USD 320 MULTIPURPOSE BUILDING

WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

ORGINAL CONTRACT DOCUMENTS

Owner:

USD 320 SCHOOL DISTRICT
1008 8TH STREET
WAMEGO, KS 66547

PROJECT DESCRIPTION:

MULTIPURPOSE BUILDING FOR ATHLETIC INDOOR SPORTS PRACTICE AND CONDITIONING.

ARCHITECT:

BBN ARCHITECTS, INC.
228 POYNTZ AVE.
MANHATTAN, KS 66502
TELEPHONE: (785) 776-4912

MEP ENGINEER:

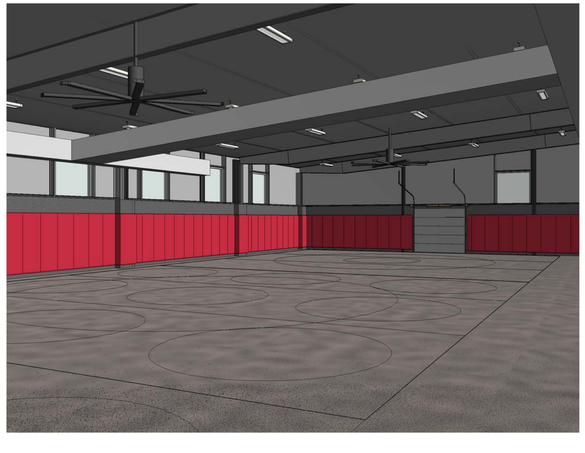
ORAZEM & SCHALORA ENGINEERING, P.A.
2312 ANDERSON AVE.
MANHATTAN, KS 66502

STRUCTURAL ENGINEER:

DUDLEY WILLIAMS AND ASSOCIATES, P.A.
230 S. LAURA SUITE #200
WICHITA, KS 67211

CIVIL ENGINEER:

SMH CONSULTANTS
2017 VANESTA PL.
MANHATTAN, KS 66503



INDEX TO DRAWINGS:

GENERAL NOTES

1. GENERAL NOTES APPLY TO ALL ARCHITECTURAL DRAWINGS & DETAILS.

2. ALL WORK SHALL CONFORM WITH APPLICABLE BUILDING CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS.

3. DESIGN DOCUMENTS HAVE BEEN PREPARED DESCRIBING GENERAL REQUIREMENTS FOR WORK AT THE EXISTING SITE. IDENTIFICATION OF EXISTING CONDITIONS, SHOWN ON THE PLANS, IS BASED ON A GENERAL REVIEW OF EXISTING CONDITIONS. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO PROCEEDING WITH CONSTRUCTION AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.

4. THE CONTRACTOR SHALL VERIFY ALL LAYOUT DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION.

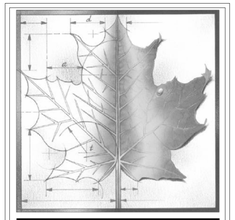
5. CONTRACTOR SHALL COORDINATE THE WORK WITH THE INSTALLATION OF ALL EQUIPMENT/TRADES SHOWN ON THE PLANS.

6. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS, METHODS, AND SEQUENCES OF CONSTRUCTION AND THE SAFETY OF ALL CONSTRUCTION PERSONNEL AND AUTHORIZED VISITORS TO THE PROJECT SITE.

7. WHERE DISCREPANCIES EXIST IN THE DOCUMENTS THE MOST STRINGENT SHALL APPLY.

8. PATCH, FINISH AND REPAINT ANY WALLS, FLOOR AND CEILINGS DAMAGED OR REMOVED WHILE INSTALLATION OF NEW WATER PIPING.

9. REMOVE AND DISPOSE OF ALL EXISTING FIXTURES, CASEWORK, PARTITIONS, CEILINGS, INSULATION, AND ALL OTHER FINISHES REQUIRED PRIOR TO RENOVATION WORK.



BBN

BBN ARCHITECTS INC
228 POYNTZ AVENUE
MANHATTAN, KANSAS 66502
PH: 785-776-4912 - FAX: 785-776-0944
WWW.BBNARCHITECTS.COM

Project Number: **17036**

Date: **9/1/17**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

Sheet Title:
TITLE SHEET

Sheet:
T101

Of:

GENERAL INFORMATION

LOCATION: **USD 320 MULTIPURPOSE BUILDING**
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

OWNER INFORMATION: **USD 320 SCHOOL DISTRICT**
1008 6TH STREET
WAMEGO, KS 66547

RESPONDING FIRE DEPARTMENT: **WAMEGO FIRE DEPARTMENT**
428 LINCOLN AVE.
WAMEGO, KS 66547
(785) 456-9555

ARCHITECT: BBN ARCHITECTS, INC.
228 POYNTZ AVE.
MANHATTAN, KS 66502
TELEPHONE: (785) 776-4912

PROJECT CONSTRUCTION PURPOSE FOR SUBMITTAL: **NEW CONSTRUCTION**

AUTHORITIES HAVING JURISDICTION: **WAMEGO FIRE DEPARTMENT**
428 LINCOLN AVE.
WAMEGO, KS 66547
(785) 456-9555

PROJECT DESCRIPTION

METAL BUILDING CONSTRUCTION FOR USE OF ATHLETIC TRAINING AND CONDITIONING.

APPLICABLE CODES

2012 INTERNATIONAL BUILDING CODE
2012 INTERNATIONAL MECHANICAL CODE
2012 INTERNATIONAL PLUMBING CODE
2012 INTERNATIONAL FUEL GAS CODE
2012 INTERNATIONAL ENERGY CODE

2011 NATIONAL ELECTRIC CODE
2012 INTERNATIONAL FIRE CODE
KANSAS FIRE PREVENTION CODE
2010 ADA STANDARD FOR ACCESSIBLE DESIGN
2010 ASHRAE 40.1

2010 NFPA 10
2010 NFPA 13
2010 NFPA 14
2010 NFPA 25
2010 NFPA 72
2003 NFPA 82B

BUILDING HEIGHTS AND AREAS

BASIC ALLOWABLE AREA AND HEIGHT:

ALLOWABLE AREA: 14,500 S.F.

ALLOWABLE HEIGHT: 55 FEET

ACTUAL AREA: 11,909 S.F.

ACTUAL HEIGHT: 19'-4"

CONSTRUCTION CLASSIFICATION

CONSTRUCTION TYPE: **II B**

STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS & TRUSSES:	0-HR
BEARING EXTERIOR WALLS:	0-HR
BEARING INTERIOR WALLS:	0-HR
NONBEARING EXT. WALLS (10\ X <30' FROM ADJACENT BUILDING OR PROPERTY LINE):	0-HR
NONBEARING INTERIOR WALLS :	0-HR
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS:	0-HR
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS:	0-HR

OCCUPANCY CLASSIFICATION

E - EDUCATIONAL GROUP

EXIT WIDTH FACTORS

STAIRS: .30" / PERSON
DOORS, LEVEL SERACES, RAMPS: .20" / PERSON

NON-CONFORMING ITEMS

NONE

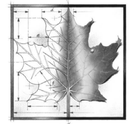
PASSIVE LIFE SAFETY SYSTEMS

CORRIDOR RATINGS:	1-HOUR (EXCEPTION USED- 1018.1 EXCEPTION 1)
EXIT STAIR ENCLOSURES:	NONE INCLUDED
SHAFTS:	NONE INCLUDED
OCCUPANCY SEPERATIONS:	NONE REQUIRED

ACTIVE LIFE SAFETY SYSTEMS

FIRE ALARM:	REQUIRED/PROVIDED	PER IBC SECTIONS 907.2
FACP:	REQUIRED/PROVIDED	
EMERGENCY VOICE ALARM COMMUNICATION:	NOT REQUIRED	PER IBC SECTION 907.2.1.1
REMOTE ANNUNCIATOR PANEL:	NOT REQUIRED	
SMOKE DETECTION:	REQUIRED/PROVIDED	ELEVATOR LOBBIES; HVAC RETURN DUCTS >2,000 CFM, SUPPLY DUCTS > 10,000 CFM, 5 FEET OF FACP
EXIT SIGNS:	REQUIRED/PROVIDED	BACKUP BY BATTERIES
EMERGENCY LIGHTS:	REQUIRED/PROVIDED	BACKUP BY BATTERIES
BACKUP POWER:	NOT REQUIRED	
STANDPIPES: CF-09	REQUIRED/PROVIDED	CLASS I WET, LOCATIONS SHOWN ON CF03-
AUTOMATIC SPRINKLERS:	NOT REQUIRED	
FIRE EXTINGUISHERS:	REQUIRED/PROVIDED	PER IBC SECTION 906.1 & NFPA 10
FIRE PUMP:	NOT REQUIRED	
PRESSURIZED EXIT STAIRS:	NOT REQUIRED	
PRESSURIZED ELEVATORS:	NOT REQUIRED	
PULL STATIONS:	REQUIRED/PROVIDED	AT REQUIRED EXITS

SYMBOL	DESCRIPTION	PROTECTIVE ELEMENTS/NOTES
	EXIT - EXTERIOR	
	EXIT - INTERIOR	EXITS FROM FLOOR OR ASSEMBLY OCCUPANTS OVER 50 OCCUPANTS
	FIRE EXTINGUISHER	
	FIRE EXTINGUISHER SPACING	75' RADIUS SHOWN ON FLOOR PLANS
	NON PROTECTED EXIT PATH	[NONE] OR [NONE-PER EXCEPTION OF FULLY SPRINKLERED A, B, E, F, M, S, U OCCUPANCY] OR [1-2 OCCUPANCY SMOKE PARTITION WALLS (NO FIRE RESISTIVE WALL RATING. DOORS LIMIT TRANSFER OF SMOKE AND SHALL HAVE POSITIVE LATCHING.]
1 1	1 HOUR EXIT PASSAGEWAY	1-HOUR FIRE BARIER WALL CONSTRUCTION. NO OPENINGS OTHER THAN REQUIRED EXIT DOORS. 1-HOUR DOOR ASSEMBLY.
2 2	2 HOUR EXIT PASSAGEWAY	2-HOUR FIRE BARIER WALL CONSTRUCTION. NO OPENINGS OTHER THAN REQUIRED EXIT DOORS. 1 1/2-HOUR DOOR ASSEMBLY.
1 1	1 HOUR EXIT STAIR ENCLOSURE (<3 STORIES OR LESS)	1-HOUR FIRE BARIER WALL CONSTRUCTION. NO OPENINGS OTHER THAN REQUIRED EXIT DOORS. 1-HOUR DOOR ASSEMBLY.
2 2	2 HOUR EXIT STAIR ENCLOSURE (>4 STORIES OR LESS)	2-HOUR FIRE BARIER WALL CONSTRUCTION. NO OPENINGS OTHER THAN REQUIRED EXIT DOORS. 1 1/2-HOUR DOOR ASSEMBLY.
	1 HOUR FIRE BARRIER (CGC # INCIDENTAL USE)	1-HOUR FIRE BARIER WALL CONSTRUCTION. 3/4-HOUR DOOR ASSEMBLY. FIRE DAMPERS.
	2 HOUR FIRE BARRIER (CGC)	2-HOUR FIRE BARIER WALL CONSTRUCTION. 1 1/2-HOUR DOOR ASSEMBLY. FIRE DAMPERS.
1 1	1 HOUR SHAFT (3 STORIES OR LESS)	1-HOUR FIRE BARRIER WALL CONSTRUCTION. 1-HOUR DOOR ASSEMBLY. FIRE/SMOKE DAMPERS
2 2	1 HOUR SHAFT (3 STORIES OR LESS)	1-HOUR FIRE BARRIER WALL CONSTRUCTION. 1-HOUR DOOR ASSEMBLY. FIRE/SMOKE DAMPERS
	SPRINKLERED INCIDENTAL USE AREAS	WALL CONSTRUCTION TO RESIST THE PASSAGE OF SMOKE FROM THE FLOOR TO FIRE-RATED FLOOR-CEILING ASSEMBLY. SELF-OR AUTOMATIC-CLOSING DOORS WITH NO AIR TRANSFER GRILLES.
192/384" / 60"	ACCUMULATED EXIT WIDTH AT REQUIRED EXIT (CLEAR WIDTH)	OCCUPANTS / REQUIRED WIDTH = PROVIDED WIDTH
	PUBLIC FIRE HYDRANT	DISTANCE FROM BUILDING SHOWN ON SITE PLAN
CONF./A4 / 65	ROOM DESIGNATION	ROOM TYPE / OCCUPANCY TYPE MAXIMUM ALLOWABLE OCCUPANTS
60 / 40	ACCUMULATED OCCUPANT LOADS FOR COMPLEX PATHS	
	NON-WORK AREAS	EXISTING CONSTRUCTION NOT INCLUDED IN TEH RENOVATION PROJECT. ALL OTHER AREAS ARE EXITNG CONSTRUCTION TO BE REMODELED
	SPRINKLER/STANDPIPE RISER	
	FIRE DEPARTMENT CONNECTION	
FACP	FIRE ALARM CONTROL PANEL	
ANN	FIRE ALARM ANNUCIATOR PANEL	
	FIRE DEPARTMENT KNOX BOX	
	EXIT SIGN	



BBN ARCHITECTS INC
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WWW.BBNARCHITECTS.COM

Description	Date

Project Number:	**17036**
Date:	**9/1/17**

Project Name:

USD 320 MULTIPURPOSE BUILDING

Project Address:

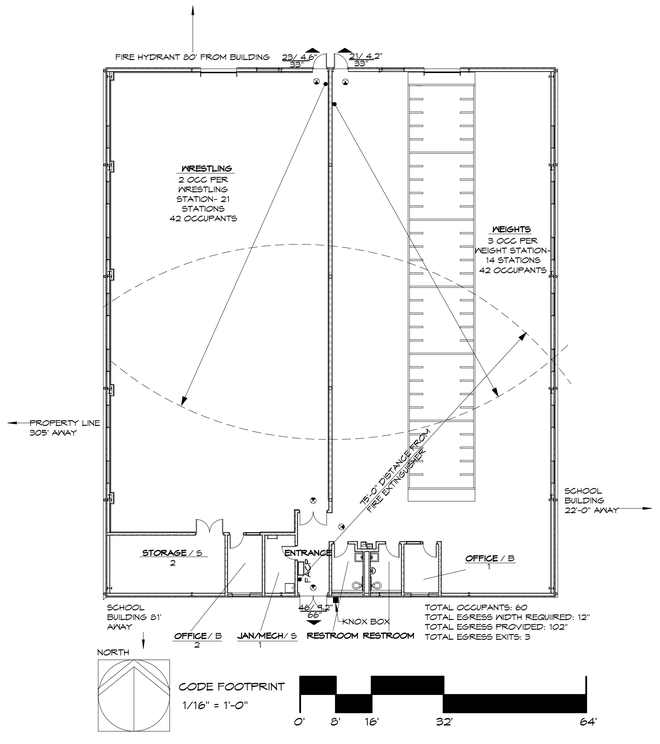
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

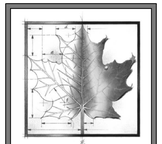
Sheet Title:

CODE REVIEW

Sheet:

CF101





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WAMEGO HIGH SCHOOL
801 LINCOLN
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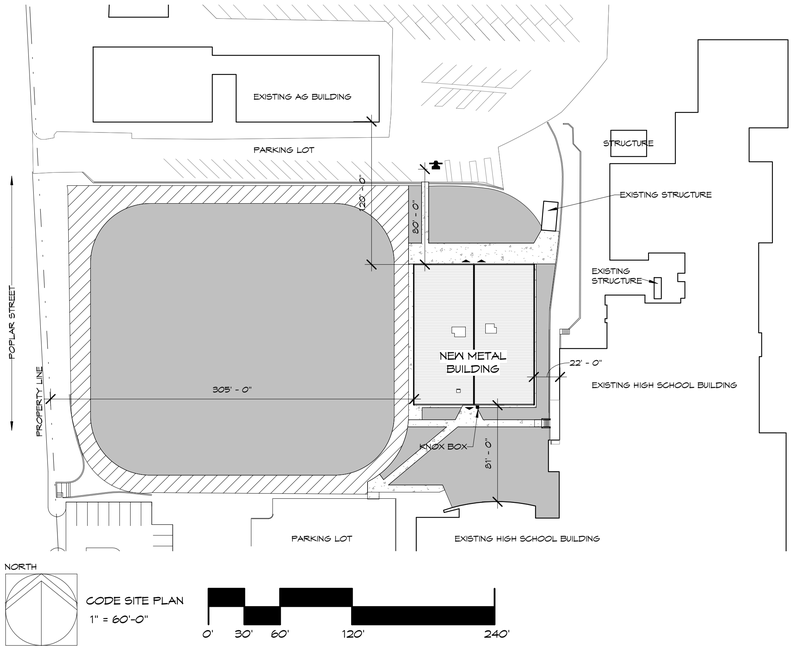
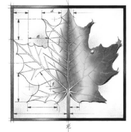
Sheet Title:

CODE FOOTPRINT

Sheet:

CF102





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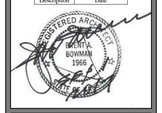

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WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

Sheet Title:

CODE SITE PLAN

Sheet:

CF103

LEGEND

- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING TRACK TO BE REMOVED
- PROPOSED GRAVEL TRACK
- EXISTING SIDEWALK TO BE REMOVED & REPLACED
- PROPOSED SIDEWALK/CONCRETE
- EXIST SS — EXISTING SANITARY SEWER
- SSS — SSS — PROPOSED SANITARY SERVICE
- EXIST W — EXISTING WATER LINE
- WS — WS — PROPOSED WATER SERVICE
- OE — EXISTING ELECTRIC LINE
- UE — PROPOSED ELECTRIC LINE
- G — G — PROPOSED GAS SERVICE
- FO — EXISTING TELEPHONE/FIBER OPTIC
- FO — PROPOSED TELEPHONE/FIBER OPTIC

PROJECT ENGINEER	BRETT M. LOUK, P.E. SMH CONSULTANTS, P.A. 2017 VANESTA DRIVE, SUITE 110 MANHATTAN, KS 66503 (785) 776-0541 blouk@smhconsultants.com
ELECTRIC	CITY OF WAMEGO 430 LINCOLN AVENUE WAMEGO, KS 66547 (785) 456-9119
WATER & SEWER	CITY OF WAMEGO 430 LINCOLN AVENUE WAMEGO, KS 66547 (785) 456-9119
TELEPHONE	WTC TELEPHONE SERVICE ANDY BOECKMAN 1009 LINCOLN AVENUE WAMEGO, KS 66547 (785) 456-1000
CABLE	COX COMMUNICATIONS GLENN CALHOON 931 SW HENDERSON TOPEKA, KS 66615 (785) 215-6705
GAS	KANSAS GAS SERVICE JULIE ROBLYER 225 SETH CHILD ROAD MANHATTAN, KS 66502 (785) 587-2339

NOTES:

IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS AND APPROVALS FROM APPROPRIATE REGULATORY AGENCIES (IF APPLICABLE) PRIOR TO COMMENCING THE WORK.

ALL CONSTRUCTION WORK AND UTILITY WORK OUTSIDE OF THE PROPERTY BOUNDARIES SHALL BE PERFORMED IN COOPERATION WITH AND IN ACCORDANCE WITH REGULATIONS OF THE AUTHORITIES CONCERNED.

EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION OF EACH PHASE OF THE PROJECT, THE CONTRACTOR SHALL BE REQUIRED TO FIELD VERIFY THE LOCATION AND ELEVATIONS OF EXISTING UTILITIES. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.

ALL EXISTING SIDEWALKS ARE TO REMAIN UNLESS OTHERWISE NOTED.

ALL DEMOLITION DEBRIS SHALL BE REMOVED FROM THE SITE. NO ON-SITE BURYING OF DEBRIS WILL BE ALLOWED.

ALL HAUL SITES SELECTED FOR COLLECTION OF DEBRIS SHALL BE APPROVED BY THE OWNER/ENGINEER.

ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE OWNER.

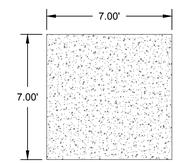
CONSTRUCTION METHODS AND MATERIALS NOT SPECIFIED ON THESE PLANS SHALL MEET OR EXCEED STANDARDS SPECIFICATIONS OF THE CITY OF WAMEGO.

FOR CONSTRUCTION OF NEW SIDEWALK, PARTIAL PANEL REMOVAL OF EXISTING SIDEWALK WILL NOT BE ALLOWED. IF A PARTIAL PANEL IS REMOVED, THEN ENTIRE PANEL SHALL BE REMOVED AND REPLACED AS NEEDED.

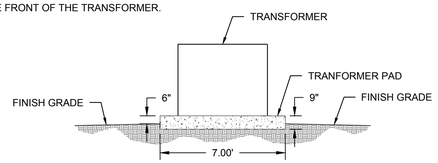
NOTE:

PROVIDE 3' MINIMUM CLEARANCE AT THE BACK AND SIDES AND 10' MINIMUM CLEARANCE AT THE FRONT OF THE TRANSFORMER.

TRANSFORMER DOORS SHALL OPEN TOWARDS THE FRONT OF THE TRANSFORMER.



TRANSFORMER PAD PLAN DETAIL
NOT TO SCALE



TRANSFORMER PAD PROFILE DETAIL
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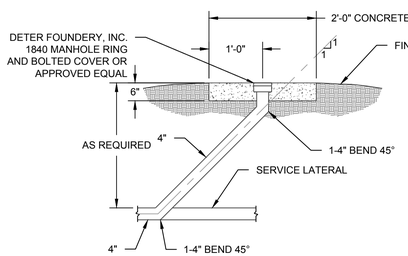
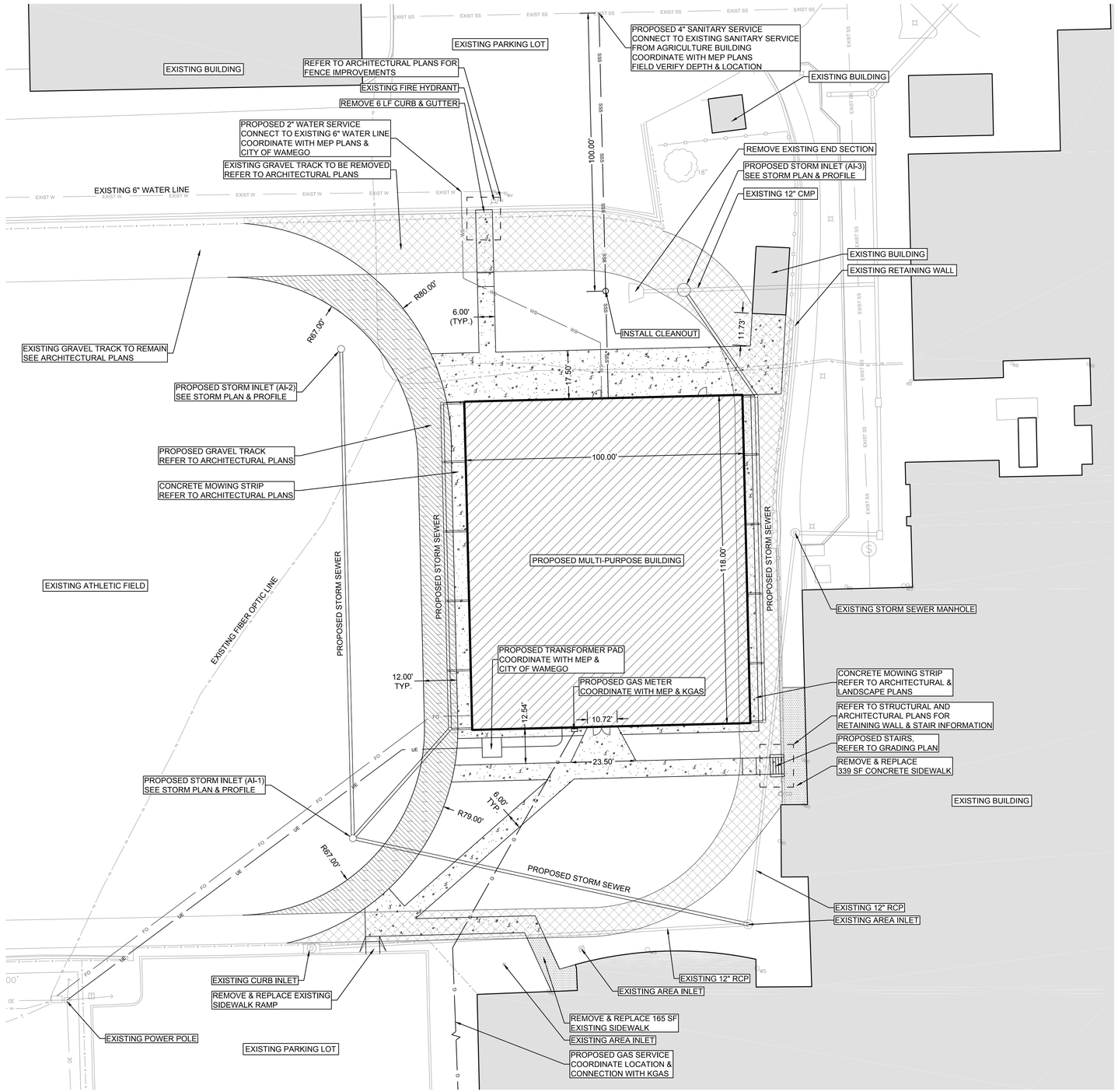


CLEANOUT DETAIL
NOT TO SCALE



KANSAS ONE-CALL SYSTEMS, INC.

CALL BEFORE YOU DIG - DRILL - BLAST
800-344-7233
(DIG-SAFE)
(316) 687-3753
(FAX)

KANSAS ONE CALL SYSTEM, INC.
The utilities as shown on this drawing were developed from the information available. This is not implied nor intended to be the complete inventory of utilities in this area. It is the clients/contractors responsibility to verify the location of all utilities (whether shown or not) and protect said utilities from any damage.
Confirmation Number 17093029.

SAFETY NOTICE TO CONTRACTOR:

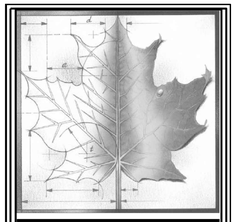
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER:

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER SMH CONSULTANTS NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE SMH CONSULTANTS INSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION ON THE SITE.

CAUTION - NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST THE EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.



BBN

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SMH
CONSULTANTS
2017 Vanesta Place, Suite 110
Manhattan, KS 66503
P (785)776-0541 • F (785)776-9760

SCALE: 1" = 20'

REV	DESCRIPTION	DATE

Project Number: 16036

Date: 9/1/2017

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO, KS

Sheet Title:
SITE PLAN

Sheet:
C1

Of:

NOTES:

ALL SOIL BROUGHT TO THE SITE AND IN SITU SHALL BE COMPACTED BY ROLLING WITH A SHEEPSFOOT ROLLER OR BY MECHANICAL TAMPING. THE SHEEPSFOOT ROLLER, WHEN FULLY LOADED, SHALL HAVE A LOAD ON EACH TAMPER FOOT NO LESS THAN 200 POUNDS PER SQUARE INCH OF CROSS-SECTIONAL AREA. ENOUGH MOISTURE SHALL BE PRESENT IN THE SOIL TO OBTAIN A DENSITY EQUAL TO OR GREATER THAN 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR DENSITY TEST BEFORE PLACING THE NEXT LIFT. EACH LIFT SHALL CONSIST OF 8-INCH LOOSE LIFTS OR LESS PRIOR TO COMPACTION. FILL MATERIAL SHALL BE APPROVED BY A LICENSED ENGINEER.

THE CROSS SLOPES OF ALL SIDEWALKS SHALL BE 1.5%.

ALL GRADE AGAINST THE BUILDING SHALL BE 3" BELOW FINISH FLOOR UNLESS OTHERWISE SPECIFIED.

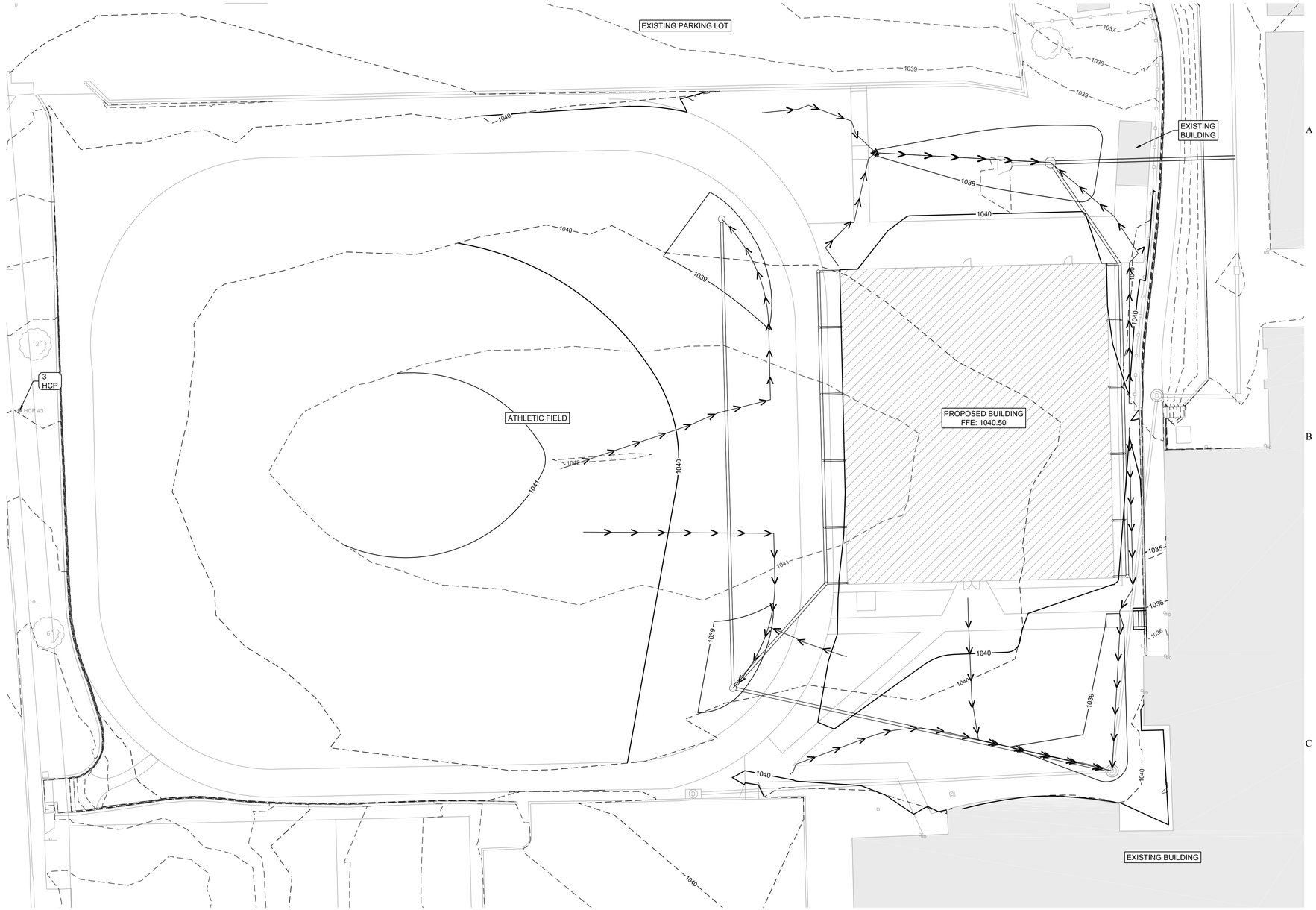
ALL STRIPPED TOPSOIL SHALL BE STOCKPILED FOR RE-USE.

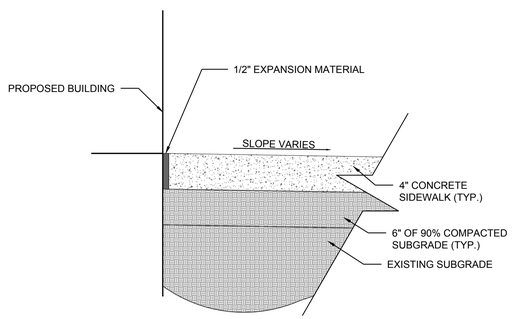
ALL GRAVEL WITHIN THE GRADING LIMITS SHALL BE STRIPPED AND STOCKPILED.

HORIZONTAL CONTROL

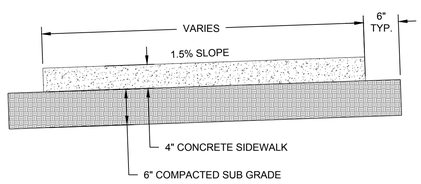
HCP #1:	N:323152.693	E:1792004.900	ELEV:1023.72
HCP #2:	N:323164.935	E:1792395.733	ELEV:1018.27
HCP #3:	N:322719.126	E:1791984.832	ELEV:1045.23
HCP #4:	N:322430.049	E:1792055.488	ELEV:1046.86

NOTE: HCPS 1, 2, & 4 ARE NOT VISIBLE ON THIS SHEET.

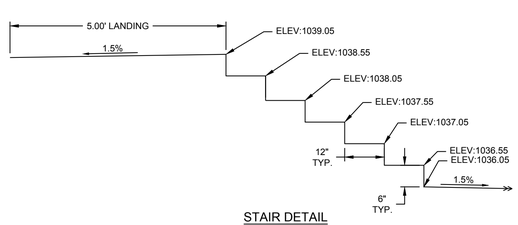




SIDEWALK ABUTTING EXISTING BUILDING DETAIL
SCALE: 1" = 1'-0"



SIDEWALK DETAIL
NOT TO SCALE



STAIR DETAIL
NOT TO SCALE

BBN ARCHITECTS INC
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WWW.BBNARCHITECTS.COM

SMH CONSULTANTS
2017 Vaneata Place, Suite 110
Manhattan, KS 66503
P (785)776-0541 • F (785)776-9760

BRETT LOWE LICENSED 23760 9-1-17 KANSAS PROFESSIONAL ENGINEER

20' 10' 0' 20'
SCALE: 1" = 20'

REV	DESCRIPTION	DATE

Project Number: 16036
Date: 9/1/2017
Project Name: USD 320 MULTIPURPOSE BUILDING
Project Address: WAMEGO, KS
Sheet Title: GRADING PLAN
Sheet: C2
Of:

LEGEND

CNR	BUILDING CORNER
FG	FINISHED GRADE
EOP	EDGE OF PAVEMENT
TRA	EDGE OF TRACK
BOR	BOTTOM OF RAMP
TOR	TOP OF RAMP
HP	HIGH POINT OF SWALE
FL	FLOW LINE
TS	TOP OF STAIR
BS	BOTTOM OF STAIR
RP	RADIUS POINT
— · — · —	FLOW LINE OF SWALE

BUILDING CORNERS

POINT #	NORTHING	EASTING	DESCRIPTION
1000	322771.84	1792292.17	CNR
1001	322774.27	1792392.14	CNR
1002	322656.31	1792395.02	CNR
1003	322653.87	1792295.05	CNR

COORDINATES

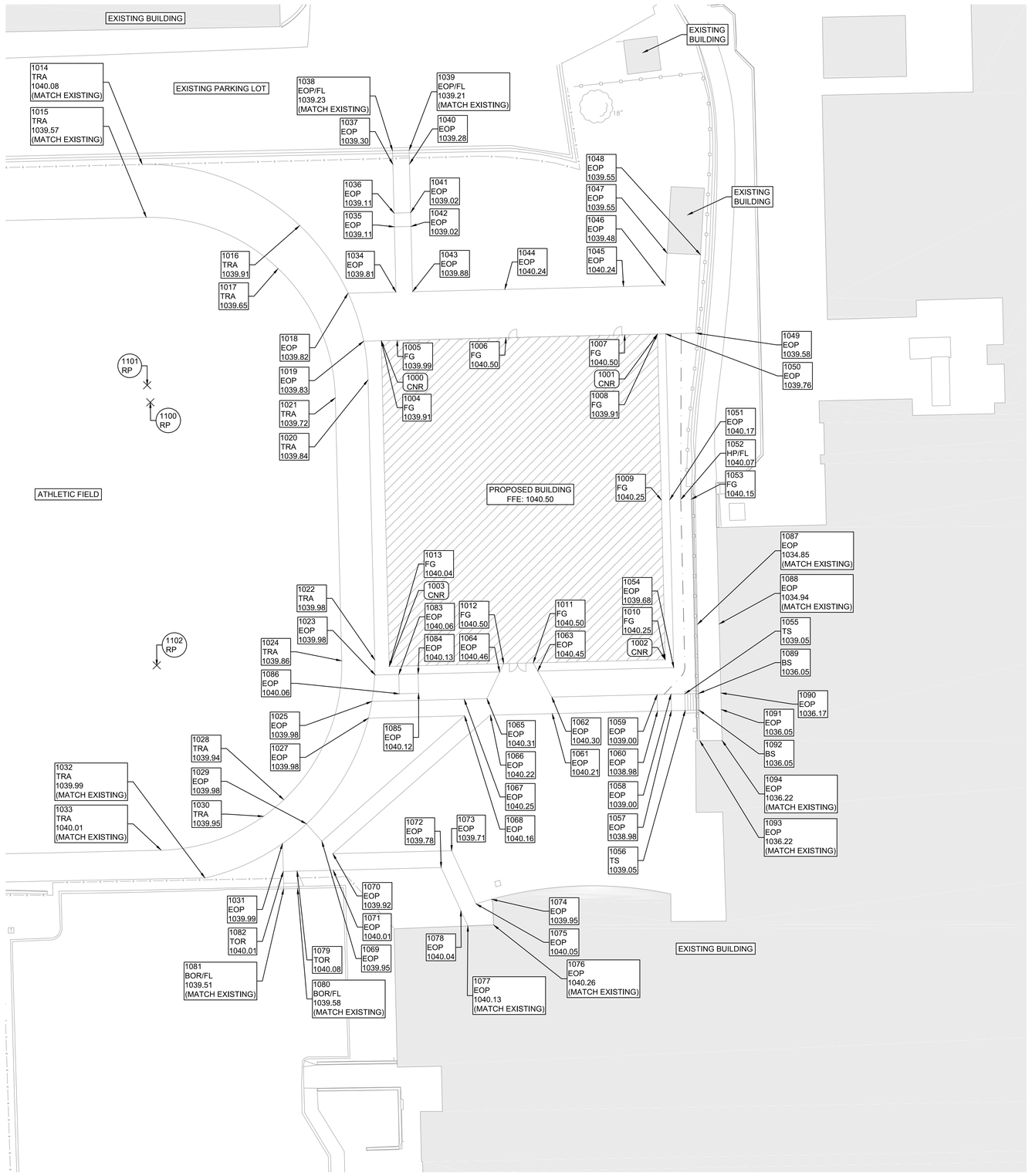
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1004	322771.84	1792292.17	1039.91	FG
1005	322771.98	1792297.92	1039.99	FG
1006	322772.94	1792337.33	1040.50	FG
1007	322773.98	1792380.31	1040.50	FG
1008	322774.27	1792392.14	1039.91	FG
1009	322714.14	1792393.61	1040.25	FG
1010	322656.31	1792395.02	1040.25	FG
1011	322655.14	1792347.22	1040.50	FG
1012	322654.88	1792336.51	1040.50	FG
1013	322653.87	1792295.05	1040.04	FG
1014	322835.70	1792205.63	1040.08	TRA
1015	322816.53	1792207.10	1039.57	TRA
1016	322813.59	1792262.64	1039.91	TRA
1017	322798.00	1792254.83	1039.65	TRA
1018	322789.05	1792280.13	1039.82	EOP
1019	322771.68	1792285.79	1039.83	EOP
1020	322757.67	1792287.38	1039.84	TRA
1021	322751.17	1792275.53	1039.72	TRA
1022	322656.18	1792289.85	1039.98	TRA
1023	322650.75	1792289.98	1039.98	EOP
1024	322655.89	1792277.85	1039.86	TRA
1025	322641.18	1792288.78	1039.98	EOP
1027	322635.14	1792287.53	1039.98	EOP
1028	322605.55	1792256.88	1039.94	TRA
1029	322596.83	1792265.12	1039.98	EOP
1030	322599.53	1792249.52	1039.95	TRA
1031	322589.73	1792256.44	1039.99	EOP
1032	322577.21	1792228.33	1039.99	TRA
1033	322587.28	1792212.49	1040.01	TRA
1034	322789.47	1792297.50	1039.81	EOP
1035	322813.11	1792296.92	1039.11	EOP
1036	322818.11	1792296.80	1039.11	EOP
1037	322835.71	1792296.37	1039.30	EOP
1038	322840.70	1792296.25	1039.23	EOP/FL
1039	322840.86	1792302.25	1039.21	EOP/FL
1040	322835.85	1792302.37	1039.28	EOP
1041	322818.25	1792302.80	1039.02	EOP
1042	322813.25	1792302.92	1039.02	EOP
1043	322789.62	1792303.49	1039.88	EOP
1044	322790.43	1792336.90	1040.24	EOP
1045	322791.48	1792379.89	1040.24	EOP
1046	322791.85	1792395.00	1039.48	EOP
1047	322803.56	1792395.68	1039.55	EOP
1048	322803.02	1792407.76	1039.55	EOP
1049	322774.61	1792406.10	1039.58	EOP

COORDINATES

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1050	322774.35	1792395.14	1039.76	EOP
1051	322714.22	1792396.61	1040.17	EOP
1052	322714.31	1792400.61	1040.07	HP/FL
1053	322714.41	1792404.42	1040.15	FG
1054	322653.38	1792398.09	1039.68	EOP
1055	322643.93	1792402.09	1039.05	TS
1056	322637.94	1792402.24	1039.05	TS
1057	322637.81	1792397.24	1038.98	EOP
1058	322643.81	1792397.09	1039.00	EOP
1059	322643.69	1792392.09	1039.00	EOP
1060	322637.69	1792392.24	1038.98	EOP
1061	322636.76	1792354.06	1040.21	EOP
1062	322642.76	1792353.92	1040.30	EOP
1063	322652.18	1792348.82	1040.45	EOP
1064	322651.85	1792335.05	1040.46	EOP
1065	322642.19	1792330.42	1040.31	EOP
1066	322636.22	1792331.67	1040.22	EOP
1067	322641.99	1792322.18	1040.25	EOP
1068	322635.99	1792322.32	1040.16	EOP
1069	322590.54	1792270.65	1039.95	EOP
1070	322586.03	1792274.62	1039.92	EOP
1071	322580.03	1792274.76	1040.01	EOP
1072	322580.98	1792313.85	1039.78	EOP
1073	322587.08	1792317.66	1039.71	EOP
1074	322569.53	1792332.11	1039.95	EOP
1075	322567.87	1792326.46	1040.05	EOP
1076	322560.22	1792332.83	1040.26	EOP
1077	322559.86	1792323.54	1040.13	EOP
1078	322565.37	1792321.01	1040.04	EOP
1079	322579.71	1792261.69	1040.08	TOR
1080	322573.38	1792261.84	1039.58	BOR/FL
1081	322573.27	1792256.84	1039.51	BOR/FL
1082	322579.59	1792256.69	1040.01	TOR
1083	322650.96	1792298.52	1040.06	EOP
1084	322651.13	1792305.52	1040.13	EOP
1085	322644.13	1792305.69	1040.12	EOP
1086	322643.96	1792298.69	1040.06	EOP
1087	322669.08	1792406.66	1034.85	EOP
1088	322669.21	1792414.52	1034.94	EOP
1089	322644.06	1792407.09	1036.05	BS
1090	322644.26	1792415.15	1036.17	EOP
1091	322638.26	1792415.30	1036.05	EOP
1092	322638.06	1792407.24	1036.05	BS
1093	322626.97	1792407.51	1036.22	EOP
1094	322627.03	1792415.58	1036.22	EOP

RADIUS POINTS

POINT #	NORTHING	EASTING	DESCRIPTION
1100	322749.54	1792208.55	RP
1101	322755.72	1792207.40	RP
1102	322654.26	1792210.87	RP



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BRETT LOUIS SMITH — LICENSED — Brett Smith — 23760 — 9-1-17 — KANSAS — PROFESSIONAL ENGINEER

SCALE: 1" = 20'

REV	DESCRIPTION	DATE

Project Number: **16036**

Date: **9/1/2017**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO, KS

Sheet Title:
HORIZONTAL & VERTICAL CONTROL PLAN

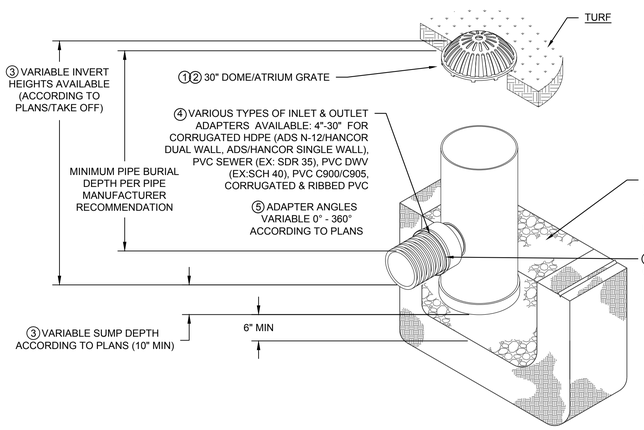
Sheet:
C3

Of:

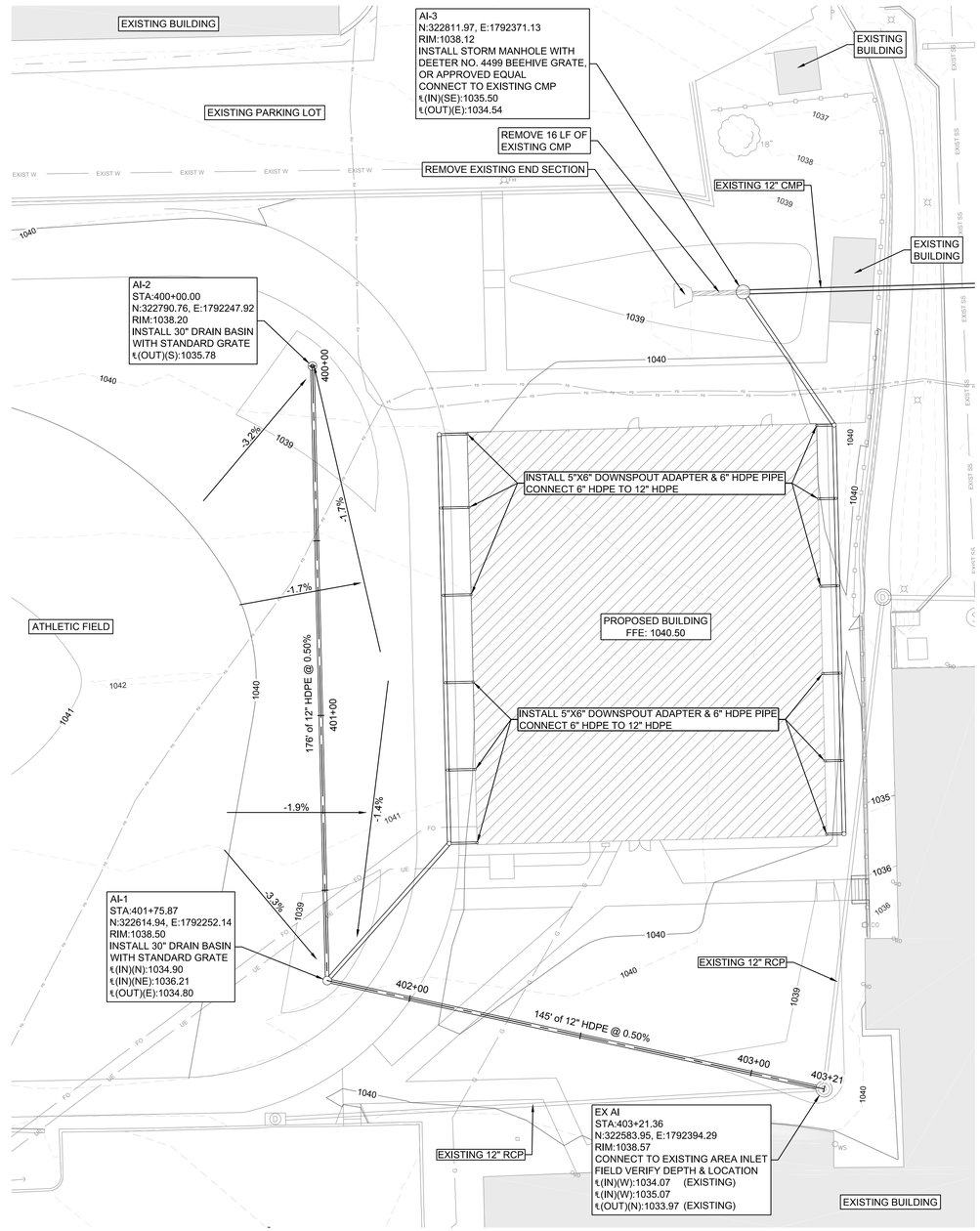
NYLOPLAST 30" DRAIN BASIN: 2830AG

NOT TO SCALE

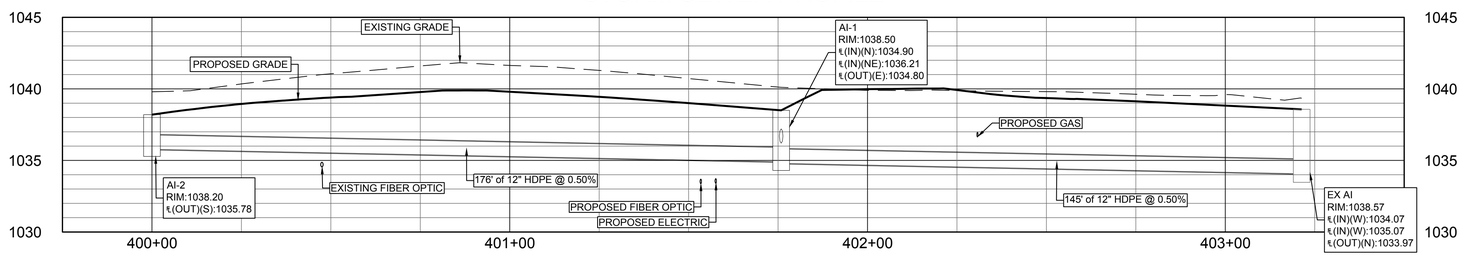
Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com



① - GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
② - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
③ - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
④ - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL) & PVC SEWER (4" - 24")
⑤ - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-013.



STORM SEWER PROFILE



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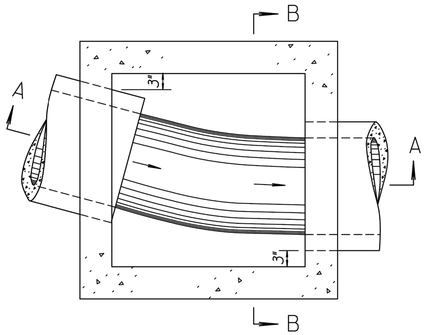
BRETT LOWE LICENSED 23760 9-1-17 KANSAS PROFESSIONAL ENGINEER

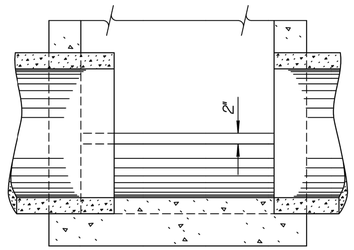
SCALE: 1" = 20'

REV	DESCRIPTION	DATE

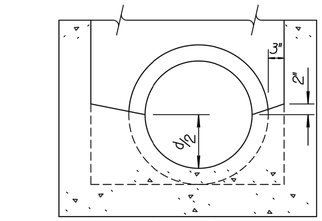
Project Number: 16036
Date: 9/1/2017
Project Name: USD 320 MULTIPURPOSE BUILDING
Project Address: WAMEGO, KS
Sheet Title: STORM PLAN & PROFILE
Sheet: C4
Of:



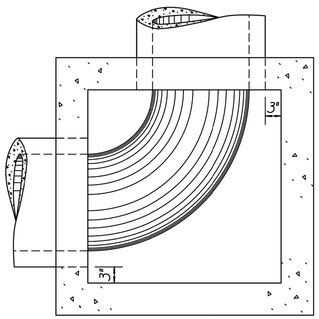
PLAN - FLOOR (Example I)



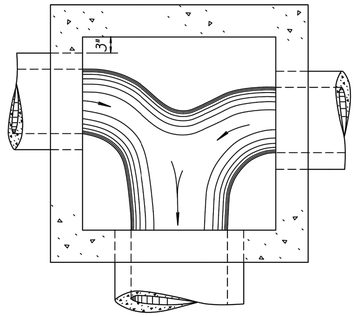
SECTION A-A (Example I)



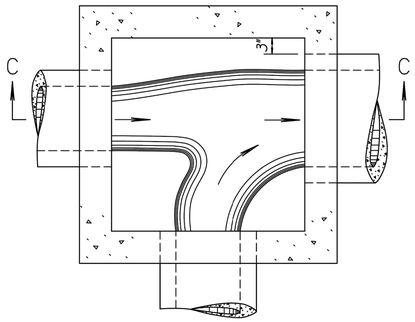
SECTION B-B (Example I)



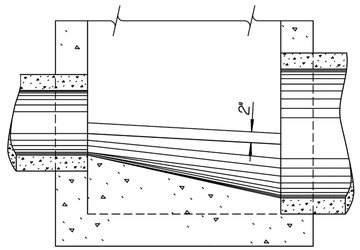
PLAN - FLOOR (Example II)



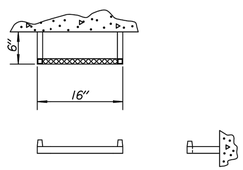
PLAN - FLOOR (Example III)



PLAN - FLOOR (Example IV)

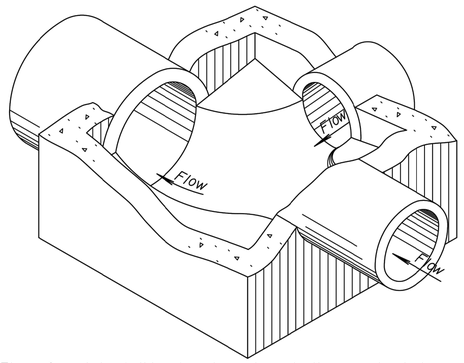


SECTION C-C (Example IV)



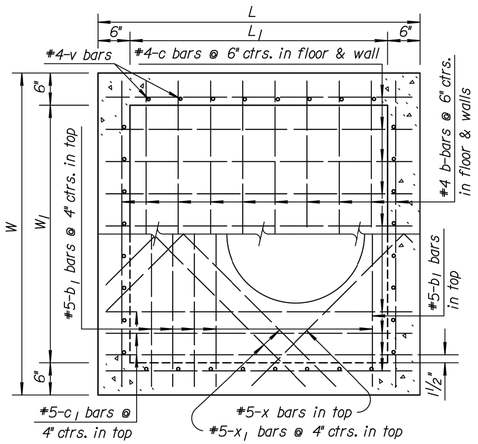
STEP DETAILS

Ø Steps shall be uniformly spaced. Spacing shall be 12" minimum and 16½" maximum.

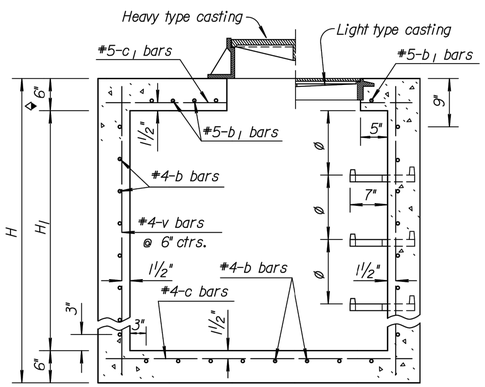


Floor of manhole shall be shaped as shown in the examples to increase hydraulic efficiency.

ISOMETRIC VIEW (Example IV)



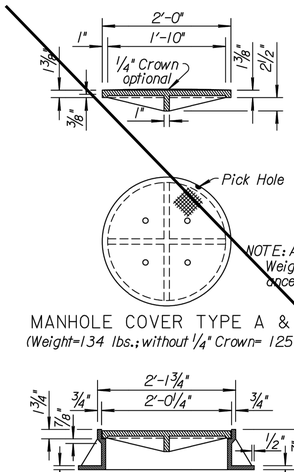
PLAN (Showing top & floor reinf.)



◊ Where dimension "L" or "W" is greater than 6'-0" use 8" slab thickness.

SECTION (Exclusive of floor shaping)

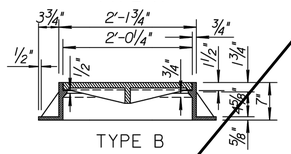
Note: Use Concrete Grade 3.0 throughout. All exposed edges shall be finished with an edging tool.
At the contractors option Concrete Grade 3.0 (AE) or mix used in concrete pavement may be used throughout.
In general, pipes will enter and leave manhole at various positions. Where possible bend bars around pipes.
Floor of manhole shall be shaped as shown in various "EXAMPLES" with unreinforced Concrete Grade 3.0.
Manhole opening and steps, where used, shall be placed to afford easy access to top of shaped invert. Top reinforcing bars shall be adjusted accordingly.
All castings shall be gray iron and shall comply with the KDOT Standard Specifications.
No deductions in concrete quantities shall be made for pipe openings or additions to concrete quantities shall be made for shaping floor of manholes.
The top of the manhole shall be sloped slightly to approximately fit the ground line or other condition as directed by the Engineer.
Dimensions and weights of cast iron as shown on this sheet are minimum. Larger dimensions and/or heavier weights of cast iron may be used.
The Contractor has the option of using precast manholes, as approved by the Engineer.
Steps shall be installed in all manholes when specified in the plans or when "H" is equal to or greater than six feet. Steps shall comply with the requirements of the KDOT Standard Specification.



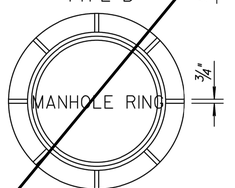
NOTE: All manhole castings are cast iron. Weight of castings includes no allowance for fillets and overruns.

MANHOLE COVER TYPE A & B
(Weight=134 lbs.; without ¼" Crown= 125 lbs.)

TYPE A

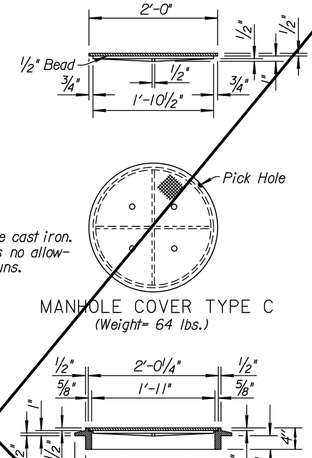


TYPE B



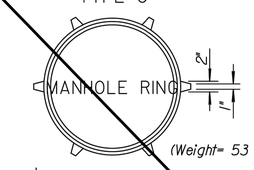
(Type A Ring= 192 lbs., Type B Ring= 198 lbs.)

HEAVY TYPE
MANHOLE COVER AND RING
Note: Either Type A or Type B may be used.



MANHOLE COVER TYPE C
(Weight= 64 lbs.)

TYPE C



(Weight= 53 lbs.)

*LIGHT TYPE
MANHOLE COVER & RING
*Rings with four equally spaced lugs will be permitted.

NO.	DATE	REVISIONS	BY	APP'D
31	1-28-05	Changed Class to Grade concrete	S.W.P.	J.O.B.
30	12-12-97	Revised step spacing	R.J.S.	J.O.B.
29	12-27-93	Delete paint note	R.J.S.	J.O.B.
28	1-30-92	Rev. paint&step notes, ent. on CADD	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

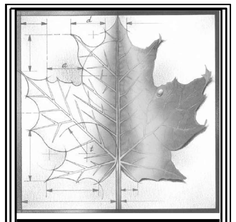
REINFORCED
CONCRETE MANHOLE

RD633

FHWA APPROVAL	06-10-05	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. Seitz

KDOT Graphics Certified

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



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SMH
CONSULTANTS
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Manhattan, KS 66503
P (785)776-0541 • F (785)776-9760

SCALE: 1" = 20'

REV	DESCRIPTION	DATE

Project Number: 16036

Date: 9/1/2017

Project Name: USD 320 MULTIPURPOSE BUILDING

Project Address: WAMEGO, KS

Sheet Title: STORM DETAILS

Sheet: C5

Of:

NOTES:
CONTRACTOR TO COMPLY WITH CITY OF WAMEGO STORM WATER MANAGEMENT REQUIREMENTS AS WELL AS THE PROVIDED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND SOIL EROSION AND SEDIMENT CONTROL PLAN .

TEMPORARY SEEDING SHALL INCLUDE ALL DISTURBED SOIL UNLESS OTHERWISE NOTED AS PERMANENT SEEDING.

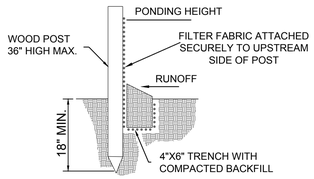
EXISTING VEGETATION SHALL BE MAINTAINED IN ALL AREAS AS STORM WATER POLLUTION PREVENTION WITH THE EXCEPTION OF THOSE AREAS NOTED TO BE DISTURBED ON THIS PLAN SHEET.

CONTRACTOR SHALL DESIGNATE TRUCK WASHOUT AREA.

LEGEND

- 5' EXISTING CONTOUR
- 1' EXISTING CONTOUR
- 5' PROPOSED CONTOUR
- 1' PROPOSED CONTOUR
- SF — SF — SILT FENCE
- GENERAL DIRECTION OF FLOW, RUNOFF
- PERMANENT SEEDING

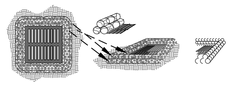
SILT FENCE BARRIER



NOTES:

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

AREA INLET PROTECTION



NOTES FOR AREA INLET PROTECTION:

- SURROUND WIRE WRAPPED ROCK WATTLE, FILLED WITH 1½" DIA. CLEAN ROCK, AROUND AREA INLET AS SHOWN.
- INSURE EACH NEW WRAP DOES NOT BEGIN AND END IN THE SAME PLACE AS THE PREVIOUS.
- USE A MINIMUM OF THREE (3) WATTLES AROUND EACH INLET, STACKED AS SHOWN.

* WHERE CLEAN ROCK IS NOT AVAILABLE, OTHER WATTLE MATERIAL MAY BE SUBSTITUTED. SUITABLE MATERIAL WILL NOT DETERIORATE OR DECOMPOSE DUE TO AGE OR WEATHER.

MATERIAL SPECIFICATION:

WATTLE INLET PROTECTION SHOULD BE CONSTRUCTED OF CLEAN ROCK THAT IS FREE OF FINES SUCH AS DUST OR SEDIMENT SMALLER THAN THE WIRE MESH ENCASING. THE STAKES USED TO ANCHOR WATTLES (WHERE POSSIBLE) SHALL BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 18" LONG.
USE WIRE WRAPPED ROCK WATTLES FILLED WITH 1½" CRUSHED, CLEAN ROCK (RECYCLED CONCRETE OR SAND BAGS ARE NOT ACCEPTABLE).
ORGANIC MATERIAL ENCASING AND/OR FILL SUCH AS COMPOST OR FIBER OF A VEGETATION ORIGIN IS PROHIBITED BECAUSE IT BIODEGRADES READILY.

PLACEMENT:

WATTLE INLET PROTECTION SHALL BE PLACED DIRECTLY AROUND THE OPENING OF A STORM INLET AND EXTEND A MINIMUM OF 2' ON EITHER SIDE OF THE OPENING. THE WATTLE(S) SHALL LAY DIRECTLY AGAINST THE CURB. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR THE WATTLE TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

- OVER PAVED SURFACES, THE LENGTH OF THE WATTLE PLACED IN FRONT OF THE INLET OPENING SHALL BE REINFORCED WITH A 2X4 CENTERED IN THE WATTLE.
- THE LENGTH OF 2X4 SHALL EXTEND 3" BEYOND BOTH SIDES OF THE INLET OPENING.
- THE WATTLE SHALL BE IN CONTINUOUS CONTACT WITH CURB AND ROAD SURFACES WHEN POSSIBLE.
- NO DAYLIGHT SHALL BE SEEN UNDER THE WATTLE.
- THE WATTLE COVERING THE AREA DIRECTLY IN FRONT OF THE INLET WILL NOT HAVE DIRECT CONTACT WITH THE CURB BUT WILL HAVE DIRECT CONTACT WITH THE ROAD SURFACE.
- IN INSTANCES WHERE FINISHED GROUND DIRECTS FLOWS OVER THE TOP OF THE INLET, A WIRE WRAPPED ROCK WATTLE SHALL BE PLACED ON TOP OF THE INLET FOR ADDITIONAL PROTECTION FROM TOP-SIDE FLOWS.
- IF WATTLES ARE USED SUCCESSIVELY, DO NOT OVERLAP THE ENDS ON TOP OF EACH OTHER.
- WATTLES SHALL BE INSTALLED AND MAINTAINED IN CONFORMANCE WITH MANUFACTURERS' SPECIFICATIONS TO MEET SITE CONDITIONS AND IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES.

NOTE: THE INSTALLATION AND MAINTENANCE OF WATTLES SHALL NOT NEGATIVELY IMPACT TRAFFIC SAFETY.

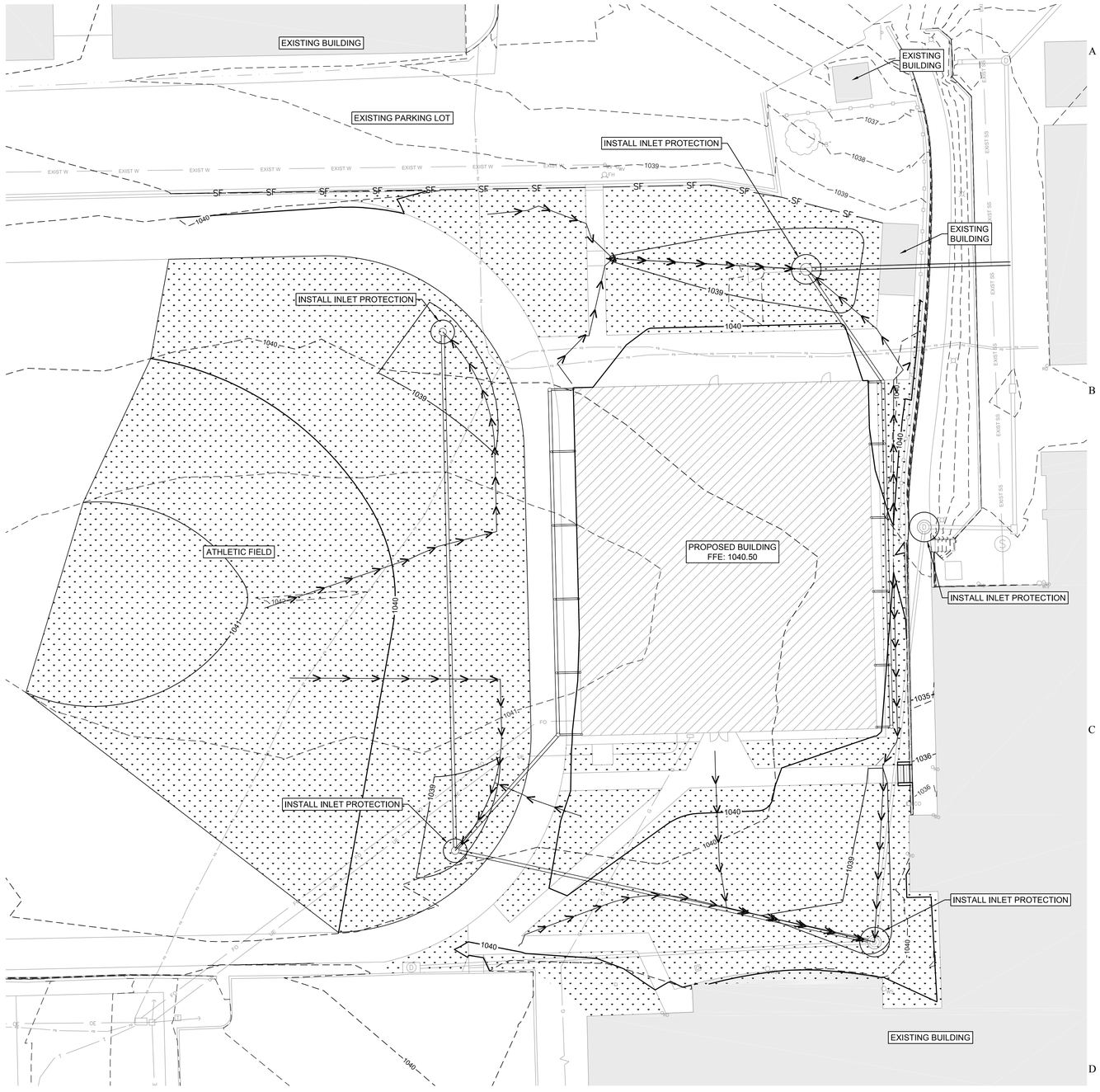
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

- WATTLES SHALL BE PLACED DIRECTLY IN FRONT OF THE INLET OPENING. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR.
- WHEN MULTIPLE WATTLES ARE USED IN A CONTINUOUS ROW, THE ENDS SHALL OVERLAP HORIZONTALLY SO THAT NO DAYLIGHT CAN BE SEEN AT EACH OVERLAPPING POINT. THE UPHILL END OF THE OVERLAPPING WATTLE SHALL BE PLACED ON THE FLOW SIDE OF THE DOWNHILL END OF THE OVERLAPPED WATTLE.

INSPECTION AND MAINTENANCE:

WATTLE INLET PROTECTION SHALL BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF ½" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHALL BE ADDRESSED DURING EACH INSPECTION:

1. DOES WATER FLOW AROUND THE WATTLE?
2. DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING WATTLES?
3. ARE ANY WATTLES DISLODGED?
4. ARE WATTLES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
5. DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE WATTLE?



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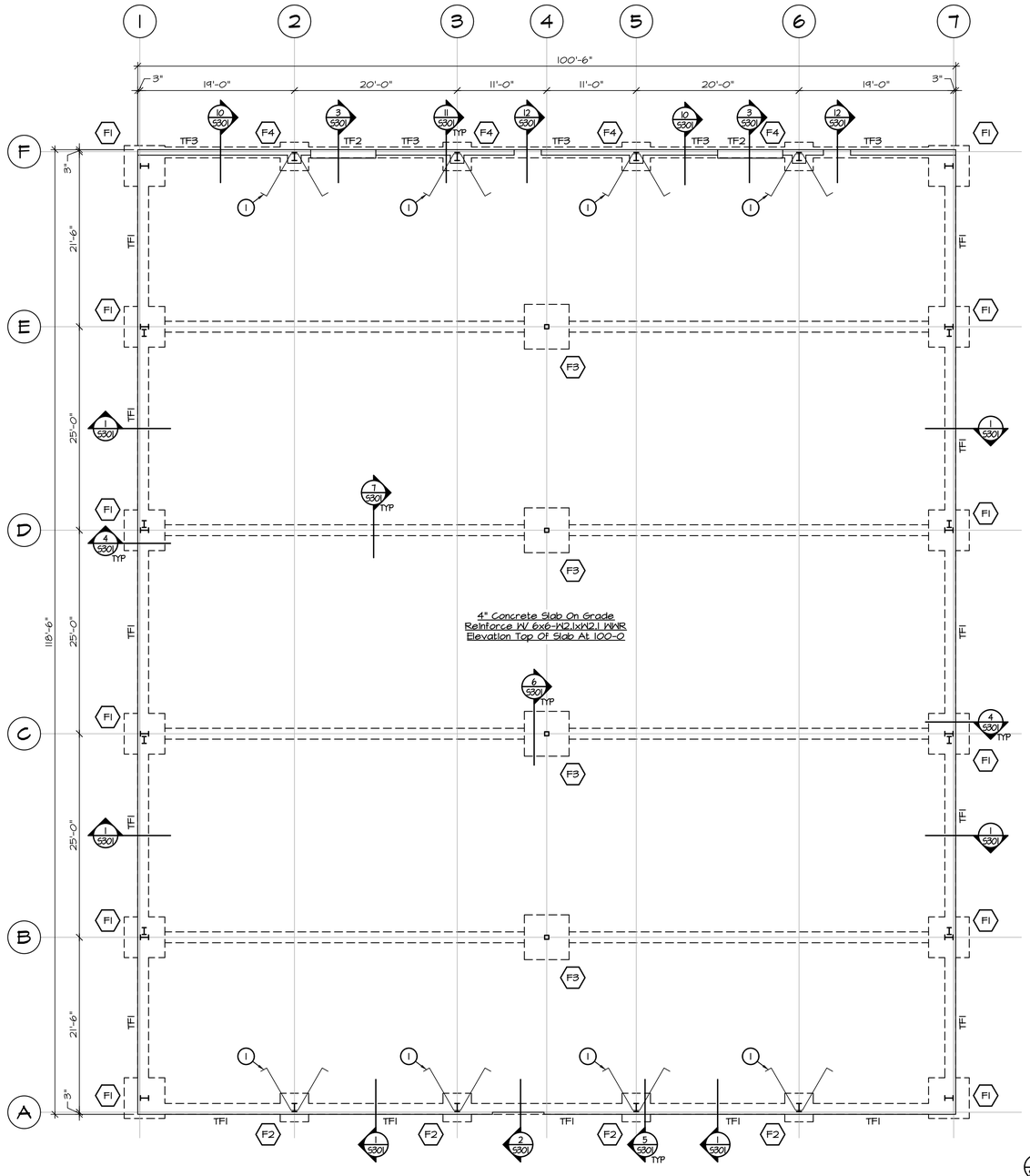
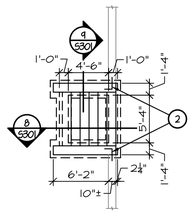
BRETT LOWN LICENSED 23760 9-1-17 KANSAS PROFESSIONAL ENGINEER

20' 10' 0' 20'
SCALE: 1" = 20'

REV	DESCRIPTION	DATE

Project Number: 16036
Date: 9/1/2017
Project Name: USD 320 MULTIPURPOSE BUILDING
Project Address: WAMEGO, KS
Sheet Title: SESC PLAN
Sheet: C6
Of:





NORTH

FOUNDATION PLAN

1/8" = 1'-0"

PLAN MARKS:

F# Column Footing Mark, See Schedule On Sheet S201

TF# Trench Footing Mark, See Schedule On Sheet S201

PLAN NOTES:

1. See General Structural Notes on Sheet S201 for Additional Notes and Information.
2. Center Column Footings Below Centerline of Metal Building Columns or Frames Unless Noted Otherwise. Coordinate Dimensional Location of Building Columns and Frames With the Metal Building Shop Drawings.
3. See Detail 13-S301 For Typical Slab Joint Details.
4. See Detail 14-S301 For Typical Corner Bar Detail.
5. See Detail 15-S301 Where Subgrade Plumbing or Electrical Conduit Lines Occur Within 2'-0" Below Bottom of Footing Elevation.
6. Verify All Perimeter Building Dimensions With Metal Building Supplier.
7. See Architectural Drawings for Exterior Slabs and Paving Details. See Mechanical Drawings for Equipment and Equipment Pad Details, Typical.

REFERENCED PLAN MARKS:

(1) #5x14-6 Hairpin Cast In Floor Slab Around Column.

(2) #5x2-2 Dowels w/ 10" Hook At 12" o.c. Vertically In Center Of Foundation Wall And Footing, Drill And Adhere 8" Into Existing Retaining Wall And Foundation.

10

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S101 in I:\17-045\17-045.03\S-FOUNDATION 9/1/2017 [MD] [1:96]

RONALD L. BROWN LICENSED PROFESSIONAL ENGINEER KANSAS 9/1/2017

REV	DESCRIPTION	DATE

Project Number: **17036**

Date: **9/1/17**

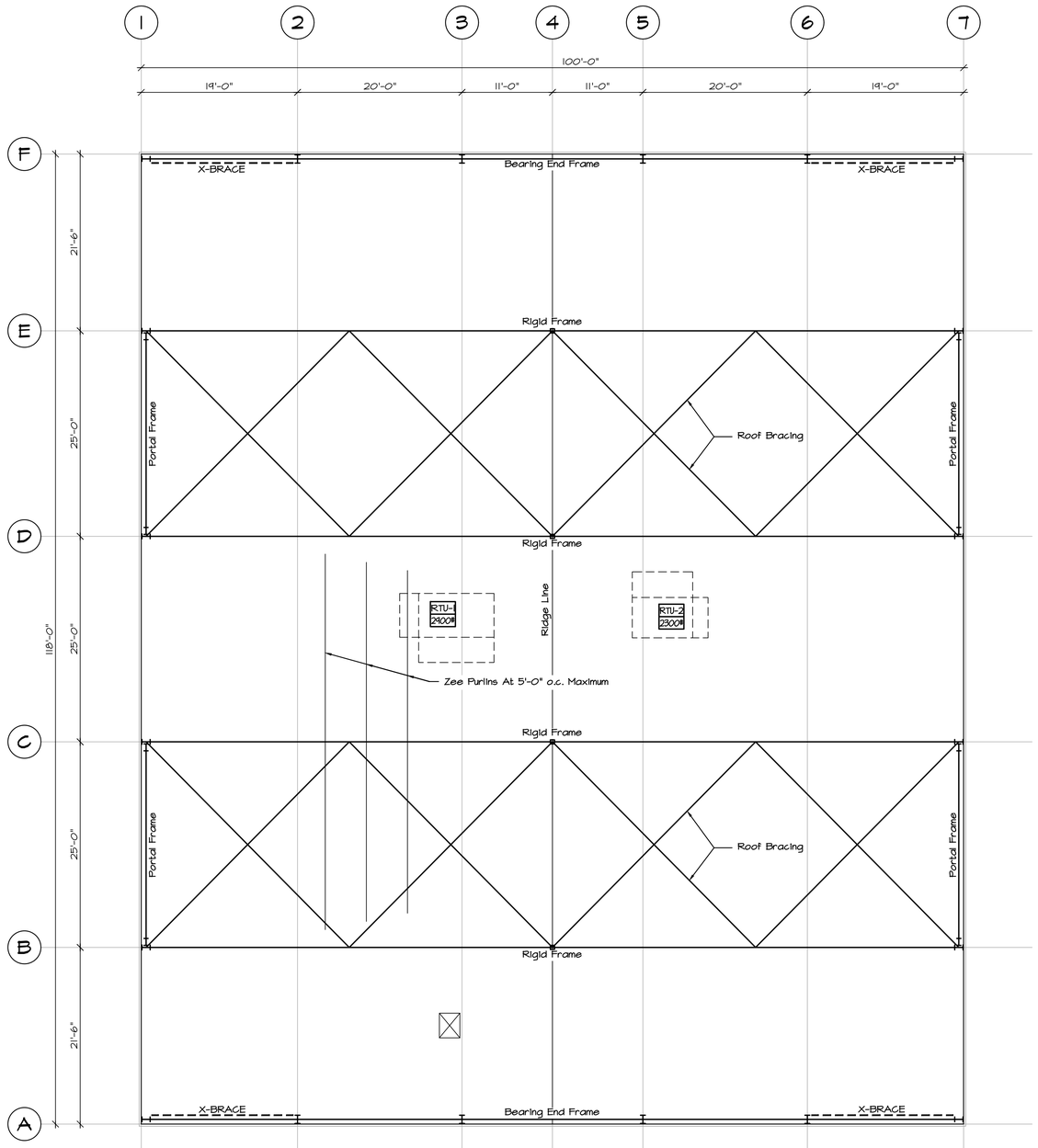
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

Sheet Title:
FOUNDATION PLAN

Sheet:
S101

Of:



NORTH

CONCEPTUAL ROOF FRAMING PLAN

1/8" = 1'-0"

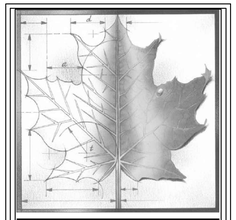
PLAN NOTES:

1. See General Structural Notes on Sheet S201 for Additional Notes and Information.
2. Dimensions Are To Outside Face Girt And Centerline Of Beams And Columns, Typical Unless Noted Otherwise.

PLAN MARKS:

RTU #
XXXX#

Indicates Mechanical Unit, See Mechanical
Indicates Scheduled Weight Of Mechanical Unit



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S102 in I:\17-045\17-045.02\S-ROOF 9/1/2017 [MD] [1:96]

RONALD L. BROWN
LICENSED
PROFESSIONAL ENGINEER
KANSAS
9/1/2017

REV	DESCRIPTION	DATE

Project Number: **17036**

Date: **9/1/17**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

Sheet Title:
CONCEPTUAL ROOF FRAMING PLAN

Sheet:
S102

Of:

GENERAL STRUCTURAL NOTES

General Contractor shall review and stamp all the shop drawings before submitting for review.
Verify all dimensions and elevations with the Architectural Drawings.
See the Architectural Drawings for the exact dimensions for openings in the walls, roof, and floor systems.
Verify all mechanical opening sizes and locations with the mechanical contractor.
Verify all electrical opening sizes and locations with the electrical contractor.
No pipes, sleeves, or etc. shall pass through the beams or columns unless indicated on the plan.
Do not hang or attach any architectural, mechanical, or electrical elements or systems from the metal roof deck or any joist bridging unless specifically approved otherwise. The contractor shall design, provide, and maintain temporary bracing, shoring, guying, etc. and other methods as required to prevent any excessive loading and to stabilize the structural elements during construction. These methods shall remain in place until all members and final connections have been completed.
The foundation is designed for an allowable bearing pressure of 2,500 psf as recommended in the Geotechnical Investigation Report prepared by GSI Engineering, LLC, Job No. 1773023B.
The building structural system is designed per the International Building Code - 2012 Edition.
The contractor shall perform all material testing and inspection requirements for compliance with the governing building code, the project specifications, the local building inspection department, and the following Structural Special Inspection Notes.
Steel joist, structural steel, and metal deck erection shall comply with OSHA Standard 29 CFR Part 1926, Subpart R and all other governing regulations. Steel joist and structural steel suppliers and fabricators shall incorporate the requirements of this standard into the materials fabricated and supplied on this project.

DESIGN LOADS

Building structure is designed for the following loads and criteria:

Building Occupancy Category: II

Dead: Weight of materials and construction plus weight of fixed service equipment

Live Load:	Floor Live Load:	
	First floor general areas:	100 psf
	Roof live load:	20 psf (non-reducible)
Snow:	Ground snow load:	Pg = 20 psf
	Flat-roof snow load:	Pf = 15 psf
	Drifting snow load:	ASCE 7-10
	Snow exposure factor:	Ce = 1.0
	Snow load importance factor:	I = 1.0
	Thermal factor:	Ct = 1.0
Wind:	Basic wind speed (3-second gust):	Vult = 115 MPH Ultimate Vasd = 89 MPH Nominal
	Wind exposure category:	C
	Internal pressure coefficient:	±0.18
Seismic:	Seismic importance factor:	I = 1.0
	Mapped spectral response accelerations:	Ss = 0.159 S1 = 0.058
	Site class:	D
	Spectral response coefficients:	Sds = 0.169 Sd1 = 0.093
	Seismic Design Category:	B
	Analysis procedure:	Equivalent lateral force
	Basic seismic-force res. system:	Structural steel system not specifically detailed for seismic resistance
	Response modification factor:	R = 3
	Seismic response coefficient:	Cs = 0.056
	Design base shear:	V = 0.056 x W

STRUCTURAL SPECIAL INSPECTIONS

The contractor shall engage one or more qualified independent testing and inspecting agencies to perform the material testing and inspection requirements as outlined in the project specifications and this section.
Testing and inspection reports shall be furnished to the Building Official, the Architect, and the Structural Engineer. Reports shall indicate that the materials tested and the work inspected are in conformance with the Contract Documents. Discrepancies shall be brought to the attention of the Contractor for correction. If the discrepancies are not corrected, the discrepancies shall be reported to the Building Official, the Architect, and the Structural Engineer.
The testing and inspecting agencies shall submit a final report for each type of work stating that any discrepancies noted in the testing and inspections have been corrected and that the structural work was, to the best of their knowledge, performed in conformance with the Contract Documents.
The testing and inspection program does not relieve the Contractor of any responsibility for constructing the project in accordance with the Contract Documents and for controlling the quality of construction.
The Contractor shall be responsible for the scheduling and the timely notification of the testing and inspection agencies of the need for material testing or inspections.
All work which requires testing or inspection shall be ready for testing or inspection at the time of the testing and inspecting agency's visit. No work shall be performed which would conceal items to be tested or inspected until the work has been reviewed and accepted.
The following types of work require special inspection (IBC references refer to the International Building Code edition referenced above):

1. Inspection of fabricators shall comply with IBC Section 1704.2.5.
2. Testing and inspection of steel construction shall comply with IBC Section 1705.2, IBC Table 1705.2.2, and American Institute of Steel Construction (AISC) Specification for Structural Steel Buildings 360.
   a. Submit material test reports, manufacturer's certifications, product data sheets, welding procedure specifications, welding personnel performance qualification records, fabricator/erector quality control manual, fabricator/erector inspector qualifications as specified. Contractor shall maintain same for review by Architect/Engineer as indicated in AISC 360 Chapter N.
   b. Submit AWS performance qualification records for personnel performing shop fabrication or field erection welding.
   c. Perform visual inspection of the fabricated or erected steel framing to verify compliance with the construction drawings, including member location, bracing, stiffeners, and connection types.
   d. Perform visual inspection of all shop fabrication and field erection welds.
   e. Perform visual inspection of all snug-tightened (Type ST) bolted connections.
   f. Perform visual inspection of the placement of anchor rods and embed plates in concrete and concrete masonry. Verify diameter, grade, type, length, and embedment of anchors prior to placing concrete or grout.
3. Testing and inspection of concrete construction shall comply with IBC Section 1705.3 and IBC Table 1705.3.
   a. Perform sampling and testing of cast-in-place concrete as specified.
   b. Perform periodic observation of reinforcing for steel size, cover, spacing, positioning, lap lengths and locations.
   c. Perform inspection of the reinforcing for steel size, cover, spacing, positioning, lap lengths and locations at slabs on grade.
   d. Perform inspection of concrete placement for proper procedures for transporting, placing, consolidating, and finishing of concrete.
   e. Perform periodic inspection of concrete curing and protection procedures, including compliance with the hot and cold weather requirements defined in the specifications.
   f. Contractor shall maintain records of all batch reports and delivery tickets on each load of concrete delivered to the project site for periodic review by the Architect/Engineer.
4. Testing and inspection of the soils shall comply with IBC Section 1705.6 and IBC Table 1705.6.
   a. Perform sampling, testing, and inspection of the soil type, exposed subgrade, moisture content, lift thickness, and compaction as specified.
   b. Perform periodic testing and inspection of the soils at the foundation system bearing elevation to verify the required soil bearing capacities.
5. Testing and inspection of post-installed anchors and post-installed reinforcing bars shall comply with IBC Section 1705.1.1.
   a. Perform an initial post-installed anchor and reinforcing bar installation inspection for each type and size of post-installed anchor and reinforcing bar. Any change in the personnel performing the post-installed anchor or reinforcing bar installation shall require an initial installation inspection.
   b. Perform periodic post-installed anchor and post-installed reinforcing bar installation inspections during the project to verify that the anchor and reinforcing bar installations continue to be properly performed.
   c. Post-installed anchor and reinforcing bar installation inspections shall verify anchor/reinforcing bar type, diameter, embedment depth, spacing, adhesive type, hole dimensions, base material, hole cleaning procedures, and adherence to the manufacturer's installation instructions.
   d. Perform visual observation of all completed post-installed anchor and post-installed reinforcing bar installations.
   e. All post-installed adhesive anchor installations shall be tested to a torque equal to a minimum of 75 percent of the anchor manufacturer's defined installation tightening torque.
   f. Perform continuous anchor installation inspections for all post-installed anchors and reinforcing bars that are installed overhead with the anchor/reinforcing bar in a vertical position.

CAST-IN-PLACE CONCRETE

All concrete shall have the following minimum compressive strengths at 28-days.

Footings:	3000 psi
Formed Foundation Walls:	4000 psi
Interior Floor Slabs:	3500 psi
Exterior Slabs and Pavement:	4000 psi

All aggregate for normal weight concrete shall meet ASTM C33. Aggregates shall be proportioned such that mix design shall contain a minimum of 50% coarse aggregates by gradation requirements set forth in ASTM C33. Coarse aggregate shall meet No. 67 grading requirements.
Exterior exposed concrete shall have from 4 to 7% entrained air.
Concrete shall be in strict conformance with the current "ACI Manual of Concrete Practice".
No aluminum shall be placed in the concrete.
Chamfer all exposed edges of the concrete 3/4"
Slabs on earth shall be 4 inches thick with 6x6-W2.1xW2.1 welded wire reinforcement unless otherwise noted.
Contraction joints or construction joints in slabs on grade shall be spaced to divide the slab into panels not to exceed 225 square feet. The longer dimension of each panel shall not exceed the shorter dimension by more than 20 percent.
All saw-cut joints in slab on grade floors shall use an early entry dry-cutting saw system.
Provide concrete bases for the mechanical equipment. All shall be 4 inches thick on top of floor slabs on grade with 6x6-W2.1xW2.1 welded wire reinforcement, unless otherwise noted.
Provide #3 spreader ties to properly position inside and outside wall vertical bars within the wall forms. Locate at top of walls and at mid height at 48" o.c. along length of walls.

REINFORCING STEEL

All welded wire reinforcement (WWR) shall meet ASTM A1064. Lap splice all welded wire reinforcement the cross wire spacing plus 2 inches. Furnish all welded wire reinforcement in flat sheets.
All reinforcing shall meet ASTM A615 - 60,000.
All reinforcing steel shall have adequate coverage as indicated in ACI 318 for the given exposure.
Reinforcing shall be continuous and lapped a minimum of 24 inches or 36 bar diameters whichever is greater, unless otherwise noted.
Reinforcing shall be detailed according to the ACI Detailing Manual and shall be prepared under the supervision of a professional engineer licensed to practice in the State of Kansas.
Provide corner lap bars to match in size and spacing of all wall, trench footing, and grade beam horizontal bars. Corner bars are not required in the wall footings, unless specifically indicated.
Fan main reinforcing around openings in the structural members. Do not field cut bars unless the Architect's approval is obtained.
Provide 2-#5, 4'-0" longer than opening dimension, on all sides of the openings in the slabs and walls.
Provide 250 pounds of extra bars of various sizes to be used as directed. Include labor for placing same.
Provide 3-inch slab bolster with continuous bottom plate at 4'-0" maximum centers for positioning all footing bottom bars.
Provide bar supports for all bars in slabs cast on grade at a maximum of 4'-0" in each direction.
Mark each bundle of the reinforcing with weatherproof tags.
Welding of all reinforcing bars shall conform to ANS D1.4, "Structural Welding Code - Reinforcing Steel".

POST-INSTALLED ANCHORS

All post-installed anchors and post-installed reinforcing bars shall be installed per the manufacturer's installation instructions. All holes shall be drilled per the manufacturer's instructions with the required bit type and size to provide the minimum embedment length specified in the Structural drawings. All holes shall be cleaned prior to installing the anchor or reinforcing bar per the manufacturer's instructions with the brush and compressed air method or with the self-cleaning Hilti Safe Set Technology method using Hilti Hollow Drill Bit and Vacuum System.
The installation of all post-installed anchors and post-installed reinforcing bars shall be performed by personnel trained and certified by the American Concrete Institute/Concrete Reinforcing Steel Institute or trained by the post-installed anchor and/or adhesive manufacturer for the type of anchor or reinforcing bar being post-installed.
Expansion anchors installed into concrete shall be wedge anchors equal to Hilti Kwik Bolt TZ Stud Anchor or Simpson Strong-Tie Strong-Bolt 2.
Expansion anchors installed into solid grouted masonry shall be wedge anchors equal to Hilti Kwik Bolt 3 Stud Anchor.
Adhesive anchors or reinforcing bars installed into concrete shall use Hilti HIT-HY 200 Adhesive Anchoring System or an approved equal.
Adhesive anchors or reinforcing bars installed into solid grouted masonry, hollow block masonry, or brick masonry shall use Hilti HIT-HY 70 Adhesive Anchoring System or an approved equal.
A piston plug injection procedure approved by the adhesive manufacturer shall be used for the injection of adhesive into all holes greater than 10 inches in depth.
Simpson Strong-Tie SET-XP, Simpson Strong-Tie AT-XP, and Hilti HIT-RE 500 V3 are approved equal adhesive anchoring systems for adhesive anchors or reinforcing bars installed into concrete.
Simpson Strong-Tie SET-XP is an approved equal adhesive anchoring system for adhesive anchors or reinforcing bars installed into solid grouted masonry.
All post-installed expansion anchors must be tightened to the anchor manufacturer's recommended installation torque.
The installation of all post-installed anchors and post-installed reinforcing bars shall be reviewed and accepted by the field testing and inspection agency.

METAL BUILDING

Metal Building shall be designed for the following loads and criteria:
Dead Load: Self weight of metal building system.
Collateral roof dead load: 5 psf
See the "Design Loads" section for live load, snow load, wind load, and seismic design criteria.

Wind loads shall be applied in accordance with the requirements contained in the body of the International Building Code.
Metal Building design shall meet the requirements of the latest MBMA Low Rise Building Systems Manual, the International Building Code, the AISC Specifications for Structural Steel Buildings, and the AISI Specification for the Design of Cold-Formed Steel Structural Members, and the project specifications.
The metal building manufacturer shall be responsible for the metal building system design.
The metal building manufacturer shall submit complete design calculations prepared and sealed by a professional engineer licensed to practice in the State of Kansas, along with the shop drawings for review prior to the start of any foundation work.
The building shall be designed to limit the combined ratio of actual stresses to allowable stresses to be equal to 1.00.
The metal building manufacturer shall provide the top and bottom flange lateral bracing angles at all roof purlins supporting standing seam roofing systems. Purlin lateral bracing shall be installed to meet the requirements of the AISI Specification for the Design of Cold-Formed Steel Structural Members, the governing building code, and the Owner's insurance carrier.
The metal building manufacturer or the contractor shall design the diameter and length of the column anchor rods. Concrete design strength and foundation details to be used in the design of anchor rods are indicated on the plans and notes. See "Structural Steel" section for additional information and requirements on anchor rods.
The building shall be designed to limit total load vertical deflection for all roof framing members to L/240.
Lateral load deflections for main frames shall be limited to H/120.
Lateral load deflection for wind girts and wind columns shall be limited as follows:
Wind girts and columns: L/180
All columns and frames shall be designed with pinned end column bases.
Verify all building dimensions with the metal building manufacturer. The exact column centerline and anchor bolt location shall be coordinated with the building foundation by the contractor and the metal building supplier prior to the start of any foundation work.
Concrete column size shall be checked against the base plate size to assure adequate size to install the column reinforcing and anchor rods.
Due consideration shall be given to the weight of any suspended equipment in the design of the structural members. See the mechanical and electrical plans and specifications. Verify the size, weight, and location of all suspended items prior to designing and fabricating the metal building structure.
X-Bracing shall consist of steel rods or other structural steel shapes. Cable bracing will not be allowed.

STRUCTURAL STEEL

Structural steel shall meet the latest AISC "Specification for Structural Steel Buildings."
Structural steel shop drawings shall be prepared under the supervision of a professional engineer licensed to practice in the State of Kansas.
All unheaded anchor rods shall be ASTM F 1554, Grade 36.
All threaded steel rods shall meet ASTM A307, Grade B; ASTM F1554, Grade 36; or an approved equal or greater strength threaded rod. All threaded rods cast in concrete or post-installed in concrete or masonry shall be thoroughly cleaned of all surface oils.
All anchor rods set in concrete shall be furnished with double nuts and shall be set with a template.
Provide an angle frame to support the metal deck at all openings greater than 9" x 9".
Welding shall conform to AWS D1.1, "Structural Welding Code - Steel". All welds shall be AWS prequalified welded joints. No unauthorized welds will be accepted.
E70xx electrodes shall be used for all welding, U.N.O..
All field completed welding and bolted connections shall be reviewed and accepted by the field inspection and testing agency prior to the installation of subsequent work.
Galvanized structural steel shall conform to ASTM A123 for members and ASTM A153 for connection elements.

EXPOSED CAST-IN-PLACE CONCRETE SPECIAL REQUIREMENTS

At all locations where the cast-in-place concrete surface is exposed to the exterior and weather, the Contractor shall take special precautions and shall implement special quality control measures to assure that the following concrete coverage requirements are met and maintained at all locations.
Concrete vertical and horizontal or longitudinal bars in concrete walls shall be detailed, fabricated, and placed to have 2 1/2" of concrete coverage from the formed or unformed surface. Noted bars shall be placed and maintained during the concrete placement to provide between 2" and 2 1/2" of concrete cover at all times. At least 2" of concrete cover must be provided on vertical, horizontal, longitudinal bars and tie wires from the formed surface at all times. All tie wires must be bent or turned back into the concrete members and away from the formed surface at all locations.
The Contractor shall perform special quality control procedures to monitor, inspect, and confirm that the defined concrete coverage requirements are met at all locations. Prior to the installation of the form work to conceal the reinforcing bar placement, a detailed and thorough inspection must be performed to confirm that the defined concrete coverage requirements have been met on the reinforcing bars and tie wires and that all loose tie wires and debris have been removed from the formed enclosure.

METAL BUILDING CONCRETE COLUMN AND FOOTING SCHEDULE

MARK	F1	F2	F3	F4
COLUMN SIZE	(2)	(2)	(2)	20x20
ELEV. TOP COLUMN	99-4 (3)	99-4 (3)	99-4	100-8
COLUMN VERTS.	Footing Dowels	Footing Dowels	Footing Dowels	Footing Dowels
COLUMN TIES	(1)	(1)	(1)	(1)
ELEV. TOP FOOTING	99-4	99-4	99-4	99-4
FOOTING SIZE	5-0x5-0x3-4	3-6x3-6x3-4	5-6x5-6x3-4	3-6x3-6x3-4
FOOTING BARS	10-#5x4-6 5 Ea. Way	8-#5x3-0 4 Ea. Way	12-#6x5-0 6 Ea. Way	8-#5x3-0 4 Ea. Way
FOOTING DOWELS	4-#7x4-8 ⌐ 1-2	4-#7x4-8 ⌐ 1-2	4-#7x4-0 ⌐ 1-2	8-#7x5-4 ⌐ 1-2

CONCRETE COLUMN AND FOOTING SCHEDULE REMARKS:

(1) #3 Ties; 4 At 3" o.c. Top, Remainder At 12" o.c.

(2) Provide Concrete Column Reinforcing For A 24x24 Concrete Column In Footing, See Plan And Sections. Provide Coverage At Ties Per ACI For Formed Foundation Exposed To Earth. Center Column Reinforcing Below Steel Column.

(3) Extend Reinforcing Into Slab As If Elevation Top Of Column = 100-0


4-Bar Column

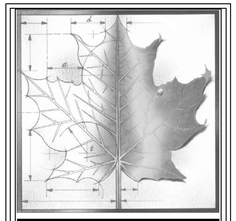

8-Bar Column

TRENCH FOOTING SCHEDULE

MARK	TYPE	ELEV. BOTT	ELEV. TOP	ELEV. LEDGE	DIMENSIONS T	DIMENSIONS A	REF. SECTION	REMARKS
TF1	1	96-0	99-4	-	1-4	-	1-S301	See Section 2-S301 At Door
TF2	1	96-0	99-4	-	1-4	-	3-S301	
TF3	1	96-0	99-4	-	1-4	-	10-S301	See Section 12-S301 At Door

TYPE 1

TRENCH FOOTING TYPES



BBN ARCHITECTS INC
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MANHATTAN, KANSAS 66502
PH: 785-776-4912 - FAX: 785-776-0944
WWW.BBNARCHITECTS.COM

DWA Dudley Williams and Associates, PA.
2301 Laura • Suite 200 • Wichita, KS 67211-1514
316.263.3591 • e-mail: dwa@dwa-inc.com

S201 in I:\17-045\17-045.03\S201 9/1/2017 [MD] [124]

REV	DESCRIPTION	DATE

Project Number: **17036**

Date: **9/1/17**

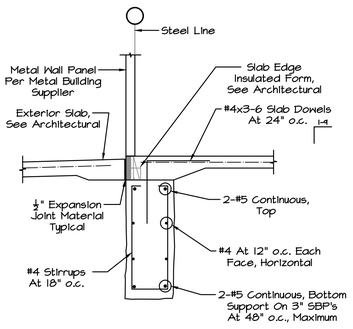
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

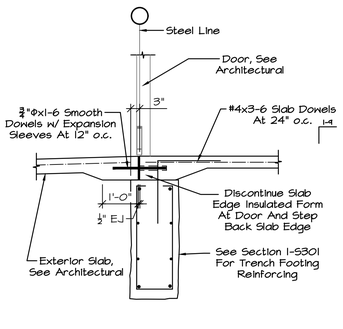
Sheet Title:
GENERAL STRUCTURAL NOTES AND SCHEDULES

Sheet:
S201

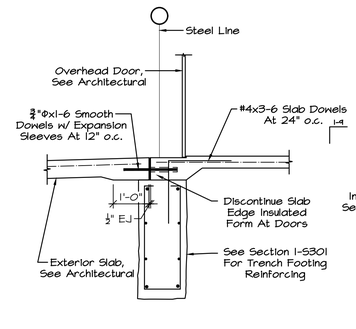
Of:



1 SECTION
½" = 1'-0"



2 SECTION
½" = 1'-0"



3 SECTION
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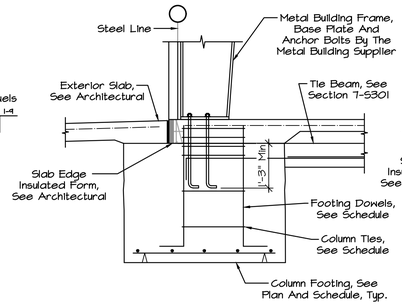

Center Column Footing Below Steel Column, U.N.O.

4 SECTION
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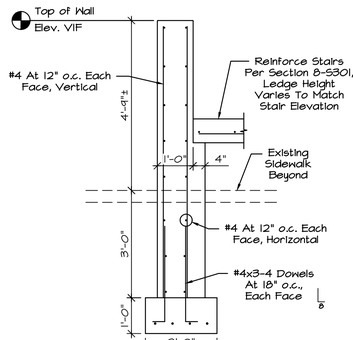
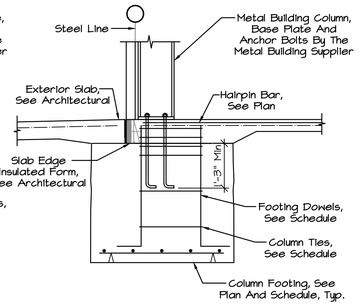
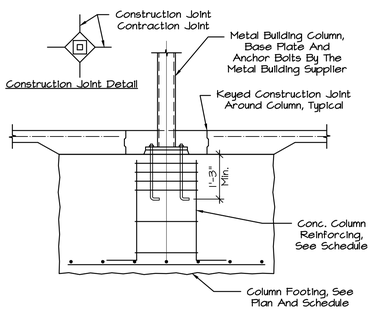


5 SECTION
½" = 1'-0"

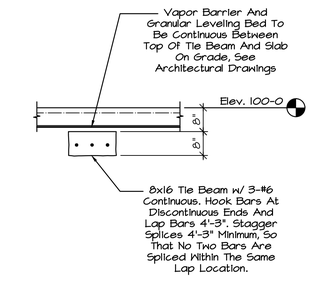


Center Column Footing Below Steel Column, U.N.O.

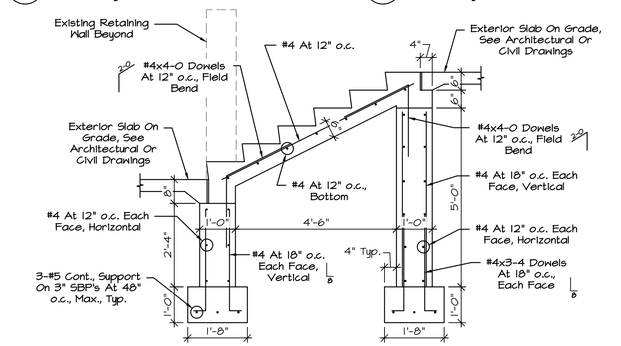


Center Column Footing Below Steel Column, U.N.O.

6 SECTION
½" = 1'-0"

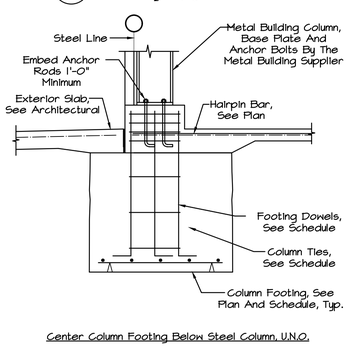


7 TYPICAL TIE BEAM DETAIL
½" = 1'-0"



8 SECTION
½" = 1'-0"

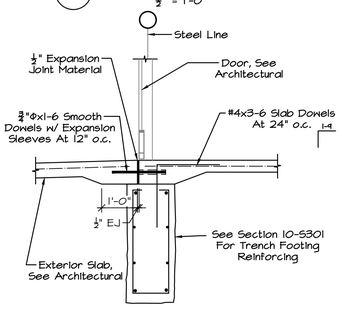
9 SECTION
½" = 1'-0"



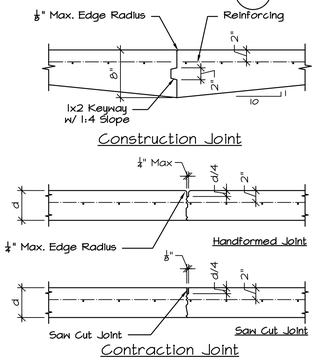
Center Column Footing Below Steel Column, U.N.O.

10 SECTION
½" = 1'-0"

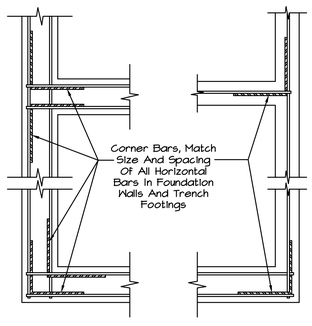
11 SECTION
½" = 1'-0"



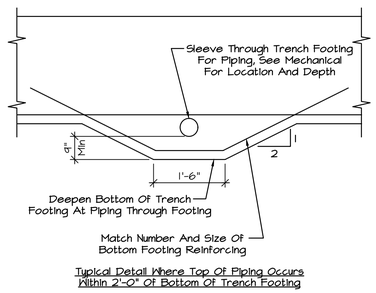
12 SECTION
½" = 1'-0"



13 TYPICAL SLAB JOINT DETAILS
No Scale

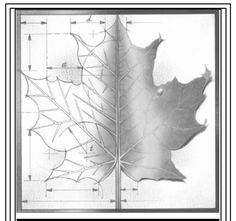


14 CORNER BAR DETAIL
No Scale



Typical Detail Where Top Of Piping Occurs Within 2'-0" Of Bottom Of Trench Footing

15 TYP. FOUNDATION DETAIL
½" = 1'-0"



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S301 in I:\17-045\17-045.03\S301 9/1/2017 [MD] [1:24]

RONALD L. BROWN
NO. 19857
LICENSED
PROFESSIONAL ENGINEER
KANSAS
9/1/2017

REV	DESCRIPTION	DATE

Project Number: **17036**

Date: **9/1/17**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

Sheet Title:
FOUNDATION SECTIONS AND DETAILS

Sheet:
S301

Of:

ABBREVIATIONS:

THE FOLLOWING LIST OF ABBREVIATIONS MAY BE USED IN THE CONTRACT DOCUMENT DRAWINGS.

&	AND
∠	ANGLE
@	AT
¢	DIAMETER
#	NUMBER OR POUND
ACOUST.	ACOUSTICAL
ADJ.	ADJUSTABLE
A.F.F.	ABOVE FINISHED FLOOR
ALUM.	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
BD.	BOARD
BLDG.	BUILDING
BLKG.	BLOCKING
B.O.	BOTTOM OF
BRG.	BEARING
B.S.	BOTH SIDES
℄	CENTERLINE
CH.	CHANNEL
C.J.	CONTROL JOINT
CLG.	CEILING
C.M.U.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CTR.	CENTER
DBL.	DOUBLE
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DR.	DOOR
DWG.	DRAWING
EA.	EACH
E.F.	EACH FACE
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EQ.	EQUAL
EQUIP.	EQUIPMENT
E.S.	EACH SIDE
EXP.	EXPANSION
EXIST.	EXISTING
EXT.	EXTERIOR
E.W.	EACH WAY
FIN.	FINISH
FL.	FLOOR
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUD
FR.	FRAME
FT.	FOOT OR FEET
FURR.	FURRING
F.D.	FLOOR DRAIN
GA.	GAUGE
GALV.	GALVANIZED
GL.	GLASS
G.S.	GROUT SOLID
GYP. BD.	GYPSUM BOARD
HDW.	HARDWARE
HDWD.	HARDWOOD
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HT.	HEIGHT
I.D.	INSIDE DIAMETER/DIMENSION
IN.	INCH
INFO.	INFORMATION
INSUL.	INSULATION
INT.	INTERIOR
L	LONG/LENGTH
LT. (LTG.)	LIGHT/LIGHTING
L.W.C.	LIGHTWEIGHT CONCRETE
MAX.	MAXIMUM
MECH.	MECHANICAL
MFG.	MANUFACTURING
MFTR.	MANUFACTURER
MIN.	MINIMUM
MIR.	MIRROR/MIRRORED
MISC.	MISCELLANEOUS
MTD.	MOUNTED
MTL.	METAL
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.P.S.	NOMINAL PIPE STANDARD
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER/DIMENSION
O.H.	OPPOSITE HAND
OPNG.	OPENING
OVHD.	OVERHEAD
OZ.	OUNCE
PL.	PLATE
PLBG.	PLUMBING
PLYWD.	PLYWOOD
POL.	POLISHED
PR.	PAIR
PT.	POINT
PTD.	PAINTED
QTY.	QUANTITY
R	RISER OR RADIUS
R.C.P.	REFLECTED CEILING PLAN
RE.	REFERENCE
REINF.	CONNECTION
REQ'D.	REQUIRED
REV.	REVISION OR REVERSED
RM.	ROOM
R.O.	ROUGH OPENING
S.C.	SOLID CORE OR SEALED CONCRETE
SCHED.	SCHEDULE
SECT.	SECTION
S.F.	SQUARE FOOT
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION(S)
SP. HD.	SPRINKLER HEAD
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STO.	STORAGE
STRUCT.	STRUCTURAL
SQ. YD.	SQUARE YARD
SYS.	SYSTEM
T	TREAD
TEL.	TELEPHONE
TEMP.	TEMPORARY
T.O.	TOP OF
T.O.D.	TOP OF DECK
T.O.S.	TOP OF SLAB/STEEL
T.O.W.	TOP OF WALL
TV	TELEVISION
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/	WITH
W/I	WITHIN
W/O	WITHOUT
WD.	WOOD
WDW.	WINDOW
WT.	WEIGHT

MATERIAL IDENTIFICATION KEY:

- CONCRETE
- CONCRETE MASONRY UNITS
- PRECAST CONCRETE
- EARTH
- STEEL
- DISCONTINUOUS LUMBER
- CONTINUOUS LUMBER
- RIGID INSULATION
- BLANKET INSULATION
- GYPSUM BOARD
- PLYWOOD
- FINISHED WOOD
- GRANULAR FILL
- METAL STUD FRAMING
- WOOD STUD FRAMING

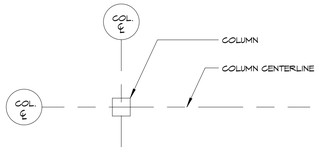
DIMENSIONING CRITERIA:

ALL DRAWINGS ARE INTENDED TO BE COMPLIMENTARY. NOTIFY THE ARCHITECT OF ANY DIMENSIONING DISCREPANCY PRIOR TO PROCEEDING.

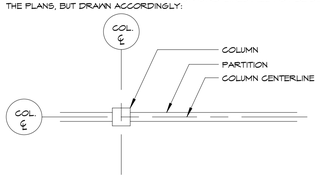
DIMENSIONS ARE AS IDENTIFIED ON THE DOCUMENTS AND AS ESTABLISHED BY CRITERIA. THIS INVOLVES ESTABLISHING TYPICAL RULES GOVERNING PARTITION LOCATIONS AND THEN DIMENSIONING ONLY THE EXCEPTION TO THESE RULES. TYPICAL DIMENSIONING CRITERIA ARE OUTLINED BELOW.

COLUMN IDENTIFICATION DETAILS WILL GOVERN ALL DIMENSIONS AND FEW DIMENSIONS WILL BE SHOWN ON THE SMALL SCALE PLANS.

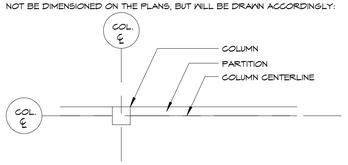
A. COLUMN GRIDS ARE DRAWN ACCORDINGLY:



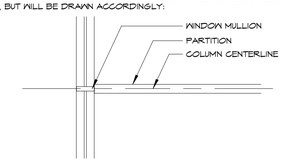
B. PARTITIONS CENTERED ON COLUMN OR GRID LINES WILL NOT BE DIMENSIONED ON THE PLANS, BUT DRAWN ACCORDINGLY:



C. PARTITIONS WITH THE FINISHED FACE FLUSH WITH THE COLUMN OR GRID LINE WILL NOT BE DIMENSIONED ON THE PLANS, BUT WILL BE DRAWN ACCORDINGLY:



D. PARTITIONS CENTERED ON WINDOW MULLIONS WILL NOT BE DIMENSIONED ON PLANS, BUT WILL BE DRAWN ACCORDINGLY:



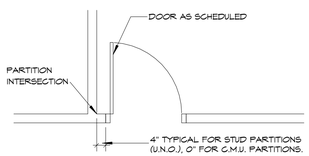
E. PARTITIONS WITH FINISHED FACE ON THE COLUMN OR GRID LINES WILL NOT BE DIMENSIONED ON THE PLANS, BUT WILL BE DRAWN ACCORDINGLY:

F. FOR OPENINGS IN PARTITIONS OR WALLS:

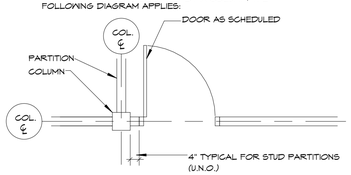
1. WHEN ONE OCCURS AT A COLUMN OR GRID LINE, NO DIMENSIONS WILL BE SHOWN ON THE PLANS, THE OPENING WIDTH WILL BE ESTABLISHED BY EITHER CRITERIA OR SCHEDULES.

2. WHEN NEITHER JAMB OCCURS AT A PARTITION INTERSECTION, AT A COLUMN OR GRID LINE; ONE JAMB WILL BE LOCATED DIMENSIONALLY BY THE DETAIL.

3. WHEN ONE JAMB IS LOCATED BY AN INTERSECTING PARTITION, THE FOLLOWING DIAGRAM APPLIES:



4. WHEN ONE JAMB IS LOCATED BY A COLUMN, THE FOLLOWING DIAGRAM APPLIES:

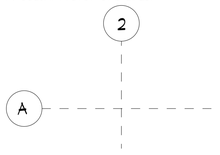


G. STUD PARTITIONS ARE DIMENSIONED FROM THE FACE OF ONE UNIT TO THE FACE OF ANOTHER UNIT. AT EXTERIOR WALLS DIMENSIONS ARE FROM FACE OF SHEATHING TO FACE OF ANOTHER UNIT.

H. MASONRY PARTITIONS ARE DIMENSIONED FROM THE NOMINAL FACE OF C.M.U., BRICK OR STONE TO THE FACE OF ANOTHER UNIT.

GRAPHIC SYMBOLS/STANDARDS:

A. COLUMN AND/OR GRID LINES:



B. FLOOR PLAN MATCHLINE SYMBOL:

C. CENTERLINE SYMBOL:

D. BAR GRAPH SYMBOL:

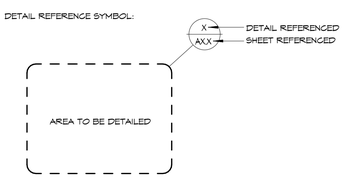
E. NORTH ARROW:

F. SPECIFICATION SECTION REFERENCE SYMBOL:

G. SPOT ELEVATION SYMBOL:

H. ELEVATION REFERENCE SYMBOL:

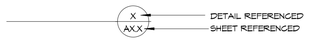
I. DETAIL REFERENCE SYMBOL:



J. INTERIOR ELEVATION REFERENCE SYMBOL:

K. BUILDING SECTION REFERENCE SYMBOL:

L. DETAIL REFERENCE SYMBOL:



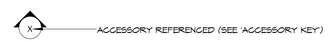
M. DETAIL REFERENCE SYMBOL:

N. WINDOW REFERENCE SYMBOL:

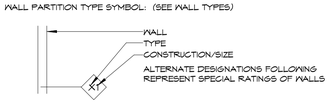
O. ROOM NUMBER/NAME SYMBOL:

1. THE FIRST NUMERAL OF A ROOM NUMBER ACTS AS A FLOOR LEVEL INDICATOR, STARTING WITH '0' AT THE BASEMENT LEVEL AND WORKING NUMERICALLY UP.

P. ACCESSORY REFERENCE SYMBOL:



Q. WALL PARTITION TYPE SYMBOL: (SEE WALL TYPES)



R. EXISTING ASSEMBLY

S. REVISIONS SYMBOLS:

T. DETAIL NOTE SYMBOL:

U. RATED WALL CONSTRUCTION SYMBOLS:

V. FIRE EXTINGUISHER IDENTIFICATION SYMBOLS:

- RECESSED CABINET W/ FIRE EXTINGUISHER
- SEMI-RECESSED CABINET W/ FIRE EXTINGUISHER
- SURFACE MOUNTED CABINET W/ FIRE EXTINGUISHER
- SURFACE MOUNTED BRACKET W/ FIRE EXTINGUISHER

W. CEILING IDENTIFICATION SYMBOLS:

1. SEE M.E.P. DRAWINGS FOR FIXTURE SPECIFICATIONS.

- SUPPLY DIFFUSER
- RETURN AIR GRILLE OR EXHAUST
- FIRE SPRINKLER HEAD
- 2 X 2 ACOUSTICAL CEILING TILE AND GRID
- GYPSUM BOARD CEILING OR SOFFIT
- RECESSED LIGHT, SEE ELECTRICAL DRAWINGS
- SUSPENDED LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
- 2 X 2 TROFFER
- LINEAR LIGHT FIXTURE
- SUSPENDED DECORATIVE LIGHT ABOVE COUNTERS

X. CEILING REFERENCE SYMBOLS:

Y. PLAN SYMBOLS:

GENERAL NOTES:

1. NONE TO ALL OF THE LISTED CRITERIA, SYMBOLS, ETC. MAY OR MAY NOT BE USED IN THIS SET OF CONSTRUCTION DOCUMENTS.

2. THE CONTRACTOR IS RESPONSIBLE FOR PRODUCING WEATHER-TIGHT CONSTRUCTION, DETAILS AND OMISSIONS TO THE DRAWINGS NOTWITHSTANDING.

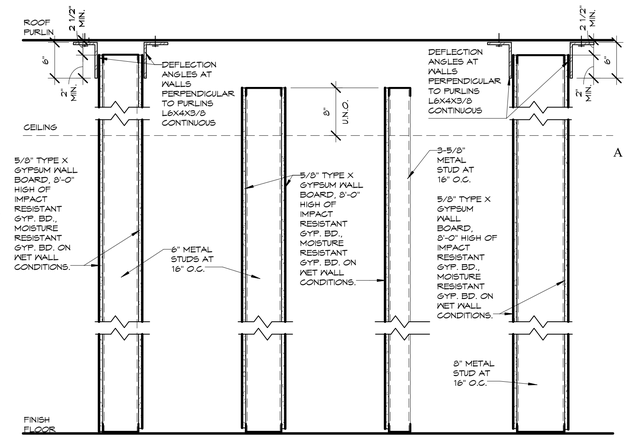
3. ALL FINISH COLORS, TEXTURE, AND PATTERNS TO BE SELECTED BY THE ARCHITECT AND APPROVED PRIOR TO INSTALLATION.

4. ANY PIPE OR CONDUIT PENETRATION THRU EXTERIOR CONSTRUCTION SHALL BE SEALED AT BOTH SIDES FOR A WATER-TIGHT CONDITION, OR FOR FIRE STOP ASSEMBLIES THROUGH RATED WALLS.

5. ALL FLOORS WITH DRAINS SHALL HAVE A MINIMUM OF 1/8" PER FOOT SLOPE TO DRAIN, U.N.O..

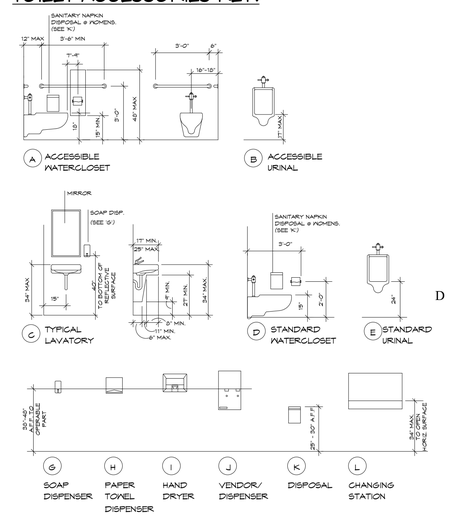
6. CONTRACTOR SHALL INVESTIGATE, VERIFY, AND BE RESPONSIBLE FOR ALL EXISTING CONDITIONS AND NEW DIMENSIONS OF THE PROJECT AND CONFIRM SUCH TO BE APPROPRIATE AND COMPATIBLE WITH NEW CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY FOR CLARIFICATION OR ABOUT ANY CONDITION REQUIRING MODIFICATION OR CHANGE BEFORE PROCEEDING WITH THE WORK.

7. ALL EXPOSED C.M.U. CORNERS TO BE BULL NOSE. COORDINATE EXCEPTIONS WITH ARCHITECT.



B1 / A001 WALL TYPES
1" = 1'-0"

TOILET ACCESSORIES KEY:



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REV	DESCRIPTION	DATE

Project Number: **17036**

Date: **9/1/17**

Project Name:

USD 320 MULTIPURPOSE BUILDING

Project Address:

WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

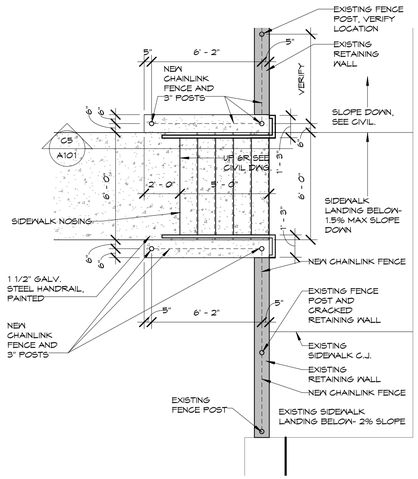
Sheet Title:

GENERAL INFORMATION

Sheet:

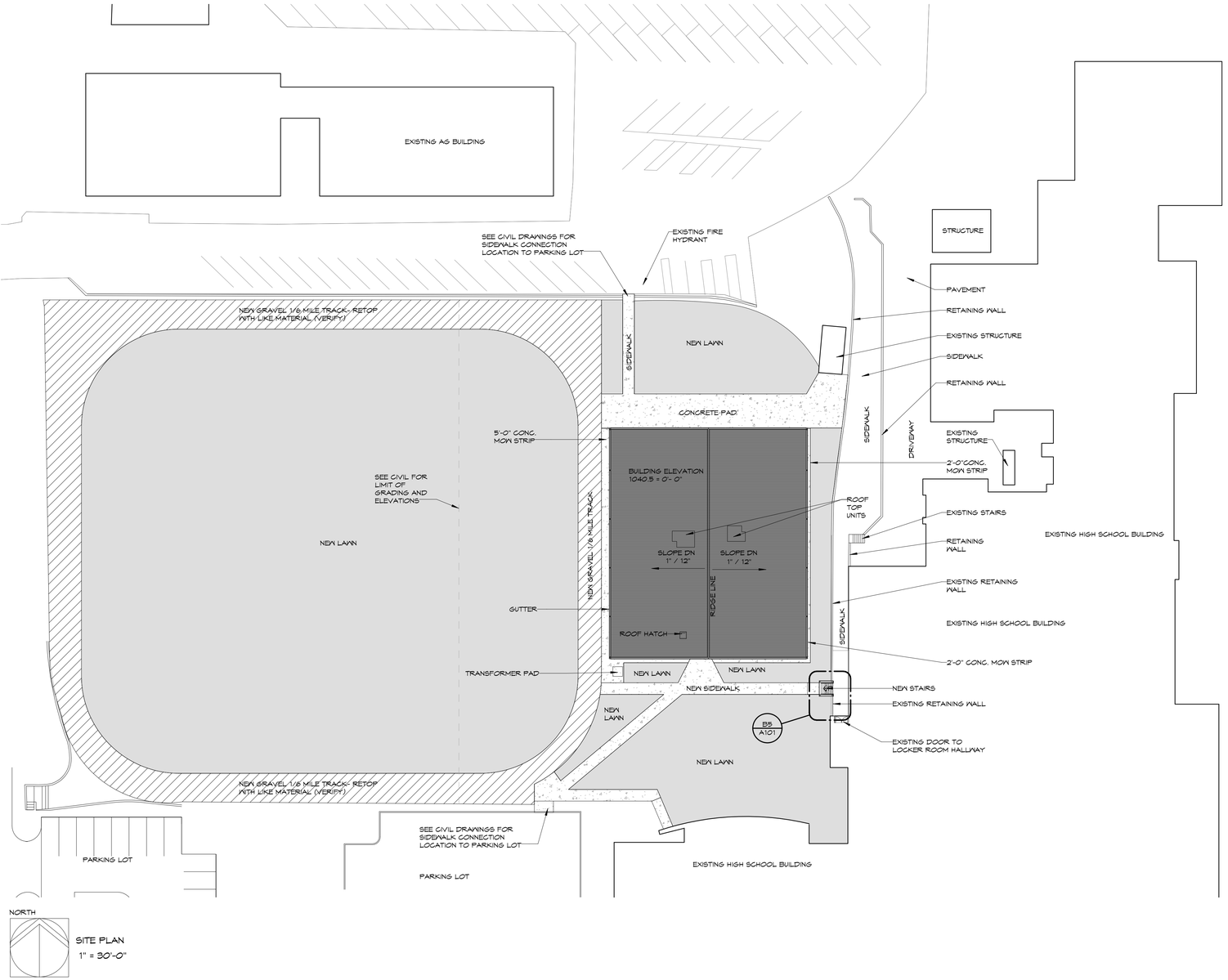
A001

Of:



B5 A101 STAIR PLAN
1/4" = 1'-0"

C5 A101 STAIR SECTION
1/4" = 1'-0"



NORTH

SITE PLAN
1" = 30'-0"

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT
TERRITA BOWMAN
1966
STATE OF KANSAS

Project Number: **17036**

Date: **9/1/17**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

Sheet Title:
SITE PLAN

Sheet:
A101

Of:

5 4 3 2 1

ROOM FINISH SCHEDULE

NUMBER	NAME	FLOOR	BASE	NORTH		EAST		SOUTH		WEST		CEILING	
				MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	HEIGHT
101	ENTRANCE	WOG	R	GYP	EP	GYP	EP	GYP/SF	EP	GYP	EP	APC-2	9' - 6"
102	RESTROOM	SC	R	GYP	EP	GYP	EP	GYP	EP	GYP	EP	APC-2	8' - 0"
103	RESTROOM	SC	R	GYP	EP	GYP	EP	GYP	EP	GYP	EP	APC-2	8' - 0"
104	OFFICE	SC	R	GYP	P	GYP	P	GYP	P	GYP	P	APC-2	8' - 0"
105	WEIGHTS	SC/SF1/SF2/ST	R	IMP	---	GYP/IMP/MR	P/MR	GYP/IMP	P	GYP	EP	L	
106	JAN/MECH	SC	R	GYP	EP	GYP	EP	GYP	EP	GYP	EP	L	
107	OFFICE	SC	R	GYP	P	GYP	P	GYP	P	GYP	P	APC-2	8' - 0"
108	STORAGE	SC	R	GYP	P	GYP	P	GYP	P	GYP	P	L	
109	WRESTLING	SC	R	GYP/IMP/WP	EP	GYP/WP	EP	GYP/WP	EP	GYP/IWP/WP	EP	L	

FINISH SCHEDULE KEY:

FLOOR FINISH:
- SC - SEALED CONCRETE
- WOG - WALK OFF CARPET
- SF1 - SPORTS FLOOR- GRAY
- SF2 - SPORTS FLOOR- RED
- ST - SYNTHETIC TURF

BASE FINISH:
- R - RUBBER BASE

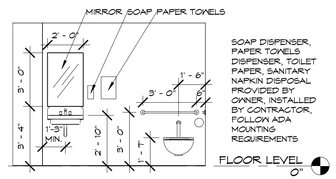
WALL MATERIAL:
- GYP - GYPSUM WALL BOARD
- IMP - INSULATED METAL PANEL
- WP - WALL PAD
- MR - MIRROR
- SF - STOREFRONT

WALL FINISH:
- EP - EPOXY PAINT
- P - PAINT (LATEX)
- MR - MIRROR

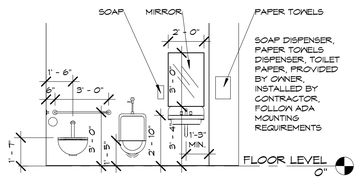
CEILING FINISH:
- L - LINER (METAL BUILDING)
- APC-2 - ACOUSTIC PANEL CEILING- TYPE 2

NOTES:

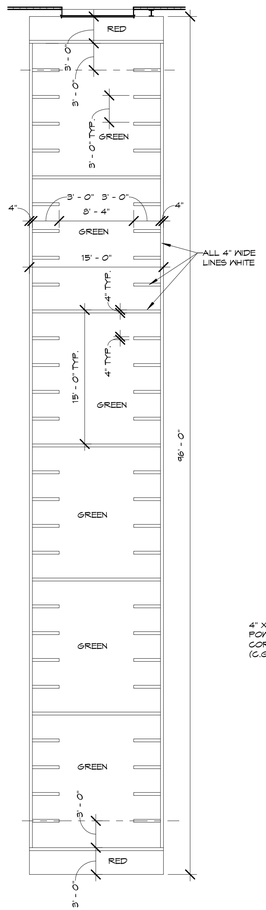
ALL GYP BELOW 8'-0" TO BE IMPACT RESISTANT TYPE X GYPSUM WALL BOARD. ALL GYP BOARD ON WET WALL CONDITIONS TO BE MOISTURE RESISTANT.



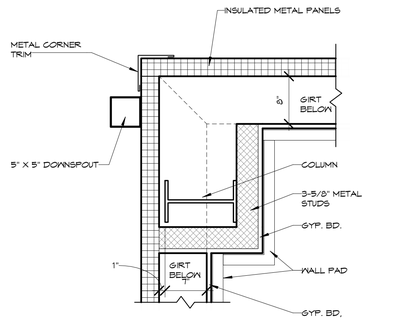
3 A102 RESTROOM 102 ELEVATION
1/4" = 1'-0"



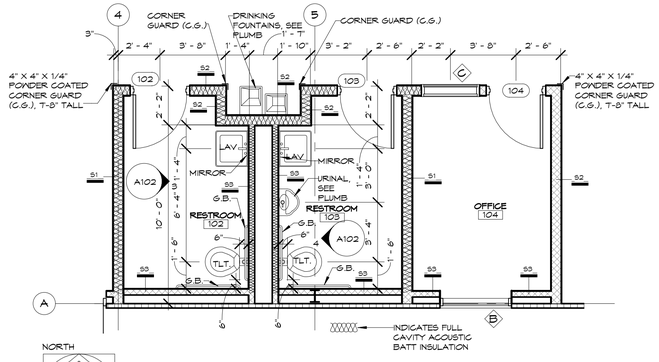
4 A102 RESTROOM 103 ELEVATION
1/4" = 1'-0"



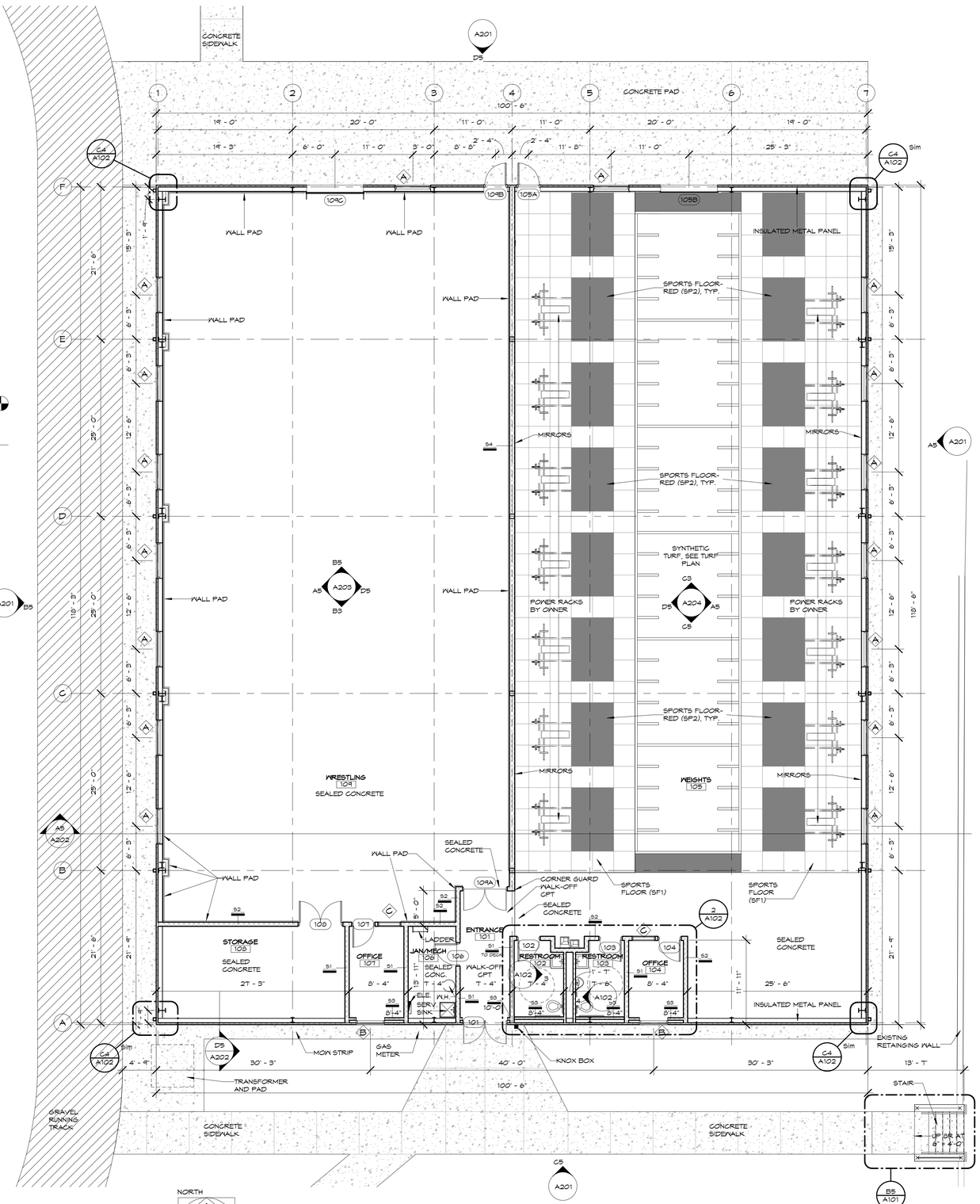
D5 A102 SYNTHETIC TURF PLAN
1/8" = 1'-0"



C4 A102 METAL BUILDING CORNER TRIM
1" = 1'-0"



NORTH
RESTROOM ENLARGED PLAN
1/4" = 1'-0"



NORTH
FLOOR PLAN
1/8" = 1'-0"

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT SHEMA BOWMAN 1966

Project Number: 17036

Date: 9/1/17

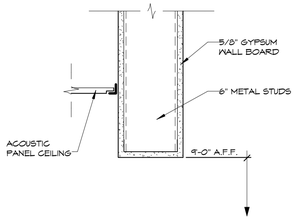
Project Name: **USD 320 MULTIPURPOSE BUILDING**

Project Address: **WAMEGO HIGH SCHOOL 801 LINCOLN WAMEGO, KS 66547**

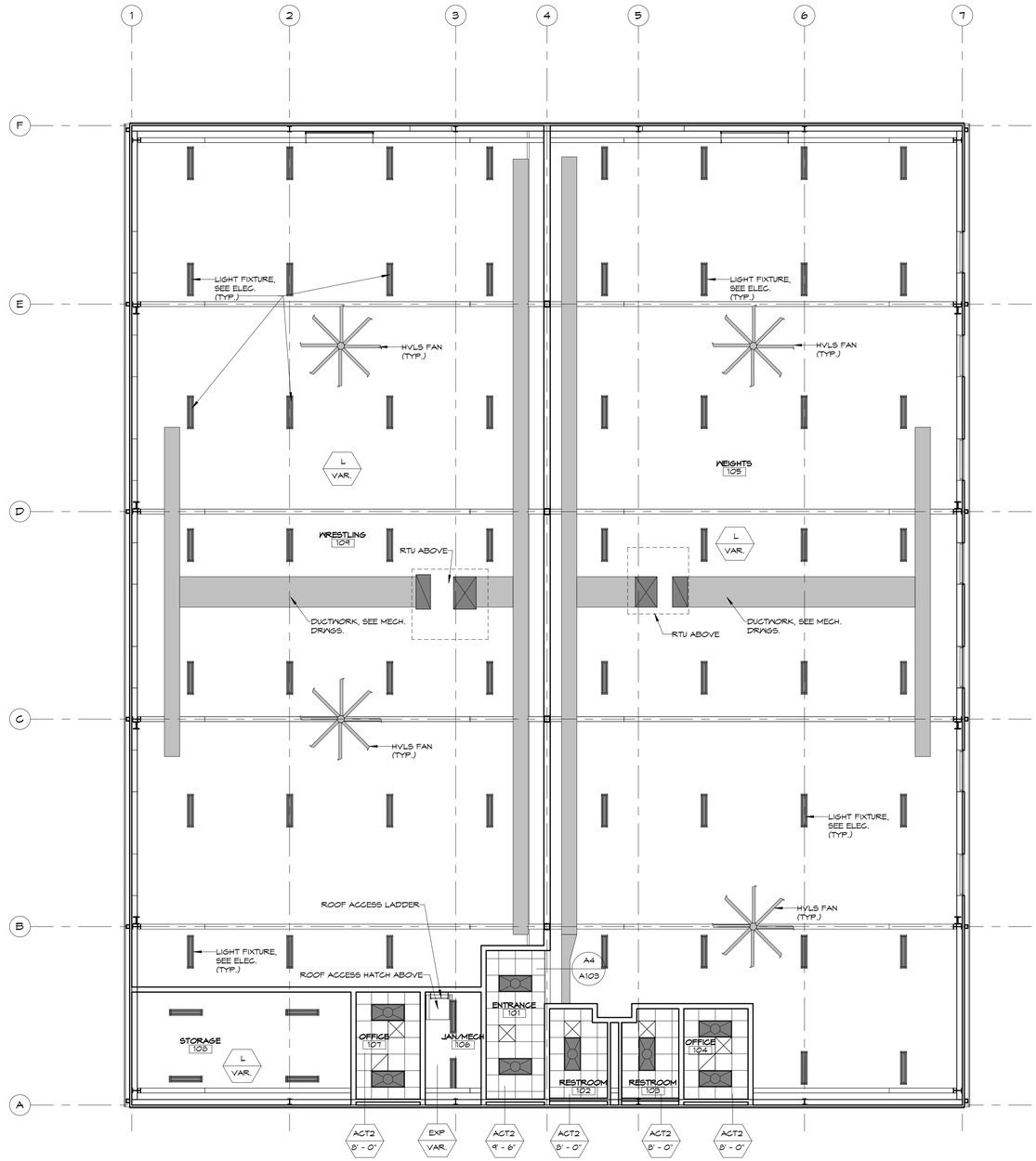
Sheet Title: **FLOOR PLAN**

Sheet: **A102**

Of:



A4 / A103 SOFFIT DETAIL @
1 1/2" = 1'-0"



1 / A103 EXISTING PLAN
1/8" = 1'-0"

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT BRENT A. BOWMAN 1966 STATE OF KANSAS

Project Number: 17036

Date: 9/1/17

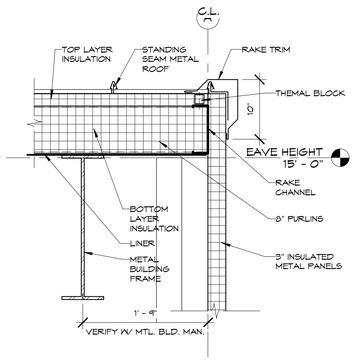
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
**WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547**

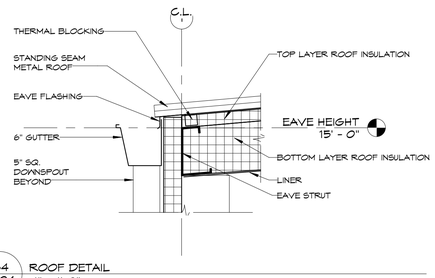
Sheet Title:
REFLECTED CEILING PLAN

Sheet: **A103**

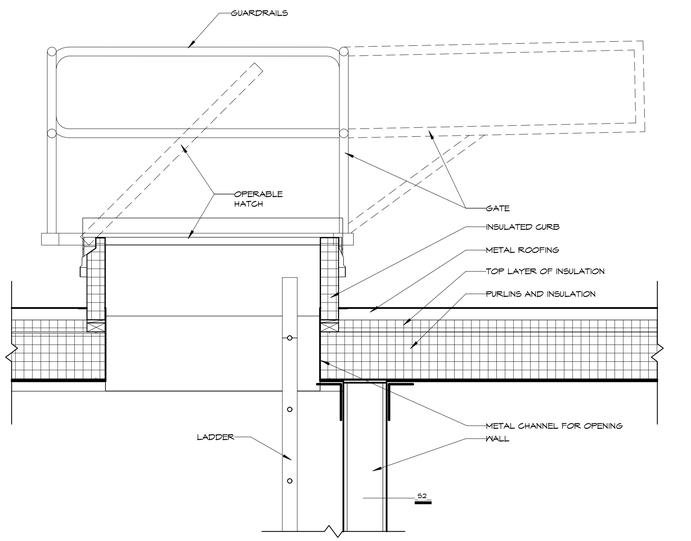
Of:



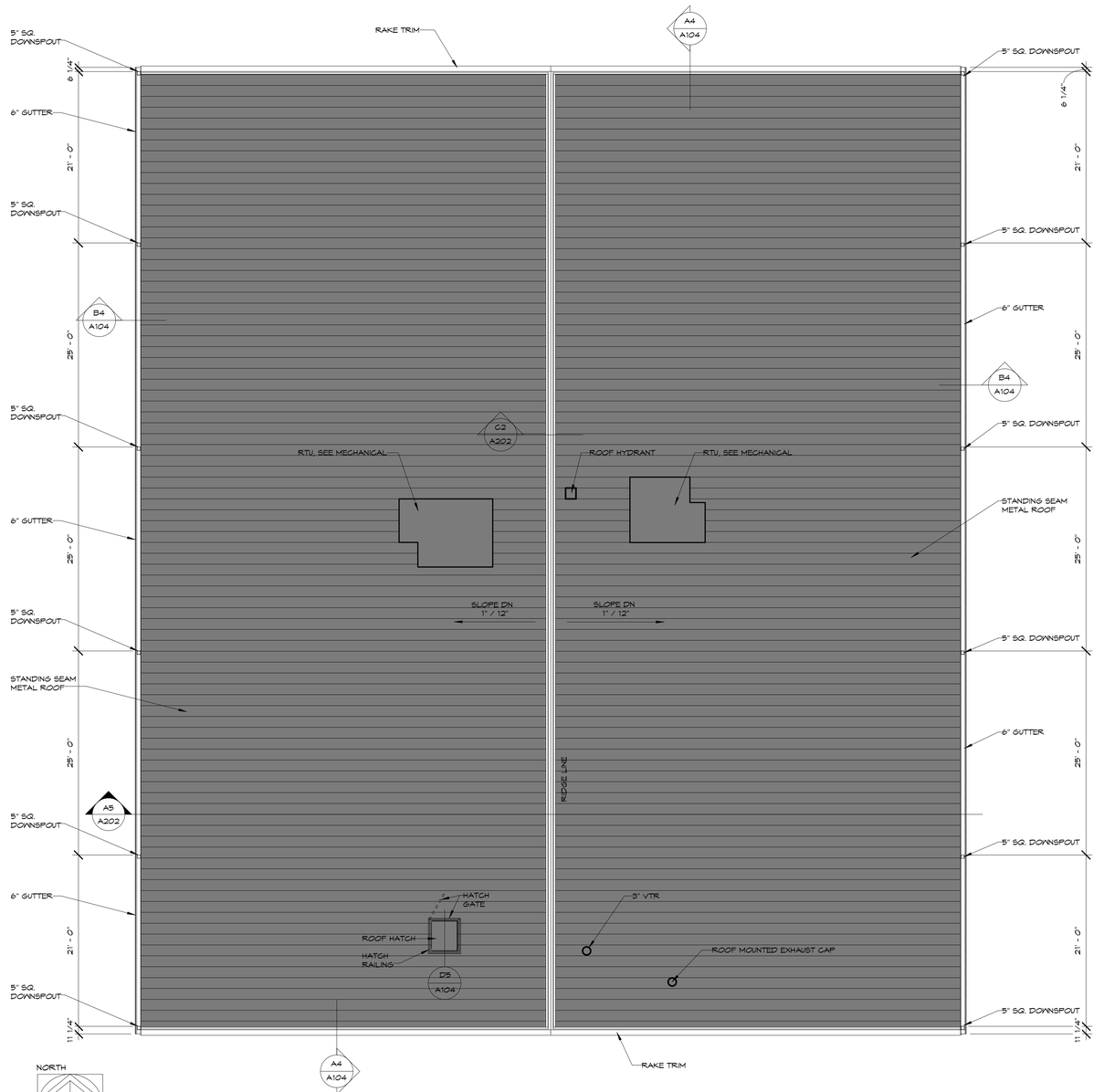
A4 / A104 ROOF DETAIL
1" = 1'-0"



B4 / A104 ROOF DETAIL
1" = 1'-0"



D5 / A104 ROOF HATCH DETAIL
1" = 1'-0"



NORTH

ROOF PLAN
1/8" = 1'-0"

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT BRENT A. BOWMAN 1966 STATE OF KANSAS

Project Number: 17036

Date: 9/1/17

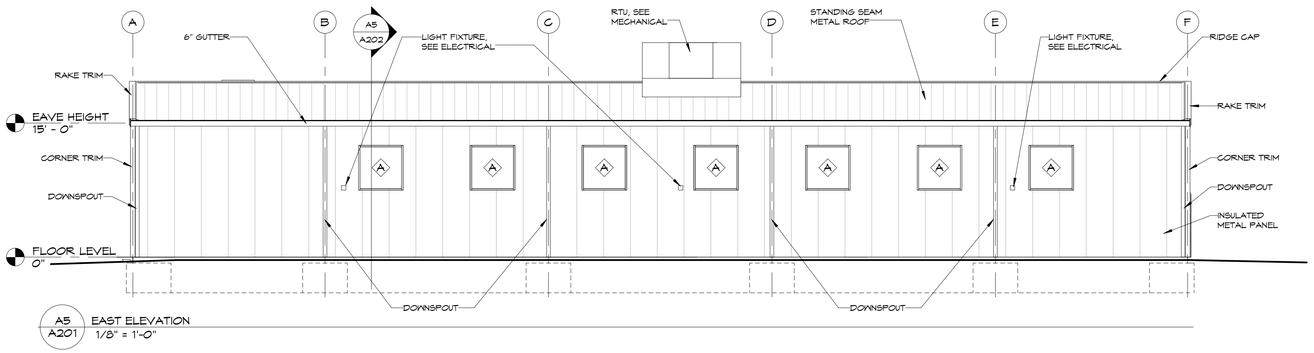
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

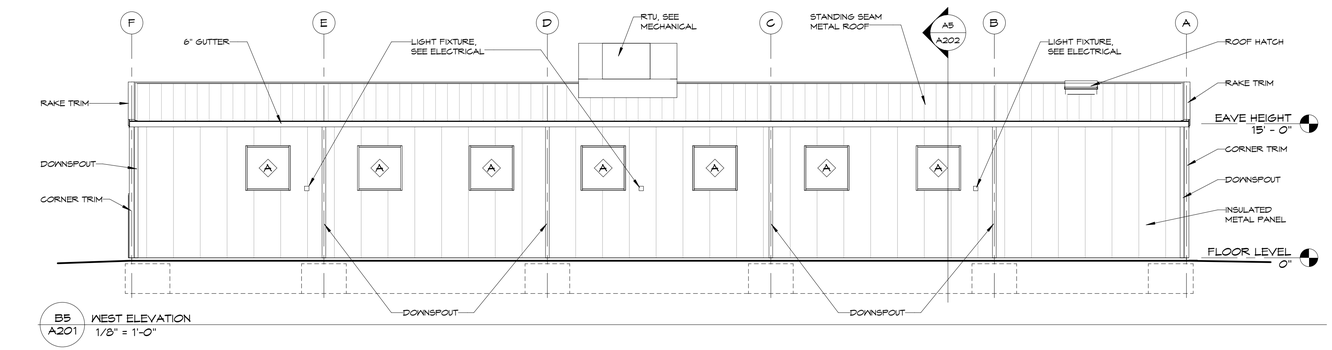
Sheet Title:
ROOF PLAN

Sheet: **A104**

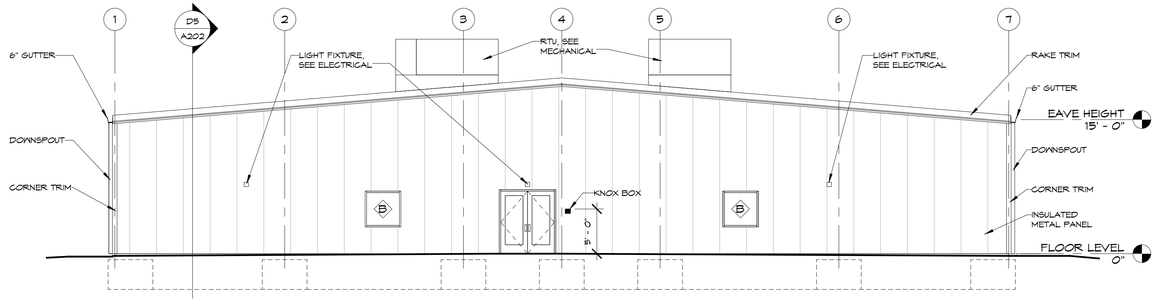
Of:



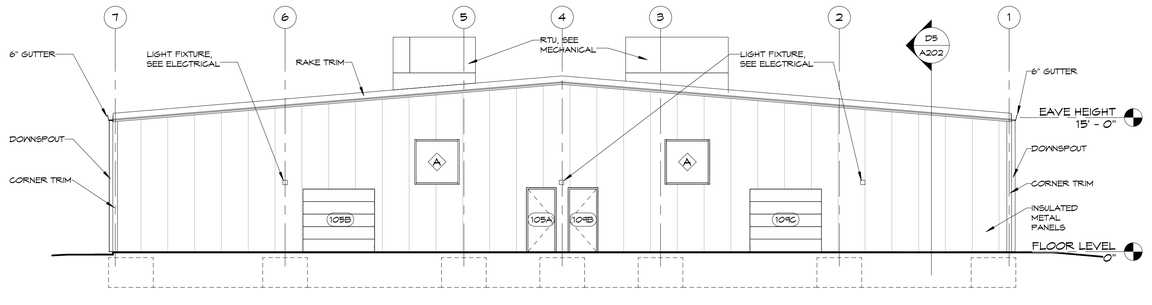
A5 / A201 EAST ELEVATION
1/8" = 1'-0"



B5 / A201 WEST ELEVATION
1/8" = 1'-0"



C5 / A201 SOUTH ELEVATION
1/8" = 1'-0"



D5 / A201 NORTH ELEVATION
1/8" = 1'-0"

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT
BRENT A. BOWMAN
1966
STATE OF KANSAS

Project Number: **17036**

Date: **9/1/17**

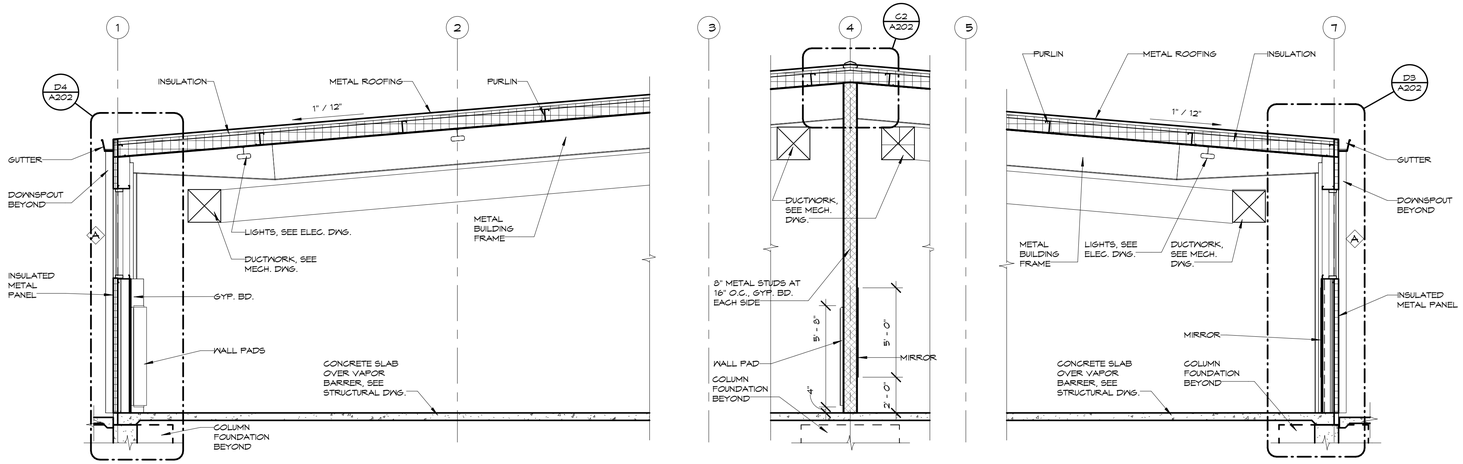
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
**WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547**

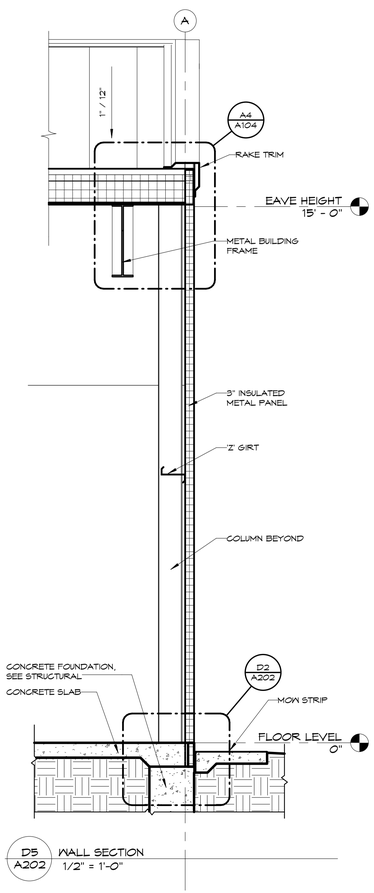
Sheet Title:
EXTERIOR ELEVATIONS

Sheet:
A201

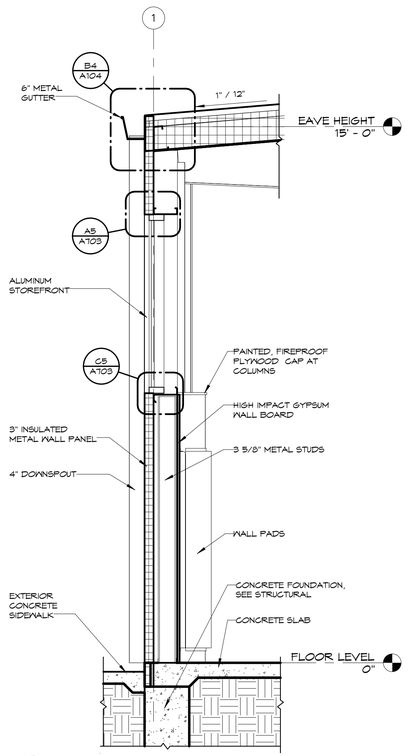
Of:



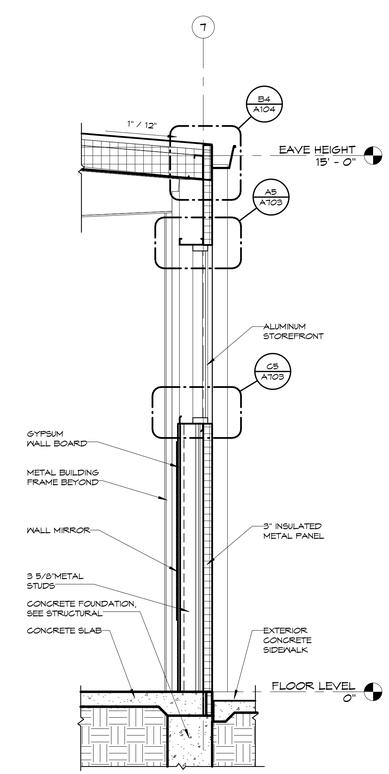
A5 A202 BUILDING SECTION
1/4" = 1'-0"



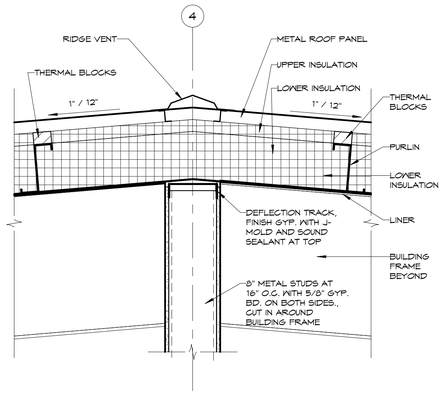
D5 A202 WALL SECTION
1/2" = 1'-0"



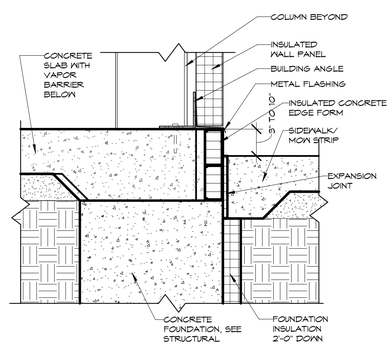
D4 A202 WALL SECTION
1/2" = 1'-0"



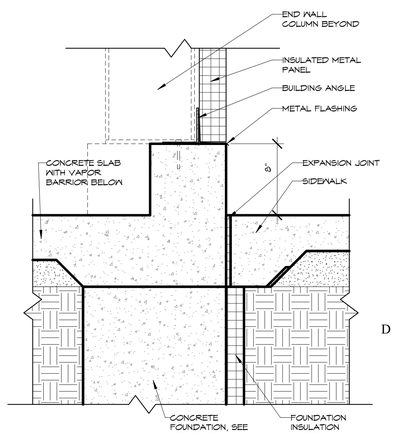
D3 A202 WALL SECTION
1/2" = 1'-0"



C2 A202 RIDGE DETAIL
1" = 1'-0"



D2 A202 DETAIL @ TYPICAL FOUNDATION
1 1/2" = 1'-0"



D1 A202 DETAIL @ NORTH FOUNDATION
1 1/2" = 1'-0"

A

B

C

D

BBN

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT
BRENT A. BOWMAN
1966
STATE OF KANSAS

Project Number:	17036
Date:	9/1/17

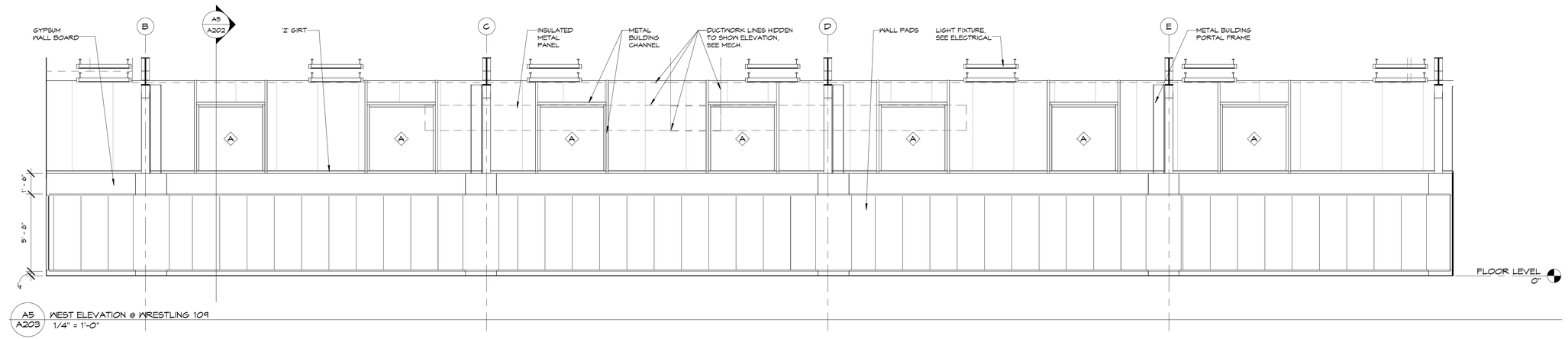
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

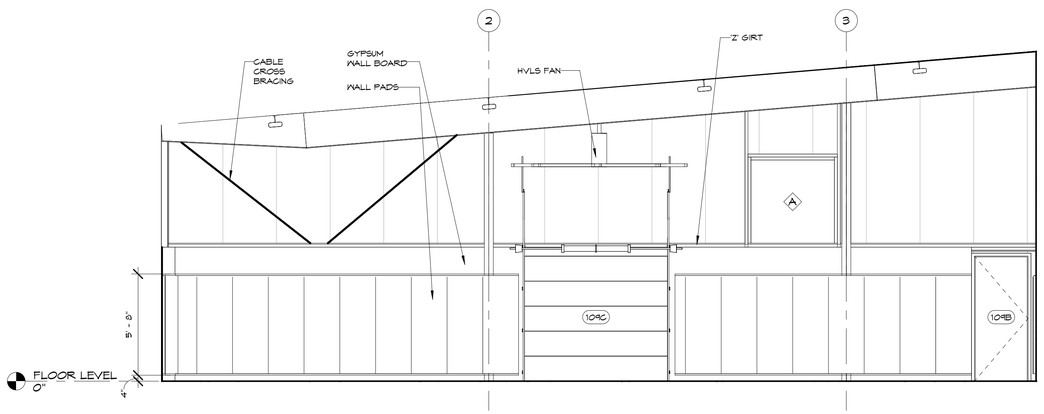
Sheet Title:
BUILDING SECTIONS

Sheet:
A202

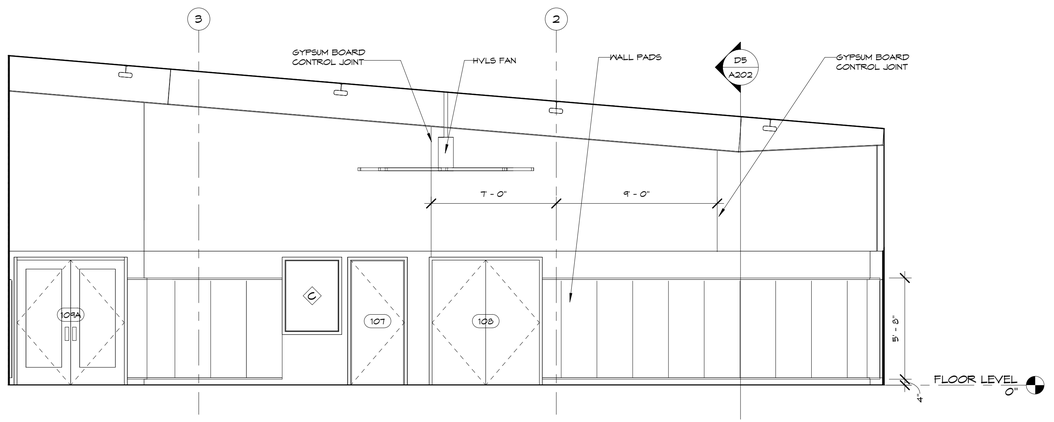
Of:



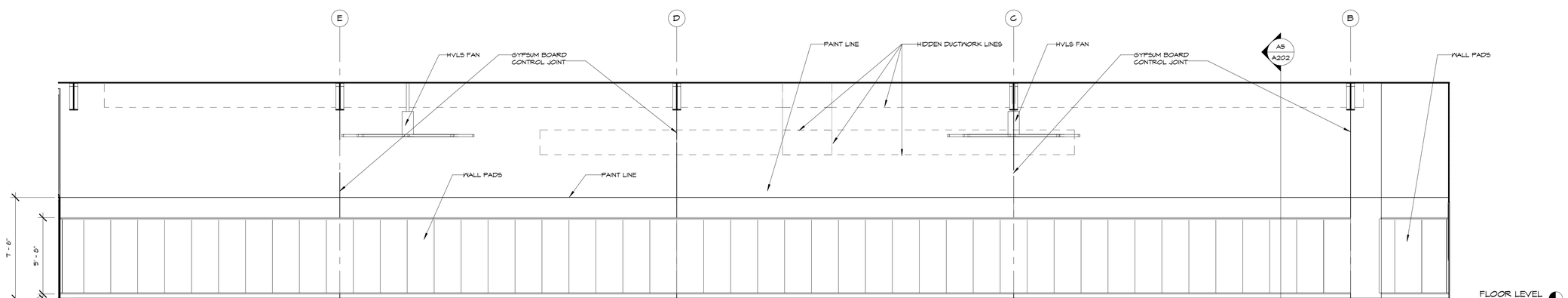
A5 A203 WEST ELEVATION @ WRESTLING 109
1/4" = 1'-0"



B5 A203 NORTH ELEVATION @ WRESTLING 109
1/4" = 1'-0"



B3 A203 SOUTH ELEVAITON @ WRESTLING 109
1/4" = 1'-0"



D5 A203 EAST ELEVATION @ WRESTLING 109
1/4" = 1'-0"

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT BRENT A. BOWMAN 1966 STATE OF KANSAS

Project Number: 17036

Date: 9/1/17

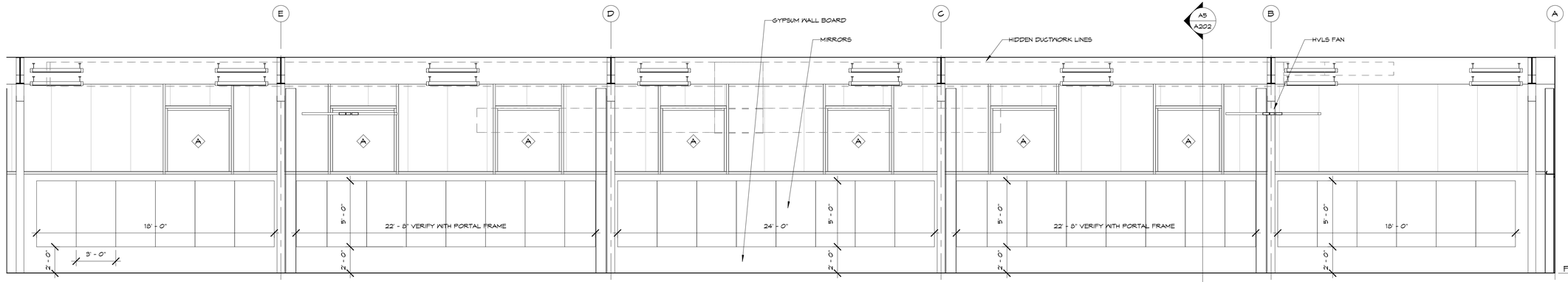
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

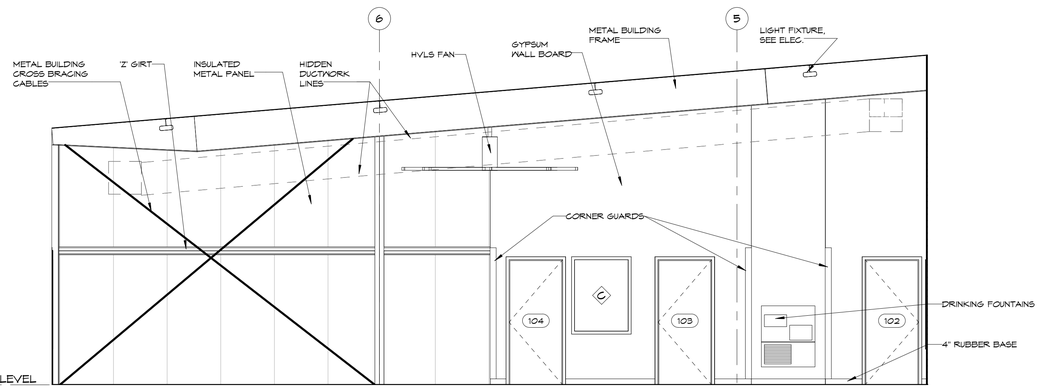
Sheet Title:
INTERIOR ELEVATIONS

Sheet:
A203

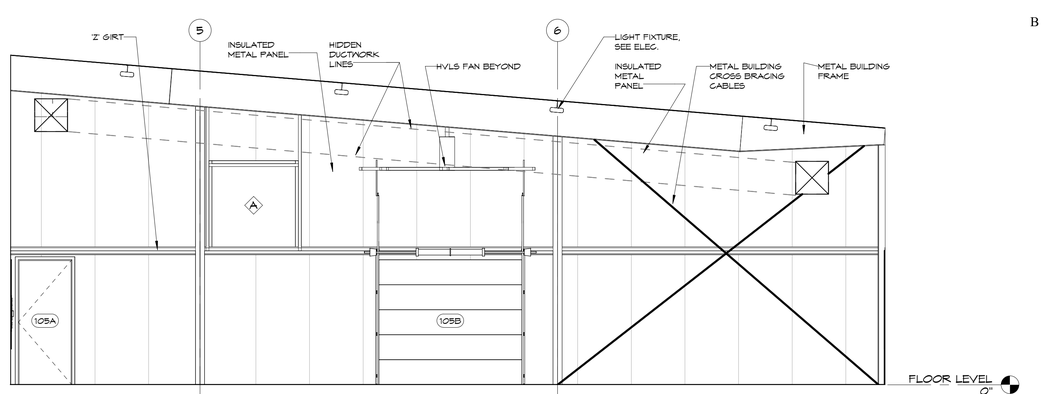
Of:



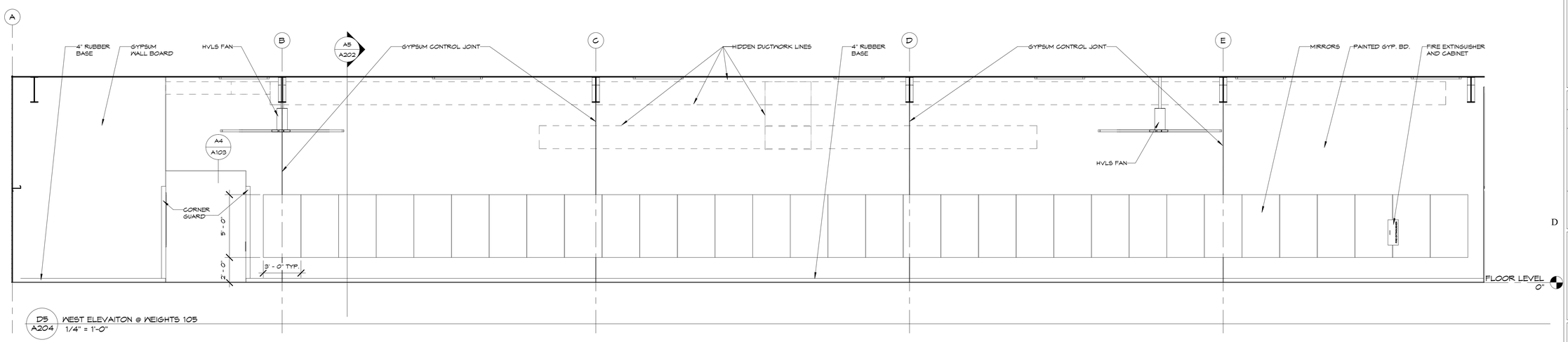
A5 A204 EAST ELEVATION @ WEIGHTS 105
1/4" = 1'-0"



C5 A204 SOUTH ELEVATION @ WEIGHTS 105
1/4" = 1'-0"



C3 A204 NORTH ELEVATION @ WEIGHTS 105
1/4" = 1'-0"



D5 A204 WEST ELEVAITON @ WEIGHTS 105
1/4" = 1'-0"

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REV	DESCRIPTION	DATE

REGISTERED ARCHITECT
BRENT A. BOWMAN
1966
STATE OF KANSAS

Project Number: 17036

Date: 9/1/17

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547

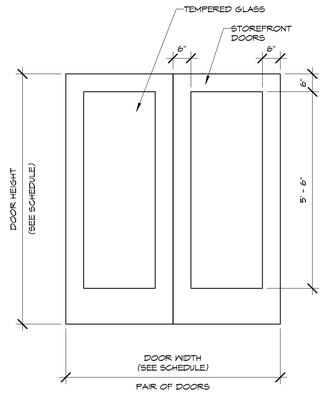
Sheet Title:
INTERIOR ELEVATIONS

Sheet:
A204

Of:

DOOR & FRAME SCHEDULE

DOOR	DOOR SIZE		TYPE		FIRE RATING	DETAILS			HARDWARE SET	COMMENTS
	WIDTH	HEIGHT	DOOR	FRAME		HEAD	JAMB	SILL		
101	6' - 0"	7' - 0"	A	3	---	A2/A702	B2/A702	D4/A702	1	
102	3' - 0"	7' - 0"	C	1	---	A5/A702	B5/A702	D5/A702	8	
103	3' - 0"	7' - 0"	C	1	---	A5/A702	B5/A702	D5/A702	8	
104	3' - 0"	7' - 0"	C	1	---	A5/A702	B5/A702	D5/A702	6	
105A	3' - 0"	7' - 0"	C	1	---	A4/A702	B4/A702	---	2	
105B	8' - 0"	7' - 0"	D	---	---	C1/A702	D1/A702	---	3	OVERHEAD SECTIONAL DOOR
106	3' - 0"	7' - 0"	C	1	---	A5/A702	B5/A702	D5/A702	7	
107	3' - 0"	7' - 0"	C	1	---	A5/A702	B5/A702	D5/A702	6	
108	6' - 0"	7' - 0"	B	2	---	A5/A702	B5/A702	D5/A702	5	
109A	6' - 0"	7' - 0"	A	3	---	A1/A702	B1/A702	D4/A702	4	
109B	3' - 0"	7' - 0"	C	1	---	A3/A702	B3/A702	---	2	
109C	8' - 0"	7' - 0"	D	---	---	C1/A702	D2/A702	---	3	OVERHEAD SECTIONAL DOOR



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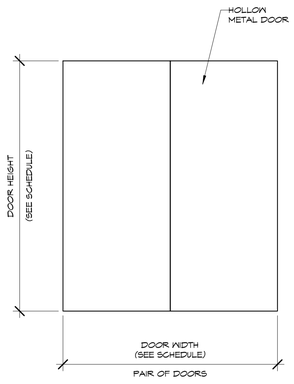

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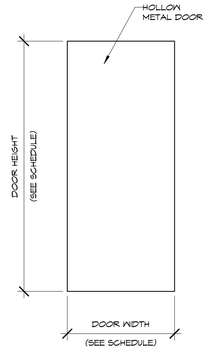
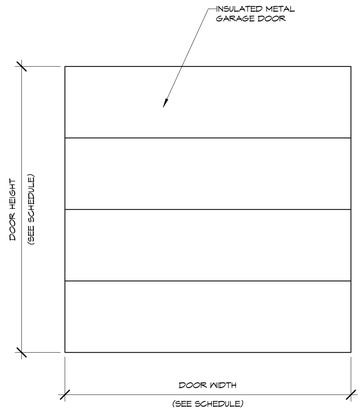
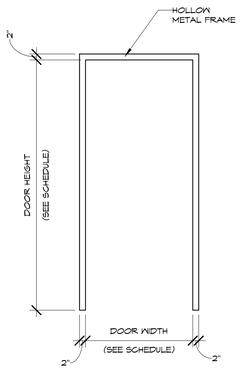


DOOR TYPE C

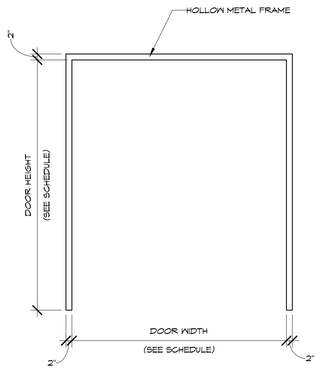


DOOR TYPE D

A5 / A701 DOOR TYPES
1/2" = 1'-0"



FRAME TYPE 1



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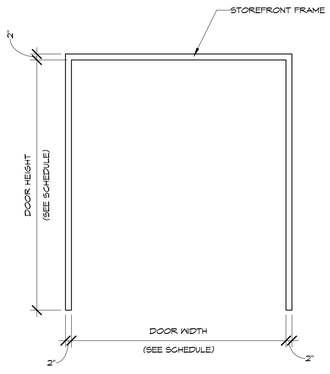

FRAME TYPE 3

D5 / A701 FRAME TYPES
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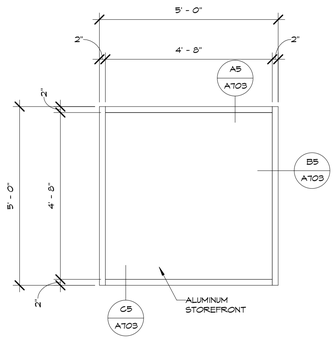

D3 / A701 WINDOW TYPE A
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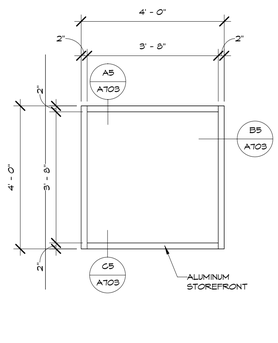
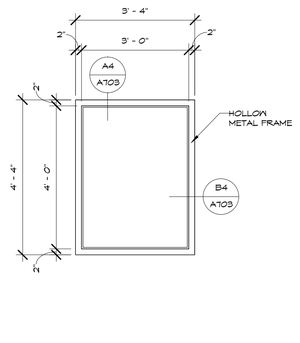


D2 / A701 WINDOW TYPE B
1/2" = 1'-0"



D1 / A701 WINDOW TYPE C
1/2" = 1'-0"

BBN ARCHITECTS INC
228 POYNTZ AVENUE
MANHATTAN, KANSAS 66502
PH: 785-776-4912 - FAX: 785-776-0944
WWW.BBNARCHITECTS.COM

REV	DESCRIPTION	DATE

REGISTERED ARCHITECT
DEANTA BOWMAN
1966
STATE OF KANSAS

Project Number: **17036**

Date: **9/1/17**

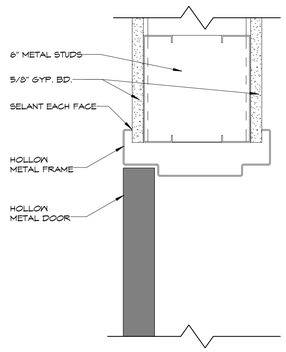
Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
**WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547**

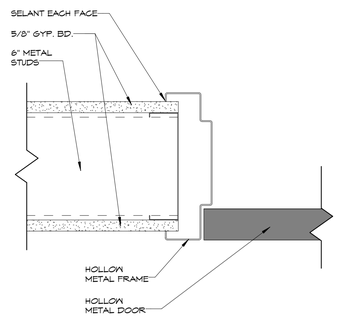
Sheet Title:
DOOR AND WINDOW TYPES/ DETAILS

Sheet:
A701

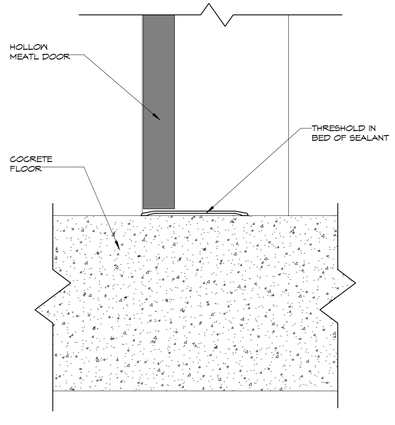
Of:



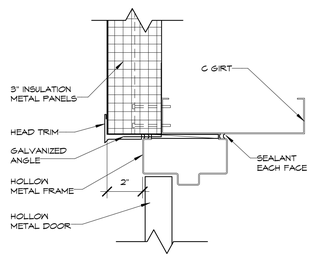
A5 / A702 HEAD DETAIL @ INTERIOR DOOR
3" = 1'-0"



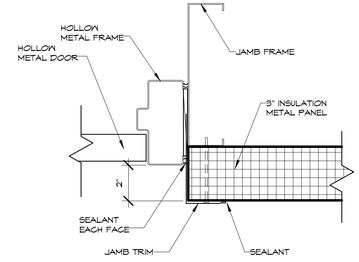
B5 / A702 JAMB DETAIL @ INTERIOR DOOR
3" = 1'-0"



D5 / A702 THRESHOLD DETAIL @ INTERIOR DOOR
3" = 1'-0"



A4 / A702 HEAD DETAIL @ EXTERIOR HM DOOR
3" = 1'-0"



B4 / A702 JAMB DETAIL @ EXTERIOR HM DOOR
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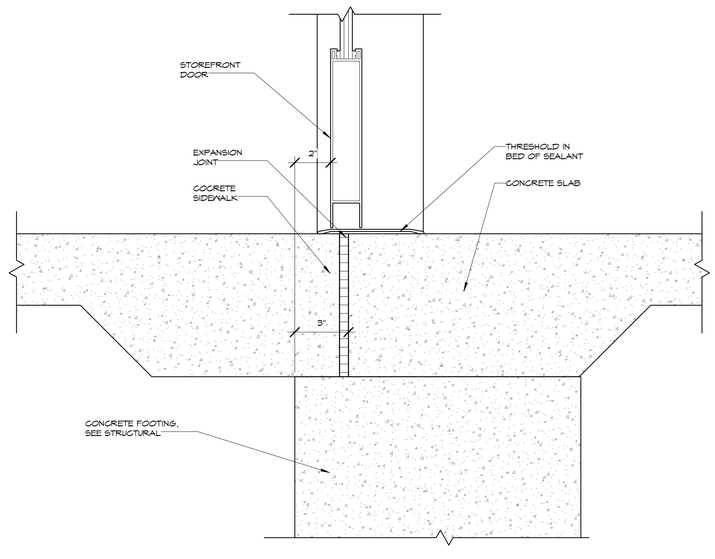

D4 / A702 THRESHOLD DETAIL @ EXTERIOR SF DOOR
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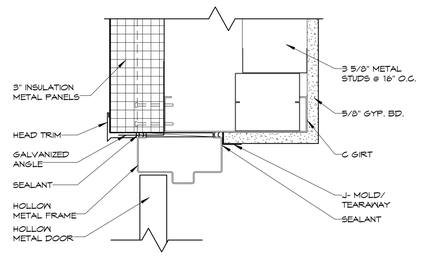
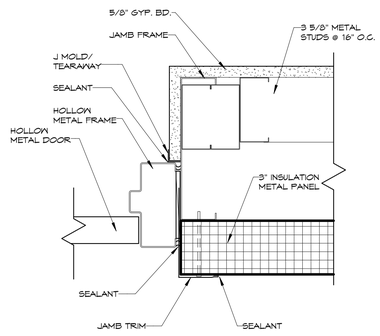


A3 / A702 HEAD DETAIL @ EXTERIOR HM DOOR GYP
3" = 1'-0"



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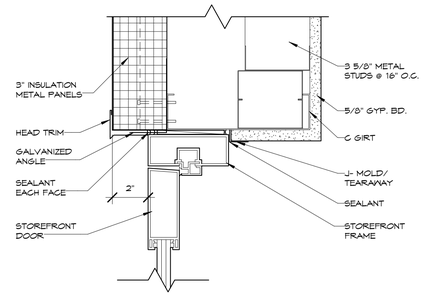
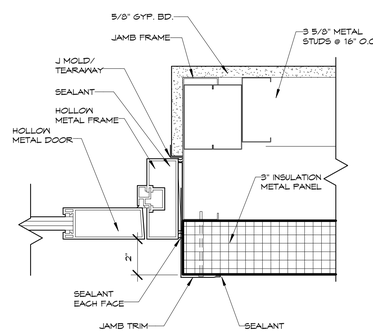


A2 / A702 HEAD DETAIL @ EXTERIOR SF DOOR
3" = 1'-0"



B2 / A702 JAMB DETAIL @ EXTERIOR SF DOOR
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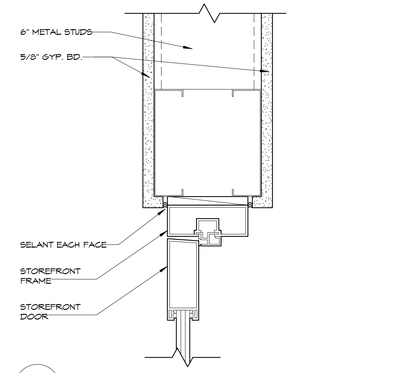
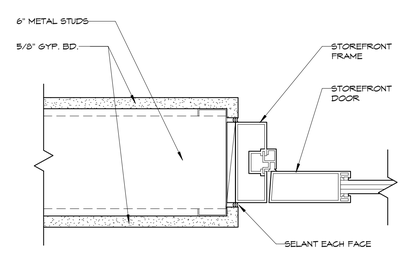


A1 / A702 HEAD DETAIL@ INTERIOR SF DOOR
3" = 1'-0"



B1 / A702 JAMB DETAIL@ INTERIOR SF DOOR
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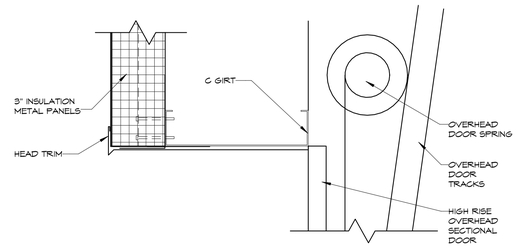
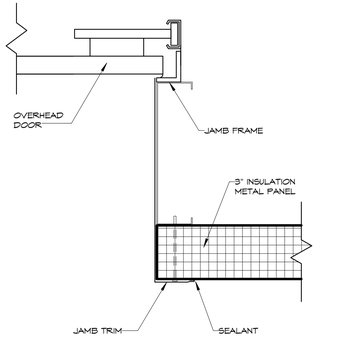


G1 / A702 HEAD DETAIL @ OVERHEAD DOOR
3" = 1'-0"



D1 / A702 JAMB DETAIL @ OVERHEAD DOOR
3" = 1'-0"

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228 POYNTZ AVENUE
MANHATTAN, KANSAS 66502
PH: 785-776-4912 - FAX: 785-776-0944
WWW.BBNARCHITECTS.COM

REV	DESCRIPTION	DATE

REGISTERED ARCHITECT BRENT A. BOWMAN 1966 STATE OF KANSAS

Project Number: 17036

Date: 9/1/17

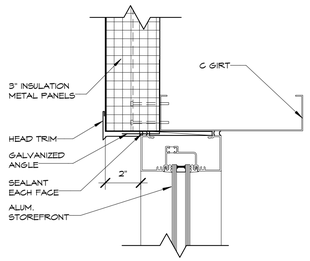
Project Name: **USD 320 MULTIPURPOSE BUILDING**

Project Address: **WAMEGO HIGH SCHOOL 801 LINCOLN WAMEGO, KS 66547**

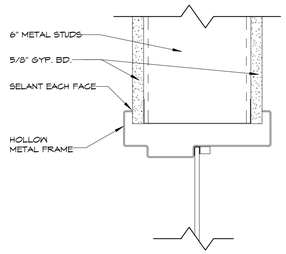
Sheet Title: **DOOR DETAILS**

Sheet: **A702**

Of:



A5 / A703 HEAD DETAIL @ EXTERIOR WINDOW
3" = 1'-0"



A4 / A703 HEAD DETAIL @ INTERIOR WINDOW
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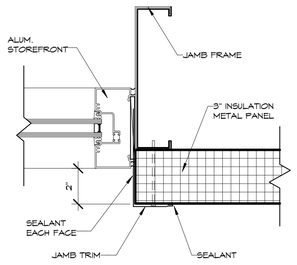

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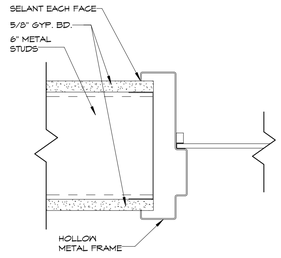

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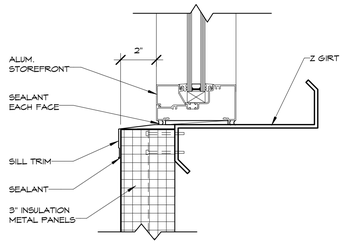
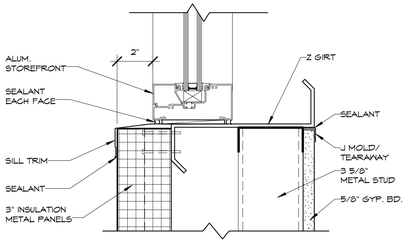
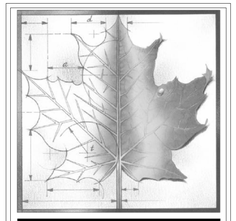


C5 / A703 SILL DETAIL @ EXTERIOR WINDOW
3" = 1'-0"



1 / A703 SILL DETAIL @ EXTERIOR WINDOW
3" = 1'-0"



BBN

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MANHATTAN, KANSAS 66502
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REV	DESCRIPTION	DATE

Project Number: **17036**

Date: **9/1/17**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
**WAMEGO HIGH SCHOOL
801 LINCOLN
WAMEGO, KS 66547**

Sheet Title:
WINDOW DETAILS

Sheet:
A703

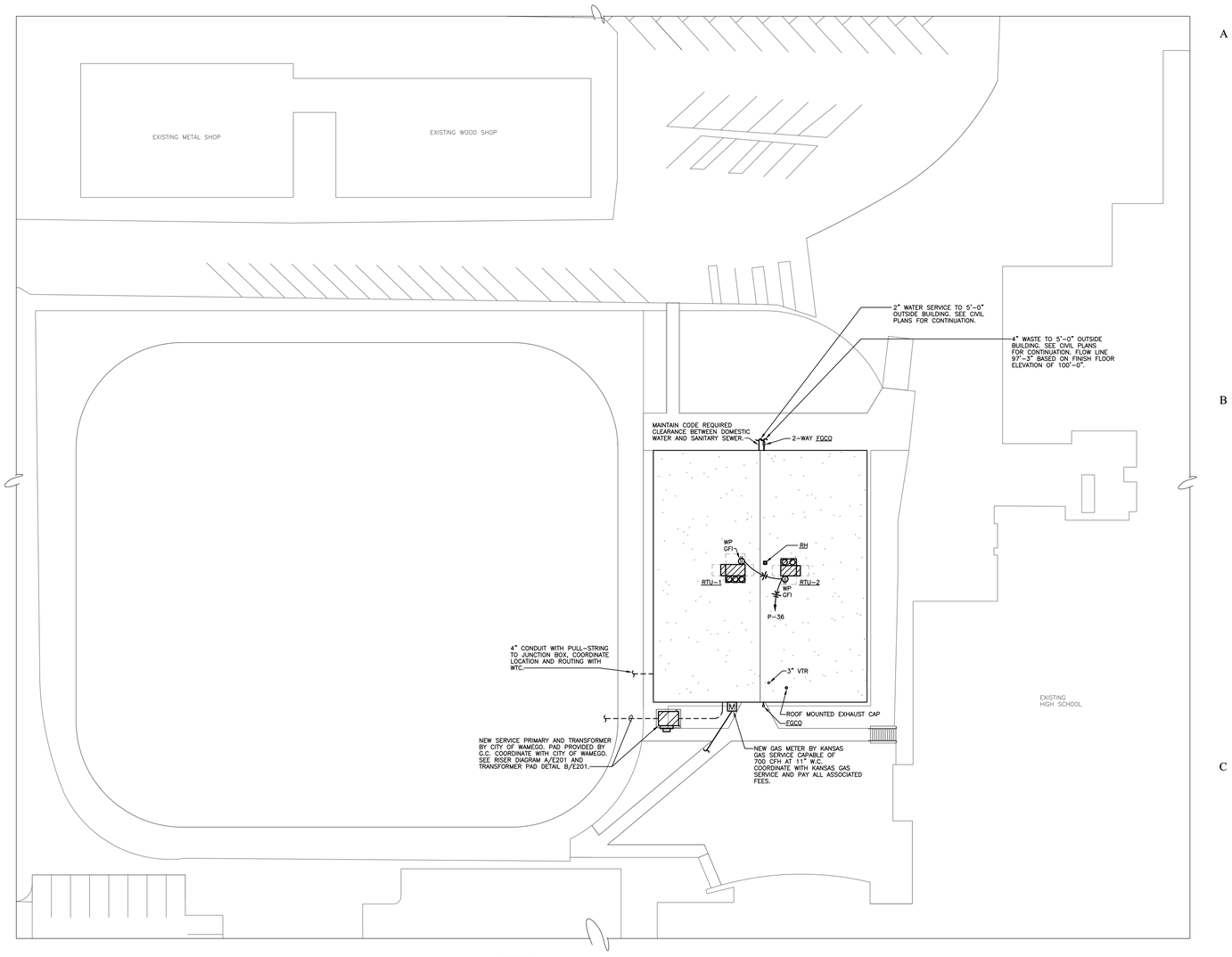
Of:

MEP SYMBOLS LEGEND

T	Thermostat		Duplex receptacle
	90° Elbow down, round duct	GFI	Ground fault interrupting duplex receptacle
	90° Elbow up, round duct	CT	Countertop duplex receptacle
	Round duct offset	WP	Weatherproof duplex receptacle
	Radius elbow		Four-plex receptacle
	90° Elbow down, rectangular supply duct		Special receptacle as noted
	90° Elbow up, rectangular supply duct		Telephone or intercom box
	90° Elbow down, rectangular return duct		Data box
	90° Elbow up, rectangular return duct	CT	Countertop data box
	Rectangular elbow with turning vanes		Cable television box
	Flexible duct		Flush junction box
	Manual balancing damper		Surface or concealed junction box
	Motorized damper		Electrical connection to equipment
	Ceiling supply air diffuser	S	Single pole switch
	Ceiling return air grille	K	Keyed switch
	Sidewall supply air diffuser	T	Timer switch
	Sidewall return air grille	3	Three-way switch
	Supply air slot diffuser	4	Four-way switch
	Round tap in bottom of duct	M	Manual motor starter
	Rectangular tap in bottom of duct		Electrical disconnect switch
D	Condensate drain		Motor starter
C	Cold water		Electrical motor
H	Hot water		Conduit concealed in wall or ceiling
G	Natural gas		In-floor conduit
	Sanitary waste above grade	G N H	Homerun to panelboard with conductors as indicated. Do not share neutrals unless noted otherwise.
	Sanitary waste below grade		
	Sanitary vent		Panelboard
VTR	Vent through roof		Transformer
	Plumbing trap		Electrical meter
	Pipe turning down		Clock backbox
	Pipe turning up		Wall mounting bracket
	Shock arrestor		Intercom ceiling speaker
	Ball valve		Fire alarm horn/strobe
	Gate valve	S	Fire alarm smoke detector
	Check valve	P	Fire alarm pull station
	Gas cock	D	Fire alarm duct smoke detector
	Union	TS	Fire alarm test switch
	Temperature/pressure relief valve	R	Fire alarm relay/addressable control module
	Strainer	M	Fire alarm addressable monitor module
	Automatic air vent	V	Fire alarm strobe
	Manual air vent	FACP	Fire alarm control panel
	Flexible pipe	C\B	Circuit breaker
	Gauge	U.N.O.	Unless noted otherwise
	Test plug	A.F.F.	Above finished floor
	Reducer	N.I.C.	Not in contract
		TYP	Typical
		G.C.	General Contractor

GENERAL MECHANICAL AND ELECTRICAL NOTES

1. Do not scale these drawings.
2. Submittal of detailed piping and electrical conduit installation shop drawings are not required. However, the Contractor shall be responsible for field verification of all dimensions and clearances for all system layouts. This shall be accomplished prior to installation.
3. Maintain maximum possible vertical clearance beneath all new conduit, equipment, and piping.
4. These drawings are a schematic representation of the work that is to be accomplished by this Contract. Refer to Architectural reflected ceiling plans and elevations for exact locations of all ceiling and wall mounted devices and equipment.
5. Lack of coordination between trades will not be a basis for change orders. Rework of already completed work to accommodate other trades will be performed at the Contractors' expense.
6. See Specifications for additional requirements.
7. All piping shall be installed concealed in finished areas, unless noted other wise.
8. All new circuitry shall be concealed in finished areas, unless noted otherwise.
9. Coordinate cutting and patching of walls, floors and ceilings with General Contractor.



NORTH

SITE PLAN - MEP

1" = 30'-0"

BBN ARCHITECTS INC
228 POYNTZ AVENUE
MANHATTAN, KS 66502
PH: 785-776-4912
WWW.BBNARCHITECTS.COM

REVISIONS:

1
2
3
4
5
6

THOMAS C. ORAZEM LICENSED 11371 09/01/2017 KANSAS PROFESSIONAL ENGINEER

Project Number:

Date: **9/1/17**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO, KS

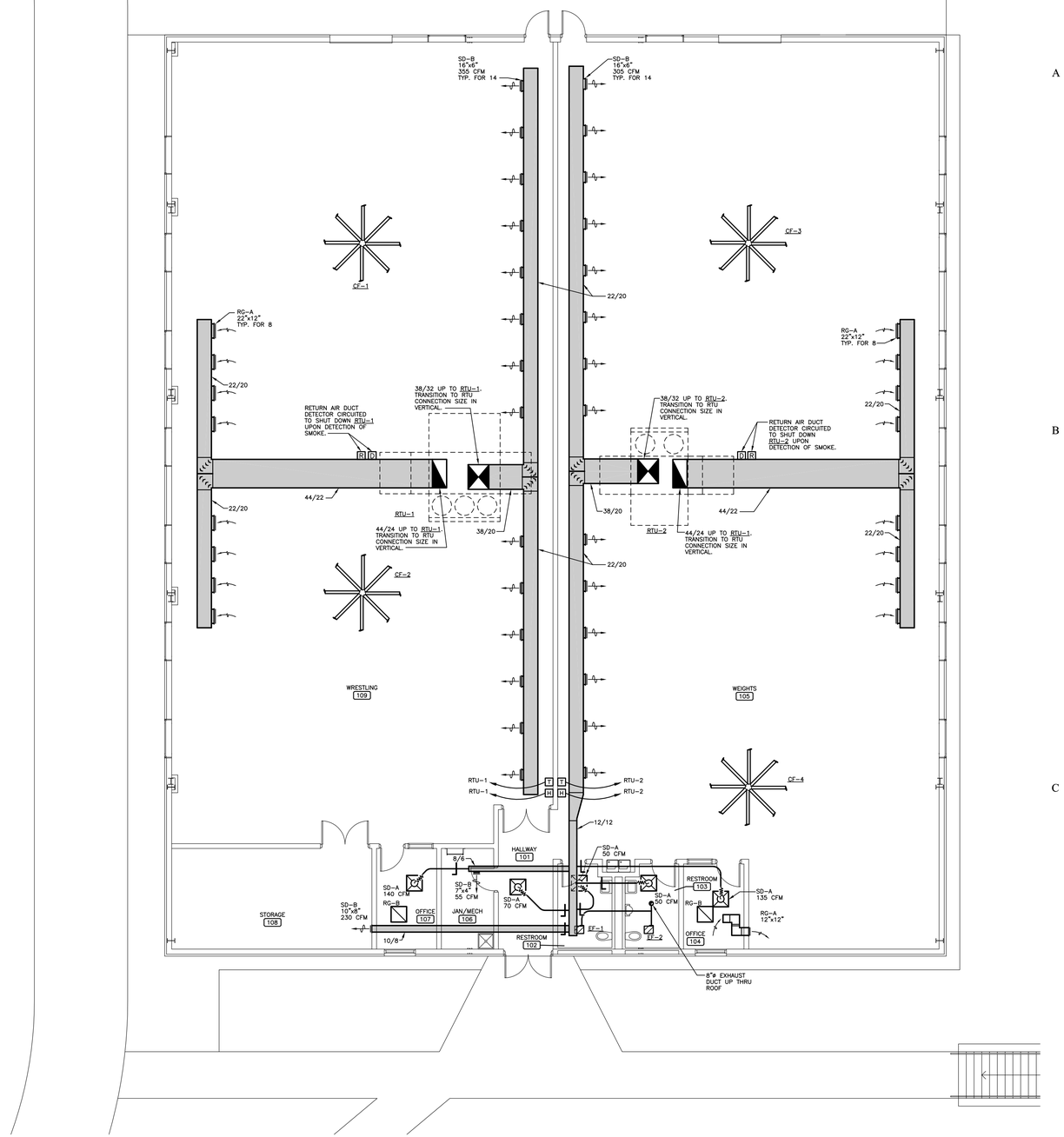
Sheet Title:
MEP SITE PLAN

Sheet: **ME101**

Of: **7**

Job No. 15011-1

ORAZEM & SCALORA ENGINEERING, P.A.
Manhattan, Kansas



NORTH

FLOOR PLAN - MECHANICAL

1/8" = 1'-0"

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PH: 785-776-4912
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REVISIONS:

1 2 3 4 5 6

THOMAS C. ORAZEM
LICENSED
11371
09/01/2017
KANSAS
PROFESSIONAL ENGINEER

Project Number:

Date: 9/1/17

Project Name: **USD 320 MULTIPURPOSE BUILDING**

Project Address: **WAMEGO, KS**

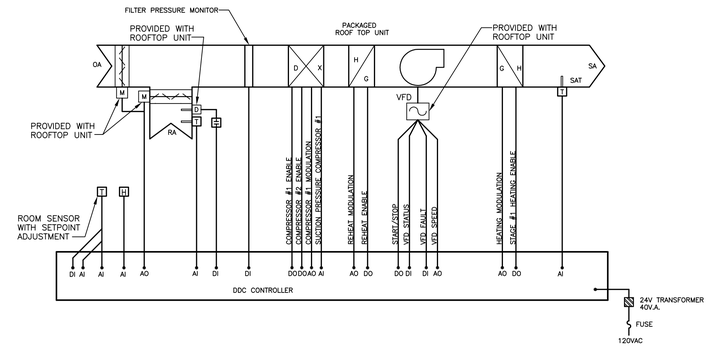
Sheet Title: **MECHANICAL PLAN**

Sheet: **M101**

Of: 7

ORAZEM & SCALORA ENGINEERING, P.A.
Manhattan, Kansas

Job No. 15011-1



A SINGLE ZONE ROOFTOP UNIT CONTROLS
NO SCALE

SEQUENCE OF OPERATIONS: RTU

Occupied Mode:
1. The building automation system shall enable the RTU to be occupied via its time-of-day schedule or local override button. During occupancy, the supply fan shall run continuously and the outside air damper shall open to minimum position.

Cooling Occupied: Mechanical Cooling
1. When the space temperature is above the cooling set point, compressor #1 shall be enabled and the variable capacity compressor will modulate to maintain space temperature set point (74F adj.).
2. If additional cooling is needed, the compressor #2 is enabled, and the variable capacity compressor will continue to modulate to maintain space set point.

Cooling Occupied: Economizer
1. If the outside air enthalpy falls below the economizer setpoint (adj.), the unit shall disable mechanical cooling operation and modulate the outside air damper and return air damper to maintain the room temperature set point (adj.).

Dehumidification Mode:
1. Anytime the space humidity is above 55% rh (adj.), the unit shall enter dehumidification mode. During the dehumidification mode, compressor #1 shall be enabled and the variable capacity compressor shall modulate to maintain suction pressure. The hot gas reheat coil shall be enabled and the valve shall modulate to maintain the space temperature setpoint (70F, adj.).

Heating Occupied:
1. When the space temperature is below the heating set point, the gas heat shall be enabled and the gas valve shall modulate to maintain space temperature set point (70F adj.).

Filter Differential Pressure Monitor:
1. The differential pressure switch across the filter shall be monitored by the building automation system and an alarm generated if the switch closes, indicating the filter is in need of replacement.

Unoccupied Mode:
1. During the unoccupied mode, as determined by the time-of-day schedule, the unit fan and all heating and cooling shall be disabled and the outside air damper shall close.
2. If the night override button is depressed on the thermostat, the rooftop unit will be enabled and will run for a time period of two hours (adj.).
3. Unit will maintain unoccupied setback temperatures of 65°F H / 80° C (adj.).
4. If the space temperature rises above the unoccupied cooling set point or drops below the unoccupied heating set point, the unit fan and required cooling or heating shall be enabled.
5. The outside air damper shall remain closed during unoccupied mode.

Smoke Detection:
1. Upon detection of smoke at the return air duct smoke detector the unit shall be shutdown.

Notes:
1. Rooftop unit provided with integral head pressure control for control of condensing unit fans.

CONTROLS SYMBOLS LEGEND

M	Electric actuator
CO2	Carbon dioxide Sensor
ES	End switch
PS	Pressure switch
FS	Flow switch
F	Flow sensor
DP	Differential pressure transducer
F	Flow meter
T	Room temperature sensor
T	Thermostat
	Relay
FS H	Freeze-stat with 2 sets of contacts
CS	Current switch
	3-way valve
	Control valve
	Connect to existing
H	Space humidity sensor
H	Duct humidity sensor
T	Duct temperature sensor
T	Pipe temperature sensor
	Thermometer
DP	Differential pressure
	Variable frequency drive
R	Fire alarm system control module
L	LED pilot light
	Spring wound timer
	Abbreviations
SA	Supply air
RA	Return air
OA	Outside air
SAT	Supply air temperature
RAT	Return air temperature
OAT	Outside air temperature
MAT	Mixed air temperature
DO	Digital output
DI	Digital input
AO	Analog output
AI	Analog input

EXHAUST FAN SCHEDULE

DESIGNATION	EF-1	EF-2
DUTY	Exhaust	Exhaust
AREA SERVED	Restroom 116	Restroom 117
TYPE	Ceiling Cabinet	Ceiling Cabinet
CFM	70	70
EXT. S.P.("WG)	0.375	0.375
TYPE DRIVE	Direct	Direct
DESIGN HP OR (WATTS)	(20)	(20)
MOTOR RPM	700	700
MAX. SONES	1.2	1.2
ACCESSORIES	1,2,3	1,2,3,4
VOLTAGE/PHASE	120/1	120/1
BASED ON: (Greenheck)	SP-B90	SP-B90

ACCESSORY KEY:
1. Provide with backdraft damper.
2. Provide with factory mounted and wired disconnect.
3. Provide with unit-mounted solid state speed control.
4. Provide 12" tall insulated roof curb compatible with roof type and construction, and RCC-7 curb cap with integral birdscreen.

CEILING FAN SCHEDULE

DESIGNATION	CF-1,2	CF-3,4
AREA SERVED	WRESTLING 115	WEIGHTS 120
TYPE	CEILING MOUNTED HVLS	CEILING MOUNTED HVLS
DIAMETER (FT)	10	10
NO OF FOILS	5	5
MAXIMUM SPEED (RPM)	122	122
BLADE DISTANCE FROM CEILING (FT)	3	3
TYPE DRIVE	DIRECT	DIRECT
DESIGN HP	1.0	1.0
VOLTAGE/PHASE	208/1	208/1
WEIGHT (LBS)	181	181
BASED ON: (ENTREMATIC FANS)	EF10B105	EF10B105

NOTES:
1. Provide each fan with variable speed, wall mounted controller and all required control circuitry.
2. Provide with vertical airfoil winglets.
3. Provide with mounting system, safety cables, and all required hardware to mount per the manufacturer's recommendations.

AIR DEVICE SCHEDULE

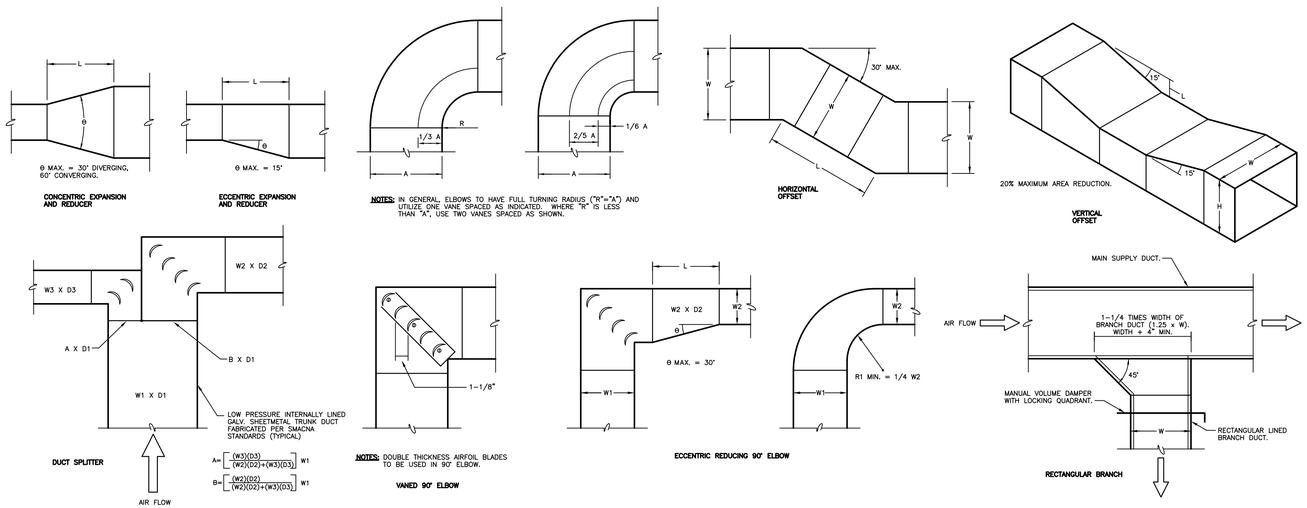
All devices shall be supplied in white finish suitable for field painting.

SD-A	EH Price SMD/6/4A steel louvered flush face diffuser, 24" square face, round neck, gasketed beveled frame. Blow pattern is 4-way unless indicated otherwise.

CFM Range	Max. APD	Max. NC	Neck Dia.
0-110	0.10	30	6"
111-200	0.10	30	8"
201-300	0.10	30	10"
301-400	0.10	30	12"
401-535	0.10	30	14"

Unless noted otherwise, runouts to diffusers shall be same size as neck.

SD-B	EH Price 520D steel double deflection sidewall register with 0 degree horizontal front blades, 1-1/4" screwed flanged frame, gasketed border, opposed blade damper. Size as indicated on drawings.
RG-A	EH Price 530/L steel louvered return air grille with horizontal blades, 1-1/4" screwed border and gasketed frame. Size as indicated on drawings.
RG-B	EH Price SMD steel louvered flush face return grille with 12" square neck, 24" square face, gasketed frame, provide with hardware for install in lay-in or hard ceiling.



B DUCT CONSTRUCTION DETAILS
NO SCALE

ROOF TOP UNIT SCHEDULE

ROOF TOP UNIT	RTU-1	RTU-2
TYPE	HEATING/COOLING	HEATING/COOLING
SERVES	SEE PLANS	SEE PLANS
CONFIGURATION	HORIZONTAL DISCHARGE	HORIZONTAL DISCHARGE
CFM	5000	5000
EXT. S.P.("WG)	1.6	1.6
MINIMUM O.A. CFM	1575	1110
HEATING FUEL	NATURAL GAS	NATURAL GAS
MAXIMUM HEATING INPUT (MBH)	405.0	292.5
MINIMUM HEATING OUTPUT (MBH)	328.1	234.0
HEATING STAGES	MODULATING	MODULATING
REFRIGERANT	R-410A	R-410A
EVAP. E.A.T. DB/WB (F)	84.5/66.5	81.6/65.2
CONDENSER E.A.T. DB(F)	105	105
NET SENSIBLE COOLING CAPACITY (MBH)	139.2	131.6
NET TOTAL COOLING CAPACITY (MBH)	179.7	162.1
SUPPLY AIR FAN RPM (or speed)	1426	1508
SUPPLY FAN HP	5	5
SUPPLY FAN DRIVE TYPE	DIRECT	DIRECT
CONDENSER FAN HP	2 @ 0.75	2 @ 0.75
NO. COMPRESSORS	2	2
COMPRESSOR FLA (EACH)	27.6	24/25
TOTAL COOLING F.L.A.	83	76
MINIMUM CIRCUIT AMPS	90	83
MAXIMUM HACR CIRCUIT BRKR. AMPS	110	100
FILTERS	2" DISPOSABLE	2" DISPOSABLE
VOLTAGE/PHASE	208/3	208/3
MINIMUM EER (SEER)	12	11.1
APPROXIMATE WEIGHT INCLUDING CURB, & ACCESSORIES (LBS)	3000	2300
BASED ON: (AAON)	RN-018-8-0-EA09-3B9	RN-015-8-0-EA09-3G9

NOTES:
1. Provide each RTU with a flexible connection at supply and return duct connections and transition as required to duct size.
2. Provide each RTU with factory installed and wired NEMA 3R disconnect switch.
3. Provide each RTU with factory installed and field wired weatherproof GFI NEMA 5-15 receptacle.
4. Equip each unit with terminal strip for interface with building automation system.
5. Install return air duct smoke detector, provided by Electrical Contractor, in RTU's over 2000 cfm of supply air. Detector shall be circuited to shut down unit entirely upon detection of smoke.
6. Provide each RTU with 14" high insulated roof curb compatible with roof slope and construction.
7. Provide each RTU with factory provided and field installed hail guards.
8. Provide each RTU modulating compressor for variable capacity cooling.
9. Provide each RTU with modulating hot gas reheat.
10. Provide each RTU with modulating gas heat.

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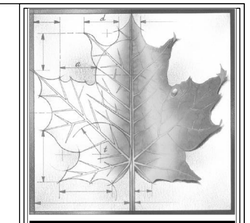

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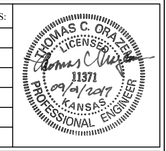


Project Number:

Date: 9/1/17

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO, KS

Sheet Title:
MECHANICAL DETAILS & SCHEDULES

Sheet: **M201**

Of: 7

LIGHTING FIXTURE SCHEDULE

MARK	SIZE	MANUF.	DESCRIPTION	LAMPS
A1	2' x 4'	Williams	Series PT LED lay-in troffer with precision die-formed 22-guage cold rolled steel housing, diffuse ribbed acrylic shielding, highly reflective non-glare matte white polyester powder coat bonded finish, and room-side access to electrical components without removing fixture from ceiling grid. Provide fixture with 4,000K lumen package producing 3,300 nominal lumens at 34 watts, prewired for non-dimming applications, L70 rated for greater than 50,000 hours, and with efficacy greater than 98 lm/W.	LEDs 34W
A2	2' x 4'	Williams	Similar to type A1 except provided with 4,000K lumen package producing 5,800 nominal lumens at 54 watts and an electronic driver with 0-10V dimming capability.	LEDs 54W
B1	14-3/16" W x 4-13/16" H x 4' L	Williams	Series GL LED low-profile industrial with die-formed aluminum housing, 92% minimum average reflective white polyester powder coat finish, and 11-gauge white powder coated wiregurd. Provide fixture with 4,000K lumen package producing 15,000 nominal lumens at 121 watts, an electronic driver prewired for non-dimming applications, and L70 rated for greater than 50,000 hours.	LEDs 121W
B2	14-3/16" W x 4-13/16" H x 4' L	Williams	Similar to type B1 except with 4,000K lumen package producing 20,000 nominal lumens 170 watts.	LEDs 170W
C1	2-3/4" W x 3-1/4" H x 4' L	Williams	Series 75L lensed LED strip fixture with 22 ga. cold rolled steel housing, all parts painted to a minimum 92% average reflectance, and 0.125" thick acrylic frosted lens. Provide all necessary hardware to surface mount or chain hang fixture as required. Provide fixture with 4,000K lumen package producing 3,800 nominal lumens at 41 watts, an electronic driver prewired for non-dimming applications, and L70 rated for greater than 50,000 hours.	LEDs 41W
C2	2-3/4" W x 3-1/4" H x 4' L	Williams	Similar to type 'C1' except with 4,000K lumen package producing 6,500 nominal lumens at 67 watts.	LEDs 67W
D	5-3/4" W x 3-5/8" D x 6-3/4" H	Lumark	Series XTOR surface mounted LED fixture with die-cast aluminum corrosion resistant housing, one-piece silicon gasket, and impact-resistant tempered glass lens. Provide fixture with 4,000K lumen package producing 2,135 lumens at 18W, and rated for greater than 72,000 hours at 90% lumen maintenance. Finish to be selected by Architect. Mount fixture at 11'-0" A.F.F. to bottom of fixture unless noted otherwise.	LEDs 18W
E1	12-1/2" x 5-1/2" x 5-7/8" D	Mule	Series MRD-HO wall mounted emergency light with white thermoplastic housing, 6 volt DC output, rated for 54 watts at 1.5 hours, solid-state battery charger, sealed maintenance free lead-calcium battery, equipped with two low profile adjustable heads and wall mounting bracket. Provide circuitry for and connect to unswitched power from lighting circuit serving the same area as emergency light. Mount fixture at 7'-6" A.F.F. to bottom of fixture unless noted otherwise. Provide fixture wire 11-gauge powered coated wire guard where indicated on plans with a "WG".	2-12W MR-16
E2	2.25" Dia. x 3-11/16" L x 5-7/8" D	Mule	Series H2O remote emergency light, die-cast aluminum head and glass lens, 6 volt DC, equipped with one adjustable head, weatherproof mounting bracket, and U.L. listed for damp locations. Mount fixture at 7'-6" A.F.F. to bottom of fixture unless noted otherwise.	LEDs
X	12" x 7-1/2"	Mule	Series MX emergency powered exit light with red letters, textured white thermoplastic housing, universal chevrons, 100 ft. visibility. All required mounting hardware, sealed NiCd emergency power battery rated for 90 minutes, integral solid state battery charger, one or two faces as indicated on plans, wall or ceiling mount as indicated on plans. Provide circuitry for and connect to unswitched power from lighting circuit serving same area as exit light. Provide fixture wire 11-gauge powered coated wire guard where indicated on plans with a "WG".	LED

NOTES:
1. All fixtures to be provided for 120 volt AC operation unless noted otherwise.
2. Coordinate mounting heights of all wall mounted fixtures with Architect prior to roughing in.

LIGHTING CONTROL DEVICE SCHEDULE

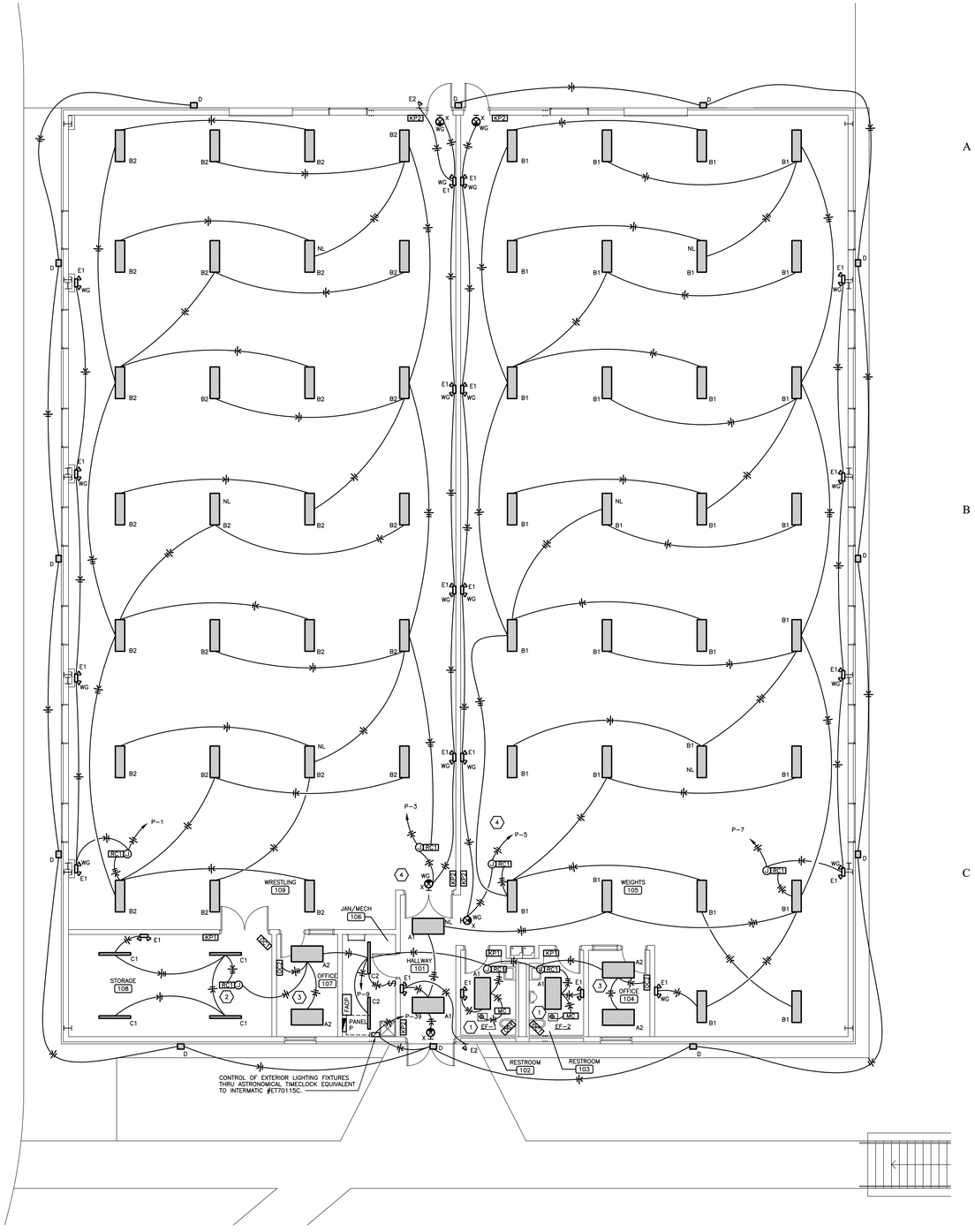
MARK	MANUF.	DESCRIPTION	MOUNTING
OC#1	Watt Stopper	LMDX-100 dual technology sensor with passive infrared and ultrasonic sensors, 40 kHz frequency ultrasonic transmission, adjustable time delay, automatic passive infrared adjustment, manual ultrasonic adjustment, 1000 sf of desktop motion coverage, 2000 sf of walking motion coverage, swivel mounting bracket. Complete installation for integration to lighting management system.	Ceiling/Wall
KP2	Watt Stopper	PW-311 Passive Infrared 0-10V Dimming Wall Switch Sensor with adjustable time delay, sensitivity adjustment, 20' x 15' minor motion coverage, 120 volt relay, mountable in standard switch box.	Switch Box
RC#1	Watt Stopper	LMRC-101 Series Digital On/Off room controller. Plenum-rated construction for mounting above ceiling, RJ45 receptacles for cable connections. Complete installation for integration to lighting management system.	Above Ceiling
KP1	Watt Stopper	LMSW-101 Series 1-Button wall switch.	Switch Box
KP2	Watt Stopper	LMSW-105 Series 5-Button wall switch. Provide custom engraving for buttons, approve with Architect and Owner before ordering.	Switch Box
LMC	Watt Stopper	LMRL-100 isolated relay interface for integration of lighting management system with exhaust fan operation. Coordinate installation with Mechanical Controls Contractor.	Above Ceiling

NOTES:
1. Install occupancy sensors per manufacturer's recommendations.
2. Provide relays, power supplies, and circuitry for complete operation of sensors.
3. Set time delays - 15 minutes for offices, 20 minutes for classrooms, 20 minutes for commons, and 15 minutes for all other rooms with occupancy sensors.
4. Provide digital wireless configuration tool equivalent to Watt Stopper LMCT-100 for remote system and device modifications.

LIGHTING CONTROL SEQUENCE SCHEDULE

TYPE	DESCRIPTION
1	Single Zone with Occupancy Sensor and Mechanical Control Device Light fixtures in space controlled by occupancy sensor with manual on/off from pushbutton device located near door. Exhaust fan in space controlled through mechanical control device in conjunction with lighting.
2	Single Zone with Occupancy Sensor Light fixtures in space controlled by occupancy sensor with manual on/off from pushbutton device located near door.
3	Single Zone with Dimming Control and Occupancy Sensor Light fixtures in space controlled by occupancy sensor with manual on/off/dim from two button pushbutton device located near door. Fixtures will be controlled On/Raise (hold) with button #1 and Off/Lower (hold) with button #2.
4	2-Zones with Nightlighting 2 separately controlled lighting zones in space controlled by manual on/off from pushbutton device located near door. Main paddle button on 5 button keypad will control all light fixtures together on/off. Individual zone control thru small buttons #2-#5. Control of zone #1 On with small button #2, Off with small button #3. Control of zone #2 On with small button #4, Off with small button #5. Fixtures noted as night lighting (NL) to remain on at all times unless turned off at panel.

NOTES:
1. See floor plan for quantity and location of occupancy sensors, room controllers, and keypad devices.



NORTH

FLOOR PLAN - LIGHTING
1/8" = 1'-0"

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Manhattan, Kansas

Job No. 15011-1

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THOMAS C. ORAZEM LICENSED 11371 09/01/2017 KANSAS PROFESSIONAL ENGINEER

Project Number:

Date: 9/1/17

Project Name:
USD 320 MULTIPURPOSE BUILDING

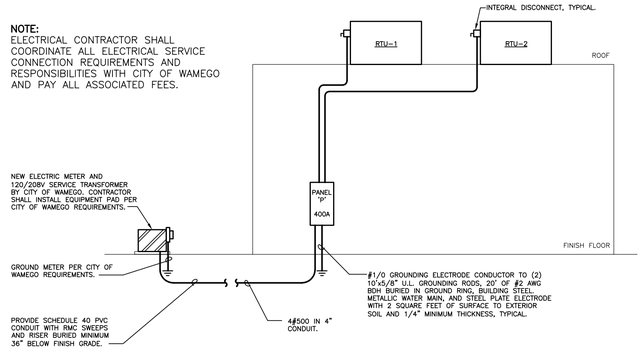
Project Address:
WAMEGO, KS

Sheet Title:
ELECTRICAL LIGHTING PLAN

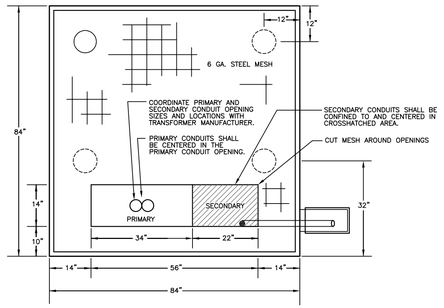
Sheet: **E101**

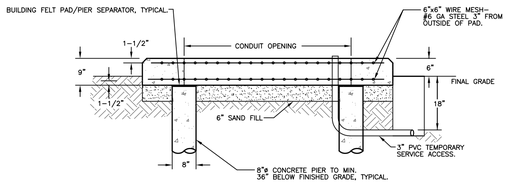
Of: 7

NOTE:
ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL SERVICE CONNECTION REQUIREMENTS AND RESPONSIBILITIES WITH CITY OF WAMEGO AND PAY ALL ASSOCIATED FEES.



A ELECTRICAL RISER DIAGRAM
NO SCALE





B TRANSFORMER PAD DETAIL
1/2" = 1'-0"

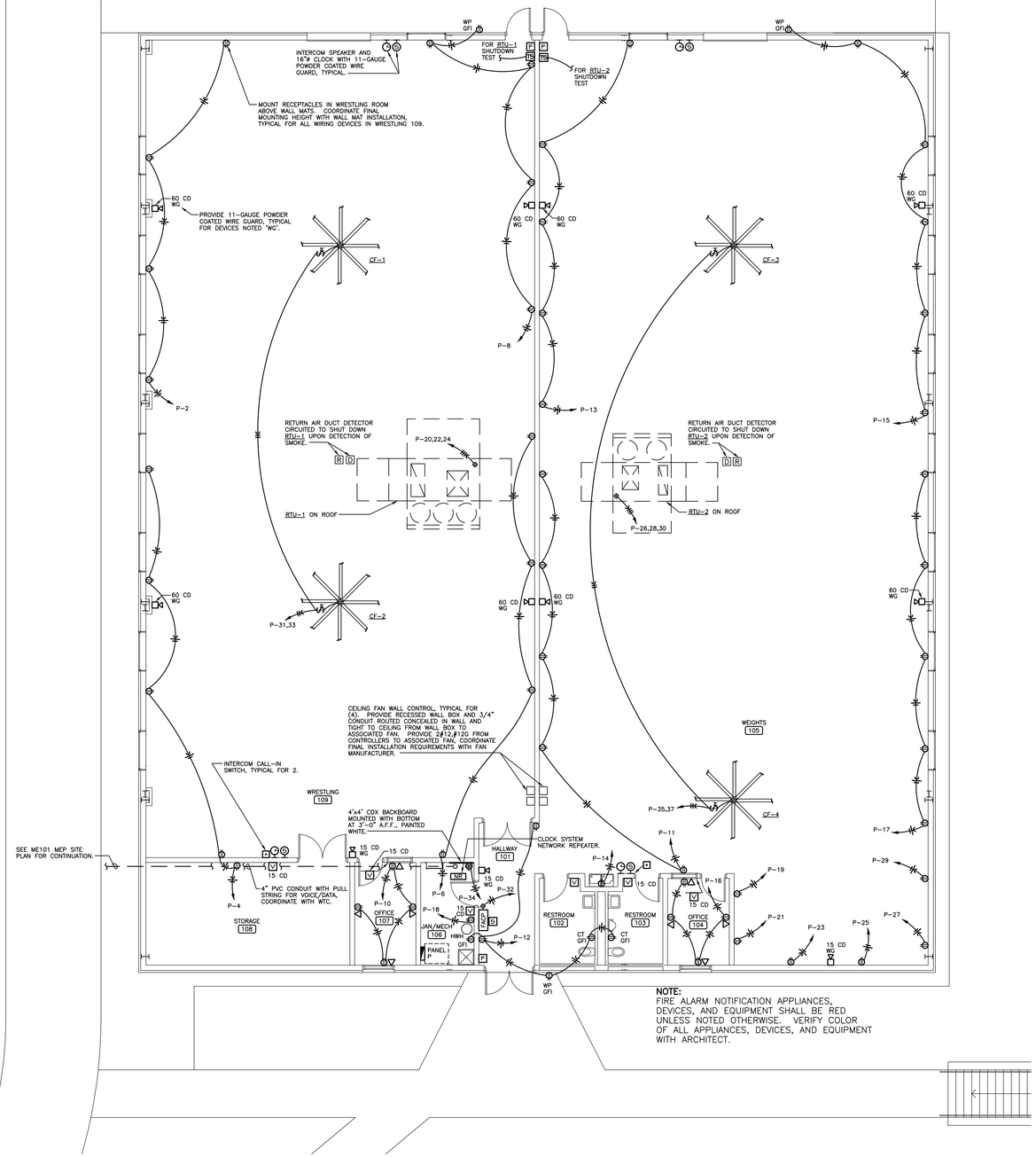
PANELBOARD SCHEDULE

PANEL DESIGNATION: Panel 'P'
LOCATION: Jan/Mech 106
VOLTS: 120/208
CONFIGURATION: 3 Phase/4 Wire
MOUNTING: Surface
MIN A.I.C.: 10000
MCB Amps: 400
BUS Amps: 400
ENCL.: NEMA 1

FEATURES:
- Panelboard Construction
- Equipment Ground Bus
- Equal to Square D NQ
- Service Entrance Rated

CKT.	Description	Conductors	C/B	CKT.	Description	Conductors	C/B
1	Ltg – Wrestling 109	2#12,#12G	20/1	2	Rcpt – Rm 109 NW	2#12,#12G	20/1
3	Ltg – Wrestling 109	2#12,#12G	20/1	4	Rcpt – Rm 109 SW, Rm 108	2#12,#12G	20/1
5	Ltg – Weights 105	2#12,#12G	20/1	6	Rcpt – Rm 109 NE, Exterior	2#12,#12G	20/1
7	Ltg – Weights 105	2#12,#12G	20/1	8	Rcpt – Rm 109 SE	2#12,#12G	20/1
9	Ltg – Rm 102-104,106-108	2#12,#12G	20/1	10	Rcpt – Rm 107	2#12,#12G	20/1
11	Rcpt – Rm 105 SW	2#12,#12G	20/1	12	Rcpt – Rm 101-103, 106, Ext.	2#12,#12G	20/1
13	Rcpt – Rm 105 NW	2#12,#12G	20/1	14	*Rcpt – Rm 105 EWC	2#12,#12G	20/1
15	Rcpt – Rm 105 NE, Exterior	2#12,#12G	20/1	16	Rcpt – Rm 104	2#12,#12G	20/1
17	Rcpt – Rm 105 SE	2#12,#12G	20/1	18	HWH-A	2#12,#12G	20/1
19	Rcpt – Rm 105 NW Ded.	2#12,#12G	20/1	20			110
21	Rcpt – Rm 105 W Mid. Ded.	2#12,#12G	20/1	22	RTU-1	3#2,#6G	
23	Rcpt – Rm 105 SW Ded.	2#12,#12G	20/1	24			3
25	Rcpt – Rm 105 SE Ded.	2#12,#12G	20/1	26			100
27	Rcpt – Rm 105 E Mid. Ded.	2#12,#12G	20/1	28	RTU-2	3#3,#8G	
29	Rcpt – Rm 105 NE Ded.	2#12,#12G	20/1	30			3
31	CF-1, CF-2	2#12,#12G	15	32	Fire Alarm Control Panel	2#12,#12G	20/1
33			2	34	Rcpt – Rm 106 Data Rack	2#12,#12G	20/1
35	CF-3, CF-4	2#12,#12G	15	36	Rcpt – RTU-1, RTU-2	2#12,#12G	20/1
37			2	38	Spare	---	20/1
39	Ltg – Exterior	2#12,#12G	20/1	40	Spare	---	20/1
41	Spare	---	20/1	42	Spare	---	20/1
43	Spare	---	20/1	44	Spare	---	20/1
45	Spare	---	20/1	46	Spare	---	20/1
47	Spare	---	20/1	48	--	---	–
49	--	---	–	50	--	---	–
51	--	---	–	52	--	---	–
53	--	---	–	54	--	---	–

* – Provide with GFCI protected breaker.



NOTE:
FIRE ALARM NOTIFICATION APPLIANCES, DEVICES, AND EQUIPMENT SHALL BE RED UNLESS NOTED OTHERWISE. VERIFY COLOR OF ALL APPLIANCES, DEVICES, AND EQUIPMENT WITH ARCHITECT.

FIRE ALARM SYSTEM NOTES
1. Provide an addressable fire alarm system in the building.
2. Provide all equipment, circuitry, installation labor and programming for for a complete and fully functional system in accordance with the applicable sections of NFPA 72, the National Electrical Code, 2012 International Building Code, 2012 International Fire Code and the supplying manufacturer's recommendations.
3. See specifications for additional requirements.

NORTH

FLOOR PLAN - POWER
1/8" = 1'-0"

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Project Address:
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Sheet Title:
ELECTRICAL POWER PLAN

Sheet: **E201**
OF: 7

Job No. 15011-1

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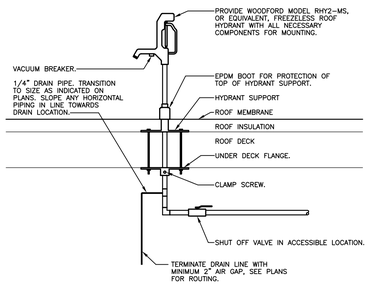
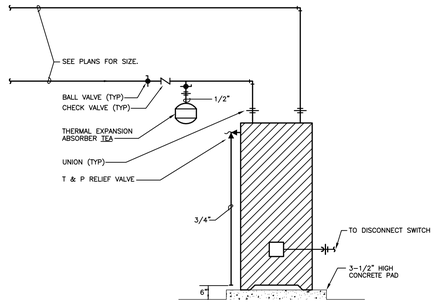
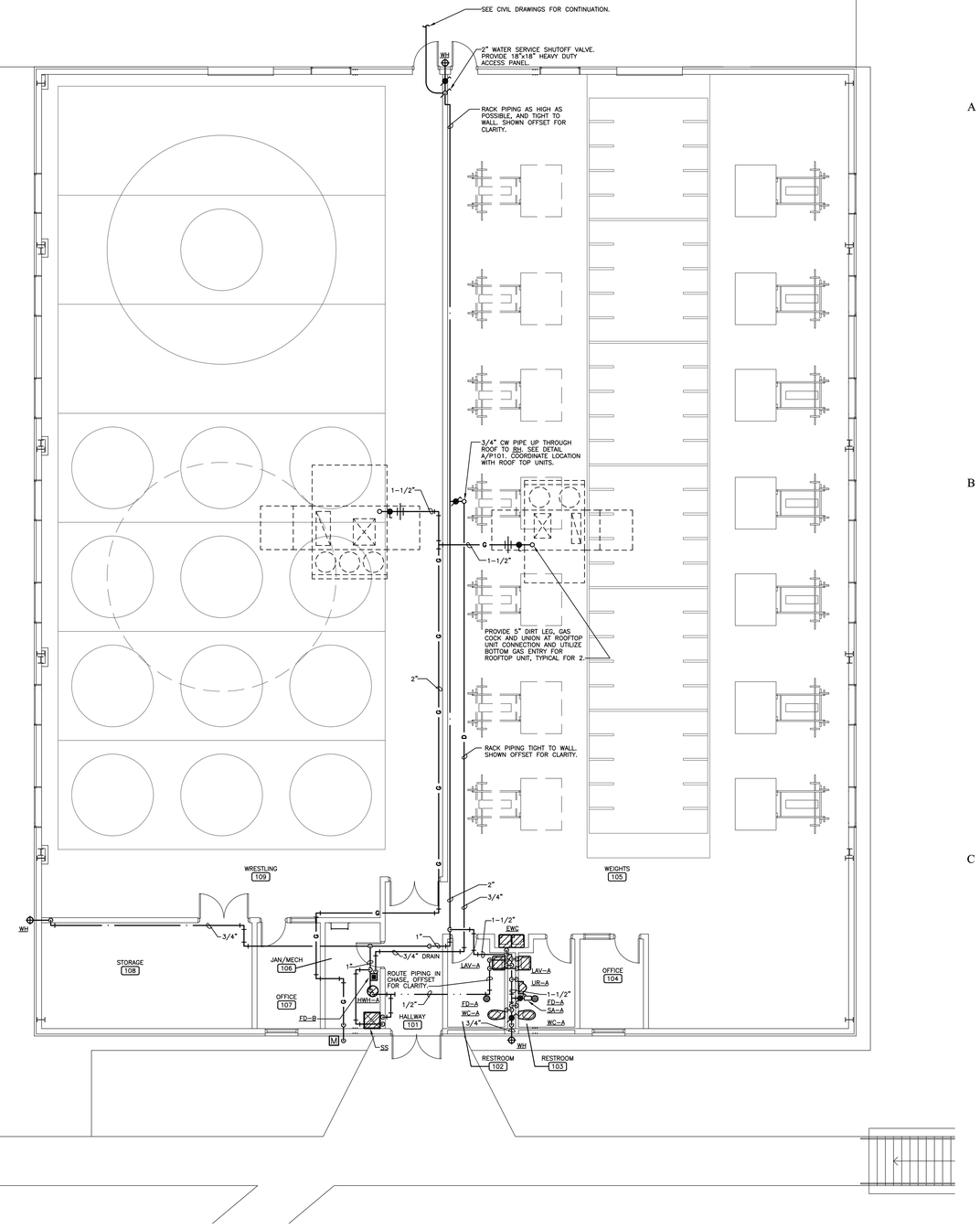


A ROOF HYDRANT DETAIL
NOT TO SCALE



B HOT WATER HEATER DETAIL
NOT TO SCALE

PLUMBING FIXTURE MINIMUM ROUGH-IN SIZE SCHEDULE				
FIXTURE/DESIGNATION	WASTE	VENT	COLD WTR.	HOT WTR.
FLUSH VALVE WATER CLOSET/WC-A	4"	2"	1"	---
URINAL/UR-A	2"	2"	3/4"	---
LAVATORY/LAV-A	2"	2"	1/2"	1/2"
SERVICE SINK/SS	3"	2"	1/2"	1/2"
WALL HYDRANT/WH	---	---	3/4"	---
FLOOR DRAIN/FD-A,B	2"	2"	---	---
ROOF HYDRANT/RH	---	---	3/4"	---



NORTH

FLOOR PLAN - WATER & GAS
1/8" = 1'-0"

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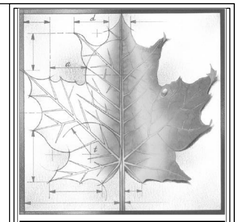
Job No. 15011-1



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Project Number:

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Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
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Sheet Title:
PLUMBING WATER & GAS PLAN

Sheet:
P101

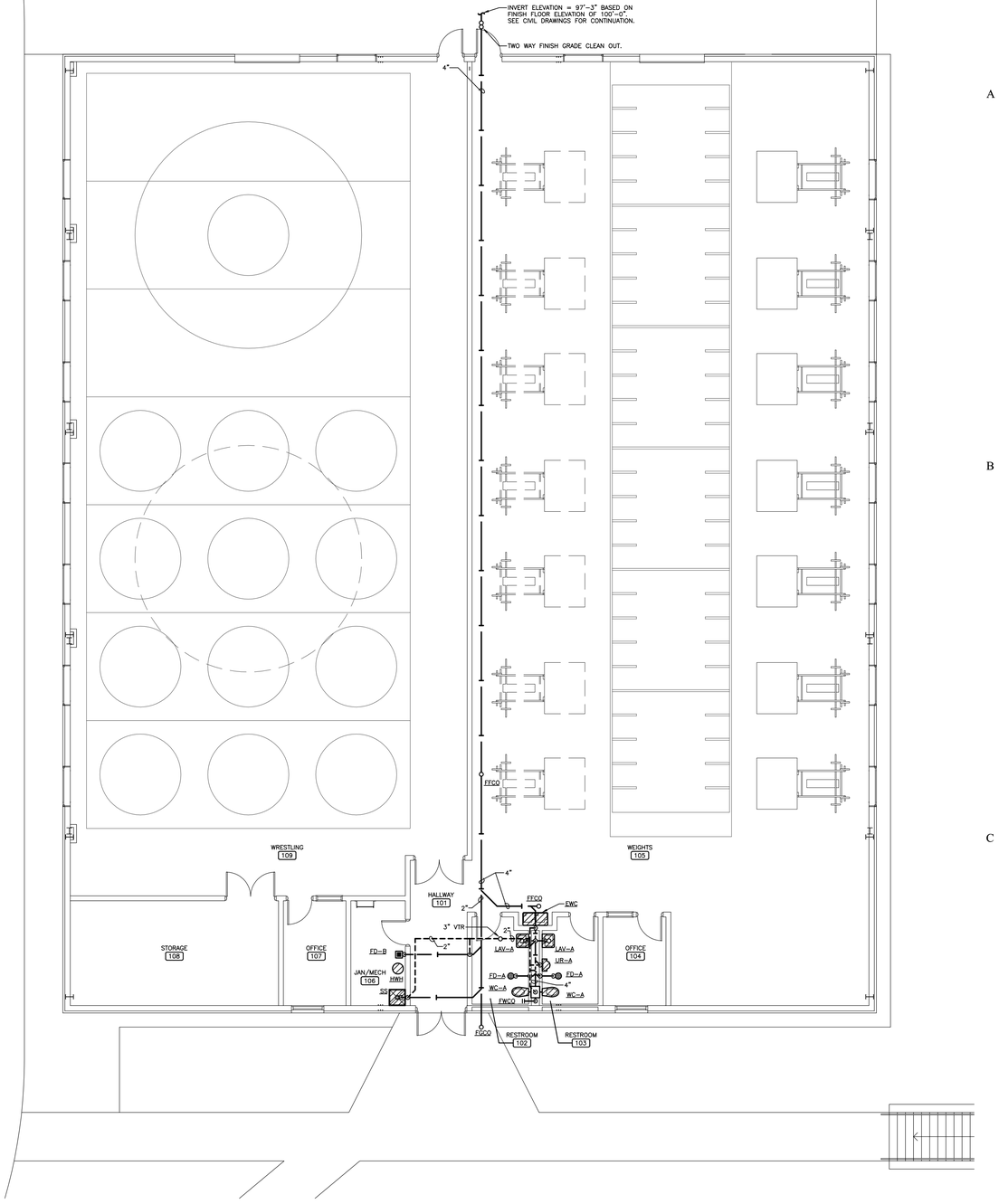
Of: 7

PLUMBING EQUIPMENT SCHEDULE

General Notes:

1. For fixtures marked (ADA), fixture, trim, mounting dimensions and installation shall meet the requirements of the 2010 Americans With Disabilities Act.
2. Coordinate fixture locations with Architectural plans and elevations prior to rough–in.
3. All fixtures shall be provided with vandal resistant trim.
4. Provide carrier required for complete installation of fixture.

WC–A	Zurn Z5615 vitreous china, wall mounted, elongated bowl, siphon jet flushing action, 1.6 GPF, 1–1/2" spud toilet, open front seat less cover, Sloan Regal 111–XL flush valve with vacuum breaker and angle stop, coated cast iron closet carrier with adjustable closet connection and with feet anchor bolted to floor. Fixture color: White. Mount with rim at 15 inches AFF. NO SUBSTITUTIONS FOR FLUSH VALVE.
UR–A	Zurn Z5750 vitreous china, wall hung, washout flushing action, extended rim, 1.0 GPF, 3/4" top spud, integral trap, wall hanger carrier with feet anchor bolted to floor, Sloan Regal 180–1 XL flush valve with vacuum breaker and angle stop. Fixture color: White. Mount with lip at maximum of 17" AFF. NO SUBSTITUTIONS FOR FLUSH VALVE.
LAV–A	Zurn Z5124 self–rimming round vitreous china lavatory, 19" outside diameter, front overflow. Trim with Zurn Z81101–XL–3M 4" centerset faucet with 4" spout, 0.5 gpm flow control, grid drain, indexed hot or cold 2–1/2" metal lever handles, Dearborn supplies with stops and escutcheon plate, Dearborn #760W 17 ga. offset tailpiece and 1–1/4" cast brass P–trap with cleanout plug. Fixture color: White. Insulate water and waste piping below sink with manufactured piping covers consisting of flexible vinyl insulation with white finish and access to piping, equivalent to Handi Lav–Guard manufactured by Truebro Inc.
EWC–A (ADA)	Halsey Taylor #HTHB–HACGB two–level, lead free, wall hung electric drinking fountain with front mounted push bars for water control, single water chilling unit with capacity to cool 8.0 GPH from 80 degrees F to 50 degrees F at 90 degrees F room temperature, with Refrigerant 134a, and single plumbing and electrical rough–in. Tops shall be stainless steel, frame shall be heavy duty welded steel with beige steel cabinet. Provide with supply stops and 1–1/4" Dearborn 17 gauge cast brass P–trap with cleanout plug. Electrical characteristics: 120 volt/1 phase, 4.8 F.L.A. Provide with bottle filling station with 1.1 GPM fill rate.
FD–A	Floor drain for finished areas – Wade 1100–1 floor drain with clamping collar, adjustable, vandal proof, 6" satin nickel bronze top. Provide with ProSet Systems trap guard T25630–F.
FD–B	Floor drain for mechanical rooms – Wade 2350–27 cast iron with bottom outlet, 8" square top, square loose set grate, and removable sediment bucket. Provide with ProSet Systems trap guard T25630–F.
WH–A	Wade W–8600 non–freeze wall hydrant, cast bronze with satin bronze face, 3/4" inlet and brass casing of sufficient length to extend through walls as required to place valve inside building. Valve rod and seat washer shall be removable through the face of the hydrant. Hydrant shall be furnished complete with detachable T–handle and integral vacuum breaker.
RH–A	Roof Hydrant, Woodford RHY2–MS freezeless hydrant for mounting on roof, 3/4" hose thread outlet with NIDEL 37HF field testable double check valve, cast iron hydrant support with under deck flange, mounting bolts, well seal, and EPDM boot.
SS	Fiat MSB2424 24" x 24" x 10" deep Molded Stone one piece service sink with drain and strainer. Trim with Zurn Z843M1–XL–CS faucet with top brace, service stops, check stops, indexed 2–1/2" hot and cold metal lever handles, bucket hook, vacuum breaker, and threaded hose end spout, polished chrome plated finish. Fixture color: White.
FWCO	Wade 8560–E cleanout tee with brass threaded plug and 8480–R round stainless steel coverplate secured to plug by countersunk screw.
FGCO	Finished grade cleanout, Wade 6000–Z cast iron cleanout with straight body and fitted with bronze countersunk plug, same size as soil pipe with ductile iron scoriated cover. Bring extra heavy cast iron riser pipe to grade. Terminate hub flush in center of 18"x18"x4" (18" x 36" x 4" for two way cleanout) concrete block when not located in concrete area.
FFCO	Finished floor cleanout, Wade 6000–Z–1 cast iron finished floor cleanout with spigot outlet, threaded adjustable housing, flanged ferrule with bronze threaded plug and vandal proof round secured nickel bronze scoriated top.
TEA	Thermal Expansion Absorber, Amtrol ST–5 precharged hydropneumatic steel expansion tank with internal butyl diaphragm. 2.0 gallons total volume, 0.9 gal minimum expansion volume, 150 psig maximum working pressure.
HWH–A	State Model ES6 20 SOMT Midget electric water heater, 19.9 gallon storage, 1,650 watt element, 120 volt, 8 gallon per hour recovery at 90° F rise, and self–cleaning design.



NORTH

FLOOR PLAN - WASTE & VENT

1/8" = 1'–0"

ORAZEM & SCALORA ENGINEERING, P.A.
Manhattan, Kansas

Job No. 15011–1

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REVISIONS:

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6.

THOMAS C. ORAZEM LICENSED 11371 9/01/2017 KANSAS PROFESSIONAL ENGINEER

Project Number:

Date: **9/1/17**

Project Name:
USD 320 MULTIPURPOSE BUILDING

Project Address:
WAMEGO, KS

Sheet Title:
PLUMBING WASTE & VENT PLAN

Sheet: **P201**

Of: **7**