 **PARTITION WALL BRACE DETAIL**
SCALE: 1 1/2"=1'-0"



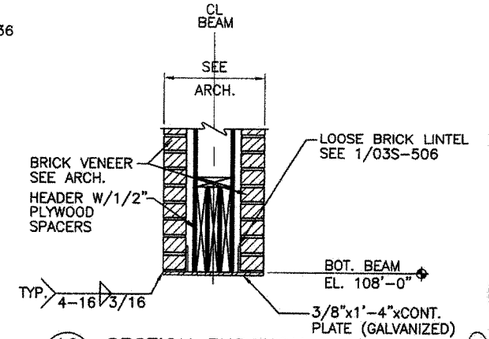
7 03S-506 **ATTACHMENT DETAIL**
SCALE: 1 1/2"=1'-0"



8 03S-506 **BEAM CONNECTION**
SCALE: 1 1/2"=1'-0"



9 03S-506 **SECTION**
SCALE: 1 1/2"=1'-0"



10 03S-506 **SECTION THROUGH LINTEL**
SCALE: 1"=1'-0"

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
FRAMING DETAILS

DESIGNED BY	TLM
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03S-506	
72 OF 289	

SYMBOLS

SECTION CUT
SECTION LOCATION

DETAIL NUMBER
DETAIL LOCATION

KEYED NOTE

DOMESTIC COLD WATER
DOMESTIC HOT WATER
DOMESTIC HOT WATER RECIRCULATING
SANITARY SEWER (UNDERGROUND)
SANITARY SEWER (ABOVEGROUND) — SAN
VENT
CONDENSATE DRAIN — CD
GAS — G
COMPRESSED AIR — A

PIPE UP
PIPE DOWN
TOP BRANCH CONNECTION
BOTTOM BRANCH CONNECTION
TEE UP
TEE DOWN
PIPE CAP
CLEANOUT
PIPE ANCHOR
PIPE GUIDE
FLOOR DRAIN
WALL HYDRANT
HOSE BIBB
UNION
STRAINER
CHECK VALVE
FLOW DIRECTION
FLEXIBLE PIPING CONNECTION

CONTROL VALVE
3-WAY CONTROL VALVE
REDUCER
SHUT OFF VALVE
BALANCING VALVE
GLOBE VALVE
GATE VALVE
BALL VALVE
BUTTERFLY VALVE
PRESSURE REDUCING VALVE
BACKFLOW PREVENTER
THERMOMETER
PRESSURE GAUGE
SAFETY RELIEF VALVE
MANUAL AIR VENT

PLUMBING GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF PLUMBING, FIXTURES, EQUIPMENT AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES. WHERE PLUMBING FIXTURES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL FLOOR PLANS. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE HVAC, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. PLUMBING, FIXTURES, AND EQUIPMENT SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. AT ALL FIRE SEPARATIONS, ALL PIPING WALL PENETRATIONS SHALL BE FIRE-STOPPED WITH U.L. APPROVED FIRE-STOP MATERIAL.
4. REFER TO STRUCTURAL DRAWINGS FOR PENETRATIONS THROUGH FOUNDATIONS.
5. SEAL ALL PIPING PENETRATIONS THROUGH ROOF WITH 1" 6 LB. DENSITY RIGID FIBERGLASS AND A NON-SHRINKING ACOUSTICAL CAULK.
6. SET TOP OF FLOOR DRAIN ELEVATION FLUSH WITH FINISH FLOOR UNLESS NOTED OTHERWISE.
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
8. UNDERGROUND AND ABOVEGROUND PLUMBING MAINS SHALL BE SLOPED AT A MINIMUM OF 1/8 INCH PER FOOT (1.0 PERCENT) UNLESS NOTED. ALL HORIZONTAL VENTS SHALL BE SLOPED 1/4 INCH PER 10 FEET MINIMUM TO DRAIN.
9. PROVIDE BASE CLEANOUTS FOR ALL WASTE STACKS AND VENT STACKS.
10. CLEANOUTS LOCATED ALONG THE HORIZONTAL DRAINS SHALL BE LOCATED AT NOT MORE THAN 100 FOOT INTERVALS.
11. SEE CIVIL DRAWINGS FOR CONTINUATION OF ALL PLUMBING 5'-0" OUTSIDE OF THE BUILDING PERIMETER.
12. ALL HVAC CONDENSATE AND EQUIPMENT DRAINS LOCATIONS TO BE COORDINATED WITH HVAC CONTRACTOR.

ABBREVIATIONS

AA	AUTOMATIC AIR VENT	MBH	BTU PER HOUR (1000'S)
AD	ACCESS DOOR	MC	MECHANICAL CONTRACTOR
ADJ	ADJUSTABLE	MD	MANUAL DAMPER
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
AG	ABOVE GROUND	MIN	MINIMUM
AMB	AMBIENT	NC	NORMALLY CLOSED
APD	AIR PRESSURE DROP	NIC	NOT IN CONTRACT
AWT	AVERAGE WATER TEMPERATURE	NO	NORMALLY OPEN
BHP	BRAKE HORSEPOWER	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	OA	OUTSIDE AIR
CAP	CAPACITY	OED	OPEN END DUCT
CFM	CUBIC FEET PER MINUTE	PC	PLUMBING CONTRACTOR
DB	DRY BULB	PCD	PVC COATED DUCTWORK
DIA	DIAMETER	PH	PHASE
DDC	DIRECT DIGITAL CONTROL	PRESS	PRESSURE
DN	DOWN	PRV	PRESSURE REDUCING VALVE
DX	DIRECT EXPANSION	PSIG	POUNDS PER SQUARE INCH GAUGE
E	EXISTING		
EA	EXHAUST AIR	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	REL	RELOCATED
EC	ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EFF	EFFICIENCY	RL	REFRIGERATION LIQUID
ESP	EXTERNAL STATIC PRESSURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	RS	REFRIGERATION SUCTION
FC	FLEXIBLE CONNECTION	RV	RELIEF VALVE
FLG	FLANGE	SA	SUPPLY AIR
FMD	FLOW MEASURING DEVICE	SC	SENSIBLE COOLING
FPM	FEET PER MINUTE	SHT	SHEET
FPS	FEET PER SECOND	SP	STATIC PRESSURE
GC	GENERAL CONTRACTOR	SRV	SAFETY RELIEF VALVE
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED	TEMP	TEMPERATURE
		TH	TOTAL HEAT
GPM	GALLONS PER MINUTE	TC	TOTAL COOLING
H	HEIGHT	TSP	TOTAL STATIC PRESSURE
HD	HEAD	UG	UNDERGROUND
HP	HORSEPOWER	V	VOLTS
HZ	HERTZ	VB	VACUUM BLOWER
I.E.	INVERT ELEVATION	VEL	VELOCITY
LAT	LEAVING AIR TEMPERATURE	VTR	VENT THROUGH ROOF
LF	LINEAR FEET	W	WIDTH
LWT	LEAVING WATER TEMPERATURE	WB	WET BULB
MAV	MANUAL AIR VENT	WC	WATER COLUMN
MAX	MAXIMUM	WPD	WATER PRESSURE DROP
		WTR	WATER

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER	HC	HEATING COIL
AC	AIR COMPRESSOR	IH	INFRARED HEATING UNIT
ACU	AIR CONDITIONING UNIT	L	LOUVER
AD	AIR DRYER	MAU	MAKEUP AIR UNIT
AHU	AIR HANDLING UNIT	P	PUMP
B	BOILER	PHC	PREHEAT COIL
CC	COOLING COIL	RF	RETURN OR RELIEF FAN
CU	CONDENSING UNIT	RHC	REHEAT COIL
CUH	CABINET UNIT HEATER	SD	SMOKE DETECTOR OR SMOKE DAMPER
EF	EXHAUST FAN		
ET	EXPANSION TANK	SF	SUPPLY FAN
EWH	ELECTRIC WATER HEATER	ST	SOUND TRAP
F	FILTER	UH	UNIT HEATER
FCU	FAN COIL UNIT	VAV	VARIABLE AIR VOLUME BOX
FD	FIRE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
GWH	GAS WATER HEATER		

FIXTURE ABBREVIATIONS

BFP	BACK FLOW PREVENTER	HB	HOSE BIBB
CO	CLEAN OUT	HR	HOSE REEL
DF	DRINKING FOUNTAIN	S	SINK
EWC	ELECTRIC WATER COOLER	SS	SERVICE SINK
F	FAUCET	SS/EW	SAFETY SHOWER/EYEWASH
FCO	FLOOR CLEANOUT	UR	URINAL
FD	FLOOR DRAIN	WC	WATER CLOSET
JS	JANITORS SINK	WCO	WALL CLEANOUT
L	LAVATORY	WF	WASH FOUNTAIN
		WFT	WALL FAUCET
		WH	WALL HYDRANT

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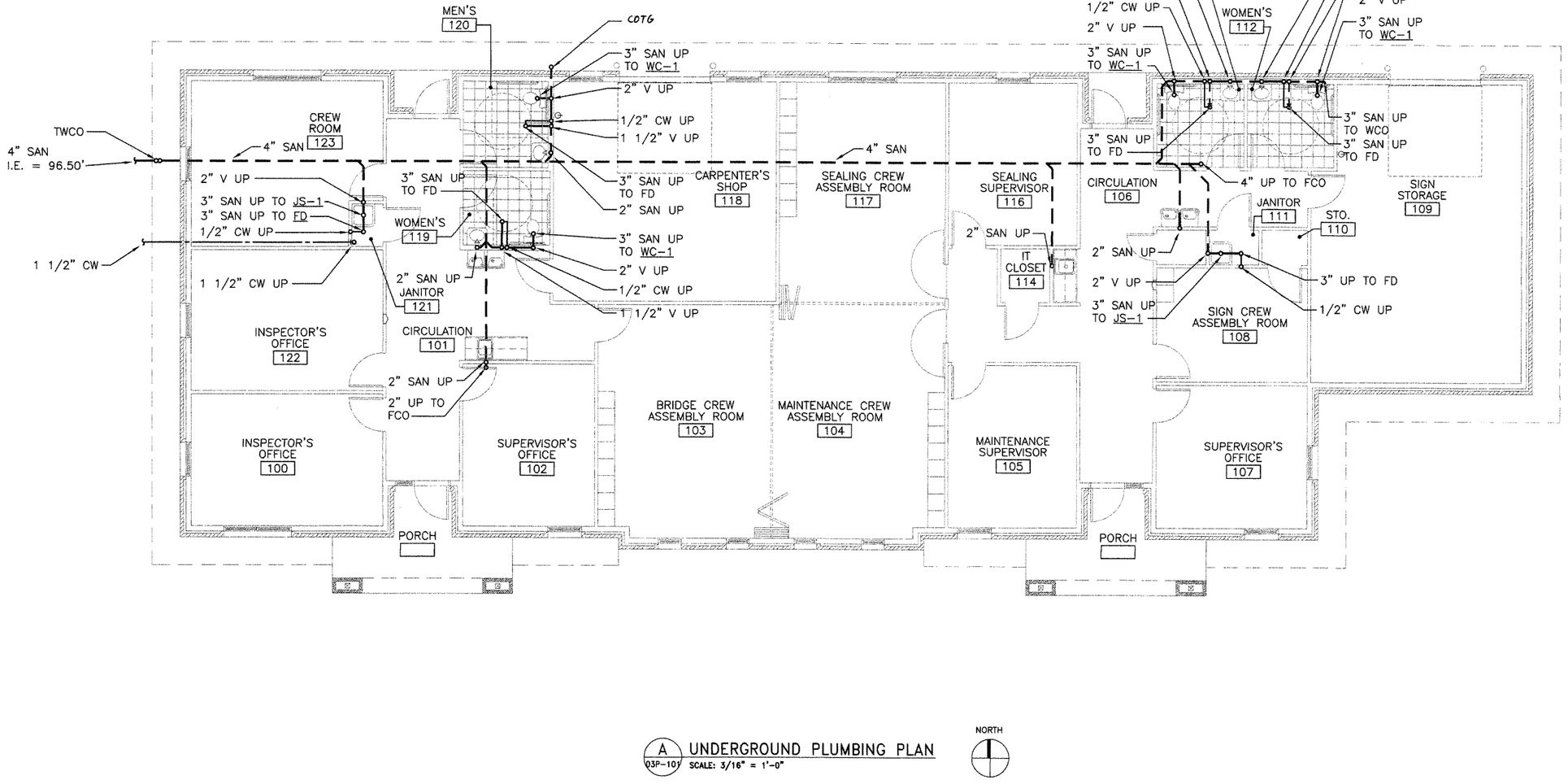
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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
PLUMBING SYMBOLS AND ABBREVIATIONS

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03P-001
REV	
73 OF 289	

Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\03_INSP_MAINT_SIGN\8120_03G-RS01.dwg



A 03P-101 UNDERGROUND PLUMBING PLAN
SCALE: 3/16" = 1'-0"

NORTH

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
UNDERGROUND PLUMBING

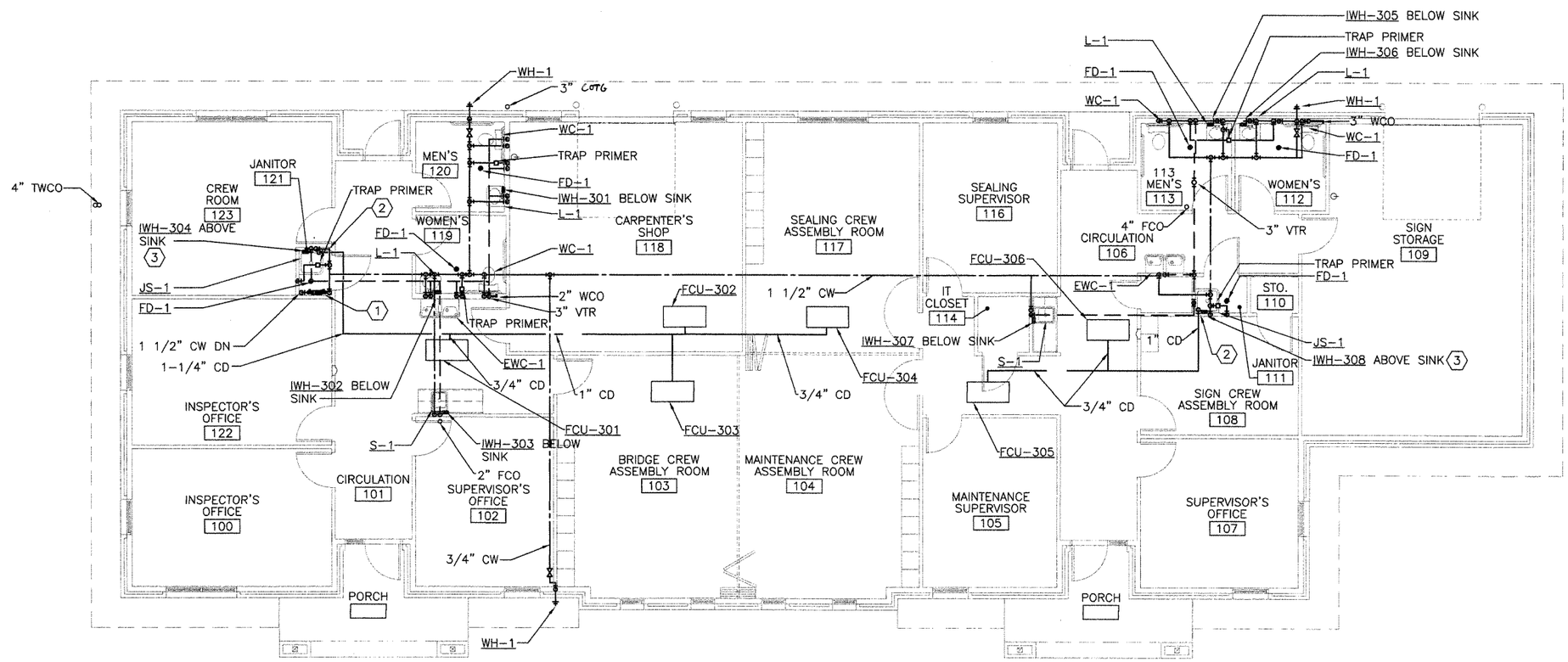
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SHEET	03P-101
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Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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LEE E. SUGGS

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A 03P-201 ABOVE GROUND PLUMBING PLAN
SCALE: 3/16" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO RISER DIAGRAM A/03P-401 FOR DOMESTIC WATER PIPE SIZING.
2. REFER TO RISER DIAGRAM B/03P-401 FOR SANITARY AND VENT PIPE SIZING.

KEYED NOTES:

(1) WATTS SERIES 009 RPZ OR EQUAL. MOUNT TO WALL 3'-0" AFF. ROUTE 3/4" DRAIN AIR GAP ALONG WALL TO JS-1.

(2) TERMINATE CONDENSATE DRAIN ABOVE JANITORS SINK WITH AIR GAP.

(3) MOUNT HEATER AT LEAST 4 FEET ABOVE FLOOD RIM OF SINK. ROUTE ALL WATER LINES INSIDE WALL.

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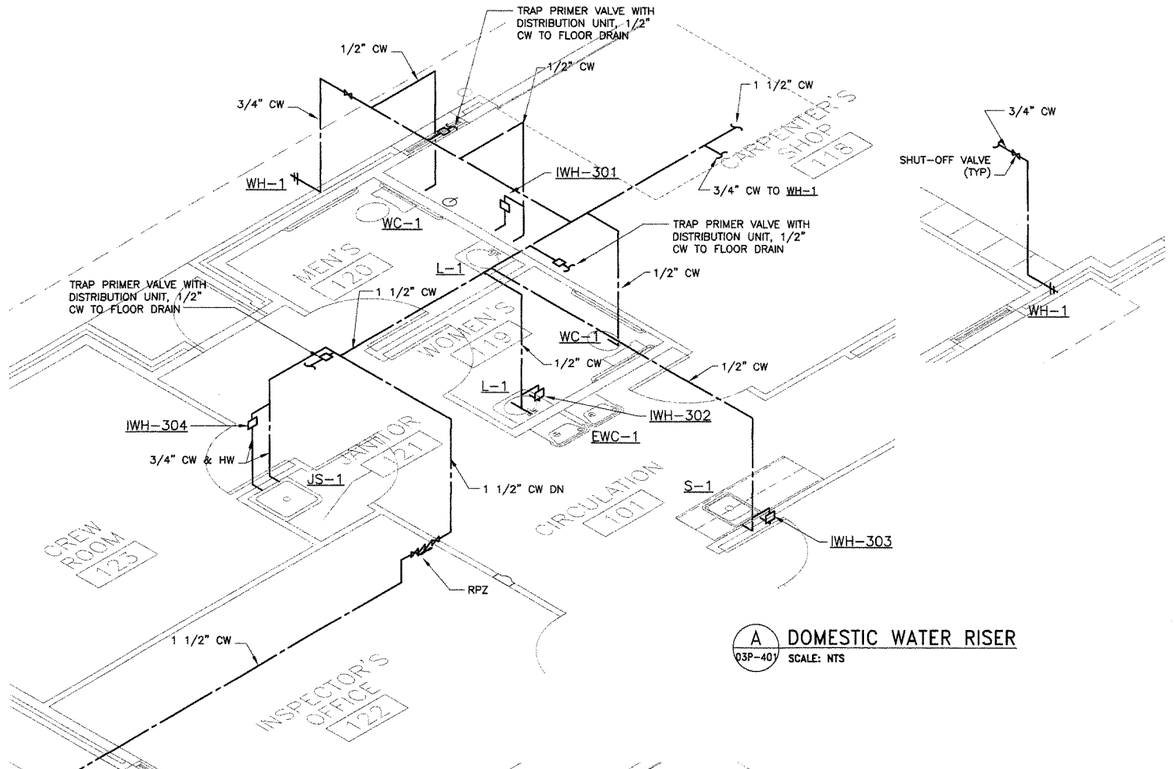
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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ABOVE GROUND PLUMBING

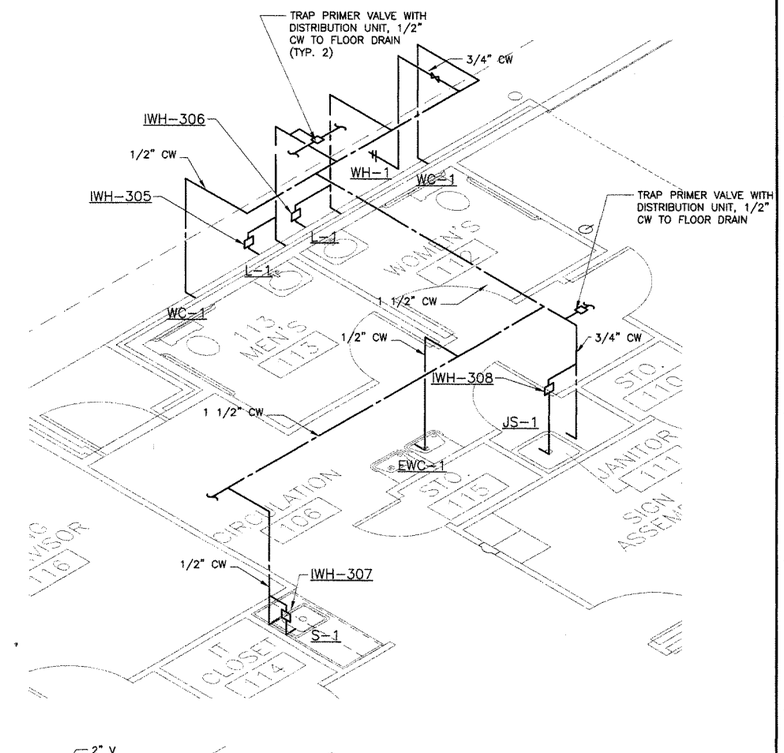
DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

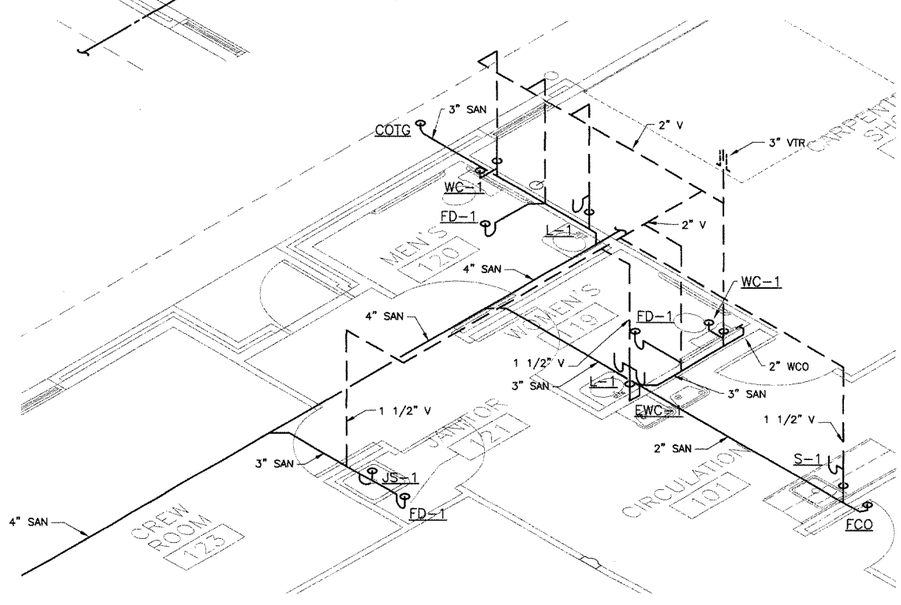
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03P-201	
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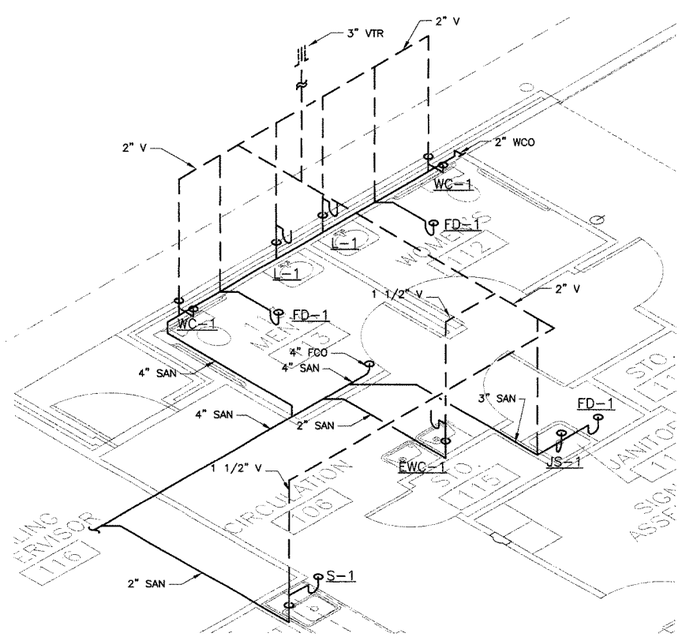
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A DOMESTIC WATER RISER
03P-401 SCALE: NTS







B SANITARY DRAIN AND VENT RISER
03P-401 SCALE: NTS

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
PLUMBING RISERS

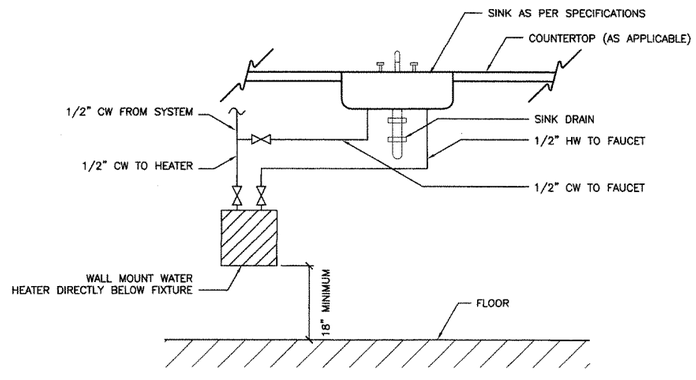
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CHECKED BY	LES
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PROJECT NUMBER	4070812000
SHEET	03P-401
REV	
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FIXTURE SCHEDULE

PLAN MARK	FIXTURE TYPE	HW	CW	WASTE	VENT	FIXTURE DESCRIPTION	FAUCET/VALVE	ACCESSORIES/REMARKS
WC-1	WATER CLOSET (ADA)	–	1/2"	3"	2"	FLOOR MOUNTED TWO PIECE TANK WITH ELONGATED BOWL MAXIMUM 1.28 GPF, 2-1/8" MIN. PASSAGEWAY KOHLER K-3496-HE OR EQUAL	–	WHITE FIXTURE HEAVY DUTY OPEN FRONT SEAT (WHITE) – LESS COVER ANGLE STOP, CHROME ESCUTCHEON 1/2" OD FLEXIBLE RISER
L-1	LAVATORY WALL HUNG (ADA)	1/2"	1/2"	1 1/2"	1 1/2"	19"x17" RECTANGULAR, VITREOUS CHINA, WALL HUNG 4" CENTERS, OVERFLOW, DRILLED FOR CONCEALED ARM CARRIER KOHLER K-1728 OR EQUAL ADA ACCESSIBLE MOUNTING HEIGHT	SINGLE LEVER CONTROL, MOUNTED ON 4" CENTERS, 0.5 GPM AERATOR KOHLER K-15593 OR EQUAL	ANGLE STOPS, CHROME ESCUTCHEONS, 1/2" OD FLEXIBLE RISERS OPEN GRID STRAINER WITH TAIL PIECE CONCEALED ARM FLOOR SUPPORTED CARRIER INSULATE WATER SUPPLIES AND DRAIN
S-1	ENTERTAINMENT SINK	1/2"	1/2"	1 1/2"	1 1/2"	20"X20"X8 1/4" DEEP SELF RIMMING, SINGLE BOWL, 18 GAUGE STAINLESS STEEL, 2 HOLES AT 4" CENTERS KOHLER K-3382 OR EQUAL.	DECK MOUNTED WIDE SPREAD FAUCET, 2.2 GPM AERATOR, LEVER HANDLES, 4" CENTERS, 4" GOOSENECK SPOUT KOHLER K-15275 OR EQUAL	ANGLE STOPS, CHROME ESCUTCHEONS, 1/2" OD FLEXIBLE RISERS OPEN GRID STRAINER WITH TAIL PIECE.
EWC-1	ELECTRIC WATER COOLER (ADA)	–	1/2"	1 1/2"	1 1/2"	REFRIGERATED, BI-LEVEL, LEAD-FREE WATERWAY, FRONT AND SIDE PUSH PADS OASIS MODEL P8ACSL OR EQUAL	–	ADA COMPLIANT INSTALLATION VINYL FINISH COLOR SELECTED BY ARCHITECT
JS-1	JANITORS SINK	1/2"	1/2"	3"	2"	24"x24"x12" HIGH MOLDED STONE JANITORS SINK, 3" DRAIN, RUBBER BUMPERS FIAT TSB-100 OR EQUAL	CHICAGO FAUCET #897-CP OR EQUAL.	INTEGRAL STOPS, PAIL HOOK, VACUUM BREAKER, CHROME PLATED, WALL MOUNTED AT 24" A.F.F., WALL BRACE, 3/4" HOSE END CONNECTION.
WH-1	NON FREEZE WALL HYDRANT	–	–	–	3/4"	BRONZE CASING, NICKEL BRONZE FACE, AND ANTI-SIPHON BACKFLOW PREVENTER WADE 8600,L8 OR EQUAL	–	–
FD-1	FLOOR DRAIN	–	–	3"	1 1/2"	WADE 1102STD5 OR EQUAL	–	JOSAM 88300 SERIES TRAP PRIMER W/ INTEGRAL BACKFLOW PREVENTER, AND VACUUM BREAKER DISTRIBUTION UNIT FOR USE WITH 2-4 FLOOR DRAINS



NOTES:
1. INSULATE DRAIN/SUPPLES AS REQUIRED FOR ADA FIXTURES.
2. JANITOR SINK INSTALLATION SIMILAR BUT HEATER SHALL BE MOUNTED AT LEAST 4 FEET ABOVE FLOOD RIM OF SINK.

A / 03P-601 INSTANEOUS ELECTRIC WATER HEATER DETAIL
SCALE: NTS

WATER HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	TANK CAPACITY (GAL)	TEMP RISE AT GPM	INPUT (KW)	ELECTRICAL DATA		NOTES
						FLA	V/PH/HZ	
IWH-301	EEMAX	SP4277	N/A	56 @ 0.5 GPM	4.1	14.8	277/1/60	–
IWH-302	EEMAX	SP4277	N/A	56 @ 0.5 GPM	4.1	14.8	277/1/60	–
IWH-303	EEMAX	EX90	N/A	61 @ 1.0 GPM	9.0	33	277/1/60	–
IWH-304	EEMAX	EX160T2	N/A	61 @ 1.0 GPM	16.0	2X29	277/1/60	–
IWH-305	EEMAX	SP4277	N/A	56 @ 0.5 GPM	4.1	14.8	277/1/60	–
IWH-306	EEMAX	SP4277	N/A	56 @ 0.5 GPM	4.1	14.8	277/1/60	–
IWH-307	EEMAX	EX90	N/A	61 @ 1.0 GPM	9.0	33	277/1/60	–
IWH-308	EEMAX	EX160T2	N/A	68 @ 1.5 GPM	16.0	2X29	277/1/60	–

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
PLUMBING SCHEDULES

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03P-601
REV	
	77 OF 289

CERTIFICATE OF AUTHORIZATION
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No. 510
ARKANSAS

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REGISTERED PROFESSIONAL ENGINEER
No. 11074
LEE E. SUGGS

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SYMBOLS

SECTION CUT
SECTION LOCATION

DETAIL NUMBER
DETAIL LOCATION

KEYED NOTE

THERMOSTAT, HUMIDISTAT MOUNTED 48" AFF

DUCT DROP

DUCT RISE

FLEXIBLE DUCT CONNECTION

MOTORIZED DAMPER

BACKDRAFT DAMPER

MANUAL DAMPER

(FD) FIRE DAMPER
(SD) SMOKE DAMPER
(FD/SD) FIRE/SMOKE DAMPER

SUPPLY DUCT SECTION

RETURN, OUTSIDE AIR, OR EXHAUST DUCT SECTION

HWS — HEATING WATER SUPPLY
HWR — HEATING WATER RETURN
CWS — CHILLED WATER SUPPLY
CWR — CHILLED WATER RETURN

PIPE UP
PIPE DOWN
TOP BRANCH CONNECTION
BOTTOM BRANCH CONNECTION
TEE UP
TEE DOWN
PIPE CAP
PIPE ANCHOR
PIPE GUIDE
UNION
STRAINER
CHECK VALVE
FLOW DIRECTION
FLEXIBLE PIPING CONNECTION

CONTROL VALVE
3-WAY CONTROL VALVE
REDUCER
SHUT OFF VALVE
BALANCING VALVE
GLOBE VALVE
GATE VALVE
BALL VALVE
BUTTERFLY VALVE
PRESSURE REDUCING VALVE
BACKFLOW PREVENTER
THERMOMETER
PRESSURE GAUGE
SAFETY RELIEF VALVE
MANUAL AIR VENT

MECHANICAL GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST TO THE GOVERNMENT. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL NEW DUCTWORK, PIPING, AIR DEVICES, AND EQUIPMENT WITH NEW WIRING, LIGHTING, AND PIPING. WHERE AIR DEVICES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. EQUIPMENT, DUCTWORK, AND PIPING ARRANGEMENTS SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. FLEXIBLE DUCT RUNOUTS SHALL BE SAME SIZE AS DIFFUSER INLET. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".

DUCT SIZING

20/10 = 20" WIDE X 10" DEEP DUCT

10"ø = 10" DIAMETER ROUND DUCT

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11074
LEE E. SUGGS

ABBREVIATIONS

AA	AUTOMATIC AIR VENT	MBH	BTU PER HOUR (1000'S)
AD	ACCESS DOOR	MC	MECHANICAL CONTRACTOR
ADJ	ADJUSTABLE	MD	MANUAL DAMPER
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
AG	ABOVE GROUND	MIN	MINIMUM
AMB	AMBIENT	NC	NORMALLY CLOSED
APD	AIR PRESSURE DROP	NIC	NOT IN CONTRACT
AWT	AVERAGE WATER TEMPERATURE	NO	NORMALLY OPEN
BHP	BRAKE HORSEPOWER	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	OA	OUTSIDE AIR
CAP	CAPACITY	OED	OPEN END DUCT
CFM	CUBIC FEET PER MINUTE	PC	PLUMBING CONTRACTOR
DB	DRY BULB	PCD	PVC COATED DUCTWORK
DIA	DIAMETER	PH	PHASE
DDC	DIRECT DIGITAL CONTROL	PRESS	PRESSURE
DN	DOWN	PRV	PRESSURE REDUCING VALVE
DX	DIRECT EXPANSION	PSIG	POUNDS PER SQUARE INCH GAUGE
E	EXISTING		
EA	EXHAUST AIR	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	REL	RELOCATED
EC	ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EFF	EFFICIENCY	RL	REFRIGERATION LIQUID
ESP	EXTERNAL STATIC PRESSURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	RS	REFRIGERATION SUCTION
FC	FLEXIBLE CONNECTION	RV	RELIEF VALVE
FLG	FLANGE	SA	SUPPLY AIR
FMD	FLOW MEASURING DEVICE	SC	SENSIBLE COOLING
FPM	FEET PER MINUTE	SHT	SHEET
FPS	FEET PER SECOND	SP	STATIC PRESSURE
GC	GENERAL CONTRACTOR	SRV	SAFETY RELIEF VALVE
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED	TEMP	TEMPERATURE
		TH	TOTAL HEAT
GPM	GALLONS PER MINUTE	TC	TOTAL COOLING
H	HEIGHT	TSP	TOTAL STATIC PRESSURE
HD	HEAD	UG	UNDERGROUND
HP	HORSEPOWER	V	VOLTS
HZ	HERTZ	VB	VACUUM BLOWER
I.E.	INVERT ELEVATION	VEL	VELOCITY
LAT	LEAVING AIR TEMPERATURE	VTR	VENT THROUGH ROOF
LF	LINEAR FEET	W	WIDTH
LWT	LEAVING WATER TEMPERATURE	WB	WET BULB
MAV	MANUAL AIR VENT	WC	WATER COLUMN
MAX	MAXIMUM	WPD	WATER PRESSURE DROP
		WTR	WATER

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER	IH	INFRARED HEATING UNIT
AC	AIR COMPRESSOR	L	LOUVER
ACU	AIR CONDITIONING UNIT	MAU	MAKEUP AIR UNIT
AD	AIR DRYER	P	PUMP
AHU	AIR HANDLING UNIT	PHC	PREHEAT COIL
B	BOILER	RF	RETURN OR RELIEF FAN
CC	COOLING COIL	RHC	REHEAT COIL
CU	CONDENSING UNIT	SD	SMOKE DETECTOR OR SMOKE DAMPER
CUH	CABINET UNIT HEATER		
EF	EXHAUST FAN	SF	SUPPLY FAN
ET	EXPANSION TANK	ST	SOUND TRAP
F	FILTER	UH	UNIT HEATER
FCU	FAN COIL UNIT	VAV	VARIABLE AIR VOLUME BOX
FD	FIRE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
HC	HEATING COIL	WH	WATER HEATER

GRILLES, REGISTERS, AND DIFFUSER TAGS

SUPPLY REGISTER TAG

A	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

SUPPLY DIFFUSER TAG

B	GRD TYPE
6"ø	NECK SIZE
100	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

RETURN/EXHAUST GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

TRANSFER GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
(TYP #)	TYPICAL OF QUANTITY

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
MECHANICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	CMS
DRAWN BY	CMS
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03M-001
REV	
78 OF 289	

Xrefs: P:\LIT\Civ\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\03_INSP_MAINT_SIGN\8120_03G-BS01.dwg

GENERAL NOTES:

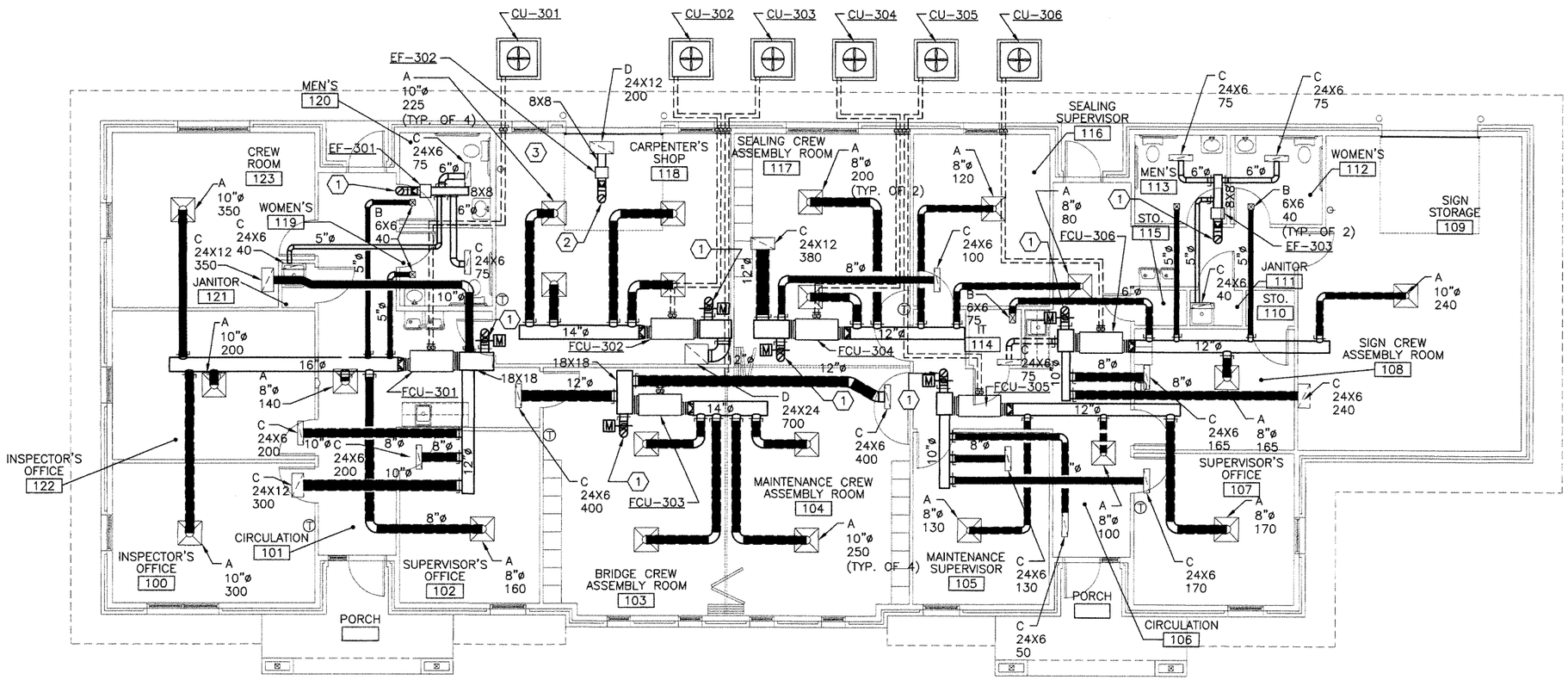
1. ROUTE RIGID DUCTWORK THROUGH WOOD TRUSSES.
2. INTERLOCK START/STOP OF EF-301 WITH FCU-301. INTERLOCK START/STOP OF EF-302 WITH FCU-302. INTERLOCK START/STOP OF EF-303 WITH FCU-306.
3. INTERLOCK OUTSIDE AIR INTAKE MOTORIZED DAMPER WITH THE ASSOCIATED FCU SUCH THAT WHEN THE FCU STARTS THE DAMPER IS OPENS, AND WHEN THE FCU STOPS THE DAMPER CLOSES.
4. FLEXIBLE DUCT DIAMETER SHALL EQUAL DIFFUSER NECK SIZE.

KEYED NOTES:

(1) EXTEND 8"ø UP TO GOOSENECK. GOOSENECK SHALL HAVE A 135° ELBOW AND TERMINATE 18" MIN. ABOVE ROOF WITH BIRD SCREEN. COORDINATE ROOF FLASHING AND SEALANT WITH GENERAL CONTRACTOR.

(2) EXTEND 10"ø UP TO GOOSENECK. GOOSENECK SHALL HAVE A 135° ELBOW AND TERMINATE 18" MIN. ABOVE ROOF WITH BIRD SCREEN. COORDINATE ROOF FLASHING AND SEALANT WITH GENERAL CONTRACTOR.

(3) CONTRACTOR TO PROVIDE DUST COLLECTOR, ONEIDA AIR SYSTEMS SUPER DUST GORILLA OR EQUAL, WITH 2 HP FAN, HEPA FILTER, AND 35 GALLON DUST DRUM. PROVIDE STARTER KIT INCLUDING 20' OF FLEXIBLE 5" COLLECTION HOSE. INSTALL AT FINAL LOCATION AS CHOSEN BY OWNER AND CONNECT TO TABLE SAW. COORDINATE FINAL LOCATION OF ELECTRICAL BASED ON OWNER'S INSTALLATION LOCATION.



A MECHANICAL PLAN
03M-101 SCALE: 3/16" = 1'-0"

NORTH

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
MECHANICAL FLOOR PLAN

DESIGNED BY	VRP
DRAWN BY	CMS
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03M-101
REV	
	79 OF 289

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LEE E. SUGGS

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FAN COIL UNIT SCHEDULE

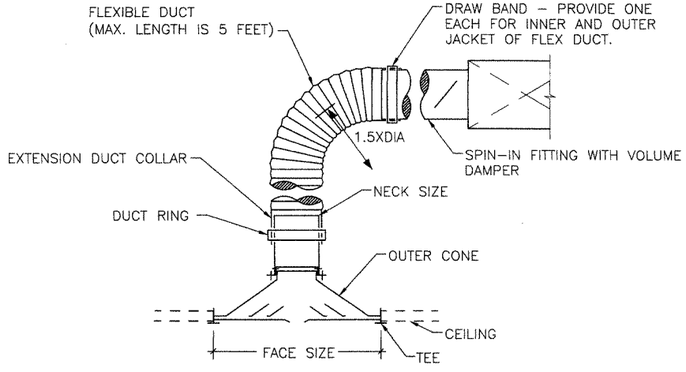
PLAN MARK	MANUFACTURER	MODEL	AREA SERVED	OUTSIDE AIR (CFM)	OUTSIDE AIR TEMP (F)	SUPPLY AIR (CFM)	RETURN AIR (CFM)	SUPPLY FAN		COOLING COIL						ELECTRIC HEATING COIL		FILTERS	ELECTRICAL DATA			NOTES
								HP	ESP (IN WC)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EAT DB (F)	EAT WB (F)	LAT DB (F)	LAT WB (F)	CAPACITY (KW)	STAGES		MCA	MOP	V/PH/HZ	
FCU-301	TRANE	4TEC3F36	OFFICE	160	96	1220	1060	1/2	0.4	36.5	27.5	82	67	59	58	5.76	2	1" MERV 7	37	40	208/1/60	1, 2, 3, 4
FCU-302	TRANE	4TEC3F30	CARPENTRY	200	96	900	700	1/2	0.4	24.5	19.5	82	67	59	58	5.76	2	1" MERV 7	37	40	208/1/60	1, 2, 3, 4
FCU-303	TRANE	4TEC3F30	ASSEMBLY	200	96	1000	800	1/2	0.4	30.7	22.3	82	67	59	58	5.76	2	1" MERV 7	37	40	208/1/60	1, 2, 3, 4
FCU-304	TRANE	4TEC3F18	OFFICE	120	96	600	480	1/3	0.4	18.4	13.3	82	67	59	58	3.6	1	1" MERV 7	24	25	208/1/60	1, 2, 3, 4
FCU-305	TRANE	4TEC3F18	OFFICE	70	96	520	450	1/3	0.4	18.4	13.3	82	67	59	58	3.6	1	1" MERV 7	24	25	208/1/60	1, 2, 3, 4
FCU-306	TRANE	4TEC3F18	ASSEMBLY	130	96	560	430	1/3	0.4	18.4	13.3	82	67	59	58	3.6	1	1" MERV 7	24	25	208/1/60	1, 2, 3, 4

NOTES:
1. SINGLE POINT POWER CONNECTION.
2. PROVIDE AUTOMATED LOGIC UNITARY CONTROLLER WITH AUTOMATED LOGIC THERMOSTAT, AUTOMATIC CHANGEOVER, OCCUPIED/UNOCCUPIED MODE WITH TEMPERATURE SETBACKS, AND TIMECLOCK. INTEGRATE INTO CAMPUS BMS.
3. SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED PERIODS.
4. PROVIDE SECONDARY DRAIN PAIN UNDER ABOVE CEILING UNITS. ROUTE SECONDARY DRAIN SEPARATE FROM PRIMARY DRAIN.

FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	LOCATION	SERVES	FAN TYPE	AIR FLOW (CFM)	SP (IN WC)	DRIVE TYPE	MOTOR (HP)	V/PH/HZ	NOTES
EF-301	GREENHECK	CSP-A250	RM 120	RESTROOMS & JAN CLOSET	CENTRIFUGAL INLINE	190	0.375	DIRECT	83 W	120/1/60	1
EF-302	GREENHECK	CSP-A250	RM 118	CARPENTRY	CENTRIFUGAL INLINE	200	0.375	DIRECT	83 W	120/1/60	1
EF-303	GREENHECK	CSP-A250	RM 113	RESTROOMS & JAN CLOSET	CENTRIFUGAL INLINE	190	0.375	DIRECT	83 W	120/1/60	1

NOTES:
1. INTEGRAL BACKDRAFT DAMPER.



NOTES:
1. SEAL INNER JACKET OF FLEX DUCT TO SPIN-IN FITTING AND DIFFUSER NECK WITH NON-HARDENING SEALER.
2. TURNING RADIUS FROM BRANCH DUCT TO AIR DIFFUSER IS LESS THAN 1.5XDUCT DIAMETER.

A / 03M-601 TYPICAL CEILING DIFFUSER MOUNTING DETAIL
SCALE: NONE

CONDENSING UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	UNIT SERVED	LOCATION	TYPE	NOMINAL CAPACITY (TONS)	OUTDOOR AIR TEMP (F)	REFRIGERANT	ELECTRICAL DATA			NOTES
									MCA	MOP	V/PH/HZ	
CU-301	TRANE	4TWA3036	FCU-301	OUTSIDE	SCROLL	3	105	R410A	7	15	460/3/60	–
CU-302	TRANE	4TWA3030	FCU-302	OUTSIDE	SCROLL	2.5	105	R410A	5	15	460/3/60	–
CU-303	TRANE	4TWA3030	FCU-303	OUTSIDE	SCROLL	2.5	105	R410A	5	15	460/3/60	–
CU-304	TRANE	4TWB3018	FCU-304	OUTSIDE	SCROLL	1 1/2	105	R410A	9	15	208/1/60	–
CU-305	TRANE	4TWB3018	FCU-305	OUTSIDE	SCROLL	1 1/2	105	R410A	9	15	208/1/60	–
CU-306	TRANE	4TWB3018	FCU-306	OUTSIDE	SCROLL	1 1/2	105	R410A	9	15	208/1/60	–

DIFFUSERS, GRILLES, & REGISTER SCHEDULE

PLAN MARK	TYPE	FINISH	MATERIAL	MOUNTING	ACCESSORIES	MANUFACTURER	MODEL	NOTES
A	SUPPLY	WHITE	STEEL	LAY-IN	–	TITUS	TMS	2
B	SUPPLY	WHITE	STEEL	SURFACE	–	TITUS	300RL	1
C	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	–	TITUS	50F	1, 3
D	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	FILTER	TITUS	50F	1, 3

NOTES:
1. REFER TO PLANS FOR SIZES.
2. 24x24 SQUARE.
3. PROVIDE FIELD FABRICATED PLENUM BOX EQUAL TO GRILLE DIMENSIONS AND 10" DEEP MINIMUM.

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LEE E. SIGGS 10/13/11

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
MECHANICAL SCHEDULES

DESIGNED BY	CMS
DRAWN BY	CMS
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
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PROJECT NUMBER	4070812000
SHEET	03M-601
REV	

80 OF 289

Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\03_INSP_MAINT_SIGN\8120_03G-BS01.dwg

ELECTRICAL SYMBOLS LEGEND

CEILING	WALL	
# A	# A	FLUORESCENT FIXTURE, A = FIXTURE TYPE, # = CKT. # TYPICAL
A	A	FLUORESCENT FIXTURE, EQUIPPED WITH BATTERY PACK.
NL A	A	HID, COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
A	A	EXIT LIGHT, DARKENED SECTION(S) DENOTE FACE(S). USE DIRECTIONAL ARROWS WHERE INDICATED.
A	A	FLUORESCENT STRIP FIXTURE
	A	EMERGENCY FIXTURE
	A	REMOTE EMERGENCY FIXTURE

NOTE: REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION

———	CONDUIT CONCEALED
———O	CONDUIT TURNING UP
———⊖	CONDUIT TURNING DOWN
— — —	CONDUIT BELOW GRADE
J	JUNCTION BOX
J	JUNCTION BOX WALL MOUNTED
═══	CABLE TRAY
	HOMERUN TO PANEL BOARD OR DEVICE. TICK MARKS DENOTE NUMBERS OF CIRCUITS. HOMERUN WITH NO TICK MARKS SHALL BE A SINGLE CIRCUIT,
T	TRANSFORMER
HH	HANDHOLE
——|||—	GROUND
M	METER
	SWITCHBOARD, DISTRIBUTION PANEL
▬	PANEL BOARD
	HEAVY DUTY SAFETY SWITCH, MOUNT WITH L OF HANDLE AT 60" A.F.F. REFER TO EQUIPMENT SCHEDULE FOR AMPACITY, NEMA CONFIGURATION, FUSING, ECT.
⊖	SINGLE RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
⊖	DUPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE
WP	DUPLEX GFI RECEPTACLE W/ WEATHERPROOF "IN-USE" TYPE COVER MOUNTED @ 18" A.F.F.
GFI	COMMERCIAL GRADE GFI RECEPTACLE MOUNTED @ 18" A.F.F.
⊖	QUADPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
⊖	CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, MOUNTED RECESSED WHEN INSTALLED IN ACCESSIBLE CEILING PANEL. SECURE TO STRUCTURE PER N.E.C.
	DUPLEX RECEPTACLE OUTLET, FLOOR MOUNTED

⊛	SPECIAL PURPOSE OUTLET, ELECTRICAL CHARACTERISTICS AS SPECIFIED ON PLANS OR SCHEDULE.
$	SINGLE POLE SWITCH, MOUNTED AT 48" A.F.F.
$	SINGLE POLE SWITCH WITH PILOT LIGHT, MOUNTED AT 48" A.F.F.
$3	3-WAY SWITCH, MOUNTED AT 48" A.F.F.
$4	4-WAY SWITCH, MOUNTED AT 48" A.F.F.
$OS	COMBINATION OCCUPANCY/SENSOR/SWITCH, MOUNTED AT 48" A.F.F.
$M	MOTOR RATED SWITCH MOUNTED AT MOTOR, UNLESS NOTED OTHERWISE.
D$	DIMMER SWITCH, MOUNTED AT 48" A.F.F.
OC	OCCUPANCY SENSOR, CEILING MOUNTED.
OC	OCCUPANCY SENSOR, WALL MOUNTED WITH SWIVEL BRACKET.
	MOTOR LOAD

GENERAL NOTES

1. FOR ALL ELECTRICAL WORK, REFER TO DIVISION 26 SPECIFICATION SECTION.
2. HEIGHTS INDICATED ARE TO THE CENTERLINE OF BOX, UNLESS INDICATED OTHERWISE.
3. ALL SYMBOLS MAY NOT BE USED.
4. FOR ALL ELECTRICAL EQUIPMENT INDICATED TO BE SUSPENDED FROM METAL BUILDING FRAMING (TRANSFORMERS, LIGHTING, ETC.), THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUPPLEMENTAL FRAMING, HANGERS, ETC. NECESSARY TO SUPPORT ELECTRICAL ITEMS IN ACCORDANCE WITH THE METAL BUILDING MANUFACTURER'S RECOMMENDATIONS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF HANGERS FOR ELECTRICAL ITEMS WITH METAL ROOF LINER PANEL INSTALLATION SEQUENCE.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, COORDINATE AND CONFIRM WITH THE MECHANICAL AND PLUMBING CONTRACTOR ALL OF THE FOLLOWING:
   A. VERIFY EXACT FEED LOCATIONS AND NUMBER OF CONNECTIONS TO ALL A/C UNITS, FAN COILS, CHILLERS, COOLING TOWERS, SYSTEM PUMPS, EVAP. COOLERS, MAKE-UP AIR UNITS, DAMPER MOTORS, ETC.
   B. ELECTRICAL CHARACTERISTICS (E.G., KW, HP, AMPS, VOLTAGE, PHASE, ETC.): CONFIRM WITH APPROVED MECHANICAL/PLUMBING EQUIPMENT SHOP DRAWINGS.
   C. EXACT LOCATION OF ALL CONTROL PANELS, CONTROL DEVICES, THERMOSTATS, DAMPER MOTORS, ETC.

ABBREVIATIONS

A	
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMP INTURUPTING CAPACITY
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B	
BKR	CIRCUIT BREAKER
BLDG	BUILDING
C	
CKT	CIRCUIT
℄	CENTERLINE
CLG	CEILING
COL	COLUMN
CU	COPPER
°C	DEGREES CELSIUS
D	
DEG	DEGREES
DIA, ø	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DIV	DIVISION
DN	DOWN
DWG	DRAWING
E	
EA.	EXHAUST AIR, EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRICAL WATER COOLER
EX	EXISTING
F	
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE (CONDUIT)
FLR	FLOOR
FT	FOOT, FEET
°F	DEGREES FAHRENHEIT
G	
GA	GAUGE
GALV	GALVANIZED
GFI, GFCI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL (CONDUIT)
H	
HID	HIGH INTENSITY DISCHARGE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & A/C
HZ	HERTZ
I	
ID	INSIDE DIAMETER, IDENTIFICATION
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH, INCHES
J	
J-BOX	JUNCTION BOX
K	
KCMIL	THOUSAND CIRCULAR MILS (AREA)
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR
L	
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
M	
MAX	MAXIMUM
MC	MULTI CONDUCTOR (CABLE)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MOCP, MOP	MAXIMUM OVER CURRENT PROTECTION
MH	MANHOLE, METAL HALIDE
MIL, MILS	1/1000 INCH
MIN	MINIMUM

N	
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFR'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O	
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OEP	OVERHEAD ELECTRICAL PRIMARY
OES	OVERHEAD ELECTRICAL SECONDARY
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.
P	
PE	PHOTO ELECTRIC, PROFESSIONAL ENGINEER
PF	POWER FACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
PWR	POWER
Q	
QTY	QUANTITY
R	
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REF;	REFERENCE, REFER TO
REQD	REQUIRED
REV	REVISION, REVISE
RLA	RUNNING LOAD AMPS
RM	ROOM
RMS	ROOT MEAN SQUARE
RPM	REVOLUTION PER MINUTE
S	
SCH	SCHEDULE, SCHEDULED
SF	SQUARE FEET, SQUARE FOOT
SPEC	SPECIFICATION, SPECIFY
SS	STAINLESS STEEL, STATIONARY SEWER
STD	STANDARD
SUSP	SUSPEND, SUSPENDED
T	
TELECOM	TELECOMMUNICATIONS
THRU	THROUGH
TSTAT	THERMOSTAT
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
U	
U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UEP	UNDERGROUND ELECTRICAL PRIMARY
UES	UNDERGROUND ELECTRICAL SECONDARY
UL	UNDERWRITER'S LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	
V	VOLT, VENT, VERTICAL
VA	VOLT-AMPERE
VERT	VERTICAL
W	
W	WATT, WIDTH, WIRE
W/	WITH
W/O	WITHOUT
X	
XFMR	TRANSFORMER

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13428 — JOSHUA T. LOVICK

SAIC
From Science to Solutions
SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC
201 Presidential Drive
Lowell, Arkansas
(479) 770-5800
(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ELECTRICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	JBB
DRAWN BY	JBB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03E-100
REV	

81 OF 289

KEY NOTES: (THIS SHEET ONLY)

(1) ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL F/03E-403.

GENERAL NOTES (THIS SHEET ONLY):

A. REFER TO SHEET 03E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. CONTRACTOR SHALL COORDINATE ALL OCCUPANCY SENSOR TIME-OUT SETTINGS WITH THE OWNER.

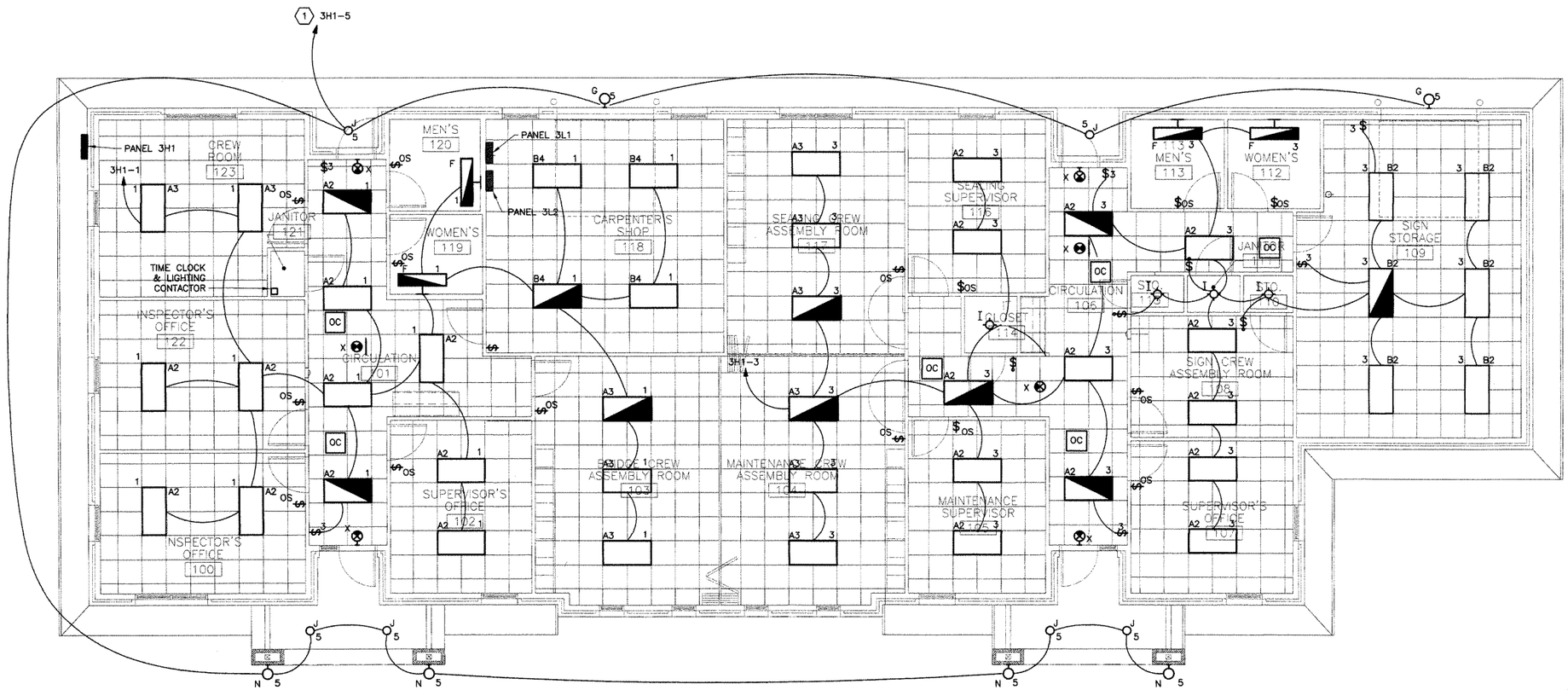
C. ALL LAY-IN FLUORESCENT LIGHTING FIXTURES SHALL BE INSTALLED WITH A 1/2" MC CABLE WHIP DOWN TO EACH FIXTURE. WHIPS SHALL BE MAXIMUM OF 6' LONG.

D. ALL EXIT FIXTURES AND EMERGENCY WALL PACK FIXTURES SHALL BE POWERED FROM AN UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.

E. PROVIDE AN UNSWITCHED 'HOT' CONDUCTOR TO ALL FLUORESCENT LIGHTING FIXTURES EQUIPPED WITH AN EMERGENCY BATTERY BACKUP BALLAST.

F. ALL SPACES INDICATED WITH A CEILING MOUNTED OCCUPANCY SENSOR SHALL ALSO BE PROVIDED WITH A WALL MOUNTED MANUAL OVERRIDE SWITCH AS INDICATED.

G. CIRCUITING BETWEEN LIGHTING FIXTURES AND SWITCHES ARE NOT SHOWN FOR CLARITY.



A 03E-101 ELECTRICAL LIGHTING PLAN
SCALE: 3/16" = 1'-0"

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ELECTRICAL LIGHTING PLAN

DESIGNED BY	JWJ
DRAWN BY	DRM
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03E-101
REV	
82 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA J. JOYCE 10/13/11

KEY NOTES: (THIS SHEET ONLY)

(1) PROVIDE A 75KVA DRY-TYPE TRANSFORMER WITH NEMA 3R ENCLOSURE AS SHOWN. REFER TO THE POWER RISER DIAGRAM ON SHEET 03E-402 FOR EQUIPMENT CONNECTION.

GENERAL NOTES: (THIS SHEET ONLY)

A. REFER TO SHEET 03E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

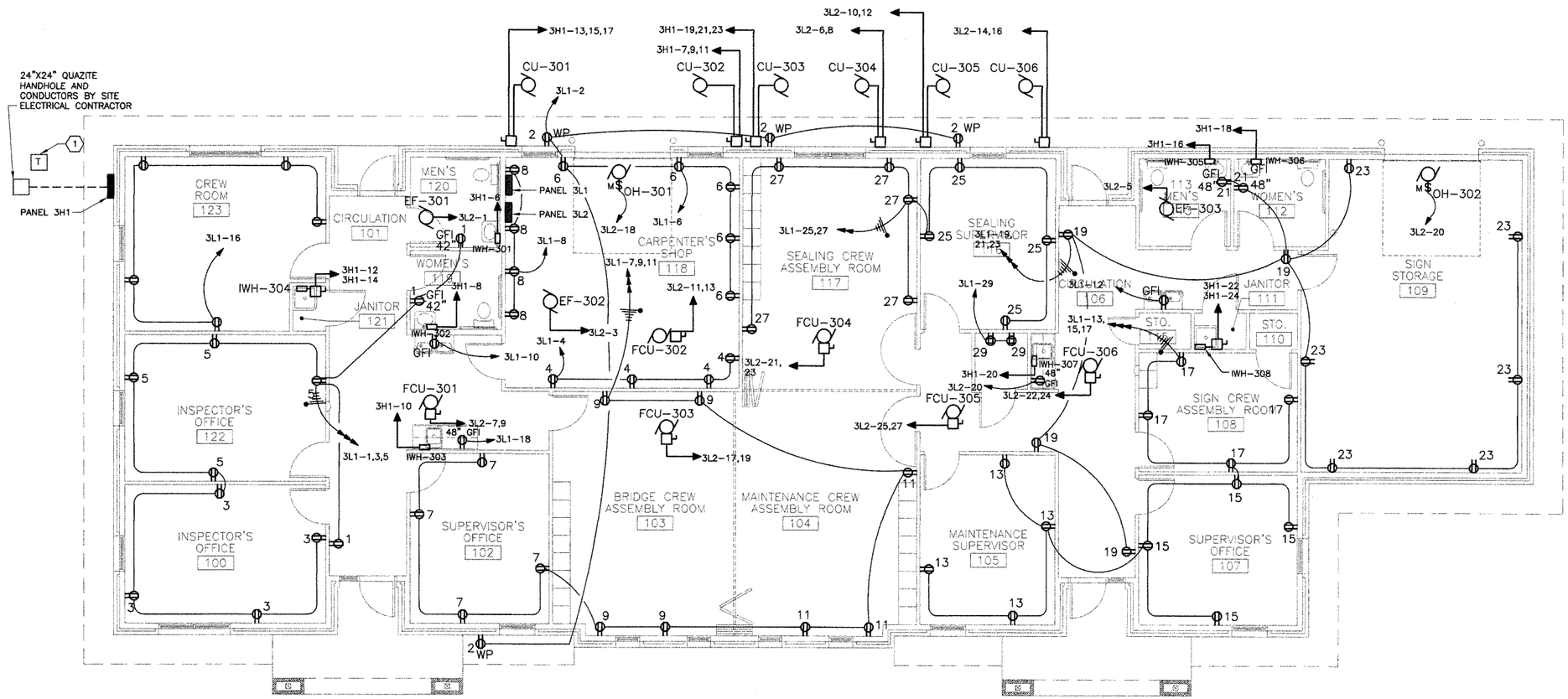
B. COORDINATE THE EXACT LOCATION OF ELECTRICAL OUTLETS WITH THE COMMUNICATIONS DRAWINGS. RECEPTACLES SHALL BE ADJACENT TO EACH TELEPHONE/DATA OUTLET.

C. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

D. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

E. CONTRACTORS SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

F. HOMERUN CIRCUIT SLASHES SHOWN FOR MULTIWIRE BRANCH CIRCUITS ONLY. REFER EQUIPMENT SCHEDULE FOR CIRCUITING TO ALL EQUIPMENT.



A 03E-102 ELECTRICAL POWER PLAN
SCALE: 3/16" = 1'-0"

NORTH

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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ELECTRICAL POWER PLAN

DESIGNED BY	JWJ
DRAWN BY	DRM
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03E-102
REV	

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CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 10/13/11 JOSHUA R. SHOCK

TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	VOLTS	REMARKS / NOTES
A2	LSI	2LLC-G-2-32-RPW-SS010-VOLT	TWO LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	2	32	48" T8	277*	
A3	LSI	2LLC-G-3-32-RPW-SS010-VOLT	THREE LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	3	32	48" T8	277*	
B2	LSI	LA-2-32-SD-SS010-VOLT	TWO LAMP LENSED FLUORESCENT TROFFER	2	32	48" T8	277*	
B4	LSI	LA-4-32-SD-SS010-VOLT	FOUR LAMP LENSED FLUORESCENT TROFFER	4	32	48" T8	277*	
C	LSI	EG-2-32-SS010-VOLT	TWO LAMP ENCLOSED / GASKETED FLUORESCENT	2	32	48" T8	277*	NOTE 8
D	LSI	F22-2-32-SS010-VOLT	TWO LAMP SUSPENDED FLUORESCENT	2	32	48" T8	277*	NOTES 1,3
E	LSI	TEM-WH-SD2	LOW PROFILE 6V EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
EX	LSI	PRX-R-U-WB-WH-WH-PR50	COMBINATION EXIT / EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
F	LSI	W44-4-2-32-SS010-UE	TWO LAMP WALL MOUNT LINEAR FLUORESCENT	2	32	48" T8	277*	NOTE 2
G	LSI	PTWS-FT-150-MH-F-VOLT-BRZ	EXTERIOR HID WALL SCONCE	1	150	150W MH	277*	NOTES 2,8
H	LSI	IHB-400-MH-MT-IAC22-PM	PENDANT MOUNT HID HIGHBAY FIXTURE	1	400	400W MH	277*	NOTES 1,4,5
I	WF HARRIS	50S-D-26PLC-VOLT	ONE LAMP COMPACT FLUORESCENT	1	26	26W PLC	277*	
J	LSI	208V-CFL-1-42T-UNIV	8" RECESSED DOWNLIGHT	1	42	42W CFT	277*	NOTE 9
K	LPDI	383-C-75-G	EXPLOSION PROOF INCANDESCENT (CEILING MOUNT)	1	60	60W A19	120*	NOTES 10,11
L	LSI	DRM2-MF-400-PSMUR-F-TT-BRZ	HID FLOOD LIGHT W/ VERTICAL WALL MOUNT BRACKET	1	400	400W MH	277*	NOTES 2,8
M	LSI	SOV-RD-175-MH-73-VOLT	LENSED HID	1	175	175W MH	277*	NOTES 9'12
N	ESCO LIGHTING	W26000 SERIES	10" UP/DOWN WALL MOUNT CYLINDER (BRONZE)	2	150	150W MH	277*	
O	SPAULDING	RCL-A-P75-H3P	POLE MOUNTED SITE LIGHT, TYPE III DISTRIBUTION	1	750	750W MH	480*	NOTES 14,15
P	LSI	CHA2-400-PSMV-MT-A25-LMC	PENDANT MOUNT HID LOWBAY FIXTURE	1	400	400W MH	277*	NOTES 5,9
X	LSI	EXC-R- -U-WB-WW-SD2	CAST ALUMINUM LED EXT SIGN	-	4	-	277*	NOTES 6,7

FIXTURES INDICATED WITHIN THIS LIGHTING FIXTURE SCHEDULE INCLUDE ALL BUILDING AND SITE LIGHTING WITHIN THE AHTD D4 HEADQUARTERS COMPLEX. NOT ALL FIXTURES ARE USED AT EACH BUILDING.

*PROVIDE VOLTAGE INDICATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE LIGHTING PLAN.

NOTES:
1. PROVIDE WIRE GUARD
2. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
3. SUSPEND FIXTURE AT 10'-0" A.F.F.
4. SUSPEND FIXTURE AT 19'-0" A.F.F.
5. PROVIDE TWIST-LOCK TYPE CONNECTOR AT EACH FIXTURE.
6. PROVIDE ARROWS WHERE INDICATED.
7. POWER FIXTURES FROM UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.
8. U.L. LISTED FOR WET LOCATIONS.
9. U.L. LISTED FOR DAMP LOCATIONS.
10. U.L. LISTED EXPLOSION PROOF (CLASS I, DIV I).
11. PROVIDE WITH EXTRA LONG LIFE INCANDESCENT LAMP.
12. TRIM FINISH SHALL MATCH SURROUNDING AREA.
13. PROVIDE EMERGENCY QUARTZ LIGHTING KIT.
14. POLE MOUNTED AT 34'-0" A.F.G.
15. PROVIDE OPTIONAL ADJUSTABLE MOUNTING ARM.

BUILDING 03 - EQUIPMENT SCHEDULE

EQUIPMENT	DESCRIPTION	VOLTAGE	PHASE	AMPS	CONDUIT	WIRE SIZE	DISCONNECT ENCLOSURE	DISCONNECT SIZE	DISCONNECT FUSING	NOTES
FCU-301	FAN COIL UNIT	208	1	37	3/4"	2#8,1#10(G)	NEMA 1	60A/2P	NON-FUSIBLE	
FCU-302	FAN COIL UNIT	208	1	37	3/4"	2#8,1#10(G)	NEMA 1	60A/2P	NON-FUSIBLE	
FCU-303	FAN COIL UNIT	208	1	37	3/4"	2#8,1#10(G)	NEMA 1	60A/2P	NON-FUSIBLE	
FCU-304	FAN COIL UNIT	208	1	24	3/4"	2#10,1#10(G)	NEMA 1	30A/2P	NON-FUSIBLE	
FCU-305	FAN COIL UNIT	208	1	24	3/4"	2#10,1#10(G)	NEMA 1	30A/2P	NON-FUSIBLE	
FCU-306	FAN COIL UNIT	208	1	24	3/4"	2#10,1#10(G)	NEMA 1	30A/2P	NON-FUSIBLE	
CU-301	CONDENSING UNIT	480	3	7	3/4"	3#12,1#12(G)	NEMA 3R	30A/2P	NON-FUSIBLE	
CU-302	CONDENSING UNIT	480	3	5	3/4"	3#12,1#12(G)	NEMA 3R	30A/3P	NON-FUSIBLE	
CU-303	CONDENSING UNIT	480	3	5	3/4"	3#12,1#12(G)	NEMA 3R	30A/3P	NON-FUSIBLE	
CU-304	CONDENSING UNIT	208	1	9	3/4"	2#12,1#12(G)	NEMA 3R	30A/2P	NON-FUSIBLE	
CU-305	CONDENSING UNIT	208	1	9	3/4"	2#12,1#12(G)	NEMA 3R	30A/2P	NON-FUSIBLE	
CU-306	CONDENSING UNIT	208	1	9	3/4"	2#12,1#12(G)	NEMA 3R	30A/2P	NON-FUSIBLE	
EF-301	EXHAUST FAN	120	1	0.67	3/4"	1#12,1#12(N),1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 1
EF-302	EXHAUST FAN	120	1	0.67	3/4"	1#12,1#12(N),1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 1
EF-303	EXHAUST FAN	120	1	0.67	3/4"	1#12,1#12(N),1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 1
IWH-301	WATER HEATER	277	1	14.8	3/4"	1#12,1#12(N),1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 1
IWH-302	WATER HEATER	277	1	14.8	3/4"	1#12,1#12(N),1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 1
IWH-303	WATER HEATER	277	1	33	3/4"	1#6,1#6(N),1#10(G)	BRANCH CIRCUIT BREAKER			NOTE 1
IWH-304	WATER HEATER	277	1	2X29	2X3/4"	2X(1#8,1#8(N),1#10(G))	NEMA 1	60A/4P	NON-FUSIBLE	
IWH-305	WATER HEATER	277	1	14.8	3/4"	1#12,1#12(N),1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 1
IWH-306	WATER HEATER	277	1	14.8	3/4"	1#12,1#12(N),1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 1
IWH-307	WATER HEATER	277	1	33	3/4"	1#6,1#6(N),1#10(G)	BRANCH CIRCUIT BREAKER			NOTE 1
IWH-308	WATER HEATER	277	1	2X29	2X3/4"	2X(1#8,1#8(N),1#10(G))	NEMA 1	60A/4P	NON-FUSIBLE	
EWC-301	WATER COOLER	120	1	4.8	3/4"	1#12,1#12(N),1#12(G)	RECEPTACLE			
EWC-301	WATER COOLER	120	1	4.8	3/4"	1#12,1#12(N),1#12(G)	RECEPTACLE			
OH-301	OVERHEAD DOOR	120	1	9.4	3/4"	1#12,1#12(N),1#12(G)	MOTOR RATED TOGGLE			
OH-302	OVERHEAD DOOR	120	1	9.4	3/4"	1#12,1#12(N),1#12(G)	MOTOR RATED TOGGLE			

NOTES:
1. PROVIDE APPROVED CIRCUIT BREAKER HANDLE LOCKOUT.

Panel "3L1" — 120 Volts L-N 3Ø, 4W; 208 Volts L-L; 10,000 AIC BRANCH BRKRS; 225A3P MAIN BREAKER; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: NQOD; NEMA 1 ENCLOSURE; FLUSH MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ	Phase BØ	Phase CØ	Brkr.	Conn. Load	Ckt. No.	Service
RCPT - CORR & RR 101,119,120	1	826	20/1				20/1	720	2	RCPT - EXTERIOR
RCPT - OFFICE 100	3	720	20/1				20/1	720	4	RCPT - CARPENTERS SHOP 118
RCPT - OFFICE 122	5	720	20/1				20/1	900	6	RCPT - CARPENTERS SHOP 118
RCPT - OFFICE 102	7	720	20/1				20/1	720	8	RCPT - CARPENTERS SHOP 118
RCPT - ASSEMBLY 103	9	720	20/1				20/1	575	10	EWC-301
RCPT - ASSEMBLY 104	11	540	20/1				20/1	575	12	EWC-302
RCPT - OFFICE 105	13	720	20/1				20/1	300	14	TIME CLOCK
RCPT - OFFICE 107	15	720	20/1				20/1	900	16	RCPT - OFFICE
RCPT - OFFICE 108	17	720	20/1				20/1	500	18	RCPT - COFFEE MAKER
RCPT - CORR 106	19	720	20/1				20/1	500	20	RCPT - COFFEE MAKER
RCPT - RR 112,113	21	360	20/1				20/1	0	22	SPARE
RCPT - STORAGE 109	23	1080	20/1				20/1	0	24	SPARE
RCPT - OFFICE 116	25	720	20/1				20/1	0	26	SPARE
RCPT - ASSEMBLY 117	27	720	20/1					0	28	SPACE
RCPT - IT	29	800	20/1					0	30	SPACE
SPACE	31	0						0	32	SPACE
SPACE	33	0						0	34	SPACE
SPACE	35	0						0	36	SPACE
SPACE	37	0						18043	38	
SPACE	39	0					225/3	14143	40	PANEL 3L2
SPACE	41	0						16543	42	
PROVIDE IDENTIFIED HANDLE TIES FOR ALL MULTIWIRE BRANCH CIRCUITS PER NEC 210.4		Totals	AØ	BØ	CØ	Totals				
		VA	23 989	19 578	22 378	VA				
		AMPS	199.9	163.2	186.5	AMPS				

Panel "3H1" — 277 Volts L-N 3Ø, 4W; 480 Volts L-L; 22,000 AIC BRANCH BRKRS; 200A3P MAIN BREAKER; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: I - LINE; NEMA 1 ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ	Phase BØ	Phase CØ	Brkr.	Conn. Load	Ckt. No.	Service
LGTS - WEST	1	1642	20/1				20/1	0	2	SPARE
LGTS - EAST	3	2249	20/1				20/1	0	4	SPARE
LGTS - EXTERIOR	5	1221	20/1				20/1	4100	6	IWH-301
CU-302	7	1385	15/3				20/1	4100	8	IWH-302
	9	1385					45/1	9000	10	IWH-303
	11	1385					40/1	8000	12	IWH-304
CU-301	13	1939	15/3				40/1	8000	14	IWH-304
	15	1939					20/1	4100	16	IWH-305
	17	1939					20/1	4100	18	IWH-306
CU-303	19	1385	15/3				45/1	9000	20	IWH-307
	21	1385					40/1	8000	22	IWH-308
	23	1385					40/1	8000	24	IWH-308
MIN. 4.5" SPACE	25	0						0	26	MIN. 4.5" SPACE
	27	0						0	28	
	29	0						0	30	
	31	0						0	32	
	33	0						0	34	
	35	0						0	36	
	37	0						23989	38	TRANSFORMER T3 (75KVA)
	39	0					125/3	19578	40	
	41	0						22378	42	
PANEL SHALL BE SIZED FOR A MINIMUM 9" ADDITIONAL SPACE ON EACH SIDE OF BUSSING FOR FUTURE PANEL LOADS.		Totals	AØ	BØ	CØ	Totals				
		VA	51 440	47 636	52 508	VA				
		AMPS	165.7	172.0	189.6	AMPS				

Panel "3L2" — 120 Volts L-N 3Ø, 4W; 208 Volts L-L; 10,000 AIC BRANCH BRKRS; 225A3P MAIN LUGS ONLY; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: NQOD; NEMA 1 ENCLOSURE; FLUSH MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ	Phase BØ	Phase CØ	Brkr.	Conn. Load	Ckt. No.	Service
EF-301	1	83	20/1				20/2	0	2	SPARE
EF-302	3	83	20/1					0	4	
EF-303	5	83	20/1				15/2	1080	6	CU-304
FCU-301	7	4100	40/2					1080	8	
	9	4100					15/2	1080	10	CU-305
FCU-302	11	4000	40/2					1080	12	
	13	4000					15/2	1080	14	CU-306
SPARE	15	0	20/1					1080	16	
FCU-303	17	4000	40/2				20/1	1100	18	OH-301
	19	4000					20/1	1100	20	OH-302
FCU-304	21	2600	25/2				25/2	2600	22	FCU-306
	23	2600						2600	24	
FCU-305	25	2600	25/2				20/1	0	26	SPARE
	27	2600					20/1	0	28	SPARE
SPARE	29	0	20/1				20/1	0	30	SPARE
SPARE	31	0	20/1				20/1	0	32	SPARE
SPACE	33	0						0	34	SPACE
SPACE	35	0						0	36	SPACE
SPACE	37	0						0	38	SPACE
SPACE	39	0						0	40	SPACE
SPACE	41	0						0	42	SPACE
PROVIDE IDENTIFIED HANDLE TIES FOR ALL MULTIWIRE BRANCH CIRCUITS PER NEC 210.4		Totals	AØ	BØ	CØ	Totals				
		VA	18 043	14 143	16 543	VA				
		AMPS	150.4	117.9	137.9	AMPS				

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STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13428 — JOSHUA W. LOVE

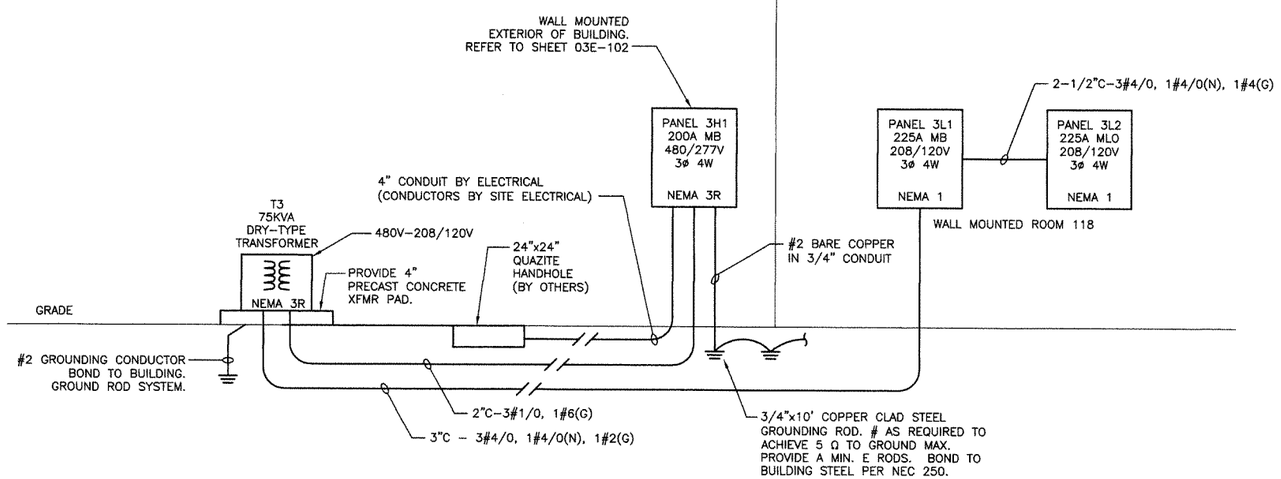
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DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ELECTRICAL SCHEDULES

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03E-401
REV	
84 OF 289	



1 / 03E-402 POWER RISER DIAGRAM
SCALE: NTS

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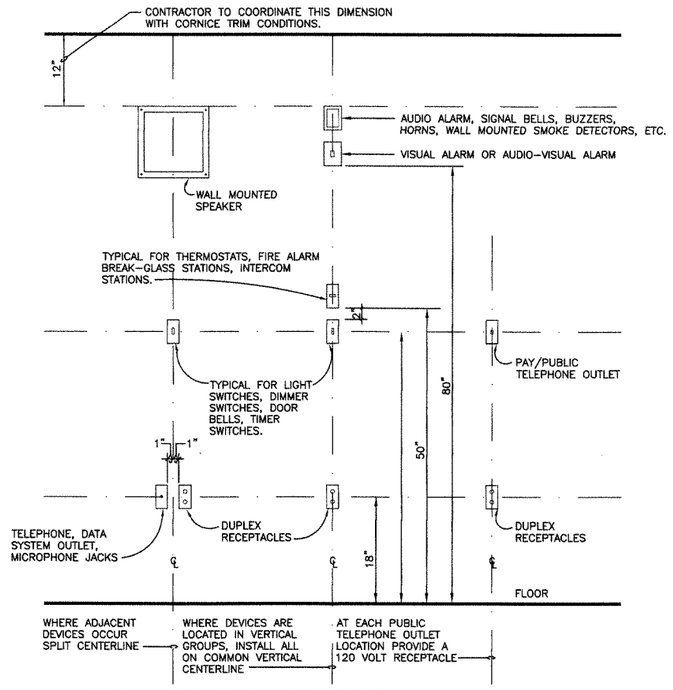
DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
POWER RISER DIAGRAM

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

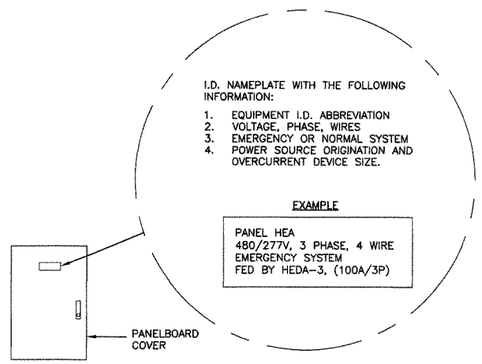
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PROJECT NUMBER	4070812000
SHEET	03E-402
REV	
85 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA T. COYER 10/13/11

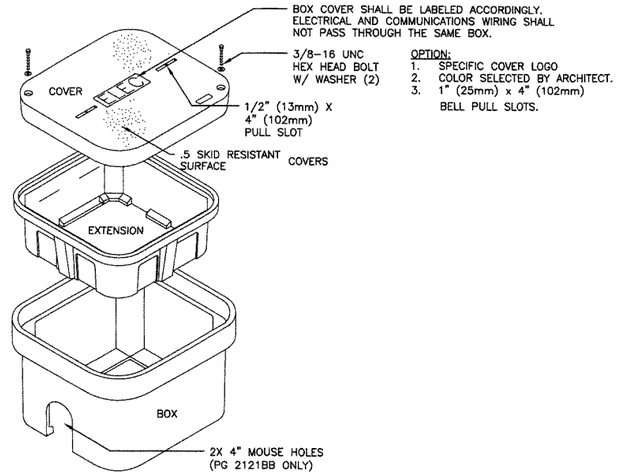


A 03E-403 TYPICAL OUTLET & DEVICE DIMENSIONS
SCALE: NTS

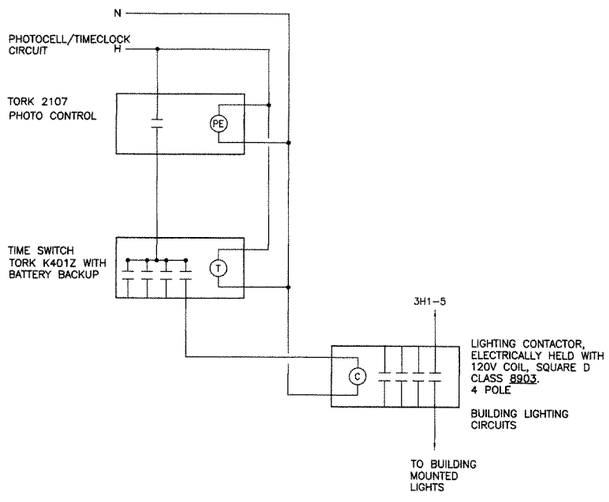


PANEL IDENTIFICATION NOTES:
1. SIMILAR FOR DISCONNECTS, MOTOR CONTROLLERS, TRANSFORMERS, LIGHTING CONTROL PANEL, AUTOMATIC TRANSFER SWITCHES, ETC.

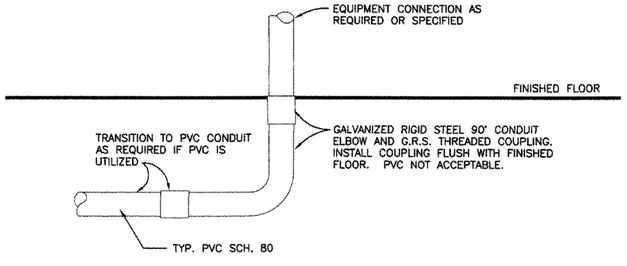
B 03E-403 PANEL IDENTIFICATION DETAIL
SCALE: NTS



C 03E-403 IN-GRADE PULLBOX DETAIL
SCALE: NTS

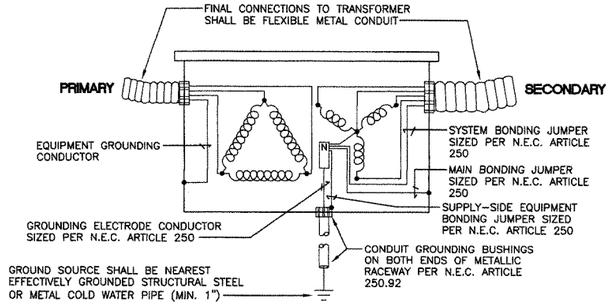


F 03E-403 LIGHTING CONTROL DETAIL
SCALE: NTS



NOTE: UNLESS NOTED OTHERWISE, THIS DETAIL SHALL BE USED, WITH NO EXCEPTIONS, FOR ALL CONDUIT PENETRATIONS IN OPEN FLOOR AREAS OR IN MOVABLE WALLS.

D 03E-403 TYPICAL STUB-UP DETAIL
SCALE: NTS



E 03E-403 TYPICAL DRY-TYPE TRANSFORMER DETAIL
SCALE: NTS

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
ELECTRICAL DETAILS

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
03E-403	
86 OF 289	

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13398
10/13/11
JOSHUA W. JOICE

TELECOMMUNICATIONS SYMBOLS

COMMUNICATIONS SYMBOLS

- W — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS ON WALL PHONE FACEPLATE
- WP — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR OUTSIDE WALL PHONE IN WEATHERPROOF ENCLOSURE
- A — ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR
- B — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR DATA (LAN)
- C — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS – ONE (1) CABLE FOR DATA (LAN) AND ONE (1) CABLE FOR RADIO.
- D — FOUR (4) CATEGORY 6 CABLES ON 8P/8C CONNECTORS
- DENOTES CEILING MOUNTED OUTLET
- DENOTES FLOOR BOX OR POKE THROUGH
- WAP — NEW WIRELESS ACCESS POINT, ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR WITH 30' SERVICE LOOP COILED AND SECURED
- COMMUNICATIONS CABLING SLEEVE OR CONDUIT
- CT — OVERHEAD CABLE TRAY, 12"W UNLESS NOTED OTHERWISE
- TELECOM GROUND BAR
- UNDERGROUND CONDUIT
- 19" COMMUNICATIONS EQUIPMENT RACK
- CROSS CONNECT
- CONDUIT DOWN
- CONDUIT UP
- (P) COMMUNICATIONS POWER POLE
- (J) JUNCTION BOX
- (J) WALL MOUNTED JUNCTION BOX

A/V SYMBOLS

- TV — TELEVISION
- IC — INTERCOM CONNECTION
- V — VOLUME CONTROL
- M — MICROPHONE
- (S) SPEAKER
- S — SPEAKER PENDANT
- S — SPEAKER WALL
- AMP — AUDIO AMPLIFIER
- HEADEND
- WIRELESS ANTENNA
- LCD PROJECTOR
- 1 OUTPUT TAP
- 2 OUTPUT TAP
- 4 OUTPUT TAP
- 8 OUTPUT TAP
- 2/4/8 WAY SPLITTER
- 2–WAY VIDEO AMPLIFIER
- FIBER OPTIC TRANSMITTER
- FIBER OPTIC RECEIVER
- TERMINATOR
- VIDEO EQUALIZER
- VIDEO ATTENUATOR
- COUPLER
- VIDEO AMPLIFIER

SECURITY SYMBOLS

- KEYPAD DEVICE
- CARD ACCESS READER
- CARD ACCESS READER W/KEYPAD
- BIO ACCESS DEVICE
- INTERCOM DEVICE
- FIBER OPTIC MODULE
- MOTION DETECTOR – PASSIVE INFRARED
- ELECTRIC STRIKE
- MOTION DETECTOR VOLUMETRIC
- MONITOR
- PUSH BUTTON
- GLASS BREAKING SENSOR
- BALANCED MAGNETIC SWITCH
- CAPACITANCE SENSOR
- SCREENING DEVICE
- CAMERA – FIXED FOCUS
- PTZ — CAMERA – PTZ
- TURNSTILE
- ELECTROMAGNETIC LOCK
- ANNUNCIATION DEVICE
- SECURITY SCREEN WITH ALARM

OUTSIDE PLANT

- POLE WITH RISER
- MH — MAINTENANCE HOLE
- HH — HAND HOLE
- PROPOSED STRAIGHT SPLICE
- STRAIGHT SPLICE WITH CHANGES
- SPLICE THREE WAY
- DOWN GUY
- DEAD MAN
- BRACED GUY
- SIDEWALK GUY
- GROUND
- ISOLATION GAP
- SPLICE, BURIED CABLE, IN PEDESTAL
- Enc — ENCAPSULATED SPLICE
- CABLE LOOP

LINE TYPES

- –BC– BACKBONE CONDUIT
- –BCC– BACKBONE CONDUIT FOR COPPER
- –BFC– BACKBONE CONDUIT FOR FIBER
- –COP– COPPER BACKBONE
- –OF– OPTICAL FIBER BACKBONE
- -COAX- COAXIAL BACKBONE
- –PDS– PROTECTED DISTRIBUTION SYSTEM

GENERAL NOTES – COMMUNICATIONS

1. ALL COPPER TERMINATION HARDWARE TO BE 110 STYLE IDC, UNO.
2. TERMINATE ALL CONDUCTORS; NO CABLE SHALL CONTAIN NON TERMINATED ELEMENTS EXCEPT THE 25TH PAIR OF BINDER GROUPS IN MULTI–PAIR COPPER BACKBONE CABLE. MAKE TERMINATION ONLY AT INDICATED OUTLETS, TERMINALS, CROSS–CONNECTS AND PATCH PANELS.
3. CABLE MAY NOT BE SPLICED, UNO.
4. MONITOR CABLE PULL TENSION TO ENSURE MANUFACTURER RECOMMENDATION AND INDUSTRY STANDARDS ARE NOT EXCEEDED.
5. PROVIDE PULL STRING IN ALL EMPTY CONDUIT OR INNERDUCT. PULL STRING TO BE RATED FOR 200 lbs. IN ALL CONDUIT.
6. CABLE TRAY TO BE TRAPEZE OR CANTILEVER HUNG ONLY. BOND ALL SECTIONS OF TRAY TOGETHER WITH MANUFACTURER APPROVED BONDING METHOD.
7. PROVIDE PULL BOXES IN CONDUITS NO MORE THAN 100' APART AND PER EVERY 180 DEGREES OF BEND – SIZE PER TIA ALL CABLE TRAY TO BE 12"W U.N.O.
8. FIELD COORDINATE LOCATION OF NEW EQUIPMENT IAW APPLICABLE CODES.
9. ALL OUTLET BOXES ARE 4 11/16" SQUARE WITH SINGLE GANG EXTENSION RING WITH 1" CONDUIT STUBBED INTO CEILING SPACE.
10. NO CONDULETS OR FITTINGS SHALL BE USED.

SECURITY SYSTEM – GENERAL NOTES

1. PROVIDE AND INSTALL ALL SECURITY WIRING, DEVICES AND EQUIPMENT AS INDICATED
2. PROVIDE SUFFICIENT SERVICE LOOP AT EACH END OF SECURITY CABLE FOR PROPER CONNECTION TO AND MAINTENANCE OF EQUIPMENT OR DEVICES
3. ALL SECURITY CABLING TO BE INSTALLED IN METALLIC CONDUIT TO THE ASSOCIATED SECURITY PANEL
4. IN TURN KEY SYSTEMS ALL COMPONENTS PROVIDED ARE TO BE LISTED FOR USE IN THE SYSTEM INDICATED
5. IN TURN KEY SYSTEMS ALL ENCLOSURES AND IDS DEVICES WITH REMOVABLE COVERS SHALL HAVE TAMPER PROTECTION DEVICES CAPABLE OF BEING MONITORED CONTINUOUSLY
6. IN TURN KEY SYSTEMS ALL SECURITY SYSTEM COMMUNICATIONS LEAVING THE FACILITY WILL EMPLOY LINE SECURITY. CERTIFICATES THAT LINE SECURITY HAS BEEN EMPLOYED TO BE PROVIDED.

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13620 — JOSHUA T. TOLTON — 10/13/11

SAIC Energy, Environment & Infrastructure, LLC — CERTIFICATE OF AUTHORIZATION — No. 510 — ARKANSAS

COMMUNICATIONS ABBREVIATIONS LIST

AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
BCC	BACKBONE COPPER CABLE
BKBD	BACKBOARD
BSMT	BASEMENT
BMS	BALANCED MAGNETIC SWITCH
CAT 6	4–PAIR, 24 GA, CATEGORY 6 UTP CABLE
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CD	CABLE DUCT
CER	COMMUNICATIONS EQUIPMENT ROOM
CLST	CLOSET
CMH	COMMUNICATIONS MAINTENANCE HOLE
COMM	COMMUNICATIONS
CT	CABLE TRAY
DEMO	DEMOLITION
DIST	DISTRIBUTION
EES	EARTH ELECTRODE SYSTEM
EF	ENTRANCE FACILITY
EMT	ELECTRICAL METALLIC TUBING
ENL	EXISTING DEVICE NEW LOCATION
ETM	EXISTING TO MOVE
ETR	EXISTING TO REMAIN
ETBR	EXISTING TO BE REMOVED
FO	FIBER OPTIC CABLE
GF/GI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
GF/CI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GI/CF	GOVERNMENT INSTALLED CONTRACTOR FURNISHED
GND	GROUND
IDF	INTERMEDIATE DISTRIBUTION FRAME
IDS	INTRUSION DETECTION SYSTEM
IC	INTERMEDIATE CROSS–CONNECT
IMC	INTERMEDIATE METAL CONDUIT
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MH	MAINTENANCE HOLE
MIN	MINIMUM
MM	MULTIMODE FIBER
MNS	MASS NOTIFICATION SYSTEM
MSB	MAIN SERVICE BUS
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
OSP	OUTSIDE PLANT
PET	PROTECTED ENTRANCE TERMINAL
PR	PAIR
PT	POINT
PTZ	PAN / TILT / ZOOM
PVC	POLY VINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
RSC	RIGID STEEL CONDUIT
RM	ROOM
RU	RACK UNIT
SHT	SHEET
SM	SINGLEMODE FIBER
TBL	TABLE
TGB	TELECOMM GROUNDING BUS BAR
TMGB	TELECOMM MAIN GROUNDING BUS BAR
TR	TELECOMM ROOm
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
W/	WITH

A / 03T–001 — TELECOMMUNICATIONS SYMBOLS AND LEGEND
NTS

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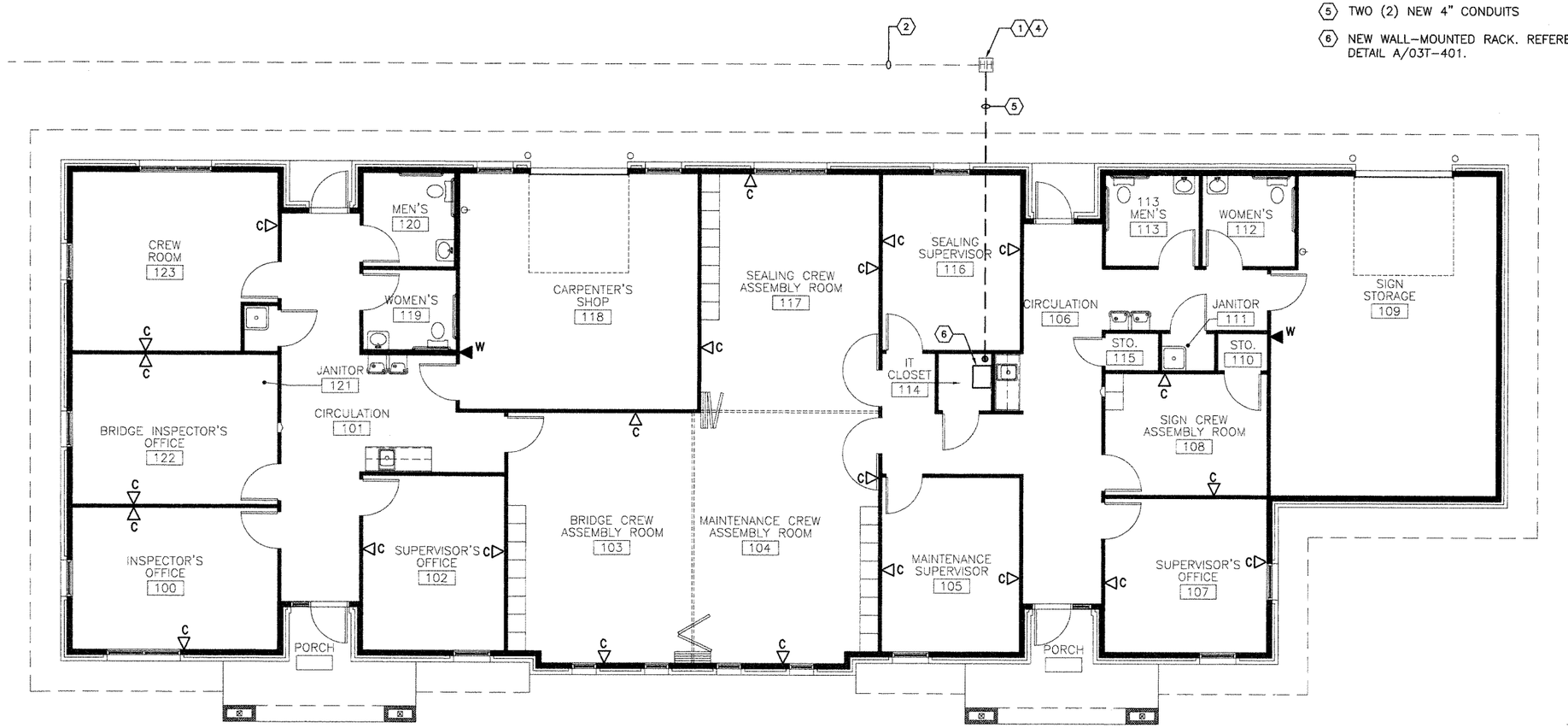
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI–CREW BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS SYMBOLS AND LEGEND

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	TDD
APPROVED BY	BMG
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03T–001
REV	0
87 OF 289	

KEY NOTES: THIS SHEET ONLY

1. EXISTING 24" X 30" HAND HOLE
2. TWO (2) EXISTING 4" CONDUITS
3. NOT USED
4. INSTALL EXISTING 12-STRAND OPTICAL FIBER CABLE (COILED WITHIN HANDHOLE) IN NEW CONDUIT TO WALL CABINET. TERMINATE WITH "SC" STYLE CONNECTORS AND TEST.
5. TWO (2) NEW 4" CONDUITS
6. NEW WALL-MOUNTED RACK. REFERENCE DETAIL A/03T-401.



A 03T-101 TELECOMMUNICATIONS FLOOR PLAN
SCALE: 3/16" = 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS FLOOR PLAN

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	TDD
APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03T-101
REV	0

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ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13409 JOSHUA T. TAYLOR

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

GENERAL NOTES (THIS SHEET ONLY):

1. ALL EQUIPMENT SHOWN IS CONCEPTUAL ONLY. PROVIDE AND INSTALL QUANTITIES AS REQUIRED BY SPECIFICATIONS AND DRAWINGS. DETAIL IS TYPICAL AND SOME CABLING AND EQUIPMENT MAY NOT APPLY.

KEYED NOTES (THIS SHEET ONLY):

(1) MINIMUM 6 AWG STRANDED BONDING CONDUCTOR WITH GREEN THERMOPLASTIC SHEATH.

(2) VERTICAL CABLE MANAGEMENT.

(3) OPTICAL FIBER TERMINATION SHELF.

(4) 48-PORT CATEGORY 6 PATCH PANEL.

(5) 2 RU HORIZONTAL CABLE MANAGEMENT – PROVIDE ONE PER PATCH PANEL.

(6) HORIZONTAL RADIO CABLE

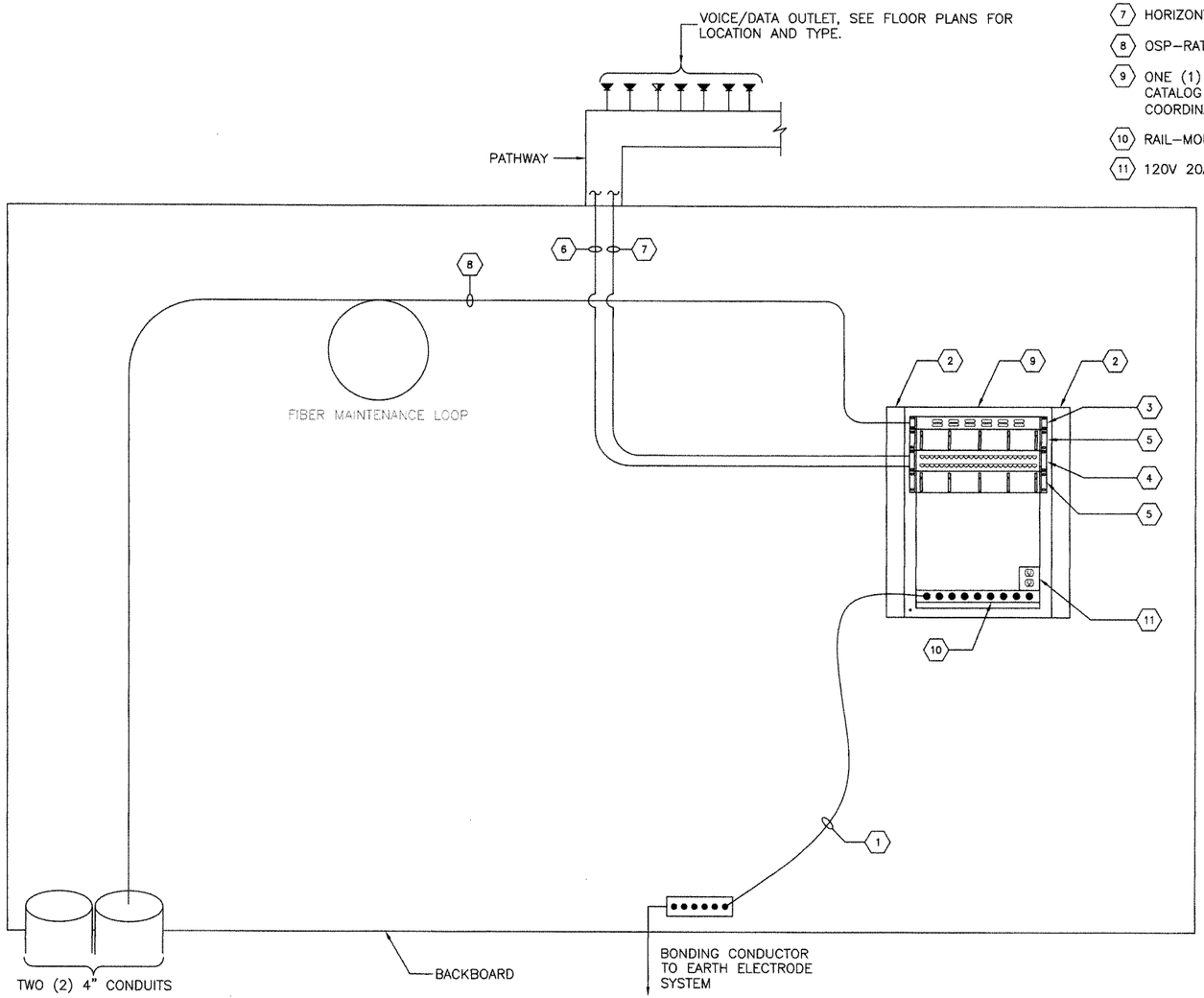
(7) HORIZONTAL DATA (LAN) CABLE

(8) OSP-RATED OPTICAL FIBER CABLE – CAMPUS DISTRIBUTOR.

(9) ONE (1) 20.7"W X 18"D X 48"H "HUBBELL" WALL-MOUNTED RACK. CATALOG NO. HPWWMR48 OR APPROVED FUNCTIONALLY EQUIVALENT. COORDINATE EXACT LOCATION W/ ELECTRICAL.

(10) RAIL-MOUNTED GROUND BUS BAR.

(11) 120V 20A DUPLEX RECEPTACLE MOUNTED TO BACKPLATE.



A 03T-401 MAIN CLOSET ROOM ELEVATION
SCALE: NTS

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS MAIN CLOSET ELEVATION

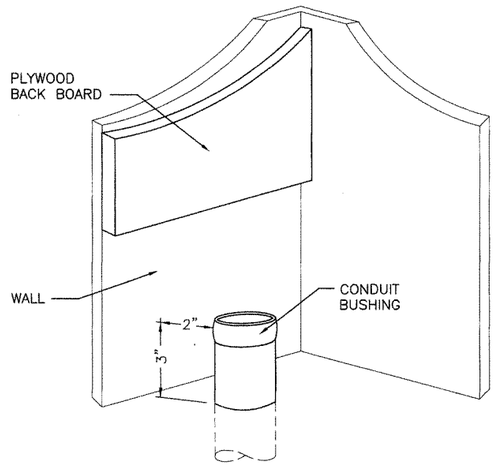
DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	TDD
APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03T-401
REV	0

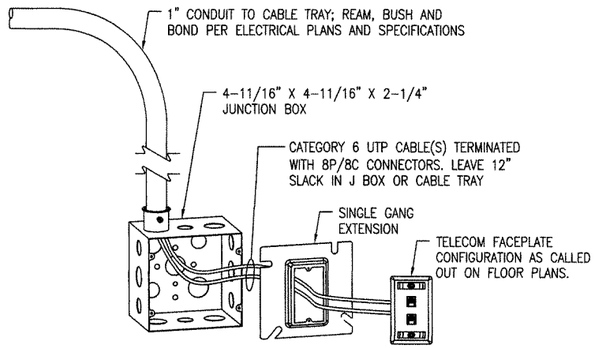
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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 13429
10/13/11
JOSHUA T. TOYCE

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS



A 03T-501 TYPICAL CONDUIT STUB-UP
SCALE: NTS



NOTES:
1. COORDINATE HEIGHT OF OUTLET WITH ELECTRICAL RECEPTACLE.

B 03T-501 WALL MOUNT COMMUNICATIONS OUTLET (TYPICAL)
SCALE: NTS

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(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT MULTI-CREW BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS DETAILS

DESIGNED BY	ASC
DRAWN BY	BMG
CHECKED BY	TDD
APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	03T-501
REV	0

90 OF 209

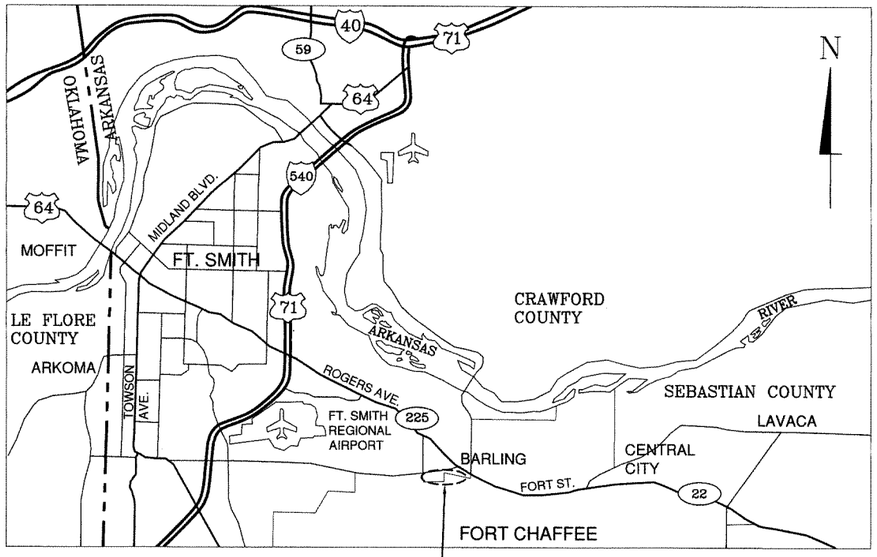
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13468 JOSHUA T. JOYCE

SAIC Energy, Environment & Infrastructure, LLC No. 510 CERTIFICATE OF AUTHORIZATION ARKANSAS

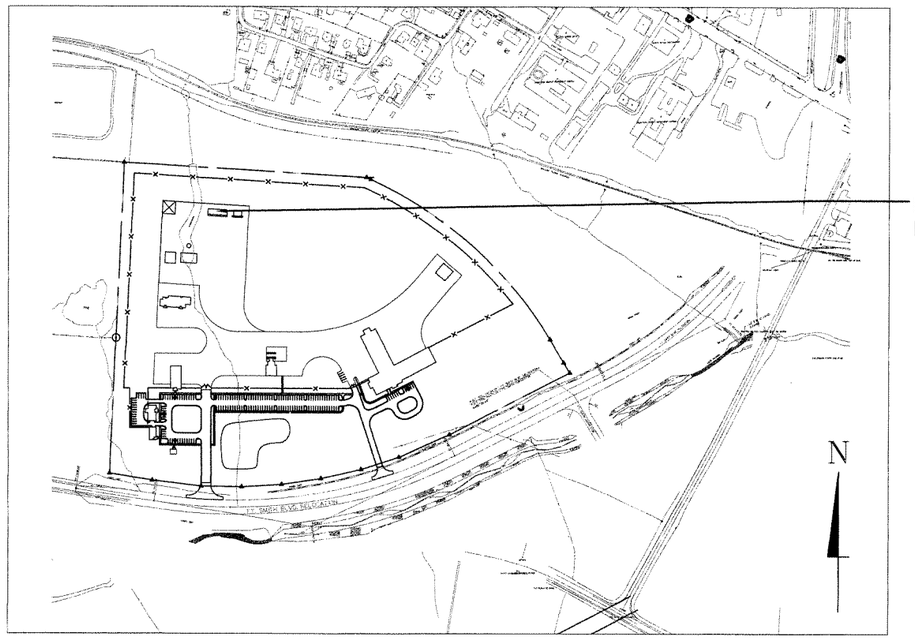
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
	ARK.			
JOB NO.		040554	91	289
DISTRICT STORAGE BUILDING A				

DISTRICT STORAGE BUILDING A



VICINITY MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

DISTRICT STORAGE BUILDING A			
CODE INFORMATION			
OCCUPANCY:	GROUP S-1, STORAGE, MODERATE HAZARD		AFPC SECTION 311.2
CONSTRUCTION: TYPE IIB, UNSPRINKLERED, UNPROTECTED			AFPC SECTION 602.5, TABLE 601, TABLE 602
	STRUCTURAL FRAME	0 HOUR	
	BEARING WALLS	0 HOUR	
	NONBEARING WALLS AND PARTITIONS	0 HOUR	
	FLOOR CONSTRUCTION	0 HOUR	
	ROOF CONSTRUCTION	0 HOUR	
	FIRE SEPARATION WALLS	NOT APPLICABLE	
	FIRE PARTITIONS		
	STORAGE/MECHANICAL AREAS	0 HOUR	AFPC TABLE 508.2
	EXIT ACCESS CORRIDORS	0 HOUR	AFPC TABLE 1017.1
	SHAFT ENCLOSURES	NOT APPLICABLE	
	AREA OF EXTERIOR OPENINGS	UNLIMITED	AFPC TABLE 704.8
BUILDING LIMITATIONS FOR S-1 OCCUPANCY			
	HEIGHT AND STORIES	55 FT/3 STORY	AFPC TABLE 503
	ACTUAL HEIGHT AND STORIES	20 FT/1 STORY	
	BASE AREA	17,500 SF/FLOOR	AFPC TABLE 503
	ACTUAL AREA (1 STORY)	1,500 SF	
MEANS OF EGRESS			
	OCCUPANT LOAD, GROUP S-1	5 OCCUPANTS	AFPC TABLE 1004.1.1
	WIDTH OF EGRESS DOORS		
	EXITS	36" REQUIRED; 36" PROVIDED	AFPC SECTION 1008.1.1
	MINIMUM NUMBER OF EXITS	1 REQUIRED; 1 PROVIDED	AFPC TABLE 1015.1
	EXIT ACCESS TRAVEL DISTANCE	200 FT	AFPC TABLE 1016.1
	EXIT ACCESS CORRIDOR WIDTH	44" REQUIRED NA	AFPC SECTION 1017.2
	DEAD END CORRIDOR	20 FT NA	AFPC SECTION 1017.3

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

JOHNNY R. RAMSEY, ARCHITECT

REVISION TABLE Fort Smith, Arkansas		
DATE	DESCRIPTION	SHEET NUMBER

SYMBOL INDEX

- WALL KEY (E)
- DOOR NUMBER (101)
- WINDOW KEY (C)
- ELEVATION MARKER (B/A6)
- DATUM MARKER (100'-0" F.F.E.)
- BUILDING SECTION (X/AX)
- PARTIAL SECTION (X/AX)

ABBREVIATIONS

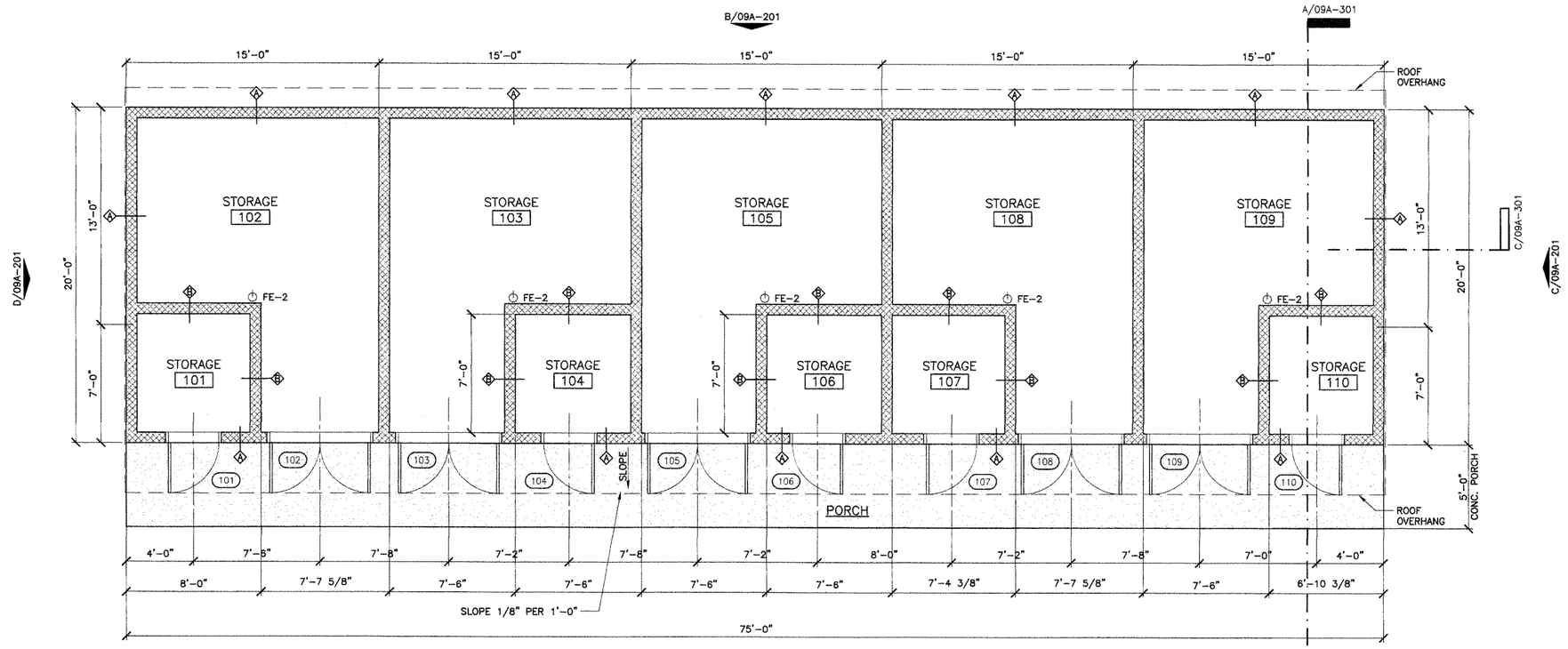
ABC	AGGREGATE BASE COURSE
ADJ	ADJUSTABLE
A.F.F.	ABOVE FINISH FLOOR
ALUM	ALUMINUM
A.W.C.	ACCESSIBLE WATER CLOSET
BCE	BASE CIVIL ENGINEER
BM	BEAM
BD	BOARD
B.O.	BOTTOM OF
BOT	BOTTOM
BRNG	BEARING
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CU	CONDENSING UNIT
CJ	CONTROL JOINT
DIA	DIAMETER
ø	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DTL	DETAIL
DN	DOWN
EA	EACH
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EXP JT	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
F.E.	FIRE EXTINGUISHER
FFE	FINISHED FLOOR ELEVATION
FIN	FINISH OR FINISHED
FLR	FLOOR
FTG	FOOTING
GA	GAUGE
GEN	GENERAL
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HDF	HIGH DENSITY FIBERBOARD
HMAC	HOT MIX ASPHALTIC CONCRETE
HORIZ	HORIZONTAL
HPL	HIGH PRESSURE LAMINATE
HT	HEIGHT
INSUL	INSULATION
INT	INTERIOR
L	ANGLE
LAV	LAVATORY
LPL	LOW PRESSURE LAMINATE
LVL	LAMINATED VENEER LUMBER
LT	LIGHT
MAS	MASONRY
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MFGR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
OSB	ORIENTED STRAND BOARD
PED	PEDESTRIAN
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
PLCS	PLACES
R	RADIUS
RAD	RADIUS
REF	REFER TO
REINF.	REINFORCING
REQ'D	REQUIRED
RM	ROOM
R.T.U.	ROOF TOP UNIT
SS	SANITARY SEWER OR STAINLESS STEEL
SCHED	SCHEDULE
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STD	STANDARD
STL	STEEL
THK	THICK
T.O.	TOP OF
T.O.BM.	TOP OF BEAM
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
T.P.	TOILET PAPER
TS	TUBE STEEL
TYP.	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V.I.F.	VERIFY IN FIELD
W	WATER MAIN
WD	WOOD
W/	WITH
WC	WATER CLOSET
VCT	VINYL COMPOSITION TILE
VTR	VENT THRU ROOF

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(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
INDEX & GOVERNING SPECIFICATIONS
QUANTITIES & REVISION TABLE

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09G-002
REV	



A FLOOR PLAN
09A-101 SCALE: 1/4" = 1'-0"

NORTH

NOTE: FE-2 FIRE EXTINGUISHER W/BRACKET ONLY, NO CABINET. MOUNT WITH HANDLE @ 42" A.F.F.

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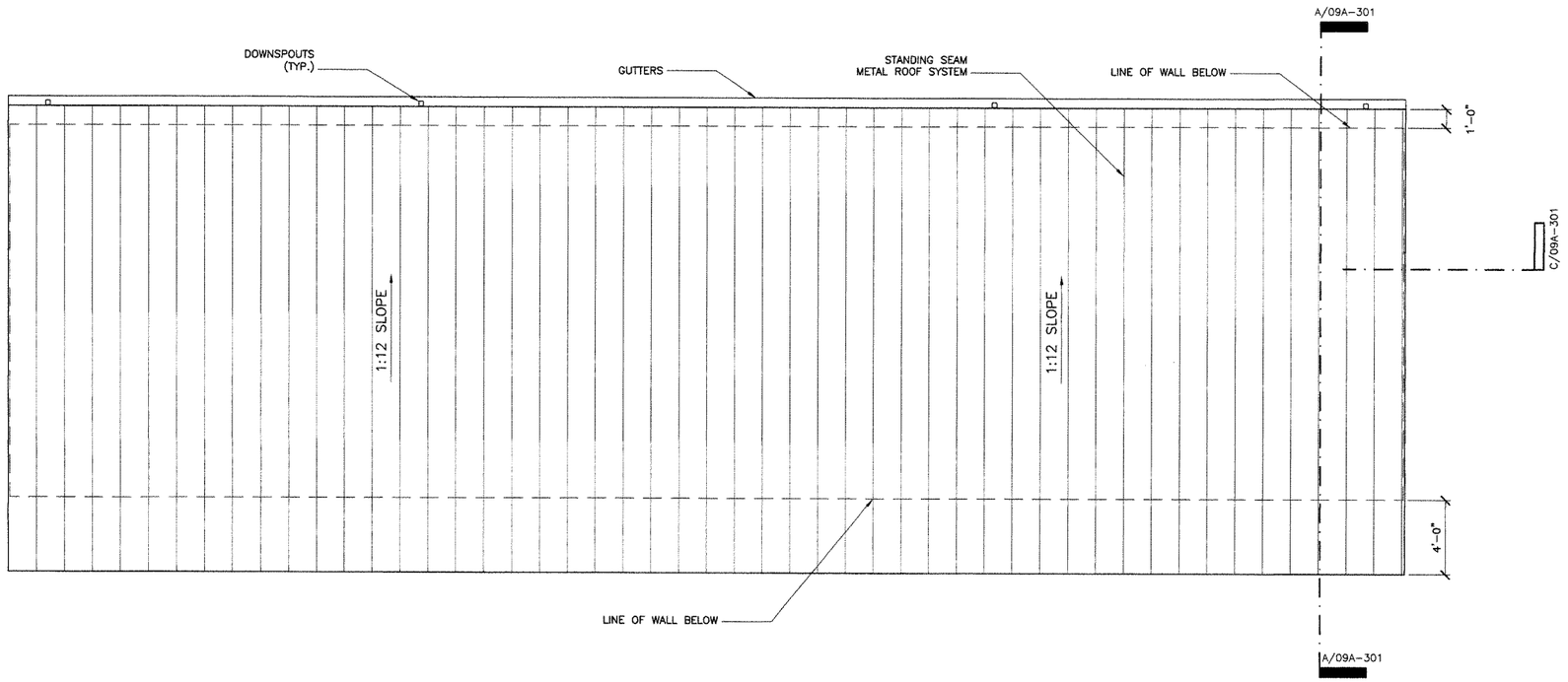
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
FLOOR PLAN

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11

DESIGNED BY	JSR
DRAWN BY	DM
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09A-101
REV	



A/09A-102 ROOF PLAN
SCALE: 1/4"= 1'-0"

NORTH

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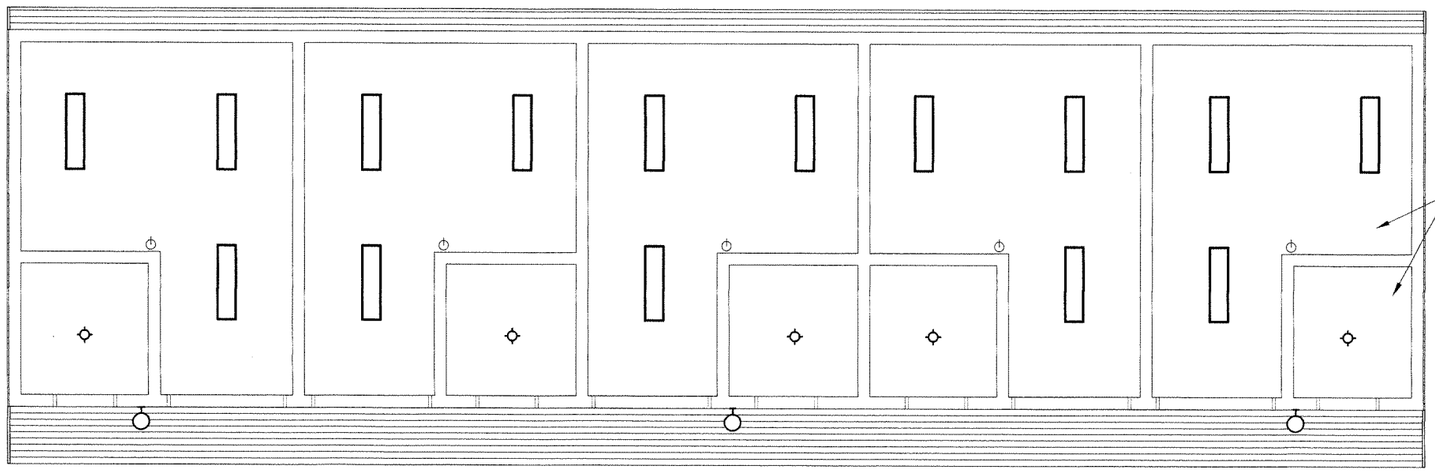
DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
ROOF PLAN

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11

DESIGNED BY	JSR
DRAWN BY	DM
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
09A-102	
94 OF 289	



A 09A-103 REFLECTED CEILING PLAN
SCALE: 1/4"= 1'-0"

NORTH

CEILING PLAN LEGEND:

- 1'-0" x 4'-0" FLUORESCENT FIXTURE, CONNECTED TO EMERGENCY SYSTEM AND EQUIPPED WITH BATTERY PACK.
- INCANDESCENT LIGHT FIXTURE
- COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE

NOTE:
EAVE SOFFITS TO BE PRE-FINISHED FLUSH SEAM PANEL

NOTE:
REFER ELECTRICAL

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RILEY
REGISTERED ARCHITECT
No. 2272
ARKANSAS
10.13.11

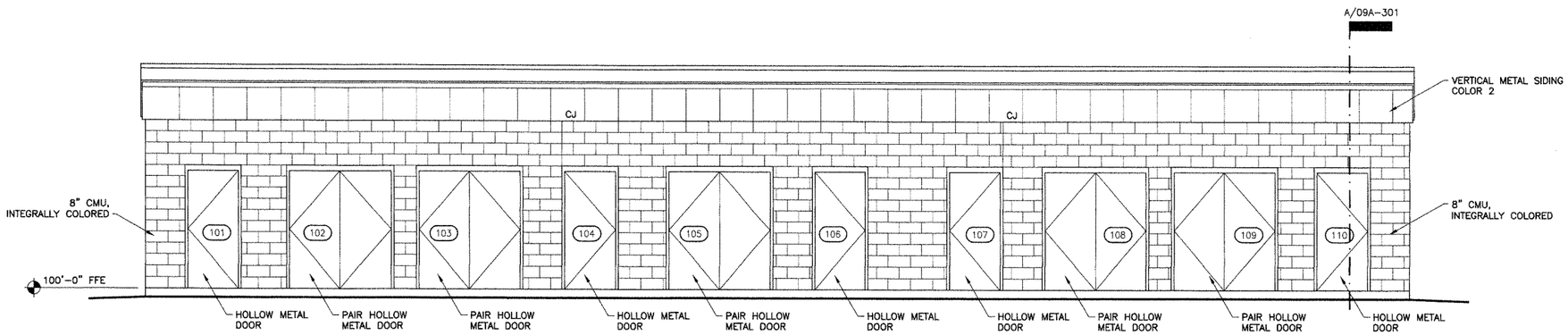
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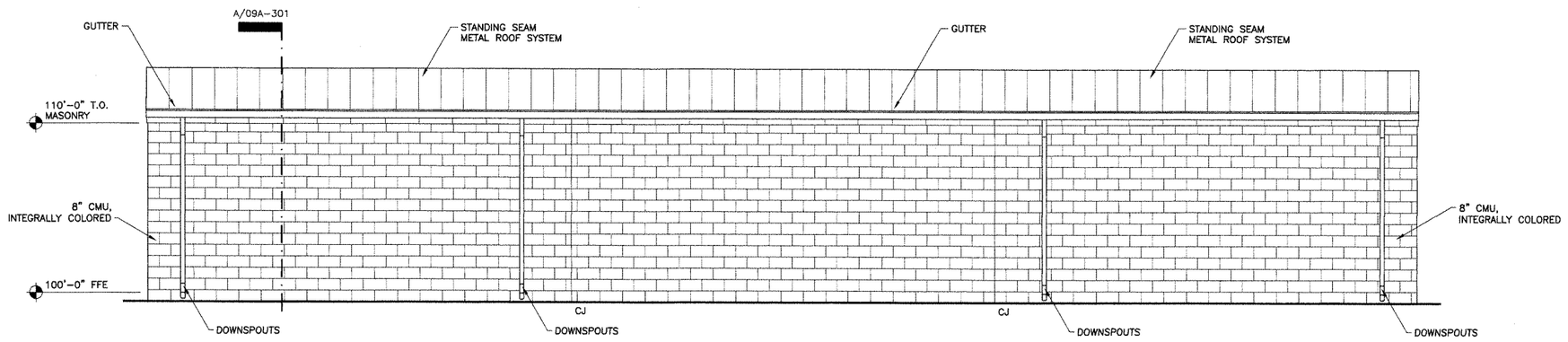
DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
REFLECTED CEILING PLAN

DESIGNED BY	JSR
DRAWN BY	DM
CHECKED BY	JRR
APPROVED BY	JSR

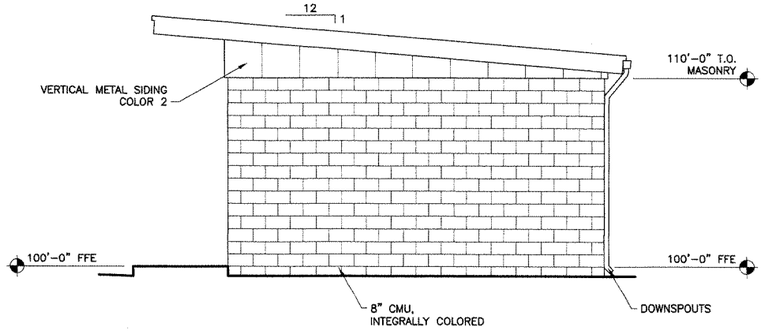
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
09A-103	



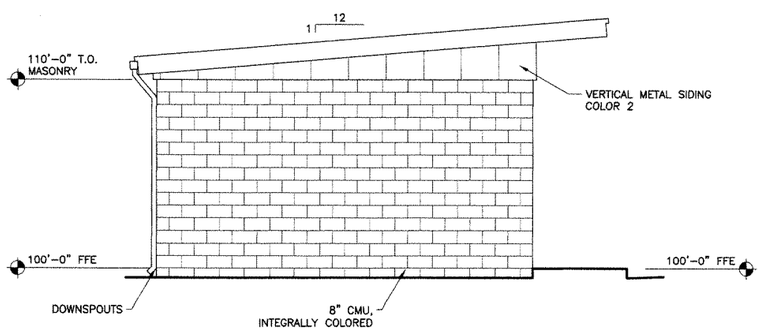
A 09A-201 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



B 09A-201 REAR ELEVATION
SCALE: 1/4" = 1'-0"



C 09A-201 RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



D 09A-201 LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

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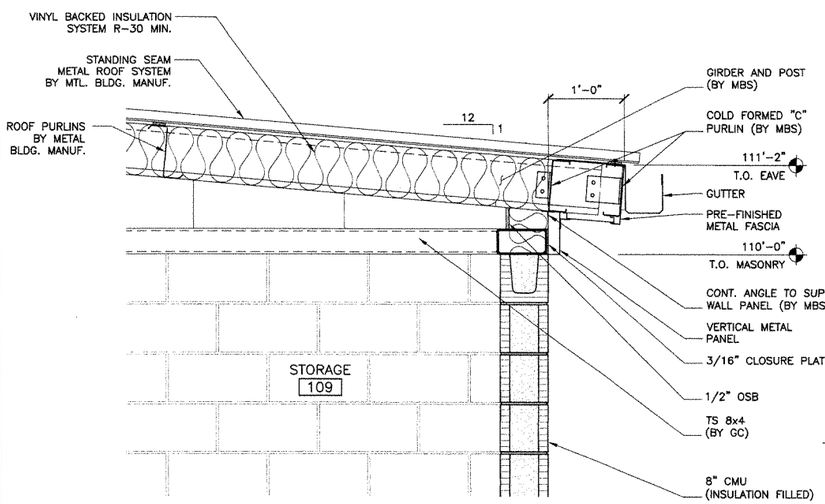
DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
EXTERIOR ELEVATIONS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

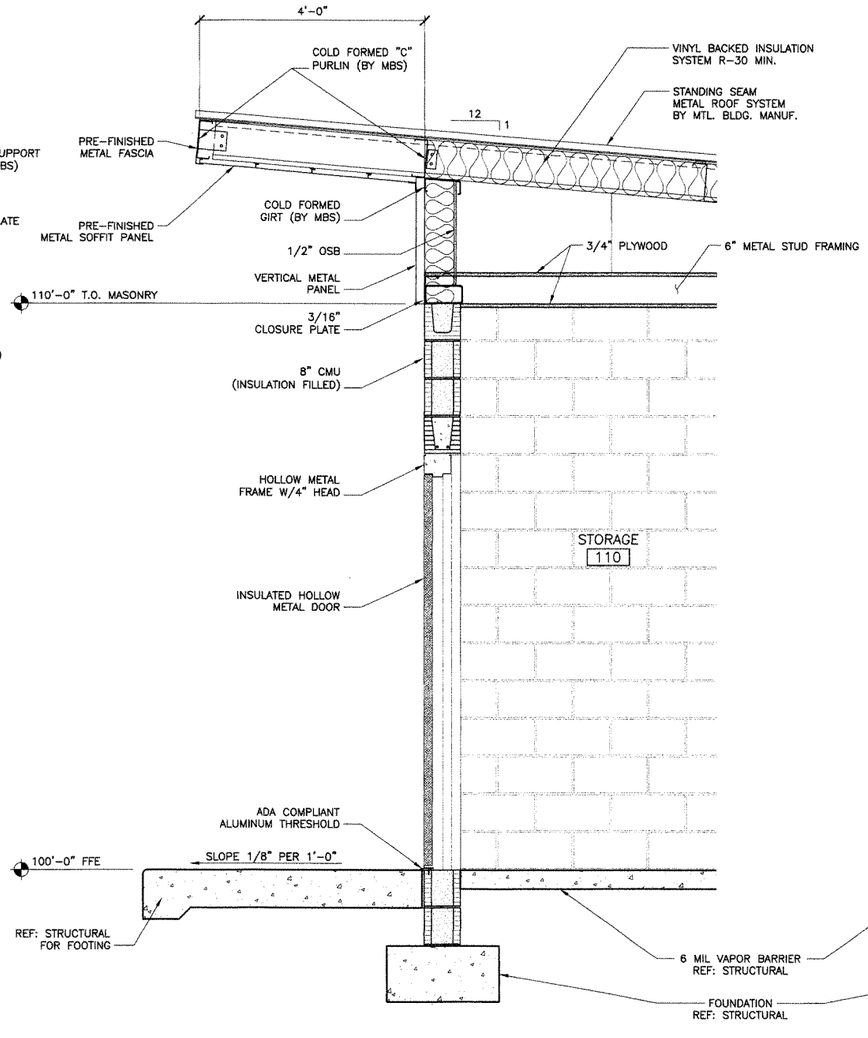
JOHNNY RAY RILEY
REGISTERED ARCHITECT
No. 2272
ARKANSAS
10-13-11

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09A-201
REV	

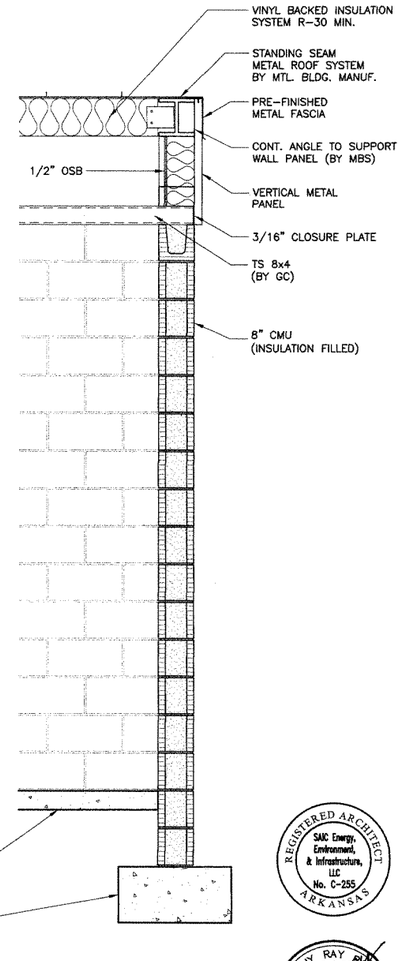
NOTE:
MBS TO PROVIDE FRAMING, STANDING SEAM ROOF, CAP AND TRIM FLASHING, WALL LINER PANEL, ETC. (SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION).



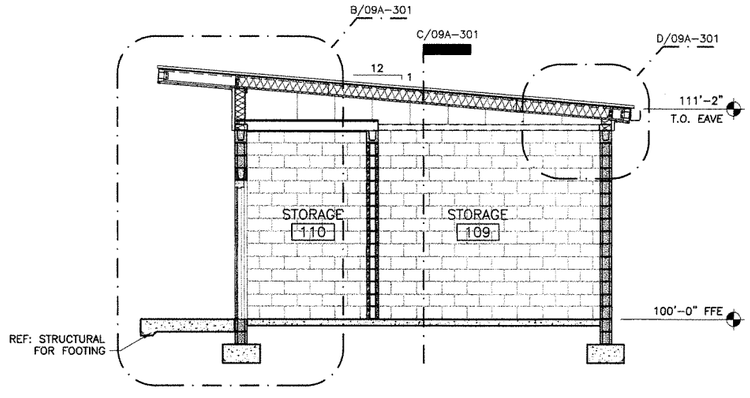
D 09A-301 WALL SECTION
SCALE: 1"= 1'-0"



B 09A-301 WALL SECTION
SCALE: 3/4"= 1'-0"



C 09A-301 WALL SECTION
SCALE: 3/4"= 1'-0"



A 09A-301 BUILDING SECTION
SCALE: 1/4"= 1'-0"

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
BUILDING SECTIONS

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
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DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
09A-301	
97 OF 289	

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11

P:\LR\LITTLE ROCK\070812000_AHTD_DISTRICT\20_DESIGN\40_CAD\09_DWG\P4070812000-BLDG_A\09A-301.dwg

DOOR SCHEDULE

DOOR NO.	DOOR SIZE	DOOR DESCRIPTION	DOOR ELEV.	FRAME TYPE	FRAME MATL.	DETAILS HRDWR SET	DETAILS DETAIL GROUP	REMARKS
101	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D2	F1	HM		A	
102	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F2	HM		A	
103	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F2	HM		A	
104	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D2	F1	HM		A	
105	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F2	HM		A	
106	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D2	F1	HM		A	
107	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D2	F1	HM		A	
108	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F2	HM		A	
109	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F2	HM		A	
110	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D2	F1	HM		A	

HARDWARE NOTE #1:

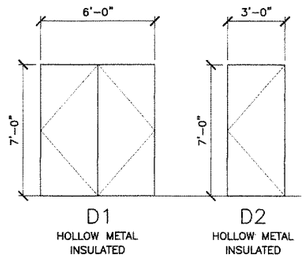
REFER TO "SECTION 087100 - DOOR HARDWARE" FOR HARDWARE SETS BY GENERAL DOOR TYPE.

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH NORTH	WALL FINISH EAST	WALL FINISH SOUTH	WALL FINISH WEST	CEILING MATL.	CEILING FINISH	CEILING HT. A.F.F.	NOTES
101	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
102	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
103	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
104	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
105	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
106	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
107	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
108	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
109	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---
110	STORAGE	SC	SC	EXP	EXP	EXP	EXP	EXP	---	---	---

FINISH LEGEND

ACT ACOUSTICAL CEILING TILE
CT CERAMIC TILE
EXP EXPOSED
PT PAINT
R RUBBER
SC SEALED CONCRETE
STC STAINED CONCRETE
C CARPET
VCT VINYL COMPOSITION TILE

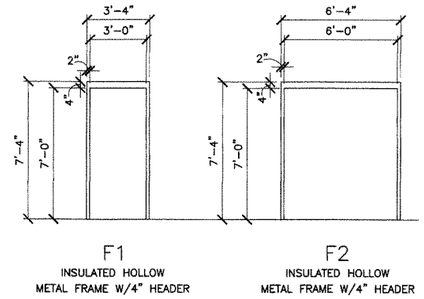


D1
HOLLOW METAL INSULATED

D2
HOLLOW METAL INSULATED

DOOR ELEVATIONS

SCALE: 1/4" = 1'-0"

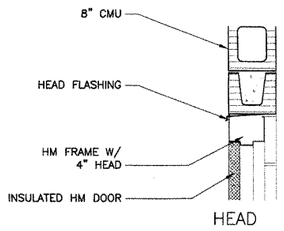


F1
INSULATED HOLLOW METAL FRAME W/4" HEADER

F2
INSULATED HOLLOW METAL FRAME W/4" HEADER

FRAME ELEVATIONS

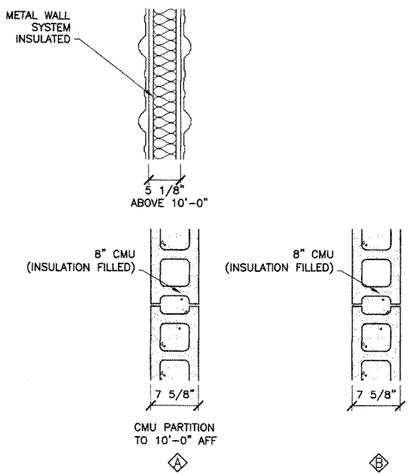
SCALE: 1/4" = 1'-0"



DETAIL GROUP A

HEAD JAMB & SILL DETAIL

SCALE: 1" = 1'-0"



PARTITION TYPE

SCALE: 1" = 1'-0"

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
DOOR SCHEDULE AND ELEVATIONS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RUSSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09A-501
REV	

STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT	GA	GAUGE	S	SOUTH
ACT	ACTUAL	GALV	GALVANIZED	SA	SLAB BOLSTER
ADDN	ADDITIONAL	GL	GLU LAM	SB	SLEEVE ANCHOR
ADH	ADHESIVE	GLB	GLUED LAMINATED BEAM	SCHED	SCHEDULE
ADJ	ADJACENT			SECT	SECTION
AFF	ABOVE FINISHED FLOOR	HC	HIGH CHAIR	SF–	STEP FOOTING
AHU	AIR HANDLING UNIT	HK	HOOK	SIM	SIMILAR
ALUM	ALUMINUM	HORIZ	HORIZONTAL	SPEC	SPECIFICATIONS
ALT	ALTERNATE	HP	HIGH POINT	SP	SPACING,ES
ANCH	ANCHORAGE, ANCHOR	HSA	HEADED STUD ANCHOR	SQ	SQUARE
APPD	APPROVED	HSB	HIGH STRENGTH BOLT	SSL	SHORT SLOTTED HOLES
ARCH	ARCHITECT,(URAL)	HT	HEIGHT	SS	STAINLESS STEEL
				STD	STANDARD
B–	CONC. BEAM	ID	INSIDE DIAMETER	STIFF	STIFFENERS
B/	BOTTOM OF	IF	INSIDE FACE	STL	STEEL
B/B	BACK TO BACK	IN	INCH	STRL	STRUCTURAL
BIT	BITUMINOUS, BITUMASTIC	INCL	INCLUDE, ING	SYMM	SYMMETRICAL
BLDG	BUILDING	INSUL	INSULATE, D, ION		
BM	BEAM	INT	INTERIOR	T	TIES
BOF	BOTTOM OF FOOTING	INTERM	INTERMEDIATE	t	THICKNESS
BOT	BOTTOM			T/	TOP OF
BRDG	BRIDGING	JST	JOIST	TB–	TIE BEAM
BRG	BEARING	JT	JOINT	TC	TIE COLUMN
BLK	BLOCK	k	KIP	T&B	TOP AND BOTTOM
BTWN	BETWEEN			TEMP	TEMPORARY, TEMPERATURE
BSMT	BASEMENT	L–	ANGLE	TERM	TERMINATE
		LB	POUND	TOL	TOLERANCE
C	CHANNEL	LG	LONG	TOF	TOP OF FOOTING
CANT	CANTILEVER	LL	LIVE LOAD	TRAN	TRANSVERSE
CEN	CENTER, ED	LLH	LONG LEG HORIZONTAL	TS	TUBE STEEL
C/C	CENTER TO CENTER	LLV	LONG LEG VERTICAL	TYP	TYPICAL
CHAM	CHAMFER	LONG	LONGITUDINAL		
CIRC	CIRCULAR	LP	LOW POINT	UNO	UNLESS NOTED OTHERWISE
CJ	CONTROL JOINT	LT	LIGHT	U/S	UNDERSIDE
CLR	CLEAR	LSL	LONG SLOTTED HOLES	VERT	VERTICAL
CMU	CONCRETE MASONRY UNITS	LTWT	LIGHTWEIGHT		
COL	COLUMN	LVL	LAMINATED VENEER LUMBER	W	WIDTH, WEST, WIDE FLANGE
CONC	CONCRETE			W/	WITH
CONN	CONNECTION	MAS	MASONRY	W/O	WITHOUT
CONST	CONSTRUCTION	MAX	MAXIMUM	WF–	WALL FOOTING
CONT	CONTINUOUS, ATION	MB	MACHINE BOLT	WP	WORKING POINT
CONTR	CONTRACTOR	MBS	METAL BUILDING SUPPLIER	WS	WATERSTOP
COORD	COORDINATE, TION	MECH	MECHANICAL	WT	WEIGHT
CTRD	CENTERED	MET	METAL	WWF	WELDED WIRE FABRIC
		MEZZ	MEZZANINE		
D	DEPTH, DISTANCE	MFR	MANUFACTURER		
DBA	DEFORMED BAR ANCHOR	MID	MIDDLE		
DBL	DOUBLE	MIN	MINIMUM		
DBS	DOWEL BAR SPLICER	MISC	MISCELLANEOUS		
DET	DETAIL	MJ	MASONRY JOINT		
DIA	DIAMETER	MO	MASONRY OPENING		
DIAG	DIAGONAL				
DIM	DIMENSION	N	NORTH		
DL	DEAD LOAD	NIC	NOT IN CONTRACT		
DN	DOWN	NO	NUMBER		
DSGN	DESIGN	NS	NEAR SIDE		
DWGS	DRAWINGS	NTS	NOT TO SCALE		
DWL	DOWEL				
		O/O	OUT TO OUT		
E	EAST	OC	ON CENTER		
EA	EACH	OD	OUTSIDE DIAMETER		
EB	EXPANSION BOLT	OF	OUTSIDE FACE		
EE	EACH END	OPNG	OPENING		
EF	EACH FACE	OPP	OPPOSITE		
EJ	EXPANSION JOINT	OSL	OUTSTANDING LEG		
EL	ELEVATION, ELEVATED	OVS	OVERSIZE HOLES		
ELEV	ELEVATOR				
ENGR	ENGINEER	PAF	POWDER ACTUATED FASTENER		
EQ	EQUAL	PL	PLATE		
EQUIP	EQUIPMENT	PLF	POUNDS PER LINEAL FOOT		
ES	EACH SIDE	PROJ	PROJECTION		
EW	EACH WAY	PSF	POUNDS PER SQUARE FOOT		
EXP	EXPANSION	PSI	POUNDS PER SQUARE INCH		
EXIST	EXISTING	PSL	PARALLEL STRAND LUMBER		
EXT	EXTERIOR	PT	PRESSURE TREATED		
		PVC	POLYVINYL CHLORIDE		
F–	FOOTING MARK				
FC	FILLED CELL	R/W	REINFORCED WITH		
FF	FINISHED FLOOR	RAD	RADIUS		
FIN	FINISH	REF	REFERENCE		
FLG	FLANGE	REINF	REINFORCE, MENT		
FLR	FLOOR	REQ	REQUIRE, D, MENT		
FDN	FOUNDATION	RET	RETURN		
FRMG	FRAMING	REV	REVISION		
FS	FARSIDE	RP	RADIUS POINT		
FT	FOOT, FEET	RT	RIGHT		
FTG	FOOTING	RTU	ROOF TOP UNIT		
FV	FIELD VERIFY				

STANDARDS

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
NFPA	NATIONAL FOREST PRODUCTS ASSOCIATION
PCI	PRESTRESSED CONCRETE INSTITUTE
PTI	POST TENSIONING INSTITUTE
TPI	TRUSS PLATE INSTITUTE
UL	UNDERWRITER'S LABORATORY

SYMBOLS

&	AND
@	AT
℄	CENTERLINE
⌀	DIAMETER
◆	ELEVATION
#	NUMBER, POUNDS
C.J.	CONSTRUCTION JT.
S.J.	SAW CUT JOINT
ℙ	PLATE

STRUCTURAL DESIGN CRITERIA

D–1 CODE – 2006 INTERNATIONAL BUILDING CODE WITH ARKANSAS FIRE PREVENTION CODE, 2002 EDITION

D–2 DESIGN LIVE LOADS:
ROOF 20 PSF
FLOOR SLAB–ON–GRADE

D–3 WIND LOAD: 90 MPH
EXPOSURE 'C'
CATEGORY

D–4 SEISMIC: SEISMIC ZONE: 1
S_S = 0.212
S_1 = 0.090
SITE CLASS C
S_{DS} = 0.170
S_{D1} = 0.102
DESIGN CATEGORY B
STEEL. NOT DETAILED, R = 3
Cs = 0.057

D–5 ALLOWABLE SOIL BEARING PRESSURE 2000 PSF (CONT) AND 2500 PSF (SPREAD FOOTINGS).

GENERAL NOTES

G–1 THE GENERAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS, PRIOR TO FABRICATION AND START OF CONSTRUCTION.

G–2 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER.

G–3 THE GENERAL CONTRACTOR SHALL COORDINATE STRUCTURAL AND OTHER DRAWINGS WHICH ARE PART OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS WHICH MAY AFFECT THE STRUCTURAL DRAWINGS.

G–4 ALL DETAILS AND SECTIONS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS SHOWN.

G–5 REPRODUCTION OF THE CONTRACT DOCUMENTS USED FOR THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS WILL NOT BE PERMITTED. REPRODUCED DRAWINGS WILL BE RETURNED UNCHECKED FOR RESUBMITTAL.

G–6 DO NOT SCALE DRAWINGS.

SHALLOW FOUNDATIONS

SF–1 SOIL TO BE STRIPPED, COMPACTED AND TESTED IN ACCORDANCE WITH RECOMMENDATIONS OF THE THE SOILS REPORT PREPARED BY GRUBBS, HOSKYN, BARTON & WYATT, INC DATED JULY 3, 2008, AND AMENDMENTS THAT FOLLOW.

SF–2 HORIZONTAL JOINTS IN FOOTINGS WILL NOT BE PERMITTED.

SF–3 EXCAVATING UNDER OR NEAR IN – PLACE FOOTINGS/FOUNDATIONS WHICH DISTURBS THE COMPACTED SOIL BENEATH THE FOOTINGS/ FOUNDATIONS WILL NOT BE PERMITTED.

SF–4 REINFORCING SHALL BE SUPPORTED ON PRECAST PADS. ANCHOR BOLTS AND DOWELS FOR COLUMNS AND FILLED CELLS SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE. USE TEMPLATES FOR SETTING ANCHOR BOLTS.

SF–5 FOUNDATIONS SHALL BEAR ON STIFF TO VERY STIFF CLAY OR COMPETENT WEATHERED SHALE OR LIMESTONE. CONTRACTOR SHALL UNDER CUT FOOTINGS AS REQUIRED TO REACH COMPETENT BEARING MATERIAL. PROVIDE SOLID FILL OR LEAN–FILL AS REQUIRED. OVERSIZE UNDER CUTS LATERALLY ONE HORIZONTAL TO TWO VERTICAL FROM FOOTING EDGE.

SF–6 FOUNDATIONS SHALL BEAR A MINIMUM OF 24" BELOW GRADE.

REINFORCED CONCRETE

RC–1 CONCRETE WORK SHALL COMPLY WITH SECTION 802 OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT 2003 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

RC–2 PROVIDE CLASS OF CONCRETE WITH THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH.

CLASS OF CONCRETE

S	3500 PSI (UNLESS NOTED OTHERWISE)
S (AE)	4000 PSI (EXTERIOR CONCRETE)
LEAN–FILL	1500 PSI

RC–3 ALL PUMPED CONCRETE WITH #57 AGGREGATE IS TO CONTAIN A HIGH RANGE WATER REDUCING AGENT. MINIMUM SIZE OF DISCHARGE TO BE 4" I.D. SEE SPECIFICATIONS FOR REQUIRED MIX DESIGN. A 2" I.D. DISCHARGE MAY BE USED WITH #89 AGGREGATE.

RC–4 ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318 (LATEST EDITION) AND ACI DETAILING MANUAL, ACI–315 LATEST EDITION.

RC–5 REINFORCING STEEL SHALL BE NEW DEFORMED BARS, FREE FROM RUST, SCALE AND OIL, CONFORMING TO ASTM A–615, GRADE 60, WITH MINIMUM YIELD STRENGTH = 60,000 PSI.

RC–6 PROVIDE THE FOLLOWING CONCRETE COVERAGE OVER REINFORCING:

FOOTINGS: BOTTOMS & UNFORMED EDGES 3" CLEAR

RC–7 NO REINFORCING BARS SHALL BE CUT TO ACCOMMODATE THE INSTALLATION OF ANCHORS, EMBEDS OR OTHER ITEMS.

RC–8 USE THE STRUCTURAL DRAWINGS (INCLUDING REVISIONS AND ADDENDA) IN CONJUNCTION WITH REVIEWED SHOP DRAWINGS FOR PLACEMENT OF REINFORCING.

RC–9 AT CHANGES IN DIRECTION OF WALL BEAMS AND STRIP FOOTINGS, PROVIDE CORNER BARS OF SAME SIZE AND QUANTITY (U.N.O.) AS HORIZONTAL STEEL. REFER TO TYPICAL DETAIL 2 ON SHEET 09S–501.

RC–10 ALL EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

MASONRY

M–1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI "BUILDING CODE AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ASCE 530.1–88) EXCEPT AS AMENDED BELOW.
REQUIREMENTS FOR MASONRY STRUCTURES" (ACI/ASCE 530–LATEST EDITION)

M–2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C–90 (28 DAY STRENGTH = 2000 P.S.I., fm' = 1500 P.S.I.) LAID IN RUNNING BOND WITH FULL MORTAR BEDMENT. ALL MASONRY SHALL BE NORMAL WEIGHT, TYPE 1, GRADE "N" U.N.O.

M–3 USE TYPE "M" OR "S" MORTAR WITH MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.

M–4 PROVIDE FULL MORTAR BEDDING AROUND ALL CELLS.

M–5 PROVIDE LAP SPLICES FOR REINFORCING AS SHOWN ON SCHEDULE.

LAP SPLICE SCHEDULE

BAR SIZE "D"	POSITION	CONCRETE f'c (PSI) 3000	CONCRETE f'c (PSI) 4000	MASONRY fm'=1500
#3	ALL	17"	15"	–
#4	ALL	22"	19"	(1) BAR PER CELL = 24" (2) BAR PER CELL = 36"
#5	ALL	28"	24"	(1) BAR PER CELL = 30" (2) BAR PER CELL = 54"
#6	ALL	33"	29"	(1) BAR PER CELL = 52" (2) BAR PER CELL = 108"
#7	ALL	49"	42"	–
#8	ALL	55"	48"	–

NOTES (FOR CONCRETE REBAR LAP SPLICE ONLY):
1. "d" DENOTES BAR DIAMETER.
2. VALUES APPLY TO ALL BARS WITH MIN. CONCRETE COVER OF 2d AND MIN. CENTER–TO–CENTER SPACING OF 5d.
3. FOR BARS WITH COVER BETWEEN d AND 2d, MULTIPLY VALUES BY 1.67.
4. FOR BARS WITH CENTER–TO–CENTER SPACING BETWEEN 3d AND 5d, MULTIPLY VALUES BY 1.67.
5. FOR BARS NOT MEETING ABOVE REQUIREMENTS, MULTIPLY BY 2.5.

METAL BUILDING SYSTEM DESCRIPTION STORAGE BUILDING A

MB–1 REFER TO SPECIFICAITON SECTION 133419 FOR METAL BUILDING DESIGN CRITERIA, FABRICATION AND CONSTRUCTION REQUIREMENTS.

MB–2 SEE DRAWINGS FOR CODES, DESIGN CRITEIA AND OTHER NOTES THAT APPLY.

MB–3 THE BUILDING ROOF SHALL BE A METAL BUILDING SYSTEM OF THE SIZE AND CONFIGURATION SHOWN. THE BUILDING ROOF SHALL BE DESIGNED AND FABRICATED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.

MB–4 A COMPLETE DESIGN ANALYSIS SHOWING ALL CALCULATIONS FOR WIND AND SEISMIC LOADS SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE DETAILS OF ALL MEMBERS, TYPICAL CONNECTIONS AND ERECTION DRAWINGS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS.

MB–5 THE ROOF SHALL BE DESIGNED TO SUPPORT ALL MECHANICAL AND ELECTRICAL EQUIPMENT INCLUDING LIGHTS, DUCTS, HEATERS, SPRINKLERS AND ALL SUCH DEVICES. GIRTS, PURLINS OR BEAMS SHALL BE LOCATED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL EQUIPMENT.

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JOHN DAVID WESTERHEIDE No. 12626 10/13/11

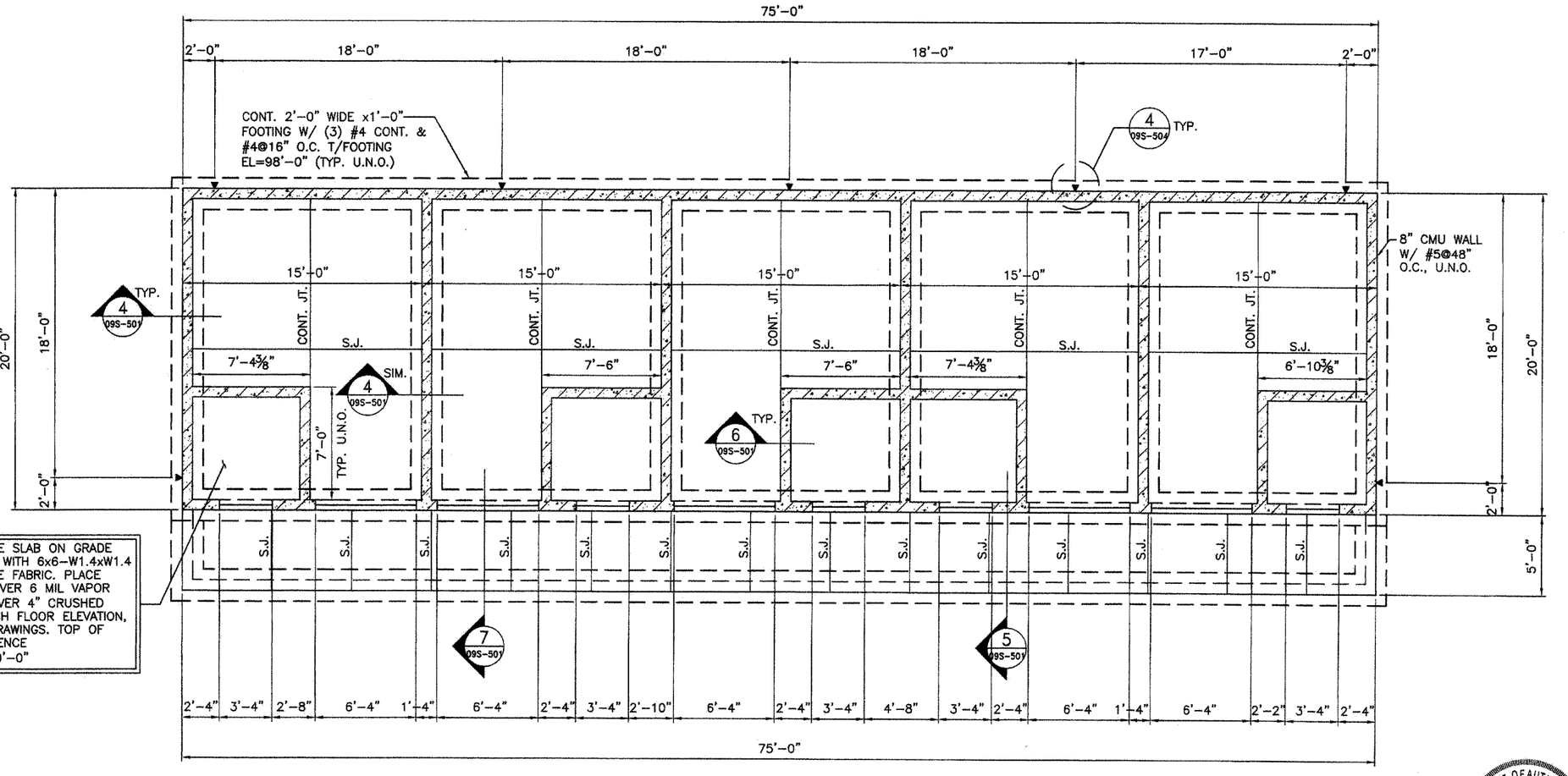
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

DESIGNED BY	JDW
DRAWN BY	JMS
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09S–001
REV	
	99 OF 289



1 09S-101 FOUNDATION PLAN
SCALE: 3/16"= 1'-0"

NORTH

NOTES:
1. REFER TO DETAIL 3/09S-501 FOR SLAB CONTROL JOINT (S.J.).
2. SEE STRUCTURAL GENERAL NOTES ON SHEET 09S-001.
3. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDERGROUND UTILITY REQUIREMENTS.
4. CONTRACTOR MAY REPLACE SAW JOINTS (S.J.) WITH CONSTRUCTION JOINTS (C.J.) AT HIS DISCRETION. ALTERNATE FLOOR SLAB JOINT LOCATIONS SHALL BE SUBMITTED FOR APPROVAL.
5. ▼ DENOTES MASONRY CONTROL JOINTS.
6. REFER TO SHEETS 09S-504 AND 09S-505 FOR TYPICAL MASONRY DETAILS.

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 12626 JOHN DAVID WESTERFIELD 10/13/11

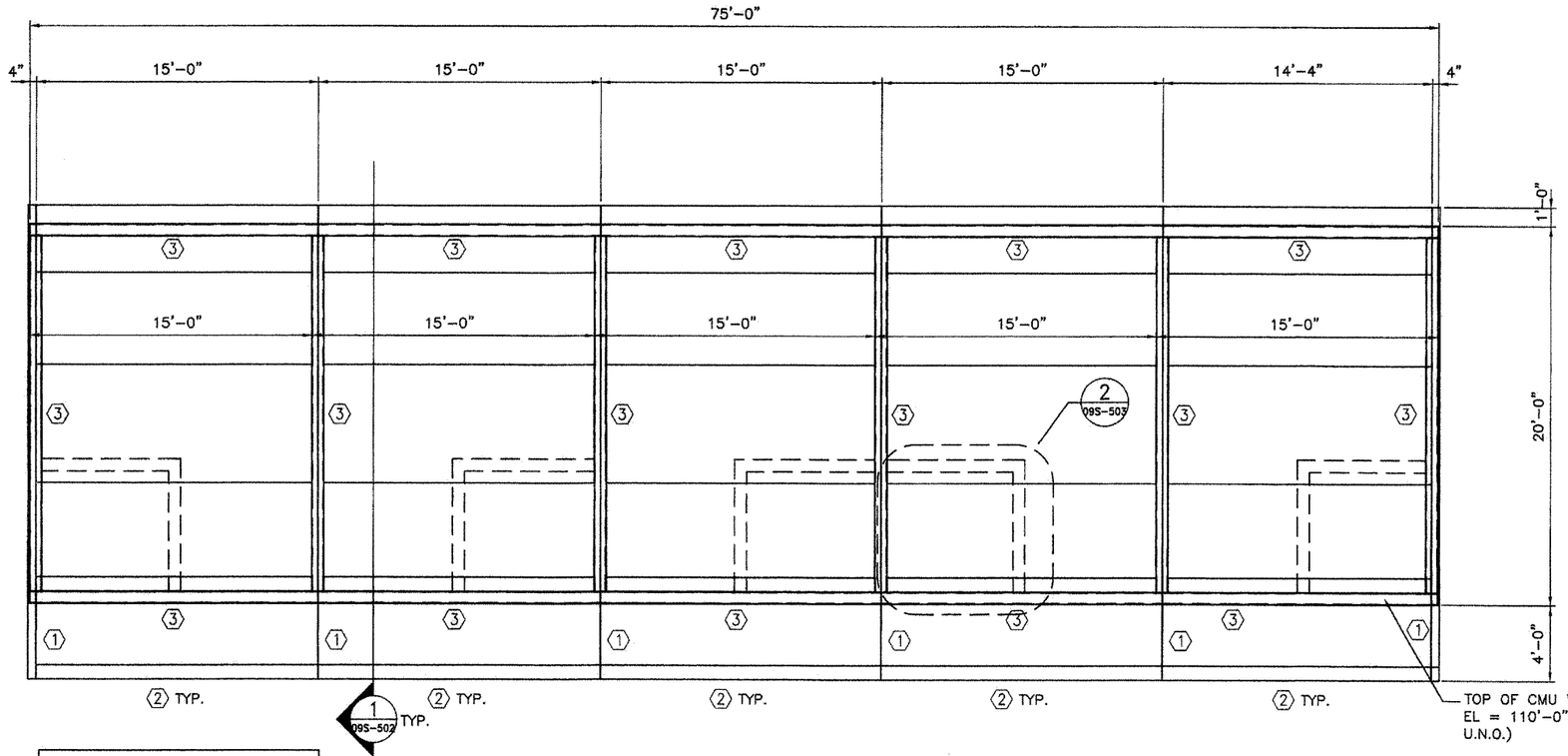
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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
FOUNDATION PLAN

DESIGNED BY	JDW
DRAWN BY	JMS
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09S-101
REV	
	100 OF 289



NOTE: MBS TO PROVIDE FRAMING, STANDING SEAM ROOF, CAP AND TRIM FLASHING, WALL AND LINER PANEL, ROOF LINER, ETC. SEE ARCH FOR ADDITIONAL INFORMATION.

KEYED NOTES

1. GIRDER BY MBS
2. COLD-FORMED "C" OR "Z" BY MBS
3. HSS8x4x3/16" BY GENERAL CONTRACTOR

1 / 09S-102 ROOF FRAMING PLAN
SCALE: 3/16"= 1'-0"

NORTH

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10/13/11

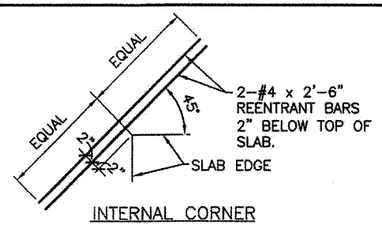
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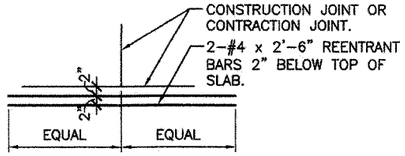
DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
ROOF FRAMING PLAN

DESIGNED BY	JDW
DRAWN BY	JMS
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09S-102
REV	

101 OF 289

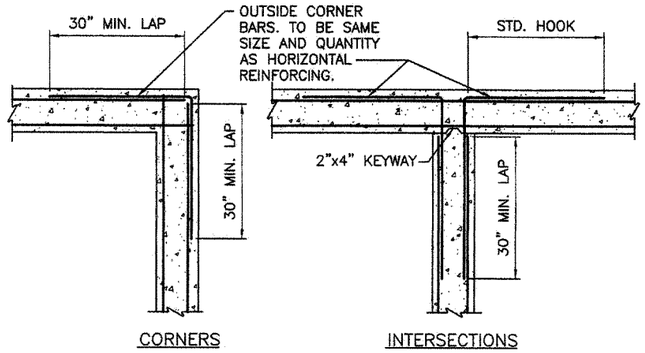


INTERNAL CORNER



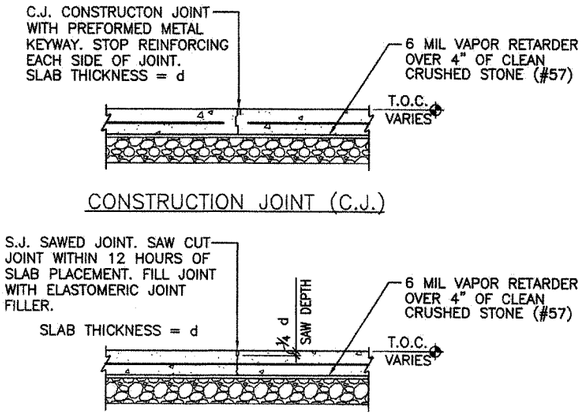
DISCONTINUOUS JOINT INTERSECTION

1 09S-501 **TYPICAL REENTRANT DETAILS**
SCALE: 3/4"= 1'-0"



CORNERS INTERSECTIONS

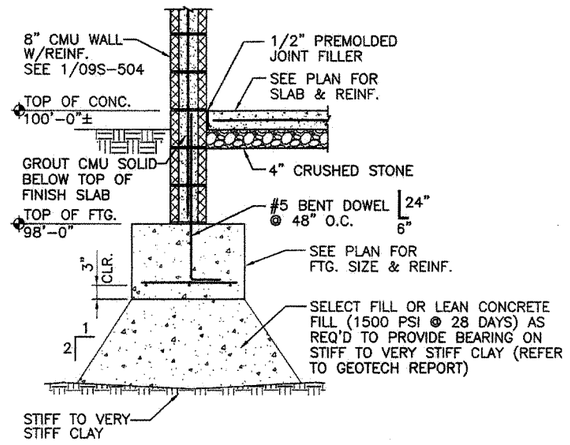
2 09S-501 **TYPICAL CORNER DETAILS**
SCALE: 3/4"= 1'-0"



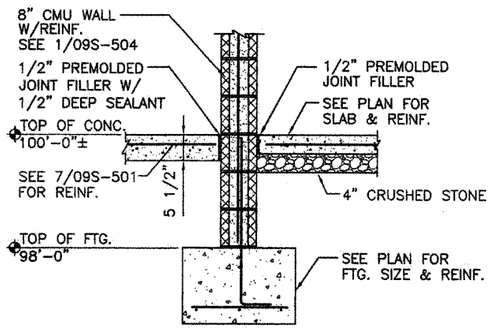
CONSTRUCTION JOINT (C.J.)

SAWED CONSTRUCTION JOINT (S.J.)

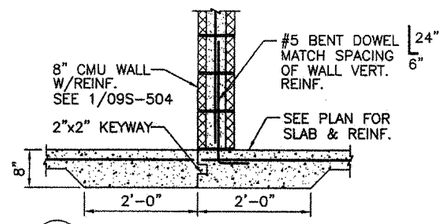
3 09S-501 **TYPICAL CONSTRUCTION JOINT DETAILS**
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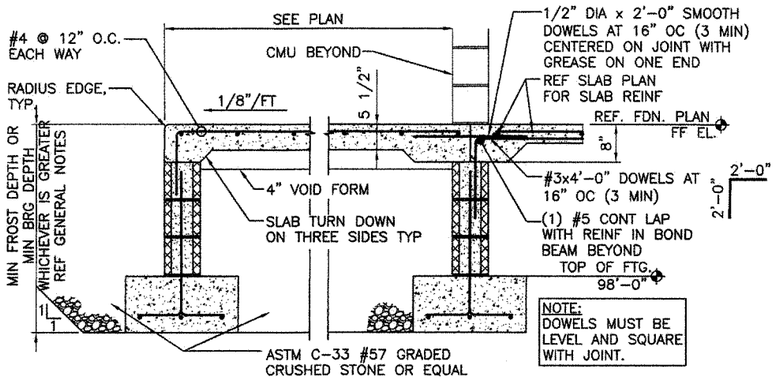
4 09S-501 **TYPICAL FOUNDATION DETAIL**
SCALE: 3/4"= 1'-0"



5 09S-501 **DETAIL AT DOOR STOOP**
SCALE: 3/4"= 1'-0"



6 09S-501 **DETAIL AT INTERIOR WALL**
SCALE: 3/4"= 1'-0"



7 09S-501 **SLAB AT OPENING WITH STOOP**
SCALE: 3/4"= 1'-0"

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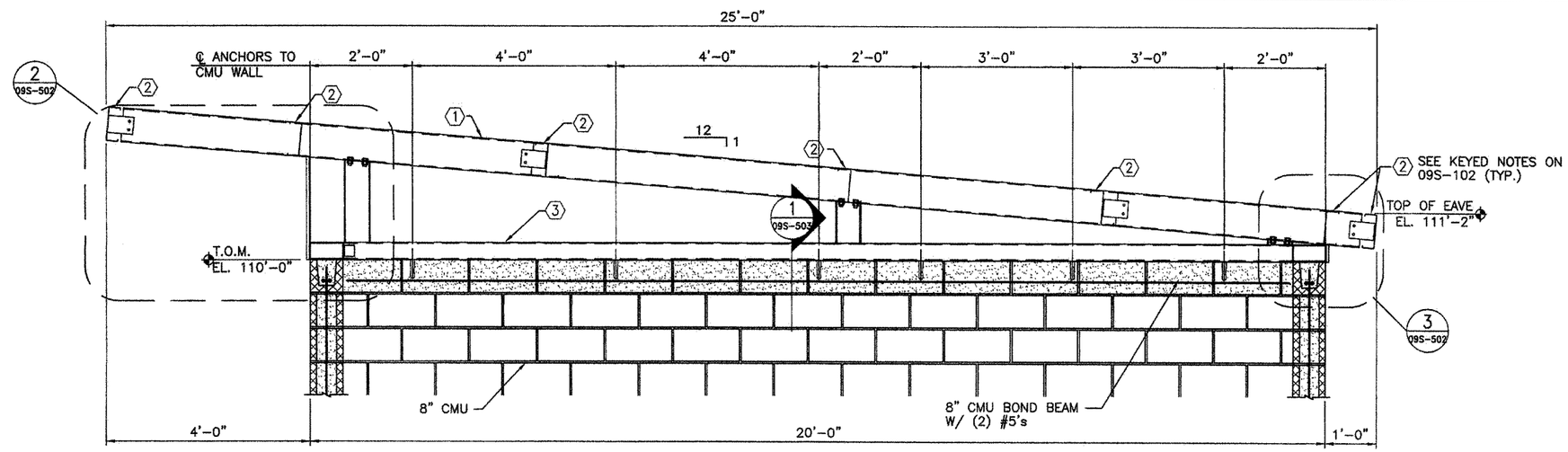
DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TYPICAL FOUNDATION DETAILS

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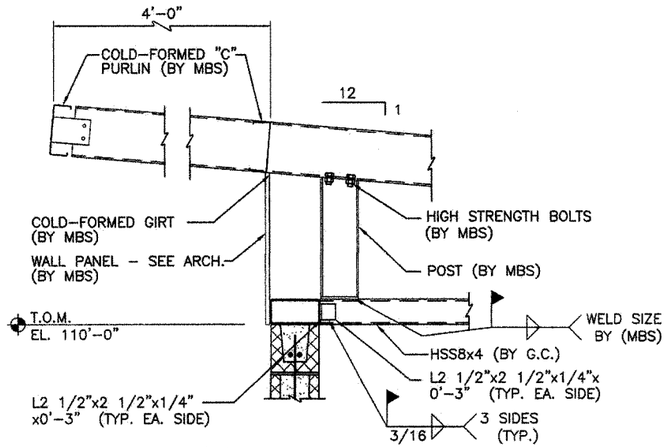
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No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DESIGNED BY	JDW
DRAWN BY	JMS
CHECKED BY	TBC
APPROVED BY	JSR
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SCALE	AS NOTED
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SHEET	09S–501
REV	

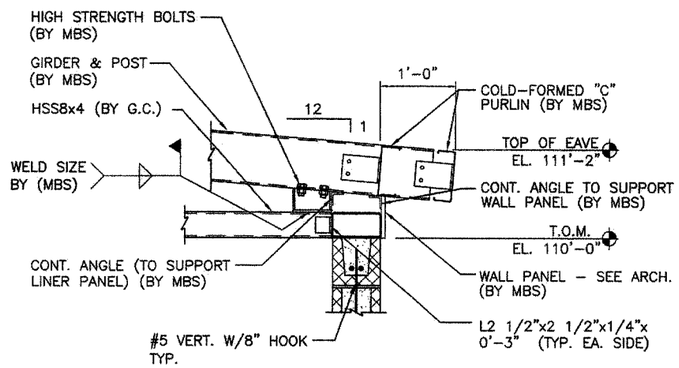
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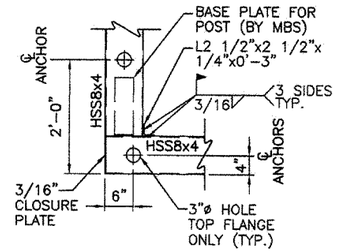
1 09S-502 **SECTION** SCALE: 3/4"= 1'-0"



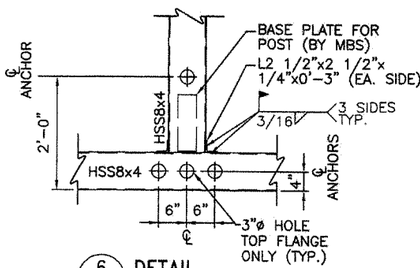
2 09S-502 **DETAIL** SCALE: 1"= 1'-0"



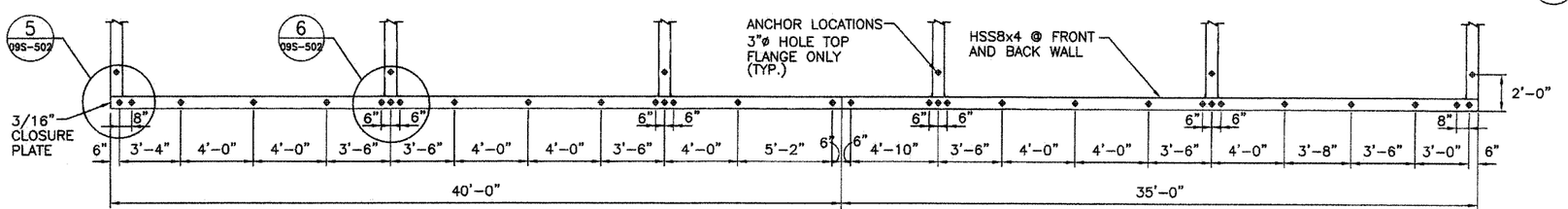
3 09S-502 **DETAIL** SCALE: 1"= 1'-0"



5 09S-502 **DETAIL** SCALE: 3/4"= 1'-0"



6 09S-502 **DETAIL** SCALE: 3/4"= 1'-0"



4 09S-502 **FRAMING PLAN (TYP.) NORTH & SOUTH WALLS** SCALE: 1/4"= 1'-0"

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AHTD JOB NO. 040554
TYPICAL FRAMING DETAILS

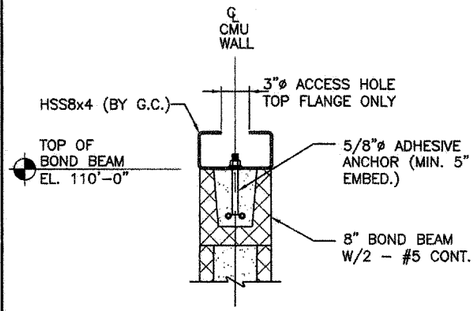
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JOHN DAVID WESTERHEIDE
10/13/11

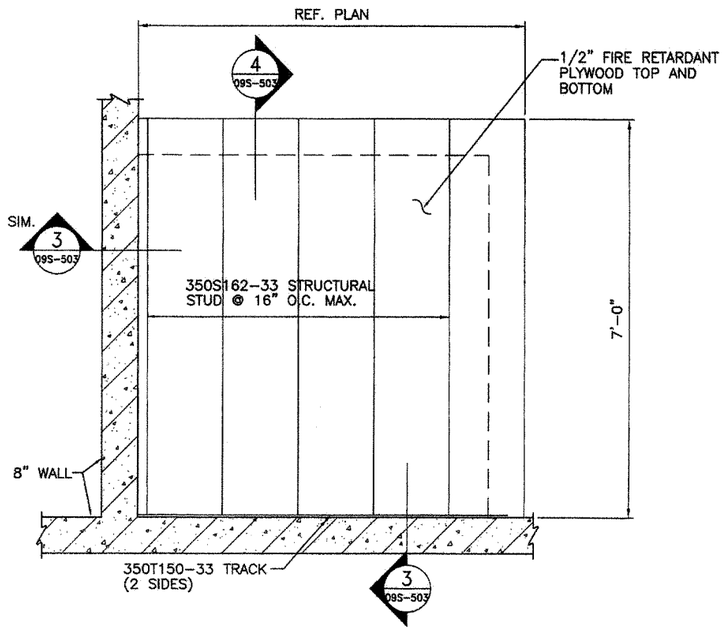
DESIGNED BY	JDW
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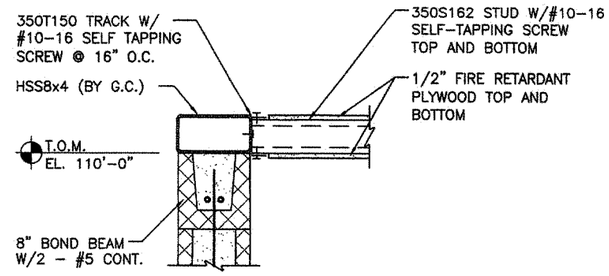
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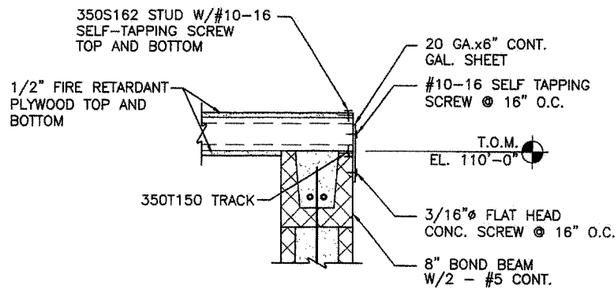
1 SECTION
09S-503 SCALE: 1 1/2"=1'-0"



PLAN AT LID OVER
STORAGE ROOM (TYP.) 5 PLACES
2 09S-503 SCALE: 3/4"= 1'-0"



3 SECTION
09S-503 SCALE: 1 1/2"=1'-0"



4 SECTION
09S-503 SCALE: 1 1/2"=1'-0"

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
FRAMING DETAILS

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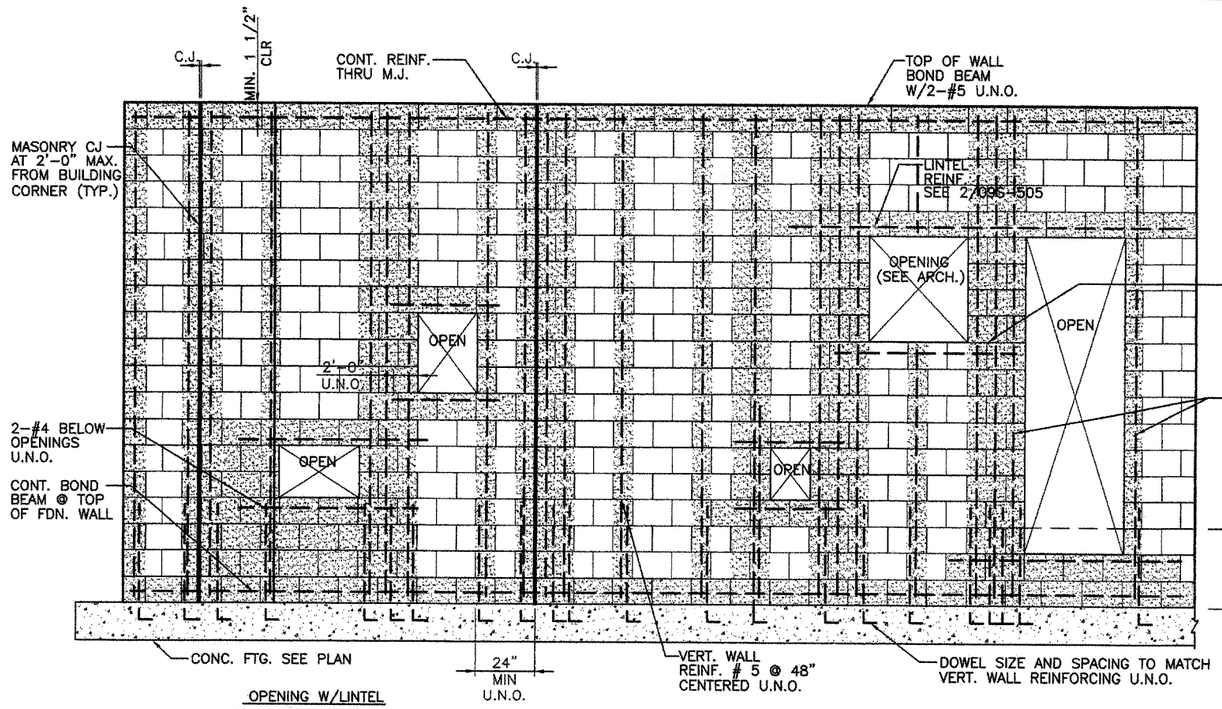
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09S-503
REV	
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PROFESSIONAL
ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

GENERAL MASONRY NOTES:

1. UNITS SHALL UTILIZE FACE SHELL MORTAR BEDDING U.N.O.
2. MASONRY WALLS SHALL HAVE CONTROL JOINTS AT A MAXIMUM OF 30'–0" U.N.O. SEE ARCH. DRAWINGS FOR CONTROL JOINT LOCATIONS IN CMU WALLS. SEE 4/09S–504 FOR CONTROL JOINT DETAIL.
3. CONSOLIDATE GROUT POURS OVER 12' BY MECHANICAL VIBRATION. RECONSOLIDATE GROUT IN MASONRY CELLS BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
4. FOR HIGH LIFT GROUTING (OVER 5'–0") CLEANOUTS ARE REQUIRED AT EVERY GROUTED CORE AT THE BASE OF EACH LIFT. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR. TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
5. HIGH LIFT GROUT SHALL NOT EXCEED 10'–6" IN HEIGHT FOR #4 OR #5 VERT. BARS 12'–6" IN HEIGHT FOR #6 VERT. BARS.
6. THE USE OF SELF–CONSOLIDATING GROUT (SCG) WILL REQUIRE FULL INSPECTION AND ACCEPTANCE OF THE GROUT MIX DELIVERED TO THE SITE BY THE SUPPLIERS REPRESENTATIVE AND THE INSPECTION AGENCY.
7. SCG ON–SITE INSPECTION SHALL VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DETERMINED BY ASTM C 1611.
8. PROVIDE STANDARD 90 DEGREE HOOK DOWELS BETWEEN FOUNDATIONS AND WALLS EQUAL TO THE SIZE AND SPACING OF THE VERTICAL REINFORCING U.N.O.
9. PROVIDE 9 GA. LADDER TYPE HORIZONTAL AT JOINT REINFORCEMENT EVERY COURSE IN STACK BOND WALLS AND EVERY OTHER COURSE IN RUNNING BOND WALLS U.N.O. PROVIDE A 6 INCH SPLICE LENGTH FOR HORIZONTAL REINF.
10. ALL SPLICES WITHIN WALL SHALL BE IN ACCORDANCE WITH THE LAP SPLICE SCHEDULE (SEE 09S–001) U.N.O. SEE SECTIONS AND DETAILS FOR DOWELS AND SPLICE AT FOUNDATIONS AND FLOOR LEVELS.
11. PROVIDE CONTINUOUS BOND BEAM REINFORCEMENT WITH 2–#4 BARS OR AS NOTED.
12. ALL NON–BEARING MASONRY WALLS SHALL BE PROVIDED WITH VERTICAL SLIP CONNECTIONS AT THE TOP OF THE WALL U.N.O.
13. REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS.
14. TOLERANCES FOR THE PLACEMENT OF REINFORCEMENT IN WALLS AND FLEXURAL ELEMENTS SHALL BE PLUS OR MINUS 1/2" FOR d EQUAL TO 8" OR LESS, PLUS OR MINUS 1" FOR d EQUAL TO 24" OR LESS BUT GREATER THAN 8", AND PLUS OR MINUS 1 1/4" FOR d GREATER THAN 24". NOTE: d = DISTANCE FROM CENTERLINE OF REINFORCING STEEL TO THE OPPOSITE FACE OF MASONRY.
15. SEE 09S–001 FOR INFORMATION ON CMU MATERIAL REQUIREMENTS.
16. ALL MORTAR PROTRUSIONS INTO CELLS TO BE GROUTED ARE REQUIRED TO BE REMOVED BY MASON AND ALL DEBRIS MUST BE VACUUMED FROM CORE.
17. REINFORCING IS CONTINUOUS FROM TOP OF FOOTING TO TOP OF WALL.



OPENING W/LINTEL BOND BEAM COMBINATION

TYPICAL CONTROL JOINT

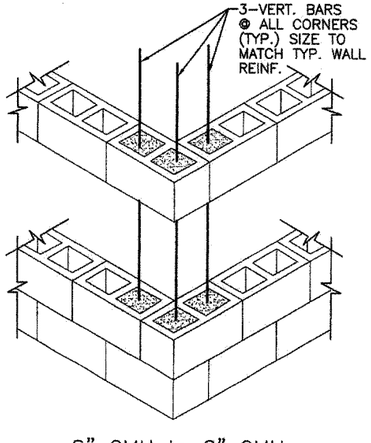
TYPICAL WALL PIER

1 TYPICAL MASONRY WALL REINFORCING DETAIL
09S–504 SCALE: N.T.S.

MASONRY JAMB SCHEDULE		
OPENING WIDTH	# CELLS	BARS EACH CELL
3'–4" OR LESS	1	1–#5 CENTERED
OVER 3'–4" TO 10'–0"	2	1–#5 CENTERED

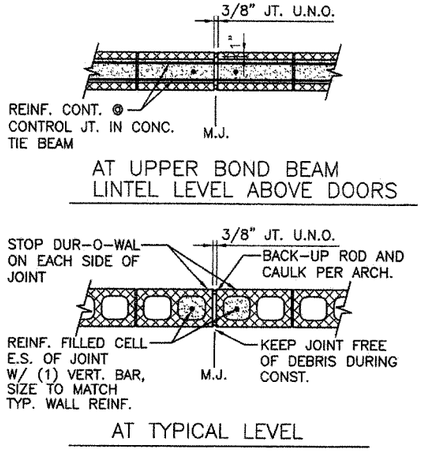
NOTES:
1. THE INDICATED REINFORCEMENT IS CONTINUOUS FULL HEIGHT OF WALL.
2. PROVIDE ONE ADDITIONAL CELL WITH 1–#5 CENTERED BENEATH BEARING OF STEEL LINTELS.

2 MASONRY JAMB SCHEDULE
09S–504 SCALE: N.T.S.



8" CMU to 8" CMU

3 TYP. MASONRY CORNER DETAIL
09S–504 SCALE: N.T.S.



4 TYP. WALL CONTROL JOINT DETAILS
09S–504 SCALE: N.T.S.

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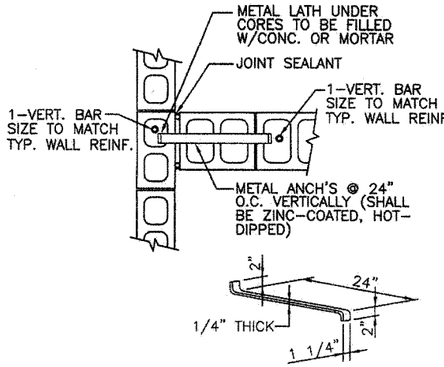
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CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TYPICAL MASONRY DETAILS

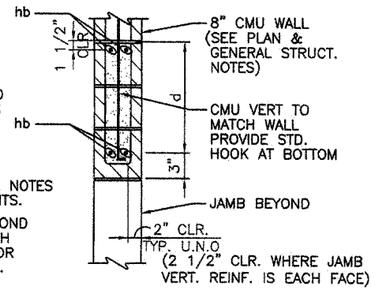
DESIGNED BY	JDW
DRAWN BY	JMS
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09S–504
REV	



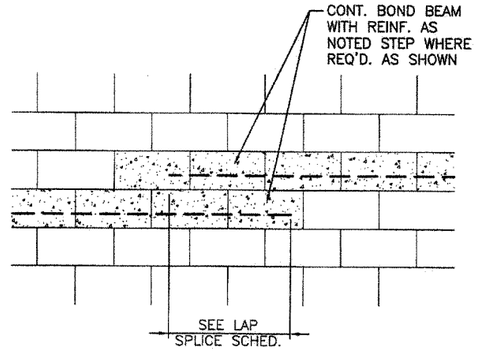
1 09S-505 TYP. WALL DETAIL
SCALE: N.T.S.

LINTEL SCHEDULE				
MARK	OPENING WIDTH	d	hb	COMMENTS
ML1	3'-4" OR LESS	5"	(2) #4	
ML2	OVER 3'-4" TO 6'-8"	13"	(2) #4	BOTTOM
ML3	OVER 6'-8" TO 10'-0"	21"	(2) #4	T&B

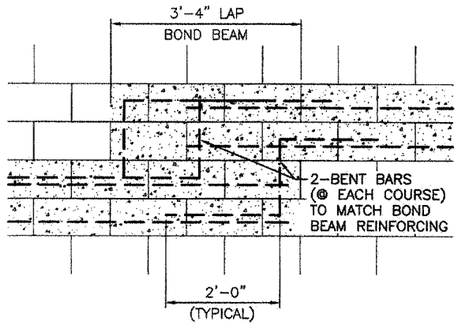
NOTES:
1. EXTEND HORIZONTAL BARS 2'-0" MIN. PAST FACE OF JAMB. PROVIDE STANDARD HOOK @ BAR END IF THIS CANNOT BE ACHIEVED.
2. DO NOT SPLICE HORIZONTAL BARS.
3. SEE GENERAL STRUCTURAL NOTES FOR SHORING REQUIREMENTS.
4. PROVIDE A CONTINUOUS BOND BEAM LINTEL IN THE SOUTH WALL OVER THE DOORS FOR THE LENGTH OF THE WALL.



2 09S-505 TYP. REINF. MASONRY LINTEL DETAIL
SCALE: N.T.S.



3 09S-505 TYPICAL BOND BEAM STEP DETAIL
SCALE: N.T.S.



4 09S-505 MULTICOURSE BOND BEAM STEP DETAIL
SCALE: N.T.S.

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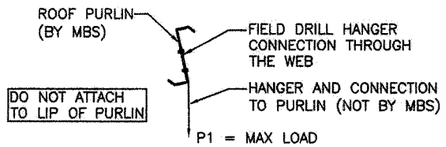
DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TYPICAL MASONRY DETAILS

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 12626 JOHN DAVID WESTERHEIDE 10/13/11

DESIGNED BY	JDW
DRAWN BY	JMS
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09S-505
REV	

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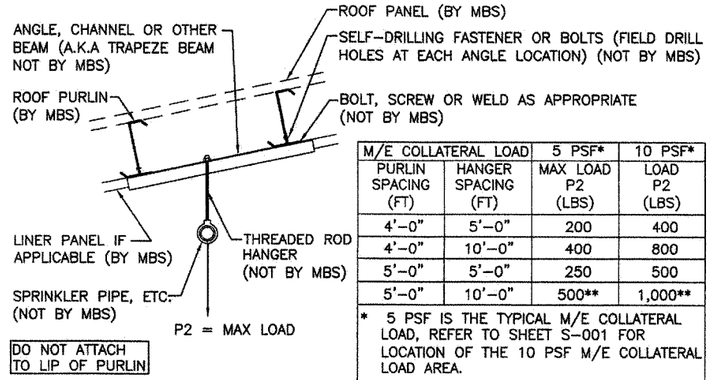


M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	LOAD P1 (LBS)	LOAD P1 (LBS)
4'–0"	5'–0"	100	200
4'–0"	10'–0"	200	400
5'–0"	5'–0"	125	250
5'–0"	10'–0"	250**	500**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.

** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

1 09S–506 **RECOMMENDED METHOD FOR HANGING LOADS ON A SINGLE PURLIN**
SCALE: 1"=1'–0"



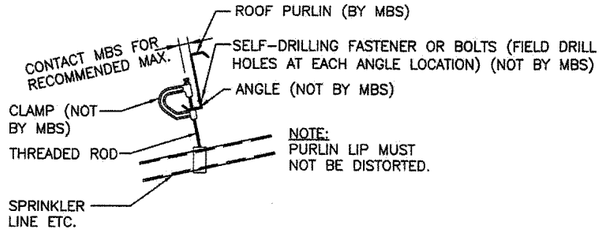
M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	MAX LOAD P2 (LBS)	LOAD P2 (LBS)
4'–0"	5'–0"	200	400
4'–0"	10'–0"	400	800
5'–0"	5'–0"	250	500
5'–0"	10'–0"	500**	1,000**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.

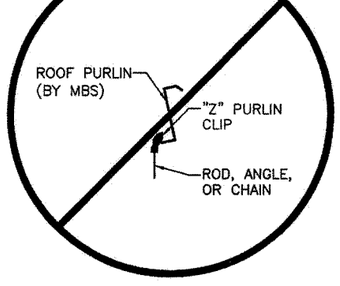
** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

2 09S–506 **SPREADER BEAM (A.K.A. TRAPEZE BEAM) DETAIL**
SCALE: 1"=1'–0"

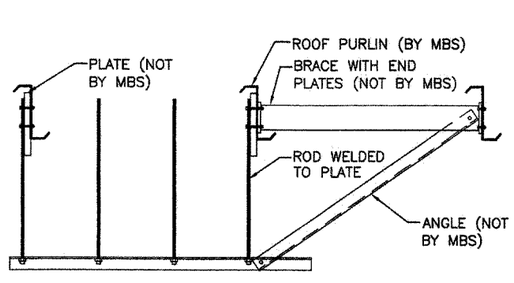
NOTE:
* FOR LOADS GREATER THAN 40 POUNDS, VERIFY ADEQUACY OF ROOF FRAMING WITH M.B.S.



3 09S–506 **CLAMP HANGER DETAIL VERIFY W/MANUF. PRIOR TO USE**
SCALE: 1"=1'–0"



4 09S–506 **INCORRECT METHOD FOR HANGING LOADS ON PURLINS**
SCALE: 1"=1'–0"



5 09S–506 **SEISMIC OR SWAY BRACE DETAIL**
SCALE: 1"=1'–0"

GENERAL HANGING LOAD NOTES FOR METAL BUILDINGS:

1. THE DETAILS DEPICTED HEREIN ARE TYPICAL INDUSTRY STANDARD DETAILS FOR HANGING LOADS (DUCTS, PIPING, CONDUITS, ETC.) FROM THE COLD–FORMED PURLINS OF METAL BUILDING ROOFS.
2. THE ACTUAL DETAILS TO BE USED SHALL BE DETERMINED BY THE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. CONTRACTOR AND REVIEWED BY THE RESPECTIVE METAL BUILDING CONTRACTOR, INCLUDING THE VALUES OF THE HANGER LOADS.
3. THE HANGER RODS, BRACES, STRUTS BETWEEN THE PURLINS TO SUPPORT THE HANGER AND/OR SWAY BRACES SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR (NOT THE METAL BUILDING CONTRACTOR UNLESS PREVIOUS ARRANGEMENTS HAVE BEEN MADE).
4. THE RESPECTIVE CONTRACTOR SHALL CONSULT THE BUILDING MANUFACTURER REGARDING THEIR SPECIFIC GUIDELINES FOR HANGING LOADS ON PURLINS.
5. HANGING LOADS SHOULD NOT BE APPLIED TO THE PURLIN LIP. WHERE PERMISSIBLE, THE PREFERRED PRACTICE FOR HANGING LOADS IS TO ATTACH TO THE PURLIN WEB USING A BOLT AND NUT, OR SELF–DRILLING SCREWS.
6. HANGING UNIFORM LOADS SUCH AS SPRINKLER MAINS OR HVAC EQUIPMENT SHOULD BE DISTRIBUTED OVER SEVERAL PURLINS AND SHOULD NEVER EXCEED THE COLLATERAL LOAD ALLOWANCE FOR THE ROOF SYSTEM. FOR UNIFORM LOADS THAT RUN PARALLEL TO THE PURLINS, IT MAY BE NECESSARY TO USE TRANSVERSE CHANNELS (A.K.A. TRAPEZE BEAMS) ATTACHED TO THE WEBS OR FLANGES OF TWO OR MORE PURLINS TO SPREAD THE LOAD BETWEEN TWO OR MORE PURLINS. IN SUCH CASES, CONTACT THE BUILDING MANUFACTURER OR A LOCAL PROFESSIONAL ENGINEER PRIOR TO ATTEMPTING TO HANG LOADS FROM THE PURLINS.
7. IN SOME CASES, IT MAY BE ALLOWABLE TO HANG LIGHTWEIGHT LOADS FROM HANGER RODS ATTACHED THROUGH A SMALL HOLE DRILLED IN THE BOTTOM PURLIN FLANGE WITH A THREADED ROD AND NUT. CONTACT THE MANUFACTURER TO SEE IF THEY PERMIT THIS AND FOR THEIR SPECIFIC RECOMMENDATION REGARDING THE HOLE SIZE AND MAXIMUM ACCEPTABLE DISTANCE FROM THE APPLIED LOAD TO THE PURLIN WEB.
8. MULTIPLE HANGERS MAY BE CONNECTED TO THE SAME PURLIN WITH PRIOR APPROVAL FROM THE BUILDING MANUFACTURER. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.
9. IN SOME CASES, LIGHTWEIGHT LOADS SUCH AS FROM SUSPENDED CEILING TILE HANGER WIRES, MAY BE LOOPED OVER THE TOP OF THE ROOF PURLINS. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.

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STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER No. 12626 — JOHN S. WESTERHEIDE — 10/13/11

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TYPICAL HANGING LOAD DETAILS AT PURLINS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09S–506
REV	

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ELECTRICAL SYMBOLS LEGEND

CEILING	WALL	
# A	# A	FLUORESCENT FIXTURE, A = FIXTURE TYPE, # = CKT. # TYPICAL
A	A	FLUORESCENT FIXTURE, EQUIPPED WITH BATTERY PACK.
NL A	A	HID, COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
A	A	EXIT LIGHT, DARKENED SECTION(S) DENOTE FACE(S). USE DIRECTIONAL ARROWS WHERE INDICATED.
A	A	FLUORESCENT STRIP FIXTURE
A		EMERGENCY FIXTURE
A		REMOTE EMERGENCY FIXTURE

NOTE: REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION

———	CONDUIT CONCEALED
———o	CONDUIT TURNING UP
———d	CONDUIT TURNING DOWN
— — —	CONDUIT BELOW GRADE
J	JUNCTION BOX
J	JUNCTION BOX WALL MOUNTED
═══	CABLE TRAY
	HOMERUN TO PANEL BOARD OR DEVICE. TICK MARKS DENOTE NUMBERS OF CIRCUITS. HOMERUN WITH NO TICK MARKS SHALL BE A SINGLE CIRCUIT,
T	TRANSFORMER
HH	HANDHOLE
	GROUND
M	METER
	SWITCHBOARD, DISTRIBUTION PANEL
	PANEL BOARD
	HEAVY DUTY SAFETY SWITCH, MOUNT WITH L OF HANDLE AT 60" A.F.F. REFER TO EQUIPMENT SCHEDULE FOR AMPACITY, NEMA CONFIGURATION, FUSING, ECT.
	SINGLE RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
	DUPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE
WP	DUPLEX GFI RECEPTACLE W/ WEATHERPROOF "IN-USE" TYPE COVER MOUNTED @ 18" A.F.F.
GFI	COMMERCIAL GRADE GFI RECEPTACLE MOUNTED @ 18" A.F.F.
	QUADPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
	CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, MOUNTED RECESSED WHEN INSTALLED IN ACCESSIBLE CEILING PANEL. SECURE TO STRUCTURE PER N.E.C.
	DUPLEX RECEPTACLE OUTLET, FLOOR MOUNTED
	SPECIAL PURPOSE OUTLET, ELECTRICAL CHARACTERISTICS AS SPECIFIED ON PLANS OR SCHEDULE.
$	SINGLE POLE SWITCH, MOUNTED AT 48" A.F.F.
$P	SINGLE POLE SWITCH WITH PILOT LIGHT, MOUNTED AT 48" A.F.F.
$3	3-WAY SWITCH, MOUNTED AT 48" A.F.F.
$4	4-WAY SWITCH, MOUNTED AT 48" A.F.F.
$OS	COMBINATION OCCUPANCY/SENSOR/SWITCH, MOUNTED AT 48" A.F.F.
$M	MOTOR RATED SWITCH MOUNTED AT MOTOR, UNLESS NOTED OTHERWISE.
D$	DIMMER SWITCH, MOUNTED AT 48" A.F.F.
OC	OCCUPANCY SENSOR, CEILING MOUNTED.
OC	OCCUPANCY SENSOR, WALL MOUNTED WITH SWIVEL BRACKET.
	MOTOR LOAD

GENERAL NOTES

1. FOR ALL ELECTRICAL WORK, REFER TO DIVISION 26 SPECIFICATION SECTION.
2. HEIGHTS INDICATED ARE TO THE CENTERLINE OF BOX, UNLESS INDICATED OTHERWISE.
3. ALL SYMBOLS MAY NOT BE USED.
4. FOR ALL ELECTRICAL EQUIPMENT INDICATED TO BE SUSPENDED FROM METAL BUILDING FRAMING (TRANSFORMERS, LIGHTING, ETC.), THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUPPLEMENTAL FRAMING, HANGERS, ETC. NECESSARY TO SUPPORT ELECTRICAL ITEMS IN ACCORDANCE WITH THE METAL BUILDING MANUFACTURER'S RECOMMENDATIONS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF HANGERS FOR ELECTRICAL ITEMS WITH METAL ROOF LINER PANEL INSTALLATION SEQUENCE.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, COORDINATE AND CONFIRM WITH THE MECHANICAL AND PLUMBING CONTRACTOR ALL OF THE FOLLOWING:
   A. VERIFY EXACT FEED LOCATIONS AND NUMBER OF CONNECTIONS TO ALL A/C UNITS, FAN COILS, CHILLERS, COOLING TOWERS, SYSTEM PUMPS, EVAP. COOLERS, MAKE-UP AIR UNITS, DAMPER MOTORS, ETC.
   B. ELECTRICAL CHARACTERISTICS (E.G., KW, HP, AMPS, VOLTAGE, PHASE, ETC.): CONFIRM WITH APPROVED MECHANICAL/PLUMBING EQUIPMENT SHOP DRAWINGS.
   C. EXACT LOCATION OF ALL CONTROL PANELS, CONTROL DEVICES, THERMOSTATS, DAMPER MOTORS, ETC.

ABBREVIATIONS

A	
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMP INTURUPTING CAPACITY
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B	
BKR	CIRCUIT BREAKER
BLDG	BUILDING
C	
CKT	CIRCUIT
℄	CENTERLINE
CLG	CEILING
COL	COLUMN
CU	COPPER
°C	DEGREES CELSIUS
D	
DEG	DEGREES
DIA, ø	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DIV	DIVISION
DN	DOWN
DWG	DRAWING
E	
EA.	EXHAUST AIR, EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRICAL WATER COOLER
EX	EXISTING
F	
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE (CONDUIT)
FLR	FLOOR
FT	FOOT, FEET
°F	DEGREES FAHRENHEIT
G	
GA	GAUGE
GALV	GALVANIZED
GFI, GFCI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL (CONDUIT)
H	
HID	HIGH INTENSITY DISCHARGE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & A/C
HZ	HERTZ
I	
ID	INSIDE DIAMETER, IDENTIFICATION
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH, INCHES
J	
J-BOX	JUNCTION BOX
K	
KCMIL	THOUSAND CIRCULAR MILS (AREA)
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR
L	
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
M	
MAX	MAXIMUM
MC	MULTI CONDUCTOR (CABLE)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MOCP, MOP	MAXIMUM OVER CURRENT PROTECTION
MH	MANHOLE, METAL HALIDE
MIL, MILS	1/1000 INCH
MIN	MINIMUM

N	
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFR'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O	
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OEP	OVERHEAD ELECTRICAL PRIMARY
OES	OVERHEAD ELECTRICAL SECONDARY
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.
P	
PE	PHOTO ELECTRIC, PROFESSIONAL ENGINEER
PF	POWER FACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
PWR	POWER
Q	
QTY	QUANTITY
R	
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REF;	REFERENCE, REFER TO
REQD	REQUIRED
REV	REVISION, REVISE
RLA	RUNNING LOAD AMPS
RM	ROOM
RMS	ROOT MEAN SQUARE
RPM	REVOLUTION PER MINUTE
S	
SCH	SCHEDULE, SCHEDULED
SF	SQUARE FEET, SQUARE FOOT
SPEC	SPECIFICATION, SPECIFY
SS	STAINLESS STEEL, STATIONARY SEWER
STD	STANDARD
SUSP	SUSPEND, SUSPENDED
T	
TELECOM	TELECOMMUNICATIONS
THRU	THROUGH
TSTAT	THERMOSTAT
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
U	
U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UEP	UNDERGROUND ELECTRICAL PRIMARY
UES	UNDERGROUND ELECTRICAL SECONDARY
UL	UNDERWRITER'S LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	
V	VOLT, VENT, VERTICAL
VA	VOLT-AMPERE
VERT	VERTICAL
W	
W	WATT, WIDTH, WIRE
W/	WITH
W/O	WITHOUT
X	
XFMR	TRANSFORMER

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STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13428 — JOSHUA D. TOTTEN

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
ELECTRICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	JBB
DRAWN BY	JBB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09E-100
REV	

108 OF 289

KEY NOTES: (THIS SHEET ONLY)

1. ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL F/10E-403.
2. ALL LIGHTING AND POWER CIRCUITS AT THIS BUILDING SHALL BE FED FROM PANEL 10L1 LOCATED AT STORAGE BUILDING B. EXTEND HOMERUNS BELOW GRADE BETWEEN BUILDINGS.

GENERAL NOTES: (THIS SHEET ONLY)

A. REFER TO SHEET 09E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. CIRCUITING BETWEEN LIGHTING FIXTURES AND SWITCHES ARE NOT SHOWN FOR CLARITY.

C. ALL LIGHTING IN STORAGE BUILDING A SHALL BE 120V.

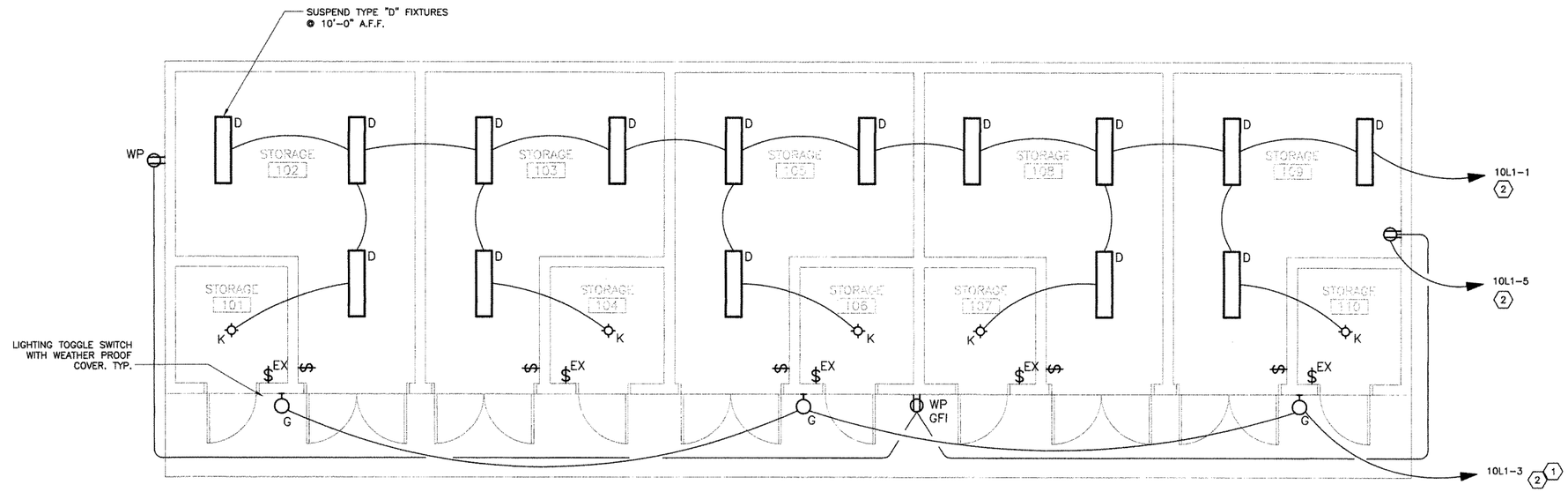
D. ELECTRICAL CIRCUITS SHALL NOT PASS THROUGH ROOMS 101, 104, 106, 107 OR 110 UNLESS REQUIRED FOR LIGHTING CIRCUIT.

E. PROVIDE CONDUIT SEALS PER NEC ART 501 ON ALL CONDUITS ENTERING OR LEAVING STORAGE ROOMS 101, 104, 106, 107, AND 110.

F. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

G. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

H. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.



A 09E-101 ELECTRICAL LIGHTING & POWER PLAN
SCALE: 1/4" = 1'-0"

NORTH

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
ELECTRICAL LIGHTING & POWER PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09E-101
REV	
109 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 13428 JOSHUA W. JOYCE 10/13/2011

TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	VOLTS	REMARKS / NOTES
A2	LSI	2LLC-G-2-32-RPW-SS010-VOLT	TWO LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	2	32	48" T8	277*	
A3	LSI	2LLC-G-3-32-RPW-SS010-VOLT	THREE LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	3	32	48" T8	277*	
B2	LSI	LA-2-32-SD-SS010-VOLT	TWO LAMP LENSED FLUORESCENT TROFFER	2	32	48" T8	277*	
B4	LSI	LA-4-32-SD-SS010-VOLT	FOUR LAMP LENSED FLUORESCENT TROFFER	4	32	48" T8	277*	
C	LSI	EG-2-32-SS010-VOLT	TWO LAMP ENCLOSED / GASKETED FLUORESCENT	2	32	48" T8	277*	NOTE 8
D	LSI	F22-2-32-SS010-VOLT	TWO LAMP SUSPENDED FLUORESCENT	2	32	48" T8	277*	NOTES 1,3
E	LSI	TEM-WH-SD2	LOW PROFILE 8V EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
EX	LSI	PRX-R-U-WB-WH-WH-PR50	COMBINATION EXIT / EMERGENCY FIXTURE	-	-	-	277*	NOTES 8,7
F	LSI	W44-4-2-32-SS010-UE	TWO LAMP WALL MOUNT LINEAR FLUORESCENT	2	32	48" T8	277*	NOTE 2
G	LSI	PTWS-FT-150-MH-F-VOLT-BRZ	EXTERIOR HID WALL SCONCE	1	150	150W MH	277*	NOTES 2,8
H	LSI	IHB-400-MH-MT-IAC22-PM	PENDANT MOUNT HID HIGHBAY FIXTURE	1	400	400W MH	277*	NOTES 1,4,5
I	WF HARRIS	50S-D-26PLC-VOLT	ONE LAMP COMPACT FLUORESCENT	1	26	26W PLC	277*	
J	LSI	208V-CFL-1-42T-UNIV	8" RECESSED DOWNLIGHT	1	42	42W CFT	277*	NOTE 9
K	LPDI	383-C-75-G	EXPLOSION PROOF INCANDESCENT (CEILING MOUNT)	1	80	60W A19	120*	NOTES 10,11
L	LSI	DRM2-MF-400-PSMUR-F-TT-BRZ	HID FLOOD LIGHT W/ VERTICAL WALL MOUNT BRACKET	1	400	400W MH	277*	NOTES 2,8
M	LSI	SOV-RD-175-MH-73-VOLT	LENSED HID	1	175	175W MH	277*	NOTES 9'12
N	ESCO LIGHTING	W26000 SERIES	10" UP/DOWN WALL MOUNT CYLINDER (BRONZE)	2	150	150W MH	277*	
O	SPAULDING	RCL-A-P75-H3P	POLE MOUNTED SITE LIGHT, TYPE III DISTRIBUTION	1	750	750W MH	480*	NOTES 14,15
P	LSI	CHA2-400-PSMV-MT-A25-LMC	PENDANT MOUNT HID LOWBAY FIXTURE	1	400	400W MH	277*	NOTES 5,9
X	LSI	EXC-R- -U-WB-WW-SD2	CAST ALUMINUM LED EXIT SIGN	-	4	-	277*	NOTES 8,7

FIXTURES INDICATED WITHIN THIS LIGHTING FIXTURE SCHEDULE INCLUDE ALL BUILDING AND SITE LIGHTING WITHIN THE AHTD D4 HEADQUARTERS COMPLEX. NOT ALL FIXTURES ARE USED AT EACH BUILDING.

*PROVIDE VOLTAGE INDICATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE LIGHTING PLAN.

NOTES:

1. PROVIDE WIRE GUARD
2. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
3. SUSPEND FIXTURE AT 10'-0" A.F.F.
4. SUSPEND FIXTURE AT 19'-0" A.F.F.
5. PROVIDE TWIST-LOCK TYPE CONNECTOR AT EACH FIXTURE.
6. PROVIDE ARROWS WHERE INDICATED.
7. POWER FIXTURES FROM UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.
8. U.L. LISTED FOR WET LOCATIONS.
9. U.L. LISTED FOR DAMP LOCATIONS.
10. U.L. LISTED EXPLOSION PROOF (CLASS I, DIV I).
11. PROVIDE WITH EXTRA LONG LIFE INCANDESCENT LAMP.
12. TRIM FINISH SHALL MATCH SURROUNDING AREA.
13. PROVIDE EMERGENCY QUARTZ LIGHTING KIT.
14. POLE MOUNTED AT 34'-0" A.F.G.
15. PROVIDE OPTIONAL ADJUSTABLE MOUNTING ARM.

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
ELECTRICAL SCHEDULE

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09E-401
REV	
110 OF 209	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 12428 JOSHUA W. JOYCE

TELECOMMUNICATIONS SYMBOLS

COMMUNICATIONS SYMBOLS

- W — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS ON WALL PHONE FACEPLATE
- WP — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR OUTSIDE WALL PHONE IN WEATHERPROOF ENCLOSURE
- A — ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR
- B — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR DATA (LAN)
- C — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS – ONE (1) CABLE FOR DATA (LAN) AND ONE (1) CABLE FOR RADIO.
- D — FOUR (4) CATEGORY 6 CABLES ON 8P/8C CONNECTORS
- DENOTES CEILING MOUNTED OUTLET
- DENOTES FLOOR BOX OR POKE THROUGH
- WAP — NEW WIRELESS ACCESS POINT, ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR WITH 30' SERVICE LOOP COILED AND SECURED
- COMMUNICATIONS CABLING SLEEVE OR CONDUIT
- CT — OVERHEAD CABLE TRAY, 12"W UNLESS NOTED OTHERWISE
- TELECOM GROUND BAR
- UNDERGROUND CONDUIT
- 19" COMMUNICATIONS EQUIPMENT RACK
- CROSS CONNECT
- CONDUIT DOWN
- CONDUIT UP
- P — COMMUNICATIONS POWER POLE
- J — JUNCTION BOX
- WALL MOUNTED JUNCTION BOX

A/V SYMBOLS

- TV — TELEVISION
- IC — INTERCOM CONNECTION
- V — VOLUME CONTROL
- M — MICROPHONE
- S — SPEAKER
- S — SPEAKER PENDANT
- S — SPEAKER WALL
- AMP — AUDIO AMPLIFIER
- HEADEND
- WIRELESS ANTENNA
- LCD PROJECTOR
- ## — 1 OUTPUT TAP
- ## — 2 OUTPUT TAP
- ## — 4 OUTPUT TAP
- ## — 8 OUTPUT TAP
- 2/4/8 WAY SPLITTER
- 2-WAY VIDEO AMPLIFIER
- FIBER OPTIC TRANSMITTER
- FIBER OPTIC RECEIVER
- TERMINATOR
- VIDEO EQUALIZER
- VIDEO ATTENUATOR
- COUPLER
- VIDEO AMPLIFIER

SECURITY SYMBOLS

- KEYPAD DEVICE
- CARD ACCESS READER
- CARD ACCESS READER W/KEYPAD
- BIO ACCESS DEVICE
- INTERCOM DEVICE
- FIBER OPTIC MODULE
- MOTION DETECTOR – PASSIVE INFRARED
- ELECTRIC STRIKE
- MOTION DETECTOR VOLUMETRIC
- MONITOR
- PUSH BUTTON
- GLASS BREAKING SENSOR
- BALANCED MAGNETIC SWITCH
- CAPACITANCE SENSOR
- SCREENING DEVICE
- CAMERA – FIXED FOCUS
- PTZ — CAMERA – PTZ
- TURNSTILE
- ELECTROMAGNETIC LOCK
- ANNUNCIATION DEVICE
- SECURITY SCREEN WITH ALARM

OUTSIDE PLANT

- POLE WITH RISER
- MH — MAINTENANCE HOLE
- HH — HAND HOLE
- PROPOSED STRAIGHT SPLICE
- STRAIGHT SPLICE WITH CHANGES
- SPLICE THREE WAY
- DOWN GUY
- DEAD MAN
- BRACED GUY
- SIDEWALK GUY
- GROUND
- ISOLATION GAP
- B — SPLICE, BURIED CABLE, IN PEDESTAL
- Enc — ENCAPSULATED SPLICE
- CABLE LOOP

LINE TYPES

- —BC— BACKBONE CONDUIT
- —BCC— BACKBONE CONDUIT FOR COPPER
- —BFC— BACKBONE CONDUIT FOR FIBER
- —COP— COPPER BACKBONE
- —OF— OPTICAL FIBER BACKBONE
- -COAX- COAXIAL BACKBONE
- —PDS— PROTECTED DISTRIBUTION SYSTEM

GENERAL NOTES – COMMUNICATIONS

1. ALL COPPER TERMINATION HARDWARE TO BE 110 STYLE IDC, UNO.
2. TERMINATE ALL CONDUCTORS; NO CABLE SHALL CONTAIN NON TERMINATED ELEMENTS EXCEPT THE 25TH PAIR OF BINDER GROUPS IN MULTI-PAIR COPPER BACKBONE CABLE. MAKE TERMINATION ONLY AT INDICATED OUTLETS, TERMINALS, CROSS-CONNECTS AND PATCH PANELS.
3. CABLE MAY NOT BE SPLICED, UNO.
4. MONITOR CABLE PULL TENSION TO ENSURE MANUFACTURER RECOMMENDATION AND INDUSTRY STANDARDS ARE NOT EXCEEDED.
5. PROVIDE PULL STRING IN ALL EMPTY CONDUIT OR INNERDUCT. PULL STRING TO BE RATED FOR 200 lbs. IN ALL CONDUIT.
6. CABLE TRAY TO BE TRAPEZE OR CANTILEVER HUNG ONLY. BOND ALL SECTIONS OF TRAY TOGETHER WITH MANUFACTURER APPROVED BONDING METHOD.
7. PROVIDE PULL BOXES IN CONDUITS NO MORE THAN 100' APART AND PER EVERY 180 DEGREES OF BEND – SIZE PER TIA ALL CABLE TRAY TO BE 12"W U.N.O.
8. FIELD COORDINATE LOCATION OF NEW EQUIPMENT IAW APPLICABLE CODES.
9. ALL OUTLET BOXES ARE 4 11/16" SQUARE WITH SINGLE GANG EXTENSION RING WITH 1" CONDUIT STUBBED INTO CEILING SPACE.
10. NO CONDULETS OR FITTINGS SHALL BE USED.

SECURITY SYSTEM – GENERAL NOTES

1. PROVIDE AND INSTALL ALL SECURITY WIRING, DEVICES AND EQUIPMENT AS INDICATED
2. PROVIDE SUFFICIENT SERVICE LOOP AT EACH END OF SECURITY CABLE FOR PROPER CONNECTION TO AND MAINTENANCE OF EQUIPMENT OR DEVICES
3. ALL SECURITY CABLING TO BE INSTALLED IN METALLIC CONDUIT TO THE ASSOCIATED SECURITY PANEL
4. IN TURN KEY SYSTEMS ALL COMPONENTS PROVIDED ARE TO BE LISTED FOR USE IN THE SYSTEM INDICATED
5. IN TURN KEY SYSTEMS ALL ENCLOSURES AND IDS DEVICES WITH REMOVABLE COVERS SHALL HAVE TAMPER PROTECTION DEVICES CAPABLE OF BEING MONITORED CONTINUOUSLY
6. IN TURN KEY SYSTEMS ALL SECURITY SYSTEM COMMUNICATIONS LEAVING THE FACILITY WILL EMPLOY LINE SECURITY. CERTIFICATES THAT LINE SECURITY HAS BEEN EMPLOYED TO BE PROVIDED.

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13428 — JOSHUA D. JOYCE — 10/13/11

SAIC — CERTIFICATE OF AUTHORIZATION — Energy, Environment & Infrastructure, LLC — No. 510 — ARKANSAS

COMMUNICATIONS ABBREVIATIONS LIST

AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
BCC	BACKBONE COPPER CABLE
BKBD	BACKBOARD
BSMT	BASEMENT
BMS	BALANCED MAGNETIC SWITCH
CAT 6	4-PAIR, 24 GA, CATEGORY 6 UTP CABLE
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CD	CABLE DUCT
CER	COMMUNICATIONS EQUIPMENT ROOM
CLST	CLOSET
CMH	COMMUNICATIONS MAINTENANCE HOLE
COMM	COMMUNICATIONS
CT	CABLE TRAY
DEMO	DEMOLITION
DIST	DISTRIBUTION
EES	EARTH ELECTRODE SYSTEM
EF	ENTRANCE FACILITY
EMT	ELECTRICAL METALLIC TUBING
ENL	EXISTING DEVICE NEW LOCATION
ETM	EXISTING TO MOVE
ETR	EXISTING TO REMAIN
ETBR	EXISTING TO BE REMOVED
FO	FIBER OPTIC CABLE
GF/GI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
GF/CI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GI/CF	GOVERNMENT INSTALLED CONTRACTOR FURNISHED
GND	GROUND
IDF	INTERMEDIATE DISTRIBUTION FRAME
IDS	INTRUSION DETECTION SYSTEM
IC	INTERMEDIATE CROSS-CONNECT
IMC	INTERMEDIATE METAL CONDUIT
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MH	MAINTENANCE HOLE
MIN	MINIMUM
MM	MULTIMODE FIBER
MNS	MASS NOTIFICATION SYSTEM
MSB	MAIN SERVICE BUS
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
OSP	OUTSIDE PLANT
PET	PROTECTED ENTRANCE TERMINAL
PR	PAIR
PT	POINT
PTZ	PAN / TILT / ZOOM
PVC	POLY VINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
RSC	RIGID STEEL CONDUIT
RM	ROOM
RU	RACK UNIT
SHT	SHEET
SM	SINGLEMODE FIBER
TBL	TABLE
TGB	TELECOMM GROUNDING BUS BAR
TMGB	TELECOMM MAIN GROUNDING BUS BAR
TR	TELECOMM ROOm
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTIFIED OTHERWISE
W/	WITH

A / 09T-001 — TELECOMMUNICATIONS LEGEND AND ABBREVIATIONS
NTS

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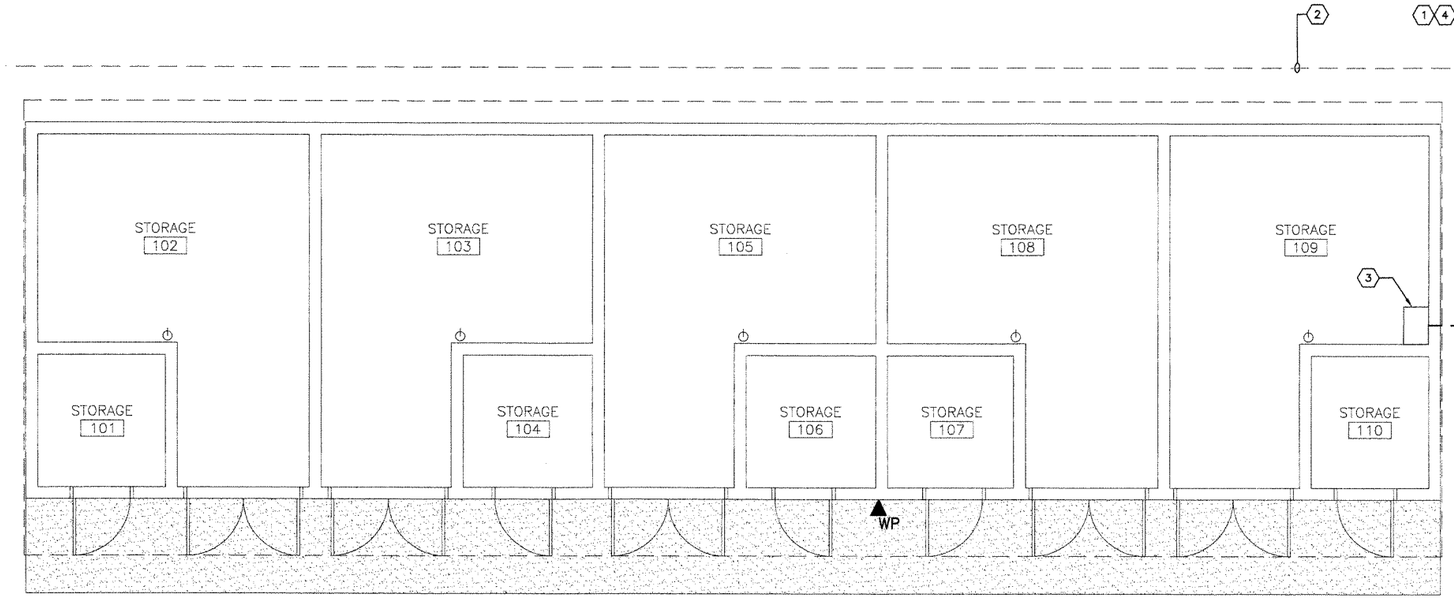
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TELECOMMUNICATIONS LEGEND AND ABBREVIATIONS

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	TDD
APPROVED BY	BMG
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09T-001
REV	0
	111 OF 289

KEY NOTES: THIS SHEET ONLY

1. EXISTING 36" X 36" HAND HOLE
2. ONE (1) EXISTING 4" CONDUIT
3. WALL CABINET. REFERENCE DETAIL A/09T-401.
4. INSTALL EXISTING 12-STRAND OPTICAL FIBER CABLE (COILED WITHIN HANDHOLE) IN NEW CONDUIT TO WALL CABINET. TERMINATE WITH "SC" STYLE CONNECTORS AND TEST.
5. ONE (1) NEW 4" CONDUIT



A 09T-101 TELECOMMUNICATIONS FLOOR PLAN
SCALE: 1/4" = 1'-0"

NORTH

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 13428 JOSHUA T. JOYCE 10/13/11

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TELECOMMUNICATIONS FLOOR PLAN

DESIGNED BY	TLS
DRAWN BY	JBB
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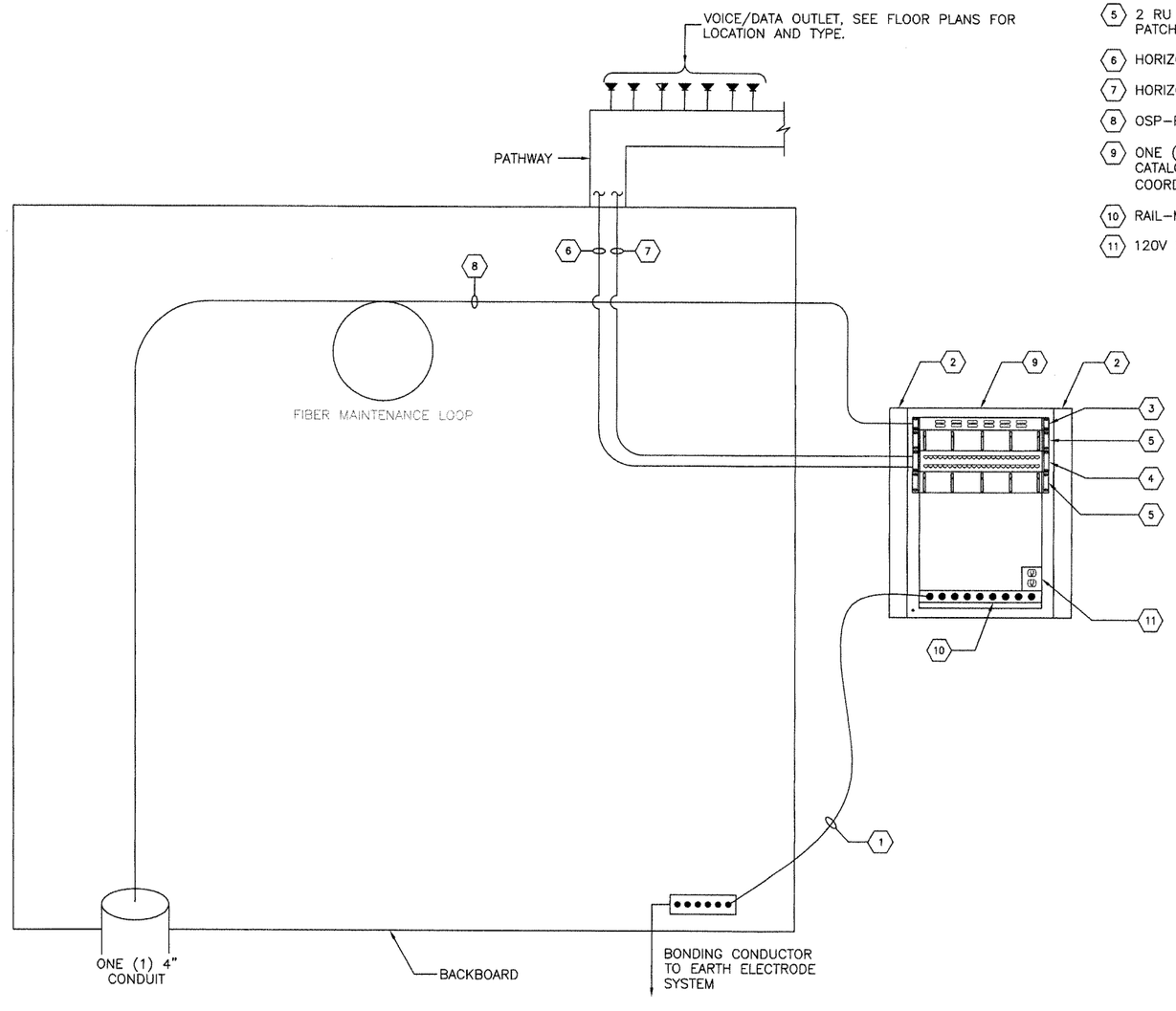
DATE	10/13/11
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PROJECT NUMBER	4070812000
SHEET	09T-101
REV	0

GENERAL NOTES (THIS SHEET ONLY):

1. ALL EQUIPMENT SHOWN IS CONCEPTUAL ONLY. PROVIDE AND INSTALL QUANTITIES AS REQUIRED BY SPECIFICATIONS AND DRAWINGS. DETAIL IS TYPICAL AND SOME CABLING AND EQUIPMENT MAY NOT APPLY.

KEYED NOTES (THIS SHEET ONLY):

1. MINIMUM 6 AWG STRANDED BONDING CONDUCTOR WITH GREEN THERMOPLASTIC SHEATH.
2. VERTICAL CABLE MANAGEMENT.
3. OPTICAL FIBER TERMINATION SHELF.
4. 48-PORT CATEGORY 6 PATCH PANEL.
5. 2 RU HORIZONTAL CABLE MANAGEMENT – PROVIDE ONE PER PATCH PANEL.
6. HORIZONTAL RADIO CABLE
7. HORIZONTAL DATA (LAN) CABLE
8. OSP-RATED OPTICAL FIBER CABLE – CAMPUS DISTRIBUTOR.
9. ONE (1) 20"D X 48"H "QUADCAB" WALL-MOUNTED CABINET. CATALOG NO. HSQ48 OR APPROVED FUNCTIONALLY EQUIVALENT. COORDINATE EXACT LOCATION W/ ELECTRICAL.
10. RAIL-MOUNTED GROUND BUS BAR.
11. 120V 20A DUPLEX RECEPTACLE MOUNTED TO BACKPLATE.



A 09T-401 MAIN CLOSET ROOM ELEVATION
SCALE: NTS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA T. TOYLOR

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

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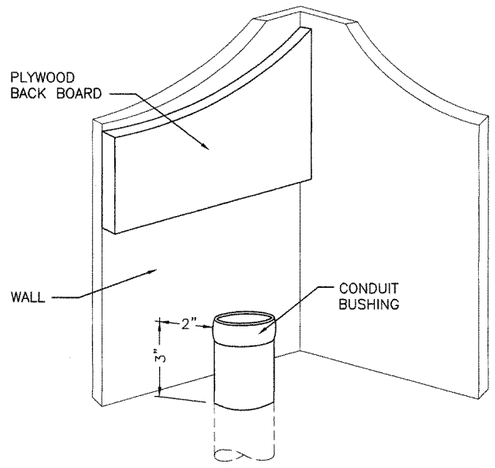
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DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TELECOMMUNICATIONS MAIN CLOSET ELEVATION

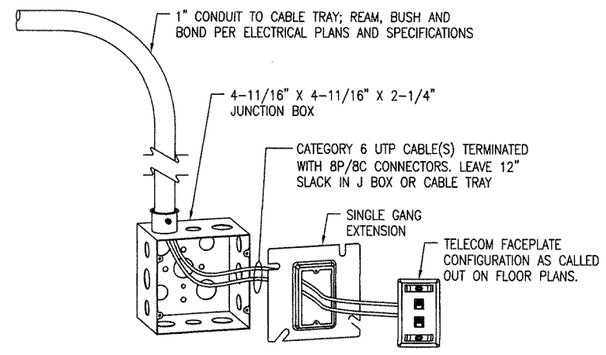
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PROJECT NUMBER	4070812000
SHEET	09T-401
REV	0

113 OF 289



A 09T-501 TYPICAL CONDUIT STUB-UP
SCALE: NTS



NOTES:
1. COORDINATE HEIGHT OF OUTLET WITH ELECTRICAL RECEPTACLE.

B 09T-501 WALL MOUNT COMMUNICATIONS OUTLET (TYPICAL)
SCALE: NTS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13468
JOSHUA D. JOYCE
10/13/11

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

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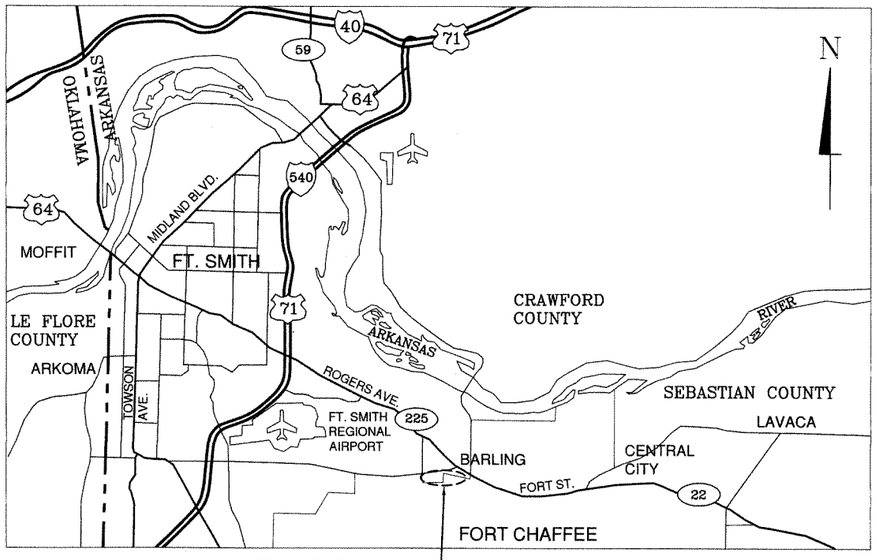
DISTRICT STORAGE BUILDING A
AHTD JOB NO. 040554
TELECOMMUNICATIONS DETAILS

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DRAWN BY	ASC
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APPROVED BY	BMG

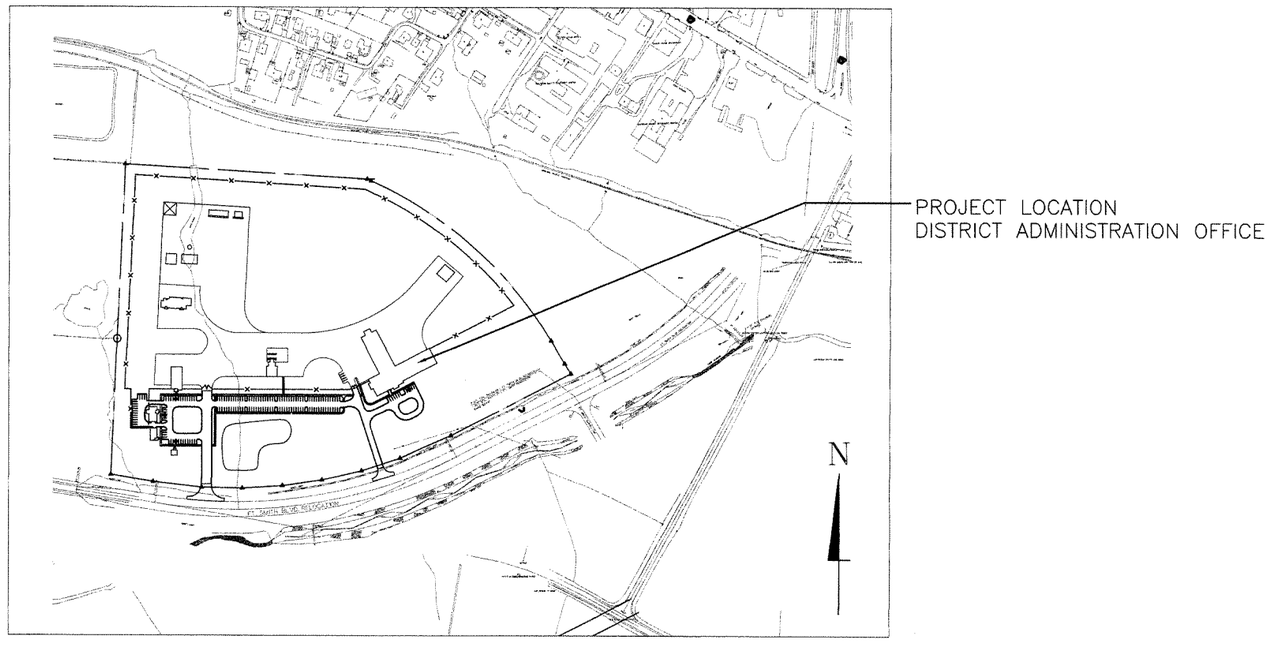
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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	09T-501
REV	0

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
					ARK.			
				JOB NO.		040554	115	289
				DISTRICT ADMINISTRATION OFFICE				

DISTRICT ADMINISTRATION BUILDING



VICINITY MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

DISTRICT ADMINISTRATION OFFICES			
CODE INFORMATION			
OCCUPANCY:	GROUP F-1, FACTORY, MODERATE HAZARD		AFPC SECTION 306.2
	NONSEPARATED USES		AFPC SECTION 508.3.2
CONSTRUCTION:	TYPE IIB, SPRINKLERED, UNPROTECTED		AFPC SECTION 602.5, TABLE 601, TABLE 602
STRUCTURAL FRAME		0 HOUR	
BEARING WALLS		0 HOUR	
NONBEARING WALLS AND PARTITIONS		0 HOUR	
FLOOR CONSTRUCTION		0 HOUR	
ROOF CONSTRUCTION		0 HOUR	
FIRE SEPARATION WALLS		NOT APPLICABLE	
FIRE PARTITIONS			
	STORAGE/MECHANICAL AREAS	0 HOUR	AFPC TABLE 508.2
	EXIT ACCESS CORRIDORS	0 HOUR	AFPC TABLE 1017.1
SHAFT ENCLOSURES		NOT APPLICABLE	
AREA OF EXTERIOR OPENINGS		UNLIMITED	AFPC TABLE 704.8
BUILDING LIMITATIONS FOR F-1 OCCUPANCY			
HEIGHT AND STORIES		55 FT/2 STORY	AFPC TABLE 503
ACTUAL HEIGHT AND STORIES		26 FT/1 STORY	
BASE AREA		15,500 SF/FLOOR	AFPC TABLE 503
MODIFICATION WITH SPRINKLER SYSTEM		46,500 SF/1 FLOOR	AFPC SECTION 506.3
ACTUAL AREA (1 STORY)		29,447 SF	
MEANS OF EGRESS			
OCCUPANT LOAD, GROUP F-1		106 OCCUPANTS	AFPC TABLE 1004.1.1
OCCUPANT LOAD, GROUP B		77 OCCUPANTS	AFPC TABLE 1004.1.1
OCCUPANT LOAD, GROUP A-3		84 OCCUPANTS	AFPC TABLE 1004.1.1
OCCUPANT LOAD, GROUP S-1		34 OCCUPANTS	AFPC TABLE 1004.1.1
TOTAL OCCUPANT LOAD		301 OCCUPANTS	
WIDTH OF EGRESS DOORS			
	EXITS	36" REQUIRED; 36" PROVIDED	AFPC SECTION 1008.1.1
MINIMUM NUMBER OF EXITS		2 REQUIRED; MULTIPLE PROVIDED	AFPC TABLE 1015.1
EXIT ACCESS TRAVEL DISTANCE		200 FT	AFPC TABLE 1016.1
EXIT ACCESS CORRIDOR WIDTH		44" REQUIRED 60" PROVIDED	AFPC SECTION 1017.2
DEAD END CORRIDOR		20 FT NA	AFPC SECTION 1017.3

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JOHNNY RAY RAMSEY
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10/13/11

"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

JOHNNY R. RAMSEY, ARCHITECT

ABBREVIATIONS

ABC	AGGREGATE BASE COURSE	F.E.	FIRE EXTINGUISHER	OSB	ORIENTED STRAND BOARD
ADJ	ADJUSTABLE	FFE	FINISHED FLOOR ELEVATION	PED	PEDESTRIAN
A.F.F.	ABOVE FINISH FLOOR	FIN	FINISH OR FINISHED	P.E.M.B.	PRE-ENGINEERED METAL BUILDING
ALUM	ALUMINUM	FLR	FLOOR	PLCS	PLACES
ASSEM	ASSEMBLY	FTG	FOOTING	R	RADIUS
A.W.C.	ACCESSIBLE WATER CLOSET	GA	GAUGE	RAD	RADIUS
BCE	BASE CIVIL ENGINEER	GEN	GENERAL	REF	REFER TO
BM	BEAM	GYP	GYPSUM	REINF.	REINFORCING
BD	BOARD	GYP BD	GYPSUM BOARD	REQ'D	REQUIRED
B.O.	BOTTOM OF	HDF	HIGH DENSITY FIBERBOARD	RM	ROOM
BOT	BOTTOM	HMAC	HOT MIX ASPHALTIC CONCRETE	R.T.U.	ROOF TOP UNIT
BRNG	BEARING	HORIZ	HORIZONTAL	SS	SANITARY SEWER OR STAINLESS STEEL
CLG	CEILING	HPL	HIGH PRESSURE LAMINATE	SCHED	SCHEDULE
CMU	CONCRETE MASONRY UNIT	HT	HEIGHT	SIM	SIMILAR
COL	COLUMN	INSUL	INSULATION	SPEC	SPECIFIED OR SPECIFICATION
CONC	CONCRETE	INT	INTERIOR	STD	STANDARD
CONST	CONSTRUCTION	L	ANGLE	STL	STEEL
CONT	CONTINUOUS	LAV	LAVATORY	THK	THICK
CU	CONDENSING UNIT	LPL	LOW PRESSURE LAMINATE	T.O.	TOP OF
CJ	CONTROL JOINT	LVL	LAMINATED VENEER LUMBER	T.O. BM.	TOP OF BEAM
DIA	DIAMETER	LT	LIGHT	T.O.M.	TOP OF MASONRY
ø	DIAMETER	MAS	MASONRY	T.O.S.	TOP OF STEEL
DIM	DIMENSION	MAX	MAXIMUM	T.O.W.	TOP OF WALL
DISP	DISPENSER	MDF	MEDIUM DENSITY FIBERBOARD	T.P.	TOILET PAPER
DTL	DETAIL	MECH	MECHANICAL	TS	TUBE STEEL
DN	DOWN	MFGR	MANUFACTURER	TYP.	TYPICAL
EA	EACH	MIN	MINIMUM	UGE	UNDERGROUND ELECTRIC
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM	MTL	METAL	UGT	UNDERGROUND TELEPHONE
		N.I.C.	NOT IN CONTRACT	U.N.O.	UNLESS NOTED OTHERWISE
ELEC	ELECTRICAL	N.T.S.	NOT TO SCALE	VERT	VERTICAL
ELEV	ELEVATION	OC	ON CENTER	V.I.F.	VERIFY IN FIELD
EQ	EQUAL	OHE	OVERHEAD ELECTRIC	W	WATER MAIN
EXP JT	EXPANSION JOINT	OHT	OVERHEAD TELEPHONE	WD	WOOD
EXIST	EXISTING			W/	WITH
EXT	EXTERIOR			WC	WATER CLOSET
EWC	ELECTRIC WATER COOLER			VCT	VINYL COMPOSITION TILE

SYMBOL INDEX

- (E) WALL KEY
- (101) DOOR NUMBER
- (C) WINDOW KEY
- B/A6 ELEVATION MARKER
- 100'-0" F.F.E. DATUM MARKER
- X/AX BUILDING SECTION
- X/AX PARTIAL SECTION
- X/AX

REVISION TABLE Fort Smith, Arkansas		
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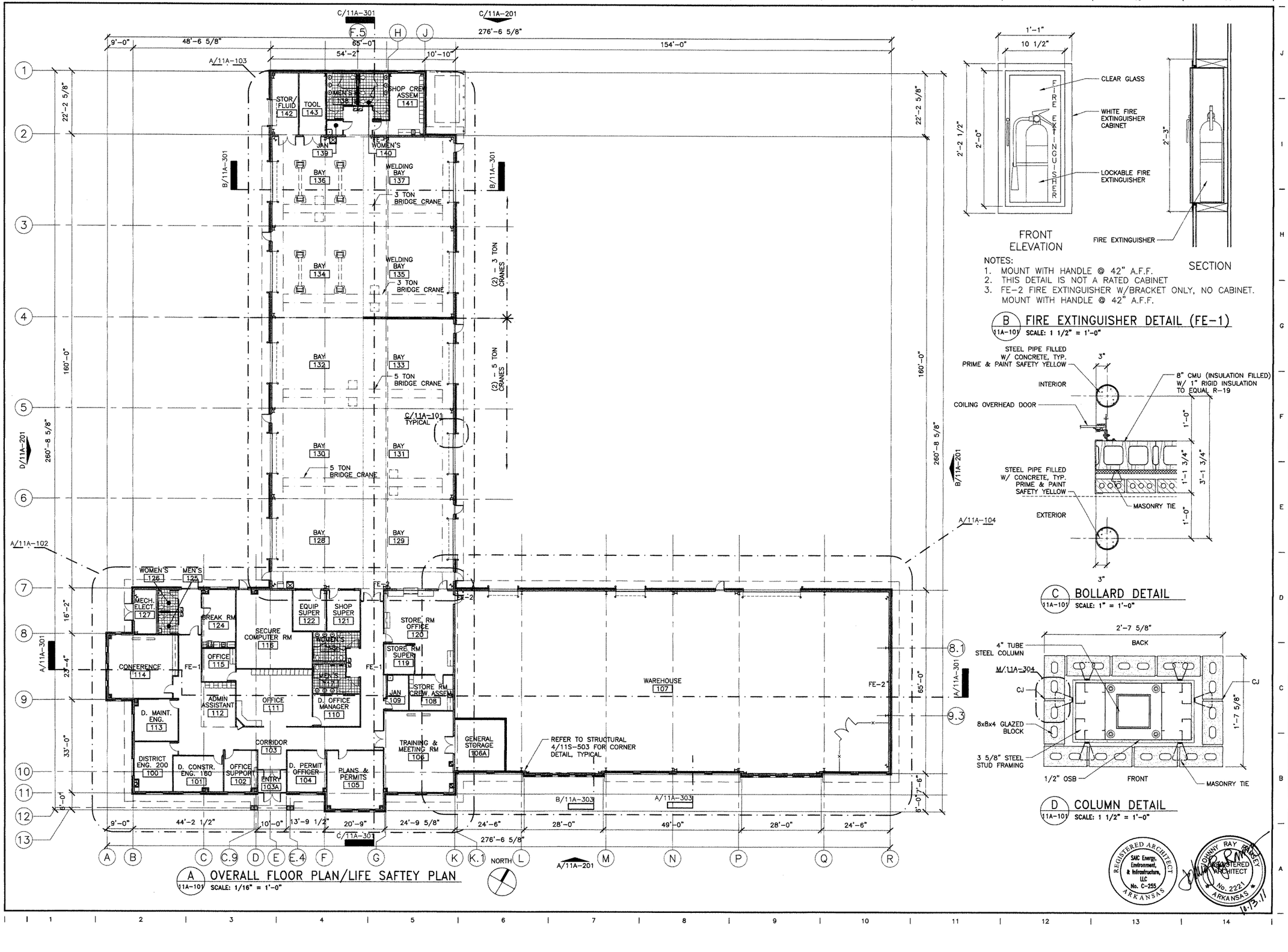
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
INDEX & GOVERNING SPECIFICATIONS
QUANTITIES & REVISION TABLE

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET / REV	11G-002
	116 OF 289



A OVERALL FLOOR PLAN/LIFE SAFTEY PLAN
11A-101 SCALE: 1/16" = 1'-0"

NOTES:
1. MOUNT WITH HANDLE @ 42" A.F.F.
2. THIS DETAIL IS NOT A RATED CABINET
3. FE-2 FIRE EXTINGUISHER W/BRACKET ONLY, NO CABINET. MOUNT WITH HANDLE @ 42" A.F.F.

B 11A-101 FIRE EXTINGUISHER DETAIL (FE-1)
SCALE: 1 1/2" = 1'-0"

C 11A-101 BOLLARD DETAIL
SCALE: 1" = 1'-0"

D 11A-101 COLUMN DETAIL
SCALE: 1 1/2" = 1'-0"

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10.13.11

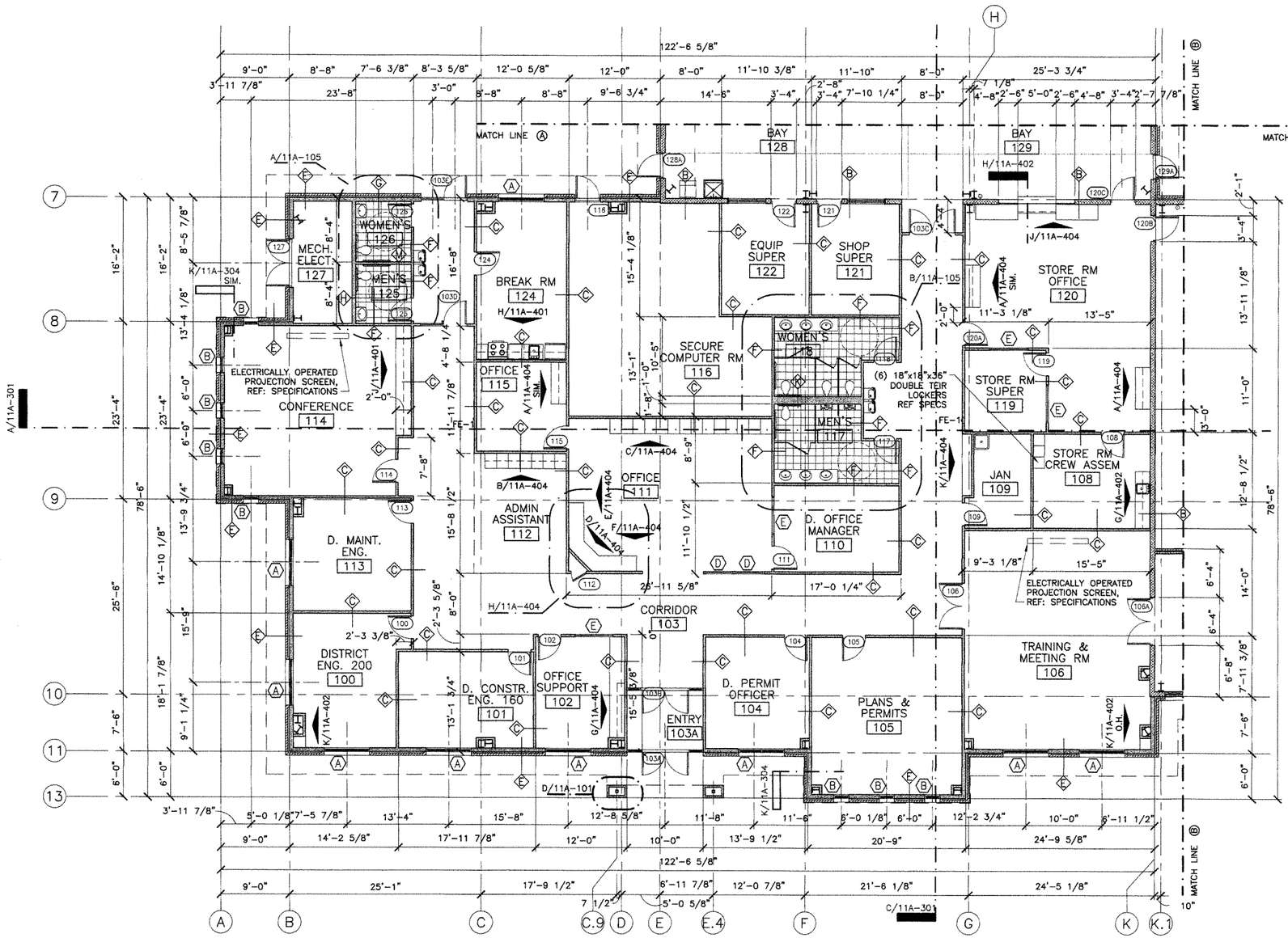
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FLOOR PLAN

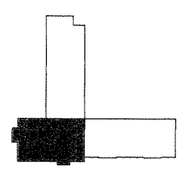
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SHEET	REV
11A-101	



A ENLARGED FLOOR PLAN
11A-102 SCALE: 1/8"= 1'-0"

NORTH



KEY PLAN
SCALE: 1/128" = 1'-0"

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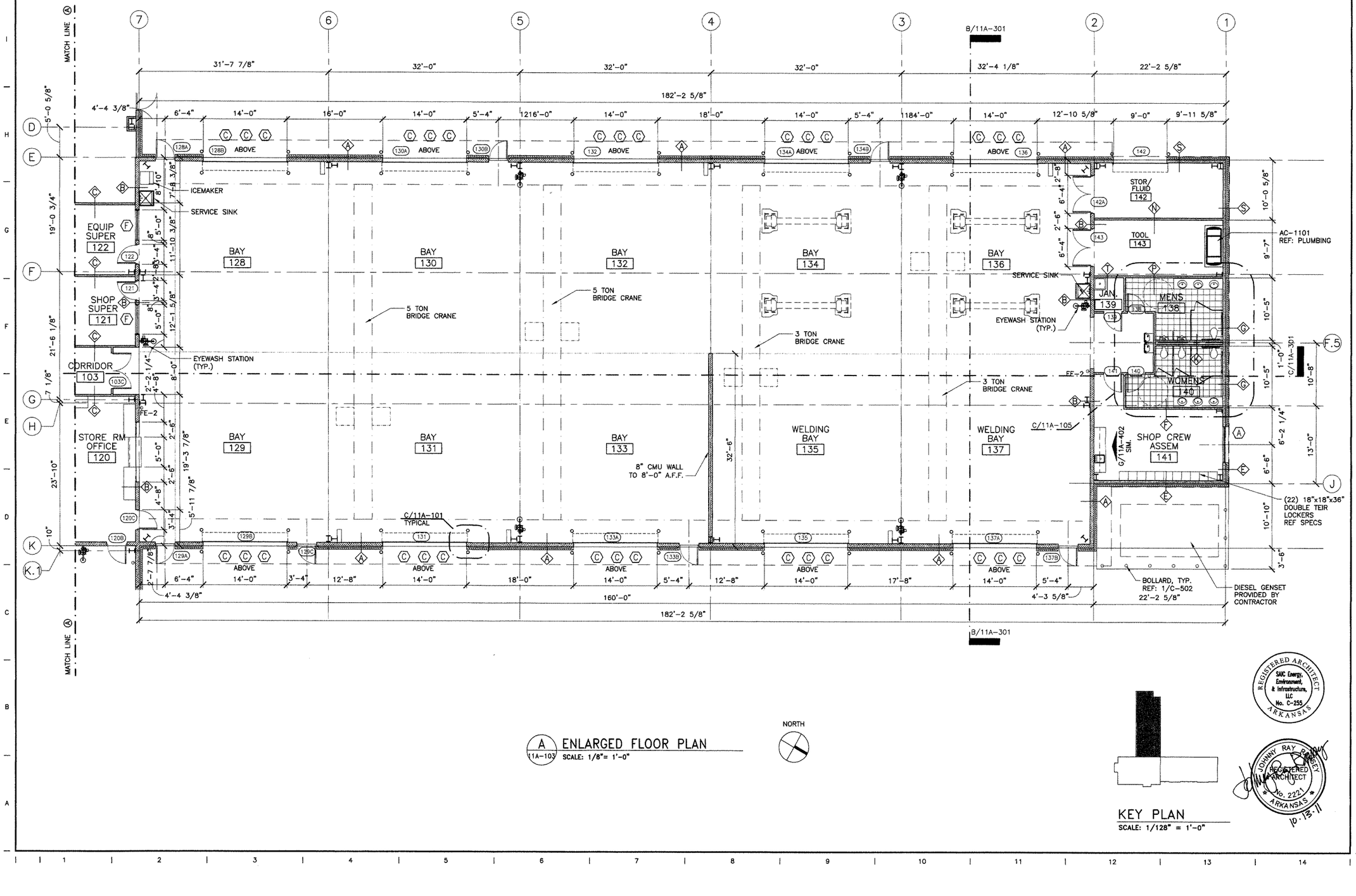
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PROJECT NUMBER	4070812000
SHEET	11A-102
REV	

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A ENLARGED FLOOR PLAN
11A-103 SCALE: 1/8"= 1'-0"

KEY PLAN
SCALE: 1/128" = 1'-0"

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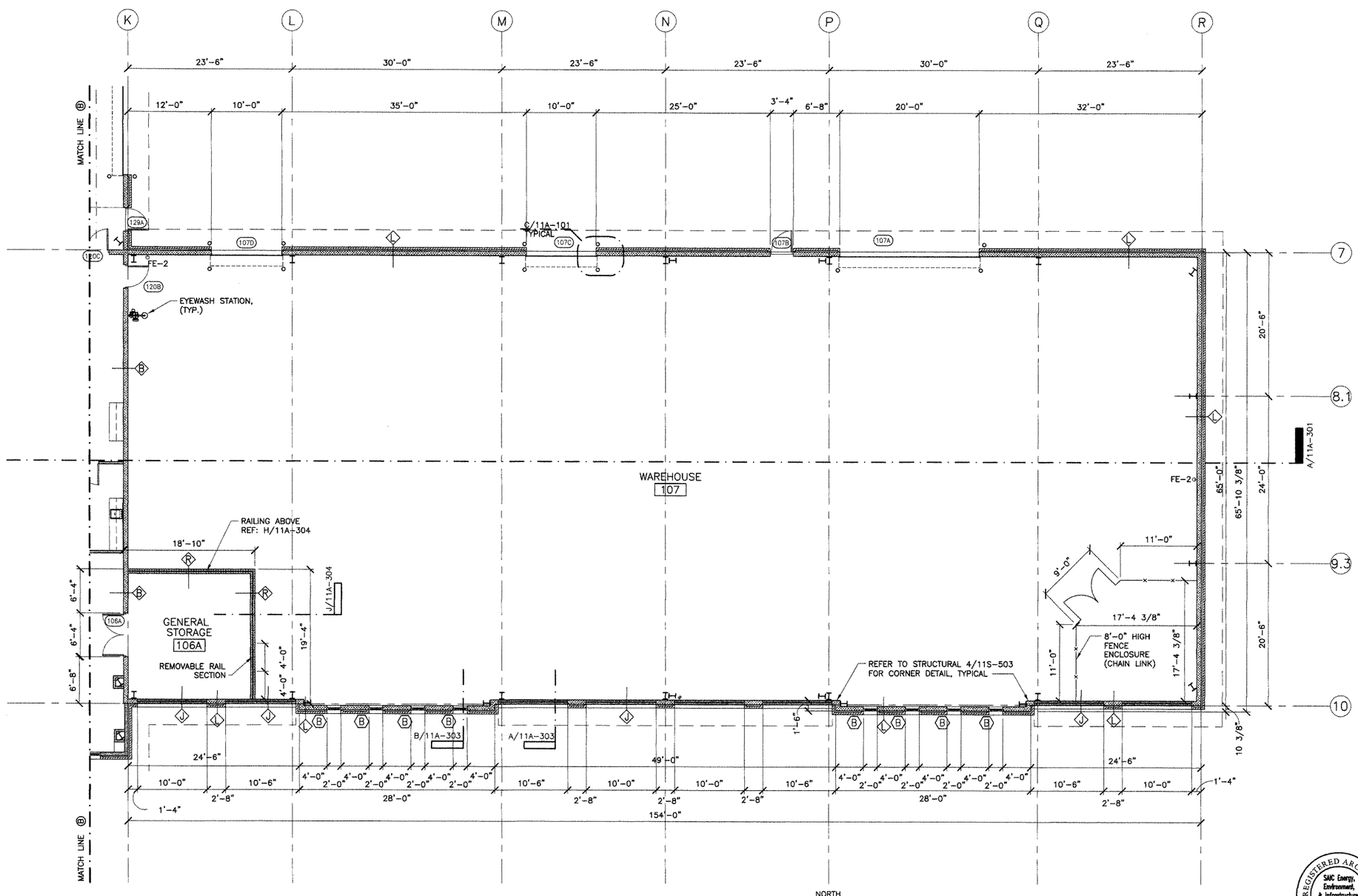
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PROJECT NUMBER	4070812000
SHEET	11A-103
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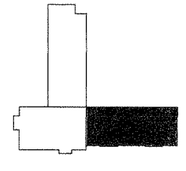
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A 11A-104 ENLARGED FLOOR PLAN
SCALE: 1/8"= 1'-0"

NORTH



KEY PLAN
SCALE: 1/128" = 1'-0"

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ENLARGED FLOOR PLAN

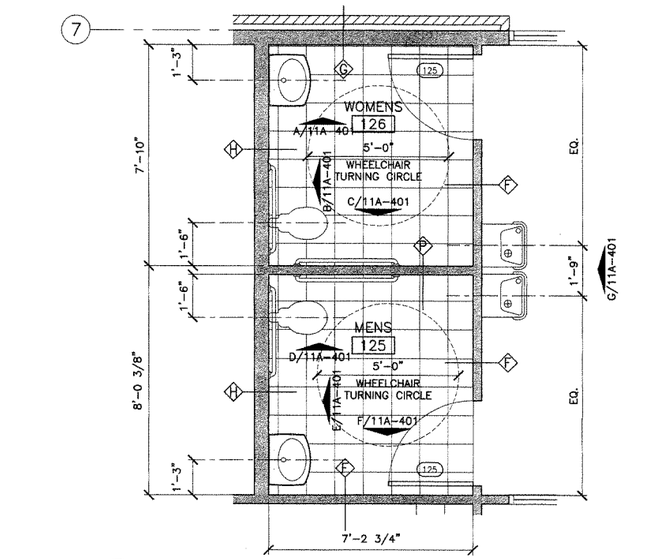
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PROJECT NUMBER	4070812000
SHEET	11A-104
REV	

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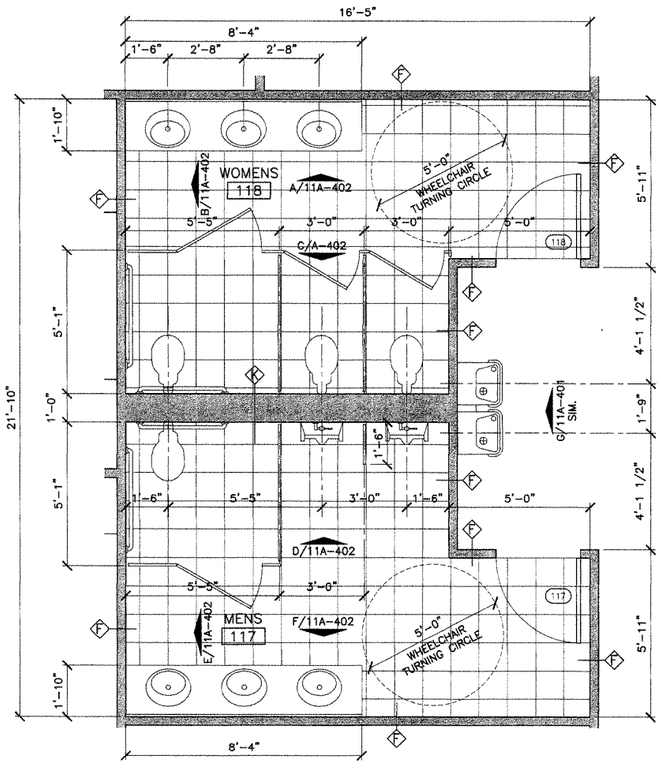
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A 11A-105 ENLARGED PLAN – RESTROOMS 125 & 126

SCALE: 3/8"= 1'-0"



B 11A-105 ENLARGED PLAN – RESTROOMS 117 & 118

SCALE: 3/8"= 1'-0"

C 11A-105 ENLARGED PLAN – RESTROOMS 138 & 140

SCALE: 3/8"= 1'-0"

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ENLARGED RESTROOM PLANS

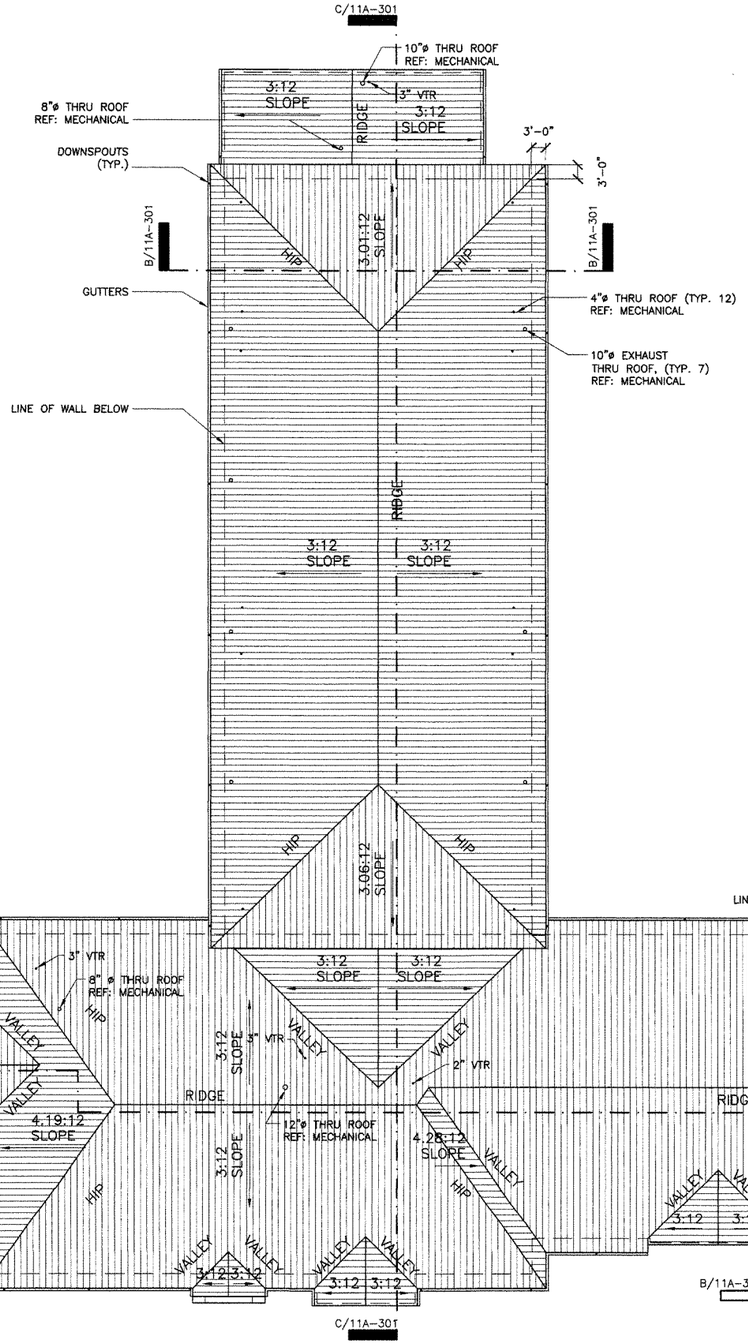
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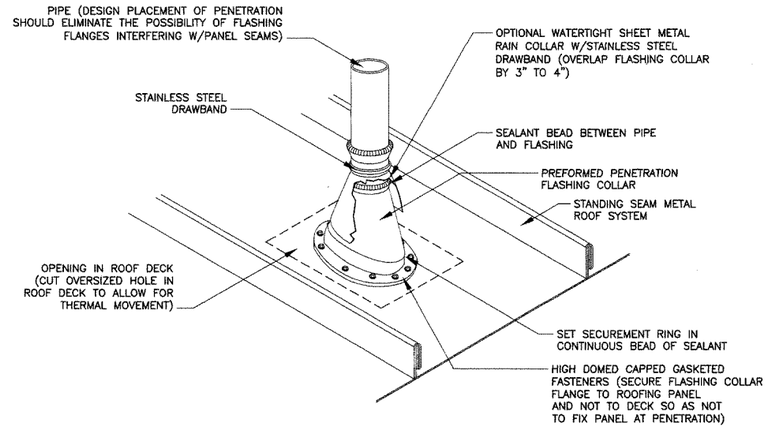
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-105
REV	

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A ROOF PLAN
11A-106 SCALE: 1/16" = 1'-0"

NORTH



B VENT THRU ROOF DETAIL
11A-106 SCALE: 1 1/2" = 1'-0"

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ROOF PLAN

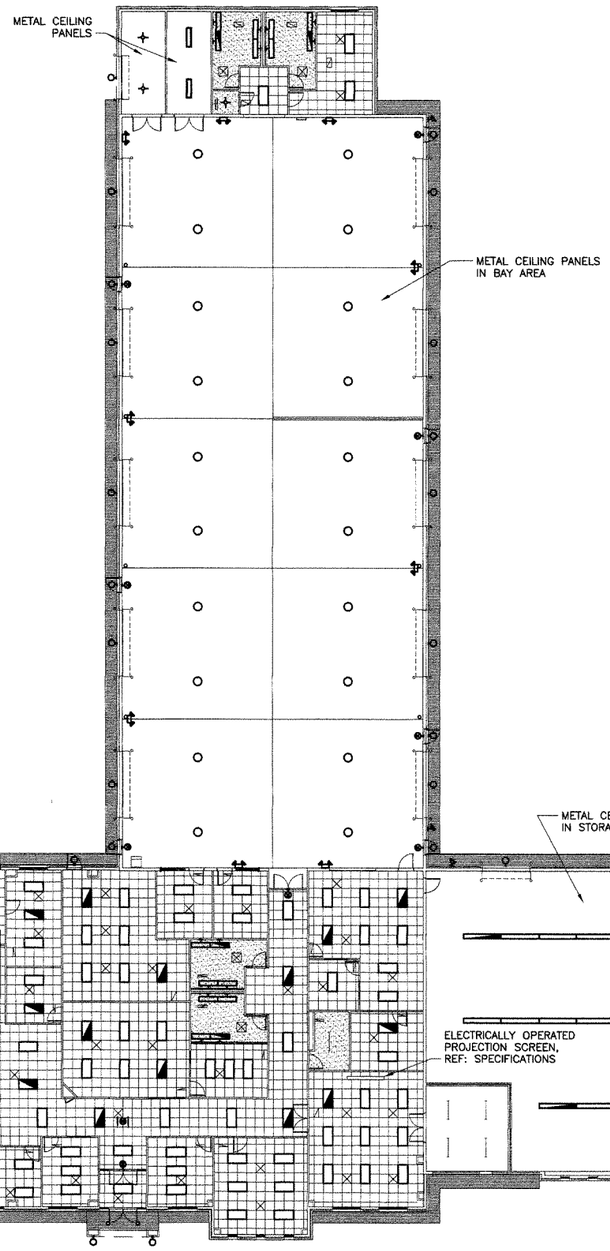
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SHEET	REV
11A-106	

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A 11A-107 REFLECTED CEILING PLAN
SCALE: 1/16" = 1'-0"

NORTH

CEILING PLAN LEGEND:

INDICATED CEILING GRID IS 2'-0" x 2'-0". ALL ACCESSORIES INTENDED TO FIT IN THE CEILING GRID SHOULD FIT THIS MODULE OR A 2'-0" x 4'-0" MODULE.

- 2'-0" x 4'-0" FLUORESCENT LIGHT FIXTURE
- 2'-0" X 4'-0" FLUORESCENT FIXTURE, CONNECTED TO EMERGENCY SYSTEM AND EQUIPPED WITH BATTERY PACK.
- 1'-0" x 4'-0" WALL MOUNTED FLUORESCENT FIXTURE
- 1'-0" x 4'-0" FLUORESCENT FIXTURE, CONNECTED TO EMERGENCY SYSTEM AND EQUIPPED WITH BATTERY PACK.
- FLUORESCENT STRIP FIXTURE
- INCANDESCENT LIGHT FIXTURE
- COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
- EXIT LIGHTS
- CEILING FAN
- SUPPLY AIR DIFFUSER
- RETURN AIR DIFFUSER

NOTE:
EAVE SOFFITS TO BE PRE-FINISHED FLUSH SEAM PANEL

NOTE:
REFERENCE ELECTRICAL

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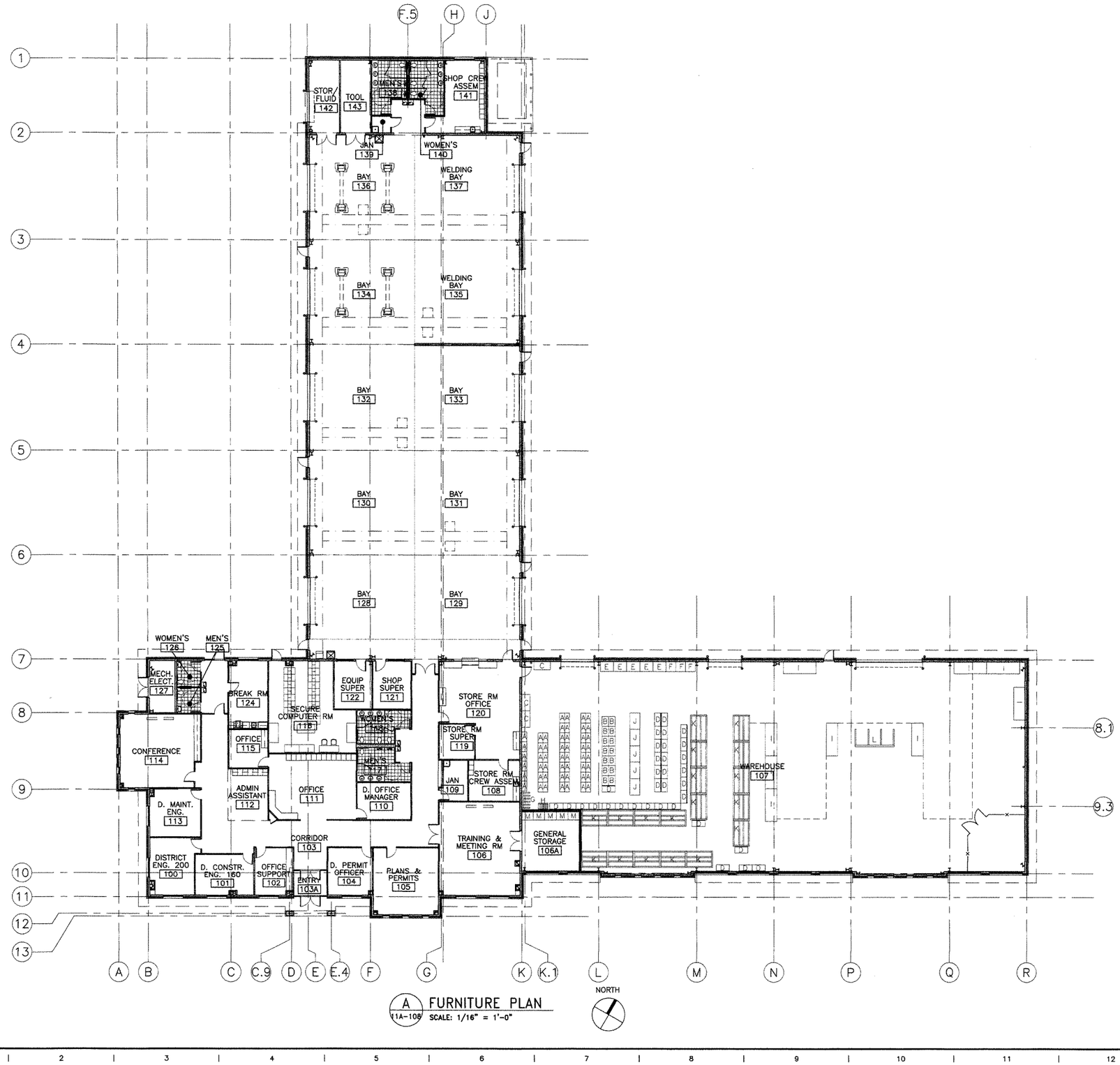
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AHTD JOB NO. 040554
REFLECTED CEILING PLAN

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DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
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11A-107	
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A FURNITURE PLAN
11A-108 SCALE: 1/16" = 1'-0"

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FURNITURE PLAN

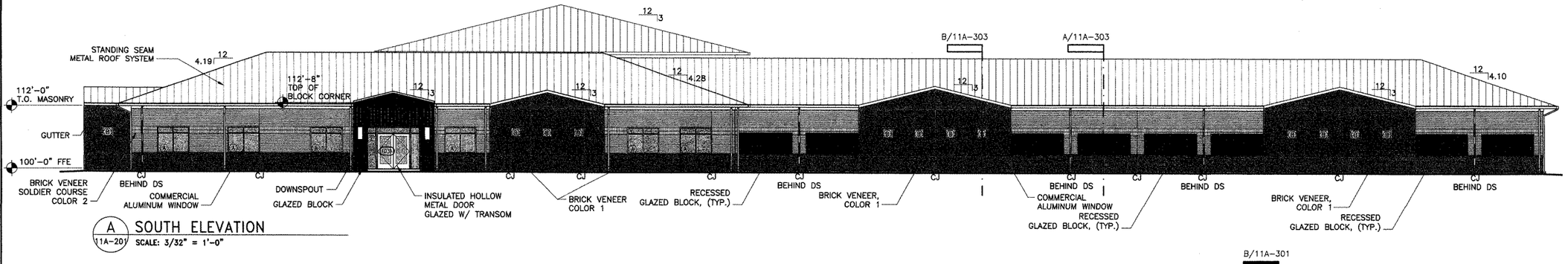
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REV	
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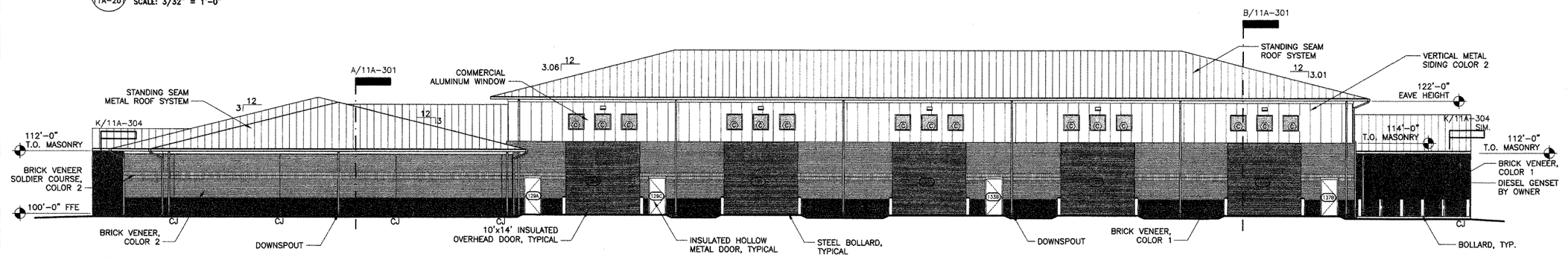
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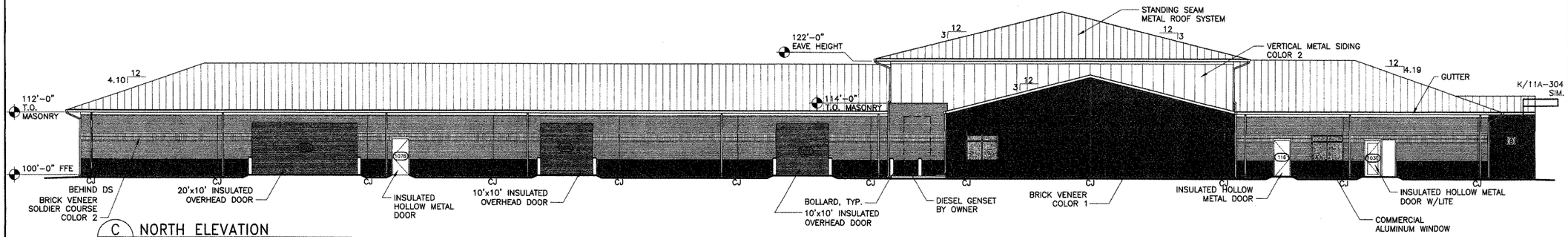
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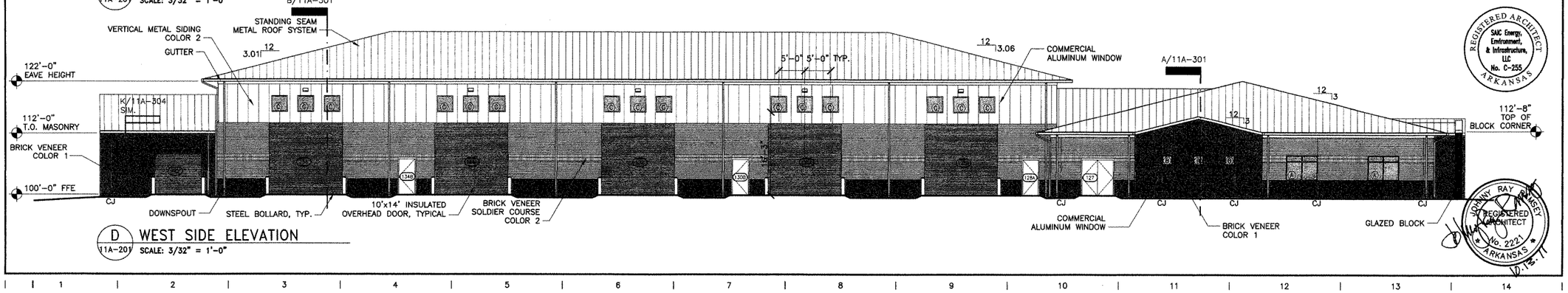
A 11A-201 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



B 11A-201 EAST SIDE ELEVATION
SCALE: 3/32" = 1'-0"



C 11A-201 NORTH ELEVATION
SCALE: 3/32" = 1'-0"



D 11A-201 WEST SIDE ELEVATION
SCALE: 3/32" = 1'-0"

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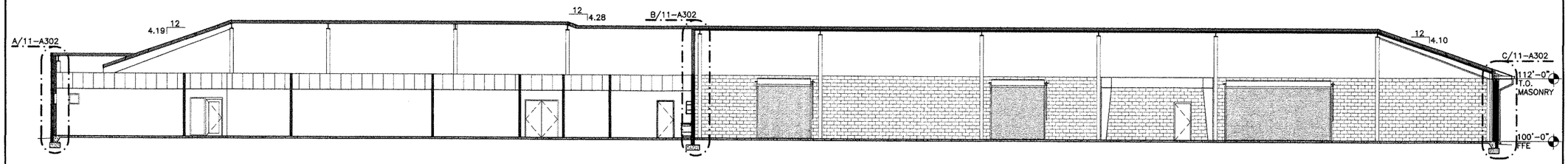
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AHTD JOB NO. 040554
EXTERIOR ELEVATIONS

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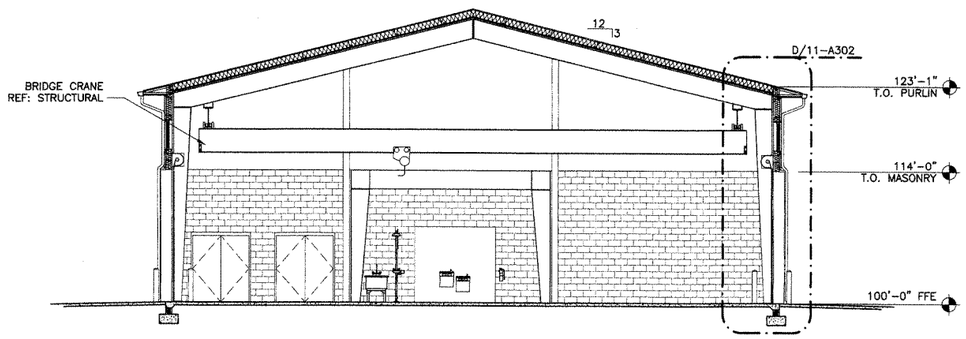
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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11A-201	
125 OF 289	

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

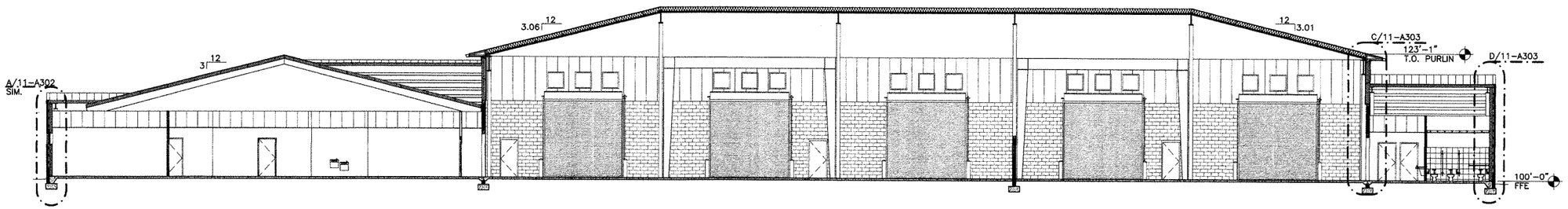
JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11



A BUILDING SECTION
11A-301 SCALE: 3/32" = 1'-0"



B BUILDING SECTION
11A-301 SCALE: 1/8" = 1'-0"



C BUILDING SECTION
11A-301 SCALE: 3/32" = 1'-0"

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Lowell, Arkansas
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(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
BUILDING SECTIONS

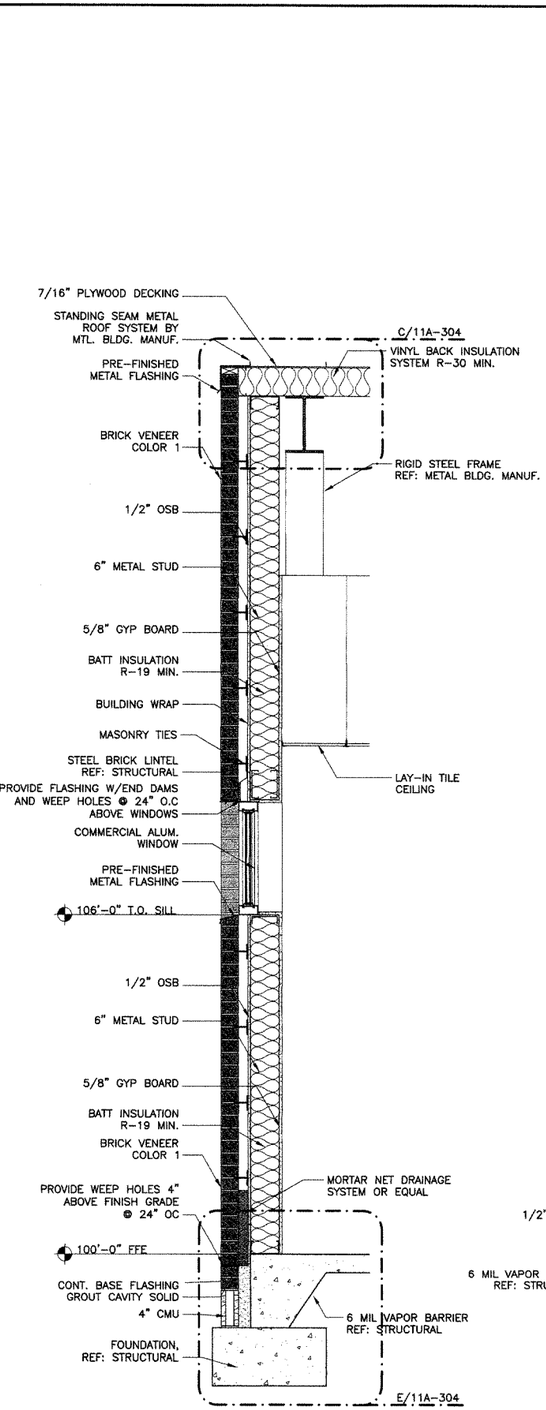
DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-301
REV	

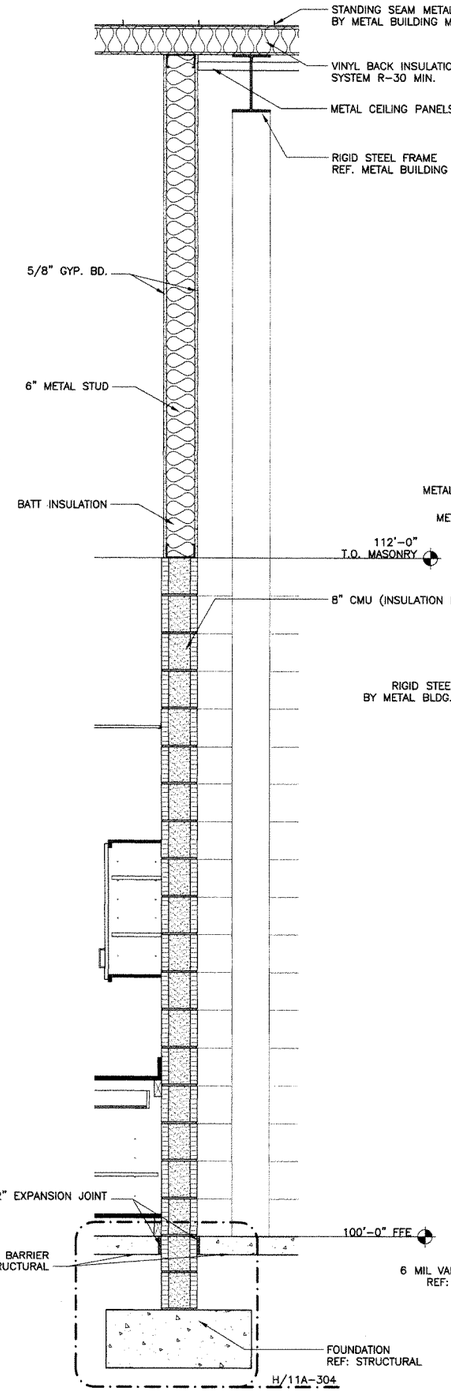
126 OF 289

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

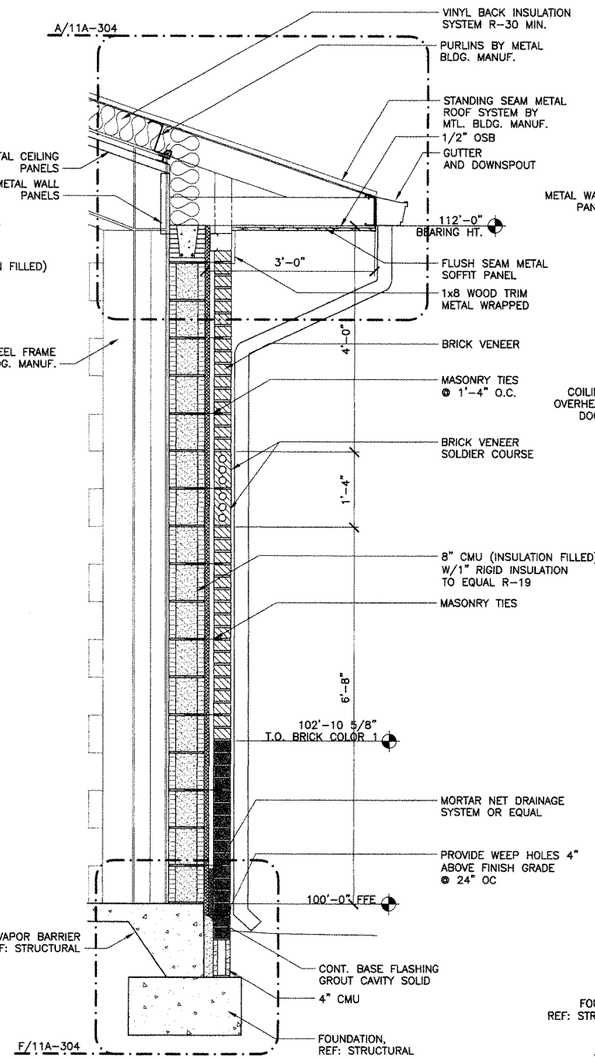
JOHNNY RAY RUSSELL
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11



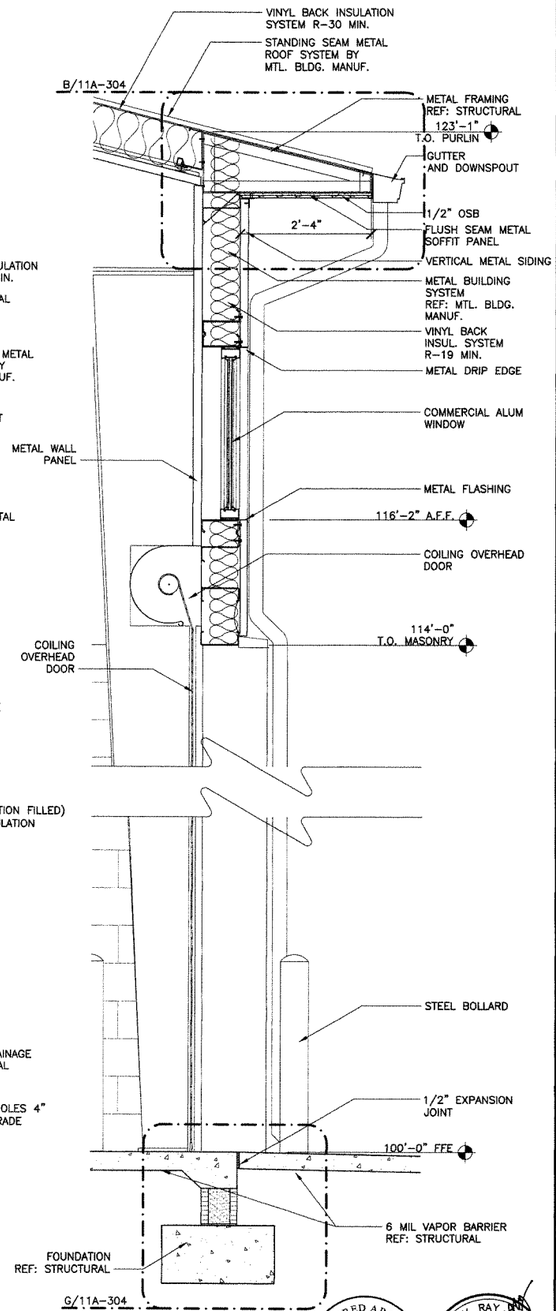
A WALL SECTION
11A-302 SCALE: 3/4" = 1'-0"



B WALL SECTION
11A-302 SCALE: 3/4" = 1'-0"



C WALL SECTION
11A-302 SCALE: 3/4" = 1'-0"



D WALL SECTION
11A-302 SCALE: 3/4" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
WALL SECTIONS

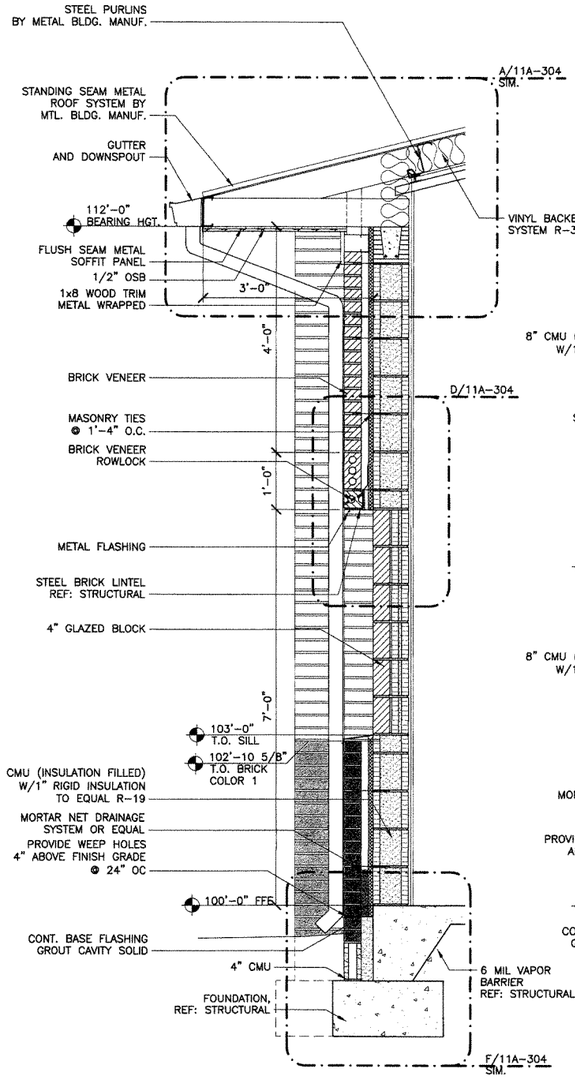
DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-302
REV	

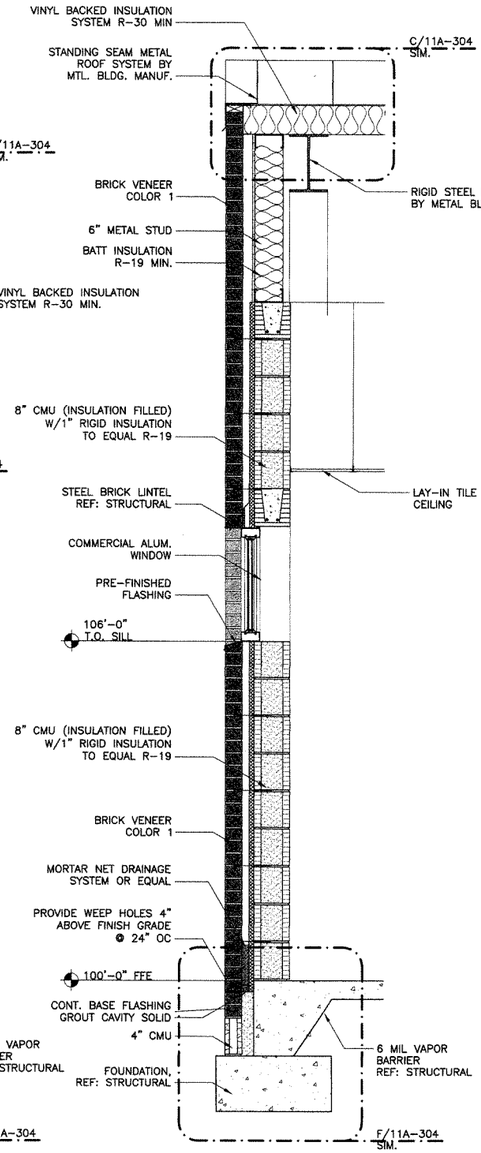
127 OF 289

REGISTERED ARCHITECT SAIC Energy, Environment & Infrastructure, LLC No. C-255 ARKANSAS

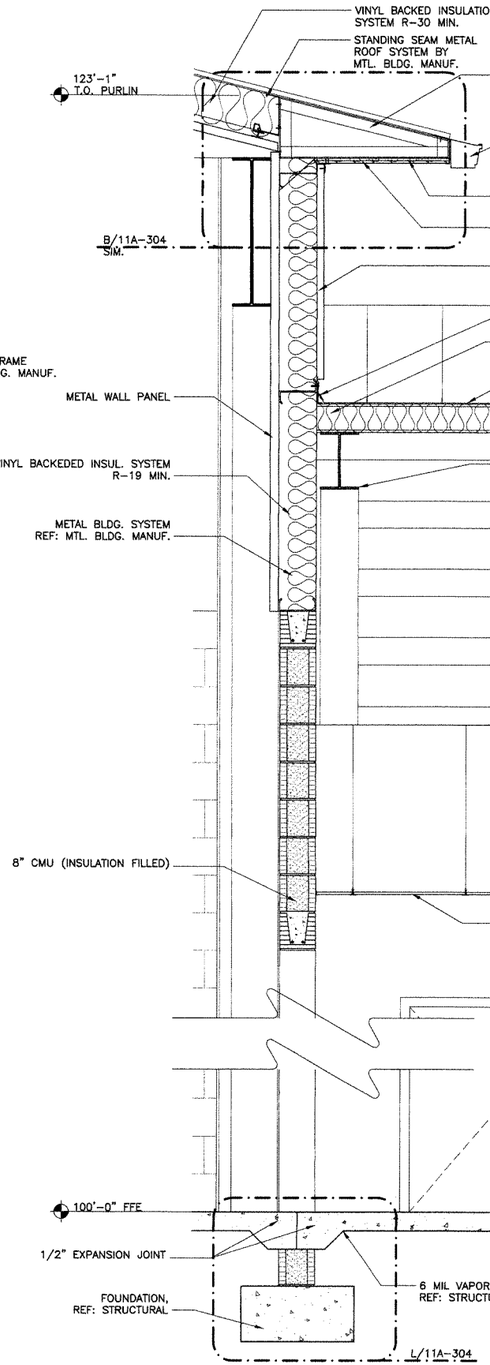
JOHNNY RAY MASSEY REGISTERED ARCHITECT No. 2221 ARKANSAS 10.13.11



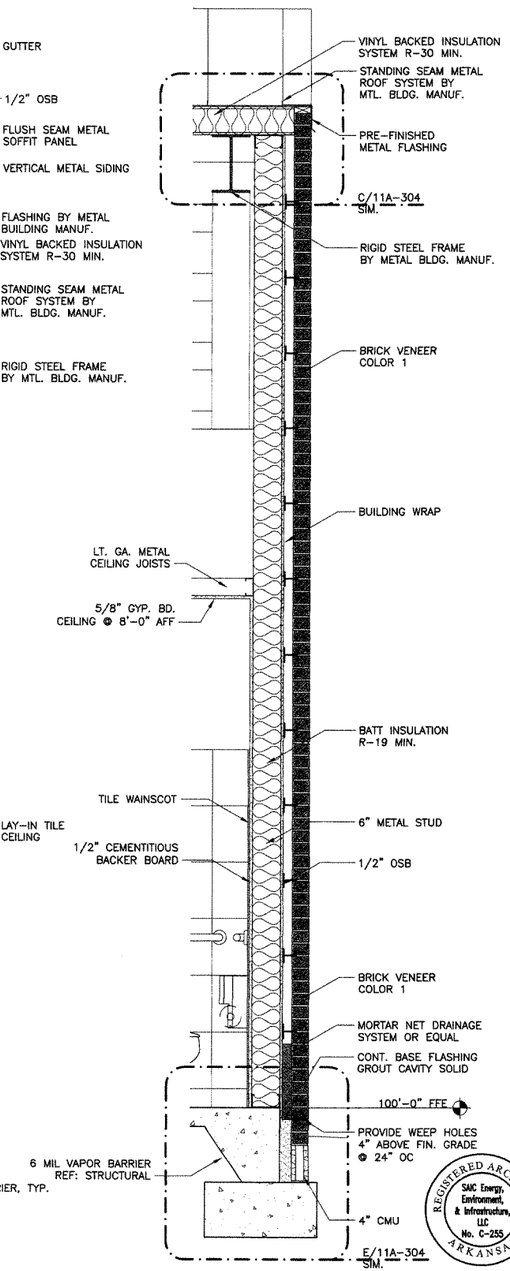
A WALL SECTION
11A-303 SCALE: 3/4" = 1'-0"



B WALL SECTION
11A-303 SCALE: 3/4" = 1'-0"



C WALL SECTION
11A-303 SCALE: 3/4" = 1'-0"



D WALL SECTION
11A-303 SCALE: 3/4" = 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
WALL SECTIONS

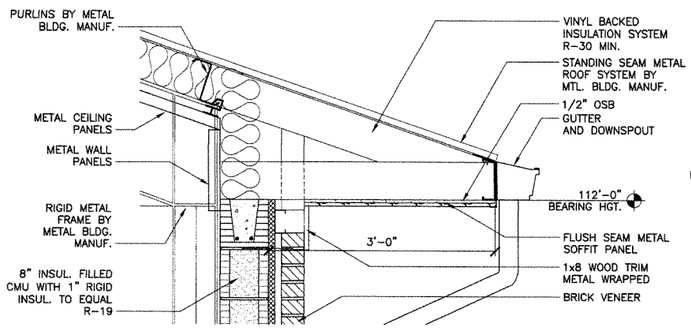
DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-303
REV	

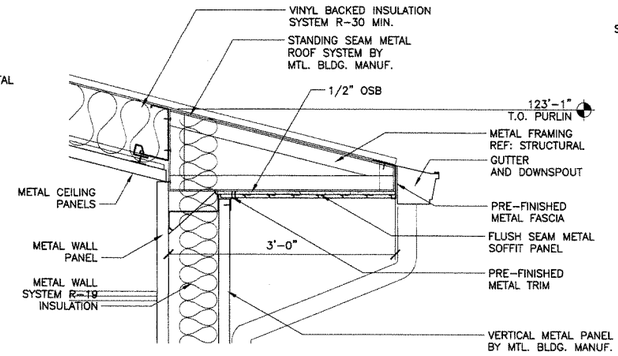
128 OF 289

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

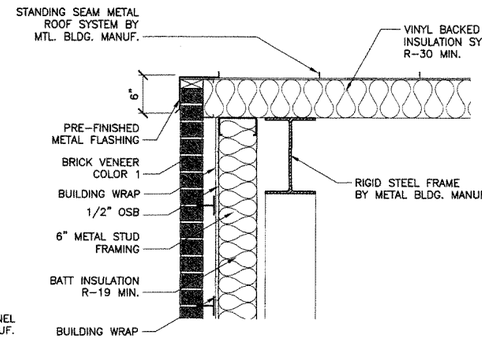
JOHNNY RAY ROGERS
REGISTERED ARCHITECT
No. 2221
ARKANSAS



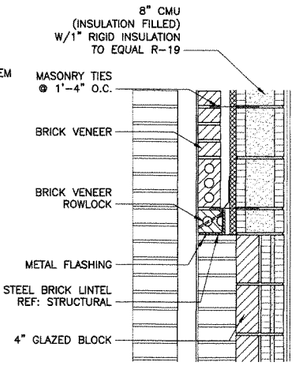
A SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"



B SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"

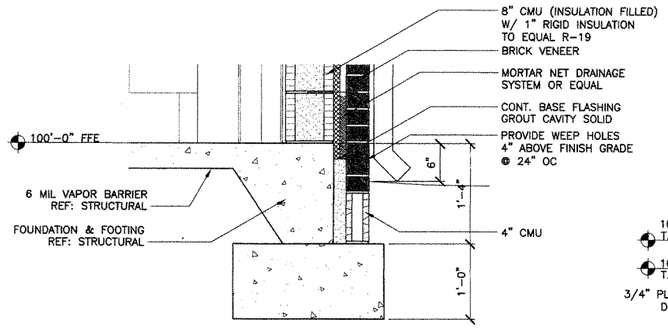


C SECTION DETAIL
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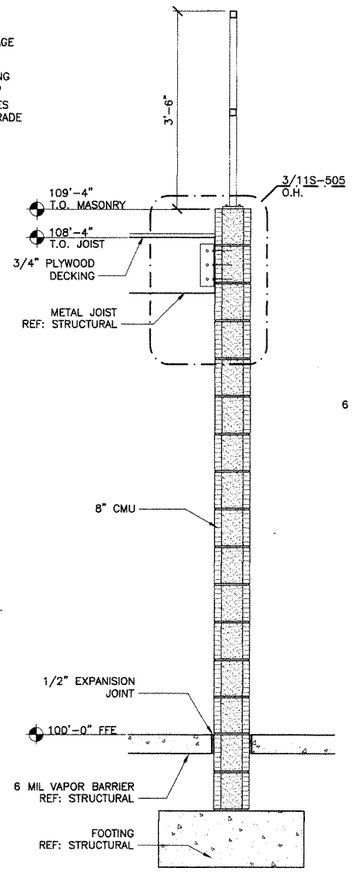


D SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"

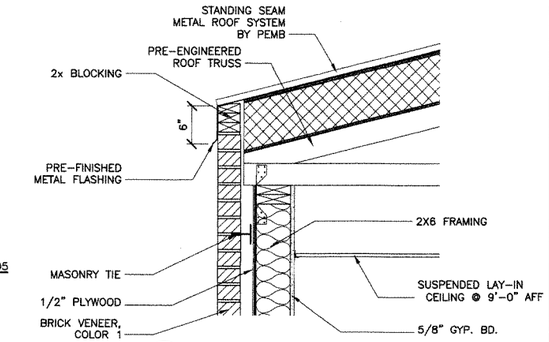
E SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"



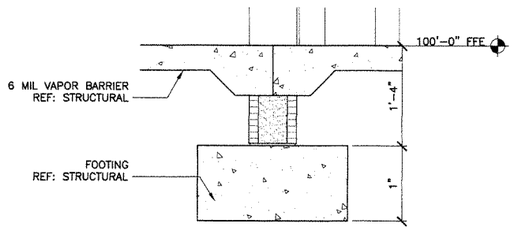
F SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"



J SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"

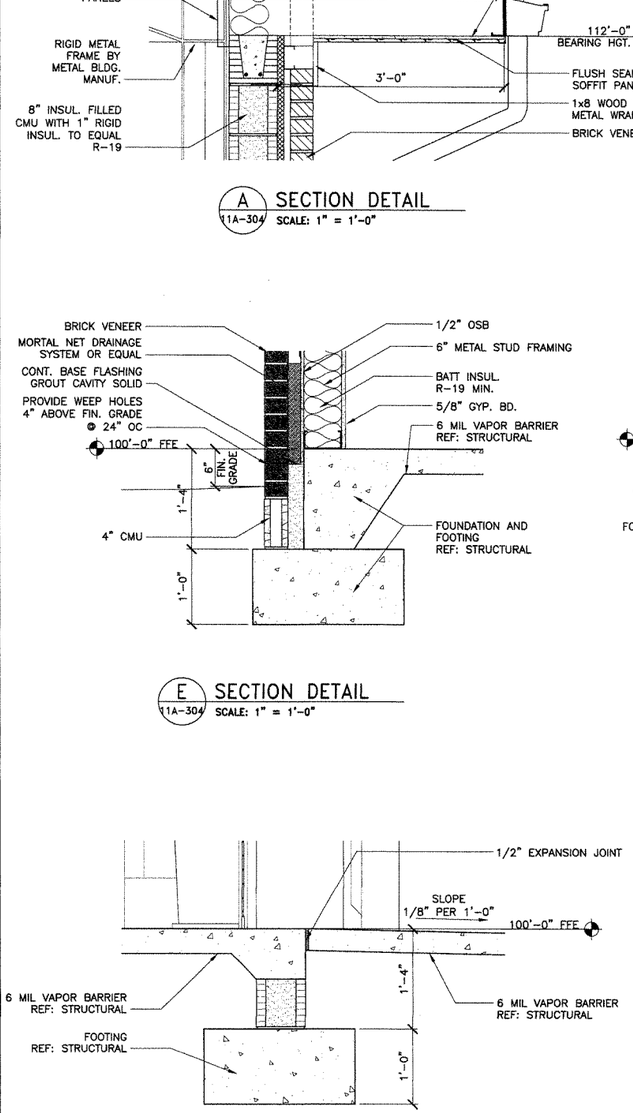


K SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"



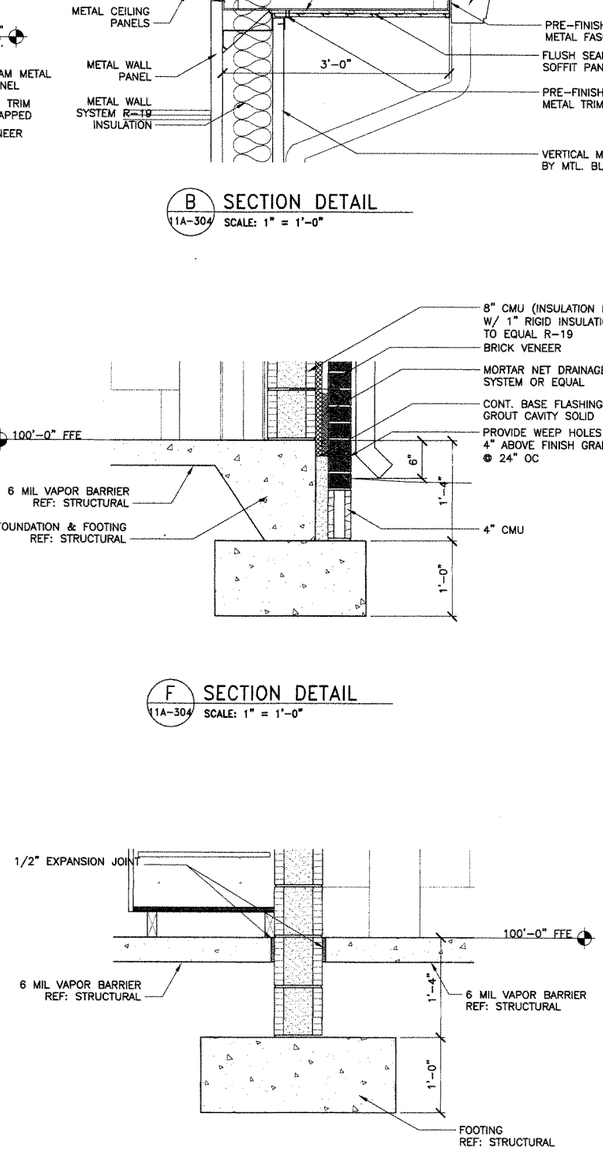
L SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"

PLAN
REF: 7/S-502

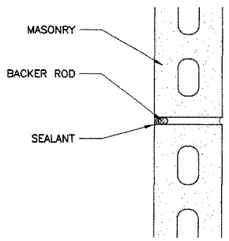


G SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"

PLAN
REF: 9/S-501



H SECTION DETAIL
11A-304 SCALE: 1" = 1'-0"



M CONTROL JOINT (TYPICAL)
11A-304 SCALE: 3" = 1'-0"

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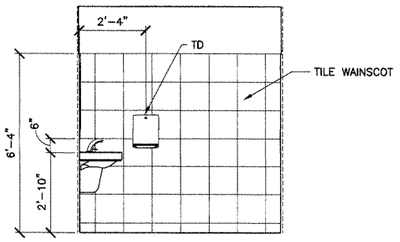
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
SECTION DETAILS

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

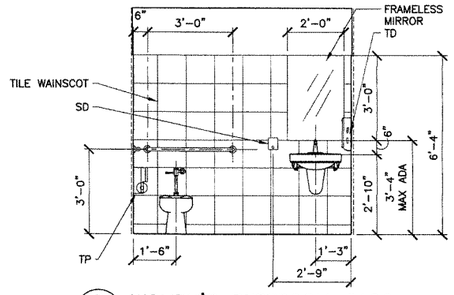
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11A-304	
129 OF 289	

REGISTERED ARCHITECT SAIC Energy, Environment, & Infrastructure, LLC No. C-255 ARKANSAS

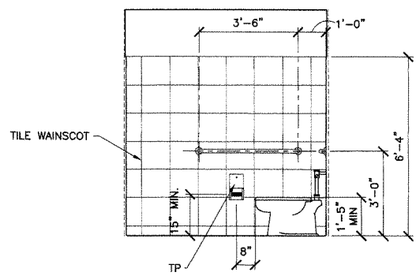
JOHNNY RAY MESEY REGISTERED ARCHITECT No. 2271 ARKANSAS 10.13.11



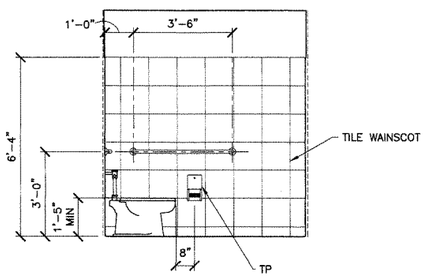
A 11A-401 WOMEN'S RESTROOM #126
SCALE: 3/8"= 1'-0"



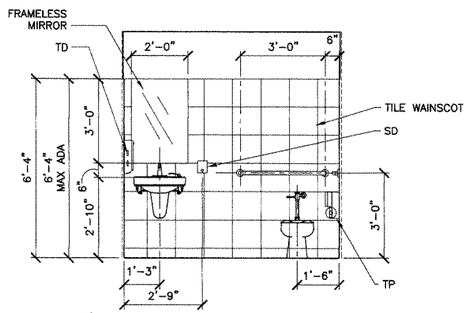
B 11A-401 WOMEN'S RESTROOM #126
SCALE: 3/8"= 1'-0"



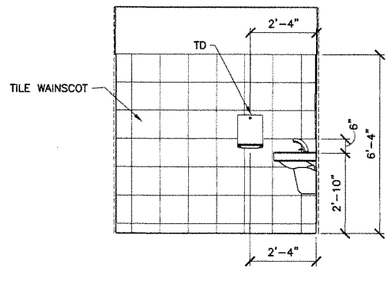
C 11A-401 WOMEN'S RESTROOM #126
SCALE: 3/8"= 1'-0"



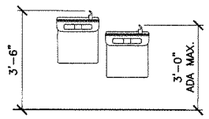
D 11A-401 MEN'S RESTROOM #125
SCALE: 3/8"= 1'-0"



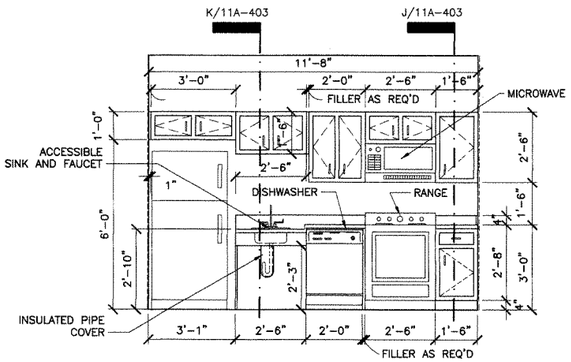
E 11A-401 MEN'S RESTROOM #125
SCALE: 3/8"= 1'-0"



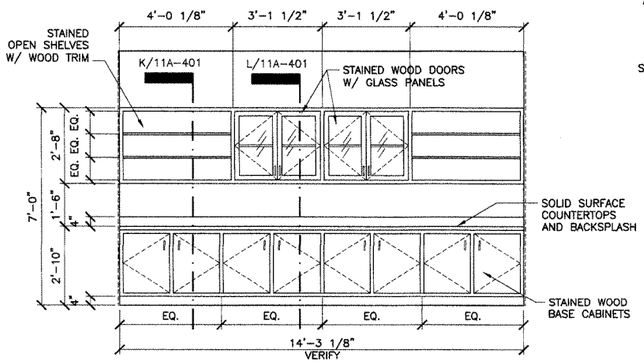
F 11A-401 MEN'S RESTROOM #125
SCALE: 3/8"= 1'-0"



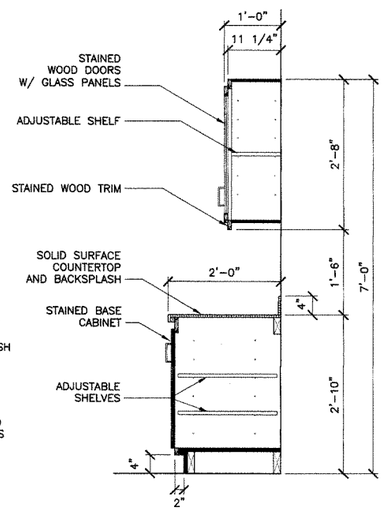
G 11A-401 WATER FOUNTAIN ELEVATION
SCALE: 3/8"= 1'-0"



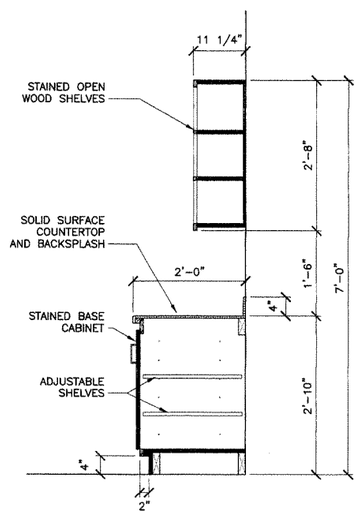
H 11A-401 BREAKROOM #124
SCALE: 3/8"= 1'-0"



J 11A-401 CONFERENCE ROOM #114
SCALE: 3/8"= 1'-0"



K 11A-401 CABINET SECTION W/GLASS DOORS
SCALE: 3/4" = 1'-0"



L 11A-401 CABINET SECTION W/OPEN SHELVES
SCALE: 3/4" = 1'-0"

TOILET ACCESSORY SCHEDULE

ITEM	MFGR	MODEL #	DESCRIPTION	MOUNTING HEIGHT
TP	BOBRICK	B-4288	CONTURA SERIES SURFACE-MOUNTED MULTI-ROLL TOILET TISSUE DISPENSER	BOTTOM @ 15" MIN. A.F.F. (ADA HEIGHT)
TD	BOBRICK	B-4262	CONTURA SERIES SURFACE-MOUNTED PAPER TOWEL DISPENSER	BOTTOM @ 48" MAX. A.F.F. (ADA HEIGHT)
SD	BOBRICK	B-4112	CONTURA SERIES SURFACE-MOUNTED SOAP DISPENSER	BOTTOM @ 44" MAX. A.F.F. (ADA HEIGHT)
SD2	BOBRICK	B-8221	COUNTER MOUNTED SOAP DISPENSER	

APPLIANCES SCHEDULE

REFRIGERATOR/FREEZER	UNDERCOUNTER DISHWASHER
KENMORE 26.5 CU. FT. SIDE-BY-SIDE ENERGY STAR RATED THRU DOOR ICE AND WATER SEARS ITEM NO. 04651022000 MFGR. MODEL NO. 51022 COLOR: WHITE	KENMORE 24" DISHWASHER SEARS ITEM NO. 02215262000 MFGR. MODEL NO. 1526 PROVIDE SINK-MOUNTED AIR GAP COLOR: WHITE
FREESTANDING RANGE/OVEN	**MICROWAVE/HOOD COMBINATION**
KENMORE 30" ELECTRIC SELF-CLEANING SEARS ITEM NO. 02292202000 MFGR. MODEL NO. 92202 COLOR: WHITE	KENMORE 30" MICROWAVE/HOOD RECIRCULATING FILTER SEARS ITEM NO.02285032000 MFGR. MODEL NO. 8503 COLOR: WHITE

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2227
ARKANSAS
10.12.11

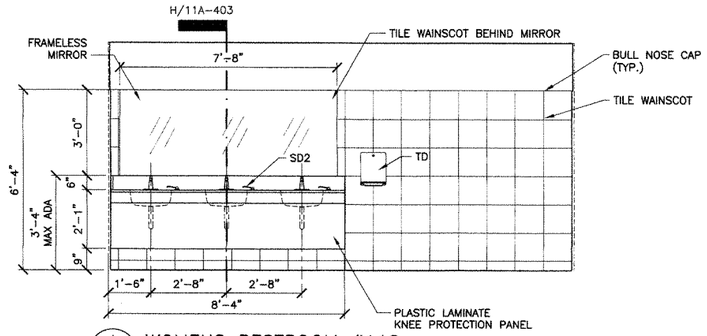
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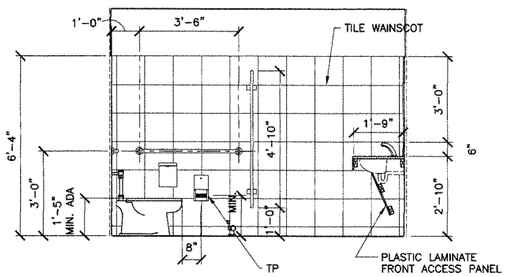
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
INTERIOR ELEVATIONS

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

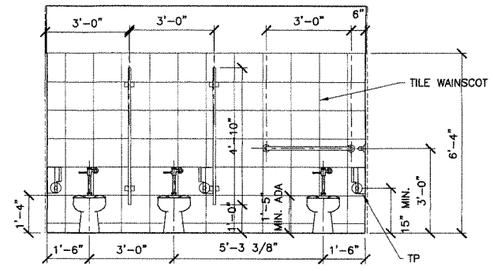
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11A-401	
130 OF 289	



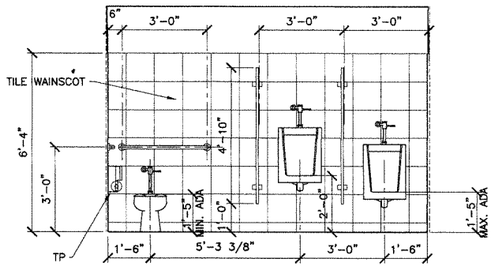
A 11A-402 WOMENS RESTROOM #118
SCALE: 3/8"= 1'-0"



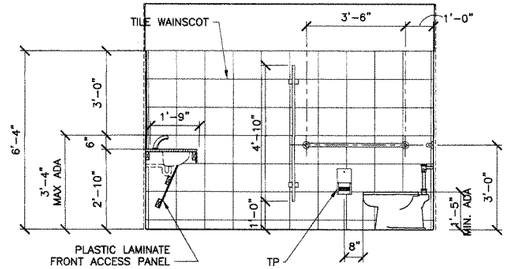
B 11A-402 WOMENS RESTROOM #118
SCALE: 3/8"= 1'-0"



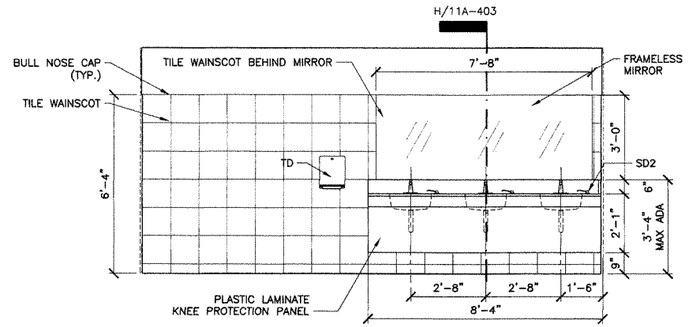
C 11A-402 WOMENS RESTROOM #118
SCALE: 3/8"= 1'-0"



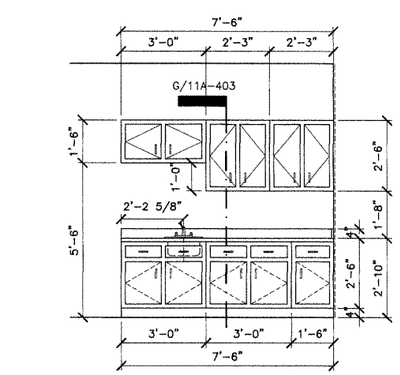
D 11A-402 MENS RESTROOM #117
SCALE: 3/8"= 1'-0"



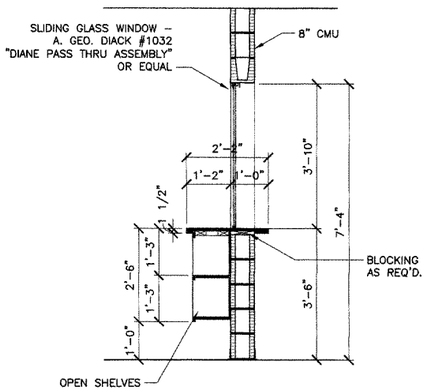
E 11A-402 MENS RESTROOM #117
SCALE: 3/8"= 1'-0"



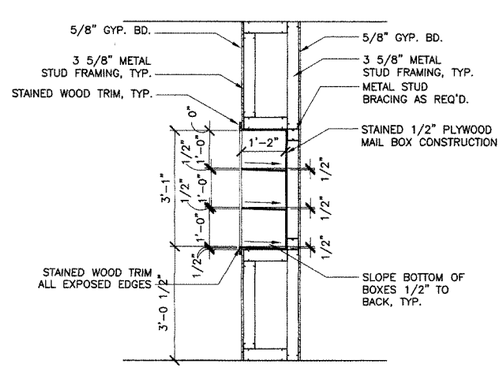
F 11A-402 MENS RESTROOM #117
SCALE: 3/8"= 1'-0"



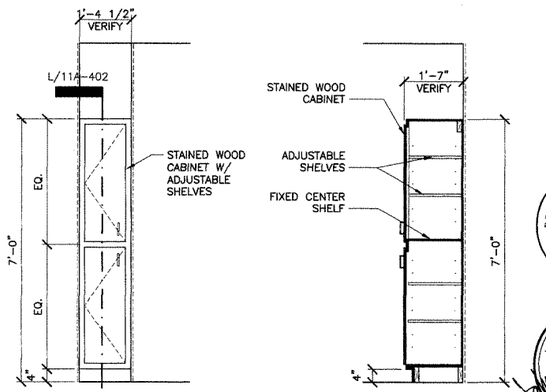
G 11A-402 STOREROOM ASSEMBLY #108 & SHOP CREW ASSEMBLY # 141
SCALE: 3/8"= 1'-0"



H 11A-402 SLIDING WINDOW SECTION
SCALE: 1/2" = 1'-0"



J 11A-402 MAIL BOX SECTION
SCALE: 1/2" = 1'-0"



K 11A-402 CORNER CABINET ROOMS 100 & 106
SCALE: 1/2" = 1'-0"

L 11A-402 CABINET SECTION
SCALE: 1/2" = 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

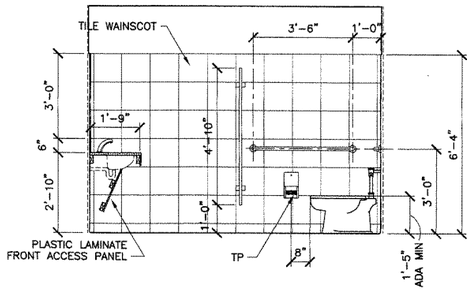
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
INTERIOR ELEVATIONS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

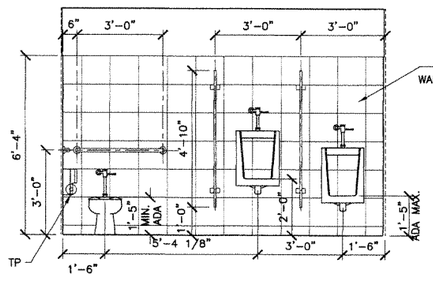
JOHNNY RAY JERSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

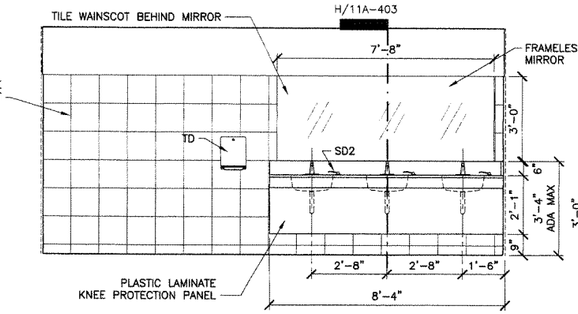
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11A-402	
131	OF 289



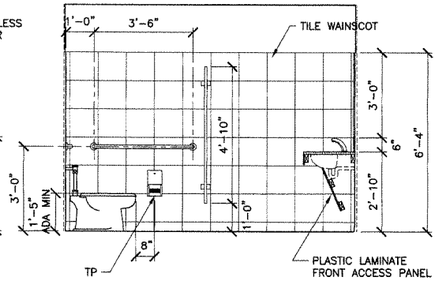
A 11A-403 MENS RESTROOM #138
SCALE: 3/8"= 1'-0"



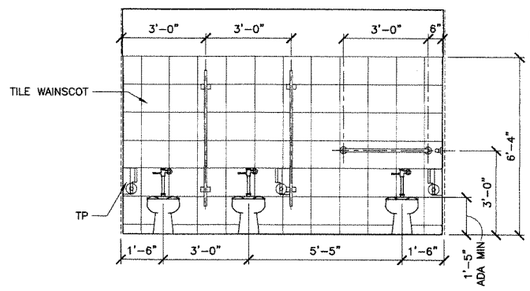
B 11A-403 MENS RESTROOM #138
SCALE: 3/8"= 1'-0"



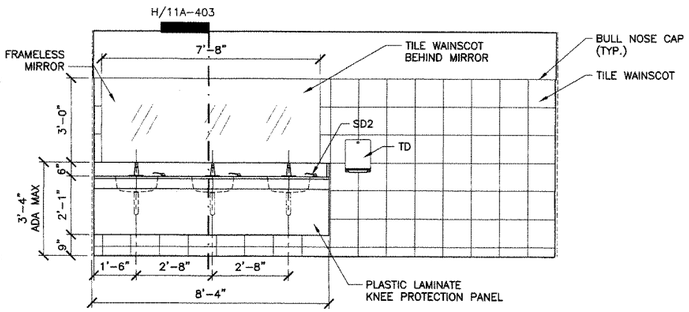
C 11A-403 MENS RESTROOM #138
SCALE: 3/8"= 1'-0"



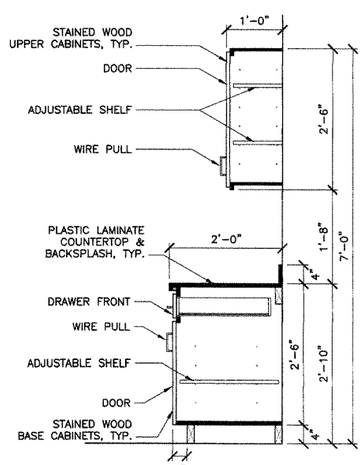
D 11A-403 WOMENS RESTROOM #140
SCALE: 3/8"= 1'-0"



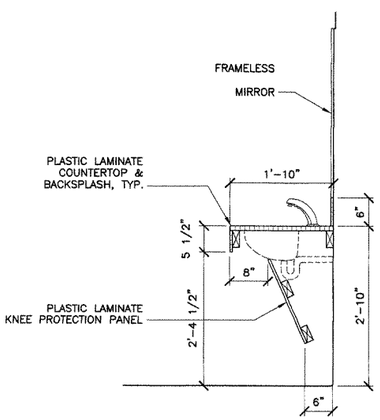
E 11A-403 WOMENS RESTROOM #140
SCALE: 3/8"= 1'-0"



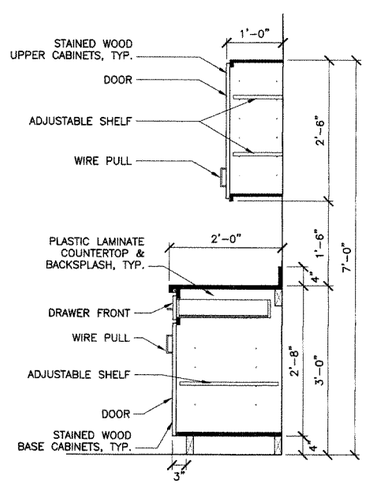
F 11A-403 WOMENS RESTROOM #140
SCALE: 3/8"= 1'-0"



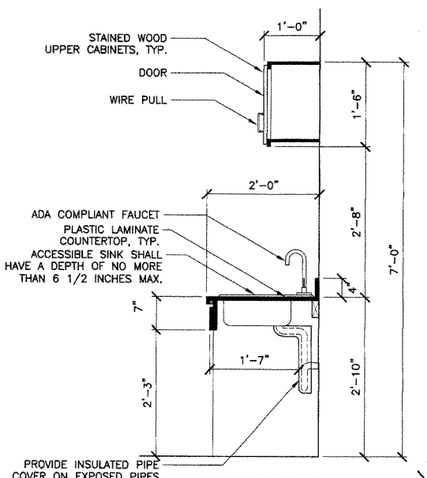
G 11A-403 CABINET SECTION
SCALE: 3/4" = 1'-0"



H 11A-403 LAVATORY SECTION
SCALE: 3/4" = 1'-0"



J 11A-403 CABINET SECTION
SCALE: 3/4" = 1'-0"



K 11A-403 ACCESSIBLE SINK CABINET SECTION
SCALE: 3/4" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
INTERIOR ELEVATIONS

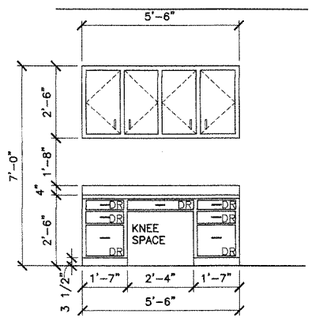
DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-403
REV	

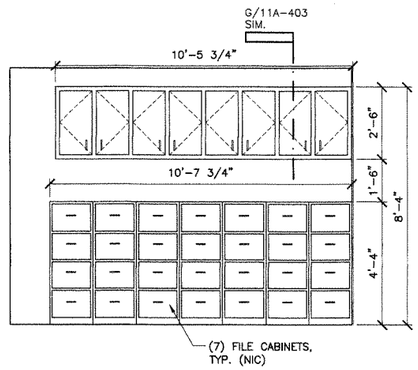
132 OF 289

REGISTERED ARCHITECT SAIC Energy, Environment, & Infrastructure, LLC No. C-255 ARKANSAS

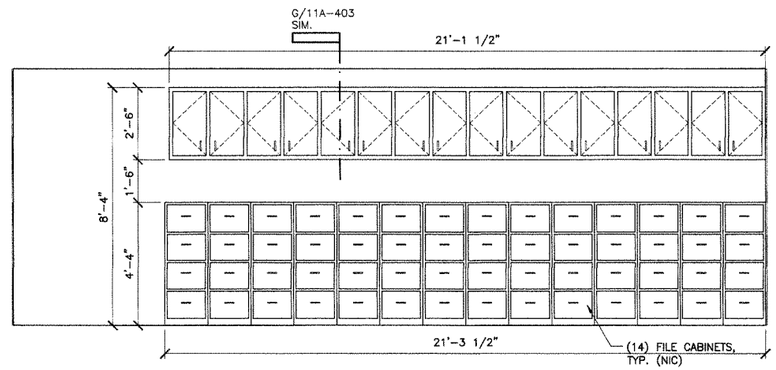
JOHNNY RAY RUMSEY REGISTERED ARCHITECT No. 2221 ARKANSAS 10-13-11



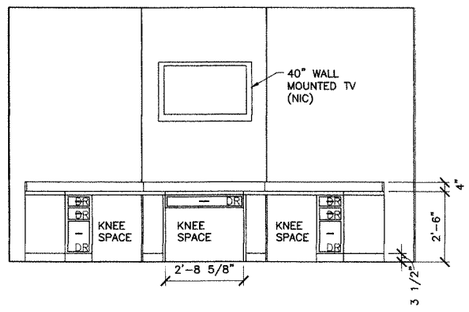
A 11A-404 DESK ELEVATION (TYP.)
SCALE: 3/16"= 1'-0"



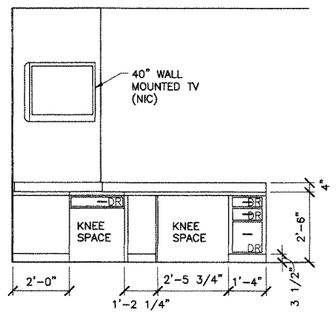
B 11A-404 FILE CABINET ELEVATION ROOM 112
SCALE: 3/8" = 1'-0"



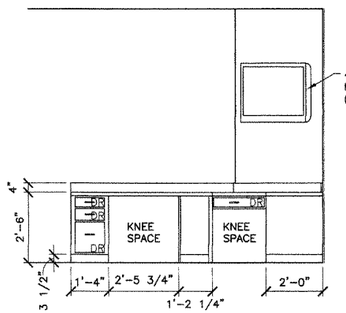
C 11A-404 FILE CABINET ELEVATION ROOM 111
SCALE: 3/8" = 1'-0"



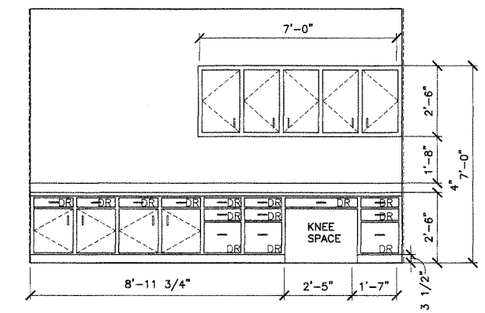
D 11A-404 MEDIA DESK ELEVATION
SCALE: 3/8" = 1'-0"



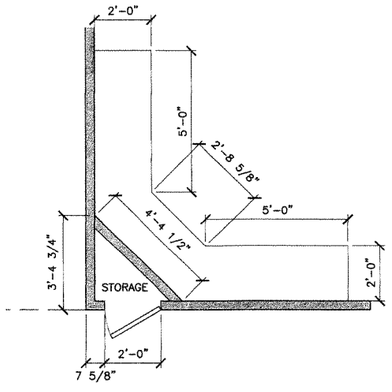
E 11A-404 MEDIA DESK ELEVATION
SCALE: 3/8" = 1'-0"



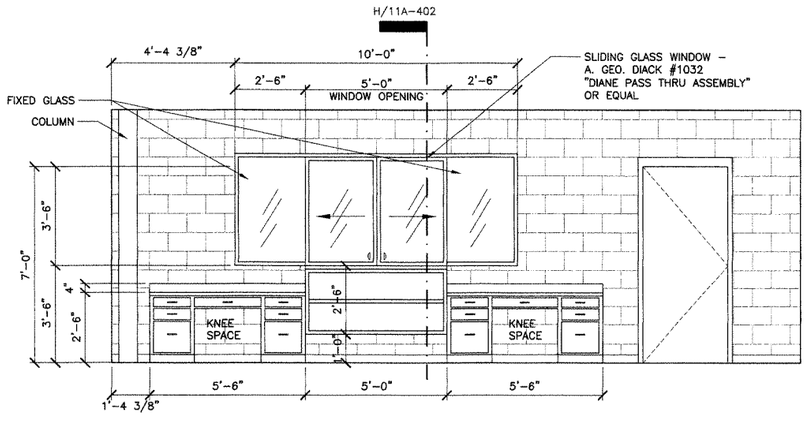
F 11A-404 MEDIA DESK ELEVATION
SCALE: 3/8" = 1'-0"



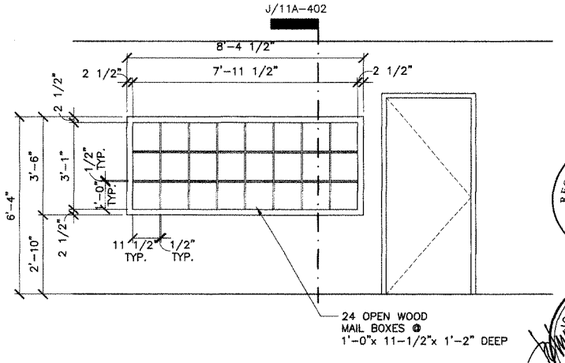
G 11A-404 DESK ELEVATION
SCALE: 3/8" = 1'-0"



H 11A-404 DESK PLAN DETIAL
SCALE: 3/8" = 1'-0"



J 11A-404 STORE ROOM OFFICE #120
SCALE: 3/8" = 1'-0"



K 11A-404 MAIL BOXES
SCALE: 3/8" = 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
INTERIOR ELEVATIONS

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11A-404	
133 OF 289	

DOOR SCHEDULE

DOOR				FRAME		DETAILS				
DOOR NO.	DOOR SIZE	DOOR DESCRIPTION	DOOR ELEV.	FRAME TYPE	FRAME MATL.	FIRE RATING	STC RATING	HRDWR SET	DETAIL GROUP	REMARKS
100	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
101	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
102	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
103A	(PAIR) 3'-0" x 6-8" x 1 3/4"	INSULATED H.M.	D2	F1	HM				E	WITH GLAZING
103B	(PAIR) 3'-0" x 6'-8" x 1 3/4"	INSULATED H.M.	D2	F1	HM				F	WITH GLAZING
103C	(PAIR) 3'-0" x 6'-8" x 1 3/4"	INSULATED H.M.	D8	F4	HM				D	
103D	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D7	F7	HM				F	WITH GLAZING
103E	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D6	F6	HM				E SIM.	WITH GLAZING
104	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
105	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
106	(PAIR) 3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D5	F4	HM				D	
106A	(PAIR) 3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D5	F4	HM				D	
107A	10'-0" x 20'-0"	OVERHEAD DOOR	D12	–	–				G	
107B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
107C	10'-0" x 10'-0"	OVERHEAD DOOR	D10	–	–				G	
107D	10'-0" x 10'-0"	OVERHEAD DOOR	D10	–	–				G	
108	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
109	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
110	NOT USED									
111	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
112	2'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D13	F8	HM				D	
113	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
114	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
115	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
116	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
117	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
118	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
119	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
120A	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
120B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				C	
120C	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				C	
121	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				C	
122	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				C	
124	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
125	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
126	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F5	HM				D	
127	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D3	F2	HM				A	
128A	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
128B	14'-0" x 14'-0"	OVERHEAD DOOR	D9		–				H	
129A	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
129B	14'-0" x 14'-0"	OVERHEAD DOOR	D9		–				H	
129C	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
130A	14'-0" x 14-0"	OVERHEAD DOOR	D9		–				H	
130B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
131	14'-0" x 14'-0"	OVERHEAD DOOR	D9		–				H	
132	14'-0" x 14"-0"	OVERHEAD DOOR	D9		–				H	
133A	14'-0" x 14-0"	OVERHEAD DOOR	D9		–				H	
133B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
134A	14'-0" x 14'-0"	OVERHEAD DOOR	D9		–				H	
134B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
135	14'-0" x 14'-0"	OVERHEAD DOOR	D9		–				H	
136	14'-0" x 14-0"	OVERHEAD DOOR	D9		–				H	
137A	14'-0" x 14-0"	OVERHEAD DOOR	D9		–				H	
137B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				B	
138	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				D SIM.	
139	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				D SIM.	
140	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				D SIM.	
141	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D1	F3	HM				D SIM.	
142	9'-0" x 8'-0"	OVERHEAD DOOR	D11		–				J	MANUAL OPERATOR ONLY
142A	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D3	F2	HM				C	
143	(PAIR) 3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D3	F2	HM				C	

HARDWARE NOTE #1:

REFER TO "SECTION 087100 - DOOR HARDWARE" FOR HARDWARE SETS BY GENERAL DOOR TYPE.

WINDOW SCHEDULE

WINDOW				FRAME	DETAILS	
WINDOW NO.	WINDOW SIZE	WINDOW DESCRIPTION	WINDOW ELEV.	FRAME MATERIAL	DETAIL GROUP	REMARKS
A	6'-0"x5'-0"	COMMERCIAL ALUMINUM	A	HM	M	
B	2'-0"x2'-0"	COMMERCIAL ALUMINUM	B	HM	N	
C	3'-0"x3'-0"	COMMERCIAL ALUMINUM	C	HM	O	
D	3'-10"x6'-10"	COMMERCIAL ALUMINUM	D	HM	Q	
E	5'-0"x3'-10"	COMMERCIAL ALUMINUM	E	HM	P	
F	5'-0"x3'-10"	COMMERCIAL ALUMINUM	E	HM	R	

REGISTERED ARCHITECT — SAIC Energy, Environment, & Infrastructure, LLC No. C-255 — ARKANSAS

JOHNNY R. RAMSEY — REGISTERED ARCHITECT — No. 2221 — ARKANSAS — 10-13-11

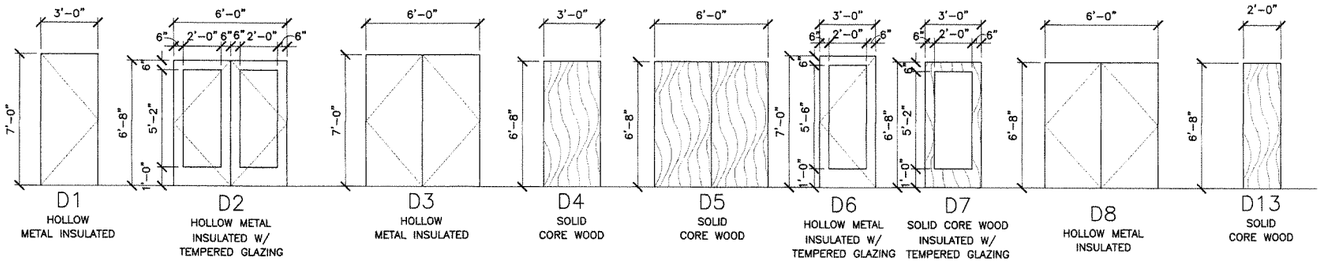
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
DOOR & WINDOW SCHEDULE

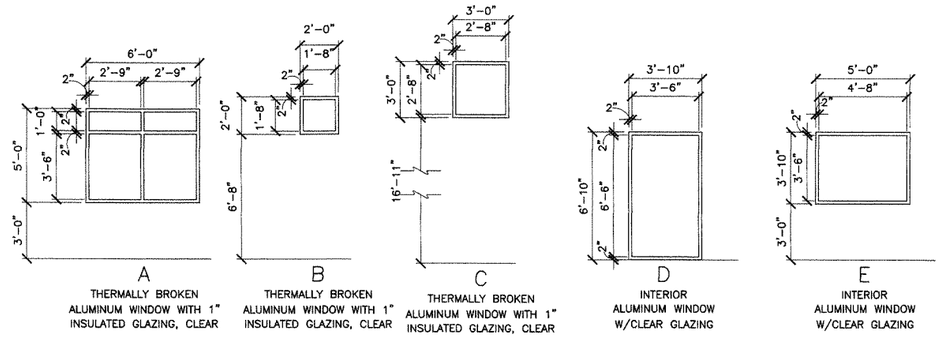
DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-501
REV	
	124 OF 289



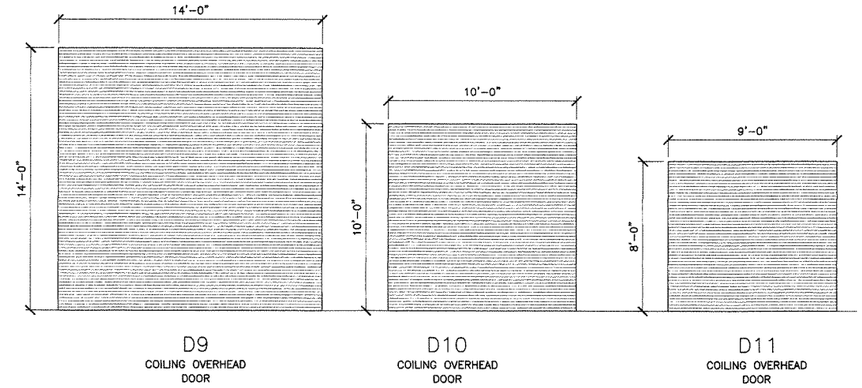
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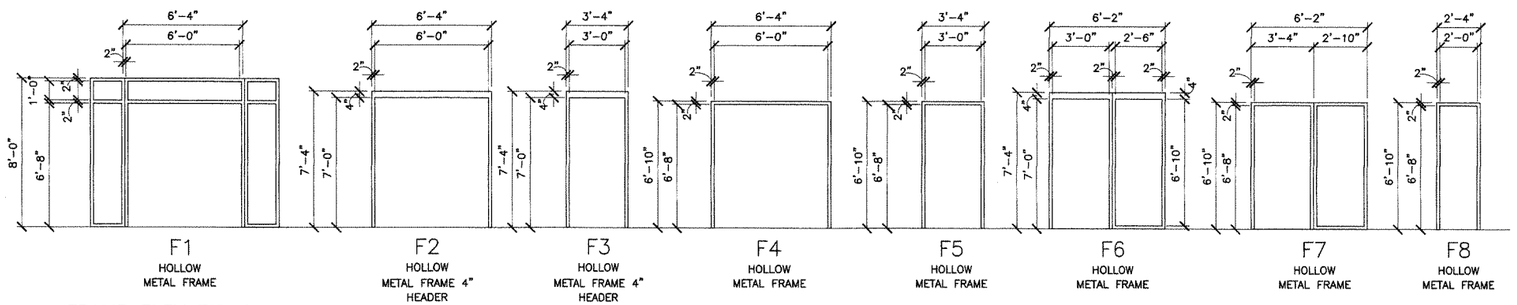
SCALE: 1/4" = 1'-0"



WINDOW ELEVATIONS

SCALE: 1/4" = 1'-0"





FRAME ELEVATIONS

SCALE: 1/4" = 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

SAIC
From Science to Solutions
SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC
201 Presidential Drive
Lowell, Arkansas
(479) 770-5800
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

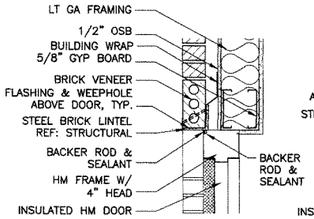
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
DOOR & WINDOW ELEVATIONS

DESIGNED BY	JSR
DRAWN BY	MSB
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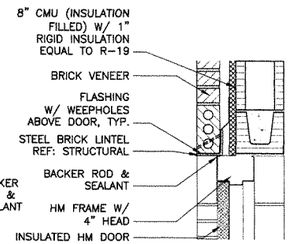
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-502
REV	

DOOR HEAD JAMB & SILL DETAILS

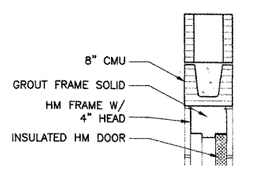
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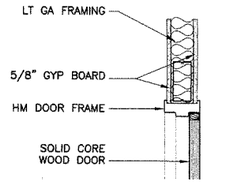
DETAIL GROUP A



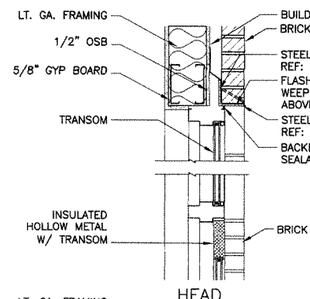
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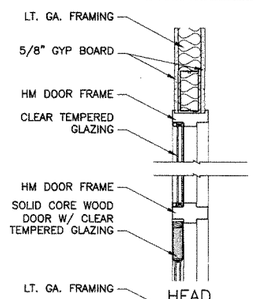
DETAIL GROUP C



DETAIL GROUP D



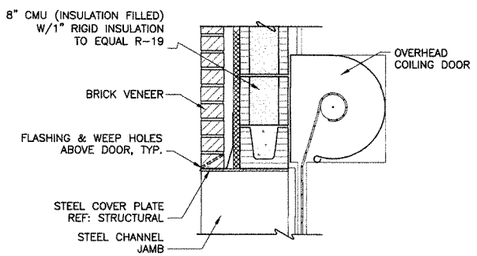
DETAIL GROUP E



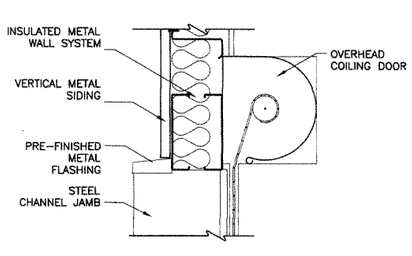
DETAIL GROUP F

OVERHEAD DOOR HEAD JAMB & SILL DETAIL

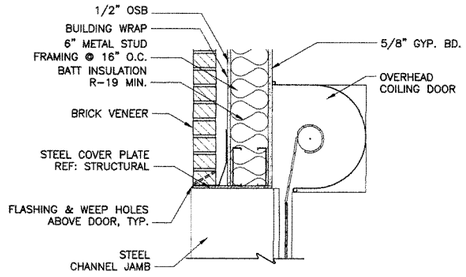
SCALE: 1" = 1'-0"



DETAIL GROUP G



DETAIL GROUP H



DETAIL GROUP J

OVERHEAD DOOR HEAD JAMB & SILL DETAIL

SCALE: 1" = 1'-0"

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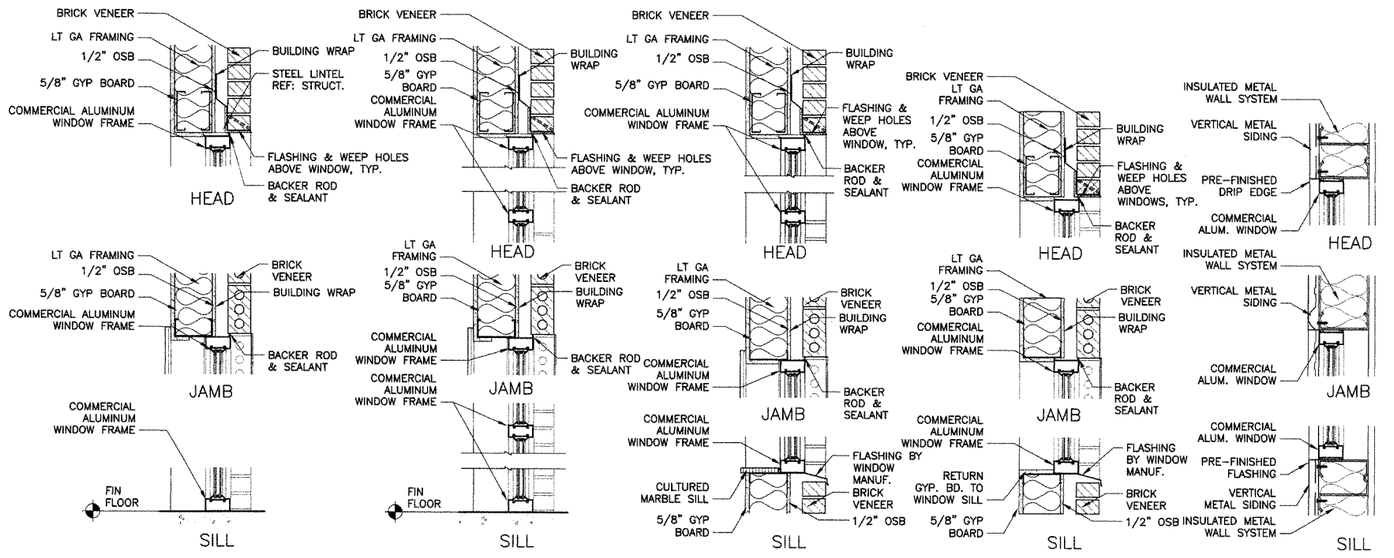
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
HEAD JAMB & SILL DETAILS

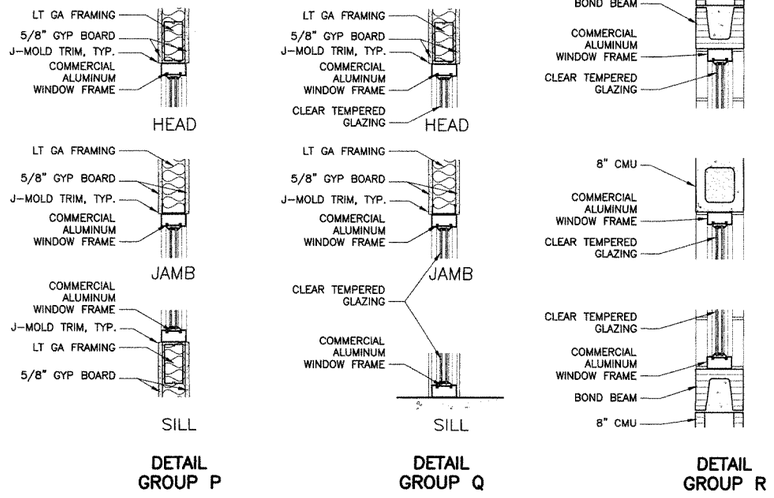
DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11A-503	
136 OF 289	

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-12-11





WINDOW HEAD JAMB & SILL DETAILS

SCALE: 1" = 1'-0"

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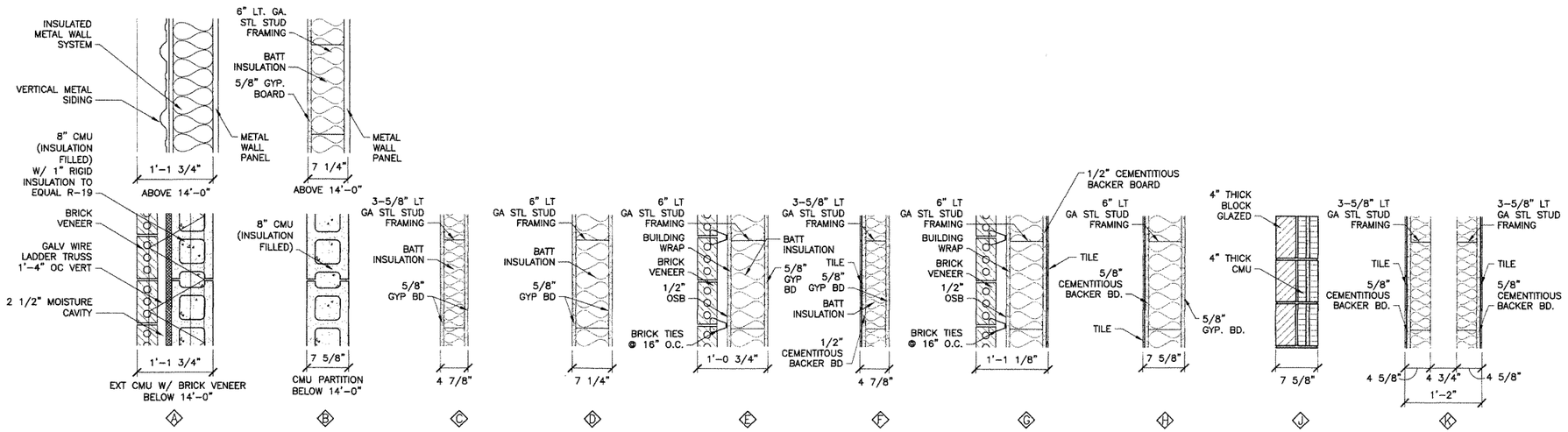
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
HEAD JAMB & SILL DETAILS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

TOMMY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR
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PROJECT NUMBER	4070812000
SHEET	11A-504
REV	

137 OF 289



PARTITION TYPES

SCALE: 1" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PARTITION TYPES

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 22721
ARKANSAS
10.13.11

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11A-505
REV	

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING			NOTES
				NORTH	EAST	SOUTH	WEST	MATL.	FINISH	HT. A.F.F.	
100	DISTRICT ENGINEER 200	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
101	D. CONSTR. ENGINEER 160	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
102	OFFICE SUPPORT	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
103	CORRIDOR	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
103A	ENTRY	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
104	D. PERMIT OFFICER	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
105	PLANS & PERMITS	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
106	TRAINING & MEETING ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
106A	GENERAL STORAGE	VCT	R	PT	PT	PT	PT	ACT	---	-	---
107	WAREHOUSE	VCT	R	PT	PT	PT	PT	EXP	---	---	---
108	STORE RM CREW ASSEM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
109	JANITOR	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
110	D. OFFICE MANAGER	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
111	OFFICE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
112	ADMIN ASSISTANT	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
113	D. MAINT. ENGINEER	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
114	CONFERENCE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
115	OFFICE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
116	SECURE COMPUTER ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
117	MEN'S	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
118	WOMEN'S	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
119	STORE ROOM SUPERVISOR	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
120	STORE ROOM OFFICE	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
121	SHOP SUPERVISOR	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
122	EQUIP SUPERVISOR	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
124	BREAK ROOM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
125	MEN'S	CT	R	CT/PT	CT/PT	CT/PT	CT/PT	GYP	PT	8'-0"	---
126	WOMEN'S	CT	R	CT/PT	CT/PT	CT/PT	CT/PT	GYP	PT	8'-0"	---
127	MECHANICAL ELECTRICAL	VCT	R	PT	PT	PT	PT	EXP	---	---	---
128	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
129	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
130	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
131	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
132	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
133	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
134	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
135	WELDING BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
136	BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
137	WELDING BAY	SC	---	PT/MTL	PT/MTL	PT/MTL	PT/MTL	EXP	PT	---	---
138	MEN'S	CT	R	CT/PT	CT/PT	CT/PT	CT/PT	GYP	PT	8'-0"	---
139	JANITOR	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---
140	WOMEN'S	CT	R	CT/PT	CT/PT	CT/PT	CT/PT	GYP	PT	8'-0"	---
141	SHOP CREW ASSEM	VCT	R	PT	PT	PT	PT	ACT	---	9'-0"	---
142	STORAGE/FLUID	SC	R	PT	PT	PT	PT	MTL	---	10'-0"	PLYWOOD WALL MATERIAL
143	TOOL	SC	R	PT	PT	PT	PT	MTL	---	10-0"	PLYWOOD WALL MATERIAL

NOTE: ALL EXPOSED CMU TO BE PAINTED

FINISH LEGEND

ACT ACOUSTICAL CEILING TILE
CT CERAMIC TILE
EXP EXPOSED
GYP GYPSUM BOARD
MTL PREFINISHED METAL PANEL
PLY PLYWOOD
PT PAINT
R RUBBER
SC SEALED CONCRETE
STC STAINED CONCRETE
C CARPET
VCT VINYL COMPOSITION TILE

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
FINISH SCHEDULE

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ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

DESIGNED BY	JSR
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CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11A-601	
139 OF 289	

STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT
ACT	ACTUAL
ADDN	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ALT	ALTERNATE
ANCH	ANCHORAGE, ANCHOR
APPD	APPROVED
ARCH	ARCHITECT,(URAL)
B–	CONC. BEAM
B/	BOTTOM OF
B/B	BACK TO BACK
BIT	BITUMINOUS, BITUMASTIC
BLDG	BUILDING
BM	BEAM
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
BRDG	BRIDGING
BRG	BEARING
BLK	BLOCK
BTWN	BETWEEN
BSMT	BASEMENT
C	CHANNEL
CANT	CANTILEVER
CEN	CENTER, ED
C/C	CENTER TO CENTER
CHAM	CHAMFER
CIRC	CIRCULAR
CJ	CONTROL JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNITS
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS, ATION
CONTR	CONTRACTOR
COORD	COORDINATE, TION
CTRD	CENTERED
D	DEPTH, DISTANCE
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DBS	DOWEL BAR SPLICER
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DSGN	DESIGN
DWGS	DRAWINGS
DWL	DOWEL
E	EAST
EA	EACH
EB	EXPANSION BOLT
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION, ELEVATED
ELEV	ELEVATOR
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXP	EXPANSION
EXIST	EXISTING
EXT	EXTERIOR
F–	FOOTING MARK
FC	FILLED CELL
FF	FINISHED FLOOR
FIN	FINISH
FLG	FLANGE
FLR	FLOOR
FDN	FOUNDATION
FRMG	FRAMING
FS	FARSIDE
FT	FOOT, FEET
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GL	GLU LAM
GLB	GLUED LAMINATED BEAM
HC	HIGH CHAIR
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HSA	HEADED STUD ANCHOR
HSB	HIGH STRENGTH BOLT
HT	HEIGHT
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INCL	INCLUDE, ING
INSUL	INSULATE, D, ION
INT	INTERIOR
INTERM	INTERMEDIATE
JST	JOIST
JT	JOINT
k	KIP
L–	ANGLE
LB	POUND
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LP	LOW POINT
LT	LIGHT
LSL	LONG SLOTTED HOLES
LTWT	LIGHTWEIGHT
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MBS	METAL BUILDING SUPPLIER
MECH	MECHANICAL
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MASONRY JOINT
MO	MASONRY OPENING
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
O/O	OUT TO OUT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OPNG	OPENING
OPP	OPPOSITE
OSL	OUTSTANDING LEG
OVS	OVERSIZE HOLES
PAF	POWDER ACTUATED FASTENER
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
R/W	REINFORCED WITH
RAD	RADIUS
REF	REFERENCE
REINF	REINFORCE, MENT
REQ	REQUIRE, D, MENT
RET	RETURN
REV	REVISION
RP	RADIUS POINT
RT	RIGHT
RTU	ROOF TOP UNIT
S	SOUTH
SA	SLAB BOLSTER
SB	SLEEVE ANCHOR
SCHED	SCHEDULE
SECT	SECTION
SF–	STEP FOOTING
SIM	SIMILAR
SPEC	SPECIFICATIONS
SP	SPACING,ES
SQ	SQUARE
SSL	SHORT SLOTTED HOLES
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENERS
STL	STEEL
STRL	STRUCTURAL
SYMM	SYMMETRICAL
T	TIES
t	THICKNESS
T/	TOP OF
TB–	TIE BEAM
TC	TIE COLUMN
T&B	TOP AND BOTTOM
TEMP	TEMPORARY, TEMPERATURE
TERM	TERMINATE
TOL	TOLERANCE
TOF	TOP OF FOOTING
TRAN	TRANSVERSE
TS	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VERT	VERTICAL
W	WIDTH, WEST, WIDE FLANGE
W/	WITH
W/O	WITHOUT
WF–	WALL FOOTING
WP	WORKING POINT
WS	WATERSTOP
WT	WEIGHT
WWF	WELDED WIRE FABRIC

STANDARDS

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
NFPA	NATIONAL FOREST PRODUCTS ASSOCIATION
PCI	PRESTRESSED CONCRETE INSTITUTE
PTI	POST TENSIONING INSTITUTE
TPI	TRUSS PLATE INSTITUTE
UL	UNDERWRITER'S LABORATORY

SYMBOLS

&	AND
@	AT
℄	CENTERLINE
ø	DIAMETER
⌖	ELEVATION
#	NUMBER, POUNDS
C.J.	CONSTRUCTION JT.
S.J.	SAW CUT JOINT
ℙ	PLATE

STRUCTURAL DESIGN CRITERIA

D–1 CODE – 2006 INTERNATIONAL BUILDING CODE WITH ARKANSAS FIRE PREVENTION CODE, 2002 EDITION

D–2 DESIGN LIVE LOADS:

ROOF	20 PSF (REDUCIBLE)
COLLATERAL M/E	5 PSF
SUSPENDED CEILING	5 PSF
FLOOR	SLAB–ON–GRADE

SNOW LOAD: GROUND SNOW Pg = 10 PSF

D–3 WIND LOAD: 90 MPH, ENCLOSED
60 MPH, PARTIALLY ENCLOSED
EXPOSURE 'C'
OCCUPANCY CATEGORY II, I = 1.0

D–4 SEISMIC: SEISMIC ZONE: 1
Ss = 0.212
S1 = 0.090
SITE CLASS C
SDS = 0.170
SD1 = 0.102
DESIGN CATEGORY B
STEEL. NOT DETAILED, R = 3
Cs = 0.057

D–5 ALLOWABLE SOIL BEARING PRESSURE 2000 PSF (CONT) AND 2500 PSF (SPREAD FOOTINGS).

GENERAL NOTES

G–1 THE GENERAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS, PRIOR TO FABRICATION AND START OF CONSTRUCTION.

G–2 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER.

G–3 THE GENERAL CONTRACTOR SHALL COORDINATE STRUCTURAL AND OTHER DRAWINGS WHICH ARE PART OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS WHICH MAY AFFECT THE STRUCTURAL DRAWINGS.

G–4 ALL DETAILS AND SECTIONS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS SHOWN.

G–5 REPRODUCTION OF THE CONTRACT DOCUMENTS USED FOR THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS WILL NOT BE PERMITTED. REPRODUCED DRAWINGS WILL BE RETURNED UNCHECKED FOR RESUBMITTAL.

G–6 DO NOT SCALE DRAWINGS.

SHALLOW FOUNDATIONS

SF–1 SOIL TO BE STRIPPED, COMPACTED AND TESTED IN ACCORDANCE WITH RECOMMENDATIONS OF THE THE SOILS REPORT PREPARED BY GRUBBS, HOSKYN, BARTON & WYATT, INC DATED JULY 3, 2008, AND AMENDMENTS THAT FOLLOW.

SF–2 HORIZONTAL JOINTS IN FOOTINGS WILL NOT BE PERMITTED.

SF–3 EXCAVATING UNDER OR NEAR IN – PLACE FOOTINGS/FOUNDATIONS WHICH DISTURBS THE COMPACTED SOIL BENEATH THE FOOTINGS/ FOUNDATIONS WILL NOT BE PERMITTED.

SF–4 REINFORCING SHALL BE SUPPORTED ON PRECAST PADS. ANCHOR BOLTS AND DOWELS FOR COLUMNS AND FILLED CELLS SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE. USE TEMPLATES FOR SETTING ANCHOR BOLTS.

SF–5 FOUNDATIONS SHALL BEAR ON STIFF TO VERY STIFF CLAY OR COMPETENT WEATHERED SHALE OR LIMESTONE. CONTRACTOR SHALL UNDER CUT FOOTINGS AS REQUIRED TO REACH COMPETENT BEARING MATERIAL. PROVIDE SOLID FILL OR LEAN–FILL AS REQUIRED. OVERSIZE UNDER CUTS LATERALLY ONE HORIZONTAL TO TWO VERTICAL FROM FOOTING EDGE.

SF–6 FOUNDATIONS SHALL BEAR A MINIMUM OF 24" BELOW GRADE.

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERMEIDE
10/13/11

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S–001
REV	

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REINFORCED CONCRETE

RC-1 CONCRETE WORK SHALL COMPLY WITH SECTION 802 OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT 2003 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

RC-2 PROVIDE CLASS OF CONCRETE WITH THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH.

CLASS OF CONCRETE	
S	3500 PSI (UNLESS NOTED OTHERWISE)
S	4000 PSI (SLAB GREATER THAN 4")
S (AE)	4000 PSI (EXTERIOR CONCRETE)
LEAN-FILL	1500 PSI

RC-3 ALL PUMPED CONCRETE WITH #57 AGGREGATE IS TO CONTAIN A HIGH RANGE WATER REDUCING AGENT. MINIMUM SIZE OF DISCHARGE TO BE 4" I.D. SEE SPECIFICATIONS FOR REQUIRED MIX DESIGN. A 2" I.D. DISCHARGE MAY BE USED WITH #89 AGGREGATE.

RC-4 ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318 (LATEST EDITION) AND ACI DETAILING MANUAL, ACI-315 LATEST EDITION.

RC-5 REINFORCING STEEL SHALL BE NEW DEFORMED BARS, FREE FROM RUST, SCALE AND OIL, CONFORMING TO ASTM A-615, GRADE 60, WITH MINIMUM YIELD STRENGTH = 60,000 PSI.

RC-6 PROVIDE THE FOLLOWING CONCRETE COVERAGE OVER REINFORCING:

FOOTINGS:	BOTTOMS & UNFORMED EDGES	3" CLEAR
	TOP & FORMED EDGES	1 1/2" CLEAR

RC-7 NO REINFORCING BARS SHALL BE CUT TO ACCOMMODATE THE INSTALLATION OF ANCHORS, EMBEDS OR OTHER ITEMS.

RC-8 USE THE STRUCTURAL DRAWINGS (INCLUDING REVISIONS AND ADDENDA) IN CONJUNCTION WITH REVIEWED SHOP DRAWINGS FOR PLACEMENT OF REINFORCING.

RC-9 AT CHANGES IN DIRECTION OF WALL BEAMS AND STRIP FOOTINGS, PROVIDE CORNER BARS OF SAME SIZE AND QUANTITY (U.N.O.) AS HORIZONTAL STEEL. REFER TO TYPICAL DETAIL 2 ON SHEET 11S-501.

RC-10 ALL EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

MASONRY

M-1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI "SPECIFICATIONS FOR MASONRY STRUCTURES" (ASCE 530.1-LATEST EDITION)

M-2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C-90 (28 DAY STRENGTH = 1900 P.S.I., fm' = 1500 P.S.I.) LAID IN RUNNING BOND. ALL MASONRY SHALL BE TYPE 1, GRADE "N" U.N.O.

M-3 USE TYPE "M" OR "S" MORTAR WITH MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.

M-4 PROVIDE LAP SPLICES FOR REINFORCING AS SHOWN ON SCHEDULE.

M-5 SEE SHEETS 11S-506 AND 11S-507 FOR ADDITIONAL NOTES.

M-6 SEE 5/11S-505 FOR LOOSE LINTELS AT BRICK VENEER.

STRUCTURAL STEEL:

S-1 STRUCTURAL STEEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE AND AISC SPECIFICATIONS 530-05.

S-2 STRUCTURAL STEEL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS:

TYPE	ASTM	GRADE	Fy, MIN. (ksi)
WIDE FLANGE SHAPES	A992		50
OTHER SHAPES AND PLATES	A36		36
PIPE	A53	B	35
HOLLOW STRUCTURAL SHAPES (HSS SHAPES)	A500	B	46
STRUCTURAL BOLTS	A325		92
THREADED (ANCHOR) RODS	F1554		36

S-3 STRUCTURAL STEEL CONNECTIONS:
- a. ALL HIGH STRENGTH BOLTED CONNECTIONS SHALL USE TENSION CONTROL BOLTS.
- b. ALL WELDING SHALL BE IN ACCORDANCE WITH LATEST AWS CODE. ALL WELDS SHALL USE E70XX ELECTRODES.
- c. CONNECTION BOLTS SHOWN IN DRAWINGS ARE 3/4" DIAMETER A325 BEARING TYPE "N", UNLESS NOTED OTHERWISE.

S-4 NO HOLES OR LENGTH ADJUSTMENTS SHALL BE CUT IN STEEL BEAMS IN THE FIELD UNLESS APPROVED BY THE STRUCTURAL ENGINEER.

METAL BUILDING SYSTEM DESCRIPTION ADMINISTRATION BUILDING

REFER TO SPECIFICATIONS AND NOTES ON THE DRAWINGS FOR ADDITIONAL INFORMATION.

PRIMARY FRAME TYPE:	RIGID CLEAR SPAN
END-WALL FRAMING:	PINNED
EXTERIOR COLUMN TYPE:	TAPERED
INTERIOR COLUMNS:	N/A
ROOF RAFTER TYPE:	TAPERED
SECONDARY FRAME TYPE-ROOF:	MFG. STANDARD "C" OR "Z" COLD-FORMED PURLINS AND
SECONDARY FRAME TYPE-GIRTS:	EXTERIOR FRAMED (BYPASS)
SIDEWALL BRACING TYPE:	PORTAL FRAMES AND X-BRACES AS SHOWN
COLUMN BASES:	PINNED
EXTERIOR WALL SYSTEM:	REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATION

METAL BUILDING SYSTEMS (MBS):

MB-1 REFER TO SPECIFICATION SECTION 133419 FOR METAL BUILDING DESIGN CRITERIA, FABRICATION AND CONSTRUCTION REQUIREMENTS.

MB-2 SEE THIS DRAWING FOR CODES, DESIGN CRITERIA AND OTHER NOTES THAT APPLY.

MB-3 THE BUILDING SHALL BE METAL BUILDING SYSTEMS OF THE SIZE AND CONFIGURATION SHOWN. THE BUILDINGS SHALL BE DESIGNED AND FABRICATED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

MB-4 A COMPLETE DESIGN ANALYSIS SHOWING ALL CALCULATIONS FOR THE RIGID FRAMES, GIRTS, PURLINS, PORTAL FRAMES, X-BRACING FOR WIND AND SEISMIC LOADS AND A LAYOUT OF ANCHOR BOLTS AND OTHER EMBEDDED ITEMS SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE DETAILS OF ALL MAIN MEMBERS, TYPICAL CONNECTIONS (SHOWING BOLT HOLES AND WELDS), AND ERECTION DRAWINGS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS.

MB-5 COLUMN REACTIONS SHALL BE SUBMITTED FOR REVIEW OF FOUNDATION DESIGN WITHIN TWO WEEKS OF AWARD DATE OR AS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.

MB-6 THE BUILDING SHALL BE DESIGNED TO SUPPORT ALL CRANES, MECHANICAL EQUIPMENT INCLUDING HEATERS, SPRINKLERS, EXHAUST SYSTEMS, AND ALL OTHER SUCH DEVICES. ADDITIONAL GIRTS OR PURLINS OR BEAMS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL EQUIPMENT.

MB-7 THE BUILDING SHALL BE DESIGNED AND MEMBERS PROVIDED FOR LATERAL SUPPORT OF MASONRY WALLS.

MB-8 THE BUILDING FRAME SHALL BE DESIGNED TO LIMIT THE LATERAL DEFLECTION TO H/400. "H" BEING THE EAVE HEIGHT, AT THE BUILDING EAVE FOR THE BASIC WIND SPEED CALLED (SEE "DESIGN CRITERIA" SECTION THIS SHEET) FOR SEISMIC, THE Cd X DESIGN LEVEL RESPONSE DISPLACEMENT SHALL NOT EXCEED H/50.

MB-9 CROSS BRACING SHALL BE USED TO TAKE LATERAL DIAPHRAGM LOADS UNLESS THE METAL PANELS ARE THROUGH FASTENED TO THEIR SUPPORTS. LOAD TESTS ON METAL PANELS MUST BE SUBMITTED WHERE THESE ARE USED AS A DIAPHRAGM. METAL PANELS USED, AS A DIAPHRAGM MUST BE A MINIMUM OF 22 GAGE.

MB-10 ALL VERTICAL BRACING TO BE ANCHORED TO COLUMN WEBS.

MB-11 ALL METAL BUILDING FRAMES AND BEAMS SHOWN ON ROOF FRAMING PLANS ARE DIAGRAMMATIC FOR INTENT ONLY. ALL FINAL LOCATIONS, SIZES, ETC. FOR ALL FLOOR AND ROOF MEMBERS SHALL BE FROM METAL BUILDING SYSTEMS SUPPLIER (AND/OR JOIST AND BEAM MANUFACTURER) BEARING THE SEAL, SIGNATURE AND DATE OF THE REGISTERED ENGINEER IN THE STATE OF ARKANSAS. METAL BUILDING SYSTEMS SUPPLIER IS RESPONSIBLE FOR FINAL TRUSS LAYOUT AND DESIGN OF ALL ROOF FRAMES.

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 12626 JOHN GREGORY WESTERMEIER 10/13/11

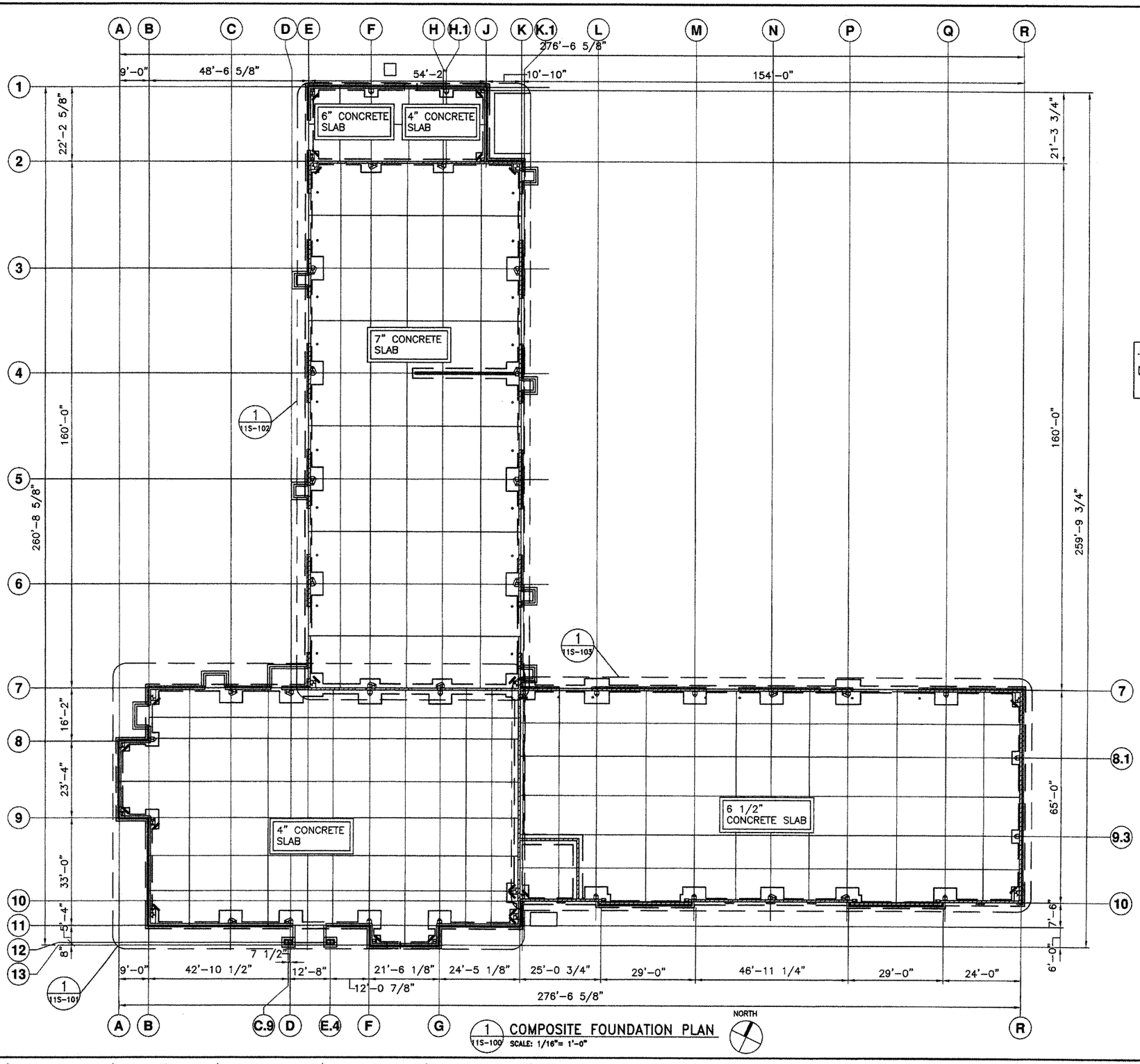
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-002
REV	

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1 11S-100 COMPOSITE FOUNDATION PLAN
SCALE: 1/16"= 1'-0"

LEGEND

INDICATES NON-LOAD BEARING BRICK VENEER OR BLOCK REFER TO ARCHITECTURAL

KEY PLAN
SCALE: 1/128" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
COMPOSITE FOUNDATION PLAN

DESIGNED BY	JDW
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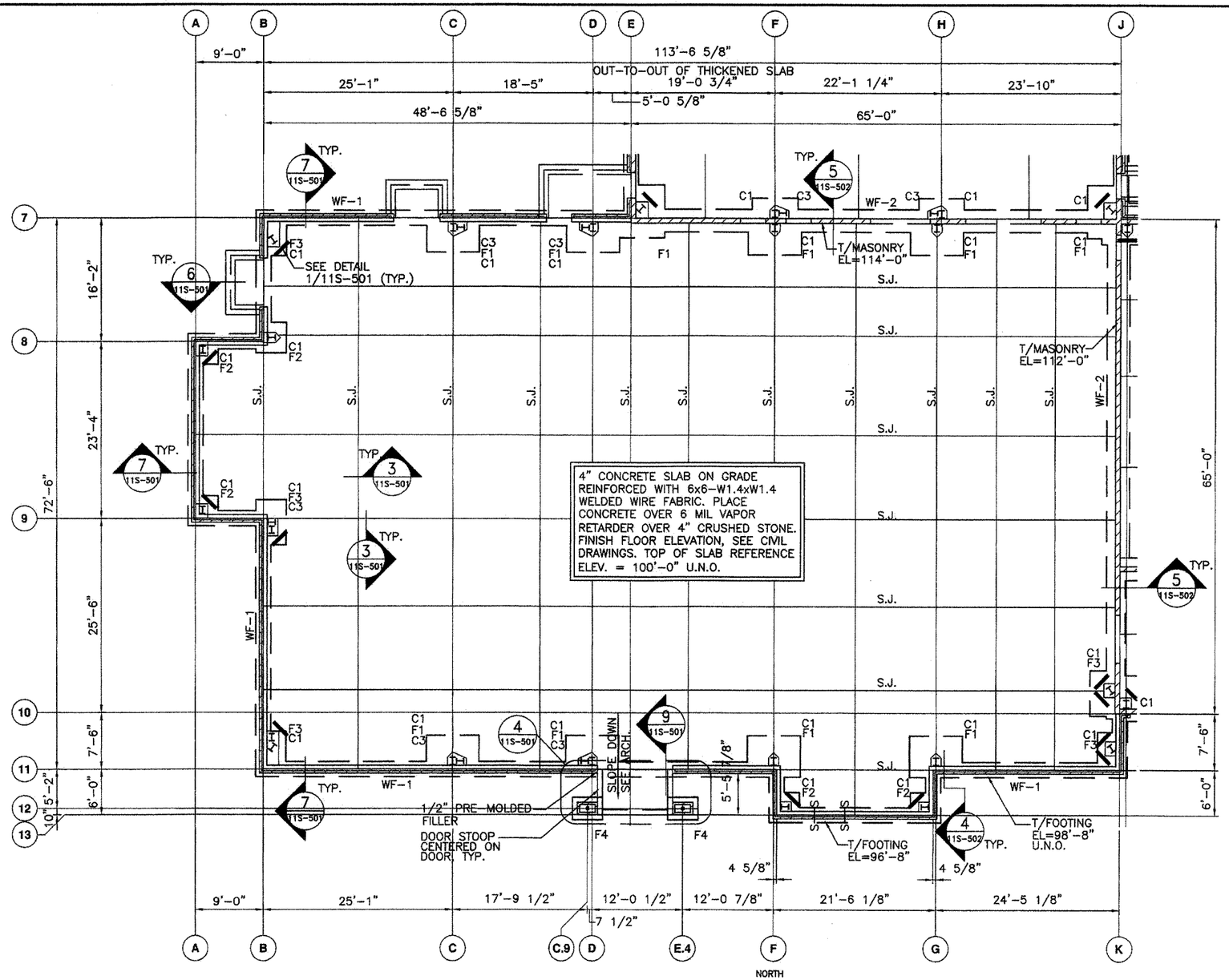
CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
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No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-100
REV	

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1 11S-101 **FOUNDATION PLAN – SECTOR 1**
SCALE: 1/8"= 1'-0"

NORTH

LEGEND

INDICATES BRICK VENEER OR BLOCK REFER TO ARCHITECTURAL

NOTES:

1. REFER TO DETAIL 3/11S-501 FOR SLAB CONTROL JOINT (S.J.).
2. SEE STRUCTURAL GENERAL NOTES ON SHEET 11S-001 & 11S-002.
3. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDERGROUND UTILITY REQUIREMENTS.
4. ALL DIMENSIONS ARE TO OUT-TO-OUT OF THICKENED SLAB OR CMU WALL UNLESS NOTED OTHERWISE.
5. REFER TO MECHANICAL DRAWINGS FOR FLOOR DRAIN LOCATION.
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF THICKENED, SLOPED, RAISED, OR DEPRESSED SLABS.
7. CONTRACTOR MAY REPLACE SAW JOINTS (S.J.) WITH CONSTRUCTION JOINTS (C.J.) AT HIS DISCRETION. ALTERNATE FLOOR SLAB JOINT LOCATIONS SHALL BE SUBMITTED FOR APPROVAL.
6. REFER TO SHEETS 11S-506 AND 11S-507 FOR TYPICAL MASONRY DETAILS.
7. REFER TO SHEET 11S-601 FOR FOOTING SCHEDULE.

KEY PLAN
SCALE: 1/128" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
FOUNDATION PLAN – SECTOR 1

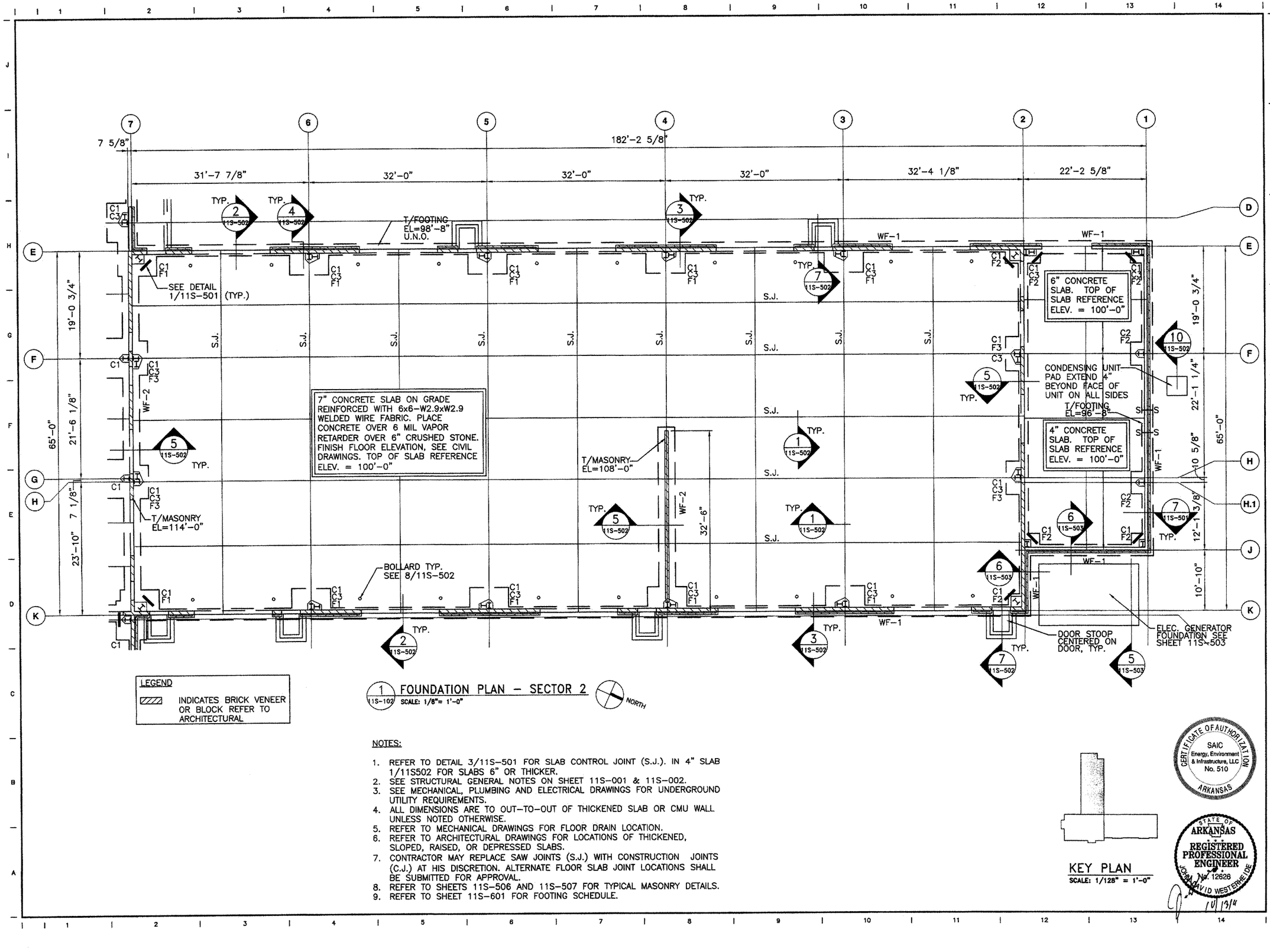
DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

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SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-101
REV	
	143 OF 289

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LEGEND

INDICATES BRICK VENEER OR BLOCK REFER TO ARCHITECTURAL

1 / 11S-102 FOUNDATION PLAN – SECTOR 2

SCALE: 1/8"= 1'-0"

NORTH

NOTES:

1. REFER TO DETAIL 3/11S-501 FOR SLAB CONTROL JOINT (S.J.). IN 4" SLAB 1/11S502 FOR SLABS 6" OR THICKER.
2. SEE STRUCTURAL GENERAL NOTES ON SHEET 11S-001 & 11S-002.
3. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDERGROUND UTILITY REQUIREMENTS.
4. ALL DIMENSIONS ARE TO OUT-TO-OUT OF THICKENED SLAB OR CMU WALL UNLESS NOTED OTHERWISE.
5. REFER TO MECHANICAL DRAWINGS FOR FLOOR DRAIN LOCATION.
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF THICKENED, SLOPED, RAISED, OR DEPRESSED SLABS.
7. CONTRACTOR MAY REPLACE SAW JOINTS (S.J.) WITH CONSTRUCTION JOINTS (C.J.) AT HIS DISCRETION. ALTERNATE FLOOR SLAB JOINT LOCATIONS SHALL BE SUBMITTED FOR APPROVAL.
8. REFER TO SHEETS 11S-506 AND 11S-507 FOR TYPICAL MASONRY DETAILS.
9. REFER TO SHEET 11S-601 FOR FOOTING SCHEDULE.

KEY PLAN

SCALE: 1/128" = 1'-0"

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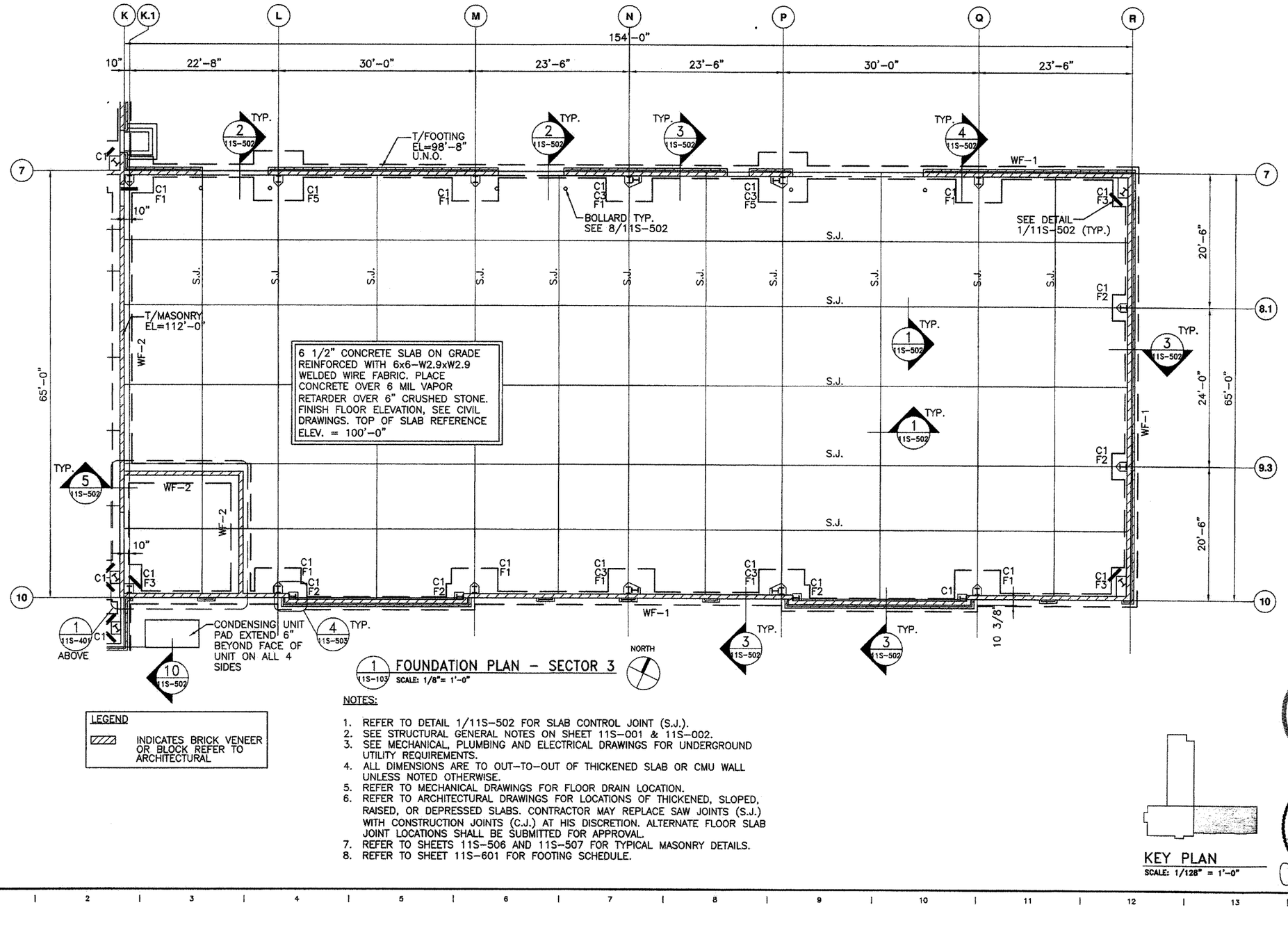
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
FOUNDATION PLAN – SECTOR 2

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-102
REV	
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1 11S-103 FOUNDATION PLAN – SECTOR 3
SCALE: 1/8"= 1'-0"

LEGEND

INDICATES BRICK VENEER OR BLOCK REFER TO ARCHITECTURAL

NOTES:

1. REFER TO DETAIL 1/11S-502 FOR SLAB CONTROL JOINT (S.J.).
2. SEE STRUCTURAL GENERAL NOTES ON SHEET 11S-001 & 11S-002.
3. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDERGROUND UTILITY REQUIREMENTS.
4. ALL DIMENSIONS ARE TO OUT-TO-OUT OF THICKENED SLAB OR CMU WALL UNLESS NOTED OTHERWISE.
5. REFER TO MECHANICAL DRAWINGS FOR FLOOR DRAIN LOCATION.
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF THICKENED, SLOPED, RAISED, OR DEPRESSED SLABS. CONTRACTOR MAY REPLACE SAW JOINTS (S.J.) WITH CONSTRUCTION JOINTS (C.J.) AT HIS DISCRETION. ALTERNATE FLOOR SLAB JOINT LOCATIONS SHALL BE SUBMITTED FOR APPROVAL.
7. REFER TO SHEETS 11S-506 AND 11S-507 FOR TYPICAL MASONRY DETAILS.
8. REFER TO SHEET 11S-601 FOR FOOTING SCHEDULE.

KEY PLAN
SCALE: 1/128" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
FOUNDATION PLAN – SECTOR 3

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

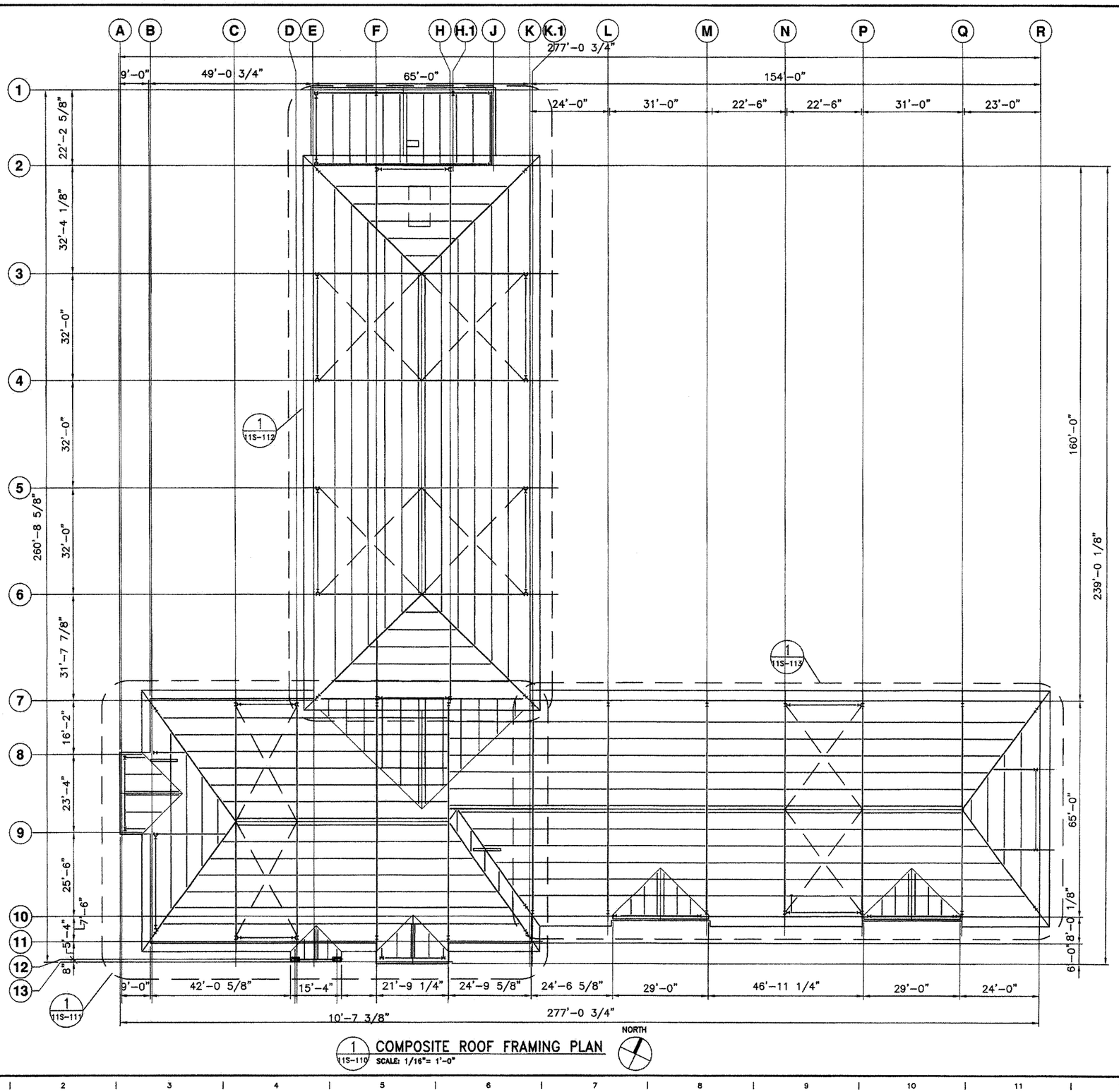
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SHEET	11S-103
REV	

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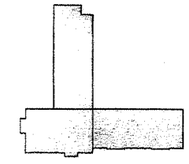
STATE OF ARKANSAS
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1 COMPOSITE ROOF FRAMING PLAN
11S-110 SCALE: 1/16"= 1'-0"

NORTH



KEY PLAN
SCALE: 1/128" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
COMPOSITE ROOF FRAMING PLAN

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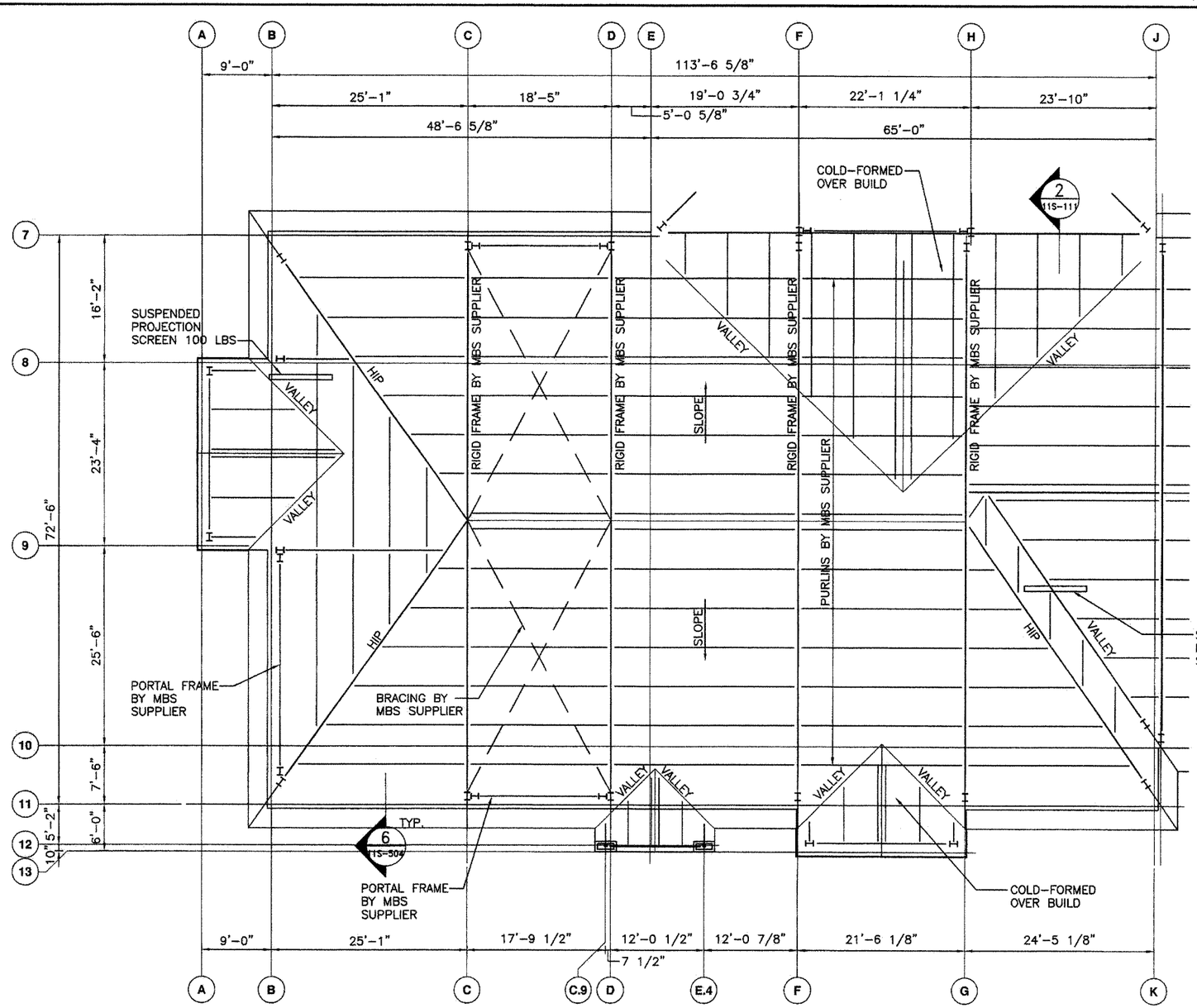
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1 11S-111 ROOF FRAMING PLAN – SECTOR 1
SCALE: 1/8"= 1'-0"

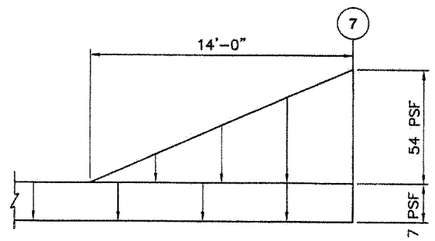
NORTH

1. G.C. TO PROVIDE SCREEN SUPPORTS. REFER TO DETAIL 6/11S-508.

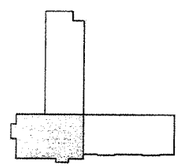
METAL BUILDING SYSTEMS SUPPLIER SHALL DESIGN THE ROOF FRAMING TO SUPPORT THE INDICATED COLLATERAL LOADS AND THE WEIGHT OF THE MECHANICAL/ELECTRICAL UNITS SUSPENDED FROM THE ROOF FRAMING.

METAL BUILDING SYSTEMS SUPPLIER SHALL COORDINATE WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING THE SIZE AND WEIGHTS OF THE ROOF SUPPORTED MECHANICAL/ELECTRICAL UNITS AND THE SIZE, LOCATION AND WEIGHTS OF ANY EXTERIOR WALL MOUNTED EQUIPMENT OR LOUVERS THAT PENETRATE THE METAL WALL PANELS PROVIDED BY THE METAL BUILDING SUPPLIER.

MECHANICAL AND ELECTRICAL CONTRACTOR SHOULD COORDINATE THE APPLICABLE HANGER SYSTEMS AND DETAILS WITH METAL BUILDING SYSTEMS MANUFACTURER AND THE TYPICAL DETAILS SHOWN ON SHEET 11S-508.



2 11S-111 SNOW LOAD DIAGRAM
SCALE: NO SCALE



KEY PLAN
SCALE: 1/128" = 1'-0"

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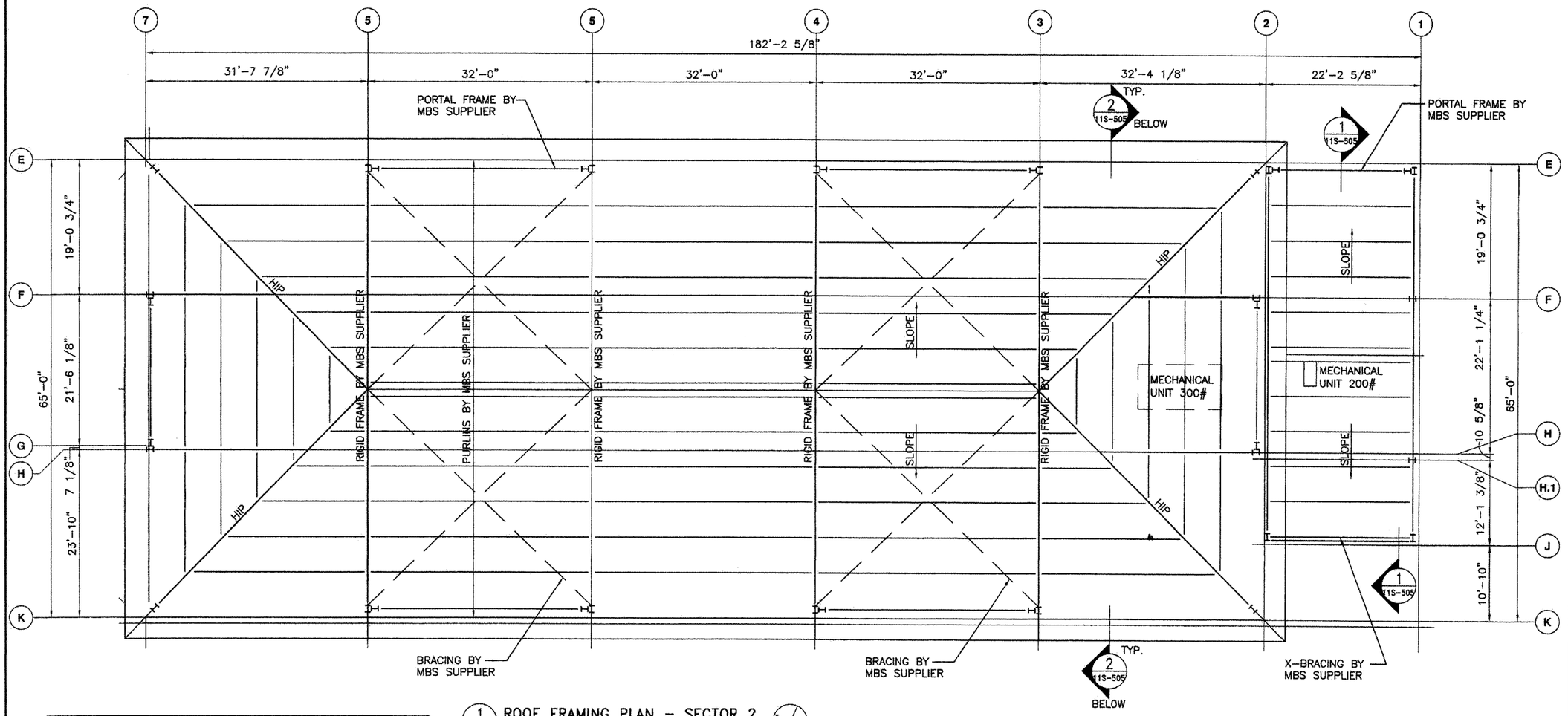
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ROOF FRAMING PLAN – SECTOR 1

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 12626 JOHN DAVID WESTERMEIER
10/13/11

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-111
REV	
147 OF 289	



1 (11S-112) ROOF FRAMING PLAN – SECTOR 2
SCALE: 1/8"= 1'-0"

NORTH

METAL BUILDING SYSTEMS SUPPLIER SHALL DESIGN THE ROOF FRAMING TO SUPPORT THE INDICATED UNIFORM COLLATERAL LOADS AND THE WEIGHT OF THE MECHANICAL/ELECTRICAL UNITS SUSPENDED FROM THE ROOF FRAMING.

METAL BUILDING SYSTEMS SUPPLIER SHALL COORDINATE WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING THE SIZE AND WEIGHTS OF THE ROOF SUPPORTED MECHANICAL/ELECTRICAL UNITS AND THE SIZE, LOCATION AND WEIGHTS OF ANY EXTERIOR WALL MOUNTED EQUIPMENT OR LOUVERS THAT PENETRATE THE METAL WALL PANELS PROVIDED BY THE METAL BUILDING SUPPLIER.

MECHANICAL AND ELECTRICAL CONTRACTOR SHOULD COORDINATE THE APPLICABLE HANGER SYSTEMS AND DETAILS WITH METAL BUILDING SYSTEMS MANUFACTURER AND THE TYPICAL DETAILS SHOWN ON SHEET 11S–508.

KEY PLAN
SCALE: 1/128" = 1'-0"

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No. 510
ARKANSAS

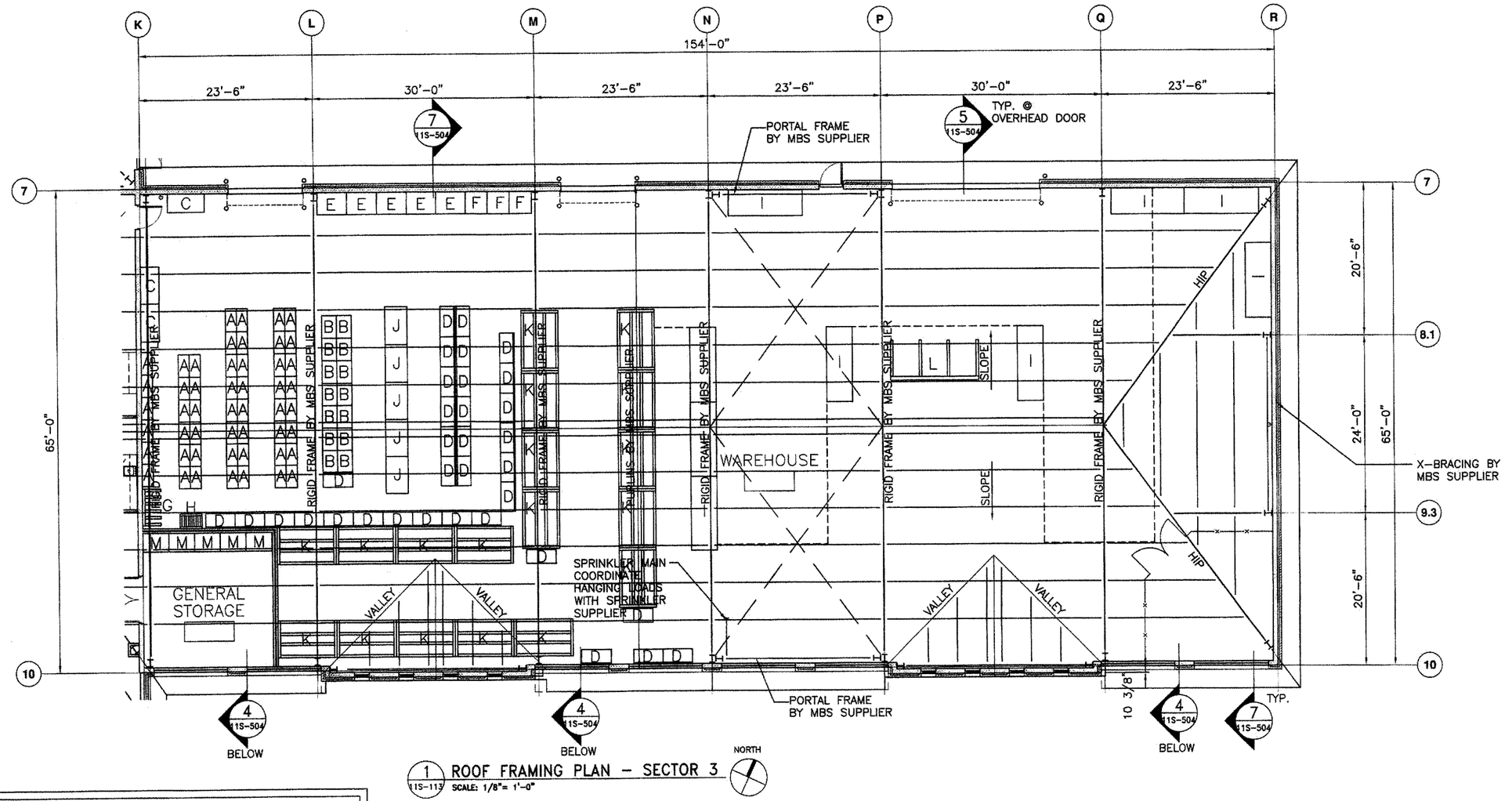
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ROOF FRAMING PLAN – SECTOR 2

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S–112
REV	
148 OF 289	

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1 ROOF FRAMING PLAN – SECTOR 3
11S-113 SCALE: 1/8"= 1'-0"

NORTH

METAL BUILDING SYSTEMS SUPPLIER SHALL DESIGN THE ROOF FRAMING TO SUPPORT THE INDICATED UNIFORM COLLATERAL LOADS AND THE WEIGHT OF THE MECHANICAL/ELECTRICAL UNITS SUSPENDED FROM THE ROOF FRAMING.

METAL BUILDING SYSTEMS SUPPLIER SHALL COORDINATE WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING THE SIZE AND WEIGHTS OF THE ROOF SUPPORTED MECHANICAL/ELECTRICAL UNITS AND THE SIZE, LOCATION AND WEIGHTS OF ANY EXTERIOR WALL MOUNTED EQUIPMENT OR LOUVERS THAT PENETRATE THE METAL WALL PANELS PROVIDED BY THE METAL BUILDING SUPPLIER.

MECHANICAL AND ELECTRICAL CONTRACTOR SHOULD COORDINATE THE APPLICABLE HANGER SYSTEMS AND DETAILS WITH METAL BUILDING SYSTEMS MANUFACTURER AND THE TYPICAL DETAILS SHOWN ON SHEET 11S–508.

KEY PLAN
SCALE: 1/128" = 1'-0"

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AHTD JOB NO. 040554
ROOF FRAMING PLAN – SECTOR 3

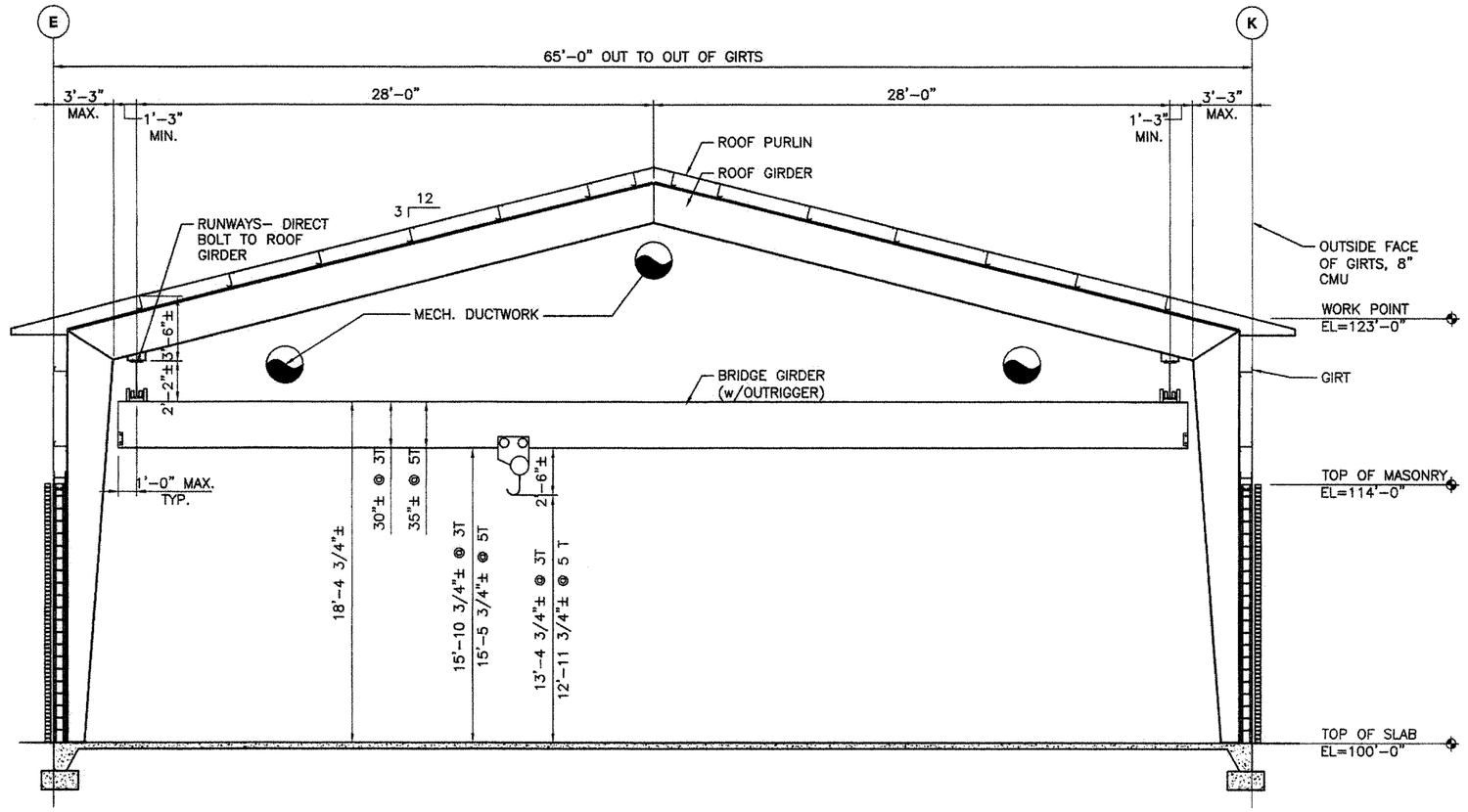
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Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S–113
REV	
	199 OF 289

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1 (11S-201) SECTION THRU MAINTENANCE BAY
SCALE: 1/4"= 1'-0"

NOTES:

1. BRIDGE CRANE MANUFACTURER SHALL DESIGN AND SUPPLY RUNWAY BEAMS AND ASSOCIATED CONNECTIONS.

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
CRANE FRAMING ELEVATIONS

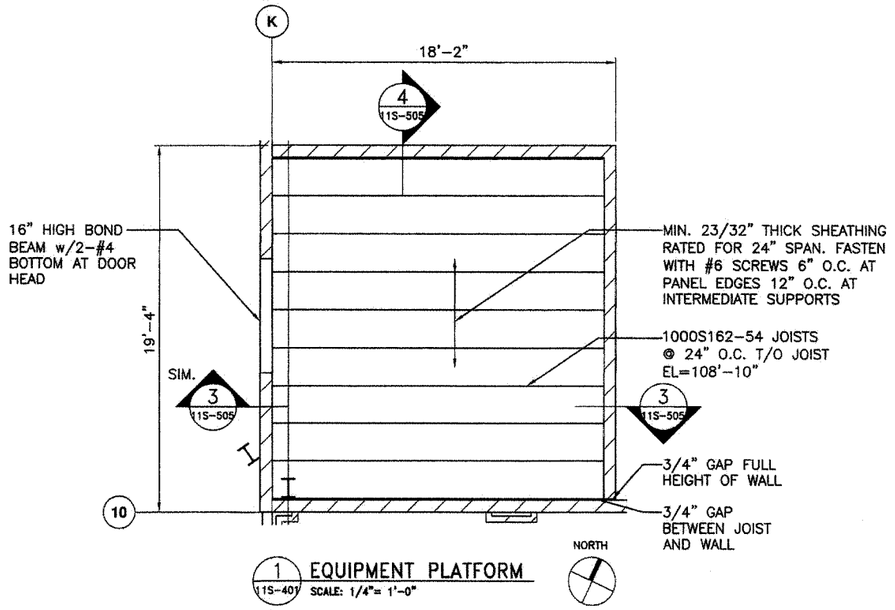
DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-201
REV	
	156 OF 289

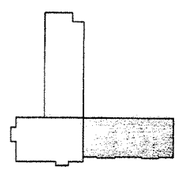
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No. 12626
JOHN DAVID WESTERFIELD
10/13/11

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1 / 11S-401 EQUIPMENT PLATFORM
SCALE: 1/4"= 1'-0"



KEY PLAN
SCALE: 1/128" = 1'-0"

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No. 12626
JOHN DAVID WESTERFIELD
10/13/11

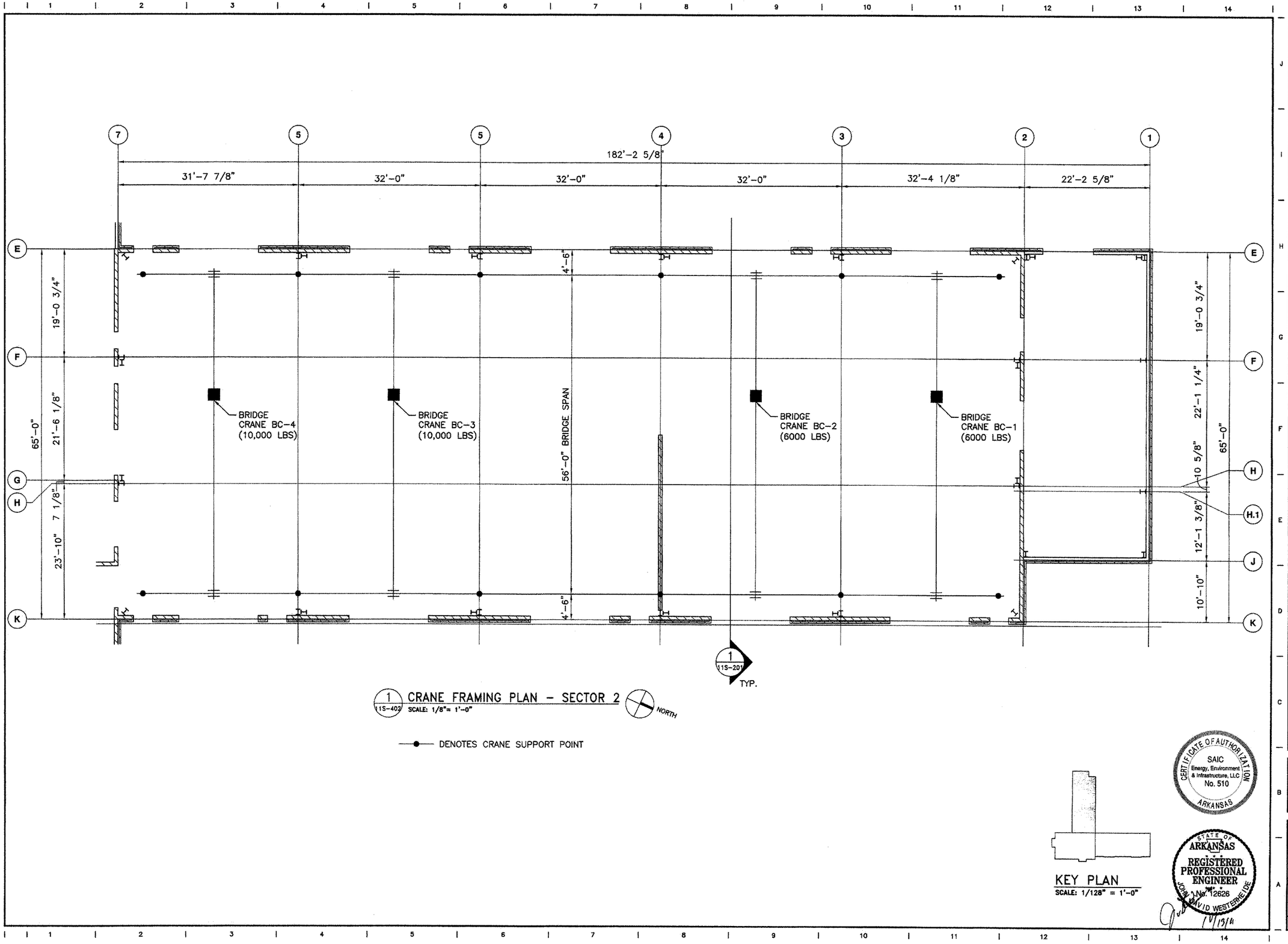
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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED PLANS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-401
REV	
	151 OF 289

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1 / 11S-402 CRANE FRAMING PLAN – SECTOR 2

SCALE: 1/8"= 1'-0"

NORTH

DENOTES CRANE SUPPORT POINT

KEY PLAN

SCALE: 1/128" = 1'-0"

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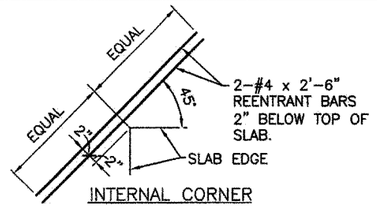
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
CRANE FRAMING PLAN –SECTOR 2

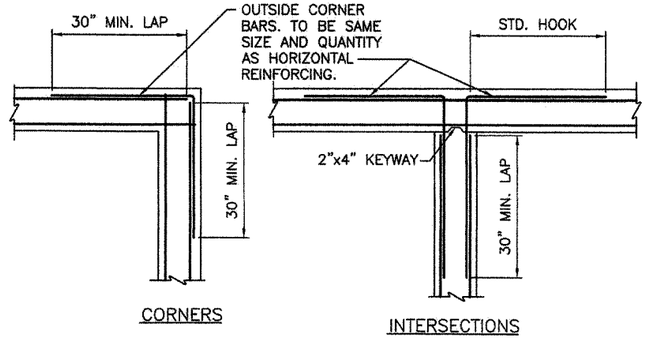
DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-402
REV	
	152 OF 289

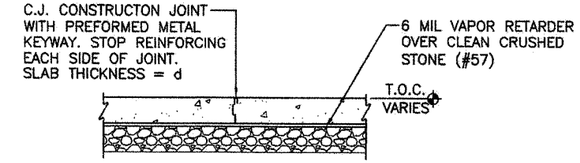
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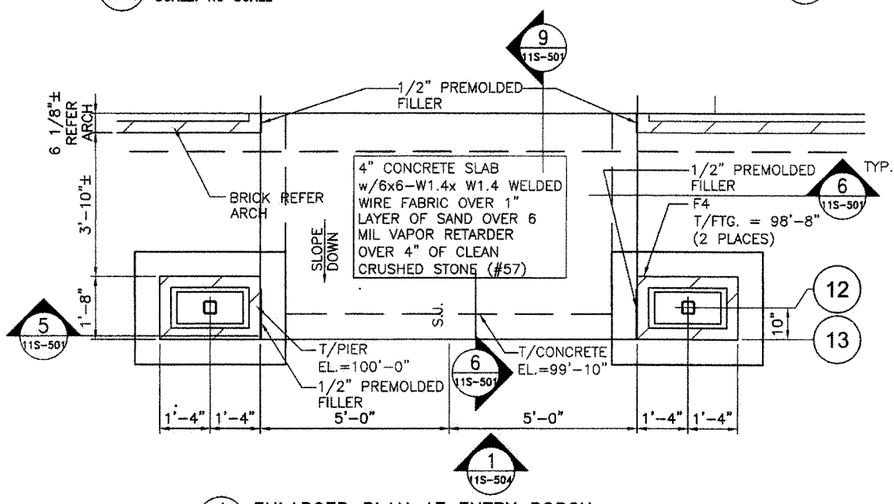
1 TYPICAL REENTRANT DETAILS
11S–501 SCALE: NO SCALE



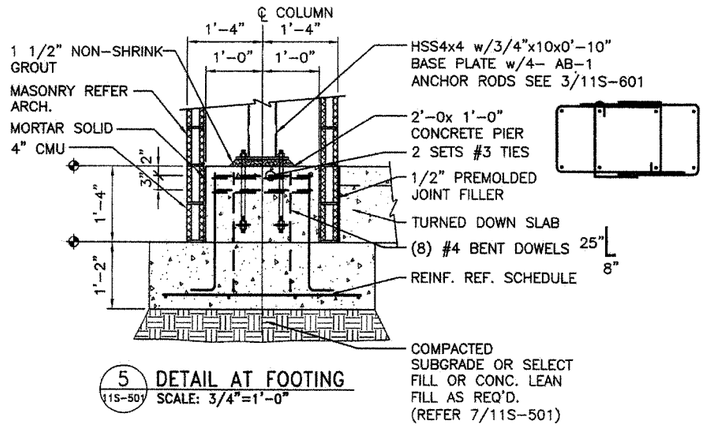
2 TYPICAL CORNER DETAILS
11S–501 SCALE: NO SCALE



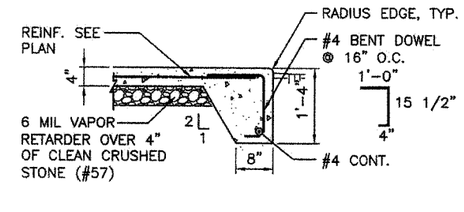
3 TYPICAL CONSTRUCTION JOINT DETAILS – 4" THICK SLABS
11S–501 SCALE: 1"=1'–0"



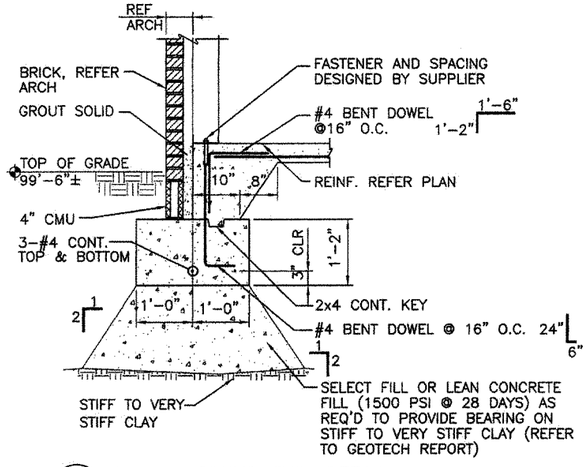
4 ENLARGED PLAN AT ENTRY PORCH
11S–501 SCALE: 1/2"= 1'–0"



5 DETAIL AT FOOTING
11S–501 SCALE: 3/4"=1'–0"

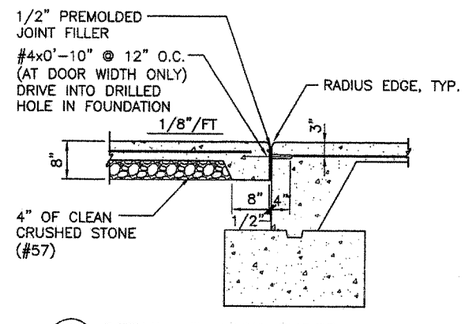


6 TURNED DOWN SLAB DETAIL
11S–501 SCALE: 3/4"=1'–0"



7 TYPICAL FOUNDATION DETAIL
11S–501 SCALE: 3/4"=1'–0"

8 NOT USED
11S–501



9 DETAIL AT DOOR STOOP
11S–501 SCALE: 3/4"=1'–0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TYPICAL FOUNDATION DETAILS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

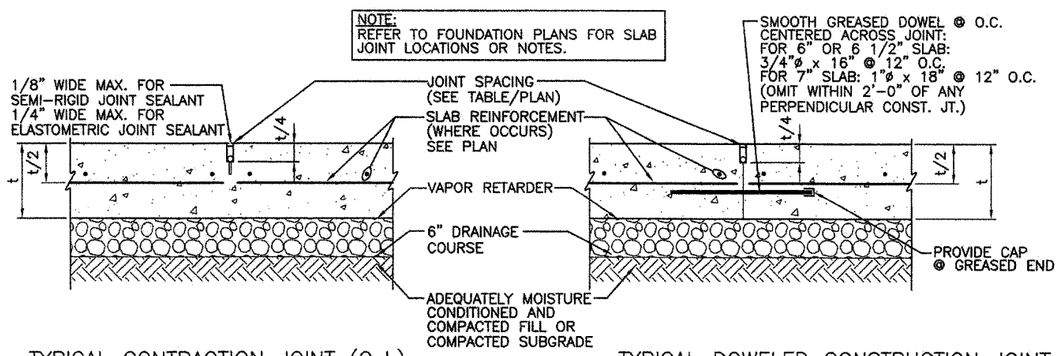
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S–501
REV	
	153 OF 289

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

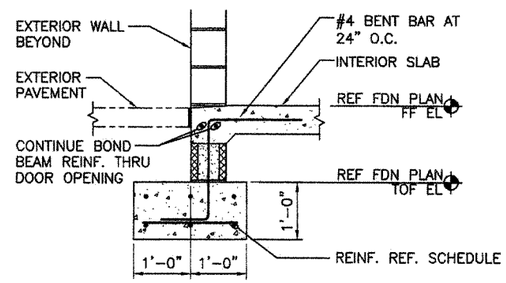
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NOTE:
REFER TO FOUNDATION PLANS FOR SLAB JOINT LOCATIONS OR NOTES.

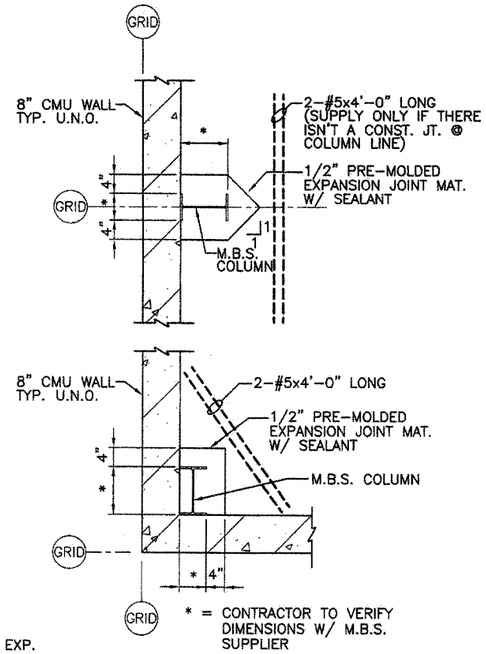


TYPICAL CONTRACTION JOINT (C.J.) TYPICAL DOWELED CONSTRUCTION JOINT

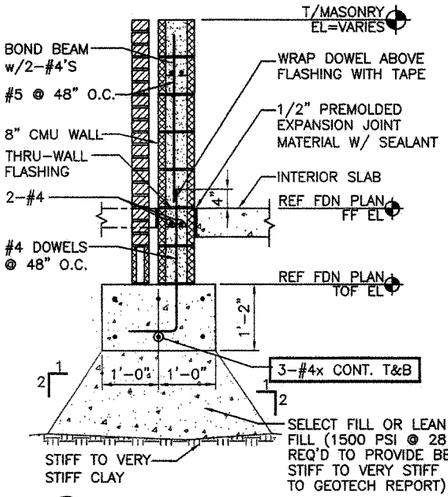
1 TYPICAL SLAB-ON-GRADE DETAILS - 6" AND THICKER SLABS
1S-502 SCALE: NO SCALE



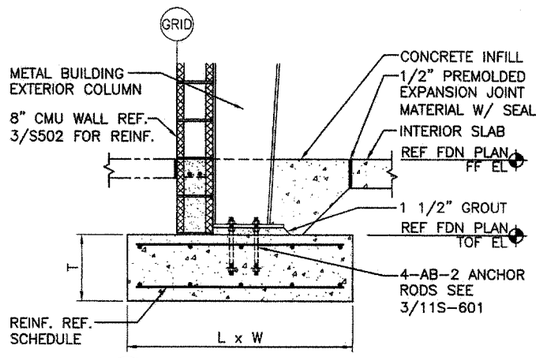
2 FOOTING AT O.H. DOOR OPENING
1S-502 SCALE: NO SCALE



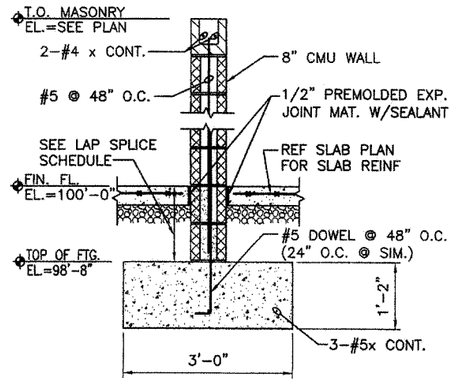
6 TYP. M.B.S. COLUMN DIAMOND DETAIL
1S-502 SCALE: NO SCALE



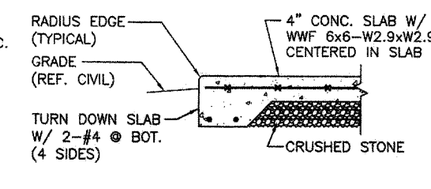
3 TYP. EXTERIOR FOOTING
1S-502 SCALE: NO SCALE



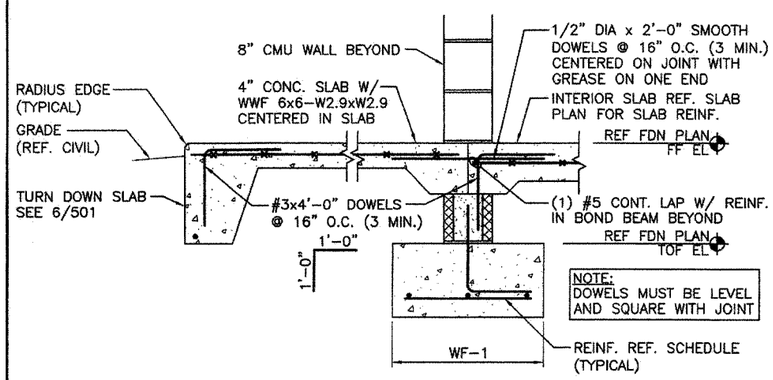
4 TYP. FTG. AT EXTERIOR COLUMN
1S-502 SCALE: NO SCALE



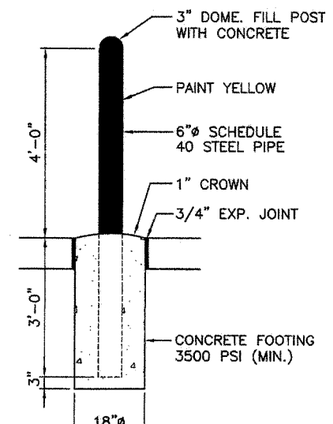
5 TYPICAL INTERIOR FOOTING DETAIL
1S-502 SCALE: NO SCALE



10 EXTERIOR PAD DETAIL
1S-502 SCALE: NO SCALE

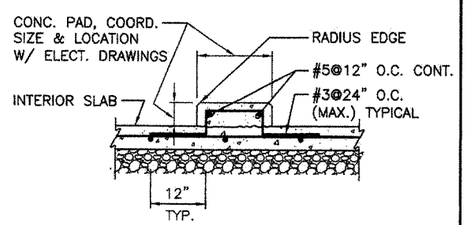


7 TYPICAL EXIT DOOR STOOP
1S-502 SCALE: NO SCALE



8 TYPICAL BOLLARD
1S-502 SCALE: NO SCALE

9 NOT USED
1S-502



11 HOUSEKEEPING PAD DETAIL
1S-502 SCALE: NO SCALE

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JOHN DAVID WESTERHEIDE NO. 12626

10/13/11

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
SECTIONS & DETAILS

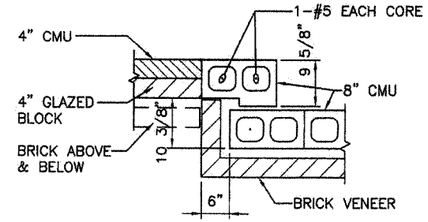
DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S-502
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154	OF 289

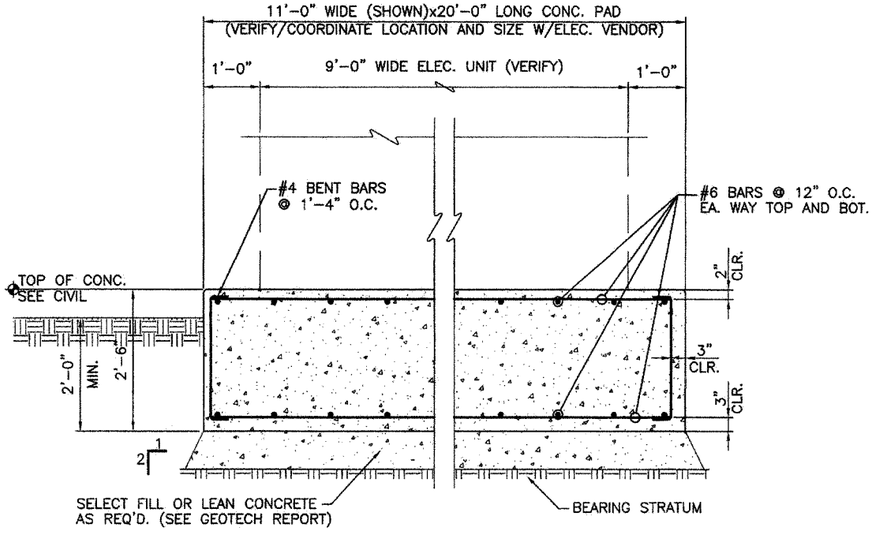
1 NOT USED
11S-503

2 NOT USED
11S-503

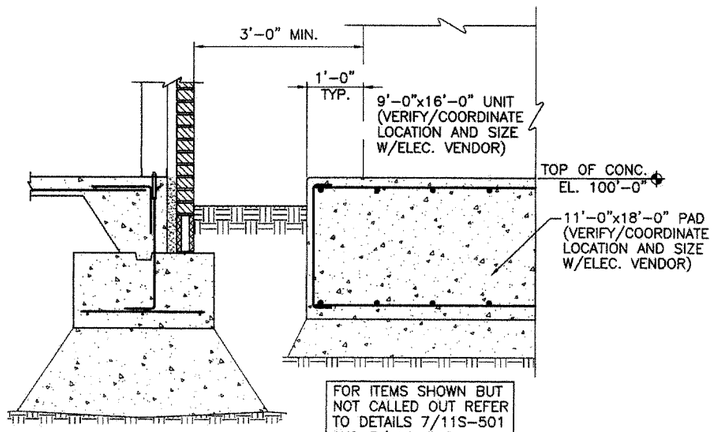
3 NOT USED
11S-503



4 CMU CORNER DETAIL
11S-503 SCALE: 3/4"=1'-0"



5 ELECTRICAL GENERATOR FOUNDATION
11S-503 SCALE: 3/4"=1'-0"



6 ELEC. GENERATOR FOUNDATION SECTION AT BUILDING WALL
11S-503 SCALE: 3/4"=1'-0"

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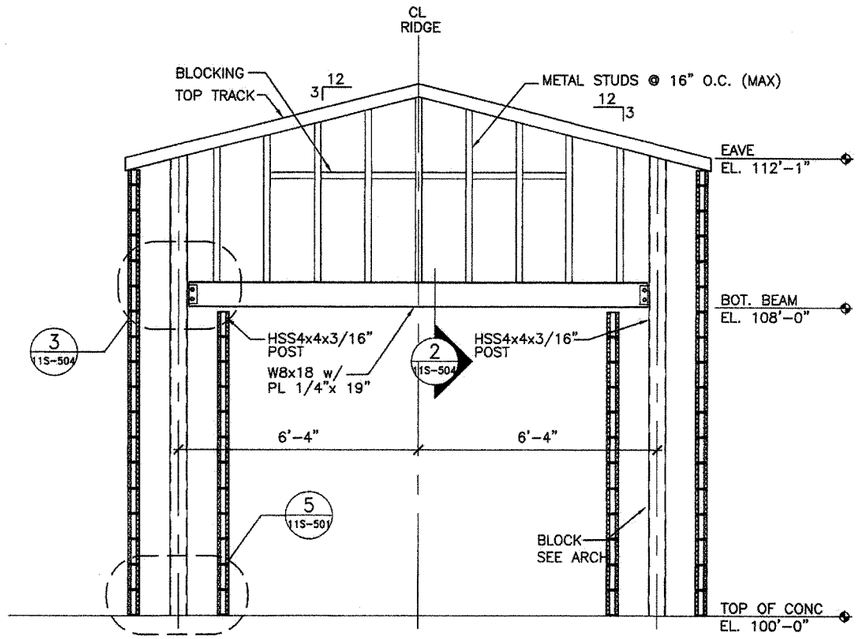
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
FOUNDATION DETAILS

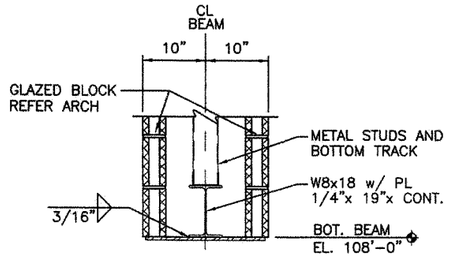
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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

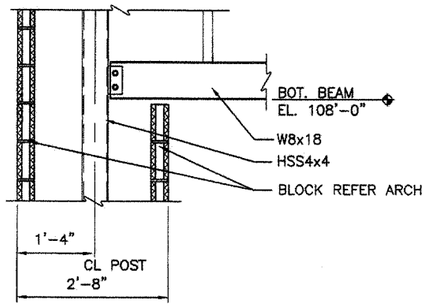
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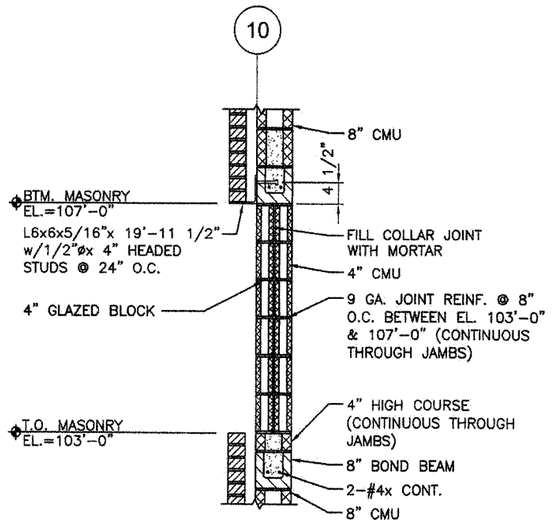
1 SECTION AT PORCH CANOPY
11S-504 SCALE: 1/2"=1'-0"



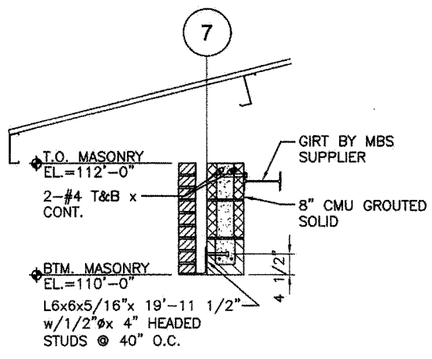
2 SECTION THROUGH LINTEL
11S-504 SCALE: 1"=1'-0"



3 FRAMING CONNECTION
11S-504 SCALE: 3/4"=1'-0"

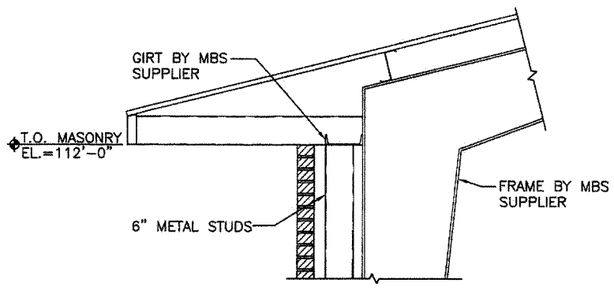


4 WALL DETAIL
11S-504 SCALE: 3/4"=1'-0"

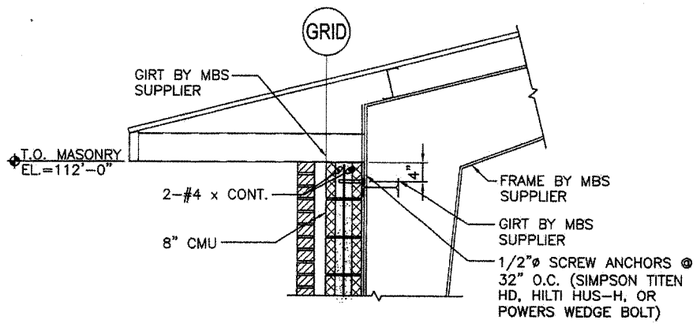


NOTE: STEEL JAMB FOR 20'-0" OVERHEAD DOOR SHALL SPAN FROM FLOOR TO GIRT WITHOUT ATTACHMENT TO CMU.

5 LINTEL AT 20' O.H. DOOR
11S-504 SCALE: 3/4"=1'-0"



6 EAVE DETAIL AT OFFICE WING
11S-504 SCALE: 3/4"=1'-0"



7 EAVE DETAIL AT WAREHOUSE WING
11S-504 SCALE: 3/4"=1'-0"

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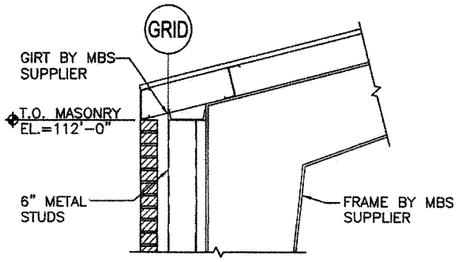
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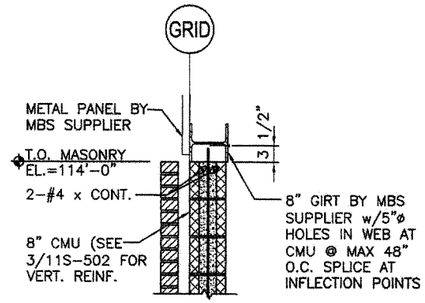
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TYPICAL FRAMING DETAILS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

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SCALE	AS NOTED
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REV	

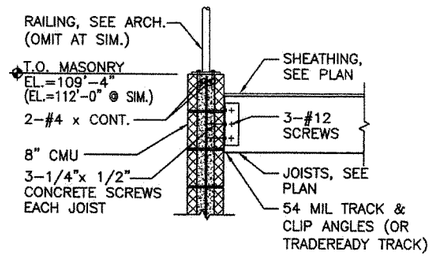


1 EAVE DETAIL AT SHOP
11S-505 SCALE: NO SCALE

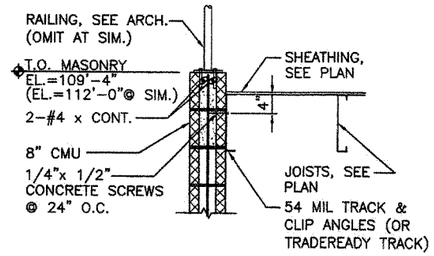


NOTE: STEEL JAMB FOR 14'x14' OVERHEAD DOORS SHALL SPAN FROM FLOOR TO GIRT WITHOUT ATTACHMENT TO CMU.

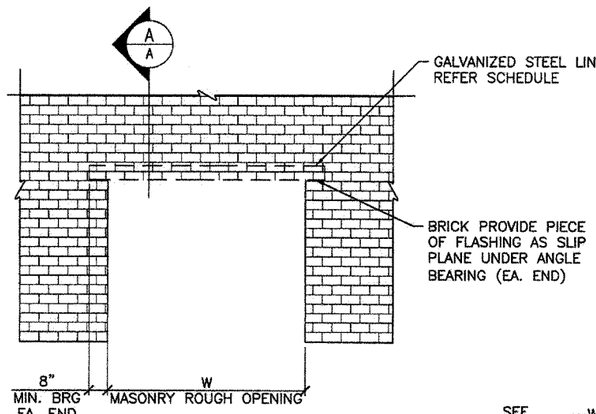
2 CMU WALL DETAIL AT MAINTENANCE WING
11S-505 SCALE: NO SCALE



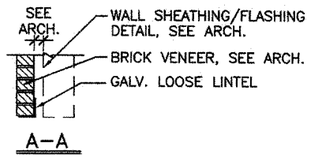
3 EQUIPMENT PLATFORM DETAIL
11S-505 SCALE: NO SCALE



4 EQUIPMENT PLATFORM DETAIL
11S-505 SCALE: NO SCALE



BRICK VENEER LINTEL SCHEDULE	
W	DESCRIPTION
TO 4'-0"	L4x3 1/2x5/16" (LLV)
4'-4" TO 6'-4"	L6x3 1/2x5/16" (LLV)
6'-4" TO 10'-0"	L8x4x1/2" (LLV)



5 LOOSE LINTEL DETAIL AT BRICK VENEER
11S-505 SCALE: 3/4"=1'-0"

6 NOT USED
11S-505

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DISTRICT ADMINISTRATION BUILDING
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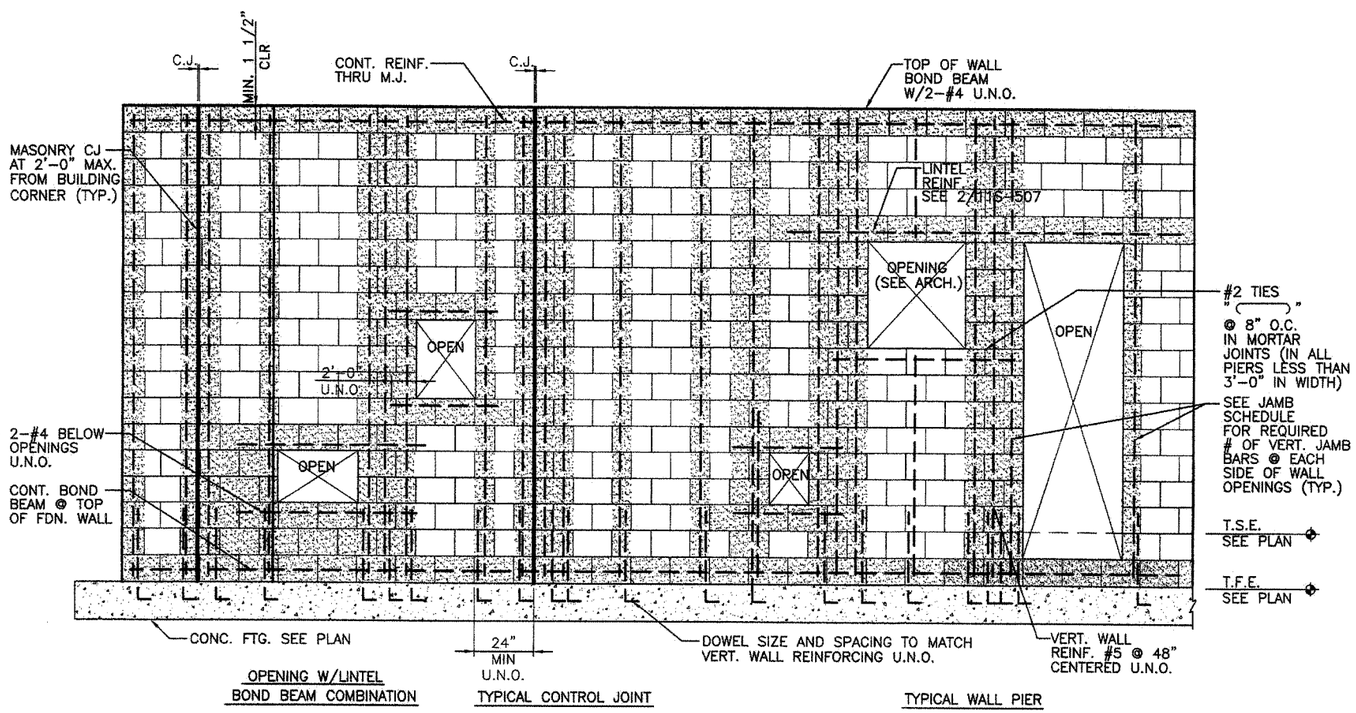
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STATE OF ARKANSAS
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JOHN DAVID WESTERFIELD
10/13/11

GENERAL MASONRY NOTES:

1. UNITS SHALL UTILIZE FACE SHELL MORTAR BEDDING U.N.O.
2. MASONRY WALLS SHALL HAVE CONTROL JOINTS AT A MAXIMUM OF 30'–0" U.N.O. SEE ARCH. DRAWINGS FOR CONTROL JOINT LOCATIONS IN CMU WALLS. SEE 4/11S–506 FOR CONTROL JOINT DETAIL.
3. CONSOLIDATE GROUT POURS OVER 12' BY MECHANICAL VIBRATION. RECONSOLIDATE GROUT IN MASONRY CELLS BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
4. FOR HIGH LIFT GROUTING (OVER 5'–0") CLEANOUTS ARE REQUIRED AT EVERY GROUTED CORE AT THE BASE OF EACH LIFT. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR. TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
5. HIGH LIFT GROUT SHALL NOT EXCEED 10'–6" IN HEIGHT FOR #4 OR #5 VERT. BARS 12'–6" IN HEIGHT FOR #6 VERT. BARS.
6. THE USE OF SELF–CONSOLIDATING GROUT (SCG) WILL REQUIRE FULL INSPECTION AND ACCEPTANCE OF THE GROUT MIX DELIVERED TO THE SITE BY THE SUPPLIERS REPRESENTATIVE AND THE INSPECTION AGENCY.
7. SCG ON–SITE INSPECTION SHALL VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DETERMINED BY ASTM C 1611.
8. PROVIDE STANDARD 90 DEGREE HOOK DOWELS BETWEEN FOUNDATIONS AND WALLS EQUAL TO THE SIZE AND SPACING OF THE VERTICAL REINFORCING U.N.O.
9. PROVIDE 9 GA. LADDER TYPE HORIZONTAL AT JOINT REINFORCEMENT EVERY COURSE IN STACK BOND WALLS AND EVERY OTHER COURSE IN RUNNING BOND WALLS U.N.O. PROVIDE A 6 INCH SPLICE LENGTH FOR HORIZONTAL REINF.
10. ALL SPLICES WITHIN WALL SHALL BE IN ACCORDANCE WITH THE LAP SPLICE SCHEDULE U.N.O. SEE SECTIONS AND DETAILS FOR DOWELS AND SPLICE AT FOUNDATIONS AND AND FLOOR LEVELS.
11. PROVIDE CONTINUOUS BOND BEAM REINFORCEMENT WITH 2–#4 BARS OR AS NOTED.
12. ALL NON–BEARING MASONRY WALLS SHALL BE PROVIDED WITH VERTICAL SLIP CONNECTIONS AT THE TOP OF THE WALL U.N.O.
13. REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS.
14. TOLERANCES FOR THE PLACEMENT OF REINFORCEMENT IN WALLS AND FLEXURAL ELEMENTS SHALL BE PLUS OR MINUS 1/2" FOR d EQUAL TO 8" OR LESS, PLUS OR MINUS 1" FOR d EQUAL TO 24" OR LESS BUT GREATER THAN 8", AND PLUS OR MINUS 1 1/4" FOR d GREATER THAN 24". NOTE: d = DISTANCE FROM CENTERLINE OF REINFORCING STEEL TO THE OPPOSITE FACE OF MASONRY.
15. SEE 11S–001 FOR INFORMATION ON CMU MATERIAL REQUIREMENTS.
16. ALL MORTAR PROTRUSIONS INTO CELLS TO BE GROUTED ARE REQUIRED TO BE REMOVED BY MASON AND ALL DEBRIS MUST BE VACUUMED FROM CORE.
17. REINFORCING IS CONTINUOUS FROM TOP OF FOOTING TO TOP OF WALL.

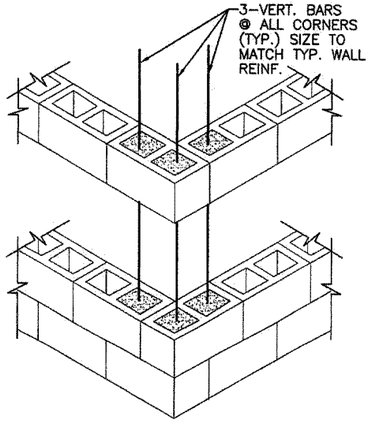


1 (11S–506) TYPICAL MASONRY WALL REINFORCING DETAIL
SCALE: NO SCALE

MASONRY JAMB SCHEDULE		
OPENING WIDTH	# CELLS	BARS EACH CELL
3'–4" OR LESS	1	1–#5 CENTERED
OVER 3'–4" TO 10'–0"	2	1–#5 CENTERED

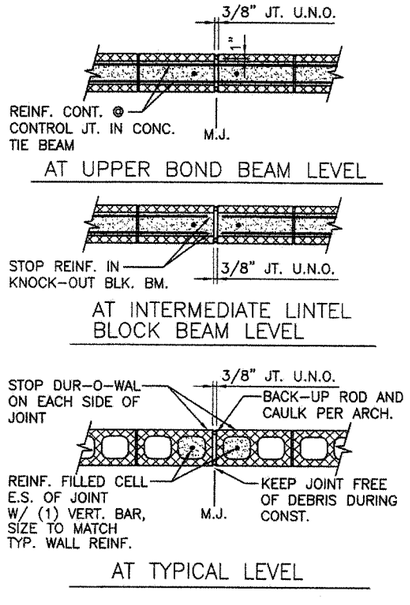
NOTES:
1. THE INDICATED REINFORCEMENT IS CONTINUOUS FULL HEIGHT OF WALL.
2. PROVIDE ONE ADDITIONAL CELL WITH 1–#5 CENTERED BENEATH BEARING OF STEEL LINTELS.

2 (11S–506) MASONRY JAMB SCHEDULE
SCALE: NO SCALE



8" CMU to 8" CMU

3 (11S–506) TYP. MASONRY CORNER DETAIL
SCALE: NO SCALE



4 (11S–506) TYP. WALL CONTROL JOINT DETAILS
SCALE: NO SCALE

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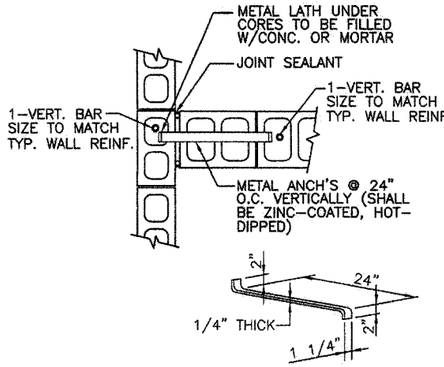
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TYPICAL MASONRY DETAILS

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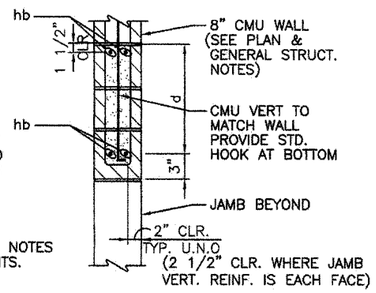
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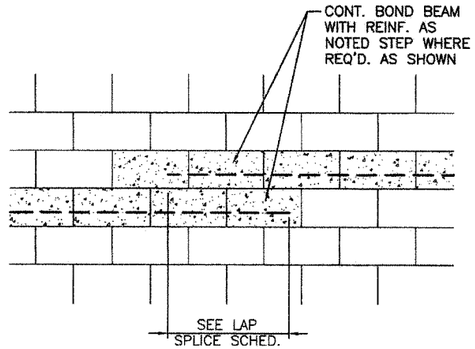
1 (11S-507) TYP. WALL DETAIL
SCALE: NO SCALE

LINTEL SCHEDULE				
MARK	OPENING WIDTH	d	hb	COMMENTS
ML1	3'-4" OR LESS	5"	(2) #4	
ML2	OVER 3'-4" TO 6'-8"	13"	(2) #4	BOTTOM
ML3	OVER 6'-8" TO 10'-0"	21"	(2) #4	T&B

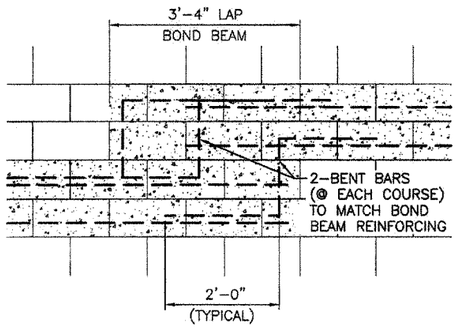
NOTES:
1. EXTEND HORIZONTAL BARS 2'-0" MIN. PAST FACE OF JAMB. PROVIDE STANDARD HOOK @ BAR END IF THIS CANNOT BE ACHIEVED.
2. DO NOT SPLICE HORIZONTAL BARS.
3. SEE GENERAL STRUCTURAL NOTES FOR SHORING REQUIREMENTS.



2 (11S-507) TYP. REINF. MASONRY LINTEL DETAIL
SCALE: NO SCALE



3 (11S-507) TYPICAL BOND BEAM STEP DETAIL
SCALE: NO SCALE



4 (11S-507) MULTICOURSE BOND BEAM STEP DETAIL
SCALE: NO SCALE

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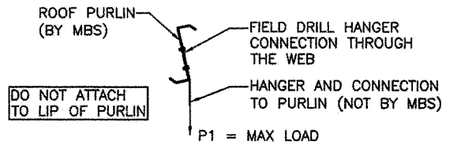
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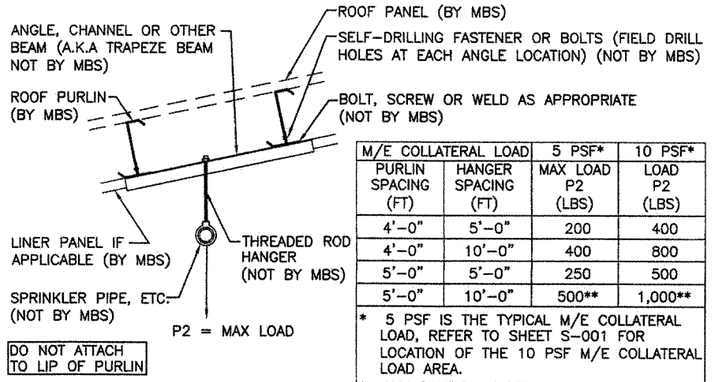
STATE OF ARKANSAS
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10/13/11



M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	LOAD P1 (LBS)	LOAD P1 (LBS)
4'–0"	5'–0"	100	200
4'–0"	10'–0"	200	400
5'–0"	5'–0"	125	250
5'–0"	10'–0"	250**	500**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.
** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

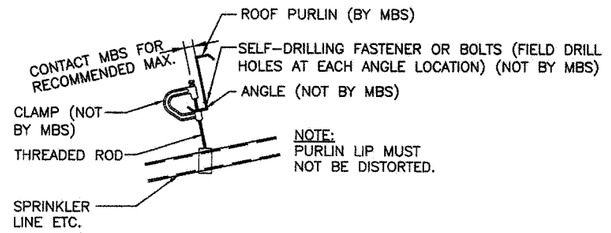
1 (11S–508) RECOMMENDED METHOD FOR HANGING LOADS ON A SINGLE PURLIN
SCALE: 1"=1'–0"



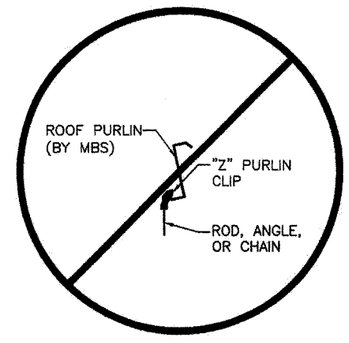
M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	MAX LOAD P2 (LBS)	LOAD P2 (LBS)
4'–0"	5'–0"	200	400
4'–0"	10'–0"	400	800
5'–0"	5'–0"	250	500
5'–0"	10'–0"	500**	1,000**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.
** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

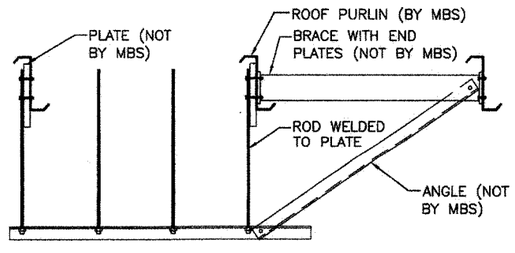
2 (11S–508) SPREADER BEAM (A.K.A. TRAPEZE BEAM) DETAIL
SCALE: 1"=1'–0"
NOTE:
* FOR LOADS GREATER THAN 40 POUNDS, VERIFY ADEQUACY OF ROOF FRAMING WITH M.B.S.



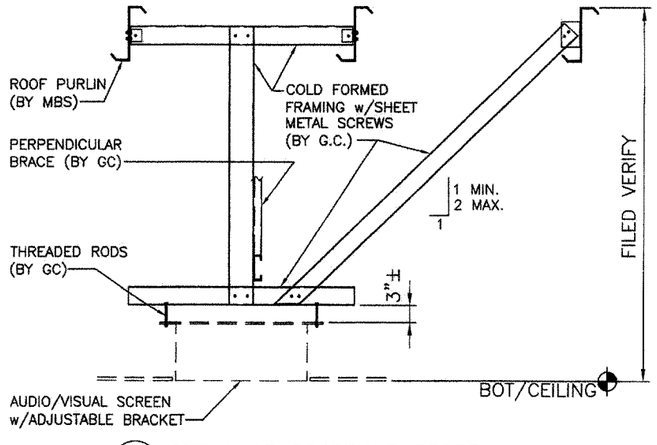
3 (11S–508) CLAMP HANGER DETAIL VERIFY W/MANUF. PRIOR TO USE
SCALE: 1"=1'–0"



4 (11S–508) INCORRECT METHOD FOR HANGING LOADS ON PURLINS
SCALE: 1"=1'–0"



5 (11S–508) SEISMIC OR SWAY BRACE DETAIL
SCALE: 1"=1'–0"



6 (11S–508) DETAIL AT SCREEN SUPPORT
SCALE: 1"=1'–0"
CONTRACTOR TO COORDINATE LOCATION OF SUPPORT WITH SCREENS, DUCTWORK, ETC.. AND MANUFACTURERS REQUIREMENTS FOR HANGING SCREENS.

GENERAL HANGING LOAD NOTES FOR METAL BUILDINGS:

1. THE DETAILS DEPICTED HEREIN ARE TYPICAL INDUSTRY STANDARD DETAILS FOR HANGING LOADS (DUCTS, PIPING, CONDUITS, ETC.) FROM THE COLD–FORMED PURLINS OF METAL BUILDING ROOFS.
2. THE ACTUAL DETAILS TO BE USED SHALL BE DETERMINED BY THE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. CONTRACTOR AND REVIEWED BY THE RESPECTIVE METAL BUILDING CONTRACTOR, INCLUDING THE VALUES OF THE HANGER LOADS.
3. THE HANGER RODS, BRACES, STRUTS BETWEEN THE PURLINS TO SUPPORT THE HANGER AND/OR SWAY BRACES SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR (NOT THE METAL BUILDING CONTRACTOR UNLESS PREVIOUS ARRANGEMENTS HAVE BEEN MADE).
4. THE RESPECTIVE CONTRACTOR SHALL CONSULT THE BUILDING MANUFACTURER REGARDING THEIR SPECIFIC GUIDELINES FOR HANGING LOADS ON PURLINS.
5. HANGING LOADS SHOULD NOT BE APPLIED TO THE PURLIN LIP. WHERE PERMISSIBLE, THE PREFERRED PRACTICE FOR HANGING LOADS IS TO ATTACH TO THE PURLIN WEB USING A BOLT AND NUT, OR SELF–DRILLING SCREWS.
6. HANGING UNIFORM LOADS SUCH AS SPRINKLER MAINS OR HVAC EQUIPMENT SHOULD BE DISTRIBUTED OVER SEVERAL PURLINS AND SHOULD NEVER EXCEED THE COLLATERAL LOAD ALLOWANCE FOR THE ROOF SYSTEM. FOR UNIFORM LOADS THAT RUN PARALLEL TO THE PURLINS, IT MAY BE NECESSARY TO USE TRANSVERSE CHANNELS (A.K.A. TRAPEZE BEAMS) ATTACHED TO THE WEBS OR FLANGES OF TWO OR MORE PURLINS TO SPREAD THE LOAD BETWEEN TWO OR MORE PURLINS. IN SUCH CASES, CONTACT THE BUILDING MANUFACTURER OR A LOCAL PROFESSIONAL ENGINEER PRIOR TO ATTEMPTING TO HANG LOADS FROM THE PURLINS.
7. IN SOME CASES, IT MAY BE ALLOWABLE TO HANG LIGHTWEIGHT LOADS FROM HANGER RODS ATTACHED THROUGH A SMALL HOLE DRILLED IN THE BOTTOM PURLIN FLANGE WITH A THREADED ROD AND NUT. CONTACT THE MANUFACTURER TO SEE IF THEY PERMIT THIS AND FOR THEIR SPECIFIC RECOMMENDATION REGARDING THE HOLE SIZE AND MAXIMUM ACCEPTABLE DISTANCE FROM THE APPLIED LOAD TO THE PURLIN WEB.
8. MULTIPLE HANGERS MAY BE CONNECTED TO THE SAME PURLIN WITH PRIOR APPROVAL FROM THE BUILDING MANUFACTURER. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.
9. IN SOME CASES, LIGHTWEIGHT LOADS SUCH AS FROM SUSPENDED CEILING TILE HANGER WIRES, MAY BE LOOPED OVER THE TOP OF THE ROOF PURLINS. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 12626 — JOHN DAVID WESTERMEIER — 10/13/11

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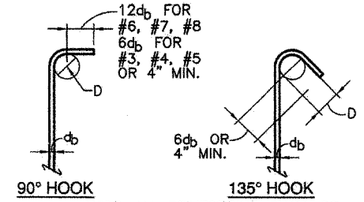
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TYPICAL HANGING LOAD DETAILS AT PURLINS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S–508
REV	
	160 OF 289

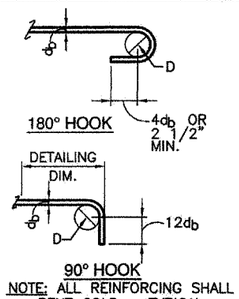
BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$4d_b$
#6 THRU #8	$6d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

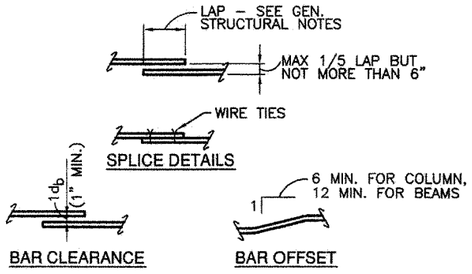
STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCING

BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$6d_b$
#6, #7, #8,	$8d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

STANDARD HOOKS FOR PRIMARY REINFORCING



1 TYPICAL BAR BEND & LAP SPLICE DETAILS
11S–601 SCALE: NO SCALE

PRELIMINARY FOOTING SCHEDULE

MK	SIZE WIDTH x LENGTH x THICKNESS	REINF. EA. WAY @ BOT. U.N.O.	TYP. DETAIL	REMARKS
WF–1	2'–0" x CONT x 1'–2"	3–#4 LONG. T&B	3/11S–502	CONTINUE LONG. BARS THRU COL FTG
WF–2	3'–0" x CONT x 1'–2"	3–#5 LONG.	5/11S–502	CONTINUE LONG. BARS THRU COL FTG
F1	7'–0" x 5'–6" x 1'–2"	6–#4 T&B TRANS. 7–#4 T&B LONG.	4/11S–501	90 DEGREE HOOK EXTERIOR END OF TRANSVERSE REINF.
F2	4'–0" x 4'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/11S–501	90 DEGREE HOOK EACH END
F3	6'–0" x 4'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/11S–501	90 DEGREE HOOK EACH END
F4	4'–0" x 3'–0" x 1'–2"	#4 @ 12" O.C. BTM. EACH WAY		90 DEGREE HOOK EACH END
F5	7'–0" x 7'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/11S–501	

FOOTING NOTES:

1. FOUNDATION SIZES ARE PRELIMINARY. DO NOT FABRICATE OR CONSTRUCT COLUMN FOOTINGS UNTIL FOOTINGS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. ALLOWABLE BEARING PRESSURE FOR SHALLOW SPREAD FOOTINGS IS 2000 PSF FOR CONTINUOUS FOOTINGS AND 2500 PSF FOR INDIVIDUAL FOOTINGS.
3. EXTERIOR FOOTINGS SHALL BEAR AT A MINIMUM DEPTH OF 24 INCHES BELOW LOWEST ADJACENT GRADE.
4. CONNECTION OF METAL BUILDING COLUMNS TO FOUNDATION IS TO BE PINNED.
5. REINFORCING TO CONFORM TO ASTM A615, GRADE 60.

2 FOOTING SCHEDULE
11S–601 SCALE: NO SCALE

COLUMN DESCRIPTIONS	
MK	DESCRIPTIONS
C1	METAL BUILDING RIGID FRAME COLUMN
C2	METAL BUILDING EXTERIOR COLUMN
C3	PORTAL FRAME COLUMN

4 COLUMN SCHEDULE
11S–601 SCALE: NO SCALE

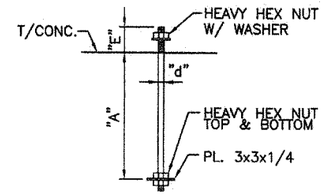
LAP SPLICE SCHEDULE

BAR SIZE "D"	POSITION	CONCRETE f'c (PSI) 3000	CONCRETE f'c (PSI) 4000	MASONRY fm'=1500
#3	ALL	17"	15"	–
#4	ALL	22"	19"	(1) BAR PER CELL = 24" (2) BAR PER CELL = 36"
#5	ALL	28"	24"	(1) BAR PER CELL = 30" (2) BAR PER CELL = 54"
#6	ALL	33"	29"	(1) BAR PER CELL = 52" (2) BAR PER CELL = 108"
#7	ALL	49"	42"	–
#8	ALL	55"	48"	–

NOTES (FOR CONCRETE REBAR LAP SPLICE ONLY):

1. "d" DENOTES BAR DIAMETER.
2. VALUES APPLY TO ALL BARS WITH MIN. CONCRETE COVER OF 2d AND MIN. CENTER–TO–CENTER SPACING OF 5d.
3. FOR BARS WITH COVER BETWEEN d AND 2d, MULTIPLY VALUES BY 1.67.
4. FOR BARS WITH CENTER–TO–CENTER SPACING BETWEEN 3d AND 5d, MULTIPLY VALUES BY 1.67.
5. FOR BARS NOT MEETING ABOVE REQUIREMENTS, MULTIPLY BY 2.5.

5 LAP SPLICE SCHEDULE
11S–601 SCALE: NO SCALE



PRELIMINARY ANCHOR ROD SCHEDULE

TYPE	QTY. & DIA. "d"	"A"	PROJ. "E"	LOCATION
AB–1	(4) 3/4"ø	0'–10"	5"	BUILDING COLUMN
AB–2	(4) 3/4"ø	0'–10"	5"	BUILDING COLUMN

NOTES:

1. DO NOT FABRICATE ANCHOR RODS UNTIL THE RODS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. CONTRACTOR TO COORDINATE INSTALLATION OF ANCHOR RODS WITH METAL BUILDING SYSTEM DRAWINGS.
3. ANCHOR RODS SHALL MEET THE REQUIREMENTS OF ASTM F1554 (GRADE 36 KSI) UNLESS NOTED OTHERWISE.
4. ANCHOR RODS SHALL BE FURNISHED WITH HEAVY HEX NUTS AND CUT WASHERS OF SPECIFICATIONS COMPATIBLE WITH THOSE OF THE THREADED UNLESS OTHERWISE NOTED.
5. PRIOR TO SETTING ANCHOR RODS, THEY SHALL BE CLEANED FREE OF ANY OILS OR OTHER MATERIALS. ANCHOR BOLTS SHALL REQUIRE SPECIAL INSPECTION.
6. A POSITIVE MEANS SHALL BE USED TO KEEP CONCRETE FROM CONTACTING WITH THE PROJECTING PART OF THE RODS.

3 ANCHOR ROD SCHEDULE
11S–601 SCALE: NO SCALE

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
SCHEDULES

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11S–601
REV	

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SYMBOLS

SECTION CUT
SECTION LOCATION

DETAIL NUMBER
DETAIL LOCATION

KEYED NOTE

DOMESTIC COLD WATER
DOMESTIC HOT WATER
DOMESTIC HOT WATER RECIRCULATING
SANITARY SEWER (UNDERGROUND)
SANITARY SEWER (ABOVEGROUND)
VENT
CONDENSATE DRAIN
GAS
COMPRESSED AIR

FIRE PROTECTION NOTES

THIS BUILDING IS TO BE SPRINKLED THROUGHOUT. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE FIRE SPRINKLER SYSTEM, DESIGNED AND INSTALLED BY A LICENSED FIRE PROTECTION CONTRATOR, IN ACCORDANCE WITH ALL NFPA, LOCAL, STATE, AND FEDERAL REQUIREMENTS, AS WELL AS THESE DRAWINGS AND SPECIFICATIONS, AND BASED UPON THE DESIGNATED OCCUPANCY CLASSIFICATION. A COMPLETED FIRE PROTECTION SYSTEM DESIGN AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WORK.

PIPE UP
PIPE DOWN
TOP BRANCH CONNECTION
BOTTOM BRANCH CONNECTION
TEE UP
TEE DOWN
PIPE CAP
CLEANOUT
PIPE ANCHOR
PIPE GUIDE
FLOOR DRAIN
WALL HYDRANT
HOSE BIBB
UNION
STRAINER
CHECK VALVE
FLOW DIRECTION
FLEXIBLE PIPING CONNECTION

CONTROL VALVE
3-WAY CONTROL VALVE
REDUCER
SHUT OFF VALVE
BALANCING VALVE
GLOBE VALVE
GATE VALVE
BALL VALVE
BUTTERFLY VALVE
PRESSURE REDUCING VALVE
BACKFLOW PREVENTER
THERMOMETER
PRESSURE GAUGE
SAFETY RELIEF VALVE
MANUAL AIR VENT

PLUMBING GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF PLUMBING, FIXTURES, EQUIPMENT AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES. WHERE PLUMBING FIXTURES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL FLOOR PLANS. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE HVAC, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. PLUMBING, FIXTURES, AND EQUIPMENT SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. AT ALL FIRE SEPARATIONS, ALL PIPING WALL PENETRATIONS SHALL BE FIRE-STOPPED WITH U.L. APPROVED FIRE-STOP MATERIAL.
4. REFER TO STRUCTURAL DRAWINGS FOR PENETRATIONS THROUGH FOUNDATIONS.
5. SEAL ALL PIPING PENETRATIONS THROUGH ROOF WITH 1" 6 LB. DENSITY RIGID FIBERGLASS AND A NON-SHRINKING ACOUSTICAL CAULK.
6. SET TOP OF FLOOR DRAIN ELEVATION FLUSH WITH FINISH FLOOR UNLESS NOTED OTHERWISE.
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
8. UNDERGROUND AND ABOVEGROUND PLUMBING MAINS SHALL BE SLOPED AT A MINIMUM OF 1/8 INCH PER FOOT (1.0 PERCENT) UNLESS NOTED. ALL HORIZONTAL VENTS SHALL BE SLOPED 1/4 INCH PER 10 FEET MINIMUM TO DRAIN.
9. PROVIDE BASE CLEANOUTS FOR ALL WASTE STACKS AND VENT STACKS.
10. CLEANOUTS LOCATED ALONG THE HORIZONTAL DRAINS SHALL BE LOCATED AT NOT MORE THAN 100 FOOT INTERVALS.
11. SEE CIVIL DRAWINGS FOR CONTINUATION OF ALL PLUMBING 5'-0" OUTSIDE OF THE BUILDING PERIMETER.
12. ALL HVAC CONDENSATE AND EQUIPMENT DRAINS LOCATIONS TO BE COORDINATED WITH HVAC CONTRACTOR.

ABBREVIATIONS

AA	AUTOMATIC AIR VENT	MBH	BTU PER HOUR (1000'S)
AD	ACCESS DOOR	MC	MECHANICAL CONTRACTOR
ADJ	ADJUSTABLE	MD	MANUAL DAMPER
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
AG	ABOVE GROUND	MIN	MINIMUM
AMB	AMBIENT	NC	NORMALLY CLOSED
APD	AIR PRESSURE DROP	NIC	NOT IN CONTRACT
AWT	AVERAGE WATER TEMPERATURE	NO	NORMALLY OPEN
BHP	BRAKE HORSEPOWER	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	OA	OUTSIDE AIR
CAP	CAPACITY	OED	OPEN END DUCT
CFM	CUBIC FEET PER MINUTE	PC	PLUMBING CONTRACTOR
DB	DRY BULB	PCD	PVC COATED DUCTWORK
DIA	DIAMETER	PH	PHASE
DDC	DIRECT DIGITAL CONTROL	PRESS	PRESSURE
DN	DOWN	PRV	PRESSURE REDUCING VALVE
DX	DIRECT EXPANSION	PSIG	POUNDS PER SQUARE INCH GAUGE
E	EXISTING		
EA	EXHAUST AIR	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	REL	RELOCATED
EC	ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EFF	EFFICIENCY	RL	REFRIGERATION LIQUID
ESP	EXTERNAL STATIC PRESSURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	RS	REFRIGERATION SUCTION
FC	FLEXIBLE CONNECTION	RV	RELIEF VALVE
FLG	FLANGE	SA	SUPPLY AIR
FMD	FLOW MEASURING DEVICE	SC	SENSIBLE COOLING
FPM	FEET PER MINUTE	SHT	SHEET
FPS	FEET PER SECOND	SP	STATIC PRESSURE
GC	GENERAL CONTRACTOR	SRV	SAFETY RELIEF VALVE
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED	TEMP	TEMPERATURE
		TH	TOTAL HEAT
GPM	GALLONS PER MINUTE	TC	TOTAL COOLING
H	HEIGHT	TSP	TOTAL STATIC PRESSURE
HD	HEAD	UG	UNDERGROUND
HP	HORSEPOWER	V	VOLTS
HZ	HERTZ	VB	VACUUM BLOWER
I.E.	INVERT ELEVATION	VEL	VELOCITY
LAT	LEAVING AIR TEMPERATURE	VTR	VENT THROUGH ROOF
LF	LINEAR FEET	W	WIDTH
LWT	LEAVING WATER TEMPERATURE	WB	WET BULB
MAV	MANUAL AIR VENT	WC	WATER COLUMN
MAX	MAXIMUM	WPD	WATER PRESSURE DROP
		WTR	WATER

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER	GUH	GAS UNIT HEATER
AC	AIR COMPRESSOR	HC	HEATING COIL
ACU	AIR CONDITIONING UNIT	IH	INFRARED HEATING UNIT
AD	AIR DRYER	L	LOUVER
AHU	AIR HANDLING UNIT	MAU	MAKEUP AIR UNIT
B	BOILER	P	PUMP
CC	COOLING COIL	PHC	PREHEAT COIL
CU	CONDENSING UNIT	RF	RETURN OR RELIEF FAN
CUH	CABINET UNIT HEATER	RHC	REHEAT COIL
EF	EXHAUST FAN	SD	SMOKE DETECTOR OR SMOKE DAMPER
ET	EXPANSION TANK		
EWH	ELECTRIC WATER HEATER	SF	SUPPLY FAN
F	FILTER	ST	SOUND TRAP
FCU	FAN COIL UNIT	UH	UNIT HEATER
FD	FIRE DAMPER	VAV	VARIABLE AIR VOLUME BOX
GWH	GAS WATER HEATER	VFD	VARIABLE FREQUENCY DRIVE

FIXTURE ABBREVIATIONS

BFP	BACK FLOW PREVENTER	L	LAVATORYHB HOSE BIBB
CO	CLEAN OUT	HR	HOSE REEL
COTG	CLEAN OUT TO GRADE	RPZ	REDUCED PRESSURE BACKFLOW PREVENTER
DF	DRINKING FOUNTAIN		
EWC	ELECTRIC WATER COOLER	S	SINK
F	FAUCET	SS	SERVICE SINK
FCO	FLOOR CLEANOUT	SS/EW	SAFETY SHOWER/EYEWASH
FD	FLOOR DRAIN	TWCO	TWO WAY CLEAN OUT
JS	JANITORS SINK	UR	URINAL
		WC	WATER CLOSET
		WCO	WALL CLEANOUT
		WF	WASH FOUNTAIN
		WFT	WALL FAUCET
		WH	WALL HYDRANT

SAIC Energy, Environment & Infrastructure, LLC No. 510 — CERTIFICATE OF AUTHORIZATION — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 11074 — E. E. BUGGS

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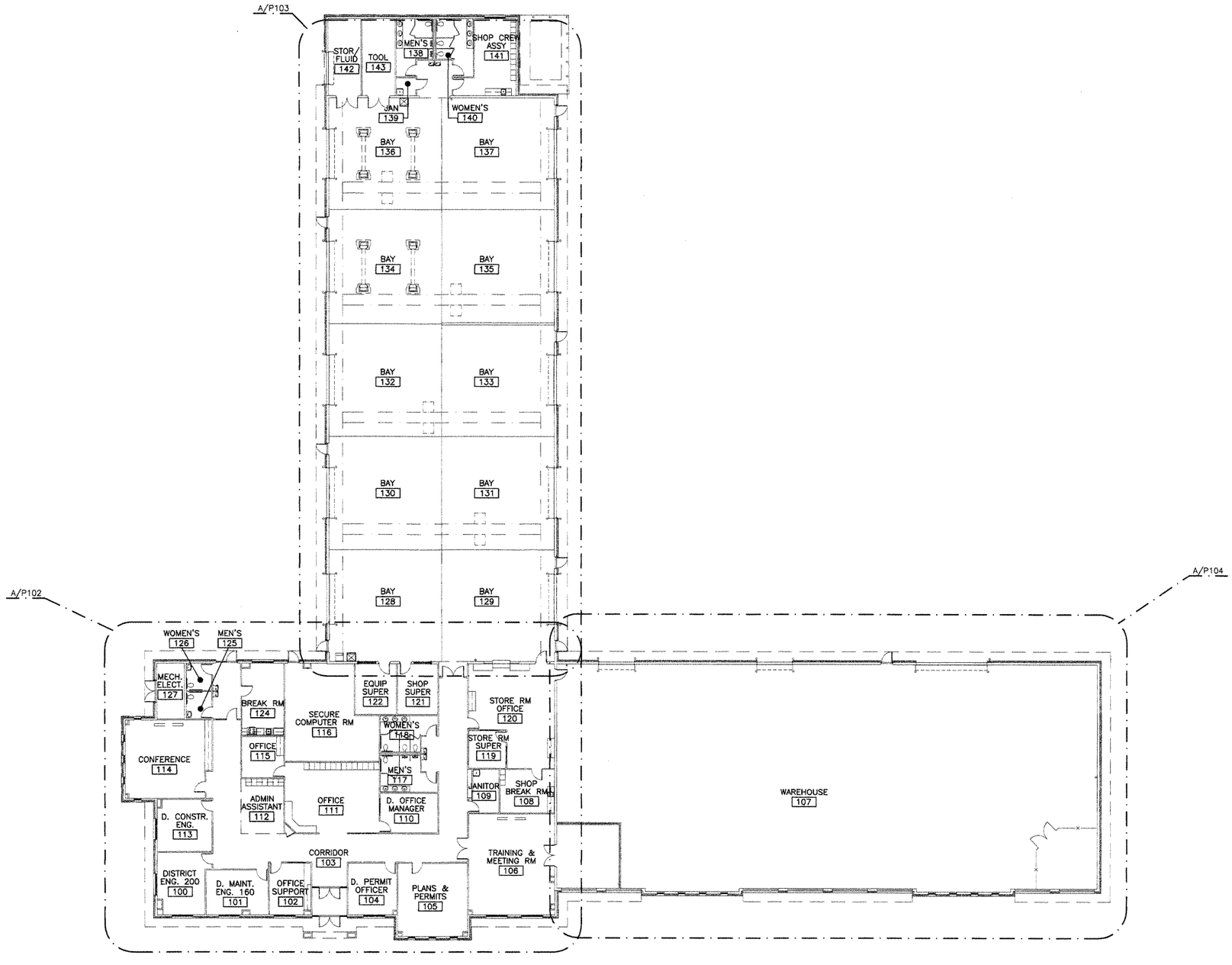
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PLUMBING SYMBOLS AND ABBREVIATIONS

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-001
REV	

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A 11P-101 UNDERGROUND PLUMBING PLAN
SCALE: 1/16" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
UNDERGROUND PLUMBING

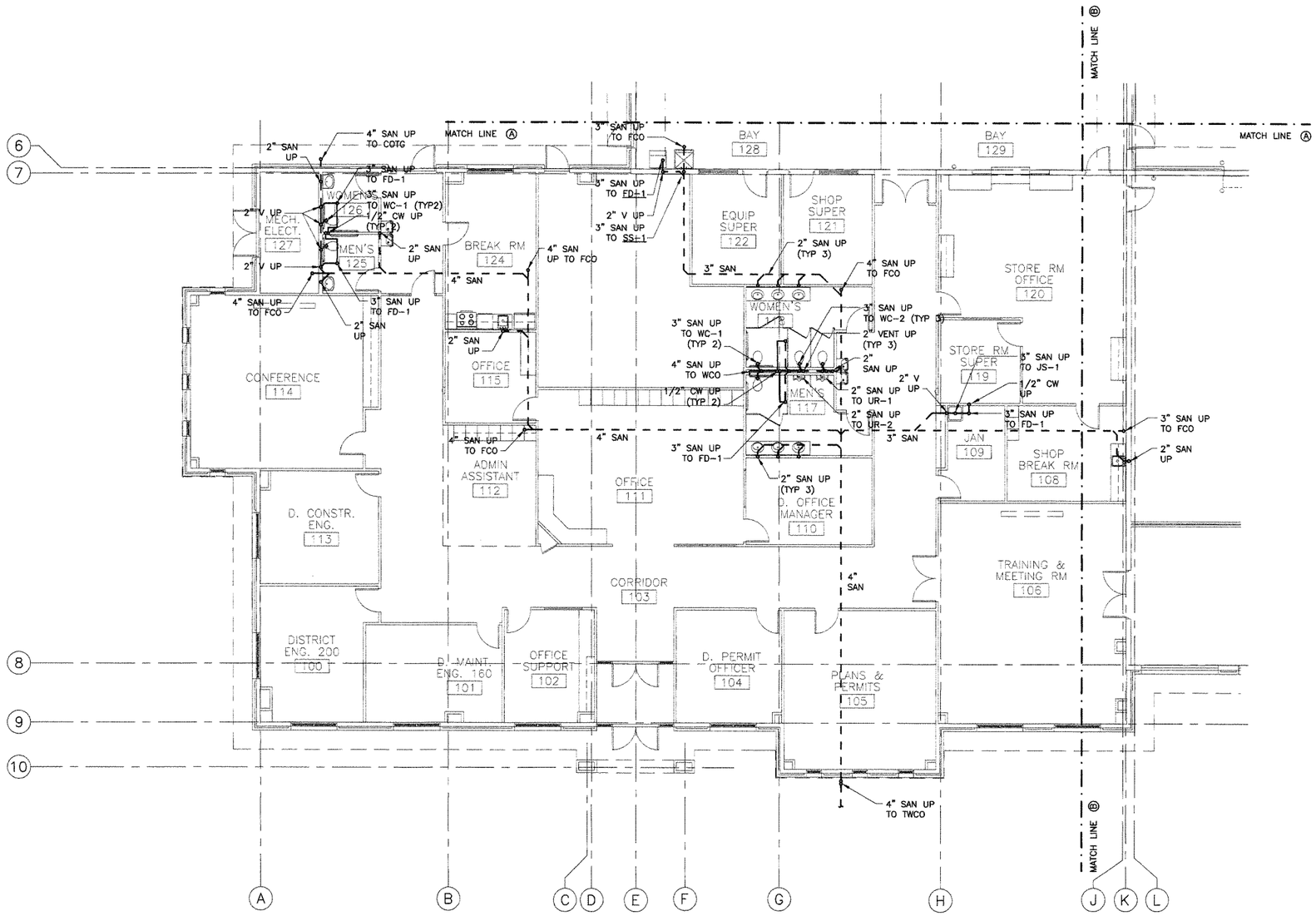
DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11P-101	
163 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LES SHUGGS

Plotted: 10/13/2011 3:45:00 PM By: bredehoeftms
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Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\11_DIST_ADMIN_OFFICES\8120_11G-BS01.dwg
P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\11_DIST_ADMIN_OFFICES\8120_11A-FP01.dwg



A ENLARGED UNDERGROUND PLUMBING PLAN
11P-102 SCALE: 1/8"= 1'-0"

NORTH

KEY PLAN
SCALE: 1/128" = 1'-0"

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LES SUGGS

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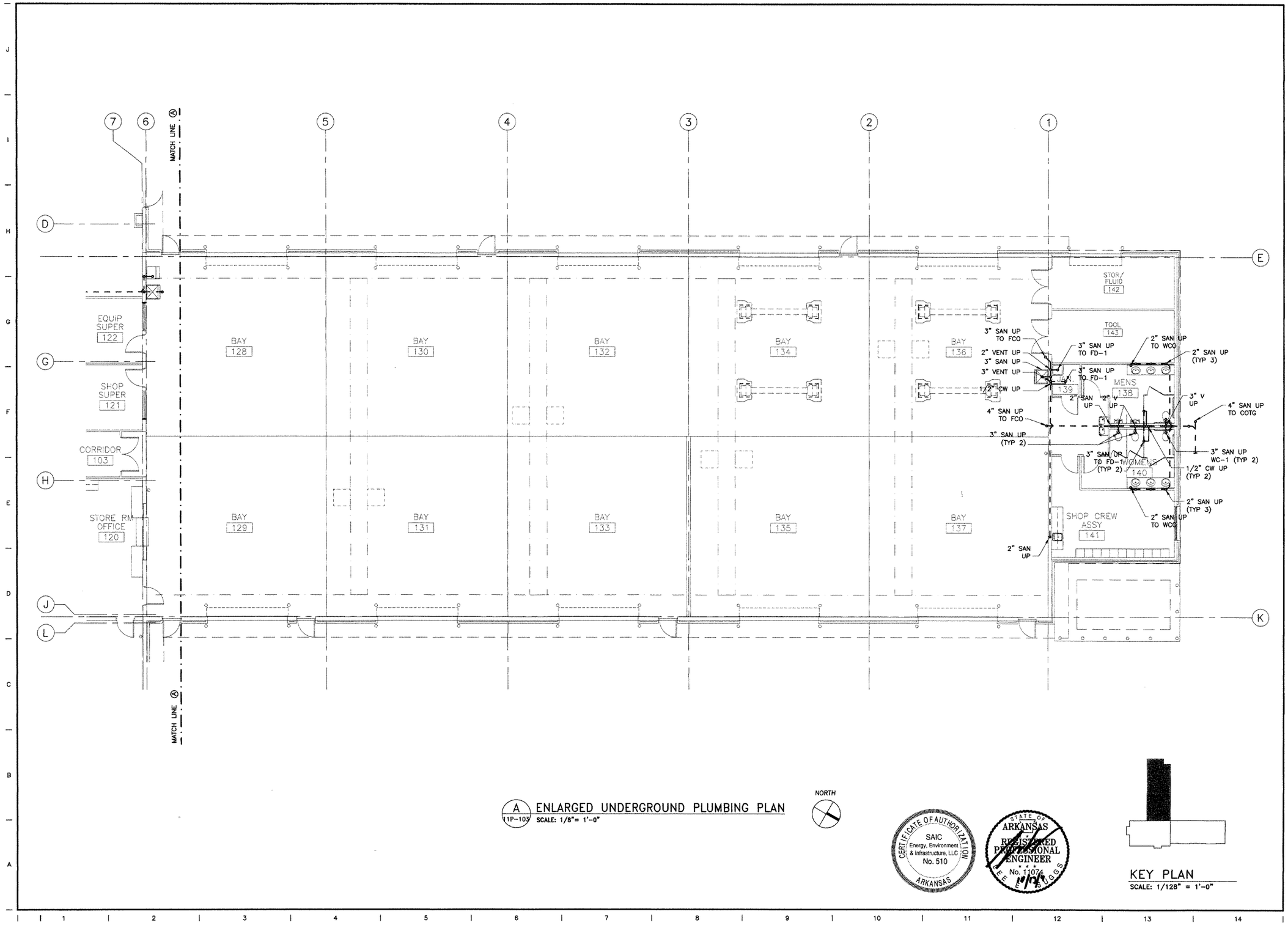
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED UNDERGROUND PLUMBING

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-102
REV	
	164 OF 289

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A ENLARGED UNDERGROUND PLUMBING PLAN
11P-103 SCALE: 1/8"= 1'-0"

NORTH

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 10/13/11

KEY PLAN
SCALE: 1/128" = 1'-0"

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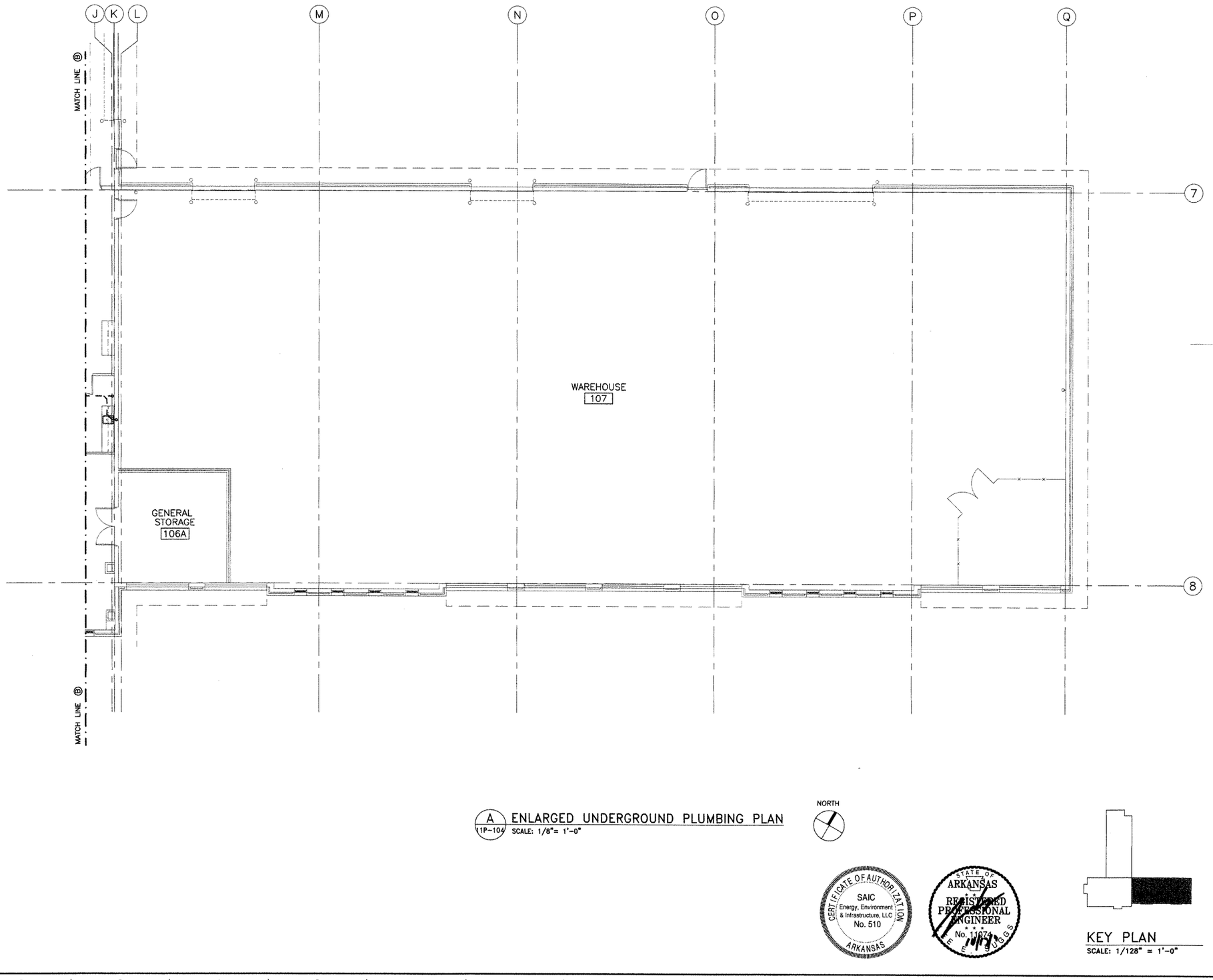
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED UNDERGROUND PLUMBING

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-103
REV	

165 OF 289

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A 11P-104 ENLARGED UNDERGROUND PLUMBING PLAN
SCALE: 1/8"= 1'-0"

NORTH

KEY PLAN
SCALE: 1/128" = 1'-0"

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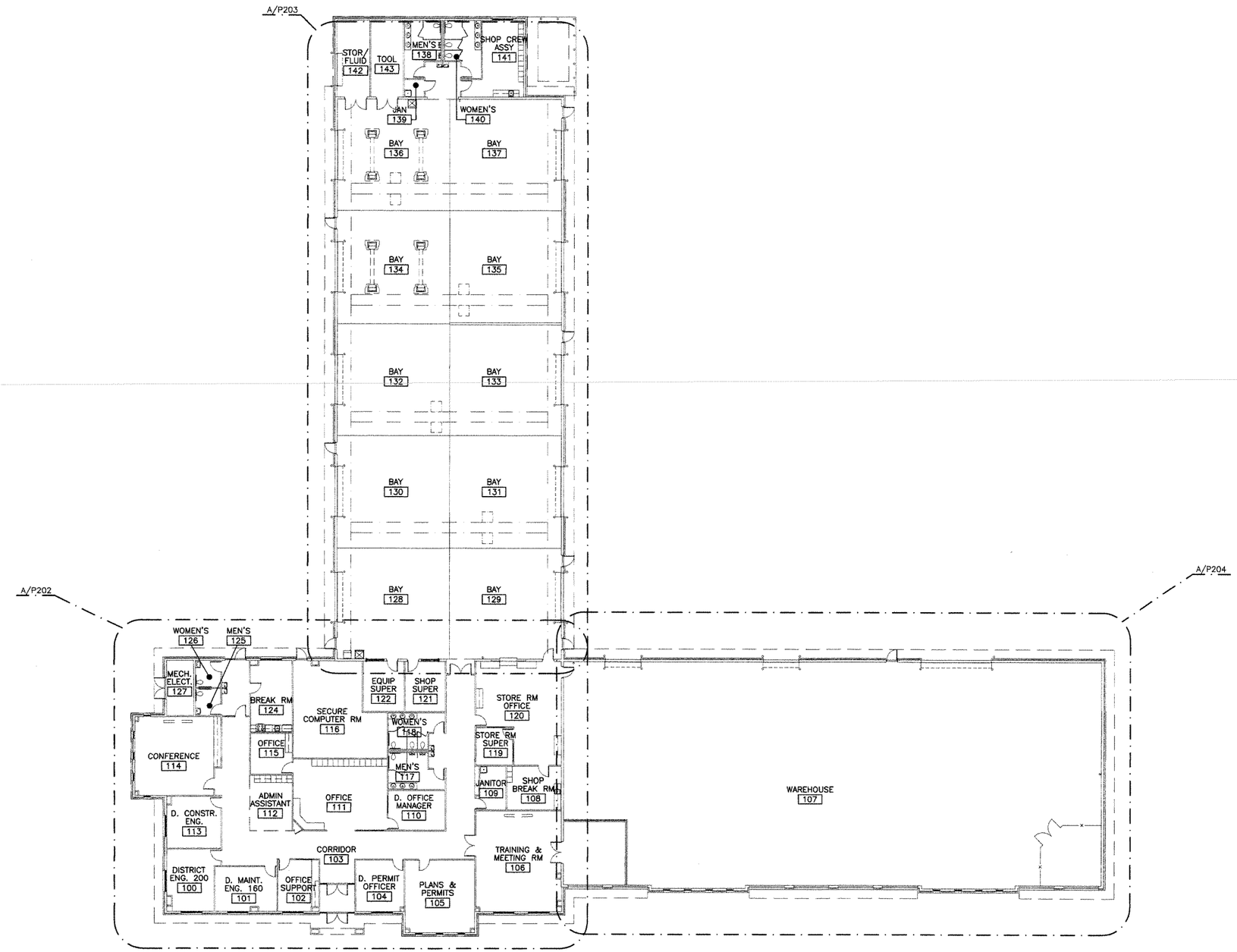
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AHTD JOB NO. 040554
ENLARGED UNDERGROUND PLUMBING

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-104
REV	

166 OF 289

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A 11P-201 ABOVE GROUND PLUMBING PLAN
SCALE: 1/16" = 1'-0"

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AHTD JOB NO. 040554
ABOVE GROUND PLUMBING

DESIGNED BY	CMS
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CHECKED BY	LES
APPROVED BY	LES

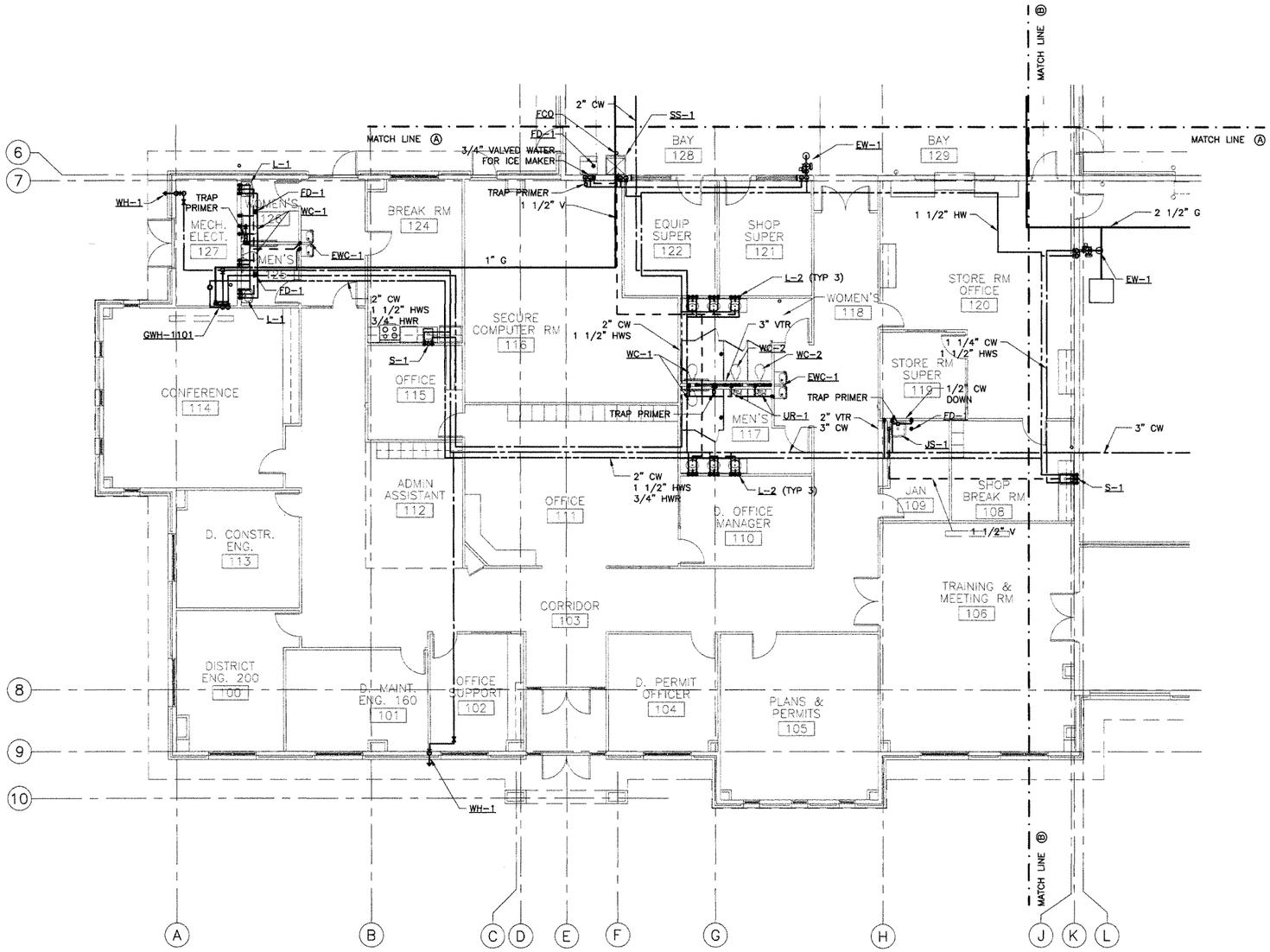
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-201
REV	

167 OF 289

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LES E. SIGGS

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A 11P-202 ENLARGED ABOVE GROUND PLUMBING PLAN

SCALE: 1/8"= 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO RISER DIAGRAM A/11P-401 FOR DOMESTIC WATER PIPE SIZING.
2. REFER TO RISER DIAGRAM B/11P-402 FOR SANITARY AND VENT PIPE SIZING.

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KEY PLAN
SCALE: 1/128" = 1'-0"

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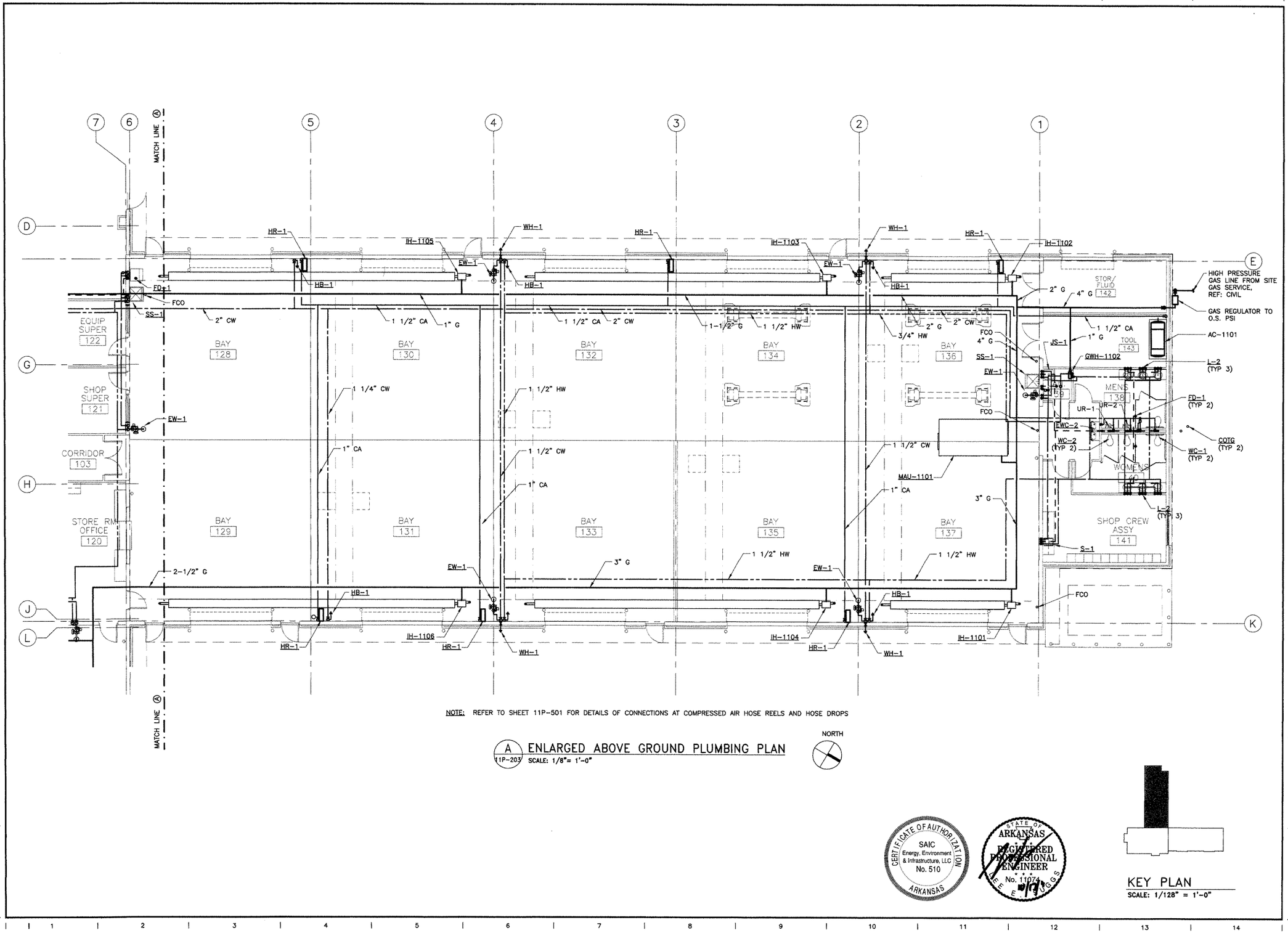
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED ABOVE GROUND PLUMBING

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-202
REV	

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NOTE: REFER TO SHEET 11P-501 FOR DETAILS OF CONNECTIONS AT COMPRESSED AIR HOSE REELS AND HOSE DROPS

NORTH

A ENLARGED ABOVE GROUND PLUMBING PLAN
11P-203 SCALE: 1/8"= 1'-0"

KEY PLAN
SCALE: 1/128" = 1'-0"

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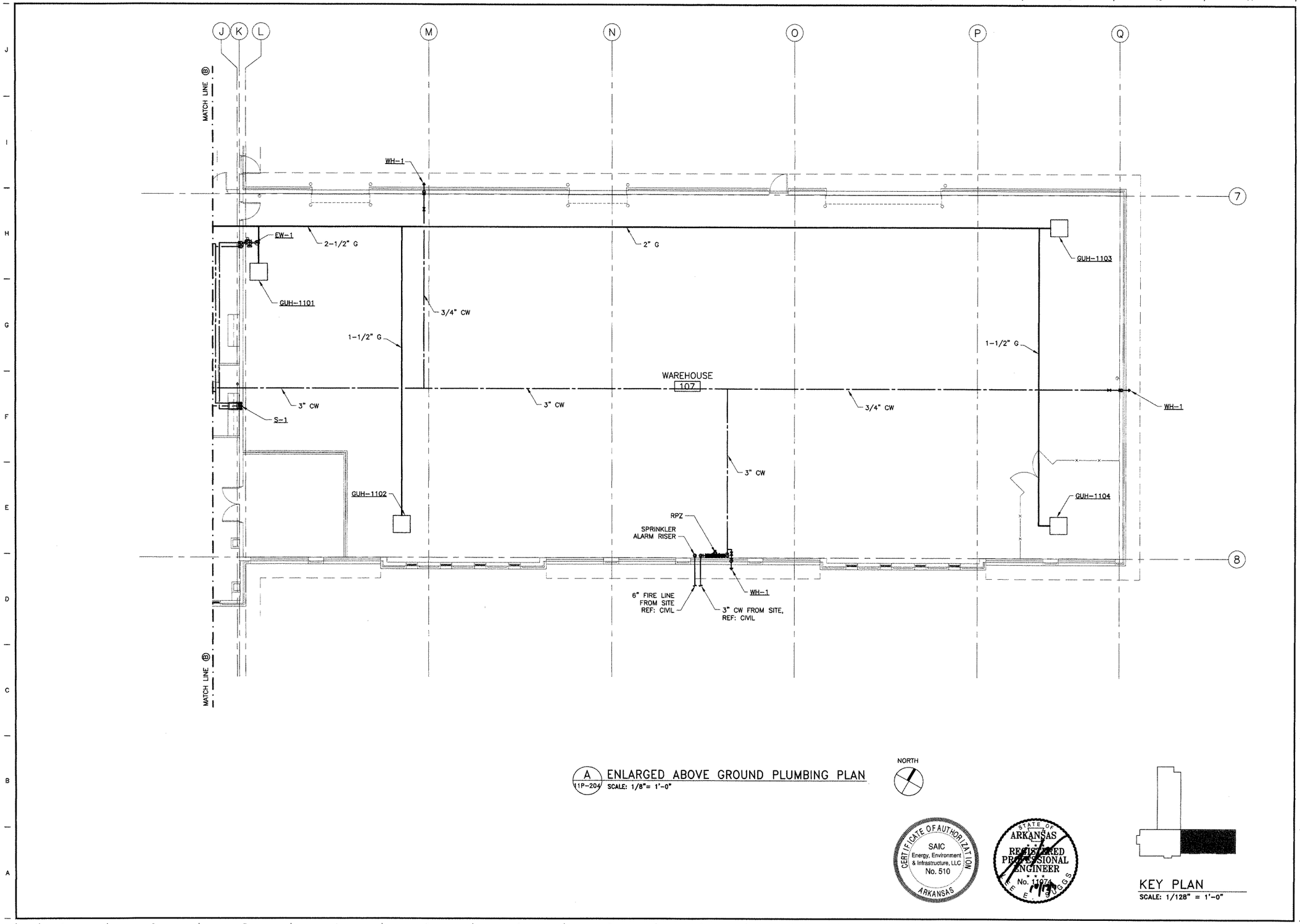
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED ABOVE GROUND PLUMBING

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-203
REV	

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A 11P-204 ENLARGED ABOVE GROUND PLUMBING PLAN

SCALE: 1/8"= 1'-0"

NORTH

KEY PLAN

SCALE: 1/128" = 1'-0"

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LES SIGGS
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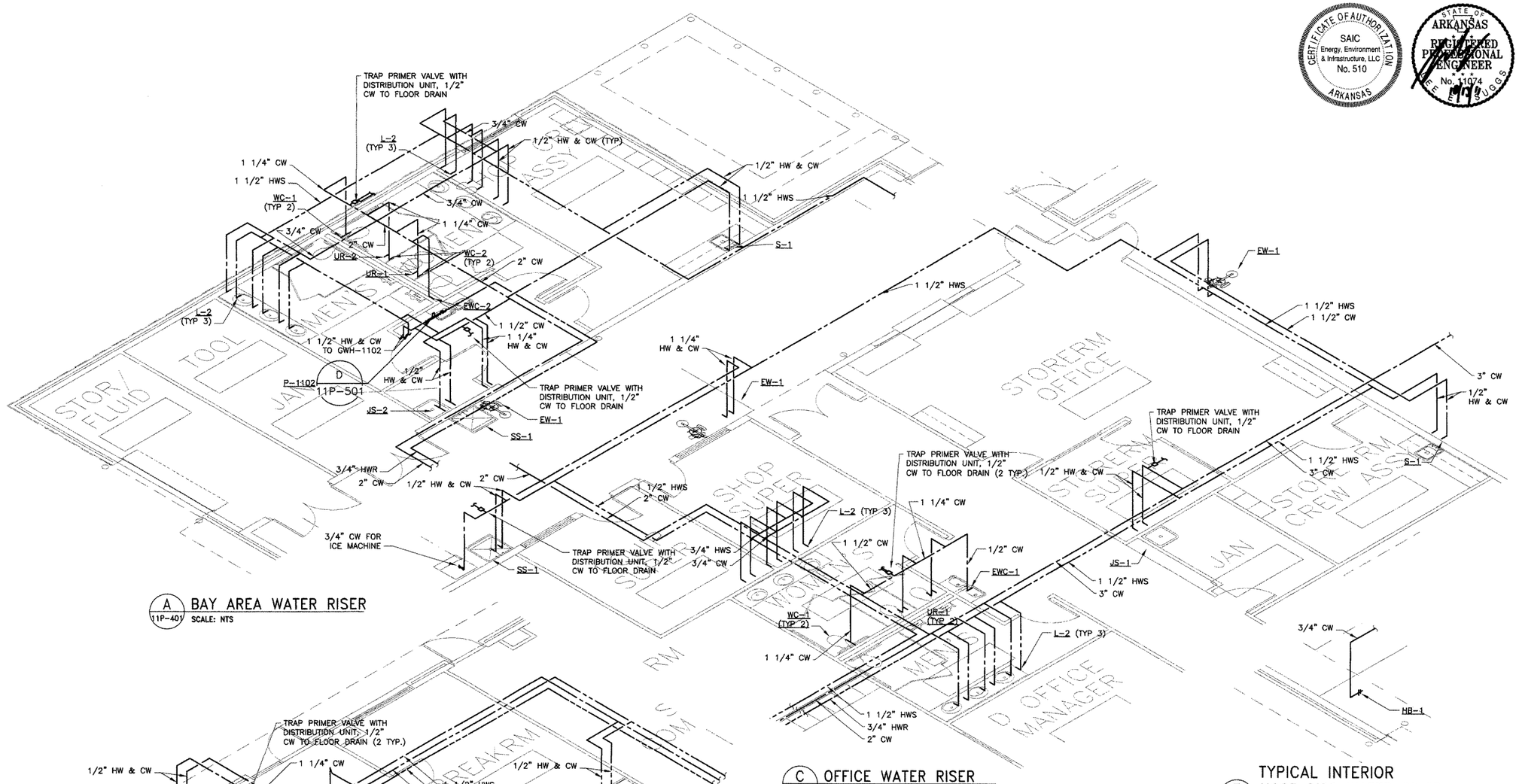
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED ABOVE GROUND PLUMBING

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11P-204	
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A 11P-401 BAY AREA WATER RISER
SCALE: NTS

C 11P-401 OFFICE WATER RISER
SCALE: NTS

F 11P-401 TYPICAL INTERIOR HOSE BIBB WATER RISER
SCALE: NTS

B 11P-401 OFFICE WATER RISER
SCALE: NTS

D 11P-401 TYPICAL EYE WASH STATION WATER RISER
SCALE: NTS

E 11P-401 TYPICAL EXTERIOR WALL HYDRANT WATER RISER
SCALE: NTS

G 11P-401 DOMESTIC WATER RISER @ WAREHOUSE 107
SCALE: NTS

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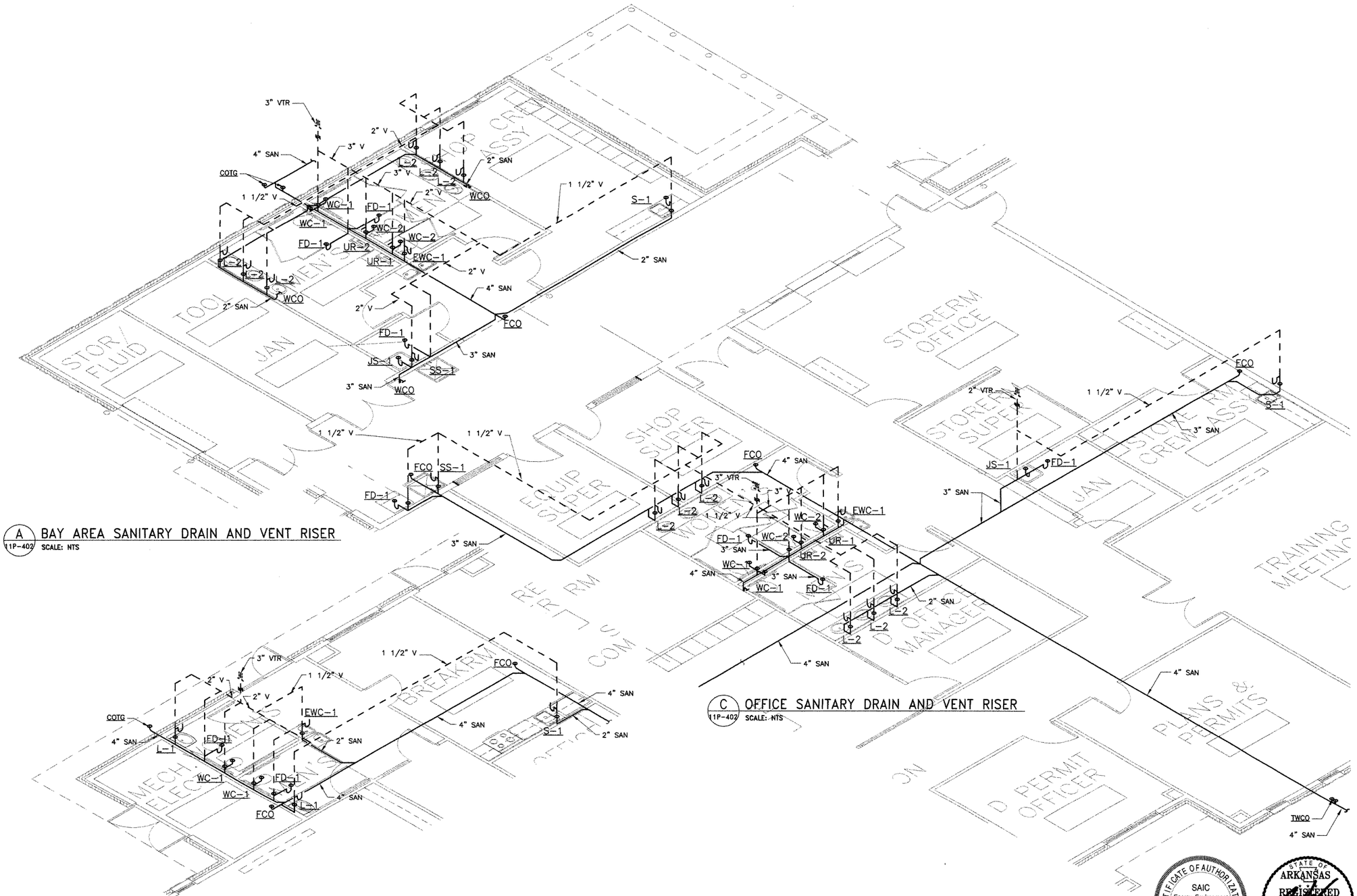
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PLUMBING RISERS

DESIGNED BY	CMS
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APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-401
REV	
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A 11P-402 BAY AREA SANITARY DRAIN AND VENT RISER
SCALE: NTS

B 11P-402 OFFICE SANITARY DRAIN AND VENT RISER
SCALE: NTS

C 11P-402 OFFICE SANITARY DRAIN AND VENT RISER
SCALE: NTS

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PLUMBING RISERS

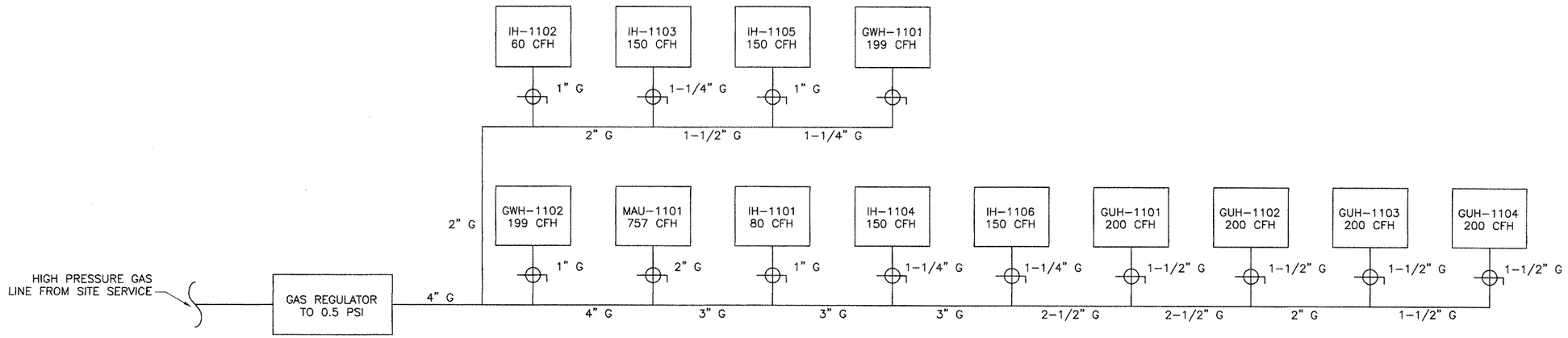
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APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-402
REV	0

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No. 11074
LEE E. SUGGS



GAS PIPING SYSTEM DESIGN INFORMATION
GAS SYSTEM DEMAND: 2798 CFH
MAX. DEVELOPED PIPE LENGTH: 500'
MAX. PRESSURE DROP: 0.5" W.C.

C 11P-403 NATURAL GAS RISER DIAGRAM
SCALE: NTS

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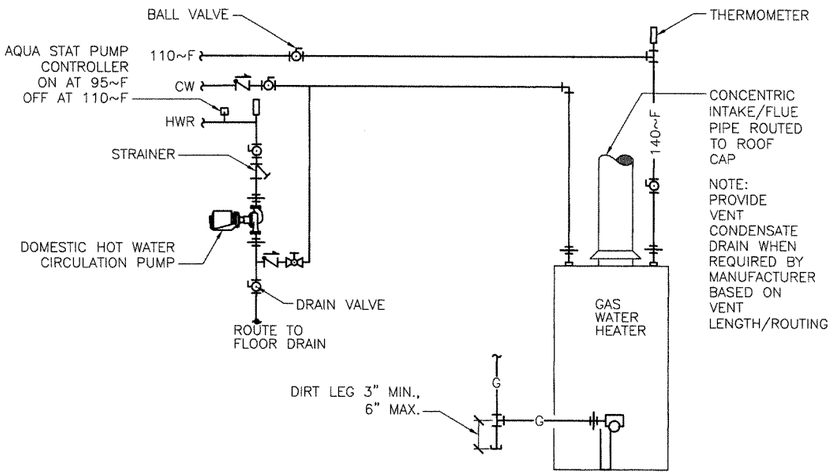
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PLUMBING RISERS

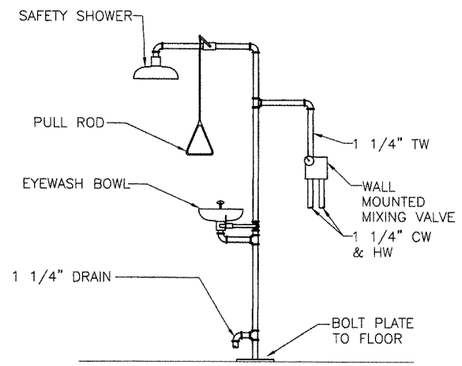
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DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-403
REV	

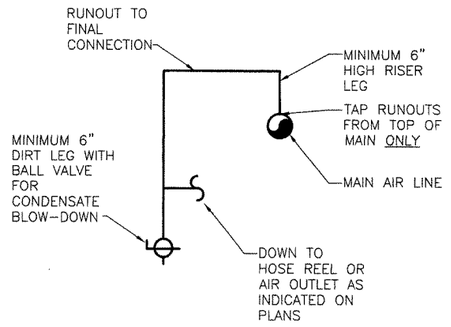
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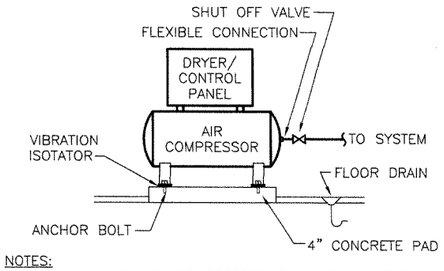
A 11P-501 GAS WATER HEATER DETAIL
SCALE: NTS



B 11P-501 SAFETY SHOWER/EYEWASH DETAIL
SCALE: NTS

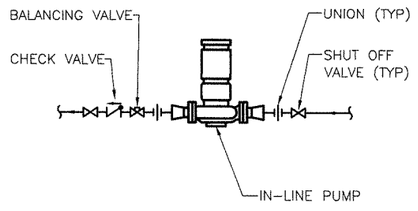


E 11P-501 AIR DROP CONNECTION DETAIL
SCALE: NTS



NOTES:
1. PIPE AUTOMATIC AIR COMPRESSOR TANK DRAIN, DRYER DRAIN, MOISTURE SEPARATOR DRAIN, AND AIR FILTER DRAIN TO FLOOR DRAIN.

C 11P-501 AIR COMPRESSOR WITH DRYER DETAIL
SCALE: NTS



D 11P-501 HOT WATER CIRCULATION PUMP DETAIL
SCALE: NTS

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PLUMBING DETAILS

DESIGNED BY	TBC
DRAWN BY	bjb
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-501
REV	
174 OF 287	

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No. 11074
EXPIRES 6/30/13

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FIXTURE SCHEDULE

PLAN MARK	FIXTURE TYPE	HW	CW	WASTE	VENT	FIXTURE DESCRIPTION	FAUCET/VALVE	ACCESSORIES/REMARKS
WC-1	WATER CLOSET (ADA)	–	1"	3"	2"	FLOOR MOUNTED ELONGATED BOWL WHITE VITREOUS CHINA WITH TOP SPUD, 2-1/4" PASSAGE WAY, 1.6 GPF. KOHLER K-4302 OR EQUAL.	MANUAL LEVER FLUSH VALVE BRASS BODY WITH CHROME PLATED FINISH, 1-1/2" SPUD CONNECTION, 1.6 GPF SLOAN ROYAL MODEL 110 OR EQUAL	HEAVY DUTY OPEN FRONT SEAT-KOHLER-K-4670 OR EQUAL. MOUNT TO ADA HIGHT AND CLEARANCE REQUIREMENTS.
WC-2	WATER CLOSET (ADA)	–	1"	3"	2"	FLOOR MOUNTED ELONGATED BOWL WHITE VITREOUS CHINA WITH TOP SPUD, 2-1/4" PASSAGE WAY, 1.6 GPF. KOHLER K-4349 OR EQUAL.	MANUAL LEVER FLUSH VALVE BRASS BODY WITH CHROME PLATED FINISH, 1-1/2" SPUD CONNECTION, 1.6 GPF SLOAN ROYAL MODEL 110 OR EQUAL	HEAVY DUTY OPEN FRONT SEAT-KOHLER-K-4670 OR EQUAL.
UR-1	URINAL (ADA)	–	3/4"	2"	2"	WALL MOUNTED, WHITE VITREOUS CHINA WITH TOP SPUD, 1.0 GPF. KOHLER K-4960 OR EQUAL.	MANUAL LEVER FLUSH VALVE BRASS BODY WITH CHROME PLATED FINISH, 3/4" SPUD CONNECTION, 1.0 GPF SLOAN ROYAL MODEL 186 OR EQUAL	PROVIDE HEAVY DUTY WALL CARRIER MOUNT ONE URINAL IN EACH RESTROOM TO ADA REQUIREMENTS MOUNT OTHER URINAL(S) TO STANDARD HEIGHT
L-1	LAVATORY WALL HUNG (ADA)	1/2"	1/2"	1 1/2"	1 1/2"	19"x17" RECTANGULAR, VITREOUS CHINA, WALL HUNG 4" CENTERS, OVERFLOW, DRILLED FOR CONCEALED ARM CARRIER KOHLER K-1728 OR EQUAL ADA ACCESSIBLE MOUNTING HEIGHT	SINGLE LEVER CONTROL, MOUNTED ON 4" CENTERS, 0.5 GPM AERATOR KOHLER K-15593 OR EQUAL	WHITE FIXTURE OPEN GRID STRAINER WITH TAIL PIECE CONCEALED ARM FLOOR SUPPORTED CARRIER INSULATE WATER SUPPLIES AND DRAIN WITH TUU-BUO LEV-SHIELD OR EQUAL. MOUNT TO ADA HIGHT AND CLEARANCES.
L-2	LAVATORY COUNTER MOUNTED (ADA)	1/2"	1/2"	1 1/2"	1 1/2"	20"x17"x8-1/2" DEEP SELF RIMMING, SINGLE BOWL WHITE VITREOUS CHINA, 4" CENTERS, WITH OVER FLOW. KOHLER K-2196 OR EQUAL	SINGLE LEVER CONTROL, MOUNTED ON 4" CENTERS, 0.5 GPM AERATOR KOHLER K-15593 OR EQUAL	OPEN GRID STRAINER AND CHROME WHEELCHAIR TAILPIECE. INSULATE WATER SUPPLIES AND DRAIN WITH TUU-BUO LEV-SHIELD OR EQUAL. MOUNT TO ADA HIGHT AND CLEARANCES.
S-1	ENTERTAINMENT SINK	1/2"	1/2"	1 1/2"	1 1/2"	20"X20"X8 1/4" DEEP SELF RIMMING, SINGLE BOWL, 18 GAUGE STAINLESS STEEL, 2 HOLES AT 4" CENTERS KOHLER K-3382 OR EQUAL.	DECK MOUNTED WIDE SPREAD FAUCET, 2.2 GPM AERATOR, LEVER HANDLES, 4" CENTERS, 4" GOOSENECK SPOUT KOHLER K-15275 OR EQUAL	ANGLE STOPS, CHROME ESCUTCHEONS, 1/2" OD FLEXIBLE RISERS OPEN GRID STRAINER WITH TAIL PIECE.
S-2	DOUBLE COMPARTMENT SINK	1/2"	1/2"	1 1/2"	1 1/2"	33"X22"X8 3/16" DEEP SELF RIMMING, DOUBLE BOWL, 19 GAUGE STAINLESS STEEL, 3 HOLES AT 8" CENTERS KOHLER K-3346 OR EQUAL.	DECK MOUNTED WIDE SPREAD FAUCET, 2.2 GPM AERATOR, LEVER HANDLES, 8" CENTERS, HIGH ARC 9" GOOSENECK SPOUT KOHLER K-15888 OR EQUAL	ANGLE STOPS, CHROME ESCUTCHEONS, 1/2" OD FLEXIBLE RISERS OPEN GRID STRAINER WITH TAIL PIECE. JAY R SMITH MODEL 8714 SOLIDS INTERCEPTOR OR EQUAL.
EWC-1	ELECTRIC WATER COOLER (ADA)	–	1/2"	1 1/2"	1 1/2"	REFRIGERATED, BI-LEVEL, LEAD-FREE WATERWAY, FRONT AND SIDE PUSH PADS OASIS MODEL P8ACSL OR EQUAL	–	ADA COMPLIANT INSTALLATION VINYL FINISH COLOR SELECTED BY ARCHITECT
JS-1	JANITORS SINK	1/2"	1/2"	3"	2"	24"x24"x12" HIGH MOLDED STONE JANITORS SINK, 3" DRAIN, RUBBER BUMPERS FIAT TSB-100 OR EQUAL	CHICAGO FAUCET #897-CP OR EQUAL.	INTEGRAL STOPS, PAIL HOOK, VACUUM BREAKER, CHROME PLATED, WALL MOUNTED AT 24" A.F.F., WALL BRACE, 3/4" HOSE END CONNECTION.
WH-1	NON FREEZE WALL HYDRANT	–	3/4"	–	–	BRONZE CASING, NICKEL BRONZE FACE, AND ANTI-SIPHON BACKFLOW PREVENTER WADE 8600,L8 OR EQUAL	–	MOUNT 28" A.F.G.
HB-1	HOSE BIBB	–	3/4"	–	–	BRONZE BODY WITH ROUGH BRONZE FINISH, KNOB HANDLE INTEGRAL BACKFLOW PREVENTER ZURN Z1341BFP OR EQUAL.	–	MOUNT 28" A.F.G.
EW-1	SAFETY SHOWER EYEWASH	1 1/4"	1 1/4"	–	–	FREE STANDING DELUGE SAFETY SHOWER AND EYEWASH COMBINATION UNIT SPEAKMAN MODEL SE-612 OR EQUAL.	SHOWER VALVE: 1" INCH STAY OPEN BALL EYEWASH VALVE: 1/2" STAY OPEN BALL	8-INCH DIAMETER ABS YELLOW PLASTIC SHOWER HEAD, ALUMINUM TRIANGULAR PULL ROD, 20 GPM REGULATOR. LAWLER MODEL 911E THERMOSTATIC MIXING VALVE OR EQUAL.
FD-1	FLOOR DRAIN	–	–	3"	1 1/2"	WADE 1102STD5 OR EQUAL	–	JOSAM 88300 SERIES TRAP PRIMER W/ INTEGRAL BACKFLOW PREVENTER, AND VACUUM BREAKER DISTRIBUTION UNIT FOR USE WITH 2-4 FLOOR DRAINS
SS-1	SERVICE SINK	1/2"	1/2"	2"	1 1/2"	23"X19"X12" WALL MOUNT SINGLE BOWL SERVICE SINK 14 GAUGE STAINLESS WITH BACKSPLASH AND SUPPORT LEG/GRID DRAIN ELKAY ESS2319 OR EQUAL	TWO SINGLE OUTLET FAUCETS WITH COLOR CODED T HANDLES ELKAY LK69C OR EQUAL	–

PUMP SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	TYPE	SERVICE	LOCATION	GPM	HEAD FT.	RPM	MOTOR (WATTS)	SUCTION SIZE (INCH)	DISCHARGE SIZE (INCH)	IMPELLER SIZE (INCH)	MOTOR DATA VOLTS / PH / HZ	NOTES
P-1101	BELL & GOSSET	NBF-33	INLINE CIRCULATOR	DOMESTIC WATER	RM 103	5.0	10	2950	125	3/4	3/4	–	120/60/1	1
P-1102	BELL & GOSSET	NBF-33	INLINE CIRCULATOR	DOMESTIC WATER	RM 103	5.0	10	2950	125	3/4	3/4	–	120/60/1	1

NOTES:
1. PROVIDE WITH AUTOMATIC TIMER KIT MODEL TC-1.

2 SHEET ADDED

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 14074 CHARLES E. SUGGS 11/29/11

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(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		
1	11/30/11	Added Fixture & Pump Schedule		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PLUMBING SCHEDULES

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-601
REV	

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Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HO\20_DESGN\40_CAD\11_DIST_ADMIN_OFFICES\8120_11G-BS01.dwg

HOSE REEL SCHEDULE

PLAN MARK	MANUFACTURER	FLUID	HOSE REEL		HOSE			DISPENSING VALVE		NOTES
			SERIES	MODEL	I.D. (IN)	LENGTH (FT)	PRESSURE RATING (PSI)	DESCRIPTION	MODEL	
HR-01	GRACO	COMPRESSED AIR	700	237728	1/2	75	180	BLOW GUN WITH 3/8" QUICK CONNECT COUPLER	236211	1

NOTES:
1. LOCATE AIR SHUT OFF VALVE, PARTICULATE FILTER, LUBRICATOR AT 4'-0" A.F.F. IN AN ACCESSIBLE LOCATION FOR EACH HOSE REEL.

AIR COMRRESSOR SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	TYPE	SERVICE	RATING	RECEIVER (GAL)	ELECTRICAL		NOTES
							MOTOR (HP)	V/PH/HZ	
AC-1101	INGERSOLL RAND	UP6-15C TAS	ROTARY SCREW	BAYS	55 ACFM @ 125 PSIG	120	15	208/3/60	1

NOTES:
1. INTEGRAL CYCLING REFRIGERATED DRYER - 120/1/60.

WATER HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	TANK CAPACITY (GAL)	GPM @ 50° F TEMP RISE	INPUT MBH	ELECTRICAL DATA		NOTES
						FLA	V/PH/HZ	
GWH-1101	RINNAI	RL94I	N/A	7.5	199	0.75	120/1/60	1, 2
GWH-1102	RINNAI	RL94I	N/A	7.5	199	0.75	120/1/60	1, 2

NOTES:
1. PROVIDE MANUFACTURER'S WALL MOUNTING BRACKET, CONCENTRIC INTAKE/FLU PIPING, AND ROOF OR WALL INTAKE/FLUE VENT. SET UNIT FOR 110°F DISCHARGE
2. PROVIDE WATER HEATER WITH ASSOCIATED RECIRCULATION PUMP (GWH-1101 W/ P-1101, GWH-1102 W/ P-1102)

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
PLUMBING SCHEDULES

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11P-602
REV	
	176 OF 289

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LES E. SUGGS

Saved: 3/4/2009 9:05:44 AM By: bredehoeftms
Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\11_DIST_ADMIN_OFFICES\B120_11G-BS01.dwg

SYMBOLS

SECTION CUT
SECTION LOCATION

DETAIL NUMBER
DETAIL LOCATION

KEYED NOTE

THERMOSTAT, HUMIDISTAT MOUNTED 48" AFF

DUCT DROP

DUCT RISE

FLEXIBLE DUCT CONNECTION

MOTORIZED DAMPER

BACKDRAFT DAMPER

MANUAL DAMPER

(FD) FIRE DAMPER
(SD) SMOKE DAMPER
(FD/SD) FIRE/SMOKE DAMPER

SUPPLY DUCT SECTION

RETURN, OUTSIDE AIR, OR EXHAUST DUCT SECTION

CONTROL VALVE
3-WAY CONTROL VALVE
REDUCER
SHUT OFF VALVE
BALANCING VALVE
GLOBE VALVE
GATE VALVE
BALL VALVE
BUTTERFLY VALVE
PRESSURE REDUCING VALVE
BACKFLOW PREVENTER
THERMOMETER
PRESSURE GAUGE
SAFETY RELIEF VALVE
MANUAL AIR VENT
PIPE UP
PIPE DOWN
TOP BRANCH CONNECTION
BOTTOM BRANCH CONNECTION
TEE UP
TEE DOWN
PIPE CAP
PIPE ANCHOR
PIPE GUIDE
UNION
STRAINER
CHECK VALVE
FLOW DIRECTION
FLEXIBLE PIPING CONNECTION

COLD DOMESTIC WATER - CW
HOT DOMESTIC WATER - HW
DOMESTIC HOT WATER RECIRCULATING - HWR
SS SANITARY SEWER
ARW ACID RESISTANT WASTE
VENT
SD STORM DRAIN
A COMPRESSED AIR
RD ROOF DRAIN
G NATURAL GAS NEW
G_x NATURAL GAS EXISTING
HEATING WATER SUPPLY
HEATING WATER RETURN
CWS CHILLED WATER SUPPLY
CWR CHILLED WATER RETURN
C CONDENSER WATER SUPPLY
CR CONDENSER WATER RETURN
ST CONDENSATE DRAIN
RL REFRIGERANT LIQUID
RS REFRIGERANT SUCTION
RD REFRIGERANT DISCHARGE
INW INDUSTRIAL WASTE
F FIRE SERVICE MAIN

DUCT SIZING

20/10 = 20" WIDE X 10" DEEP DUCT

10"ø = 10" DIAMETER ROUND DUCT

MECHANICAL GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST TO THE GOVERNMENT. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL NEW DUCTWORK, PIPING, AIR DEVICES, AND EQUIPMENT WITH NEW WIRING, LIGHTING, AND PIPING. WHERE AIR DEVICES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. EQUIPMENT, DUCTWORK, AND PIPING ARRANGEMENTS SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. FLEXIBLE DUCT RUNOUTS SHALL BE SAME SIZE AS DIFFUSER INLET. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 MECHANICAL

FACILITY BUILDING AUTOMATION AND CONTROL SYSTEM (BAS) GENERAL NOTES

THE BUILDING AUTOMATION SYSTEM (BAS) SHALL BE A SINGLE COMPLETE SYSTEM SUITABLE FOR, BUT NOT LIMITED TO, DIRECT DIGITAL CONTROL (DDC) OF THE HEATING, VENTILATING AND AIR CONDITIONING (HVAC) SYSTEMS. THE BAS SYSTEM SHALL BE BASED ON THE AUTOMATED LOGIC CONTROL SYSTEM (NO SUBSTITUTIONS) AND UTILIZE BACNET COMMUNICATION PROTOCOLS. THE SYSTEM SHALL BE STAND-ALONE FOR THE ENTIRE DISTRICT 4 HEADQUARTERS SITE, AND SHALL INCLUDE A USER INTERFACE PERSONAL COMPUTER WHICH SHALL BE LOCATED IN THE ADMINISTRATION BUILDING 11. CONTROL CONTRACTOR SHALL INTERCONNECT WITH ALL EXISTING ON-SITE AUTOMATED LOGIC UNITARY A/C CONTROLLERS, AND THOSE BEING INSTALLED UNDER THIS CONTRACT, IN THE FOLLOWING BUILDINGS: RESIDENT ENGINEER 1, AREA HEADQUARTERS 2, MULTI-CREW 3, DISTRICT SERVICE STATION 4, HIGHWAY POLICE 5, DISTRICT MATERIALS LAB 6, AND ADMINISTRATION BUILDING. CONTROL CONTRACTOR SHALL PROVIDE ALL CONTROLLER AND INTERFACES AS REQUIRED TO IMPLEMENT A COMPLETE FACILITY WIDE CONTROL SYSTEM AS INDICATED. SEE SHEET 11M-701 AND THE SPECIFICATIONS FOR FURTHER CONTROL SYSTEM INFORMATION

THIS SYSTEM SHALL BE COMPLETE WITH ALL REQUIRED HARDWARE AND SOFTWARE, INCLUDING ALL GRAPHICS. SYSTEM SHALL BE FULLY COORDINATED WITH AHTD PERSONNEL.

PROVIDE MANUAL OVER RIDE FOR ALL DIGITAL AND ANALOG OUTPUTS, INCLUDING BUT NOT LIMITED TO DAMPERS AND MOTORS.

ABBREVIATIONS

AA	AUTOMATIC AIR VENT	MBH	BTU PER HOUR (1000'S)
AD	ACCESS DOOR	MC	MECHANICAL CONTRACTOR
ADJ	ADJUSTABLE	MD	MANUAL DAMPER
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
AG	ABOVE GROUND	MIN	MINIMUM
AMB	AMBIENT	NC	NORMALLY CLOSED
APD	AIR PRESSURE DROP	NIC	NOT IN CONTRACT
AWT	AVERAGE WATER TEMPERATURE	NO	NORMALLY OPEN
BHP	BRAKE HORSEPOWER	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	OA	OUTSIDE AIR
CAP	CAPACITY	OED	OPEN END DUCT
CFM	CUBIC FEET PER MINUTE	PC	PLUMBING CONTRACTOR
DB	DRY BULB	PCD	PVC COATED DUCTWORK
DIA	DIAMETER	PH	PHASE
DDC	DIRECT DIGITAL CONTROL	PRESS	PRESSURE
DN	DOWN	PRV	PRESSURE REDUCING VALVE
DX	DIRECT EXPANSION	PSIG	POUNDS PER SQUARE INCH GAUGE
E	EXISTING		
EA	EXHAUST AIR	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	REL	RELOCATED
EC	ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EFF	EFFICIENCY	RL	REFRIGERATION LIQUID
ESP	EXTERNAL STATIC PRESSURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	RS	REFRIGERATION SUCTION
FC	FLEXIBLE CONNECTION	RV	RELIEF VALVE
FLG	FLANGE	SA	SUPPLY AIR
FMD	FLOW MEASURING DEVICE	SC	SENSIBLE COOLING
FPM	FEET PER MINUTE	SHT	SHEET
FPS	FEET PER SECOND	SP	STATIC PRESSURE
GC	GENERAL CONTRACTOR	SRV	SAFETY RELIEF VALVE
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED	TEMP	TEMPERATURE
		TH	TOTAL HEAT
GPM	GALLONS PER MINUTE	TC	TOTAL COOLING
H	HEIGHT	TSP	TOTAL STATIC PRESSURE
HD	HEAD	UG	UNDERGROUND
HP	HORSEPOWER	V	VOLTS
HZ	HERTZ	VB	VACUUM BLOWER
I.E.	INVERT ELEVATION	VEL	VELOCITY
LAT	LEAVING AIR TEMPERATURE	VTR	VENT THROUGH ROOF
LF	LINEAR FEET	W	WIDTH
LWT	LEAVING WATER TEMPERATURE	WB	WET BULB
MAV	MANUAL AIR VENT	WC	WATER COLUMN
MAX	MAXIMUM	WPD	WATER PRESSURE DROP
		WTR	WATER

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER	IH	INFRARED HEATING UNIT
AC	AIR COMPRESSOR	L	LOUVER
ACU	AIR CONDITIONING UNIT	MAU	MAKEUP AIR UNIT
AD	AIR DRYER	P	PUMP
AHU	AIR HANDLING UNIT	PHC	PREHEAT COIL
B	BOILER	RF	RETURN OR RELIEF FAN
CC	COOLING COIL	RHC	REHEAT COIL
CU	CONDENSING UNIT	SD	SMOKE DETECTOR OR SMOKE DAMPER
CUH	CABINET UNIT HEATER		
EF	EXHAUST FAN	SF	SUPPLY FAN
ET	EXPANSION TANK	ST	SOUND TRAP
F	FILTER	UH	UNIT HEATER
FCU	FAN COIL UNIT	VAV	VARIABLE AIR VOLUME BOX
FD	FIRE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
HC	HEATING COIL	WH	WATER HEATER

GRILLES, REGISTERS, AND DIFFUSER TAGS

SUPPLY REGISTER TAG

A	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

SUPPLY DIFFUSER TAG

B	GRD TYPE
6"ø	NECK SIZE
100	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

RETURN/EXHAUST GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

TRANSFER GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
(TYP #)	TYPICAL OF QUANTITY

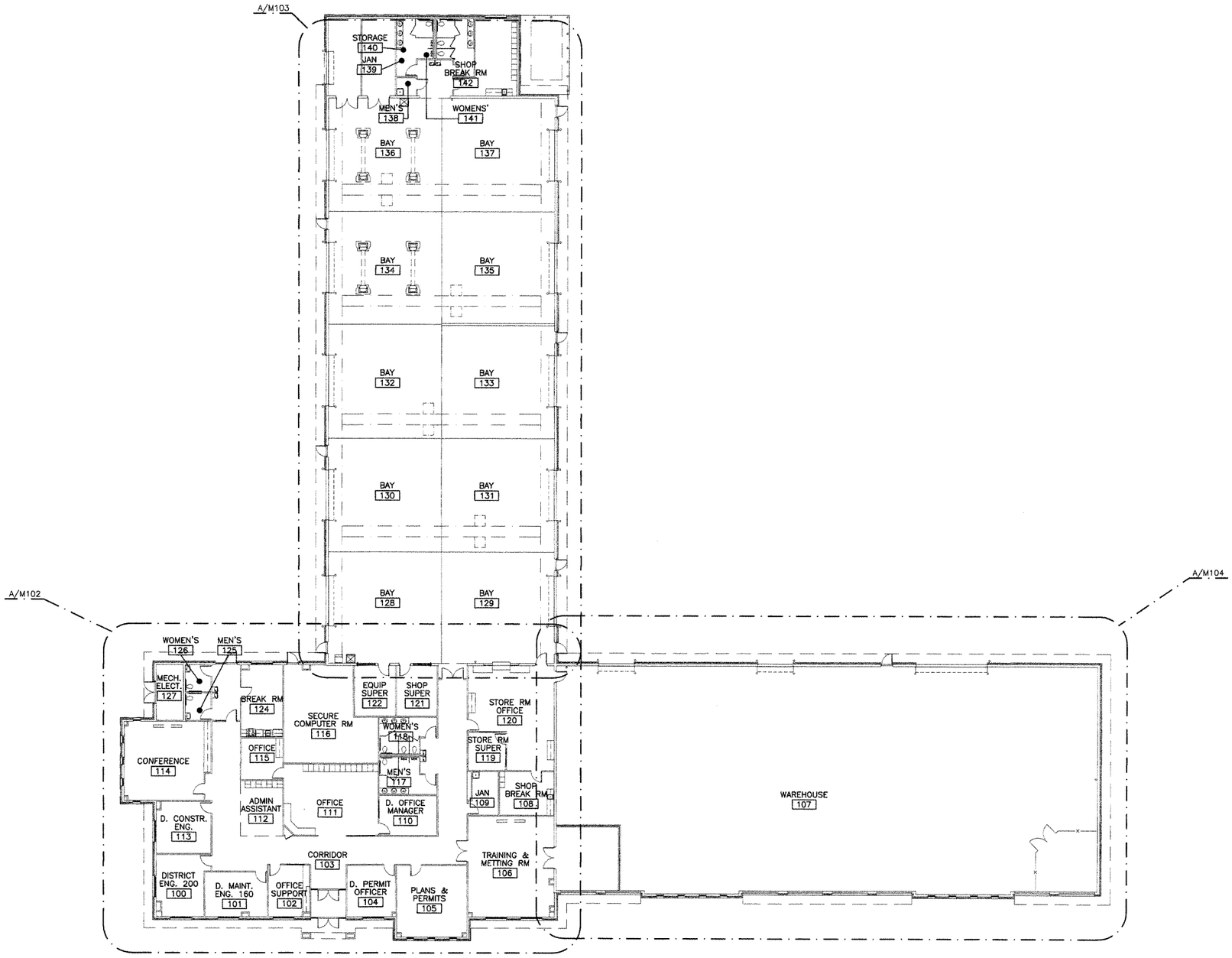
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NO.	DATE	ISSUED FOR CONSTRUCTION DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11			

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
MECHANICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	VRP
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11M-001	
177 OF 289	



A 11M-101 MECHANICAL PLAN
SCALE: 1/16" = 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
MECHANICAL FLOOR PLAN

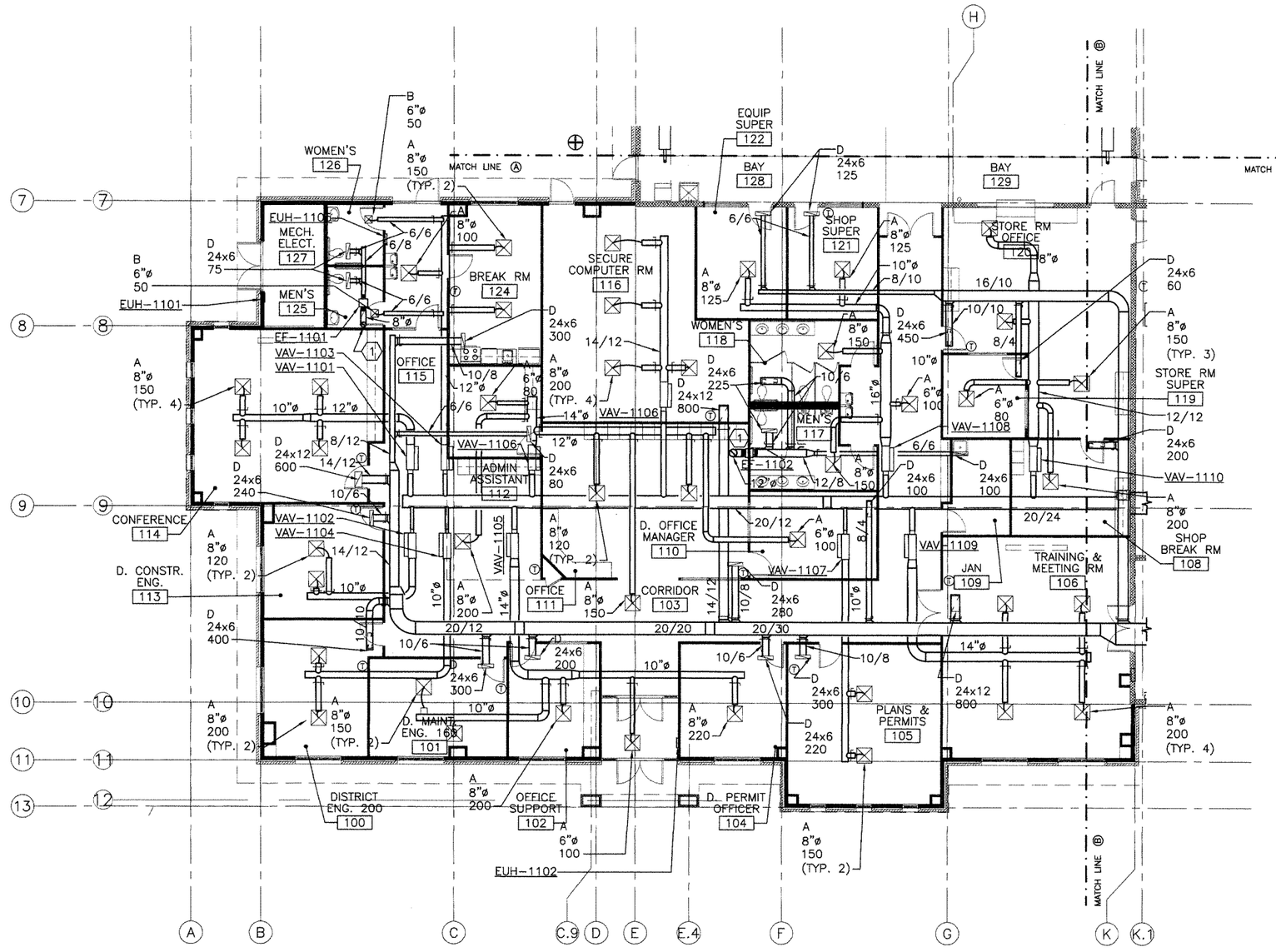
DESIGNED BY	VRP
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11M-101
REV	
128 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LES SUGGS

Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\11_DIST_ADMIN_OFFICES\8120_11G-BS01.dwg
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A ENLARGED MECHANICAL PLAN
11M-102 SCALE: 1/8"= 1'-0"

NORTH

GENERAL NOTES:

1. ROUTE SHEETMETAL DUCTWORK AND FLEXIBLE DUCTWORK THROUGH WOOD TRUSSES WHERE REQUIRED.
2. INTERLOCK EF-1101 AND EF-1102 SUCH THAT WHEN AHU-1101 STARTS EF-1101 AND EF-1102 START AND WHEN AHU-1101 STOPS EF-1101 AND EF-1102 STOP.
3. RUNOUT AND FLEXIBLE DUCT DIAMETER SHALL EQUAL DIFFUSER NECK SIZE.
4. THERMOSTATS INDICATED ON PLAN SHALL CONTROL VAV BOX THAT SERVES ROOM THERMOSTAT IS LOCATED IN.

KEYED NOTES:

(1) EXTEND UP TO GOOSENECK. GOOSENECK SHALL HAVE A 135° ELBOW AND TERMINATE 18" MIN. ABOVE ROOF WITH BIRD SCREEN. COORDINATE ROOF FLASHING AND SEALANT WITH GENERAL CONTRACTOR.

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074

KEY PLAN
SCALE: 1/128" = 1'-0"

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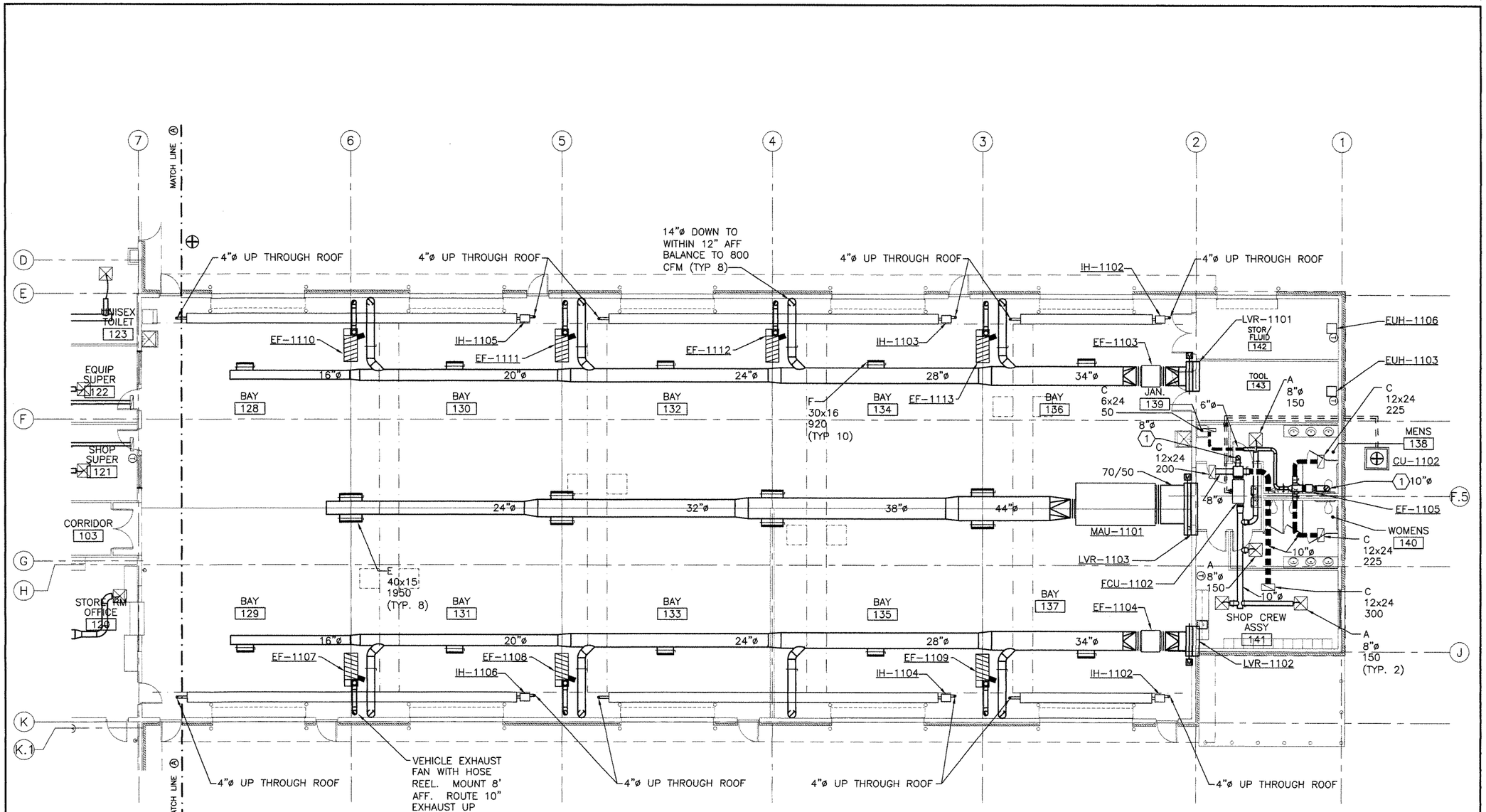
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED MECHANICAL FLOOR PLAN

DESIGNED BY	VRP
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11M-102
REV	
129 OF 289	

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GENERAL NOTES:

1. ROUTE SHEETMETAL DUCTWORK AND FLEXIBLE DUCTWORK THROUGH WOOD TRUSSES.
2. INTERLOCK EF-1105 SUCH THAT WHEN FCU-1102 STARTS EF-1105 STARTS AND WHEN FCU-1102 STOPS EF-1105 STOPS.
3. INTERLOCK OUTSIDE AIR INTAKE MOTORIZED DAMPERS WITH THE ASSOCIATED FCU SUCH THAT WHEN THE FCU STARTS THE DAMPER OPENS AND WHEN THE FCU STOPS THE DAMPER CLOSES.
4. FLEXIBLE DUCT DIAMETER SHALL EQUAL DIFFUSER NECK SIZE.
5. ROUTE SEPARATE 3/4" AUXILIARY CONDENSATE DRAINS FROM FCU-1102 TO JS-1 IN ROOM 139.

A 11M-103 ENLARGED MECHANICAL PLAN
SCALE: 1/8"= 1'-0"

NORTH

KEYED NOTES:

(1) EXTEND UP TO GOOSENECK. GOOSENECK SHALL HAVE A 135° ELBOW AND TERMINATE 18" MIN. ABOVE ROOF WITH BIRD SCREEN. COORDINATE ROOF FLASHING AND SEALANT WITH GENERAL CONTRACTOR.

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER LEE E. SUGGS No. 11074

KEY PLAN
SCALE: 1/128" = 1'-0"

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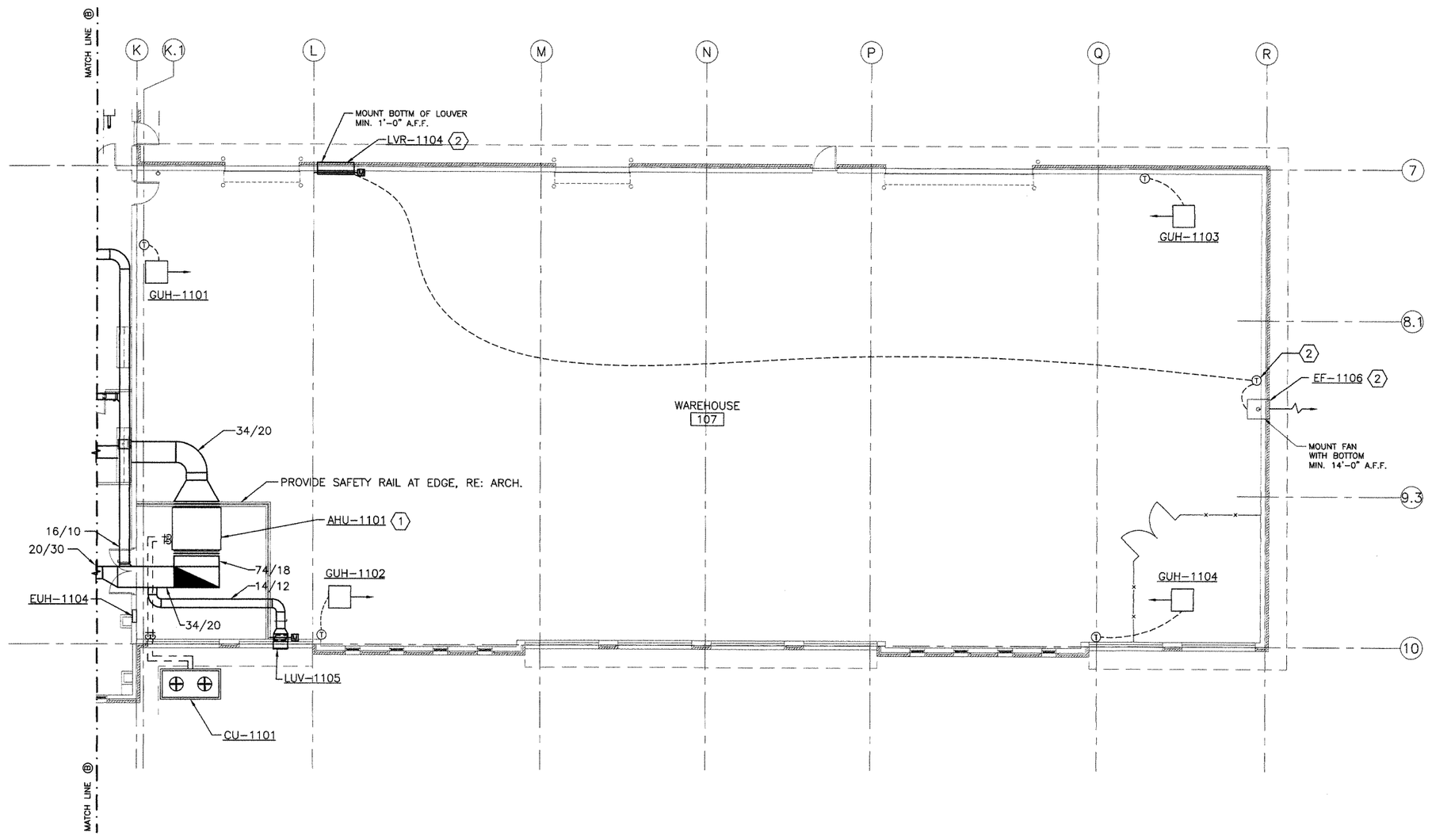
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED MECHANICAL FLOOR PLAN

DESIGNED BY	VRP
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11M-103
REV	

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Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\11_DIST_ADMIN_OFFICES\8120_11G-BS01.dwg
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GENERAL NOTES:

1. ROUTE SHEETMETAL DUCTWORK AND FLEXIBLE DUCTWORK THROUGH WOOD TRUSSES.
2. INTERLOCK OUTSIDE AIR INTAKE MOTORIZED DAMPERS WITH THE ASSOCIATED FCU SUCH THAT WHEN THE FCU STARTS THE DAMPER OPENS AND WHEN THE FCU STOPS THE DAMPER CLOSES.
3. FLEXIBLE DUCT DIAMETER SHALL EQUAL DIFFUSER NECK SIZE.
4. ROUTE 1" CONDENSATE AND AUXILIARY CONDENSATE DRAINS FROM AHU-1101 TO JS-1 IN ROOM 109. PROVIDE CONDENSATE PUMP.

KEYED NOTES:

(1) AIR HANDLING UNIT MOUNTED ON ROOF OF STORAGE ROOM ON BASE RAIL. COORDINATE LOCATION WITH STRUCTURAL AND ARCHITECTURAL DETAILS. ROUTE FULL SIZE CONDENSATE DRAIN TO BUILDING EXTERIOR GRADE.

(2) INTERLOCK EF-1106 AND LVR-1104 TO WALL T-STAT FAN SHALL ACTIVATE AND LOUVER DAMPER OPEN WHEN TEMP. RISES ABOVE T-STAT SET POINT. PROVIDE MANUAL OVERRIDE SWITCH AT T-STAT FOR CONTINUOUS OPERATION.

A / 11M-104 ENLARGED MECHANICAL PLAN
SCALE: 1/8"= 1'-0"

NORTH

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS LEE E. SIGGS REGISTERED PROFESSIONAL ENGINEER No. 11974

KEY PLAN
SCALE: 1/128" = 1'-0"

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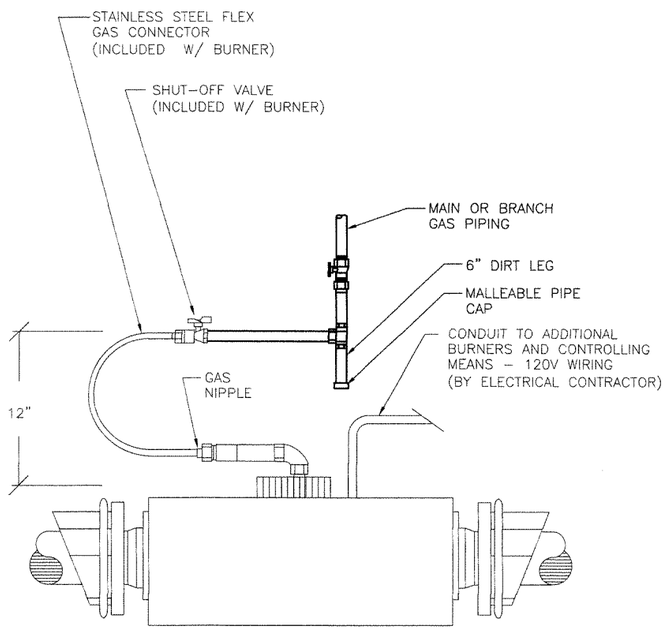
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ENLARGED MECHANICAL FLOOR PLAN

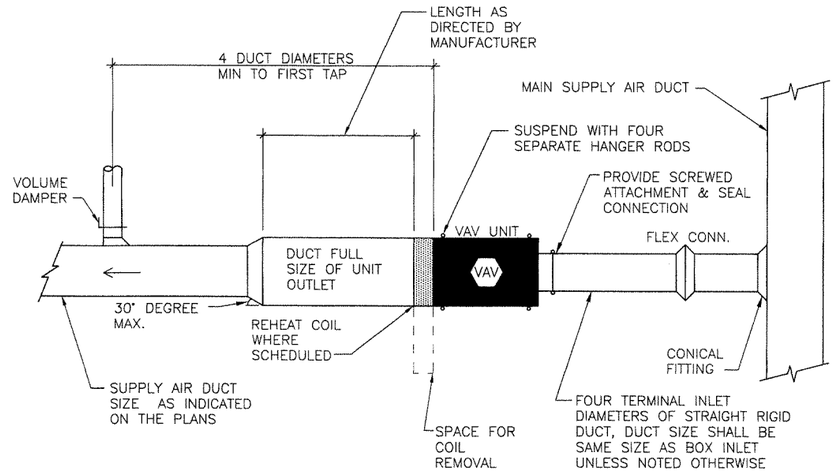
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APPROVED BY	LES

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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11M-104	
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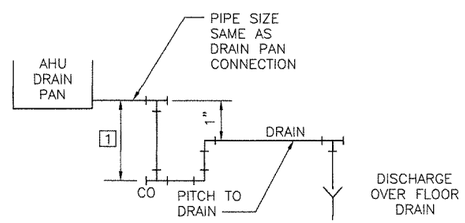
A M-501 **INFRARED BURNER DETAIL**
NO SCALE



NOTES:

1. INSTALL TERMINAL UNIT PLUMB AND LEVEL WITH SERVICE SPACE FOR COIL, CONTROLS, ETC.

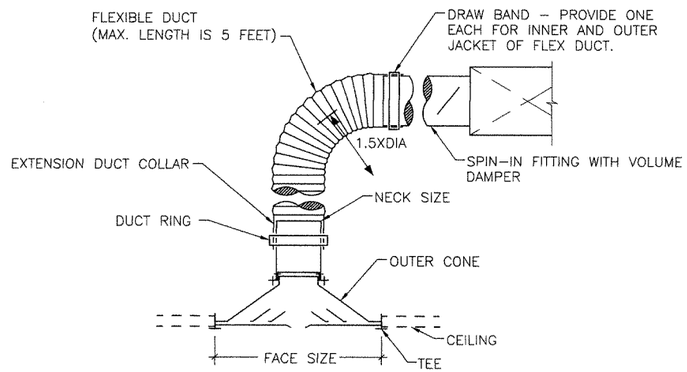
B M-501 **TYPICAL VAV TERMINAL WITH HEATING COIL**
SCALE: NONE



NOTES:

1. TRAP HEIGHT SHALL BE EQUAL TO TOTAL STATIC PRESSURE OF SUPPLY FAN PLUS 1".

C M-501 **TYPICAL CONDENSATE PIPING (DRAW THRU AHU)**
SCALE: NONE



NOTES:

1. SEAL INNER JACKET OF FLEX DUCT TO SPIN-IN FITTING AND DIFFUSER NECK WITH NON-HARDENING SEALER.
2. TURNING RADIUS FROM BRANCH DUCT TO AIR DIFFUSER IS LESS THAN 1.5XDUCT DIAMETER.

D M-501 **TYPICAL CEILING DIFFUSER MOUNTING DETAIL**
SCALE: NONE

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
MECHANICAL DETAILS

DESIGNED BY	VRP
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11M-501	
182 OF 289	

FAN COIL UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	AREA SERVED	OUTSIDE AIR (CFM)	OUTSIDE AIR TEMP (F)	SUPPLY AIR (CFM)	RETURN AIR (CFM)	SUPPLY FAN		COOLING COIL						ELECTRIC HEATING COIL		FILTERS	ELECTRICAL DATA			NOTES
								HP	ESP (IN WC)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EAT DB (F)	EAT WB (F)	LAT DB (F)	LAT WB (F)	CAPACITY (KW)	STAGES		MCA	MOP	V/PH/HZ	
AHU-1101	TRANE	TWE180E	OFFICE	870	96	5230	4360	3	1.5	171.7	121.1	79.9	65.9	55.4	53.7	–	–	1" MERV 7	6	15	460/3/60	1, 3, 4, 5
FCU-1102	TRANE	4TEH3F18	OFFICE	100	96	600	500	1/3	0.4	17.4	13.1	79.9	65.9	59.6	57.3	3.6	2	1" MERV 7	25	25	208/1/60	1, 2, 3

NOTES:
1. SINGLE POINT POWER CONNECTION.
2. PROVIDE WEBCTRL BY AUTOMATED LOGIC CONTROLIER AND TEMPERATURE SENSOR. INTEGRATE WITH FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM.
3. SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED PERIODS.
4. VARIABLE SPEED DRIVE ON SUPPLY FAN MOTOR
5. PROVIDE FIELD MOUNTED AUTOMATED LOGIC WEBCTRL CONTROLS PACKAGE FOR ALL UNIT SENSOR AND FUNCTIONS. INTEGRATE WITH FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM.

FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	LOCATION	SERVES	FAN TYPE	AIR FLOW (CFM)	SP (IN WC)	DRIVE TYPE	MOTOR (HP)	V/PH/HZ	NOTES
EF-1101	GREENHECK	CSP-A200	RM 125	RESTROOMS	CENTRIFUGAL INLINE	150	0.375	DIRECT	48 W	120/1/60	1,4
EF-1102	GREENHECK	CSP-A780	RM 117	RESTROOMS & JAN CLOSET	CENTRIFUGAL INLINE	635	0.375	DIRECT	405 W	120/1/60	1,4
EF-1103	GREENHECK	BSQ-240	BAYS	BAYS	CENTRIFUGAL INLINE	7,800	0.375	BELT	2	208/3/60	1,4
EF-1104	GREENHECK	BSQ-240	BAYS	BAYS	CENTRIFUGAL INLINE	7,800	0.375	BELT	2	208/3/60	1,4
EF-1105	GREENHECK	CSP-A250	RM 140	RESTROOMS & JAN CLOSET	CENTRIFUGAL INLINE	600	0.375	DIRECT	405 W	120/1/60	1,4
EF-1106	GREENHECK	SE2-24-620	WAREHOUSE	WAREHOUSE	PROPELLER WALL	4,400	0.150	DIRECT	1/3 W	208/1/60	2,4
EF-1107	CAR-MON	CMW-13	BAYS	VEHICLE	CENTRIFUGAL	1,400	4.0	BELT	1.5HP	460/3	3
EF-1108	CAR-MON	CMW-13	BAYS	VEHICLE	CENTRIFUGAL	1,400	4.0	BELT	1.5HP	460/3	3
EF-1109	CAR-MON	CMW-13	BAYS	VEHICLE	CENTRIFUGAL	1,400	4.0	BELT	1.5HP	460/3	3
EF-1110	CAR-MON	CMW-13	BAYS	VEHICLE	CENTRIFUGAL	1,400	4.0	BELT	1.5HP	460/3	3
EF-1111	CAR-MON	CMW-13	BAYS	VEHICLE	CENTRIFUGAL	1,400	4.0	BELT	1.5HP	460/3	3
EF-1112	CAR-MON	CMW-13	BAYS	VEHICLE	CENTRIFUGAL	1,400	4.0	BELT	1.5HP	460/3	3
EF-1113	CAR-MON	CMW-13	BAYS	VEHICLE	CENTRIFUGAL	1,400	4.0	BELT	1.5HP	460/3	3

NOTES:
1. INTEGRAL BACKDRAFT DAMPER
2. PROVIDE WITH WELL HOUSING WITH GRAVITY DAMPER, BIRDSCREEN, & WEATHERHOOD. PROVIDE 80°-110° F WALL THERMOSTAT.
3. CAR-MON MODEL NO. TSR-P36 TUBING STORAGE REEL WITH 25 FEET OF 8"ø CLX HOSE, MOUNTED PUSH BUTTON, AND CMW-13 EXHAUST FAN. TYP. 7 LOCATIONS. PROVIDE 2 VERTICAL TRACTOR EXHAUST STACK AND 5 DUAL AUTO EXHAUST CONNECTORS TOTAL.
4. PROVIDE AUTOMATED LOGIC WEBCTRL UNIT CONTROLLER AND FULLY INTEGRATE WITH FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM.

MAKE-UP AIR UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	TYPE	CFM	INPUT (MBH)	OUTPUT (MBH)	EAT (F)	LAT (F)	ESP (IN WC)	ELECTRICAL DATA		NOTES
											MOTOR (HP)	V/PH/HZ	
MAU-1101	GREENHECK	DGX-125	BAYS	NATL GAS	15,600	757.1	696.5	19.0	60.0	0.5	10	208/3/60	1

NOTES:
1. PROVIDE AUTOMATED LOGIC WEBCTRL UNIT CONTROLLER AND FULLY INTEGRATE WITH FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM.

2 SHEET REPLACED

CONDENSING UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	UNIT SERVED	LOCATION	TYPE	NOMINAL CAPACITY (TONS)	OUTDOOR AIR TEMP (F)	REFRIGERANT	ELECTRICAL DATA			NOTES
									MCA	MOP	V/PH/HZ	
CU-1101	TRANE	TWA180E	AHU-1101	OUTSIDE	SCROLL	15	105	R410A	33	45	460/3/60	1
CU-1102	TRANE	4TWA3018	FCU-1102	OUTSIDE	SCROLL	1 1/2	105	R410A	9	15	208/1/60	1

NOTES:
1. PROVIDE AUTOMATED LOGIC WEBCTRL CONTROLLER AND FULLY INTEGRATE INTO FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM

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No. 11074
LEE E. SUGG
11/21/11

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	11/30/11	Revised Condensing Unit Schedule		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
MECHANICAL SCHEDULES

DESIGNED BY	VRP
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11M-601
REV	

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DIFFUSERS, GRILLES, & REGISTER SCHEDULE

PLAN MARK	TYPE	FINISH	MATERIAL	MOUNTING	ACCESSORIES	MANUFACTURER	MODEL	NOTES
A	SUPPLY	WHITE	STEEL	LAY-IN	–	TITUS	TMS	2
B	SUPPLY	WHITE	STEEL	SURFACE	–	TITUS	300RL	1
C	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	–	TITUS	50F	1, 3
D	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	FILTER	TITUS	50F	1, 3
E	SUPPLY	WHITE	ALUMINUM	DUCT	OPPOSED BLADE DAMPER	TITUS	DL	1

NOTES:
1. REFER TO PLANS FOR SIZES.
2. 24x24 SQUARE.
3. PROVIDE FIELD FABRICATED PLENUM BOX EQUAL TO GRILLE DIMENSIONS AND 10" DEEP MINIMUM.

ELECTRIC UNIT HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	MOUNTING TYPE	MOUNTING HEIGHT	INPUT (KW)	ELECTRICAL DATA		NOTES
							AMPS	V/PH/HZ	
EUH-1101	BERKO	VFK204	RM 127	WALL	8" MIN	2.0	8.3	208/1/60	1, 2
EUH-1102	BERKO	VFK204	VESTIBULE	WALL	8" MIN	2.0	8.3	208/1/60	1, 2
EUH-1103	BERKO	HUHAA	TOOL RM.	WALL	8' MIN	5.0	15.3	208/3/60	2, 4
EUH-1104	BERKO	VFK204	STORAGE	WALL	8" MIN	1.5	12.5	120/1/60	1, 2
EUH-1105	BERKO	VFK151	VESTIBULE	WALL	8" MIN	2.0	8.3	120/1/60	1, 2
EUH-1106	BERKO	RUX	LIQ. STOR.	WALL	8' MIN	5.0	15.3	208/3/60	2, 3

NOTES:
1. 1" SEMI-RECESSED.
2. INTEGRAL THERMOSTAT.
3. EXPLOSION-PROOF HEATER AND UNIT MOUNTED THERMOSTAT.
4. WALL MOUNTING BRACKET

WALL LOUVER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SIZE (W"xL")	FREE AREA (SQFT.)	NOTES
LVR-1101	RUSKIN	ELC6375DAX	54"x54"	9.67	1, 2
LVR-1102	RUSKIN	ELC6375DAX	54"x54"	9.67	1, 2
LVR-1103	RUSKIN	ELC6375DAX	96"x60"	19.04	1, 2
LVR-1104	RUSKIN	ELC6375DAX	60"x30"	5.37	1, 2
LVR-1105	RUSKIN	ELC6375DAX	30"x24"	1.94	1, 2

NOTES:
1. COMBINATION LOUVER WITH ACTUATED DAMPER. PROVIDE 24V POWERED ACTUATOR DRIVEN OFF OF CONTROL SYSTEM POWER. PROVIDE AUTOMATED LOGIC WEBCTRL INTERFACE AND INTEGRATTE WITH FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM.
2. ARCHITECT TO MAKE FINAL LOUVER COLOR SELECTIONS.

VARIABLE AIR VOLUME TERMINAL UNITS

PLAN MARK	MANUFACTURER	MODEL	MAXIMUM CFM	MINIMUM CFM	INLET (IN)	OUTLET (IN)	ELECTRIC HEATING COIL						NOTES
							HTG CFM	KW	STEPS	EAT °F	LAT °F	V/PH/HZ	
VAV-1101	TITUS	DESV	600	190	8ø	12x10	190	2.0	3	55	90	208/1/60	1
VAV-1102	TITUS	DESV	250	250	5ø	12x8	85	1.0	1	55	90	208/1/60	1
VAV-1103	TITUS	DESV	470	140	6ø	12x8	140	1.5	2	55	90	208/1/60	1
VAV-1104	TITUS	DESV	400	120	6ø	12x8	120	1.5	2	55	90	208/1/60	1
VAV-1105	TITUS	DESV	770	230	8ø	12x10	230	3.0	3	55	90	208/1/60	1
VAV-1106	TITUS	DESV	810	240	8ø	12x10	240	3.0	3	55	90	208/1/60	1
VAV-1107	TITUS	DESV	300	90	5ø	12x8	90	1.0	1	55	90	208/1/60	1
VAV-1108	TITUS	DESV	650	195	8ø	12x10	195	2.5	3	55	90	208/1/60	1
VAV-1109	TITUS	DESV	800	240	8ø	12x10	240	3.0	3	55	90	208/1/60	1
VAV-1110	TITUS	DESV	600	205	8ø	12x10	205	2.5	3	55	90	208/1/60	1
VAV-1111	TITUS	DESV	800	240	8ø	12x10	240	3.0	3	55	90	208/1/60	1

NOTES:
1. PROVIDE AUTOMATED LOGIC WEBCTRL PACKAGE FOR EACH VAV UNIT. INTEGRATE WITH FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM AND INTERLOCK WITH AIR HANDLING UNIT CONTROLS.

INFRARED HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	TYPE	INPUT (MBH)	MOUNTING HEIGHT	REFLECTOR ANGLE	TUBE LENGTH (FT)	ELECTRICAL	NOTES
IH-1101	ROBERTS GORDON	CTH3-80	BAYS	NATL GAS	52/80	19'-0"	45°	20	SEE NOTE	1,2,3
IH-1102	ROBERTS GORDON	CTH3-80	BAYS	NATL GAS	52/80	19'-0"	45°	20	SEE NOTE	1,2,3
IH-1103	ROBERTS GORDON	CTH3-150	BAYS	NATL GAS	100/150	19'-0"	45°	50	SEE NOTE	1,2,3
IH-1104	ROBERTS GORDON	CTH3-150	BAYS	NATL GAS	100/150	19'-0"	45°	50	SEE NOTE	1,2,3
IH-1105	ROBERTS GORDON	CTH3-150	BAYS	NATL GAS	100/150	19'-0"	45°	50	SEE NOTE	1,2,3
IH-1106	ROBERTS GORDON	CTH3-150	BAYS	NATL GAS	100/150	19'-0"	45°	50	SEE NOTE	1,2,3

NOTES:
1. 120V PLUG-IN. 4.8 STARTING AMPS.
2. MODULATING BURNER.
3. SHIELDED THERMOSTAT. PROVIDE AUTOMATED LOGIC WEBCTRL INTERFACE AND INTEGRATE WITH FACILITY WIDE CONTROL SYSTEM.

GAS UNIT HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	INPUT (MBH)	OUTPUT (MBH)	MOUNTING HEIGHT	ELECTRICAL DATA			NOTES
							FLA	MOCP	V/PH/HZ	
GUH-1101	REZNOR	UDAS-125	RM 107	120.0	99.6	15'-0"	5.1	15	120/1/60	1, 2
GUH-1102	REZNOR	UDAS-125	RM 107	120.0	99.6	15'-0"	5.1	15	120/1/60	1, 2
GUH-1103	REZNOR	UDAS-125	RM 107	120.0	99.6	15'-0"	5.1	15	120/1/60	1, 2
GUH-1104	REZNOR	UDAS-125	RM 107	120.0	99.6	15'-0"	5.1	15	120/1/60	1, 2

NOTES:
1. CONCENTRIC VENT KIT.
2. WALL MOUNTED THERMOSTAT. PROVIDE AUTOMATED LOGIC WEBCTRL INTERFACE AND INTEGRATE WITH FACILITY-WIDE AUTOMATED LOGIC CONTROL SYSTEM.

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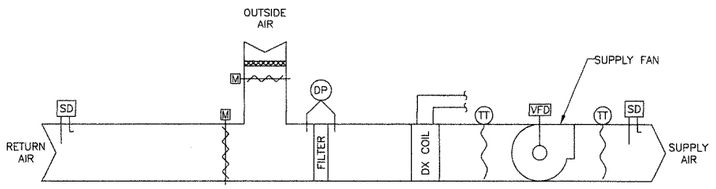
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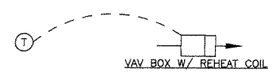
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DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11M-602	
184 OF 289	





CONTROL DIAGRAM – AHU–1101

SEQUENCE OF OPERATION:

A. FAN OPERATION:

1. SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OWNER ADJUSTABLE OCCUPIED PERIODS.
2. MODULATE VARIABLE SPEED FAN DRIVES TO MAINTAIN SUPPLY DUCT STATIC PRESSURE.
3. BUILDING AUTOMATION SYSTEM (BAS) SHALL ALARM IF SUPPLY FAN FAILS.
4. STATIC PRESSURE SWITCH LOCATED IN FAN DISCHARGE SHALL STOP FAN AND SIGNAL ALARM WHEN STATIC PRESSURE RISES ABOVE EXCESSIVE STATIC PRESSURE SET POINT.

B. DAMPER CONTROL:

1. DURING OCCUPIED PERIODS, WHEN SUPPLY FAN STARTS, OPEN OUTSIDE, RELIEF, AND RETURN AIR DAMPERS TO MINIMUM POSITION.
2. DAMPERS SHALL MODULATE TO MAINTAIN MINIMUM OUTSIDE AIR FLOW SUCH THAT RELIEF AIR DAMPER SHALL MODULATE OPEN AND RETURN AIR DAMPER SHALL MODULATE CLOSED AS OUTSIDE AIR DAMPER MODULATES TOWARDS FULLY OPEN POSITION.
3. DURING COOLING SEASON, MODULATE OUTSIDE, RELIEF, AND RETURN AIR DAMPERS OPEN TO PROVIDE ECONOMIZER COOLING.
   a. WHEN OUTSIDE AIR ENTHALPY EXCEEDS RETURN AIR ENTHALPY, SET OUTSIDE,RELIEF, AND RETURN AIR DAMPERS TO MINIMUM POSITION.
4. WHEN AHU IS SHUT DOWN, POSITION OUTSIDE AND RELIEF AIR DAMPERS CLOSED AND RETURN AIR DAMPER OPEN.

C. COOLING COIL CONTROL:

1. DURING OCCUPIED PERIODS, WHEN FAN IS RUNNING, AND OUTSIDE AIR TEMPERATURE RISES ABOVE 55°F, BAS SHALL STAGE CONDENSING UNIT AND DX COIL TO MAINTAIN SUPPLY AIR TEMPERATURE BASED ON THE FOLLOWING RESET SCHEDULE (ADJ):

O.A. TEMP.	SUPPLY AIR TEMP.
ABOVE 79°F	55°F
70°F–79°F	58°F
60°F–69°F	62°F
56°F–59°F	64°F
BELOW 56°F	OFF

D. FILTERS:

1. DURING OCCUPIED PERIODS, WHEN FAN IS RUNNING, DIFFERENTIAL AIR PRESSURE SENSOR SHALL SIGNA ALARM WHEN LOW AND HIGH PRESSURE CONDITIONS EXIST.

E. COORDINATION OF AHU CONTROL:

1. ENSURE THAT MIXED AIR, HEATING COIL, AND COOLING COIL CONTROLS HAVE COMMON INPUTS AND DO NOT OVERLAP IN FUNCTION.

F. SAFETIES:

1. LOW TEMPERATURE DETECTION:
   a. TEMPERATURE SENSOR LOCATED BEFORE SUPPLY FAN SHALL SIGNAL ALARM, STOP SUPPLY AND RETURN FANS AND CLOSES OUTSIDE AND OPENS RETURN AIR DAMP WHEN TEMPERATURE FALLS BELOW 37°F (ADJ).
2. SMOKE CONTROL:
   a. SMOKE DETECTOR LOCATED IN SUPPLY AND RETURN DUCT SHALL SIGNAL ALARM, AND STOP SUPPLY FAN WHEN PRODUCTS OF COMBUSTION ARE DETECTED IN AIRSTREAM.

G. VARIABLE AIR VOLUME TERMINAL (VAV) CONTROL:

1. SPACE TEMPERATURE SENSOR SHALL REPORT SPACE TEMPERATURE
2. IN COOLING MODE, BAS SHALL MODULATE VOLUME DAMPER TO MAINTAIN SPACE TEMPERATURE SET POINT 78°F (ADJ).
3. IN HEATING MODE, BAS SHALL MODULATE REHEAT CONTROL VALVE AND VOLUME DAMPER TO MAINTAIN SPACE TEMPERATURE SET POINT 70°F (ADJ) AND A MAXIMUM DISCHARGE AIR TEMPERATURE OF 90°F (ADJ).

H. UNOCCUPIED OPERATION:

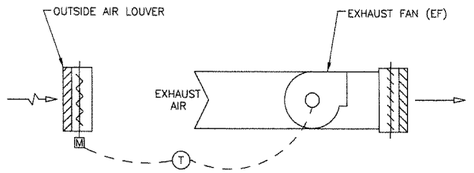
1. DURING UNOCCUPIED PERIODS, AHU SHALL START WHEN AVERAGE EXTERIOR ZONE TEMPERATURE DROPS TO HEATING SETBACK TEMPERATURE SETPOINT OF 60°F (ADJ) AND OPERATE UNIT UNTIL AVERAGE EXTERIOR ZONE TEMPERATURE IS 2°F (ADJ) ABOVE HEATING SETBACK TEMPERATURE.

I. OPTIMAL START:

1. BAS SHALL DETERMINE OPTIMAL TIME TO START MORNING COOL DOWN AND WARM UP TO MEET THE SPACE TEMPERATURE SET POINTS AT THE BEGINNING OF OCCUPIED PERIODS.

SYMBOL LEGEND

- AIR FLOW MEASURING STATION
- BACKDRAFT DAMPER
- DIFFERENTIAL PRESSURE SENSOR (DP)
- GAS FURNACE
- FAN
- AIR FLOW SENSOR (F)
- MOTORIZED DAMPER
- DUCT SMOKE DETECTOR (SD)
- TEMPERATURE SENSOR (DUCT/UNIT) (TT)
- TEMPERATE SENSOR (SPACE) (T)
- VARIABLE FREQUENCY DRIVE (VFD)



CONTROL DIAGRAM – EF–1106

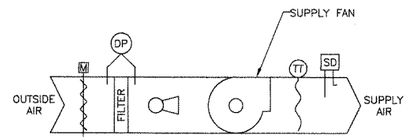
SEQUENCE OF OPERATION:

A. FAN OPERATION:

1. EXHAUST FANS SHALL RUN WHEN SPACE TEMPERATURE RISES ABOVE 75°F (ADJ), OR WHEN MANUALLY ACTIVATED.
2. BUILDING AUTOMATION SYSTEM (BAS) SHALL ALARM IF FAN OR DAMPER FAILS.

B. DAMPER OPERATION:

1. OUTSIDE AIR LOUVER DAMPERS SHALL BE FULLY OPEN WHEN FAN IS OPERATING AND CLOSED WHEN FAN IS OFF.



CONTROL DIAGRAM – MAU–1101

SEQUENCE OF OPERATION:

A. FAN OPERATION:

1. SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OWNER ADJUSTABLE OCCUPIED PERIODS WHEN EF–1103 AND EF–1104 ARE ACTIVE.
2. BUILDING AUTOMATION SYSTEM (BAS) SHALL ALARM IF SUPPLY FAN OR DAMPER(S) FAIL.

B. DAMPER CONTROL:

1. DURING OCCUPIED PERIODS, WHEN SUPPLY FAN STARTS, MAU INLET DAMPER SHALL FULLY OPEN.
2. WHEN MAU IS SHUT DOWN, MAU INLET DAMPER SHALL BE FULLY CLOSED.

C. GAS FURNACE CONTROL:

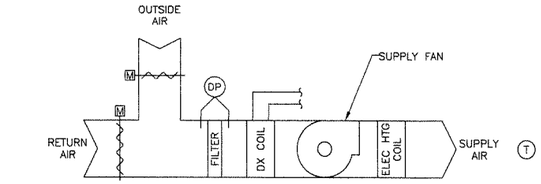
1. DURING OCCUPIED PERIODS, WHEN FAN IS RUNNING, AND OUTSIDE AIR TEMPERATURE DROPS BELOW 55°F (ADJ), BAS SHALL MODULATE GAS FURNACE TO MAINTAIN A 60°F (ADJ) SUPPLY AIR TEMPERATURE.

D. FILTERS:

1. DURING OCCUPIED PERIODS, WHEN FAN IS RUNNING, DIFFERENTIAL AIR PRESSURE SENSOR SHALL SIGNAL ALARM WHEN LOW AND HIGH PRESSURE CONDITIONS EXIST.

E. SAFETIES:

1. LOW TEMPERATURE DETECTION:
   a. TEMPERATURE SENSOR LOCATED BEFORE SUPPLY FAN SHALL SIGNAL ALARM, STOP SUPPLY FAN AND CLOSE OUTSIDE AIR LOUVER DAMPER AND MAU INLET DAMPER WHEN TEMPERATURE FALLS BELOW 37°F (ADJ).
2. SMOKE CONTROL:
   a. SMOKE DETECTOR LOCATED IN SUPPLY DUCT SHALL SIGNAL ALARM, AND STOP SUPPLY FAN WHEN PRODUCTS OF COMBUSTION ARE DETECTED IN AIRSTREAM.



CONTROL DIAGRAM – FCU–1102

SEQUENCE OF OPERATION:

A. FAN OPERATION:

1. SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED PERIODS.
2. BUILDING AUTOMATION SYSTEM (BAS) SHALL ALARM IF SUPPLY FAN OR DAMPER(S) FAIL.

B. ELECTRIC HEATING COIL CONTROL:

1. WHEN FAN IS RUNNING, BAS SHALL MODULATE ELECTRIC HEATING COIL TO MAINTAIN SPACE HEATING TEMPERATURE SETPOINT OF 70°F (ADJ).

C. COOLING COIL CONTROL:

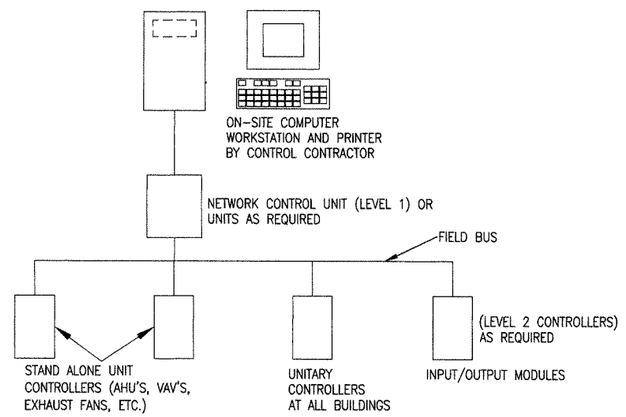
1. WHEN FAN IS RUNNING, BAS SHALL STAGE CONDENSING UNIT AND DX COIL TO MAINTAIN SPACE COOLING TEMPERATURE SETPOINT OF 78°F (ADJ).

D. FILTERS:

1. DURING OCCUPIED PERIODS, WHEN FAN IS RUNNING, DIFFERENTIAL AIR PRESSURE SENSOR SHALL SIGNAL ALARM WHEN LOW AND HIGH PRESSURE CONDITIONS EXIST.

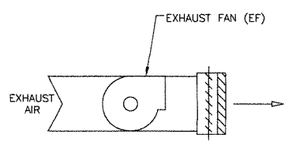
E. COORDINATION OF AHU CONTROL:

1. ENSURE THAT THE ELECTRIC HEATING COIL AND COOLING COIL CONTROLS DO NOT OVERLAP IN FUNCTION.



1 M502 M502 SYSTEM ARCHITECTURE DIAGRAM

SCALE: NO SCALE

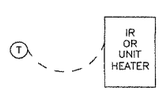


CONTROL DIAGRAM – EF–1101 THRU EF–1105

SEQUENCE OF OPERATION:

A. FAN OPERATION:

1. EXHAUST FANS SHALL RUN CONTINUOUSLY DURING OWNER ADJUSTABLE OCCUPIED PERIODS.
2. BUILDING AUTOMATION SYSTEM (BAS) SHALL ALARM IF FAN FAILS OR DAMPER FAILS.



CONTROL DIAGRAM – INFRA–RED AND UNIT HEATERS

SEQUENCE OF OPERATION:

A. FAN OPERATION:

1. INFRA–RED AND UNIT HEATERS SHALL OPERATE WHENEVER THE SPACE TEMPERATURE DROP BELOW 55°F (ADJ) OR WHEN MANUALLY ACTIVATED.
2. BUILDING AUTOMATION SYSTEM (BAS) SHALL ALARM IF UNIT FAILS.

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LEE E. SUGGS

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
HVAC CONTROLS

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11M–701
REV	

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ELECTRICAL SYMBOLS LEGEND

CEILING	WALL	
# A	# A	FLUORESCENT FIXTURE, A = FIXTURE TYPE, # = CKT. # TYPICAL
A NL	A	FLUORESCENT FIXTURE, EQUIPPED WITH BATTERY PACK.
A	A	HID, COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
A	A	EXIT LIGHT, DARKENED SECTION(S) DENOTE FACE(S). USE DIRECTIONAL ARROWS WHERE INDICATED.
A	A	FLUORESCENT STRIP FIXTURE
A		EMERGENCY FIXTURE
A		REMOTE EMERGENCY FIXTURE

NOTE: REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION

———	CONDUIT CONCEALED
———○	CONDUIT TURNING UP
———⊃	CONDUIT TURNING DOWN
— — —	CONDUIT BELOW GRADE
J	JUNCTION BOX
J	JUNCTION BOX WALL MOUNTED
═══	CABLE TRAY
	HOMERUN TO PANEL BOARD OR DEVICE. TICK MARKS DENOTE NUMBERS OF CIRCUITS. HOMERUN WITH NO TICK MARKS SHALL BE A SINGLE CIRCUIT,
T	TRANSFORMER
HH	HANDHOLE
	GROUND
M	METER
	SWITCHBOARD, DISTRIBUTION PANEL
	PANEL BOARD
	HEAVY DUTY SAFETY SWITCH, MOUNT WITH L OF HANDLE AT 60" A.F.F. REFER TO EQUIPMENT SCHEDULE FOR AMPACITY, NEMA CONFIGURATION, FUSING, ECT.
	SINGLE RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
	DUPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE
WP	DUPLEX GFI RECEPTACLE W/ WEATHERPROOF "IN-USE" TYPE COVER MOUNTED @ 18" A.F.F.
GFI	COMMERCIAL GRADE GFI RECEPTACLE MOUNTED @ 18" A.F.F.
	QUADPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
	CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, MOUNTED RECESSED WHEN INSTALLED IN ACCESSIBLE CEILING PANEL. SECURE TO STRUCTURE PER N.E.C.
	DUPLEX RECEPTACLE OUTLET, FLOOR MOUNTED

Ⓢ	SPECIAL PURPOSE OUTLET, ELECTRICAL CHARACTERISTICS AS SPECIFIED ON PLANS OR SCHEDULE.
$	SINGLE POLE SWITCH, MOUNTED AT 48" A.F.F.
$P	SINGLE POLE SWITCH WITH PILOT LIGHT, MOUNTED AT 48" A.F.F.
$3	3-WAY SWITCH, MOUNTED AT 48" A.F.F.
$4	4-WAY SWITCH, MOUNTED AT 48" A.F.F.
$OS	COMBINATION OCCUPANCY/SENSOR/SWITCH, MOUNTED AT 48" A.F.F.
$M	MOTOR RATED SWITCH MOUNTED AT MOTOR, UNLESS NOTED OTHERWISE.
D$	DIMMER SWITCH, MOUNTED AT 48" A.F.F.
OC	OCCUPANCY SENSOR, CEILING MOUNTED.
OC	OCCUPANCY SENSOR, WALL MOUNTED WITH SWIVEL BRACKET.
	MOTOR LOAD

GENERAL NOTES

1. FOR ALL ELECTRICAL WORK, REFER TO DIVISION 26 SPECIFICATION SECTION.
2. HEIGHTS INDICATED ARE TO THE CENTERLINE OF BOX, UNLESS INDICATED OTHERWISE.
3. ALL SYMBOLS MAY NOT BE USED.
4. FOR ALL ELECTRICAL EQUIPMENT INDICATED TO BE SUSPENDED FROM METAL BUILDING FRAMING (TRANSFORMERS, LIGHTING, ETC.), THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUPPLEMENTAL FRAMING, HANGERS, ETC. NECESSARY TO SUPPORT ELECTRICAL ITEMS IN ACCORDANCE WITH THE METAL BUILDING MANUFACTURER'S RECOMMENDATIONS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF HANGERS FOR ELECTRICAL ITEMS WITH METAL ROOF LINER PANEL INSTALLATION SEQUENCE.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, COORDINATE AND CONFIRM WITH THE MECHANICAL AND PLUMBING CONTRACTOR ALL OF THE FOLLOWING:
   A. VERIFY EXACT FEED LOCATIONS AND NUMBER OF CONNECTIONS TO ALL A/C UNITS, FAN COILS, CHILLERS, COOLING TOWERS, SYSTEM PUMPS, EVAP. COOLERS, MAKE-UP AIR UNITS, DAMPER MOTORS, ETC.
   B. ELECTRICAL CHARACTERISTICS (E.G., KW, HP, AMPS, VOLTAGE, PHASE, ETC.): CONFIRM WITH APPROVED MECHANICAL/PLUMBING EQUIPMENT SHOP DRAWINGS.
   C. EXACT LOCATION OF ALL CONTROL PANELS, CONTROL DEVICES, THERMOSTATS, DAMPER MOTORS, ETC.

ABBREVIATIONS

A	
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMP INTURUPTING CAPACITY
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B	
BKR	CIRCUIT BREAKER
BLDG	BUILDING
C	
CKT	CIRCUIT
℄	CENTERLINE
CLG	CEILING
COL	COLUMN
CU	COPPER
°C	DEGREES CELSIUS
D	
DEG	DEGREES
DIA, ø	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DIV	DIVISION
DN	DOWN
DWG	DRAWING
E	
EA.	EXHAUST AIR, EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRICAL WATER COOLER
EX	EXISTING
F	
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE (CONDUIT)
FLR	FLOOR
FT	FOOT, FEET
°F	DEGREES FAHRENHEIT
G	
GA	GAUGE
GALV	GALVANIZED
GFI, GFCI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL (CONDUIT)
H	
HID	HIGH INTENSITY DISCHARGE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & A/C
HZ	HERTZ
I	
ID	INSIDE DIAMETER, IDENTIFICATION
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH, INCHES
J	
J-BOX	JUNCTION BOX
K	
KCMIL	THOUSAND CIRCULAR MILS (AREA)
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR
L	
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
M	
MAX	MAXIMUM
MC	MULTI CONDUCTOR (CABLE)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MOCP, MOP	MAXIMUM OVER CURRENT PROTECTION
MH	MANHOLE, METAL HALIDE
MIL, MILS	1/1000 INCH
MIN	MINIMUM

N	
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFR'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O	
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OEP	OVERHEAD ELECTRICAL PRIMARY
OES	OVERHEAD ELECTRICAL SECONDARY
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.
P	
PE	PHOTO ELECTRIC, PROFESSIONAL ENGINEER
PF	POWER FACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
PWR	POWER
Q	
QTY	QUANTITY
R	
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REF;	REFERENCE, REFER TO
REQD	REQUIRED
REV	REVISION, REVISE
RLA	RUNNING LOAD AMPS
RM	ROOM
RMS	ROOT MEAN SQUARE
RPM	REVOLUTION PER MINUTE
S	
SCH	SCHEDULE, SCHEDULED
SF	SQUARE FEET, SQUARE FOOT
SPEC	SPECIFICATION, SPECIFY
SS	STAINLESS STEEL, STATIONARY SEWER
STD	STANDARD
SUSP	SUSPEND, SUSPENDED
T	
TELECOM	TELECOMMUNICATIONS
THRU	THROUGH
TSTAT	THERMOSTAT
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
U	
U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UEP	UNDERGROUND ELECTRICAL PRIMARY
UES	UNDERGROUND ELECTRICAL SECONDARY
UL	UNDERWRITER'S LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	
V	VOLT, VENT, VERTICAL
VA	VOLT-AMPERE
VERT	VERTICAL
W	
W	WATT, WIDTH, WIRE
W/	WITH
W/O	WITHOUT
X	
XFMR	TRANSFORMER

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JOSHUA J. JOYCE 10/13/11

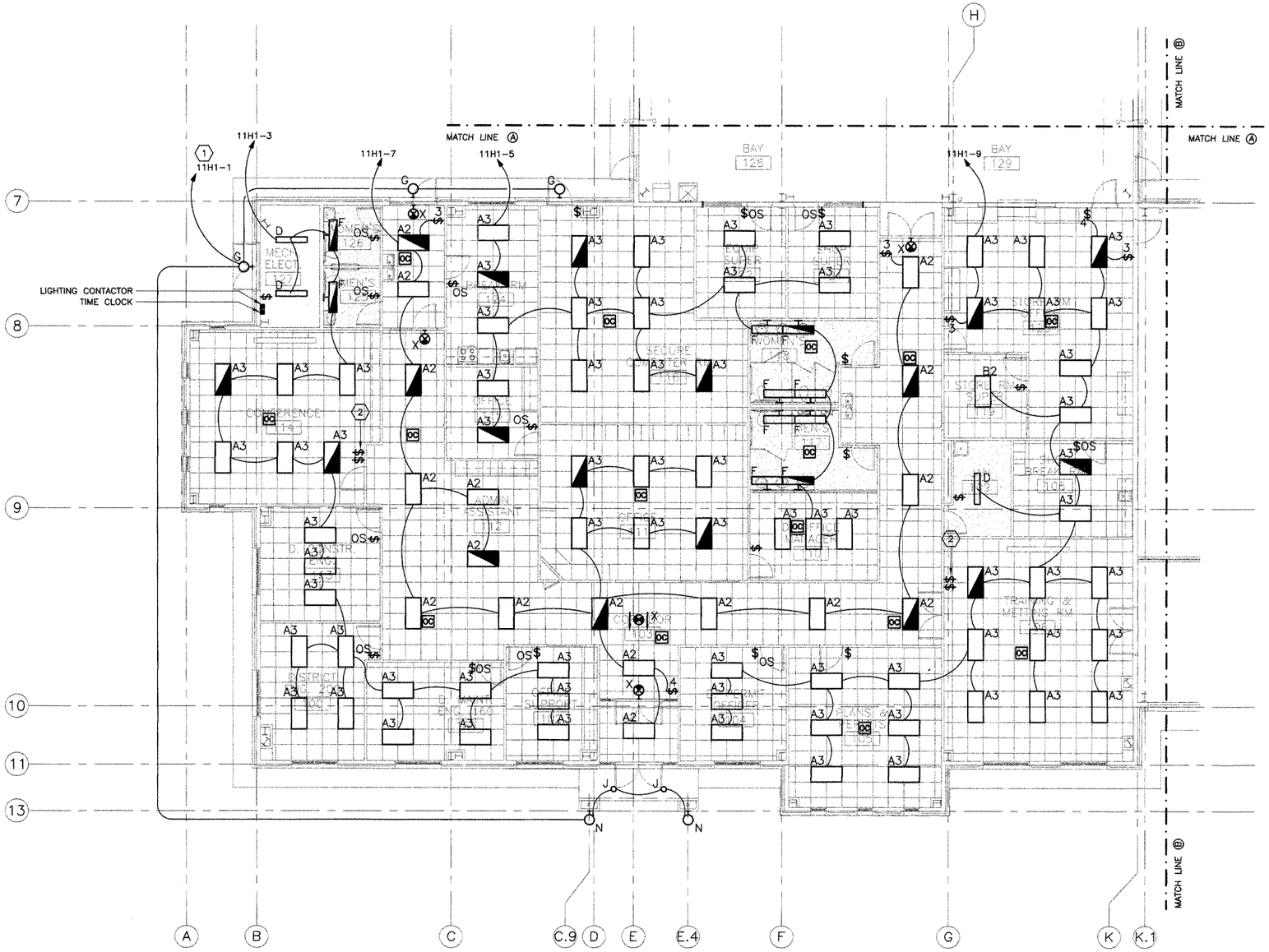
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-100
REV	
186 OF 289	



A ELECTRICAL LIGHTING PLAN
11E-101 SCALE: 1/8"= 1'-0"

NORTH

GENERAL NOTES:

A. REFER TO SHEET 11E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. CONTRACTOR SHALL COORDINATE ALL OCCUPANCY SENSOR TIME-OUT SETTINGS WITH OWNER.

C. ALL LAY-IN FLUORESCENT LIGHTING FIXTURES SHALL BE INSTALLED WITH A 1/2" MC CABLE WHIP DOWN TO EACH FIXTURE. WHIPS SHALL BE MAXIMUM OF 6' LONG.

D. ALL EXIT FIXTURES AND EMERGENCY WALL PACK FIXTURES SHALL BE POWERED FROM AN UNSWITCHED LIGHTING CIRCUIT SEEING THE SAME SPACE.

E. PROVIDE AN UNSWITCHED 'HOT' CONDUCTOR TO ALL FLUORESCENT LIGHTING FIXTURES EQUIPPED WITH AN EMERGENCY BATTERY BACKUP BALLAST.

F. ALL SPACE INDICATED WITH A CEILING MOUNTED OCCUPANCY SENSOR SHALL ALSO BE PROVIDED WITH A WALL MOUNTED MANUAL OVERRIDE SWITCH AS INDICATED.

G. CIRCUITING BETWEEN LIGHTING FIXTURES AND SWITCHES ARE NOT SHOWN FOR CLARITY.

KEY NOTES: (THIS SHEET ONLY)

(1) ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL G/11E-404.

(2) THIS PAIR OF WALL SWITCHES SHALL SERVE AS DUAL LEVEL LIGHTING CONTROL IN THIS SPACE. ONE SWITCH SHALL CONTROL THE INNER FLUORESCENT LAMP AND THE OTHER SHALL CONTROL THE OUTER PAIR OF LAMPS. SWITCHES SHALL WORK IN CONJUNCTION WITH THE OCCUPANCY SENSOR IN THIS SPACE.

KEY PLAN
SCALE: 1/128" = 1'-0"

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL LIGHTING PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-101
REV	
	187 OF 289

SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS
CERTIFICATE OF AUTHORIZATION

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13429
JOSHUA W. KITCH

KEY NOTES: (THIS SHEET ONLY)

1. ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL G/11E-404.
2. PROVIDE A 6-POLE ELECTRICALLY HELD LIGHTING CONTRACTOR (LTC-2) IN NEMA 1 ENCLOSURE AT THIS LOCATION. THIS LIGHTING CONTACTOR SHALL SERVE TYPE 'H' HID LIGHTING FIXTURES IN THIS SPACE AND SHALL BE SWITCHED BY WALL SWITCHES AT EACH OF THE DOORS.
3. ALL TYPE 'L' FLOOD LIGHT FIXTURES ALONG THE EXTERIOR OF THIS BUILDING SHALL BE SWITCHED BY THIS WALL SWITCH.

GENERAL NOTES:

A. REFER TO SHEET 11E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. CONTRACTOR SHALL COORDINATE ALL OCCUPANCY SENSOR TIME-OUT SETTINGS WITH OWNER.

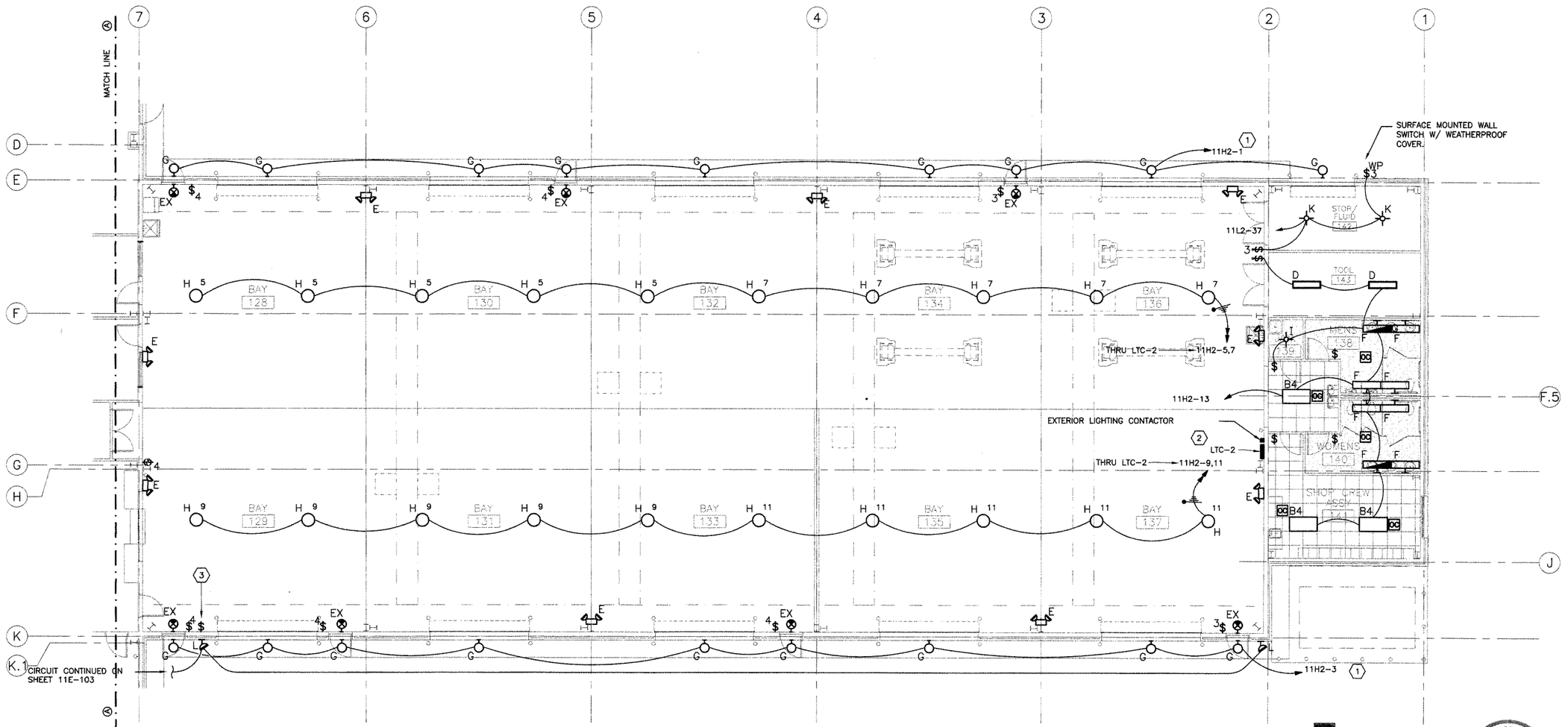
C. ALL LAY-IN FLUORESCENT LIGHTING FIXTURES SHALL BE INSTALLED WITH A 1/2" MC CABLE WHIP DOWN TO EACH FIXTURE. WHIPS SHALL BE MAXIMUM OF 6' LONG.

D. ALL EXIT FIXTURES AND EMERGENCY WALL PACK FIXTURES SHALL BE POWERED FROM AN UNSWITCHED LIGHTING CIRCUIT SEEING THE SAME SPACE.

E. PROVIDE AN UNSWITCHED 'HOT' CONDUCTOR TO ALL FLUORESCENT LIGHTING FIXTURES EQUIPPED WITH AN EMERGENCY BATTERY BACKUP BALLAST.

F. ALL SPACE INDICATED WITH A CEILING MOUNTED OCCUPANCY SENSOR SHALL ALSO BE PROVIDED WITH A WALL MOUNTED MANUAL OVERRIDE SWITCH AS INDICATED.

G. CIRCUITING BETWEEN LIGHTING FIXTURES AND SWITCHES ARE NOT SHOWN FOR CLARITY.



A 11E-102 ELECTRICAL LIGHTING PLAN
SCALE: 1/8"= 1'-0"

NORTH

KEY PLAN
SCALE: 1/128" = 1'-0"

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Lowell, Arkansas
(479) 770-5800
(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL LIGHTING PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-102
REV	
188 OF 209	

SAIC CERTIFICATE OF AUTHORIZATION No. 510 ARKANSAS

ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA W. JOYCE

KEY NOTES: (THIS SHEET ONLY)

1. ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL G/11E-404.
2. PROVIDE A 6-POLE ELECTRICALLY HELD LIGHTING CONTACTOR (LTC-1) IN NEMA 1 ENCLOSURE AT THIS LOCATION. THIS LIGHTING CONTACTOR SHALL SERVE TYPE 'D' LIGHTING FIXTURES IN THIS SPACE AND SHALL BE SWITCHED BY WALL SWITCHES AT EACH OF THE DOORS.
3. THE TYPE 'D' LIGHTING FIXTURES INDICATED IN THE WAREHOUSE SHALL BE 8' TANDEM MOUNTED UNITS WITH 4 EA. 48" T8 LAMPS PER UNIT. ALL UNITS SHALL BE SECURED END-TO-END FOR A CONTINUOUS ROW AS SHOWN.
4. REFER TO KEYED NOTE #3 ON SHEET 11E-102 FOR SWITCHING OF TYPE 'L' FLOOD LIGHT FIXTURES.

GENERAL NOTES:

A. REFER TO SHEET 11E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

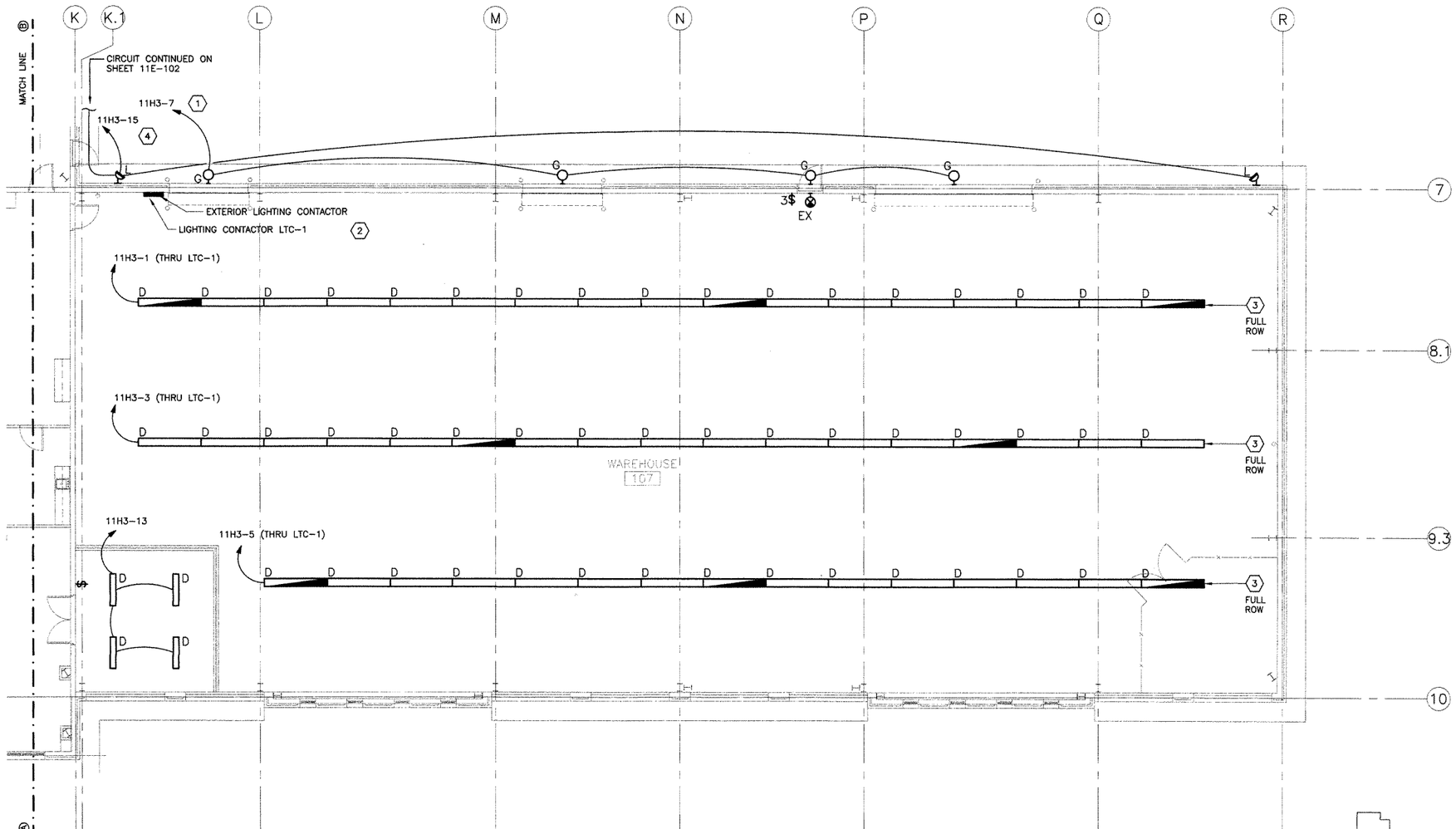
B. CONTRACTOR SHALL COORDINATE ALL OCCUPANCY SENSOR TIME-OUT SETTINGS WITH OWNER.

C. ALL LAY-IN FLUORESCENT LIGHTING FIXTURES SHALL BE INSTALLED WITH A 1/2" MC CABLE WHIP DOWN TO EACH FIXTURE. WHIPS SHALL BE MAXIMUM OF 6' LONG.

D. PROVIDE AN UNSWITCHED 'HOT' CONDUCTOR TO ALL FLUORESCENT LIGHTING FIXTURES EQUIPPED WITH AN EMERGENCY BATTERY BACKUP BALLAST.

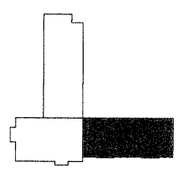
E. ALL SPACE INDICATED WITH A CEILING MOUNTED OCCUPANCY SENSOR SHALL ALSO BE PROVIDED WITH A WALL MOUNTED MANUAL OVERRIDE SWITCH AS INDICATED.

F. CIRCUITING BETWEEN LIGHTING FIXTURES AND SWITCHES ARE NOT SHOWN FOR CLARITY.



A 11E-103 ELECTRICAL LIGHTING PLAN
SCALE: 1/8"= 1'-0"

NORTH



KEY PLAN
SCALE: 1/128" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL LIGHTING PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-103
REV	
	189 OF 289

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA W. JOYCE 10/13/11

GENERAL NOTES: (THIS SHEET ONLY)

A. REFER TO SHEET 11E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. COORDINATE THE EXACT LOCATION OF ELECTRICAL OUTLETS WITH THE COMMUNICATIONS DRAWINGS. RECEPTACLES SHALL BE ADJACENT TO EACH TELEPHONE/DATA OUTLET.

C. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

D. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

E. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

F. PROVIDE 120V POWER TO EACH CCTV CAMERA. REFER TO TELECOM DRAWINGS FOR CAMERA LOCATIONS.

KEY NOTES: (THIS SHEET ONLY)

(1) PROVIDE A 75KVA DRY-TYPE TRANSFORMER SUSPENDED FROM STRUCTURE AS HIGH AS POSSIBLE. REFER TO THE POWER RISER DIAGRAM ON SHEET 11E-403 FOR EQUIPMENT CONNECTION. REFER TO DETAIL F/11E-404 FOR MOUNTING.

(2) AT THIS LOCATION, PROVIDE AN EMERGENCY SHUTDOWN PUSH-BUTTON PER NEC 645.10. PUSH-BUTTON SHALL BE SIMILAR TO SQUARE D TYPE K WITH HINGED PROTECTIVE COVER. PUSHING BUTTON SHALL DISCONNECT POWER FROM BOTH THE UPS AND FROM THE UPS TO SUPPLIED LOADS. BUTTON SHALL ALSO DISCONNECT POWER TO ALL COMPUTER ROOM HVAC UNITS. PROVIDE SHUNT TRIP BREAKERS WITHIN PANEL 11H1 AND 11L1 TO DISCONNECT POWER TO UPS AND HVAC UNITS. THE OWNER WILL PROVIDE THE DISCONNECT MEANS BETWEEN THE UPS AND SUPPLIED LOADS.

(3) EXTEND CIRCUIT TO LOCATION INDICATED. AHTD WILL PROVIDE UPS AND MAKE FINAL ELECTRICAL CONNECTION TO UNIT.

(4) EACH RECEPTACLE IN THE SECURE COMPUTER ROOM SHALL BE CIRCUITED TO A JUNCTION BOX ABOVE THE CEILING. AHTD WILL MAKE THE FINAL CONNECTION TO UPS SYSTEM.

A ELECTRICAL POWER PLAN
11E-104
SCALE: 1/8"= 1'-0"

KEY PLAN
SCALE: 1/128" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL POWER PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-104
REV	
	190 OF 289

SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS
CERTIFICATE OF AUTHORIZATION NOTED

ARKANSAS 13115 REGISTERED PROFESSIONAL ENGINEER JOSHUA W. JOYCE

KEY NOTES: (THIS SHEET ONLY)

1. COORDINATE EXACT LOCATION OF TRUCK LIFT STUB-UP WITH ONWER PROVIDED EQUIPMENT REQUIRMENTS. PROVIDE FLEXIBLE CONNECTION TO EQUIPMENT.
2. PROVIDE A 75KVA DRY-TYPE TRANSFORMER SUSPENDED FROM STRUCTURE AS HIGH AS POSSIBLE. REFER TO THE POWER RISER DIAGRAM ON SHEET 11E-403 FOR EQUIPMENT CONNECTION. REFER TO DETAIL B/11E-404 FOR MOUNTING.
3. HEAVY DUTY 45' CORD REEL SUSPENDED FROM STRUCTURE AT 8'-0" AFF.
4. 400KW DIESEL GENERATOR 480/277V, 3 PHASE, 60HZ, WITH WEATHER HOUSING AND 48 HOUR SUB BASE FUEL TANK.

GENERAL NOTES: (THIS SHEET ONLY)

A. REFER TO SHEET 11E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. COORDINATE THE EXACT LOCATION OF ELECTRICAL OUTLETS WITH THE COMMUNICATIONS DRAWINGS. RECEPTACLES SHALL BE ADJACENT TO EACH TELEPHONE/DATA OUTLET.

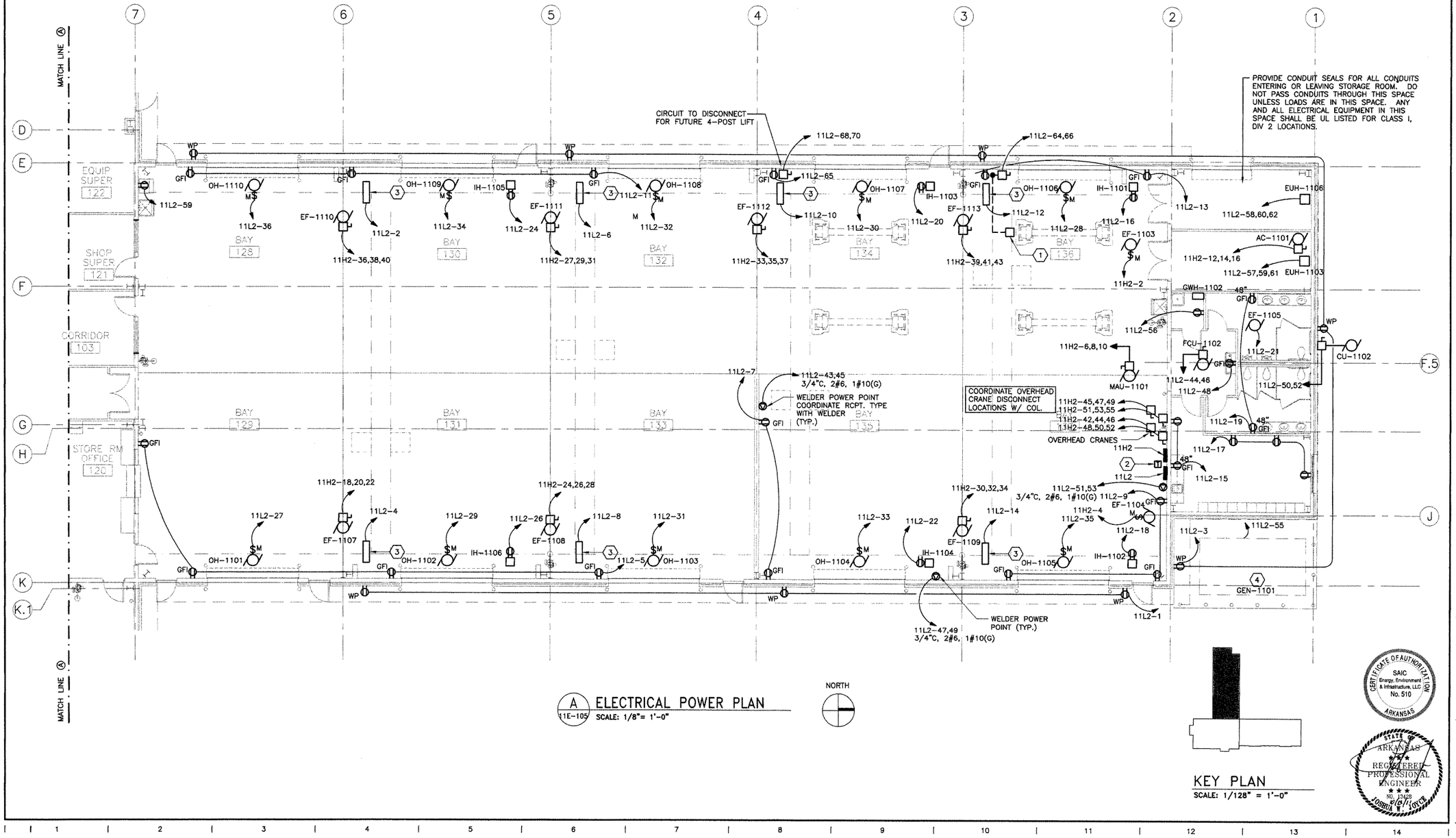
C. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

D. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

E. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

F. PROVIDE 120V POWER TO EACH CCTV CAMERA. REFER TO TELECOM DRAWINGS FOR CAMERA LOCATIONS.

G. ALL RECEPTACLES IN THE WORK BAY AREA SHALL BE MOUNTED AT 48" A.F.F.



A ELECTRICAL POWER PLAN
11E-105 SCALE: 1/8"= 1'-0"

NORTH

KEY PLAN
SCALE: 1/128" = 1'-0"

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA W. JOYCE

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL POWER PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-105
REV	
	191 OF 289

KEY NOTES: (THIS SHEET ONLY)

(1) PROVIDE A 15KVA DRY-TYPE TRANSFORMER SUSPENDED FROM STRUCTURE AS HIGH AS POSSIBLE. REFER TO THE POWER RISER DIAGRAM ON SHEET 11E-403 FOR EQUIPMENT CONNECTION. REFER TO DETAIL F/11E-404 FOR MOUNTING.

GENERAL NOTES: (THIS SHEET ONLY)

A. REFER TO SHEET 11E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

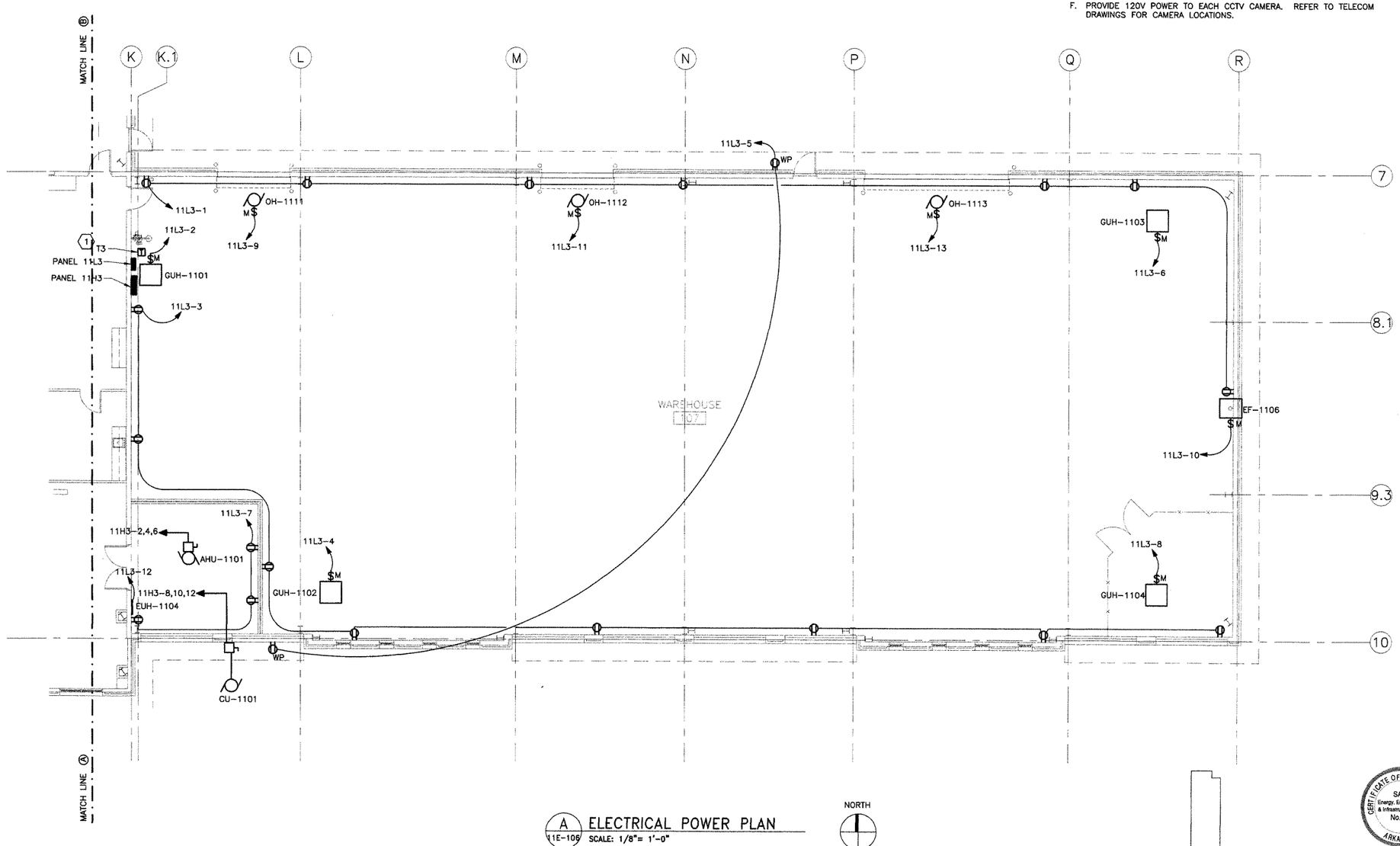
B. COORDINATE THE EXACT LOCATION OF ELECTRICAL OUTLETS WITH THE COMMUNICATIONS DRAWINGS. RECEPTACLES SHALL BE ADJACENT TO EACH TELEPHONE/DATA OUTLET.

C. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

D. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

E. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

F. PROVIDE 120V POWER TO EACH CCTV CAMERA. REFER TO TELECOM DRAWINGS FOR CAMERA LOCATIONS.



A 11E-106 ELECTRICAL POWER PLAN
SCALE: 1/8"= 1'-0"

NORTH

KEY PLAN
SCALE: 1/128" = 1'-0"

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL POWER PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-106
REV	
	192 OF 289

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JOSHUA J. JOYCE NO. 13428

TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	VOLTS	REMARKS / NOTES
A2	LSI	2LLC-G-2-32-RPW-SS010-VOLT	TWO LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	2	32	48" T8	277*	
A3	LSI	2LLC-G-3-32-RPW-SS010-VOLT	THREE LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	3	32	48" T8	277*	
B2	LSI	LA-2-32-SD-SS010-VOLT	TWO LAMP LENSED FLUORESCENT TROFFER	2	32	48" T8	277*	
B4	LSI	LA-4-32-SD-SS010-VOLT	FOUR LAMP LENSED FLUORESCENT TROFFER	4	32	48" T8	277*	
C	LSI	EG-2-32-SS010-VOLT	TWO LAMP ENCLOSED / GASKETED FLUORESCENT	2	32	48" T8	277*	NOTE 8
D	LSI	F22-2-32-SS010-VOLT	TWO LAMP SUSPENDED FLUORESCENT	2	32	48" T8	277*	NOTES 1,3
E	LSI	TEM-WH-SD2	LOW PROFILE 8V EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
EX	LSI	PRX-R-U-WB-WH-WH-PR50	COMBINATION EXIT / EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
F	LSI	W44-4-2-32-SS010-UE	TWO LAMP WALL MOUNT LINEAR FLUORESCENT	2	32	48" T8	277*	NOTE 2
G	LSI	PTWS-FT-150-MH-F-VOLT-BRZ	EXTERIOR HID WALL SCONCE	1	150	150W MH	277*	NOTES 2,8
H	LSI	IHB-400-MH-MT-IAC22-PM	PENDANT MOUNT HID HIGHBAY FIXTURE	1	400	400W MH	277*	NOTES 1,4,5
I	WF HARRIS	50S-D-26PLC-VOLT	ONE LAMP COMPACT FLUORESCENT	1	26	26W PLC	277*	
J	LSI	208V-CFL-1-42T-UNIV	8" RECESSED DOWNLIGHT	1	42	42W CFT	277*	NOTE 9
K	LPDI	383-C-75-G	EXPLOSION PROOF INCANDESCENT (CEILING MOUNT)	1	60	60W A19	120*	NOTES 10,11
L	LSI	DRM2-MF-400-PSMUR-F-TT-BRZ	HID FLOOD LIGHT W/ VERTICAL WALL MOUNT BRACKET	1	400	400W MH	277*	NOTES 2,8
M	LSI	SOV-RD-175-MH-73-VOLT	LENSED HID	1	175	175W MH	277*	NOTES 9'12
N	ESCO LIGHTING	W26000 SERIES	10" UP/DOWN WALL MOUNT CYLINDER (BRONZE)	2	150	150W MH	277*	
O	SPAULDING	RCL-A-P75-H3P	POLE MOUNTED SITE LIGHT, TYPE III DISTRIBUTION	1	750	750W MH	480*	NOTES 14,15
P	LSI	CHA2-400-PSMV-MT-A25-LMC	PENDANT MOUNT HID LOWBAY FIXTURE	1	400	400W MH	277*	NOTES 5,9
X	LSI	EXC-R- -U-WB-WW-SD2	CAST ALUMINUM LED EXIT SIGN	-	4	-	277*	NOTES 6,7

FIXTURES INDICATED WITHIN THIS LIGHTING FIXTURE SCHEDULE INCLUDE ALL BUILDING AND SITE LIGHTING WITHIN THE AHTD D4 HEADQUARTERS COMPLEX. NOT ALL FIXTURES ARE USED AT EACH BUILDING.

*PROVIDE VOLTAGE INDICATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE LIGHTING PLAN.

NOTES:
1. PROVIDE WIRE GUARD
2. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
3. SUSPEND FIXTURE AT 10'–0" A.F.F.
4. SUSPEND FIXTURE AT 19'–0" A.F.F.
5. PROVIDE TWIST–LOCK TYPE CONNECTOR AT EACH FIXTURE.
6. PROVIDE ARROWS WHERE INDICATED.
7. POWER FIXTURES FROM UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.
8. U.L. LISTED FOR WET LOCATIONS.
9. U.L. LISTED FOR DAMP LOCATIONS.
10. U.L. LISTED EXPLOSION PROOF (CLASS I, DIV I).
11. PROVIDE WITH EXTRA LONG LIFE INCANDESCENT LAMP.
12. TRIM FINISH SHALL MATCH SURROUNDING AREA.
13. PROVIDE EMERGENCY QUARTZ LIGHTING KIT.
14. POLE MOUNTED AT 34'–0" A.F.G.
15. PROVIDE OPTIONAL ADJUSTABLE MOUNTING ARM.

Panel "11H1" — 277 Volts L-N 3Ø, 4W; 480 Volts L-L; 25,000 AIC BRANCH BRKRS; 600A3P MAIN LUGS ONLY; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: I - LINE; NEMA 1 ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
LGTS - OFFICE, EXTERIOR	1	1412	20/1			64834	2	
LGTS - OFFICE, WEST	3	2394	20/1		250/3	64528	4	PANEL 11H2
LGTS - OFFICE, CENTRAL	5	2570	20/1			58358	6	
LGTS - OFFICE, CORRIDOR	7	3028	20/1			17045	8	
LGTS - OFFICE, EAST	9	2992	20/1		100/3	18826	10	PANEL 11H3
VAV-1101	11	2000	20/1			16550	12	
VAV-1102	13	1000	20/1			11052	14	
VAV-1103	15	1500	20/1		50/3	11052	16	COMPUTER ROOM HVAC
VAV-1104	17	1000	20/1			11052	18	
VAV-1105	19	2500	20/1			11052	20	
VAV-1106	21	3000	20/1		50/3	11052	22	COMPUTER ROOM HVAC
VAV-1107	23	1000	20/1			11052	24	
VAV-1108	25	3000	20/1			0	26	
VAV-1109	27	3000	20/1			0	28	SPACE
VAV-1110	29	1000	20/1			0	30	
VAV-1111	31	3000	20/1			0	32	
LGTS - SITE	33	2063	20/2		30/3	0	34	TVSS
	35	2063				0	36	
MIN. 9" SPACE	37	0				16949	38	
	39	0			125/3	21453	40	TRANSFORMER T1 (75KVA)
	41	0				19997	42	
PANEL SHALL BE SIZED FOR A MINIMUM	Totals	AØ	BØ	CØ	Totals			
9" ADDITIONAL SPACE ON EACH SIDE OF	VA	134 872	141 860	126 642	VA			
BUSSING FOR FUTURE PANEL LOADS.	AMPS	486.9	512.1	457.2	AMPS			

Panel "11H2" — 277 Volts L-N 3Ø, 4W; 480 Volts L-L; 18,000 AIC BRANCH BRKRS; 400A3P MAIN LUGS ONLY; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: I - LINE; NEMA 1 ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
LGTS - SHOP, EXTERIOR	1	1320	20/1		20/1	2900	2	EF-1103
LGTS - SHOP, EXTERIOR	3	1485	20/1		20/1	2900	4	EF-1104
LGTS - SHOP, BAYS 128 - 132	5	2200	20/1			3878	6	
LGTS - SHOP, BAYS 132 - 136	7	2200	20/1		25/3	3878	8	MAU-1101
LGTS - SHOP, BAYS 129 - 133	9	2200	20/1			3878	10	
LGTS - SHOP, BAYS 133 - 137	11	2200	20/1			5817	12	
LGTS - SHOP, NORTH	13	1447	20/1		40/3	5817	14	AC-1101
SPARE	15	0	20/1			5817	16	
SPARE	17	0	20/1			797	18	
LGTS - SITE	19	3300	20/2		15/3	797	20	EF-1107
	21	3300				797	22	
LGTS - SITE	23	2063	20/2			797	24	
	25	2063			15/3	797	26	EF-1108
EF-1111	27	797				797	28	
	29	797	15/3			797	30	
	31	797			15/3	797	32	EF-1109
EF-1112	33	797				797	34	
	35	797	15/3			797	36	
	37	797			15/3	797	38	EF-1110
EF-1113	39	797				797	40	
	41	797	15/3			3213	42	
	43	797			50/3	3213	44	OVERHEAD CRANE (3 TON)
OVERHEAD CRANE (5 TON)	45	3213				3213	46	
	47	3213	50/3			3213	48	
	49	3213			50/3	3213	50	OVERHEAD CRANE (3 TON)
OVERHEAD CRANE (5 TON)	51	3213				3213	52	
	53	3213	50/3			0	54	SPACE
	55	3213				23478	56	
SPACE	57	0			125/3	26517	58	TRANSFORMER T2 (75KVA)
	59	0				23789	60	
PANEL SHALL BE SIZED FOR A MINIMUM	Totals	AØ	BØ	CØ	Totals			
9" ADDITIONAL SPACE ON EACH SIDE OF	VA	64 834	64 528	58 358	VA			
BUSSING FOR FUTURE PANEL LOADS.	AMPS	234.1	233.0	210.7	AMPS			

Panel "11H3" — 277 Volts L-N 3Ø, 4W; 480 Volts L-L; 18,000 AIC BRANCH BRKRS; 125A3P MAIN LUGS ONLY; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: NF; NEMA 1 ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
LGTS - WAREHOUSE, NORTH	1	2430	20/1			1662	2	
LGTS - WAREHOUSE, CENTER	3	2400	20/1		15/3	1662	4	AHU-1101
LGTS - WAREHOUSE, SOUTH	5	2112	20/1			1662	6	
LGTS - WAREHOUSE, EXTERIOR	7	990	20/1			7526	8	
LGTS - SITE	9	1650	20/2		45/3	7526	10	CU-1101
	11	1650				7526	12	
LGTS - STORAGE	13	285	20/1		20/1	0	14	SPARE
LGTS - FLOOD	15	1760	20/1		20/1	0	16	SPARE
SPACE	17	0				0	18	SPACE
SPACE	19	0				0	20	SPACE
SPACE	21	0				0	22	SPACE
SPACE	23	0				0	24	SPACE
SPACE	25	0				4152	26	
SPACE	27	0			25/3	3828	28	TRANSFORMER T3 (15KVA)
SPACE	29	0				3600	30	
PANEL SHALL BE SIZED FOR A MINIMUM	Totals	AØ	BØ	CØ	Totals			
9" ADDITIONAL SPACE ON EACH SIDE OF	VA	17 045	18 826	16 550	VA			
BUSSING FOR FUTURE PANEL LOADS.	AMPS	61.5	68.0	59.7	AMPS			

Panel "11L1" SECTION 1 — 120 Volts L-N 3Ø, 4W; 208 Volts L-L; 10,000 AIC BRANCH BRKRS; 250A3P MAIN BREAKER; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: NQOD; NEMA 1 ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
RCPT - EXTERIOR (3)	1	540	20/1		20/1	720	2	RCPT - OFFICE 122 (4)
RCPT - CONFERENCE 114 (8)	3	1440	20/1		20/1	720	4	RCPT - OFFICE 121 (4)
RCPT - OFFICE 113 (4)	5	720	20/1		20/1	360	6	RCPT - RR 117 & 118 (2)
RCPT - OFFICE 100 (4)	7	720	20/1		20/1	900	8	RCPT - STORE RM 120 (5)
RCPT - OFFICE 101 (4)	9	720	20/1		20/1	720	10	RCPT - OFFICE 119 (4)
RCPT - OFFICE 102 (3)	11	540	20/1		20/1	360	12	RCPT - BREAK 108 & 109 (2)
RCPT - OFFICE 104 (4)	13	720	20/1		20/1	900	14	RCPT - OFFICE 105 (5)
RCPT - MECH 127 (1)	15	180	20/1		20/1	900	16	RCPT - TRAINING 106 (5)
RCPT - RR 125 & 126 (2)	17	360	20/1		20/1	1000	18	RCPT - TRAINING PROJECTOR (1)
RCPT - BREAK 124 (3)	19	540	20/1		20/1	1000	20	RCPT - CONFERENCE PROJ (1)
RCPT - OFFICE 115 & 112 (6)	21	1080	20/1		20/1	1000	22	RCPT - VENDING
RCPT - OFFICE 111 (5)	23	900	20/1		20/1	1000	24	RCPT - VENDING
RCPT - OFFICE 110 (4)	25	720	20/1		20/1	360	26	RCPT - BREAK 108 (2)
RCPT - CORRIDOR (4)	27	720	20/1		20/1	200	28	PROJECTOR SCREEN
DISHWASHER	29	1200	20/1		20/1	0	30	SPARE
RCPT - BREAK 124 COUNTER (1)	31	180	20/1		20/1	0	32	SPARE
REFRIGERATOR	33	1200	20/1		20/1	0	34	SPARE
MICROHOOD	35	1500	20/1		20/1	0	36	SPARE
TIME CLOCK / LGT CONTACTOR	37	0	20/1			6666	38	
RANGE	39	3211	40/2		140/3	6666	40	UPS-1101
	41	3211				6666	42	
PROVIDE IDENTIFIED HANDLE TIES FOR	Totals	AØ	BØ	CØ	Totals			
ALL MULTIWIRE BRANCH CIRCUITS PER	VA	13 966	16 757	17 817	VA			
NEC 210.4	AMPS	116.4	156.3	148.5	AMPS			

Panel "11L1" SECTION 2 — 120 Volts L-N 3Ø, 4W; 208 Volts L-L; 10,000 AIC BRANCH BRKRS; 400A3P MAIN LUGS ONLY; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: NQOD; NEMA 1 ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
EWC-1101	43	575	20/1		20/1	48	44	EF-1101
EWC-1102	45	575	20/1		20/1	405	46	EF-1102
EUH-1101	47	1000	20/2		20/2	1000	48	EUH-1102
	49	1000				1000	50	
GWH-1101	51	360	20/1		20/1	996	52	EUH-1105
MEDIA TV	53	180	20/1		20/1	0	54	SPARE
RCPT DESK	55	360	20/1		20/1	0	56	SPARE
RCPT DESK	57	360	20/1		20/1	0	58	SPARE
SPARE	59	0	20/1		20/1	0	60	SPARE
SPARE	61	0	20/1		20/1	0	62	SPARE
SPARE	63	0	20/1		20/1	0	64	SPARE
SPARE	65	0	20/1		20/1	0	66	SPARE
SPARE	67	0	20/1		20/1	0	68	SPARE
SPARE	69	0	20/1		20/1	0	70	SPARE
SPARE	71	0	20/1			0	72	SPACE
SPACE	73	0				0	74	SPACE
SPACE	75	0				0	76	SPACE
SPACE	77	0				0	78	SPACE
SPACE	79	0				0	80	
SPACE	81	0			30/3	0	82	TVSS
SPACE	83	0				0	84	
PROVIDE IDENTIFIED HANDLE TIES FOR	Totals	AØ	BØ	CØ	Totals			
ALL MULTIWIRE BRANCH CIRCUITS PER	VA	2 983	2 696	2 180	VA			
NEC 210.4	AMPS	24.9	22.5	18.2	AMPS			

SAIC
From Science to Solutions
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL SCHEDULES

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	BRC
APPROVED BY	BRC
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E–401
REV	

193 OF 289

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC — No. 510 — ARKANSAS

ARKANSAS — 13111 02 — REGISTERED PROFESSIONAL ENGINEER — No. 13111 — JOSHUA W. JAYCOX — 10/13/11

Panel "11L2" SECTION 1	120 Volts L-N 3Ø, 4W 208 Volts L-L 10,000 AIC BRANCH BRKRS			Phase AØ BØ CØ	250A3P MAIN BREAKER COPPER BUS EQUIP. GROUNDING BAR			TYPE: NQOD NEMA 1 ENCLOSURE SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.		Brkr.	Conn. Load	Ckt. No.	Service
RCPT - EXTERIOR (3)	1	540	20/1		20/1	360	2	RCPT - CORD REEL
RCPT - EXTERIOR (5)	3	900	20/1		20/1	360	4	RCPT - CORD REEL
RCPT - SHOP (4)	5	720	20/1		20/1	360	6	RCPT - CORD REEL
RCPT - SHOP (2)	7	360	20/1		20/1	360	8	RCPT - CORD REEL
RCPT - SHOP (3)	9	540	20/1		20/1	360	10	RCPT - CORD REEL
RCPT - SHOP (4)	11	720	20/1		20/1	360	12	RCPT - CORD REEL
RCPT - SHOP (4)	13	720	20/1		20/1	360	14	RCPT - CORD REEL
RCPT - BREAK RM (2)	15	360	20/1		20/1	160	16	IH-1101
RCPT - RREAK RM (3)	17	540	20/1		20/1	160	18	IH-1102
RCPT - RR (2)	19	360	20/1		20/1	160	20	IH-1103
EF-1105	21	83	20/1		20/1	160	22	IH-1104
SPARE	23	0	20/1		20/1	160	24	IH-1105
SPARE	25	0	20/1		20/1	160	26	IH-1106
OH-1101	27	1128	20/1		20/1	1128	28	OH-1106
OH-1102	29	1128	20/1		20/1	1128	30	OH-1107
OH-1103	31	1128	20/1		20/1	1128	32	OH-1108
OH-1104	33	1128	20/1		20/1	1128	34	OH-1109
OH-1105	35	1128	20/1		20/1	1128	36	OH-1110
LGTS - STORAGE	37	120	20/1		20/1	0	38	SPARE
SPARE	39	0	20/1		20/1	0	40	SPARE
SPARE	41	0	20/1		20/1	0	42	SPARE
PROVIDE IDENTIFIED HANDLE TIES FOR	Totals	AØ		BØ	CØ	Totals		
ALL MULTIWIRE BRANCH CIRCUITS PER	VA	5 756		7 435	7 532	VA		
NEC 210.4	AMPS	48.0		62.0	62.8	AMPS		

Panel "11L2" SECTION 2	120 Volts L-N 3Ø, 4W 208 Volts L-L 10,000 AIC BRANCH BRKRS			Phase AØ BØ CØ	400A3P MAIN LUGS ONLY COPPER BUS EQUIP. GROUNDING BAR			TYPE: NQOD NEMA 1 ENCLOSURE SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.		Brkr.	Conn. Load	Ckt. No.	Service
WELDER RCPT	43	4200	50/2		25/2	2400	44	FCU-1102
	45	4200				2400	46	
WELDER RCPT	47	4200	50/2		20/1	575	48	EWC
	49	4200			15/2	950	50	CU-1102
WELDER RCPT	51	4200	50/2			950	52	
	53	4200			20/1	2000	54	EUH-1105
GENERATOR	55	500	20/1		20/1	360	56	GWH-1102
EUH-1103	57	1836	25/3		25/3	1836	58	EUH-1106
	59	1836				1836	60	
	61	1836				1836	62	
RCPT - ICE MAKER	63	780	20/1		20/2	1440	64	4-POST LIFT
RCPT - PORTABLE LIFT	65	150	20/1			1440	66	
SPARE	67	0	20/1		20/2	1440	68	4-POST LIFT
SPARE	69	0	20/1			1440	70	
SPARE	71	0	20/1		20/1	0	72	SPARE
SPARE	73	0	20/1		20/1	0	74	SPARE
SPARE	75	0	20/1		20/1	0	76	SPARE
SPACE	77	0				0	78	SPACE
SPACE	79	0				0	80	SPACE
SPACE	81	0				0	82	SPACE
SPACE	83	0				0	84	SPACE
PROVIDE IDENTIFIED HANDLE TIES FOR	Totals	AØ		BØ	CØ	Totals		
ALL MULTIWIRE BRANCH CIRCUITS PER	VA	17 722		19 082	16 237	VA		
NEC 210.4	AMPS	147.7		159.0	135.3	AMPS		

Panel "11L3"	120 Volts L-N 3Ø, 4W 208 Volts L-L 10,000 AIC BRANCH BRKRS			Phase AØ BØ CØ	50A3P MAIN BREAKER COPPER BUS EQUIP. GROUNDING BAR			TYPE: NQOD NEMA 1 ENCLOSURE SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.		Brkr.	Conn. Load	Ckt. No.	Service
RCPT - WAREHOUSE (7)	1	1260	20/1		20/1	612	2	GUH-1101
RCPT - WAREHOUSE (7)	3	1260	20/1		20/1	612	4	GUH-1102
RCPT - EXTERIOR (2)	5	360	20/1		20/1	612	6	GUH-1103
RCPT - STORAGE (3)	7	540	20/1		20/1	612	8	GUH-1104
OH-1111	9	1128	20/1		20/1	828	10	EF-1106
OH-1112	11	1128	20/1		20/1	1500	12	EUH-1104
OH-1113	13	1128	20/1		20/1	0	14	SPARE
SPARE	15	0	20/1		20/1	0	16	SPARE
SPARE	17	0	20/1		20/1	0	18	SPARE
SPARE	19	0	20/1		20/1	0	20	SPARE
SPARE	21	0	20/1		20/1	0	22	SPARE
SPARE	23	0	20/1		20/1	0	24	SPARE
SPARE	25	0	20/1		20/1	0	26	SPARE
SPARE	27	0	20/1		20/1	0	28	SPARE
SPARE	29	0	20/1		20/1	0	30	SPARE
SPACE	31	0				0	32	SPACE
SPACE	33	0				0	34	SPACE
SPACE	35	0				0	36	SPACE
SPACE	37	0				0	38	SPACE
SPACE	39	0				0	40	SPACE
SPACE	41	0				0	42	SPACE
PROVIDE IDENTIFIED HANDLE TIES FOR	Totals	AØ		BØ	CØ	Totals		
ALL MULTIWIRE BRANCH CIRCUITS PER	VA	4 152		3 828	3 600	VA		
NEC 210.4	AMPS	34.6		31.9	30.0	AMPS		

BUILDING 11 - EQUIPMENT SCHEDULE

EQUIPMENT	DESCRIPTION	VOLTAGE	PHASE	AMPS	CONDUIT	WIRE SIZE	DISCONNECT ENCLOSURE	DISCONNECT SIZE	DISCONNECT FUSING	NOTES
FCU-1102	FAN COIL UNIT	208	1	20	3/4"	2#10, 1#10(G)	NEMA 1	30A/2P	NON-FUSIBLE	
CU-1101	CONDENSER UNIT	480	3	28	3/4"	3#8, 1#10(G)	NEMA 3R	30A/3P	NON-FUSIBLE	
CU-1102	CONDENSER UNIT	208	1	8	3/4"	2#12, 1#12(G)	NEMA 3R	30A/2P	NON-FUSIBLE	
MAU-1101	MAKE-UP AIR UNIT	480	3	14	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
AHU-1101	AIR HANDLER UNIT	480	3	6	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EF-1101	EXHAUST FAN	120	1	0.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
EF-1102	EXHAUST FAN	120	1	3.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
EF-1103	EXHAUST FAN	277	1	10.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
EF-1104	EXHAUST FAN	277	1	10.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
EF-1105	EXHAUST FAN	120	1	0.7	3/4"	1#12, 1#12(N), 1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 2
EF-1106	EXHAUST FAN	120	1	7.2	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
EF-1107	EXHAUST FAN	480	3	3	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EF-1108	EXHAUST FAN	480	3	3	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EF-1109	EXHAUST FAN	480	3	3	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EF-1110	EXHAUST FAN	480	3	3	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EF-1111	EXHAUST FAN	480	3	3	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EF-1112	EXHAUST FAN	480	3	3	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EF-1113	EXHAUST FAN	480	3	3	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	
EUH-1101	UNIT HEATER	208	1	8.3	3/4"	2#12, 1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 2
EUH-1102	UNIT HEATER	208	1	8.3	3/4"	2#12, 1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 2
EUH-1103	UNIT HEATER	208	3	15.3	3/4"	3#10, 1#10(G)	BRANCH CIRCUIT BREAKER			NOTE 2
EUH-1104	UNIT HEATER	120	1	12.5	3/4"	1#12, 1#12(N), 1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 2
EUH-1105	UNIT HEATER	120	1	12.5	3/4"	1#12, 1#12(N), 1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 2
EUH-1106	UNIT HEATER	208	3	15.3	3/4"	3#12, 1#12(G)	BRANCH CIRCUIT BREAKER			NOTE 2
VAV-1101	VAV TERMINAL UNIT	277	1	7.2	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1102	VAV TERMINAL UNIT	277	1	3.6	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1103	VAV TERMINAL UNIT	277	1	5.4	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1104	VAV TERMINAL UNIT	277	1	3.6	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1105	VAV TERMINAL UNIT	277	1	9	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1106	VAV TERMINAL UNIT	277	1	10.8	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1107	VAV TERMINAL UNIT	277	1	3.6	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1108	VAV TERMINAL UNIT	277	1	10.8	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1109	VAV TERMINAL UNIT	277	1	10.8	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1110	VAV TERMINAL UNIT	277	1	3.6	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
VAV-1111	VAV TERMINAL UNIT	277	1	10.8	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
IH-1101	INFRARED HEATER	120	1	1.3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
IH-1102	INFRARED HEATER	120	1	1.3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
IH-1103	INFRARED HEATER	120	1	1.3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
IH-1104	INFRARED HEATER	120	1	1.3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
IH-1105	INFRARED HEATER	120	1	1.3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
IH-1108	INFRARED HEATER	120	1	1.3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
GUH-1101	GAS UNIT HEATER	120	1	5.1	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
GUH-1102	GAS UNIT HEATER	120	1	5.1	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
GUH-1103	GAS UNIT HEATER	120	1	5.1	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
GUH-1104	GAS UNIT HEATER	120	1	5.1	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
EWC-1101	WATER COOLER	120	1	4.7	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
EWC-1102	WATER COOLER	120	1	4.7	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
EWC-1103	WATER COOLER	120	1	4.7	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
GWH-1101	WATER HEATER	120	1	3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			NOTE 4
GWH-1102	WATER HEATER	120	1	3	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			NOTE 4
AC-1101	AIR COMPRESSOR	480	3	21	3/4"	3#10, 1#10(G)	NEMA 1	30A/3P	NON-FUSIBLE	
P-1101	RECIRC PUMP	120	1	1	3/4"	1#12, 1#12(N), 1#12(G)	BRANCH CIRCUIT BREAKER			
P-1102	RECIRC PUMP	120	1	1	3/4"	1#12, 1#12(N), 1#12(G)	BRANCH CIRCUIT BREAKER			
RANGE		208	1	26.8	3/4"	1#8, 1#8(N), 1#8(G)	RECEPTACLE			
MIRCOHOOD		120	1	12.5	3/4"	1#12, 1#12(N), 1#12(G)	BRANCH CIRCUIT BREAKER			
TRUCK LIFT		208	1	12	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
TRUCK LIFT		208	1	12	3/4"	1#12, 1#12(N), 1#12(G)	NEMA 1	30A/2P	NON-FUSIBLE	
UPS-1101	BATTERY BACKUP	208	3	111	2"	3#1/0, 1#6(G)	-	-	-	NOTE 1
OH-1101	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1102	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1103	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1104	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1105	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1106	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1107	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1108	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1109	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1110	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1111	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1112	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
OH-1113	OVERHEAD DOOR	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED SWITCH			
	OVERHEAD CRANE	480	3	12	1"	3#6, 1#10(G)	NEMA 1	60A/3P	NON-FUSIBLE	NOTE 3
	OVERHEAD CRANE	480	3	12	1"	3#6, 1#10(G)	NEMA 1	60A/3P	NON-FUSIBLE	NOTE 3
	OVERHEAD CRANE	480	3	12	1"	3#6, 1#10(G)	NEMA 1	60A/3P	NON-FUSIBLE	NOTE 3
	OVERHEAD CRANE	480	3	12	1"	3#6, 1#10(G)	NEMA 1	60A/3P	NON-FUSIBLE	NOTE 3

NOTES:
1. OWNER PROVIDED, OWNER INSTALLED.
2. PROVIDE APPROVED CIRCUIT BREAKER HANDLE LOCKOUT.
3. COORDINATE BREAKER / CIRCUIT SIZE WITH EQUIPMENT PROVIDED.
4. POWER ASSOCIATED RECIRC PUMP FROM THE SAME BRANCH CIRCUIT. REFER TO PLUMBING PLANS FOR PUMP LOCATION.

TVSS SCHEDULE

PANEL	PANEL SIZE	VOLTAGE	PROTECTION MODES (KA) L-N	L-G	L-L	N-G	UL SUPPRESSION VOLATGE RATING L-N	L-G	N-G	L-L	MCOV	MODULAR/ NON-MODULAR	NOTES
11H1	600A	480Y/277V 3Ø4W	120	120	240	120	800V	800V	800V	1500V	320V	MODULAR	NOTE 1
11L1	400A	208Y/120V 3Ø4W	80	60	120	60	400V	400V	400V	800V	150V	MODULAR	NOTE 1

NOTES:
1. INTEGRAL SURGE COUNTER.

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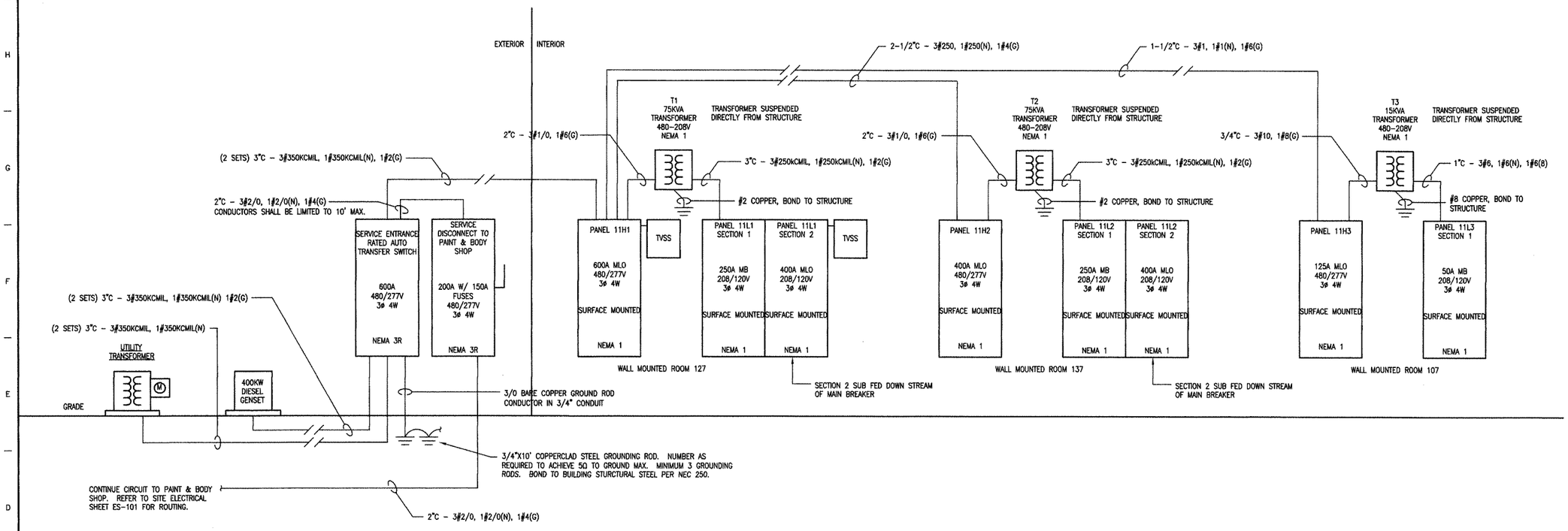
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL SCHEDULES

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 13428 JOSHUA W. JOYCE 10/13/11

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-402
REV	
	194 OF 289



1 (11E-402) POWER RISER DIAGRAM
SCALE: NTS

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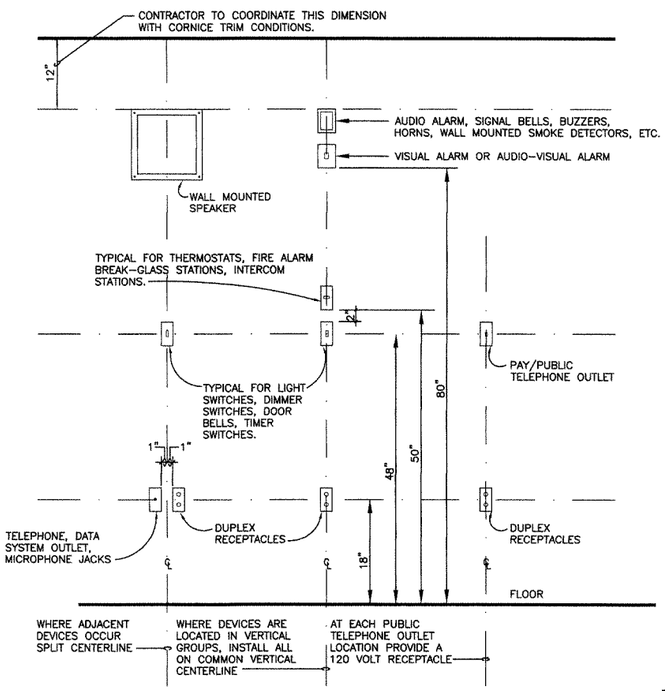
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL ONE-LINE DIAGRAM

DESIGNED BY	JBB
DRAWN BY	JBB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11E-403
REV	
	195 OF 289

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 13428
10/13/11
JOSHUA B. TAYLOR

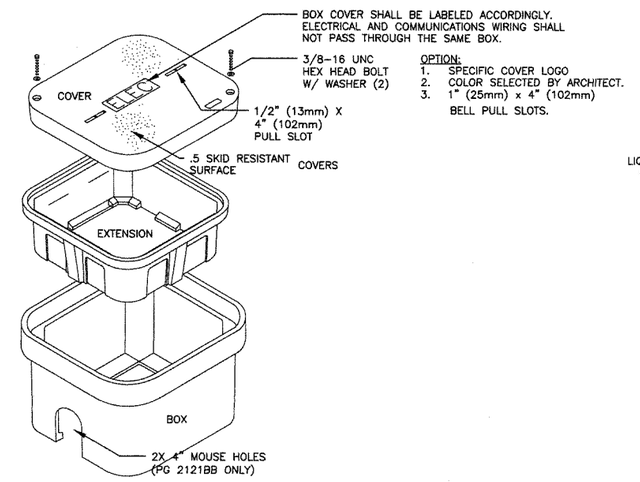


NOTE: SPECIFIC DIMENSIONS INDICATED ON PLANS SUPERCEDE THE ABOVE.

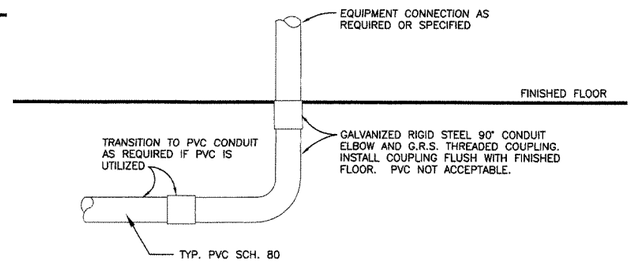
A TYPICAL OUTLET & DEVICE DIMENSIONS
11E-403 SCALE: NTS

PANEL IDENTIFICATION NOTES:
1. SIMILAR FOR DISCONNECTS, MOTOR CONTROLLERS, TRANSFORMERS, LIGHTING CONTROL PANEL, AUTOMATIC TRANSFER SWITCHES, ETC.

B PANEL IDENTIFICATION DETAIL
11E-403 SCALE: NTS

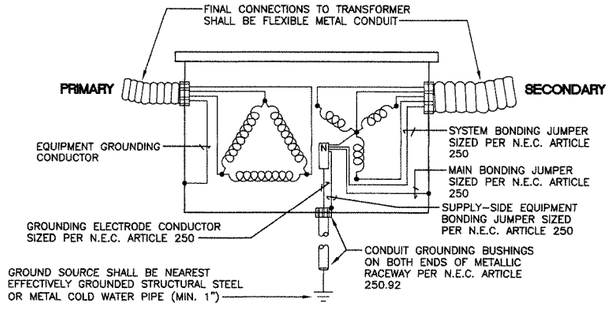


C IN-GRADE PULLBOX DETAIL
11E-403 SCALE: NTS

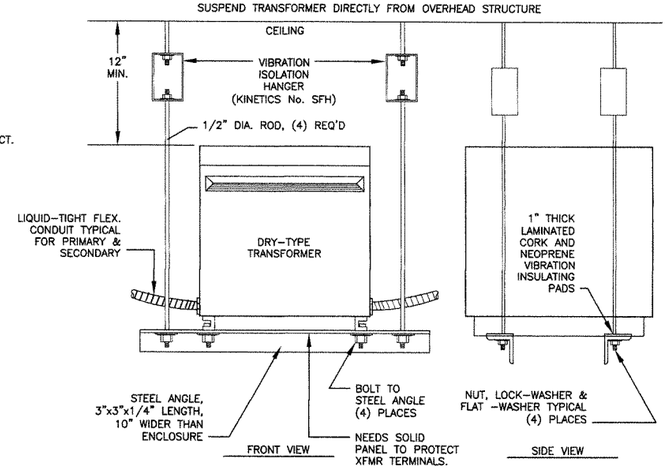


NOTE: UNLESS NOTED OTHERWISE, THIS DETAIL SHALL BE USED, WITH NO EXCEPTIONS, FOR ALL CONDUIT PENETRATIONS IN OPEN FLOOR AREAS OR IN MOVABLE WALLS.

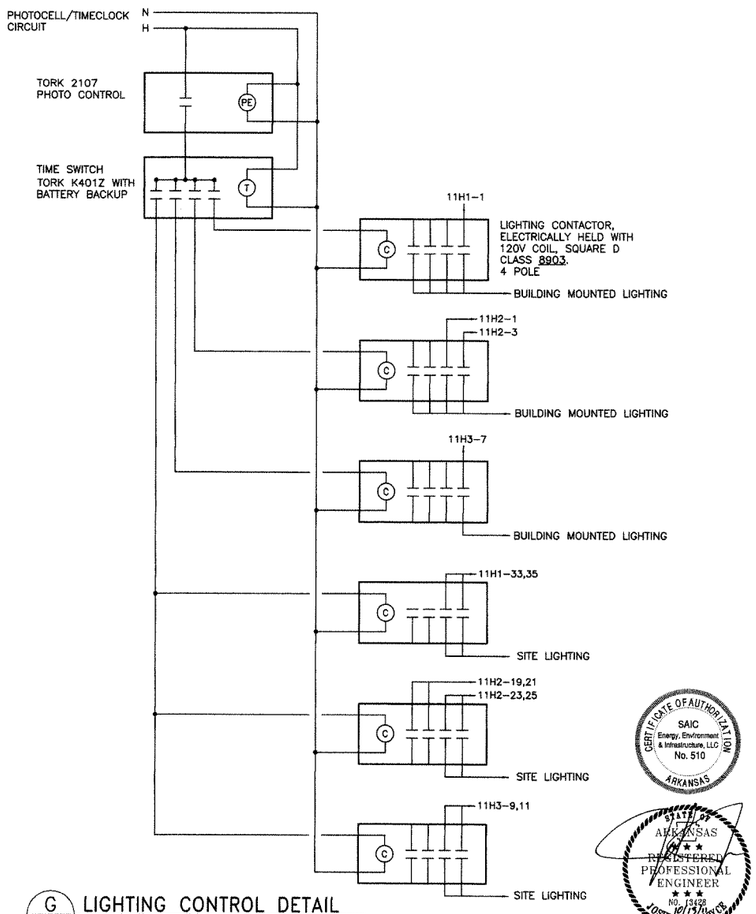
D TYPICAL STUB-UP DETAIL
11E-403 SCALE: NTS



E TYPICAL DRY-TYPE TRANSFORMER DETAIL
11E-403 SCALE: NTS



F TYPICAL DRY-TYPE XFMR MOUNTING DETAIL
11E-403 SCALE: NTS



G LIGHTING CONTROL DETAIL
11E-403 SCALE: NTS

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 13428 JOSHUA W. LOVE 10/13/2011

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
ELECTRICAL DETAILS

DESIGNED BY	JWJ
DRAWN BY	JBB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
11E-404	
196 OF 289	

TELECOMMUNICATIONS SYMBOLS

COMMUNICATIONS SYMBOLS

- W — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS ON WALL PHONE FACEPLATE
- WP — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR OUTSIDE WALL PHONE IN WEATHERPROOF ENCLOSURE
- A — ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR
- B — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR DATA (LAN)
- C — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS – ONE (1) CABLE FOR DATA (LAN) AND ONE (1) CABLE FOR RADIO.
- D — FOUR (4) CATEGORY 6 CABLES ON 8P/8C CONNECTORS
- DENOTES CEILING MOUNTED OUTLET
- DENOTES FLOOR BOX OR POKE THROUGH
- WAP — NEW WIRELESS ACCESS POINT, ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR WITH 30' SERVICE LOOP COILED AND SECURED
- COMMUNICATIONS CABLING SLEEVE OR CONDUIT
- CT — OVERHEAD CABLE TRAY, 12"W UNLESS NOTED OTHERWISE
- TELECOM GROUND BAR
- UNDERGROUND CONDUIT
- 19" COMMUNICATIONS EQUIPMENT RACK
- CROSS CONNECT
- CONDUIT DOWN
- CONDUIT UP
- (P) COMMUNICATIONS POWER POLE
- (J) JUNCTION BOX
- (J) WALL MOUNTED JUNCTION BOX

A/V SYMBOLS

- TV — TELEVISION
- IC — INTERCOM CONNECTION
- V — VOLUME CONTROL
- M — MICROPHONE
- (S) SPEAKER
- S — SPEAKER PENDANT
- S — SPEAKER WALL
- AMP — AUDIO AMPLIFIER
- HEADEND
- WIRELESS ANTENNA
- LCD PROJECTOR
- ## — 1 OUTPUT TAP
- (##) — 2 OUTPUT TAP
- ## — 4 OUTPUT TAP
- (##) — 8 OUTPUT TAP
- 2/4/8 WAY SPLITTER
- 2–WAY VIDEO AMPLIFIER
- FIBER OPTIC TRANSMITTER
- FIBER OPTIC RECEIVER
- TERMINATOR
- VIDEO EQUALIZER
- VIDEO ATTENUATOR
- COUPLER
- VIDEO AMPLIFIER

SECURITY SYMBOLS

- KEYPAD DEVICE
- CARD ACCESS READER
- CARD ACCESS READER W/KEYPAD
- BIO ACCESS DEVICE
- INTERCOM DEVICE
- FIBER OPTIC MODULE
- MOTION DETECTOR – PASSIVE INFRARED
- ELECTRIC STRIKE
- MOTION DETECTOR VOLUMETRIC
- MONITOR
- PUSH BUTTON
- GLASS BREAKING SENSOR
- BALANCED MAGNETIC SWITCH
- CAPACITANCE SENSOR
- SCREENING DEVICE
- CAMERA – FIXED FOCUS
- PTZ — CAMERA – PTZ
- TURNSTILE
- ELECTROMAGNETIC LOCK
- ANNUNCIATION DEVICE
- SECURITY SCREEN WITH ALARM

OUTSIDE PLANT

- POLE WITH RISER
- MH — MAINTENANCE HOLE
- HH — HAND HOLE
- PROPOSED STRAIGHT SPLICE
- STRAIGHT SPLICE WITH CHANGES
- SPLICE THREE WAY
- DOWN GUY
- DEAD MAN
- BRACED GUY
- SIDEWALK GUY
- GROUND
- ISOLATION GAP
- B — SPLICE, BURIED CABLE, IN PEDESTAL
- Enc — ENCAPSULATED SPLICE
- CABLE LOOP

LINE TYPES

- –BC– BACKBONE CONDUIT
- –BCC– BACKBONE CONDUIT FOR COPPER
- –BFC– BACKBONE CONDUIT FOR FIBER
- –COP– COPPER BACKBONE
- –OF– OPTICAL FIBER BACKBONE
- -COAX- COAXIAL BACKBONE
- –PDS– PROTECTED DISTRIBUTION SYSTEM

GENERAL NOTES – COMMUNICATIONS

1. ALL COPPER TERMINATION HARDWARE TO BE 110 STYLE IDC, UNO.
2. TERMINATE ALL CONDUCTORS; NO CABLE SHALL CONTAIN NON TERMINATED ELEMENTS EXCEPT THE 25TH PAIR OF BINDER GROUPS IN MULTI–PAIR COPPER BACKBONE CABLE. MAKE TERMINATION ONLY AT INDICATED OUTLETS, TERMINALS, CROSS–CONNECTS AND PATCH PANELS.
3. CABLE MAY NOT BE SPLICED, UNO.
4. MONITOR CABLE PULL TENSION TO ENSURE MANUFACTURER RECOMMENDATION AND INDUSTRY STANDARDS ARE NOT EXCEEDED.
5. PROVIDE PULL STRING IN ALL EMPTY CONDUIT OR INNERDUCT. PULL STRING TO BE RATED FOR 200 lbs. IN ALL CONDUIT.
6. CABLE TRAY TO BE TRAPEZE OR CANTILEVER HUNG ONLY. BOND ALL SECTIONS OF TRAY TOGETHER WITH MANUFACTURER APPROVED BONDING METHOD.
7. PROVIDE PULL BOXES IN CONDUITS NO MORE THAN 100' APART AND PER EVERY 180 DEGREES OF BEND – SIZE PER TIA ALL CABLE TRAY TO BE 12"W U.N.O.
8. FIELD COORDINATE LOCATION OF NEW EQUIPMENT IAW APPLICABLE CODES.
9. ALL OUTLET BOXES ARE 4 11/16" SQUARE WITH SINGLE GANG EXTENSION RING WITH 1" CONDUIT STUBBED INTO CEILING SPACE.
10. NO CONDULETS OR FITTINGS SHALL BE USED.

SECURITY SYSTEM – GENERAL NOTES

1. PROVIDE AND INSTALL ALL SECURITY WIRING, DEVICES AND EQUIPMENT AS INDICATED
2. PROVIDE SUFFICIENT SERVICE LOOP AT EACH END OF SECURITY CABLE FOR PROPER CONNECTION TO AND MAINTENANCE OF EQUIPMENT OR DEVICES
3. ALL SECURITY CABLING TO BE INSTALLED IN METALLIC CONDUIT TO THE ASSOCIATED SECURITY PANEL
4. IN TURN KEY SYSTEMS ALL COMPONENTS PROVIDED ARE TO BE LISTED FOR USE IN THE SYSTEM INDICATED
5. IN TURN KEY SYSTEMS ALL ENCLOSURES AND IDS DEVICES WITH REMOVABLE COVERS SHALL HAVE TAMPER PROTECTION DEVICES CAPABLE OF BEING MONITORED CONTINUOUSLY
6. IN TURN KEY SYSTEMS ALL SECURITY SYSTEM COMMUNICATIONS LEAVING THE FACILITY WILL EMPLOY LINE SECURITY. CERTIFICATES THAT LINE SECURITY HAS BEEN EMPLOYED TO BE PROVIDED.

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 19468 — JOSHUA T. TAYLOR

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COMMUNICATIONS ABBREVIATIONS LIST

AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
BCC	BACKBONE COPPER CABLE
BKBD	BACKBOARD
BSMT	BASEMENT
BMS	BALANCED MAGNETIC SWITCH
CAT 6	4–PAIR, 24 GA, CATEGORY 6 UTP CABLE
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CD	CABLE DUCT
CER	COMMUNICATIONS EQUIPMENT ROOM
CLST	CLOSET
CMH	COMMUNICATIONS MAINTENANCE HOLE
COMM	COMMUNICATIONS
CT	CABLE TRAY
DEMO	DEMOLITION
DIST	DISTRIBUTION
EES	EARTH ELECTRODE SYSTEM
EF	ENTRANCE FACILITY
EMT	ELECTRICAL METALLIC TUBING
ENL	EXISTING DEVICE NEW LOCATION
ETM	EXISTING TO MOVE
ETR	EXISTING TO REMAIN
ETBR	EXISTING TO BE REMOVED
FO	FIBER OPTIC CABLE
GF/GI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
GF/CI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GI/CF	GOVERNMENT INSTALLED CONTRACTOR FURNISHED
GND	GROUND
IDF	INTERMEDIATE DISTRIBUTION FRAME
IDS	INTRUSION DETECTION SYSTEM
IC	INTERMEDIATE CROSS–CONNECT
IMC	INTERMEDIATE METAL CONDUIT
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MH	MAINTENANCE HOLE
MIN	MINIMUM
MM	MULTIMODE FIBER
MNS	MASS NOTIFICATION SYSTEM
MSB	MAIN SERVICE BUS
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
OSP	OUTSIDE PLANT
PET	PROTECTED ENTRANCE TERMINAL
PR	PAIR
PT	POINT
PTZ	PAN / TILT / ZOOM
PVC	POLY VINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
RSC	RIGID STEEL CONDUIT
RM	ROOM
RU	RACK UNIT
SHT	SHEET
SM	SINGLEMODE FIBER
TBL	TABLE
TGB	TELECOMM GROUNDING BUS BAR
TMGB	TELECOMM MAIN GROUNDING BUS BAR
TR	TELECOMM ROOm
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTIFIED OTHERWISE
W/	WITH

A / 11T–001 TELECOMMUNICATIONS LEGEND AND ABBREVIATIONS
NTS

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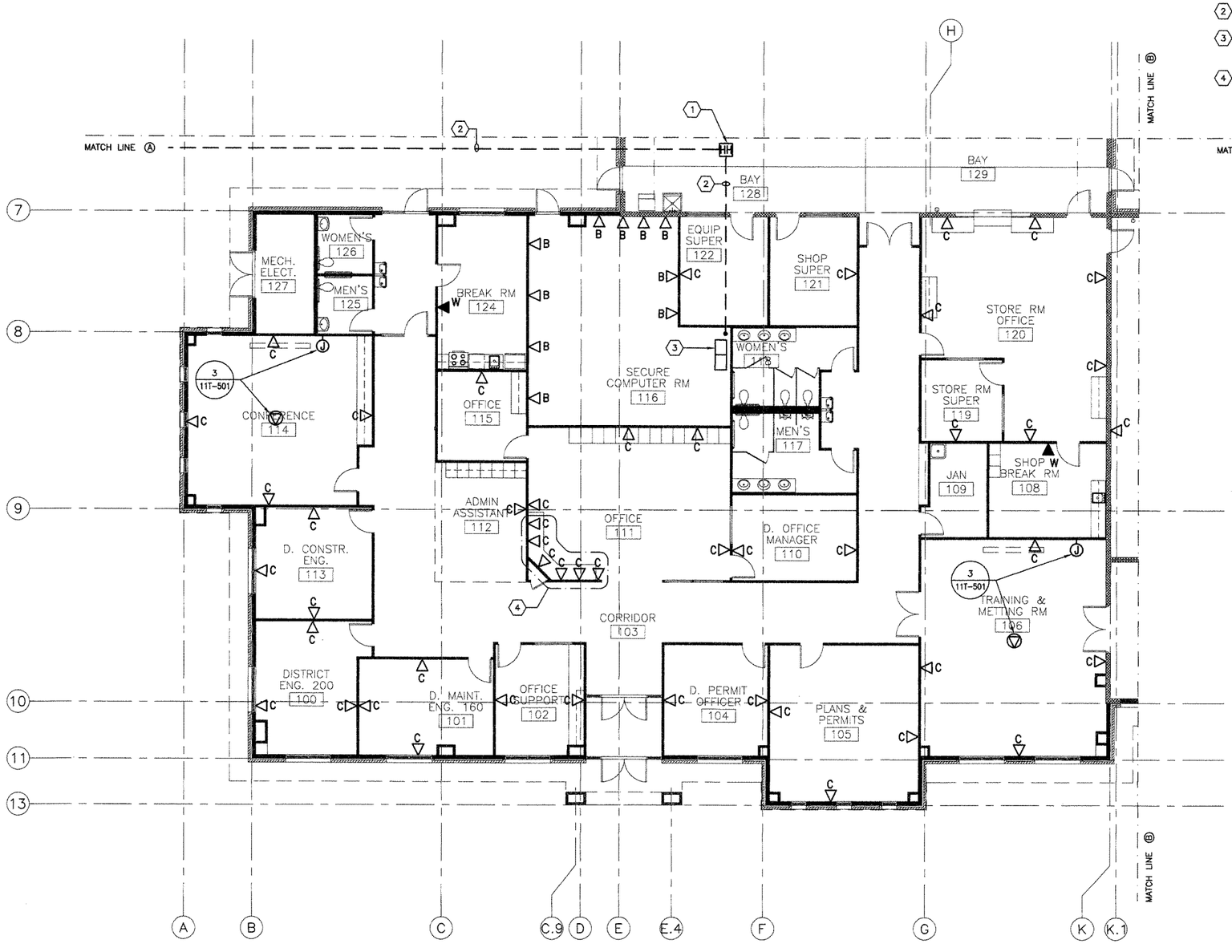
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS LEGEND AND ABBREVIATIONS

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	TDD
APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11T–001
REV	0
	197 OF 289

KEY NOTES: THIS SHEET ONLY

1. NEW 36" X 36" HAND HOLE QUAZITE ENCLOSURE.
2. FOUR (4) NEW 4" CONDUITS.
3. NEW RACK(S). REFERENCE DETAIL A/11T-401.
4. INSTALL SIX (6) NEW TELECOM OUTLETS ABOVE COUNTER. COORDINATE EXACT HEIGHT WITH OWNER.

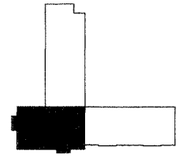


A 11T-101 COMMUNICATIONS FLOOR PLAN
SCALE: 1/8"= 1'-0"

NORTH







KEY PLAN
SCALE: 1/128" = 1'-0"

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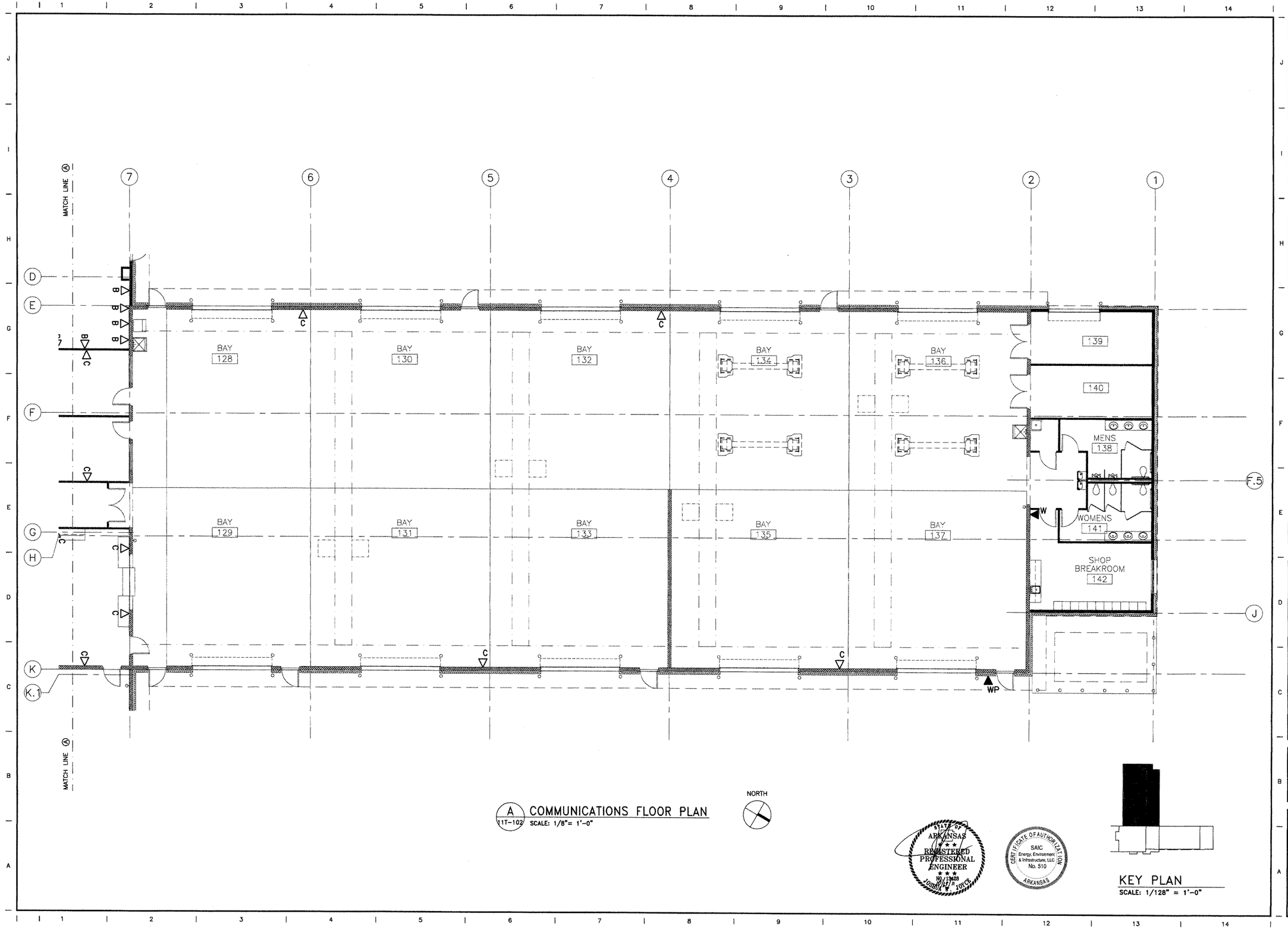
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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS FLOOR PLAN - SECTOR 1

DESIGNED BY	BMG
DRAWN BY	ASC
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APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11T-101
REV	0

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A 11T-102 COMMUNICATIONS FLOOR PLAN
SCALE: 1/8"= 1'-0"

KEY PLAN
SCALE: 1/128" = 1'-0"

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13628 JOSHUA D. TAYLOR

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS FLOOR PLAN – SECTOR 2

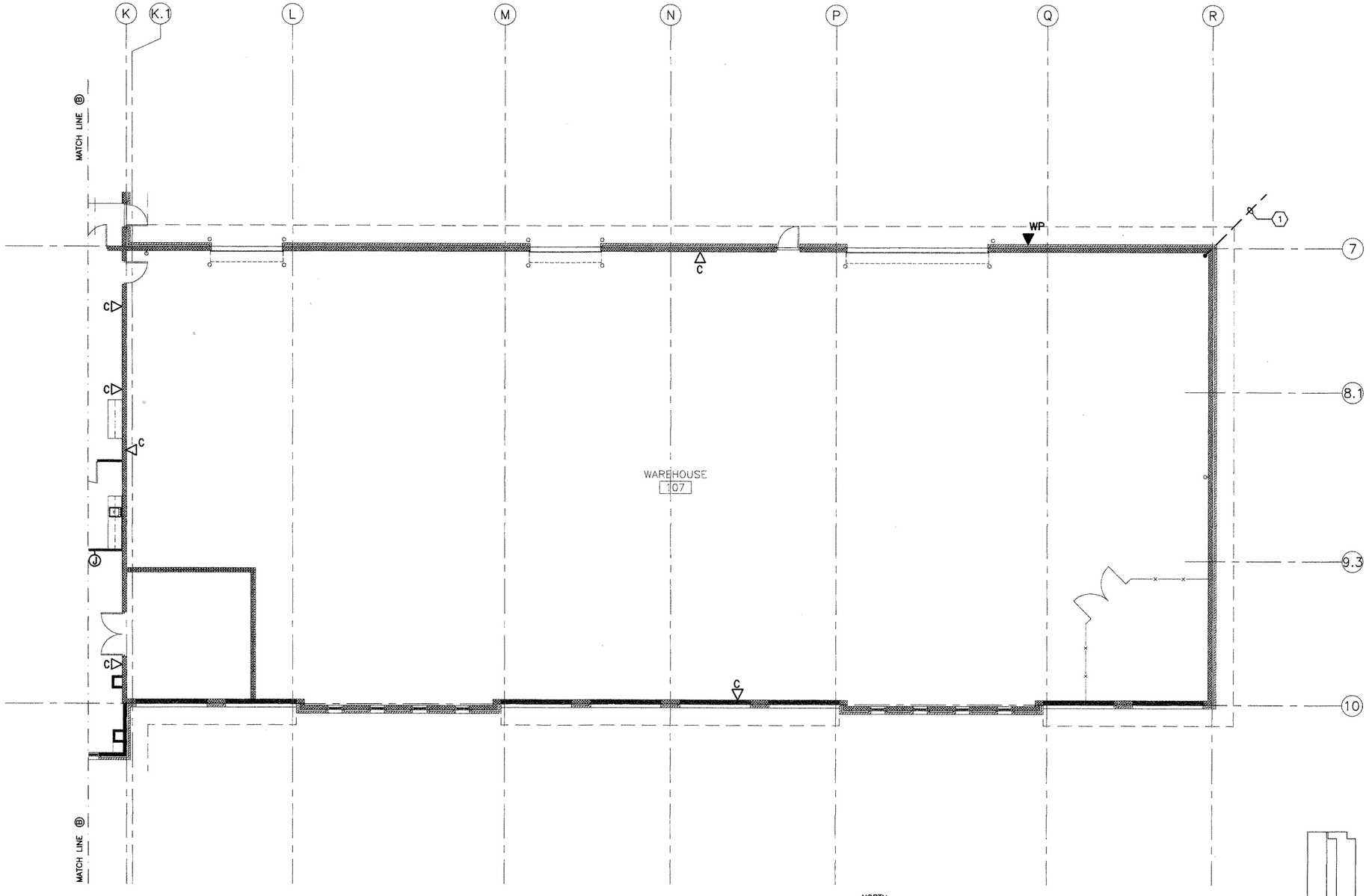
DESIGNED BY	BMG
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APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11T-102
REV	0

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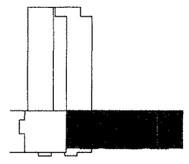
KEY NOTES: THIS SHEET ONLY

(1) ONE (1) NEW 4" CONDUIT TO "BODY AND PAINT SHOP" 12.



A (11T-103) COMMUNICATIONS FLOOR PLAN
SCALE: 1/8"= 1'-0"

NORTH



KEY PLAN
SCALE: 1/128" = 1'-0"

ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13408 JOSHUA M. TOYCE

SAIC Energy, Environment & Infrastructure, LLC No. 510 CERTIFICATE OF AUTHORIZATION ARKANSAS

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DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS FLOOR PLAN - SECTOR 3

DESIGNED BY	BMG
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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11T-103
REV	0

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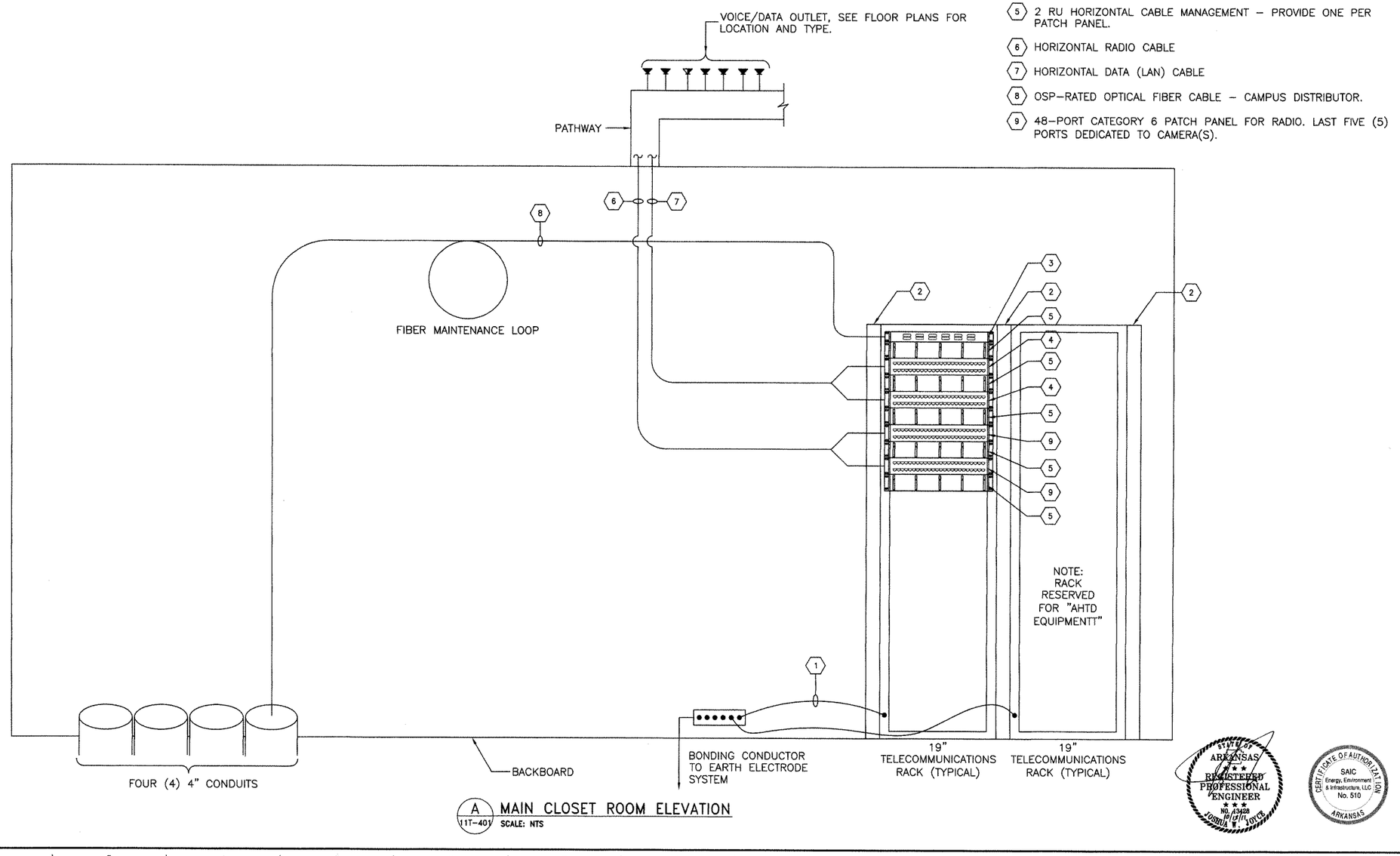
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GENERAL NOTES (THIS SHEET ONLY):

1. ALL EQUIPMENT SHOWN IS CONCEPTUAL ONLY. PROVIDE AND INSTALL QUANTITIES AS REQUIRED BY SPECIFICATIONS AND DRAWINGS. DETAIL IS TYPICAL AND SOME CABLING AND EQUIPMENT MAY NOT APPLY.

KEYED NOTES (THIS SHEET ONLY):

1. MINIMUM 6 AWG STRANDED BONDING CONDUCTOR WITH GREEN THERMOPLASTIC SHEATH.
2. VERTICAL CABLE MANAGEMENT.
3. 96–PORT OPTICAL FIBER TERMINATION SHELF. TERMINATE AND TEST 36–STRAND CABLE FROM "RESIDENT ENGINEER" (BUILDING #1) AND 12–STRAND CABLE FROM "BODY AND PAINT SHOP" (BUILDING #12).
4. 48–PORT CATEGORY 6 PATCH PANEL FOR DATA (LAN).
5. 2 RU HORIZONTAL CABLE MANAGEMENT – PROVIDE ONE PER PATCH PANEL.
6. HORIZONTAL RADIO CABLE
7. HORIZONTAL DATA (LAN) CABLE
8. OSP–RATED OPTICAL FIBER CABLE – CAMPUS DISTRIBUTOR.
9. 48–PORT CATEGORY 6 PATCH PANEL FOR RADIO. LAST FIVE (5) PORTS DEDICATED TO CAMERA(S).



A 11T–401 MAIN CLOSET ROOM ELEVATION
SCALE: NTS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 10/13/11 JOSHUA T. LOVICK

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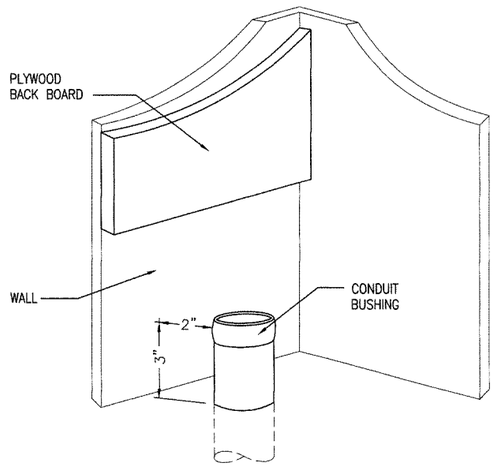
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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS MAIN CLOSET ELEVATION

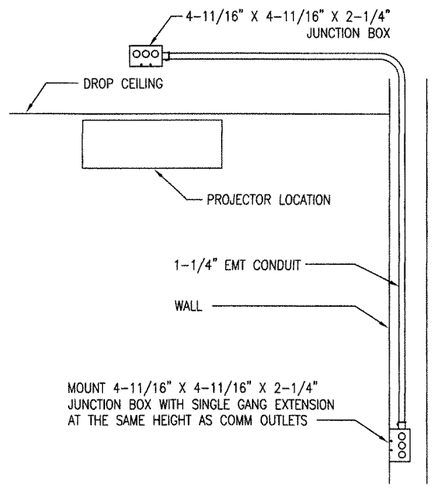
DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	TDD
APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11T–401
REV	0

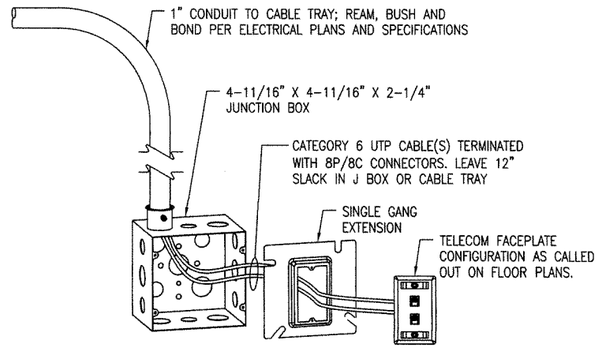
201 OF 289



A 11T-501 TYPICAL CONDUIT STUB-UP
SCALE: NTS



B 11T-501 CEILING MOUNTED PROJECTOR ROUGH-IN
SCALE: NTS



NOTES:
1. COORDINATE HEIGHT OF OUTLET WITH ELECTRICAL RECEPTACLE.

C 11T-501 WALL MOUNT COMMUNICATIONS OUTLET (TYPICAL)
SCALE: NTS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13428
JOSHUA T. JOYCE
10/13/11

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

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From Science to Solutions
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201 Presidential Drive
Lowell, Arkansas
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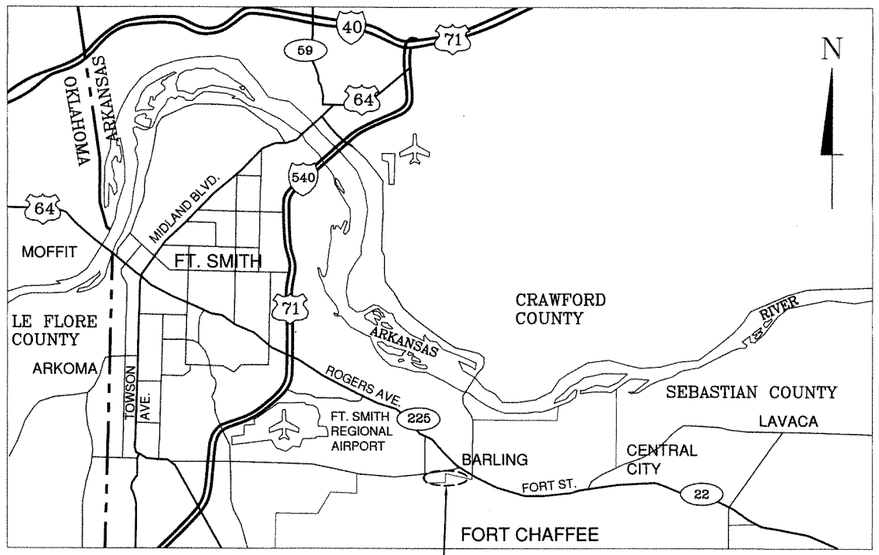
DISTRICT ADMINISTRATION BUILDING
AHTD JOB NO. 040554
TELECOMMUNICATIONS DETAILS

DESIGNED BY	BMG
DRAWN BY	ASC
CHECKED BY	TDD
APPROVED BY	BMG

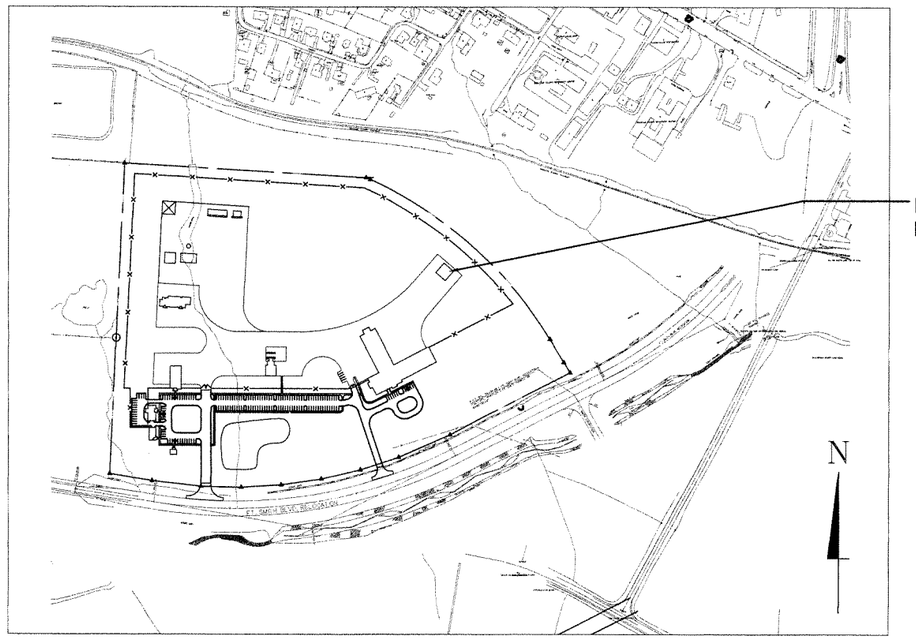
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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	11T-501
REV	0

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
					ARK.		203	289
				JOB NO.		040554		
				DISTRICT BODY & PAINT SHOP				

DISTRICT BODY AND PAINT SHOP



VICINITY MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

DISTRICT BODY AND PAINT SHOP			
CODE INFORMATION			
OCCUPANCY:	GROUP F-1, FACTORY, MODERATE HAZARD		AFPC SECTION 306.2
CONSTRUCTION:	TYPE IIB, UNSPRINKLERED, UNPROTECTED		AFPC SECTION 602.5, TABLE 601, TABLE 602
	STRUCTURAL FRAME	0 HOUR	
	BEARING WALLS	0 HOUR	
	NONBEARING WALLS AND PARTITIONS	0 HOUR	
	FLOOR CONSTRUCTION	0 HOUR	
	ROOF CONSTRUCTION	0 HOUR	
	FIRE SEPARATION WALLS	NOT APPLICABLE	
	FIRE PARTITIONS		
	STORAGE/MECHANICAL AREAS	0 HOUR	AFPC TABLE 508.2
	EXIT ACCESS CORRIDORS	0 HOUR	AFPC TABLE 1017.1
	SHAFT ENCLOSURES	NOT APPLICABLE	
	AREA OF EXTERIOR OPENINGS	UNLIMITED	AFPC TABLE 704.8
BUILDING LIMITATIONS FOR F-1 OCCUPANCY			
	HEIGHT AND STORIES	55 FT/2 STORY	AFPC TABLE 503
	ACTUAL HEIGHT AND STORIES	30 FT/1 STORY	
	BASE AREA	15,500 SF/FLOOR	AFPC TABLE 503
	ACTUAL AREA (1 STORY)	2,304 SF	
MEANS OF EGRESS			
	OCCUPANT LOAD, GROUP F-1	24 OCCUPANTS	AFPC TABLE 1004.1.1
	WIDTH OF EGRESS DOORS		
	EXITS	36" REQUIRED;	AFPC SECTION 1008.1.1
		36" PROVIDED	
	MINIMUM NUMBER OF EXITS	1 REQUIRED;	AFPC TABLE 1015.1
		2 PROVIDED	
	EXIT ACCESS TRAVEL DISTANCE	200 FT	AFPC TABLE 1016.1
	EXIT ACCESS CORRIDOR WIDTH	44" REQUIRED	AFPC SECTION 1017.2
		60" PROVIDED	
	DEAD END CORRIDOR	20 FT	AFPC SECTION 1017.3
		NA	

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-12-11

"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

JOHNNY R. RAMSEY, ARCHITECT

ABBREVIATIONS

ABC	AGGREGATE BASE COURSE
ADJ	ADJUSTABLE
A.F.F.	ABOVE FINISH FLOOR
ALUM	ALUMINUM
A.W.C.	ACCESSIBLE WATER CLOSET
BCE	BASE CIVIL ENGINEER
BM	BEAM
BD	BOARD
B.O.	BOTTOM OF
BOT	BOTTOM
BRNG	BEARING
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CU	CONDENSING UNIT
CJ	CONTROL JOINT
DIA	DIAMETER
ø	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DTL	DETAIL
DN	DOWN
EA	EACH
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EXP JT	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
F.E.	FIRE EXTINGUISHER
FFE	FINISHED FLOOR ELEVATION
FIN	FINISH OR FINISHED
FLR	FLOOR
FTG	FOOTING
GA	GAUGE
GEN	GENERAL
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HDF	HIGH DENSITY FIBERBOARD
HMAC	HOT MIX ASPHALTIC CONCRETE
HORIZ	HORIZONTAL
HPL	HIGH PRESSURE LAMINATE
HT	HEIGHT
INSUL	INSULATION
INT	INTERIOR
L	ANGLE
LAV	LAVATORY
LPL	LOW PRESSURE LAMINATE
LVL	LAMINATED VENEER LUMBER
LT	LIGHT
MAS	MASONRY
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MFGR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
OSB	ORIENTED STRAND BOARD
PED	PEDESTRIAN
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
PLCS	PLACES
R	RADIUS
RAD	RADIUS
REF	REFER TO
REINF.	REINFORCING
REQ'D	REQUIRED
RM	ROOM
R.T.U.	ROOF TOP UNIT
SS	SANITARY SEWER OR STAINLESS STEEL
SCHED	SCHEDULE
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STD	STANDARD
STL	STEEL
THK	THICK
T.O.	TOP OF
T.O.BM.	TOP OF BEAM
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
T.P.	TOILET PAPER
TS	TUBE STEEL
TYP.	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V.I.F.	VERIFY IN FIELD
W	WATER MAIN
WD	WOOD
W/	WITH
WC	WATER CLOSET
VCT	VINYL COMPOSITION TILE
VTR	VENT THRU ROOF

REVISION TABLE Fort Smith, Arkansas		
DATE	DESCRIPTION	SHEET NUMBER

SYMBOL INDEX

- (E) WALL KEY
- (101) DOOR NUMBER
- (C) WINDOW KEY
- B/A6 ELEVATION MARKER
- 100'-0" F.F.E. DATUM MARKER
- X/AX BUILDING SECTION
- X/AX PARTIAL SECTION

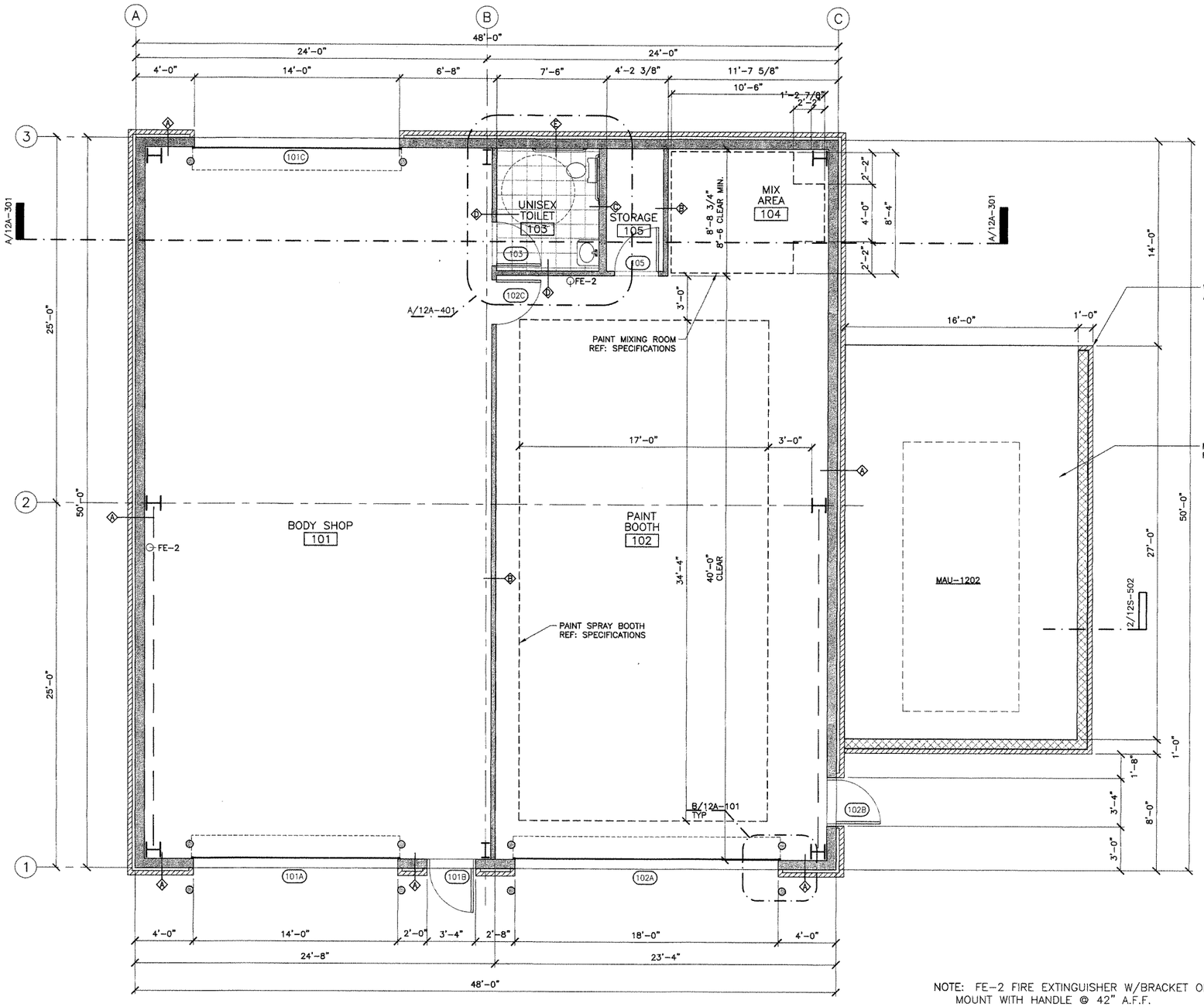
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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
INDEX & GOVERNING SPECIFICATIONS
QUANTITIES & REVISION TABLE

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

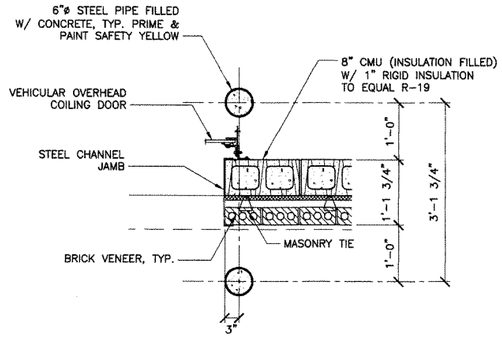
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET / REV	12G-002
	204 OF 289



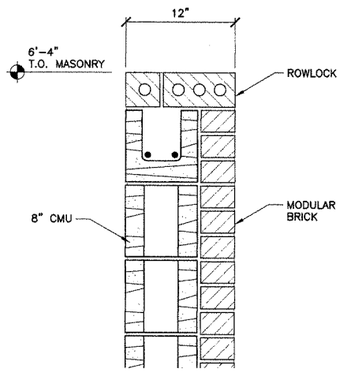
A FLOOR PLAN
12A-101 SCALE: 1/4"= 1'-0"

NOTE: FE-2 FIRE EXTINGUISHER W/BRACKET ONLY, NO CABINET. MOUNT WITH HANDLE @ 42" A.F.F.

NORTH



B BOLLARD DETAIL
12A-101 SCALE: 3/4" = 1'-0"



C SCREEN WALL SECTION
12A-101 SCALE: 1 1/2" = 1'-0"

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SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.12.11

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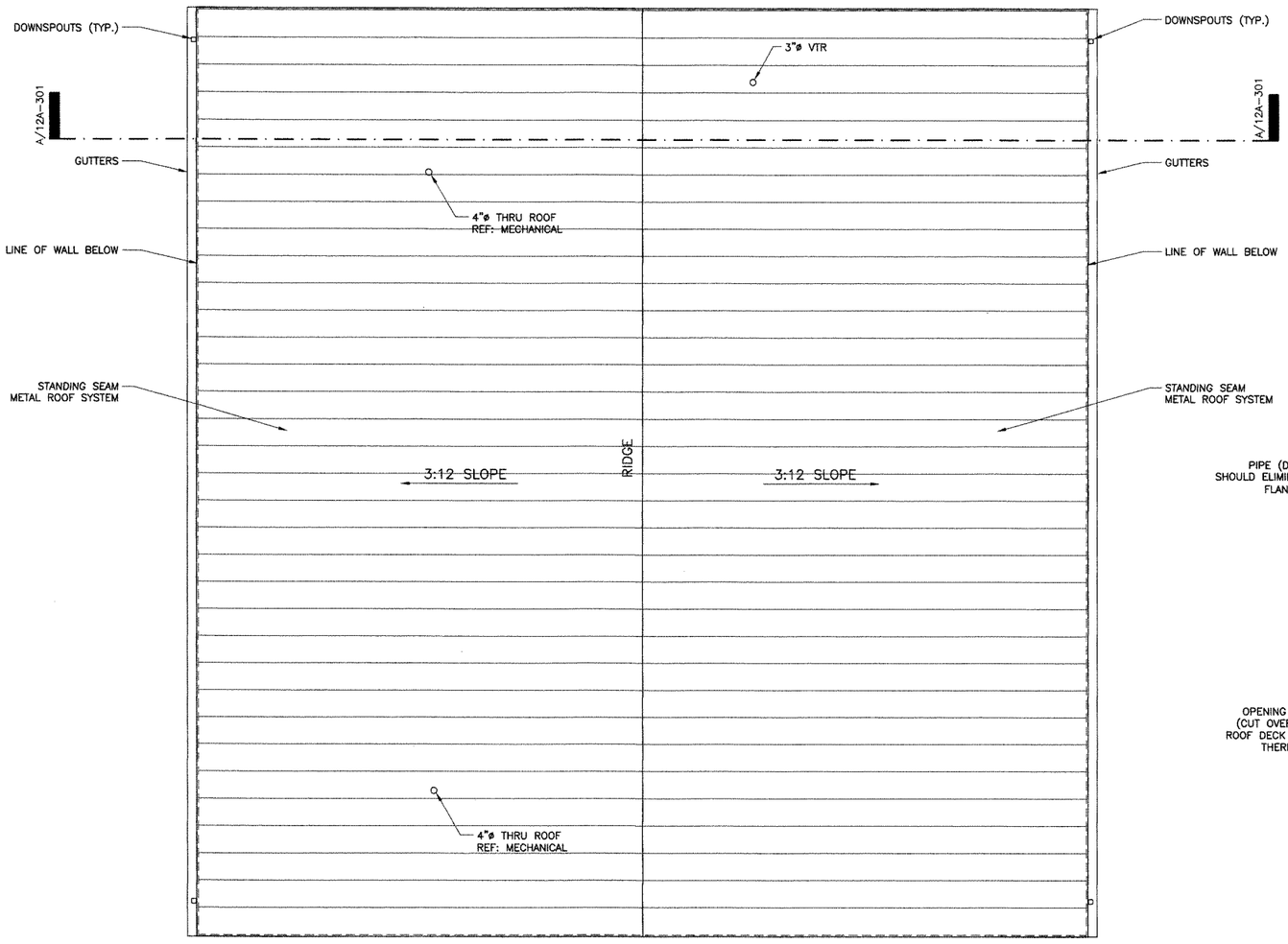
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
FLOOR PLAN

DESIGNED BY	JSR
DRAWN BY	DRM
CHECKED BY	JRR
APPROVED BY	JSR

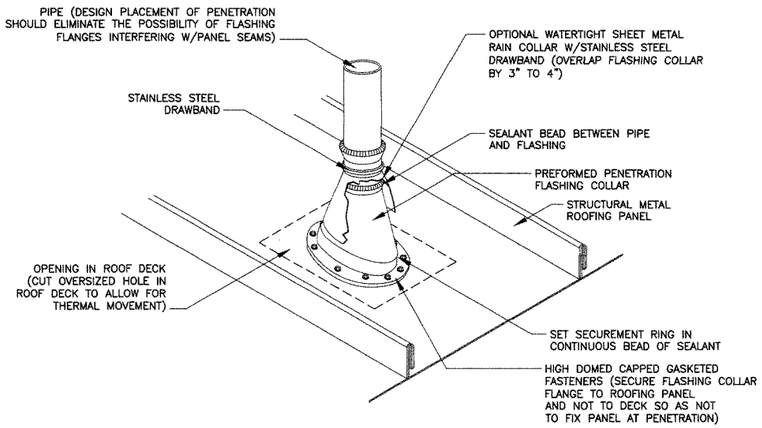
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12A-101
REV	

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A 12A-102 ROOF PLAN
SCALE: 1/4" = 1'-0"

NORTH



B 12A-102 VENT THRU ROOF DETAIL
SCALE: 1 1/2" = 1'-0"

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No. C-255
ARKANSAS

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REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

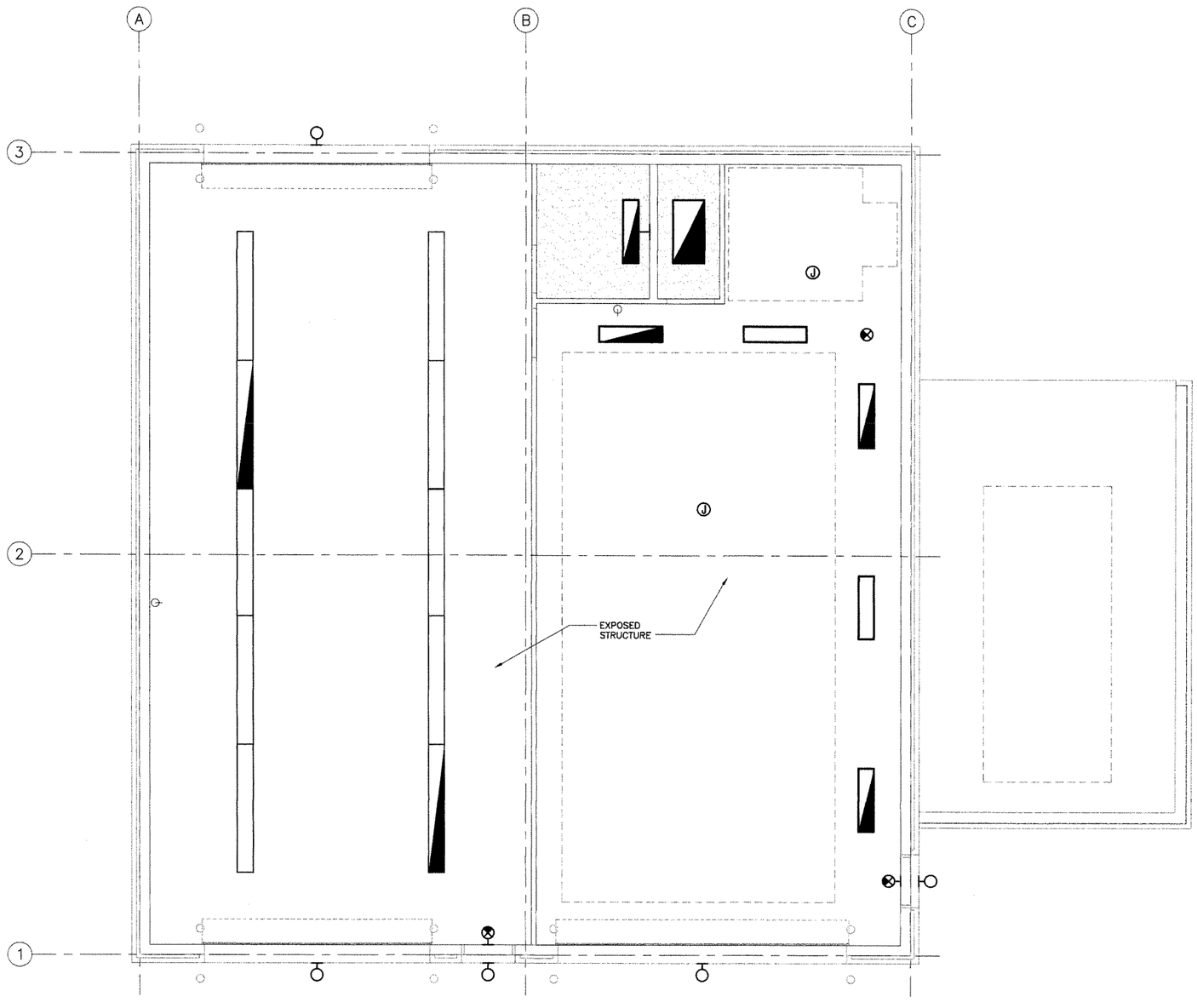
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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ROOF PLAN

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12A-102	
206 OF 289	



A REFLECTED CEILING PLAN
12A-103 SCALE: 1/4"= 1'-0"

NORTH

CEILING PLAN LEGEND:

- 2'-0" x 4'-0" FLUORESCENT LIGHT FIXTURE
- 1'-0" x 4'-0" FLUORESCENT FIXTURE, SUSPEND AT 10'-0" A.F.F.
- 1'-0" x 8'-0" FLUORESCENT FIXTURE, SUSPEND AT 10'-0" A.F.F.
- 1'-0" x 8'-0" FLUORESCENT FIXTURE, CONNECTED TO EMERGENCY SYSTEM AND EQUIPPED WITH BATTERY PACK. SUSPEND AT 10'-0" A.F.F.
- 1'-0" x 4'-0" FLUORESCENT FIXTURE, CONNECTED TO EMERGENCY SYSTEM AND EQUIPPED WITH BATTERY PACK. SUSPEND AT 10'-0" A.F.F.
- 1'-0" x 4'-0" FLUORESCENT FIXTURE, CONNECTED TO EMERGENCY SYSTEM AND EQUIPPED WITH BATTERY PACK.
- COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
- EXIT LIGHT
- JUNCTION BOX

NOTE:
EAVE SOFFITS TO BE PRE-FINISHED FLUSH SEAM PANEL

NOTE:
REFER TO ELECTRICAL

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

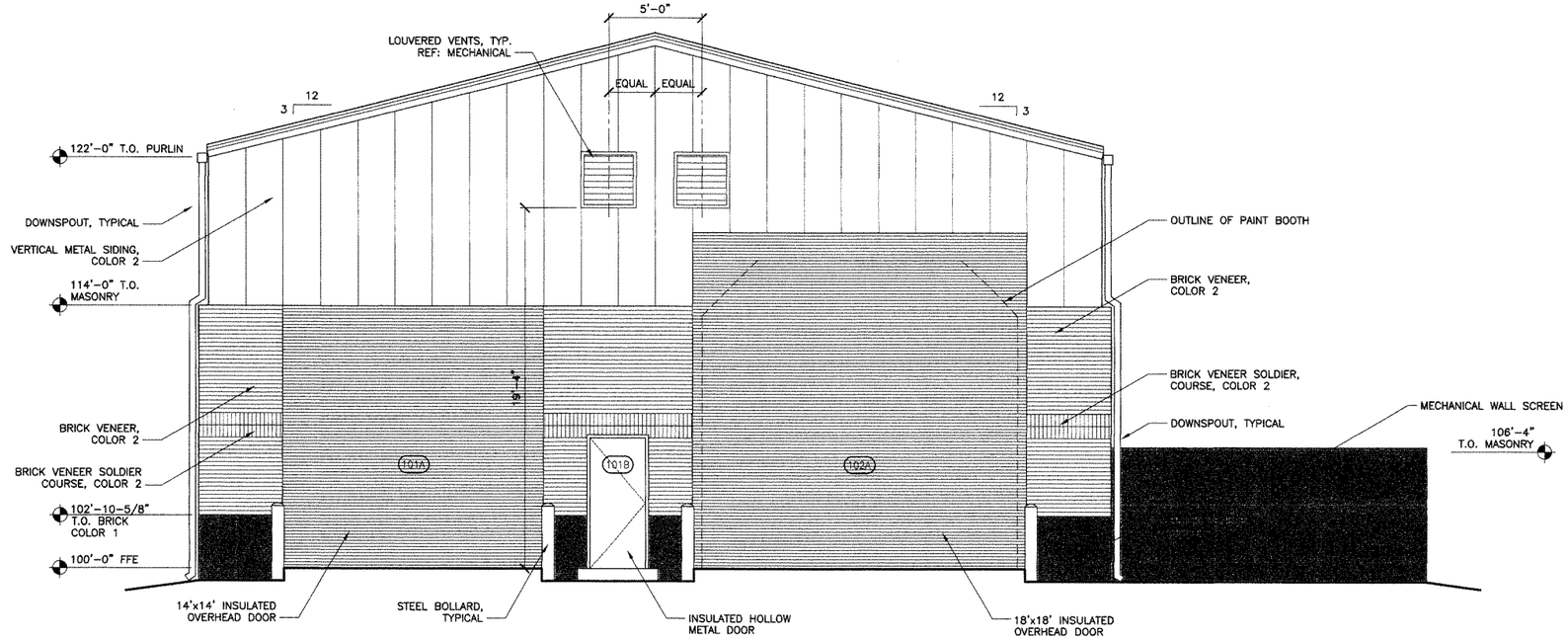
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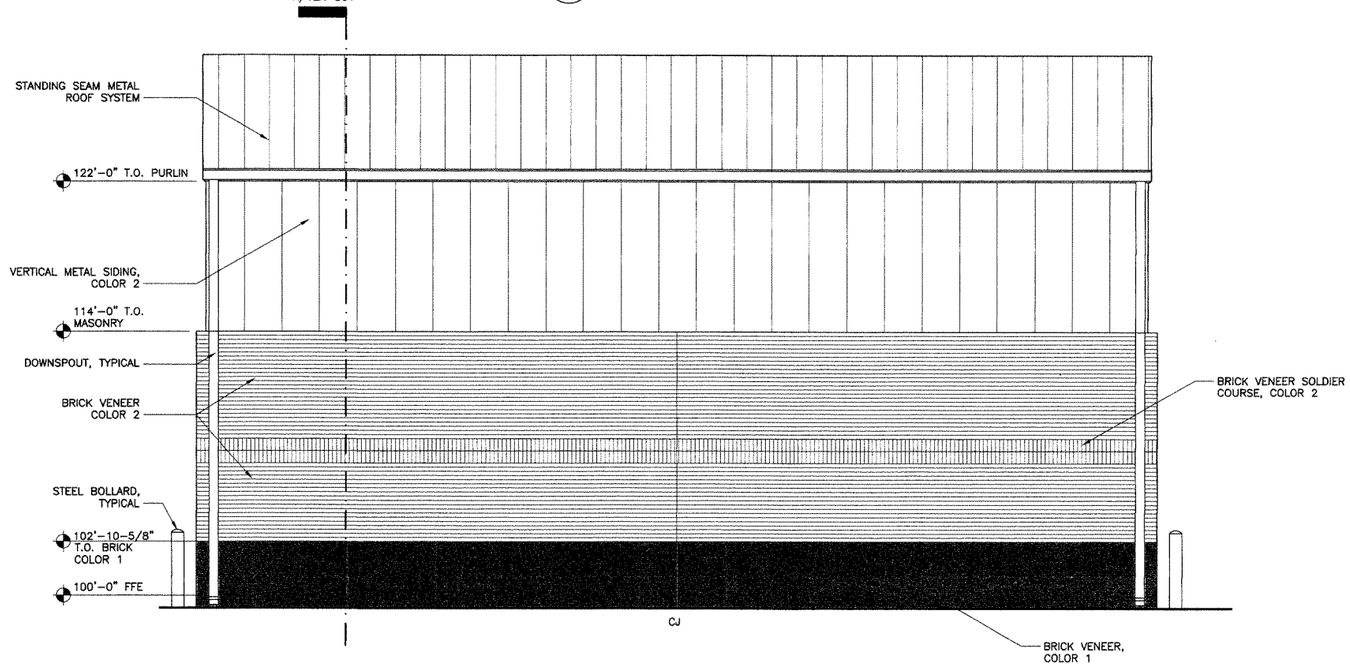
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
REFLECTED CEILING PLAN

DESIGNED BY	JSR
DRAWN BY	DAM
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12A-103
REV	



A 12A-201 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



B 12A-201 SIDE ELEVATION
SCALE: 1/4" = 1'-0"

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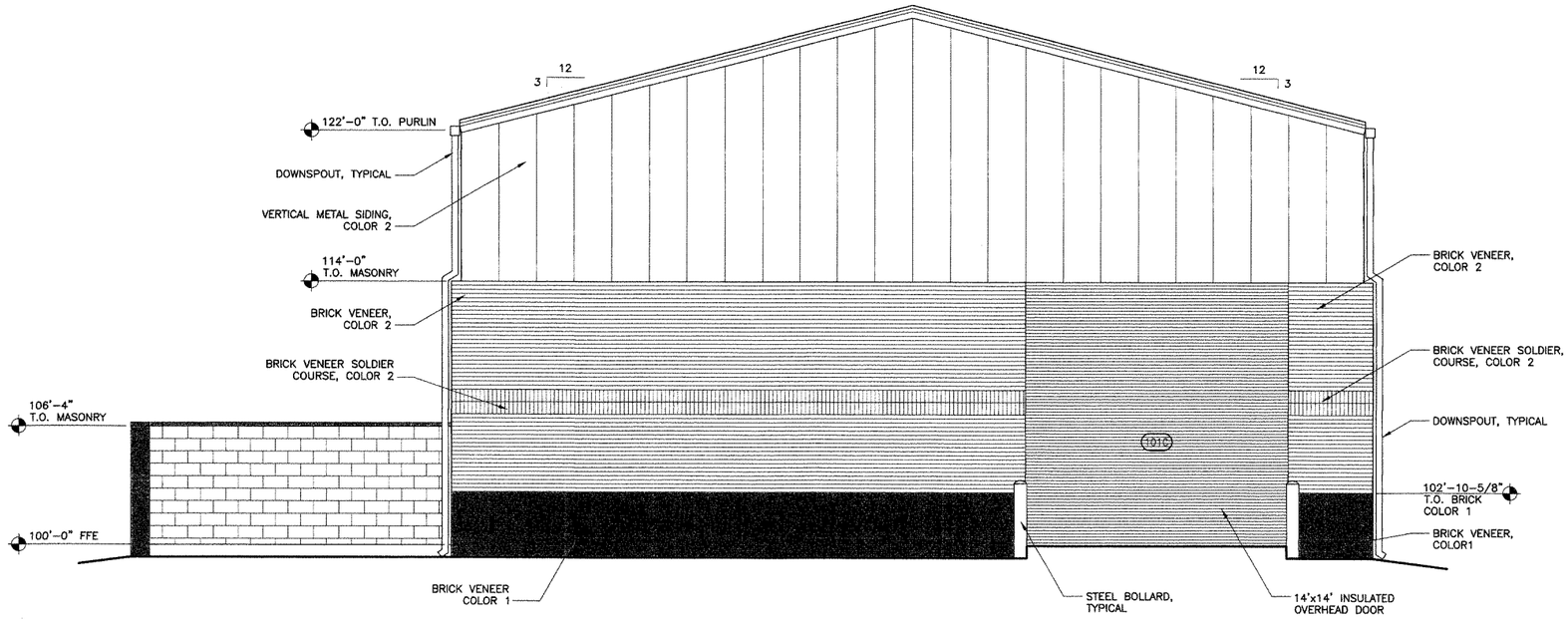
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
EXTERIOR ELEVATIONS

DESIGNED BY	JSR
DRAWN BY	DRM
CHECKED BY	JRR
APPROVED BY	JSR

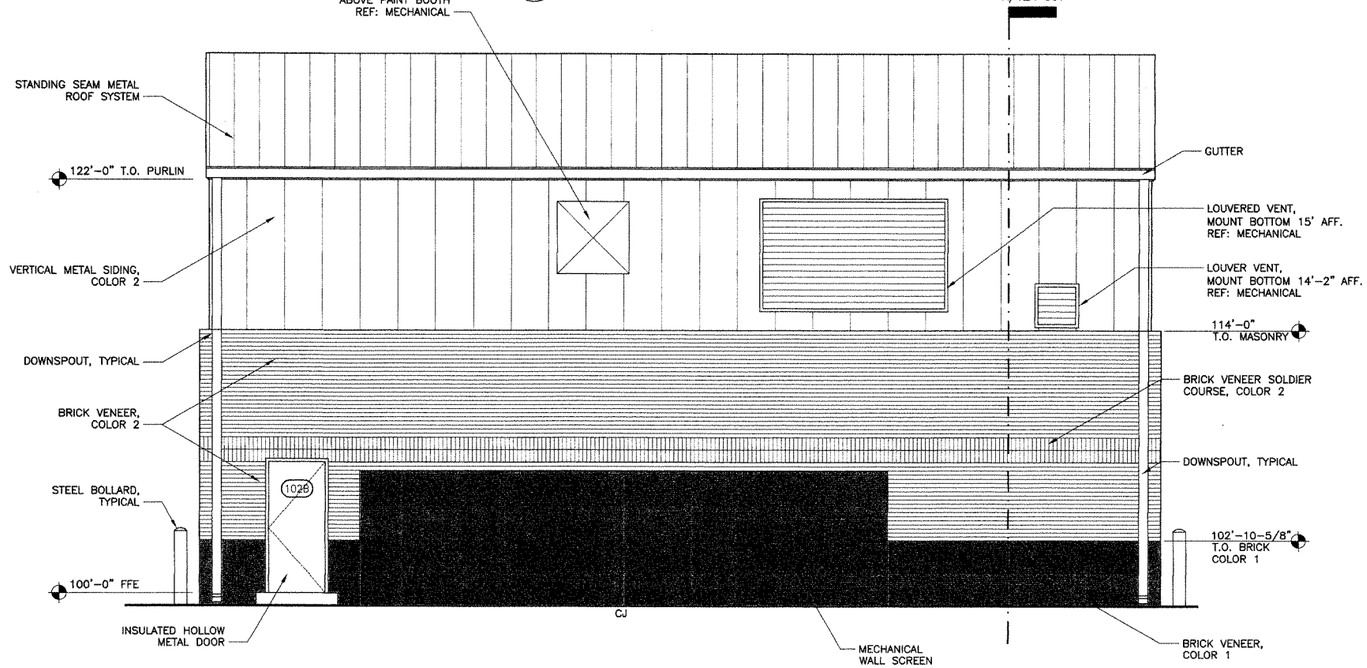
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12A-201	
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REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11



A 12A-202 **REAR ELEVATION**
SCALE: 1/4" = 1'-0"



B 12A-202 **SIDE ELEVATION**
SCALE: 1/4" = 1'-0"

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
EXTERIOR ELEVATIONS

DESIGNED BY	JSR
DRAWN BY	DRM
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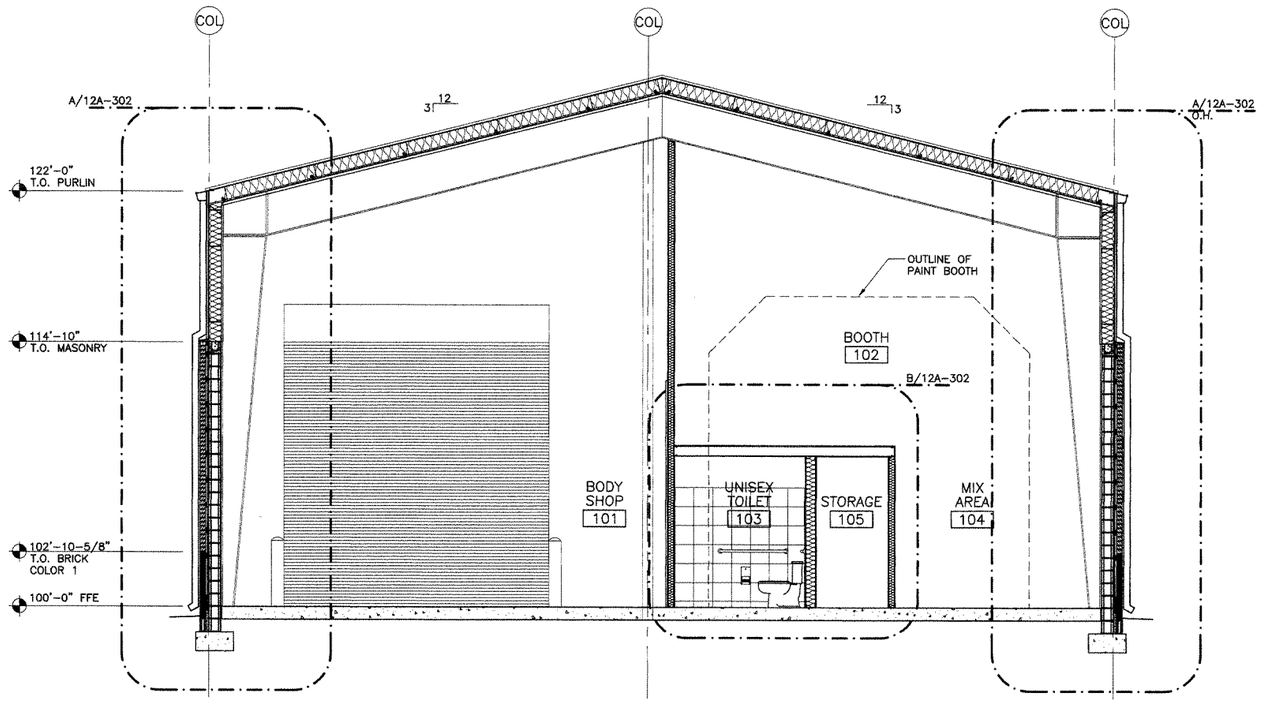
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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12A-202
REV	

209 OF 289

REGISTERED ARCHITECT — SAIC Energy, Environment, & Infrastructure, LLC — No. C-255 — ARKANSAS

JOHNNY RAY REMSEY — REGISTERED ARCHITECT — No. 2221 — ARKANSAS — 10.13.11

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A 12A-301 **BUILDING SECTION**
SCALE: 1/4"= 1'-0"

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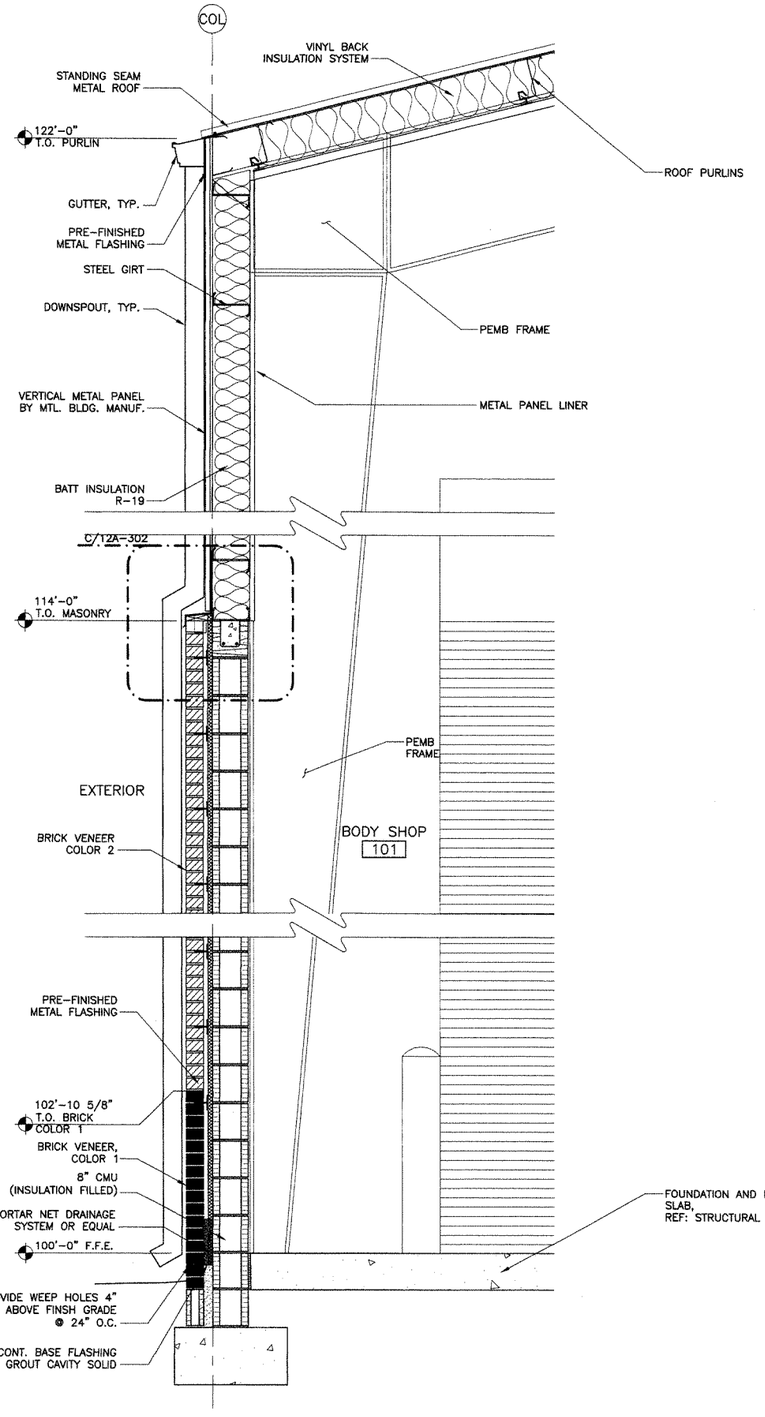
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
BUILDING SECTIONS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

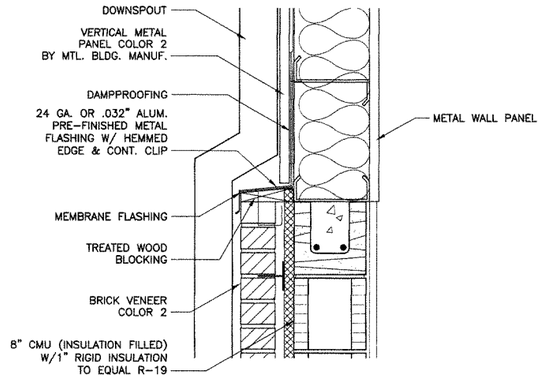
JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

DESIGNED BY	JSR
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CHECKED BY	JRR
APPROVED BY	JSR

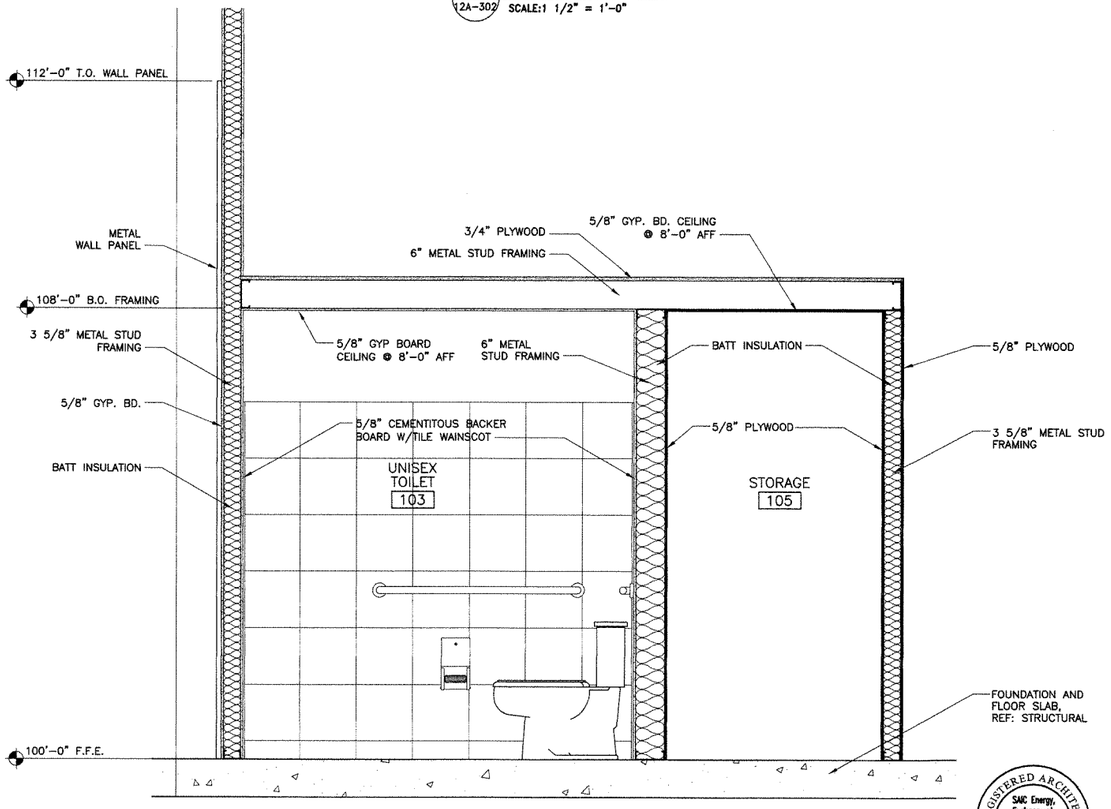
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12A-301
REV	



A 12A-302 WALL SECTION
SCALE: 3/4"= 1'-0"



C 12A-302 SECTION DETAIL
SCALE:1 1/2" = 1'-0"



B 12A-302 WALL SECTION
SCALE: 3/4"= 1'-0"

NOTE:
ADD SIGN, "NO STORAGE."
ABOVE ROOMS 103 AND 105.

REGISTERED ARCHITECT
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ARKANSAS
10-13-11

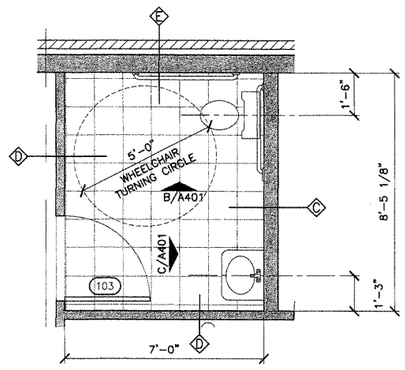
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0	10/13/11	ISSUED FOR CONSTRUCTION		

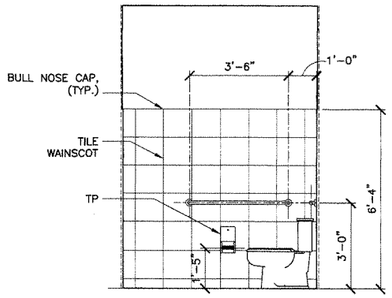
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
WALL SECTIONS AND DETAILS

DESIGNED BY	JSR
DRAWN BY	DAM
CHECKED BY	JRR
APPROVED BY	JSR

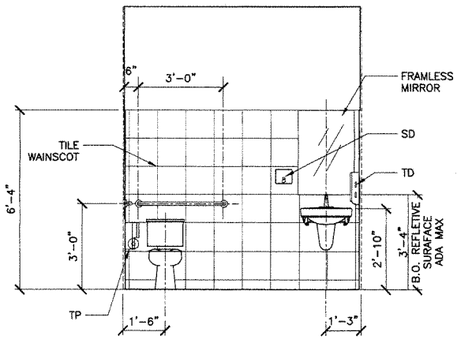
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12A-302	



A 12A-401 UNISEX TOILET PLAN
SCALE: 3/8" = 1'-0"



B 12A-401 UNISEX TOILET ELEVATION
SCALE: 3/8" = 1'-0"



C 12A-401 UNISEX TOILET ELEVATION
SCALE: 3/8" = 1'-0"

TOILET ACCESSORY SCHEDULE

ITEM	MFGR	MODEL #	DESCRIPTION	MOUNTING HEIGHT
TP	BOBRICK	B-4288	CONTURA SERIES SURFACE-MOUNTED MULTI-ROLL TOILET TISSUE DISPENSER	15" AFF TO CENTER OF ROLL
TD	BOBRICK	B-4262	CONTURA SERIES SURFACE-MOUNTED PAPER TOWEL DISPENSER	48" AFF TO BOTTOM OF UNIT
SD	BOBRICK	B-4112	CONTURA SERIES SURFACE-MOUNTED SOAP DISPENSER	36" AFF TO BOTTOM OF UNIT

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
INTERIOR ELEVATIONS

DESIGNED BY	JSR
DRAWN BY	AW
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12A-401
REV	
	212 OF 289

DOOR SCHEDULE

DOOR NO.	DOOR SIZE	DOOR DESCRIPTION	DOOR ELEV.	FRAME TYPE	FRAME MATL.	DETAILS HRDWR SET	DETAILS DETAIL GROUP	REMARKS
101A	14'-0" x 14'-0"	OVERHEAD DOOR	D1				C	
101B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D3	F1	HM		B	
101C	14'-0" x 14'-0"	OVERHEAD DOOR	D1				C	
102A	18'-0" x 18'-0"	OVERHEAD DOOR	D2				C	
102B	3'-0" x 7'-0" x 1 3/4"	INSULATED H.M.	D3	F1	HM		B	
102C	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F2	HM		A	
103	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F2	HM		A	
105	3'-0" x 6'-8" x 1 3/4"	SOLID CORE WOOD	D4	F2	HM		A	

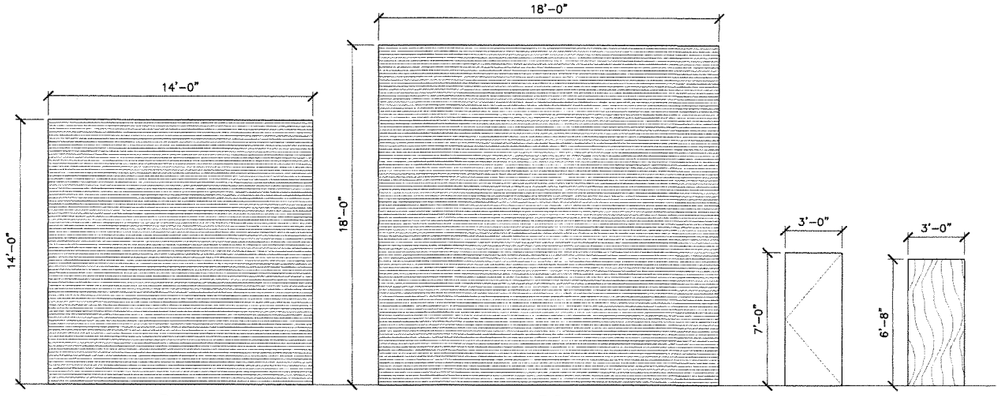
HARDWARE NOTE #1: REFER TO "SECTION 087100 - DOOR HARDWARE" FOR HARDWARE SETS BY GENERAL DOOR TYPE.

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH NORTH	WALL FINISH EAST	WALL FINISH SOUTH	WALL FINISH WEST	CEILING MATL.	CEILING FINISH	CEILING HT. A.F.F.	NOTES
101	BODY SHOP	SC	R	PT	PT	PT	PT	EXP	PT	---	---
102	PAINT BOOTH	SC	R	PT	PT	PT	PT	EXP	PT	---	---
103	UNISEX TOILET	CT	R	PT/CT	PT/CT	PT/CT	PT/CT	GYP	PT	8'-0"	---
104	MIX AREA	SC	SC	PT	PT	PT	PT	EXP	PT	---	---
105	STORAGE	VCT	R	PT	PT	PT	PT	GYP	PT	8'-0"	---

FINISH LEGEND

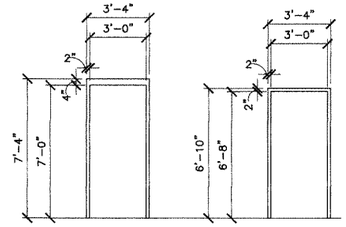
ACT ACOUSTICAL CEILING TILE
CT CERAMIC TILE
EXP EXPOSED
GYP GYPSUM BOARD
PT PAINT
R RUBBER
SC SEALED CONCRETE
STC STAINED CONCRETE
C CARPET
VCT VINYL COMPOSITION TILE



D1 OVERHEAD COILING DOOR, INSULATED
D2 OVERHEAD COILING DOOR, INSULATED
D3 HOLLOW METAL INSULATED
D4 SOLID CORE WOOD

DOOR ELEVATIONS

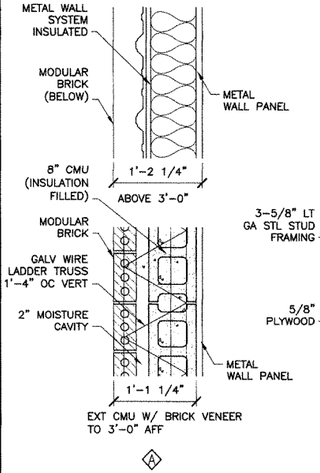
SCALE: 1/4" = 1'-0"

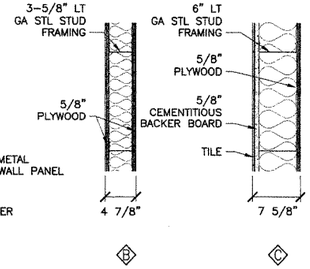


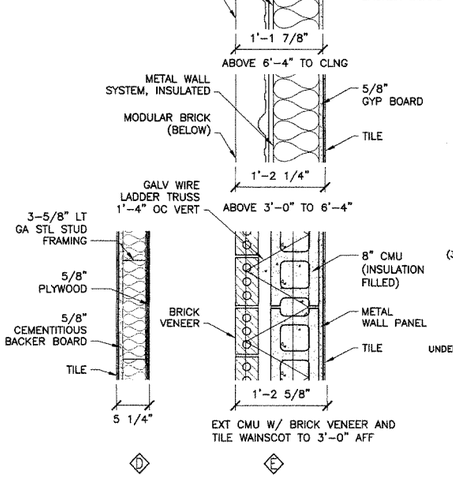
F1 HOLLOW METAL FRAME
F2 HOLLOW METAL FRAME

FRAME ELEVATIONS

SCALE: 1/4" = 1'-0"

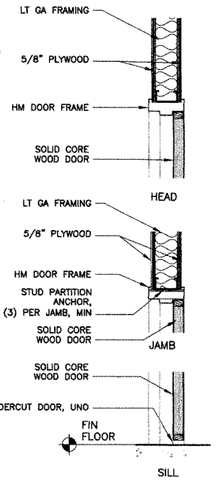




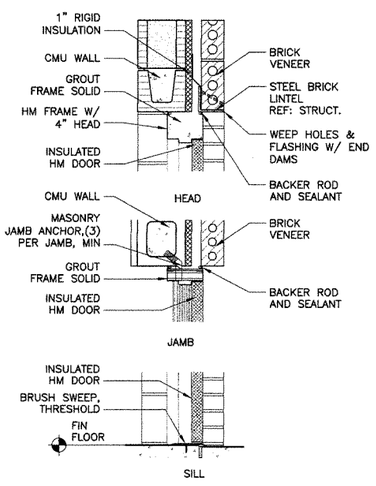


PARTITION TYPES

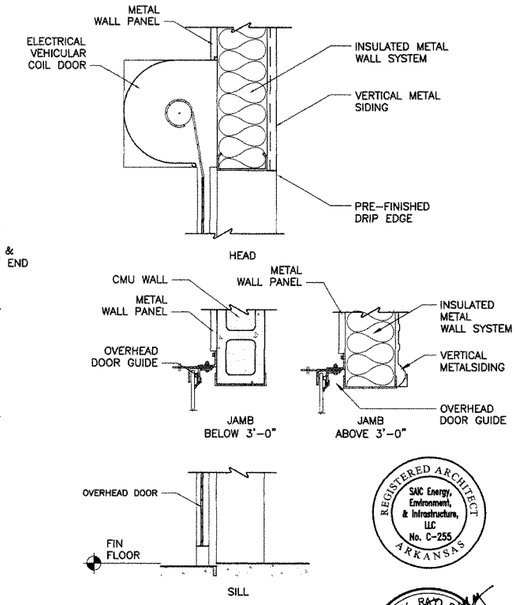
SCALE: 1" = 1'-0"



DETAIL GROUP A



DETAIL GROUP B



DETAIL GROUP C

HEAD JAMB & SILL DETAILS

SCALE: 1" = 1'-0"

REGISTERED ARCHITECT SAIC Energy, Environment, & Infrastructure, LLC No. C-255 ARKANSAS

JOHNNY RAY GUNSEY REGISTERED ARCHITECT No. 2221 ARKANSAS 10-12-11

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
DOOR SCHEDULE AND ELEVATIONS

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DRAWN BY	AW, BJB
CHECKED BY	JRR
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DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12A-501
REV	

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STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT
ACT	ACTUAL
ADDN	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ALT	ALTERNATE
ANCH	ANCHORAGE, ANCHOR
APPD	APPROVED
ARCH	ARCHITECT,(URAL)
B–	CONC. BEAM
B/	BOTTOM OF
B/B	BACK TO BACK
BIT	BITUMINOUS, BITUMASTIC
BLDG	BUILDING
BM	BEAM
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
BRDG	BRIDGING
BRG	BEARING
BLK	BLOCK
BTWN	BETWEEN
BSMT	BASEMENT
C	CHANNEL
CANT	CANTILEVER
CEN	CENTER, ED
C/C	CENTER TO CENTER
CHAM	CHAMFER
CIRC	CIRCULAR
CJ	CONTROL JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNITS
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS, ATION
CONTR	CONTRACTOR
COORD	COORDINATE, TION
CTRD	CENTERED
D	DEPTH, DISTANCE
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DBS	DOWEL BAR SPLICER
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DSGN	DESIGN
DWGS	DRAWINGS
DWL	DOWEL
E	EAST
EA	EACH
EB	EXPANSION BOLT
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION, ELEVATED
ELEV	ELEVATOR
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXP	EXPANSION
EXIST	EXISTING
EXT	EXTERIOR
F–	FOOTING MARK
FC	FILLED CELL
FF	FINISHED FLOOR
FIN	FINISH
FLG	FLANGE
FLR	FLOOR
FDN	FOUNDATION
FRMG	FRAMING
FS	FARSIDE
FT	FOOT, FEET
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GL	GLU LAM
GLB	GLUED LAMINATED BEAM
HC	HIGH CHAIR
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HSA	HEADED STUD ANCHOR
HSB	HIGH STRENGTH BOLT
HT	HEIGHT
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INCL	INCLUDE, ING
INSUL	INSULATE, D, ION
INT	INTERIOR
INTERM	INTERMEDIATE
JST	JOIST
JT	JOINT
k	KIP
L–	ANGLE
LB	POUND
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LP	LOW POINT
LT	LIGHT
LSL	LONG SLOTTED HOLES
LTWT	LIGHTWEIGHT
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MBS	METAL BUILDING SUPPLIER
MECH	MECHANICAL
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MASONRY JOINT
MO	MASONRY OPENING
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
O/O	OUT TO OUT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OPNG	OPENING
OPP	OPPOSITE
OSL	OUTSTANDING LEG
OVS	OVERSIZE HOLES
PAF	POWDER ACTUATED FASTENER
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
R/W	REINFORCED WITH
RAD	RADIUS
REF	REFERENCE
REINF	REINFORCE, MENT
REQ	REQUIRE, D, MENT
RET	RETURN
REV	REVISION
RP	RADIUS POINT
RT	RIGHT
RTU	ROOF TOP UNIT
S	SOUTH
SA	SLAB BOLSTER
SB	SLEEVE ANCHOR
SCHED	SCHEDULE
SECT	SECTION
SF–	STEP FOOTING
SIM	SIMILAR
SPEC	SPECIFICATIONS
SP	SPACING,ES
SQ	SQUARE
SSL	SHORT SLOTTED HOLES
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENERS
STL	STEEL
STRL	STRUCTURAL
SYMM	SYMMETRICAL
T	TIES
t	THICKNESS
T/	TOP OF
TB–	TIE BEAM
TC	TIE COLUMN
T&B	TOP AND BOTTOM
TEMP	TEMPORARY, TEMPERATURE
TERM	TERMINATE
TOL	TOLERANCE
TOF	TOP OF FOOTING
TRAN	TRANSVERSE
TS	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VERT	VERTICAL
W	WIDTH, WEST, WIDE FLANGE
W/	WITH
W/O	WITHOUT
WF–	WALL FOOTING
WP	WORKING POINT
WS	WATERSTOP
WT	WEIGHT
WWF	WELDED WIRE FABRIC

STANDARDS

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
NFPA	NATIONAL FOREST PRODUCTS ASSOCIATION
PCI	PRESTRESSED CONCRETE INSTITUTE
PTI	POST TENSIONING INSTITUTE
TPI	TRUSS PLATE INSTITUTE
UL	UNDERWRITER'S LABORATORY

SYMBOLS

&	AND
@	AT
℄	CENTERLINE
⌀	DIAMETER
◆	ELEVATION
#	NUMBER, POUNDS
C.J.	CONSTRUCTION JT.
S.J.	SAW CUT JOINT
PL	PLATE

STRUCTURAL DESIGN CRITERIA

D–1 CODE – 2006 INTERNATIONAL BUILDING CODE WITH ARKANSAS FIRE PREVENTION CODE, 2002 EDITION

D–2 DESIGN LIVE LOADS:

ROOF	20 PSF (REDUCIBLE)
COLLATERAL M/E	5 PSF
FLOOR	SLAB–ON–GRADE
SNOW LOAD:	GROUND SNOW Pg = 10 PSF

D–3 WIND LOAD: 90 MPH, ENCLOSED
60 MPH, PARTIALLY ENCLOSED
EXPOSURE 'C'
OCCUPANCY CATEGORY II, I = 1.0

D–4 SEISMIC:
SEISMIC ZONE: 1
S_s = 0.212
S_1 = 0.090
SITE CLASS C
S_{DS} = 0.170
S_{D1} = 0.102
DESIGN CATEGORY B
STEEL NOT DETAILED, R = 3
Cs = 0.057

D–5 ALLOWABLE SOIL BEARING PRESSURE 2000 PSF (CONT) AND 2500 PSF (SPREAD FOOTINGS).

GENERAL NOTES

G–1 THE GENERAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS, PRIOR TO FABRICATION AND START OF CONSTRUCTION.

G–2 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER.

G–3 THE GENERAL CONTRACTOR SHALL COORDINATE STRUCTURAL AND OTHER DRAWINGS WHICH ARE PART OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS WHICH MAY AFFECT THE STRUCTURAL DRAWINGS.

G–4 ALL DETAILS AND SECTIONS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS SHOWN.

G–5 REPRODUCTION OF THE CONTRACT DOCUMENTS USED FOR THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS WILL NOT BE PERMITTED. REPRODUCED DRAWINGS WILL BE RETURNED UNCHECKED FOR RESUBMITTAL.

G–6 DO NOT SCALE DRAWINGS.

SHALLOW FOUNDATIONS

SF–1 SOIL TO BE STRIPPED, COMPACTED AND TESTED IN ACCORDANCE WITH RECOMMENDATIONS OF THE THE SOILS REPORT PREPARED BY GRUBBS, HOSKYN, BARTON & WYATT, INC DATED JULY 3, 2008, AND AMENDMENTS THAT FOLLOW.

SF–2 HORIZONTAL JOINTS IN FOOTINGS WILL NOT BE PERMITTED.

SF–3 EXCAVATING UNDER OR NEAR IN – PLACE FOOTINGS/FOUNDATIONS WHICH DISTURBS THE COMPACTED SOIL BENEATH THE FOOTINGS/ FOUNDATIONS WILL NOT BE PERMITTED.

SF–4 REINFORCING SHALL BE SUPPORTED ON PRECAST PADS. ANCHOR BOLTS AND DOWELS FOR COLUMNS AND FILLED CELLS SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE. USE TEMPLATES FOR SETTING ANCHOR BOLTS.

SF–5 FOUNDATIONS SHALL BEAR ON STIFF TO VERY STIFF CLAY OR COMPETENT WEATHERED SHALE OR LIMESTONE. CONTRACTOR SHALL UNDER CUT FOOTINGS AS REQUIRED TO REACH COMPETENT BEARING MATERIAL. PROVIDE SOLID FILL OR LEAN–FILL AS REQUIRED. OVERSIZE UNDER CUTS LATERALLY ONE HORIZONTAL TO TWO VERTICAL FROM FOOTING EDGE.

SF–6 FOUNDATIONS SHALL BEAR A MINIMUM OF 24" BELOW GRADE.

REINFORCED CONCRETE

RC–1 CONCRETE WORK SHALL COMPLY WITH SECTION 802 OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT 2003 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

RC–2 PROVIDE CLASS OF CONCRETE WITH THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH.

CLASS OF CONCRETE

S	3500 PSI (UNLESS NOTED OTHERWISE)
S	4000 PSI (SLAB GREATER THAN 4")
S (AE)	4000 PSI (EXTERIOR CONCRETE)
LEAN–FILL	1500 PSI

RC–3 ALL PUMPED CONCRETE WITH #57 AGGREGATE IS TO CONTAIN A HIGH RANGE WATER REDUCING AGENT. MINIMUM SIZE OF DISCHARGE TO BE 4" I.D. SEE SPECIFICATIONS FOR REQUIRED MIX DESIGN. A 2" I.D. DISCHARGE MAY BE USED WITH #89 AGGREGATE.

RC–4 ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318 (LATEST EDITION) AND ACI DETAILING MANUAL, ACI–315 LATEST EDITION.

RC–5 REINFORCING STEEL SHALL BE NEW DEFORMED BARS, FREE FROM RUST, SCALE AND OIL, CONFORMING TO ASTM A–615, GRADE 60, WITH MINIMUM YIELD STRENGTH = 60,000 PSI.

RC–6 PROVIDE THE FOLLOWING CONCRETE COVERAGE OVER REINFORCING:

FOOTINGS:	BOTTOMS & UNFORMED EDGES	3" CLEAR
	TOP & FORMED EDGES	1 1/2" CLEAR

RC–7 NO REINFORCING BARS SHALL BE CUT TO ACCOMMODATE THE INSTALLATION OF ANCHORS, EMBEDS OR OTHER ITEMS.

RC–8 USE THE STRUCTURAL DRAWINGS (INCLUDING REVISIONS AND ADDENDA) IN CONJUNCTION WITH REVIEWED SHOP DRAWINGS FOR PLACEMENT OF REINFORCING.

RC–9 AT CHANGES IN DIRECTION OF WALL BEAMS AND STRIP FOOTINGS, PROVIDE CORNER BARS OF SAME SIZE AND QUANTITY (U.N.O.) AS HORIZONTAL STEEL. REFER TO TYPICAL DETAIL 11 ON SHEET 12S–501.

RC–10 ALL EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

MASONRY

M–1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI "BUILDING CODE AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ASCE 530.1–LATEST EDITION) EXCEPT AS AMENDED BELOW.
REQUIREMENTS FOR MASONRY STRUCTURES" (ACI/ASCE 530–LATEST EDITION)

M–2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C–90 (28 DAY STRENGTH = 2000 P.S.I., fm' = 1500 P.S.I.) LAID IN RUNNING BOND.
ALL MASONRY SHALL BE NORMAL WEIGHT, TYPE 1, GRADE "N" U.N.O.

M–3 USE TYPE "M" OR "S" MORTAR WITH MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.

M–4 PROVIDE LAP SPLICES FOR REINFORCING AS SHOWN ON SCHEDULE.

M–5 SEE SHEET 12S–502 FOR ADDITIONAL NOTES.

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12S–001
REV	

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METAL BUILDING SYSTEM DESCRIPTION BODY & PAINT SHOP

REFER TO SPECIFICATIONS AND NOTES ON THE DRAWINGS FOR ADDITIONAL INFORMATION.

PRIMARY FRAME TYPE:	RIGID CLEAR SPAN
END-WALL FRAMING:	PINNED
EXTERIOR COLUMN TYPE:	TAPERED
INTERIOR COLUMNS:	N/A
ROOF RAFTER TYPE:	TAPERED
SECONDARY FRAME TYPE-ROOF:	MFG. STANDARD "C" OR "Z" COLD-FORMED PURLINS AND
SECONDARY FRAME TYPE-GIRTS:	EXTERIOR FRAMED (BYPASS)
SIDEWALL BRACING TYPE:	X-BRACE & DIAGONAL BRACE AS SHOWN
COLUMN BASES:	PINNED
EXTERIOR WALL SYSTEM:	REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATION

METAL BUILDING SYSTEMS (MBS):

MB-1 REFER TO SPECIFICATION SECTION 133419 FOR METAL BUILDING DESIGN CRITERIA, FABRICATION AND CONSTRUCTION REQUIREMENTS.

MB-2 SEE THIS DRAWING FOR CODES, DESIGN CRITERIA AND OTHER NOTES THAT APPLY.

MB-3 THE BUILDING SHALL BE METAL BUILDING SYSTEMS OF THE SIZE AND CONFIGURATION SHOWN. THE BUILDINGS SHALL BE DESIGNED AND FABRICATED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

MB-4 A COMPLETE DESIGN ANALYSIS SHOWING ALL CALCULATIONS FOR THE RIGID FRAMES, GIRTS, PURLINS, BRACING FOR WIND AND SEISMIC LOADS AND A LAYOUT OF ANCHOR BOLTS AND OTHER EMBEDDED ITEMS SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE DETAILS OF ALL MAIN MEMBERS, TYPICAL CONNECTIONS (SHOWING BOLT HOLES AND WELDS), AND ERECTION DRAWINGS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS.

MB-5 COLUMN REACTIONS SHALL BE SUBMITTED FOR REVIEW OF FOUNDATION DESIGN WITHIN TWO WEEKS OF AWARD DATE OR AS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.

MB-6 THE BUILDING SHALL BE DESIGNED TO SUPPORT ALL CRANES, MECHANICAL EQUIPMENT INCLUDING HEATERS, SPRINKLERS, EXHAUST SYSTEMS, AND ALL OTHER SUCH DEVICES. ADDITIONAL GIRTS OR PURLINS OR BEAMS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL EQUIPMENT.

MB-7 THE BUILDING SHALL BE DESIGNED AND MEMBERS PROVIDED FOR LATERAL SUPPORT OF MASONRY WALLS.

MB-8 THE BUILDING FRAME SHALL BE DESIGNED TO LIMIT THE LATERAL DEFLECTION TO H/400. "H" BEING THE EAVE HEIGHT, AT THE BUILDING EAVE FOR THE BASIC WIND SPEED CALLED (SEE "DESIGN CRITERIA" SECTION THIS SHEET) FOR SEISMIC, THE Cd X DESIGN LEVEL RESPONSE DISPLACEMENT SHALL NOT EXCEED H/50.

MB-9 CROSS BRACING SHALL BE USED TO TAKE LATERAL DIAPHRAGM LOADS UNLESS THE METAL PANELS ARE THROUGH FASTENED TO THEIR SUPPORTS. LOAD TESTS ON METAL PANELS MUST BE SUBMITTED WHERE THESE ARE USED AS A DIAPHRAGM. METAL PANELS USED, AS A DIAPHRAGM MUST BE A MINIMUM OF 22 GAGE.

MB-10 ALL VERTICAL BRACING TO BE ANCHORED TO COLUMN WEBS.

MB-11 ALL METAL BUILDING FRAMES AND BEAMS SHOWN ON ROOF FRAMING PLANS ARE DIAGRAMMATIC FOR INTENT ONLY. ALL FINAL LOCATIONS, SIZES, ETC. FOR ALL FLOOR AND ROOF MEMBERS SHALL BE FROM METAL BUILDING SYSTEMS SUPPLIER (AND/OR JOIST AND BEAM MANUFACTURER) BEARING THE SEAL, SIGNATURE AND DATE OF THE REGISTERED ENGINEER IN THE STATE OF ARKANSAS. METAL BUILDING SYSTEMS SUPPLIER IS RESPONSIBLE FOR FINAL TRUSS LAYOUT AND DESIGN OF ALL ROOF FRAMES.

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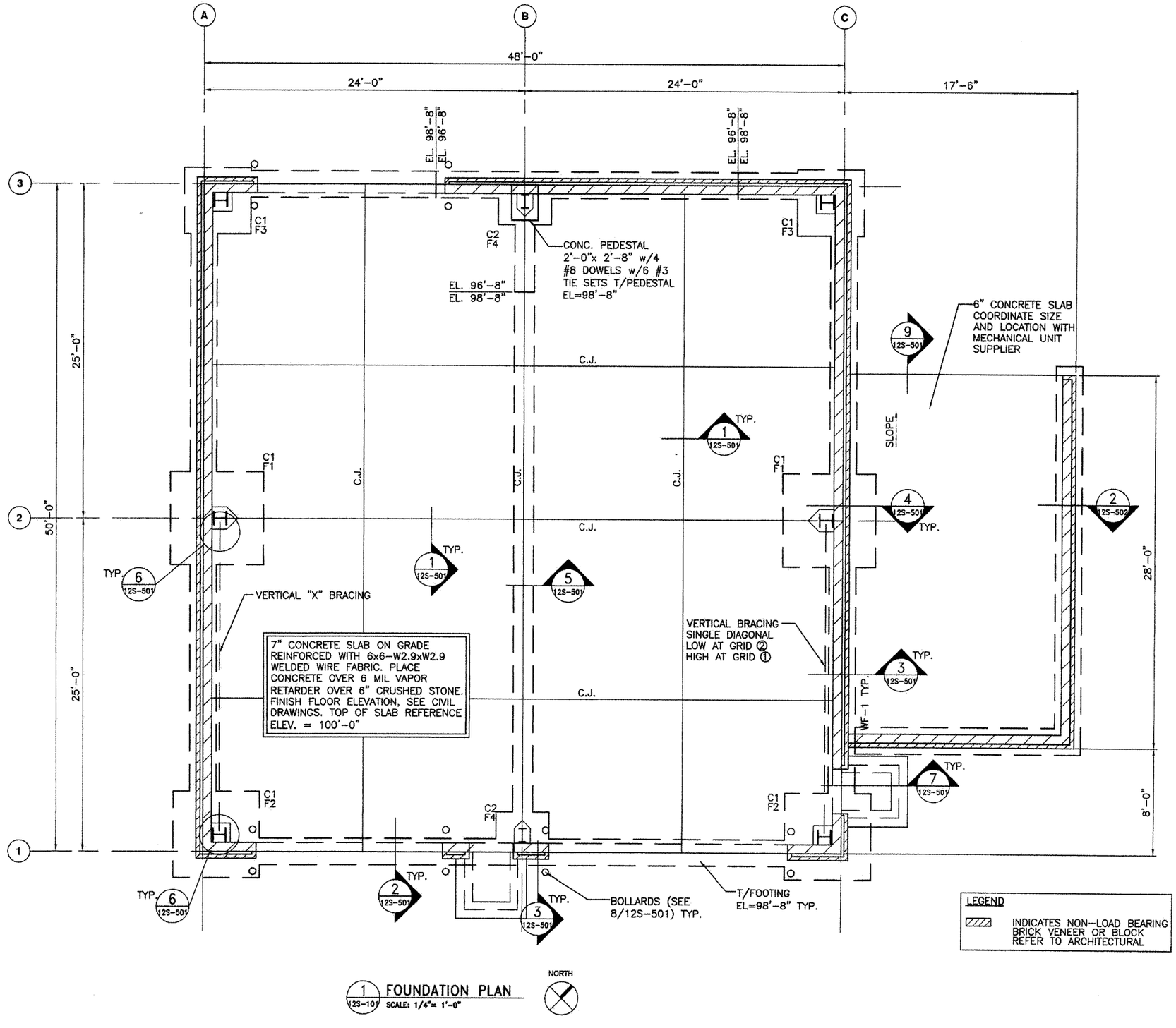
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
JOHN DAVID WESTERHEIDE
No. 12626
10/13/11

DESIGNED BY	JDW
DRAWN BY	RCE
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12S-002	
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1 FOUNDATION PLAN (12S-101)
SCALE: 1/4"= 1'-0"

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
FOUNDATION PLAN

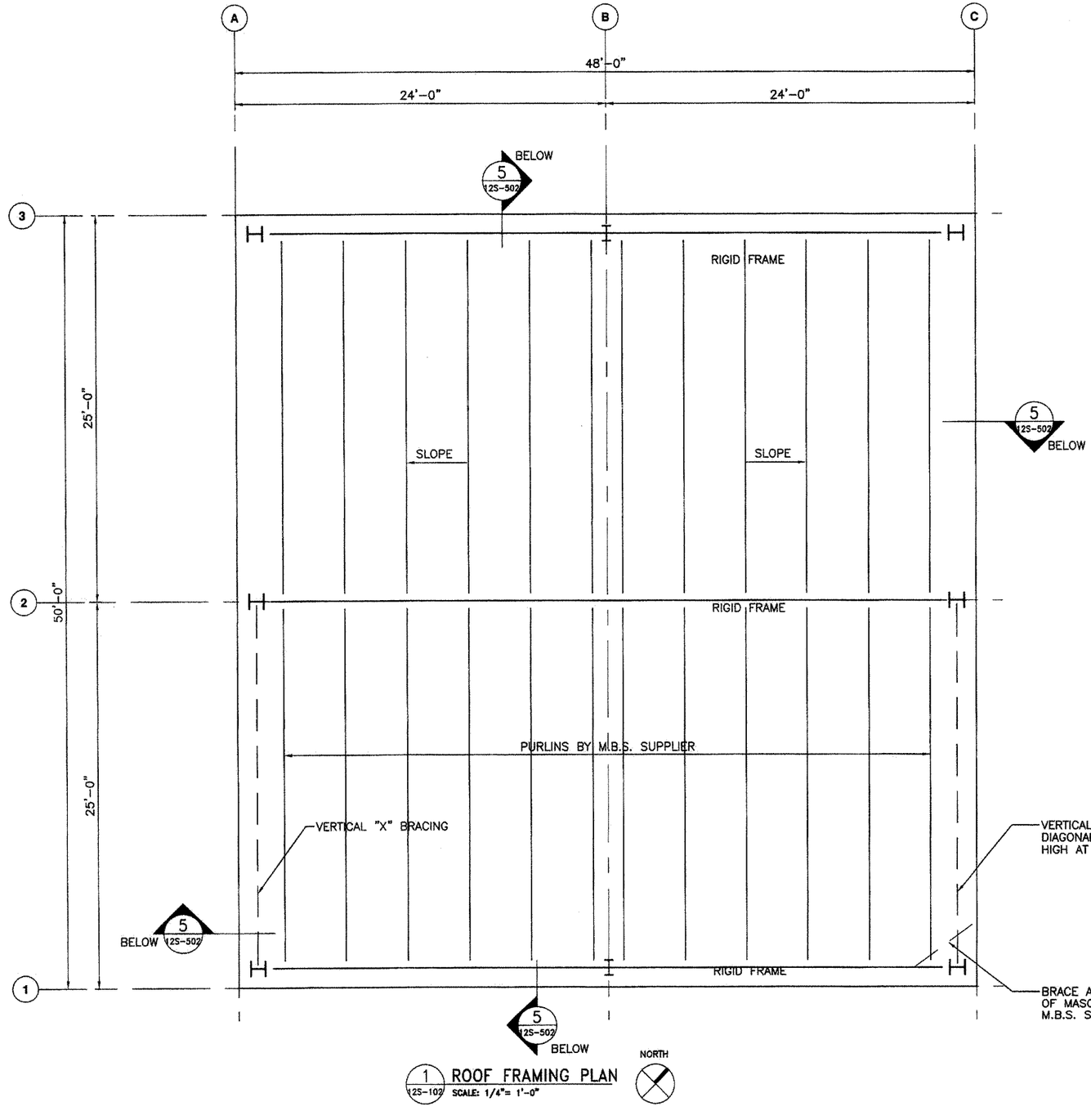
DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
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SHEET	12S-101
REV	

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CERTIFICATE OF AUTHORIZATION
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STATE OF ARKANSAS
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No. 12626
JOHN DAVID WESTERVELDE
10/13/11



1 ROOF FRAMING PLAN (12S-102)
SCALE: 1/4"= 1'-0"

METAL BUILDING SYSTEMS SUPPLIER SHALL DESIGN THE ROOF FRAMING TO SUPPORT THE INDICATED UNIFORM COLLATERAL LOADS AND THE WEIGHT OF THE MECHANICAL/ELECTRICAL UNITS SUSPENDED FROM THE ROOF FRAMING.

METAL BUILDING SYSTEMS SUPPLIER SHALL COORDINATE WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING THE SIZE AND WEIGHTS OF THE ROOF SUPPORTED MECHANICAL/ELECTRICAL UNITS AND THE SIZE, LOCATION AND WEIGHTS OF ANY EXTERIOR WALL MOUNTED EQUIPMENT OR LOUVERS THAT PENETRATE THE METAL WALL PANELS PROVIDED BY THE METAL BUILDING SUPPLIER.

MECHANICAL AND ELECTRICAL CONTRACTOR SHOULD COORDINATE THE APPLICABLE HANGER SYSTEMS AND DETAILS WITH METAL BUILDING SYSTEMS MANUFACTURER AND THE TYPICAL DETAILS SHOWN ON THE ATTACHED SHEETS.

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ROOF FRAMING PLAN

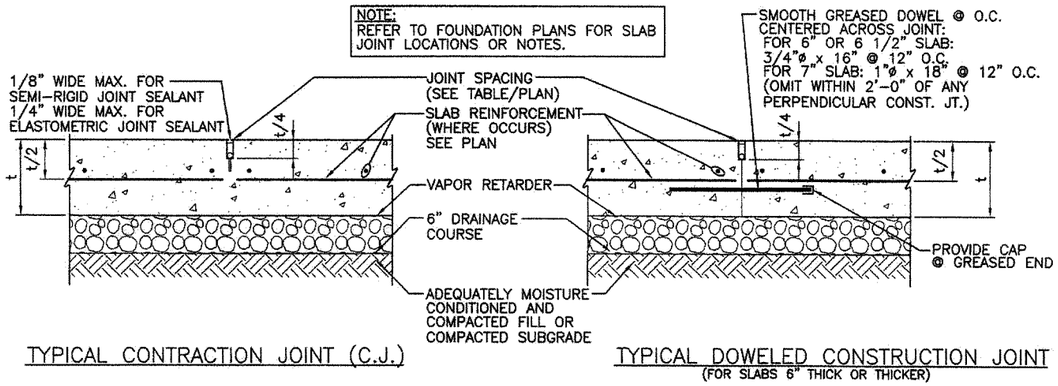
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STATE OF ARKANSAS
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No. 12626
JOHN DAVID WESTERHEIDE

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SHEET	12S-102
REV	

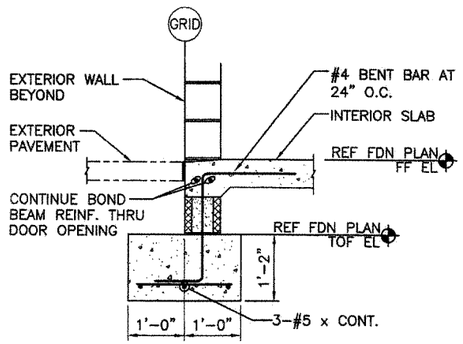
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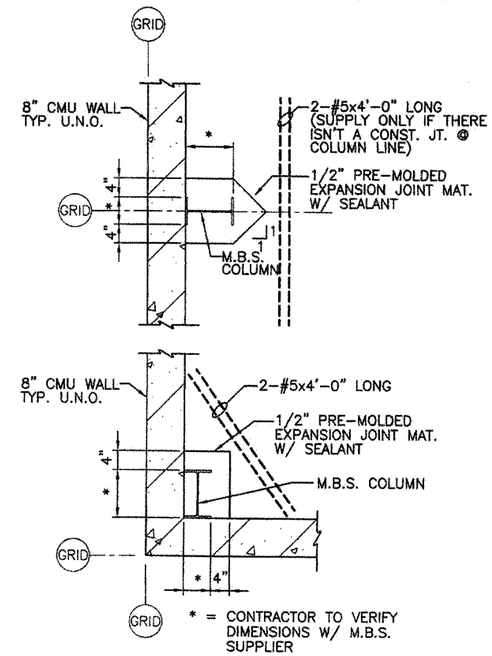
TYPICAL CONTRACTION JOINT (C.J.)

TYPICAL DOWELED CONSTRUCTION JOINT
(FOR SLABS 6" THICK OR THICKER)

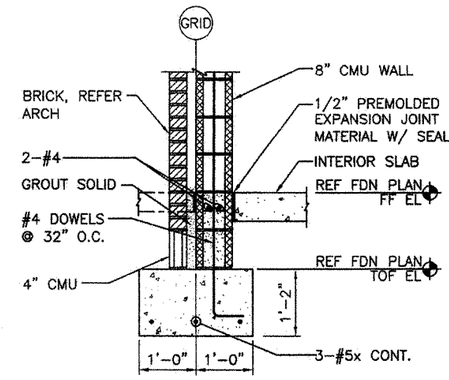
1 (12S-501) TYPICAL SLAB-ON-GRADE DETAILS
SCALE: NO SCALE



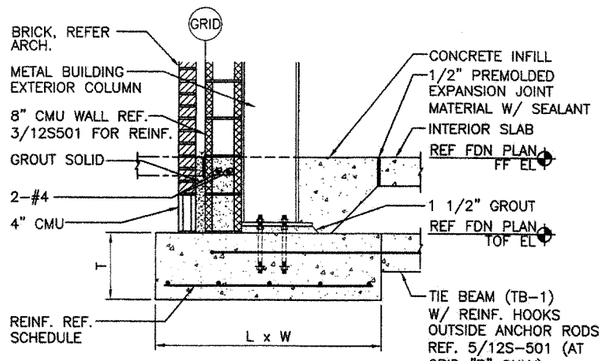
2 (12S-501) FOOTING AT O.H. DOOR OPENING
SCALE: 3/4"=1'-0"



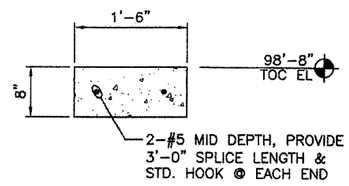
6 (12S-501) TYP. M.B.S. COLUMN DIAMOND DETAIL
SCALE: NO SCALE



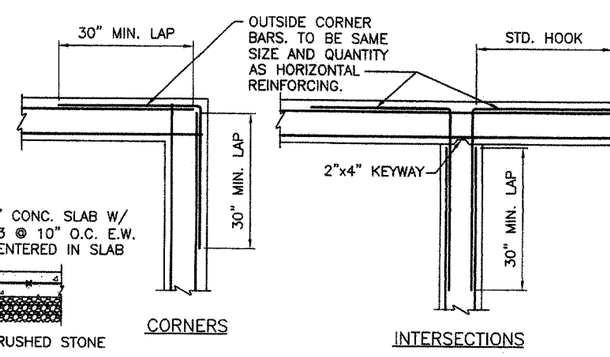
3 (12S-501) TYP. EXTERIOR FOOTING
SCALE: 3/4"=1'-0"



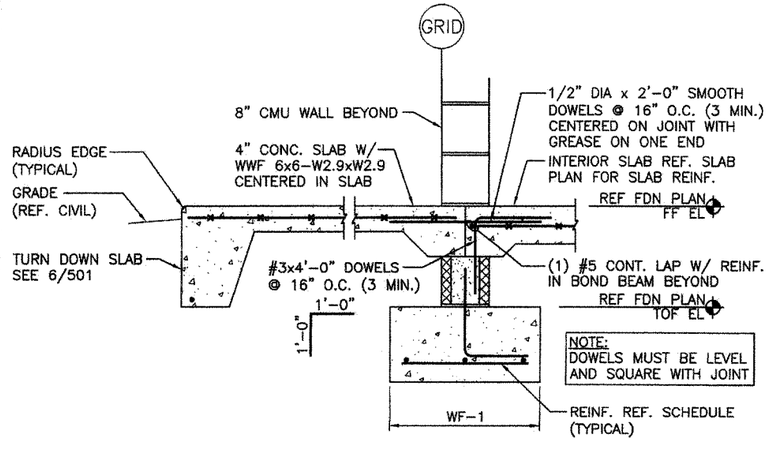
4 (12S-501) TYP. FTG. AT EXTERIOR COLUMN
SCALE: 3/4"=1'-0"



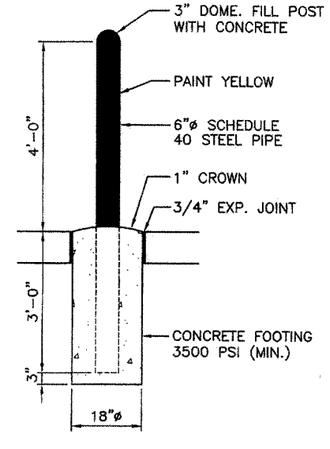
5 (12S-501) TYPICAL TIE BEAM (TB-1)
SCALE: 1"=1'-0"



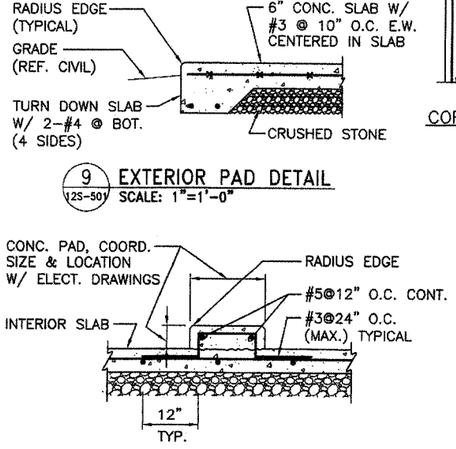
11 (12S-501) TYPICAL CORNER DETAILS
SCALE: NO SCALE



7 (12S-501) TYPICAL EXIT DOOR STOOP
SCALE: 1"=1'-0"



8 (12S-501) TYPICAL BOLLARD
SCALE: 1"=1'-0"



9 (12S-501) EXTERIOR PAD DETAIL
SCALE: 1"=1'-0"

10 (12S-501) HOUSEKEEPING PAD DETAIL
SCALE: 1"=1'-0"

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
SECTIONS & DETAILS

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

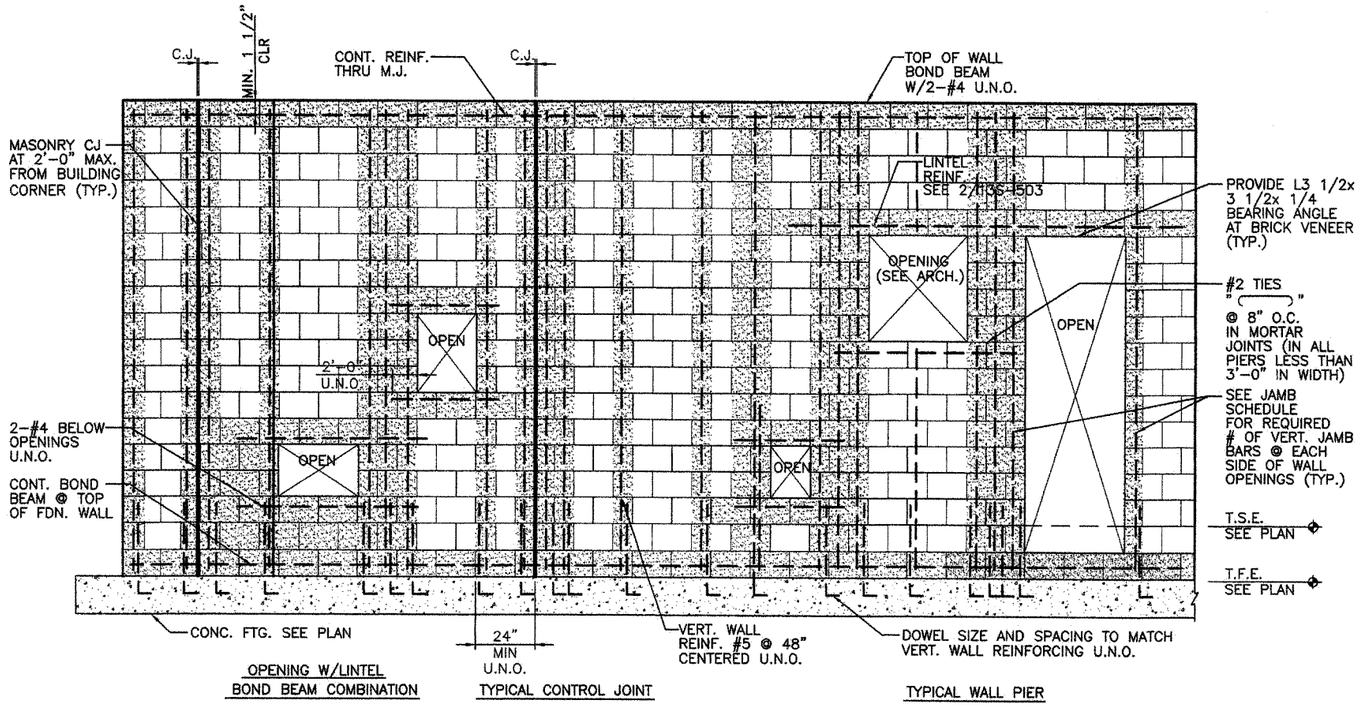
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
JOHN DAVID WESTERFIELDE
No. 12626
10/13/11

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12S-501
REV	

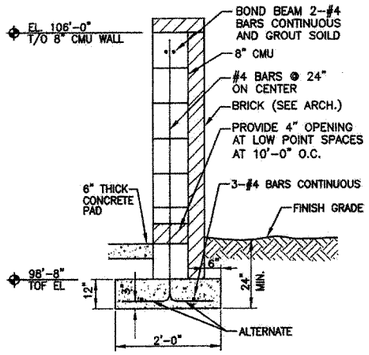
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GENERAL MASONRY NOTES:

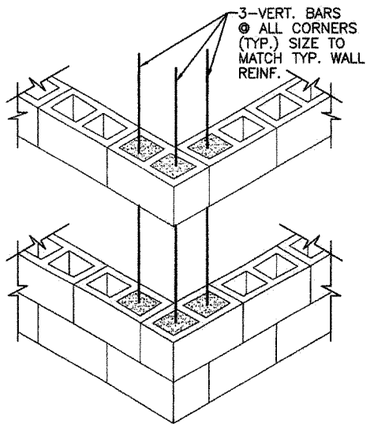
1. UNITS SHALL UTILIZE FACE SHELL MORTAR BEDDING U.N.O.
2. MASONRY WALLS SHALL HAVE CONTROL JOINTS AT A MAXIMUM OF 30'–0" U.N.O. SEE ARCH. DRAWINGS FOR CONTROL JOINT LOCATIONS IN CMU WALLS. SEE 4/12S–502 FOR CONTROL JOINT DETAIL.
3. CONSOLIDATE GROUT POURS OVER 12' BY MECHANICAL VIBRATION. RECONSOLIDATE GROUT IN MASONRY CELLS BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
4. FOR HIGH LIFT GROUTING (OVER 5'–0") CLEANOUTS ARE REQUIRED AT EVERY GROUTED CORE AT THE BASE OF EACH LIFT. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR. TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
5. HIGH LIFT GROUT SHALL NOT EXCEED 10'–6" IN HEIGHT FOR #4 OR #5 VERT. BARS 12'–6" IN HEIGHT FOR #6 VERT. BARS.
6. THE USE OF SELF–CONSOLIDATING GROUT (SCG) WILL REQUIRE FULL INSPECTION AND ACCEPTANCE OF THE GROUT MIX DELIVERED TO THE SITE BY THE SUPPLIERS REPRESENTATIVE AND THE INSPECTION AGENCY.
7. SCG ON–SITE INSPECTION SHALL VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DETERMINED BY ASTM C 1611.
8. PROVIDE STANDARD 90 DEGREE HOOK DOWELS BETWEEN FOUNDATIONS AND WALLS EQUAL TO THE SIZE AND SPACING OF THE VERTICAL REINFORCING U.N.O.
9. PROVIDE 9 GA. LADDER TYPE HORIZONTAL AT JOINT REINFORCEMENT EVERY COURSE IN STACK BOND WALLS AND EVERY OTHER COURSE IN RUNNING BOND WALLS U.N.O. PROVIDE A 6 INCH SPLICE LENGTH FOR HORIZONTAL REINF.
10. ALL SPLICES WITHIN WALL SHALL BE IN ACCORDANCE WITH THE LAP SPLICE SCHEDULE U.N.O. SEE SECTIONS AND DETAILS FOR DOWELS AND SPLICE AT FOUNDATIONS AND AND FLOOR LEVELS.
11. PROVIDE CONTINUOUS BOND BEAM REINFORCEMENT WITH 2–#4 BARS OR AS NOTED.
12. ALL NON–BEARING MASONRY WALLS SHALL BE PROVIDED WITH VERTICAL SLIP CONNECTIONS AT THE TOP OF THE WALL U.N.O.
13. REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS.
14. TOLERANCES FOR THE PLACEMENT OF REINFORCEMENT IN WALLS AND FLEXURAL ELEMENTS SHALL BE PLUS OR MINUS 1/2" FOR d EQUAL TO 8" OR LESS, PLUS OR MINUS 1" FOR d EQUAL TO 24" OR LESS BUT GREATER THAN 8", AND PLUS OR MINUS 1 1/4" FOR d GREATER THAN 24". NOTE: d = DISTANCE FROM CENTERLINE OF REINFORCING STEEL TO THE OPPOSITE FACE OF MASONRY.
15. SEE 12S–001 FOR INFORMATION ON CMU MATERIAL REQUIREMENTS.
16. ALL MORTAR PROTRUSIONS INTO CELLS TO BE GROUTED ARE REQUIRED TO BE REMOVED BY MASON AND ALL DEBRIS MUST BE VACUUMED FROM CORE.
17. REINFORCING IS CONTINUOUS FROM TOP OF FOOTING TO TOP OF WALL.
18. NO CMU CONSTRUCTION MAY BEGIN UNTIL A PRECONSTRUCTION CONFERENCE HAS TAKEN PLACE WITH THE FOLLOWING PARTIES IN ATTENDANCE: STRUCTURAL ENGINEER, MASONRY SUBCONTRACTOR, GENERAL CONTRACTOR, ARCHITECT AND OWNERS REPRESENTATIVE.



1 TYPICAL MASONRY WALL REINFORCING DETAIL
12S–502 SCALE: NO SCALE

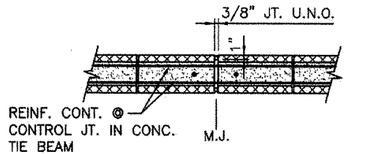


2 SCREEN WALL SECTION
12S–502 SCALE: NO SCALE

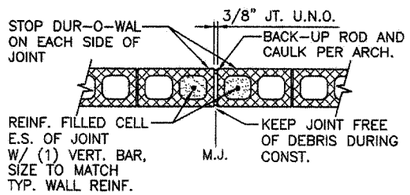


8" CMU to 8" CMU

3 TYP. MASONRY CORNER DETAIL
12S–502 SCALE: NO SCALE

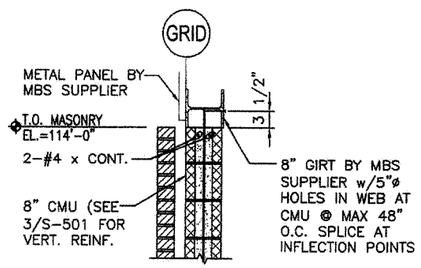


AT UPPER BOND BEAM LEVEL



AT TYPICAL LEVEL

4 TYP. WALL CONTROL JOINT DETAILS
12S–502 SCALE: NO SCALE



NOTE: STEEL JAMB FOR 14'x14' OVERHEAD DOORS SHALL SPAN FROM FLOOR TO GIRT WITHOUT ATTACHMENT TO CMU.

5 TYPICAL GIRT @ CMU WALL
12S–502 SCALE: 3/4"=1'–0"

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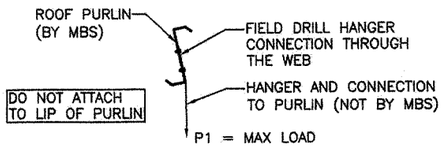
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
TYPICAL MASONRY DETAILS

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

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SHEET	REV
12S–502	
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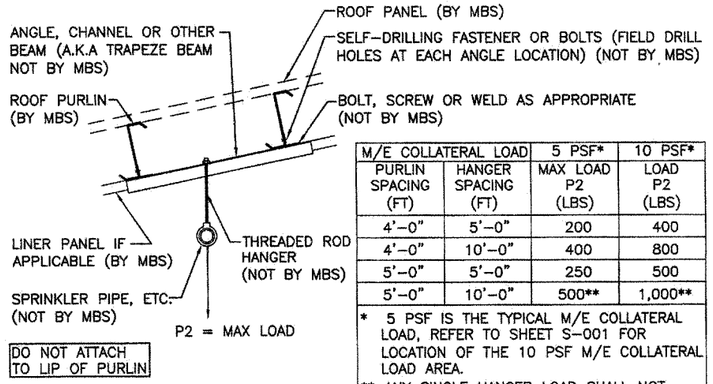
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JOHN DAVID WESTERHEIDE No. 12626
10/13/11



M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	LOAD P1 (LBS)	LOAD P1 (LBS)
4'–0"	5'–0"	100	200
4'–0"	10'–0"	200	400
5'–0"	5'–0"	125	250
5'–0"	10'–0"	250**	500**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.
** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

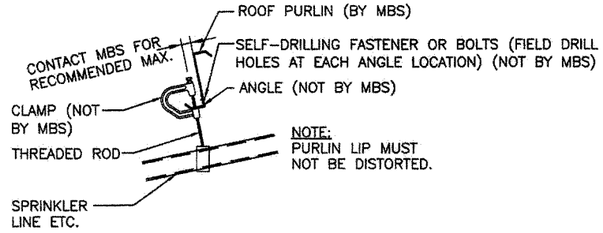
1 (12S–503) RECOMMENDED METHOD FOR HANGING LOADS ON A SINGLE PURLIN
SCALE: 1"=1'–0"



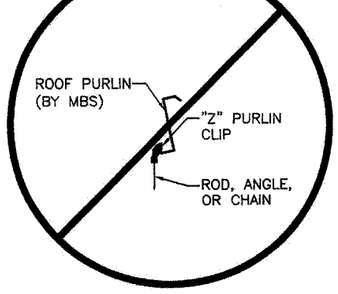
M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	MAX LOAD P2 (LBS)	LOAD P2 (LBS)
4'–0"	5'–0"	200	400
4'–0"	10'–0"	400	800
5'–0"	5'–0"	250	500
5'–0"	10'–0"	500**	1,000**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.
** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

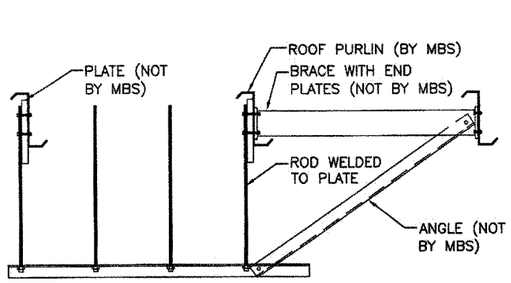
2 (12S–503) SPREADER BEAM (A.K.A. TRAPEZE BEAM) DETAIL
SCALE: 1"=1'–0"
NOTE:
* FOR LOADS GREATER THAN 40 POUNDS, VERIFY ADEQUACY OF ROOF FRAMING WITH M.B.S.



3 (12S–503) CLAMP HANGER DETAIL VERIFY W/MANUF. PRIOR TO USE
SCALE: 1"=1'–0"



4 (12S–503) INCORRECT METHOD FOR HANGING LOADS ON PURLINS
SCALE: 1"=1'–0"



5 (12S–503) SEISMIC OR SWAY BRACE DETAIL
SCALE: 1"=1'–0"

GENERAL HANGING LOAD NOTES FOR METAL BUILDINGS:

1. THE DETAILS DEPICTED HEREIN ARE TYPICAL INDUSTRY STANDARD DETAILS FOR HANGING LOADS (DUCTS, PIPING, CONDUITS, ETC.) FROM THE COLD–FORMED PURLINS OF METAL BUILDING ROOFS.
2. THE ACTUAL DETAILS TO BE USED SHALL BE DETERMINED BY THE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. CONTRACTOR AND REVIEWED BY THE RESPECTIVE METAL BUILDING CONTRACTOR, INCLUDING THE VALUES OF THE HANGER LOADS.
3. THE HANGER RODS, BRACES, STRUTS BETWEEN THE PURLINS TO SUPPORT THE HANGER AND/OR SWAY BRACES SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR (NOT THE METAL BUILDING CONTRACTOR UNLESS PREVIOUS ARRANGEMENTS HAVE BEEN MADE).
4. THE RESPECTIVE CONTRACTOR SHALL CONSULT THE BUILDING MANUFACTURER REGARDING THEIR SPECIFIC GUIDELINES FOR HANGING LOADS ON PURLINS.
5. HANGING LOADS SHOULD NOT BE APPLIED TO THE PURLIN LIP. WHERE PERMISSIBLE, THE PREFERRED PRACTICE FOR HANGING LOADS IS TO ATTACH TO THE PURLIN WEB USING A BOLT AND NUT, OR SELF–DRILLING SCREWS.
6. HANGING UNIFORM LOADS SUCH AS SPRINKLER MAINS OR HVAC EQUIPMENT SHOULD BE DISTRIBUTED OVER SEVERAL PURLINS AND SHOULD NEVER EXCEED THE COLLATERAL LOAD ALLOWANCE FOR THE ROOF SYSTEM. FOR UNIFORM LOADS THAT RUN PARALLEL TO THE PURLINS, IT MAY BE NECESSARY TO USE TRANSVERSE CHANNELS (A.K.A. TRAPEZE BEAMS) ATTACHED TO THE WEBS OR FLANGES OF TWO OR MORE PURLINS TO SPREAD THE LOAD BETWEEN TWO OR MORE PURLINS. IN SUCH CASES, CONTACT THE BUILDING MANUFACTURER OR A LOCAL PROFESSIONAL ENGINEER PRIOR TO ATTEMPTING TO HANG LOADS FROM THE PURLINS.
7. IN SOME CASES, IT MAY BE ALLOWABLE TO HANG LIGHTWEIGHT LOADS FROM HANGER RODS ATTACHED THROUGH A SMALL HOLE DRILLED IN THE BOTTOM PURLIN FLANGE WITH A THREADED ROD AND NUT. CONTACT THE MANUFACTURER TO SEE IF THEY PERMIT THIS AND FOR THEIR SPECIFIC RECOMMENDATION REGARDING THE HOLE SIZE AND MAXIMUM ACCEPTABLE DISTANCE FROM THE APPLIED LOAD TO THE PURLIN WEB.
8. MULTIPLE HANGERS MAY BE CONNECTED TO THE SAME PURLIN WITH PRIOR APPROVAL FROM THE BUILDING MANUFACTURER. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.
9. IN SOME CASES, LIGHTWEIGHT LOADS SUCH AS FROM SUSPENDED CEILING TILE HANGER WIRES, MAY BE LOOPED OVER THE TOP OF THE ROOF PURLINS. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — NO. 12626 — JOHN DAVID WESTERHEIDE — 10/13/11

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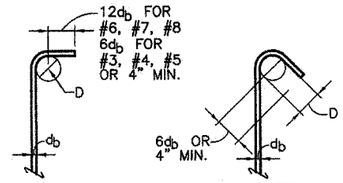
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
TYPICAL HANGING LOAD DETAILS AT PURLINS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12S–503
REV	

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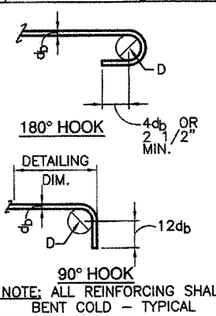
BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$4d_b$
#6 THRU #8	$6d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

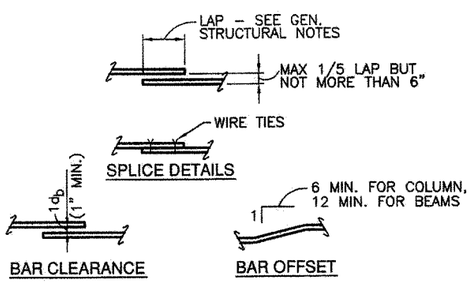
STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCING

BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$6d_b$
#6, #7, #8,	$8d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

STANDARD HOOKS FOR PRIMARY REINFORCING



1 (12S-601) TYPICAL BAR BEND & LAP SPLICE DETAILS
SCALE: NO SCALE

PRELIMINARY FOOTING SCHEDULE

MK	SIZE WIDTH x LENGTH x THICKNESS	REINF. EA. WAY @ BOT. U.N.O.	TYP. DETAIL	REMARKS
WF–1	2'–0" x CONT x 1'–2"	3–#5 LONG. T&B	3/12S–501	CONTINUE LONG. BARS THRU COL FTG
F1	7'–0" x 7'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/12S–501	
F2	6'–6" x 6'–6" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/12S–501	
F3	5'–0" x 5'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/12S–501	90 DEGREE HOOK EACH END
F4	4'–0" x 4'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/12S–501	90 DEGREE HOOK EACH END

FOOTING NOTES:

1. FOUNDATION SIZES ARE PRELIMINARY. DO NOT FABRICATE OR CONSTRUCT COLUMN FOOTINGS UNTIL FOOTINGS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. ALLOWABLE BEARING PRESSURE FOR SHALLOW SPREAD FOOTINGS IS 2000 PSF FOR CONTINUOUS FOOTINGS AND 2500 PSF FOR INDIVIDUAL FOOTINGS.
3. EXTERIOR FOOTINGS SHALL BEAR AT A MINIMUM DEPTH OF 24 INCHES BELOW LOWEST ADJACENT GRADE.
4. CONNECTION OF METAL BUILDING COLUMNS TO FOUNDATION IS TO BE PINNED.
5. REINFORCING TO CONFORM TO ASTM A615, GRADE 60.

2 (12S-601) FOOTING SCHEDULE
SCALE: NO SCALE

COLUMN DESCRIPTIONS	
MK	DESCRIPTIONS
C1	METAL BUILDING RIGID FRAME COLUMN
C2	METAL BUILDING EXTERIOR COLUMN

4 (12S-601) COLUMN SCHEDULE
SCALE: NO SCALE

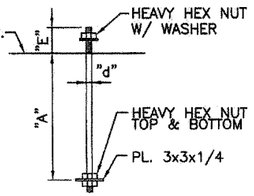
LAP SPLICE SCHEDULE

BAR SIZE "D"	POSITION	CONCRETE f'c (PSI) 3000	CONCRETE f'c (PSI) 4000	MASONRY fm'=1500
#3	ALL	17"	15"	–
#4	ALL	22"	19"	(1) BAR PER CELL = 24" (2) BAR PER CELL = 36"
#5	ALL	28"	24"	(1) BAR PER CELL = 30" (2) BAR PER CELL = 54"
#6	ALL	33"	29"	(1) BAR PER CELL = 52" (2) BAR PER CELL = 108"
#7	ALL	49"	42"	–
#8	ALL	55"	48"	–

NOTES (FOR CONCRETE REBAR LAP SPLICE ONLY):

1. "d" DENOTES BAR DIAMETER.
2. VALUES APPLY TO ALL BARS WITH MIN. CONCRETE COVER OF 2d AND MIN. CENTER–TO–CENTER SPACING OF 5d.
3. FOR BARS WITH COVER BETWEEN d AND 2d, MULTIPLY VALUES BY 1.67.
4. FOR BARS WITH CENTER–TO–CENTER SPACING BETWEEN 3d AND 5d, MULTIPLY VALUES BY 1.67.
5. FOR BARS NOT MEETING ABOVE REQUIREMENTS, MULTIPLY BY 2.5.

5 (12S-601) LAP SPLICE SCHEDULE
SCALE: NO SCALE



PRELIMINARY ANCHOR ROD SCHEDULE

TYPE	QTY. & DIA. "d"	"A"	PROJ. "E"	LOCATION
AB–1	(4) 3/4"ø	0'–10"	5"	BUILDING COLUMN

NOTES:

1. DO NOT FABRICATE ANCHOR RODS UNTIL THE RODS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. CONTRACTOR TO COORDINATE INSTALLATION OF ANCHOR RODS WITH METAL BUILDING SYSTEM DRAWINGS.
3. ANCHOR RODS SHALL MEET THE REQUIREMENTS OF ASTM F1554 (GRADE 36 KSI) UNLESS NOTED OTHERWISE.
4. ANCHOR RODS SHALL BE FURNISHED WITH HEAVY HEX NUTS AND CUT WASHERS OF SPECIFICATIONS COMPATIBLE WITH THOSE OF THE THREADED UNLESS OTHERWISE NOTED.
5. PRIOR TO SETTING ANCHOR RODS, THEY SHALL BE CLEANED FREE OF ANY OILS OR OTHER MATERIALS. ANCHOR BOLTS SHALL REQUIRE SPECIAL INSPECTION.
6. A POSITIVE MEANS SHALL BE USED TO KEEP CONCRETE FROM CONTACTING WITH THE PROJECTING PART OF THE RODS.

3 (12S-601) ANCHOR ROD SCHEDULE
SCALE: NO SCALE

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
SCHEDULES

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12S–601
REV	

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SYMBOLS

SECTION CUT
SECTION LOCATION

DETAIL NUMBER
DETAIL LOCATION

KEYED NOTE

DOMESTIC COLD WATER
DOMESTIC HOT WATER
DOMESTIC HOT WATER RECIRCULATING
SANITARY SEWER (UNDERGROUND)
SANITARY SEWER (ABOVEGROUND) — SAN
VENT
CONDENSATE DRAIN — CD
GAS — G
COMPRESSED AIR — A

PIPE UP
PIPE DOWN
TOP BRANCH CONNECTION
BOTTOM BRANCH CONNECTION
TEE UP
TEE DOWN
PIPE CAP
CLEANOUT
PIPE ANCHOR
PIPE GUIDE
FLOOR DRAIN
WALL HYDRANT
HOSE BIBB
UNION
STRAINER
CHECK VALVE
FLOW DIRECTION
FLEXIBLE PIPING CONNECTION

CONTROL VALVE
3-WAY CONTROL VALVE
REDUCER
SHUT OFF VALVE
BALANCING VALVE
GLOBE VALVE
GATE VALVE
BALL VALVE
BUTTERFLY VALVE
PRESSURE REDUCING VALVE
BACKFLOW PREVENTER
THERMOMETER
PRESSURE GAUGE
SAFETY RELIEF VALVE
MANUAL AIR VENT

PLUMBING GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF PLUMBING, FIXTURES, EQUIPMENT AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES. WHERE PLUMBING FIXTURES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL FLOOR PLANS. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE HVAC, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. PLUMBING, FIXTURES, AND EQUIPMENT SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. AT ALL FIRE SEPARATIONS, ALL PIPING WALL PENETRATIONS SHALL BE FIRE-STOPPED WITH U.L. APPROVED FIRE-STOP MATERIAL.
4. REFER TO STRUCTURAL DRAWINGS FOR PENETRATIONS THROUGH FOUNDATIONS.
5. SEAL ALL PIPING PENETRATIONS THROUGH ROOF WITH 1" 6 LB. DENSITY RIGID FIBERGLASS AND A NON-SHRINKING ACOUSTICAL CAULK.
6. SET TOP OF FLOOR DRAIN ELEVATION FLUSH WITH FINISH FLOOR UNLESS NOTED OTHERWISE.
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
8. UNDERGROUND AND ABOVEGROUND PLUMBING MAINS SHALL BE SLOPED AT A MINIMUM OF 1/8 INCH PER FOOT (1.0 PERCENT) UNLESS NOTED. ALL HORIZONTAL VENTS SHALL BE SLOPED 1/4 INCH PER 10 FEET MINIMUM TO DRAIN.
9. PROVIDE BASE CLEANOUTS FOR ALL WASTE STACKS AND VENT STACKS.
10. CLEANOUTS LOCATED ALONG THE HORIZONTAL DRAINS SHALL BE LOCATED AT NOT MORE THAN 100 FOOT INTERVALS.
11. SEE CIVIL DRAWINGS FOR CONTINUATION OF ALL PLUMBING 5'-0" OUTSIDE OF THE BUILDING PERIMETER.
12. ALL HVAC CONDENSATE AND EQUIPMENT DRAINS LOCATIONS TO BE COORDINATED WITH HVAC CONTRACTOR.

ABBREVIATIONS

AA	AUTOMATIC AIR VENT	MBH	BTU PER HOUR (1000'S)
AD	ACCESS DOOR	MC	MECHANICAL CONTRACTOR
ADJ	ADJUSTABLE	MD	MANUAL DAMPER
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
AG	ABOVE GROUND	MIN	MINIMUM
AMB	AMBIENT	NC	NORMALLY CLOSED
APD	AIR PRESSURE DROP	NIC	NOT IN CONTRACT
AWT	AVERAGE WATER TEMPERATURE	NO	NORMALLY OPEN
BHP	BRAKE HORSEPOWER	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	OA	OUTSIDE AIR
CAP	CAPACITY	OED	OPEN END DUCT
CFM	CUBIC FEET PER MINUTE	PC	PLUMBING CONTRACTOR
DB	DRY BULB	PCD	PVC COATED DUCTWORK
DIA	DIAMETER	PH	PHASE
DDC	DIRECT DIGITAL CONTROL	PRESS	PRESSURE
DN	DOWN	PRV	PRESSURE REDUCING VALVE
DX	DIRECT EXPANSION	PSIG	POUNDS PER SQUARE INCH GAUGE
E	EXISTING		
EA	EXHAUST AIR	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	REL	RELOCATED
EC	ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EFF	EFFICIENCY	RL	REFRIGERATION LIQUID
ESP	EXTERNAL STATIC PRESSURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	RS	REFRIGERATION SUCTION
FC	FLEXIBLE CONNECTION	RV	RELIEF VALVE
FLG	FLANGE	SA	SUPPLY AIR
FMD	FLOW MEASURING DEVICE	SC	SENSIBLE COOLING
FPM	FEET PER MINUTE	SHT	SHEET
FPS	FEET PER SECOND	SP	STATIC PRESSURE
GC	GENERAL CONTRACTOR	SRV	SAFETY RELIEF VALVE
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED	TEMP	TEMPERATURE
		TH	TOTAL HEAT
GPM	GALLONS PER MINUTE	TC	TOTAL COOLING
H	HEIGHT	TSP	TOTAL STATIC PRESSURE
HD	HEAD	UG	UNDERGROUND
HP	HORSEPOWER	V	VOLTS
HZ	HERTZ	VB	VACUUM BLOWER
I.E.	INVERT ELEVATION	VEL	VELOCITY
LAT	LEAVING AIR TEMPERATURE	VTR	VENT THROUGH ROOF
LF	LINEAR FEET	W	WIDTH
LWT	LEAVING WATER TEMPERATURE	WB	WET BULB
MAV	MANUAL AIR VENT	WC	WATER COLUMN
MAX	MAXIMUM	WPD	WATER PRESSURE DROP
		WTR	WATER

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER	HC	HEATING COIL
AC	AIR COMPRESSOR	IH	INFRARED HEATING UNIT
ACU	AIR CONDITIONING UNIT	L	LOUVER
AD	AIR DRYER	MAU	MAKEUP AIR UNIT
AHU	AIR HANDLING UNIT	P	PUMP
B	BOILER	PHC	PREHEAT COIL
CC	COOLING COIL	RF	RETURN OR RELIEF FAN
CU	CONDENSING UNIT	RHC	REHEAT COIL
CUH	CABINET UNIT HEATER	SD	SMOKE DETECTOR OR SMOKE DAMPER
EF	EXHAUST FAN		
ET	EXPANSION TANK	SF	SUPPLY FAN
EWH	ELECTRIC WATER HEATER	ST	SOUND TRAP
F	FILTER	UH	UNIT HEATER
FCU	FAN COIL UNIT	VAV	VARIABLE AIR VOLUME BOX
FD	FIRE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
GWH	GAS WATER HEATER		

FIXTURE ABBREVIATIONS

BFP	BACK FLOW PREVENTER	COTG	CLEAN OUT TO GRADEHB HOSE BIBB
CO	CLEAN OUT	HR	HOSE REEL
DF	DRINKING FOUNTAIN	S	SINK
EWC	ELECTRIC WATER COOLER	SS	SERVICE SINK
F	FAUCET	SS/EW	SAFETY SHOWER/EYEWASH
FCO	FLOOR CLEANOUT	UR	URINAL
FD	FLOOR DRAIN	WC	WATER CLOSET
JS	JANITORS SINK	WCO	WALL CLEANOUT
L	LAVATORY	WF	WASH FOUNTAIN
		WFT	WALL FAUCET
		WH	WALL HYDRANT

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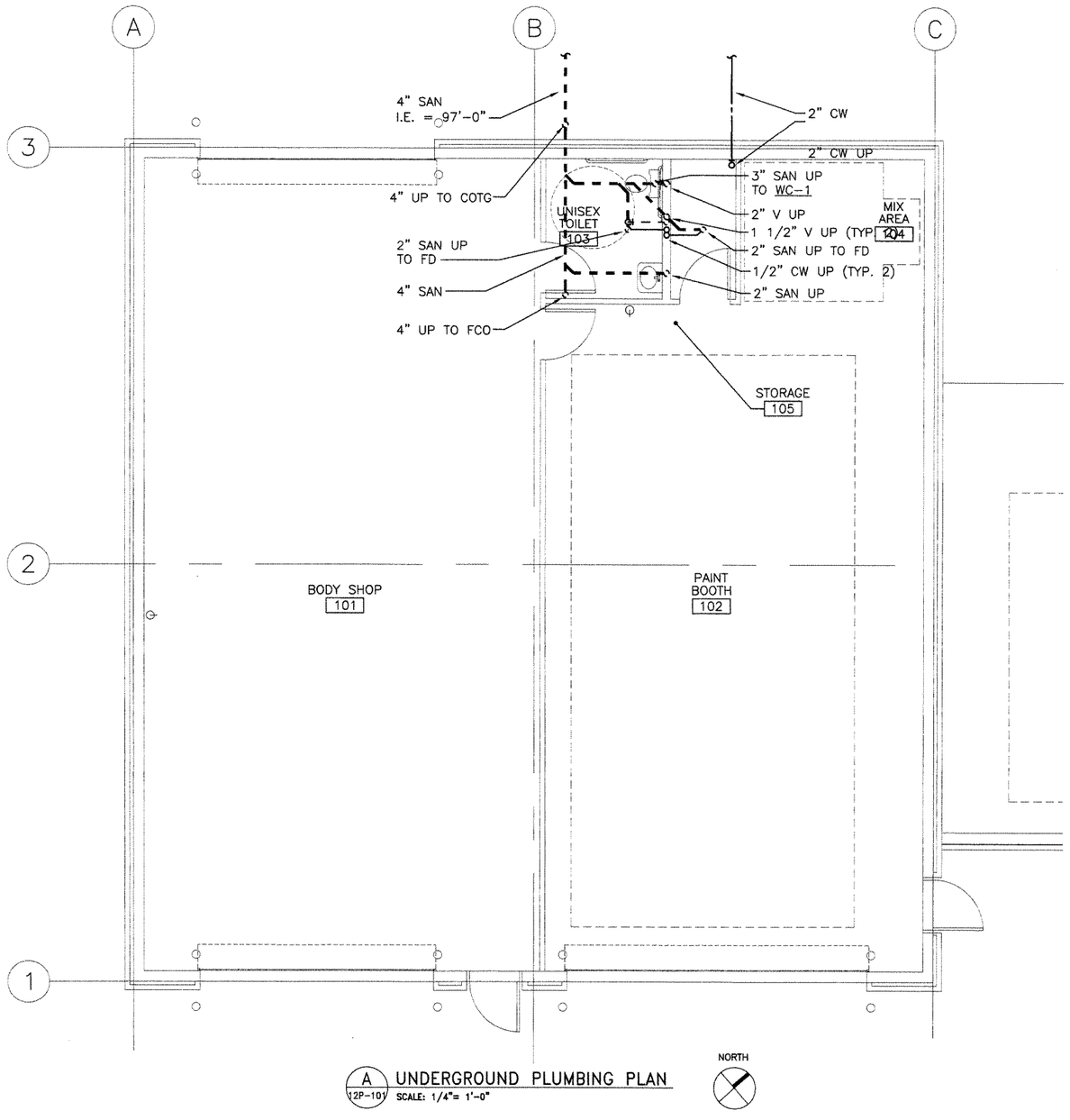
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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
PLUMBING SYMBOLS AND ABBREVIATIONS

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12P-001
REV	
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A UNDERGROUND PLUMBING PLAN
12P-101 SCALE: 1/4"= 1'-0"

NORTH

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
UNDERGROUND PLUMBING

DESIGNED BY	CMS
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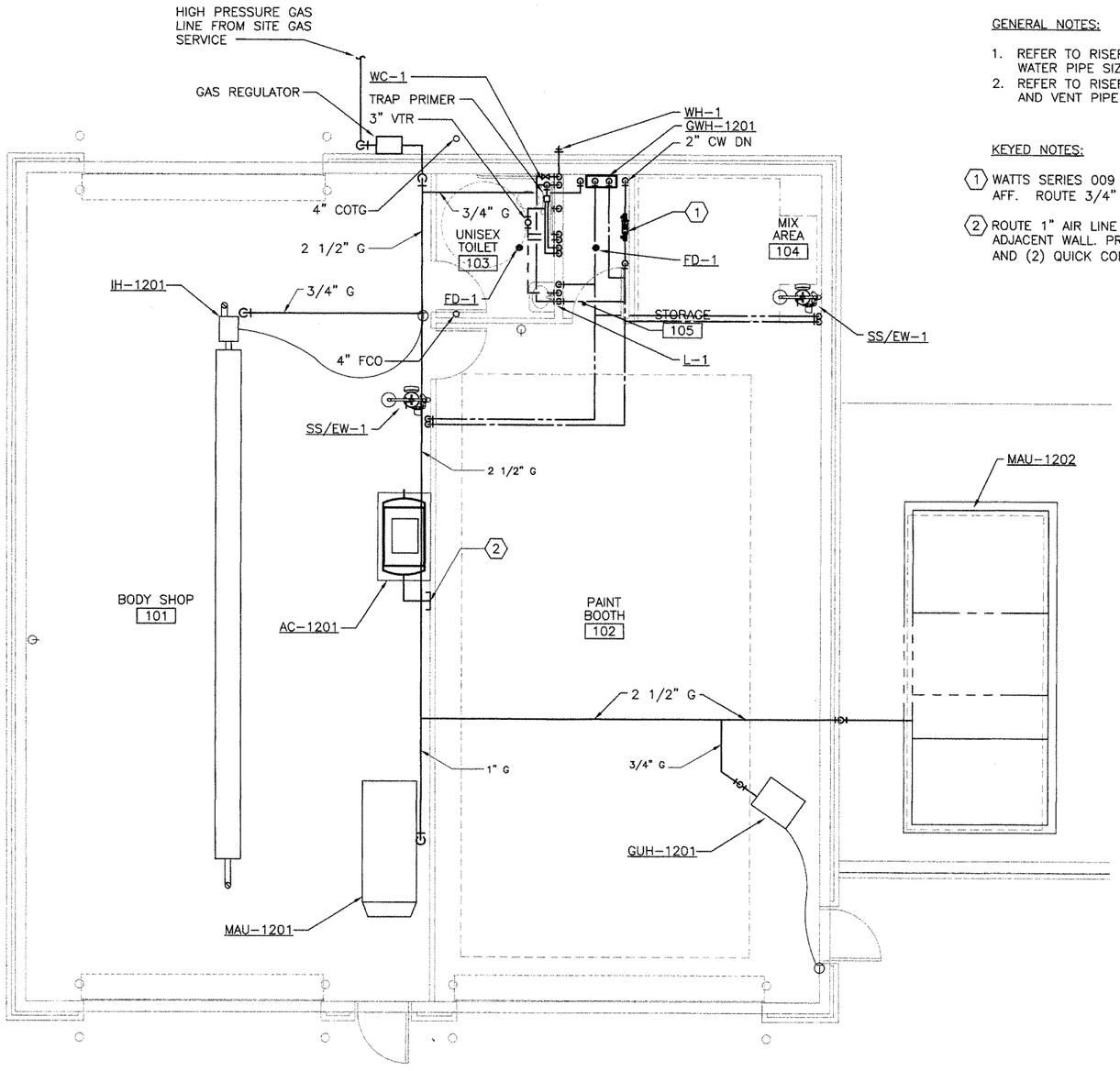
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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12P-101
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CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11077 LES E. GRIGGS

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A 12P-201 ABOVE GROUND PLUMBING PLAN
SCALE: 1/4"= 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO RISER DIAGRAM A/12P-401 FOR DOMESTIC WATER PIPE SIZING.
2. REFER TO RISER DIAGRAM B/12P-401 FOR SANITARY AND VENT PIPE SIZING.

KEYED NOTES:

(1) WATTS SERIES 009 RPZ OR EQUAL. MOUNT TO WALL 3'-0" AFF. ROUTE 3/4" DRAIN WITH AIR GAP TO FD.

(2) ROUTE 1" AIR LINE FROM COMPRESSOR DISCHARGE TO ADJACENT WALL. PROVIDE SHUT-OFF, FILTER, REGULATOR, AND (2) QUICK CONNECT FITTINGS ON WALL @ 3' A.F.F.

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ABOVE GROUND PLUMBING

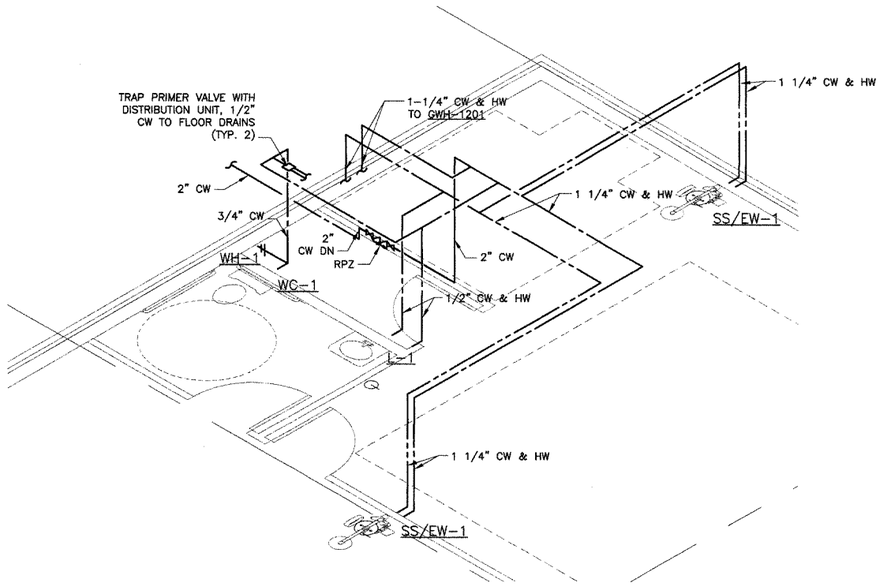
DESIGNED BY	CMS
DRAWN BY	KAH
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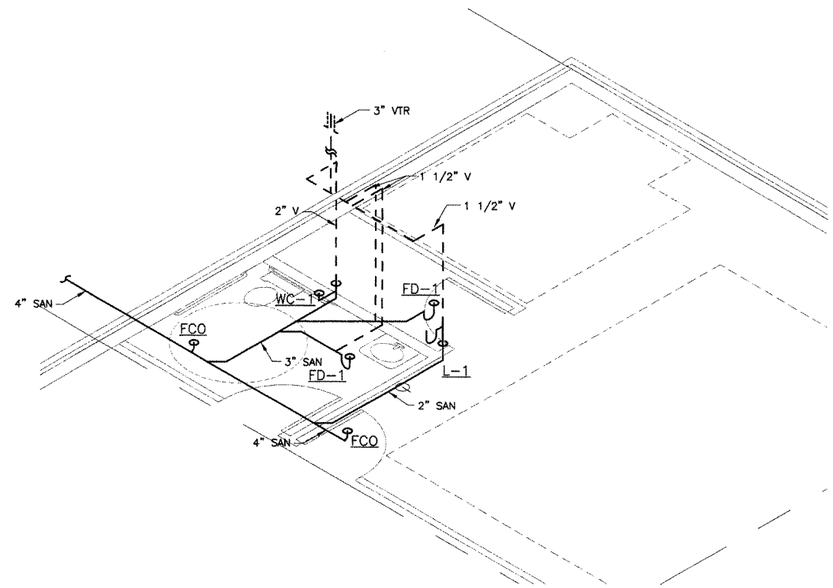
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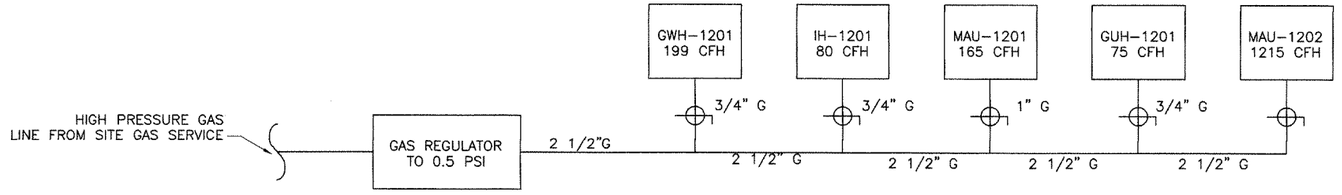
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A 12P-401 DOMESTIC WATER RISER
SCALE: NTS



B 12P-401 SANITARY DRAIN AND VENT RISER
SCALE: NTS



NATURAL GAS PIPING SYSTEM DESIGN INFORMATION
MAX. SYSTEM DEMAND: 1734 CFH
DEVELOPED PIPE LENGTH: 100'
MAX. PRESSURE DROP: 0.5" W.C.

C 12P-401 NATURAL GAS RISER DIAGRAM
SCALE: NTS

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
PLUMBING RISERS

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	RWK
APPROVED BY	JLH

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12P-401
REV	
115 OF 289	

Saved: 2/9/2009 11:59:01 AM By: bredehoeftms
Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\12_EQUIP_REPAIR_SHOP\8120_12G-BS01.dwg
..\8120_12P-PP02.dwg ..\8120_12A-FP01.dwg

FIXTURE SCHEDULE

PLAN MARK	FIXTURE TYPE	HW	CW	WASTE	VENT	FIXTURE DESCRIPTION	FAUCET/VALVE	ACCESSORIES/REMARKS
WC-1	WATER CLOSET (ADA)	-	1/2"	3"	2"	FLOOR MOUNTED TWO PEICE TANK WITH ELONGATED BOWL MAXIMUM 1.28 GPF, 2-1/8" MIN. PASSAGEWAY KOHLER K-3496-HE OR EQUAL	-	WHITE FIXTURE HEAVY DUTY OPEN FRONT SEAT (WHITE) - LESS COVER
L-1	LAVATORY WALL HUNG (ADA)	1/2"	1/2"	1 1/2"	1 1/2"	19"x17" RECTANGULAR, VITREOUS CHINA, WALL HUNG 4" CENTERS, OVERFLOW, DRILLED FOR CONCEALED ARM CARRIER KOHLER K-1728 OR EQUAL ADA ACCESSIBLE MOUNTING HEIGHT	SINGLE LEVER CONTROL, MOUNTED ON 4" CENTERS, 0.5 GPM AERATOR KOHLER K-15593 OR EQUAL	WHITE FIXTURE OPEN GRID STRAINER WITH TAIL PIECE CONCEALED ARM FLOOR SUPPORTED CARRIER INSULATE WATER SUPPLIES AND DRAIN
JS-1	JANITORS SINK	1/2"	1/2"	3"	2"	24"x24"x12" HIGH MOLDED STONE JANITORS SINK, 3" DRAIN, RUBBER BUMPERS FIAT TSB-100 OR EQUAL	CHICAGO FAUCET #897-CP OR EQUAL.	INTEGRAL STOPS, PAIL HOOK, VACUUM BREAKER, CHROME PLATED, WALL MOUNTED AT 24" A.F.F., WALL BRACE, 3/4" HOSE END CONNECTION.
FD-1	FLOOR DRAIN	-	-	2"	1 1/2"	WADE 1102STD5 OR EQUAL	-	JOSAM 88300 SERIES TRAP PRIMER W/ INTEGRAL BACKFLOW PREVENTER, AND VACUUM BREAKER DISTRIBUTION UNIT FOR USE WITH 2-4 FLOOR DRAINS
WH-1	NON FREEZE WALL HYDRANT	-	3/4"	-	-	BRONZE CASING, NICKEL BRONZE FACE, AND ANTI-SIPHON BACKFLOW PREVENTOR WADE 8600,L8 OR EQUAL	-	-
SS/EW-1	SAFETY SHOWER EYEWASH	1 1/4"	1 1/4"	-	-	FREE STANDING DELUGE SAFETY SHOWER AND EYEWASH COMBINATION UNIT SPEAKMAN MODEL SE-612 OR EQUAL.	SHOWER VALVE: 1" INCH STAY OPEN BALL EYEWASH VALVE: 1/2" STAY OPEN BALL	8-INCH DIAMETER ABS YELLOW PLASTIC SHOWER HEAD, ALUMINUM TRIANGULAR PULL ROD, 20 GPM REGULATOR. LAWLER MODEL 911E THERMOSTATIC MIXING VALVE OR EQUAL.

WATER HEATER SCHEDULE

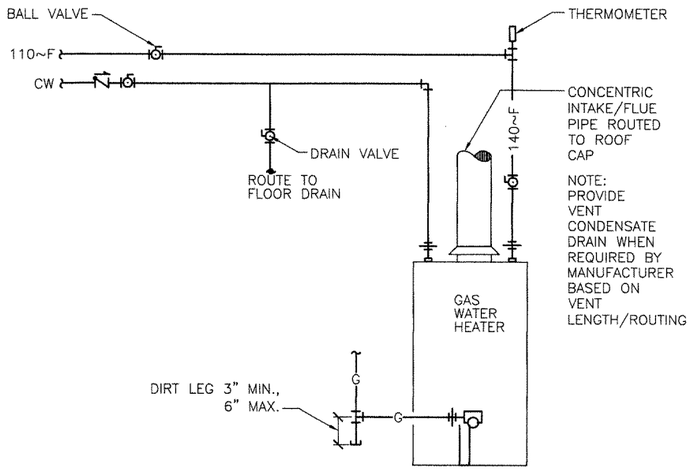
PLAN MARK	MANUFACTURER	MODEL	TANK CAPACITY (GAL)	GPM @ 50° F TEMP RISE	INPUT MBH	ELECTRICAL DATA		NOTES
						FLA	V/PH/HZ	
GWH-1201	RINNAI	RL94I	N/A	7.5	199	0.75	120/1/60	1, 2

NOTES:
1. PROVIDE MANUFACTURER'S WALL MOUNTING BRACKET, CONCENTRIC INTAKE/FLU PIPING, AND ROOF OR WALL INTAKE/FLUE VENT. SET UNIT FOR 110°F DISCHARGE
2. PROVIDE WATER HEATER WITH ASSOCIATED RECIRCULATION PUMP (GWH-1101 W/ P-1101, GWH-1102 W/ P-1102)

AIR COMPRESSOR SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	TYPE	SERVICE	RATING	RECEIVER (GAL)	ELECTRICAL		NOTES
							MOTOR (HP)	V/PH/HZ	
AC-1201	INGERSOLL RAND	UP6-5TAS	ROTARY SCREW	TRUCK BAYS	18.5 ACFM @ 125 PSIG	80	5	208/3/60	1,2

NOTES:
1. INTEGRAL CYCLING REFRIGERATED DRYER - 120/1/60.
2. PROVIDE FILTER, REGULATOR, AND (2) QUICK CONNECT FITTINGS ON WALL ADJACENT TO TANK.



A 12P-601 GAS WATER HEATER DETAIL
SCALE: NTS

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER LEE E. SUGGS No. 11074 10/13/11

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
PLUMBING SCHEDULES

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12P-601
REV	

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Saved: 2/9/2009 10:27:24 AM By: bredehoeftms
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SYMBOLS

# / M-###	SECTION CUT SECTION LOCATION
# / M-###	DETAIL NUMBER DETAIL LOCATION
#	KEYED NOTE
(T)(H)	THERMOSTAT, HUMIDISTAT MOUNTED 48" AFF
D →	DUCT DROP
R →	DUCT RISE
	FLEXIBLE DUCT CONNECTION
M	MOTORIZED DAMPER
	BACKDRAFT DAMPER
	MANUAL DAMPER
FD / AP AP	(FD) FIRE DAMPER (SD) SMOKE DAMPER (FD/SD) FIRE/SMOKE DAMPER
	SUPPLY DUCT SECTION
	RETURN, OUTSIDE AIR, OR EXHAUST DUCT SECTION

	PIPE UP
	PIPE DOWN
	TOP BRANCH CONNECTION
	BOTTOM BRANCH CONNECTION
	TEE UP
	TEE DOWN
	PIPE CAP
	PIPE ANCHOR
	PIPE GUIDE
	UNION
	STRAINER
	CHECK VALVE
	FLOW DIRECTION
	FLEXIBLE PIPING CONNECTION

	CONTROL VALVE
	3-WAY CONTROL VALVE
	REDUCER
	SHUT OFF VALVE
	BALANCING VALVE
	GLOBE VALVE
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	BACKFLOW PREVENTER
	THERMOMETER
	PRESSURE GAUGE
	SAFETY RELIEF VALVE
	MANUAL AIR VENT

MECHANICAL GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST TO THE GOVERNMENT. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL NEW DUCTWORK, PIPING, AIR DEVICES, AND EQUIPMENT WITH NEW WIRING, LIGHTING, AND PIPING. WHERE AIR DEVICES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. EQUIPMENT, DUCTWORK, AND PIPING ARRANGEMENTS SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. FLEXIBLE DUCT RUNOUTS SHALL BE SAME SIZE AS DIFFUSER INLET. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".

DUCT SIZING

20/10 = 20" WIDE X 10" DEEP DUCT

10"ø = 10" DIAMETER ROUND DUCT

ABBREVIATIONS

AA	AUTOMATIC AIR VENT	MBH	BTU PER HOUR (1000'S)
AD	ACCESS DOOR	MC	MECHANICAL CONTRACTOR
ADJ	ADJUSTABLE	MD	MANUAL DAMPER
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
AG	ABOVE GROUND	MIN	MINIMUM
AMB	AMBIENT	NC	NORMALLY CLOSED
APD	AIR PRESSURE DROP	NIC	NOT IN CONTRACT
AWT	AVERAGE WATER TEMPERATURE	NO	NORMALLY OPEN
BHP	BRAKE HORSEPOWER	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	OA	OUTSIDE AIR
CAP	CAPACITY	OED	OPEN END DUCT
CFM	CUBIC FEET PER MINUTE	PC	PLUMBING CONTRACTOR
DB	DRY BULB	PCD	PVC COATED DUCTWORK
DIA	DIAMETER	PH	PHASE
DDC	DIRECT DIGITAL CONTROL	PRESS	PRESSURE
DN	DOWN	PRV	PRESSURE REDUCING VALVE
DX	DIRECT EXPANSION	PSIG	POUNDS PER SQUARE INCH GAUGE
E	EXISTING		
EA	EXHAUST AIR	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	REL	RELOCATED
EC	ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EFF	EFFICIENCY	RL	REFRIGERATION LIQUID
ESP	EXTERNAL STATIC PRESSURE	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	RS	REFRIGERATION SUCTION
FC	FLEXIBLE CONNECTION	RV	RELIEF VALVE
FLG	FLANGE	SA	SUPPLY AIR
FMD	FLOW MEASURING DEVICE	SC	SENSIBLE COOLING
FPM	FEET PER MINUTE	SHT	SHEET
FPS	FEET PER SECOND	SP	STATIC PRESSURE
GC	GENERAL CONTRACTOR	SRV	SAFETY RELIEF VALVE
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED	TEMP	TEMPERATURE
		TH	TOTAL HEAT
GPM	GALLONS PER MINUTE	TC	TOTAL COOLING
H	HEIGHT	TSP	TOTAL STATIC PRESSURE
HD	HEAD	UG	UNDERGROUND
HP	HORSEPOWER	V	VOLTS
HZ	HERTZ	VB	VACUUM BLOWER
I.E.	INVERT ELEVATION	VEL	VELOCITY
LAT	LEAVING AIR TEMPERATURE	VTR	VENT THROUGH ROOF
LF	LINEAR FEET	W	WIDTH
LWT	LEAVING WATER TEMPERATURE	WB	WET BULB
MAV	MANUAL AIR VENT	WC	WATER COLUMN
MAX	MAXIMUM	WPD	WATER PRESSURE DROP
		WTR	WATER

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER	IH	INFRARED HEATING UNIT
AC	AIR COMPRESSOR	L	LOUVER
ACU	AIR CONDITIONING UNIT	MAU	MAKEUP AIR UNIT
AD	AIR DRYER	P	PUMP
AHU	AIR HANDLING UNIT	PHC	PREHEAT COIL
B	BOILER	RF	RETURN OR RELIEF FAN
CC	COOLING COIL	RHC	REHEAT COIL
CU	CONDENSING UNIT	SD	SMOKE DETECTOR OR SMOKE DAMPER
CUH	CABINET UNIT HEATER		
EF	EXHAUST FAN	SF	SUPPLY FAN
ET	EXPANSION TANK	ST	SOUND TRAP
F	FILTER	UH	UNIT HEATER
FCU	FAN COIL UNIT	VAV	VARIABLE AIR VOLUME BOX
FD	FIRE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
HC	HEATING COIL	WH	WATER HEATER

GRILLES, REGISTERS, AND DIFFUSER TAGS

SUPPLY REGISTER TAG

A	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

SUPPLY DIFFUSER TAG

B	GRD TYPE
6"ø	NECK SIZE
100	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

RETURN/EXHAUST GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

TRANSFER GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
(TYP #)	TYPICAL OF QUANTITY

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 11674 — CHARLES E. RUGGS

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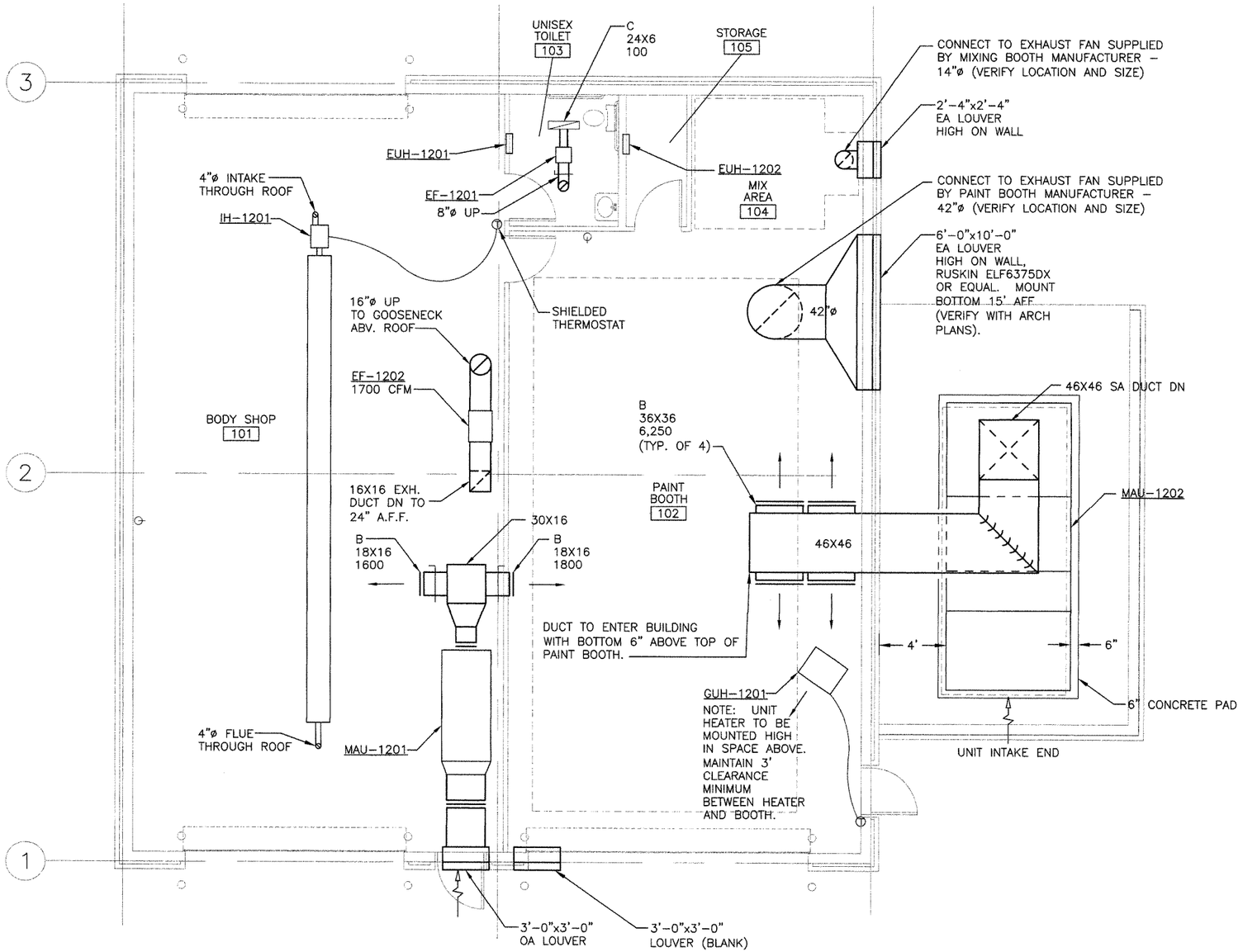
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
MECHANICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	CMS
DRAWN BY	CMS
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12M-001
REV	

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Saved: 4/3/2009 11:33:59 AM By: bredehoeftms
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A MECHANICAL PLAN
12M–101 SCALE: 1/4" = 1'–0"

NORTH

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
MECHANICAL FLOOR PLAN

DESIGNED BY	VRP
DRAWN BY	DAE
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12M–101
REV	
	228 OF 289

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11074
LES SUGG
10/13/11

FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	LOCATION	SERVES	FAN TYPE	AIR FLOW (CFM)	SP (IN WC)	DRIVE TYPE	MOTOR (HP)	V/PH/HZ	NOTES
EF-1101	GREENHECK	CSP-B110	RM 102	RESTROOM	CENTRIFUGAL INLINE	100	0.375	DIRECT	80 W	120/1/60	1
EF-1102	GREENHECK	BSQ-120	RM 201	BODY SHOP	CENTRIFUGAL INLINE	1700	0.5	BELT	0.5	208/3/60	2

NOTES:
1. INTEGRAL BACKDRAFT DAMPER.
2. PROVIDE WALL SWITCH FOR ACTIVATION. INTERLOCK WITH MAU-1201 TO ACTIVATE MAKE-UP AIR WHEN EXHAUST IS ACTIVE.

MAKE-UP AIR UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	TYPE	CFM	INPUT (MBH)	OUTPUT (MBH)	EAT (F)	LAT (F)	ESP (IN WC)	ELECTRICAL DATA		NOTES
											MOTOR (HP)	V/PH/HZ	
MAU-1201	GREENHECK	DG-112	BODY SHOP/MIX	NATL GAS	3400	165	152	19.0	60.0	0.5	2	208/3/60	3
MAU-1202	GREENHECK	DGX-127	PAINT BOOTH	NATL GAS	25000	1213	696.5	19.0	60.0	0.75	20	480/3/60	1,2

NOTES:
1. PROVIDE W/ UPBLAST DISCHARGE MODULE.
2. INTERLOCK W/ PAINT BOOTH EXHAUST FAN. UNIT SHALL RUN WHEN PAINT BOOTH FAN IS ACTIVE. UNIT TO CONTROL DISCHARGE AIR TEMPERATURE TO 60° MINIMUM
3. INTERLOCAK WITH EF-1102 TO RUN MAKEUP AIR UNIT WHEN EXHAUST FAN IS ACTIVE. UNIT TO CONTROL DISCHARGE TEMPERATURE TO 60° MINIMUM.

INFRARED HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	TYPE	INPUT (MBH)	MOUNTING HEIGHT	REFLECTOR ANGLE	TUBE LENGTH (FT)	ELECTRICAL	NOTES
IH-1201	ROBERTS GORDON	CTH3-80	BODY SHOP	NATL GAS	52/80	19'-0"	45°	20	SEE NOTE	1,2,3

NOTES:
1. 120V PLUG-IN. 4.8 STARTING AMPS.
2. MODULATING BURNER.
3. SHIELDED THERMOSTAT.

GAS UNIT HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	INPUT (MBH)	OUTPUT (MBH)	MOUNTING HEIGHT	ELECTRICAL DATA			NOTES
							FLA	MOCP	V/PH/HZ	
GUH-1201	REZNOR	UDAS-75	RM 102	75.0	62.2	ABV. BOOTH	3.3	15	120/1/60	1, 2, 3

NOTES:
1. CONCENTRIC VENT KIT.
2. WALL MOUNTED THERMOSTAT.

ELECTRIC UNIT HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	MOUNTING TYPE	MOUNTING HEIGHT	INPUT (KW)	ELECTRICAL DATA		NOTES
							AMPS	V/PH/HZ	
EUH-1201	BERKO	VFK151	RM 103	WALL	8" MIN	1.5	12.5	120/1/60	1, 2, 3
EUH-1201	BERKO	VFK151	RM 105	WALL	8" MIN	1.5	12.5	120/1/60	1, 2, 3

NOTES:
1. 1" SEMI-RECESSED.
2. INTEGRAL THERMOSTAT.

DIFFUSERS, GRILLES, & REGISTER SCHEDULE

PLAN MARK	TYPE	FINISH	MATERIAL	MOUNTING	ACCESSORIES	MANUFACTURER	MODEL	NOTES
A	SUPPLY	WHITE	STEEL	LAY-IN	-	TITUS	TMS	2
B	SUPPLY	WHITE	STEEL	SURFACE	-	TITUS	300RL	1
C	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	-	TITUS	50F	1, 3
D	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	FILTER	TITUS	50F	1, 3
E	SUPPLY	WHITE	ALUMINUM	DUCT	OPPOSED BLADE DAMPER	TITUS	DL	1

NOTES:
1. REFER TO PLANS FOR SIZES.
2. 24x24 SQUARE.
3. PROVIDE FIELD FABRICATED PLENUM BOX EQUAL TO GRILLE DIMENSIONS AND 10" DEEP MINIMUM.

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AHTD JOB NO. 040554
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ELECTRICAL SYMBOLS LEGEND

CEILING	WALL	
# A	# A	FLUORESCENT FIXTURE, A = FIXTURE TYPE, # = CKT. # TYPICAL
A NL	A	FLUORESCENT FIXTURE, EQUIPPED WITH BATTERY PACK.
A	A	HID, COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
A	A	EXIT LIGHT, DARKENED SECTION(S) DENOTE FACE(S). USE DIRECTIONAL ARROWS WHERE INDICATED.
A	A	FLUORESCENT STRIP FIXTURE
	A	EMERGENCY FIXTURE
	A	REMOTE EMERGENCY FIXTURE

NOTE: REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION

- CONDUIT CONCEALED
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUIT BELOW GRADE
- JUNCTION BOX
- JUNCTION BOX WALL MOUNTED
- CABLE TRAY
- HOMERUN TO PANEL BOARD OR DEVICE. TICK MARKS DENOTE NUMBERS OF CIRCUITS. HOMERUN WITH NO TICK MARKS SHALL BE A SINGLE CIRCUIT.
- T — TRANSFORMER
- HH — HANDHOLE
- GROUND
- (M) — METER
- SWITCHBOARD, DISTRIBUTION PANEL
- PANEL BOARD
- HEAVY DUTY SAFETY SWITCH, MOUNT WITH L OF HANDLE AT 60" A.F.F. REFER TO EQUIPMENT SCHEDULE FOR AMPACITY, NEMA CONFIGURATION, FUSING, ECT.
- SINGLE RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
- DUPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE
- WP — DUPLEX GFI RECEPTACLE W/ WEATHERPROOF "IN-USE" TYPE COVER MOUNTED @ 18" A.F.F.
- GFI — COMMERCIAL GRADE GFI RECEPTACLE MOUNTED @ 18" A.F.F.
- QUADPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
- CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, MOUNTED RECESSED WHEN INSTALLED IN ACCESSIBLE CEILING PANEL. SECURE TO STRUCTURE PER N.E.C.
- DUPLEX RECEPTACLE OUTLET, FLOOR MOUNTED
- SPECIAL PURPOSE OUTLET, ELECTRICAL CHARACTERISTICS AS SPECIFIED ON PLANS OR SCHEDULE.
- $ — SINGLE POLE SWITCH, MOUNTED AT 48" A.F.F.
- $ — SINGLE POLE SWITCH WITH PILOT LIGHT, MOUNTED AT 48" A.F.F.
- $3 — 3-WAY SWITCH, MOUNTED AT 48" A.F.F.
- $4 — 4-WAY SWITCH, MOUNTED AT 48" A.F.F.
- $OS — COMBINATION OCCUPANCY/SENSOR/SWITCH, MOUNTED AT 48" A.F.F.
- $M — MOTOR RATED SWITCH MOUNTED AT MOTOR, UNLESS NOTED OTHERWISE.
- D$ — DIMMER SWITCH, MOUNTED AT 48" A.F.F.
- OC — OCCUPANCY SENSOR, CEILING MOUNTED.
- OC — OCCUPANCY SENSOR, WALL MOUNTED WITH SWIVEL BRACKET.
- MOTOR LOAD

GENERAL NOTES

1. FOR ALL ELECTRICAL WORK, REFER TO DIVISION 26 SPECIFICATION SECTION.
2. HEIGHTS INDICATED ARE TO THE CENTERLINE OF BOX, UNLESS INDICATED OTHERWISE.
3. ALL SYMBOLS MAY NOT BE USED.
4. FOR ALL ELECTRICAL EQUIPMENT INDICATED TO BE SUSPENDED FROM METAL BUILDING FRAMING (TRANSFORMERS, LIGHTING, ETC.), THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUPPLEMENTAL FRAMING, HANGERS, ETC. NECESSARY TO SUPPORT ELECTRICAL ITEMS IN ACCORDANCE WITH THE METAL BUILDING MANUFACTURER'S RECOMMENDATIONS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF HANGERS FOR ELECTRICAL ITEMS WITH METAL ROOF LINER PANEL INSTALLATION SEQUENCE.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, COORDINATE AND CONFIRM WITH THE MECHANICAL AND PLUMBING CONTRACTOR ALL OF THE FOLLOWING:
   - A. VERIFY EXACT FEED LOCATIONS AND NUMBER OF CONNECTIONS TO ALL A/C UNITS, FAN COILS, CHILLERS, COOLING TOWERS, SYSTEM PUMPS, EVAP. COOLERS, MAKE-UP AIR UNITS, DAMPER MOTORS, ETC.
   - B. ELECTRICAL CHARACTERISTICS (E.G., KW, HP, AMPS, VOLTAGE, PHASE, ETC.): CONFIRM WITH APPROVED MECHANICAL/PLUMBING EQUIPMENT SHOP DRAWINGS.
   - C. EXACT LOCATION OF ALL CONTROL PANELS, CONTROL DEVICES, THERMOSTATS, DAMPER MOTORS, ETC.

ABBREVIATIONS

A	
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMP INTURUPTING CAPACITY
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B	
BKR	CIRCUIT BREAKER
BLDG	BUILDING
C	
CKT	CIRCUIT
℄	CENTERLINE
CLG	CEILING
COL	COLUMN
CU	COPPER
°C	DEGREES CELSIUS
D	
DEG	DEGREES
DIA, ø	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DIV	DIVISION
DN	DOWN
DWG	DRAWING
E	
EA	EXHAUST AIR, EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRICAL WATER COOLER
EX	EXISTING
F	
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE (CONDUIT)
FLR	FLOOR
FT	FOOT, FEET
°F	DEGREES FAHRENHEIT
G	
GA	GAUGE
GALV	GALVANIZED
GFI, GFCI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL (CONDUIT)
H	
HID	HIGH INTENSITY DISCHARGE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & A/C
HZ	HERTZ
I	
ID	INSIDE DIAMETER, IDENTIFICATION
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH, INCHES
J	
J-BOX	JUNCTION BOX
K	
KCMIL	THOUSAND CIRCULAR MILS (AREA)
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR
L	
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
M	
MAX	MAXIMUM
MC	MULTI CONDUCTOR (CABLE)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MOCP, MOP	MAXIMUM OVER CURRENT PROTECTION
MH	MANHOLE, METAL HALIDE
MIL, MILS	1/1000 INCH
MIN	MINIMUM

N	
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFR'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O	
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OEP	OVERHEAD ELECTRICAL PRIMARY
OES	OVERHEAD ELECTRICAL SECONDARY
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.
P	
PE	PHOTO ELECTRIC, PROFESSIONAL ENGINEER
PF	POWER FACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
PWR	POWER
Q	
QTY	QUANTITY
R	
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REF;	REFERENCE, REFER TO
REQD	REQUIRED
REV	REVISION, REVISE
RLA	RUNNING LOAD AMPS
RM	ROOM
RMS	ROOT MEAN SQUARE
RPM	REVOLUTION PER MINUTE
S	
SCH	SCHEDULE, SCHEDULED
SF	SQUARE FEET, SQUARE FOOT
SPEC	SPECIFICATION, SPECIFY
SS	STAINLESS STEEL, STATIONARY SEWER
STD	STANDARD
SUSP	SUSPEND, SUSPENDED
T	
TELECOM	TELECOMMUNICATIONS
THRU	THROUGH
TSTAT	THERMOSTAT
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
U	
U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UEP	UNDERGROUND ELECTRICAL PRIMARY
UES	UNDERGROUND ELECTRICAL SECONDARY
UL	UNDERWRITER'S LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	
V	VOLT, VENT, VERTICAL
VA	VOLT-AMPERE
VERT	VERTICAL
W	
W	WATT, WIDTH, WIRE
W/	WITH
W/O	WITHOUT
X	
XFMR	TRANSFORMER

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13938 — JOSHUA B. JOYCE

SAIC
From Science to Solutions
SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC
201 Presidential Drive
Lowell, Arkansas
(479) 770-5800
(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ELECTRICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	JBB
DRAWN BY	JBB
CHECKED BY	BRC
APPROVED BY	BRC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12E-100
REV	
	230 OF 289

KEY NOTES: (THIS SHEET ONLY)

1. ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL B/12E-404.
2. EXTEND CIRCUIT 12H1-7 DOWN TO PAINT BOOTH AND MIX BOOTH TO POWER INTEGRAL LIGHTING. PROVIDE CONNECTION TO BOOTHS PER MANUFACTURER'S RECOMMENDATIONS.
3. THE TYPE 'D' LIGHTING FIXTURES INDICATED IN THE BODY SHOP SHALL BE 8' TANDEM MOUNTED UNITS WITH 4 EA. 48" T8 LAMPS PER UNIT. ALL UNITS SHALL BE SECURED END-TO-END FOR A CONTINUOUS ROW AS SHOWN.

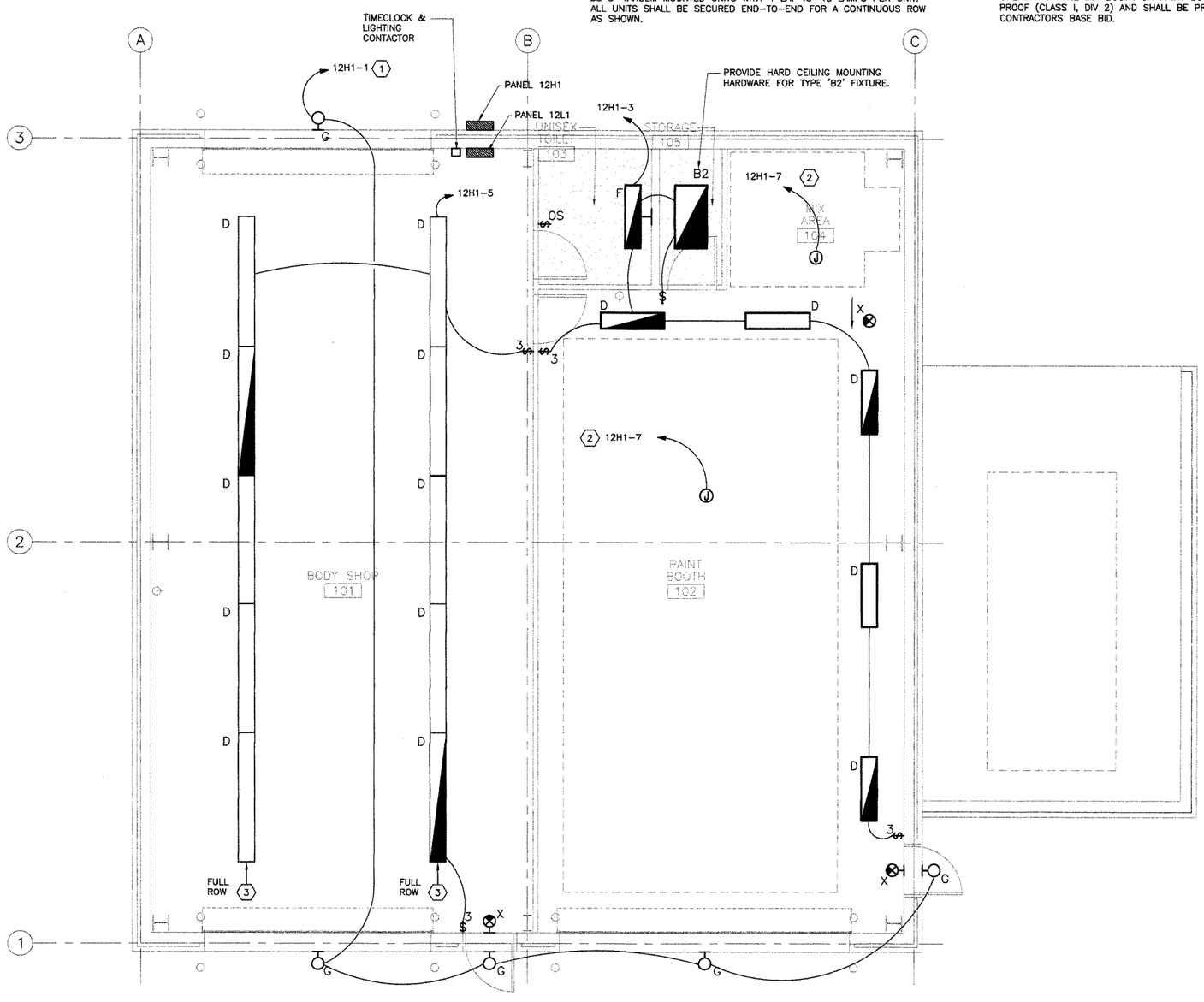
GENERAL NOTES: (THIS SHEET ONLY)

A. REFER TO SHEET 12E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. PROVIDE AN UNSWITCHED 'HOT' CONDUCTOR TO ALL FLUORESCENT LIGHTING FIXTURES EQUIPPED WITH AN EMERGENCY BATTERY BACKUP BALLAST.

C. CIRCUITING BETWEEN LIGHTING FIXTURES AND SWITCHES ARE NOT SHOWN FOR CLARITY.

D. ANY AND ALL ELECTRICAL EQUIPMENT (INCLUDING LIGHTING) WITHIN 36" OF THE OPENING OF THE MIX BOOTH OR PAINT BOOTH IS REQUIRED TO BE EXPLOSION PROOF (CLASS I, DIV 2) AND SHALL BE PROVIDED AS SUCH UNDER THE CONTRACTORS BASE BID.



A 12E-101 ELECTRICAL LIGHTING PLAN
SCALE: 1/4"= 1'-0"

NORTH

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ELECTRICAL LIGHTING PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12E-101	
231 OF 289	

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13468
JOSHUA W. JAYCOX

KEY NOTES: (THIS SHEET ONLY)

(1) PROVIDE A 45KVA DRY-TYPE TRANSFORMER SUSPENDED FROM STRUCTURE AS HIGH AS POSSIBLE. REFER TO THE POWER RISER DIAGRAM ON SHEET 12E-402 FOR EQUIPMENT CONNECTION. REFER TO DETAIL A/12E-404 FOR MOUNTING.

(2) INFRARED HEATER RECEPTACLE SHALL BE SECURELY FASTENED TO STRUCTURE WITHIN 36" OF EQUIPMENT.

GENERAL NOTES: (THIS SHEET ONLY)

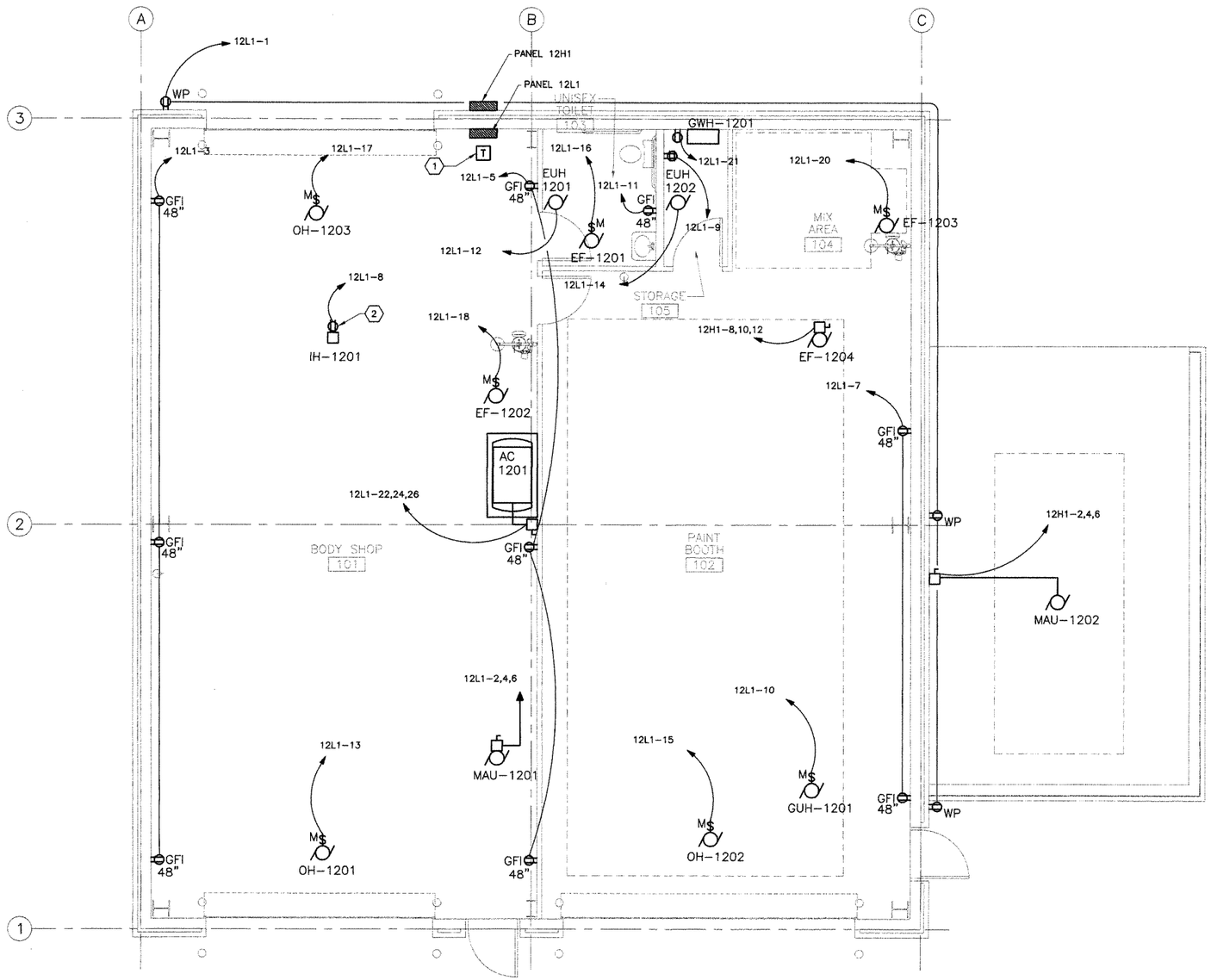
A. REFER TO SHEET 12E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

C. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

D. HOMERUN CIRCUIT SLASHES SHOWN FOR MULTIWIRE BRANCH CIRCUITS ONLY. REFER EQUIPMENT SCHEDULE FOR CIRCUITING TO ALL EQUIPMENT.

E. ANY AND ALL ELECTRICAL EQUIPMENT (INCLUDING LIGHTING) WITHIN 36" OF THE OPENING OF THE MIX BOOTH OR PAINT BOOTH IS REQUIRED TO BE EXPLOSION PROOF (CLASS I, DIV 2) AND SHALL BE PROVIDED AS SUCH UNDER THE CONTRACTORS BASE BID.



A 12E-102 ELECTRICAL POWER PLAN
SCALE: 1/4"= 1'-0"

NORTH

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ELECTRICAL POWER PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12E-102	
232 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA R. LOYCE 10/14/11

TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	VOLTS	REMARKS / NOTES
A2	LSI	2LLC-G-2-32-RPW-SS010-VOLT	TWO LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	2	32	48" T8	277*	
A3	LSI	2LLC-G-3-32-RPW-SS010-VOLT	THREE LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	3	32	48" T8	277*	
B2	LSI	LA-2-32-SD-SS010-VOLT	TWO LAMP LENSED FLUORESCENT TROFFER	2	32	48" T8	277*	
B4	LSI	LA-4-32-SD-SS010-VOLT	FOUR LAMP LENSED FLUORESCENT TROFFER	4	32	48" T8	277*	
C	LSI	EG-2-32-SS010-VOLT	TWO LAMP ENCLOSED / GASKETED FLUORESCENT	2	32	48" T8	277*	NOTE 8
D	LSI	F22-2-32-SS010-VOLT	TWO LAMP SUSPENDED FLUORESCENT	2	32	48" T8	277*	NOTES 1,3
E	LSI	TEM-WH-SD2	LOW PROFILE 6V EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
EX	LSI	PRX-R-U-WB-WH-WH-PR50	COMBINATION EXIT / EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
F	LSI	W44-4-2-32-SS010-UE	TWO LAMP WALL MOUNT LINEAR FLUORESCENT	2	32	48" T8	277*	NOTE 2
G	LSI	PTWS-FT-150-MH-F-VOLT-BRZ	EXTERIOR HID WALL SCONCE	1	150	150W MH	277*	NOTES 2,8
H	LSI	IHB-400-MH-MT-IAC22-PM	PENDANT MOUNT HID HIGHBAY FIXTURE	1	400	400W MH	277*	NOTES 1,4,5
I	WF HARRIS	60S-D-26PLC-VOLT	ONE LAMP COMPACT FLUORESCENT	1	26	26W PLC	277*	
J	LSI	208V-CFL-1-42T-UNIV	8" RECESSED DOWNLIGHT	1	42	42W CFT	277*	NOTE 9
K	LPDI	383-C-75-G	EXPLOSION PROOF INCANDESCENT (CEILING MOUNT)	1	60	60W A19	120*	NOTES 10,11
L	LSI	DRM2-MF-400-PSMUR-F-TT-BRZ	HID FLOOD LIGHT W/ VERTICAL WALL MOUNT BRACKET	1	400	400W MH	277*	NOTES 2,8
M	LSI	SOV-RD-175-MH-73-VOLT	LENSED HID	1	175	175W MH	277*	NOTES 9'12
N	ESCO LIGHTING	W28000 SERIES	10" UP/DOWN WALL MOUNT CYLINDER (BRONZE)	2	150	150W MH	277*	
O	SPAULDING	RCL-A-P75-H3P	POLE MOUNTED SITE LIGHT, TYPE III DISTRIBUTION	1	750	750W MH	480*	NOTES 14,15
P	LSI	CHA2-400-PSMV-MT-A25-LMC	PENDANT MOUNT HID LOWBAY FIXTURE	1	400	400W MH	277*	NOTES 5,9
X	LSI	EXC-R- -U-WB-WW-SD2	CAST ALUMINUM LED EXT SIGN	-	4	-	277*	NOTES 6,7

FIXTURES INDICATED WITHIN THIS LIGHTING FIXTURE SCHEDULE INCLUDE ALL BUILDING AND SITE LIGHTING WITHIN THE AHTD D4 HEADQUARTERS COMPLEX. NOT ALL FIXTURES ARE USED AT EACH BUILDING.

*PROVIDE VOLTAGE INDICATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE LIGHTING PLAN.

NOTES:
1. PROVIDE WIRE GUARD
2. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
3. SUSPEND FIXTURE AT 10'-0" A.F.F.
4. SUSPEND FIXTURE AT 19'-0" A.F.F.
5. PROVIDE TWIST-LOCK TYPE CONNECTOR AT EACH FIXTURE.
6. PROVIDE ARROWS WHERE INDICATED.
7. POWER FIXTURES FROM UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.
8. U.L. LISTED FOR WET LOCATIONS.
9. U.L. LISTED FOR DAMP LOCATIONS.
10. U.L. LISTED EXPLOSION PROOF (CLASS I, DIV I).
11. PROVIDE WITH EXTRA LONG LIFE INCANDESCENT LAMP.
12. TRIM FINISH SHALL MATCH SURROUNDING AREA.
13. PROVIDE EMERGENCY QUARTZ LIGHTING KIT.
14. POLE MOUNTED AT 34'-0" A.F.G.
15. PROVIDE OPTIONAL ADJUSTABLE MOUNTING ARM.

BUILDING 06 - EQUIPMENT SCHEDULE

EQUIPMENT	DESCRIPTION	VOLTAGE	PHASE	AMPS	CONDUIT	WIRE SIZE	DISCONNECT ENCLOSURE	DISCONNECT SIZE	DISCONNECT FUSING	NOTES
MAU-1201	MAKEUP AIR UNIT	208	3	7.5	3/4"	3#12, 1#12(G)	NEMA 1		NON-FUSIBLE	
MAU-1202	MAKEUP AIR UNIT	480	3	25.9	3/4"	3#8, 1#10(G)	NEMA 3R		NON-FUSIBLE	
IH-1201	INFRARED HEATER	120	1	4.8	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			
GUH-1201	GAS UNIT HEATER	120	1	3.3	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			
EUH-1201	UNIT HEATER	120	1	12.5	3/4"	1#12, 1#12(N), 1#12(G)	-	-	-	
EUH-1202	UNIT HEATER	120	1	12.5	3/4"	1#12, 1#12(N), 1#12(G)	-	-	-	
EF-1201	EXHAUST FAN	120	1	0.67	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			
EF-1202	EXHAUST FAN	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			
EF-1203	EXHAUST FAN	120	1	9.4	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 3
EF-1204	EXHAUST FAN	480	3	11	3/4"	3#12, 1#12(G)	NEMA 1	30A/3P	NON-FUSIBLE	NOTE 3
AC-1201	AIR COMPRESSOR	208	3	16.9	3/4"	3#10, 1#10(G)	NEMA 1	30A/3P	NON-FUSIBLE	
OH-1201	OVERHEAD DOOR	120	1	6.9	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 2
OH-1202	OVERHEAD DOOR	120	1	6.9	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 2
OH-1203	OVERHEAD DOOR	120	1	6.9	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 2

NOTES:
1. PROVIDE APPROVED CIRCUIT BREAKER HANDLE LOCKOUT.
2. PROVIDE CONTROL ADJACENT TO OVERHEAD DOOR PER SPECIFICATIONS.
3. EQUIPENT IS OWNER PROVIDED.

Panel "12H1" — 277 Volts L-N 3Ø, 4W; 480 Volts L-L; 22,000 AIC BRANCH BRKRS; 150A3P MAIN BREAKER; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: I - LINE; NEMA 3R ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ	Phase BØ	Phase CØ	Brkr.	Conn. Load	Ckt. No.	Service
LGTS - EXTERIOR	1	825	20/1					7202	2	
LGTS - PAINT SHOP	3	520	20/1				60/3	7202	4	MAU-1202
LGTS - BODY SHOP	5	1408	20/1					7202	6	
LGTS - PAINT & MIX BOOTHS	7	1500	20/1					3047	8	
SPARE	9	0	20/1				20/3	3047	10	EF-1204
	11	0						3047	12	
	13	0						0	14	
	15	0						0	16	
	17	0						0	18	
	19	0						0	20	
	21	0						0	22	
	23	0						0	24	
MIN. 9" SPACE	25	0						0	26	MIN. 9" SPACE
	27	0						0	28	
	29	0						0	30	
	31	0						0	32	
	33	0						0	34	
	35	0						0	36	
	37	0						8162	38	
	39	0					70/3	5432	40	TRANSFORMER T12 (45KVA)
	41	0						7206	42	
PANEL SHALL BE SIZED FOR A MINIMUM		Totals		AØ	BØ	CØ		Totals		
9" ADDITIONAL SPACE ON EACH SIDE OF		VA		20 736	16 201	18 863		VA		
BUSSING FOR FUTURE PANEL LOADS.		AMPS		74.9	58.5	68.1		AMPS		

Panel "12L1" — 120 Volts L-N 3Ø, 4W; 208 Volts L-L; 10,000 AIC BRANCH BRKRS; 150A3P MAIN BREAKER; COPPER BUS; EQUIP. GROUNDING BAR; TYPE: NQOD; NEMA 1 ENCLOSURE; SURFACE MOUNTED

Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ	Phase BØ	Phase CØ	Brkr.	Conn. Load	Ckt. No.	Service
RCPT - EXTERIOR (3)	1	540	20/1					900	2	
RCPT - BODY SHOP (3)	3	540	20/1				15/3	900	4	MAU-1201
RCPT - BODY SHOP(3)	5	540	20/1					900	6	
RCPT - PAINT SHOP (2)	7	360	20/1				20/1	576	8	IR-1201
RCPT - STORAGE (2)	9	360	20/1				20/1	396	10	GUH-1201
RCPT - RESTROOM (1)	11	180	20/1				20/1	1500	12	EUH-1201
OH-1201	13	828	20/1				20/1	1500	14	EUH-1202
OH-1202	15	828	20/1				20/1	80	16	EF-1201
OH-1203	17	828	20/1				20/1	1230	18	EF-1202
TIME CLOCK	19	200	20/1				20/1	1230	20	EF-1203
GWH-1201	21	300	20/1					2028	22	
SPARE	23	0	20/1				35/3	2028	24	AC-1201
SPARE	25	0	20/1					2028	26	
SPARE	27	0	20/1				20/1	0	28	SPARE
SPACE	29	0					20/1	0	30	SPARE
SPACE	31	0					20/1	0	32	SPARE
SPACE	33	0					20/1	0	34	SPARE
SPACE	35	0						0	36	SPACE
SPACE	37	0						0	38	SPACE
SPACE	39	0						0	40	SPACE
SPACE	41	0						0	42	SPACE
PROVIDE IDENTIFIED HANDLE TIES FOR		Totals		AØ	BØ	CØ		Totals		
ALL MULTIWIRE BRANCH CIRCUITS PER		VA		8 162	5 432	7 206		VA		
NEC 210.4		AMPS		68.0	45.3	60.1		AMPS		

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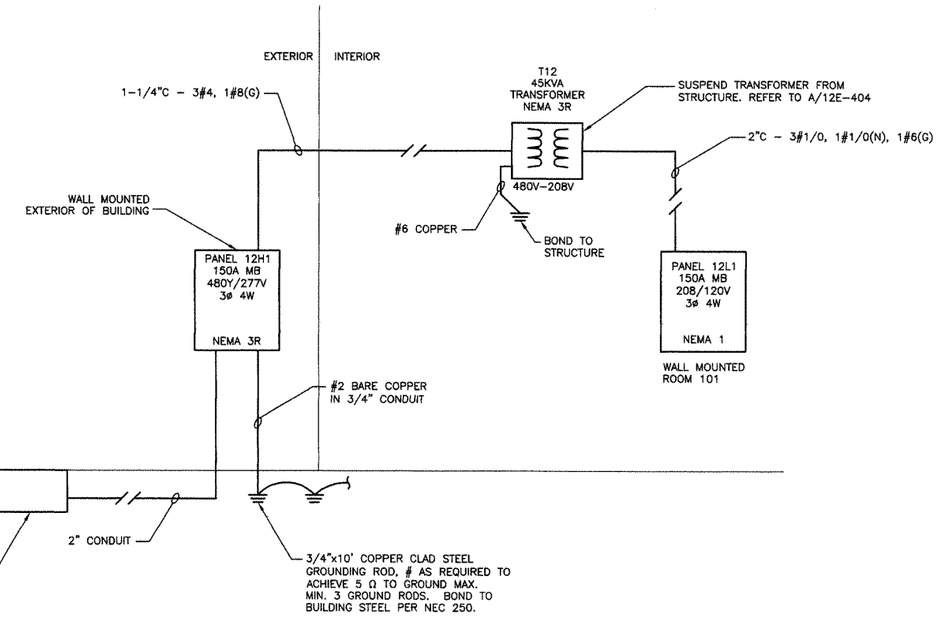
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ELECTRICAL SCHEDULES

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13428 — JOSHUA J. WYCOFF

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	BRC
APPROVED BY	BRC
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12E-401
REV	

233 OF 289



1 / 12E-402 POWER RISER DIAGRAM
SCALE: NTS

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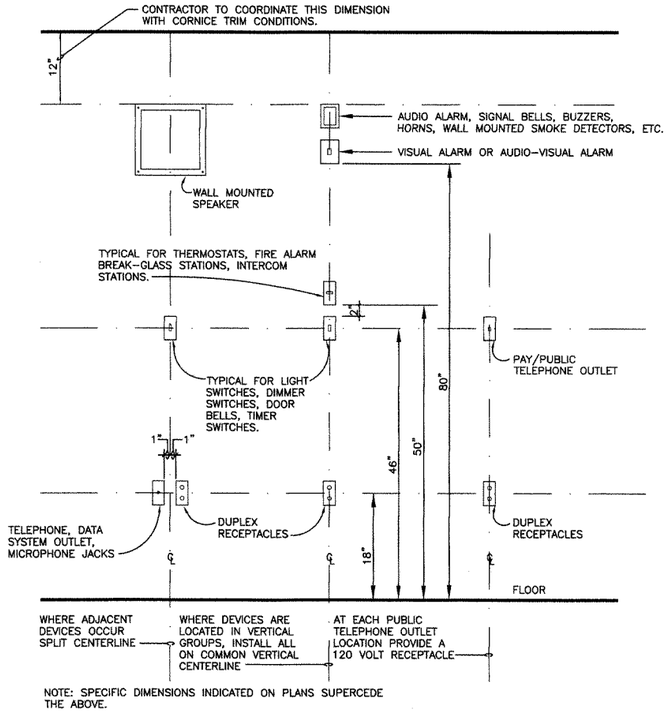
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
POWER RISER DIAGRAM

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

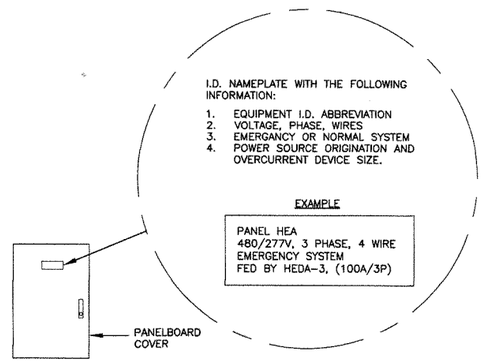
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12E-402	
234 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

JOSHUA W. JAYCOX ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 10/13/11

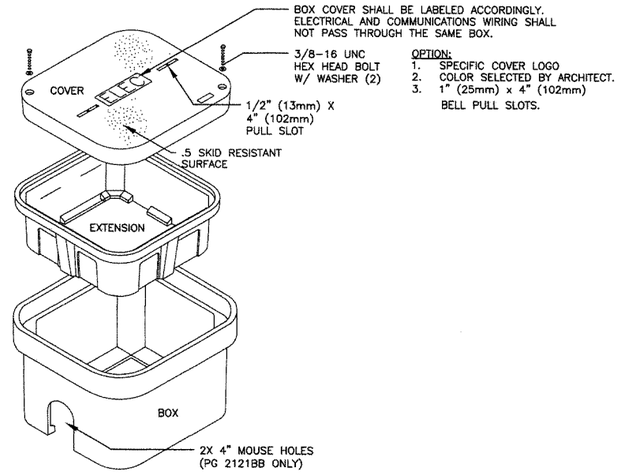


A 12E-403 TYPICAL OUTLET & DEVICE DIMENSIONS
SCALE: NTS

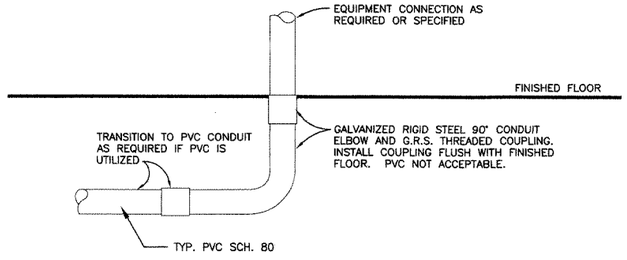


PANEL IDENTIFICATION NOTES:
1. SIMILAR FOR DISCONNECTS, MOTOR CONTROLLERS, TRANSFORMERS, LIGHTING CONTROL PANEL, AUTOMATIC TRANSFER SWITCHES, ETC.

B 12E-403 PANEL IDENTIFICATION DETAIL
SCALE: NTS

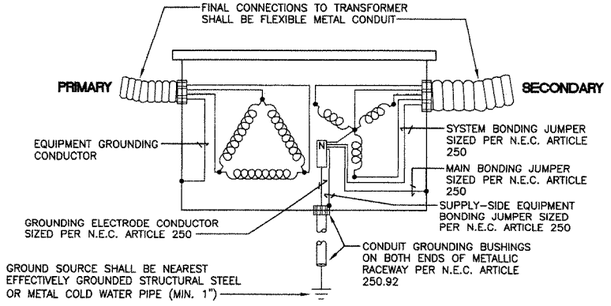


C 12E-403 IN-GRADE PULLBOX DETAIL
SCALE: NTS



NOTE: UNLESS NOTED OTHERWISE, THIS DETAIL SHALL BE USED, WITH NO EXCEPTIONS, FOR ALL CONDUIT PENETRATIONS IN OPEN FLOOR AREAS OR IN MOVABLE WALLS.

D 12E-403 TYPICAL STUB-UP DETAIL
SCALE: NTS



E 12E-403 TYPICAL DRY-TYPE TRANSFORMER DETAIL
SCALE: NTS

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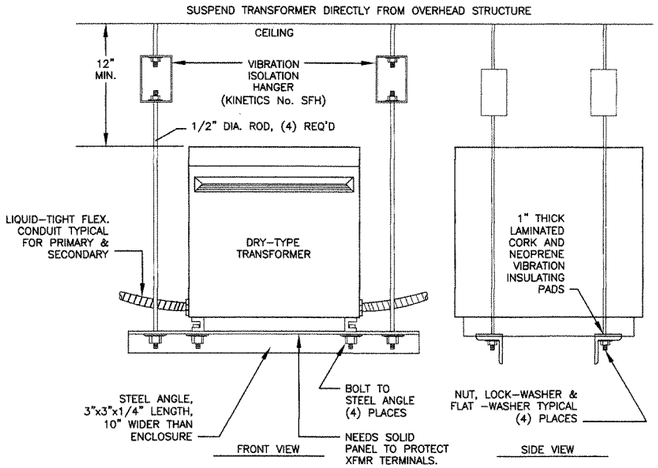
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ELECTRICAL DETAILS

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

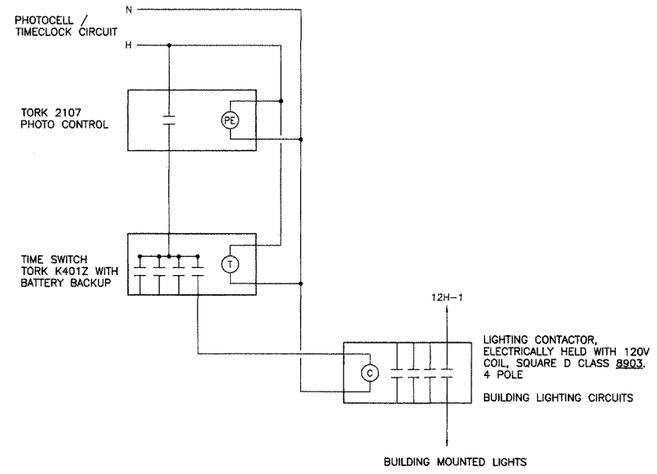
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
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12E-403	
235 OF 289	

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — NO. 13428 — JOSHUA W. JOYCE — 10/13/11



A 12E-404 TYPICAL DRY-TYPE XFMR MOUNTING DETAIL
SCALE: NTS



B 12E-404 LIGHTING CONTROL DETAIL
SCALE: NTS

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
ELECTRICAL DETAILS

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CHECKED BY	TBC
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DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
12E-404	
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CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 18498 JOSHUA W. JOYCE 10/13/11

TELECOMMUNICATIONS SYMBOLS

COMMUNICATIONS SYMBOLS

- W — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS ON WALL PHONE FACEPLATE
- WP — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR OUTSIDE WALL PHONE IN WEATHERPROOF ENCLOSURE
- A — ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR
- B — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS FOR DATA (LAN)
- C — TWO (2) CATEGORY 6 CABLES ON 8P/8C CONNECTORS – ONE (1) CABLE FOR DATA (LAN) AND ONE (1) CABLE FOR RADIO.
- D — FOUR (4) CATEGORY 6 CABLES ON 8P/8C CONNECTORS
- DENOTES CEILING MOUNTED OUTLET
- DENOTES FLOOR BOX OR POKE THROUGH
- WAP — NEW WIRELESS ACCESS POINT, ONE (1) CATEGORY 6 CABLE ON 8P/8C CONNECTOR WITH 30' SERVICE LOOP COILED AND SECURED
- COMMUNICATIONS CABLING SLEEVE OR CONDUIT
- CT — OVERHEAD CABLE TRAY, 12"W UNLESS NOTED OTHERWISE
- TELECOM GROUND BAR
- UNDERGROUND CONDUIT
- 19" COMMUNICATIONS EQUIPMENT RACK
- CROSS CONNECT
- CONDUIT DOWN
- CONDUIT UP
- (P) COMMUNICATIONS POWER POLE
- (J) JUNCTION BOX
- (J) WALL MOUNTED JUNCTION BOX

A/V SYMBOLS

- TV — TELEVISION
- IC — INTERCOM CONNECTION
- V — VOLUME CONTROL
- M — MICROPHONE
- (S) — SPEAKER
- S — SPEAKER PENDANT
- S — SPEAKER WALL
- AMP — AUDIO AMPLIFIER
- HEADEND
- WIRELESS ANTENNA
- LCD PROJECTOR
- 1 OUTPUT TAP
- 2 OUTPUT TAP
- 4 OUTPUT TAP
- 8 OUTPUT TAP
- 2/4/8 WAY SPLITTER
- 2–WAY VIDEO AMPLIFIER
- FIBER OPTIC TRANSMITTER
- FIBER OPTIC RECEIVER
- TERMINATOR
- VIDEO EQUALIZER
- VIDEO ATTENUATOR
- COUPLER
- VIDEO AMPLIFIER

SECURITY SYMBOLS

- KEYPAD DEVICE
- CARD ACCESS READER
- CARD ACCESS READER W/KEYPAD
- BIO ACCESS DEVICE
- INTERCOM DEVICE
- FIBER OPTIC MODULE
- MOTION DETECTOR – PASSIVE INFRARED
- ELECTRIC STRIKE
- MOTION DETECTOR VOLUMETRIC
- MONITOR
- PUSH BUTTON
- GLASS BREAKING SENSOR
- BALANCED MAGNETIC SWITCH
- CAPACITANCE SENSOR
- SCREENING DEVICE
- CAMERA – FIXED FOCUS
- PTZ — CAMERA – PTZ
- TURNSTILE
- ELECTROMAGNETIC LOCK
- ANNUNCIATION DEVICE
- SECURITY SCREEN WITH ALARM

OUTSIDE PLANT

- POLE WITH RISER
- MH — MAINTENANCE HOLE
- HH — HAND HOLE
- PROPOSED STRAIGHT SPLICE
- STRAIGHT SPLICE WITH CHANGES
- SPLICE THREE WAY
- DOWN GUY
- DEAD MAN
- BRACED GUY
- SIDEWALK GUY
- GROUND
- ISOLATION GAP
- B — SPLICE, BURIED CABLE, IN PEDESTAL
- Enc — ENCAPSULATED SPLICE
- CABLE LOOP

LINE TYPES

- –BC– BACKBONE CONDUIT
- –BCC– BACKBONE CONDUIT FOR COPPER
- –BFC– BACKBONE CONDUIT FOR FIBER
- –COP– COPPER BACKBONE
- –OF– OPTICAL FIBER BACKBONE
- -COAX- COAXIAL BACKBONE
- –PDS– PROTECTED DISTRIBUTION SYSTEM

GENERAL NOTES – COMMUNICATIONS

1. ALL COPPER TERMINATION HARDWARE TO BE 110 STYLE IDC, UNO.
2. TERMINATE ALL CONDUCTORS; NO CABLE SHALL CONTAIN NON TERMINATED ELEMENTS EXCEPT THE 25TH PAIR OF BINDER GROUPS IN MULTI–PAIR COPPER BACKBONE CABLE. MAKE TERMINATION ONLY AT INDICATED OUTLETS, TERMINALS, CROSS–CONNECTS AND PATCH PANELS.
3. CABLE MAY NOT BE SPLICED, UNO.
4. MONITOR CABLE PULL TENSION TO ENSURE MANUFACTURER RECOMMENDATION AND INDUSTRY STANDARDS ARE NOT EXCEEDED.
5. PROVIDE PULL STRING IN ALL EMPTY CONDUIT OR INNERDUCT. PULL STRING TO BE RATED FOR 200 lbs. IN ALL CONDUIT.
6. CABLE TRAY TO BE TRAPEZE OR CANTILEVER HUNG ONLY. BOND ALL SECTIONS OF TRAY TOGETHER WITH MANUFACTURER APPROVED BONDING METHOD.
7. PROVIDE PULL BOXES IN CONDUITS NO MORE THAN 100' APART AND PER EVERY 180 DEGREES OF BEND – SIZE PER TIA ALL CABLE TRAY TO BE 12"W U.N.O.
8. FIELD COORDINATE LOCATION OF NEW EQUIPMENT IAW APPLICABLE CODES.
9. ALL OUTLET BOXES ARE 4 11/16" SQUARE WITH SINGLE GANG EXTENSION RING WITH 1" CONDUIT STUBBED INTO CEILING SPACE.
10. NO CONDULETS OR FITTINGS SHALL BE USED.

SECURITY SYSTEM – GENERAL NOTES

1. PROVIDE AND INSTALL ALL SECURITY WIRING, DEVICES AND EQUIPMENT AS INDICATED
2. PROVIDE SUFFICIENT SERVICE LOOP AT EACH END OF SECURITY CABLE FOR PROPER CONNECTION TO AND MAINTENANCE OF EQUIPMENT OR DEVICES
3. ALL SECURITY CABLING TO BE INSTALLED IN METALLIC CONDUIT TO THE ASSOCIATED SECURITY PANEL
4. IN TURN KEY SYSTEMS ALL COMPONENTS PROVIDED ARE TO BE LISTED FOR USE IN THE SYSTEM INDICATED
5. IN TURN KEY SYSTEMS ALL ENCLOSURES AND IDS DEVICES WITH REMOVABLE COVERS SHALL HAVE TAMPER PROTECTION DEVICES CAPABLE OF BEING MONITORED CONTINUOUSLY
6. IN TURN KEY SYSTEMS ALL SECURITY SYSTEM COMMUNICATIONS LEAVING THE FACILITY WILL EMPLOY LINE SECURITY. CERTIFICATES THAT LINE SECURITY HAS BEEN EMPLOYED TO BE PROVIDED.

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 13468 — JOSHUA D. WILLIFORD

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC — No. 510 — ARKANSAS

COMMUNICATIONS ABBREVIATIONS LIST

AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
BCC	BACKBONE COPPER CABLE
BKBD	BACKBOARD
BSMT	BASEMENT
BMS	BALANCED MAGNETIC SWITCH
CAT 6	4–PAIR, 24 GA, CATEGORY 6 UTP CABLE
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CD	CABLE DUCT
CER	COMMUNICATIONS EQUIPMENT ROOM
CLST	CLOSET
CMH	COMMUNICATIONS MAINTENANCE HOLE
COMM	COMMUNICATIONS
CT	CABLE TRAY
DEMO	DEMOLITION
DIST	DISTRIBUTION
EES	EARTH ELECTRODE SYSTEM
EF	ENTRANCE FACILITY
EMT	ELECTRICAL METALLIC TUBING
ENL	EXISTING DEVICE NEW LOCATION
ETM	EXISTING TO MOVE
ETR	EXISTING TO REMAIN
ETBR	EXISTING TO BE REMOVED
FO	FIBER OPTIC CABLE
GF/GI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
GF/CI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GI/CF	GOVERNMENT INSTALLED CONTRACTOR FURNISHED
GND	GROUND
IDF	INTERMEDIATE DISTRIBUTION FRAME
IDS	INTRUSION DETECTION SYSTEM
IC	INTERMEDIATE CROSS–CONNECT
IMC	INTERMEDIATE METAL CONDUIT
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MH	MAINTENANCE HOLE
MIN	MINIMUM
MM	MULTIMODE FIBER
MNS	MASS NOTIFICATION SYSTEM
MSB	MAIN SERVICE BUS
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
OSP	OUTSIDE PLANT
PET	PROTECTED ENTRANCE TERMINAL
PR	PAIR
PT	POINT
PTZ	PAN / TILT / ZOOM
PVC	POLY VINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
RSC	RIGID STEEL CONDUIT
RM	ROOM
RU	RACK UNIT
SHT	SHEET
SM	SINGLEMODE FIBER
TBL	TABLE
TGB	TELECOMM GROUNDING BUS BAR
TMGB	TELECOMM MAIN GROUNDING BUS BAR
TR	TELECOMM ROOm
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTIFIED OTHERWISE
W/	WITH

A / 12T–001 — TELECOMMUNICATIONS LEGEND AND ABBREVIATIONS
NTS

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
TELECOMMUNICATIONS LEGEND AND ABBREVIATIONS

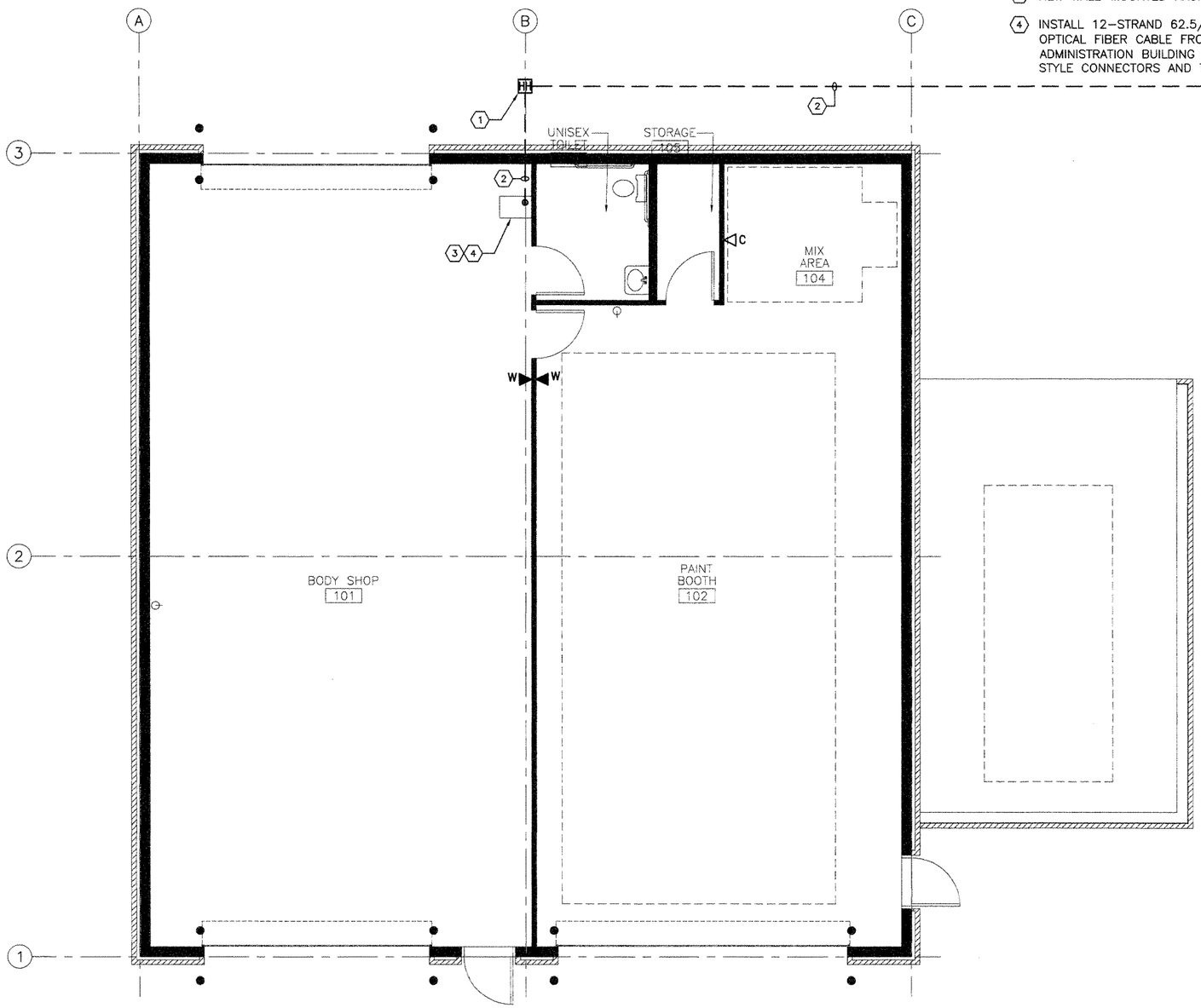
DESIGNED BY	BMG
DRAWN BY	ASC
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APPROVED BY	BMG

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12T–001
REV	0

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KEY NOTES: THIS SHEET ONLY

1. NEW 24" X 30" HAND HOLE
2. ONE (1) NEW 4" CONDUIT
3. NEW WALL-MOUNTED RACK. REFERENCE DETAIL A/12T-401.
4. INSTALL 12-STRAND 62.5/125 MULTI-MODE OSP-RATED OPTICAL FIBER CABLE FROM WALL CABINET/RACK TO ADMINISTRATION BUILDING 11, ROOM 116. TERMINATE WITH "SC" STYLE CONNECTORS AND TEST.



A 12T-101 COMMUNICATIONS FLOOR PLAN
SCALE: 1/4"= 1'-0"

NORTH

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 13428 JOSHUA D. TATUM

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
TELECOMMUNICATIONS FLOOR PLAN

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SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	12T-101
REV	0

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GENERAL NOTES (THIS SHEET ONLY):

1. ALL EQUIPMENT SHOWN IS CONCEPTUAL ONLY. PROVIDE AND INSTALL QUANTITIES AS REQUIRED BY SPECIFICATIONS AND DRAWINGS. DETAIL IS TYPICAL AND SOME CABLING AND EQUIPMENT MAY NOT APPLY.

KEYED NOTES (THIS SHEET ONLY):

(1) MINIMUM 6 AWG STRANDED BONDING CONDUCTOR WITH GREEN THERMOPLASTIC SHEATH.

(2) VERTICAL CABLE MANAGEMENT.

(3) OPTICAL FIBER TERMINATION SHELF.

(4) 48-PORT CATEGORY 6 PATCH PANEL.

(5) 2 RU HORIZONTAL CABLE MANAGEMENT – PROVIDE ONE PER PATCH PANEL.

(6) HORIZONTAL RADIO CABLE

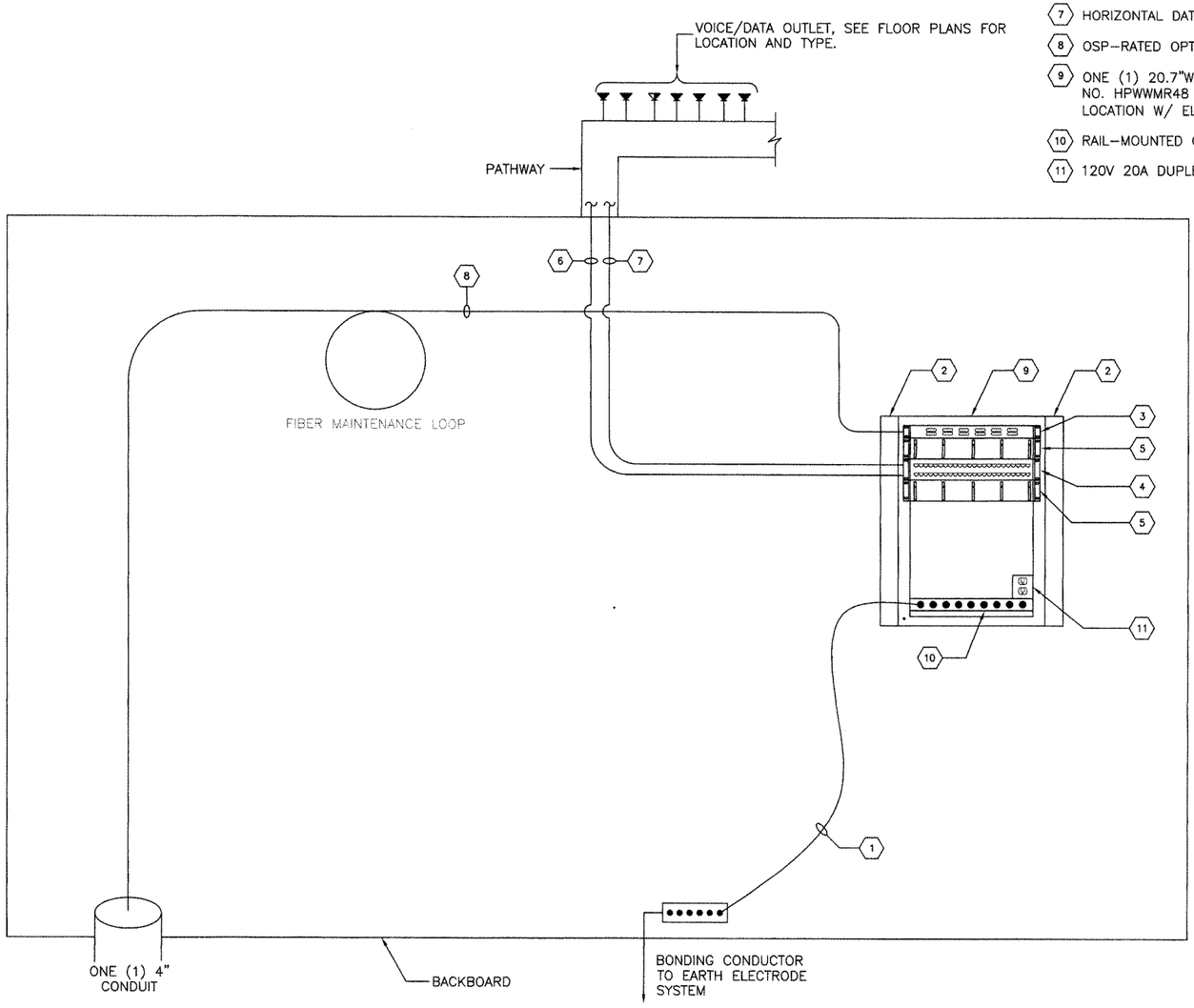
(7) HORIZONTAL DATA (LAN) CABLE

(8) OSP-RATED OPTICAL FIBER CABLE – CAMPUS DISTRIBUTOR.

(9) ONE (1) 20.7"W X 18"D X 48"H "HUBBELL" WALL-MOUNTED RACK. CATALOG NO. HPWWMR48 OR APPROVED FUNCTIONALLY EQUIVALENT. COORDINATE EXACT LOCATION W/ ELECTRICAL.

(10) RAIL-MOUNTED GROUND BUS BAR.

(11) 120V 20A DUPLEX RECEPTACLE MOUNTED TO BACKPLATE.



A 12T-401 MAIN CLOSET ROOM ELEVATION
SCALE: NTS

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DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
TELECOMMUNICATIONS MAIN CLOSET ELEVATION

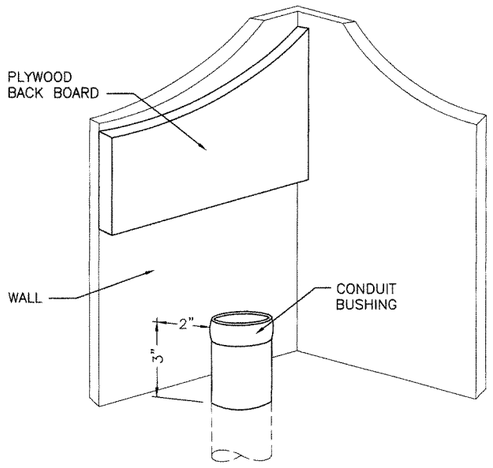
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SHEET	REV
12T-401	0

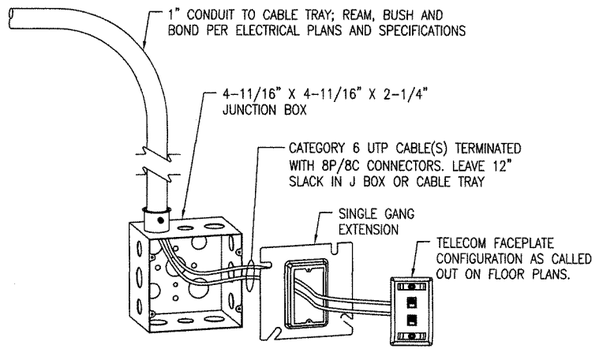
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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 19428 JOSHUA D. TAYLOR

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS



A 12T-501 TYPICAL CONDUIT STUB-UP
SCALE: NTS



NOTES:
1. COORDINATE HEIGHT OF OUTLET WITH ELECTRICAL RECEPTACLE.

B 12T-501 WALL MOUNT COMMUNICATIONS OUTLET (TYPICAL)
SCALE: NTS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13428
10/12/11
JOSHUA T. DOYLE

CERTIFICATE OF AUTHORIZATION
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Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

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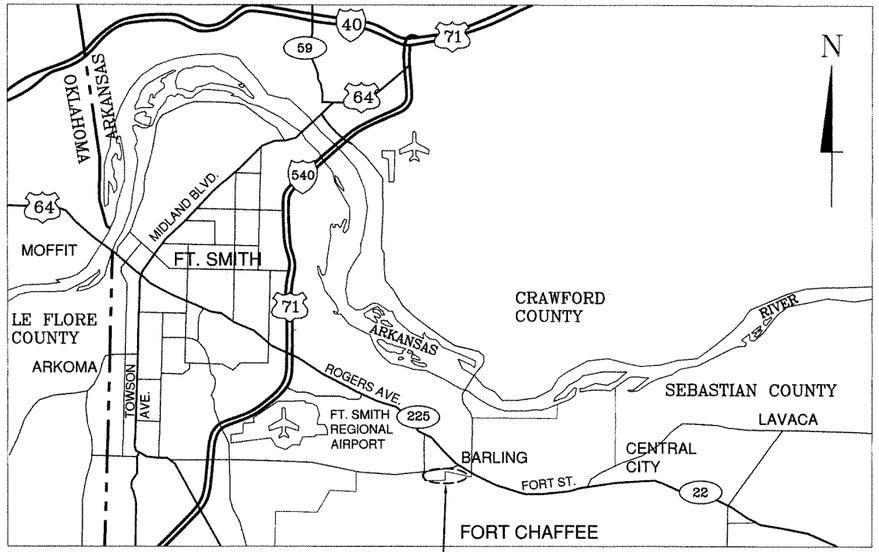
DISTRICT BODY AND PAINT SHOP
AHTD JOB NO. 040554
TELECOMMUNICATIONS DETAILS

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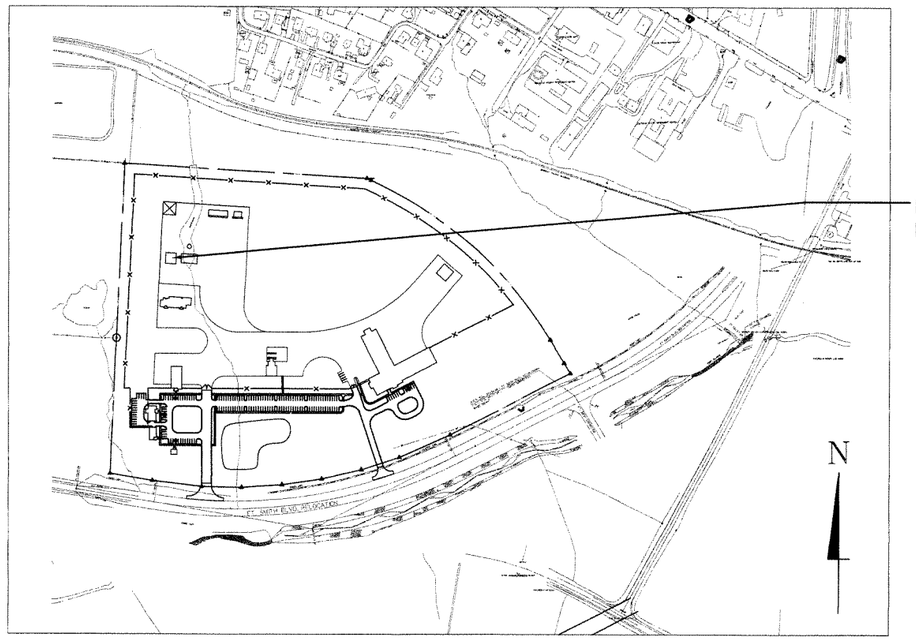
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12T-501	0
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
					ARK.		241	289
				JOB NO.		040554		
				DISTRICT WASH STATION				

DISTRICT EQUIPMENT WASH BUILDING



VICINITY MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

DISTRICT EQUIPMENT WASH BUILDING			
CODE INFORMATION			
OCCUPANCY:	GROUP F-1, FACTORY, MODERATE HAZARD		AFPC SECTION 306.2
CONSTRUCTION:	TYPE IIB, UNSPRINKLERED, UNPROTECTED		AFPC SECTION 602.2, TABLE 601, TABLE 602
	STRUCTURAL FRAME	0 HOUR	
	BEARING WALLS	0 HOUR	
	NONBEARING WALLS AND PARTITIONS	0 HOUR	
	FLOOR CONSTRUCTION	0 HOUR	
	ROOF CONSTRUCTION	0 HOUR	
	FIRE SEPARATION WALLS	NOT APPLICABLE	
	FIRE PARTITIONS		
	STORAGE/MECHANICAL AREAS	NOT APPLICABLE	
	EXIT ACCESS CORRIDORS	NOT APPLICABLE	
	SHAFT ENCLOSURES	NOT APPLICABLE	
	AREA OF EXTERIOR OPENINGS	NOT APPLICABLE	
BUILDING LIMITATIONS FOR F-1 OCCUPANCY			
	HEIGHT AND STORIES	55 FT/2 STORY	AFPC TABLE 503
	ACTUAL HEIGHT AND STORIES	23 FT/1 STORY	
	BASE AREA	15,500 SF/FLOOR	AFPC TABLE 503
	ACTUAL AREA (1 STORY)	1,606 SF	
MEANS OF EGRESS			
	OCCUPANT LOAD, GROUP F-1	16 OCCUPANTS	AFPC TABLE 1004.1.1
	WIDTH OF EGRESS DOORS		
	EXITS	36" REQUIRED;	AFPC SECTION 1008.1.1
		36" PROVIDED	
	MINIMUM NUMBER OF EXITS	1 REQUIRED;	AFPC TABLE 1015.1
		1 PROVIDED	
	EXIT ACCESS TRAVEL DISTANCE	200 FT	AFPC TABLE 1016.1
	EXIT ACCESS CORRIDOR WIDTH	44" REQUIRED	AFPC SECTION 1017.2
		NA	
	DEAD END CORRIDOR	20 FT	AFPC SECTION 1017.3
		NA	

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

JOHNNY R. RAMSEY, ARCHITECT

ABBREVIATIONS

ABC	AGGREGATE BASE COURSE
ADJ	ADJUSTABLE
A.F.F.	ABOVE FINISH FLOOR
ALUM	ALUMINUM
A.W.C.	ACCESSIBLE WATER CLOSET
BCE	BASE CIVIL ENGINEER
BM	BEAM
BD	BOARD
B.O.	BOTTOM OF
BOT	BOTTOM
BRNG	BEARING
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CU	CONDENSING UNIT
CJ	CONTROL JOINT
DIA	DIAMETER
ø	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DTL	DETAIL
DN	DOWN
EA	EACH
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EXP JT	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
F.E.	FIRE EXTINGUISHER
FFE	FINISHED FLOOR ELEVATION
FIN	FINISH OR FINISHED
FLR	FLOOR
FTG	FOOTING
GA	GAUGE
GEN	GENERAL
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HDF	HIGH DENSITY FIBERBOARD
HMAC	HOT MIX ASPHALTIC CONCRETE
HORIZ	HORIZONTAL
HPL	HIGH PRESSURE LAMINATE
HT	HEIGHT
INSUL	INSULATION
INT	INTERIOR
L	ANGLE
LAV	LAVATORY
LPL	LOW PRESSURE LAMINATE
LVL	LAMINATED VENEER LUMBER
LT	LIGHT
MAS	MASONRY
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MFGR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
OSB	ORIENTED STRAND BOARD
PED	PEDESTRIAN
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
PLCS	PLACES
R	RADIUS
RAD	RADIUS
REF	REFER TO
REINF.	REINFORCING
REQ'D	REQUIRED
RM	ROOM
R.T.U.	ROOF TOP UNIT
SS	SANITARY SEWER OR STAINLESS STEEL
SCHED	SCHEDULE
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STD	STANDARD
STL	STEEL
THK	THICK
T.O.	TOP OF
T.O.BM.	TOP OF BEAM
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
T.P.	TOILET PAPER
TS	TUBE STEEL
TYP.	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V.I.F.	VERIFY IN FIELD
W	WATER MAIN
WD	WOOD
W/	WITH
WC	WATER CLOSET
VCT	VINYL COMPOSITION TILE
VTR	VENT THRU ROOF

REVISION TABLE
Fort Smith, Arkansas

DATE	DESCRIPTION	SHEET NUMBER

SYMBOL INDEX

- WALL KEY (E)
- DOOR NUMBER (101)
- WINDOW KEY (C)
- ELEVATION MARKER B/A6
- DATUM MARKER 100'-0" F.F.E.
- BUILDING SECTION X/AX
- PARTIAL SECTION X/AX

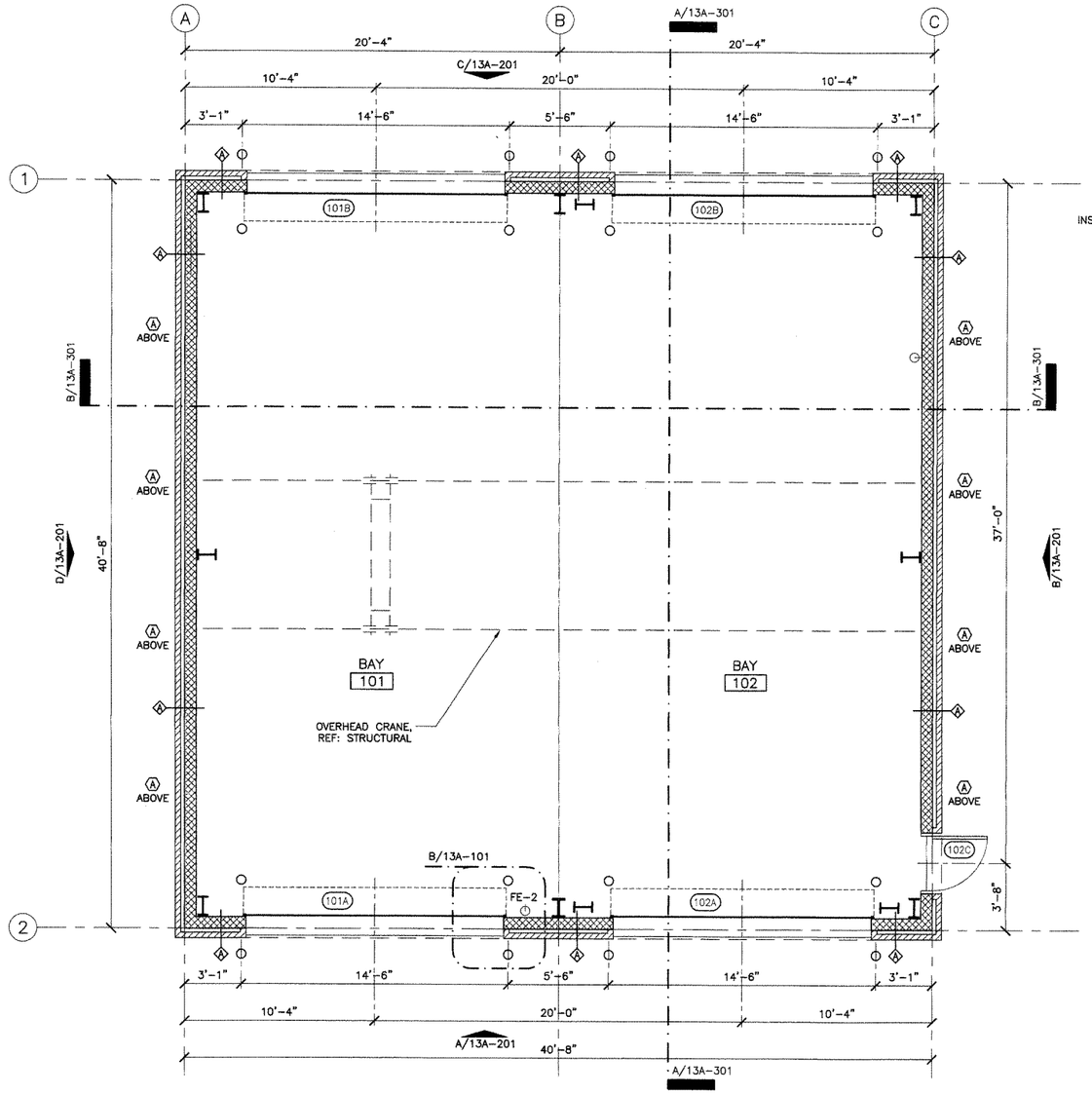
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
INDEX & GOVERNING SPECIFICATIONS
QUANTITIES & REVISION TABLE

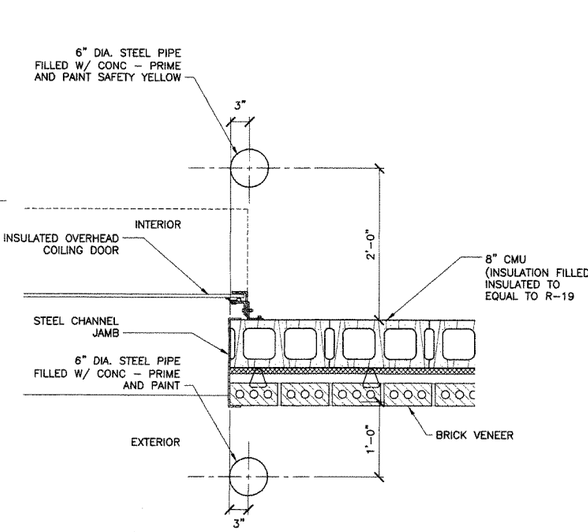
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DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13G-002
REV	

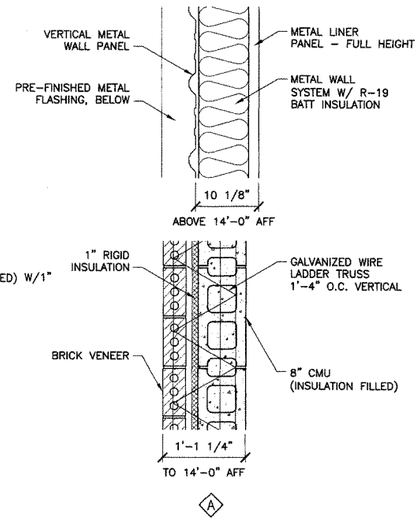


A FLOOR PLAN
13A-101 SCALE: 1/4" = 1'-0"

NOTE:
REFER ELEVATIONS FOR UPPER WINDOW LOCATIONS.



B BOLLARD DETAIL
13A-101 SCALE: 1" = 1'-0"



C PARTITION TYPES
13A-101 SCALE: 1" = 1'-0"

NOTE: FE-2 FIRE EXTINGUISHER W/BRACKET ONLY, NO CABINET.
MOUNT WITH HANDLE @ 42" A.F.F.

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
FLOOR PLAN

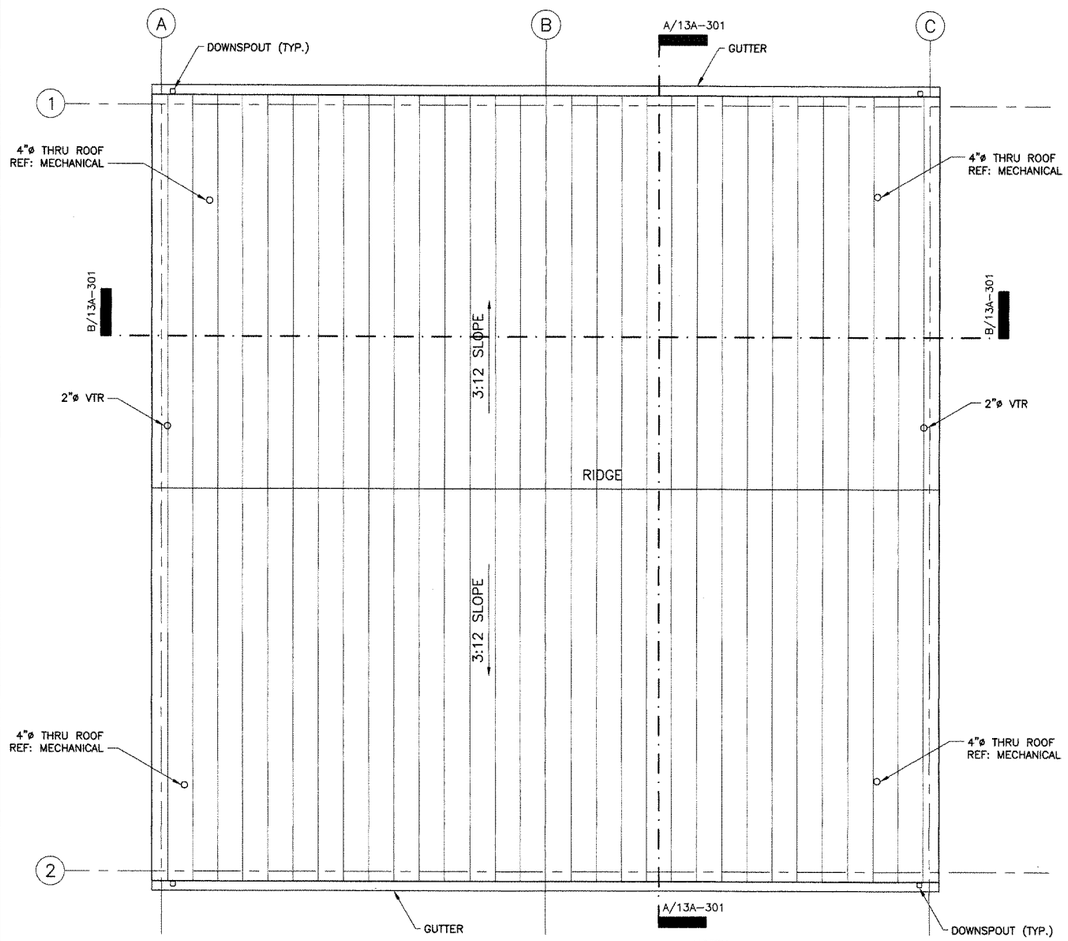
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APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13A-101
REV	

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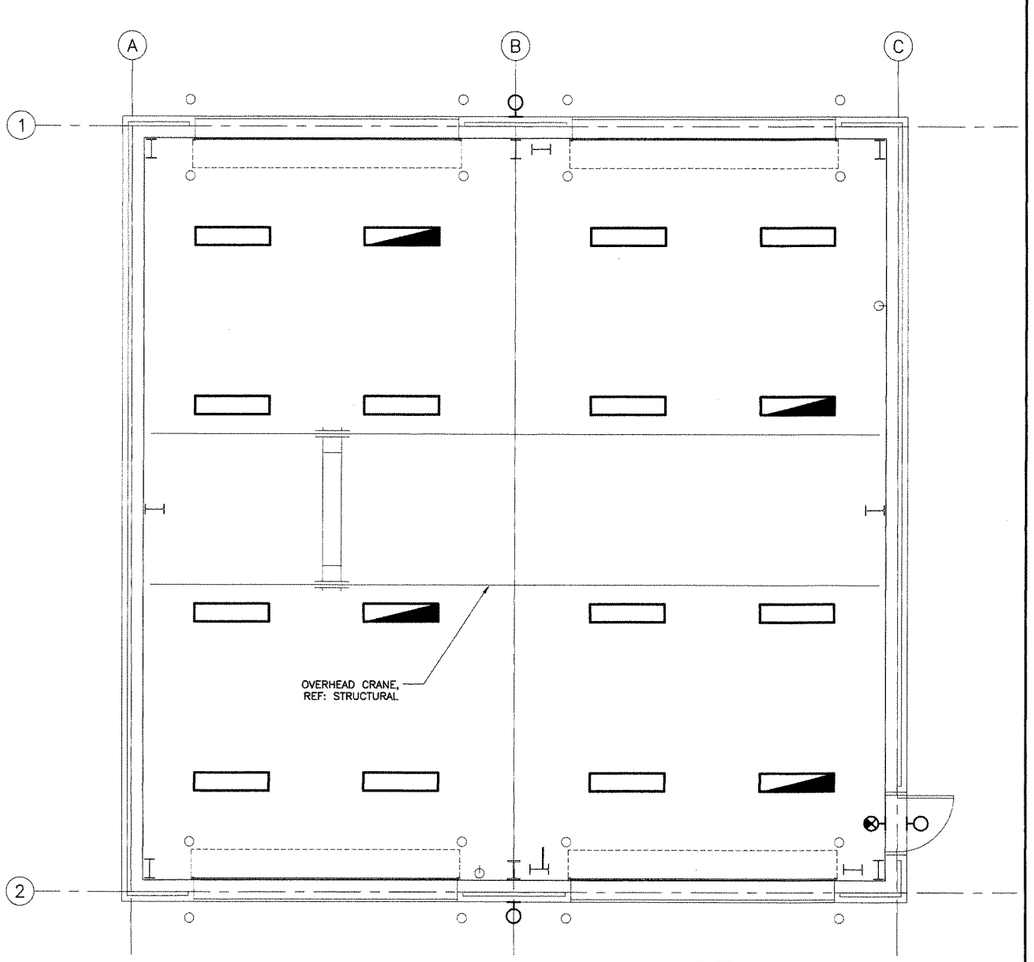
REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11



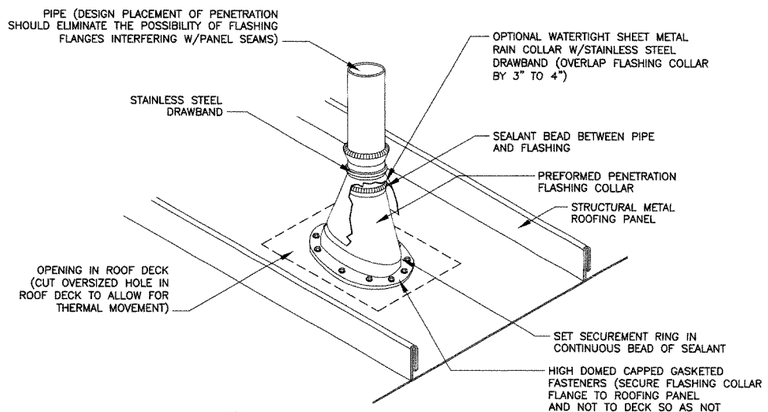
A 13A-102 ROOF PLAN
SCALE: 1/4" = 1'-0"

NORTH



C 13A-102 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

NORTH



B 13A-102 VENT THRU ROOF DETAIL
SCALE: 1 1/2" = 1'-0"

CEILING PLAN LEGEND:

- 1'-0" x 4'-0" FLUORESCENT FIXTURE
- 1'-0" x 4'-0" FLUORESCENT FIXTURE, CONNECTED TO EMERGENCY SYSTEM AND EQUIPPED WITH BATTERY PACK.
- COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
- EXIT LIGHT

NOTE:
EAVE SOFFITS TO BE PRE-FINISHED FLUSH SEAM PANEL

NOTE:
REFER ELECTRICAL

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0	11-15-11	ISSUED FOR CONSTRUCTION		

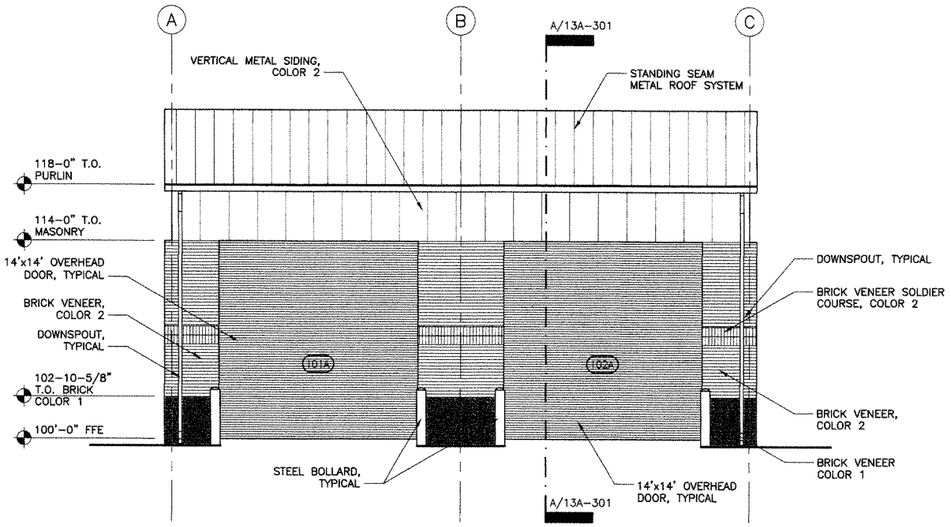
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
ROOF PLAN & REFLECTED CEILING PLAN

REGISTERED ARCHITECT
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No. C-255
ARKANSAS

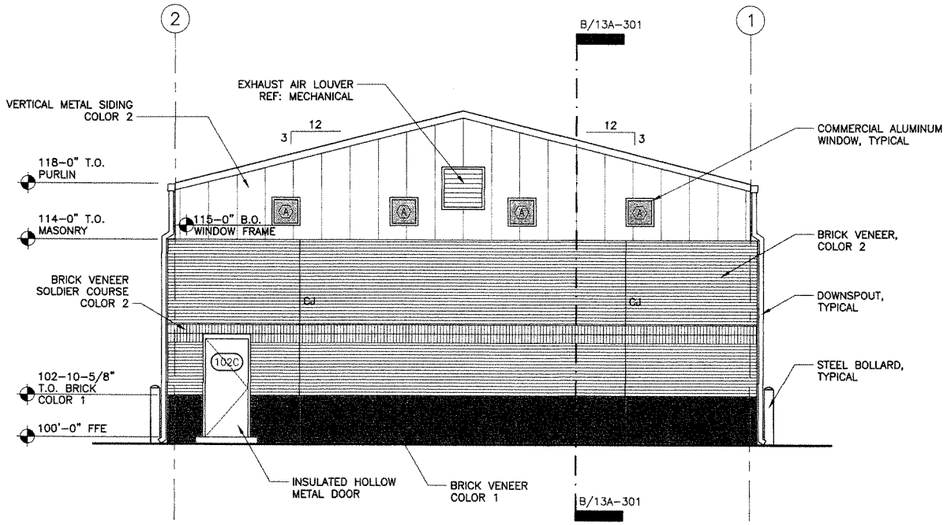
JOHNNY RAY RISSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

DESIGNED BY	JSR
DRAWN BY	AMB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13A-102
REV	

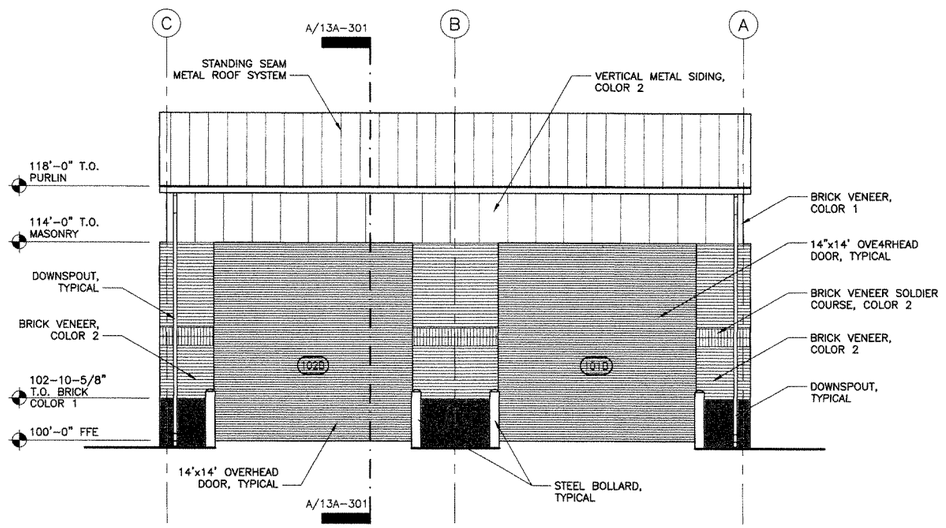
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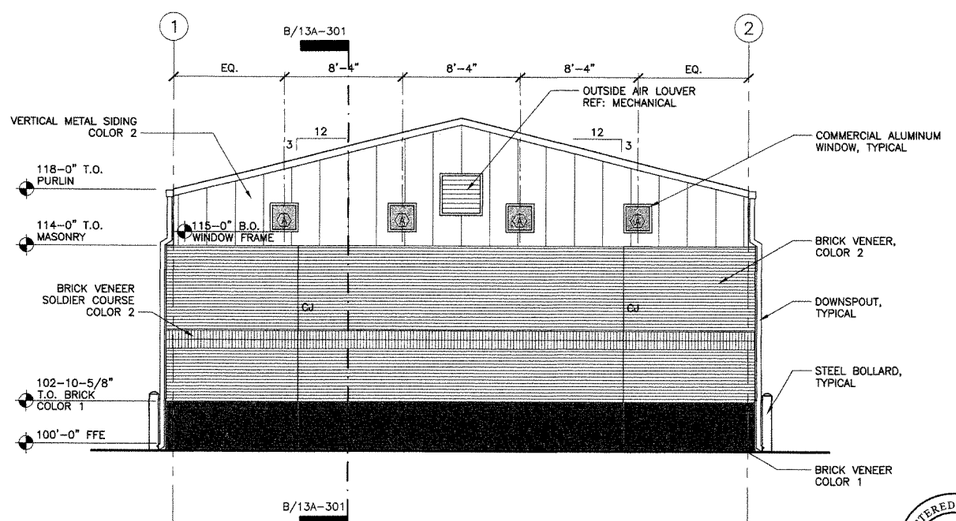
A 13A-201 EXTERIOR ELEVATION
SCALE: 3/16" = 1'-0"



B 13A-201 EXTERIOR ELEVATION
SCALE: 3/16" = 1'-0"



C 13A-201 EXTERIOR ELEVATION
SCALE: 3/16" = 1'-0"



D 13A-201 EXTERIOR ELEVATION
SCALE: 3/16" = 1'-0"

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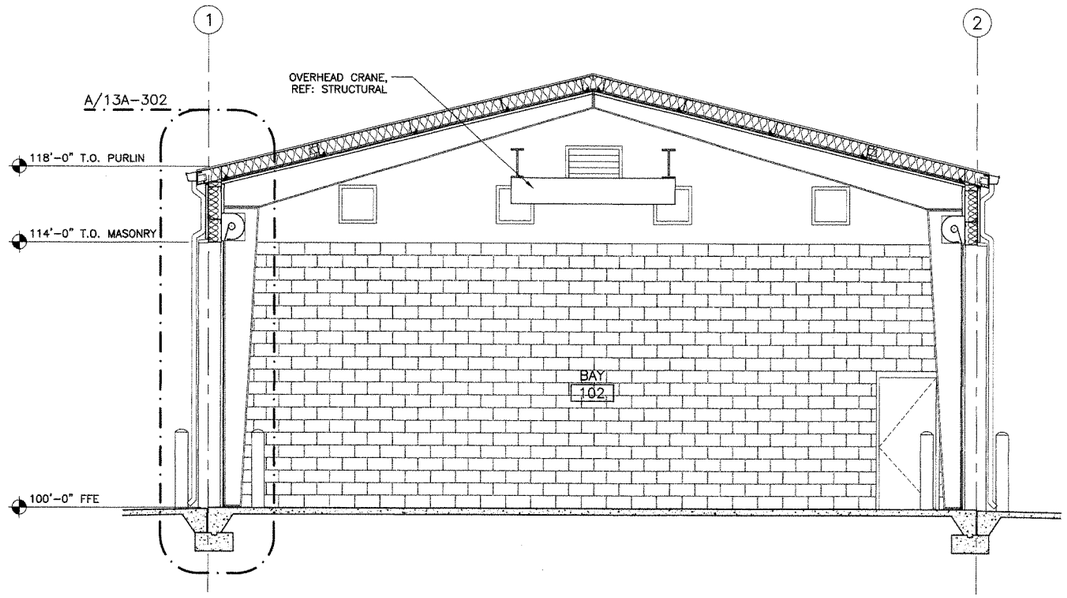
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
EXTERIOR ELEVATIONS

DESIGNED BY	JSR
DRAWN BY	AMB
CHECKED BY	JRR
APPROVED BY	JSR

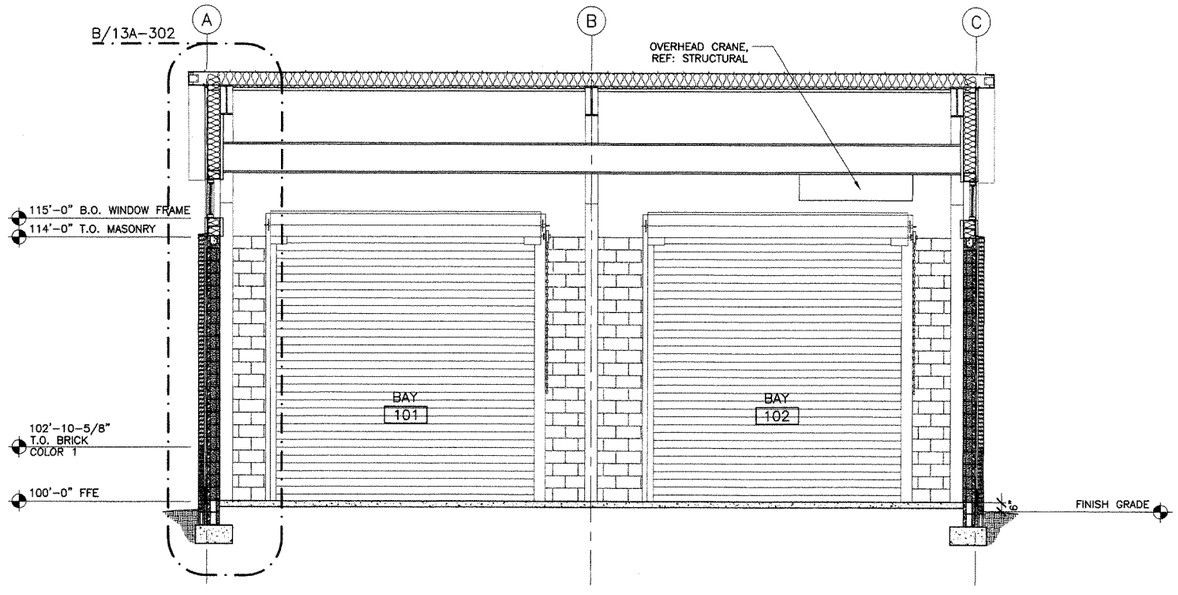
REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
NO. 2221
ARKANSAS
10-13-11

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13A-201
REV	0



A 13A-301 **BUILDING SECTION**
SCALE: 1/4" = 1'-0"



B 13A-301 **BUILDING SECTION**
SCALE: 1/4" = 1'-0"

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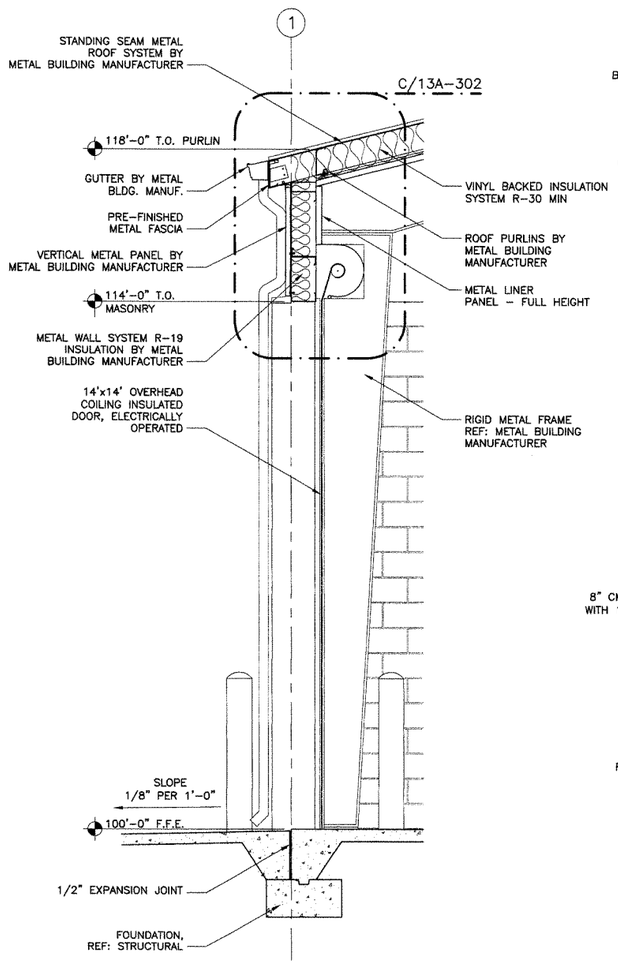
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
BUILDING SECTIONS

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

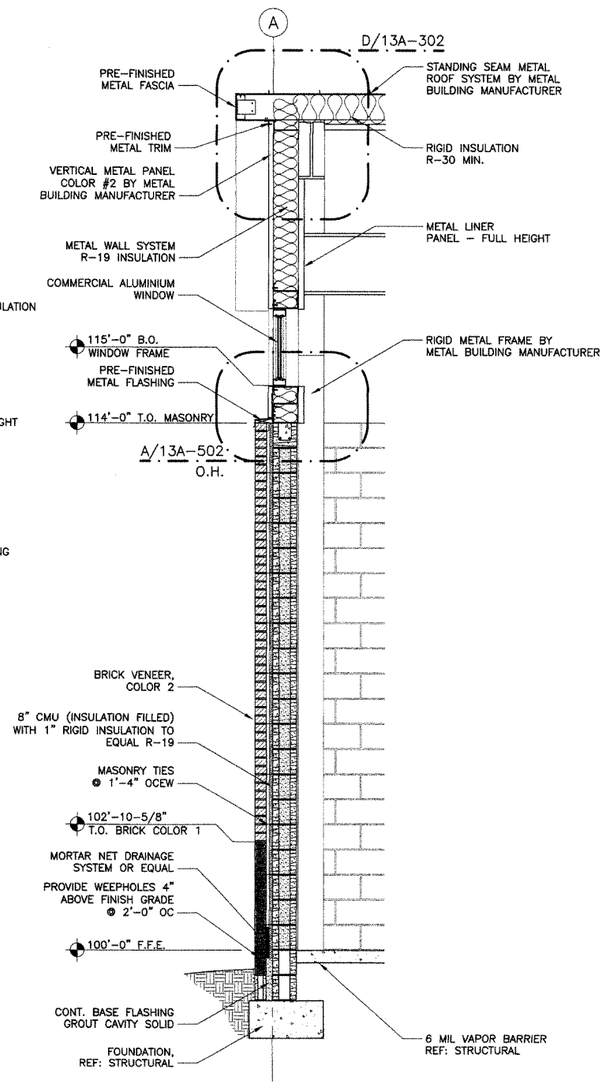
JOHNNY RAY RUSSELL
REGISTERED ARCHITECT
No. 22721
ARKANSAS
10-13-11

DESIGNED BY	JSR
DRAWN BY	AMB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13A-301
REV	

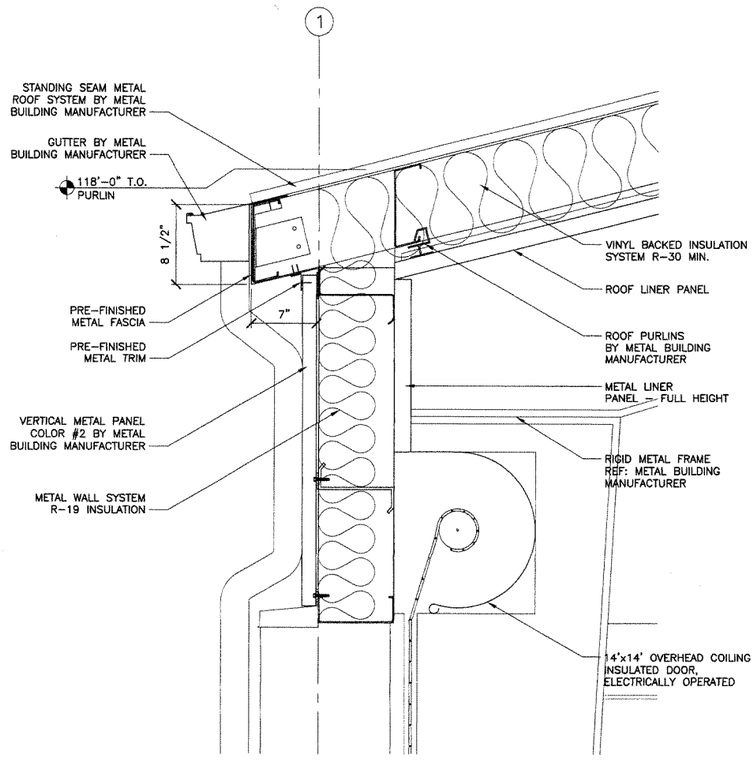
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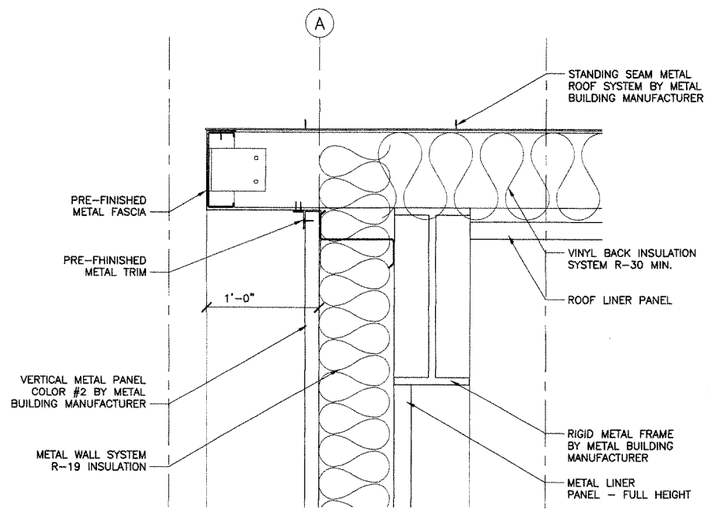
A WALL SECTION
13A-302 SCALE: 1/2" = 1'-0"



B WALL SECTION
13A-302 SCALE: 1/2" = 1'-0"



C SECTION DETAIL
13A-302 SCALE: 1 1/2" = 1'-0"



D SECTION DETAIL
13A-302 SCALE: 1 1/2" = 1'-0"

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
WALL SECTIONS

DESIGNED BY	TBC
DRAWN BY	MSB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13A-302
REV	
	247 OF 289

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY BAILEY
REGISTERED ARCHITECT
No. 12221
ARKANSAS
10-13-11

DOOR SCHEDULE

DOOR				FRAME		DETAILS		
DOOR NO.	DOOR SIZE	DOOR DESCRIPTION	DOOR ELEV.	FRAME TYPE	FRAME MATL.	HRDWR SET	DETAIL GROUP	REMARKS
101A	14'-0" x 14'-0"	OVERHEAD DOOR	D1		-		C	
101B	14'-0" x 14'-0"	OVERHEAD DOOR	D1		-		C	
102A	14'-0" x 14'-0"	OVERHEAD DOOR	D1		-		C	
102B	14'-0" x 14'-0"	OVERHEAD DOOR	D1		-		C	
102C	3'-0" x 7'-0" x 1 3/4"	HM INSULATED	D2	F1	HM		B	

HARDWARE NOTE #1:

REFER TO "SECTION 087100 - DOOR HARDWARE" FOR HARDWARE SETS BY GENERAL DOOR TYPE.

WINDOW SCHEDULE

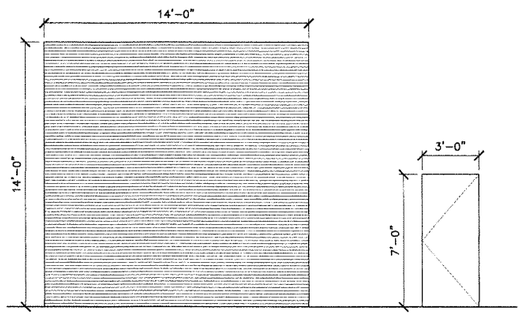
WINDOW				FRAME	DETAILS	
WINDOW NO.	WINDOW SIZE	WINDOW DESCRIPTION	WINDOW ELEV.	FRAME MATERIAL	DETAIL GROUP	REMARKS
A	2'-0"x2'-0"	COMMERCIAL ALUM FRAME	A	ALUM	A	

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING			NOTES
				NORTH	EAST	SOUTH	WEST	MATL.	FINISH	HT. A.F.F.	
101	WASH BAY	SC	R	PT	PT	PT	PT	EXP	PT	--	--
102	WASH BAY	SC	R	PT	PT	PT	PT	EXP	PT	--	--

FINISH LEGEND

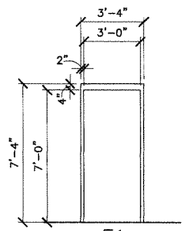
ACT	ACOUSTICAL CEILING TILE
CT	CERAMIC TILE
EXP	EXPOSED
GYP	GYPSUM BOARD
PT	PAINT
R	RUBBER
SC	SEALED CONCRETE
STC	STAINED CONCRETE
VCT	VINYL COMPOSITION TILE



D1
OVERHEAD COILING DOOR, INSULATED

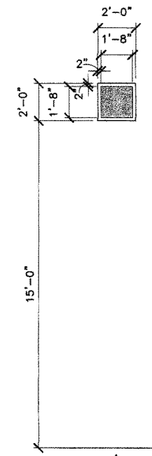
D2
HOLLOW METAL INSULATED

DOOR ELEVATIONS
SCALE: 1/4" = 1'-0"



F1
INSULATED HOLLOW METAL FRAME W/4" HEADER

FRAME ELEVATION
SCALE: 1/4" = 1'-0"



A
THERMALLY BROKEN ALUMINUM WINDOW WITH 1" INSULATED GLAZING, CLEAR LOW-E, ARGON FILLED

WINDOW ELEVATION
SCALE: 1/4" = 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-13-11

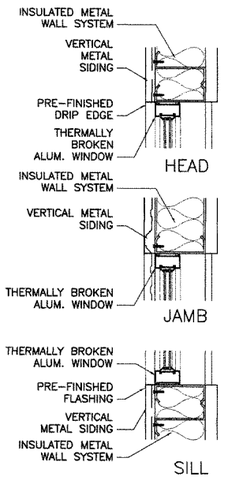
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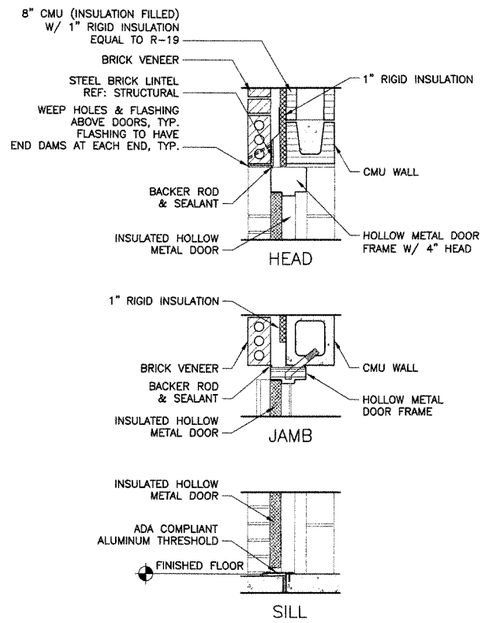
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
DOOR & WINDOW ELEVATIONS & SCHEDULES

DESIGNED BY	TBC
DRAWN BY	AMB
CHECKED BY	TBC
APPROVED BY	TBC

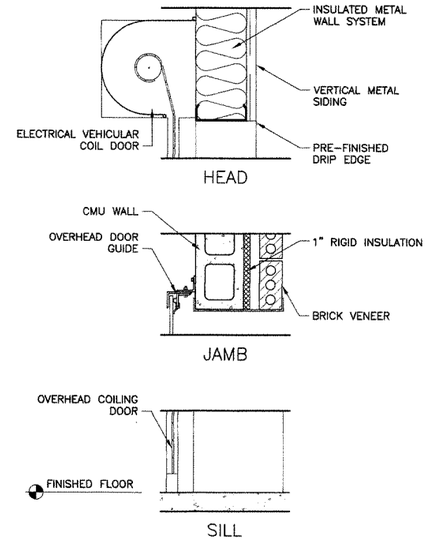
DATE	10/13/11
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SHEET	13A-501
REV	



DETAIL
GROUP A



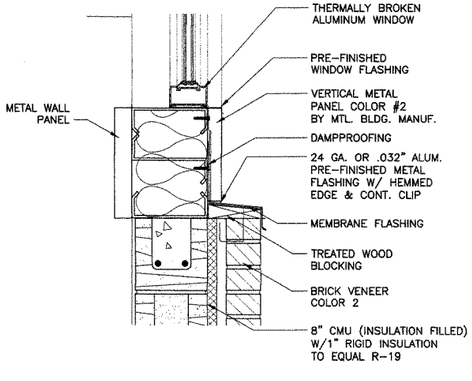
DETAIL
GROUP B



DETAIL
GROUP C

HEAD JAMB & SILL DETAILS

SCALE: ##########



A / 13A-502 FLASHING DETAIL

SCALE: 1 1/2" = 1'-0"

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
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10.12.11

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
HEAD JAMB & SILL DETAILS

DESIGNED BY	TBC
DRAWN BY	AMB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13A-502
REV	

STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT
ACT	ACTUAL
ADDN	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ALT	ALTERNATE
ANCH	ANCHORAGE, ANCHOR
APPD	APPROVED
ARCH	ARCHITECT,(URAL)
B–	CONC. BEAM
B/	BOTTOM OF
B/B	BACK TO BACK
BIT	BITUMINOUS, BITUMASTIC
BLDG	BUILDING
BM	BEAM
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
BRDG	BRIDGING
BRG	BEARING
BLK	BLOCK
BTWN	BETWEEN
BSMT	BASEMENT
C	CHANNEL
CANT	CANTILEVER
CEN	CENTER, ED
C/C	CENTER TO CENTER
CHAM	CHAMFER
CIRC	CIRCULAR
CJ	CONTROL JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNITS
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS, ATION
CONTR	CONTRACTOR
COORD	COORDINATE, TION
CTRD	CENTERED
D	DEPTH, DISTANCE
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DBS	DOWEL BAR SPLICER
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DSGN	DESIGN
DWGS	DRAWINGS
DWL	DOWEL
E	EAST
EA	EACH
EB	EXPANSION BOLT
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION, ELEVATED
ELEV	ELEVATOR
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXP	EXPANSION
EXIST	EXISTING
EXT	EXTERIOR
F–	FOOTING MARK
FC	FILLED CELL
FF	FINISHED FLOOR
FIN	FINISH
FLG	FLANGE
FLR	FLOOR
FDN	FOUNDATION
FRMG	FRAMING
FS	FARSIDE
FT	FOOT, FEET
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GL	GLU LAM
GLB	GLUED LAMINATED BEAM
HC	HIGH CHAIR
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HSA	HEADED STUD ANCHOR
HSB	HIGH STRENGTH BOLT
HT	HEIGHT
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INCL	INCLUDE, ING
INSUL	INSULATE, D, ION
INT	INTERIOR
INTERM	INTERMEDIATE
JST	JOIST
JT	JOINT
k	KIP
L–	ANGLE
LB	POUND
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LP	LOW POINT
LT	LIGHT
LSL	LONG SLOTTED HOLES
LTWT	LIGHTWEIGHT
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MBS	METAL BUILDING SUPPLIER
MECH	MECHANICAL
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MASONRY JOINT
MO	MASONRY OPENING
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
O/O	OUT TO OUT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OPNG	OPENING
OPP	OPPOSITE
OSL	OUTSTANDING LEG
OVS	OVERSIZE HOLES
PAF	POWDER ACTUATED FASTENER
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
R/W	REINFORCED WITH
RAD	RADIUS
REF	REFERENCE
REINF	REINFORCE, MENT
REQ	REQUIRE, D, MENT
RET	RETURN
REV	REVISION
RP	RADIUS POINT
RT	RIGHT
RTU	ROOF TOP UNIT
S	SOUTH
SA	SLAB BOLSTER
SB	SLEEVE ANCHOR
SCHED	SCHEDULE
SECT	SECTION
SF–	STEP FOOTING
SIM	SIMILAR
SPEC	SPECIFICATIONS
SP	SPACING,ES
SQ	SQUARE
SSL	SHORT SLOTTED HOLES
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENERS
STL	STEEL
STRL	STRUCTURAL
SYMM	SYMMETRICAL
T	TIES
t	THICKNESS
T/	TOP OF
TB–	TIE BEAM
TC	TIE COLUMN
T&B	TOP AND BOTTOM
TEMP	TEMPORARY, TEMPERATURE
TERM	TERMINATE
TOL	TOLERANCE
TOF	TOP OF FOOTING
TRAN	TRANSVERSE
TS	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VERT	VERTICAL
W	WIDTH, WEST, WIDE FLANGE
W/	WITH
W/O	WITHOUT
WF–	WALL FOOTING
WP	WORKING POINT
WS	WATERSTOP
WT	WEIGHT
WWF	WELDED WIRE FABRIC

STANDARDS

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
NFPA	NATIONAL FOREST PRODUCTS ASSOCIATION
PCI	PRESTRESSED CONCRETE INSTITUTE
PTI	POST TENSIONING INSTITUTE
TPI	TRUSS PLATE INSTITUTE
UL	UNDERWRITER'S LABORATORY

SYMBOLS

&	AND
@	AT
℄	CENTERLINE
⌀	DIAMETER
⌖	ELEVATION
#	NUMBER, POUNDS
C.J.	CONSTRUCTION JT.
S.J.	SAW CUT JOINT
PL	PLATE

STRUCTURAL DESIGN CRITERIA

D–1 CODE – 2006 INTERNATIONAL BUILDING CODE WITH ARKANSAS FIRE PREVENTION CODE, 2002 EDITION

D–2 DESIGN LIVE LOADS:

ROOF	20 PSF (REDUCIBLE)
COLLATERAL M/E	5 PSF
FLOOR	SLAB–ON–GRADE

SNOW LOAD: GROUND SNOW Pg = 10 PSF

D–3 WIND LOAD: 90 MPH, ENCLOSED
60 MPH, PARTIALLY ENCLOSED
EXPOSURE 'C'
OCCUPANCY CATEGORY II, I = 1.0

D–4 SEISMIC: SEISMIC ZONE: 1
S_s = 0.212
S_1 = 0.090
SITE CLASS C
S_{DS} = 0.170
S_{D1} = 0.102
DESIGN CATEGORY B
STEEL. NOT DETAILED, R = 3
Cs = 0.057

D–5 ALLOWABLE SOIL BEARING PRESSURE 2000 PSF (CONT) AND 2500 PSF (SPREAD FOOTINGS).

GENERAL NOTES

G–1 THE GENERAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS, PRIOR TO FABRICATION AND START OF CONSTRUCTION.

G–2 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER.

G–3 THE GENERAL CONTRACTOR SHALL COORDINATE STRUCTURAL AND OTHER DRAWINGS WHICH ARE PART OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS WHICH MAY AFFECT THE STRUCTURAL DRAWINGS.

G–4 ALL DETAILS AND SECTIONS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS SHOWN.

G–5 REPRODUCTION OF THE CONTRACT DOCUMENTS USED FOR THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS WILL NOT BE PERMITTED. REPRODUCED DRAWINGS WILL BE RETURNED UNCHECKED FOR RESUBMITTAL.

G–6 DO NOT SCALE DRAWINGS.

SHALLOW FOUNDATIONS

SF–1 SOIL TO BE STRIPPED, COMPACTED AND TESTED IN ACCORDANCE WITH RECOMMENDATIONS OF THE THE SOILS REPORT PREPARED BY GRUBBS, HOSKYN, BARTON & WYATT, INC DATED JULY 3, 2008, AND AMENDMENTS THAT FOLLOW.

SF–2 HORIZONTAL JOINTS IN FOOTINGS WILL NOT BE PERMITTED.

SF–3 EXCAVATING UNDER OR NEAR IN – PLACE FOOTINGS/FOUNDATIONS WHICH DISTURBS THE COMPACTED SOIL BENEATH THE FOOTINGS/ FOUNDATIONS WILL NOT BE PERMITTED.

SF–4 REINFORCING SHALL BE SUPPORTED ON PRECAST PADS. ANCHOR BOLTS AND DOWELS FOR COLUMNS AND FILLED CELLS SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE. USE TEMPLATES FOR SETTING ANCHOR BOLTS.

SF–5 FOUNDATIONS SHALL BEAR ON STIFF TO VERY STIFF CLAY OR COMPETENT WEATHERED SHALE OR LIMESTONE. CONTRACTOR SHALL UNDER CUT FOOTINGS AS REQUIRED TO REACH COMPETENT BEARING MATERIAL. PROVIDE SOLID FILL OR LEAN–FILL AS REQUIRED. OVERSIZE UNDER CUTS LATERALLY ONE HORIZONTAL TO TWO VERTICAL FROM FOOTING EDGE.

SF–6 FOUNDATIONS SHALL BEAR A MINIMUM OF 24" BELOW GRADE.

REINFORCED CONCRETE

RC–1 CONCRETE WORK SHALL COMPLY WITH SECTION 802 OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT 2003 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

RC–2 PROVIDE CLASS OF CONCRETE WITH THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH.

CLASS OF CONCRETE

S	3500 PSI (UNLESS NOTED OTHERWISE)
S	4000 PSI (SLABS GREATER THAN 4")
S (AE)	4000 PSI (EXTERIOR CONCRETE)
LEAN–FILL	1500 PSI

RC–5 ALL PUMPED CONCRETE WITH #57 AGGREGATE IS TO CONTAIN A HIGH RANGE WATER REDUCING AGENT. MINIMUM SIZE OF DISCHARGE TO BE 4" I.D. SEE SPECIFICATIONS FOR REQUIRED MIX DESIGN. A 2" I.D. DISCHARGE MAY BE USED WITH #89 AGGREGATE.

RC–6 ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318 (LATEST EDITION) AND ACI DETAILING MANUAL, ACI–315 LATEST EDITION.

RC–7 REINFORCING STEEL SHALL BE NEW DEFORMED BARS, FREE FROM RUST, SCALE AND OIL, CONFORMING TO ASTM A–615, GRADE 60, WITH MINIMUM YIELD STRENGTH = 60,000 PSI.

RC–8 PROVIDE THE FOLLOWING CONCRETE COVERAGE OVER REINFORCING:

FOOTINGS:	BOTTOMS & UNFORMED EDGES	3" CLEAR
	TOP & FORMED EDGES	1 1/2" CLEAR

RC–9 NO REINFORCING BARS SHALL BE CUT TO ACCOMMODATE THE INSTALLATION OF ANCHORS, EMBEDS OR OTHER ITEMS.

RC–10 USE THE STRUCTURAL DRAWINGS (INCLUDING REVISIONS AND ADDENDA) IN CONJUNCTION WITH REVIEWED SHOP DRAWINGS FOR PLACEMENT OF REINFORCING.

RC–11 AT CHANGES IN DIRECTION OF WALL BEAMS AND STRIP FOOTINGS, PROVIDE CORNER BARS OF SAME SIZE AND QUANTITY (U.N.O.) AS HORIZONTAL STEEL. REFER TO TYPICAL DETAIL 6 ON SHEET 13S–601.

RC–12 ALL EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

MASONRY

M–1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI "BUILDING CODE AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ASCE 530.1–LATEST EDITION) EXCEPT AS AMENDED BELOW.
REQUIREMENTS FOR MASONRY STRUCTURES" (ACI/ASCE 530–LATEST EDITION)

M–2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C–90 (28 DAY STRENGTH = 2000 P.S.I., fm' = 1500 P.S.I.) LAID IN RUNNING BOND.
ALL MASONRY SHALL BE NORMAL WEIGHT, TYPE 1,
GRADE "N" U.N.O.

M–3 USE TYPE "M" OR "S" MORTAR WITH MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.

M–4 PROVIDE LAP SPLICES FOR REINFORCING AS SHOWN ON SCHEDULE.

M–5 SEE SHEETS 13S–502 AND 13S–503 FOR ADDITIONAL NOTES.

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No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

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Lowell, Arkansas
(479) 770–5800
(479) 770–5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13S–001
REV	

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METAL BUILDING SYSTEM DESCRIPTION EQUIPMENT WASH BUILDING

REFER TO SPECIFICATIONS AND NOTES ON THE DRAWINGS FOR ADDITIONAL INFORMATION.

PRIMARY FRAME TYPE:	RIGID CLEAR SPAN
END-WALL FRAMING:	PINNED
EXTERIOR COLUMN TYPE:	TAPERED
INTERIOR COLUMNS:	N/A
ROOF RAFTER TYPE:	TAPERED
SECONDARY FRAME TYPE-ROOF:	MFG. STANDARD "C" OR "Z" COLD-FORMED PURLINS AND
SECONDARY FRAME TYPE-GIRTS:	EXTERIOR FRAMED (BYPASS)
SIDEWALL BRACING TYPE:	PORTAL FRAMES
COLUMN BASES:	PINNED
EXTERIOR WALL SYSTEM:	REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATION

METAL BUILDING SYSTEMS (MBS):

MB-1 REFER TO SPECIFICATION SECTION 133419 FOR METAL BUILDING DESIGN CRITERIA, FABRICATION AND CONSTRUCTION REQUIREMENTS.

MB-2 SEE THIS DRAWING FOR CODES, DESIGN CRITERIA AND OTHER NOTES THAT APPLY.

MB-3 THE BUILDING SHALL BE METAL BUILDING SYSTEMS OF THE SIZE AND CONFIGURATION SHOWN. THE BUILDINGS SHALL BE DESIGNED AND FABRICATED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

MB-4 A COMPLETE DESIGN ANALYSIS SHOWING ALL CALCULATIONS FOR THE RIGID FRAMES, GIRTS, PURLINS, PORTAL FRAMIES, X-BRACING FOR WIND AND SEISMIC LOADS AND A LAYOUT OF ANCHOR BOLTS AND OTHER EMBEDDED ITEMS SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE DETAILS OF ALL MAIN MEMBERS, TYPICAL CONNECTIONS (SHOWING BOLT HOLES AND WELDS), AND ERECTION DRAWINGS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS.

MB-5 COLUMN REACTIONS SHALL BE SUBMITTED FOR REVIEW OF FOUNDATION DESIGN WITHIN TWO WEEKS OF AWARD DATE OR AS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.

MB-6 THE BUILDING SHALL BE DESIGNED TO SUPPORT ALL CRANES, MECHANICAL EQUIPMENT INCLUDING HEATERS, SPRINKLERS, EXHAUST SYSTEMS, AND ALL OTHER SUCH DEVICES. ADDITIONAL GIRTS OR PURLINS OR BEAMS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL EQUIPMENT.

MB-7 THE BUILDING SHALL BE DESIGNED AND MEMBERS PROVIDED FOR LATERAL SUPPORT OF MASONRY WALLS.

MB-8 THE BUILDING FRAME SHALL BE DESIGNED TO LIMIT THE LATERAL DEFLECTION TO H/400. "H" BEING THE EAVE HEIGHT, AT THE BUILDING EAVE FOR THE BASIC WIND SPEED CALLED (SEE "DESIGN CRITERIA" SECTION THIS SHEET) FOR SEISMIC, THE Cd X DESIGN LEVEL RESPONSE DISPLACEMENT SHALL NOT EXCEED H/50.

MB-9 CROSS BRACING SHALL BE USED TO TAKE LATERAL DIAPHRAGM LOADS UNLESS THE METAL PANELS ARE THROUGH FASTENED TO THEIR SUPPORTS. LOAD TESTS ON METAL PANELS MUST BE SUBMITTED WHERE THESE ARE USED AS A DIAPHRAGM. METAL PANELS USED, AS A DIAPHRAGM MUST BE A MINIMUM OF 22 GAGE.

MB-10 ALL VERTICAL BRACING TO BE ANCHORED TO COLUMN WEBS.

MB-11 ALL METAL BUILDING FRAMES AND BEAMS SHOWN ON ROOF FRAMING PLANS ARE DIAGRAMMATIC FOR INTENT ONLY. ALL FINAL LOCATIONS, SIZES, ETC. FOR ALL FLOOR AND ROOF MEMBERS SHALL BE FROM METAL BUILDING SYSTEMS SUPPLIER (AND/OR JOIST AND BEAM MANUFACTURER) BEARING THE SEAL, SIGNATURE AND DATE OF THE REGISTERED ENGINEER IN THE STATE OF ARKANSAS. METAL BUILDING SYSTEMS SUPPLIER IS RESPONSIBLE FOR FINAL TRUSS LAYOUT AND DESIGN OF ALL ROOF FRAMES.

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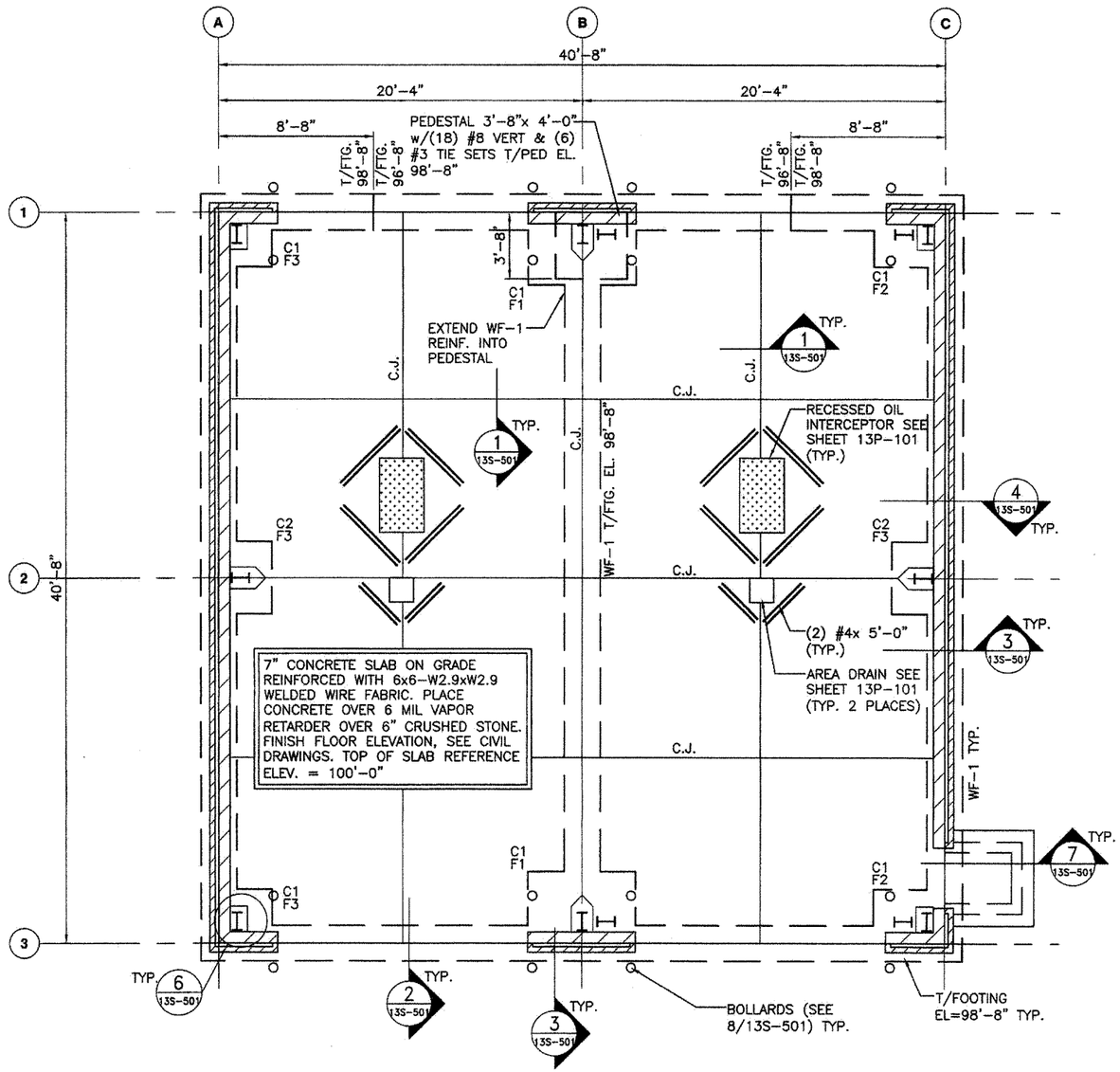
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

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Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13S-002
REV	



1 13S-101 FOUNDATION PLAN
SCALE: 1/4"= 1'-0"

NORTH

LEGEND

INDICATES NON-LOAD BEARING BRICK VENEER OR BLOCK REFER TO ARCHITECTURAL

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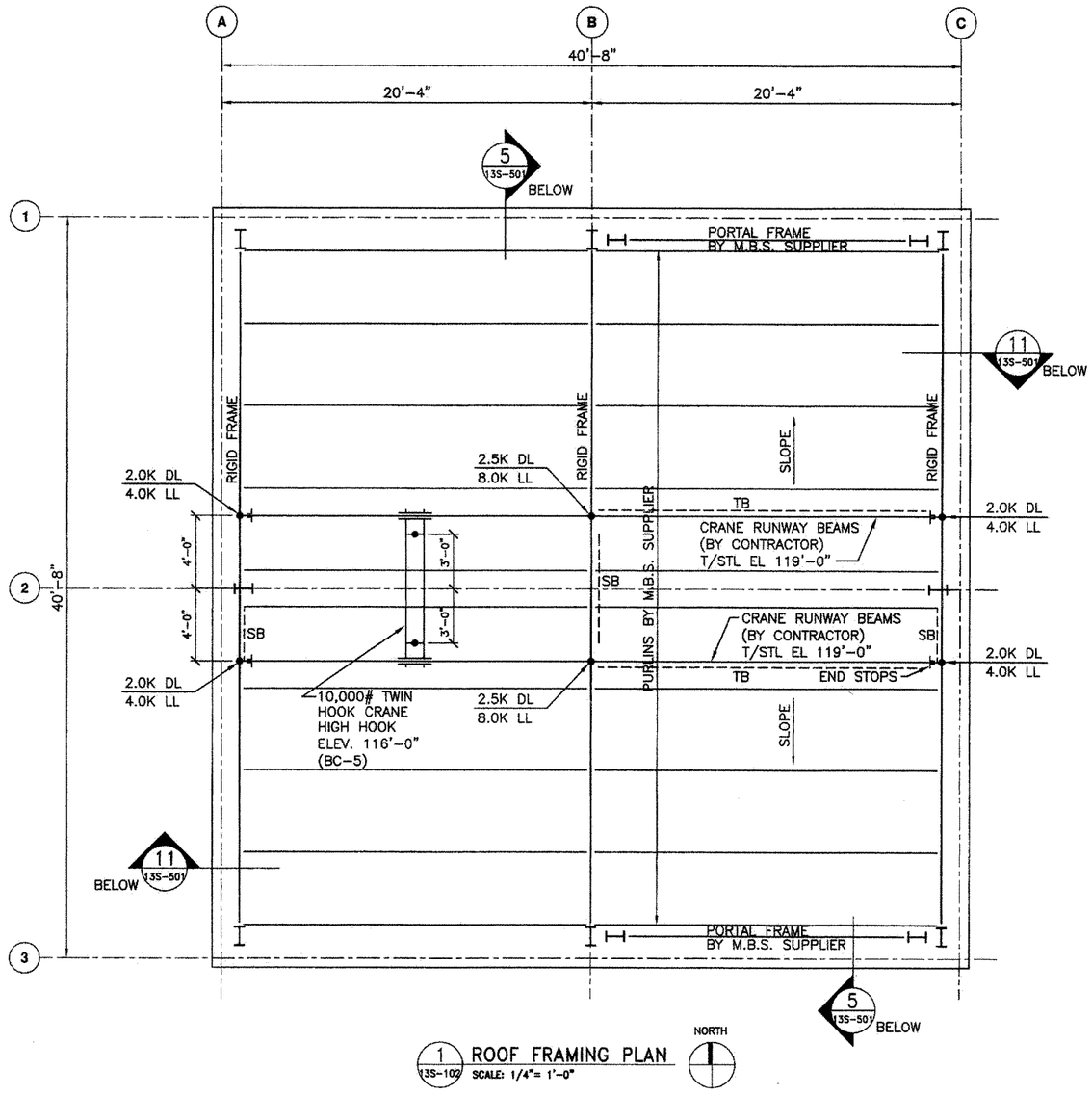
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
FOUNDATION PLAN

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DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13S-101
REV	
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JOHN DAVID WESTERHEIDE
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1 13S-102 ROOF FRAMING PLAN
SCALE: 1/4"= 1'-0"

NOTES:

1. PROVIDE COMPLETE CRANE SYSTEM, INCLUDING HANGERS, RUNWAY BEAMS, SWAY BRACING (S.B.) AND THRUST BRACING (T.B.) AND ALL CRANE COMPONENTS.
2. LISTED DESIGN LOADS ARE SERVICE LEVEL, APPLY IMPACT FACTORS PER AISC.
3. PROVIDE SPREADER BAR AS PER DETAIL 4 / 13S-503

METAL BUILDING SYSTEMS SUPPLIER SHALL DESIGN THE ROOF FRAMING TO SUPPORT THE INDICATED UNIFORM COLLATERAL LOADS AND THE WEIGHT OF THE MECHANICAL/ELECTRICAL UNITS SUSPENDED FROM THE ROOF FRAMING.

METAL BUILDING SYSTEMS SUPPLIER SHALL COORDINATE WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING THE SIZE AND WEIGHTS OF THE ROOF SUPPORTED MECHANICAL/ELECTRICAL UNITS AND THE SIZE, LOCATION AND WEIGHTS OF ANY EXTERIOR WALL MOUNTED EQUIPMENT OR LOUVERS THAT PENETRATE THE METAL WALL PANELS PROVIDED BY THE METAL BUILDING SUPPLIER.

MECHANICAL AND ELECTRICAL CONTRACTOR SHOULD COORDINATE THE APPLICABLE HANGER SYSTEMS AND DETAILS WITH METAL BUILDING SYSTEMS MANUFACTURER AND THE TYPICAL DETAILS SHOWN ON THE ATTACHED SHEETS.

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
ROOF FRAMING PLAN

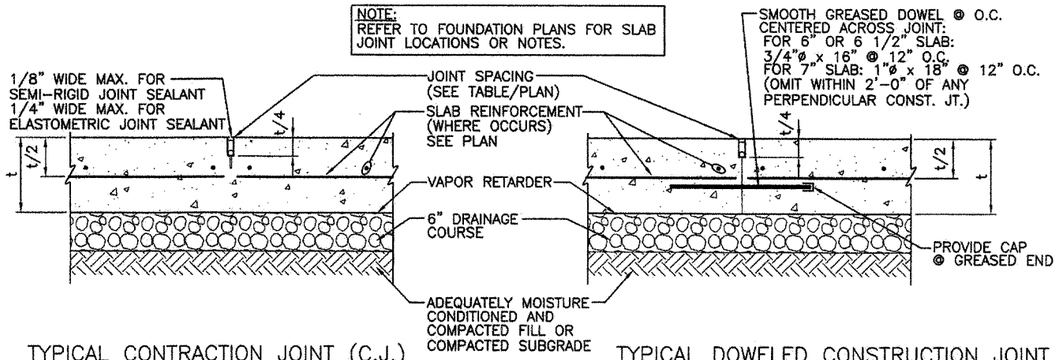
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SHEET	13S-102
REV	

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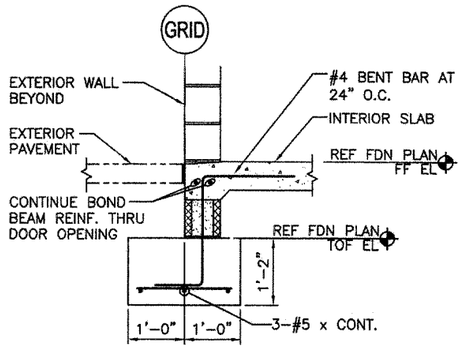
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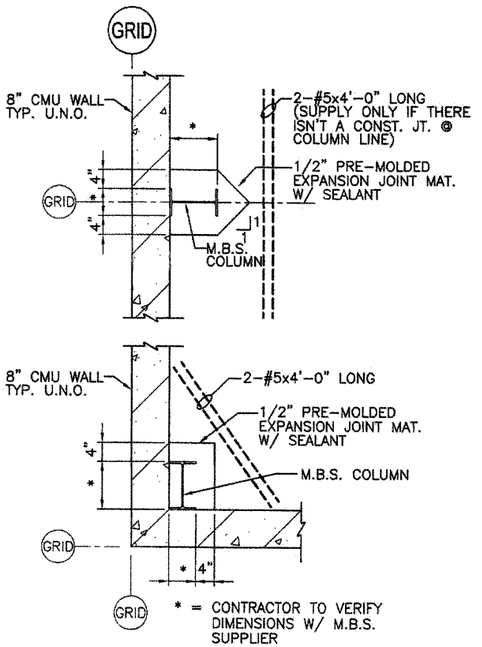
TYPICAL CONTRACTION JOINT (C.J.)

TYPICAL DOWELED CONSTRUCTION JOINT
(FOR SLABS 6" THICK OR THICKER)

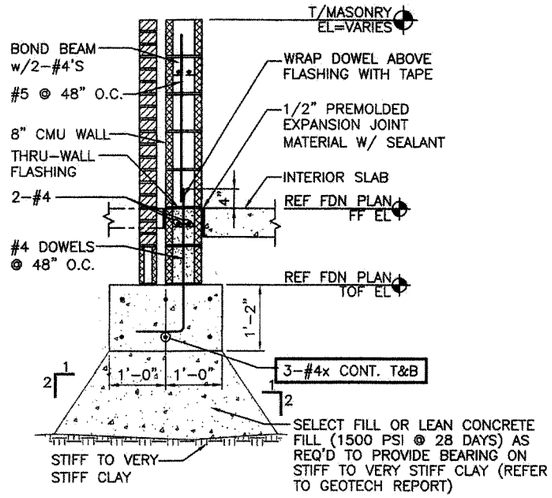
1 (13S-501) TYPICAL SLAB-ON-GRADE DETAILS
SCALE: NO SCALE



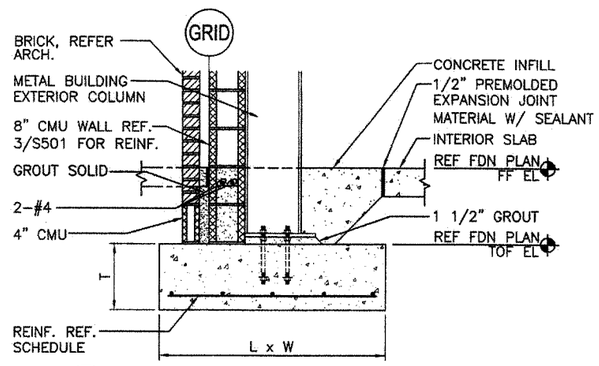
2 (13S-501) FOOTING AT O.H. DOOR OPENING
SCALE: 3/4"=1'-0"



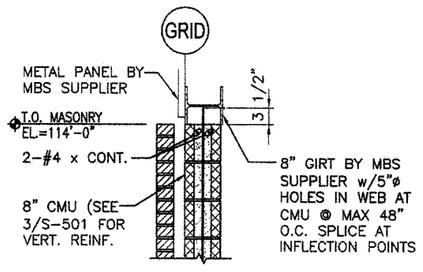
6 (13S-501) TYP. M.B.S. COLUMN DIAMOND DETAIL
SCALE: NO SCALE



3 (13S-501) TYP. EXTERIOR FOOTING
SCALE: 3/4"=1'-0"

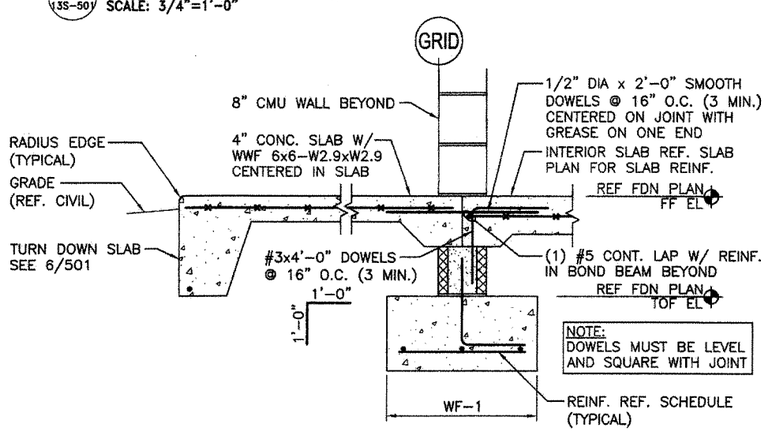


4 (13S-501) TYP. FTG. AT EXTERIOR COLUMN
SCALE: 3/4"=1'-0"

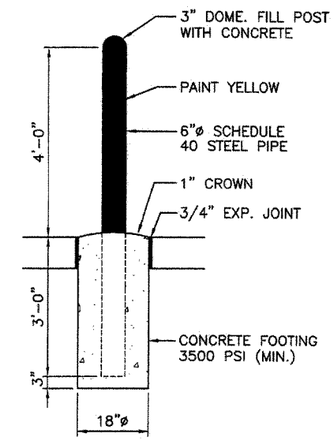


NOTE: STEEL JAMB FOR 14'x14' OVERHEAD DOORS SHALL SPAN FROM FLOOR TO GIRT WITHOUT ATTACHMENT TO CMU.

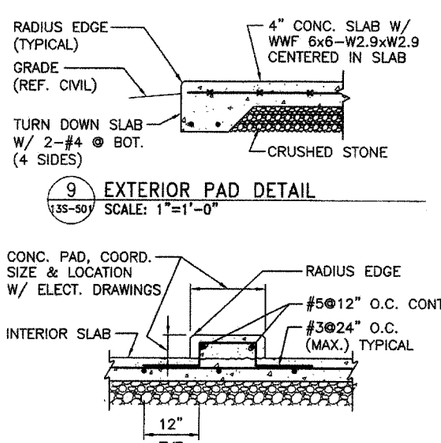
5 (13S-501) TYPICAL GIRT @ CMU WALL
SCALE: 3/4"=1'-0"



7 (13S-501) TYPICAL EXIT DOOR STOOP
SCALE: 1"=1'-0"

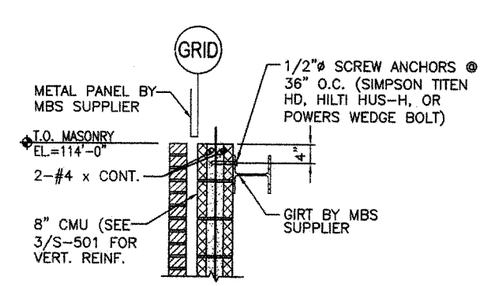


8 (13S-501) TYPICAL BOLLARD
SCALE: 1"=1'-0"



9 (13S-501) EXTERIOR PAD DETAIL
SCALE: 1"=1'-0"

10 (13S-501) HOUSEKEEPING PAD DETAIL
SCALE: 1"=1'-0"



11 (13S-501) TYPICAL GIRT @ CMU WALL
SCALE: 3/4"=1'-0"

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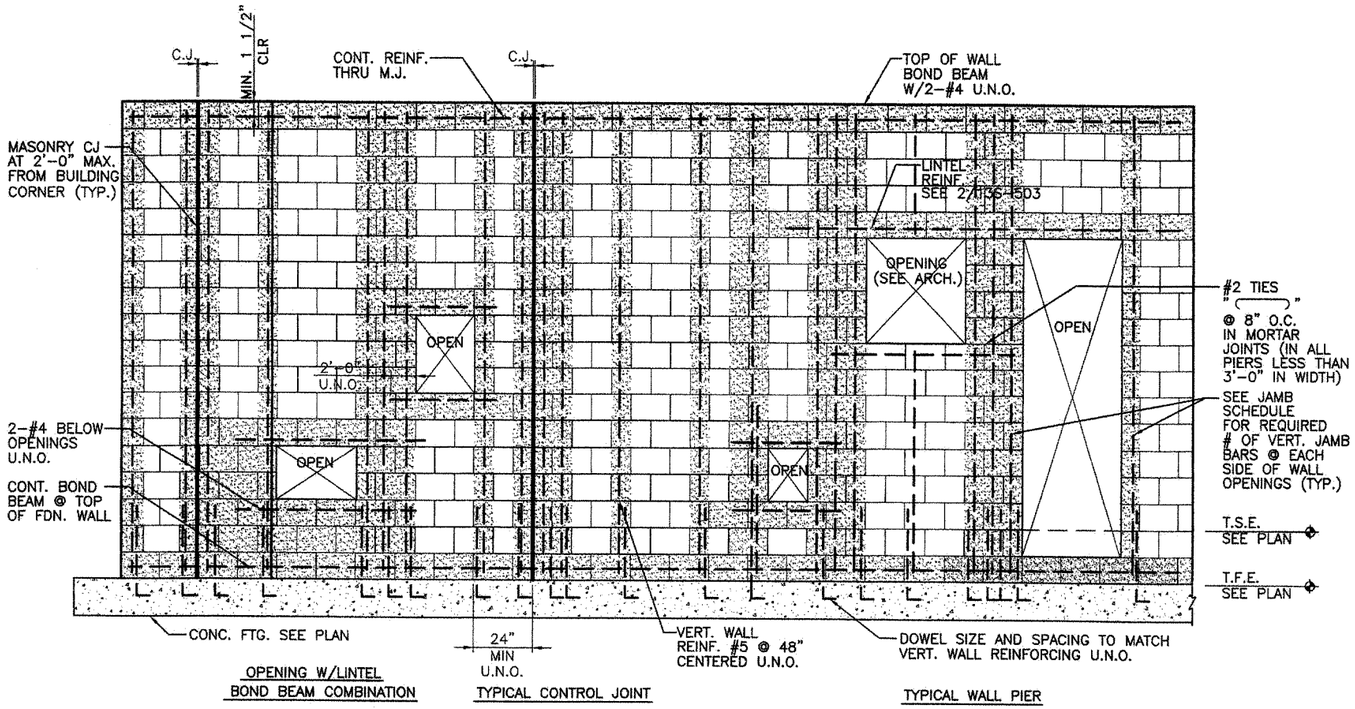
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
SECTIONS & DETAILS

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13S-501
REV	

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GENERAL MASONRY NOTES:

1. UNITS SHALL UTILIZE FACE SHELL MORTAR BEDDING U.N.O.
2. MASONRY WALLS SHALL HAVE CONTROL JOINTS AT A MAXIMUM OF 30'–0" U.N.O. SEE ARCH. DRAWINGS FOR CONTROL JOINT LOCATIONS IN CMU WALLS. SEE 4/13S–502 FOR CONTROL JOINT DETAIL.
3. CONSOLIDATE GROUT POURS OVER 12' BY MECHANICAL VIBRATION. RECONSOLIDATE GROUT IN MASONRY CELLS BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
4. FOR HIGH LIFT GROUTING (OVER 5'–0") CLEANOUTS ARE REQUIRED AT EVERY GROUTED CORE AT THE BASE OF EACH LIFT. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR. TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
5. HIGH LIFT GROUT SHALL NOT EXCEED 10'–6" IN HEIGHT FOR #4 OR #5 VERT. BARS 12'–6" IN HEIGHT FOR #6 VERT. BARS.
6. THE USE OF SELF–CONSOLIDATING GROUT (SCG) WILL REQUIRE FULL INSPECTION AND ACCEPTANCE OF THE GROUT MIX DELIVERED TO THE SITE BY THE SUPPLIERS REPRESENTATIVE AND THE INSPECTION AGENCY.
7. SCG ON–SITE INSPECTION SHALL VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DETERMINED BY ASTM C 1611.
8. PROVIDE STANDARD 90 DEGREE HOOK DOWELS BETWEEN FOUNDATIONS AND WALLS EQUAL TO THE SIZE AND SPACING OF THE VERTICAL REINFORCING U.N.O.
9. PROVIDE 9 GA. LADDER TYPE HORIZONTAL AT JOINT REINFORCEMENT EVERY COURSE IN STACK BOND WALLS AND EVERY OTHER COURSE IN RUNNING BOND WALLS U.N.O. PROVIDE A 6 INCH SPLICE LENGTH FOR HORIZONTAL REINF.
10. ALL SPLICES WITHIN WALL SHALL BE IN ACCORDANCE WITH THE LAP SPLICE SCHEDULE U.N.O. SEE SECTIONS AND DETAILS FOR DOWELS AND SPLICE AT FOUNDATIONS AND AND FLOOR LEVELS.
11. PROVIDE CONTINUOUS BOND BEAM REINFORCEMENT WITH 2–#4 BARS OR AS NOTED.
12. ALL NON–BEARING MASONRY WALLS SHALL BE PROVIDED WITH VERTICAL SLIP CONNECTIONS AT THE TOP OF THE WALL U.N.O.
13. REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS.
14. TOLERANCES FOR THE PLACEMENT OF REINFORCEMENT IN WALLS AND FLEXURAL ELEMENTS SHALL BE PLUS OR MINUS 1/2" FOR d EQUAL TO 8" OR LESS, PLUS OR MINUS 1" FOR d EQUAL TO 24" OR LESS BUT GREATER THAN 8", AND PLUS OR MINUS 1 1/4" FOR d GREATER THAN 24". NOTE: d = DISTANCE FROM CENTERLINE OF REINFORCING STEEL TO THE OPPOSITE FACE OF MASONRY.
15. SEE 13S–001 FOR INFORMATION ON CMU MATERIAL REQUIREMENTS.
16. ALL MORTAR PROTRUSIONS INTO CELLS TO BE GROUTED ARE REQUIRED TO BE REMOVED BY MASON AND ALL DEBRIS MUST BE VACUUMED FROM CORE.
17. REINFORCING IS CONTINUOUS FROM TOP OF FOOTING TO TOP OF WALL.
18. NO CMU CONSTRUCTION MAY BEGIN UNTIL A PRECONSTRUCTION CONFERENCE HAS TAKEN PLACE WITH THE FOLLOWING PARTIES IN ATTENDANCE: STRUCTURAL ENGINEER, MASONRY SUBCONTRACTOR, GENERAL CONTRACTOR, ARCHITECT AND OWNERS REPRESENTATIVE.

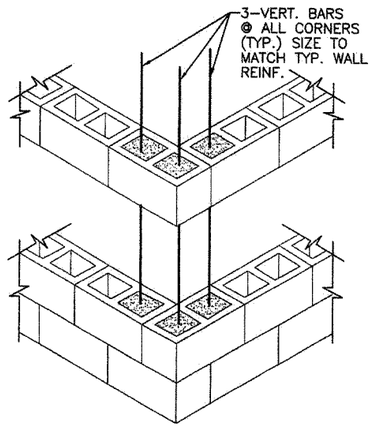


1 / 13S–502 TYPICAL MASONRY WALL REINFORCING DETAIL
SCALE: NO SCALE

MASONRY JAMB SCHEDULE		
OPENING WIDTH	# CELLS	BARS EACH CELL
3'–4" OR LESS	1	1–#5 CENTERED
OVER 3'–4" TO 10'–0"	2	1–#5 CENTERED

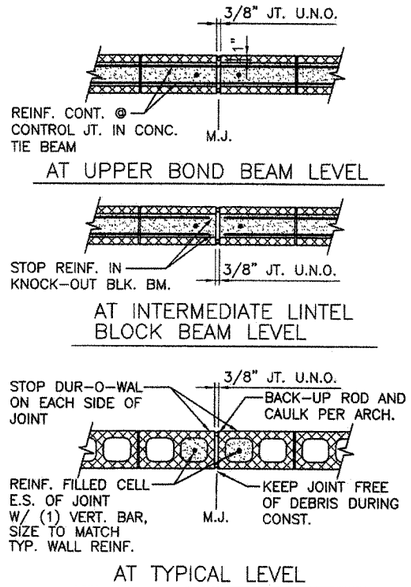
NOTES:
1. THE INDICATED REINFORCEMENT IS CONTINUOUS FULL HEIGHT OF WALL.
2. PROVIDE ONE ADDITIONAL CELL WITH 1–#5 CENTERED BENEATH BEARING OF STEEL LINTELS.

2 / 13S–502 MASONRY JAMB SCHEDULE
SCALE: NO SCALE



8" CMU to 8" CMU

3 / 13S–502 TYP. MASONRY CORNER DETAIL
SCALE: NO SCALE



4 / 13S–502 TYP. WALL CONTROL JOINT DETAILS
SCALE: NO SCALE

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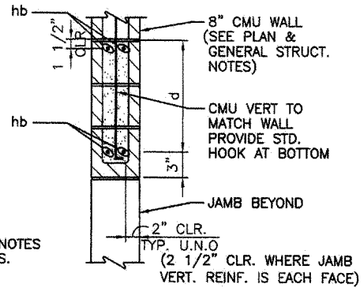
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
TYPICAL MASONRY DETAILS

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

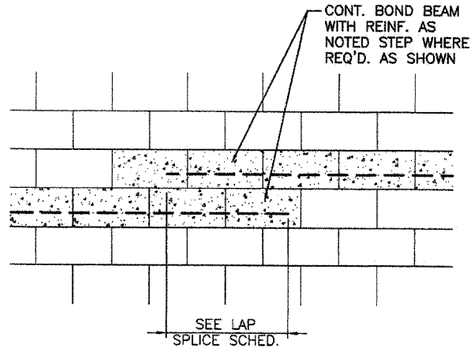
DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
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LINTEL SCHEDULE				
MARK	OPENING WIDTH	d	hb	COMMENTS
ML1	3'-4" OR LESS	5"	(2) #4	
ML2	OVER 3'-4" TO 6'-8"	13"	(2) #4	BOTTOM
ML3	OVER 6'-8" TO 10'-0"	21"	(2) #4	T&B



NOTES:

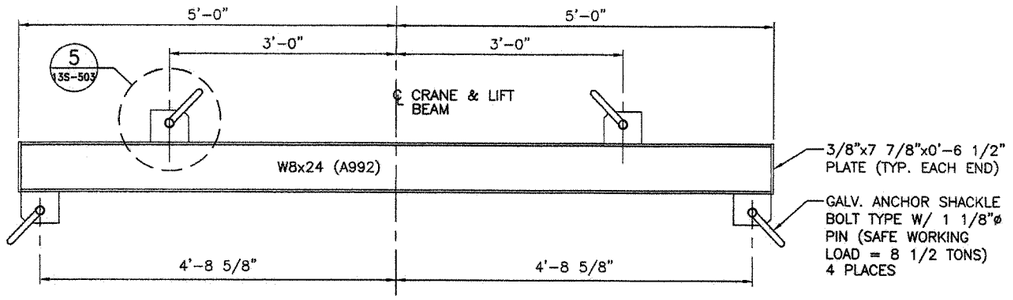
1. EXTEND HORIZONTAL BARS 2'-0" MIN. PAST FACE OF JAMB. PROVIDE STANDARD HOOK @ BAR END IF THIS CANNOT BE ACHIEVED.
2. DO NOT SPLICE HORIZONTAL BARS.
3. SEE GENERAL STRUCTURAL NOTES FOR SHORING REQUIREMENTS.



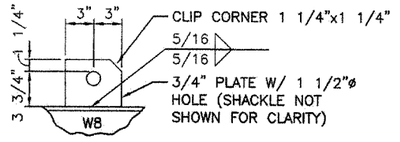
1 / 13S-503 NOT USED
SCALE: NO SCALE

2 / 13S-503 TYP. REINF. MASONRY LINTEL DETAIL
SCALE: NO SCALE

3 / 13S-503 TYPICAL BOND BEAM STEP DETAIL
SCALE: NO SCALE



4 / 13S-503 DETAIL @ LIFT BEAM
SCALE: 1"=1'-0" NOTE: HOT DIP GLAVANIZED AFTER FABRICATION



5 / 13S-503 LUG DETAIL
SCALE: 1 1/2"=1'-0"

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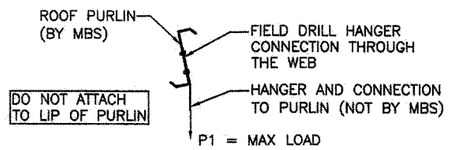
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
TYPICAL MASONRY DETAILS

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SAIC Energy, Environment & Infrastructure, LLC
No. 510
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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
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SCALE	AS NOTED
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SHEET	13S-503
REV	

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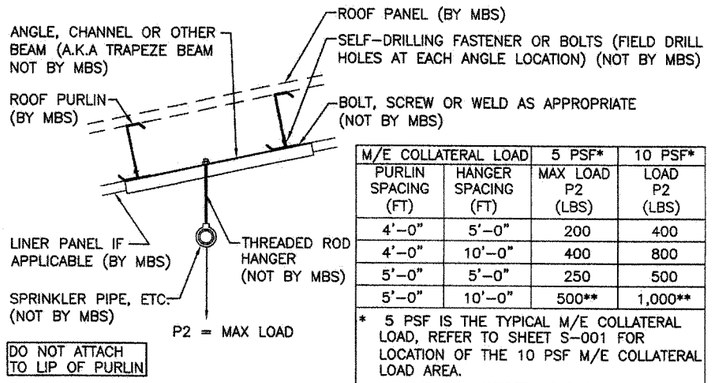


M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	LOAD P1 (LBS)	LOAD P1 (LBS)
4'–0"	5'–0"	100	200
4'–0"	10'–0"	200	400
5'–0"	5'–0"	125	250
5'–0"	10'–0"	250**	500**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.

** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

1 (13S–504) RECOMMENDED METHOD FOR HANGING LOADS ON A SINGLE PURLIN
SCALE: 1"=1'–0"



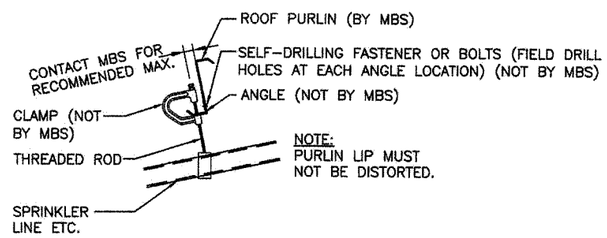
M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	MAX LOAD P2 (LBS)	LOAD P2 (LBS)
4'–0"	5'–0"	200	400
4'–0"	10'–0"	400	800
5'–0"	5'–0"	250	500
5'–0"	10'–0"	500**	1,000**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S–001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.

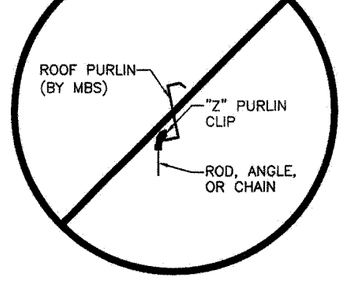
** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

2 (13S–504) SPREADER BEAM (A.K.A. TRAPEZE BEAM) DETAIL
SCALE: 1"=1'–0"

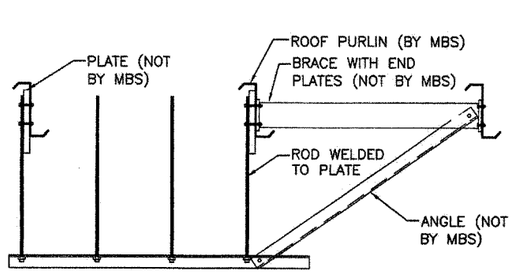
NOTE:
* FOR LOADS GREATER THAN 40 POUNDS, VERIFY ADEQUACY OF ROOF FRAMING WITH M.B.S.



3 (13S–504) CLAMP HANGER DETAIL VERIFY W/MANUF. PRIOR TO USE
SCALE: 1"=1'–0"



4 (13S–504) INCORRECT METHOD FOR HANGING LOADS ON PURLINS
SCALE: 1"=1'–0"



5 (13S–504) SEISMIC OR SWAY BRACE DETAIL
SCALE: 1"=1'–0"

GENERAL HANGING LOAD NOTES FOR METAL BUILDINGS:

1. THE DETAILS DEPICTED HEREIN ARE TYPICAL INDUSTRY STANDARD DETAILS FOR HANGING LOADS (DUCTS, PIPING, CONDUITS, ETC.) FROM THE COLD–FORMED PURLINS OF METAL BUILDING ROOFS.
2. THE ACTUAL DETAILS TO BE USED SHALL BE DETERMINED BY THE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. CONTRACTOR AND REVIEWED BY THE RESPECTIVE METAL BUILDING CONTRACTOR, INCLUDING THE VALUES OF THE HANGER LOADS.
3. THE HANGER RODS, BRACES, STRUTS BETWEEN THE PURLINS TO SUPPORT THE HANGER AND/OR SWAY BRACES SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR (NOT THE METAL BUILDING CONTRACTOR UNLESS PREVIOUS ARRANGEMENTS HAVE BEEN MADE).
4. THE RESPECTIVE CONTRACTOR SHALL CONSULT THE BUILDING MANUFACTURER REGARDING THEIR SPECIFIC GUIDELINES FOR HANGING LOADS ON PURLINS.
5. HANGING LOADS SHOULD NOT BE APPLIED TO THE PURLIN LIP. WHERE PERMISSIBLE, THE PREFERRED PRACTICE FOR HANGING LOADS IS TO ATTACH TO THE PURLIN WEB USING A BOLT AND NUT, OR SELF–DRILLING SCREWS.
6. HANGING UNIFORM LOADS SUCH AS SPRINKLER MAINS OR HVAC EQUIPMENT SHOULD BE DISTRIBUTED OVER SEVERAL PURLINS AND SHOULD NEVER EXCEED THE COLLATERAL LOAD ALLOWANCE FOR THE ROOF SYSTEM. FOR UNIFORM LOADS THAT RUN PARALLEL TO THE PURLINS, IT MAY BE NECESSARY TO USE TRANSVERSE CHANNELS (A.K.A. TRAPEZE BEAMS) ATTACHED TO THE WEBS OR FLANGES OF TWO OR MORE PURLINS TO SPREAD THE LOAD BETWEEN TWO OR MORE PURLINS. IN SUCH CASES, CONTACT THE BUILDING MANUFACTURER OR A LOCAL PROFESSIONAL ENGINEER PRIOR TO ATTEMPTING TO HANG LOADS FROM THE PURLINS.
7. IN SOME CASES, IT MAY BE ALLOWABLE TO HANG LIGHTWEIGHT LOADS FROM HANGER RODS ATTACHED THROUGH A SMALL HOLE DRILLED IN THE BOTTOM PURLIN FLANGE WITH A THREADED ROD AND NUT. CONTACT THE MANUFACTURER TO SEE IF THEY PERMIT THIS AND FOR THEIR SPECIFIC RECOMMENDATION REGARDING THE HOLE SIZE AND MAXIMUM ACCEPTABLE DISTANCE FROM THE APPLIED LOAD TO THE PURLIN WEB.
8. MULTIPLE HANGERS MAY BE CONNECTED TO THE SAME PURLIN WITH PRIOR APPROVAL FROM THE BUILDING MANUFACTURER. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.
9. IN SOME CASES, LIGHTWEIGHT LOADS SUCH AS FROM SUSPENDED CEILING TILE HANGER WIRES, MAY BE LOOPED OVER THE TOP OF THE ROOF PURLINS. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.

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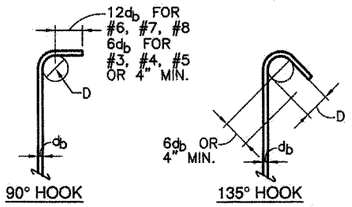
AHTD District 4 Headquarters Complex
Fort Smith, Arkansas
DISTRICT SERVICE STATION
AHTD JOB NO. 040554

TYPICAL HANGING LOAD DETAILS AT PURLINS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/30/09
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13S–504
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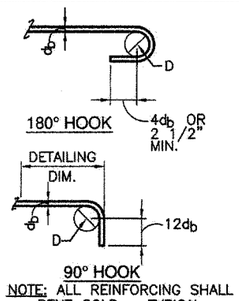
BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$4d_b$
#6 THRU #8	$6d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

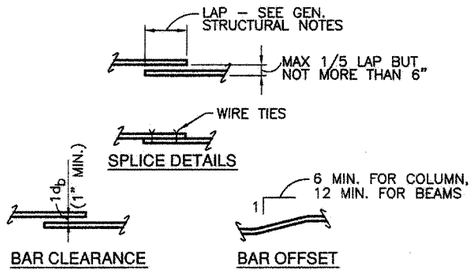
STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCING

BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$6d_b$
#6, #7, #8,	$8d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

STANDARD HOOKS FOR PRIMARY REINFORCING



1 TYPICAL BAR BEND & LAP SPLICE DETAILS (13S-601) SCALE: NO SCALE

PRELIMINARY FOOTING SCHEDULE

MK	SIZE WIDTH x LENGTH x THICKNESS	REINF. EA. WAY @ BOT. U.N.O.	TYP. DETAIL	REMARKS
WF–1	2'–0" x CONT x 1'–2"	3–#5 LONG. T&B	3/13S–501	CONTINUE LONG. BARS THRU COL FTG
F1	6'–0" x 6'–0" x 1'–4"	#5 @ 12" O.C. T&B EACH WAY	4/13S–501	90 DEGREE HOOK EXTERIOR END OF TRANSVERSE REINF.
F2	5'–0" x 5'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/13S–501	90 DEGREE HOOK EACH END
F3	5'–0" x 5'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/13S–501	90 DEGREE HOOK EACH END

FOOTING NOTES:

1. FOUNDATION SIZES ARE PRELIMINARY. DO NOT FABRICATE OR CONSTRUCT COLUMN FOOTINGS UNTIL FOOTINGS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. ALLOWABLE BEARING PRESSURE FOR SHALLOW SPREAD FOOTINGS IS 2000 PSF FOR CONTINUOUS FOOTINGS AND 2500 PSF FOR INDIVIDUAL FOOTINGS.
3. EXTERIOR FOOTINGS SHALL BEAR AT A MINIMUM DEPTH OF 24 INCHES BELOW LOWEST ADJACENT GRADE.
4. CONNECTION OF METAL BUILDING COLUMNS TO FOUNDATION IS TO BE PINNED.
5. REINFORCING TO CONFORM TO ASTM A615, GRADE 60.

2 FOOTING SCHEDULE (13S-601) SCALE: NO SCALE

COLUMN DESCRIPTIONS	
MK	DESCRIPTIONS
C1	METAL BUILDING RIGID FRAME COLUMN
C2	METAL BUILDING EXTERIOR COLUMN

4 COLUMN SCHEDULE (13S-601) SCALE: NO SCALE

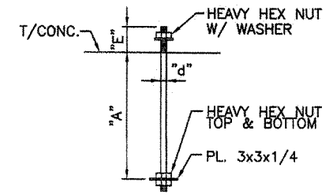
LAP SPLICE SCHEDULE

BAR SIZE "D"	POSITION	CONCRETE f'c (PSI) 3000	CONCRETE f'c (PSI) 4000	MASONRY fm'=1500
#3	ALL	17"	15"	–
#4	ALL	22"	19"	(1) BAR PER CELL = 24" (2) BAR PER CELL = 36"
#5	ALL	28"	24"	(1) BAR PER CELL = 30" (2) BAR PER CELL = 54"
#6	ALL	33"	29"	(1) BAR PER CELL = 52" (2) BAR PER CELL = 108"
#7	ALL	49"	42"	–
#8	ALL	55"	48"	–

NOTES (FOR CONCRETE REBAR LAP SPLICE ONLY):

1. "d" DENOTES BAR DIAMETER.
2. VALUES APPLY TO ALL BARS WITH MIN. CONCRETE COVER OF 2d AND MIN. CENTER–TO–CENTER SPACING OF 5d.
3. FOR BARS WITH COVER BETWEEN d AND 2d, MULTIPLY VALUES BY 1.67.
4. FOR BARS WITH CENTER–TO–CENTER SPACING BETWEEN 3d AND 5d, MULTIPLY VALUES BY 1.67.
5. FOR BARS NOT MEETING ABOVE REQUIREMENTS, MULTIPLY BY 2.5.

5 LAP SPLICE SCHEDULE (13S-601) SCALE: NO SCALE



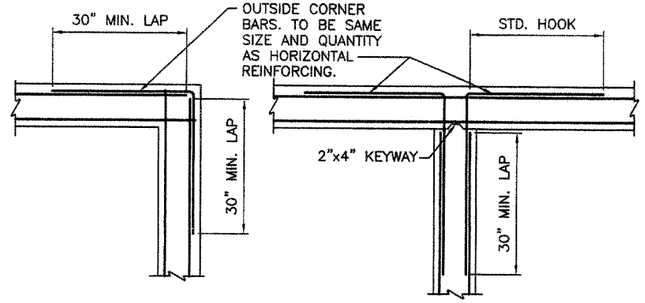
PRELIMINARY ANCHOR ROD SCHEDULE

TYPE	QTY. & DIA. "d"	"A"	PROJ. "E"	LOCATION
AB–1	(4) 1"ø	1'–2"	5"	BUILDING COLUMN

NOTES:

1. DO NOT FABRICATE ANCHOR RODS UNTIL THE RODS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. CONTRACTOR TO COORDINATE INSTALLATION OF ANCHOR RODS WITH METAL BUILDING SYSTEM DRAWINGS.
3. ANCHOR RODS SHALL MEET THE REQUIREMENTS OF ASTM F1554 (GRADE 36 KSI) UNLESS NOTED OTHERWISE.
4. ANCHOR RODS SHALL BE FURNISHED WITH HEAVY HEX NUTS AND CUT WASHERS OF SPECIFICATIONS COMPATIBLE WITH THOSE OF THE THREADED UNLESS OTHERWISE NOTED.
5. PRIOR TO SETTING ANCHOR RODS, THEY SHALL BE CLEANED FREE OF ANY OILS OR OTHER MATERIALS. ANCHOR BOLTS SHALL REQUIRE SPECIAL INSPECTION.
6. A POSITIVE MEANS SHALL BE USED TO KEEP CONCRETE FROM CONTACTING WITH THE PROJECTING PART OF THE RODS.

3 ANCHOR ROD SCHEDULE (13S-601) SCALE: NO SCALE



6 TYPICAL CORNER DETAILS (13S-601) SCALE: NO SCALE

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
SCHEDULES

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 12626 JOHN DAVID WESTERHEIDE 10/13/11

DESIGNED BY	RCE
DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13S–601
REV	

258 OF 289

SYMBOLS

# / P-###	SECTION CUT
	SECTION LOCATION
# / P-###	DETAIL NUMBER
	DETAIL LOCATION
#	KEYED NOTE

	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRCULATING
	SANITARY SEWER (UNDERGROUND)
SAN	SANITARY SEWER (ABOVEGROUND)
	VENT
CD	CONDENSATE DRAIN
G	GAS
A	COMPRESSED AIR

	PIPE UP
	PIPE DOWN
	TOP BRANCH CONNECTION
	BOTTOM BRANCH CONNECTION
	TEE UP
	TEE DOWN
	PIPE CAP
	CLEANOUT
	PIPE ANCHOR
	PIPE GUIDE
	FLOOR DRAIN
	WALL HYDRANT
	HOSE BIBB
	UNION
	STRAINER
	CHECK VALVE
	FLOW DIRECTION
	FLEXIBLE PIPING CONNECTION

	CONTROL VALVE
	3-WAY CONTROL VALVE
	REDUCER
	SHUT OFF VALVE
	BALANCING VALVE
	GLOBE VALVE
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	BACKFLOW PREVENTER
	THERMOMETER
	PRESSURE GAUGE
	SAFETY RELIEF VALVE
	MANUAL AIR VENT

PLUMBING GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF PLUMBING, FIXTURES, EQUIPMENT AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES. WHERE PLUMBING FIXTURES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL FLOOR PLANS. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE HVAC, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. PLUMBING, FIXTURES, AND EQUIPMENT SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. AT ALL FIRE SEPARATIONS, ALL PIPING WALL PENETRATIONS SHALL BE FIRE-STOPPED WITH U.L. APPROVED FIRE-STOP MATERIAL.
4. REFER TO STRUCTURAL DRAWINGS FOR PENETRATIONS THROUGH FOUNDATIONS.
5. SEAL ALL PIPING PENETRATIONS THROUGH ROOF WITH 1" 6 LB. DENSITY RIGID FIBERGLASS AND A NON-SHRINKING ACOUSTICAL CAULK.
6. SET TOP OF FLOOR DRAIN ELEVATION FLUSH WITH FINISH FLOOR UNLESS NOTED OTHERWISE.
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
8. UNDERGROUND AND ABOVEGROUND PLUMBING MAINS SHALL BE SLOPED AT A MINIMUM OF 1/8 INCH PER FOOT (1.0 PERCENT) UNLESS NOTED. ALL HORIZONTAL VENTS SHALL BE SLOPED 1/4 INCH PER 10 FEET MINIMUM TO DRAIN.
9. PROVIDE BASE CLEANOUTS FOR ALL WASTE STACKS AND VENT STACKS.
10. CLEANOUTS LOCATED ALONG THE HORIZONTAL DRAINS SHALL BE LOCATED AT NOT MORE THAN 100 FOOT INTERVALS.
11. SEE CIVIL DRAWINGS FOR CONTINUATION OF ALL PLUMBING 5'-0" OUTSIDE OF THE BUILDING PERIMETER.
12. ALL HVAC CONDENSATE AND EQUIPMENT DRAINS LOCATIONS TO BE COORDINATED WITH HVAC CONTRACTOR.

ABBREVIATIONS

AA	AUTOMATIC AIR VENT
AD	ACCESS DOOR
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AG	ABOVE GROUND
AMB	AMBIENT
APD	AIR PRESSURE DROP
AWT	AVERAGE WATER TEMPERATURE
BHP	BRAKE HORSEPOWER
BOP	BOTTOM OF PIPE
CAP	CAPACITY
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
DIA	DIAMETER
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
DX	DIRECT EXPANSION
E	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EFF	EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
FC	FLEXIBLE CONNECTION
FLG	FLANGE
FMD	FLOW MEASURING DEVICE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
GC	GENERAL CONTRACTOR
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GPM	GALLONS PER MINUTE
H	HEIGHT
HD	HEAD
HP	HORSEPOWER
HZ	HERTZ
I.E.	INVERT ELEVATION
LAT	LEAVING AIR TEMPERATURE
LF	LINEAR FEET
LWT	LEAVING WATER TEMPERATURE
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBH	BTU PER HOUR (1000'S)
MC	MECHANICAL CONTRACTOR
MD	MANUAL DAMPER
MFR	MANUFACTURER
MIN	MINIMUM
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OED	OPEN END DUCT
PC	PLUMBING CONTRACTOR
PCD	PVC COATED DUCTWORK
PH	PHASE
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
REL	RELOCATED
RH	RELATIVE HUMIDITY
RL	REFRIGERATION LIQUID
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERATION SUCTION
RV	RELIEF VALVE
SA	SUPPLY AIR
SC	SENSIBLE COOLING
SHT	SHEET
SP	STATIC PRESSURE
SRV	SAFETY RELIEF VALVE
TEMP	TEMPERATURE
TH	TOTAL HEAT
TC	TOTAL COOLING
TSP	TOTAL STATIC PRESSURE
UG	UNDERGROUND
V	VOLTS
VB	VACUUM BLOWER
VEL	VELOCITY
VTR	VENT THROUGH ROOF
W	WIDTH
WB	WET BULB
WC	WATER COLUMN
WPD	WATER PRESSURE DROP
WTR	WATER

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER
AC	AIR COMPRESSOR
ACU	AIR CONDITIONING UNIT
AD	AIR DRYER
AHU	AIR HANDLING UNIT
B	BOILER
CC	COOLING COIL
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
EF	EXHAUST FAN
ET	EXPANSION TANK
EWH	ELECTRIC WATER HEATER
F	FILTER
FCU	FAN COIL UNIT
FD	FIRE DAMPER
GWH	GAS WATER HEATER
HC	HEATING COIL
IH	INFRARED HEATING UNIT
L	LOUVER
MAU	MAKEUP AIR UNIT
P	PUMP
PHC	PREHEAT COIL
RF	RETURN OR RELIEF FAN
RHC	REHEAT COIL
SD	SMOKE DETECTOR OR SMOKE DAMPER
SF	SUPPLY FAN
ST	SOUND TRAP
UH	UNIT HEATER
VAV	VARIABLE AIR VOLUME BOX
VFD	VARIABLE FREQUENCY DRIVE

FIXTURE ABBREVIATIONS

BFP	BACK FLOW PREVENTER
CO	CLEAN OUT
DF	DRINKING FOUNTAIN
EWC	ELECTRIC WATER COOLER
F	FAUCET
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
JS	JANITORS SINK
L	LAVATORY
COTG	CLEAN OUT TO GRADE
TWCO	TWO WAY CLEAN OUTHB
HOSE BIBB	
HR	HOSE REEL
S	SINK
SS	SERVICE SINK
SS/EW	SAFETY SHOWER/EYEWASH
UR	URINAL
WC	WATER CLOSET
WCO	WALL CLEANOUT
WF	WASH FOUNTAIN
WFT	WALL FAUCET
WH	WALL HYDRANT

CERTIFICATE OF AUTHORIZATION ARKANSAS SAIC Energy, Environment & Infrastructure, LLC No. 510

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER LEE E. SUGGS No. 11074

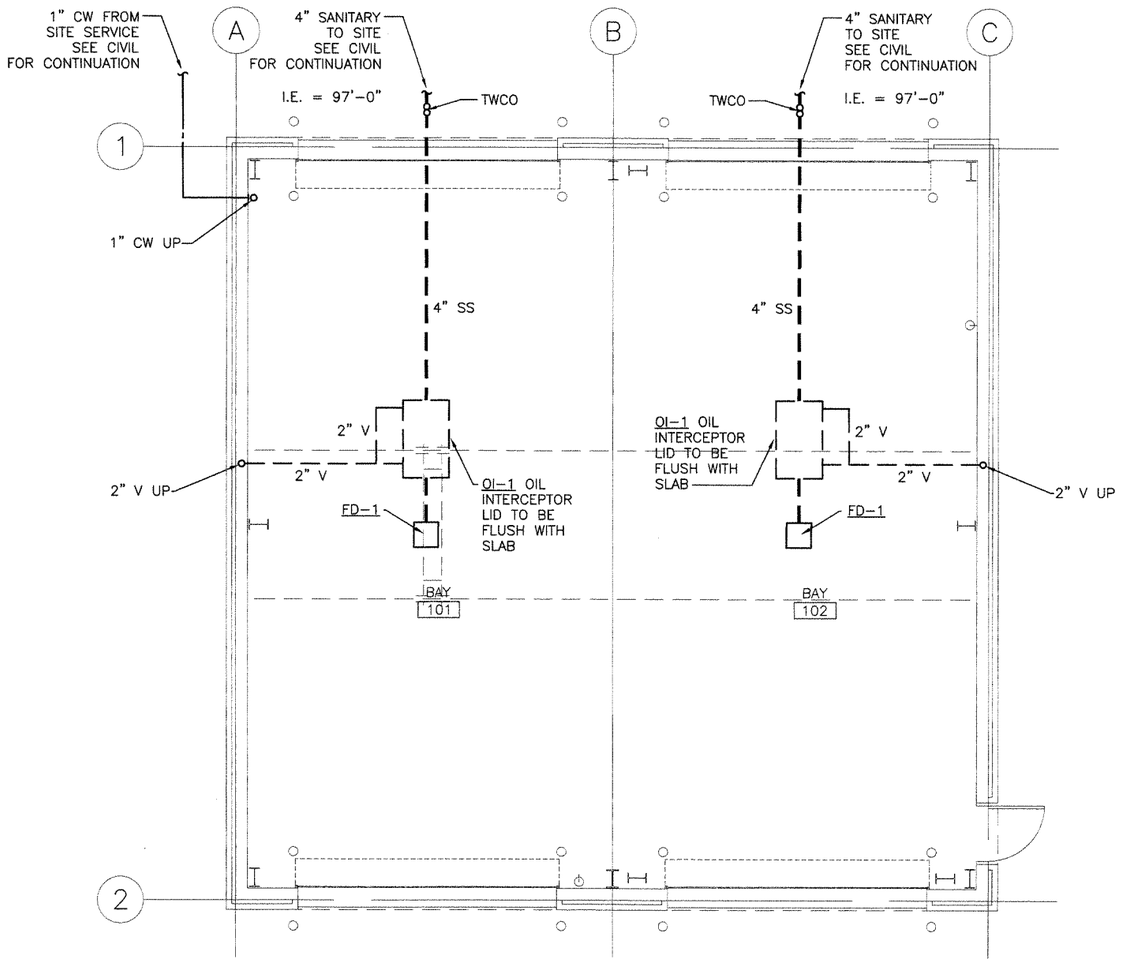
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201 Presidential Drive
Lowell, Arkansas
(479) 770-5800
(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
PLUMBING SYMBOLS AND ABBREVIATIONS

DESIGNED BY	CMS
DRAWN BY	KAH
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13P-001
REV	
	259 OF 289



A UNDERGROUND PLUMBING PLAN
13P-101
SCALE: 1/4" = 1'-0"

NORTH

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
UNDERGROUND PLUMBING

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

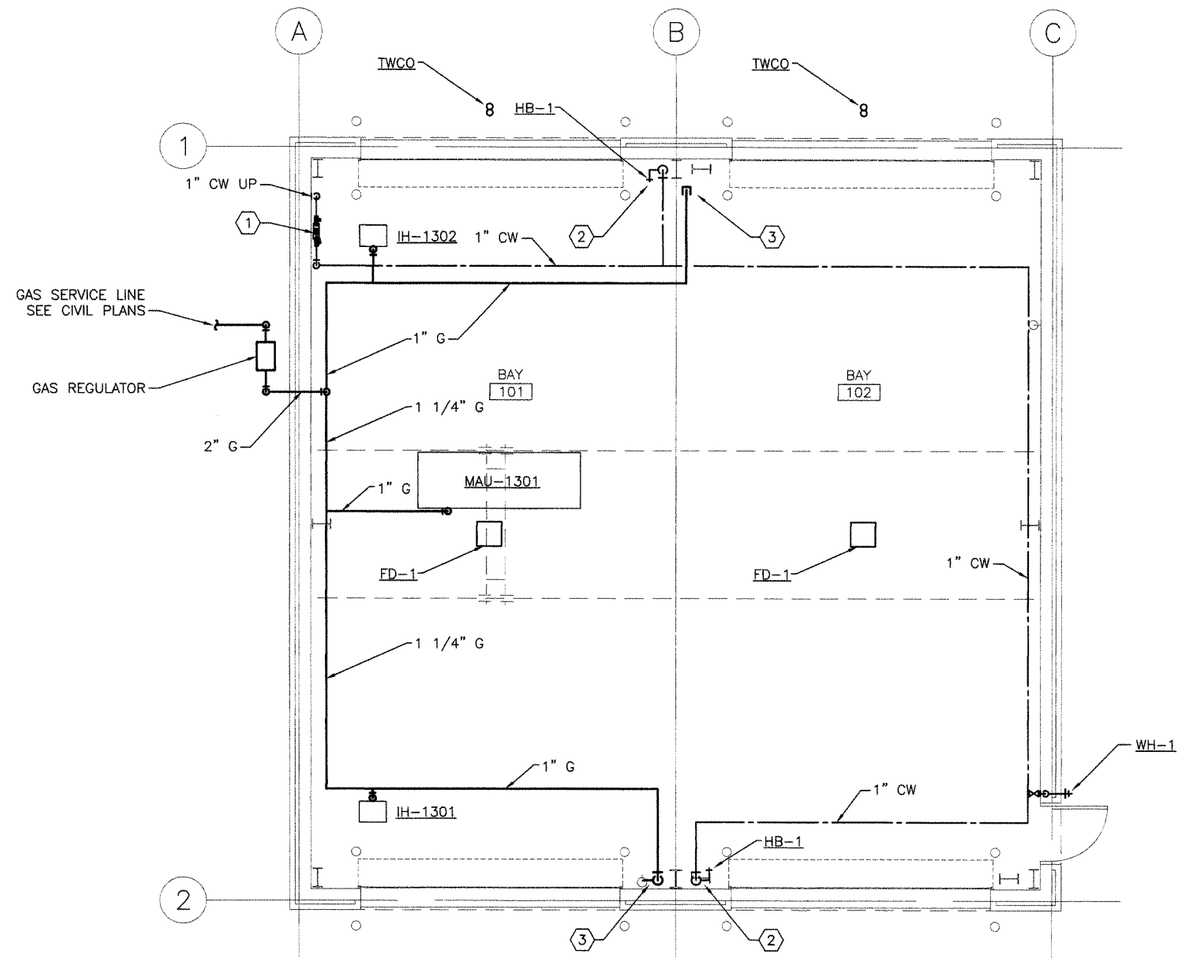
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13P-101
REV	

260 OF 289

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11074 LEE E. SIGGS 10/13/11

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KEYED NOTES:

1. WATTS SERIES 009 RPZ OR EQUAL. MOUNT TO WALL 3'-0" AFF. ROUTE 3/4" DRAIN AIR GAP THRU EXTERIOR WALL.
2. ROUTE 1" CW DOWN AT COLUMN. PROVIDE BALL VALVE AND CAP 24" A.F.F. FOR OWNER PROVIDED AND INSTALLED PRESSURE WASHER. ALSO PROVIDE HOSE BIB AS INDICATED.
3. STUB OUT 1" GAS LINE FOR FUTURE OWNER PROVIDED AND INSTALLED PRESSURE WASHER. VALVE AND CAP.

A (13P-201) ABOVE GROUND PLUMBING PLAN
SCALE: 1/4" = 1'-0"

NORTH

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
ABOVE GROUND PLUMBING PLAN

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

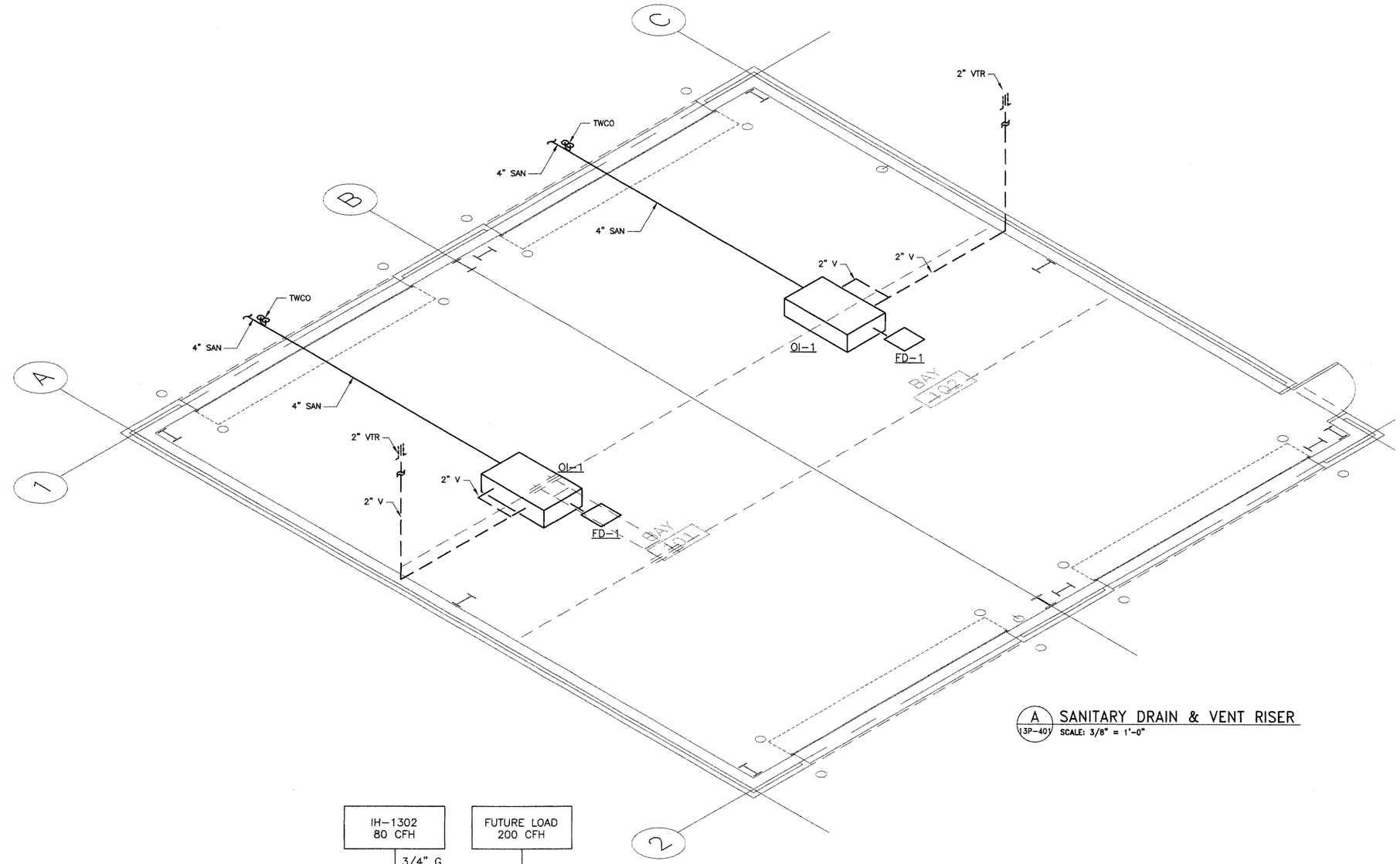
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13P-201
REV	

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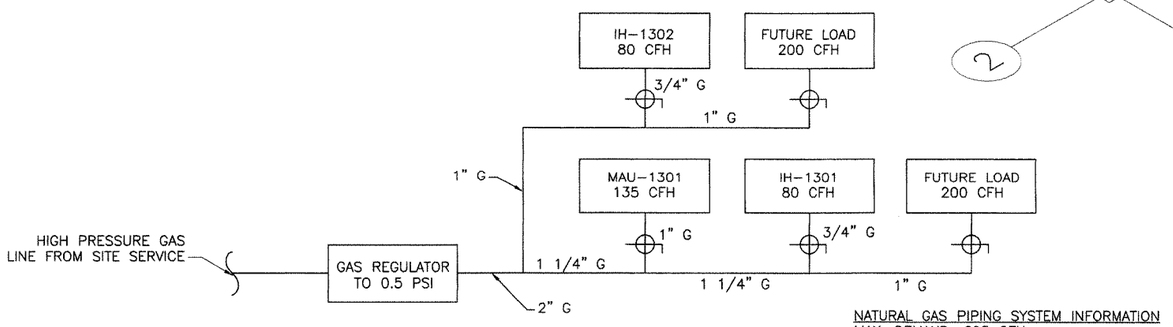
CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER LEE E. SUGGS No. 11074

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A SANITARY DRAIN & VENT RISER
13P-401 SCALE: 3/8" = 1'-0"



B NATURAL GAS PIPING RISER DIAGRAM
13P-401 SCALE: NTS

NATURAL GAS PIPING SYSTEM INFORMATION
MAX. DEMAND: 695 CFH
DEVELOPED PIPE LENGTH: 80'
MAX. PRESSURE DROP: 0.5" W.C.

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11074
LEE E. BUGGS
10/13/11

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
PLUMBING RISER

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13P-401
REV	

262 OF 289

XREFS: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\13_DIST_WASH_STATION\8120_13A-FP01.dwg P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\13_DIST_WASH_STATION\8120_13A-FP02.dwg

FIXTURE SCHEDULE

PLAN MARK	FIXTURE TYPE	HW	CW	WASTE	VENT	FIXTURE DESCRIPTION	FAUCET/VALVE	ACCESSORIES/REMARKS
WH-1	NON FREEZE WALL HYDRANT	–	3/4"	–	–	BRONZE CASING, NICKEL BRONZE FACE, AND ANTI-SIPHON BACKFLOW PREVENTOR WADE 8600,L8 OR EQUAL	–	–
FD-1	WASH BAY AREA FLOOR DRAIN	–	–	4"	–	16"X16" SQUARE AREA DRAIN WITH TRAFFIC GRADE HIGH FLOW GRATE COATED CAST IRON BODY, SEDIMENT BUCKET ZURN Z662-HF OR EQUAL	–	COORDINATE PLACEMENT WITH STRUCTURAL FLOOR SLOPES
OI-1	OIL AND SEDIMENT INTERCEPTOR	–	–	4"	2"	RECESSED OIL INTERCEPTOR WITH H-20 TRAFFIC GRADE LID, COATED STEEL CONSTRUCTION, VENT CONNECTIONS, SEDIMENT TRAP, INTEGRAL OIL TANK, 75 GPM MAXIMUM FLOW RATING WADE MODEL 5500-75	–	MOUNT WITH LID FLUSH TO FINISHED FLOOR. PROVIDE FOR AT-GRADE OIL REMOVAL FROM OIL TANK
HB-1	HOSE BIBB	–	3/4"	–	–	BRONZE BODY WITH ROUGH BRONZE FINISH, KNOB HANDLE INTEGRAL BACKFLOW PREVENTER ZURN Z1341BFP OR EQUAL.	–	MOUNT 28" A.F.G.

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
PLUMBING SCHEDULES

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13P-601
REV	
263 OF 289	

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11071
EEE ENGGS

Xrefs: 8120_02G-BS01.dwg

SYMBOLS

# / M-###	SECTION CUT SECTION LOCATION
# / M-###	DETAIL NUMBER DETAIL LOCATION
#	KEYED NOTE
TH	THERMOSTAT, HUMIDISTAT MOUNTED 48" AFF
D	DUCT DROP
R	DUCT RISE
	FLEXIBLE DUCT CONNECTION
M	MOTORIZED DAMPER
	BACKDRAFT DAMPER
	MANUAL DAMPER
FD / AP AP	(FD) FIRE DAMPER (SD) SMOKE DAMPER (FD/SD) FIRE/SMOKE DAMPER
	SUPPLY DUCT SECTION
	RETURN, OUTSIDE AIR, OR EXHAUST DUCT SECTION

	PIPE UP
	PIPE DOWN
	TOP BRANCH CONNECTION
	BOTTOM BRANCH CONNECTION
	TEE UP
	TEE DOWN
	PIPE CAP
	PIPE ANCHOR
	PIPE GUIDE
	UNION
	STRAINER
	CHECK VALVE
	FLOW DIRECTION
	FLEXIBLE PIPING CONNECTION

	CONTROL VALVE
	3-WAY CONTROL VALVE
	REDUCER
	SHUT OFF VALVE
	BALANCING VALVE
	GLOBE VALVE
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	BACKFLOW PREVENTER
	THERMOMETER
	PRESSURE GAUGE
	SAFETY RELIEF VALVE
	MANUAL AIR VENT

ABBREVIATIONS

AA	AUTOMATIC AIR VENT
AD	ACCESS DOOR
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AG	ABOVE GROUND
AMB	AMBIENT
APD	AIR PRESSURE DROP
AWT	AVERAGE WATER TEMPERATURE
BHP	BRAKE HORSEPOWER
BOP	BOTTOM OF PIPE
CAP	CAPACITY
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
DIA	DIAMETER
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
DX	DIRECT EXPANSION
E	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EFF	EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
FC	FLEXIBLE CONNECTION
FLG	FLANGE
FMD	FLOW MEASURING DEVICE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
GC	GENERAL CONTRACTOR
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GPM	GALLONS PER MINUTE
H	HEIGHT
HD	HEAD
HP	HORSEPOWER
HZ	HERTZ
I.E.	INVERT ELEVATION
LAT	LEAVING AIR TEMPERATURE
LF	LINEAR FEET
LWT	LEAVING WATER TEMPERATURE
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBH	BTU PER HOUR (1000'S)
MC	MECHANICAL CONTRACTOR
MD	MANUAL DAMPER
MFR	MANUFACTURER
MIN	MINIMUM
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OED	OPEN END DUCT
PC	PLUMBING CONTRACTOR
PCD	PVC COATED DUCTWORK
PH	PHASE
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
REL	RELOCATED
RH	RELATIVE HUMIDITY
RL	REFRIGERATION LIQUID
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERATION SUCTION
RV	RELIEF VALVE
SA	SUPPLY AIR
SC	SENSIBLE COOLING
SHT	SHEET
SP	STATIC PRESSURE
SRV	SAFETY RELIEF VALVE
TEMP	TEMPERATURE
TH	TOTAL HEAT
TC	TOTAL COOLING
TSP	TOTAL STATIC PRESSURE
UG	UNDERGROUND
V	VOLTS
VB	VACUUM BLOWER
VEL	VELOCITY
VTR	VENT THROUGH ROOF
W	WIDTH
WB	WET BULB
WC	WATER COLUMN
WPD	WATER PRESSURE DROP
WTR	WATER

MECHANICAL GENERAL NOTES:

1. THE DRAWINGS INDICATE, THE GENERAL DESIGN AND ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, AND ACCESSORIES. THE EXACT LOCATION OF THESE ITEMS IS SUBJECT TO CHANGE BY FIELD CONDITIONS AND SHALL BE MADE AS REQUIRED WITHOUT ADDITIONAL COST TO THE GOVERNMENT. MEASUREMENTS SHALL BE VERIFIED BY ACTUAL OBSERVATION AT THE CONSTRUCTION SITE.
2. COORDINATE INSTALLATION OF ALL NEW DUCTWORK, PIPING, AIR DEVICES, AND EQUIPMENT WITH NEW WIRING, LIGHTING, AND PIPING. WHERE AIR DEVICES ARE TO BE INSTALLED, COORDINATE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, AND FINISH CONDITIONS THAT AFFECT THE WORK TO BE PERFORMED AND ARRANGE WORK ACCORDINGLY. FURNISH REQUIRED OFFSETS, FITTINGS, AND ACCESSORIES TO MEET SUCH CONDITIONS. EQUIPMENT, DUCTWORK, AND PIPING ARRANGEMENTS SHALL FIT INTO SPACE ALLOTTED AND ALLOW ADEQUATE ACCEPTABLE CLEARANCES FOR INSTALLATION, REPLACEMENT, ENTRY SERVICING, AND MAINTENANCE.
3. FLEXIBLE DUCT RUNOUTS SHALL BE SAME SIZE AS DIFFUSER INLET. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".

DUCT SIZING

20/10 = 20" WIDE X 10" DEEP DUCT

10"ø = 10" DIAMETER ROUND DUCT

EQUIPMENT ABBREVIATIONS

AB	AIR BLENDER
AC	AIR COMPRESSOR
ACU	AIR CONDITIONING UNIT
AD	AIR DRYER
AHU	AIR HANDLING UNIT
B	BOILER
CC	COOLING COIL
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
EF	EXHAUST FAN
ET	EXPANSION TANK
F	FILTER
FCU	FAN COIL UNIT
FD	FIRE DAMPER
HC	HEATING COIL
IH	INFRARED HEATING UNIT
L	LOUVER
MAU	MAKEUP AIR UNIT
P	PUMP
PHC	PREHEAT COIL
RF	RETURN OR RELIEF FAN
RHC	REHEAT COIL
SD	SMOKE DETECTOR OR SMOKE DAMPER
SF	SUPPLY FAN
ST	SOUND TRAP
UH	UNIT HEATER
VAV	VARIABLE AIR VOLUME BOX
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER

GRILLES, REGISTERS, AND DIFFUSER TAGS

SUPPLY REGISTER TAG

A	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

SUPPLY DIFFUSER TAG

B	GRD TYPE
6"ø	NECK SIZE
100	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

RETURN/EXHAUST GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
300	GRILLE AIR FLOW (CFM)
(TYP #)	TYPICAL OF QUANTITY

TRANSFER GRILLE TAG

C	GRD TYPE
12x12	GRILLE SIZE
(TYP #)	TYPICAL OF QUANTITY

CERTIFICATE OF AUTHORIZATION — SAIC Energy, Environment & Infrastructure, LLC No. 510 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 11074 — JEFFREY E. SUGGS

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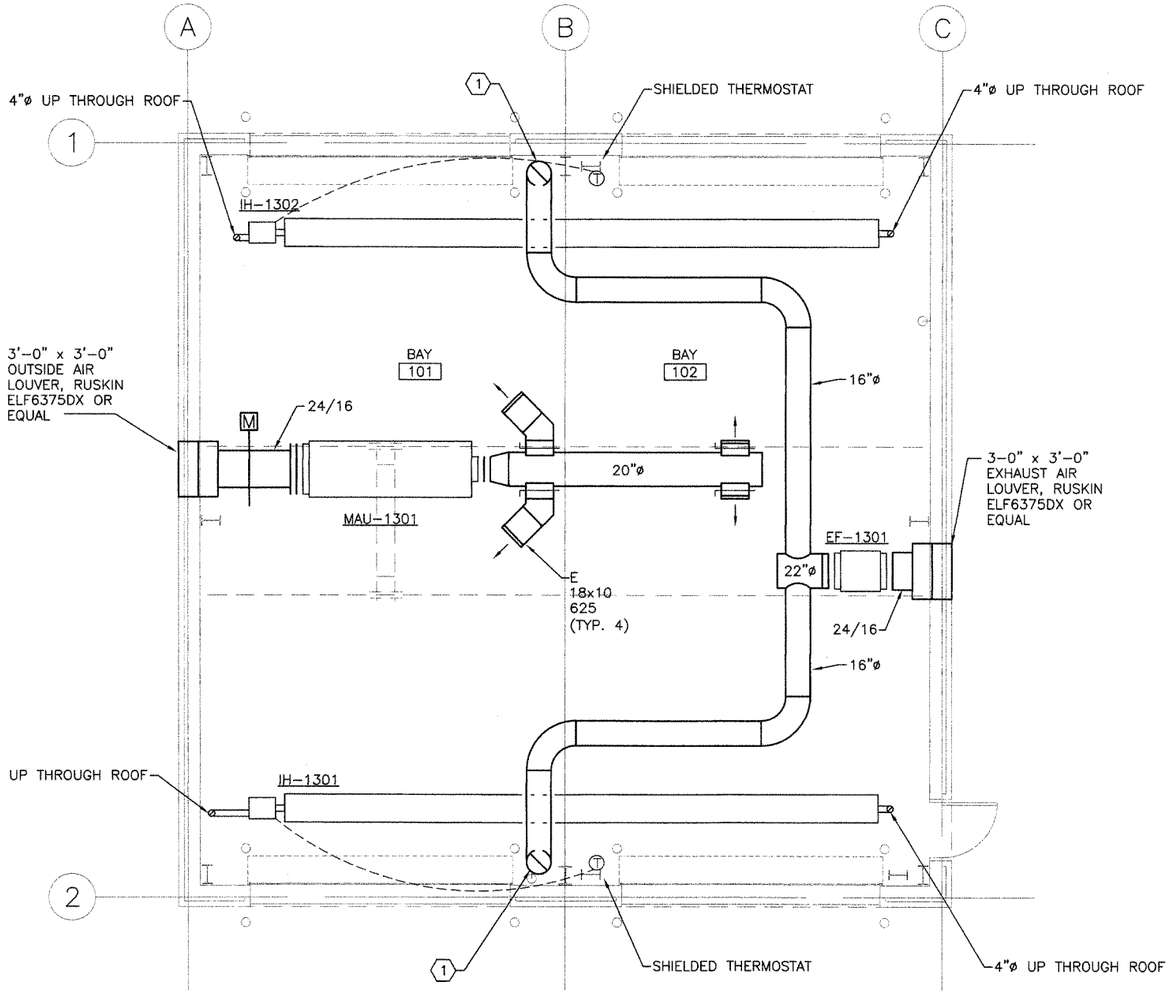
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
MECHANICAL SYMBOLS AND ABBREVIATIONS

DESIGNED BY	CMS
DRAWN BY	CMS
CHECKED BY	LES
APPROVED BY	LES

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13M-001
REV	
264 OF 289	

Xrefs: H:\LIT\CIV\40\0812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\13_DIST_WASH_STATION\B120_13G-BSD1.dwg



KEYED NOTES:

(1) 16"ø DUCT DN TO WITHIN 12" A.F.F. WITH 1/2" X 1/2" WIRE MESH SCREEN.

A 13M-101 MECHANICAL PLAN
SCALE: 1/4"= 1'-0"

NORTH

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Lowell, Arkansas
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(479) 770-5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
MECHANICAL FLOOR PLAN

DESIGNED BY	TBC
DRAWN BY	DRM
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
13M-101	
265 OF 289	

CERTIFICATE OF AUTHORIZATION
SAIC
Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11071
LEE E. BIGGS

Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\13_DIST_WASH_STATION\8120_13S-BS01.dwg P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\13_DIST_WASH_STATION\8120_13A-FP01.dwg
P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESIGN\40_CAD\13_DIST_WASH_STATION\8120_13M-HPU1.dwg

FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	LOCATION	SERVES	FAN TYPE	AIR FLOW (CFM)	SP (IN WC)	DRIVE TYPE	MOTOR (HP)	V/PH/HZ	NOTES
EF-1301	GREENHECK	BSQ-160	RM 108	BAYS	CENTRIFUGAL INLINE	2,800	0.5	BELT	3/4	208/3/60	1, 2

NOTES:
1. INTEGRAL BACKDRAFT DAMPER.
2. PROVIDE WALL SWITCH FOR FAN ACTIVATION. INTERLOCK WITH MAKEUP AIR UNIT MAU-1301. MAKEUP AIR UNIT SHALL RUN WHILE EXHAUST FAN IS IN OPERATION.

MAKE-UP AIR UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	TYPE	CFM	INPUT (MBH)	OUTPUT (MBH)	EAT (F)	LAT (F)	ESP (IN WC)	ELECTRICAL DATA		NOTES
											MOTOR (HP)	V/PH/HZ	
MAU-1301	GREENHECK	DG-110	TRUCK BAYS	NATL GAS	2,800	135.9	125.0	19.0	60.0	0.5	1 1/2	208/3/60	1

NOTES:
1. INTERLOCK WITH EXHAUST FAN EF-1301. UNIT SHALL RUN WHILE EXHAUST FAN IS ACTIVE. UNIT SHALL CONTROL DISCHARGE TEMPERATURE TO 60°F MINIMUM.

INFRARED HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SERVES	TYPE	INPUT (MBH)	MOUNTING HEIGHT	REFLECTOR ANGLE	TUBE LENGTH (FT)	ELECTRICAL	NOTES
IH-1301	ROBERTS GORDON	CTH3-80	TRUCK BAYS	NATL GAS	52/80	15'-6"	45°	32	SEE NOTE	1, 2, 3
IH-1302	ROBERTS GORDON	CTH3-80	TRUCK BAYS	NATL GAS	52/80	15'-6"	45°	32	SEE NOTE	1, 2, 3

NOTES:
1. 120V PLUG-IN. 4.8 STARTING AMPS.
2. MODULATING BURNER.
3. SHIELDED THERMOSTAT.

DIFFUSERS, GRILLES, & REGISTER SCHEDULE

PLAN MARK	TYPE	FINISH	MATERIAL	MOUNTING	ACCESSORIES	MANUFACTURER	MODEL	NOTES
A	SUPPLY	WHITE	STEEL	LAY-IN	-	TITUS	TMS	2
B	SUPPLY	WHITE	STEEL	SURFACE	-	TITUS	300RL	1
C	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	-	TITUS	50F	1, 3
D	RETURN/ EXHAUST	WHITE	ALUMINUM	LAY-IN	FILTER	TITUS	50F	1, 3
E	SUPPLY	WHITE	ALUMINUM	DUCT	OPPOSED BLADE DAMPER	TITUS	DL	1

NOTES:
1. REFER TO PLANS FOR SIZES.
2. 24x24 SQUARE.
3. PROVIDE FIELD FABRICATED PLENUM BOX EQUAL TO GRILLE DIMENSIONS AND 10" DEEP MINIMUM.

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Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11074
10/13/11
LEE E. SUGGS

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
MECHANICAL SCHEDULES

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
13M-601	
266 OF 289	

Xrefs: P:\LIT\CIV\4070812000_AHTD_Dist4HQ\20_DESGN\40_CAD\13_DIST_WASH_STATION\8120_136-BS01.dwg

ELECTRICAL SYMBOLS LEGEND

CEILING	WALL	
# A	# A	FLUORESCENT FIXTURE, A = FIXTURE TYPE, # = CKT. # TYPICAL
A NL	A	FLUORESCENT FIXTURE, EQUIPPED WITH BATTERY PACK.
A	A	HID, COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
A	A	EXIT LIGHT, DARKENED SECTION(S) DENOTE FACE(S). USE DIRECTIONAL ARROWS WHERE INDICATED.
A	A	FLUORESCENT STRIP FIXTURE
	A	EMERGENCY FIXTURE
	A	REMOTE EMERGENCY FIXTURE

NOTE: REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION

- CONDUIT CONCEALED
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUIT BELOW GRADE
- (J) JUNCTION BOX
- (J) JUNCTION BOX WALL MOUNTED
- CABLE TRAY
- HOMERUN TO PANEL BOARD OR DEVICE. TICK MARKS DENOTE NUMBERS OF CIRCUITS. HOMERUN WITH NO TICK MARKS SHALL BE A SINGLE CIRCUIT,
- [T] TRANSFORMER
- [HH] HANDHOLE
- GROUND
- (M) METER
- SWITCHBOARD, DISTRIBUTION PANEL
- PANEL BOARD
- HEAVY DUTY SAFETY SWITCH, MOUNT WITH L OF HANDLE AT 60" A.F.F. REFER TO EQUIPMENT SCHEDULE FOR AMPACITY, NEMA CONFIGURATION, FUSING, ECT.
- SINGLE RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
- DUPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE
- WP DUPLEX GFI RECEPTACLE W/ WEATHERPROOF "IN-USE" TYPE COVER MOUNTED @ 18" A.F.F.
- GFI COMMERCIAL GRADE GFI RECEPTACLE MOUNTED @ 18" A.F.F.
- QUADPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
- CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, MOUNTED RECESSED WHEN INSTALLED IN ACCESSIBLE CEILING PANEL. SECURE TO STRUCTURE PER N.E.C.
- DUPLEX RECEPTACLE OUTLET, FLOOR MOUNTED

- SPECIAL PURPOSE OUTLET, ELECTRICAL CHARACTERISTICS AS SPECIFIED ON PLANS OR SCHEDULE.
- $ SINGLE POLE SWITCH, MOUNTED AT 48" A.F.F.
- $P SINGLE POLE SWITCH WITH PILOT LIGHT, MOUNTED AT 48" A.F.F.
- $3 3-WAY SWITCH, MOUNTED AT 48" A.F.F.
- $4 4-WAY SWITCH, MOUNTED AT 48" A.F.F.
- $OS COMBINATION OCCUPANCY/SENSOR/SWITCH, MOUNTED AT 48" A.F.F.
- $M MOTOR RATED SWITCH MOUNTED AT MOTOR, UNLESS NOTED OTHERWISE.
- D$ DIMMER SWITCH, MOUNTED AT 48" A.F.F.
- OC OCCUPANCY SENSOR, CEILING MOUNTED.
- OC OCCUPANCY SENSOR, WALL MOUNTED WITH SWIVEL BRACKET.
- MOTOR LOAD

GENERAL NOTES

1. FOR ALL ELECTRICAL WORK, REFER TO DIVISION 26 SPECIFICATION SECTION.
2. HEIGHTS INDICATED ARE TO THE CENTERLINE OF BOX, UNLESS INDICATED OTHERWISE.
3. ALL SYMBOLS MAY NOT BE USED.
4. FOR ALL ELECTRICAL EQUIPMENT INDICATED TO BE SUSPENDED FROM METAL BUILDING FRAMING (TRANSFORMERS, LIGHTING, ETC.), THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUPPLEMENTAL FRAMING, HANGERS, ETC. NECESSARY TO SUPPORT ELECTRICAL ITEMS IN ACCORDANCE WITH THE METAL BUILDING MANUFACTURER'S RECOMMENDATIONS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF HANGERS FOR ELECTRICAL ITEMS WITH METAL ROOF LINER PANEL INSTALLATION SEQUENCE.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, COORDINATE AND CONFIRM WITH THE MECHANICAL AND PLUMBING CONTRACTOR ALL OF THE FOLLOWING:
   A. VERIFY EXACT FEED LOCATIONS AND NUMBER OF CONNECTIONS TO ALL A/C UNITS, FAN COILS, CHILLERS, COOLING TOWERS, SYSTEM PUMPS, EVAP. COOLERS, MAKE-UP AIR UNITS, DAMPER MOTORS, ETC.
   B. ELECTRICAL CHARACTERISTICS (E.G., KW, HP, AMPS, VOLTAGE, PHASE, ETC.): CONFIRM WITH APPROVED MECHANICAL/PLUMBING EQUIPMENT SHOP DRAWINGS.
   C. EXACT LOCATION OF ALL CONTROL PANELS, CONTROL DEVICES, THERMOSTATS, DAMPER MOTORS, ETC.

ABBREVIATIONS

A

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMP INTURUPTING CAPACITY
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE

B

BKR	CIRCUIT BREAKER
BLDG	BUILDING

C

CKT	CIRCUIT
℄	CENTERLINE
CLG	CEILING
COL	COLUMN
CU	COPPER
°C	DEGREES CELSIUS

D

DEG	DEGREES
DIA, ø	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DIV	DIVISION
DN	DOWN
DWG	DRAWING

E

EA.	EXHAUST AIR, EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRICAL WATER COOLER
EX	EXISTING

F

FLA	FULL LOAD AMPS
FLEX	FLEXIBLE (CONDUIT)
FLR	FLOOR
FT	FOOT, FEET
°F	DEGREES FAHRENHEIT

G

GA	GAUGE
GALV	GALVANIZED
GFI, GFCI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL (CONDUIT)

H

HID	HIGH INTENSITY DISCHARGE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & A/C
HZ	HERTZ

I

ID	INSIDE DIAMETER, IDENTIFICATION
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH, INCHES

J

J-BOX	JUNCTION BOX

K

KCMIL	THOUSAND CIRCULAR MILS (AREA)
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR

L

LRA	LOCKED ROTOR AMPS
LTG	LIGHTING

M

MAX	MAXIMUM
MC	MULTI CONDUCTOR (CABLE)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MOCP, MOP	MAXIMUM OVER CURRENT PROTECTION
MH	MANHOLE, METAL HALIDE
MIL, MILS	1/1000 INCH
MIN	MINIMUM

N

N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFR'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE

O

OD	OUTSIDE DIAMETER
OH	OVERHEAD
OEP	OVERHEAD ELECTRICAL PRIMARY
OES	OVERHEAD ELECTRICAL SECONDARY
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.

P

PE	PHOTO ELECTRIC, PROFESSIONAL ENGINEER
PF	POWER FACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
PWR	POWER

Q

QTY	QUANTITY

R

RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REF;	REFERENCE, REFER TO
REQD	REQUIRED
REV	REVISION, REVISE
RLA	RUNNING LOAD AMPS
RM	ROOM
RMS	ROOT MEAN SQUARE
RPM	REVOLUTION PER MINUTE

S

SCH	SCHEDULE, SCHEDULED
SF	SQUARE FEET, SQUARE FOOT
SPEC	SPECIFICATION, SPECIFY
SS	STAINLESS STEEL, STATIONARY SEWER
STD	STANDARD
SUSP	SUSPEND, SUSPENDED

T

TELECOM	TELECOMMUNICATIONS
THRU	THROUGH
TSTAT	THERMOSTAT
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL

U

U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UEP	UNDERGROUND ELECTRICAL PRIMARY
UES	UNDERGROUND ELECTRICAL SECONDARY
UL	UNDERWRITER'S LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY

V

V	VOLT, VENT, VERTICAL
VA	VOLT-AMPERE
VERT	VERTICAL

W

W	WATT, WIDTH, WIRE
W/	WITH
W/O	WITHOUT

X

XFMR	TRANSFORMER

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 Joseph John Joyce

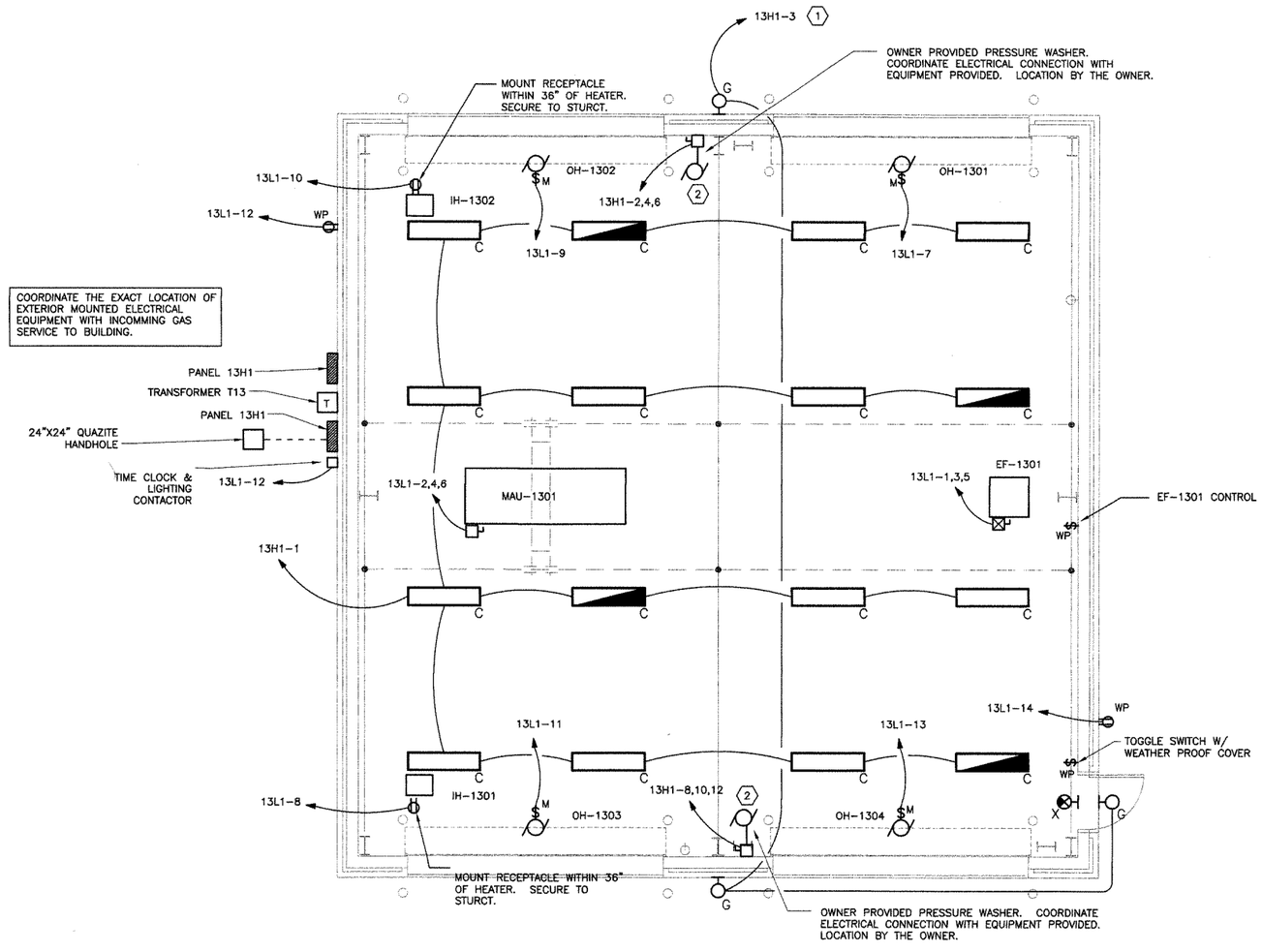
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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
ELECTRICAL SYMBOLS & ABBREVIATIONS

DESIGNED BY	TBC
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13E-100
REV	
	267 OF 289



A 13E-101 ELECTRICAL LIGHTING & POWER PLAN

SCALE: 1/4" = 1'-0"

NORTH

GENERAL NOTES: (THIS SHEET ONLY)

A. REFER TO SHEET 13E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. PROVIDE AN UNSWITCHED 'HOT' CONDUCTOR TO ALL FLUORESCENT LIGHTING FIXTURES EQUIPPED WITH AN EMERGENCY BATTERY BACKUP BALLAST.

C. CIRCUITING BETWEEN LIGHTING FIXTURES AND SWITCHES ARE NOT SHOWN FOR CLARITY.

D. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

E. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

F. CONTRACTOR SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.

KEY NOTES: (THIS SHEET ONLY)

1. ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CONTROLLED VIA COMBINATION PHOTOCELL AND TIME CLOCK. PHOTOCELL SHALL BE EXTERIOR MOUNTED ON THE SOUTH WALL OF BUILDING. REFER TO DETAIL C/13E-402.

2. COORDINATE THE EXACT LOCATION OF PRESSURE WASHER EQUIPMENT WITH THE OWNER.

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DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
ELECTRICAL LIGHTING & POWER PLAN

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13E-101
REV	
	268 OF 289

SAIC Energy, Environment & Infrastructure, LLC No. 510 CERTIFICATE OF AUTHORIZATION ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13428 JOSHUA W. JOYCE 10/13/2011

TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	VOLTS	REMARKS / NOTES
A2	LSI	2LLC-G-2-32-RPW-SS010-VOLT	TWO LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	2	32	48" T8	277*	
A3	LSI	2LLC-G-3-32-RPW-SS010-VOLT	THREE LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	3	32	48" T8	277*	
B2	LSI	LA-2-32-SD-SS010-VOLT	TWO LAMP LENSED FLUORESCENT TROFFER	2	32	48" T8	277*	
B4	LSI	LA-4-32-SD-SS010-VOLT	FOUR LAMP LENSED FLUORESCENT TROFFER	4	32	48" T8	277*	
C	LSI	EG-2-32-SS010-VOLT	TWO LAMP ENCLOSED / GASKETED FLUORESCENT	2	32	48" T8	277*	NOTE 8
D	LSI	F22-2-32-SS010-VOLT	TWO LAMP SUSPENDED FLUORESCENT	2	32	48" T8	277*	NOTES 1,3
E	LSI	TEM-WH-SD2	LOW PROFILE 6V EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
EX	LSI	PRX-R-U-WB-WH-WH-PR50	COMBINATION EXIT / EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
F	LSI	W44-4-2-32-SS010-UE	TWO LAMP WALL MOUNT LINEAR FLUORESCENT	2	32	48" T8	277*	NOTE 2
G	LSI	PTWS-FT-150-MH-F-VOLT-BRZ	EXTERIOR HID WALL SCONCE	1	150	150W MH	277*	NOTES 2,8
H	LSI	IHB-400-MH-MT-IAC22-PM	PENDANT MOUNT HID HIGHBAY FIXTURE	1	400	400W MH	277*	NOTES 1,4,5
I	WF HARRIS	50S-D-26PLC-VOLT	ONE LAMP COMPACT FLUORESCENT	1	26	26W PLC	277*	
J	LSI	208V-CFL-1-42T-UNIV	8" RECESSED DOWNLIGHT	1	42	42W CFT	277*	NOTE 9
K	LPDI	383-C-75-G	EXPLOSION PROOF INCANDESCENT (CEILING MOUNT)	1	60	60W A19	120*	NOTES 10,11
L	LSI	OFM2-WB-400-PSMU-F-MT-BRZ	HID FLOOD LIGHT	1	400	400W MH	277*	NOTES 2,8
M	LSI	SOV-RD-175-MH-73-VOLT	LENSED HID	1	175	175W MH	277*	NOTES 9'12
N	ESCO LIGHTING	W26000 SERIES	10" UP/DOWN WALL MOUNT CYLINDER (BRONZE)	2	150	150W MH	277*	
O	SPAULDING	RCL-A-P75-H3P	POLE MOUNTED SITE LIGHT, TYPE III DISTRIBUTION	1	750	750W MH	480*	NOTES 14,15
P	LSI	CHA2-400-PSMV-MT-A25-LMC	PENDANT MOUNT HID LOWBAY FIXTURE	1	400	400W MH	277*	NOTES 5,9
X	LSI	EXC-R- -U-WB-WW-SD2	CAST ALUMINUM LED EXIT SIGN	-	4	-	277*	NOTES 6,7

FIXTURES INDICATED WITHIN THIS LIGHTING FIXTURE SCHEDULE INCLUDE ALL BUILDING AND SITE LIGHTING WITHIN THE AHTD D4 HEADQUARTERS COMPLEX. NOT ALL FIXTURES ARE USED AT EACH BUILDING.

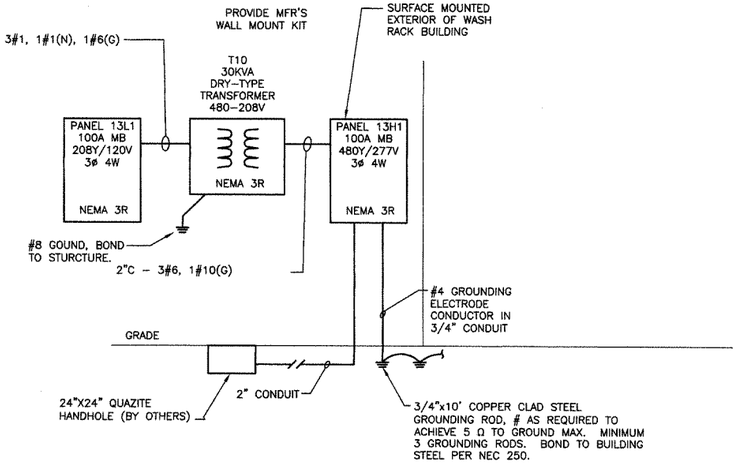
PROVIDE VOLTAGE INDICATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE LIGHTING PLAN.

NOTES:
1. PROVIDE WIRE GUARD
2. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
3. SUSPEND FIXTURE AT 10'-0" A.F.F.
4. SUSPEND FIXTURE AT 19'-0" A.F.F.
5. PROVIDE TWIST-LOCK TYPE CONNECTOR AT EACH FIXTURE.
6. PROVIDE ARROWS WHERE INDICATED.
7. POWER FIXTURES FROM UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.
8. U.L. LISTED FOR WET LOCATIONS.
9. U.L. LISTED FOR DAMP LOCATIONS.
10. U.L. LISTED EXPLOSION PROOF (CLASS I, DIV I).
11. PROVIDE WITH EXTRA LONG LIFE INCANDESCENT LAMP.
12. TRIM FINISH SHALL MATCH SURROUNDING AREA.
13. PROVIDE EMERGENCY QUARTZ LIGHTING KIT.
14. POLE MOUNTED AT 34'-0" A.F.G.
15. PROVIDE OPTIONAL ADJUSTABLE MOUNTING ARM.

BUILDING 13 - EQUIPMENT SCHEDULE

EQUIPMENT	DESCRIPTION	VOLTAGE	PHASE	AMPS	CONDUIT	WIRE SIZE	DISCONNECT ENCLOSURE	DISCONNECT SIZE	DISCONNECT FUSING	NOTES
MAU-1301	MAKEUP AIR UNIT	208	3	6.9	3/4"	3#12, 1#12(G)	NEMA 3R	30A3P	NON-FUSIBLE	
EF-1301	EXHAUST FAN	208	3	3.7	3/4"	3#12, 1#12(G)	NEMA 3R	30A3P	NON-FUSIBLE	NOTE 4
IH-1301	INFRARED HEATER	120	1	4.6	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			NOTE 1
IH-1302	INFRARED HEATER	120	1	4.6	3/4"	1#12, 1#12(N), 1#12(G)	RECEPTACLE			NOTE 1
OH-1301	OVERHEAD DOOR	120	1	6.9	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 2
OH-1302	OVERHEAD DOOR	120	1	6.9	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 2
OH-1303	OVERHEAD DOOR	120	1	6.9	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 2
OH-1304	OVERHEAD DOOR	120	1	6.9	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR RATED TOGGLE			NOTE 2
	PRSR WASHER	480	3	14	3/4"	3#10, 1#10(G)	NEMA 3R	30A3P	NON-FUSIBLE	NOTE 3
	OVERHEAD CRANE	480	3	11	3/4"	3#12, 1#12(G)	NEMA 3R	30A3P	NON-FUSIBLE	NOTE 5

NOTES:
1. PROVIDE APPROVED CIRCUIT BREAKER HANDLE LOCKOUT.
2. PROVIDE CONTROL ADJACENT TO OVERHEAD DOOR PER SPECIFICATIONS
3. EQUIPMENT IS OWNER PROVIDED, COORDINATE CIRCUIT W/ EQUIPMENT PROVIDED. ESTIMATED AT 10HP.
4. PROVIDE COMBINATION DISCONNECT / MOTOR STARTER W/ WALL SWITCH CONTROL.
5. COORDINATE CIRCUIT SIZE WITH EQUIPMENT PROVIDED.



1 / 13E-401 POWER RISER DIAGRAM
SCALE: NTS

Panel "13H1"	277 Volts L-N 3Ø, 4W; 480 Volts L-L; 25,000 AIC BRANCH BRKRS				100A3P MAIN BREAKER; COPPER BUS; EQUIP. GROUNDING BAR			TYPE: NF; NEMA 3R ENCLOSURE; SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
LGTS - WASH RACK	1	1200	20/1			3878	2	
LGTS - WASH RACK EXTERIOR	3	330	20/1		25/3	3878	4	PRESSURE WASHER
	5	3047				3878	6	
OVERHEAD CRANE	7	3047	20/1			3878	8	
	9	3047			25/3	3878	10	PRESSURE WASHER
SPARE	11	0	20/1			3878	12	
SPACE	13	0			20/1	0	14	SPARE
SPACE	15	0				0	16	SPACE
SPACE	17	0				0	18	SPACE
SPACE	19	0				0	20	SPACE
SPACE	21	0				0	22	SPACE
SPACE	23	0				0	24	SPACE
SPACE	25	0				3570	26	
SPACE	27	0			50/3	2720	28	TRANSFORMER T13 (30KVA)
SPACE	29	0				2244	30	
		Totals	AØ	BØ	CØ	Totals		
		VA	15 573	13 853	13 047	VA		
		AMPS	56.2	50.0	47.1	AMPS		

Panel "13L1"	120 Volts L-N 3Ø, 4W; 208 Volts L-L; 10,000 AIC BRANCH BRKRS				100A3P MAIN BREAKER; COPPER BUS; EQUIP. GROUNDING BAR			TYPE: NQOD; NEMA 3R ENCLOSURE; SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
	1	444				850	2	
EF-1301	3	444	15/3		15/1	850	4	MAU-1301
	5	444				850	6	
OH-1301	7	850	20/1		20/1	576	8	IH-1301
OH-1302	9	850	20/1		20/1	576	10	IH-1302
OH-1303	11	850	20/1		20/1	100	12	TIMECLOCK
OH-1304	13	850	20/1		20/1	0	14	SPARE
SPARE	15	0	20/1		20/1	0	16	SPARE
SPARE	17	0	20/1		20/1	0	18	SPARE
SPARE	19	0	20/1		20/1	0	20	SPARE
SPARE	21	0	20/1		20/1	0	22	SPARE
SPARE	23	0	20/1		20/1	0	24	SPARE
SPACE	25	0				0	26	SPACE
SPACE	27	0				0	28	SPACE
SPACE	29	0				0	30	SPACE
PROVIDE IDENTIFIED HANDLE TIES FOR ALL MULITWIRE BRANCH CIRCUITS PER NEC 210.4		Totals	AØ	BØ	CØ	Totals		
		VA	3 570	2 720	2 244	VA		
		AMPS	29.8	22.7	18.7	AMPS		

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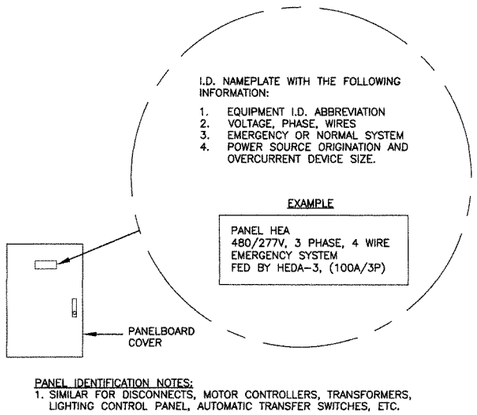
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
ELECTRICAL SCHEDULES

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	13E-401
REV	
	269 OF 289

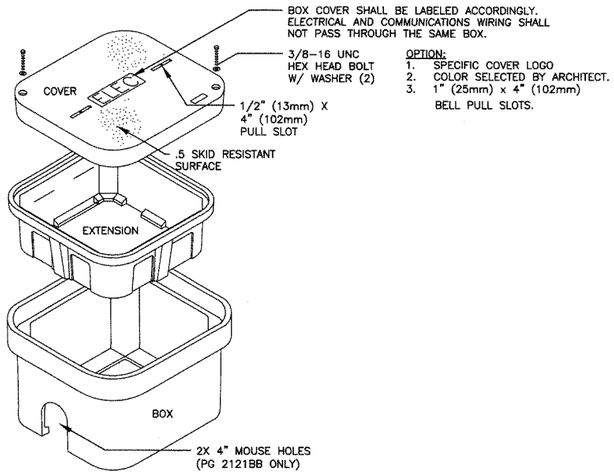
CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JOSHUA W. JOYCE No. 14496 10/13/2011

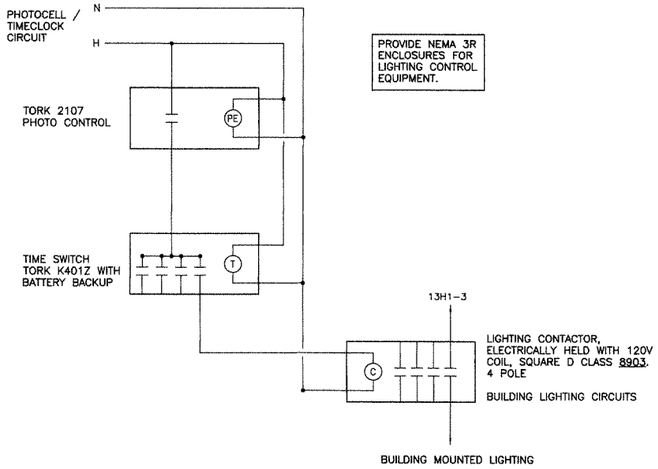


PANEL IDENTIFICATION NOTES:
1. SIMILAR FOR DISCONNECTS, MOTOR CONTROLLERS, TRANSFORMERS, LIGHTING CONTROL PANEL, AUTOMATIC TRANSFER SWITCHES, ETC.

(A) 13E-402 PANEL IDENTIFICATION DETAIL
SCALE: NTS



(B) 13E-402 IN-GRADE PULLBOX DETAIL
SCALE: NTS



(C) 13E-402 LIGHTING CONTROL DETAIL
SCALE: NTS

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13428
JOSHUA J. LOVICK

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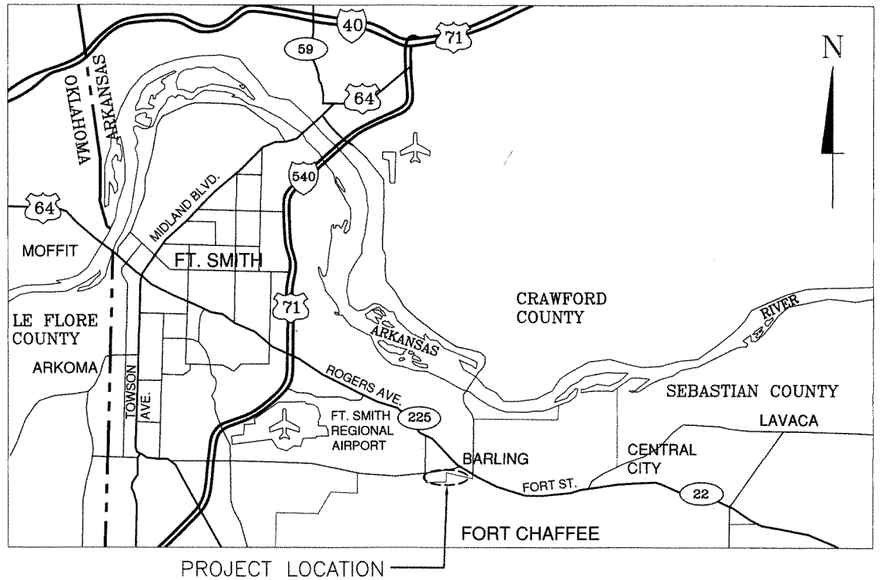
DISTRICT EQUIPMENT WASH BUILDING
AHTD JOB NO. 040554
ELECTRICAL DETAILS

DESIGNED BY	JWJ
DRAWN BY	BJB
CHECKED BY	TBC
APPROVED BY	TBC

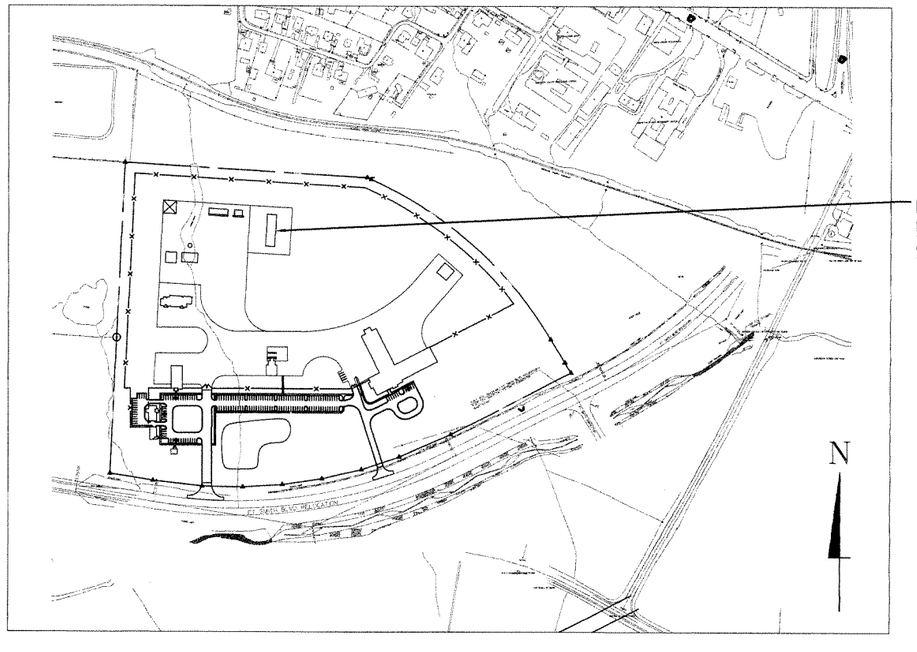
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
13E-402	
270 OF 289	

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEET
					ARK.		271	289
				JOB NO.		040554		
				DISTRICT SALT SPREADER STORAGE				

DISTRICT SALT SPREADER STORAGE BUILDING



VICINITY MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

DISTRICT SALT SPREADER STORAGE BUILDING

CODE INFORMATION

OCCUPANCY:	GROUP S-2, STORAGE, LOW HAZARD		AFPC SECTION 311.3
CONSTRUCTION:	TYPE VB, UNSPRINKLERED, UNPROTECTED		AFPC SECTION 602.5, TABLE 601, TABLE 602
	STRUCTURAL FRAME	0 HOUR	
	BEARING WALLS	0 HOUR	
	NONBEARING WALLS AND PARTITIONS	0 HOUR	
	FLOOR CONSTRUCTION	0 HOUR	
	ROOF CONSTRUCTION	0 HOUR	
	FIRE SEPARATION WALLS	NOT APPLICABLE	
	FIRE PARTITIONS		
	STORAGE/MECHANICAL AREAS	0 HOUR	AFPC TABLE 508.2
	EXIT ACCESS CORRIDORS	0 HOUR	AFPC TABLE 1017.1
	SHAFT ENCLOSURES	NOT APPLICABLE	
	AREA OF EXTERIOR OPENINGS	UNLIMITED	AFPC TABLE 704.8
BUILDING LIMITATIONS FOR S-2 OCCUPANCY			
	HEIGHT AND STORIES	40 FT/2 STORY	AFPC TABLE 503
	ACTUAL HEIGHT AND STORIES	23 FT/1 STORY	
	BASE AREA	13,500 SF/FLOOR	AFPC TABLE 503
	ACTUAL AREA (1 STORY)	4,530 SF	
MEANS OF EGRESS			
	OCCUPANT LOAD, GROUP S-2	9 OCCUPANTS	AFPC TABLE 1004.1.1
	WIDTH OF EGRESS DOORS		
	EXITS	36" REQUIRED; NA	AFPC SECTION 1008.1.1
	MINIMUM NUMBER OF EXITS	1 REQUIRED; NA	AFPC TABLE 1015.1
	EXIT ACCESS TRAVEL DISTANCE	200 FT	AFPC TABLE 1016.1
	EXIT ACCESS CORRIDOR WIDTH	44" REQUIRED 60" PROVIDED	AFPC SECTION 1017.2
	DEAD END CORRIDOR	20 FT NA	AFPC SECTION 1017.3

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10-12-11

"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

JOHNNY R. RAMSEY, ARCHITECT

ABBREVIATIONS

ABC	AGGREGATE BASE COURSE
ADJ	ADJUSTABLE
A.F.F.	ABOVE FINISH FLOOR
ALUM	ALUMINUM
A.W.C.	ACCESSIBLE WATER CLOSET
BCE	BASE CIVIL ENGINEER
BM	BEAM
BD	BOARD
B.O.	BOTTOM OF
BOT	BOTTOM
BRNG	BEARING
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CU	CONDENSING UNIT
CJ	CONTROL JOINT
DIA	DIAMETER
ø	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DTL	DETAIL
DN	DOWN
EA	EACH
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EXP JT	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
F.E.	FIRE EXTINGUISHER
FFE	FINISHED FLOOR ELEVATION
FIN	FINISH OR FINISHED
FLR	FLOOR
FTG	FOOTING
GA	GAUGE
GEN	GENERAL
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HDF	HIGH DENSITY FIBERBOARD
HMAC	HOT MIX ASPHALTIC CONCRETE
HORIZ	HORIZONTAL
HPL	HIGH PRESSURE LAMINATE
HT	HEIGHT
INSUL	INSULATION
INT	INTERIOR
L	ANGLE
LAV	LAVATORY
LPL	LOW PRESSURE LAMINATE
LVL	LAMINATED VENEER LUMBER
LT	LIGHT
MAS	MASONRY
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MFGR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
OSB	ORIENTED STRAND BOARD
PED	PEDESTRIAN
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
PLCS	PLACES
R	RADIUS
RAD	RADIUS
REF	REFER TO
REINF.	REINFORCING
REQ'D	REQUIRED
RM	ROOM
R.T.U.	ROOF TOP UNIT
SS	SANITARY SEWER OR STAINLESS STEEL
SCHED	SCHEDULE
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STD	STANDARD
STL	STEEL
THK	THICK
T.O.	TOP OF
T.O.BM.	TOP OF BEAM
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
T.P.	TOILET PAPER
TS	TUBE STEEL
TYP.	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V.I.F.	VERIFY IN FIELD
W	WATER MAIN
WD	WOOD
W/	WITH
WC	WATER CLOSET
VCT	VINYL COMPOSITION TILE
VTR	VENT THRU ROOF

REVISION TABLE Fort Smith, Arkansas		
DATE	DESCRIPTION	SHEET NUMBER

SYMBOL INDEX

- (E) WALL KEY
- (101) DOOR NUMBER
- (C) WINDOW KEY
- B/A6 ELEVATION MARKER
- 100'-0" F.F.E. DATUM MARKER
- X/AX BUILDING SECTION
- X/AX PARTIAL SECTION

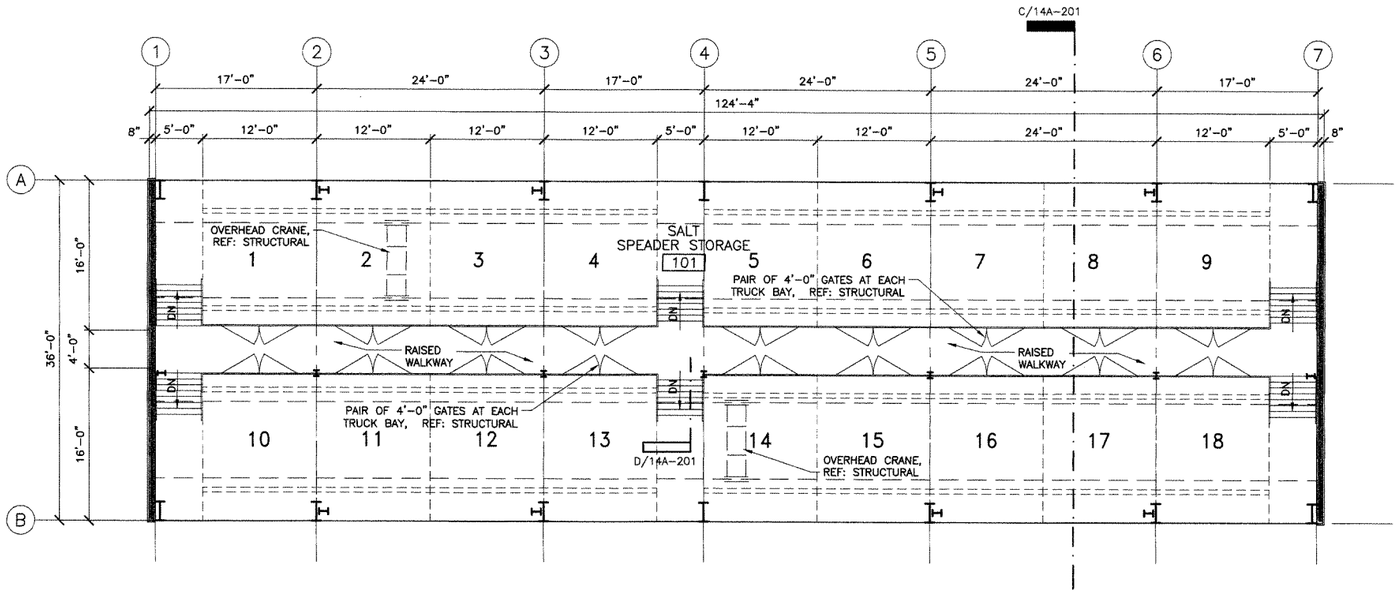
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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
INDEX & GOVERNING SPECIFICATIONS
QUANTITIES & REVISION TABLE

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14G-002
REV	

272 OF 289



A 14A-101 FLOOR PLAN
SCALE: 1/8" = 1'-0"

NORTH

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
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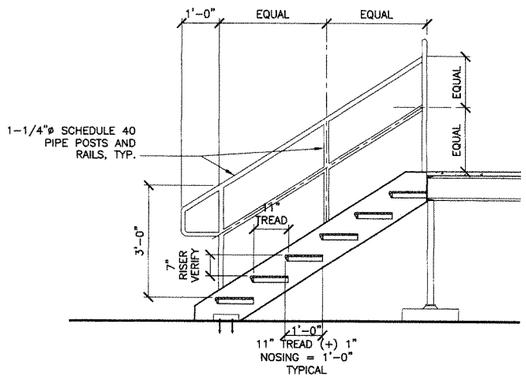
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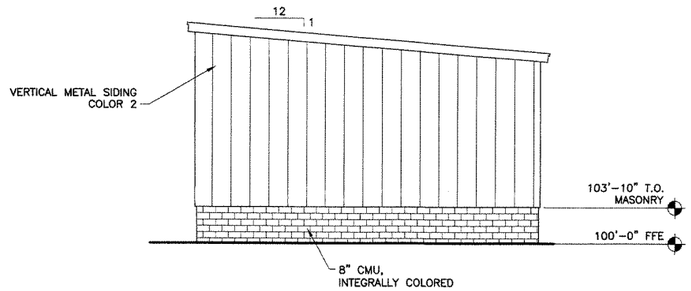
DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
FLOOR PLAN

DESIGNED BY	JSR
DRAWN BY	MSB
CHECKED BY	JRR
APPROVED BY	JSR

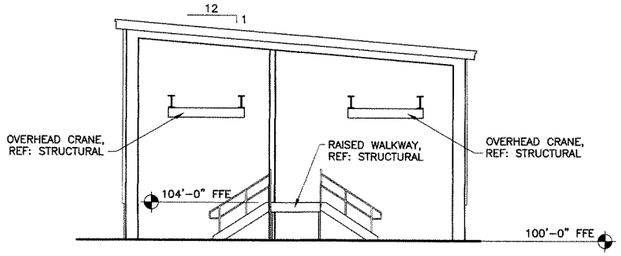
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
14A-101	



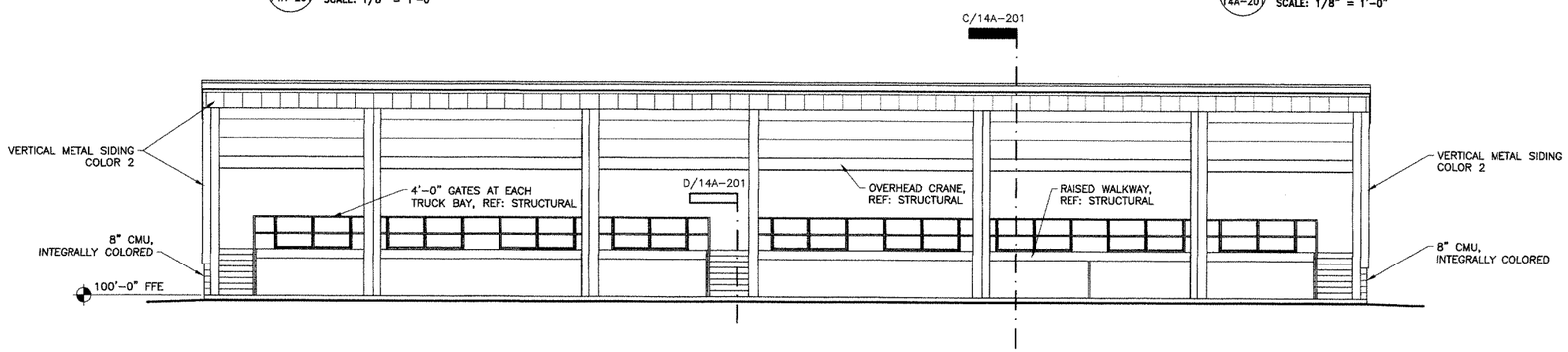
D 14A-201 **STAIR SECTION**
SCALE: 1/2" = 1'-0"



B 14A-201 **SIDE ELEVATION**
SCALE: 1/8" = 1'-0"



C 14A-201 **BUILDING SECTION**
SCALE: 1/8" = 1'-0"



A 14A-201 **FRONT ELEVATION**
SCALE: 1/8" = 1'-0"

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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
EXTERIOR ELEVATIONS & BUILDING SECTION

DESIGNED BY	JSR
DRAWN BY	BJB
CHECKED BY	JRR
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
14A-201	
274 OF 289	

REGISTERED ARCHITECT
SAIC Energy, Environment, & Infrastructure, LLC
No. C-255
ARKANSAS

JOHNNY RAY RAMSEY
REGISTERED ARCHITECT
No. 2221
ARKANSAS
10.13.11

STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT
ACT	ACTUAL
ADDN	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ALT	ALTERNATE
ANCH	ANCHORAGE, ANCHOR
APPD	APPROVED
ARCH	ARCHITECT,(URAL)
B–	CONC. BEAM
B/	BOTTOM OF
B/B	BACK TO BACK
BIT	BITUMINOUS, BITUMASTIC
BLDG	BUILDING
BM	BEAM
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
BRDG	BRIDGING
BRG	BEARING
BLK	BLOCK
BTWN	BETWEEN
BSMT	BASEMENT
C	CHANNEL
CANT	CANTILEVER
CEN	CENTER, ED
C/C	CENTER TO CENTER
CHAM	CHAMFER
CIRC	CIRCULAR
CJ	CONTROL JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNITS
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS, ATION
CONTR	CONTRACTOR
COORD	COORDINATE, TION
CTRD	CENTERED
D	DEPTH, DISTANCE
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DBS	DOWEL BAR SPLICER
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DSGN	DESIGN
DWGS	DRAWINGS
DWL	DOWEL
E	EAST
EA	EACH
EB	EXPANSION BOLT
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION, ELEVATED
ELEV	ELEVATOR
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXP	EXPANSION
EXIST	EXISTING
EXT	EXTERIOR
F–	FOOTING MARK
FC	FILLED CELL
FF	FINISHED FLOOR
FIN	FINISH
FLG	FLANGE
FLR	FLOOR
FDN	FOUNDATION
FRMG	FRAMING
FS	FARSIDE
FT	FOOT, FEET
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GL	GLU LAM
GLB	GLUED LAMINATED BEAM
HC	HIGH CHAIR
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HSA	HEADED STUD ANCHOR
HSB	HIGH STRENGTH BOLT
HT	HEIGHT
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INCL	INCLUDE, ING
INSUL	INSULATE, D, ION
INT	INTERIOR
INTERM	INTERMEDIATE
JST	JOIST
JT	JOINT
k	KIP
L–	ANGLE
LB	POUND
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LP	LOW POINT
LT	LIGHT
LSL	LONG SLOTTED HOLES
LTWT	LIGHTWEIGHT
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MBS	METAL BUILDING SUPPLIER
MECH	MECHANICAL
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MASONRY JOINT
MO	MASONRY OPENING
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
O/O	OUT TO OUT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OPNG	OPENING
OPP	OPPOSITE
OSL	OUTSTANDING LEG
OVS	OVERSIZE HOLES
PAF	POWDER ACTUATED FASTENER
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
R/W	REINFORCED WITH
RAD	RADIUS
REF	REFERENCE
REINF	REINFORCE, MENT
REQ	REQUIRE, D, MENT
RET	RETURN
REV	REVISION
RP	RADIUS POINT
RT	RIGHT
RTU	ROOF TOP UNIT
S	SOUTH
SA	SLAB BOLSTER
SB	SLEEVE ANCHOR
SCHED	SCHEDULE
SECT	SECTION
SF–	STEP FOOTING
SIM	SIMILAR
SPEC	SPECIFICATIONS
SP	SPACING,ES
SQ	SQUARE
SSL	SHORT SLOTTED HOLES
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENERS
STL	STEEL
STRL	STRUCTURAL
SYMM	SYMMETRICAL
T	TIES
t	THICKNESS
T/	TOP OF
TB–	TIE BEAM
TC	TIE COLUMN
T&B	TOP AND BOTTOM
TEMP	TEMPORARY, TEMPERATURE
TERM	TERMINATE
TOL	TOLERANCE
TOF	TOP OF FOOTING
TRAN	TRANSVERSE
TS	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VERT	VERTICAL
W	WIDTH, WEST, WIDE FLANGE
W/	WITH
W/O	WITHOUT
WF–	WALL FOOTING
WP	WORKING POINT
WS	WATERSTOP
WT	WEIGHT
WWF	WELDED WIRE FABRIC

STANDARDS

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
NFPA	NATIONAL FOREST PRODUCTS ASSOCIATION
PCI	PRESTRESSED CONCRETE INSTITUTE
PTI	POST TENSIONING INSTITUTE
TPI	TRUSS PLATE INSTITUTE
UL	UNDERWRITER'S LABORATORY

SYMBOLS

&	AND
@	AT
℄	CENTERLINE
⌀	DIAMETER
◆	ELEVATION
#	NUMBER, POUNDS
C.J.	CONSTRUCTION JT.
S.J.	SAW CUT JOINT
ℙ	PLATE

STRUCTURAL DESIGN CRITERIA

D–1 CODE – 2006 INTERNATIONAL BUILDING CODE WITH ARKANSAS FIRE PREVENTION CODE, 2002 EDITION

D–2 DESIGN LIVE LOADS:

ROOF	20 PSF
COLLATERAL M/E	5 PSF
FLOOR	SLAB–ON–GRADE

SNOW LOAD: GROUND SNOW Pg = 10 PSF PLUS SNOW DRIFT REQUIREMENTS (SEE ROOF FRAMING PLAN)

D–3 WIND LOAD: 90 MPH, OPEN EXPOSURE 'C' OCCUPANCY CATEGORY II, I = 1.0

D–4 SEISMIC: SEISMIC ZONE: 1
S_s = 0.212
S_1 = 0.090
SITE CLASS C
S_{DS} = 0.170
S_{D1} = 0.102
DESIGN CATEGORY B
MOMENT FRAME, R = 3.5
Cs = 0.049 (MBS)

D–5 ALLOWABLE SOIL BEARING PRESSURE 2000 PSF (CONT) AND 2500 PSF (SPREAD FOOTINGS).

GENERAL NOTES

G–1 THE GENERAL CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS, PRIOR TO FABRICATION AND START OF CONSTRUCTION.

G–2 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER.

G–3 THE GENERAL CONTRACTOR SHALL COORDINATE STRUCTURAL AND OTHER DRAWINGS WHICH ARE PART OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS WHICH MAY AFFECT THE STRUCTURAL DRAWINGS.

G–4 ALL DETAILS AND SECTIONS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS SHOWN.

G–5 REPRODUCTION OF THE CONTRACT DOCUMENTS USED FOR THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS WILL NOT BE PERMITTED. REPRODUCED DRAWINGS WILL BE RETURNED UNCHECKED FOR RESUBMITTAL.

G–6 DO NOT SCALE DRAWINGS.

SHALLOW FOUNDATIONS

SF–1 SOIL TO BE STRIPPED, COMPACTED AND TESTED IN ACCORDANCE WITH RECOMMENDATIONS OF THE THE SOILS REPORT PREPARED BY GRUBBS, HOSKYN, BARTON & WYATT, INC DATED JULY 3, 2008, AND AMENDMENTS THAT FOLLOW.

SF–2 HORIZONTAL JOINTS IN FOOTINGS WILL NOT BE PERMITTED.

SF–3 EXCAVATING UNDER OR NEAR IN – PLACE FOOTINGS/FOUNDATIONS WHICH DISTURBS THE COMPACTED SOIL BENEATH THE FOOTINGS/ FOUNDATIONS WILL NOT BE PERMITTED.

SF–4 REINFORCING SHALL BE SUPPORTED ON PRECAST PADS. ANCHOR BOLTS AND DOWELS FOR COLUMNS AND FILLED CELLS SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE. USE TEMPLATES FOR SETTING ANCHOR BOLTS.

SF–5 FOUNDATIONS SHALL BEAR ON STIFF TO VERY STIFF CLAY OR COMPETENT WEATHERED SHALE OR LIMESTONE. CONTRACTOR SHALL UNDER CUT FOOTINGS AS REQUIRED TO REACH COMPETENT BEARING MATERIAL. PROVIDE SOLID FILL OR LEAN–FILL AS REQUIRED. OVERSIZE UNDER CUTS LATERALLY ONE HORIZONTAL TO TWO VERTICAL FROM FOOTING EDGE.

SF–6 FOUNDATIONS SHALL BEAR A MINIMUM OF 24" BELOW GRADE.

REINFORCED CONCRETE

RC–1 CONCRETE WORK SHALL COMPLY WITH SECTION 802 OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT 2003 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

RC–2 PROVIDE CLASS OF CONCRETE WITH THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH.

CLASS OF CONCRETE

S	3500 PSI (UNLESS NOTED OTHERWISE)
S	4000 PSI (SLAB GREATER THAN 4")
S (AE)	4000 PSI (EXTERIOR CONCRETE)
LEAN–FILL	1500 PSI

RC–3 ALL PUMPED CONCRETE WITH #57 AGGREGATE IS TO CONTAIN A HIGH RANGE WATER REDUCING AGENT. MINIMUM SIZE OF DISCHARGE TO BE 4" I.D. SEE SPECIFICATIONS FOR REQUIRED MIX DESIGN. A 2" I.D. DISCHARGE MAY BE USED WITH #89 AGGREGATE.

RC–4 ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318 (LATEST EDITION) AND ACI DETAILING MANUAL, ACI–315 LATEST EDITION.

RC–5 REINFORCING STEEL SHALL BE NEW DEFORMED BARS, FREE FROM RUST, SCALE AND OIL, CONFORMING TO ASTM A–615, GRADE 60, WITH MINIMUM YIELD STRENGTH = 60,000 PSI.

RC–6 PROVIDE THE FOLLOWING CONCRETE COVERAGE OVER REINFORCING:

FOOTINGS: BOTTOMS & UNFORMED EDGES 3" CLEAR

RC–7 NO REINFORCING BARS SHALL BE CUT TO ACCOMMODATE THE INSTALLATION OF ANCHORS, EMBEDS OR OTHER ITEMS.

RC–8 USE THE STRUCTURAL DRAWINGS (INCLUDING REVISIONS AND ADDENDA) IN CONJUNCTION WITH REVIEWED SHOP DRAWINGS FOR PLACEMENT OF REINFORCING.

RC–9 AT CHANGES IN DIRECTION OF WALL BEAMS AND STRIP FOOTINGS, PROVIDE CORNER BARS OF SAME SIZE AND QUANTITY (U.N.O.) AS HORIZONTAL STEEL. REFER TO TYPICAL DETAIL 2 ON SHEET 04S–501.

RC–10 ALL EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

MASONRY

M–1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI "BUILDING CODE AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ASCE 530.1–88) EXCEPT AS AMENDED BELOW.
REQUIREMENTS FOR MASONRY STRUCTURES" (ACI/ASCE 530–LATEST EDITION)

M–2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C–90 (28 DAY STRENGTH = 2000 P.S.I., fm' = 1500 P.S.I.) LAID IN RUNNING BOND WITH FULL MORTAR BEDMENT. ALL MASONRY SHALL BE NORMAL WEIGHT, TYPE 1, GRADE "N" U.N.O.

M–3 USE TYPE "M" OR "S" MORTAR WITH MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.

M–4 PROVIDE FULL MORTAR BEDDING AROUND ALL CELLS.

M–5 PROVIDE LAP SPLICES FOR REINFORCING AS SHOWN ON SCHEDULE ON SHEET 04S–601.

STRUCTURAL STEEL:

S–1 STRUCTURAL STEEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE AND AISC SPECIFICATIONS 530–05.

S–2 STRUCTURAL STEEL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS:

TYPE	ASTM	GRADE	F_y MIN. (ksi)
WIDE FLANGE SHAPES	A992		50
OTHER SHAPES AND PLATES	A36		36
PIPE	A53	B	35
HOLLOW STRUCTURAL SHAPES (HSS SHAPES)	A500	B	46
STRUCTURAL BOLTS	A325		92
THREADED (ANCHOR) RODS	F1554		36

S–3 STRUCTURAL STEEL CONNECTIONS:
a. ALL HIGH STRENGTH BOLTED CONNECTIONS SHALL USE TENSION CONTROL BOLTS.
b. ALL WELDING SHALL BE IN ACCORDANCE WITH LATEST AWS CODE. ALL WELDS SHALL USE E70XX ELECTRODES.
c. CONNECTION BOLTS SHOWN IN DRAWINGS ARE 3/4" DIAMETER A325 BEARING TYPE "N", UNLESS NOTED OTHERWISE.

S–4 NO HOLES OR LENGTH ADJUSTMENTS SHALL BE CUT IN STEEL BEAMS IN THE FIELD UNLESS APPROVED BY THE STRUCTURAL ENGINEER.

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Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12826
JOHN DAVID WESTERFIELD
10/13/11

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201 Presidential Drive
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(479) 770–5800
(479) 770–5801

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

DESIGNED BY	JDW
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S–001
REV	

METAL BUILDING SYSTEM DESCRIPTION SALT SPREADER STORAGE BUILDING

REFER TO SPECIFICATIONS AND NOTES ON THE DRAWINGS FOR ADDITIONAL INFORMATION.

PRIMARY FRAME TYPE:	RIGID FRAME
END-WALL FRAMING:	RIGID FRAME
EXTERIOR COLUMN TYPE:	TAPERED
INTERIOR COLUMNS:	PARALLEL FLANGE
ROOF RAFTER TYPE:	TAPERED
SECONDARY FRAME TYPE-ROOF:	MFG. STANDARD "C" OR "Z" COLD-FORMED PURLINS AND
SECONDARY FRAME TYPE-GIRTS:	EXTERIOR FRAMED (BYPASS)
SIDEWALL BRACING TYPE:	PORTAL FRAMES
COLUMN BASES:	PINNED
EXTERIOR WALL SYSTEM:	REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATION

METAL BUILDING SYSTEMS (MBS):

MB-1 REFER TO SPECIFICATION SECTION 133419 FOR METAL BUILDING DESIGN CRITERIA, FABRICATION AND CONSTRUCTION REQUIREMENTS.

MB-2 SEE THIS DRAWING FOR CODES, DESIGN CRITERIA AND OTHER NOTES THAT APPLY.

MB-3 THE BUILDING SHALL BE METAL BUILDING SYSTEMS OF THE SIZE AND CONFIGURATION SHOWN. THE BUILDINGS SHALL BE DESIGNED AND FABRICATED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

MB-4 A COMPLETE DESIGN ANALYSIS SHOWING ALL CALCULATIONS FOR THE RIGID FRAMES, GIRTS, PURLINS, PORTAL FRAMIES, X-BRACING FOR WIND AND SEISMIC LOADS AND A LAYOUT OF ANCHOR BOLTS AND OTHER EMBEDDED ITEMS SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE DETAILS OF ALL MAIN MEMBERS, TYPICAL CONNECTIONS (SHOWING BOLT HOLES AND WELDS), AND ERECTION DRAWINGS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS.

MB-5 COLUMN REACTIONS SHALL BE SUBMITTED FOR REVIEW OF FOUNDATION DESIGN WITHIN TWO WEEKS OF AWARD DATE OR AS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.

MB-6 THE BUILDING SHALL BE DESIGNED TO SUPPORT ALL MECHANICAL EQUIPMENT INCLUDING HEATERS, SPRINKLERS, EXHAUST SYSTEMS, AND ALL OTHER SUCH DEVICES. ADDITIONAL GIRTS OR PURLINS OR BEAMS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL EQUIPMENT.

MB-7 THE BUILDING SHALL BE DESIGNED AND MEMBERS PROVIDED FOR LATERAL SUPPORT OF MASONRY WALLS.

MB-8 THE BUILDING FRAME SHALL BE DESIGNED TO LIMIT THE LATERAL DEFLECTION TO H/200. "H" BEING THE EAVE HEIGHT, AT THE BUILDING EAVE FOR THE BASIC WIND SPEED CALLED (SEE "DESIGN CRITERIA" SECTION THIS SHEET) FOR SEISMIC, THE Cd X DESIGN LEVEL RESPONSE DISPLACEMENT SHALL NOT EXCEED H/50.

MB-9 CROSS BRACING SHALL BE USED TO TAKE LATERAL DIAPHRAGM LOADS UNLESS THE METAL PANELS ARE THROUGH FASTENED TO THEIR SUPPORTS. LOAD TESTS ON METAL PANELS MUST BE SUBMITTED WHERE THESE ARE USED AS A DIAPHRAGM. METAL PANELS USED, AS A DIAPHRAGM MUST BE A MINIMUM OF 22 GAGE.

MB-10 ALL VERTICAL BRACING TO BE ANCHORED TO COLUMN WEBS.

MB-11 ALL METAL BUILDING FRAMES AND BEAMS SHOWN ON ROOF FRAMING PLANS ARE DIAGRAMMATIC FOR INTENT ONLY. ALL FINAL LOCATIONS, SIZES, ETC. FOR ALL FLOOR AND ROOF MEMBERS SHALL BE FROM METAL BUILDING SYSTEMS SUPPLIER (AND/OR JOIST AND BEAM MANUFACTURER) BEARING THE SEAL, SIGNATURE AND DATE OF THE REGISTERED ENGINEER IN THE STATE OF ARKANSAS. METAL BUILDING SYSTEMS SUPPLIER IS RESPONSIBLE FOR FINAL TRUSS LAYOUT AND DESIGN OF ALL ROOF FRAMES.

SOIL TERMITE TREATMENT REQUIREMENTS

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR RE-INSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL.
2. CONDENSATE AND ROOF DOWNSPOUTS SHALL DISCHARGE AT LEAST 1'-0" AWAY FROM BUILDING SIDE WALLS.
3. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE ARKANSAS STATE PLANT BOARD.
4. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL.
5. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN 15'-0" OF ANY BUILDING OR PROPOSED BUILDING.

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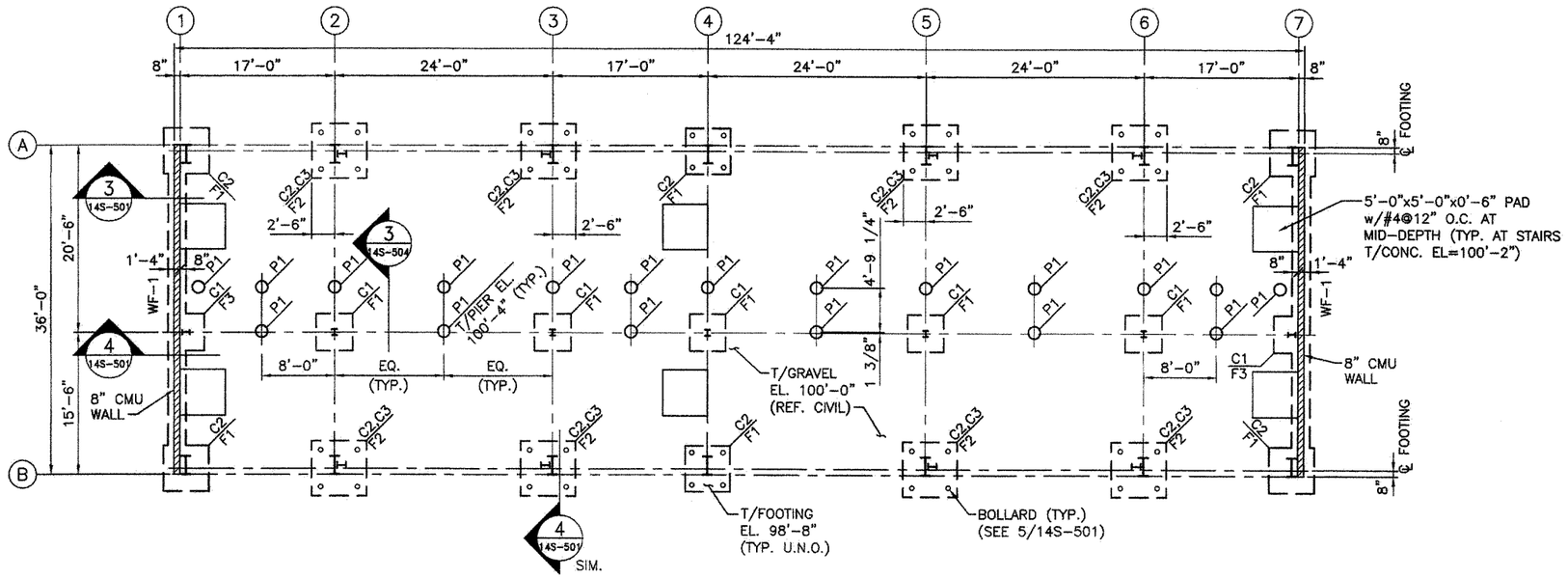
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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
GENERAL STRUCTURAL NOTES

DESIGNED BY	JDW
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S-002
REV	



1 14S-101 **FOUNDATION PLAN**
SCALE: 1/8" = 1'-0"

NORTH

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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
FOUNDATION PLAN

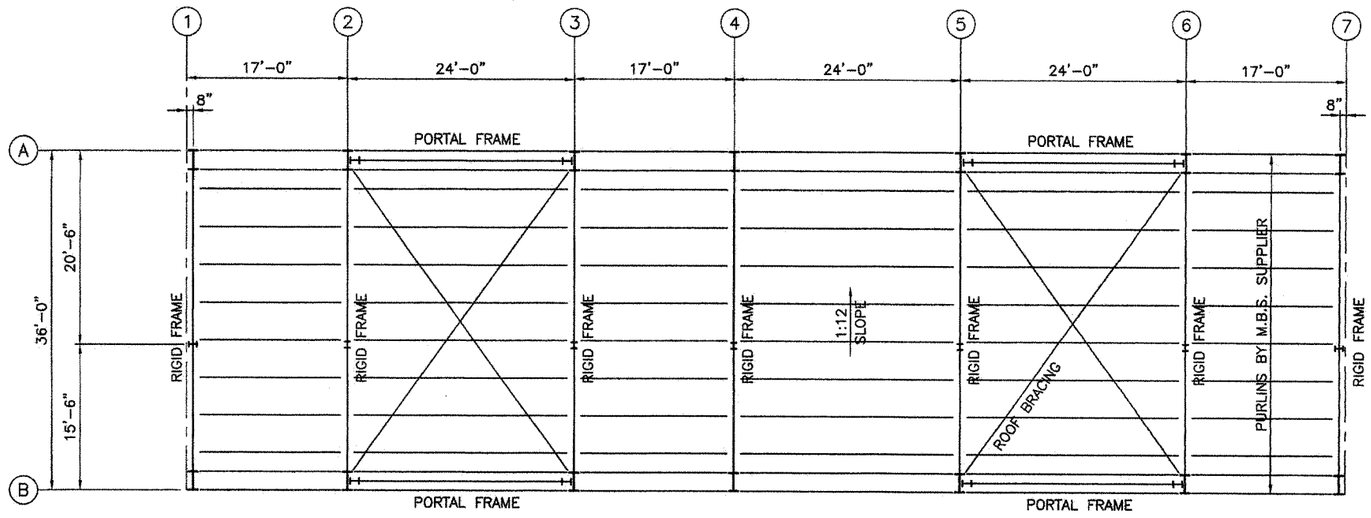
DESIGNED BY	JDW
DRAWN BY	ELD
CHECKED BY	
APPROVED BY	

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S-101
REV	

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REGISTERED PROFESSIONAL ENGINEER
No. 12626
DAVID WESTERHEIDE
10/13/11



1 (14S-102) ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

NORTH

NOTES:
1. REFER TO SHEET 14S-103 FOR EQUIPMENT AND CRANE LOADS

METAL BUILDING SYSTEMS SUPPLIER SHALL DESIGN THE ROOF FRAMING TO SUPPORT THE INDICATED UNIFORM COLLATERAL LOADS AND THE WEIGHT OF THE MECHANICAL/ELECTRICAL UNITS SUSPENDED FROM THE ROOF FRAMING.

METAL BUILDING SYSTEMS SUPPLIER SHALL COORDINATE WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING THE SIZE AND WEIGHTS OF THE ROOF SUPPORTED MECHANICAL/ELECTRICAL UNITS AND THE SIZE, LOCATION AND WEIGHTS OF ANY EXTERIOR WALL MOUNTED EQUIPMENT OR LOUVERS THAT PENETRATE THE METAL WALL PANELS PROVIDED BY THE METAL BUILDING SUPPLIER.

MECHANICAL AND ELECTRICAL CONTRACTOR SHOULD COORDINATE THE APPLICABLE HANGER SYSTEMS AND DETAILS WITH METAL BUILDING SYSTEMS MANUFACTURER AND THE TYPICAL DETAILS SHOWN ON THE ATTACHED SHEETS.

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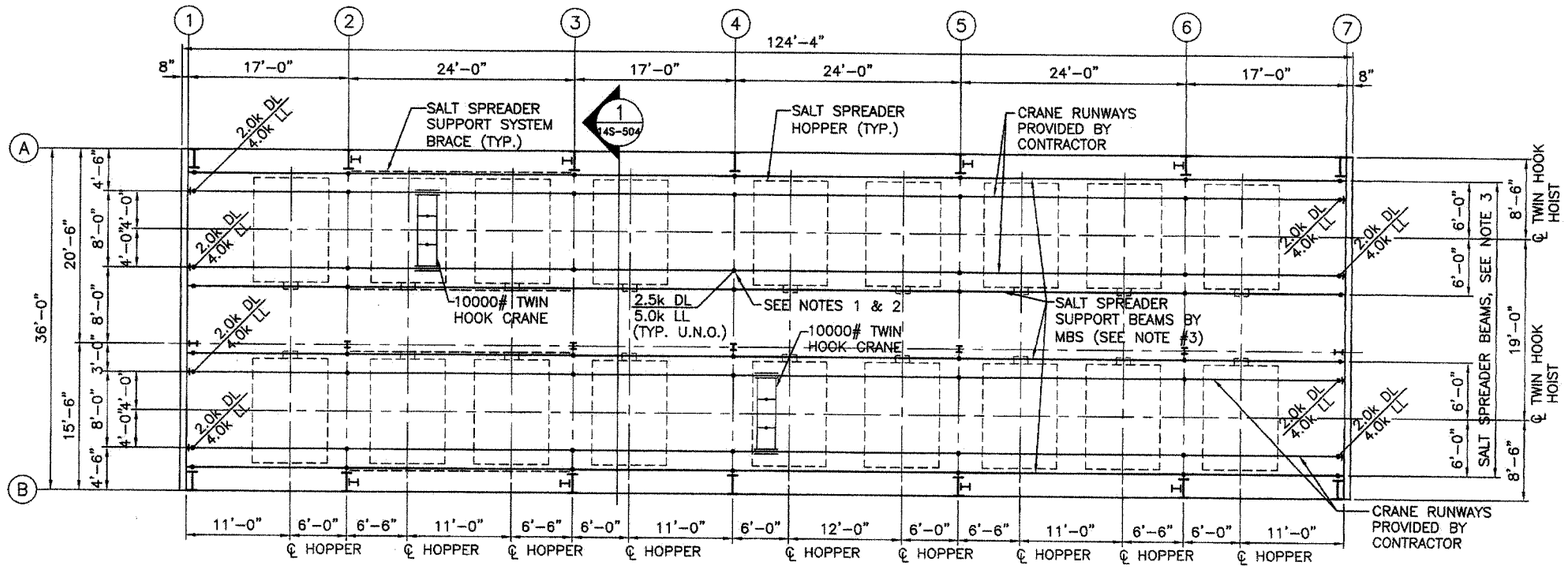
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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
ROOF FRAMING PLAN

DESIGNED BY	JDW
DRAWN BY	ELD
CHECKED BY	
APPROVED BY	

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
14S-102	
278 OF 289	

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1 / 14S-103 CRANE/HOPPER SUPPORT PLAN

SCALE: 1/8" = 1'-0"

NORTH

PLAN NOTES:

1. ● INDICATES LOCATION OF HANGER FROM RIGID FRAME GIRDER. LOADS INDICATED ARE SERVICE LOAD LEVEL. SUBMIT CALCULATIONS SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
2. VERIFY LOADS WITH CRANE SUPPLIER.
3. PROVIDE SALT SPREADER SUPPORT FRAMING, INCLUDING BRACING AND SUPPORT LUGS. SUBMIT CALCULATIONS SIGNED AND SEALED BY A REGISTERED ENGINEER. REFER TO DETAILS ON SHEET 14S-504 FOR HOPPER LOADS.

BASIS OF DESIGN FOR SUPPORT SYSTEMS/CRANE:

THE PURPOSE OF THE BRIDGE CRANES/HOISTS IS TO LIFT THE SALT SPREADER HOPPERS FROM THE BED OF THE AHTD TRUCKS. WHEN NOT IN USE, THE HOPPERS WILL BE SUSPENDED FROM THE SALT SPREADER SUPPORT FRAME SYSTEM. BOTH CRANES MAY BE IN OPERATION AT THE SAME TIME. HOWEVER, THERE WILL BE NO LIVE LOAD ON EITHER CRANE WHEN ALL OF THE HOPPERS ARE IN PLACE.

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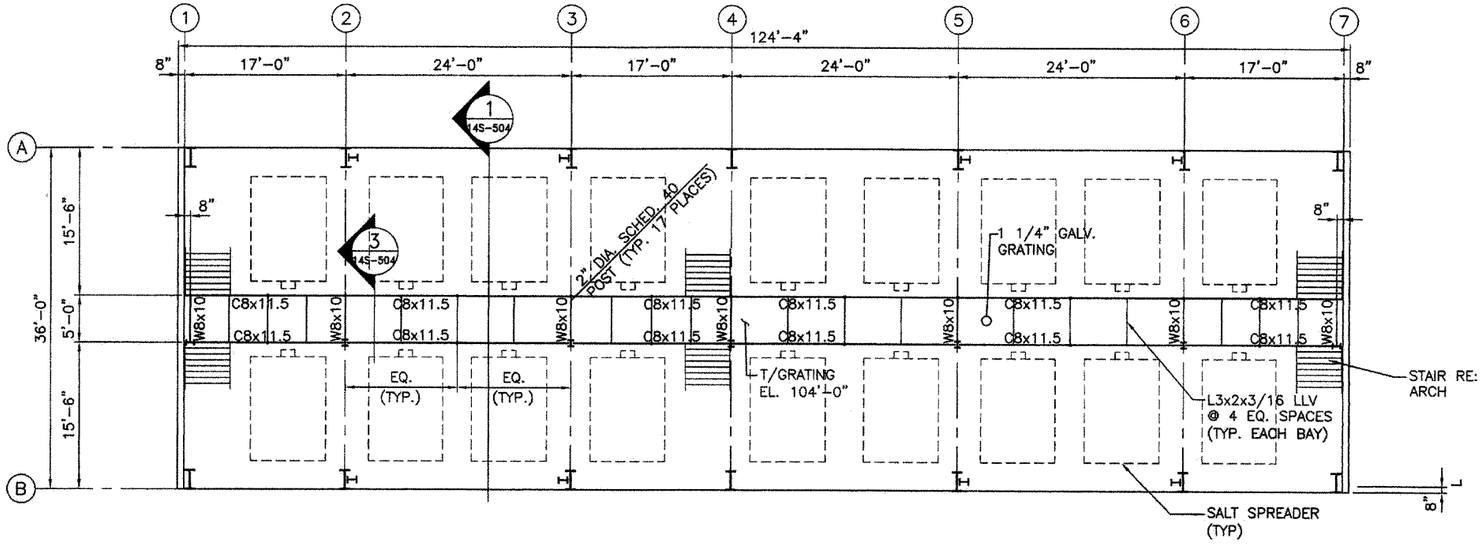
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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
CRANE AND HOPPER SUPPORT PLAN

DESIGNED BY	JDW
DRAWN BY	ELD
CHECKED BY	
APPROVED BY	

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S-103
REV	
	279 OF 289



1 14S-104 **CATWALK PLAN** SCALE: 1/8" = 1'-0"

NORTH

NOTES:
1. GRATING TO BE 1 1/4" DEEP SERRATED GALV. GRATING SEE SPECS FOR ADDITIONAL INFORMATION.
2. ALL STEEL FRAMING FOR CATWALK TO BE HOT-DIP GALVANIZED.

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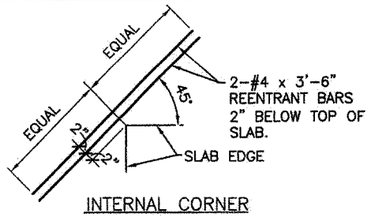
DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
CATWALK FRAMING PLAN

DESIGNED BY	JDW
DRAWN BY	ELD
CHECKED BY	
APPROVED BY	

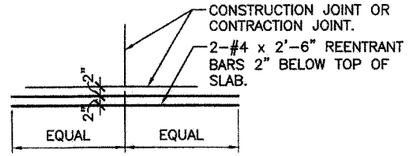
DATE	10/13/11
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SHEET	14S-104
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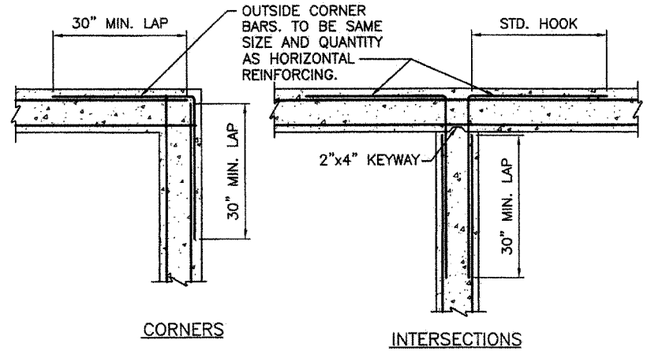


INTERNAL CORNER



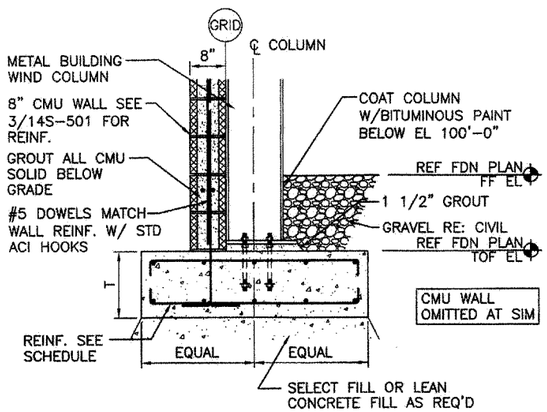
DISCONTINUOUS JOINT INTERSECTION

1 TYPICAL REENTRANT DETAILS
14S–501 SCALE: 3/4"=1'–0"

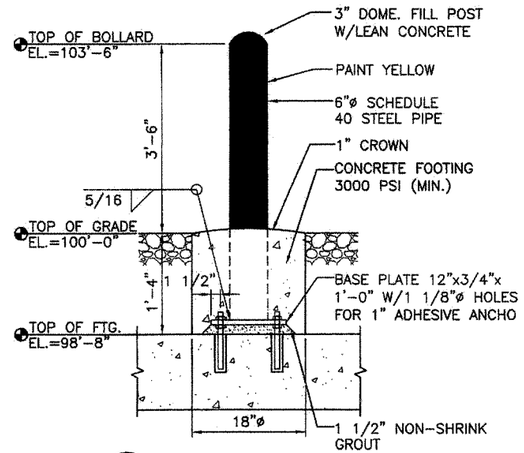


CORNERS INTERSECTIONS

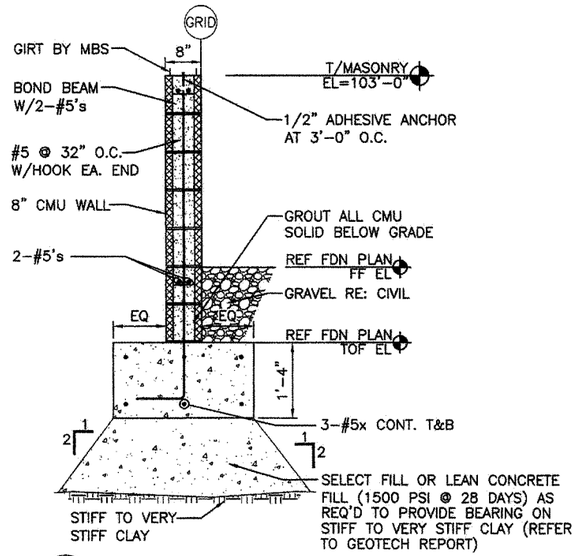
2 TYPICAL CORNER DETAILS
14S–501 SCALE: 3/4"=1'–0"



4 TYP. FTG. AT COLUMN
14S–501 SCALE: 3/4" = 1'–0"



5 TYPICAL BOLLARD
14S–501 SCALE: 1" = 1'–0"



3 TYP. EXTERIOR FOOTING
14S–501 SCALE: 3/4" = 1'–0"

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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
TYPICAL FOUNDATION DETAILS

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ARKANSAS

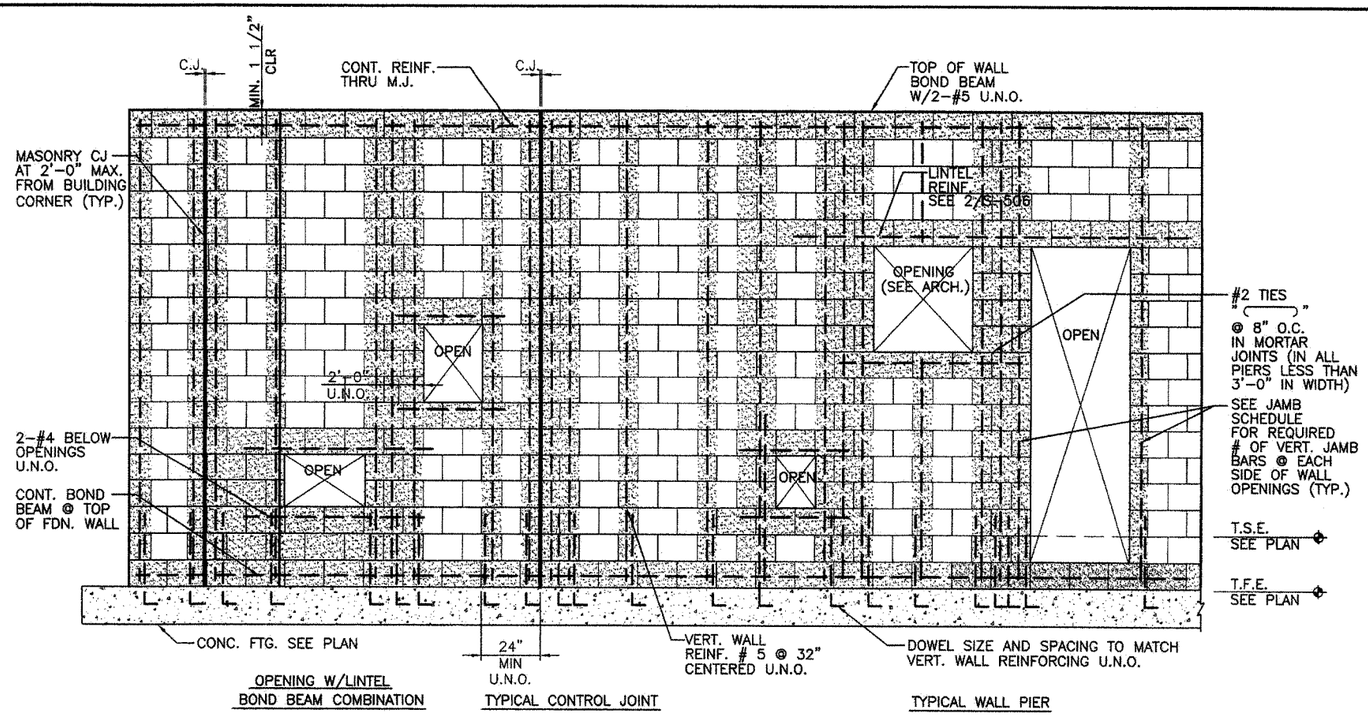
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERFIELD
10/13/11

DESIGNED BY	JDW
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
14S–501	
281 OF 289	

GENERAL MASONRY NOTES:

1. UNITS SHALL UTILIZE FACE SHELL MORTAR BEDDING U.N.O.
2. MASONRY WALLS SHALL HAVE CONTROL JOINTS AT A MAXIMUM OF 30'–0" U.N.O. SEE ARCH. DRAWINGS FOR CONTROL JOINT LOCATIONS IN CMU WALLS. SEE 4/04S–505 FOR CONTROL JOINT DETAIL.
3. CONSOLIDATE GROUT POURS OVER 12' BY MECHANICAL VIBRATION. RECONSOLIDATE GROUT IN MASONRY CELLS BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
4. FOR HIGH LIFT GROUTING (OVER 5'–0") CLEANOUTS ARE REQUIRED AT EVERY GROUTED CORE AT THE BASE OF EACH LIFT. IF NEXT GROUT POUR WILL BE MORE THAN (1) HOUR. TERMINATE GROUT POUR 1.5" BELOW TOP OF MASONRY.
5. HIGH LIFT GROUT SHALL NOT EXCEED 10'–6" IN HEIGHT FOR #4 OR #5 VERT. BARS 12'–6" IN HEIGHT FOR #6 VERT. BARS.
6. THE USE OF SELF–CONSOLIDATING GROUT (SCG) WILL REQUIRE FULL INSPECTION AND ACCEPTANCE OF THE GROUT MIX DELIVERED TO THE SITE BY THE SUPPLIERS REPRESENTATIVE AND THE INSPECTION AGENCY.
7. SCG ON–SITE INSPECTION SHALL VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DETERMINED BY ASTM C 1611.
8. PROVIDE STANDARD 90 DEGREE HOOK DOWELS BETWEEN FOUNDATIONS AND WALLS EQUAL TO THE SIZE AND SPACING OF THE VERTICAL REINFORCING U.N.O.
9. PROVIDE HORIZONTAL BOND BEAM W/2–#5's AT MID–HEIGHT OF CMU WALL (TYP.)
10. PROVIDE 9 GA. LADDER TYPE HORIZONTAL AT JOINT REINFORCEMENT EVERY COURSE IN STACK BOND WALLS AND EVERY OTHER COURSE IN RUNNING BOND WALLS U.N.O. PROVIDE A 6 INCH SPLICE LENGTH FOR HORIZONTAL REINF.
11. ALL SPLICES WITHIN WALL SHALL BE IN ACCORDANCE WITH THE LAP SPLICE SCHEDULE (SEE 5/04S–601) U.N.O. SEE SECTIONS AND DETAILS FOR DOWELS AND SPLICE AT FOUNDATIONS AND FLOOR LEVELS.
12. PROVIDE CONTINUOUS BOND BEAM REINFORCEMENT WITH 2–#4 BARS OR AS NOTED.
13. ALL NON–BEARING MASONRY WALLS SHALL BE PROVIDED WITH VERTICAL SLIP CONNECTIONS AT THE TOP OF THE WALL U.N.O.
14. REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS.
15. TOLERANCES FOR THE PLACEMENT OF REINFORCEMENT IN WALLS AND FLEXURAL ELEMENTS SHALL BE PLUS OR MINUS 1/2" FOR d EQUAL TO 8" OR LESS, PLUS OR MINUS 1" FOR d EQUAL TO 24" OR LESS BUT GREATER THAN 8", AND PLUS OR MINUS 1 1/4" FOR d GREATER THAN 24". NOTE: d = DISTANCE FROM CENTERLINE OF REINFORCING STEEL TO THE OPPOSITE FACE OF MASONRY.
16. SEE 04S–001 FOR INFORMATION ON CMU MATERIAL REQUIREMENTS.
17. ALL MORTAR PROTRUSIONS INTO CELLS TO BE GROUTED ARE REQUIRED TO BE REMOVED BY MASON AND ALL DEBRIS MUST BE VACUUMED FROM CORE.
18. REINFORCING IS CONTINUOUS FROM TOP OF FOOTING TO TOP OF WALL.

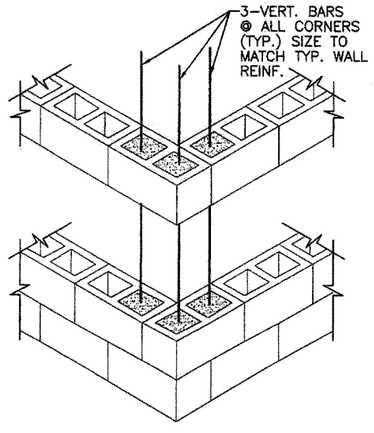


1 (14S–502) TYPICAL MASONRY WALL REINFORCING DETAIL
SCALE: N.T.S.

MASONRY JAMB SCHEDULE		
OPENING WIDTH	# CELLS	BARS EACH CELL
3'–4" OR LESS	1	1–#5 CENTERED
OVER 3'–4" TO 10'–0"	2	1–#5 CENTERED
OVER 10'–0"	3	1–#5 CENTERED

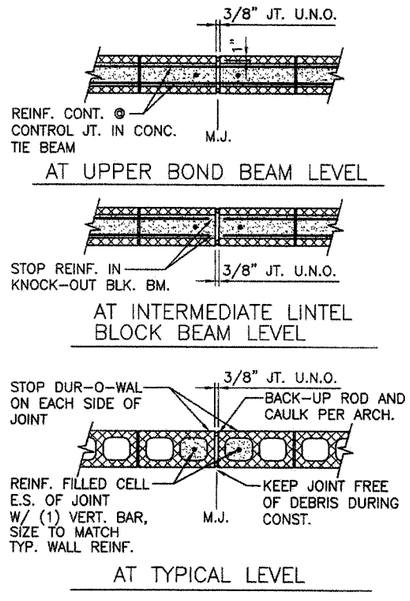
NOTES:
1. THE INDICATED REINFORCEMENT IS CONTINUOUS FULL HEIGHT OF WALL.
2. PROVIDE ONE ADDITIONAL CELL WITH 1–#5 CENTERED BENEATH BEARING OF STEEL LINTELS.

2 (14S–502) MASONRY JAMB SCHEDULE
SCALE: N.T.S.



8" CMU to 8" CMU

3 (14S–502) TYP. MASONRY CORNER DETAIL
SCALE: N.T.S.



4 (14S–502) TYP. WALL CONTROL JOINT DETAILS
SCALE: N.T.S.

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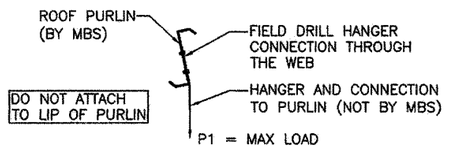
CERTIFICATE OF AUTHORIZATION
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No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 12626
JOHN DAVID WESTERHEIDE
10/13/11

DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
TYPICAL MASONRY DETAILS

DESIGNED BY	JDW
DRAWN BY	MLS
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S–502
REV	

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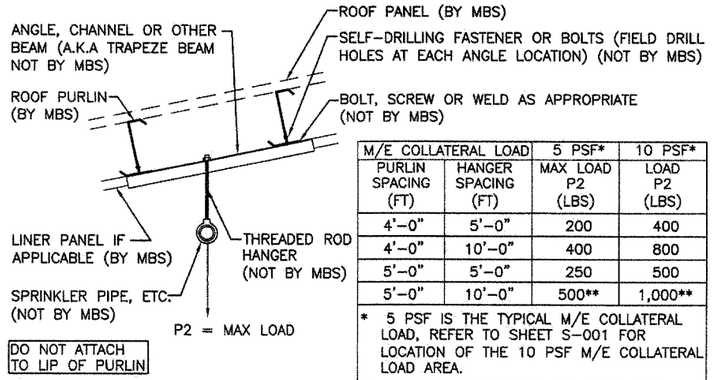


M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	LOAD P1 (LBS)	LOAD P1 (LBS)
4'-0"	5'-0"	100	200
4'-0"	10'-0"	200	400
5'-0"	5'-0"	125	250
5'-0"	10'-0"	250**	500**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S-001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.

** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

1 (14S-503) RECOMMENDED METHOD FOR HANGING LOADS ON A SINGLE PURLIN
SCALE: 1"=1'-0"



M/E COLLATERAL LOAD		5 PSF*	10 PSF*
PURLIN SPACING (FT)	HANGER SPACING (FT)	MAX LOAD P2 (LBS)	LOAD P2 (LBS)
4'-0"	5'-0"	200	400
4'-0"	10'-0"	400	800
5'-0"	5'-0"	250	500
5'-0"	10'-0"	500**	1,000**

* 5 PSF IS THE TYPICAL M/E COLLATERAL LOAD, REFER TO SHEET S-001 FOR LOCATION OF THE 10 PSF M/E COLLATERAL LOAD AREA.

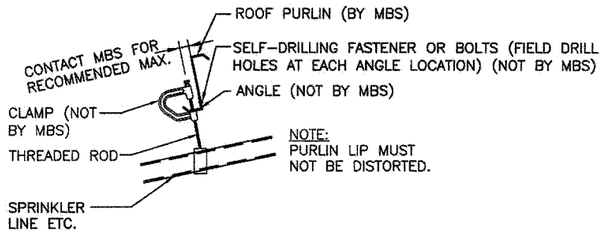
** ANY SINGLE HANGER LOAD SHALL NOT EXCEED THIS VALUE.

2 (14S-503) SPREADER BEAM (A.K.A. TRAPEZE BEAM) DETAIL
SCALE: 1"=1'-0"

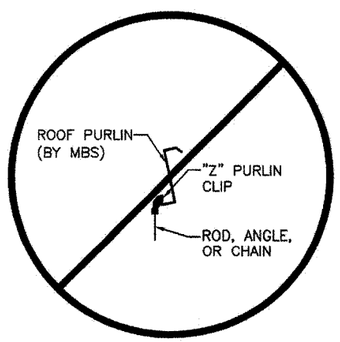
NOTE:
* FOR LOADS GREATER THAN 40 POUNDS, VERIFY ADEQUACY OF ROOF FRAMING WITH M.B.S.

GENERAL HANGING LOAD NOTES FOR METAL BUILDINGS:

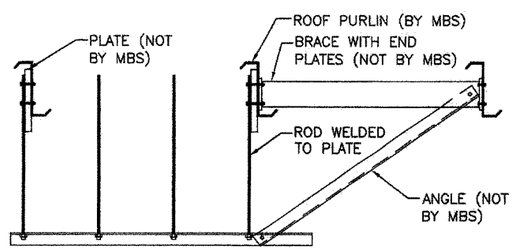
1. THE DETAILS DEPICTED HEREIN ARE TYPICAL INDUSTRY STANDARD DETAILS FOR HANGING LOADS (DUCTS, PIPING, CONDUITS, ETC.) FROM THE COLD-FORMED PURLINS OF METAL BUILDING ROOFS.
2. THE ACTUAL DETAILS TO BE USED SHALL BE DETERMINED BY THE MECHANICAL, ELECTRICAL, FIRE PROTECTION, ETC. CONTRACTOR AND REVIEWED BY THE RESPECTIVE METAL BUILDING CONTRACTOR, INCLUDING THE VALUES OF THE HANGER LOADS.
3. THE HANGER RODS, BRACES, STRUTS BETWEEN THE PURLINS TO SUPPORT THE HANGER AND/OR SWAY BRACES SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR (NOT THE METAL BUILDING CONTRACTOR UNLESS PREVIOUS ARRANGEMENTS HAVE BEEN MADE).
4. THE RESPECTIVE CONTRACTOR SHALL CONSULT THE BUILDING MANUFACTURER REGARDING THEIR SPECIFIC GUIDELINES FOR HANGING LOADS ON PURLINS.
5. HANGING LOADS SHOULD NOT BE APPLIED TO THE PURLIN LIP. WHERE PERMISSIBLE, THE PREFERRED PRACTICE FOR HANGING LOADS IS TO ATTACH TO THE PURLIN WEB USING A BOLT AND NUT, OR SELF-DRILLING SCREWS.
6. HANGING UNIFORM LOADS SUCH AS SPRINKLER MAINS OR HVAC EQUIPMENT SHOULD BE DISTRIBUTED OVER SEVERAL PURLINS AND SHOULD NEVER EXCEED THE COLLATERAL LOAD ALLOWANCE FOR THE ROOF SYSTEM. FOR UNIFORM LOADS THAT RUN PARALLEL TO THE PURLINS, IT MAY BE NECESSARY TO USE TRANSVERSE CHANNELS (A.K.A. TRAPEZE BEAMS) ATTACHED TO THE WEBS OR FLANGES OF TWO OR MORE PURLINS TO SPREAD THE LOAD BETWEEN TWO OR MORE PURLINS. IN SUCH CASES, CONTACT THE BUILDING MANUFACTURER OR A LOCAL PROFESSIONAL ENGINEER PRIOR TO ATTEMPTING TO HANG LOADS FROM THE PURLINS.
7. IN SOME CASES, IT MAY BE ALLOWABLE TO HANG LIGHTWEIGHT LOADS FROM HANGER RODS ATTACHED THROUGH A SMALL HOLE DRILLED IN THE BOTTOM PURLIN FLANGE WITH A THREADED ROD AND NUT. CONTACT THE MANUFACTURER TO SEE IF THEY PERMIT THIS AND FOR THEIR SPECIFIC RECOMMENDATION REGARDING THE HOLE SIZE AND MAXIMUM ACCEPTABLE DISTANCE FROM THE APPLIED LOAD TO THE PURLIN WEB.
8. MULTIPLE HANGERS MAY BE CONNECTED TO THE SAME PURLIN WITH PRIOR APPROVAL FROM THE BUILDING MANUFACTURER. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.
9. IN SOME CASES, LIGHTWEIGHT LOADS SUCH AS FROM SUSPENDED CEILING TILE HANGER WIRES, MAY BE LOOPED OVER THE TOP OF THE ROOF PURLINS. CONTACT THE MANUFACTURER FOR THEIR SPECIFIC RECOMMENDATIONS.



3 (14S-503) CLAMP HANGER DETAIL
VERIFY W/MANUF. PRIOR TO USE
SCALE: 1"=1'-0"



4 (14S-503) INCORRECT METHOD FOR HANGING LOADS ON PURLINS
SCALE: 1"=1'-0"



5 (14S-503) SEISMIC OR SWAY BRACE DETAIL
SCALE: 1"=1'-0"

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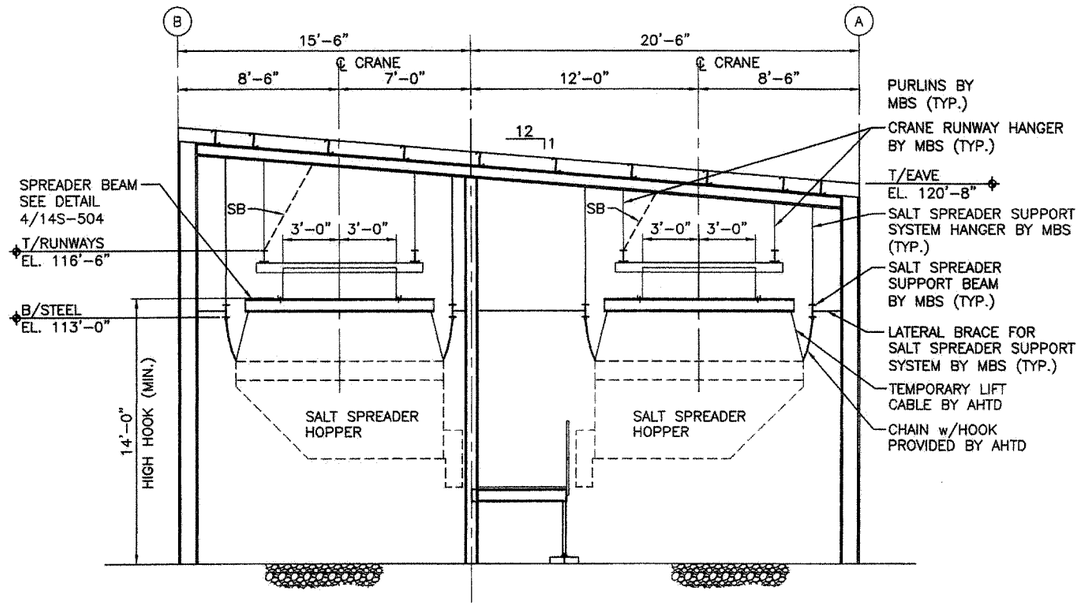
DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
TYPICAL HANGING LOAD DETAILS AT PURLINS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S-503
REV	

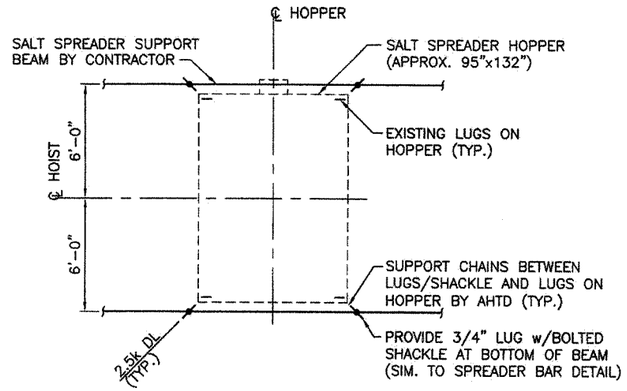
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CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 12626 JOHN DAVID WESTERFIELD
10/13/11

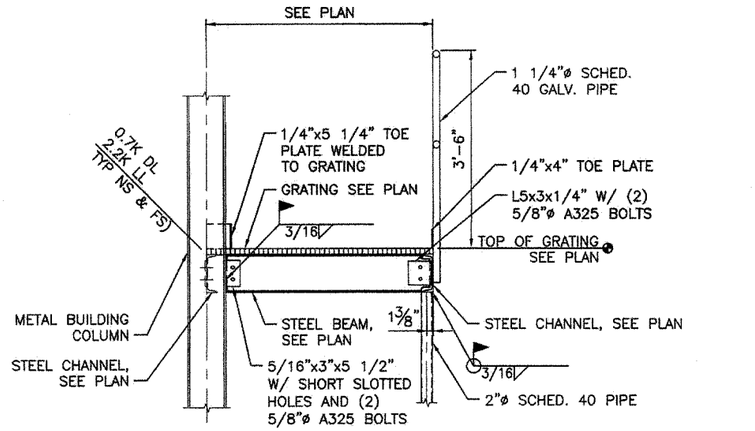


1 14S-504 **SECTION**
SCALE: 1/4"=1'-0"

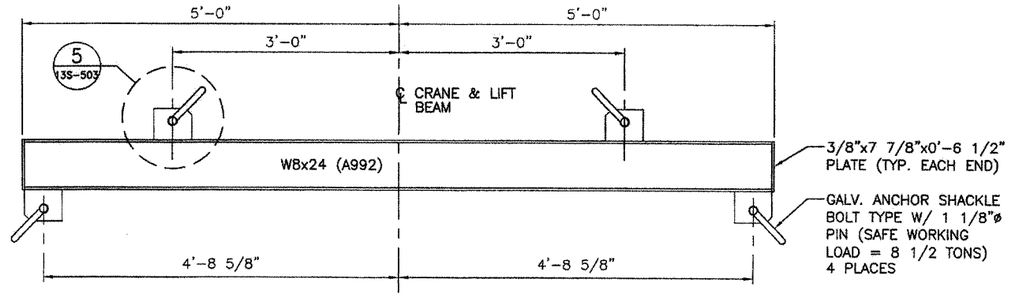


2 14S-504 **SALT SPREADER SUPPORT SYSTEM LOAD DIAPHRAGM (TYP. EACH HOPPER)**
SCALE: 1/4"=1'-0"

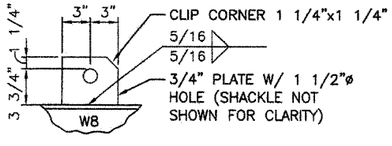
NOTES:
1. DESIGN SUPPORT BEAMS FOR LOAD INDICATED. ASSUME 10% LATERAL AND LONGITUDINAL COMPONENT TO ACCOUNT FOR SLOPE OF CHAINS.



3 14S-504 **SECTION**
SCALE: 3/4"=1'-0"



4 14S-504 **DETAIL @ LIFT BEAM**
SCALE: 1"=1'-0"
NOTE: HOT DIP GLAVANIZED AFTER FABRICATION



5 14S-504 **LUG DETAIL**
SCALE: 1 1/2"=1'-0"

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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
FRAMING SECTIONS AND DETAILS

DESIGNED BY	JDW
DRAWN BY	JJG
CHECKED BY	TBC
APPROVED BY	JSR

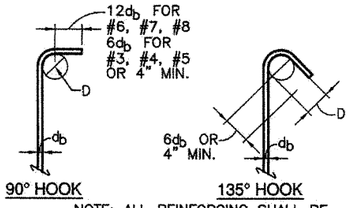
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S-504
REV	

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CERTIFICATE OF AUTHORIZATION
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STATE OF ARKANSAS
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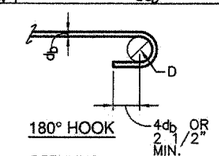
BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$4d_b$
#6 THRU #8	$6d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

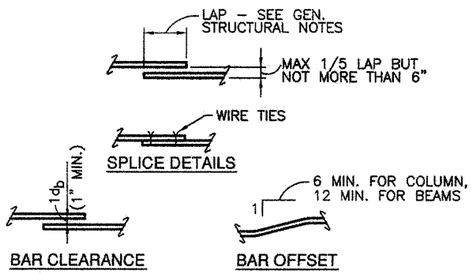
STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCING

BAR SIZE	BEND DIA. "D" (INSIDE OF BAR)
#3 THRU #5	$6d_b$
#6, #7, #8,	$8d_b$



NOTE: ALL REINFORCING SHALL BE BENT COLD – TYPICAL

STANDARD HOOKS FOR PRIMARY REINFORCING



1 (14S-601) TYPICAL BAR BEND & LAP SPLICE DETAILS
SCALE: NO SCALE

PRELIMINARY FOOTING SCHEDULE

MK	SIZE WIDTH x LENGTH x THICKNESS	REINF. EA. WAY @ BOT. U.N.O.	TYP. DETAIL	REMARKS
WF–1	2'–0" x CONT x 1'–4"	3–#5 LONG. T&B	3/14S–501	CONTINUE LONG. BARS THRU COL FTG
F1	5'–0" x 5'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/14S–501	90 DEGREE HOOK EACH END
F2	6'–0" x 6'–0" x 1'–4"	#5 @ 12" O.C. T&B EACH WAY	4/14S–501	90 DEGREE HOOK EACH END
F3	4'–0" x 4'–0" x 1'–2"	#4 @ 12" O.C. T&B EACH WAY	4/14S–501	90 DEGREE HOOK EACH END
P1	1'–6"ø X 3'–0" LG	(4) #6'S WITH (5) #3 TIES	3/14S–504	

FOOTING NOTES:

1. FOUNDATION SIZES ARE PRELIMINARY. DO NOT FABRICATE OR CONSTRUCT COLUMN FOOTINGS UNTIL FOOTINGS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. ALLOWABLE BEARING PRESSURE FOR SHALLOW SPREAD FOOTINGS IS 2000 PSF FOR CONTINUOUS FOOTINGS AND 2500 PSF FOR INDIVIDUAL FOOTINGS.
3. EXTERIOR FOOTINGS SHALL BEAR AT A MINIMUM DEPTH OF 24 INCHES BELOW LOWEST ADJACENT GRADE.
4. CONNECTION OF METAL BUILDING COLUMNS TO FOUNDATION IS TO BE PINNED.
5. REINFORCING TO CONFORM TO ASTM A615, GRADE 60.

2 (14S-601) FOOTING SCHEDULE
SCALE: NO SCALE

LAP SPLICE SCHEDULE

BAR SIZE "D"	POSITION	CONCRETE f'c (PSI) 3000	CONCRETE f'c (PSI) 4000	MASONRY fm'=1500
#3	ALL	17"	15"	–
#4	ALL	22"	19"	(1) BAR PER CELL = 24" (2) BAR PER CELL = 36"
#5	ALL	28"	24"	(1) BAR PER CELL = 30" (2) BAR PER CELL = 54"
#6	ALL	33"	29"	(1) BAR PER CELL = 52" (2) BAR PER CELL = 108"
#7	ALL	49"	42"	–
#8	ALL	55"	48"	–

NOTES (FOR CONCRETE REBAR LAP SPLICE ONLY):

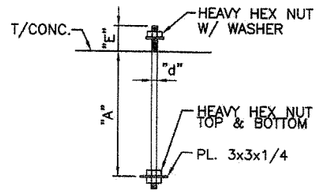
1. "d" DENOTES BAR DIAMETER.
2. VALUES APPLY TO ALL BARS WITH MIN. CONCRETE COVER OF 2d AND MIN. CENTER–TO–CENTER SPACING OF 5d.
3. FOR BARS WITH COVER BETWEEN d AND 2d, MULTIPLY VALUES BY 1.67.
4. FOR BARS WITH CENTER–TO–CENTER SPACING BETWEEN 3d AND 5d, MULTIPLY VALUES BY 1.67.
5. FOR BARS NOT MEETING ABOVE REQUIREMENTS, MULTIPLY BY 2.5.

5 (14S-601) LAP SPLICE SCHEDULE
SCALE: NO SCALE

COLUMN DESCRIPTIONS

MK	DESCRIPTIONS
C1	METAL BUILDING INTERIOR FRAME COLUMN
C2	METAL BUILDING EXTERIOR COLUMN
C3	METAL BUILDING PORTAL FRAME

4 (14S-601) COLUMN SCHEDULE
SCALE: NO SCALE



PRELIMINARY ANCHOR ROD SCHEDULE

TYPE	QTY. & DIA. "d"	"A"	PROJ. "E"	LOCATION
AB–1	(4) 1"ø	1'–2"	5"	BUILDING COLUMN

NOTES:

1. DO NOT FABRICATE ANCHOR RODS UNTIL THE RODS HAVE BEEN APPROVED BY ENGINEER FOLLOWING THE REVIEW OF THE METAL BUILDING SYSTEM SHOP DRAWINGS AND CALCULATIONS SUBMITTAL.
2. CONTRACTOR TO COORDINATE INSTALLATION OF ANCHOR RODS WITH METAL BUILDING SYSTEM DRAWINGS.
3. ANCHOR RODS SHALL MEET THE REQUIREMENTS OF ASTM F1554 (GRADE 36 KSI) UNLESS NOTED OTHERWISE.
4. ANCHOR RODS SHALL BE FURNISHED WITH HEAVY HEX NUTS AND CUT WASHERS OF SPECIFICATIONS COMPATIBLE WITH THOSE OF THE THREADED UNLESS OTHERWISE NOTED.
5. PRIOR TO SETTING ANCHOR RODS, THEY SHALL BE CLEANED FREE OF ANY OILS OR OTHER MATERIALS. ANCHOR BOLTS SHALL REQUIRE SPECIAL INSPECTION.
6. A POSITIVE MEANS SHALL BE USED TO KEEP CONCRETE FROM CONTACTING WITH THE PROJECTING PART OF THE RODS.

3 (14S-601) ANCHOR ROD SCHEDULE
SCALE: NO SCALE

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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
SCHEDULES

CERTIFICATE OF AUTHORIZATION
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STATE OF ARKANSAS
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No. 12626
JOHN DAVID WESTERHEIDE

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DRAWN BY	JJG
CHECKED BY	JDW
APPROVED BY	JSR
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14S-601
REV	

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ELECTRICAL SYMBOLS LEGEND

CEILING	WALL	
# A	# A	FLUORESCENT FIXTURE, A = FIXTURE TYPE, # = CKT. # TYPICAL
A NL	A	FLUORESCENT FIXTURE, EQUIPPED WITH BATTERY PACK.
A	A	HID, COMPACT FLUORESCENT OR INCANDESCENT LIGHT FIXTURE
A	A	EXIT LIGHT, DARKENED SECTION(S) DENOTE FACE(S). USE DIRECTIONAL ARROWS WHERE INDICATED.
A	A	FLUORESCENT STRIP FIXTURE
	A	EMERGENCY FIXTURE
	A	REMOTE EMERGENCY FIXTURE

NOTE: REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION

———	CONDUIT CONCEALED
———○	CONDUIT TURNING UP
———⊃	CONDUIT TURNING DOWN
— — —	CONDUIT BELOW GRADE
J	JUNCTION BOX
J	JUNCTION BOX WALL MOUNTED
	CABLE TRAY
	HOMERUN TO PANEL BOARD OR DEVICE. TICK MARKS DENOTE NUMBERS OF CIRCUITS. HOMERUN WITH NO TICK MARKS SHALL BE A SINGLE CIRCUIT,
T	TRANSFORMER
HH	HANDHOLE
	GROUND
M	METER
	SWITCHBOARD, DISTRIBUTION PANEL
	PANEL BOARD
	HEAVY DUTY SAFETY SWITCH, MOUNT WITH L OF HANDLE AT 60" A.F.F. REFER TO EQUIPMENT SCHEDULE FOR AMPACITY, NEMA CONFIGURATION, FUSING, ECT.
	SINGLE RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
	DUPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE
WP	DUPLEX GFI RECEPTACLE W/ WEATHERPROOF "IN-USE" TYPE COVER MOUNTED @ 18" A.F.F.
GFI	COMMERCIAL GRADE GFI RECEPTACLE MOUNTED @ 18" A.F.F.
	QUADPLEX RECEPTACLE OUTLET, MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.
	CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, MOUNTED RECESSED WHEN INSTALLED IN ACCESSIBLE CEILING PANEL. SECURE TO STRUCTURE PER N.E.C.
	DUPLEX RECEPTACLE OUTLET, FLOOR MOUNTED
	SPECIAL PURPOSE OUTLET, ELECTRICAL CHARACTERISTICS AS SPECIFIED ON PLANS OR SCHEDULE.
$	SINGLE POLE SWITCH, MOUNTED AT 48" A.F.F.
$P	SINGLE POLE SWITCH WITH PILOT LIGHT, MOUNTED AT 48" A.F.F.
$3	3-WAY SWITCH, MOUNTED AT 48" A.F.F.
$4	4-WAY SWITCH, MOUNTED AT 48" A.F.F.
$OS	COMBINATION OCCUPANCY/SENSOR/SWITCH, MOUNTED AT 48" A.F.F.
$M	MOTOR RATED SWITCH MOUNTED AT MOTOR, UNLESS NOTED OTHERWISE.
D$	DIMMER SWITCH, MOUNTED AT 48" A.F.F.
OC	OCCUPANCY SENSOR, CEILING MOUNTED.
HOC	OCCUPANCY SENSOR, WALL MOUNTED WITH SWIVEL BRACKET.
	MOTOR LOAD

GENERAL NOTES

1. FOR ALL ELECTRICAL WORK, REFER TO DIVISION 26 SPECIFICATION SECTION.
2. HEIGHTS INDICATED ARE TO THE CENTERLINE OF BOX, UNLESS INDICATED OTHERWISE.
3. ALL SYMBOLS MAY NOT BE USED.
4. FOR ALL ELECTRICAL EQUIPMENT INDICATED TO BE SUSPENDED FROM METAL BUILDING FRAMING (TRANSFORMERS, LIGHTING, ETC.), THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUPPLEMENTAL FRAMING, HANGERS, ETC. NECESSARY TO SUPPORT ELECTRICAL ITEMS IN ACCORDANCE WITH THE METAL BUILDING MANUFACTURER'S RECOMMENDATIONS. REFER TO STRUCTURAL SHEETS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF HANGERS FOR ELECTRICAL ITEMS WITH METAL ROOF LINER PANEL INSTALLATION SEQUENCE.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, COORDINATE AND CONFIRM WITH THE MECHANICAL AND PLUMBING CONTRACTOR ALL OF THE FOLLOWING:
   A. VERIFY EXACT FEED LOCATIONS AND NUMBER OF CONNECTIONS TO ALL A/C UNITS, FAN COILS, CHILLERS, COOLING TOWERS, SYSTEM PUMPS, EVAP. COOLERS, MAKE-UP AIR UNITS, DAMPER MOTORS, ETC.
   B. ELECTRICAL CHARACTERISTICS (E.G., KW, HP, AMPS, VOLTAGE, PHASE, ETC.): CONFIRM WITH APPROVED MECHANICAL/PLUMBING EQUIPMENT SHOP DRAWINGS.
   C. EXACT LOCATION OF ALL CONTROL PANELS, CONTROL DEVICES, THERMOSTATS, DAMPER MOTORS, ETC.

ABBREVIATIONS

A	
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMP INTURUPTING CAPACITY
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B	
BKR	CIRCUIT BREAKER
BLDG	BUILDING
C	
CKT	CIRCUIT
℄	CENTERLINE
CLG	CEILING
COL	COLUMN
CU	COPPER
°C	DEGREES CELSIUS
D	
DEG	DEGREES
DIA, ø	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DIV	DIVISION
DN	DOWN
DWG	DRAWING
E	
EA.	EXHAUST AIR, EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRICAL WATER COOLER
EX	EXISTING
F	
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE (CONDUIT)
FLR	FLOOR
FT	FOOT, FEET
°F	DEGREES FAHRENHEIT
G	
GA	GAUGE
GALV	GALVANIZED
GFI, GFCI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL (CONDUIT)
H	
HID	HIGH INTENSITY DISCHARGE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & A/C
HZ	HERTZ
I	
ID	INSIDE DIAMETER, IDENTIFICATION
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH, INCHES
J	
J-BOX	JUNCTION BOX
K	
KCMIL	THOUSAND CIRCULAR MILS (AREA)
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR
L	
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
M	
MAX	MAXIMUM
MC	MULTI CONDUCTOR (CABLE)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MOCP, MOP	MAXIMUM OVER CURRENT PROTECTION
MH	MANHOLE, METAL HALIDE
MIL, MILS	1/1000 INCH
MIN	MINIMUM

N	
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFR'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O	
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OEP	OVERHEAD ELECTRICAL PRIMARY
OES	OVERHEAD ELECTRICAL SECONDARY
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.
P	
PE	PHOTO ELECTRIC, PROFESSIONAL ENGINEER
PF	POWER FACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
PWR	POWER
Q	
QTY	QUANTITY
R	
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REF,	REFERENCE, REFER TO
REQD	REQUIRED
REV	REVISION, REVISE
RLA	RUNNING LOAD AMPS
RM	ROOM
RMS	ROOT MEAN SQUARE
RPM	REVOLUTION PER MINUTE
S	
SCH	SCHEDULE, SCHEDULED
SF	SQUARE FEET, SQUARE FOOT
SPEC	SPECIFICATION, SPECIFY
SS	STAINLESS STEEL, STATIONARY SEWER
STD	STANDARD
SUSP	SUSPEND, SUSPENDED
T	
TELECOM	TELECOMMUNICATIONS
THRU	THROUGH
TSTAT	THERMOSTAT
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
U	
U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UEP	UNDERGROUND ELECTRICAL PRIMARY
UES	UNDERGROUND ELECTRICAL SECONDARY
UL	UNDERWRITER'S LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	
V	VOLT, VENT, VERTICAL
VA	VOLT-AMPERE
VERT	VERTICAL
W	
W	WATT, WIDTH, WIRE
W/	WITH
W/O	WITHOUT
X	
XFMR	TRANSFORMER

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 13488 JOSHUA W. TOYCE

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NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
ELECTRICAL SYMBOLS

DESIGNED BY	JWJ
DRAWN BY	JWJ
CHECKED BY	JWJ
APPROVED BY	JWJ

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
14E-100	
286 OF 289	

KEY NOTES: (THIS SHEET ONLY)

(1) PROVIDE A 15KVA DRY-TYPE TRANSFORMER WITH NEMA 1 ENCLOSURE AS SHOWN. REFER TO THE POWER RISER DIAGRAM ON SHEET 14E-401 FOR EQUIPMENT CONNECTION.

GENERAL NOTES (THIS SHEET ONLY):

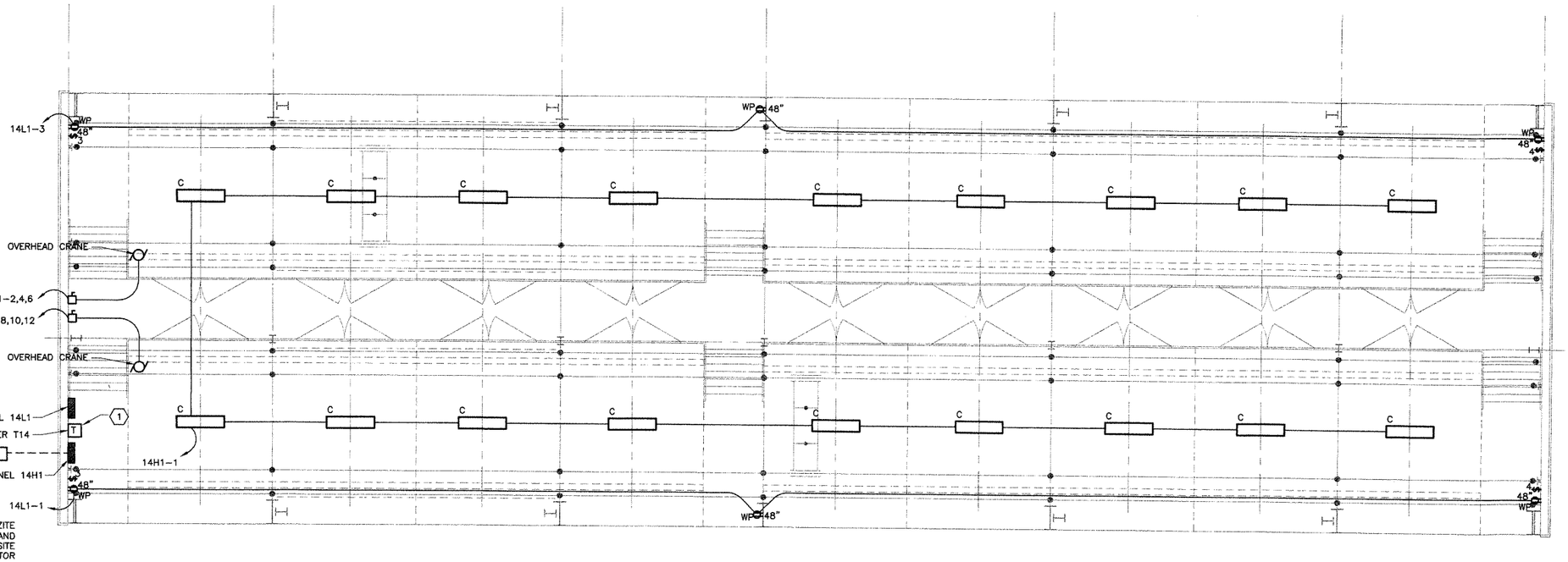
A. REFER TO SHEET 14E-100 FOR ELECTRICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES APPLICABLE TO ALL DRAWINGS.

B. ALL TYPE 'C' FIXTURES SHALL BE MOUNTED AS HIGH A POSSIBLE WITHIN THE SPACE.

C. ALL CONDUCTORS SHALL BE IN CONDUIT AS SPECIFIED.

D. UNLESS NOTED OR SCHEDULED OTHERWISE, ALL CONDUITS SHALL BE A MINIMUM 3/4" SIZE AND ALL CONDUCTORS SHALL BE #12 AWG.

E. CONTRACTORS SHALL PROVIDE PULL BOXES WHERE NEEDED FOR PULLING CONDUCTORS.



A ELECTRICAL PLAN
14E-101 SCALE: 3/16"= 1'-0"

NORTH

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0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
ELECTRICAL PLAN

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14E-101
REV	
	287 OF 289

CERTIFICATE OF AUTHORIZATION
SAIC Energy, Environment & Infrastructure, LLC
No. 510
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 13408
JOSHUA J. LOTCH
10/13/11

LIGHTING FIXTURE SCHEDULE								
TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	VOLTS	REMARKS / NOTES
A2	LSI	2LLC-G-2-32-RPW-SS010-VOLT	TWO LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	2	32	48" T8	277*	
A3	LSI	2LLC-G-3-32-RPW-SS010-VOLT	THREE LAMP RECESSED DIRECT / INDIRECT FLUORESCENT	3	32	48" T8	277*	
B2	LSI	LA-2-32-SD-SS010-VOLT	TWO LAMP LENSED FLUORESCENT TROFFER	2	32	48" T8	277*	
B4	LSI	LA-4-32-SD-SS010-VOLT	FOUR LAMP LENSED FLUORESCENT TROFFER	4	32	48" T8	277*	
C	LSI	EG-2-32-SS010-VOLT	TWO LAMP ENCLOSED / GASKETED FLUORESCENT	2	32	48" T8	277*	NOTE 8
D	LSI	F22-2-32-SS010-VOLT	TWO LAMP SUSPENDED FLUORESCENT	2	32	48" T8	277*	NOTES 1,3
E	LSI	TEM-WH-SD2	LOW PROFILE 6V EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
EX	LSI	PRX-R-U-WB-WH-WH-PR50	COMBINATION EXIT / EMERGENCY FIXTURE	-	-	-	277*	NOTES 6,7
F	LSI	W44-4-2-32-SS010-UE	TWO LAMP WALL MOUNT LINEAR FLUORESCENT	2	32	48" T8	277*	NOTE 2
G	LSI	PTWS-FT-150-MH-F-VOLT-BRZ	EXTERIOR HID WALL SCONCE	1	150	150W MH	277*	NOTES 2,8
H	LSI	IHB-400-MH-MT-IAC22-PM	PENDANT MOUNT HID HIGHBAY FIXTURE	1	400	400W MH	277*	NOTES 1,4,5
I	WF HARRIS	50S-D-26PLC-VOLT	ONE LAMP COMPACT FLUORESCENT	1	26	26W PLC	277*	
J	LSI	208V-CFL-1-42T-UNIV	8" RECESSED DOWNLIGHT	1	42	42W CFT	277*	NOTE 9
K	LPDI	383-C-75-G	EXPLOSION PROOF INCANDESCENT (CEILING MOUNT)	1	60	60W A19	120*	NOTES 10,11
L	LSI	DRM2-MF-400-PSMUR-F-TT-BRZ	HID FLOOD LIGHT W/ VERTICAL WALL MOUNT BRACKET	1	400	400W MH	277*	NOTES 2,8
M	LSI	SOV-RD-175-MH-73-VOLT	LENSED HID	1	175	175W MH	277*	NOTES 9'12
N	ESCO LIGHTING	W26000 SERIES	10" UP/DOWN WALL MOUNT CYLINDER (BRONZE)	2	150	150W MH	277*	
O	SPAULDING	RCL-A-P75-H3P	POLE MOUNTED SITE LIGHT, TYPE III DISTRIBUTION	1	750	750W MH	480*	NOTES 14,15
P	LSI	CHA2-400-PSMV-MT-A25-LMC	PENDANT MOUNT HID LOWBAY FIXTURE	1	400	400W MH	277*	NOTES 5,9
X	LSI	EXC-R -U-WB-WW-SD2	CAST ALUMINUM LED EXIT SIGN	-	4	-	277*	NOTES 6,7

FIXTURES INDICATED WITHIN THIS LIGHTING FIXTURE SCHEDULE INCLUDE ALL BUILDING AND SITE LIGHTING WITHIN THE AHTD D4 HEADQUARTERS COMPLEX. NOT ALL FIXTURES ARE USED AT EACH BUILDING.

*PROVIDE VOLTAGE INDICATED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE LIGHTING PLAN.

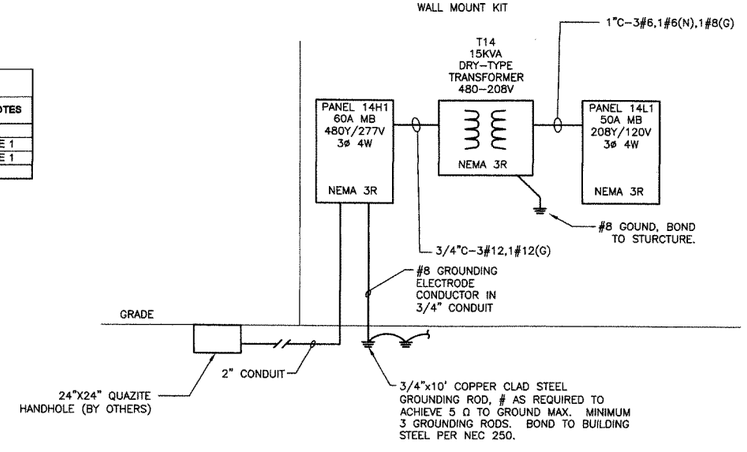
NOTES:
1. PROVIDE WIRE GUARD
2. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
3. SUSPEND FIXTURE AT 10'-0" A.F.F.
4. SUSPEND FIXTURE AT 19'-0" A.F.F.
5. PROVIDE TWIST-LOCK TYPE CONNECTOR AT EACH FIXTURE.
6. PROVIDE ARROWS WHERE INDICATED.
7. POWER FIXTURES FROM UNSWITCHED LIGHTING CIRCUIT SERVING THE SAME SPACE.
8. U.L. LISTED FOR WET LOCATIONS.
9. U.L. LISTED FOR DAMP LOCATIONS.
10. U.L. LISTED EXPLOSION PROOF (CLASS I, DIV I).
11. PROVIDE WITH EXTRA LONG LIFE INCANDESCENT LAMP.
12. TRIM FINISH SHALL MATCH SURROUNDING AREA.
13. PROVIDE EMERGENCY QUARTZ LIGHTING KIT.
14. POLE MOUNTED AT 34'-0" A.F.G.
15. PROVIDE OPTIONAL ADJUSTABLE MOUNTING ARM.

Panel "14H1"	277 Volts L-N 3Ø, 4W 480 Volts L-L 10,000 AIC BRANCH BRKRS			60A3P MAIN BREAKER COPPER BUS EQUIP. GROUNDING BAR			TYPE: NF NEMA 3R ENCLOSURE SURFACE MOUNTED	
Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
LGTS	1	1268	20/1			3047	2	
SPARE	3	0	20/1		20/3	3047	4	OVERHEAD CRANE
SPARE	5	0	20/1			3047	6	
SPARE	7	0	20/1			3047	8	
SPARE	9	0	20/1		20/3	3047	10	OVERHEAD CRANE
SPARE	11	0	20/1			3047	12	
SPACE	13	0				540	14	
SPACE	15	0			20/3	540	16	TRANSFORMER T14 (15KVA)
SPACE	17	0				0	18	
		Totals	AØ	BØ	CØ	Totals		
		VA	7 902	6 634	6 094	VA		
		AMPS	28.5	23.9	22.0	AMPS		

Panel "14L1"	120 Volts L-N 3Ø, 4W 208 Volts L-L 10,000 AIC BRANCH BRKRS			50A3P MAIN BREAKER COPPER BUS EQUIP. GROUNDING BAR			TYPE: QO NEMA 3R ENCLOSURE SURFACE MOUNTED	
Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ BØ CØ	Brkr.	Conn. Load	Ckt. No.	Service
RCPT	1	540	20/1		20/1	0	2	SPARE
RCPT	3	540	20/1		20/1	0	4	SPARE
SPARE	5	0	20/1		20/1	0	6	SPARE
SPARE	7	0	20/1		20/1	0	8	SPARE
SPACE	9	0				0	10	SPACE
SPACE	11	0				0	12	SPACE
PROVIDE IDENTIFIED HANDLE TIES FOR	Totals	AØ	BØ	CØ	Totals			
ALL MULITWIRE BRANCH CIRCUITS PER	VA	0 540	0 540	0 000	VA			
NEC 210.4	AMPS	4.5	4.5	0.0	AMPS			

BUILDING 14 - EQUIPMENT SCHEDULE									
EQUIPMENT	DESCRIPTION	VOLTAGE	PHASE	AMPS	CONDUIT	WIRE SIZE	DISCONNECT ENCLOSURE	DISCONNECT SIZE	DISCONNECT FUSING	NOTES
	OVERHEAD CRANE	480	3	11	3/4"	3#12, 1#12(G)	NEMA 3R	30A3P	NON-FUSIBLE	NOTE 1
	OVERHEAD CRANE	480	3	11	3/4"	3#12, 1#12(G)	NEMA 3R	30A3P	NON-FUSIBLE	NOTE 1

NOTES:
1. COORDINATE CIRCUIT SIZE WITH EQUIPMENT PROVIDED.



1 / 14E-401 POWER RISER DIAGRAM
SCALE: NTS

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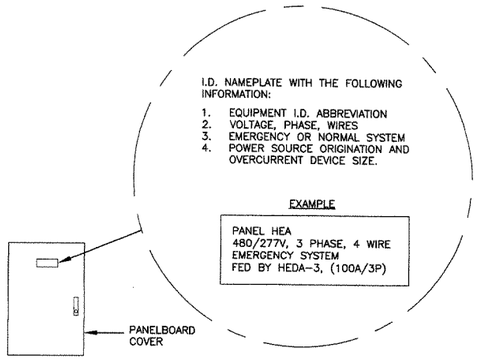
NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
0	10/13/11	ISSUED FOR CONSTRUCTION		

DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
ELECTRICAL SCHEDULES & POWER RISER

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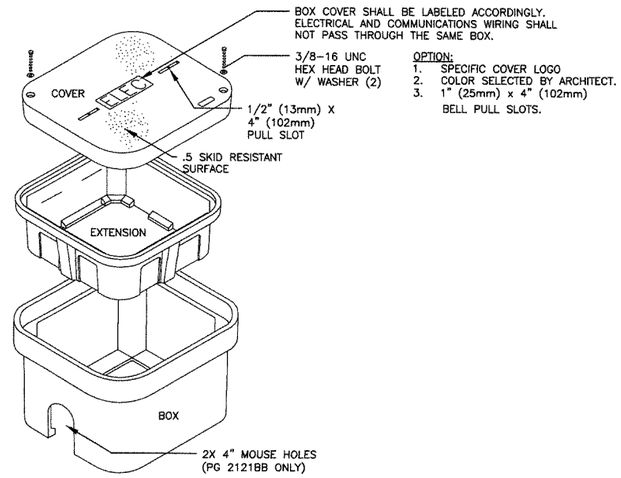
STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — NO. 13498 — 10/13/11

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC
DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	14E-401
REV	
	288 OF 289

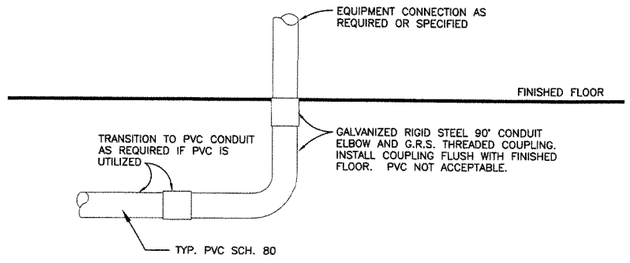


PANEL IDENTIFICATION NOTES:
1. SIMILAR FOR DISCONNECTS, MOTOR CONTROLLERS, TRANSFORMERS, LIGHTING CONTROL PANEL, AUTOMATIC TRANSFER SWITCHES, ETC.

A 14E-402 PANEL IDENTIFICATION DETAIL
SCALE: NTS

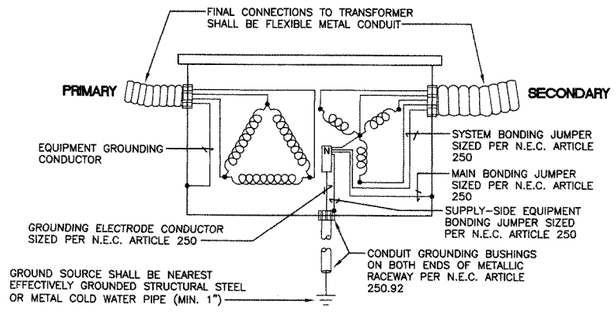


B 14E-402 IN-GRADE PULLBOX DETAIL
SCALE: NTS



NOTE: UNLESS NOTED OTHERWISE, THIS DETAIL SHALL BE USED, WITH NO EXCEPTIONS, FOR ALL CONDUIT PENETRATIONS IN OPEN FLOOR AREAS OR IN MOVABLE WALLS.

C 14E-402 TYPICAL STUB-UP DETAIL
SCALE: NTS



D 14E-402 TYPICAL DRY-TYPE TRANSFORMER DETAIL
SCALE: NTS

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DISTRICT SALT SPREADER STORAGE BUILDING
AHTD JOB NO. 040554
ELECTRICAL DETAILS

DESIGNED BY	TBC
DRAWN BY	X
CHECKED BY	TBC
APPROVED BY	TBC

DATE	10/13/11
SCALE	AS NOTED
PROJECT NUMBER	4070812000
SHEET	REV
14E-402	
289 OF 289	

CERTIFICATE OF AUTHORIZATION SAIC Energy, Environment & Infrastructure, LLC No. 510 ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 13428 10/13/11 JOSHUA W. TOVEY