RDG...
PLANNING ● DESIGN

Southeast Polk Community School District
Transportation Building
8443 NE University Avenue
Pleasant Hill, IA 50327

95% CONSTRUCTION DOCUMENTS

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PROJECT NUMBER: **3007.090.00**

DATE: **AUGUST 29, 2025**

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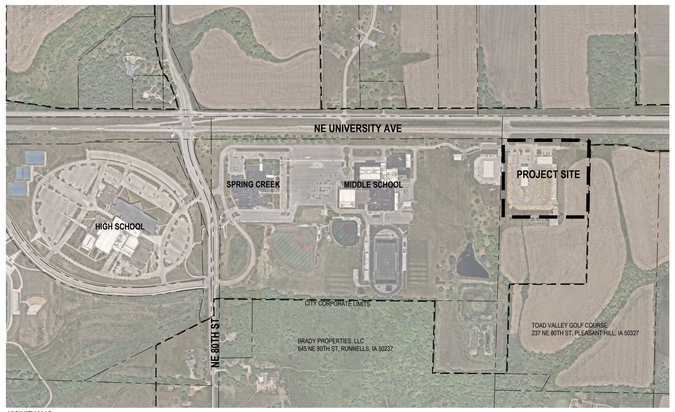

VICINITY MAP
SCALE: 1" = 500'-0"

CIVIL

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the State of Iowa.

Gregory M. Pierce | IA License #18321 | Date

Pages or Sheets covered by this seal:

As listed above

ARCHITECTURE

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed professional architect under the laws of the State of Iowa.

Naura Godar | IA License # | Date

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As listed above

LANDSCAPE ARCHITECTURE

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed professional landscape architect under the laws of the State of Iowa.

Jason T. Blome | IA License #00575 | Date

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MECHANICAL

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the State of Iowa.

Holly M. Stevens | IA License #20268 | Date

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As listed under MECHANICAL, PLUMBING

STRUCTURAL

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the State of Iowa.

Erik Raker | IA License #17922 | Date

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ELECTRICAL

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Joshua L. Nielsen | IA License #19516 | Date

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As listed above

GENERAL SITE INFORMATION

SITE ADDRESS: 8443 NE UNIVERSITY AVE
PLEASANT HILL, IA 50327

OWNER CONTACT: KEVIN BACCAM
CHIEF FINANCIAL OFFICER
SOUTHEAST POLK COMMUNITY SCHOOL DISTRICT
407 8TH STREET SE
ALTOONA, IA 50009
515-967-4294
KEVIN.BACCAM@SOUTHEASTPOLK.ORG

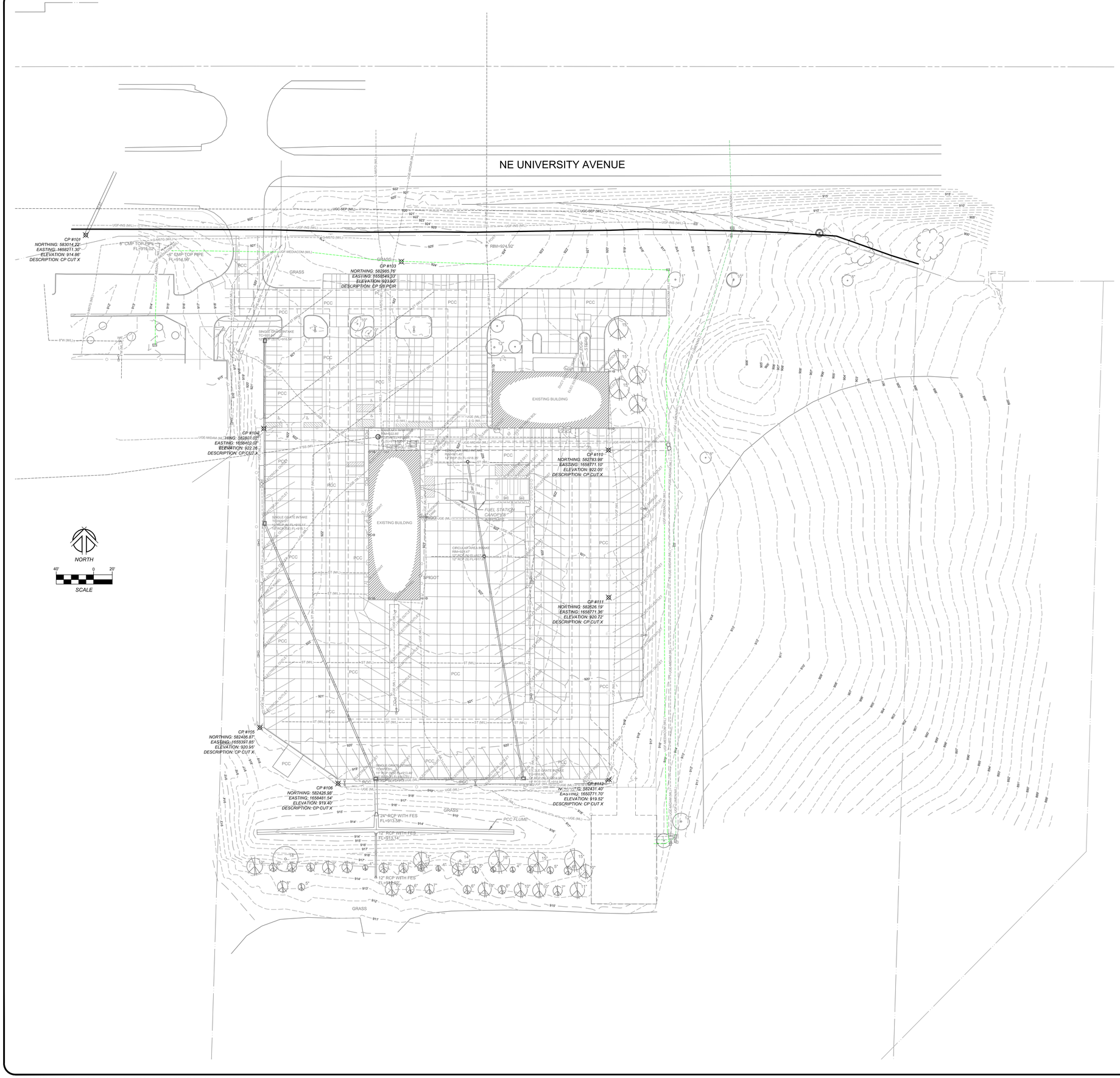
PLAN PREPARER CONTACT: JASON BLOME
RDG PLANNING & DESIGN
301 GRAND AVE
DES MOINES, IA 50309
515-288-3141
JBLOME@RDGUSA.COM

SITE LEGAL DESCRIPTION: BEG 1381.69F S OF NW COR GOV LT 2 THN S 750F E 90F N 750F W 90F TO POB & PARCEL E BEG 181.5F S OF N 1/4 COR SEC 6-78-22 THN E 622.6F SE 112.59F S 1174.14F W 730F N 1197.45F TO POB GOV LOT 2 NE FRL 1/4 SEC 6-78-22.

PARCEL NUMBER: 7822-06-200-012

ZONING & LAND USE: A-1 AGRICULTURE / PUBLIC SCHOOL FACILITY

BULK REGULATIONS: MINIMUM BUILDING SETBACK: 35 FEET (ALL YARDS)
MAXIMUM BUILDING HEIGHT: 36 FEET



SURVEY NOTES

1. Veritcal Datum: NAVD88 (GPS derived)
2. Horizontal datum: NAD83 (2011)
   Iowa State Plane South Zone (U.S. Survey Feet)

CONTROL POINTS

CP #	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	583014.22'	1658211.30'	914.86'	CP CUT X
103	582985.76'	1658549.33'	923.90'	CP 5/8 PCIR
104	582807.02'	1658402.07'	922.26'	CP CUT X
105	582486.87'	1658397.85'	920.95'	CP CUT X
106	582426.98'	1658481.54'	919.40'	CP CUT X
110	582783.98'	1658771.10'	922.05'	CP CUT X
111	582626.19'	1658771.36'	920.72'	CP CUT X
112	582431.40'	1658771.70'	919.52'	CP CUT X

UTILITY CONTACTS

Design Inquiry Results for Request # 552502029

(M52G) MIDAMER-GAS
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Email: MECDSMDesignLocates@midamerican.com

(AT2) AT&T TRANSMISSION
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Email: lv2121@att.com

(CTLIA01) CENTURYLINK
Company name : CENTURYLINK
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(INS) AUREON NETWORK SERVICES
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Email: jeff.klocko@aureon.com

(M52E) MIDAMER-ELEC
Company name : MIDAMER-ELEC
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(SEP) SOUTHEAST POLK CSD
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(SPR) SOUTHEAST POLK RURAL WATER DIS
Company name : SOUTHEAST POLK RURAL WATER DIS
Design contact: Ed Clark
Phone: 5153236244
Email: onecallmaps@dmww.com

LEGEND

- Subject boundary line
- Section line
- Existing boundary line
- Existing easement line
- Setback line
- Barbed wire fence line
- Chain-link fence line
- Sanitary sewer & size
- Storm sewer and size
- Water main and size
- Gas main & size
- Overhead electric & wires
- Overhead fiber line
- Underground electric line
- Underground television line
- Underground fiber line
- Underground communication line
- Contour elevation
- Swale flowline
- Edge of water
- Edge of tree dripline

PCC Portland cement concrete
ACC Asphaltic cement concrete
FL Pipe flowline elevation
RCP Reinforced concrete pipe
CMP Corrugated metal pipe
CPP Corrugated plastic pipe
PVC Polyvinyl chloride pipe
CIP Cast iron pipe
(ML) Utility Mapped Location
1234 Address
x 900.0' Spot elevation
Sanitary sewer manhole
Cleanout
Storm sewer manhole
Storm sewer intake
Storm sewer beehive
Flared end section
Water hydrant
Water valve
Water service shut-off
Water main manhole
Monitoring well
Yard hydrant
Well
Gas meter
Gas valve

Air conditioning unit
Electric manhole
Electric meter
Electric pedestal
Electric transformer
Utility hand hole
Utility pole
Utility pole with light
Light pole
Ground up light
Guy wire
Traffic signal
Traffic signal with light
Traffic manhole
Communication pedestal
Telephone booth
TV pedestal
Billboard sign
Street sign
Down spout
Tree shrub
Deciduous tree and trunk diameter
Coniferous tree and trunk diameter

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Landscape Architecture
NILLES ASSOCIATES

REVISIONS:

NOTICE: NILLES ASSOCIATES, INC. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR THE CONTENTS OF THESE PLANS IN ELECTRONIC FORM IF ALTERED IN ANY WAY FROM THE ORIGINAL TO OBTAIN HOOK'S TO LOW THE ENGINEERS SEAL AND SIGNATURE AND THE ORIGINAL SOURCE OBSERVE, INCORPORATIONS, AMMODIES COPYRIGHT © NILLES ASSOCIATES, INC.

PROJECT NAME: SE POLK TRANSPORTATION BUILDING
PLEASANT HILL, POLK COUNTY, IOWA

DESCRIPTION: EXISTING CONDITIONS

NAI NO.:	25052
DATE:	04/25/25
DRAWN BY:	JHP
CHECKED BY:	RAM
SHEET SIZE:	30" X 42"
SHEET TITLE:	G01.02
SHEET NO.:	1/1

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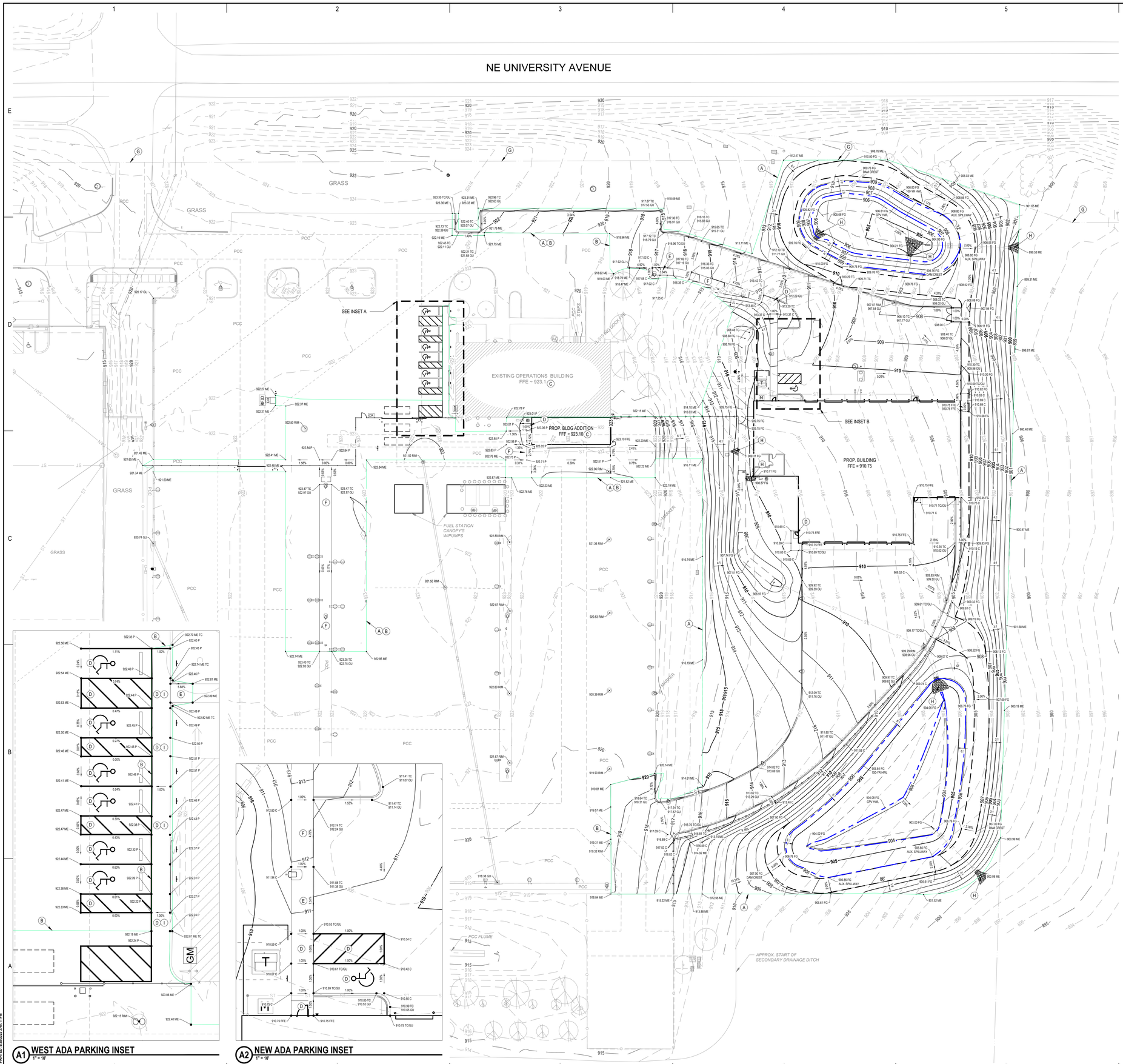

A1 **WEST ADA PARKING INSET**
1" = 10'

A2 **NEW ADA PARKING INSET**
1" = 10'

GRADING PLAN GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
2. ALL WORK SHALL COMPLY WITH IOWA SUDAS SPECIFICATIONS MANUAL (CURRENT EDITION); AS WELL AS OTHER CODES, ORDINANCES REGULATIONS AND RULES AS ADOPTED BY THE CITY OF PLEASANT HILL.
3. PRIOR TO ANY EXCAVATION AT THE SITE, THE CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER AND/OR ENGINEER AND CONSULT ANY UTILITY COMPANY REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY RELOCATIONS.
4. FOR UNDERGROUND UTILITY LOCATES CALL IOWA ONE-CALL AT 1-800-292-8989 OR 811, AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION. THE OWNER SHALL BE RESPONSIBLE FOR ANY LOCATES NOT COVERED BY THE IOWA ONE-CALL SYSTEM. NO COMPENSATION FOR DAMAGES TO EXISTING UTILITIES WILL BE ALLOWED RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
5. FIELD VERIFY ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES, CONDUITS, POLES, TREES, PAVING, BUILDINGS, STRUCTURES AND OTHER SITE FEATURES TO REMAIN PRIOR TO GRADING OR CONSTRUCTION ACTIVITIES. IMMEDIATELY INFORM THE ENGINEER FOR RESOLUTION OF ANY DISCREPANCIES BEFORE COMMENCING INTENDED WORK.
6. PROVIDE 12" OF SUBGRADE PREPARATION UNDER ALL PAVEMENT AND SHOULDER AREAS AS PER SPECIFICATIONS.
7. FOR GRADING, SUBGRADE PREPARATION AND PLACEMENT OF SUBBASE MATERIALS, FIELD QUALITY CONTROL TESTING SHALL BE PERFORMED BY THE CONTRACTOR, COMPLETE AS PER SPECIFICATIONS. RESULTS OF TESTS SHALL BE MADE AVAILABLE TO THE ENGINEER AS SOON AS THEY ARE AVAILABLE. ENGINEER MAY STOP WORK AT ANY POINT IF THEY BELIEVE TESTING IS NOT OCCURRING OR RESULTS ARE NOT BEING PROVIDED WITHIN A REASONABLE PERIOD AS CONSTRUCTION PROGRESSES. NO EXTENSION OF THE WORK PERIOD SHALL BE PROVIDED FOR TIME LOST DURING SUCH A WORK STOPPAGE. ANY DEFICIENCIES NOTED BY THIS TESTING SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO PLACEMENT OF ANY PAVED SURFACES.
8. MATCH EXISTING GRADES AT THE INTERFACE OF EXISTING SURFACES WITH NEW GRADING OR PAVING AND AT THE LIMITS OF SURFACE AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.
9. TOPSOIL SHALL BE RESPREAD TO A DEPTH OF AT LEAST 8" ACROSS ALL UNPAVED SURFACES WHICH ARE DISTURBED BY GRADING ACTIVITIES EXCEPT FOR ROCK REVETMENT. REFER TO SPECIFICATIONS FOR TOPSOIL WORK AND MATERIAL REQUIREMENTS.
10. AFTER PLACEMENT AND CONSOLIDATION, TOPSOIL SHALL BE LEVEL WITH ADJACENT PAVING AND CURB TOPS IF THE FINISH CONDITION IS TO BE SEED, AND TO MINUS ONE- AND ONE-HALF INCHES (1 ½") IF THE FINISH CONDITION IS TO BE SOD.
11. SURFACE OF ROCK OR REVETMENT MATERIALS SHALL BE PLACED, SO THAT TOP IS FLUSH WITH FINISHED GRADE SHOWN, UNLESS SPECIFICALLY NOTED OTHERWISE.
12. FINISH GRADES IN ALL LANDSCAPE AREAS ARE TO BE REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO ANY SEEDING, SODDING, OR PLANTING. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR REVIEW FIVE (5) DAYS PRIOR TO THE DESIRED DATE OF REVIEW. NO COMPENSATION FOR RE-SEEDING, RE-SODDING, OR RE-PLANTING OF AN AREA REQUIRING REMEDIAL GRADING SHALL BE ALLOWED RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
13. THE CONTRACTOR SHALL FIELD ADJUST ALL EXISTING SITE UTILITIES TO NEW FINISH GRADES. EXISTING UTILITIES INCLUDE, BUT ARE NOT LIMITED TO; FIRE HYDRANTS, MANHOLE RIMS, STORM SEWER INLETS, WATER VALVE STEMS, ELECTRICAL BOXES, AND ANY OTHER AT-GRADE UTILITY ELEMENT.
14. ALL SPOT ELEVATIONS INDICATE THE TOP OF FINISHED SURFACES. SPOT ELEVATIONS FOR CURB AND GUTTER INDICATE THE GUTTER ELEVATION UNLESS INDICATED OTHERWISE.
15. ALL WALKS SHALL HAVE A 1.0% TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE UNLESS SPECIFICALLY NOTED OTHERWISE.
16. NO SLOPE SHALL BE GREATER THAN 3:1 UNLESS SPECIFICALLY INDICATED AND DETAILED OTHERWISE.
17. SLOPE PERCENTAGE NOTATIONS ON THIS GRADING PLAN ARE PROVIDED TO CONVEY A GENERAL UNDERSTANDING OF EXPECTED GRADE CHANGES IN CRITICAL AREAS. THE SPOT ELEVATIONS DISPLAYED SHOULD BE USED DURING CONSTRUCTION TO ESTABLISH PRECISE FINISHED GRADES. REPORT ANY DISCREPANCIES TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION.
18. ALL SOIL AND OTHER DEBRIS SPILLED OR TRACKED ONTO THE PUBLIC ROW OR ADJACENT PROPERTIES SHALL BE CLEANED UP BY THE CONTRACTOR IMMEDIATELY. CONTRACTOR SHALL VERIFY THAT THIS HAS BEEN COMPLETED AT THE END OF EACH WORKDAY.
19. AUTOCAD FILES OF PROPOSED SITE GRADING ARE AVAILABLE FOR CONTRACTOR INSPECTION DURING THE BID PERIOD, TO ALLOW THE CONTRACTOR TO REVIEW AND QUANTIFY THE EXPECTED SITE EARTHWORK VOLUMES. THE PROPOSED COST FOR EARTHWORK OPERATIONS INCLUDED IN THE CONTRACTOR'S PROPOSAL SHALL INCLUDE ANY COSTS ASSOCIATED WITH IMPORT OR EXPORT OF EARTH MATERIALS AS NEEDED TO ESTABLISH THE PROPOSED FINISHED GRADES AS IDENTIFIED ON THE SITE GRADING PLAN AS SHOWN ON THE BID DOCUMENTS. NO ADDITIONAL PAYMENT FOR IMPORT OR EXPORT. OF EARTH MATERIALS WILL BE MADE.
20. ALL DETENTION BASIN AND SWALE GRADING SHALL BE FIELD VERIFIED BY DESIGN ENGINEER AND AS-BUILTS SHALL BE PROVIDED TO THE CITY WITH A LETTER OF CERTIFICATION FROM THE ENGINEER THAT THE BASINS AND SWALES WERE CONSTRUCTED TO THE DESIGN.

GRADING PLAN KEYNOTES

A. GRADING LIMIT - MATCH EXISTING GRADES ALONG THIS LINE
B. VERIFY ELEVATION OF EDGE OF EXISTING PAVEMENT AND MATCH ELEVATION FOR NEW PAVING. NOTIFY ENGINEER PRIOR TO PAVING OF ANY REQUIRED VARIATION FROM PLAN GRADES
C. VERIFY BUILDING FINISHED FLOOR ELEVATIONS PRIOR TO CONSTRUCTION. REVIEW WITH ARCHITECT REGARDING ANY ADJUSTMENTS PRIOR TO CONSTRUCTION
D. ADA TURNING SPACE, NOT TO EXCEED 2% IN ANY DIRECTION
E. ADA CURB RAMP, NOT TO EXCEED 8.33% (1V:12H)
F. PCC SIDEWALK NOT TO EXCEED 5% LONGITUDINAL SLOPE OR 2% CROSS SLOPE AT ANY POINT
G. CONSTRUCTION ACTIVITIES NOT TO OCCUR WITHIN THE IOWA DOT RIGHT-OF-WAY
H. SEE SHEET C03.10 FOR REVETMENT INFORMATION
I. REVISE EXISTING GRADES DURING MILL & OVERLAY AS NEEDED FOR ADA COMPLIANCE

GRADING LEGEND

- 105 — EXISTING CONTOUR (MAJOR)
- 104 — EXISTING CONTOUR (MINOR)
- 105 — PROPOSED CONTOUR (MAJOR)
- 104 — PROPOSED CONTOUR (MINOR)
- GRADING LIMIT
- DEPRESSED 0" CURB
- CURB TRANSITION FROM FULL HEIGHT TO 0" CURB
- HIGH WATER LEVEL (HWL)

BW - FG AT BOTTOM OF WALL
C - TOP OF CONCRETE
EG - EXISTING GRADE
FFE - FINISH FLOOR ELEVATION
FG - FINISH GRADE
GU - GUTTER/ FLOWLINE OF CURB
ME - MATCH EXISTING GRADE
P - TOP OF PAVEMENT
RIM - TOP OF RIM ELEVATION
TC - TOP OF BACK OF CURB
TT - TOP OF STAIR TREAD
TW - TOP OF WALL

NORTH
0 30' 60'

95% CONSTRUCTION DOCUMENTS

RDG PLANNING ● DESIGN

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MECH / ELEC / PLUMB
MDCED
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Des Moines, Iowa 50309
Phone: (515) 251-7080

SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	DATE

PROJECT NO. **3007.090.00**

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GRADING PLAN

C03.01

SHEET SIZE: 24" X 42"
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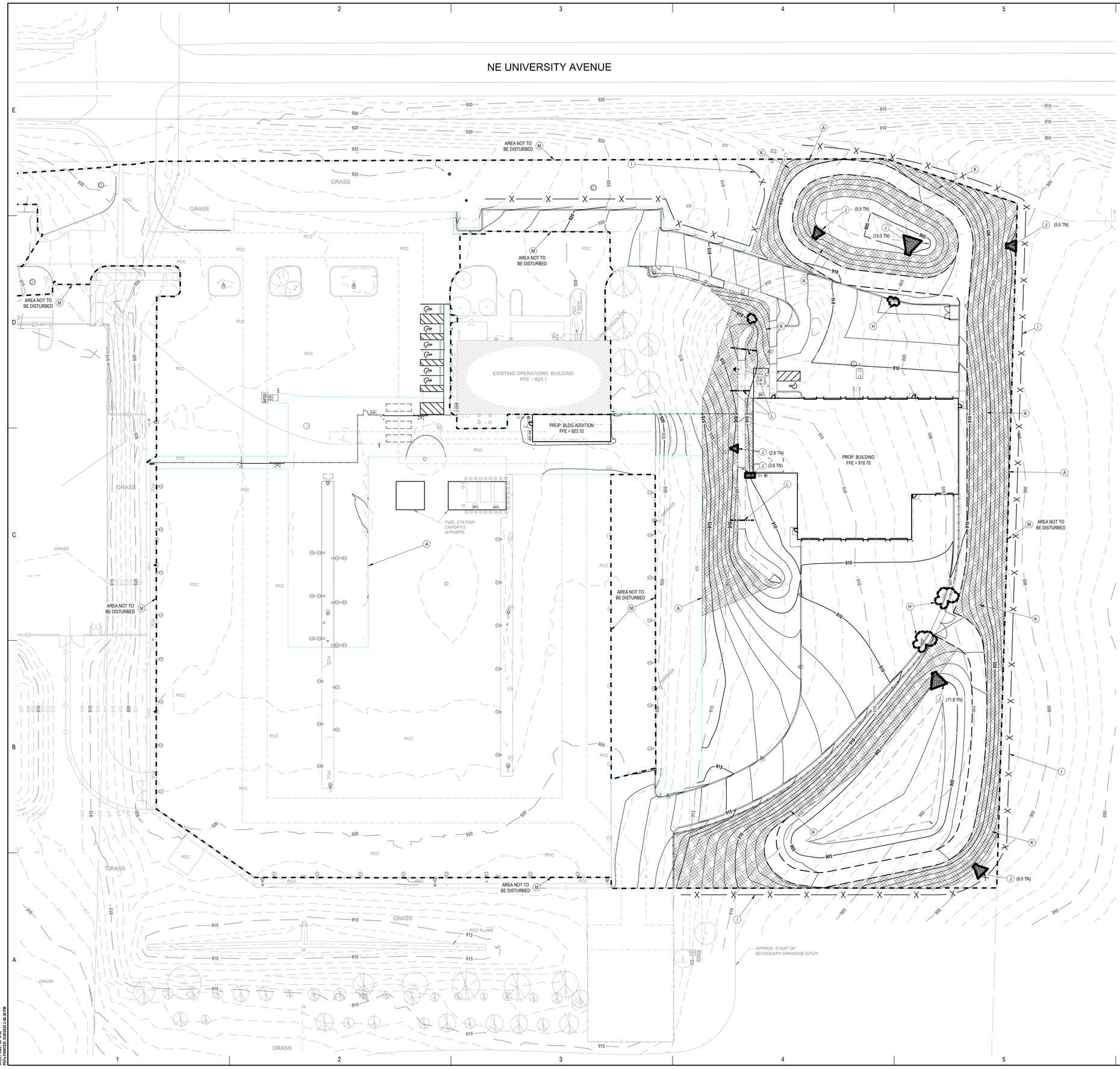

SWPPP GENERAL NOTES

1. THIS PROJECT IS BEING CONSTRUCTED UNDER AN AUTHORIZATION FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES FOR COVERAGE UNDER THE STATE OF IOWA'S NPDES GENERAL PERMIT NO. 2. AS PART OF THIS CONTRACT, AUTHORIZATION FOR PERMIT COVERAGE WILL BE OBTAINED BY THE OWNER. ALL CONTRACTORS SHALL SIGN THE CERTIFICATION STATEMENTS AS REQUIRED BY THIS PERMIT, BECOMING CO-PERMITTEES TO THE PERMIT AUTHORIZATION. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ALL PROVISIONS OF IOWA'S NPDES GENERAL PERMIT NO. 2.
2. ALL CONTRACTORS SHALL REVIEW, CERTIFY AND EXECUTE THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WHICH HAS BEEN PREPARED FOR THIS SITE. A COPY OF THE INITIAL SWPPP NARRATIVE PLAN IS INCLUDED WITHIN THE PROJECT MANUAL FOR THIS PROJECT.
3. CONDUCT ALL OPERATIONS IN COMPLIANCE WITH IOWA'S NPDES GENERAL PERMIT NO. 2. LABOR, EQUIPMENT AND MATERIALS THAT ARE NOT A SPECIFIC PAY ITEM, BUT NECESSARY TO PREVENT STORM WATER CONTAMINATION OR OTHER POLLUTION FROM CONSTRUCTION RELATED SOURCES ARE CONSIDERED INCIDENTAL TO CONTRACT WORK.SUCH INCIDENTAL ITEMS RELATED TO COMPLIANCE WITH THE PERMIT MAY INCLUDE, BUT ARE NOT LIMITED TO: HAZARDOUS MATERIALS PROTECTION, FUEL CONTAINMENT, WASTE DISPOSAL AND PROVIDING EMPLOYEE SANITARY FACILITIES.
4. CONTRACTOR SHALL PROVIDE SWPPP MANAGEMENT AS SPECIFIED. ITEMS UNDERLINED IN THESE GENERAL NOTES MAY REQUIRE THE CONTRACTOR TO ADD INFORMATION OR AMEND THE SWPPP TO KEEP IT UP TO DATE AND ACCURATE, BASED ON CHANGING SITE CONDITIONS. REFER TO THE PROJECT SWPPP NARRATIVE INCLUDED IN THE PROJECT SPECIFICATIONS FOR MORE INFORMATION.
5. DAILY CLEANUP OPERATIONS, TRASH COLLECTION, GOOD HOUSEKEEPING AND OTHER ITEMS NECESSARY TO PREVENT OFF-SITE TRACKING, DEBRIS BEING CARRIED OFF-SITE AND POLLUTION OF RECEIVING WATERS OR OTHER STORM WATER CONTAMINATION SHALL BE COMPLETED BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT WORK.
6. COMPLETE EROSION, SEDIMENT AND OTHER POLLUTION PREVENTION MEASURES IN ACCORDANCE WITH THE PROJECT SWPPP AND SPECIFICATIONS.
7. EROSION AND SEDIMENT CONTROL ITEMS SHALL BE PROVIDED, INSTALLED AND MAINTAINED AS PER LOCAL SPECIFICATIONS.
8. THIS SWPPP SCHEMATIC SITE MAP SHOWS INITIAL LOCATIONS OF PROPOSED CONTROLS BASED ON FINAL PROPOSED SITE CONDITIONS. THROUGHOUT CONSTRUCTION, ADDITIONAL CONTROLS MAY BE NECESSARY BASED ON CHANGING SITE CONDITIONS. THE CONTRACTOR SHALL KEEP AN AMENDED COPY OF THE POLLUTION PREVENTION SITE MAP UPDATED TO REFLECT CURRENT SITE CONDITIONS WITH CHANGES IN EROSION AND SEDIMENT CONTROLS NOTED.
9. CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ANY LOCATION WHERE CONSTRUCTION EQUIPMENT OR VEHICLES WILL ENTER THE DISTURBED SITE AREA FROM A PAVED SURFACE. THIS SCE WILL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
   - 9.1. ENTRANCE SHALL BE AT LEAST 75 FEET IN LENGTH AND 16 FEET IN WIDTH. COORDINATE ITS LOCATION WITH THE OWNER AND IDENTIFY ITS LOCATION AS AN AMENDMENT TO THE SWPPP ON A COPY OF THIS SITE POLLUTION PREVENTION MAP (SEE SWPPP NARRATIVE DOCUMENT INCLUDED WITHIN PROJECT SPECIFICATIONS FOR HOW THE SITE MAP IS TO BE UPDATED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT).
   - 9.2. ENGINEERING FABRIC MATERIAL AS PER SUDAS SECTION 9040 SHALL BE INSTALLED BELOW ALL STABILIZED CONSTRUCTION ENTRANCES.
   - 9.3. EACH SCE WILL BE REMOVED AFTER SITE DISTURBING ACTIVITIES HAVE BEEN COMPLETED OR IF IT IS NO LONGER PLANNED TO BE USED, AND PRIOR TO FINAL ACCEPTANCE OF THE WORK BY OWNER. REMOVAL SHALL INCLUDE REMOVAL OF STONE MATERIALS, ENGINEERING FABRIC, ACCUMULATED SEDIMENT AND ANY OTHER ASSOCIATED MATERIALS AND PROPER DISPOSAL OF THESE ITEMS. AFTER REMOVAL, COMPLETE SURFACE ROUGHENING, SEEDBED PREPARATION AND SEEDING OF IMPACTED AREA.
10. TEMPORARY SANITARY FACILITIES SHALL BE STAKED DOWN OR OTHERWISE SECURED TO PREVENT OVERTURNING. WASTE COLLECTION AREAS SHALL BE COVERED OR SECURED IN A MANNER TO PREVENT BLOWING OF TRASH OR DEBRIS. LOCATE THESE FACILITIES AWAY FROM STORM INLETS, CONCENTRATED FLOW PATHS, STREAMS OR THE SITE PERIMETER. CONTRACTOR SHALL NOTE LOCATION OF SUCH FACILITIES ON THE AMENDED COPY OF THIS SITE POLLUTION PREVENTION PLAN MAP.
11. PROVIDE TEMPORARY STABILIZATION OF SOIL STOCKPILE MATERIALS IMMEDIATELY, IF AREAS WITHIN STOCKPILES ARE NOT TO BE DISTURBED FOR AT LEAST 14 DAYS. PLACE PERIMETER SEDIMENT CONTROLS AROUND STOCKPILES (25-50 FEET FROM TOE OF STOCKPILE TO ALLOW FOR EQUIPMENT MOVEMENT AND SEDIMENT COLLECTION).
12. PROVIDE TEMPORARY STABILIZATION FOR DISTURBED AREAS WITHIN SITE WHERE NO ADDITIONAL GRADING OR CONSTRUCTION ACTIVITIES ARE EXPECTED FOR AT LEAST 14 DAYS. REFER TO LOCAL SPECIFICATIONS FOR STABILIZATION METHODS.
13. SILT FENCES AND FILTER SOCKS INSTALLED IMPROPERLY OR PLACED WITH UNBROKEN LENGTHS EXCEEDING 200' ARE NOT ALLOWED AND WILL NOT BE COMPENSATED FOR. CONTRACTOR SHALL REPLACE SUCH INSTALLATIONS AS NEEDED. INSTALL SUCH ITEMS AT PROPER LENGTHS WITH "J-HOOKS" OR OTHER ALIGNMENT FEATURES TO MAXIMIZE THEIR WATER AND SEDIMENT RETENTION CAPACITY.
14. FILTER SOCKS SHALL BE 12" HEIGHT UNLESS NOTED OTHERWISE. PRIOR TO PROJECT COMPLETION, ACCUMULATED SEDIMENT AND SOCK EXTERIOR MATERIALS SHALL BE REMOVED FROM THE PROJECT AREA. INTERIOR COMPOST MATERIALS MAY BE SPREAD ACROSS THE SURROUNDING GRADE IN A MANNER THAN WILL NOT INHIBIT ESTABLISHMENT OR GROWTH OF PERMANENT VEGETATION.
15. WATTLES SHALL BE 9" HEIGHT UNLESS NOTED OTHERWISE.
16. REPAIR BREAKS AND GAPS IN SEDIMENT CONTROLS IMMEDIATELY AFTER THEY ARE OBSERVED.
17. REPAIR RILLS AND GULLIES IF THEY OCCUR WITHIN THE PROJECT SITE.
18. ALL DEWATERING OF TRENCHES AND EXCAVATIONS SHALL BE DIRECTED TO A COLLECTION AREA IN A NON-EROSIVE MANNER. DEWATERING ACTIVITIES ARE NOT PERMITTED TO BE DIRECTLY RELEASED OFF-SITE OR TO STORM SEWERS WITHOUT EFFECTIVE PRE-TREATMENT (E.G. DO NOT PUMP POLLUTED WATER DIRECTLY INTO THE STORM SEWER SYSTEM, STREET GUTTERS, ETC.).
19. REFER ALSO TO RELATED NOTES ON SITE PREPARATION, GRADING, UTILITY, AND LANDSCAPING SHEETS.
20. INSTALL INLET PROTECTION DEVICES UPON INSTALLATION OF STORM SEWER SYSTEM. MAINTAIN THESE DEVISES THROUGHOUT CONSTRUCTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS AS NECESSARY. REMOVE THE DEVICES AND ANY REMAINING SEDIMENT AND DEBRIS PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY OWNER.
21. CONTRACTOR SHALL INSTALL, MAINTAIN AND REMOVE A CONCRETE WASHOUT AREA THROUGHOUT THE DURATION OF PAVING ACTIVITIES AND OTHER CONCRETE WORK. INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS TO COMPLETE, MAINTAIN AND REMOVE ALONG WITH COLLECTED WASTE UPON COMPLETION OF CONSTRUCTION. INCLUDE PROPER DISPOSAL OF COLLECTED MATERIALS. CONTRACTOR SHALL NOTE LOCATION OF SUCH FACILITIES ON THE AMENDED COPY OF THIS SITE POLLUTION PREVENTION PLAN MAP.

SWPPP KEYNOTES

A. PROPOSED GRADING LIMIT
B. PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT ANY LOCATION WHERE EQUIPMENT OR VEHICLES ARE ENTERING / EXITING FROM PAVED SURFACES.
C. PROVIDE CONCRETE WASHOUT LOCATION.
D. PROVIDE TEMPORARY SANITARY FACILITIES ON-SITE.
E. PROVIDE LOCATION FOR TRASH, DEBRIS COLLECTION.
F. PROVIDE LOCATION FOR TOPSOIL STOCKPILE.
G. PROVIDE CONTAINMENT OF FUELS, CHEMICALS, ETC.
H. INSTALL & MAINTAIN INLET PROTECTION
I. INSTALL & MAINTAIN SILT FENCE (SHOWN OUTSIDE DISTURBANCE LIMITS FOR VISUAL PURPOSES ONLY, DO NOT INSTALL BEYOND PROPERTY LINES)
J. INSTALL & MAINTAIN RIP RAP, CLASS E
K. INSTALL & MAINTAIN ROLLED EROSION CONTROL PRODUCT
L. INSTALL & MAINTAIN 9" WATTLE
M. PROPOSED DISTURBANCE LIMIT (9.08 AC)

NOTE: CONTRACTOR SHALL MARK LOCATION OF UNDERLINED ITEMS TO A VERSION OF THIS DRAWING, TO BE KEPT UPDATED BY THE CONTRACTOR TO REFLECT CURRENT SITE CONDITION AT A GIVEN TIME. THIS PLAN SHALL BE MADE AVAILABLE TO PERMIT INSPECTION PERSONNEL UPON REQUEST. UPDATED PLAN SHALL NOTE DATES OF REVISIONS, INSTALLATION OF PRACTICES, AND CHANGES IN SITE CONDITIONS.

SWPPP LEGEND

- SILT FENCE
- RIP RAP, CLASS E
- ROLLED EROSION CONTROL PRODUCT
- INLET PROTECTION
- 9" WATTLE
- DISTURBANCE LIMIT

NORTH
0 30' 60'

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

KEY PLAN

Southeast Polk Community School District

ISSUANCE	DATE
PROJECT NO:	3007.090.00

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STORMWATER POLLUTION PREVENTION PLAN

C03.10

SHEET SIZE: 30" X 42"
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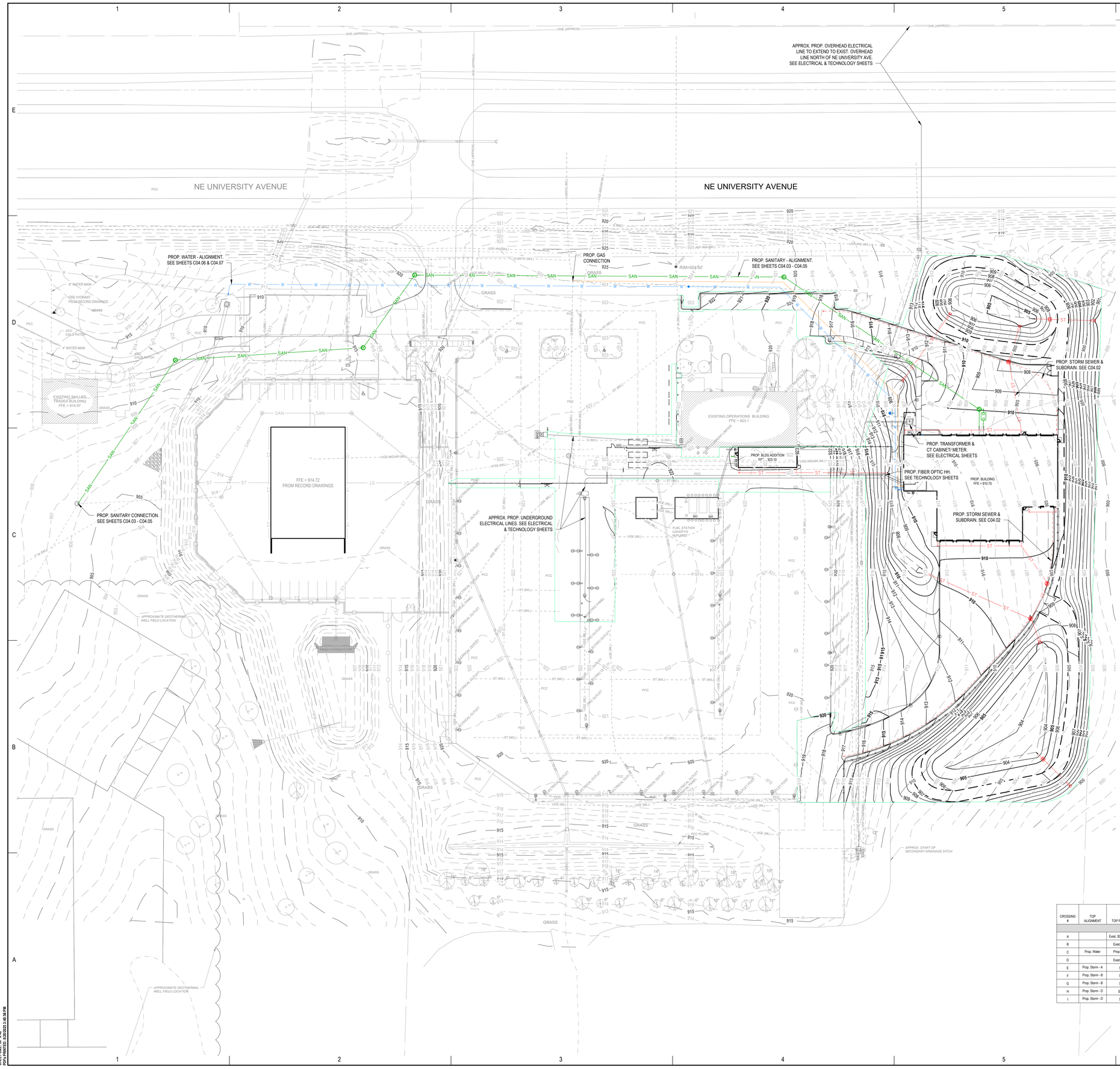

NOTES

1. TRENCH EXCAVATION AND BACKFILL SHALL BE COMPLETED AS PER SUDAS SPECIFICATION SECTION 3010.
2. STORM SEWER INSTALLATION SHALL BE COMPLETED AS PER SUDAS SPECIFICATION SECTION 4020.
3. SANITARY SEWER INSTALLATION SHALL BE COMPLETED AS PER SUDAS SPECIFICATION SECTION 4010.
4. SUBDRAIN INSTALLATION SHALL BE COMPLETED AS PER SUDAS SPECIFICATION SECTION 4040.
5. WATER MAIN, FITTING AND FIXTURES SHALL BE INSTALLED AS PER SUDAS SPECIFICATION SECTION 5010 AS AMENDED BY DES MOINES WATER WORKS (DMWW).
6. CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH EXCAVATION, BACKFILL AND COMPACTION TESTING AS PER SUDAS SPECIFICATION SECTION 3010. RESULTS OF TESTS SHALL BE MADE AVAILABLE TO THE ARCHITECT AS SOON AS THEY ARE AVAILABLE. ARCHITECT MAY STOP WORK AT ANY POINT IF THEY BELIEVE TESTING IS NOT OCCURRING OR RESULTS ARE NOT BEING PROVIDED WITHIN A REASONABLE PERIOD AS CONSTRUCTION PROGRESSES. NO EXTENSION OF THE WORK PERIOD SHALL BE PROVIDED FOR TIME LOST DURING SUCH A WORK STOPPAGE.
7. STORM AND SANITARY STRUCTURES SHALL BE INSTALLED AS PER SUDAS SPECIFICATION SECTION 6010.
8. CLEANING, INSPECTION AND TESTING OF SEWERS AND STRUCTURES SHALL BE COMPLETED BY THE CONTRACTOR AS PER SUDAS SPECIFICATION SECTION 4060 AND 6030.
9. REFER ALSO TO RELATED NOTES ON C SHEETS.

LEGEND

- ST — PROPOSED STORM SEWER PIPE
- SAN — PROPOSED SANITARY SEWER PIPE
- W — PROPOSED WATER PIPE
- PROPOSED GAS LINE
- X — UTILITY CROSSING, SEE TABLE BELOW

CROSSING #	TOP ALIGNMENT	TOP PIPE NAME	TOP PIPE X-ING STA	BOTTOM ELEVATION OF TOP PIPE	BOT ALIGNMENT	BOT PIPE NAME	BOT PIPE X-ING STA	TOP ELEVATION OF BOT PIPE	CLEARANCE
A		Exist. 30" RCP Storm		905.30	Prop. Sanitary	SA-105	12+23.42	900.74	4.57
B		Exist. 8" Water		905.91	Prop. Sanitary	SA-105	12+66.99	900.96	4.95
C	Prop. Water	Prop. 8" Water	12+02.69	913.84	Prop. Sanitary	SA-104	14+74.67	902.09	11.75
D		Exist. 2" Water		919.19	Prop. Sanitary	SA-103	17+71.61	903.68	15.52
E	Prop. Storm - A	ST-10	10+25.23	907.65	Prop. Sanitary	SA-102	20+57.88	905.21	2.44
F	Prop. Storm - B	ST-15	10+89.95	907.28	Prop. Sanitary	SA-100	21+70.58	905.69	1.60
G	Prop. Storm - B	ST-15	10+86.25	907.14	Prop. Sanitary - Dom	SA-200	10+05.37	905.64	1.50
H	Prop. Storm - D	ST-25.1	10+12.28	914.35	Prop. Sanitary	SA-102	19+54.31	904.69	9.66
I	Prop. Storm - D	ST-25	11+22.66	909.10	Prop. Storm - A	ST-10	10+60.15	908.39	0.72

NORTH

0 40' 80'

SHEET SIZE: 30" X 42"
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Southeast Polk Community School District

KEY PLAN

ISSUANCE	DATE

PROJECT NO: **3007.090.00**

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OVERALL UTILITY MAP

C04.01

NOTES

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4. SUBDRAIN INSTALLATION SHALL BE COMPLETED AS PER SUDAS SPECIFICATION SECTION 4040. REDUCERS TO BE INCIDENTAL WITH TEE/ CROSS STRUCTURES. ALL EXPOSED INLETS/ OUTLETS TO HAVE RODENT GUARD INSTALLED.
5. WATER MAIN, FITTING AND FIXTURES SHALL BE INSTALLED AS PER SUDAS SPECIFICATION SECTION 5010 AS AMENDED BY DES MOINES WATER WORKS (DMWW).
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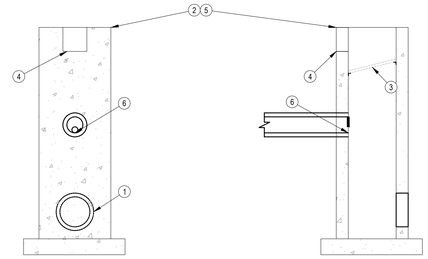
8. CLEANING, INSPECTION AND TESTING OF SEWERS AND STRUCTURES SHALL BE COMPLETED BY THE CONTRACTOR AS PER SUDAS SPECIFICATION SECTION 4060 AND 6030.
9. REFER ALSO TO RELATED NOTES ON C SHEETS.
10. SEE C03.10 FOR RIP RAP QUANTITIES AT EACH STORM OUTLET.



FRONT (WEST) VIEW

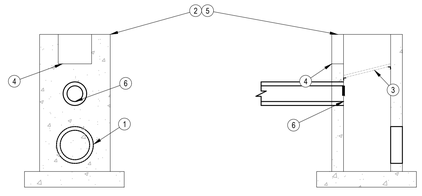
SIDE (SOUTH) VIEW

EVERYTHING SHOWN IN DETAIL INCLUDED IN OUTLET CONTROL STRUCTURE BID ITEM, UNLESS OTHERWISE NOTED

C5 S23 OUTLET CONTROL STRUCTURE
NOT TO SCALE

KEYNOTES FOR OUTLET CONTROL STRUCTURE DETAILS:

1. OUTLET PIPE (NOT INCLUDED IN OCS BID ITEM)
   - 1.1. NORTH INV = 900.08
   - 1.2. SOUTH INV = 900.53
2. CONSTRUCT WALLS AND BASE SIMILAR TO SUDAS SW-513, 3' X 3' INNER DIMS. OMIT MANHOLE TOP, LID AND SIDE OPENINGS
3. INSTALL CONTINUOUS ALUMINUM L 2" X 2" X ¼" ANGLE WITH MECHANICAL ANCHORS. BOLT GRATING TO ANGLE SUPPORTS. STAGGER ELEVATION TO ANGLE GRATE UPWARD IN THE DOWNSTREAM DIRECTION.
4. CUT RECTANGULAR WEIR IN FRONT WALL
   - 4.1. NORTH TOP OF WEIR ELEVATION = 907.40, 12" WIDE
   - 4.2. SOUTH TOP OF WEIR ELEVATION = 904.60, 17" WIDE
5. REST OF FRONT WALL, SIDE, AND BACK WALLS.
   - 5.1. NORTH TOP/ RIM ELEVATION = 908.80
   - 5.2. SOUTH TOP/ RIM ELEVATION = 905.85
6. 8" DIAMETER SUBDRAIN WITH 3" ORIFICE IN CAP.
   - 6.1. NORTH INV = 904.00
   - 6.2. SOUTH INV = 903.00



FRONT (NORTHWEST) VIEW

SIDE (SOUTHWEST) VIEW

EVERYTHING SHOWN IN DETAIL INCLUDED IN OUTLET CONTROL STRUCTURE BID ITEM, UNLESS OTHERWISE NOTED

B5 S51 OUTLET CONTROL STRUCTURE
NOT TO SCALE

LEGEND

ST	PROPOSED STORM SEWER PIPE
SAN	PROPOSED SANITARY SEWER PIPE
W	PROPOSED WATER PIPE
	PROPOSED GAS LINE
X	UTILITY CROSSING, SEE TABLE ON C04.01

NORTH

0 20' 40'

95% CONSTRUCTION DOCUMENTS

SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

KEY PLAN

Southeast Polk Community School District

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ISSUANCE	DATE

PROJECT NO: 3007.090.00
STORM

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STORM SEWER PLAN

C04.02

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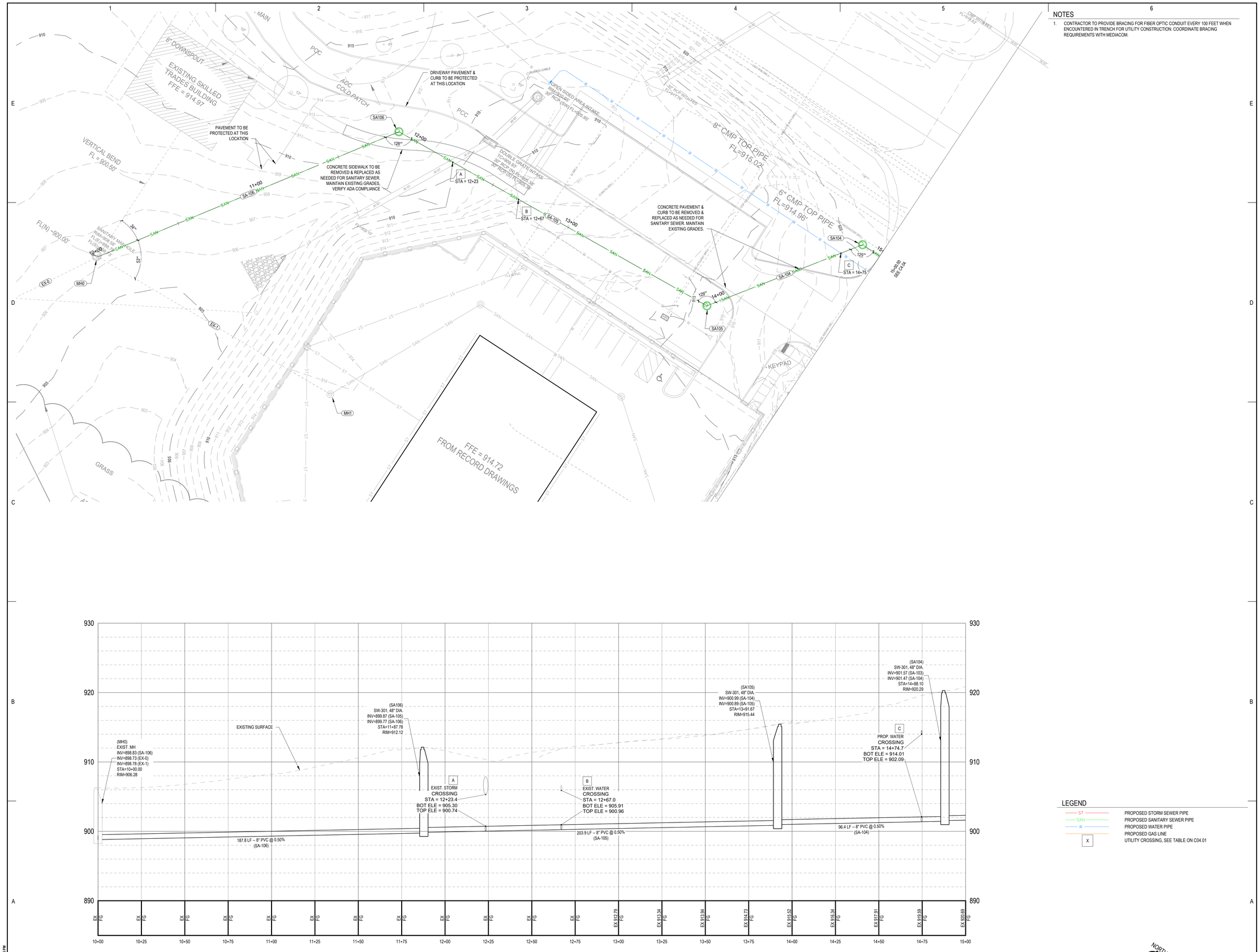

NOTES

1. CONTRACTOR TO PROVIDE BRACING FOR FIBER OPTIC CONDUIT EVERY 100 FEET WHEN ENCOUNTERED IN TRENCH FOR UTILITY CONSTRUCTION. COORDINATE BRACING REQUIREMENTS WITH MEDIACOM.

LEGEND

ST	PROPOSED STORM SEWER PIPE
SAN	PROPOSED SANITARY SEWER PIPE
W	PROPOSED WATER PIPE
	PROPOSED GAS LINE
X	UTILITY CROSSING, SEE TABLE ON C04.01

NORTH

0 20' 40'

VERTICAL SCALE: 4X

95% CONSTRUCTION DOCUMENTS

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Southeast Polk Community School District

KEY PLAN

ISSUANCE	DATE
PROJECT NO	3007.000.00

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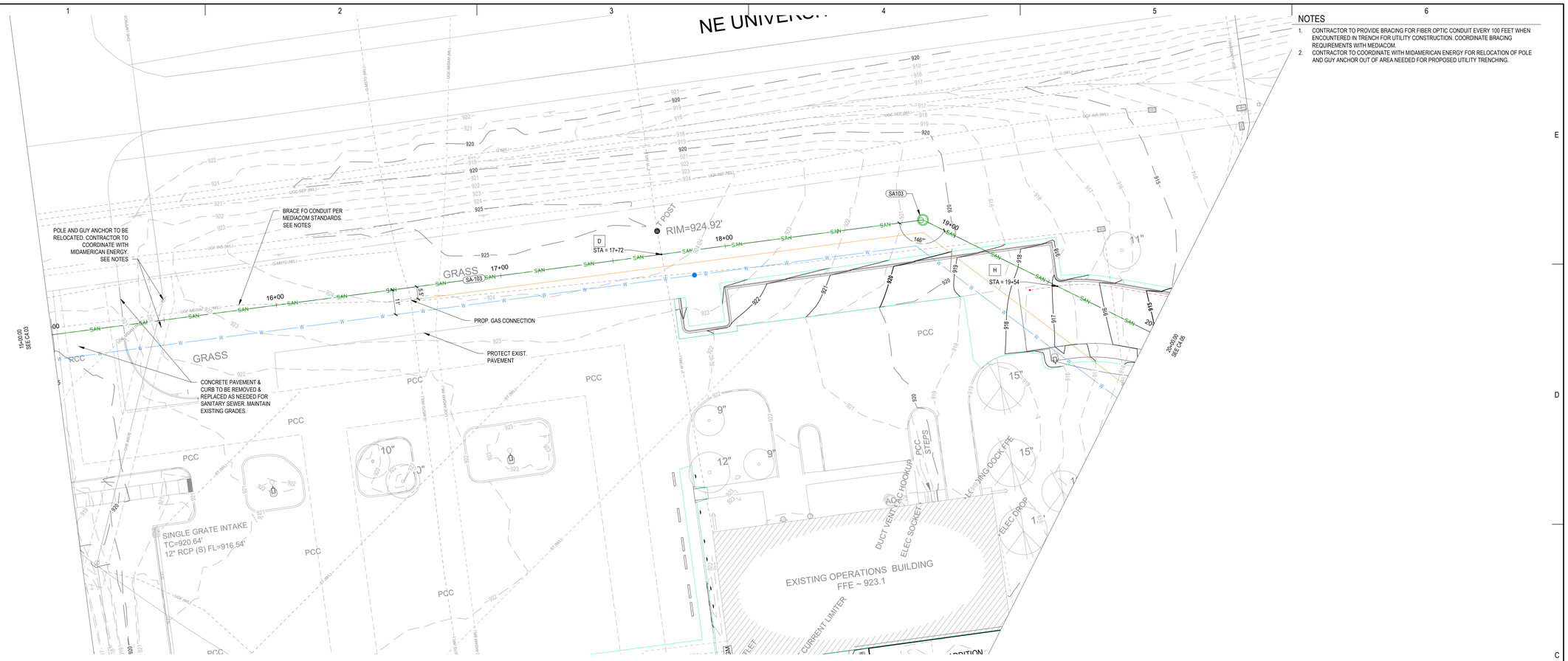
SANITARY SEWER PLAN & PROFILE

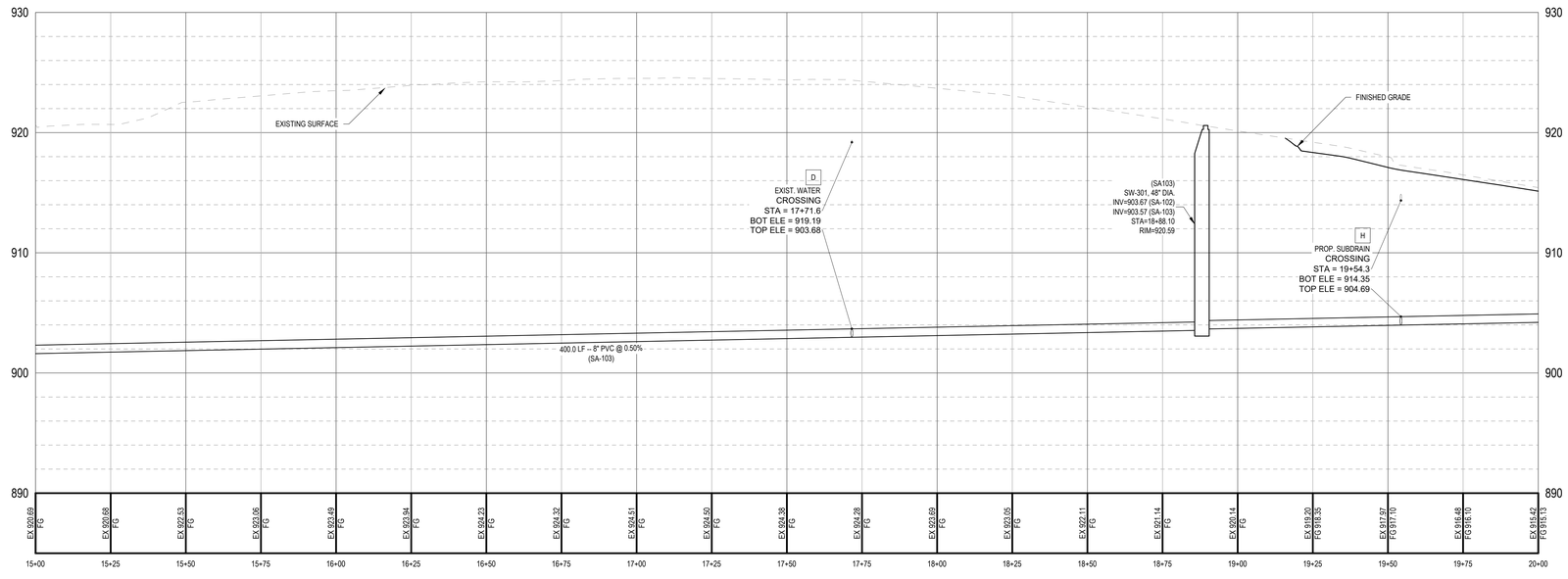
C04.03

SHEET SIZE: 24" X 42"
PLT: PRINTED: 8/28/2023 3:41:48 PM

NOTES

1. CONTRACTOR TO PROVIDE BRACING FOR FIBER OPTIC CONDUIT EVERY 100 FEET WHEN ENCOUNTERED IN TRENCH FOR UTILITY CONSTRUCTION. COORDINATE BRACING REQUIREMENTS WITH MEDIACOM.
2. CONTRACTOR TO COORDINATE WITH MIDAMERICAN ENERGY FOR RELOCATION OF POLE AND GUY ANCHOR OUT OF AREA NEEDED FOR PROPOSED UTILITY TRENCHING.





LEGEND

- ST — PROPOSED STORM SEWER PIPE
- SAN — PROPOSED SANITARY SEWER PIPE
- W — PROPOSED WATER PIPE
- PROPOSED GAS LINE
- X — UTILITY CROSSING, SEE TABLE ON C04.01

NORTH

0 20' 40'

VERTICAL SCALE: 4X

95% CONSTRUCTION DOCUMENTS

SOUTHEAST POLK TRANSPORTATION BUILDING

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Southeast Polk Community School District

KEY PLAN

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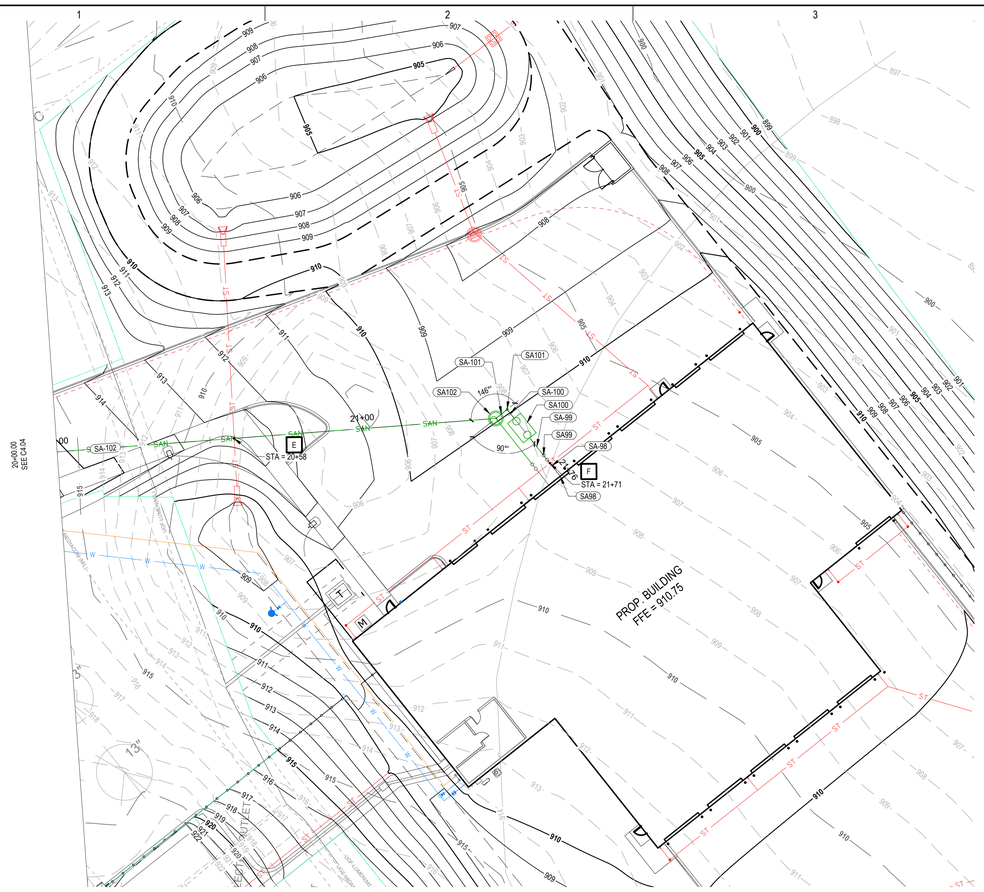
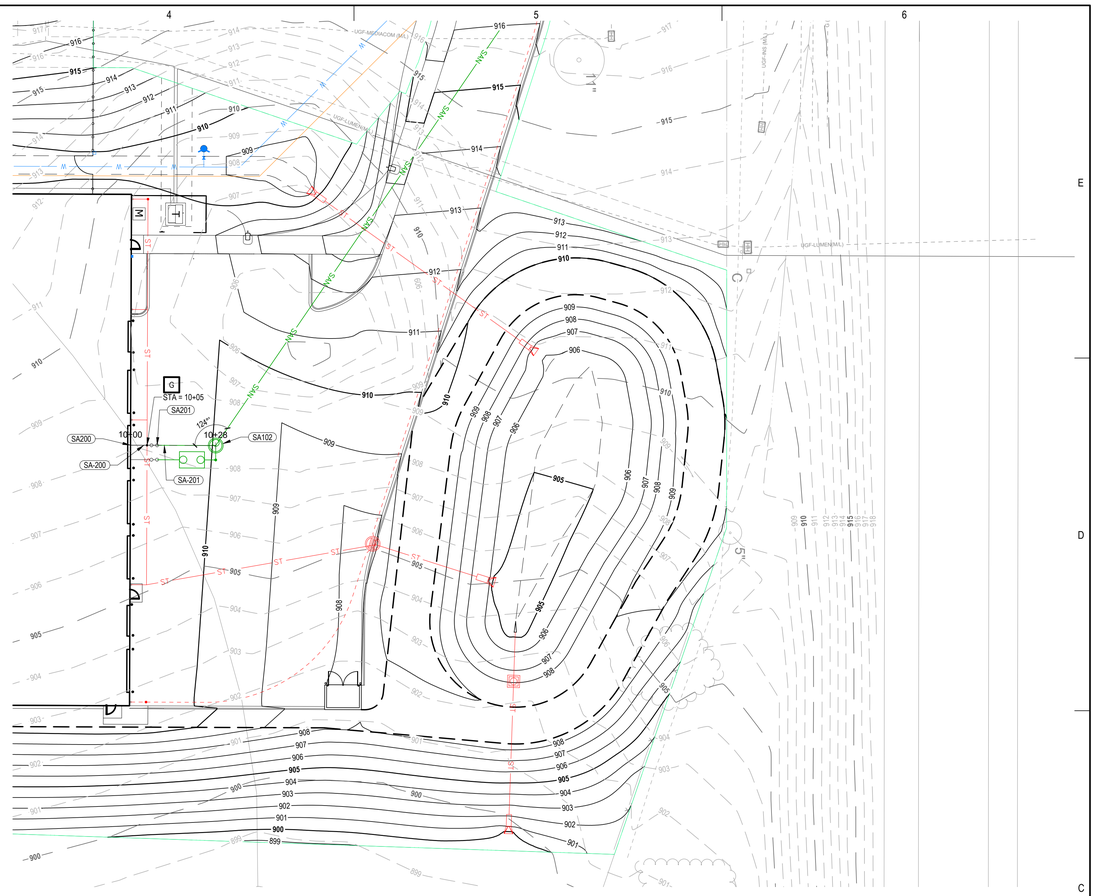
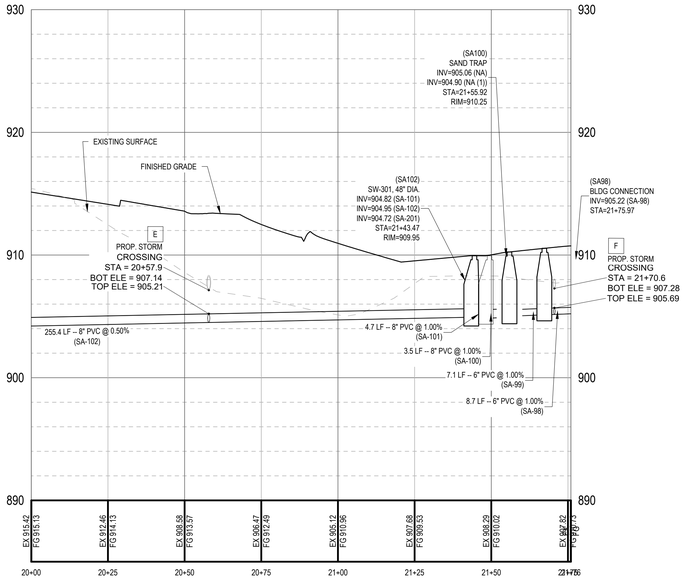
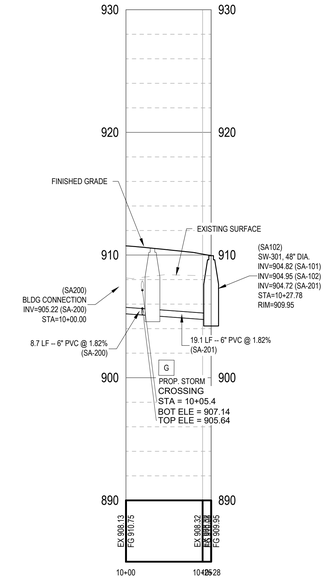
SANITARY SEWER PLAN & PROFILE

C04.04









NOTES

1. CONTRACTOR TO PROVIDE BRACING FOR FIBER OPTIC CONDUIT EVERY 100 FEET WHEN ENCOUNTERED IN TRENCH FOR UTILITY CONSTRUCTION. COORDINATE BRACING REQUIREMENTS WITH MEDIACOM.

LEGEND

ST	PROPOSED STORM SEWER PIPE
SAN	PROPOSED SANITARY SEWER PIPE
W	PROPOSED WATER PIPE
	PROPOSED GAS LINE
X	UTILITY CROSSING, SEE TABLE ON C04.01

NORTH
0 20' 40'
VERTICAL SCALE: 4X

NORTH
0 20' 40'
VERTICAL SCALE: 4X

95% CONSTRUCTION DOCUMENTS

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MECH / ELEC / PLUMB
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RDG PLANNING ● DESIGN

SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	DATE
PROJECT NO	3007.000.00

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SANITARY SEWER PLAN & PROFILE

C04.05

NE UNIVERSITY AVENUE

8" X 8" TAPPING SLEEVE & VALVE

PROP. 8" DIP WATER

EXISTING PRIVATE 8" WATER MAIN

OPEN SIDED AREA INTAKE
RIM=910.65'
30" RCP (SW) FL=905.95'

30" RCP WITH FES
FL=911.76'

8" CMP TOP PIPE
FL=915.02'

6" CMP TOP PIPE
FL=914.96'

CONCRETE PAVEMENT & CURB TO BE REMOVED & REPLACED AS NEEDED FOR WATER LINE. MAINTAIN EXISTING GRADES.

POLE AND GUY ANCHOR TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH MIDAMERICAN ENERGY. SEE NOTES

BRACE FO CONDUIT PER MEDIACOM STANDARDS. SEE NOTES

PROP. GAS CONNECTION

PROTECT EXIST. PAVEMENT

ONE OF THESE TWO DRIVES MUST REMAIN OPEN AT ALL TIMES

DOUBLE GRATE INTAKE
TC=909.93'
30" RCP (N) FL=905.38'
30" RCP (S) FL=905.38'

SINGLE GRATE INTAKE
TC=920.64'
12" RCP (S) FL=916.54'

KEYPAD

S11 CONNECT TO EXIST.
INV 30" (NE&SW) = 905.11
FROM RECORD DRAWINGS

S8 SW-501
RIM = 913.44
INV 4" (E&W) = 910.94
INV 15" (SW) = 909.24
FROM RECORD DRAWINGS

MH2 SW-301, TYPE B CASTING

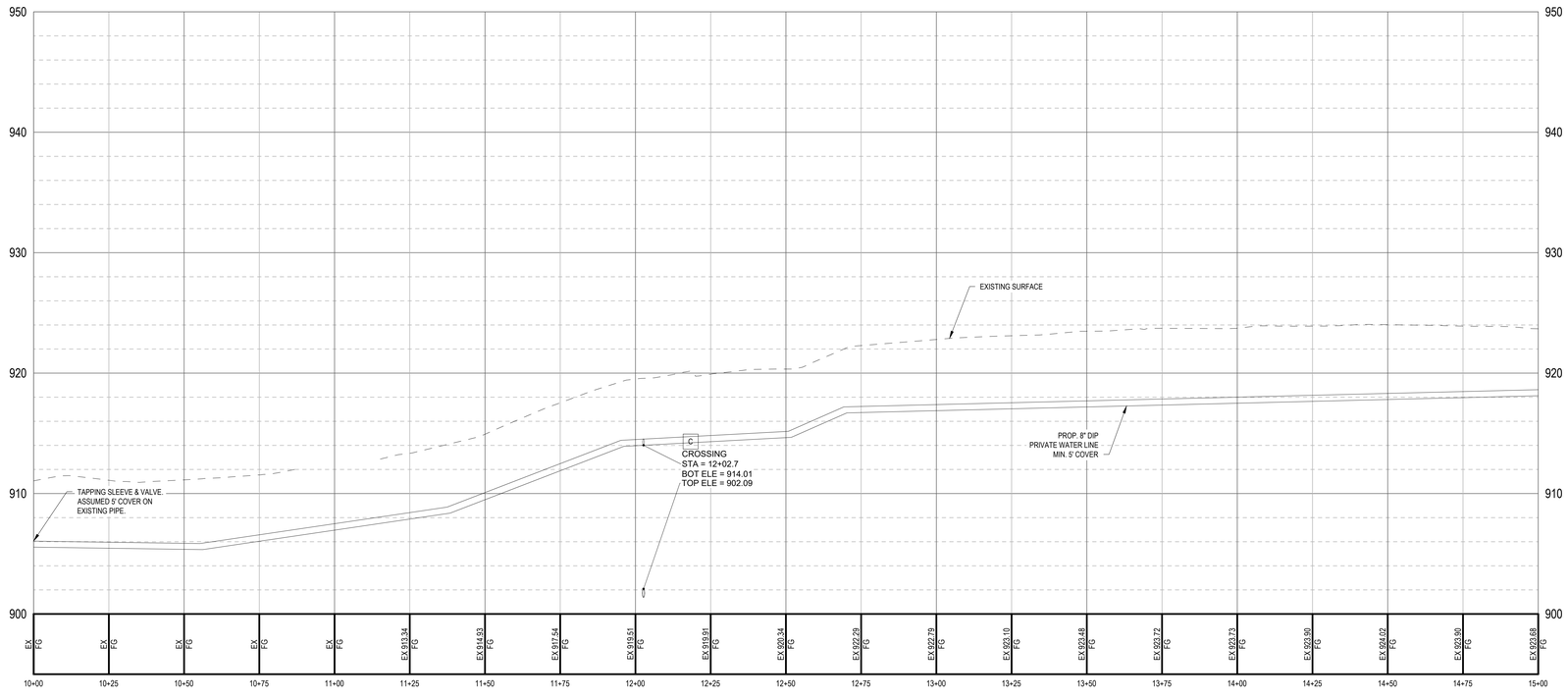
GRASS

PCC

15+00.00
SEE C4.07

NOTES

1. CONTRACTOR TO PROVIDE BRACING FOR FIBER OPTIC CONDUIT EVERY 100 FEET WHEN ENCOUNTERED IN TRENCH FOR UTILITY CONSTRUCTION. COORDINATE BRACING REQUIREMENTS WITH MEDIACOM.
2. CONTRACTOR TO COORDINATE WITH MIDAMERICAN ENERGY FOR RELOCATION OF POLE AND GUY ANCHOR OUT OF AREA NEEDED FOR PROPOSED UTILITY TRENCHING.



LEGEND

ST	PROPOSED STORM SEWER PIPE
SAN	PROPOSED SANITARY SEWER PIPE
W	PROPOSED WATER PIPE
	PROPOSED GAS LINE
X	UTILITY CROSSING, SEE TABLE ON C04.01

NORTH

0 20' 40'
VERTICAL SCALE: 4X

95% CONSTRUCTION DOCUMENTS

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KEY PLAN

ISSUANCE DATE

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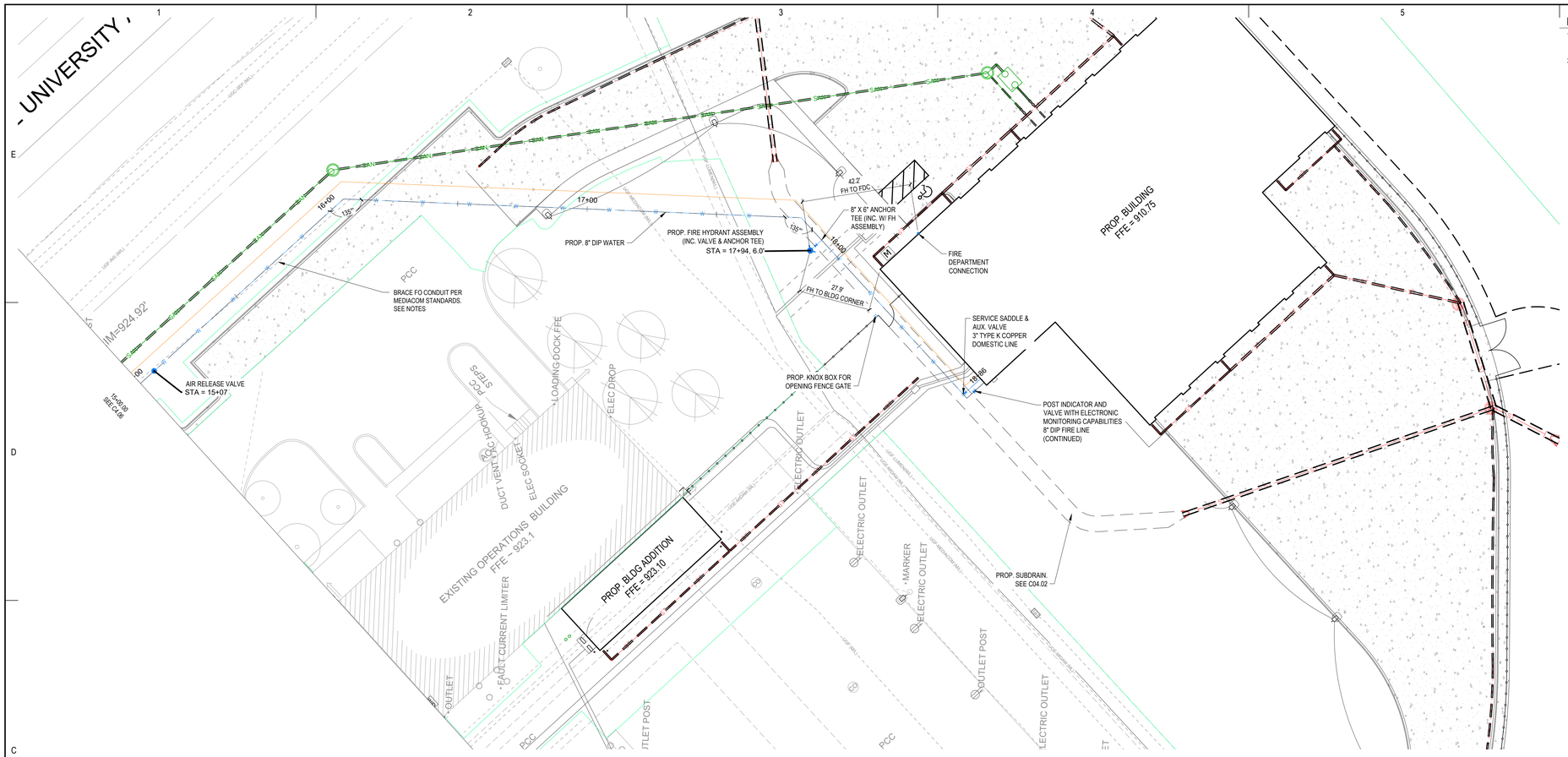
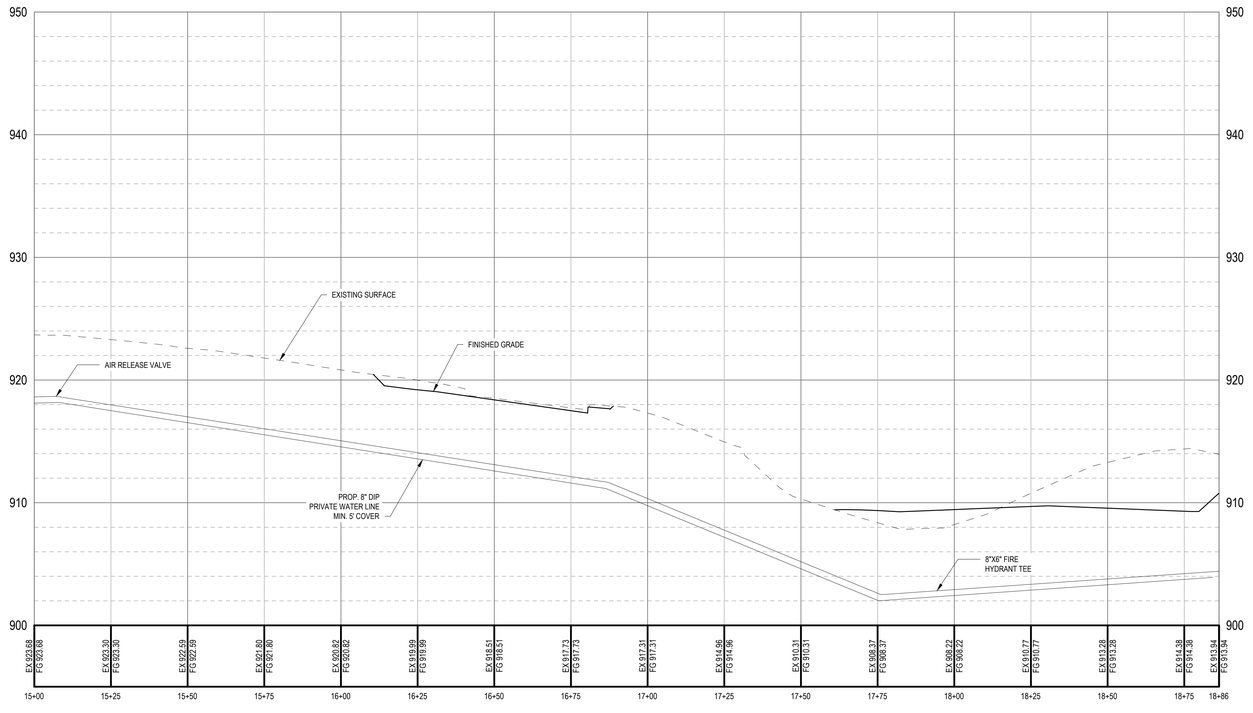
WATER PLAN & PROFILE

C04.06



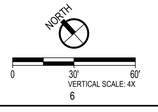
NOTES

1. CONTRACTOR TO PROVIDE BRACING FOR FIBER OPTIC CONDUIT EVERY 100 FEET WHEN ENCOUNTERED IN TRENCH FOR UTILITY CONSTRUCTION. COORDINATE BRACING REQUIREMENTS WITH MEDIACOM.
2. CONTRACTOR TO COORDINATE WITH MIDAMERICAN ENERGY FOR RELOCATION OF POLE AND GUY ANCHOR OUT OF AREA NEEDED FOR PROPOSED UTILITY TRENCHING.



LEGEND

ST	PROPOSED STORM SEWER PIPE
SAN	PROPOSED SANITARY SEWER PIPE
W	PROPOSED WATER PIPE
G	PROPOSED GAS LINE
X	UTILITY CROSSING, SEE TABLE ON C04.01



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Southeast Polk Community School District

KEY PLAN

ISSUANCE — DATE

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SOUTHEAST POLK TRANSPORTATION BUILDING

WATER PLAN & PROFILE

C04.07

NE UNIVERSITY AVE

REMOVE EXISTING PAVEMENT AND CURB

10' MIDAMERICAN OVERHEAD ELECTRICAL EASEMENT

REMOVE EXISTING PAVEMENT AND CURB

REMOVE EXISTING TREES

REMOVE EXISTING PAVEMENT

20' ACCESS EASEMENT; POLK COUNTY BOOK 8935 PAGE 999

TREE PROTECTION FENCING

REMOVE EXISTING PAVEMENT AND CURB

REMOVE EXISTING CURB

115'-0"

REMOVE EXISTING PAVEMENT AND CURB

REMOVE EXISTING TREE

REMOVE EXISTING TREE

TREE PROTECTION FENCING

EXISTING BUILDING TO REMAIN

10' UTILITY EASEMENT; POLK COUNTY BOOK 8935 PAGE 999

REMOVE EXISTING SHRUBS

REMOVE EXISTING TREE

REMOVE ELECTRICAL PEDESTAL TO BE SALVAGED AND REINSTALLED IN SAME LOCATION

REMOVE EXISTING FENCE

EXISTING BOLLARDS TO REMAIN

EXISTING UNDERGROUND ELECTRICAL AND FIBER TO REMAIN

EXISTING CANOPIES TO REMAIN; PROTECT FROM DAMAGE; FUEL PUMPS AND FUEL STORAGE LOCATED IN THIS AREA

10' UTILITY EASEMENT; POLK COUNTY BOOK 8935 PAGE 999

EXISTING BUILDING TO BE REMOVED IN ITS ENTIRETY; SEE NOTE 3

20' ACCESS EASEMENT; POLK COUNTY BOOK 8935 PAGE 999

20' ACCESS EASEMENT; POLK COUNTY BOOK 8935 PAGE 999

REMOVE EXISTING GRAVEL

REMOVE EXISTING FENCE UP TO CORNER POST

LEGEND

- PROPERTY LINE
- EXISTING FENCE
- REMOVE EXISTING FENCE
- TREE PROTECTION FENCING; 6' HEIGHT ORANGE SNOW FENCE
- CLEAR AND GRUB EXISTING TREE
- REMOVE EXISTING PAVEMENT
- REMOVE EXISTING BUILDING

KEYNOTES

1. REMOVE GAS METER; NEW GAS METER TO BE INSTALLED AT EXISTING OPERATIONS BUILDING. COORDINATE WITH OWNER AND MIDAMERICAN. REF ME0.01.
2. REMOVE MECHANICAL UNITS AND CONCRETE PAD.
3. REMOVE BOLLARDS AROUND ENTIRE BUILDING BEING DEMOLISHED.
4. EXISTING GATE ACCESS CONTROL CARD READER, PEDESTAL, AND BOLLARDS TO REMAIN. PROTECT FROM DAMAGE.
5. REMOVE RADIO ANTENNA; COORDINATE WITH OWNER FOR ANY SALVAGED ITEMS.
6. REMOVE TRANSFORMER, CT CABINET, ELECTRICAL METER AND CONCRETE PAD ONCE NEW TRANSPORTATION BUILDING IS COMPLETE; REF ME0.01.
7. EXISTING UTILITY PRIMARY AND CONDUIT TO BE REMOVED OR ABANDONED AS REQUIRED TO ACCOMMODATE BUILDING ADDITION.
8. EXISTING UNDERGROUND ELECTRICAL TO BE REMOVED OR ABANDONED AS REQUIRED. MIDAMERICAN TO DISCONNECT AND REMOVE PRIMARY CONDUCTORS. CONDUITS MAY BE ABANDONED.
9. REMOVE FUEL ISLAND EMERGENCY SHUTOFF; REF ME0.01.
10. REMOVE GAS HOOKUP.
11. REMOVE EXISTING FENCE, SLIDE GATES, AND BOLLARDS. REMOVE AND SALVAGE SLIDE GATE OPERATOR BOX FOR REINSTALLATION WITH NEW GATES.
12. REMOVE BOLLARDS. RELOCATE EXISTING MECHANICAL EQUIPMENT; REF M02.01.
13. FENCED IN STORAGE AREA TO REMAIN. PROTECT FROM DAMAGE.

NOTES

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2. THE SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE ON THE DATE OF SITE PLAN APPROVAL.
3. DEMOLITION AT EXISTING BUILDING TO INCLUDE REMOVAL OF EXISTING BUILDING FOOTINGS TO 2'-0" BELOW EXISTING GRADE.
4. REFER TO MECHANICAL DEMOLITION SITE PLAN, SHEET ME0.01 FOR ADDITIONAL DEMOLITION NOTES.
5. PROTECT ALL SITE FEATURES AND UTILITES NOT NOTED TO BE REMOVED.

NORTH

0 30' 60'

95% CONSTRUCTION DOCUMENTS

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	DATE

PROJECT NO: 3007.090.00

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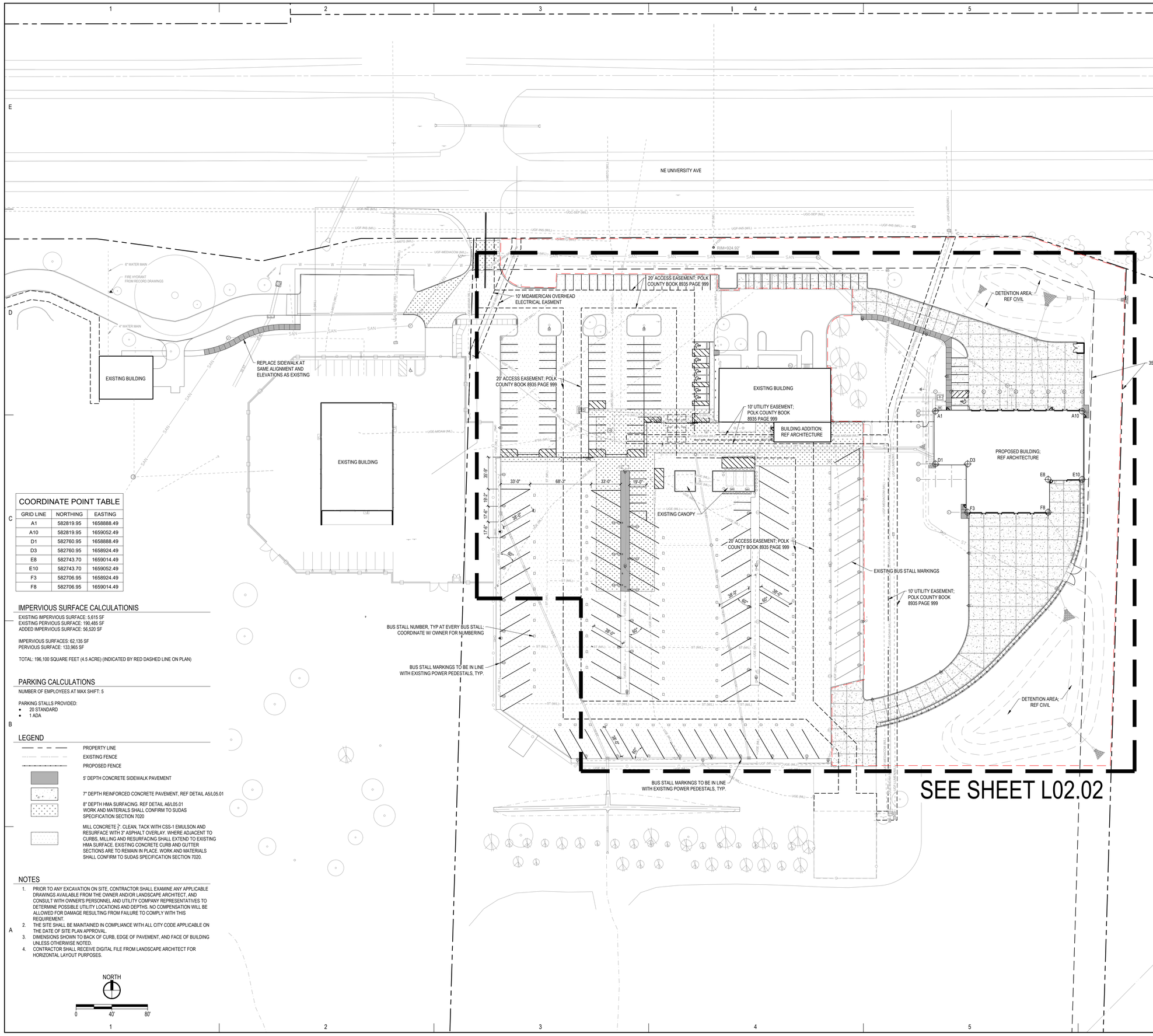
SITE PREPARATION PLAN

L01.01



COORDINATE POINT TABLE

GRID LINE	NORTHING	EASTING
A1	582819.95	1658888.49
A10	582819.95	1659052.49
D1	582760.95	1658888.49
D3	582760.95	1658924.49
E8	582743.70	1659014.49
E10	582743.70	1659052.49
F3	582706.95	1658924.49
F8	582706.95	1659014.49

IMPERVIOUS SURFACE CALCULATIONIS

EXISTING IMPERVIOUS SURFACE: 5,615 SF
EXISTING PERVIOUS SURFACE: 190,485 SF
ADDED IMPERVIOUS SURFACE: 56,520 SF

IMPERVIOUS SURFACES: 62,135 SF
PERVIOUS SURFACE: 133,965 SF

TOTAL: 196,100 SQUARE FEET (4.5 ACRE) (INDICATED BY RED DASHED LINE ON PLAN)

PARKING CALCULATIONS

NUMBER OF EMPLOYEES AT MAX SHIFT: 5

PARKING STALLS PROVIDED:
- 20 STANDARD
- 1 ADA

LEGEND

PROPERTY LINE

EXISTING FENCE

PROPOSED FENCE

5' DEPTH CONCRETE SIDEWALK PAVEMENT

7" DEPTH REINFORCED CONCRETE PAVEMENT, REF DETAIL A5/L05.01

8" DEPTH HMA SURFACING, REF DETAIL A6/L05.01
WORK AND MATERIALS SHALL CONFIRM TO SUDAS SPECIFICATION SECTION 7020

MILL CONCRETE 3", CLEAN, TACK WITH CSS-1 EMULSON AND RESURFACE WITH 3" ASPHALT OVERLAY. WHERE ADJACENT TO CURBS, MILLING AND RESURFACING SHALL EXTEND TO EXISTING HMA SURFACE. EXISTING CONCRETE CURB AND GUTTER SECTIONS ARE TO REMAIN IN PLACE. WORK AND MATERIALS SHALL CONFIRM TO SUDAS SPECIFICATION SECTION 7020.

NOTES

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2. THE SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE ON THE DATE OF SITE PLAN APPROVAL.
3. DIMENSIONS SHOWN TO BACK OF CURB, EDGE OF PAVEMENT, AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL RECEIVE DIGITAL FILE FROM LANDSCAPE ARCHITECT FOR HORIZONTAL LAYOUT PURPOSES.

NORTH

0 40' 80'

95% CONSTRUCTION DOCUMENTS

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Southeast Polk Community School District

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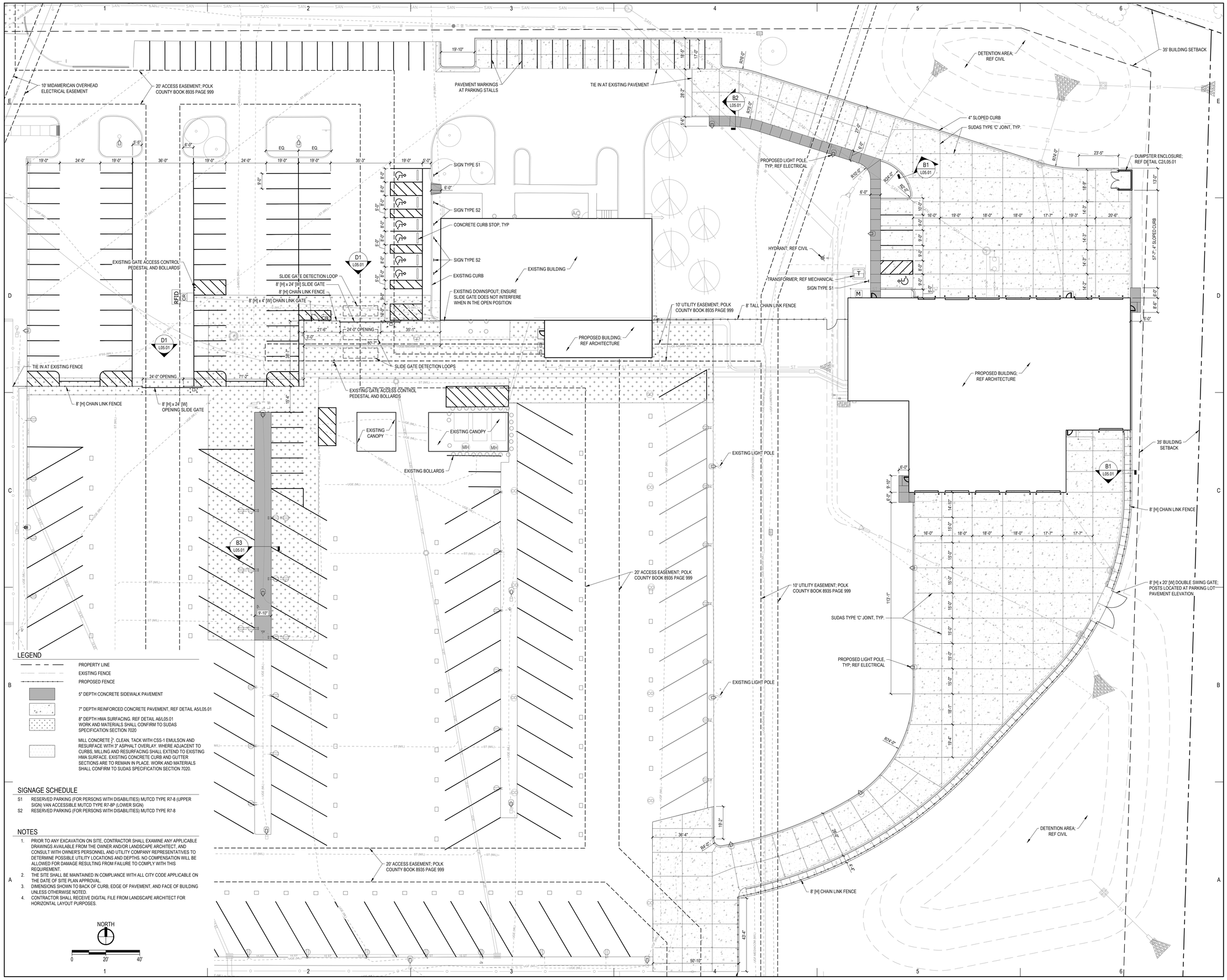
SOUTHEAST POLK TRANSPORTATION BUILDING

SITE LAYOUT PLAN OVERALL

L02.01



LEGEND

- PROPERTY LINE
- EXISTING FENCE
- PROPOSED FENCE
- 5" DEPTH CONCRETE SIDEWALK PAVEMENT
- 7" DEPTH REINFORCED CONCRETE PAVEMENT, REF DETAIL A5/L05.01
- 8" DEPTH HMA SURFACING. REF DETAIL A6/L05.01 WORK AND MATERIALS SHALL CONFIRM TO SUDAS SPECIFICATION SECTION 7020
- MILL CONCRETE 3". CLEAN, TACK WITH CSS-1 EMULSON AND RESURFACE WITH 3" ASPHALT OVERLAY. WHERE ADJACENT TO CURBS, MILLING AND RESURFACING SHALL EXTEND TO EXISTING HMA SURFACE. EXISTING CONCRETE CURB AND GUTTER SECTIONS ARE TO REMAIN IN PLACE. WORK AND MATERIALS SHALL CONFIRM TO SUDAS SPECIFICATION SECTION 7020.

SIGNAGE SCHEDULE

S1	RESERVED PARKING (FOR PERSONS WITH DISABILITIES) MUTCD TYPE R7-8 (UPPER SIGN) VAN ACCESSIBLE MUTCD TYPE R7-8P (LOWER SIGN)
S2	RESERVED PARKING (FOR PERSONS WITH DISABILITIES) MUTCD TYPE R7-8

NOTES

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NORTH

0 20' 40'

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SITE LAYOUT PLAN

L02.02

NE UNIVERSITY AVE

MATCHLINE

MATCHLINE

STEEL EDGING, TYP

NATIVE SEED

10' MIDAMERICAN OVERHEAD ELECTRICAL EASEMENT

20' ACCESS EASEMENT; POLK COUNTY BOOK 8935 PAGE 999

EXISTING BUILDING

PROPOSED BUILDING; REF ARCHITECTURE

10' UTILITY EASEMENT; POLK COUNTY BOOK 8935 PAGE 999

PROVIDE MULCH TO FILL BEDS AROUND MECHANICAL UNITS

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER
TREES					
	SM	3	Acer saccharum / Sugar Maple	2" Cal.	B&B
	AB	6	Amelanchier x grandiflora 'Autumn Brilliance' / Serviceberry	2" Cal.	B&B
	CH	7	Celtis occidentalis / Common Hackberry Strong Central Leader	2" Cal.	B&B
	ER	9	Cercis canadensis / Eastern Redbud Strong Central Leader	2" Cal.	B&B
	NS	7	Picea abies / Norway Spruce Strong Central Leader	2" Cal.	B&B
	QR	9	Quercus rubra / Red Oak Strong Central Leader	2" Cal.	B&B
SHRUBS					
	NJT	6	Ceanothus americanus / New Jersey Tea	5 gal.	
	HL	39	Hypericum x 'Deppe' / Sunny Boulevard® St. John's Wort	5 gal.	
	SG	8	Panicum virgatum / Switch Grass	5 gal.	
	PD	76	Sporobolus heterolepis / Prairie Dropseed	5 gal.	
	TT	11	Thuja occidentalis 'Tom Thumb' / Arborvitae	5 gal.	

SYMBOL	CODE	BOTANICAL / COMMON NAME
GROUND COVERS		
	NS	Native Seed
	SEED	Seed

NO LESS THAN 40% OF THE PROPOSED PLANT MATERIAL ON SITE WILL BE A SPECIES NATIVE TO IOWA.

LEGEND

- PROPERTY LINE
- EXISTING FENCE
- PROPOSED FENCE

LANDSCAPE REQUIREMENTS

SITE IMPROVEMENTS AREA OF DISTURBANCE: 196,100 SF (4.5 ACRE)
20% OPEN SPACE: 39,220 SQUARE FEET

FOR EVERY 2,000 SQUARE FEET OF REQUIRED OPEN SPACE:
- 1 DECIDUOUS / CONIFEROUS SHADE TREE REQUIRED
  - 20 REQUIRED
  - 20 PROPOSED
- 2 DECIDUOUS ORNAMENTAL TREE REQUIRED
  - 40 REQUIRED
  - 10 PROPOSED ORNAMENTAL
  - 3 PROPOSED SHADE TREE = 6 ORNAMENTAL
  - 6 EXISTING TREES OVER 10" = 12 SHADE TREE = 24 ORNAMENTAL
  - TOTAL = 40 ORNAMENTAL
- 2 SHRUBS
  - 40 REQUIRED
  - 140 PROPOSED

PROPOSED BUILDING FOOTPRINT

TRANSPORTATION BUILDING: 15,630 SF
BUILDING ADDITION TO EXISTING OPERATIONS BUILDING: 1,400 SF

NOTES

1. PRIOR TO ANY EXCAVATION ON SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER AND/OR LANDSCAPE ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY LOCATIONS AND DEPTHS. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
2. THE SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE ON THE DATE OF SITE PLAN APPROVAL.
3. DIMENSIONS SHOWN TO BACK OF CURB, EDGE OF PAVEMENT, AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL RECEIVE DIGITAL FILE FROM LANDSCAPE ARCHITECT FOR HORIZONTAL LAYOUT PURPOSES.

NORTH

0 30' 60'

95% CONSTRUCTION DOCUMENTS

LANDSCAPE ARCH
RDG Planning & Design
301 Grand Avenue
Des Moines, Iowa 50309
Phone: (515) 288-3141

ARCHITECT
RDG Planning & Design
301 Grand Avenue
Des Moines, Iowa 50309
Phone: (515) 288-3141

CIVIL ENGINEER
RDG Planning & Design
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Des Moines, Iowa 50309
Phone: (515) 288-3141

STRUCTURAL
Baker Rhodes
4717 Grand Avenue
Des Moines, Iowa 50312
Phone: (515) 277-0275

MECH / ELEC / PLUMB
MDCID
130 East 2nd Street, Suite 300
Des Moines, Iowa 50309
Phone: (515) 251-7280

RDG PLANNING • DESIGN

SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	DATE

PROJECT NO: 3007.000.00
2/2/2024

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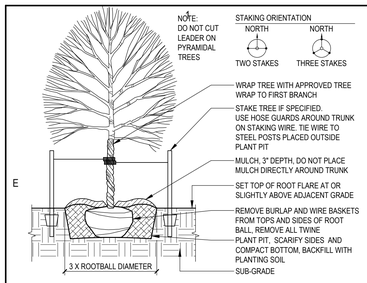
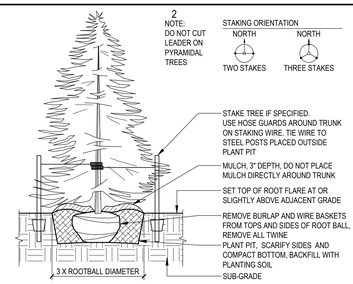
THIS DRAWING MAY NOT REPRESENT ALL CHANGES THAT HAVE OCCURRED DURING BID OR CONSTRUCTION PHASES. CONSTRUCTION DOCUMENTS, ADDENDA AND CHANGE DOCUMENTS REMAIN THE OFFICIAL CONSTRUCTION DOCUMENTS.

SITE PLANTING PLAN

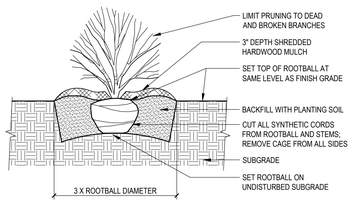
L04.01



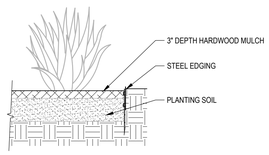
E1 TYP SECTION: DECIDUOUS TREE PLANTING
3/8" = 1'-0"



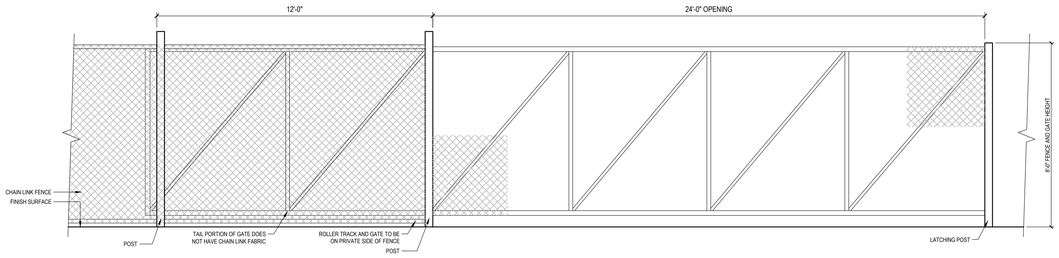
E2 TYP SECTION: CONIFEROUS TREE PLANTING
3/8" = 1'-0"



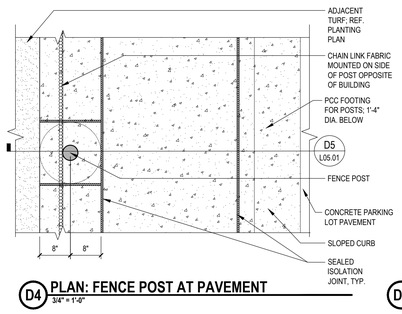
E3 TYP SECTION: SHRUB PLANTING
1/2" = 1'-0"



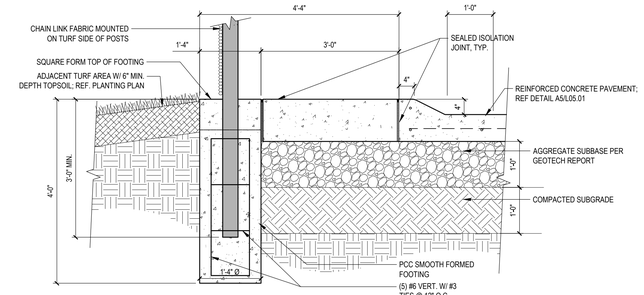
E4 TYP SECTION: STEEL EDGING
3/4" = 1'-0"



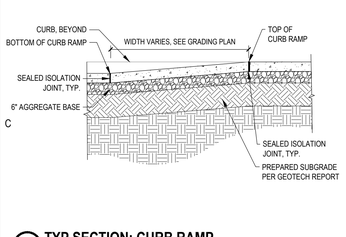
D1 TYP ELEVATION: CHAIN LINK SLIDING GATE
3/8" = 1'-0"



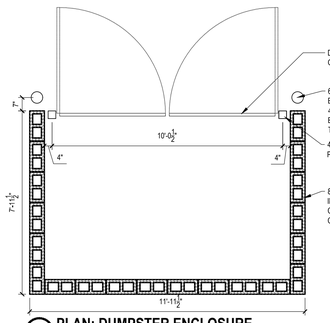
D4 PLAN: FENCE POST AT PAVEMENT
3/4" = 1'-0"



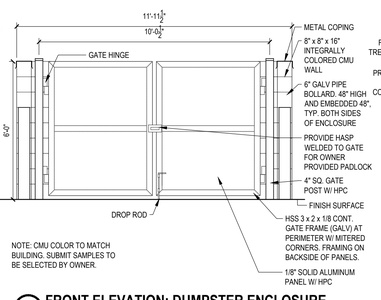
D5 TYP. SECTION: FENCE POST AT PAVEMENT
3/4" = 1'-0"



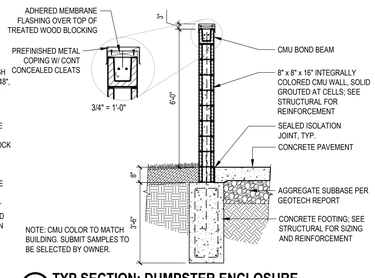
C1 TYP SECTION: CURB RAMP
3/8" = 1'-0"



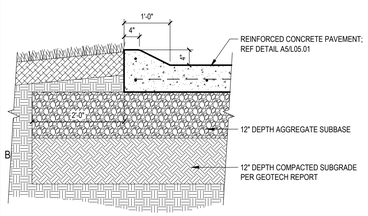
C2 PLAN: DUMPSTER ENCLOSURE
3/8" = 1'-0"



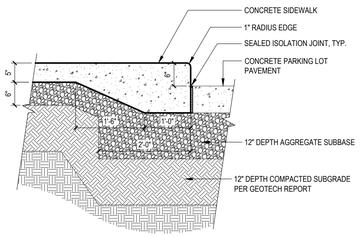
C3 FRONT ELEVATION: DUMPSTER ENCLOSURE
3/8" = 1'-0"



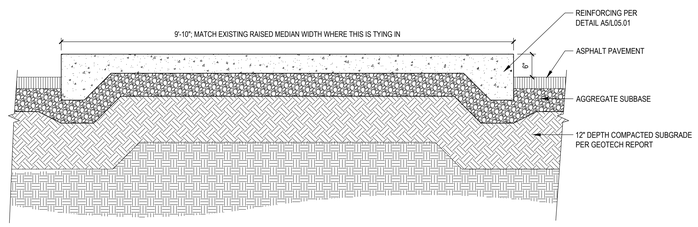
C4 TYP SECTION: DUMPSTER ENCLOSURE
3/8" = 1'-0"



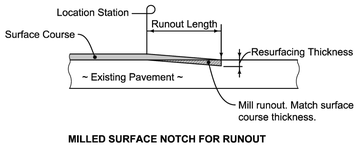
B1 TYP SECTION: SLOPED CURB
3/4" = 1'-0"



B2 TYP SECTION: INTEGRAL CURB
3/4" = 1'-0"



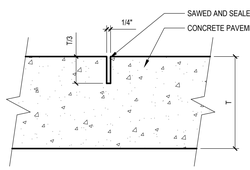
B3 TYP SECTION: RAISED MEDIAN
3/4" = 1'-0"



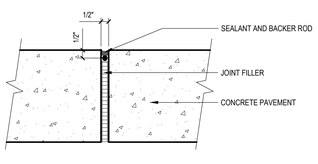
MILLED SURFACE NOTCH FOR RUNOUT

REF. SUDAS 7021.101

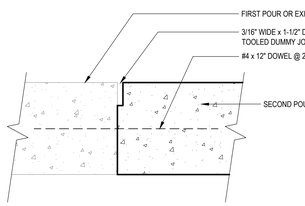
B5 TYP SECTION: ASPHALT OVERLAY
NOT TO SCALE
NTS



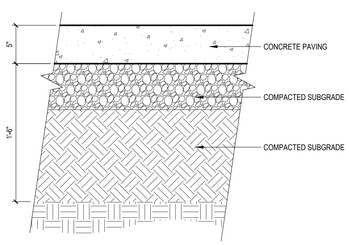
A1 TYP SECTION: SAWED CONTROL JOINT
3" = 1'-0"



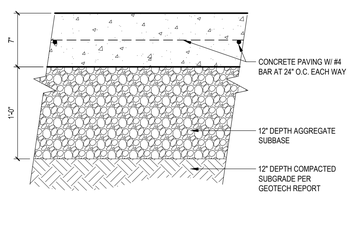
A2 TYP SECTION: ISOLATION JOINT
3" = 1'-0"



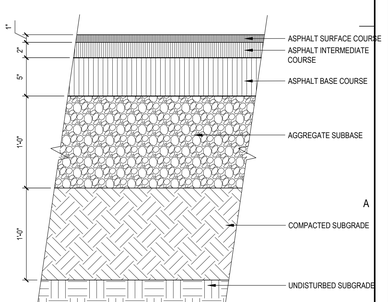
A3 TYP SECTION: DOWELED CONSTRUCTION JOINT
3" = 1'-0"



A4 TYP SECTION: SIDEWALK CONCRETE PAVEMENT
1 1/2" = 1'-0"



A5 TYP SECT: REINFORCED CONCRETE PAVEMENT
1 1/2" = 1'-0"



A6 TYP SECTION: ASPHALT PAVEMENT
1 1/2" = 1'-0"

95% CONSTRUCTION DOCUMENTS

SOUTHEAST POLK TRANSPORTATION BUILDING

RDG Planning & Design
PLANNING ● DESIGN

STRUCTURAL
Baker Rhodes
4717 Grand Avenue
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LANDSCAPE ARCH
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MDCED
130 East 3rd Street, Suite 300
Des Moines, Iowa 50309
Phone: (515) 251-7280

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE | DATE

PROJECT NO.: 3007.090.00

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SITE DETAILS

L05.01

GP GENERAL PARAMETERS

GP1 STRUCTURAL DRAWINGS ARE A PORTION OF THE CONTRACT DOCUMENTS AND ARE INTENDED TO BE USED WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INTO THEIR SHOP DRAWINGS AND WORK.

GP2 VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION OF ANY ITEMS.

GP3 DRAWINGS SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL OPENINGS, ELECTRICAL COMPONENTS, FLOOR DEPRESSIONS, ETC. NOT SHOWN ON DRAWINGS. COORDINATE LOCATION, SIZE AND REINFORCEMENT OF ALL OPENINGS WITH RESPECTIVE TRADES BEFORE FABRICATION. REPORT ANY DISCREPANCIES AND/OR INTERFERENCE PROBLEMS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.

GP4 THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE PROVIDED, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.

GP5 THE BUILDING IS NOT STRUCTURALLY STABLE UNTIL ALL CONNECTIONS, FRAMING, SHEAR WALLS, X-BRACING, AND EXTERIOR WALLS ARE COMPLETE AND HAVE ACHIEVED FINAL DESIGN STRENGTH. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING STRUCTURAL STABILITY OVERALL AND TO ALL PORTIONS OF THE BUILDING DURING DEMOLITION, ERECTION AND CONSTRUCTION. TEMPORARY GRAVITY AND LATERAL FORCE BRACING SYSTEMS THAT MAY BE REQUIRED WILL BE DESIGNED BY, AND AT THE EXPENSE OF, THE CONTRACTOR. STRUCTURAL DRAWINGS DO NOT NECESSARILY INDICATE ANY OR ALL REQUIRED TEMPORARY SUPPORT SYSTEMS. TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURAL WORK IS COMPLETE OR CONTRACTOR DEEMS THE AREA UNDER CONSIDERATION TO BE STABLE.

GP6 CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

GP8 AS USED IN GENERAL NOTES AND THROUGHOUT STRUCTURAL DRAWINGS, THE TERM "CONTRACTOR" IS DEFINED TO INCLUDE ANY OR ALL OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS, FABRICATORS, INSTALLERS, DELEGATED DESIGNERS/ENGINEERS AND ERECTORS.

DP DESIGN PARAMETERS (PEMB)

DP1 THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE ICC INTERNATIONAL BUILDING CODE, 2021 EDITION.

DP2 UNIFORM LIVE LOADS MEZZANINE:
TYPICAL FLOOR (STORAGE) 125 PSF
STAIRS AND OTHER EXITS 100 PSF
TYPICAL HANDRAIL 50 PLF

DP3 CONCENTRATED LIVE LOADS:
TYPICAL STAIRS (OVER 2 IN. x 2 IN.) 300 LB
TYPICAL HANDRAIL 200 LB

DP4 VERTICAL LINE LOADS: SEE METAL BUILDING DRAWINGS

DP5 EARTHQUAKE DESIGN DATA: SEE METAL BUILDING DRAWINGS

DP6 WIND DESIGN DATA: SEE METAL BUILDING DRAWINGS

DP7 ROOF RAIN LOAD DATA: SEE METAL BUILDING DRAWINGS

DP8 ALLOWABLE FRAMING DEFLECTIONS:
MEZZANINE FLOOR LIVE LOAD L/360
MEZZANINE FLOOR TOTAL LOAD L/240

DP9 ASSUMED FUTURE CONSTRUCTION:
VERTICAL NONE
HORIZONTAL NONE

DPA DESIGN PARAMETERS (ADDITION)

DPA1 THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE ICC INTERNATIONAL BUILDING CODE, 2021 EDITION.

DPA2 UNIFORM LIVE LOADS:
TYPICAL ROOF (GOVERNED BY SNOW) 25 PSF+DRIFT
DRIFT LOAD AS SHOWN ON PLAN

DPA3 SNOW DESIGN PARAMETERS:
GROUND SNOW LOAD (P_g) 30 PSF
FLAT ROOF SNOW LOAD (P_f) 25 PSF
SNOW EXPOSURE FACTOR (C_e) 1.0
SNOW LOAD IMPORTANCE FACTOR (I_s) 1.0
SNOW LOAD THERMAL FACTOR (C_t) 1.0
SNOW SLOPE FACTOR (C_s) 1.0

DPA4 EARTHQUAKE DESIGN PARAMETERS:
SEISMIC RISK CATEGORY II
SEISMIC IMPORTANCE FACTOR (I_e) 1.0
S_s 0.07g
S_1 0.04g
SEISMIC SITE CLASS D
S_{ds} 0.075g
S_{d1} 0.064g
SHORT-PERIOD SITE COEFFICIENT (F_a) 1.6
LONG-PERIOD SITE COEFFICIENT (F_v) 2.4
SEISMIC DESIGN CATEGORY A
SEISMIC-FORCE-RESISTING SYSTEM:
LIGHT-FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE OR STEEL SHEETS
SEISMIC BASE SHEAR (V) N-S 0.5 k
SEISMIC BASE SHEAR (V) E-W 0.5 k
SEISMIC RESPONSE COEFFICIENT (C_s) N-S 0.01
SEISMIC RESPONSE COEFFICIENT (C_s) E-W 0.01
RESPONSE MODIFICATION FACTOR (R) N-S N/A
RESPONSE MODIFICATION FACTOR (R) E-W N/A
REDUNDANCY FACTOR (ρ) N-S 1.0
REDUNDANCY FACTOR (ρ) E-W 1.0
SEISMIC ANALYSIS PROCEDURE:
EQUIVALENT LATERAL FORCE ANALYSIS

DPA5 WIND DESIGN PARAMETERS:
BASIC WIND SPEED (V) (3 SECOND GUST) 115 MPH
WIND RISK CATEGORY II
WIND EXPOSURE CATEGORY C
INTERNAL PRESSURE COEFFICIENT +/-.18
BASIC DESIGN PRESSURE @ ROOF 15 PSF (SERVICE)
NET WIND UPLIFT @ ROOF 10 PSF (SERVICE)

DPA6 ROOF RAIN LOAD PARAMETERS:
RAIN INTENSITY (i) 3.5 IN. / HR.

DPA7 ALLOWABLE WALL DEFLECTIONS:
EXTERIOR L/360

DPA8 ALLOWABLE FRAMING DEFLECTIONS:
ROOF LIVE LOAD L/360
ROOF TOTAL LOAD L/240

DPA9 ASSUMED FUTURE CONSTRUCTION:
VERTICAL NONE
HORIZONTAL NONE

FP FOUNDATION PARAMETERS

FP1 SIZE AND BOTTOM ELEVATIONS OF FOOTINGS HAVE BEEN ESTABLISHED BASED ON THE GEOTECHNICAL REPORT FILE NO. PN 251201 PREPARED BY ALLENDER BUTZKE ENGINEERS INC. AND DATED 06/11/25. AS EXCAVATION PROGRESSES, UNANTICIPATED SOIL CONDITIONS MAY REQUIRE CHANGES. CONTACT STRUCTURAL ENGINEER OF RECORD FOR EVALUATION OF THESE CHANGES.

FP2 ALLOWABLE SOIL BEARING PRESSURE
CONTINUOUS FOOTINGS.. 1500 PSF
SQUARE FOOTINGS.. 1500 PSF

FP2.1 OVEREXCAVATION IS REQUIRED TO ACHIEVE THE BEARING PRESSURES INDICATED IN NOTE FP2. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR ADD'L INFORMATION.

FP3 MINIMUM FOOTING DEPTH FOR FROST PROTECTION
(BELOW FINISHED GRADE)..................................... 42 IN.

FP4 DESIGN EARTH PRESSURES:
ACTIVE .... 35 PCF
PASSIVE .... 260 PCF
AT REST .... 60 PCF

FP5 GEOTECHNICAL ENGINEER IS SOLE JUDGE OF THE SUITABILITY OF UNDERLYING MATERIAL TO SUPPORT FOUNDATIONS. BEARING MATERIAL SHALL BE APPROVED BY GEOTECHNICAL ENGINEER BEFORE FOUNDATION INSTALLATION. DO NOT PROCEED WITHOUT APPROVAL.

FP6 PRIOR TO COMMENCING EARTHWORK, CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH ALL ASPECTS OF THE GEOTECHNICAL REPORT. CONTACT GEOTECHNICAL ENGINEER IF QUESTIONS OR DISCREPANCIES.

SU SUBMITTALS

SU1 GENERAL CONTRACTOR TO PROVIDE A SHOP DRAWING SUBMITTAL LOG ITEMIZING ALL PROPOSED SUBMITTALS FOR APPROVAL BY STRUCTURAL ENGINEER OF RECORD.

SU2 ALL SHOP DRAWINGS SHALL BE CHECKED BY THE FABRICATOR AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. SHOP DRAWING REVIEW BY ENGINEER IS LIMITED TO VERIFYING GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES FROM THE CONTRACT DOCUMENTS, DIMENSIONAL ERRORS, COORDINATION ERRORS, OR OMISSIONS IN SHOP DRAWINGS.

SU3 SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION REGARDING ALL STRUCTURAL ITEMS, INCLUDING THE FOLLOWING:

- CONCRETE MIX DESIGNS (5 DAYS BEFORE POUR, MIN.)
- CONCRETE REINFORCEMENT
- MASONRY REINFORCEMENT
- EMBEDDED STEEL ITEMS
- STRUCTURAL STEEL
- STEEL DECK
- PRE-ENGINEERED METAL BUILDING

SU4 SHOP DRAWINGS SHALL INCLUDE CONNECTIONS AS WELL AS SIZE, SPACING, AND GRADE OF ALL MEMBERS. PLANS AND ANY DETAILING NECESSARY FOR DETERMINING FIT AND PLACEMENT SHALL ALSO BE INCLUDED.

SU5 IF SHOP DRAWINGS DIFFER FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.

SU6 DESIGN DRAWINGS, SHOP DRAWINGS, AND CALCULATIONS FOR THE DESIGN AND FABRICATION OF ITEMS THAT ARE DESIGNED BY THE CONTRACTOR, INCLUDING:

- METAL DECK
- STAIRS
- PRE-ENGINEERED METAL BUILDING

SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION. CALCULATIONS SHALL BE INCLUDED FOR ALL CONNECTIONS TO THE STRUCTURE, CONSIDERING LOCALIZED EFFECTS ON STRUCTURAL ELEMENTS INDUCED BY THE CONNECTION LOADS.

SU7 ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL BE DESIGNED TO RESIST THE LIVE LOADS INDICATED IN STRUCTURAL NOTES, DEAD LOAD, SELF WEIGHT, ANY ADDITIONAL LOADING INDICATED ON PLANS AND DETAILS, SNOW DRIFT, AND A NET WIND UPLIFT.

SU8 ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL INCLUDE ANY RELEVANT TECHNICAL LITERATURE FROM MANUFACTURER. ALSO PROVIDE A CERTIFICATION FROM THE MANUFACTURER SHOWING THE PRODUCT IS IN COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.

SU9 THE CONTRACTOR SHALL COORDINATE SEISMIC RESTRAINTS OF MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT, MACHINERY, AND ASSOCIATED PIPING WITH THE STRUCTURE. ANY CONNECTIONS TO STRUCTURE SHALL CONFORM TO ASCE 7, CHAPTER 13 AND SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE APPROPRIATE STATE, AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION.

SU10 FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.

SP SPECIAL INSPECTION

SP1 SPECIAL INSPECTION PROGRAM SHALL CONFORM TO CHAPTER 17 OF THE IBC.

SP2 THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO PERFORM THE REQUIRED TESTS AND SPECIAL INSPECTIONS WITH QUALIFICATIONS DESCRIBED PER IBC CHAPTER 17 AND THE PROJECT SPECIFICATIONS.

SP3 SPECIAL INSPECTION REPORTS SHALL BE FURNISHED TO BUILDING OFFICIAL, OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND CONTRACTOR.

SP4 SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING THAT THE STRUCTURAL WORK WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.

SP5 SPECIAL INSPECTION PROGRAM:

VERIFICATION AND INSPECTION	FREQUENCY / TASK
STRUCTURAL STEEL - CONFORM TO AISC 360 REQUIREMENTS	
1. INSPECTION TASKS PRIOR TO WELDING:	
A. WELDER QUALIFICATION & CONTINUITY RECORDS	OBSERVE
B. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE.	PERFORM
C. MANUFACTURER'S CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	PERFORM
D. MATERIAL IDENTIFICATION (TYPE/GRADE).	OBSERVE
E. WELDER IDENTIFICATION SYSTEM.	OBSERVE
F. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY): • JOINT PREPARATION • DIMS. (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY & LOCATION) • BACKING TYPE & FIT (IF APPLICABLE)	OBSERVE
G. CONFIGURATION & FINISH OF ACCESS HOLES.	OBSERVE
H. FIT-UP OF FILLET WELDS: • DIMS. (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY & LOCATION)	OBSERVE
2. INSPECTION TASKS DURING WELDING:	
A. CONTROL & HANDLING OF WELDING CONSUMABLES: • EXPOSURE CONTROL • PACKAGING	OBSERVE
B. NO WELDING OVER CRACKED TACK WELDS.	OBSERVE
C. ENVIRONMENTAL CONDITIONS: • WIND SPEED WITHIN LIMITS • PRECIPITATION & TEMP.	OBSERVE
D. WPS FOLLOWED: • SETTINGS ON WELDING EQPT. • TRAVEL SPEED • SELECTED WELDING MATERIALS • PREHEAT APPLIED • SHIELDING GAS TYPE/FLOW RATE • PROPER POSITION (F, V, H, OH) • INTERPASS TEMP. MAINTAINED (MIN / MAX)	OBSERVE
E. WELDING TECHNIQUES: • INTERPASS & FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	OBSERVE
F. PLACEMENT & INSTALLATION OF STEEL HEADED STUD ANCHORS.	PERFORM
3. INSPECTION TASKS AFTER WELDING:	
A. WELDS CLEANED.	OBSERVE
B. SIZE, LENGTH, & LOCATION OF WELDS.	PERFORM
C. WELDS MEET VISUAL ACCEPTANCE CRITERIA: • CRACK PROHIBITION • WELD SIZE • WELD / BASE-METAL FUSION • UNDERCUT • CRATER CROSS SECTION • POROSITY • WELD PROFILES	PERFORM
D. ARC STRIKES.	PERFORM
E. k-AREA.	PERFORM
F. WELD ACCESS HOLES IN ROLLED HEAVY SHAPS & BUILT-UP HEAVY SHAPES.	PERFORM
G. BACKING & WELD TABS REMOVED (IF REQ'D.).	PERFORM
H. REPAIR ACTIVITIES.	PERFORM
I. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER.	PERFORM
J. NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF EOR.	PERFORM
K. N.D.T. OF CJP WELDS & JOINTS SUBECT TO FATIGUE PER AISC 360.	PERFORM
4. INSPECTION TASKS PRIOR TO BOLTING:	
A. MFR. CERTS. AVAILABLE FOR FASTENER MATERIALS.	PERFORM
B. FASTENERS MARKED IN ACCORDANCE w/ ASTM RQMTS.	OBSERVE
C. CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH, EXCLUDED THREADS).	OBSERVE
D. CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.	OBSERVE
E. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION & HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE RQMTS.	OBSERVE
F. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED & DOCUMENTED FOR FASTENER ASSEMBLIES & METHODS USED.	OBSERVE
G. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS & OTHER FASTENER COMPONENTS.	OBSERVE
5. INSPECTION TASKS DURING BOLTING:	
A. FASTENER ASSEMBLIES PLACED IN ALL HOLES & WASHERS & NUTS ARE POSITIONED AS REQ'D.	OBSERVE
B. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	OBSERVE
C. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING.	OBSERVE
D. FASTENERS ARE PRETENSIONED IN ACCORDANCE w/ THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.	OBSERVE
6. INSPECTION TASKS AFTER BOLTING:	OBSERVE
A. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNS.	PERFORM
STEEL DECK - CONFORM TO SDI REQUIREMENTS	
1. INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT:	
A. VERIFY COMPLIANCE OF MATERIALS WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, & BASE METAL THICKNESS.	PERFORM
B. DOCUMENT ACCEPTANCE OR REJECTION OF DECK & DECK ACCESSORIES.	PERFORM
2. INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT:	
A. VERIFY COMPLIANCE OF DECK & DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS.	PERFORM
B. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS.	PERFORM
C. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK & DECK ACCESSORIES.	PERFORM
3. INSPECTION OR EXECUTION TASKS PRIOR TO WELDING:	
A. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE.	OBSERVE
B. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	OBSERVE
C. MATERIAL IDENTIFICATION (TYPE/GRADE).	OBSERVE
D. CHECK WELDING EQUIPMENT.	OBSERVE
4. INSPECTION OR EXECUTION TASKS DURING WELDING:	
A. USE OF QUALIFIED WELDERS.	OBSERVE
B. CONTROL AND HANDLING OF WELDING CONSUMABLES.	OBSERVE
C. ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE).	OBSERVE
D. WPS FOLLOWED.	OBSERVE
5. INSPECTION OR EXECUTION TASKS AFTER WELDING:	
A. VERIFY SIZE & LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, & PERIMETER WELDS.	PERFORM
B. WELDS MEET VISUAL ACCEPTANCE CRITERIA.	PERFORM
C. VERIFY REPAIR ACTIVITIES.	PERFORM
D. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS.	PERFORM
6. INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING:	
A. MFR. INSTALLATION INSTRUCTIONS AVAILABLE FOR MECH. FASTENERS.	OBSERVE
B. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION.	OBSERVE
C. PROPER STORAGE FOR MECHANICAL FASTENERS.	OBSERVE
7. INSPECTION OR EXECUTION TASKS DURING MECHANICAL FASTENING:	
A. FASTENERS ARE POSITIONED AS REQ'D.	OBSERVE
B. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MFR'S INSTRUCTIONS.	OBSERVE
8. INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING:	
A. CHECK SPACING, TYPE, & INSTALLATION OF SUPPORT, SIDELAP, & PERIMETER FASTENERS.	PERFORM
B. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MFR'S INSTRUCTIONS.	PERFORM
C. VERIFY REPAIR ACTIVITIES.	PERFORM
D. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS.	PERFORM
CONCRETE	
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, & VERIFY PLACEMENT.	PERIODIC
2. REINFORCING BAR WELDING:	
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706.	PERIODIC
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16".	PERIODIC
C. INSPECT ALL OTHER WELDS.	CONT.
3. INSPECT ANCHORS CAST IN CONCRETE.	PERIODIC
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS:	
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	CONT.
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	PERIODIC
5. VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP & AIR CONTENT TESTS, AND DETERMINE CONCRETE TEMPERATURE.	CONT.
7. INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONT.
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE & TECHNIQUES.	PERIODIC
9. INSPECT FORMWORK FOR SHAPE, LOCATION & DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC

PROGRAM FOOTNOTES

1. THE ITEMS INDICATED ABOVE SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE IBC BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO THE PROJECT SPECIFICATIONS & THE SPECIFIC STRUCTURAL NOTES SECTIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING & INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, & BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS.
2. **CONT.** - CONTINUOUS SPECIAL INSPECTION. SPECIAL INSPECTOR IS PRESENT CONTINUOUSLY WHEN & WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED. (IBC SECTION 202).
3. **PERIODIC** - PERIODIC SPECIAL INSPECTION. SPECIAL INSPECTOR IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED. (IBC SECTION 202)
4. **OBSERVE** - SPECIAL INSPECTOR SHALL OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS (AISC 360 SECTION N5).
5. **PERFORM** - SPECIAL INSPECTOR SHALL PERFORM THESE TASKS FOR EACH JOINT, CONNECTION, ELEMENT OR MEMBER (AISC 360 SECTION N5).
6. **REQ'D** - SPECIAL INSPECTOR SHALL PERFORM THESE TASKS (TMS 602 TABLE 3)
7. SPECIAL INSPECTION IS NOT REQUIRED FOR WORK PERFORMED BY AN APPROVED FABRICATOR (IBC SECTION 1704.2.5).
8. ALL WELDS SHALL BE VISUALLY INSPECTED.
9. CJP WELDS SHALL BE TESTED ULTRASONICALLY OR BY SIMILAR APPROVED METHOD.
10. INSPECTION FOR PREFABRICATED CONSTRUCTION SHALL BE THE SAME AS IF THE MATERIAL USED IN THE CONSTRUCTION TOOK PLACE ON SITE. CONTINUOUS INSPECTION WILL NOT BE REQUIRED DURING PREFABRICATION IF THE APPROVED AGENCY CERTIFIES THE CONSTRUCTION AND FURNISHES EVIDENCE OF COMPLIANCE.

SP5 SPECIAL INSPECTION PROGRAM:

VERIFICATION AND INSPECTION	FREQUENCY / TASK
MASONRY - LEVEL 2 - CONFORM TO TMS 402 & 602 REQUIREMENTS	
1. PRIOR TO CONSTRUCTION, VERIFICATION OF COMPLIANCE OF SUBMITTALS.	REQ'D
2. PRIOR TO CONSTRUCTION, VERIFICATION OF f'm EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE.	REQ'D
3. DURING CONSTRUCTION, VERIFICATION OF SLUMP FLOW AND VSI WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE.	REQ'D
4. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:	
A. PROPORTIONS OF SITE-PREPARED MORTAR.	PERIODIC
B. GRADE, TYPE, & SIZE OF REINFORCEMENT, CONNECTORS, & ANCHOR BOLTS.	PERIODIC
C. SAMPLE PANEL CONSTRUCTION	PERIODIC
5. PRIOR TO GROUTING, VERIFY THE FOLLOWING ARE IN COMPLIANCE:	
A. GROUT SPACE.	PERIODIC
B. PLACEMENT OF REINFORCEMENT, CONNECTORS, & ANCHOR BOLTS.	PERIODIC
C. PROPORTIONS OF SITE-PREPARED GROUT.	PERIODIC
6. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:	
A. MATERIALS & PROCEDURES WITH THE APPROVED SUBMITTALS.	PERIODIC
B. PLACEMENT OF MASONRY UNITS & MORTAR JOINT CONSTRUCTION.	PERIODIC
C. SIZE & LOCATION OF STRUCTURAL ELEMENTS.	PERIODIC
D. TYPE, SIZE & LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.	PERIODIC
E. WELDING OF REINFORCEMENT.	CONT.
F. PREPARATION, CONSTRUCTION & PROTECTION OF MASONRY DURING COLD WEATHER (TEMP. BELOW 40°F) OR HOT WEATHER (TEMP. ABOVE 90°F).	PERIODIC
E. PLACEMENT OF GROUT.	CONT.
7. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS &/OR PRISMS.	PERIODIC
SOILS	
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH & HAVE REACHED PROPER MATERIAL.	PERIODIC
3. PERFORM CLASSIFICATION & TESTING OF COMPACTED FILL MATERIALS.	PERIODIC
4. DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES & LIFT THICKNESSES DURING PLACEMENT & COMPACTION OF COMPACTED FILL.	CONT.
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE & VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC

CN CONCRETE NOTES

CN1 CONCRETE WORK SHALL CONFORM TO CHAPTER 19 OF THE IBC.

CN2 WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SURFACE SHALL BE CLEANED AND ROUGHENED TO A MINIMUM OF 1/4" AMPLITUDE.

CN3 ALL EXPOSED EDGES OF CONCRETE MEMBERS SHALL BE CHAMFERED 3/4" U.N.O.

CN4 CONCRETE FORMWORK:
CN4.1 SLEEVES, OPENINGS, CONDUIT, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE. CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE THIRD OF THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER.
CN4.2 VERIFY ALL BLOCK OUTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS PRIOR TO POURING.

CN5 CONCRETE REINFORCEMENT:
CN5.1 DETAILING, FABRICATION, AND PLACEMENT OF REINFORCEMENT SHALL CONFORM TO ACI-315.
CN5.2 ALL REINFORCEMENT TO BE ASTM A615 GRADE 60 U.N.O. WELDED WIRE FABRIC TO BE ASTM A185 WITH WIRE CONFORMING TO ASTM A82. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE USING #16 ANNEALED IRON WIRE. REINFORCEMENT SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS, U.N.O.
CN5.3 ALL CONTINUOUS REINFORCING SHALL BE SPLICED USING CLASS B TENSION SPLICES, U.N.O.
CN5.4 BARS IN SLABS SHALL BE SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS, AS SPECIFIED BY THE CRSI MANUAL OF STANDARD PRACTICE, MSP-1.
CN5.5 CONTINUE HORIZONTAL WALL BARS THROUGH PILASTERS, COLUMNS, INTERSECTING WALLS AND INTERSECTING FOUNDATIONS. REFER TO TYPICAL DETAILS FOR LAYOUT OF CORNER BARS AND BARS IN SMALL WALL SECTIONS. SLAB BARS SHALL BE HOOKED INTO WALLS OR HOOKED DOWELS SHALL BE PROVIDED TO MATCH SLAB REINFORCING. PROVIDE HOOKED DOWELS FROM FOOTINGS TO MATCH VERTICAL WALL REINFORCING.
CN5.6 ADD TWO DIAGONAL #5 BARS, FOUR FEET LONG, CENTERED, AT EACH CORNER OF FOUNDATION OR SLAB OPENING, U.N.O.
CN5.7 U.N.O., INSTALL WWF 1 1/2" FROM TOP OF ALL SLABS ON GRADE, TOPPING SLABS ON DECK, OR TOPPING SLABS ON PRECAST. LAP JOINTS TWO FULL MESHES BUT NOT LESS THAN 8". AT CONSTRUCTION JOINTS, LOCATE WWF AT MID DEPTH OF SLAB.

CN6 COVERAGE FOR REINFORCEMENT:
CN6.1 CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH .... 3"
CN6.2 CONCRETE EXPOSED TO EARTH AND WEATHER:
#6 THRU #18 BARS .... 2"
#5 BAR, W31 OR D31 WIRE AND SMALLER .... 1 1/2"
CN6.3 CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS, JOISTS:
#14 AND # 18 ....1 1/2"
#11 BAR AND SMALLER ....3/4"
BEAMS, COLUMNS:
PRIMARY REINFORCEMENT,
TIES, STIRRUPS, SPIRALS .... 1 1/2"

CN7 CONCRETE COMPRESSIVE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39 AND SHALL BE AS FOLLOWS:
FOOTINGS.. f'c = 4,000 PSI
WALLS/PIERS/COLUMNS...................................... f'c = 4,000 PSI
SLABS ON GRADE .... f'c = 4,000 PSI
TOPPING SLABS.. f'c = 4,000 PSI

CN8 SPECIAL INSPECTOR SHALL BE NOTIFIED IF ANY WATER IS TO BE ADDED IN FIELD.

CN9 CONCRETE FOUNDATIONS:
CN9.1 ALL FOUNDATION EXCAVATIONS MUST BE REVIEWED AND APPROVED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
CN9.2 ACCURATELY SET AND SECURELY SUPPORT REINFORCING, DOWELS AND ANCHOR BOLTS PRIOR TO PLACEMENT OF CONCRETE. WET-STICKING OR FLOATING OF REINFORCING,DOWELS AND ANCHOR RODS IS NOT ALLOWED.
CN9.3 PROVIDE CONSTRUCTION JOINTS, INSERTS, SLEEVES, DOWELS, ANCHORS, ETC., AS SHOWN. ITEMS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND ACCORDING TO USUAL ACCEPTED STANDARDS OF THE TRADE. ANCHOR RODS PER ASTM F1554 AS SHOWN.
CN9.4 ALL FOUNDATION COLD JOINTS SHALL BE KEYED. CONTINUOUS REINFORCING SHALL EXTEND ONE DEVELOPMENT LENGTH PLUS 6". LOCATE FOUNDATION COLD JOINTS AT EXPANSION JOINTS IN MASONRY VENEER WHEN POSSIBLE.
CN9.5 REINFORCING SHOWN ON DETAILS IS THE REQUIRED MINIMUM. AT CONTRACTOR'S OPTION AND EXPENSE, ADDITIONAL REINFORCING MAY BE PERMITTED TO ASSIST IN EASE OF CONSTRUCTABILITY ADDITIONAL REINFORCING MUST BE SUBMITTED FOR REVIEW ON SHOP DRAWINGS.

CN10 PROVIDE MINIMUM 6000 PSI NON-SHRINK, NON-METALLIC GROUT UNDER COLUMN BASE PLATES. GROUT SHALL NOT CONTAIN GYPSUM. COLUMN BASES TO BE GROUTED BEFORE PLACEMENT OF CONCRETE TOPPING ON STEEL FORMS.

CN11 MINIMUM 4" CONCRETE SLAB ON GRADE WITH WWF 6X6-W2.1 X W2.1, OVER VAPOR BARRIER, OVER A MINIMUM 6" COMPACTABLE, TRIMMABLE, GRANULAR FILL, TYP. U.N.O. ON DRAWINGS AND GEOTECHNICAL REPORT.

CN12 SLAB CONTROL JOINTS:
CN12.1 PROVIDE SLAB CONTROL JOINTS FOR THE FOLLOWING, U.N.O.:
• SLAB-ON-GRADE ....10' ± 2'
CN12.2 PROVIDE SLAB CONTROL JOINTS ON GRID LINE WHERE PRACTICAL.
CN12.3 MAINTAIN A SLAB CONTROL JOINT ASPECT RATIO OF APPROXIMATELY 1:1.

CN13 PROVIDE VERTICAL WALL JOINTS AS FOLLOWS, U.N.O.:
CN13.1 WALLS SHORTER THAN 8'.................. 3*H
CN13.2 PROVIDE WALL JOINT WITHIN 10' OF ALL CORNERS AND IN LINE WITH EDGES OF ALL WALL OPENINGS.
CN13.3 MAXIMUM WALL JOINT SPACING SHALL NOT EXCEED 25 FEET.

CN14 CONCRETE ACCESSORIES:
CN14.1 U.N.O., DEFORMED BAR ANCHORS (D.B.A.) SHALL BE NELSON, TYPE D2L, OR APPROVED EQUIVALENT AND SHALL BE AUTOMATICALLY END WELDED BY UTILIZING THE MANUFACTURER'S STANDARD EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
CN14.2 U.N.O., EXPANSION BOLTS TO BE HILTI KWIK BOLT TZ OR APPROVED EQUIVALENT WITH EQUAL ICC TENSION AND SHEAR VALUES. EXPANSION ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING INSTALLATION.
CN14.3 U.N.O., EPOXY ANCHORS TO BE HILTI HIT-RE 500 V3 OR APPROVED EQUIVALENT WITH EQUAL ICC TENSION AND SHEAR VALUES. EPOXY ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING INSTALLATION.

CN15 PERMANENTLY EXPOSED EMBEDDED PLATES AND ANGLES TO BE HOT-DIP GALVANIZED AFTER FABRICATION, U.N.O. NO LOADS OR WELDS SHALL BE PLACED ON EMBEDDED PLATES OR ANGLES FOR A MINIMUM OF 7 DAYS AFTER CASTING.

CN16 U.N.O. IN ARCHITECTURAL DRAWINGS, 2" RIGID EXTRUDED POLYSTYRENE PERIMETER INSULATION OR EQUAL TO BE INSTALLED ON INSIDE FACE OF FOUNDATION WALL/GRADE BEAM, EXTENDING DOWN FROM THE TOP OF FOUNDATION 42 INCHES, AND EXTENDING IN FROM THE EDGE OF FOUNDATION 24 INCHES BELOW SLAB.

CN17 EPOXY REPAIR ADHESIVE SHALL CONFORM TO ASTM C881 AND SHALL BE A TWO-COMPONENT, LIQUID EPOXY WITH NON-SAG CONSISTENCY AND A LONG POT LIFE. THE EPOXY ADHESIVE SHALL BE SUITABLE FOR USE IN DRY OR DAMP CONDITIONS. MINIMUM SHEAR STRENGTH SHALL BE 5,000 PSI; MINIMUM TENSILE STRENGTH SHALL BE 4,000 PSI. HOLE SIZES AND INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH THE APPROVED ICC REQUIREMENTS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING PLACEMENT.

CN18 COLD WEATHER PROTECTION
CN18.1 DURING COLD WEATHER CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR PROTECTING CURING CONCRETE PER THE RQMTS. OF ACI 306.
CN18.2 DURING COLD WEATHER CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR PROTECTING FOUNDATIONS THAT DO NOT EXTEND TO FROST DEPTH FROM HEAVING. AT CONTRACTOR'S OPTION, BOTTOM OF FOOTINGS MAY BE EXTENDED BEYOND THE FROST ZONE, IN LIEU OF SURFACE PROTECTION METHODS. NO ADD'L REINFORCING WILL BE REQ'D AT EXTENDED FOUNDATIONS. ALL MITIGATION WORK SHALL BE PART OF THE CONTRACTOR BID AND NOT COMPENSIBLE BY CHANGE ORDER.
CN18.3 CONTRACTOR TO PROVIDE A FROST STOOP PER TYP. STOOP DETAIL @ ALL EXTERIOR DOORS, SEE ARCH. FOR DOOR LOCATIONS.

CN19 EXPOSED CONCRETE:
CN19.1 WHERE SLAB ON GRADE, SLAB, OR TOPPING SLAB IS PERMANENTLY EXPOSED TO VIEW, SLAB SHALL BE WET CURED. SEE ARCH. FOR LOCATIONS. SEE SPECIFICATIONS FOR WET CURING INFORMATION.
CN19.2 WHERE PERMANENTLY EXPOSED TO VIEW, ALL CONCRETE CONTROL JOINTS & COLD JOINTS SHALL BE COORDINATED WITH THE ARCHITECT.
CN19.3 CONTRACTOR SHALL PARTICIPATE IN A PRE-CONSTRUCTION MEETING PRIOR TO ANY CONCRETE POURS WHERE THE CONCRETE SHALL BE PERMANENTLY EXPOSED TO VIEW.
CN19.4 CONCRETE MIXES USED FOR CONCRETE SURFACES PERMANENTLY EXPOSED TO VIEW SHALL NOT INCLUDE DELETERIOUS MATERIAL WHICH MAY CAUSE FINISHED SURFACE IRREGULARITIES.
CN19.5 CONCRETE FINISHES PERMANENTLY EXPOSED TO VIEW SHALL BE PLACED AND FINISHED ACCORDING TO ACI 347.3R AND TABLE BELOW:

EXPOSED CONCRETE FINISH SCHEDULE	
EXPOSED CONCRETE ELEMENT	REQ'D. CONCRETE SURFACE CATEGORY (CSC)
WALLS (ABOVE BASEMENT)	CSC3
UNLESS NOTED OTHERWISE	CSC2

CM CONCRETE MASONRY NOTES

CM1 CONCRETE MASONRY WORK SHALL CONFORM TO CHAPTER 21 OF THE IBC.

CM2 ALL WALLS ARE NOMINAL 8" CMU STACKED WITH A RUNNING BOND PATTERN UNLESS NOTED OTHERWISE ON THE DRAWINGS. JOINT REINFORCING SHALL NOT EXTEND THROUGH CONTROL JOINTS. BOND BEAM REINFORCING SHALL BE CONTINUOUS THROUGH CONTROL JOINTS. INTERSECTING WALLS SHALL BE BONDED BY OVERLAPPING COURSES.

CM3 ALL UNITS SHALL BE NORMAL WEIGHT CONCRETE MASONRY W/ MINIMUM COMPRESSIVE STRENGTH = 2,000 PSI (ASSEMBLY f'm = 2,000 PSI) AND CONFORM TO ASTM C90. UNITS SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH ASTM C140. LINEAR SHRINKAGE FOR UNITS SHALL NOT EXCEED 0.065%. CONCRETE MASONRY WALLS SHALL BE REINFORCED AS SHOWN ON THE PLANS AND DETAILS AND, IF NOT SHOWN, SHALL BE REINFORCED AS NOTED BELOW.

CM4 CONCRETE MASONRY REINFORCEMENT:
CM4.1 REINFORCING STEEL SHALL CONFORM TO IBC SECTION 2103.4. REBAR REINFORCEMENT SHALL BE ASTM A615 GRADE 60 U.N.O. AND SHALL BE SECURELY PLACED IN ACCORDANCE WITH ACI 530.1 SECTION 3.4. TIES AND STIRRUPS SHALL BE ASTM A615 GRADE 40 (MIN.). PROVIDE MINIMUM LAP FOR REINFORCING BARS PER ACI 530 (48 BAR DIAMETERS, WITH A MINIMUM OF 18").
CM4.2 JOINT REINFORCING SHALL BE ASTM A82, LADDER OR TRUSS TYPE DESIGN, NO. 9 WIRE AT SIDES AND CROSS RODS. INSTALL CONTINUOUS JOINT REINFORCING 16" ON CENTERS VERTICALLY. INSTALL CONTINUOUS JOINT REINFORCING IN THE FIRST AND SECOND BED JOINTS ABOVE AND BELOW OPENINGS AND EXTEND REINFORCING 24" BEYOND EACH SIDE OF OPENING. LAP JOINT REINFORCING SPLICES A MINIMUM OF 6 INCHES.
CM4.3 CONTINUOUS BOND BEAMS REINFORCED WITH (2) #5 CONTINUOUS BARS SHALL BE PROVIDED AT ALL FLOOR AND ROOF LINES, AT THE TOP OF WALLS AND AT INTERMEDIATE STAIR LANDING LEVELS. STEP BOND BEAMS AS REQUIRED TO MATCH ROOF SLOPES. CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS U.N.O. AT OPENINGS WHERE A STRUCTURAL STEEL HEADER IS NOT SHOWN ON PLAN OR HEADER SCHEDULE, SEE NOTE CM8. PROVIDE A BOND BEAM REINFORCED W/ (2) #5 BARS AT SILL LOCATIONS. EXTEND BARS AT OPENINGS 2'-0" PAST THE OPENING AT EACH SIDE. PROVIDE (1) BAR, MATCHING VERTICAL BAR SIZE, FOR THE FULL HEIGHT OF THE WALL AT EACH SIDE OF OPENINGS, WALL ENDS, AND WALL INTERSECTIONS, U.N.O.
CM4.4 DOWELS TO MASONRY WALLS SHALL BE EMBEDDED A MINIMUM OF 1'-6" OR HOOKED INTO THE SUPPORTING STRUCTURE AND BE OF THE SAME SIZE AND SPACING AS WALL REINFORCING. PROVIDE CORNER BARS TO MATCH THE HORIZONTAL WALL REINFORCING AT WALL INTERSECTIONS.
CM4.5 ALL EXTERIOR MASONRY WALLS AND INTERIOR LOAD BEARING MASONRY WALLS SHALL BE REINFORCED WITH #5 BARS VERTICAL, CENTERED IN WALL, AT 48" O.C. UNLESS NOTED OTHERWISE IN THE PLANS AND SECTIONS.
CM4.6 NON-LOAD BEARING MASONRY WALLS (NOT SHOWN ON STRUCTURAL DRAWINGS) SHALL BE REINFORCED WITH #4 BARS VERTICAL, CENTERED IN WALL, AT 96" O.C. UNLESS NOTED OTHERWISE IN THE PLANS AND SECTIONS. SEE ARCH. FOR NON-LOAD BEARING MASONRY WALL LOCATIONS.
CM4.7 PROVIDE 9 GA. GALV. REBAR POSITIONERS TO ACCURATELY LOCATE VERTICAL REINFORCING BARS WITHIN WALLS.

CM5 VERTICAL CONTROL JOINTS:
CM5.1 SHALL BE SPACED USING THE LESSER OF A 1.5:1 LENGTH TO HEIGHT RATIO OR 25 FT ON CENTER. COORDINATE JOINT LOCATIONS w/ ARCH. DRAWINGS.
CM5.2 LOCATE VERTICAL CONTROL JOINTS A MINIMUM OF 8" AWAY FROM HEADER BEARING LOCATIONS
CM5.3 LOCATE VERTICAL CONTROL JOINTS ADJACENT TO CORNERS OR WALL INTERSECTIONS WITHIN A DISTANCE EQUAL TO HALF THE CONTROL JOINT SPACING LISTED IN NOTE CM5.
CM5.4 BOND BEAM REINFORCING SHALL BE CONTINUOUS THROUGH CONTROL JOINTS.

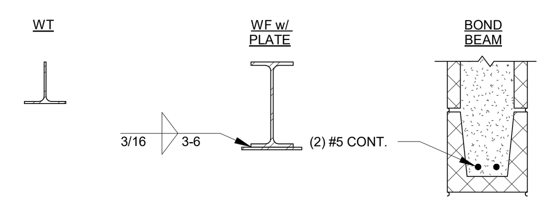
CM6 UNLESS NOTED OTHERWISE, MORTAR SHALL BE TYPE S AND SHALL CONFORM TO IBC SECTION 2103 AND ASTM C270. MORTAR BED JOINT THICKNESS SHALL NOT EXCEED 5/8".

CM7 GROUT:
CM7.1 GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI (TYPE S) AND SHALL CONFORM TO IBC SECTION 2103 AND ASTM C476. GROUT SHALL CONSIST OF A MIXTURE OF CEMENTITIOUS MATERIALS AND AGGREGATE TO WHICH SUFFICIENT WATER HAS BEEN ADDED TO CAUSE THE MIXTURE TO FLOW WITHOUT SEGREGATION OF THE CONSTITUENTS.
CM7.2 GROUT CELLS SOLID AT REINFORCING, BOND BEAMS, INSERTS, ANCHORS, ELEVATOR GUIDE RAILS, AND 24" BELOW BEARING POINT OF STEEL SECTIONS AND 12" TO EACH SIDE. CELLS WHICH ARE TO RECEIVE GROUT ARE TO BE FREE OF PROTRUDING MORTAR AND DROPPINGS. GROUT BOND BEAMS OVER OPENINGS IN ONE CONTINUOUS POUR. SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT BEFORE GROUTING.
CM7.3 CONSOLIDATE GROUT AT THE TIME OF PLACEMENT. GROUT POURS ≤ 12" TO BE CONSOLIDATED BY MECHANICAL VIBRATION OR BY PUDDLING. GROUT POURS > 12" TO BE CONSOLIDATED BY MECHANICAL VIBRATION AND RECONSOLIDATED BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.

CM8 PROVIDE MASONRY HEADERS OVER OPENINGS LARGER THAN 12" IN LENGTH AS INDICATED IN SCHEDULE BELOW, U.N.O. HEADERS SHALL BEAR 8" ON EACH SIDE OF OPENING. PERMANENTLY EXPOSED STEEL HEADERS TO BE HOT-DIP GALVANIZED AFTER FABRICATION, U.N.O.

CM8.1 ALL STEEL HEADERS OVER 6'-0" LONG SHALL HAVE #5 DBA x 2'-6" SPACED TO MATCH WALL REINFORCING.

		MAXIMUM MASONRY OPENING		
		4'-0"	8'-0"	12'-0"
WALL THICKNESS	6"	WT4x9	WT5x15	---
	8"	W8x10 w/ PL 5/16x7 - OR - (1) COURSE BOND BEAM	W8x10 w/ PL 5/16x7 - OR - (2) COURSE BOND BEAM	W16x31 w/ PL 5/16x7
	10"	W8x10 w/ PL 5/16x9 - OR - (1) COURSE BOND BEAM	W8x10 w/ PL 5/16x9 - OR - (2) COURSE BOND BEAM	W16x31 w/ PL 5/16x9
	12"	W8x10 w/ PL 5/16x11 - OR - (1) COURSE BOND BEAM	W8x15 w/ PL 5/16x11 - OR - (2) COURSE BOND BEAM	W16x31 w/ PL 5/16x11



SD STEEL DECKING NOTES

SD1 STEEL ROOF DECK SHALL COMPLY WITH CHAPTER 22 OF THE IBC.

SD1.1 STEEL FLOOR DECK SHALL CONFORM TO ASTM A653 DESIGNATION SS, GRADE 50 MINIMUM WITH 50 KSI MINIMUM YIELD STRENGTH. FLOOR DECK SHALL BE COATED WITH GALVANIZATION CONFORMING TO ASTM A653, G60 (G90 WHERE LEFT PERMANENTLY EXPOSED TO WEATHER).

SD1.2 DECKING THAT IS TO RECEIVE FIREPROOFING SHALL BE EITHER GALVANIZED OR PRIMED IN ACCORDANCE WITH ASTM E736 AND UL 263.

SD2 MINIMUM DECK GA. SHOWN ON PLANS ARE BASED ON 2-SPAN, UNSHORED CONDITIONS, AND MIN. PROPERTIES AS FOLLOWS:

SD2.1 FLOOR DECK - VULCRAFT 2.0C, 20 GA., PAINTED.
Sp = 0.326 IN^3
Sn = 0.337 IN^3
Ip = 0.402 IN^4
In = 0.402 IN^4
Fy = 50 KSI

SD3 U.N.O. BY DECK MANUFACTURER, DECK SHALL BE STORED OFF THE GROUND WITH ONE END ELEVATED TO PROVIDE DRAINAGE AND SHALL BE PROTECTED FROM THE ELEMENTS WITH A WATERPROOF COVERING, VENTILATED TO AVOID CONDENSATION.

SD4 PANEL WELDS:
SD4.1 FLOOR DECK:
PANEL WELD LAYOUT SHALL BE **36/4** PATTERN. SIDE LAPS TO BE WELDED OR BUTTON PUNCHED AT MAXIMUM **36 IN.** CENTERS BETWEEN SUPPORTS.
SD4.2 U.N.O., DECKING IS TO BE ATTACHED TO SUPPORTS WITH 5/8" DIAMETER PUDDLE WELDS AT SPECIFIED LAYOUT PANEL ENDS, INTERMEDIATE SUPPORTS, AND PANEL LAPS. SHEAR STUDS REQUIRED ON COMPOSITE BEAMS MAY BE CONSIDERED EQUIVALENT TO ABOVE DECK WELDS ON A ONE TO ONE BASIS.

SD5 END LAPS MUST OCCUR OVER SUPPORTS, w/ ENDS OF PANELS EXTENDING PAST CENTERLINE OF SUPPORTS.

SD6 FIELD CUT & TRIM TO SUIT WHERE REQUIRED.

SD7 SEE PLAN AND SECTIONS FOR POUR STOP FABRICATION DETAILS. SEE ARCHITECTURAL FLOOR PLAN FOR SECTIONS INDICATING EXACT LOCATION OF POUR STOPS.

SD8 LIMIT HANGING POINT LOADS ON COMPOSITE FLOOR DECK TO 250 LBS (5'-0" O.C. MINIMUM SPACING IN ANY DIRECTION). HANGERS MUST BE SUPPORTED BY CAST IN PLACE ANCHORS APPROVED BY THE STRUCTURAL ENGINEER.

ALL OTHER HANGERS FOR CEILINGS, PIPES, DUCTS, EQUIPMENT, ETC. SHALL BE SUPPORTED BY SUB-FRAMING DESIGNED BY THE CONTRACTOR.

SF STEEL FRAMING NOTES

SF1 STEEL FRAMING WORK SHALL COMPLY WITH CHAPTER 22 OF THE IBC.

SF2 STEEL FRAMING MATERIALS:
SF2.1 W-SECTIONS, CHANNELS
ASTM A992 FY=50,000 PSI
SF2.2 TUBULAR STEEL
ASTM A500 GR C FY=50,000 PSI
SF2.3 M-SECTIONS, S-SECTIONS, HP-SECTIONS
ASTM A572 FY=50,000 PSI
SF2.4 ANGLES, PLATES
ASTM A572 FY=50,000 PSI
SF2.5 PIPES
ASTM A53 GR B FY=35,000 PSI
SF2.6 ANCHOR RODS
ASTM F1554 FY=36,000 PSI UNO
SF2.7 WELDING ELECTRODES
E70XX

SF3 STEEL ERECTION SHALL COMPLY WITH ALL OSHA, STATE, LOCAL, AND INDUSTRY STANDARD REGULATIONS. IN ADDITION, AT THE END OF THE WORK DAY, ALL COLUMNS MUST BE FRAMED WITH BEAMS AND/OR GIRDERS IN TWO DIRECTIONS, OR ADEQUATELY GUYED OR BRACED IN BOTH DIRECTIONS. TEMPORARY GUYING/BRACING IS THE RESPONSIBILITY OF THE ERECTOR (DESIGN AND INSTALLATION).

SF4 DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC STEEL CONSTRUCTION MANUAL, AISC 360-16 INCLUDING COMMENTARY, AND THE AISC 303-16.

SF5 ALL BOLTS FOR STEEL CONNECTIONS TO BE INSTALLED PER AISC 360 AND RCSC.
SF5.1 ALL BOLTS TO BE ASTM A325-N U.N.O.
SF5.2 BOLTS USED IN STEEL JOIST CONSTRUCTION MAY BE ASTM A307
SF5.3 ALL BOLTS SHALL BE INSTALLED SNUG-TIGHT U.N.O.
SF5.4 ALL BOLTS IN BRACED FRAME CONNECTIONS TO BE PRETENSIONED U.N.O.

SF6 WELDING SHALL CONFORM TO THE AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDED PROCEDURE SPECIFICATION (WPS) AS REQUIRED IN AWS D1.1 AND APPROVED BY THE STRUCTURAL ENGINEER. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL MANUFACTURER.

SF7 WELDS SHALL BE MADE USING E70XX ELECTRODES AND SHALL BE 3/16" MINIMUM, U.N.O. ALL WELDING FOR STRUCTURAL STEEL CONNECTIONS TO BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.

SF8 ALL STEEL BEAMS, COLUMNS AND BRACING SHALL RECEIVE A SINGLE COAT OF SHOP APPLIED PRIMER, WITH THE FOLLOWING EXCEPTIONS:
SF8.1 GALVANIZED BEAMS SHALL NOT BE PRIMED.
SF8.2 STEEL THAT IS TO RECEIVE SPRAY-APPLIED FIREPROOFING (SEE ARCH. FOR LOCATIONS) SHALL NOT BE PRIMED OR SHALL BE PRIMED IN ACCORDANCE w/ ASTM E736 AND UL 263.
SF8.3 STEEL THAT IS TO RECEIVE TNEMEC AEROLON SHALL NOT BE PRIMED.

SF9 HOT-DIP GALVANIZE STEEL FOR THE FOLLOWING CONDITIONS:
SF9.1 STEEL ELEMENTS PERMANENTLY EXPOSED TO WEATHER.
SF9.2 STEEL ELEMENTS LOCATED IN UNCONDITIONED SPACES.
SF9.3 STEEL ELEMENTS LOCATED OUTSIDE THE BUILDING THERMAL ENVELOPE.
SF9.4 STEEL ELEMENTS LOCATED IN AREAS WITH HIGH HUMIDITY.
SF9.5 WHERE PIECES REQUIRING GALVANIZATION ARE PART OF A LARGER ASSEMBLY, THE HOT-DIPPING PROCESS IS TO OCCUR AFTER COMPLETE FABRICATION OF THE ASSEMBLY.
SF9.6 STEEL THAT IS TO RECEIVE TNEMEC AEROLON SHALL NOT BE GALVANIZED.

SF10 CONNECTIONS:
SF10.1 WHERE CONNECTIONS ARE NOT SHOWN, THE CONNECTIONS SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE REQUIREMENTS OF AISC SPECIFICATIONS FOR THE SHEAR CAPACITIES SHOWN BELOW:

MINIMUM SHEAR CAPACITIES (SERVICE LOADS)			
SHAPE	SHEAR CAPACITY	SHAPE	SHEAR CAPACITY
W8	16 KIPS	W21	59 KIPS
W10	16 KIPS	W24	72 KIPS
W12	28 KIPS	W27	84 KIPS
W14	28 KIPS	W30	94 KIPS
W16	41 KIPS	W33	103 KIPS
W18	53 KIPS	W36	115 KIPS

SF10.2 ANY CONNECTION REACTIONS EXCEEDING THE ABOVE MINIMUM SHEAR CAPACITIES ARE NOTED, IN KIPS, AT EITHER END OF THE MEMBER ON THE STRUCTURAL FRAMING PLANS.
SF10.3 NO CONNECTION SHALL USE LESS THAN 2 ROWS OF BOLTS.
SF10.4 ALL CONNECTIONS SHALL SATISFY THE REQUIREMENTS OF AISC AND OSHA.
SF10.5 U.N.O., POCKET BEAMS 8" MIN. INTO MASONRY AND BEAR ON 3/4" GROUT, MIN. ANCHOR WITH (2) 3/4"Φ x 1'-4" HEADED ANCHOR BOLTS. SLOT HOLES IN BEAM FLANGE 2" PARALLEL TO BEAM SPAN. GROUT POCKETS SOLID.
SF10.6 AT STEEL CONNECTIONS WITH POST INSTALLED ANCHORS, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT THE HOLE DIAMETERS COMPLY WITH THE MANUFACTURER'S RECOMMENDED DRILL BIT DIAMETER.

SF11 DUE TO VARYING BEAM DEFLECTIONS AND CAMBERS, CONTRACTOR SHALL MAKE PROVISIONS FOR ADDITIONAL CONCRETE AS REQUIRED TO ACHIEVE A FLAT FLOOR SURFACE.

SF12 WHERE OPENINGS FOR DUCTS, MECHANICAL EQUIPMENT, ETC., OCCUR IN FLOOR SLAB, PROVIDE BOX-OUTS ON TOP OF METAL DECKING PRIOR TO PLACING CONCRETE SLAB. AFTER INSTALLATION OF MECHANICAL DUCTS & ETC. (THRU BOX-OUTS), PLACE REMAINDER OF CONCRETE FLOOR.

WF WOOD FRAMING NOTES

WF1 WOOD FRAMING WORK SHALL COMPLY WITH CHAPTER 23 OF THE IBC.

WF2 THE QUALITY OF WOOD PRODUCTS AND FASTENERS, AND THE DESIGN OF LOAD-SUPPORTING MEMBERS AND CONNECTIONS, SHALL CONFORM TO THE STANDARDS SPECIFIED IN THE AWC NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION AND ITS SUPPLEMENT DESIGN VALUES FOR WOOD CONSTRUCTION.

WF3 COORDINATE WOOD NAILERS AND BLOCKING LOCATIONS WITH NEED AND REQUIREMENTS OF OTHER WORK INVOLVED.

WF4 PROVIDE SOLID BLOCKING BETWEEN SAWN JOISTS AT ALL SUPPORTS AND AT MIDSPAN OF JOISTS EXCEEDING 8 FEET (8 FEET ON-CENTER MAXIMUM SPACING FOR BLOCKING).

WF5 GIRDER TRUSSES SHALL BEAR DIRECTLY OVER WALL STUDS. NUMBER OF STUDS SHALL MATCH THE NUMBER OF PLIES IN THE GIRDER TRUSS (MINIMUM OF TWO STUDS), U.N.O.

WF6 CUTTING AND NOTCHING OF BEAMS, JOISTS, OR STRUCTURAL STUDS IS NOT ALLOWED UNLESS APPROVED BY THE EOR

WF7 SALVAGED LUMBER SHALL BE GRADED BY AN APPROVED GRADING AGENCY PRIOR TO USE AND SHALL MEET THE MINIMUM STRESSES SHOWN BELOW.

WF8 WOOD FRAMING MATERIALS (MINIMUM DESIGN VALUES):
WF8.1 SAWN LUMBER:
WF8.1 FRAMING MEMBERS (BEAMS, STUDS, ETC.)
DOUGLAS FIR-LARCH NO. 2
Fb = 900 PSI
Ft = 575 PSI
Fv = 180 PSI
Fcp = 625 PSI
Fc = 1,350 PSI
E = 1,600,000 PSI

WF8.2 LAMINATED VENEER LUMBER (LVL):
GRADE 1.9E
Fb = 2,600 PSI
Ft = 1,555 PSI
Fv = 285 PSI
Fcp = 750 PSI
Fc = 2,510 PSI
E = 1,900,000 PSI

WF9 WOOD STRUCTURAL PANELS
WF9.1 WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS OF U.S. PRODUCT STANDARD PS1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD, U.S. PRODUCT STANDARD PS2 PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS, OR APA PRP-108 PERFORMANCE STANDARDS.
WF9.2 WOOD STRUCTURAL PANEL INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER.
WF9.3 SHEAR WALL SHEATHING SHALL BE PLYWOOD OR OSB CONFORMING TO THE REQUIREMENTS FOR ITS TYPE SPECIFIED IN DOC PS1 OR PS2. SHEATHING SHALL BE APPLIED EITHER HORIZONTALLY OR VERTICALLY. SHEET SIZES SHALL BE 48"x96" UNLESS AT BOUNDARIES OR FRAMING CHANGES.
WF9.4 WALL SHEATHING (SEE SHEAR WALL SCHEDULE):
15/32" CDX, APA RATED SHEATHING, 32/16 EXP. I
OR 15/32" OSB, APA RATED SHEATHING, 32/16, EXP. I
WF9.5 ROOF SHEATHING (SEE DIAPHRAGM SCHEDULE):
5/8" OSB OR CDX, APA RATED SHEATHING, 40/20, EXP. I
WF9.7 WOOD STRUCTURAL PANELS USED AS SUBFLOOR, ROOF, OR WALL SHEATHING SHALL BE FASTENED TO FRAMING MEMBERS AS FOLLOWS, U.N.O.:
10d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES, 12" O.C. AT INTERMEDIATE SUPPORTS.
-OR-
2 7/8" X .12" NAILS SPACED AT 4" O.C. AT PANEL EDGES, 8" O.C. AT INTERMEDIATE SUPPORTS.
-OR-
2 3/4" 14 GAGE STAPLES SPACED AT 4" O.C. AT PANEL EDGES, 8" O.C. AT INTERMEDIATE SUPPORTS.
WF9.8 ALL SHEAR WALL PANEL SHEATHING EDGES SHALL BE BLOCKED. EDGE NAILS SHALL BE AT LEAST 3/8" FROM EDGES AND PANEL ENDS. STAGGER NAILING ON EDGES.
WF9.9 ALL ROOF SHEATHING SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS, U.N.O. ROOF SHEATHING SHALL EITHER BE BLOCKED, TONGUE-AND-GROOVE, OR HAVE EDGES SUPPORTED BY PLYCLIPS. WHEN ROOF SHEATHING IS NAILED DIRECTLY TO BLOCKING, THE BLOCKING SHALL BE NAILED TO SUPPORT MEMBERS WITH A MINIMUM OF 16d NAILS AT 4" O.C.
WF9.10 NAIL HEADS SHALL BE DRIVEN FLUSH WITH SHEATHING. DO NOT PENETRATE SURFACE PLY WITH NAIL HEADS. IF NAIL HEADS ARE NOT FLUSH, NOTIFY STRUCTURAL ENGINEER OF RECORD.

WF10 NAILS AND STAPLES SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1667. FASTENER TYPES AND SPACINGS SHALL BE AS INDICATED IN IBC TABLE 2304.10.1 OR ESR-1539, U.N.O.

WF11 ALL FRAMING NAILS SHALL BE OF THE SIZE AND NUMBER INDICATED IN THE DRAWINGS AND CONFORM TO ASTM F1667 AND ESR-1539. NAILS SHALL BE IDENTIFIED BY LABELS (ATTACHED TO THEIR CONTAINERS) THAT SHOW THE MANUFACTURER'S NAME, NES REPORT NUMBER, NAIL SHANK DIAMETER, AND LENGTH. THIS INFORMATION ALSO SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD PRIOR TO FRAMING. NAILING NOT SHOWN SHALL BE AS INDICATED IN IBC TABLE 2304.10.1 OR ESR-1539. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MIN. DIMENSIONS INDICATED IN THE TABLE BELOW:

COMMON NAIL SCHEDULE		
PENNYWEIGHT	LENGTH (IN.)	DIAMETER (IN.)
6d	2.00	0.113
8d	2.50	0.131
10d	3.00	0.148
16d	3.50	0.162
20d	4.00	0.192

WF WOOD FRAMING NOTES, CONTINUED

WF12 BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1. BOLT HOLES SHALL BE A MINIMUM OF 1/32" AND NO MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER. ALL BOLTS AND LAG SCREWS SHALL BE INSTALLED WITH STANDARD CUT WASHERS. ALL A307 BOLTS SHALL HAVE CUT THREADS.

WF13 METAL FRAMING CONNECTORS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE CO. ALL SPECIFIED FASTENERS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. BEFORE SUBSTITUTING ANOTHER BRAND, CONFIRM LOAD CAPACITY BASED ON RELIABLE PUBLISHED TESTING DATA OR CALCULATIONS. THE ENGINEER OF RECORD SHALL EVALUATE AND GIVE WRITTEN APPROVAL FOR SUBSTITUTION PRIOR TO INSTALLATION. HANGERS NOT SHOWN SHALL BE SIMPSON U-TYPE OR B-TYPE OF SIZE RECOMMENDED FOR THE MEMBER.

WF14 ALL INTERIOR METAL FRAMING CONNECTORS SHALL RECEIVE G90 ZINC COATING, UNO. ALL METAL FRAMING CONNECTORS AND FASTENERS INSTALLED IN EXTERIOR CONDITIONS SHALL RECEIVE G185 (SIMPSON ZMAX) COATING OR APPROVED EQUIVALENT. ALL METAL FRAMING CONNECTORS AND FASTENERS SHALL BE COMPATIBLE WITH THE APPLIED WOOD TREATMENT.

WF15 WOOD FRAMING THAT IS IN DIRECT CONTACT WITH CONCRETE OR MASONRY TO BE PRESSURE TREATED PER AWPA U1.

WF16 CONTRACTOR IS RESPONSIBLE TO MAKE PROVISIONS TO ALLOW FOR FLOOR/ROOF FRAMING DEFLECTIONS AT NON LOAD-BEARING WALLS. COORDINATE WITH ALLOWABLE FRAMING DEFLECTIONS ON GENERAL NOTES AND TRUSS SHOP DRAWINGS (IF APPLICABLE).

WOOD FASTENER SCHEDULE

NUMBER OR SPACING OF FASTENERS REQUIRED PER CONNECTION

CONNECTION/LOCATION	minimum nominal nail length (inches) x minimum nominal nail shank diameter (inches)								
	3 1/2 x 0.162	3 x 0.148	3 1/4 x 0.131	3 x 0.131	2 1/2 x 0.131	3 1/4 x 0.120	3 x 0.120	2 3/8 x 0.113	2 x 0.113
Joist to band joist / face nail	3	5	5	5	N/A	6	6	N/A	N/A
Ledger strip / face nail	3	4	4	4	6	4	4	N/A	N/A
Joist to sill or girder / toe-nail	3	3	3	4	3	4	4	N/A	N/A
Blocking between joist or rafter to top plate / toe-nail	3	3	3	4	3	4	4	N/A	N/A
Bridging to joist / toe-nail each end	N/A	N/A	N/A	N/A	2	3	3	3	4
Rim joist to top plate / toe-nail	8" o.c.	6" o.c.	6" o.c.	6" o.c.	6" o.c.	6" o.c.	4" o.c.	6" o.c.	3" o.c.
Built-up girders and beams / face nail at top and bot. staggered each side of each layer	24" o.c. (3 ea. end and splice)	24" o.c. (3 ea. end and splice)	24" o.c. (3 ea. end and splice)	24" o.c. (3 ea. end and splice)	16" o.c. (4 ea. end and splice)	16" o.c. (3 ea. end and splice)	16" o.c. (3 ea. end and splice)	N/A	N/A
Ceiling joist to plate / toe-nail	3	4	5	5	5	5	5	6	N/A
Ceiling joists laps over partitions / face nail	3	4	4	4	6	4	4	N/A	N/A
Ceiling joist to parallel rafter / face nail	3	4	4	4	6	4	4	N/A	N/A
Collar tie to rafter / face nail	3	3	4	4	5	4	4	N/A	N/A
Jack rafter to hip / toe-nail	3	3	4	4	5	4	4	N/A	N/A
Jack rafter to hip / face nail	2	3	3	3	3	4	4	N/A	N/A
Roof rafter to plate / toe nail	3	3	3	3	3	4	4	5	5
Roof rafter to 2x ridge beam / face nail through beam into end of rafter	2	3	3	3	N/A	4	4	N/A	N/A
Roof rafter to 2x ridge beam / toe-nail	2	3	3	3	3	4	4	N/A	N/A
Top or sole plate to stud / end nail	2	3	3	3	5	4	4	N/A	N/A
Stud to top or sole plate / toe-nail	3	4	4	4	4	4	4	5	5
Top plate laps and intersections / face nail each side of lap	2	3	3	3	4	3	3	N/A	N/A
Diagonal bracing / face nail each stud	2	2	2	2	2	3	3	3	4
Sole plate to joist or blocking / face nail	16" o.c.	8" o.c.	8" o.c.	8" o.c.	6" o.c.	8" o.c.	8" o.c.	N/A	N/A
Sole plate to joist or blocking at braced wall panel / face nail (number per 16" joist space)	2	3	3	4	N/A	4	4	N/A	N/A
Double top plate / face nail	16" o.c.	16" o.c.	12" o.c.	12" o.c.	8" o.c.	12" o.c.	12" o.c.	N/A	N/A
Double studs / face nail	12" o.c.	12" o.c.	8" o.c.	8" o.c.	6" o.c.	8" o.c.	8" o.c.	N/A	N/A
Corner studs / face nail	24" o.c.	16" o.c.	16" o.c.	16" o.c.	8" o.c.	12" o.c.	12" o.c.	N/A	N/A

N/A - Fastener not applicable to connection

TYPICAL STRUCTURAL ABBREVIATIONS
(PERIODS w/ ABBREVIATIONS MAY BE OMITTED WITHOUT CHANGING MEANING).

& AND
@ AT
A.B. ANCHOR BOLT
A.C.I. AMERICAN CONCRETE INSTITUTE
A.E.S.S. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
A.I.S.C. AMERICAN INSTITUTE OF STEEL CONSTRUCTION
A.S.T.M. AMERICAN SOCIETY FOR TESTING AND MATERIALS
ADD. ADDENDUM
ADD'L. ADDITIONAL
ALT. ALTERNATE
ARCH. ARCHITECTURAL

B.P. BASE PLATE
B/ BOTTOM OF
BLDG. BUILDING
BRG. BEARING

C.I.P. CAST IN PLACE
C.J. CONSTRUCTION JOINT
C.M.U. CONCRETE MASONRY UNIT
C.P. COMPLETE PENETRATION
CL CENTERLINE
CLG. CEILING
CLR. CLEAR
CONC. CONCRETE
CONN. CONNECTION
CONST. CONSTRUCTION
CONT. CONTINUOUS

CONTR. CONTRACTOR

D.B.A. DEFORMED BAR ANCHOR
D.L. DEAD LOAD
DET. DETAIL
DIA. or Φ DIAMETER
DIAG. DIAGONAL
DIM. DIMENSION
DN. DOWN
DWGS. DRAWINGS

E.F. EACH FACE
E.J. EXPANSION JOINT
E.W. EACH WAY
EA. EACH
EL. ELEVATION
ELEC. ELECTRICAL
EQ. EQUAL
EXT. EXTERIOR

F.S. FAR SIDE
FIN. FINISH
FM FOUNDATION MISCELLANEOUS
FNDN. FOUNDATION
FT FOOT/FEET

GA. GAGE
GALV. GALVANIZED
GC. GENERAL CONTRACTOR

H.P. HIGH POINT
HORIZ. HORIZONTAL
HT. HEIGHT

I.B.C. INTERNATIONAL BUILDING CODE
IN. INCH/INCHES
INT. INTERIOR

K or k KIP

L ANGLE
L.L LIVE LOAD
L.L.H. LONG LEG HORIZONTAL
L.L.V. LONG LEG VERTICAL
L.P. LOW POINT
LB. POUND
L.S.H. LONG SIDE HORIZONTAL
L.S.V. LONG SIDE VERTICAL
LONG. LONGITUDINAL
LT. GA. LIGHT GAGE

M.E.P. MECHANICAL, ELECTRICAL, PLUMBING
M.S.J.C. MASONRY STANDARDS JOINT COMMITTEE

MAX. MAXIMUM
MECH. MECHANICAL
MFR. MANUFACTURER
MIN. MINIMUM
MISC. MISCELLANEOUS
MTL. METAL

N.D.S. NATIONAL DESIGN SPECIFICATION
N.I.C. NOT IN CONTRACT
N.S. NEAR SIDE
N.T.S. NOT TO SCALE

O.C. ON CENTER
O.S.H.A. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
O.W.J. OPEN WEB JOIST
OPNG. OPENING
OPP. OPPOSITE

P.C.I. PRECAST/PRESTRESSED CONCRETE INSTITUTE
P.P. PARTIAL PENETRATION
P.S.I. POUNDS PER SQUARE INCH
P.S.F. POUNDS PER SQUARE FOOT
P.C.F. POUNDS PER CUBIC FOOT
PL PLATE
PLBG. PLUMBING

QTY. QUANTITY

R or RAD. RADIUS
REF. REFERENCE
REINF. REINFORCING
REQ'D. REQUIRED
REV. REVISION
RRE RAKER RHODES ENGINEERING

S.D.I. STEEL DECK INSTITUTE
S.J.I. STEEL JOIST INSTITUTE
S.O.G. SLAB ON GRADE
SCHED. SCHEDULE
SIM. SIMILAR
SPA. SPACING/SPACES
SPECS. SPECIFICATIONS
STD. STANDARD
STRUC. STRUCTURAL

T/ TOP OF
TYP. TYPICAL
U.N.O. UNLESS NOTED OTHERWISE

VERT. VERTICAL
V.I.F. VERIFY IN FIELD (FIELD VERIFY)

w/ WITH
w/o WITHOUT
W.F. WIDE FLANGE
W.P. WORKPOINT
W.W.F. WELDED WIRE FABRIC

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08/20/2025
PROJECT NO: R3007.090.00

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STRUCTURAL NOTES

S00.01

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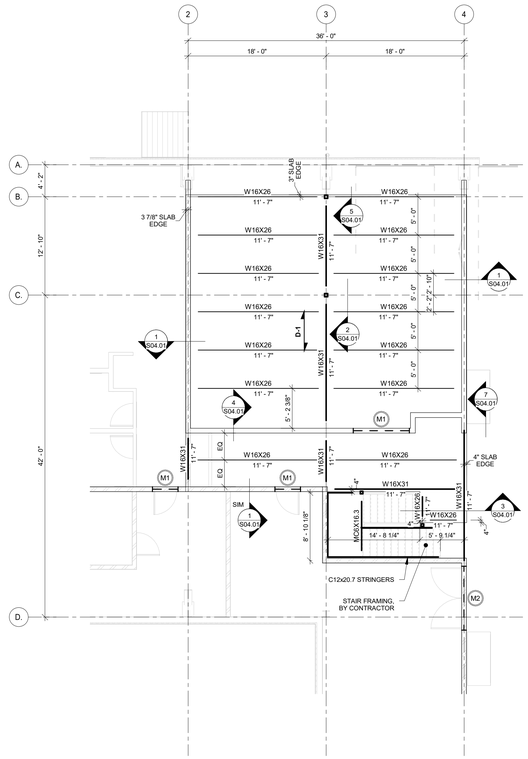
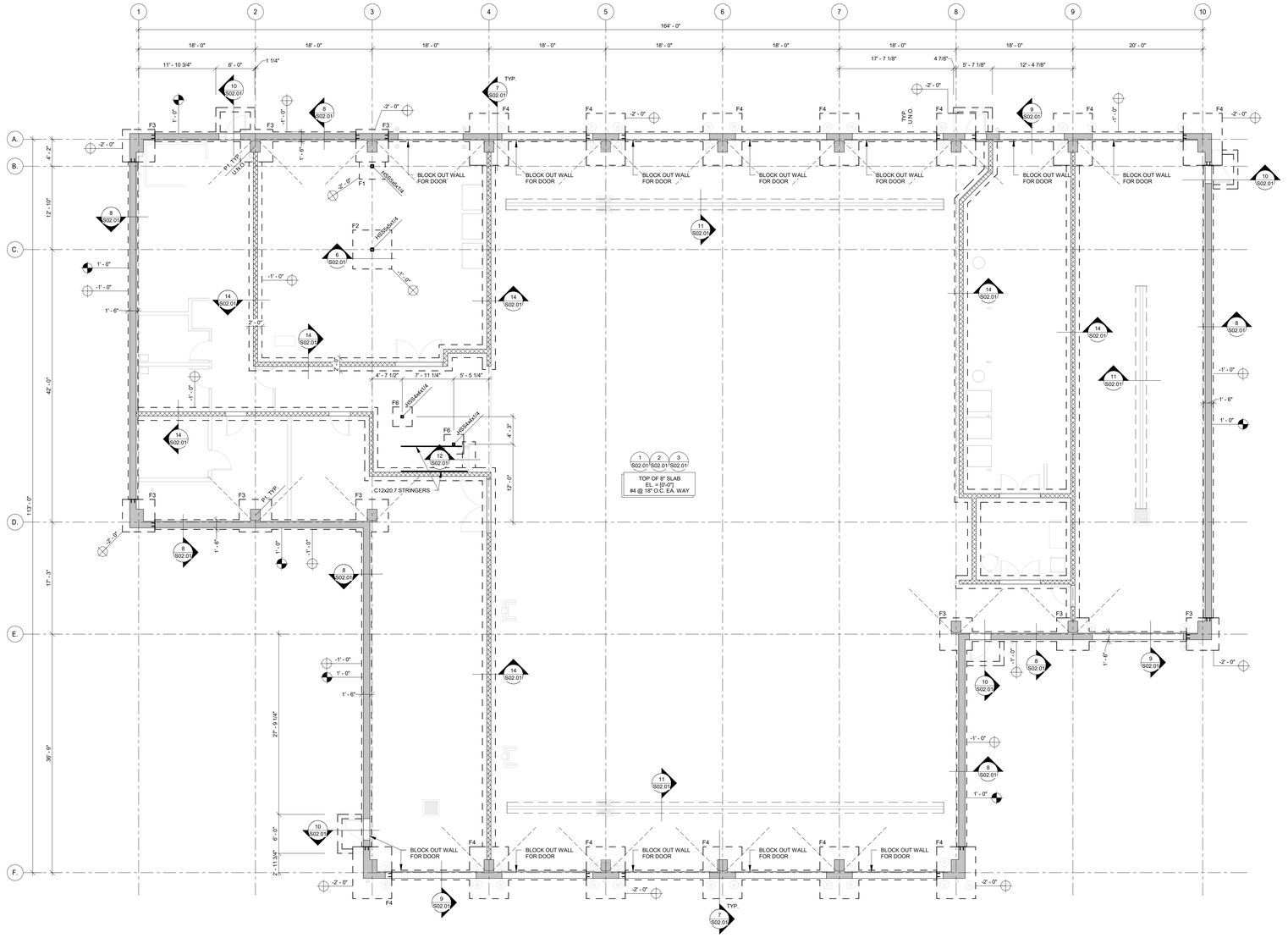


B MEZZANINE FRAMING PLAN
1/8" = 1'-0"

NORTH



A FOUNDATION PLAN
1/8" = 1'-0"

NORTH

PLAN NOTES:
1. OVER-EXCAVATION AND BACKFILL REQUIRED TO ACHIEVE DESIGN BEARING PRESSURES. SEE FP/S001 & GEOTECHNICAL REPORT FOR ADD'L INFO.
2. CONTRACTOR TO COORDINATE DEPRESSED SLAB EXTENTS/DEPTHS w/ ARCH. & FLOORING MANUFACTURER
3. SEE SHEET S02.01 FOR TYPICAL FOUNDATION / SLAB DETAILS
4. SEE SHEET S04.01 FOR TYPICAL CMU DETAILS
5. PX - INDICATES CONCRETE PIER. SEE PIER SCHEDULE FOR INFORMATION. T/ PIER = -1'-0" U.N.O.
6. FX - INDICATES CONCRETE FOOTING. SEE FOOTING SCHEDULE FOR INFORMATION

CMU WALL SCHEDULE				
MARK	WALL SIZE	VERT. REINFORCEMENT	HORIZ. REINFORCEMENT	NOTES
W1	8"	#5 @ 48" O.C.	LADDER TYPE @ 16" O.C.	---

NOTES:
1) CMU WALLS SHOWN ON PLAN ARE TYPE W1, U.N.O.

DECKING SCHEDULE			
MARK	TYPE	DETAILS	NOTES
D-1	2" - 20 GA. COMFORM FLOOR DECK + 3" N.W. CONCRETE TOPPING (5" TOTAL THICKNESS) w/ WWF6x6-W2.9xW2.9	SEE S00.01, NOTE SD4	AT MEZZANINE

PIER SCHEDULE		
MARK	SIZE	REINFORCEMENT
P1	24" x 18"	(8)-#6 VERT. BARS #3 TIES @ 12" O.C.

FOOTING SCHEDULE			
MARK	DIMENSIONS	DETAILS	NOTES
F1	4'-0" x 4'-0" x 1'-2"	(4)-#5 E.W. BOTTOM	---
F2	6'-0" x 6'-0" x 1'-2"	(6)-#5 E.W. BOTTOM	---
F3	5'-0" x 5'-0" x 3'-6"	(5)-#5 E.W. TOP & BOTTOM	---
F4	8'-0" x 6'-0" x 3'-6"	#5 @ 12" O.C. E.W. TOP & BOTTOM	---
F5	4'-0" x 2'-0" x 1'-0"	SHORT: (2)-#5. BOTTOM LONG: (4)-#5. BOTTOM	---
F6	3'-0" x 3'-0" x 1'-2"	(3)-#5 E.W. BOTTOM	---

LOAD-BEARING CMU HEADER SCHEDULE			
MARK	SIZE	GEOMETRY	NOTES
M1	CMU: (2) L5x3 1/2x5/16 (LLV), 8" MIN. BEARING	8" CMU DOUBLE ANGLE	SEE BELOW
M2	W8x15 w/ BOTTOM PL3/8x7, 8" MIN. BEARING	BRICK WF w/ BOTTOM PL	SEE BELOW

NOTES:
1) FOR HEADERS NOT DESIGNATED ON PLAN (INCLUDING MEP WALL PENETRATIONS) & FOR HEADERS @ NON LOAD-BEARING CMU WALLS, SEE CONCRETE MASONRY SECTION OF STRUCTURAL NOTES.
2) LOAD BEARING HEADERS SHALL HAVE SLIP CONNECTIONS PER TYP. BEAM BEARING @ CMU DETAIL.
3) FOR HEADERS SUPPORTING CMU w/ SPANS ≥ 6'-0", PROVIDE FIELD WELDED DBA's TO MATCH VERTICAL WALL REINFORCEMENT SIZE & SPACING.
4) WHERE EXPOSED, EXTERIOR HEADERS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION, SEE STRUCTURAL NOTES.

FOUNDATION SYMBOL KEY
- T/ WALL/ STEEL
- T/ FOOTING
- JOIST BEARING
- T/ BRICK LEDGE
- FDN. STEP

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8443 NE University Ave.
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Southeast Polk Community School District

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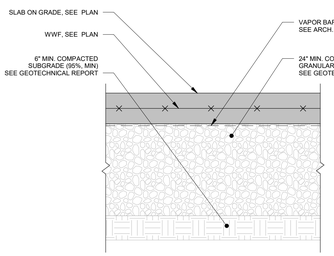
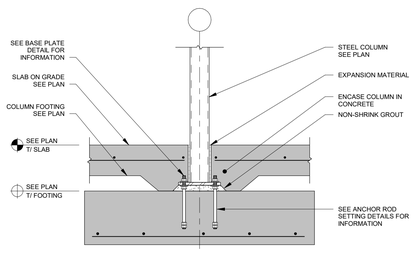
PEMB FOUNDATION & MEZZANINE PLAN

S01.01

NOTES:
1) SEE FDN. PLAN FOR SLAB THICKNESS & REINFORCING
2) SEE GENERAL NOTE CN12 FOR JOINT LOCATIONS



1 TYP. SLAB ON GRADE
1 1/2" = 1'-0"

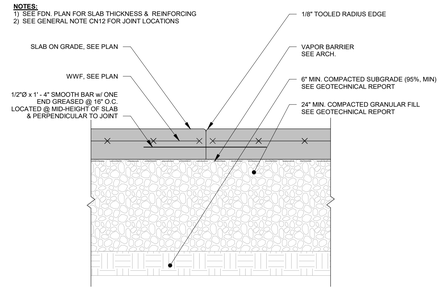


6 TYP. STEEL COLUMN @ INTERIOR FOOTING
3/4" = 1'-0"

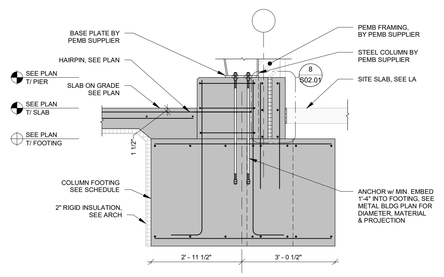
NOTE:
GC TO COORDINATE REQ'D SLAB BLOCKOUT WITH GRATING

11 TYP. TRENCH DRAIN DETAIL
1" = 1'-0"

NOTES:
1) SEE FDN. PLAN FOR SLAB THICKNESS & REINFORCING
2) SEE GENERAL NOTE CN12 FOR JOINT LOCATIONS



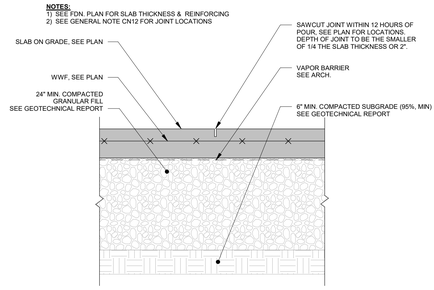
2 TYP. SLAB ON GRADE CONSTRUCTION JOINT
1 1/2" = 1'-0"



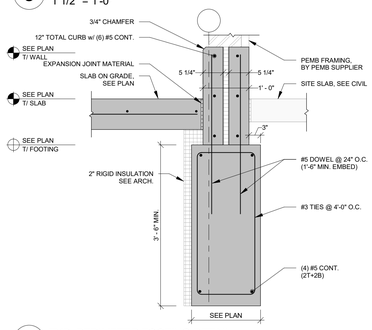
7 TYP. EXTERIOR COLUMN FOOTING
1/2" = 1'-0"

12 TYP. THICKENED SLAB @ STAIRS
3/4" = 1'-0"

NOTES:
1) SEE FDN. PLAN FOR SLAB THICKNESS & REINFORCING
2) SEE GENERAL NOTE CN12 FOR JOINT LOCATIONS



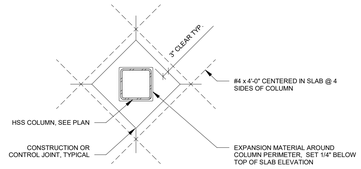
3 TYP. SLAB ON GRADE CONTROL JOINT
1 1/2" = 1'-0"



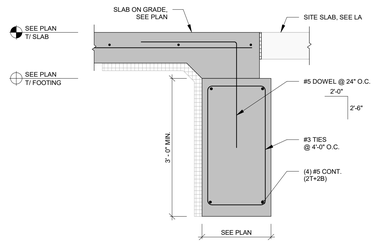
8 TYP. PERIMETER FOOTING DETAIL
3/4" = 1'-0"

NOTE:
WET-SETTING/FLOATING OF ANCHOR RODS IS NOT ALLOWED. ACCURATELY SET AND SECURELY SUPPORT ANCHOR RODS DURING PLACEMENT OF CONCRETE.

13 TYP. ANCHOR ROD SETTING DETAIL
3" = 1'-0"



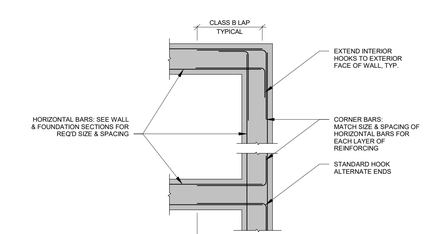
4 TYP. SLAB ISOLATION JOINT @ HSS COLUMN
1/2" = 1'-0"



9 FOUNDATION DETAIL @ OVERHEAD DOOR
3/4" = 1'-0"

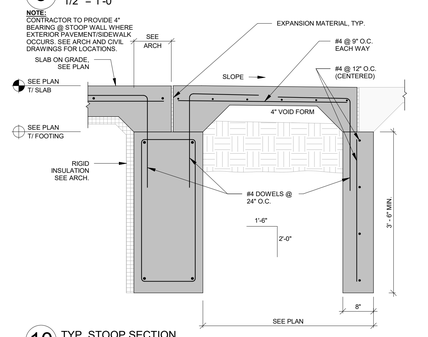
CMU WALL BAR LAP	
BAR SIZE	"Ld"
#5	2' - 6"

14 TYP. LOAD BEARING CMU FOOTING
3/4" = 1'-0"



5 TYP. REINFORCING @ CORNERS
1/2" = 1'-0"

NOTE:
CONTRACTOR TO PROVIDE 4" BEARING @ STOOP WALL WHERE EXTERIOR PAVEMENT/SIDEWALK OCCURS. SEE ARCH AND CIVIL DRAWINGS FOR LOCATIONS.



10 TYP. STOOP SECTION
3/4" = 1'-0"

NOTES:
1) SEE ARCH. FOR NON-STRUCTURAL COMPONENTS.
2) CONTRACTOR TO BLOCK OUT CURB AS REQ'D.

15 TRENCH FOOTING w/CURB
3/4" = 1'-0"

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Southeast Polk Community School District

KEY PLAN

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FOUNDATION DETAILS

S02.01

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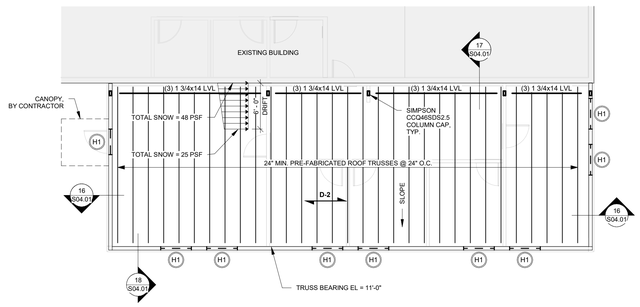
WOOD SHEATHING SCHEDULE			
MARK	TYPE	DETAILS	NOTES
D-2	5/8" OSB SHEATHING	SEE WF GENERAL STRUCTURAL NOTES	AT ROOF

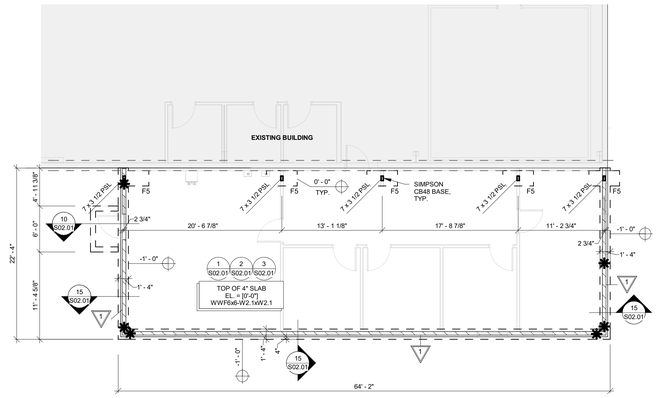
WOOD HEADER SCHEDULE		
MARK	SIZE	NOTES
H1	(3)-2x8 w/ (2)-2x6 FULL HEIGHT STUDS + (1)-2x6 JACK STUDS @ EA. JAMB	11 / S04.01

WOOD SHEAR WALL SCHEDULE	
MARK	1
STUD SIZE AND SPACING	2x6 @ 16" O.C.
SHEATHING TYPE	15/32" OSB - EXTERIOR
BLOCKED OR UNBLOCKED	BLOCKED
10d NAILS AT ALL PANEL EDGES, TOP AND BOTTOM PLATES, & BLOCKING, U.N.O. 10d NAILS @ 12" O.C. MAX. IN THE FIELD (ALL PANEL EDGES TO BE BLOCKED WITH 2x OR WIDER FRAMING, U.N.O.) NAILS SHALL BE 3/8" FROM PANEL EDGE	10d @ 6" O.C. EDGES
SILL PLATE CONNECTION @ TOPPING/PRECAST	(1)-5/8" Ø HILTI HUS-EZ ANCHOR @ 32" O.C. (4 1/4" EMBED.)
HOLD DOWN @ EA. END OF WALL (LOCATIONS SHOWN AS ✱ ON PLAN) HILTI HIT-RE 500 V3 ADHESIVE w/ THREADED HAS ROD SEE DETAIL15 / S04.01	SIMPSON HDQ8-SDS3 w/ (20)-SDS1/4x3 SCREWS w/ 7/8" Ø HILTI HAS ROD (10 1/2" EMBED.) w/ (3)-2x POST

NOTES:
1) SEE ARCH. DRAWINGS FOR NON-STRUCTURAL COMPONENTS (I.E. GYP. BOARD, RESILIENT CHANNELS, ETC.).
2) SEE DETAIL 9 / S04.01R TYPICAL BUILT-UP 2x FRAMING SCHEME.
3) SEE DETAIL12 / S04.01R TYPICAL WOOD SHEAR WALL ASSEMBLY.

FOOTING SCHEDULE			
MARK	DIMENSIONS	DETAILS	NOTES
F1	4'-0" x 4'-0" x 1'-2"	(4)-#5 E.W. BOTTOM	---
F2	6'-0" x 6'-0" x 1'-2"	(6)-#5 E.W. BOTTOM	---
F3	5'-0" x 5'-0" x 3'-6"	(5)-#5 E.W. TOP & BOTTOM	---
F4	8'-0" x 6'-0" x 3'-6"	#5 @ 12" O.C. E.W. TOP & BOTTOM	---
F5	4'-0" x 2'-0" x 1'-0"	SHORT: (2)-#5 BOTTOM LONG: (4)-#5 BOTTOM	---
F6	3'-0" x 3'-0" x 1'-2"	(3)-#5 E.W. BOTTOM	---





NORTH

B ROOF FRAMING PLAN - ADDITION
1/8" = 1'-0"

PLAN NOTES:
1. SEE SHEET S04.01 FOR TYPICAL FRAMING DETAILS.

NORTH

A FOUNDATION PLAN - ADDITION
1/8" = 1'-0"

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6. FX - INDICATES CONCRETE FOOTING. SEE FOOTING SCHEDULE FOR INFORMATION

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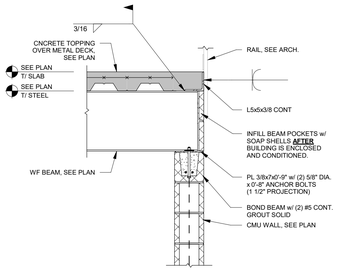
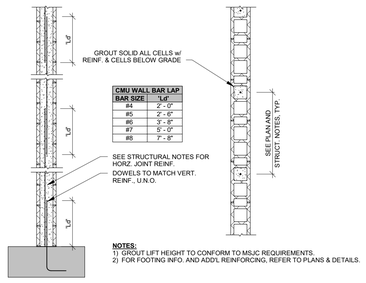
ADDITION FOUNDATION & FRAMING PLAN

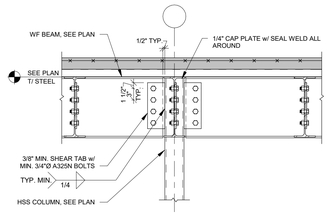
S03.01



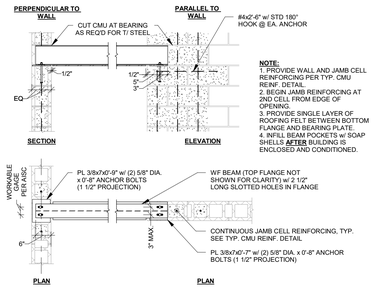
1 WF BEAM @ CMU WALL BRG
3/4" = 1'-0"

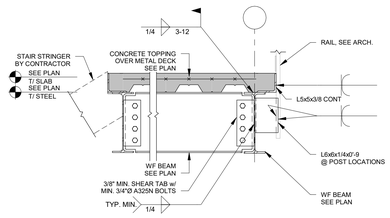


NOTES:
1) GROUT LIFT HEIGHT TO CONFORM TO MSJC REQUIREMENTS.
2) FOR FOOTING INFO. AND ADD'L REINFORCING, REFER TO PLANS & DETAILS.

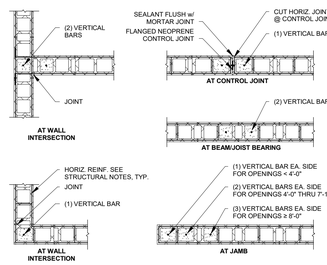


2 BEAM TO HSS COLUMN CONNECTION
3/4" = 1'-0"

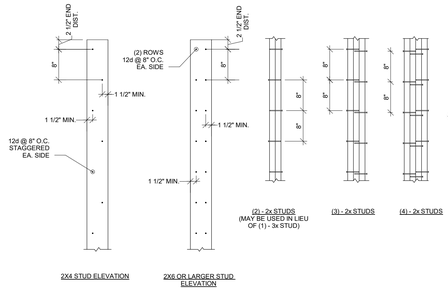




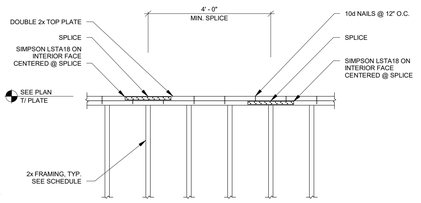
3 PERIMETER FLOOR FRAMING DETAIL
3/4" = 1'-0"



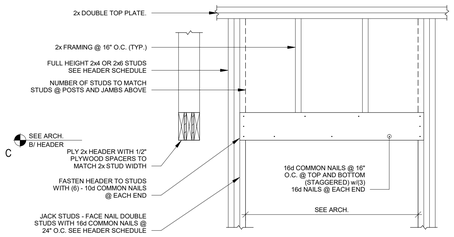
4 DECK BEARING @ MEZZANINE
3/4" = 1'-0"



5 PERIMETER FLOOR FRAMING
1" = 1'-0"

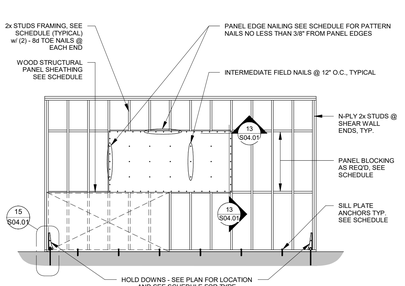


6 TYP. CMU REINFORCING PLACEMENT
N.T.S.

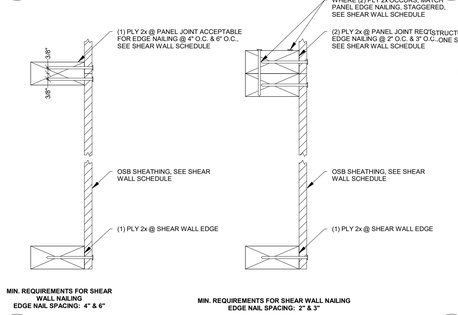


NOTE:
KING AND JACK STUDS SHALL BE CONTINUOUS FOR ALL FLOORS BELOW HEADER.

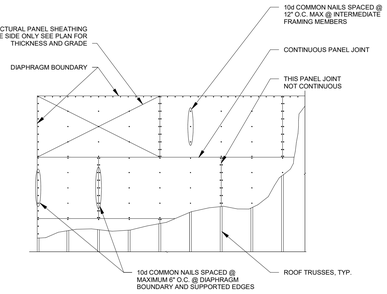
7 TYP. BEAM BEARING @ CMU
N.T.S.



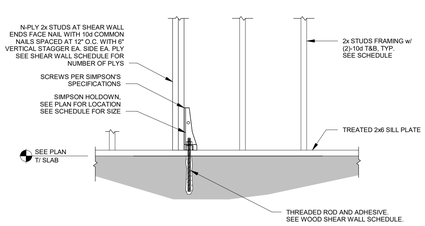
8 TYP. CMU WALL REINF.
N.T.S.



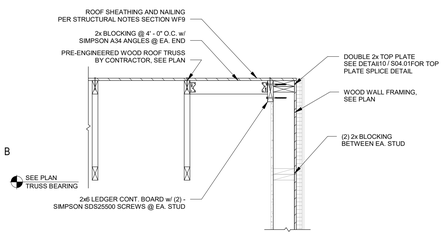
9 BUILT UP 2x FRAMING
3/4" = 1'-0"



10 TOP PLATE SPLICE
1/2" = 1'-0"

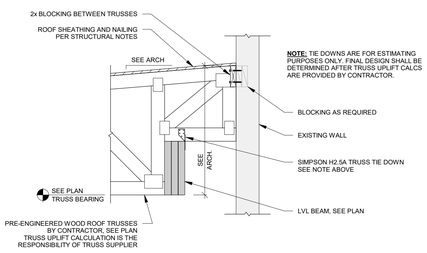


11 TYPICAL HEADER DETAIL
3/4" = 1'-0"



NOTES:
1) SEE ARCH FOR NON-STRUCTURAL WALL AND ROOF COMPONENTS

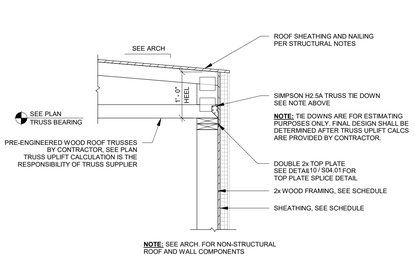
12 TYP. WOOD SHEAR WALL ELEVATION
N.T.S.



13 PANEL EDGE NAILING
3" = 1'-0"

14 WOOD ROOF DIAPHRAGM NAILING
1/4" = 1'-0"

15 SHEAR WALL HOLDOWN TO CONCRETE
3/4" = 1'-0"



NOTE: SEE ARCH. FOR NON-STRUCTURAL ROOF AND WALL COMPONENTS

16 PERIMETER ROOF FRAMING @ END WALL
3/4" = 1'-0"

17 SECTION @ EXISTING
3/4" = 1'-0"

18 PERIMETER ROOF FRAMING
3/4" = 1'-0"

8/20/2025 10:45:06 AM

NOT FOR CONSTRUCTION 95% CONSTRUCTION DOCUMENTS

SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08/20/2025

PROJECT NO: R3007.090.00

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FRAMING DETAILS

S04.01

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STRUCTURAL
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LANDSCAPE ARCH
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MECH/ ELEC/ PLUMB
Morris Engineering
3737 Woodland Ave.
Des Moines, IA 50309
Phone: (515) 251-7280

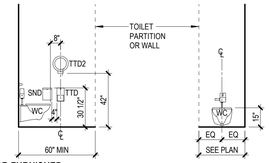
ARCHITECTURAL ABBREVIATIONS

#	Number		
%	Percent	L	Angle
&	And	LAB	Laboratory
<	Less than	LAV	Lavatory
>	Greater than	LB	Pound
@	At	LIN	Linoleum
		LT	Light
ADJ	Adjustable	LT GA	Light Gauge
AFF	Above floor finish	LVR	Louver
ALUM	Aluminum	LVT	Luxury Vinyl Tile
AP	Acoustical Panel		
APC	Acoustical Panel Ceiling	MARB	Marble
APPROX	Approximate	MAX	Maximum
ARCH	Architectural	MC	Mechanical Contractor
ARP	Acrylic Resin Panel	MECH	Mechanical
AWP	Acoustic Wall Panel	MEMB	Membrane
		MFR	Manufacturer
BCMU	Burnished Concrete Masonry Unit	MH	Manhole
BD	Board	MIC	Multicolor Interior Coating
BLDG	Building	MIN	Minimum
BLKG	Blocking	MISC	Miscellaneous
BOT	Bottom	MKRB	Marker Board
BRK	Brick	MO	Masonry Opening
BUR	Built-Up Roofing	MTD	Mounted
		MTL	Metal
CAB	Cabinet	MULL	Mullion
CB	Catch Basin		
CC	Cubicle Curtains	N	North
CFCI	Contractor Furnished Contractor Installed	NATF	Natural Finish
		NIC	Not In Contract
CFOI	Contractor Furnished Owner Installed	NOM	Nominal
CG	Corner Guard	NSF	Net Square Footage
CHBD	Chalk Board	NTS	Not To Scale
CI	Cast Iron	NUM	Number
CJ	Construction Joint		
CL	Center Line	OA	Overall
CLG	Ceiling	OC	On Center
CLJ	Control Joint	OD	Outside Diameter
CLO	Closet	OFCI	Owner Furnished Contractor Installed
CLR	Clear	OFD	Overflow Drain
CMU	Concrete Masonry Unit	OFF	Office
CNTR	Counter	OFOI	Owner Furnished Owner Installed
COL	Column	OPNG	Opening
CONC	Concrete		
CONT	Continuous	PCMU	Prefaced Concrete Masonry Unit
CORR	Corridor	PL	Plate
CPT	Carpet	PLAM	Plastic Laminate
CPT TL	Carpet Tile	PLAS	Plaster
CRL	Chair Rail	PLSH	Polished
CSMU	Cast Stone Masonry Unit	PLYWD	Plywood
CT	Ceramic Tile	PNL	Panel
CTR	Center	PR	Pair
CUH	Cabinet Unit Heater	PRCST	Precast
CVB	Coved Vinyl Base	PT	Paint
		PTN	Partition
DBL	Double	PVC	Polyvinyl Chloride
DEPT	Department		
DET	Detail	QT	Quarry Tile
DF	Drinking Fountain		
DIA	Diameter	R	Radius
DIM	Dimension	R	Riser
DISP	Dispenser	RAF	Resilient Athletic Floor
DN	Down	RB	Resilient Base
DS	Downspout	RBV	Resilient Base Vented
DWG	Drawing	RCMU	Reinforced Concrete Masonry Unit
DWR	Drawer	RCP	Reflected Ceiling Plan
		RCT	Rubber Cork Tiles
E	East	RD	Roof Drain
EA	Each	REBAR	Reinforcing Bar
EC	Electrical Contractor	REF	Reference
EIFS	Exterior Insulation Finish System	REFR	Refrigerator
EJ	Expansion Joint	REINF	Reinforced
EL	Elevation	REQD	Required
ELEC	Electric or Electrical	RESIL	Resilient
ELEC CONTR	Electrical Contractor	RF	Rubber Flooring
ELEV	Elevator	RM	Room
EMER	Emergency	RO	Rough Opening
ENCL	Enclosure	RPF	Resinous Poured Flooring
ENMAT	Entry Mat	RWC	Rigid Wall Covering
EPB	Electrical Panel Board		
EPT	Epoxy Paint	S	South
EQ	Equal	SCHED	Schedule
EQUIP	Equipment	SECT	Section
EW	Each Way	SF	Square Feet
EWC	Electric Water Cooler	SGFT	Structural Glazed Facing Tile
EXIST	Existing	SHR	Shower
EXP	Expansion	SHT	Sheet
EXT	Exterior	SHV	Shelving
		SIM	Similar
FD	Floor Drain	SLR	Sealer
FDTN	Foundation	SLRHRD	Sealer Hardener
FE	Fire Extinguisher	SM	Sheet Metal
FEC	Fire Extinguisher Cabinet	SPEC	Specification
FF	Factory Finish	SQ	Square
FH	Fire Hydrant	SS	Stainless Steel
FHC	Fire Hose Cabinet	SSM	Solid Surface
FIN	Finish	STD	Standard
FLR	Floor	STJST	Steel Joist
FLUOR	Fluorescent	STL	Steel
FRP	Fiber Reinforced Plastic	STN	Stained
FT	Foot or Feet	STO	Stone
FTG	Footing	STOR	Storage
FWC	Fabric Wall Covering	STRUCT	Structure
FWP	Fabric Wrapped Panel	SUSP	Suspended
		SV	Sheet Vinyl
G	Ground		
GA	Gauge	--X	Type X
GALV	Galvanized	T	Tread
GC	General Contractor	T & B	Top and Bottom
GCMU	Glazed Concrete Masonry Unit	T & G	Tongue and Groove
GL	Glass	TEL	Telephone
GLT	Glass Tile	TF	Transparent Finish
GYP	Gypsum	THK	Thick
GYP BD	Gypsum Board	THRES	Threshold
		TKBD	Tack Board
HB	Hose Bib	TMPD	Tempered
HDW	Hardware	TMPD GL	Tempered Glass
HDWD	Hardwood	TOC	Top of Curb. Top of Concrete
HM	Hollow Metal	TOP	Top of Pavement
HORIZ	Horizontal	TOS	Top of Steel
HPC	High Performance Coating	TOW	Top of Wall
HR	Hour	TRZ	Terrazzo
HRL	Hand Rail	TV	Television
HT	Height	TYP	Typical
ID	Inside Diameter	UNO	Unless Noted Otherwise
INSUL	Insulation	UR	Urinal
INT	Interior		
IRWC	Impact Resistant Wall Covering	VCT	Vinyl Composition Tile
		VERT	Vertical
JAN	Janitor	VEST	Vestibule
JT	Joint	VET	Vinyl Enhanced Tile
		VINSF	Vinyl Sheet Flooring
KIT	Kitchen	VT	Vinyl Tile
		VWC	Vinyl Wall Covering
		W	West
		W/	With
		W/O	Without
		WAF	Wood Athletic Flooring
		WC	Water Closet
		WD	Wood
		WD-FR	Wood Furring
		WOCPT	Walk-Off Carpet
		WP	Waterproof
		WR-	Water Resistant
		WT	Window Treatment
		WWF	Welded Wire Fabric

MOUNTING LOCATION GENERAL NOTES:

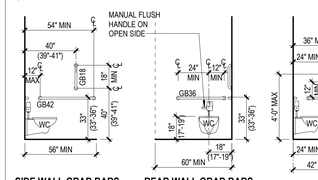
1. ACCESSIBLE ITEMS MUST MOUNT ACCORDING TO THIS SHEET. OTHER ITEMS SHALL MOUNT AS INDICATED, UNO.
2. DIMENSIONS ARE TO THE FACE OF FINISH MATERIALS AND NOT TO SUBSTRATES.
3. DIMENSIONS ARE BASED ON COMPLIANCE WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, ICC/ANSI A117.1, OR OTHER APPLICABLE CODES AND REGULATIONS.
4. CONSTRUCTION/ INSTALLATION TOLERANCES AS DEFINED IN THE PROJECT MANUAL ARE INTENDED TO BE ACCOMMODATED WITH THE DIMENSIONS INDICATED.
5. MINIMUM AND MAXIMUM NOTATIONS
   - A. WHERE A DIMENSION IS NOTED AS A MINIMUM (MIN) OR MAXIMUM (MAX), THE DIMENSION MUST BE VERIFIED AND COORDINATED WITH THE SHOP DRAWINGS SO THAT THE ITEM DIMENSIONED WILL BE INSTALLED ACCORDING TO THE DIMENSIONS INDICATED.
   - B. MINIMUM AND MAXIMUM DIMENSIONS ARE ABSOLUTE WITH NO TOLERANCE BEYOND THE DIMENSION INDICATED.

ALL TOILET AND BATH ACCESSORIES ARE **CONTRACTOR FURNISHED, CONTRACTOR INSTALLED,** UNLESS OTHERWISE INDICATED



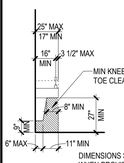
REAR WALL

STANDARD WATER CLOSET

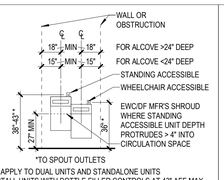


SIDE WALL GRAB BARS | REAR WALL GRAB BARS | SIDE WALL DISPENSER ZONES

ACCESSIBLE WATER CLOSET



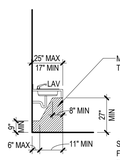
SIDE



FRONT

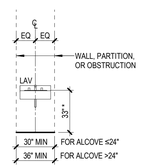
DIMENSIONS SHOWN APPLY TO DUAL UNITS AND STANDALONE UNITS WHEN PROVIDED, INSTALL UNITS WITH BOTTLE FILLER CONTROLS AT 43" AFF MAX

HC ACCESSIBLE AND STANDING EWC AND DF (GENERIC PROFILE)



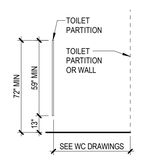
SIDE WALL

ACCESSIBLE LAVATORY

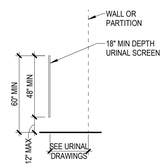


BACK WALL

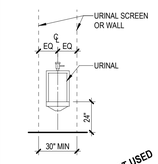
* TO THE HIGHER OF SINK RIM OR COUNTERTOP



TOILET PARTITION



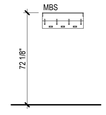
URINAL SCREEN



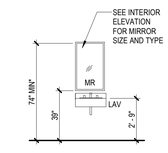
BACK WALL

NOT USED

STANDARD URINAL

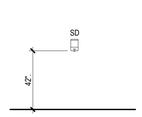


MOP/ BROOM HOLDER W/ SHELF

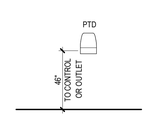


* TO REFLECTIVE SURFACE

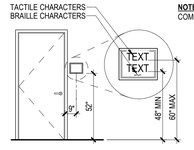
ACCESSIBLE MIRROR ABOVE LAV



ACCESSIBLE SOAP & HAND SANITIZER DISPENSER



ACCESSIBLE PTD



SIGNAGE TEXT

NOTE: TACTILE AND BRAILLE CHARACTERS SHALL COMPLY WITH SIGNAGE TEXT REQUIREMENTS

SIGNS WITH PICTOGRAMS

VERIFY AND COORDINATE INSTALLATION DIMENSIONS WITH SHOP DRAWINGS

TACTILE AND VISUAL SIGNAGE

MATERIALS LEGEND

ASPHALT	MARBLE
BATT INSULATION	METAL STUD PARTITION
BRICK	MORTAR
CONCRETE	PARTICLE BOARD
CMU	PLASTER
EARTH	PLYWOOD
FINISH WOOD	PRECAST CONCRETE
GRANITE	RIGID INSULATION
GRANULAR MATERIAL	SAND
GRAVEL	STEEL
GYPSUM BOARD	STONE
	WOOD STUD PARTITIONS

TOILET AND BATH ACCESSORIES LEGEND

Prov by / Inst by	MARK	DESCRIPTION	BASIS OF DESIGN PRODUCT
GC / GC	GB18	1 1/4" DIA X 18" L GRAB BAR	BOBRICK B-5806X18"L
GC / GC	GB36	1 1/4" DIA X 36" L GRAB BAR	BOBRICK B-5806X36"L
GC / GC	GB42	1 1/4" DIA X 42" L GRAB BAR	BOBRICK B-5806X42"L
GC / GC	MBS	MOP/BROOM HOLDER W/ SHELF	BOBRICK B-239X34 UTILITY SHELF W/ DRYING ROD, MOP HOLDERS & RAG HOOKS
GC / GC	MR2436	24" W X 36" H MIRROR	BOBRICK B-290 24" X 36"
GC / GC	PG	PIPE GUARD	TRUBLO
O / GC	PTD	PAPER TOWEL DISPENSER	--
O / GC	SD	SOAP DISPENSER	--
GC / GC	SH24	UTILITY SHELF	BOBRICK B-295X24
GC / GC	SND	SANITARY NAPKIN DISPOSAL	BOBRICK B-254 (SURFACE MOUNTED)
O / GC	TTD	TOILET TISSUE DISPENSER	--
O / O	WR	WASTE RECEPTACLE	BY OWNER

ARCHITECTURAL GENERAL NOTES

1 GENERAL

. 1.1 CONTRACTOR SHALL VERIFY CONDITIONS AND DIMENSIONS PRIOR TO MATERIAL FABRICATION AND CONSTRUCTION.

. 1.2 WHEN DRAWINGS AND SPECIFICATIONS ARE NOT IN AGREEMENT, THE BIDDER SHALL REQUEST WRITTEN CLARIFICATION PRIOR TO BIDDING AND CONSTRUCTION. IF NOT CLARIFIED PRIOR TO BIDDING, THE FOLLOWING PRECEDENCE SHALL BE USED TO DETERMINE SCOPE OF THE BID: SIZE/QUANTITY CONTROLLED BY DRAWINGS, MATERIAL QUALITY CONTROLLED BY SPECIFICATION. FINAL INTERPRETATION MUST BE ISSUED BY THE ARCHITECT/ENGINEER PRIOR TO MATERIAL FABRICATION OR CONSTRUCTION.

2 FLOORS

. 2.1 PLACE VAPOR RETARDERS DIRECTLY BELOW ALL CONCRETE INTERIOR SLABS-ON-GRADE UNLESS A WATERPROOFING MEMBRANE IS INDICATED.

2.2 SLOPE CONCRETE FLOOR SLABS TO DRAINS . SET DRAINS FLUSH WITH FLOOR FINISH.

. 2.3 ALL SIDEWALKS AND STOOPS SHALL SLOPE ¼"/FOOT MINIMUM AWAY FROM BUILDING.

3 WALLS & PARTITIONS

. 3.1 ALL PARTITIONS ARE FULL HEIGHT UNLESS INDICATED OTHERWISE ON CEILING PLANS OR STRUCTURAL PLANS.

4 DETAILS

. 4.1 EXTERIOR LOUVERS ARE BY THE GC. SIZES IF NOT SHOWN ON ARCHITECTURAL SHALL BE SHOWN ON THE MECHANICAL DRAWINGS.

CURRENT APPLICABLE BUILDING CODES:
for PLEASANT HILL IOWA

2021 INT. BUILDING CODE (IBC) . (with City ammendments)
2018 INT. FIRE CODE (IFC) (with City ammendments)
2017 NAT'L ELECTRIC CODE (NEC) (with State ammendments)
2012 INT. ENERGY CONSERVATION CODE. (IECC) (with State ammendments)
2018 INT. MECHANICAL CODE (IMC) (with State ammendments)
2018 UNIFORM PLUMBING CODE (UPC) (with State ammendments)
(State lists 2021 uniform plumbing code)
NFPA 13, & NFPA 72 for Fire Sprinkler Systems
2010 ADA - accessibility guidelines

ZONING: PROPERTY IS **ZONED A-1** (AGRICULTURAL)
COMPLY WITH SECTION 173.04 - DESIGN STANDARDS. FOR EXTERIOR MATERIALS.

311.2: BUILDING PRIMARY USE: **S-1** (Motor Vehicle repair Garage)
504 BUILDING CLASSIFICATION TYPE **VB-S1**
406.8.3: Repair Garages are required to have an automatic Fire Sprinkler System

SEC 506.2, ALLOWABLE AREA:

FLOOR AREA:	ACTUAL	ALLOWED
MAIN FLOOR	15,800 sf	26,000 sf for NS **36,000 sf for S-1**
MEZZANINE	1416 sf	(1/3rd of 8126 SHOP = 2708 sf max allowed)
HEIGHT 5043 & 504.4	24' - 0" at Eave 28'-10" at Ridge 1 story + mezz	60' high 3 stories

506.3: Allowable area increases - not needed, based on the size and location of the building.

Table 504.3: The building is greater than 60 feet from any adjacent structures. (~72ft)
Table 508.4 - Separation between occupant types, (breakroom and garage area: no separation required between B and S-1.
https://www.pleasanthilliowa.org/762/Adopted-Building-Codes

CRITERIA: SECTION 173.04

buildings located in any Non-Residential Zoning District (excluding the CP, I-1, I-2, and I-3 Industrial Zoning Districts) shall be proportioned and designed so as to have an *appropriately scaled* and visible *top, middle, and base and must incorporate no less than three (3) different class 1 or class 2 façade materials as primary façade materials*, together composing at least 75% of each street facing façade area. Class 3 and class 4 façade materials in aggregate shall not exceed 25% of any street facing façade area. Class 4 façade materials shall not exceed 10% of any street facing façade area.

At least one street-facing building façade and the façade containing the main building entry, if different from the street façade, shall consist of ***no less than 30% glass fenestrations*** (windows and full glass doors) on the first level.

NOTE: Due to the nature of the building's use as a repair garage, windows have been provided in the Breakroom area, and some high windows placed in the garage doors, but for security purposes, no low windows are provided in the repair shop areas.

Class 2 Materials: Prefininshed Metal Wall Panels.

Class 3 Materials: Decorative opaque metal trim.
Prefinished Garage Doors.

Class 4 Materials: - Smooth or scored concrete / concrete block.

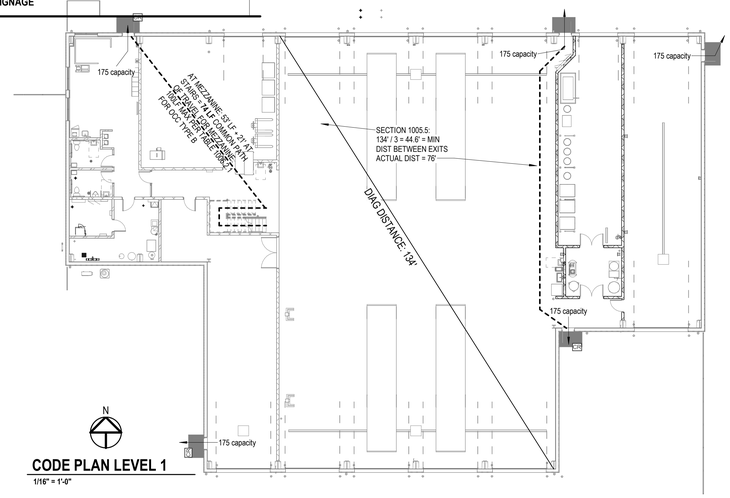
EXITING: Section 105.3.1 & 1005.3.2:

0.2 horizontal travel X 35" Clear Width = 175 capacity per door

2 exits required due to travel distance.
5 exits provided
5 x 175 = 875

Calculated Occ load: 86
Actual Occ load: 11

0.3 vertical exiting at stairs: 48" wide stairway / 0.3 = 160 capacity
Calculated Occ load, based on SF: 6 occ.
Actual Load: 1 occ.



CODE PLAN LEVEL 1
1/16" = 1'-0"

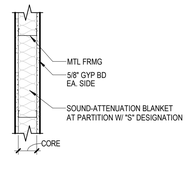
ENERGY CODE REQUIREMENTS:

ZONE 5

METAL BUILDNGS	REQUIRED	PROVIDED
ROOF:	R-19 + R11 Linear system, w/ thermal blocks	8"@ R4.3 + 2" @ R4.3 = R43 (Dow 703)
WALLS ABOVE GRADE	R-13 + R13 Cont. Insul.	8"@ R4.3 + 2" @ R5 = R44.4 (Dow 703)
UNHEATRED SLABS;	R-10 - extend 24" below grade.	R10, Extending 4' deep (Dow XPS)
NON-SWINGING DOORS:	R-4.75 - Minimum at Overehad doors..	R9.1 (Clopay, 2" EPS)

OCCUPANT LOADS AND EXITING:

AREA	USE	AREA	OCC LOAD FACTOR	OCC LOAD CALCULATED	EXITS REQUIRED	EXITS PROVIDED	ACTUAL OCC LOAD
BREAK ROOM	BREAKROOM	555 SF	1:15	37	1	2	(NON-CONCURRENT USE)
SHOP /wash bay	VEHICLE REPAIR	8126 SF	1:200	41	2 (INCL MEZZ)	3	9 MECHANICS & 2 PART TIME AT WASH BAY
STORAGE & MECH	STORAGE	3800 SF	1:300	13	1	1	1 PARTS MGR
MEZZANINE	STORAGE	1594 SF	1:300	5	1	1 (STAIRWAY)	
TOTAL (SOME EXITS SERVE TWO AREAS)				86	2	5	12 TOTAL OCCUPANTS

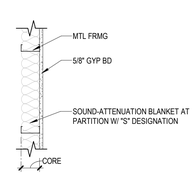


INTERIOR WALL TYPE - METAL STUDS

1" = 1'-0"

MTL STUD PARTITION - CATEGORY A

CONSTRUCTION				FIRE	
TYPE	CORE	WIDTH	STC	RATING	UL
M8A0+6S		7 5/8"			
M8A1+S6	7 5/8"	7 5/8"	44	1 HR	906
S3A0S	3 5/8"	4 7/8"	39	--	---
S3A1	3 5/8"	7 1/4"	39	1 HR	419
S6A0	6"	7 1/4"	35	--	---

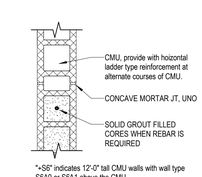


INTERIOR WALL TYPE - METAL STUDS FURRING

1" = 1'-0"

MTL STUD UNBALANCED - CATEGORY B

CONSTRUCTION				FIRE	
TYPE	CORE	WIDTH	STC	RATING	UL
F1A0	3 5/8"	2 1/4"	44	--	---
F3A0	3 5/8"	4 1/4"	44	--	---



*-"-S8" indicates 12'-0" tall CMU walls with wall type S6A0 or S8A1 above the CMU.

INTERIOR WALL TYPE - CMU

1" = 1'-0"

MASONRY PARTITION - CATEGORY A

CONSTRUCTION				FIRE	
TYPE	CORE	WIDTH	STC	RATING	UL
M8A0	7 5/8"	7 5/8"	44	--	--
M8A0+6S		7 5/8"			
M8A1	7 5/8"	7 5/8"	44	1 HR	906
M8A1+S6	7 5/8"	7 5/8"	44	1 HR	906

RESTROOM CALCS:

AREA	OCC LOAD	FIXTURE REQUIREMENTS (2021 UPC) MEN WC	UR	LAV	WOMEN WC	LAV
BREAK ROOM	37 = 18M & 18W	1:25 1	--	1:40 1	1:25 1	1:40 1
SHOP /wash bay & Storage	56 = 28M & 28W	1:100 1	--	1:100 1	1:100 1	1:100 1
CUMULATIVE TOTAL		2		2	2	2
Since the Break Room would be non-concurrent use, so the adjusted fixture requirement would be:		1		1	1	1

ACTUAL ANTICPATED OCCUPANT LOAD WILL BE 11: (9M & 2W)

PLUMBING CALCULATION NOTES:
1. due to the large physical size of the busses being serviced and washed, the building is large compared to its occupant loads and function. Larger vehicles require bigger spaces and more storage for larger parts.

All administrative functions will occur in the existing adjoining building, thus the staff areas of the maintenance building are reduced to just the break room for the mechanics. The building will not have public visitors or customers. As with their existing building, the busses are staged and brought to the building by the mechanics as needed.

Thus we requested that section 422.2 (2) of the 2021 Uniform Plumbing Code be considered for this facility, to allow for a single unisex restroom. (approved per email from Mike Sporleder, msporleder@pleasanthilliowa.org dated 04/15/2025.) But the design still shows 2 restrooms due to possible future expansion.

95% CONSTRUCTION DOCUMENTS

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SOUTHEAST POLK TRANSPORTATION BUILDING

8415 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.18.2025
PROJECT NO: R3007.090.00

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CODE PLAN & NOTES

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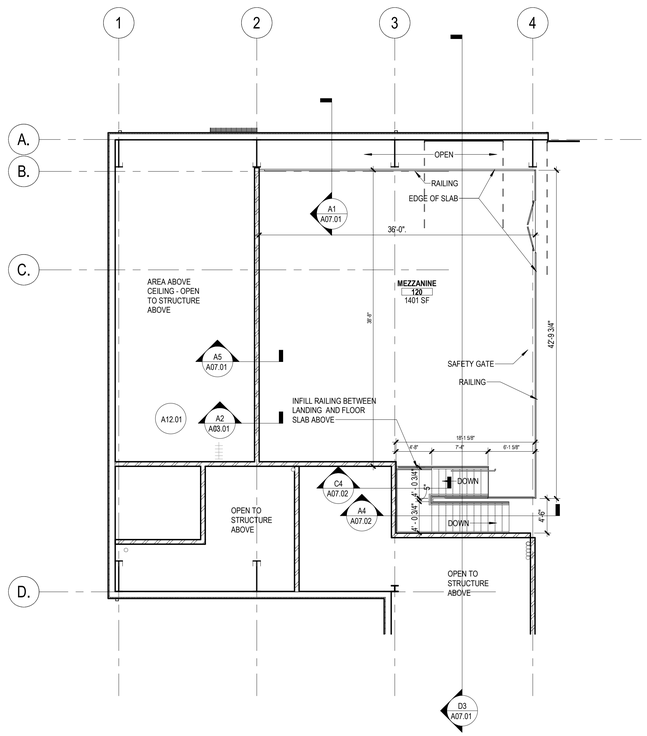

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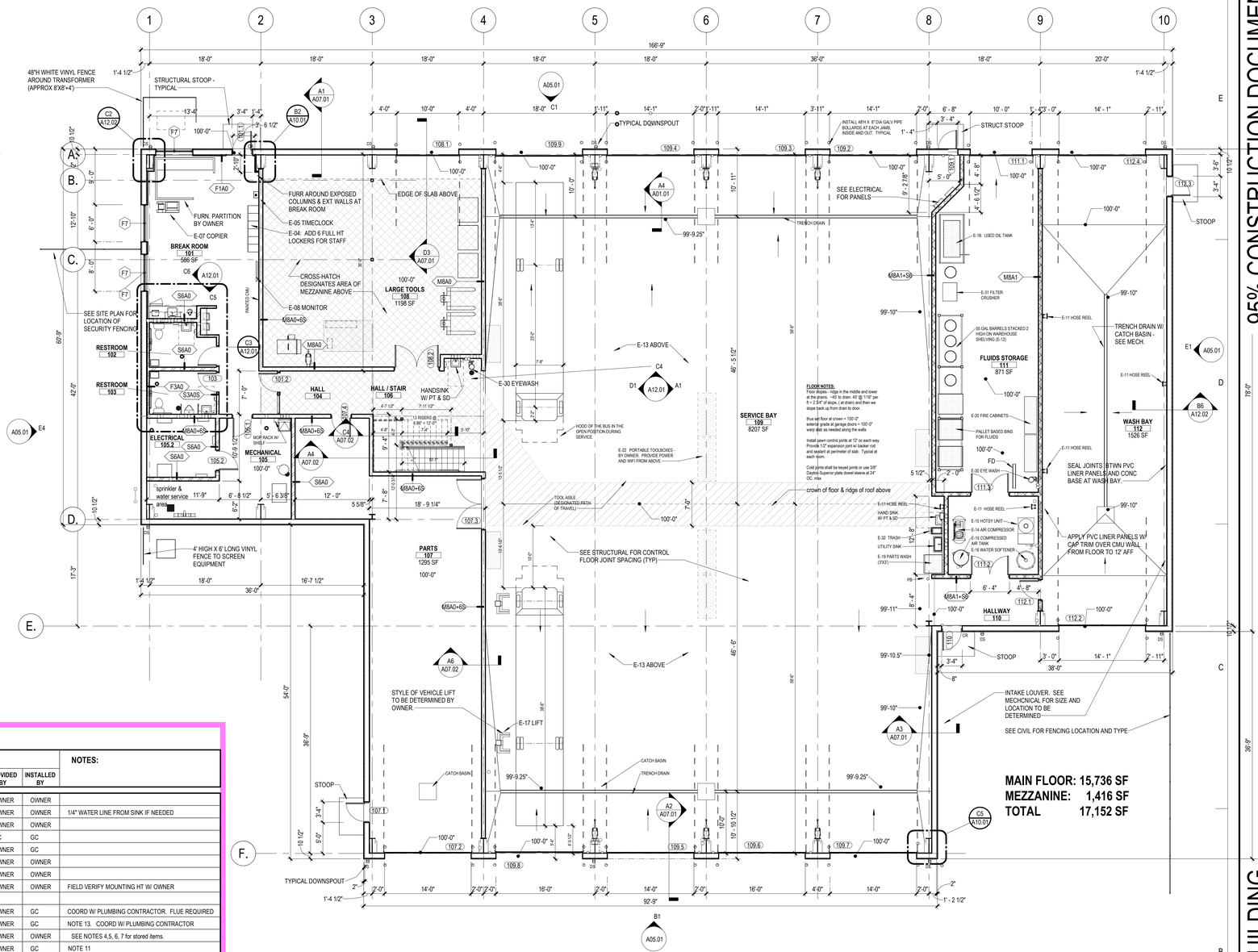
FLOOR PLAN LEVEL 2

1/8" = 1'-0"



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FLOOR PLAN - LEVEL 1

1/8" = 1'-0"

ARCHITECTURAL ELEV 100'-0" = CIVIL ELEV 910.75'

MAIN FLOOR: 15,736 SF
MEZZANINE: 1,416 SF
TOTAL 17,152 SF

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	MODEL #	SIZE	UTILITY REQUIREMENTS					PROVIDED BY	INSTALLED BY	NOTES:
				GAS/AIR	WATER	DRAIN	POWER	DATA			
E-01	UNDER COUNTER REFRIGERATOR						X		OWNER	OWNER	
E-02	COFFEE MAKER				NOTE		X		OWNER	OWNER	1/4" WATER LINE FROM SINK IF NEEDED
E-03	MICROWAVE						X		OWNER	OWNER	
E-04	EMPLOYEE LOCKERS (6)								GC	GC	
E-05	TIME CLOCK						X	X	GC	GC	
E-06	COMPUTER FOR STAFF USE						120V, 5A	CAT6	OWNER	OWNER	
E-07	COPIER / PRINTER						120V	CAT6	OWNER	OWNER	
E-08	TV / MONITOR w/ WALL SUPPORT BRACKET		42" DIA MONITOR				120V	CAT6	OWNER	OWNER	FIELD VERIFY MOUNTING HT W/ OWNER
E-10 VERIFY	HOTSY - POWER WASH SYSTEM	5832-208, HX1025 PUMP	51"H ,X 31"W X 63.4"H, 1275 LBS	NG	X9.5 GPM	X	208/3PH. 48A,	20 HP	OWNER	GC	COORD W/ PLUMBING CONTRACTOR. FLUE REQUIRED
E-11	HOSE REEL				X				OWNER	GC	NOTE 13. COORD W/ PLUMBING CONTRACTOR
E-12	STORAGE SHELVING (New & Existing)		Existing is 36" Deep						OWNER	OWNER	SEE NOTES 4,5, 6, 7 for stored items.
E-13 (VERIFY)	OIL DISPENSING SYSTEM						X		OWNER	GC	NOTE 11
E-14	COMPRESSOR	RELOCATE EXISTING		AIR			X		OWNER	OWNER/GC	GC TO PROVIDE UTILITY CONNECTION
E-15	COMPRESSOR HOLDING TANK	RELOCATE EXISTING		AIR					OWNER	OWNER/GC	GC TO PROVIDE UTILITY CONNECTION
~~E-16~~	~~WATER SOFTENER~~				X		X		GC	GC	COORD W/ PLUMBING CONTRACTOR
E-17 (VERIFY)	VEHICLE LIFT	BENDPAK HDS-27, #5175162	253"L X 153.5"W X 91.5"H	AIR			220V, 60HZ 1PH		OWNER	OWNER/GC	NOTE 10. GC TO PROVIDE UTILITY CONNECTION
E-18 (E)	USED OIL TANK	RELOCATE EXISTING	APPROX 8' LONG						OWNER	OWNER	NOTE 8 & 9
E-19 (E)	PARTS WASH	RELOCATE EXISTING	36" X 36" X 72"H +/-		X	X			GC	GC	EXISTING
E-20	FLAMMABLES STORAGE CABINET	RELOCATE EXISTING	APPROX 2' D X 5' W X 7' H						OWNER	OWNER	ONE EXISTING. ONE NEW
E-21 (E)	PORTABLE WELDERS (2 EXISTING)	RELOCATE EXISTING					220V, 60HZ 1PH		OWNER	OWNER	PLUG LOCATIONS SHOWN ON ELECTRICAL PLANS
E-22 (E)	WORK BENCH (metal, for welding) with metal break.	RELOCATE EXISTING	60"W X 96"L X 36"H						OWNER	OWNER	EXISTING
E-23 (E)	CHOP SAW	RELOCATE EXISTING					120V, 60HZ, 20A		OWNER	OWNER	EXISTING
E-24 (E)	BENCH GRINDER	RELOCATE EXISTING					120V, 60HZ, 20A		OWNER	OWNER	EXISTING
E-25 (E)	PORTABLE FANS (existing)	RELOCATE EXISTING					120V, 60HZ		OWNER	OWNER	2 EXISTING
E-26	OVERHEAD FLUIDS DISPENSING SYSTEM			AIR +			120V, 20A		OWNER	GC	NOTE 12
									OWNER	OWNER	
E-27 (E)	2 PALLET JACKS (EXISTING)	RELOCATE EXISTING							OWNER	OWNER	Stored in Large Tools room.
E-28 (E)	FORKLIFT (PROPANE FUELED)	RELOCATE EXISTING							OWNER	OWNER	Stored in FLUIDS Room
E-29 (E)	PORTABLE TOOL BOXES	RELOCATE EXISTING					120V, 60HZ, 20A	WIFI	OWNER	OWNER	NOTE 1
E-30	EYE WASH - SEE PLUMBING				X	X			GC	GC	COORD W/ PLUMBING CONTRACTOR
E-31 (E)	FILTER CRUSHER	RELOCATE EXISTING	approx 3'w x 2'd x 7'h	AIR			X		OWNER	OWNER	PROVIDE SPACE FOR ADJACENT BARREL FOR DISPOSAL
E-32	LARGE TRASH BINS								OWNER	OWNER	NOTE 3

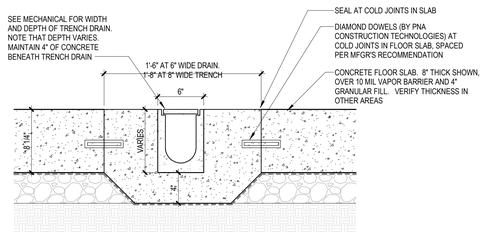
EQUIPMENT NOTES:

1. Tool boxes: are 3' deep and vary from 1@4'-6", 3@ 5'-6", to 2 @ 7'-0" long. Currently observed 6 toolboxes total. Toolboxes in the shop each required 120v power for lighting and plugs, and WIFI for laptop computers.
2. Provide exhaust port in each overhead Garage door.
3. Owner to relocate 2 to 3 existing large trash cans.
4. Pallet of diesel exhaust cleaning fluid (to be moved to new room with other fluids)
5. Pallets for fluids, 3'w x 4'd x 4'h, and a couple 50Gal drums of motor oil.
6. bulk fluids such as transmission, fluid, motor oil, car wash chemicals, washer fluid.
7. Pallet of snow-melt. (see photos). (Liquids room)
8. The existing outside oil storage tank. (4' dia x 7'L) will not be relocated to this facility. (only the inside tank will be)
9. Owner shall coordinate with vendor for a containment system at each used oil tank and fluids containers.
10. Basis of design is shown. actual product will be selected by owner and assigned to the project.
    BASIS OF DESIGN: 27,000 LB CAPACITY. REQUIRES 30PSI AIR CONNECTION
11. Basis of design is shown. actual product will be selected by owner and assigned to the project.
    BASIS OF DESIGN: https://www.flocomponents.com/sln_vehicle_service_facilities/
12. Salvage fluids dispensers and reels from existing building for reuse in new facility.
13. Salvage hose reels from existing building for reuse in new facility.

FLUIDS STORAGE ROOM: (as of 08/11/2025)

FLUIDS AND STORAGE RACKS WILL BE PROVIDED BY OWNER AND INSTALLED BY VENDORS AT THE COMPLETION OF THE PROJECT.

55 gal. drum of Washer Fluid on a pallet rack
55 gal. drum of Transmission Fluid on a pallet rack
35 gal. drum of 75W-90 Gear Oil on a pallet rack
240 gal. container with 220 gals. of 5W-40 Engine Oil on a pallet rack
120 gal. container with 55 gals. of 5W-20 Engine Oil on a pallet rack
120 gal. container with 110 gals. of Anti-freeze on a pallet rack
300 gals. of Diesel Exhaust Fluid on the floor
55 gals. of Diesel Exhaust Fluid on a cart
55 gals. of Hydraulic Oil moved with a 2-wheeler cart
200 gal. Used Oil tank on the floor
5 gal. pail of Washer Soap on the floor
5 gal. pail of Parts Cleaning Solvent on the floor
7 - 5 gal. Diesel and Gasoline containers on top of the Flammable cabinet are typically empty
Many various chemicals in small containers are stored on 2 shelving units in the current Large Parts Room
Aerosol Paint and Brake Parts Cleaner are stored in the 1-large and 4-small Flammable cabinets



TRENCH DRAIN

1 1/2" = 1'-0" (1) A01.00 MTG REVIEW

95% CONSTRUCTION DOCUMENTS

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Southeast Polk Community School District

8415 NE University Ave.
Pleasant Hill Iowa 50327

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.18.2025

PROJECT NO: R3007.090.00

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SOUTHEAST POLK TRANSPORTATION BUILDING

FLOOR PLAN LEVEL 1

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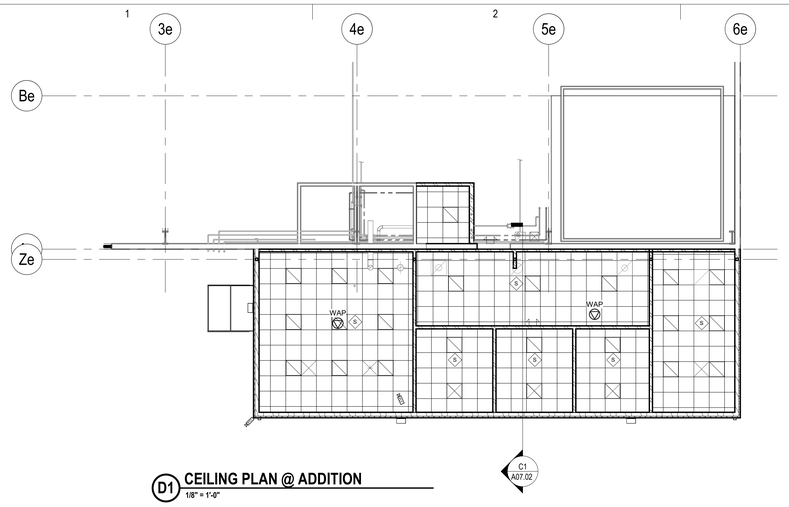
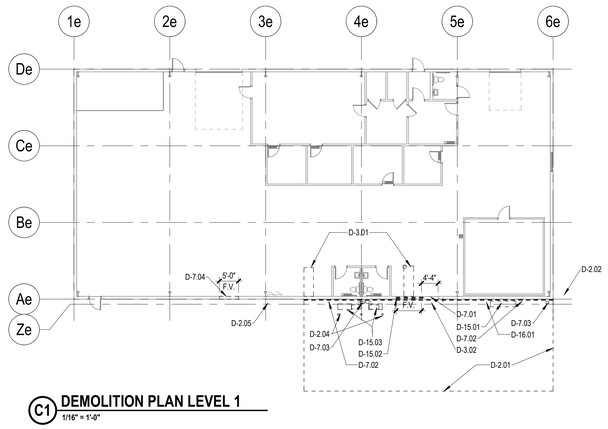


D1 CEILING PLAN @ ADDITION
1/8" = 1'-0"



C1 DEMOLITION PLAN LEVEL 1
1/16" = 1'-0"

DEMOLITION NOTES:

1.01 DEMOLITION OF EXISITNG BUS MAINTENANCE BUILDIGN IS NOT SHOWN HERE. AND WILL APPEAR ON A SEPARATE SHEET. DEMOLITION OF THAT BUILDING WILL OCCUR AFTER THE COMPLETION OF THE NEW BUILDING.

2.01 SAWCUT AND REMOVE EXTERIOR CONCRETE PARKING.
2.02 REMOVE FENCING ADJACENT TO NEW CONSTRUCTION. MAINTAIN MAJORITY OF FENCING TO SERVE AS CONSTRUCITON BARRIER.
2.03
2.04 REMOVE PIPE BOLLARDS AT MINI-SPLIT UNITS AND RETURN TOT OWNER. (BOLLARDS ARE BOLTED IN PLACE).
2.05 CLEAN EXTERIOR WALL PANELS.
.

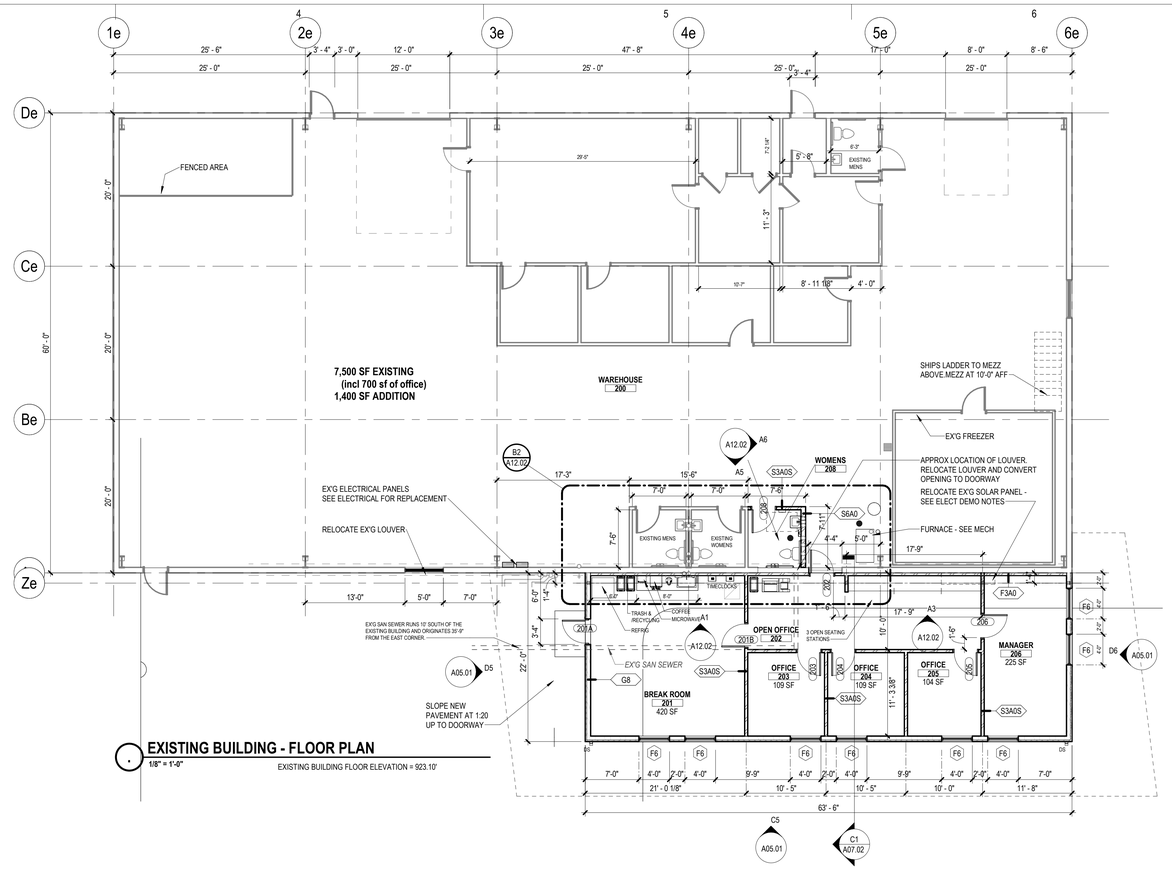
3.01 SAWCUT AND REMOVE CONCRETE FLOOR SLAB AS NEESSARY TO INSTALL NEW PLUMBING. PATCH WHEN FINISHED.
3.02 REMOVE CONC CURB AT THRESHOLD AND PATCH FLOOR LEVEL WITH EXISTING BUILDING.

7.01 SAWCUT NEW OPENING IN WALL AND LINER PANEL FOR NEW PASSAGE OPENING INTO THE ADDITION. INSTALL BENT PLAT AT JAMB TO CAPTURE AND STABILIZE THE ENDS OF ANY GIRTS IN THE AREA.
7.02 REMOVE METAL SIDING IN AREAS THAT WILL BECOME INTERIOR SPACE. APPLY 3-1/2" STUDS TO GIRTS AND APPLY 5/8" GYP BOARD.
7.03 MODIFY / RELOCATE ANY DOWNSPOUTS IN THE AREA OF THE NEW ADDITION.
7.04 SAWCUT OPENING IN WALL PANEL FOR RELOCATED LOUVER. PROVIDE STEEL ANGLE & BENT PLATE FRAMING AT PERIM OF OPENING AS NEEDED FOR STABILITY AND TO SUPPORT LOUVER.

15.01 RELOCATE REFRIGERATION EQUIPMENT THAT IS SERVING THE WALK IN COOLER TO THE EAST WALL OF THE BUILDING.
15.02 RELOCATE EXISTING INTAKE LOUVER. COORDINATE LOCATION WITH OWNER.
15.03 RELOCATE MINISPLIT UNITS AND REFRIGERATION LINES THAT ARE SERVING THE RESTROOMS. EXTEND OR RELOCATE BATHROOM EXHAUST FAN, IF NECESSARY.
16.01 REMOVE WALL PACK LIGHT FIXTURE AND RETURN TO OWNER.
16.02 RELOCATE SOLAR PANEL.

DEMOLITION NOTES FOR EXISTING MAINTENANCE FACILITY:

1. AT THE COMPLETION OF THE NEW BUILDING:
   - A. ALLOW TIME FOR THE OWNER TO RELOCATE TOOLS, EQUIPMENT AND STORED MATERIALS TO THE NEW BUILDING.
   - B. REVIEW ITEMS TO BE SALVAGED WITH THE OWNER. SALVAGED ITEMS WILL BE REMOVED BY THE CONTRACTOR AND RETURNED TO THE OWNER. ITEMS INCLUDE:
     - i. Fluid dispensing reels and equipment.
     - ii. Ceiling hung gas fire heaters.
     - iii Ceiling mounted radiant heat equipment.
     - iv Motor operators for overhead doors.
     - v Hose reels or other wast bay related equipemnt that the owner wishes to retain.
     - vi Compressor and non-rigid hoses.
2. AFTER EQUIPMENT IS MOVED AND/OR SALVAGED, DISCONNECT AND REMOVE UTILITIES TO THE BUILDING, INCLUDING:
   - A power
   - B water
   - C gas
   - D cap any sewer line from the building.
3. BUILDING DEMOLITION
   - A DEMOLISH THE BUILDING SHELL.
     - i. Separate materials that can be recycled. minimized materials going to the landfill.
     - ii. Provide protection for adjacent strucutres and vehicles stored adjacent to the building and coordinate with the owner for their temporary relocation.
   - B. REMOVE THE FLOOR SLABS AND FOUNDATION
     - i. Extend down to a point 12" min below final grade.
     - ii. Remove adjacent curps or paving as necessary to transition the building footprint to the surrounding grades.
     - iii. Backfill and prepare the site for new paving.



. EXISTING BUILDING - FLOOR PLAN
1/8" = 1'-0"

EXISTING BUILDING FLOOR ELEVATION = 923.10'

ENERGY CODE REQUIREMENTS:

ZONE 5

EXISTING METAL BUILDNG	REQUIRED	PROVIDED
INSUL ENTIRELY ABOVE ROOF DECK: (Rigid insul over wood sheathing & trusses)	R-30 Ci	5" @ R6.2 PER INCH = R-31 (POLYISOCYANURATE) + R-0.63 FOR PROTECTION BOARD = **R-31.63**
WALLS ABOVE GRADE (WOOD FRAMED)	WOOD FRAMED: R-13 + R7.5 Cont. Insul.	6"@ R-19 BATT INSUL + 2" @ R-10 (R5/INCH) (Dow 703) = **R-29**
SLAB ON GRADE: UNHEATED SLABS:	R-10.0 - extend 24" below grade.	**R-10**, Extending 4' deep (Dow XPS)

RESTROOM CALCS:

AREA	OCC LOAD	FIXTURE REQUIREMENTS (2021 UPC) MEN WC	UR	LAV	WOMEN WC	LAV
BREAK ROOM & OFFICE	30+13 = 43 = 22M & 21	1:25 1	--	1:40 1	1:25 1	1:40 1
STORAGE	22 = 11M & 11W	1:100 1	--	1:100 1	1:100 1	1:100 1
CUMULATIVE TOTAL		2	--	2	2	2
EXISITNG NEW TO BE ADDED:		2	--	2	1 1	1 1

OCCUPANT LOADS AND EXITING:

AREA	USE	AREA	OCC LOAD FACTOR	OCC LOAD CALCULATED	EXITS REQUIRED	EXITS PROVIDED	NOTES:
BREAK ROOM	BREAKROOM	462 SF	1:15	30	1	2	
OFFICE: NEW	OFFICE	1033 SF	1:150	7	1	2	
OFFICE: EXISTING	OFFICE	872 SF	1:150	6	1	2	
WAREHOUSE AREA	STORAGE	6467 SF	1:300	22	1	4	
TOTAL (SOME EXITS SERVE TWO AREAS)		8900 SF		65	2	4	7500SF EXG + 1400 SF NEW

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Phone: (515) 251-7280

SOUTHEAST POLK TRANSPORTATION BUILDING

8415 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.18.2025

PROJECT NO: R3007.000.00

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EXISTING BLDG PLAN

A01.02

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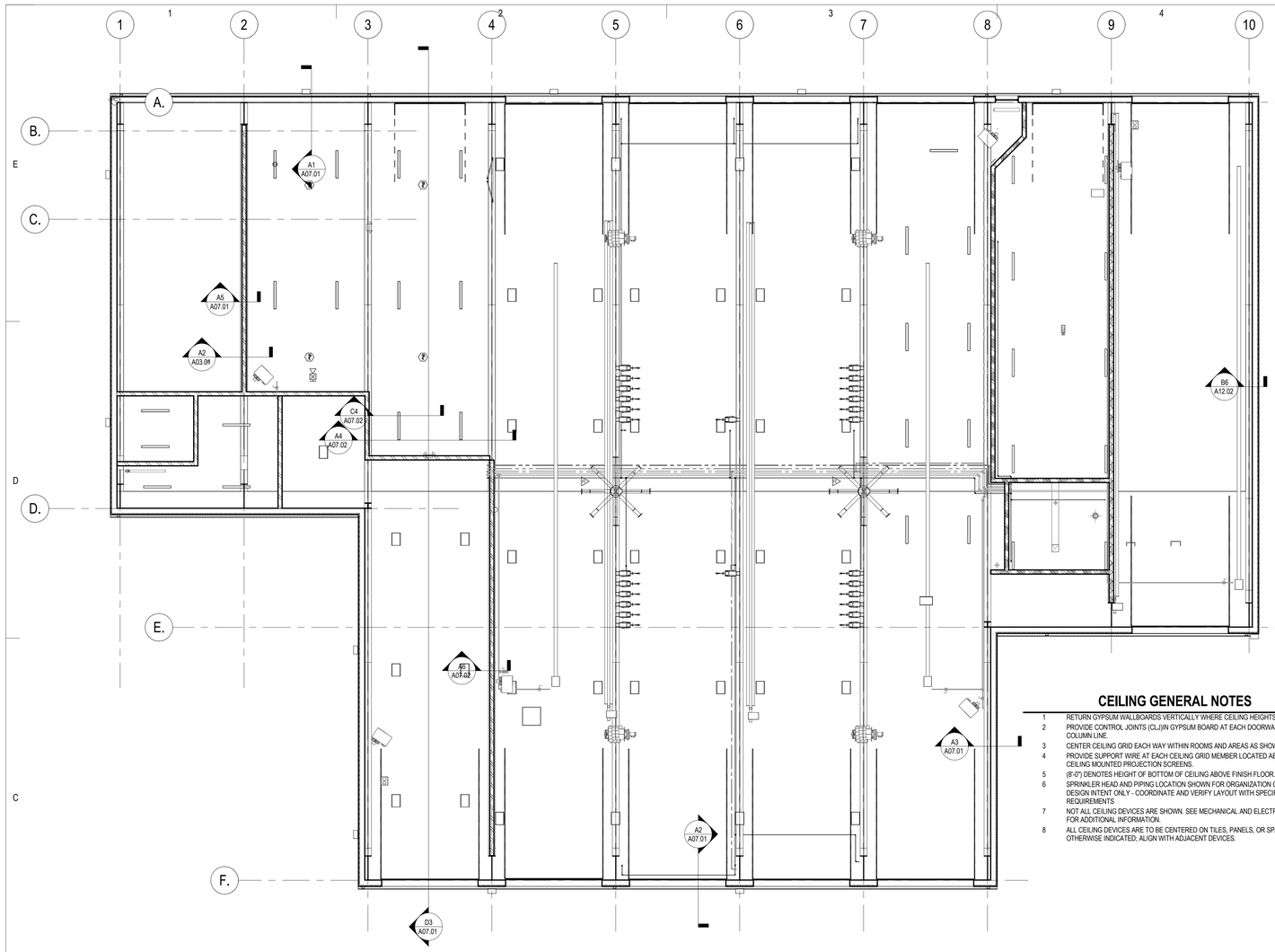

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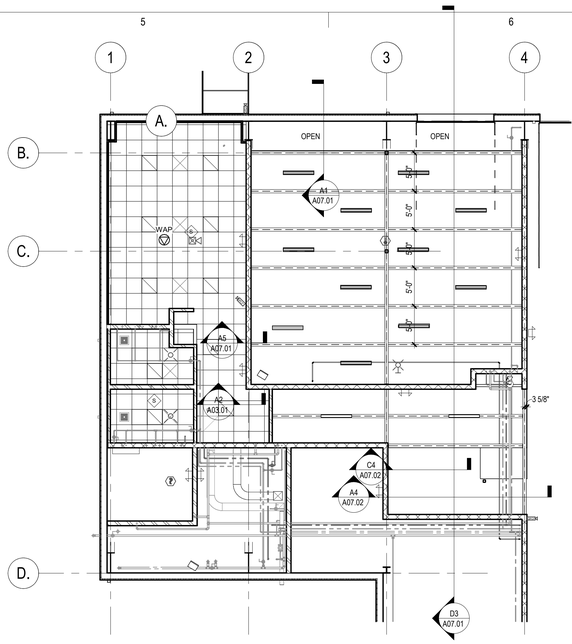
CEILING PLAN - UPPER ROOF
1/8" = 1'-0"

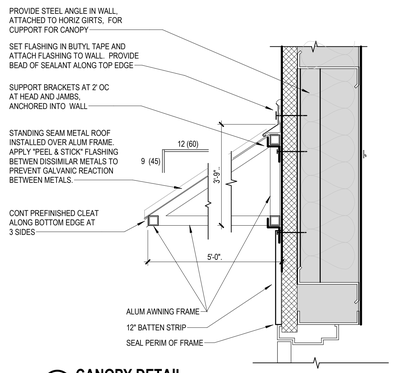


N

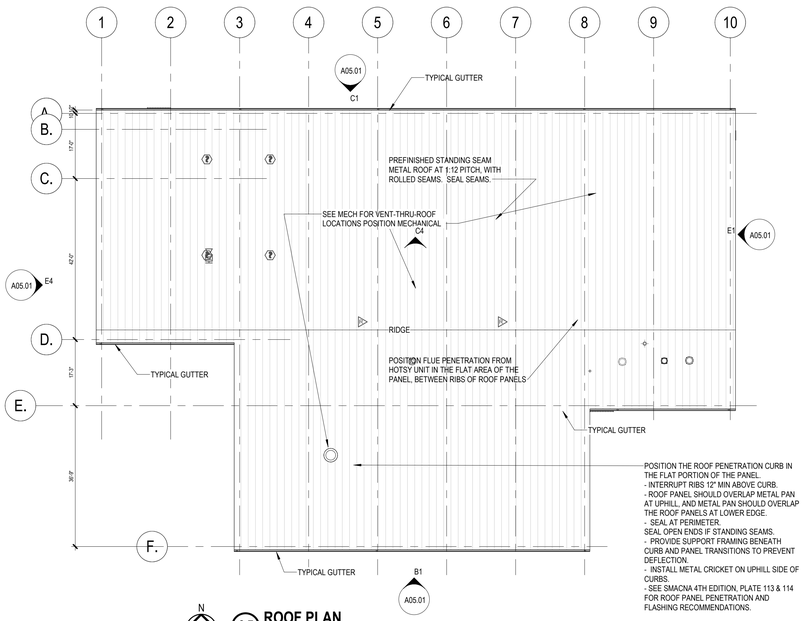
CEILING PLAN LEVEL 1 (BENEATH MEZZANINE)
1/8" = 1'-0"

CEILING GENERAL NOTES

1. RETURN GYPSUM WALLBOARDS VERTICALLY WHERE CEILING HEIGHTS OFFSET.
2. PROVIDE CONTROL JOINTS (CL)IN GYPSUM BOARD AT EACH DOORWAY, AND AT EACH COLUMN LINE.
3. CENTER CEILING GRID EACH WAY WITHIN ROOMS AND AREAS AS SHOWN HEREIN, UNO.
4. PROVIDE SUPPORT WIRE AT EACH CEILING GRID MEMBER LOCATED ABOVE ALL CEILING MOUNTED PROJECTION SCREENS.
5. (8'-0") DENOTES HEIGHT OF BOTTOM OF CEILING ABOVE FINISH FLOOR.
6. SPRINKLER HEAD AND PIPING LOCATION SHOWN FOR ORGANIZATION CONCEPT AND DESIGN INTENT ONLY - COORDINATE AND VERIFY LAYOUT WITH SPECIFIED REQUIREMENTS.
7. NOT ALL CEILING DEVICES ARE SHOWN. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
8. ALL CEILING DEVICES ARE TO BE CENTERED ON TILES, PANELS, OR SPACE UNLESS OTHERWISE INDICATED; ALIGN WITH ADJACENT DEVICES.



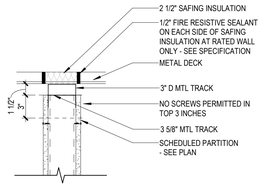
C6 CANOPY DETAIL
1 1/2" = 1'-0" (B1\ A05.01)



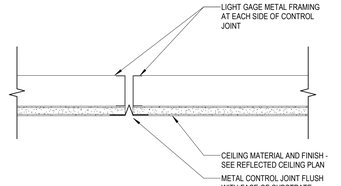
N

A5 ROOF PLAN
1/16" = 1'-0"

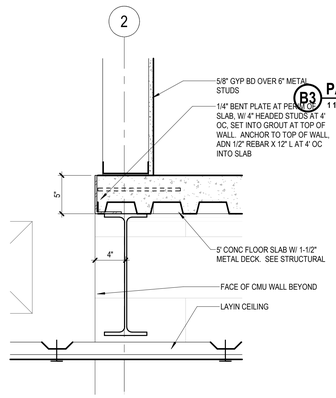
B1 WALL - CONTROL JOINT- GYP. BD.
1 1/2" = 1'-0"



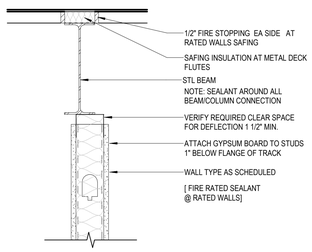
B3 PARTITION TOP - AT DECK
1 1/2" = 1'-0"



A1 CLG - GYP BD CONTROL JOINT
3" = 1'-0"



A2 MEZZ SLAB DETAIL
1 1/2" = 1'-0"



A3 TOP OF METAL STUD WALL @ BEAM
1 1/2" = 1'-0"

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SOUTHEAST POLK TRANSPORTATION BUILDING

8415 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.18.2025

PROJECT NO.: R3007.000.00

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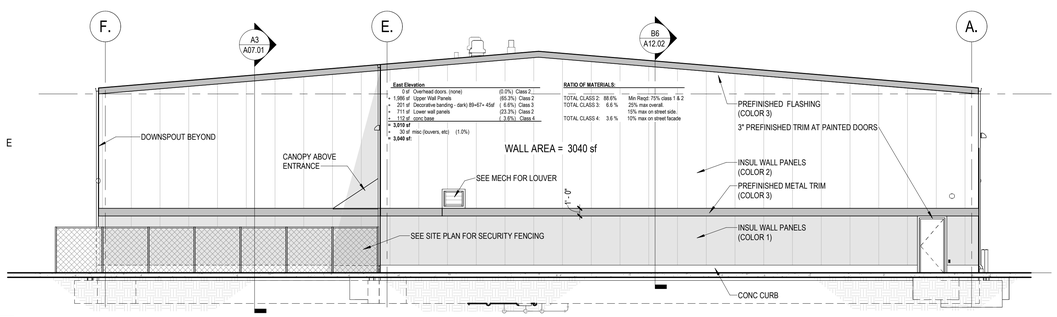
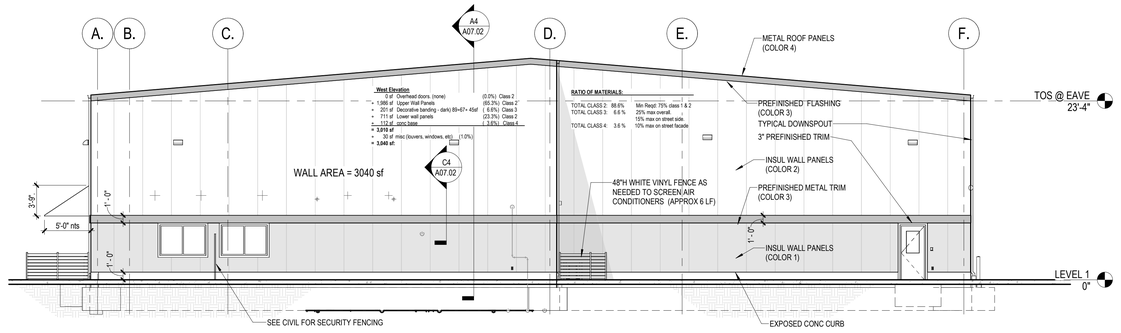
REFLECTED CEILING PLANS & ROOF PLAN

A03.01

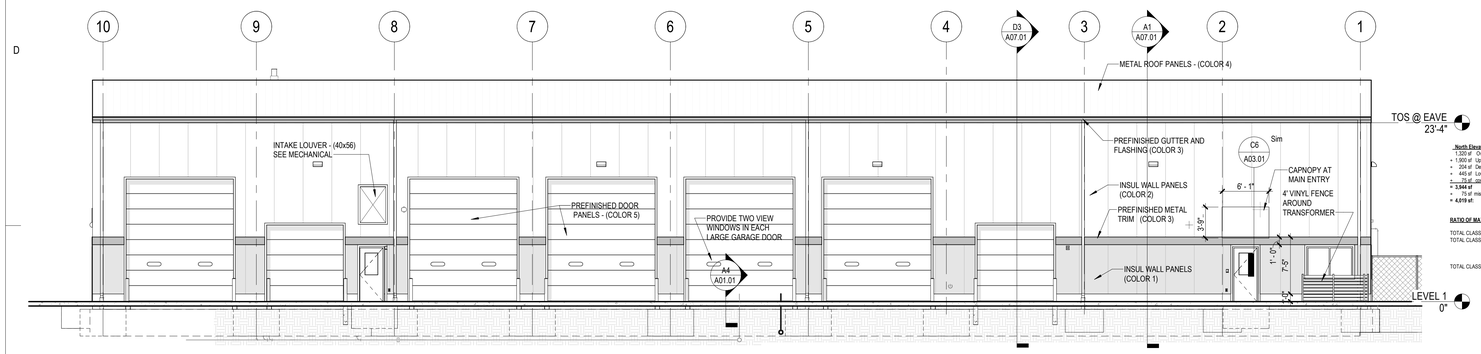


E1 2025 EAST ELEVATION
1/8" = 1'-0"

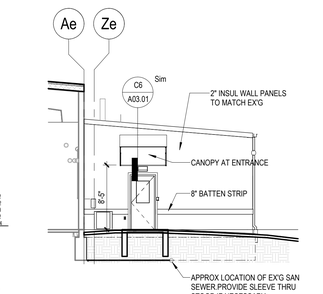
173.04: BUILDING DESIGN STANDARDS:
Non-Residential Buildings in all Non-Residential Zoning Districts, … shall be proportioned and designed so as to have an *appropriately scaled* and visible *top, middle, and base and must incorporate no less than three (3) different class 1 or class 2 façade materials as primary façade materials*, together composing at least 75% of each street facing façade area. Class 3 and class 4 façade materials in aggregate shall not exceed 25% of any street facing façade area. Class 4 façade materials shall not exceed 10% of any street facing façade area



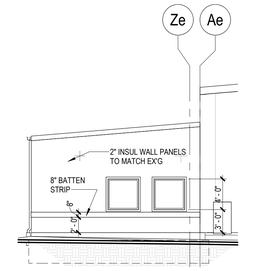
E4 2025 WEST ELEVATION
1/8" = 1'-0"



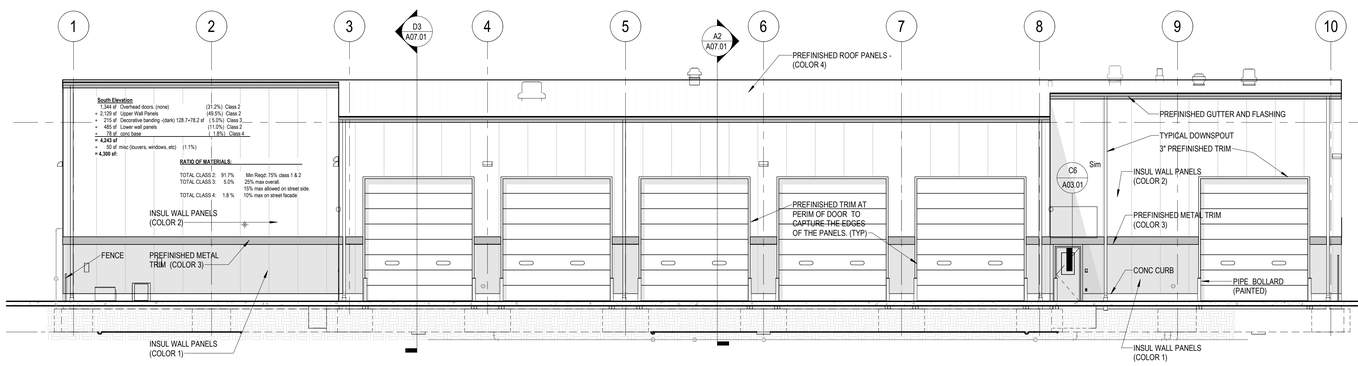
C1 2025 NORTH ELEVATION
1/8" = 1'-0"



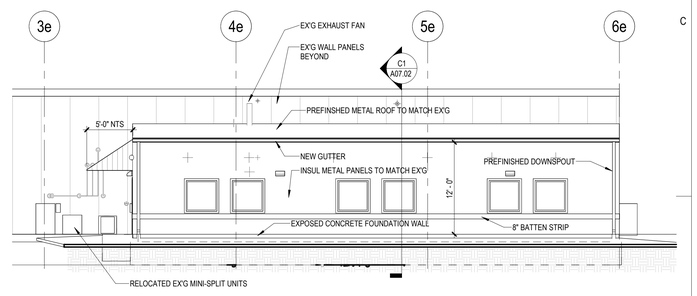
D5 WEST ELEVATION - ADDITION
1/8" = 1'-0"



D6 EAST ELEVATION - ADDITION
1/8" = 1'-0"



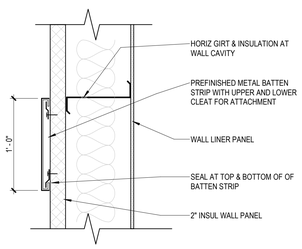
B1 2025 SOUTH ELEVATION
1/8" = 1'-0"



C5 SOUTH ELEV. - ADDITION
1/8" = 1'-0"

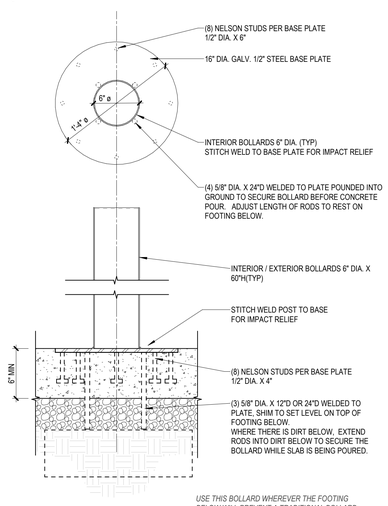
EXTERIOR COLOR LEGEND:
(BASIS OF DESIGN):

COLOR 1 - LOWER INSUL. WALL PANELS:
METL-SPAN - "ZINC GRAY"
COLOR 2 - UPPER INSUL. WALL PANELS:
METL-SPAN - "ALMOND"
COLOR 3 - DECORATIVE METAL TRIMS, BATTEN STRIP, GUTTERS, AND FASCIAS:
CECO SIGNATURE 200 - "KOKO BROWN"
COLOR 4 - PREFINISHED METAL ROOF:
CECO SIGNATURE 300 - "ALMOND"
COLOR 5 - OVERHEAD METAL DOOR PANELS:
CLOPAY - "WHITE"
COLOR 6 - PAINTED ENTRY DOORS:
PPG - "SAFETY YELLOW"
LINER PANELS (INTERIOR)
CECO SIGNATURE 200 - "POLAR WHITE"



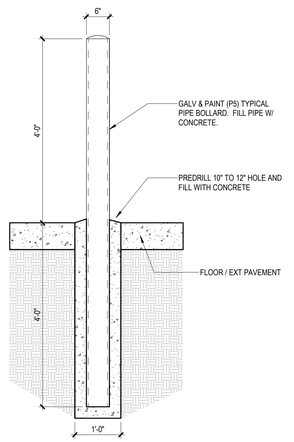
A1 BATTTEN STRIP
1 1/2" = 1'-0"

A2 VIEW FROM UNIV AVE (10FT AFF, 260 LF AWAY)



A5 PIPE BOLLARD (PB)
1 1/2" = 1'-0"

USE THIS BOLLARD WHEREVER THE FOOTING BELOW WILL PREVENT A TRADITIONAL BOLLARD FROM BEING USED.



A6 PIPE BOLLARD
3/4" = 1'-0"

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SOUTHEAST POLK TRANSPORTATION BUILDING

8415 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

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EXTERIOR ELEVATIONS

A05.01

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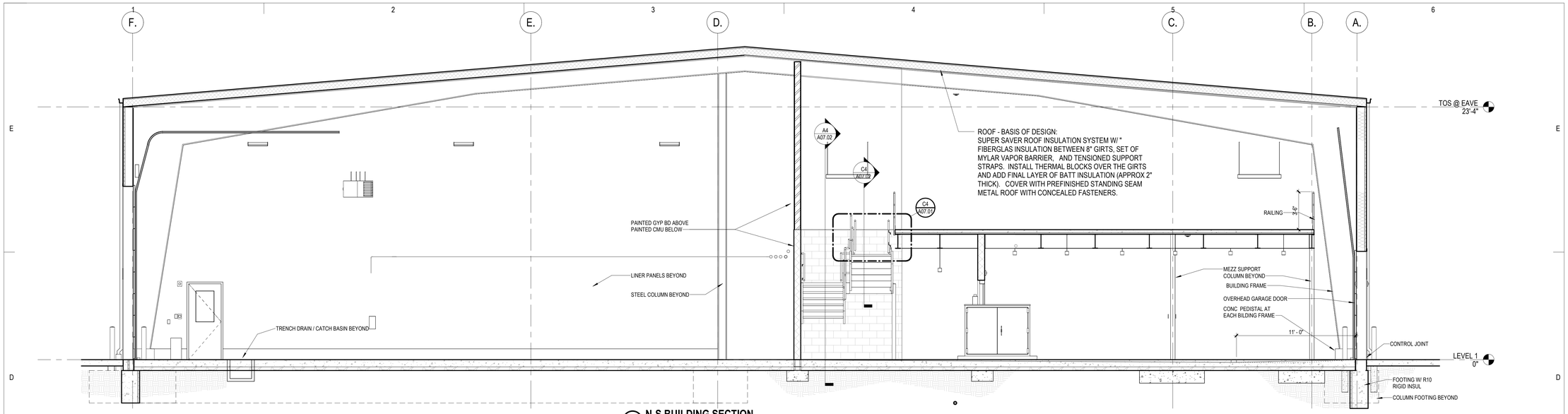
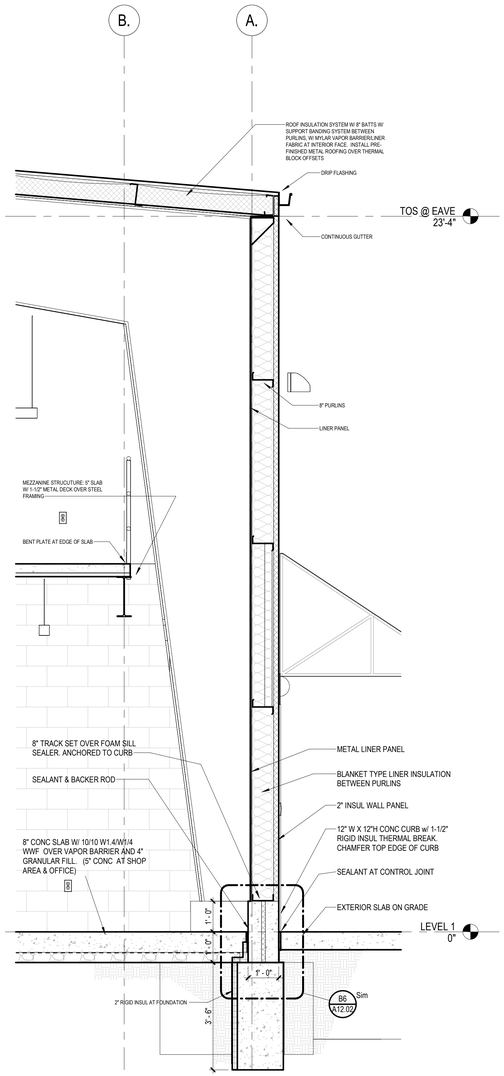
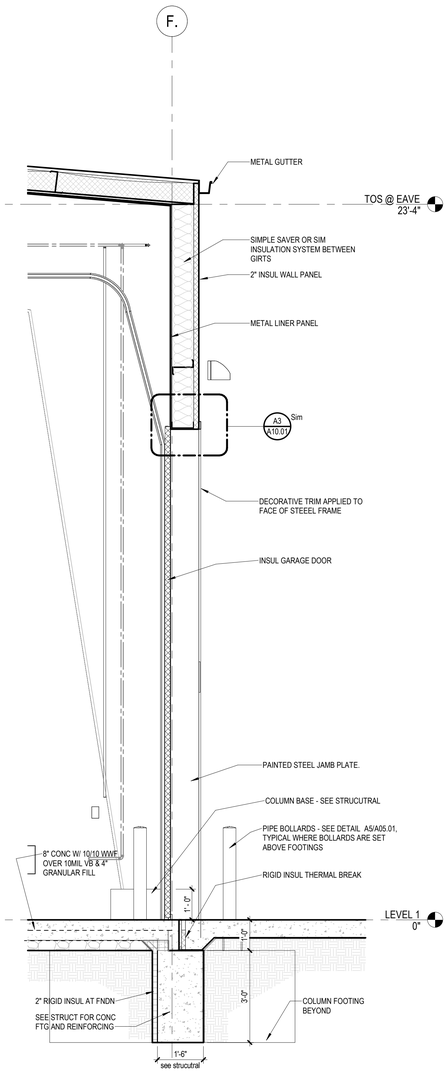


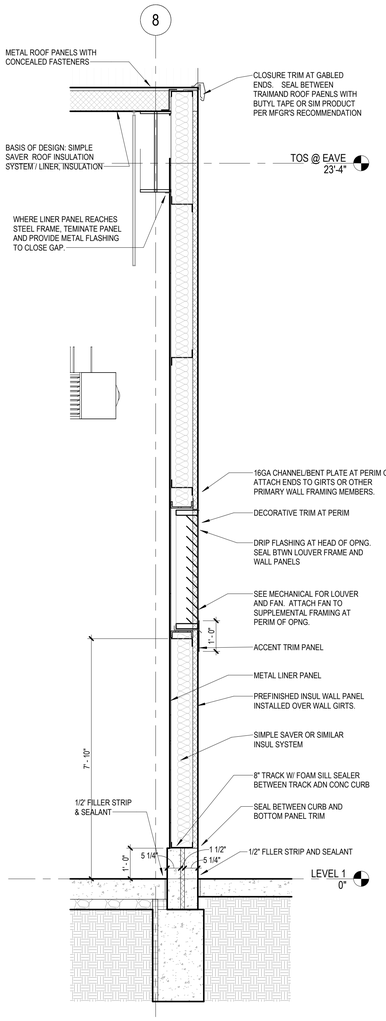
D3 N-S BUILDING SECTION
1/4" = 1'-0"



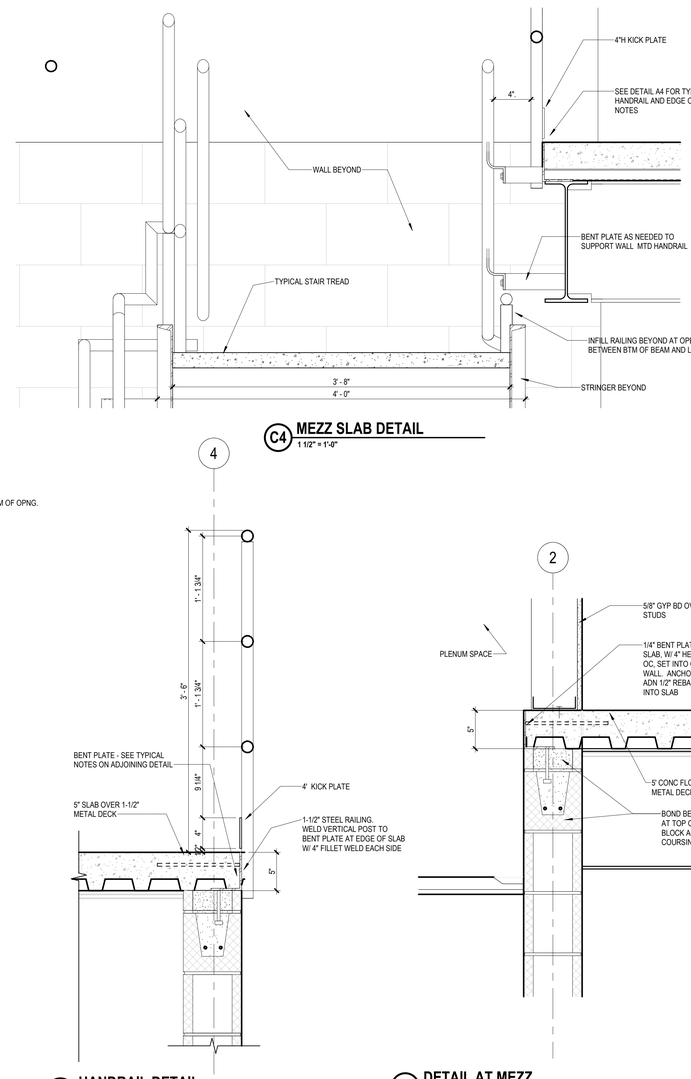
A1 SECTION AT NORTH WALL
1/2" = 1'-0"



A2 SECTION AT GARAGE DOOR
1/2" = 1'-0"

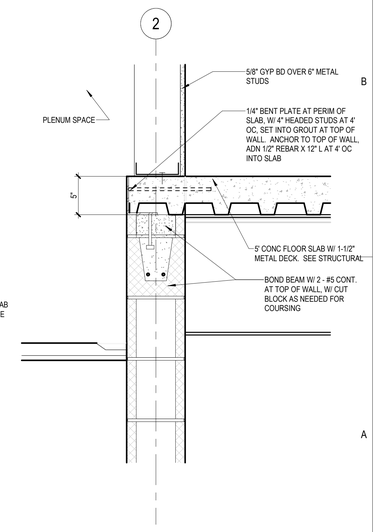


A3 SECTION AT GABLE
1/2" = 1'-0"



C4 MEZZ SLAB DETAIL
1 1/2" = 1'-0"

A4 HANDRAIL DETAIL
1 1/2" = 1'-0"



A5 DETAIL AT MEZZ
1 1/2" = 1'-0"

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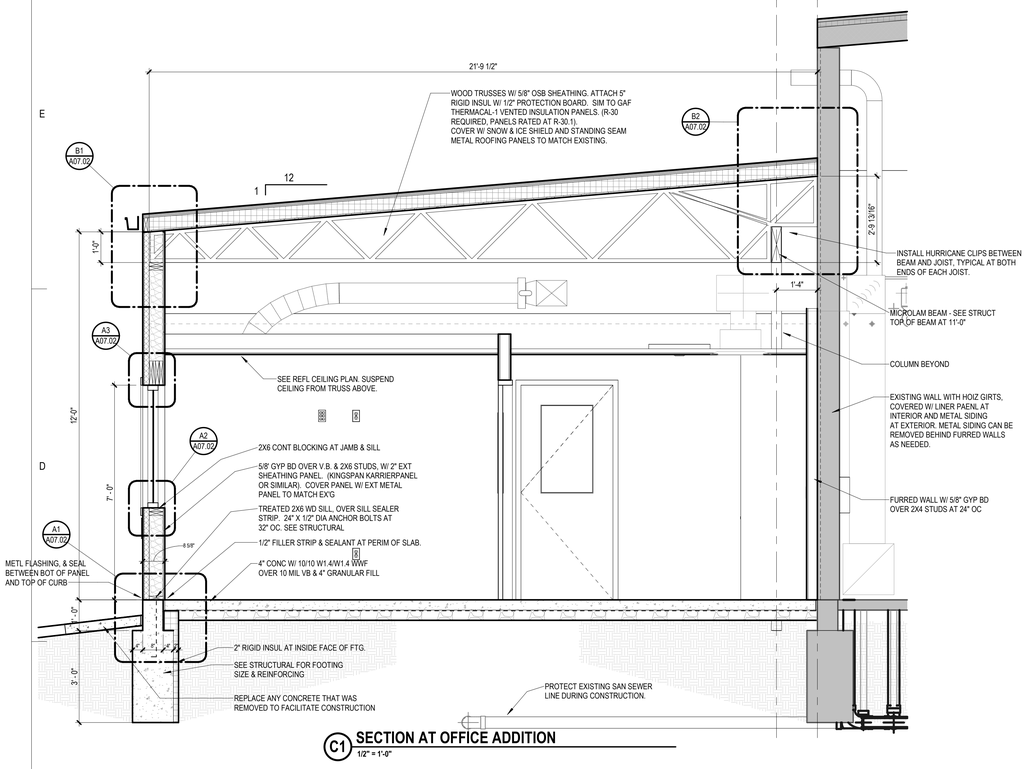
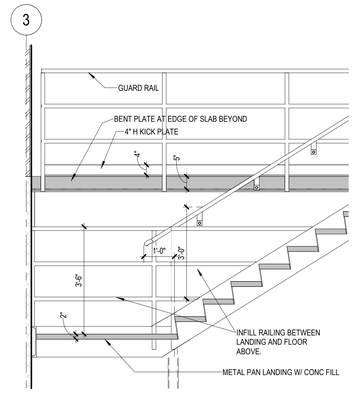
SECTIONS

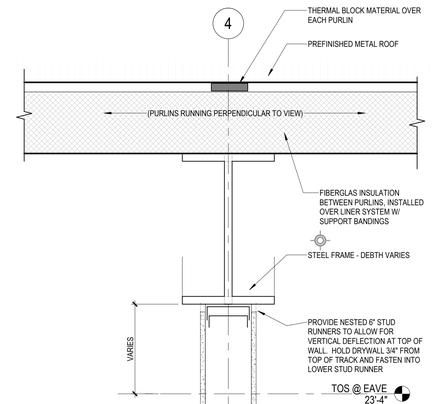
A07.01

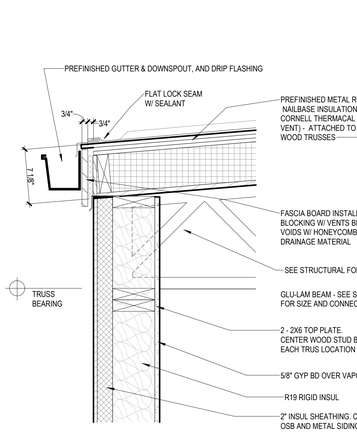


C1 SECTION AT OFFICE ADDITION
1/2" = 1'-0"

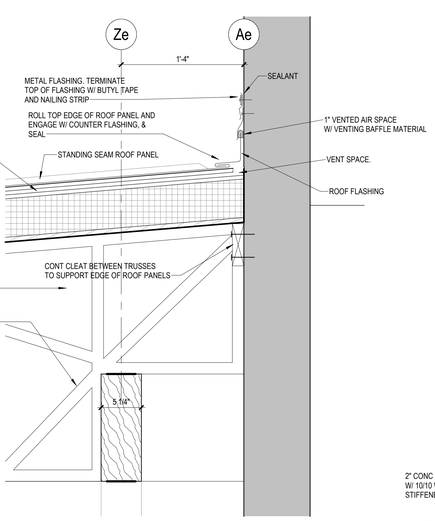


C4 PARTIAL STAIR SECTION
1/2" = 1'-0"

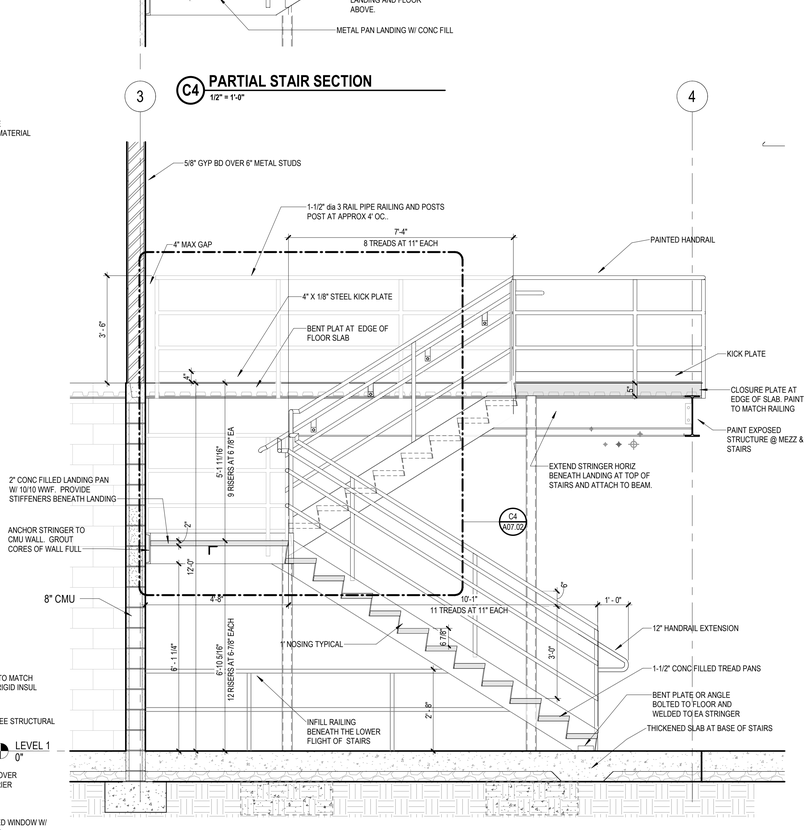




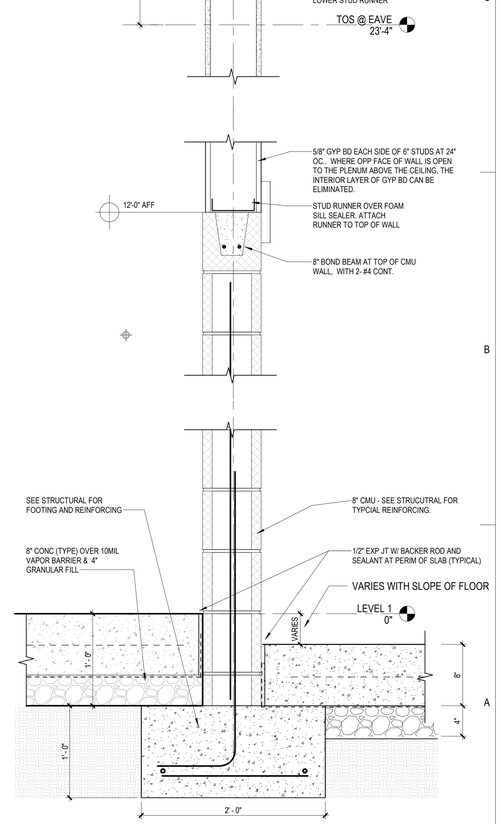
B1 SECTION AT EAVE
1 1/2" = 1'-0"



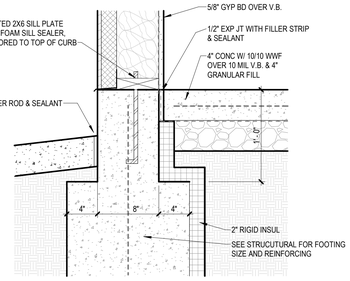
B2 SECTION AT RIDGE
1 1/2" = 1'-0"



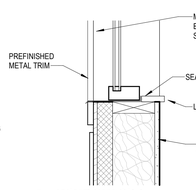
A4 STAIR SECTION 2024
1/2" = 1'-0"



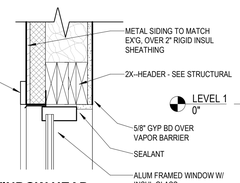
A6 WEST WALL OF SHOP
1 1/2" = 1'-0"



A1 FNDN @ OFFICE ADDITION
1 1/2" = 1'-0"



A2 WINDOW SILL
1 1/2" = 1'-0"



A3 WINDOW HEAD
1 1/2" = 1'-0"

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SOUTHEAST POLK TRANSPORTATION BUILDING

8415 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.18.2025
PROJECT NO: R3007.090.00

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SECTIONS & ELEVATIONS

A07.02

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GENERAL DOOR AND BORROWED LIGHT NOTES

THE FOLLOWING NOTES APPLY TO ALL SCHEDULED DOORS AND BORROWED LIGHTS.

1. DOOR FINISHES:
   - HM DOORS AND FRAMES, INTERIOR — PAINT P4
   - HM DOORS AND FRAMES, EXTERIOR — PAINT P4 / P5 - GALVANIZE W/ HPC
   - ALUMINUM DOORS AND FRAMES — NOT USED

2. GLAZING SCHEDULE:

		THICKNESS	TYPE	TINT	OTHER
G1	EXTERIOR WINDOWS:	1"	INSUL	CLEAR	LOW-E
G2	EXTERIOR DOORS	1"	INSUL - TEMPD	CLEAR	LOW-E
G3	INTERIOR DOORS	1/4"	TEMPD	CLEAR	PROVIDE H.M FRAME KIT AS NEEDED FOR DOOR
G4	GARAGE DOOR WDWS	1/4"	TEMPD	CLEAR	BY DOOR MFGR.

3. DOOR THICKNESS IS 1 3/4" UNO.

4. PROVIDE ROUGH-INS FOR ELECTRIFIED HARDWARE AND SECURITY PRIOR TO ENCLOSING WALLS. NO EXPOSED CONDUITS OR WIRES TO FRAMES WILL BE ACCEPTED.

ELECTRIFIED DOOR HARDWARE ABBREVIATIONS

PE	PANIC ELECTRIC
LE	LOCKSET OR STRIKE ELECTRIC
ACRE	ACCESS CONTROL READER ELECTRIC
ACRB	ACCESS CONTROL READER BATTERY
DE	DELAYED EGRESS
AEE	ALARMED EXIT ELECTRIC
AEB	ALARMED EXIT BATTERY
REX	REQUEST TO EXIT
DPS	DOOR POSITION SWITCH
AO	AUTOMATIC OPERATOR
MH	MAGNETIC HOLDER / FIRE ALARM CONNECTION
MC	MAGNETIC CLOSER / FIRE ALARM CONNECTION
ML	MAGNETIC LOCK / FIRE ALARM CONNECTION / FAIL SAFE

DOOR AND FRAME SCHEDULE

MARK	DOOR WIDTH	DOOR HEIGHT	DR. TYPE	DOOR MAT'L	FRAME TYPE	FRAME MAT'L	FRAME HEAD HEIGHT	FIRE RATING	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	HARDWARE HDWR GROUP	HARDWARE ELECTRIFIED	REMARKS	MARK
101.1	3'-0"	7'-0"	HG	HM	F1	HM-GALV	2"	--	A2/A10.01	B2/A10.01		01	•		101.1
101.2	3'-0"	7'-0"	HG	HM	F5	HM	2"		A1/A10.01	A6/A10.01		03			101.2
102	3'-0"	7'-0"	F	HM	F1	HM	2"		A1/A10.01	A1/A10.01		06			102
103	3'-0"	7'-0"	F	HM	F1	HM	2"		A1/A10.01	A1/A10.01		06			103
105.1	3'-0"	7'-0"	F	HM	F3	HM	4"		B4/A10.01	B5/A10.01		03			105.1
105.2	3'-0"	7'-0"	F	HM	F1	HM	2"		B4/A10.01	B5/A10.01		04			105.2
107.1	3'-0"	7'-0"	HG	HM-GALV	F1	HM-GALV	2"	--	A2/A10.01	B2/A10.01 SIM		01A	•	PREP FOR FUTURE CARD ACCESS. INSUL DOOR	107.1
107.2	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		107.2
107.3	8'-0"	7'-0"	F-PR	HM	F4	HM	4"		B4/A10.01	B5/A10.01		07			107.3
107.4	3'-0"	7'-0"	HG	HM	F3	HM	4"		B4/A10.01	B5/A10.01		05			107.4
108.1	10'-0"	10'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		108.1
108.2	7'-0"	7'-0"	F-PR		F4	HM	4"		B4/A10.01	B5/A10.01		07			108.2
109.1	3'-0"	7'-0"	HG	HM-GALV	F1		2"		A2/A10.01			01A	•	PREP FOR FUTURE CARD ACCESS. INSUL DOOR	109.1
109.2	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		109.2
109.3	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		109.3
109.4	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10/01	A4/A10/01		02	•		109.4
109.5	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		109.5
109.6	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		109.6
109.7	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		109.7
109.8	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		109.8
109.9	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10/01	A4/A10/01		02	•		109.9
110	3'-0"	7'-0"	HG	HM-GALV	F1	HM-GALV	2"		A2/A10.01	A2/A10.01 SIM		01	•	INSULATED DOOR	110
111.1	10'-0"	10'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02B	•		111.1
111.2	6'-0"	7'-0"	F-PR	HM	F4	HM	4"	45 MIN	B4/A10.01	B5/A10.01		07B			111.2
111.3	6'-0"	7'-0"	F-PR	HM	F4	HM	4"	45 MIN	B4/A10.01	B5/A10.01		07B			111.3
112.1	3'-0"	7'-0"	HG	HM-GALV	F3	HM-GALV	4"	--	B4/A10.01	B5/A10.01		03			112.1
112.2	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		112.2
112.3	3'-0"	7'-0"	F	HM-GALV	F1	HM-GALV	2"	--	A2/A10.01			01A		INSULATED DOOR	112.3
112.4	14'-0"	16'-0"	OHD	INSUL STL	F2	STEEL		--	A3/A10.01	A4/A10/01		02	•		112.4
201A	3'-0"	7'-0"	HG	HM-GALV	F1	HM-GALV	2"					01	•	INSULATED DOOR	201A
201B	3'-0"	7'-0"	HG	HM	F1	HM	2"		A1/A10.01	A1/A10.01		04			201B
202	3'-0"	7'-0"	HG	HM	F1	HM	2"			C1/A12.02		03			202
203	3'-0"	7'-0"	N	HM	F1	HM	2"		A1/A10.01	A1/A10.01		05			203
204	3'-0"	7'-0"	N	HM	F1	HM	2"		A1/A10.01	A1/A10.01		05			204
205	3'-0"	7'-0"	N	HM	F1	HM	2"		A1/A10.01	A1/A10.01		05			205
206	3'-0"	7'-0"	N	HM	F1	HM	2"		A1/A10.01	A1/A10.01		05			206
208	3'-0"	7'-0"	F	HM	F1	HM	2"					06		RESTROOM DOOR	208

HARDWARE SET 01 (exterior door)
1.5 PAIR BALL BEARING HINGES
1 EA CLASSROOM LOCKSET W/ LEVER HANDLES
1 EA OVERHEAD CLOSER W/ BACK-CHECK
1 EA KICKPLATE
1 EA PERIM SEALS
1 EA OVEREHEAD STOP
1 EA DRIP LEDGE AT HEAD
1 EA THRESHHOLD
1 EA DOOR SWEEP
1 EA ELECTRIC STRIKE
1 EA PROX READER.

SET 01A (Exterior Door)
1.5 PAIR BALL BEARING HINGES
1 EA STOREROOM LOCKSET W/ LEVER HANDLES
1 EA OVERHEAD CLOSER W/ BACK-CHECK
1 EA KICKPLATE
1 EA DOOR SWEEP
1 EA PERIM SEALS
1 EA OVEREHEAD STOP
1 EA DRIP LEDGE AT HEAD
1 EA THRESHHOLD

WHERE NOTED, PREP FRAME FOR FUTURE CAR READER.

HARDWARE SET 02 (overhead garage doors)
1 EA PUSH BUTTON OPERATOR
1 EA DOOR SENSOR
1 EA DOOR POSITION SWITCH
1 EA WEATHER STRIPPING AT PERIM OF FRAME
1 EA WEATHER SEAL AT SILL
1 EA SAFETY BEAM
2 EA REMOTE CONTROL (PROVIDE 2 PER DOOR)

HARDWARE SET 02B (Small garage doors)
1 EA PUSH BUTTON OPERATOR
1 EA DOOR SENSOR
1 EA DOOR POSITION SWITCH
1 EA WEATHER STRIPPING AT PERIM OF FRAME
1 EA WEATHER SEAL AT SILL
1 EA SAFETY BEAM

HARDWRE SET 03
1.5 PAIR BALL BEARING HINGES
1 EA PASSAGE SET W/ LEVER HANDLE
1 EA OVERHEAD CLOSER
1 EA 12 X 34 KICKPLATE
1 EA PERIM ACOUSTIC SEALS
1 EA WALL STOP

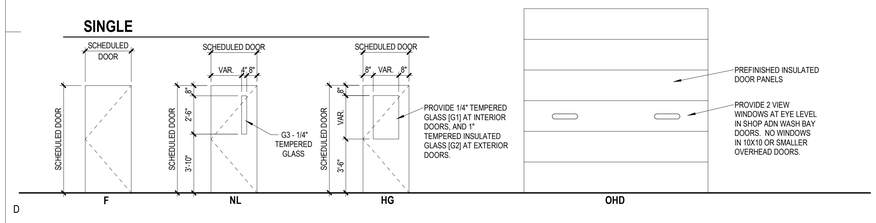
HARDWRE SET 04
1.5 PAIR BALL BEARING HINGES
1 EA PASSAGE SET W/ LEVER HANDLES
1 EA OVERHEAD CLOSER W/ BACK-CHECK
1 EA 12 X 34 KICKPLATE
1 EA PERIM ACOUSTIC SEALS
1 EA OVERHEAD STOP

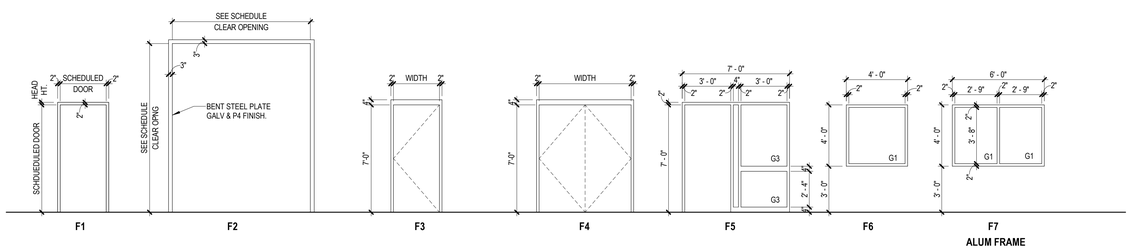
HARDWRE SET 05 (office)
1.5 PAIR BALL BEARING HINGES
1 EA OFFICE LOCKSET W/ LEVER HANDLES
1 EA OVERHEAD CLOSER
1 EA 12x34 KICKPLATE
1 EA PERIM ACOUSTIC SEALS
1 EA OVERHEAD STOP

HARWARE SET 06 (restroom)
1.5 PAIR BALLBEARING HINGES
1 EA LEVER HANDLE PRIVACY LOCKSET
1 EA OVERHEAD CLOSER
1 EA 12x34 KICKPLATE
1 EA PERIM ACOUSTIC SEALS
1 EA WALL STOP

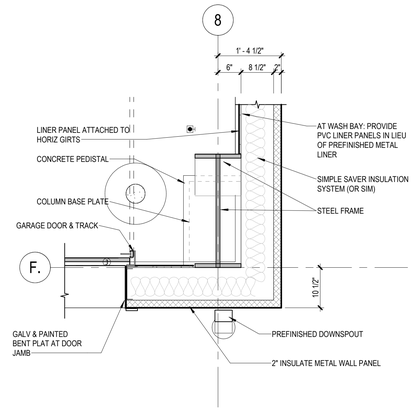
SET 07 - PAIR OF DOORS
3 Pair 1.5 PAIR BALLBEARING HINGES ON EACH LEAF
1 EA PASSAGE SET W/ LEVER HANDLE
1 EA FLUSHBOLTS TOP AND BOTTOM AT INACTIVE LEAF
1 EA DUSTPROOF STRIKE PLATE AT FLOOR
2 EA OVERHEAD STOPS - 1 AT EACH LEAF.
2 EA 36h KICKPLATE AT EACH LEAF
2 EA DROP DOWN DOOR HOLDER (1 PER LEAF)

SET 07B - PAIR OF DOORS
3 Pair 1.5 PAIR BALLBEARING HINGES ON EACH LEAF
1 EA PASSAGE SET W/ LEVER HANDLE
2 EA OVERHEAD CLOSER AT EACH LEAF.
1 EA FLUSHBOLTS TOP AND BOTTOM AT INACTIVE LEAF.
1 EA DUSTPROOF STRIKE PLATE AT FLOOR
2 EA OVERHEAD STOPS - 1 AT EACH LEAF.
2 EA 36"h KICKPLATE AT EACH LEAF

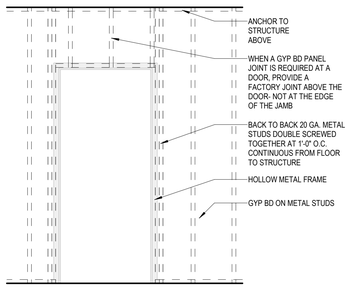




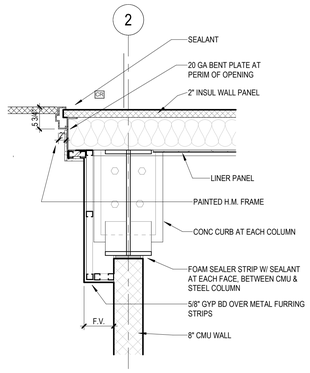
DOOR FRAME TYPES



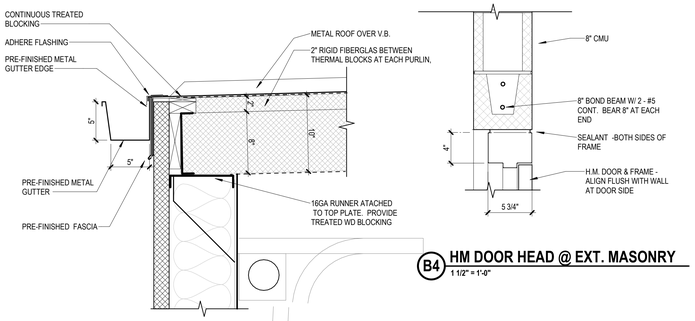
C5 JAMB AT GARAGE DOOR
3/4" = 1'-0"



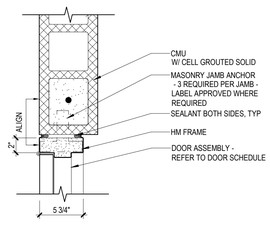
B1 DOOR FRAMING IN METAL STUD WALL
1/2" = 1'-0"



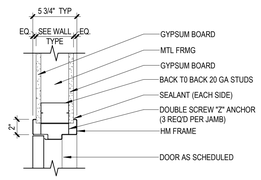
B2 DOOR JAMB
3/4" = 1'-0"



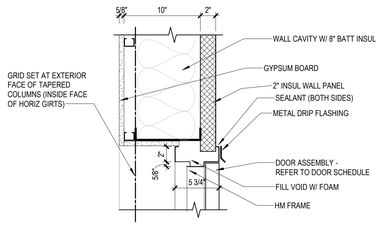
B4 HM DOOR HEAD @ EXT. MASONRY
1 1/2" = 1'-0"



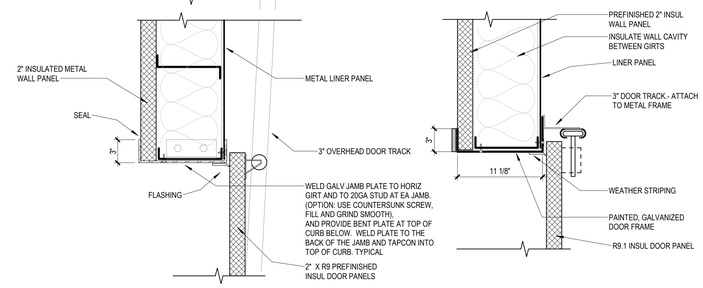
B5 HM DOOR JAMB @ MASONRY
1 1/2" = 1'-0"



A1 HM DOOR JAMB @ DRYWALL
1 1/2" = 1'-0"

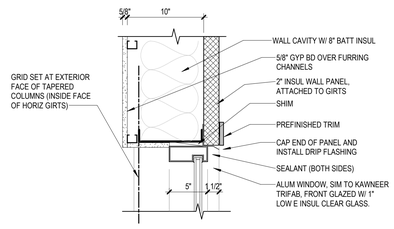


A2 HM DOOR HEAD @ EXT. METAL PANELS
1 1/2" = 1'-0"

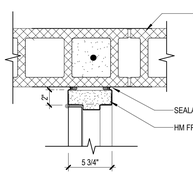


A3 OH GARAGE DOOR - HEAD
1 1/2" = 1'-0" (A2\ A07.01)

A4 OH DOOR JAMB
1 1/2" = 1'-0"



A5 WINDOW HEAD @ INS WALL PANELS
1 1/2" = 1'-0"



A6 HM DOOR JAMB @ MASONRY
1 1/2" = 1'-0"

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SOUTHEAST POLK TRANSPORTATION BUILDING

8415 NE University Ave.
Pleasant Hill Iowa 50327

Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.12.2025
PROJECT NO: R3007.090.00

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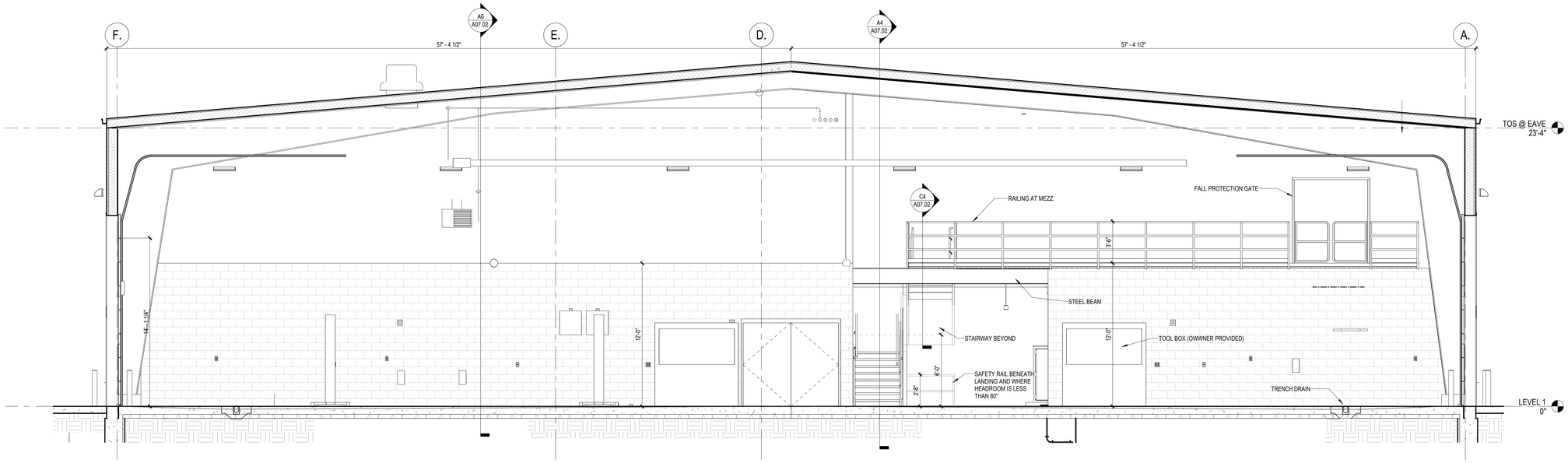
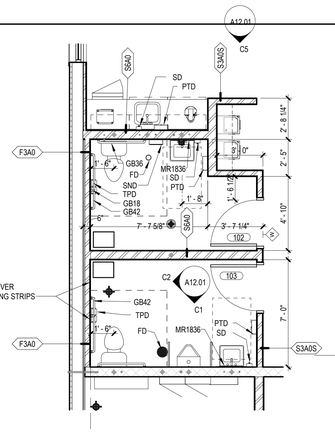
DOOR/ WINDOW SCHEDULE/ TYPES

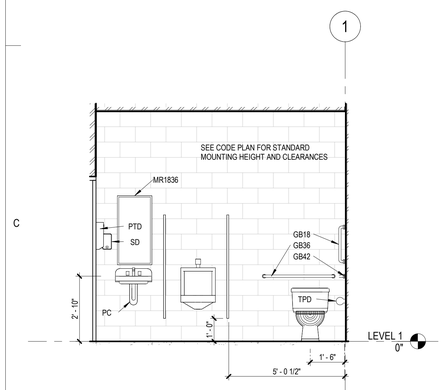
A10.01



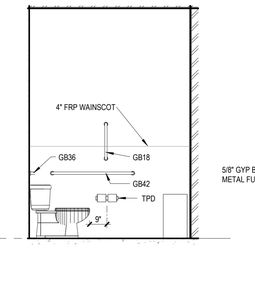
D1 SECTION THRU SHOP AREA
1/4" = 1'-0"



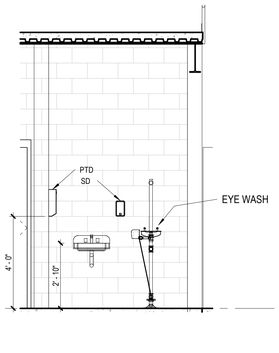
C3 EXPANDED RESTROOM PLAN
1/4" = 1'-0" (1 A01.01)



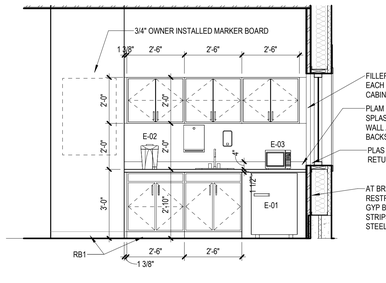
C1 SOUTH ELEVATION
3/8" = 1'-0"



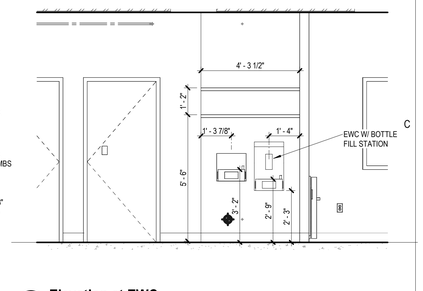
C2 WEST ELEVATION
3/8" = 1'-0"



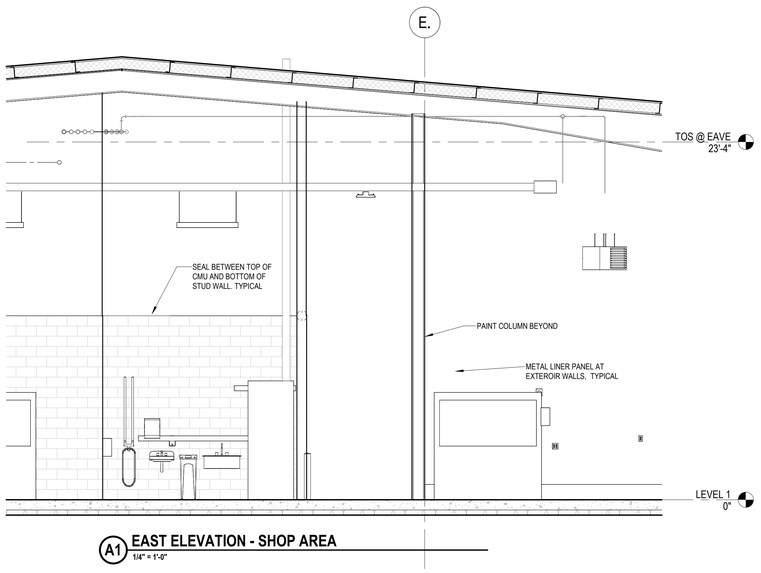
C4 HANDWASH STATION
3/8" = 1'-0"



C5 BREAK ROOM
3/8" = 1'-0"



C6 Elevation at EWC
3/8" = 1'-0"



A1 EAST ELEVATION - SHOP AREA
1/4" = 1'-0"

ROOM FINISH SCHEDULE

NUMBER	ROOM NAME	FLOOR FINISH	BASE	WALL FINISH NORTH	WALL FINISH EAST	WALL FINISH SOUTH	WALL FINISH WEST	Ceiling Finish	MILLWORK MATERIAL CABINET	MILLWORK MATERIAL COUNTERTOP	NOTES	REVISION	NUMBER
LEVEL 1													
101	BREAK ROOM	LVT1	RB1	GYP-P1	CMU-P1	GYP-P1	GYP-P1	ACT-1	PL1	PL2			101
102	RESTROOM	LVT1	RB1	GYP-P1	GYP-P1	GYP-P1	GYP-P1	ACT-1					102
103	RESTROOM	LVT1	RB1	GYP-P1	GYP-P1	CMU-P1	P3	ACT-1	--	--			103
104	HALL	CONC	RB1	--	CMU-P1	CMU-P1	GYP-P1	ACT-1					104
105	MECHANICAL	CONC	--	CMU-P1	CMU-P1	MLP1	MLP1	MYLAR					105
105.2	ELECTRICAL	CONC		CMU-P1	CMU-P1	CMU-P1	MLP1	--					105.2
106	HALL / STAIR	CONC	--	CMU-P1	---	CMU-P1	P1	PAINT STRUCT			PAINT RAILING P4		106
107	PARTS	CONC	--	CMU-P1	CMU-P1	MLP1	MLP1	MYLAR					107
108	LARGE TOOLS	CONC	--	MLP1	CMU-P1	CMU-P1	CMU-PNT	PAINT STRUCT					108
109	SERVICE BAY	CONC	--	MLP1	P1	MLP1	P1	MYLAR					109
110	HALLWAY	CONC	--	P1	P1	MLP1	---	--					110
111	FLUIDS STORAGE	CONC	--	MLP1	P1	P1	P1	MYLAR					111
112	WASH BAY	NOTE 1	--	PVC	PVC	PVC	CMU-PNT	MYLAR					112
200	WAREHOUSE	EXISTING	RB1 AT NEW WALLS	---	---	--	---	EXG			PAINT WALLS AROUND RESTROOMS- TOUCH UP PAINT AS NEEDED		200
201	BREAK ROOM	LVT1	RB1	P1	P1	P1	P1	ACT-1	PL1	PL2	FURR NORTH WALL		201
202	OPEN OFFICE	CPT1	RB1	P2	P1	P1	P1	ACT-1		PL2	FURR NORTH WALL		202
203	OFFICE	CPT1	RB1	P1	P1	P2	P1	ACT-1					203
204	OFFICE	CPT1	RB1	P1	P1	P2	P1	ACT-1					204
205	OFFICE	CPT1	RB1	P1	P1	P2	P1	ACT-1					205
206	MANAGER	CPT1	RB1	P1	P1	P2	P1	ACT-1					206
208	WOMENS	LVT1	RB1	P1	P3	P1	P1	ACT-1					208
MEZZANINE													
120	MEZZANINE	CONC	RB1 AT GYP BD	MLP1	---	--	GYP-P1	MYLAR			PAINT RAILING P4		120

GENERAL FINISH NOTES:

1. ALL EXPOSED CONCRETE FLOORS IN SERVICE AREAS TO RECEIVE SURFACE HARDENER AND SEALER
2. METAL LINER PANEL (MLP1) SHALL BE MFGR'S STANDARD WHITE.
3. COLORS SHOWN INDICATE THE BASIS OF DESIGN. WHERE NOT INDICATED, COLORS TO BE SELECTED FROM MFGR'S STANDARD PRODUCT LINE.
4. EXPOSED STEEL FRAME AND COLUMNS AND BEAM SHALL BE SHOP PRIMED WITH TNEMEC UNIBOND OF SERIES 115 WHITE PRIMER. TOUCH UP ANY DAMAGE TO PRIMER THAT OCCURS DURING ERECTION. NO ADDITIONAL FINISH REQUIRED.
5.

EXTERIOR:

WALL PANELS:

IWP1 EXTERIOR WALL PANELS - LOWER ACCENT COLOR: MATCH METL-SPAN "ZINC GRAY"
IWP2 EXTERIOR WALL PANELS - UPPER FIELD COLOR MATCH METL-SPAN "ALMOND"
IWP - INTERIOR FACE OF PANELS: METL-SPAN OR CECO SIGNATURE 200 "POLAR WHITE"
MLP1 METAL LINER PANEL COLOR: WHITE
PVC DELPRO 1638 PVC LINER PANELS. COLOR: WHITE

PM3 PREFINISHED ACM PANEL - (ACCENT COLOR): CECO SIGNATURE 200 "KOKO BROWN"
PM4 PREFINISHED METAL COLOR FOR DOWNSPOUTS AND GUTTER: CECO SIGNATURE 200 "KOKO BROWN"
PM5 PREFINISHED METAL COLOR FOR ROOF PANELS: CECO SIGNATURE 300, "ALMOND"
PROFILE OF ROOF PANELS: CECO ULTRA-DEK, 2' H X 24"W

GARAGE DOORS: (RAYNOR TM 220) MFGR'S STANDARD WHITE.
EXTERIOR LOUVERS: (UNITED ENERTECH) "SIERRA TAN"

INTERIOR:

PAINT:

P1 INT. WALL PAINT COLOR: PPG 0999-1 "IN THE CLOUD" FINISH: SATIN
P2 INT. WALL ACCENT PAINT COLOR: PPG 1031-3 "WANDERING WILLOW" FINISH: SATIN
P3 INT. RESTROOM PAINT COLOR: PPG 0999-3 "BOULDER CREEK" FINISH: SEMI-GLOSS
P4 RAILINGS, DOOR, FRAMES COLOR: PPG 0999-4 "STEPPED TEA" FINISH: SEMI GLOSS
P5 PIPE BOLLARDS COLOR: SAFETY YELLOW FINISH: SEMI GLOSS
P5 WASHBAY PAINT COLOR - WHITE / OFF WHITE EPOXY FINISH: SEMI GLOSS

LVT-1 LUXURY VINYL - COLOR: J&J CLASSICS II #1000 "NOTABLE"
RB1 RESILIENT BASE & TRANSITON STRIPS: COLOR: TARKETT #20 - CHARCOAL
ACT1 2'X2'X7/8 ACC CEILING TILE W/ GRID: COLOR: USG "MARS #88134, WHITE W/ USG DONN DX/DXL 15/16 GRID

PL1 CABINET FACES COLOR: WILSONART "FIELD ELM" 7995-12
PL2 COUNTER TOP & BACKSPLASH COLOR: WILSONART "SPRING CARNIVAL" 1876K-35

8/18/2025 2:23:23 PM

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Southeast Polk Community School District

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.12.2025
PROJECT NO: R3007.090.00
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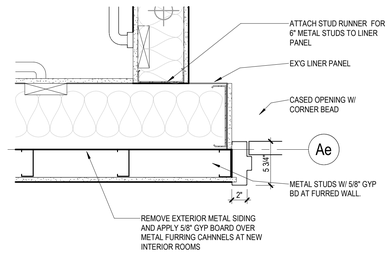
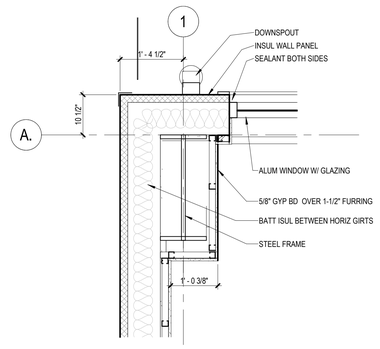
SOUTHEAST POLK TRANSPORTATION BUILDING

INTERIOR ELEVATIONS, ROOM SCHEDULE

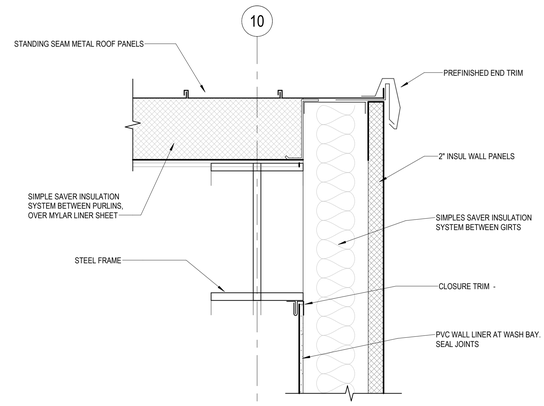
A12.01

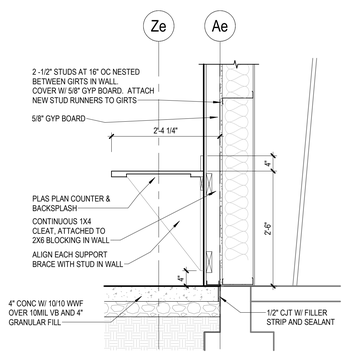


C1 NEW DOORWAY
1 1/2" = 1'-0"

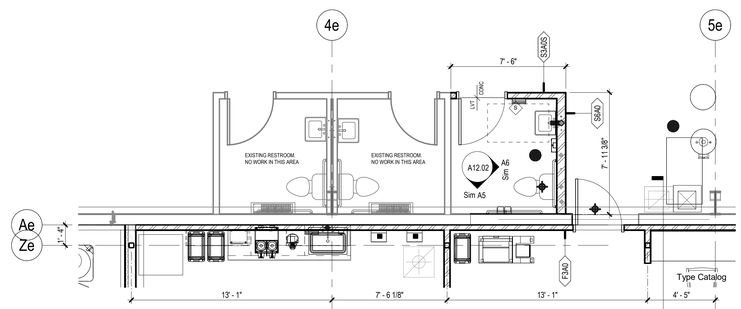


C2 CORNER DETAIL
3/4" = 1'-0"

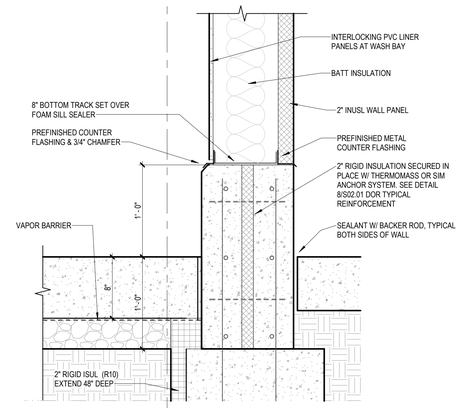




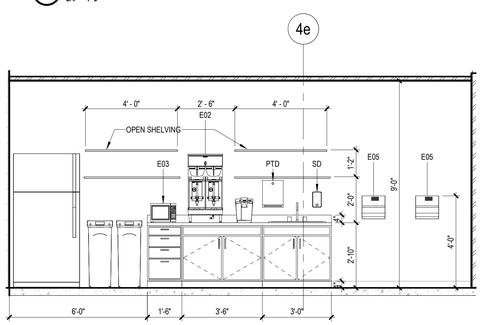
B1 COUNTER SECTION
3/4" = 1'-0"



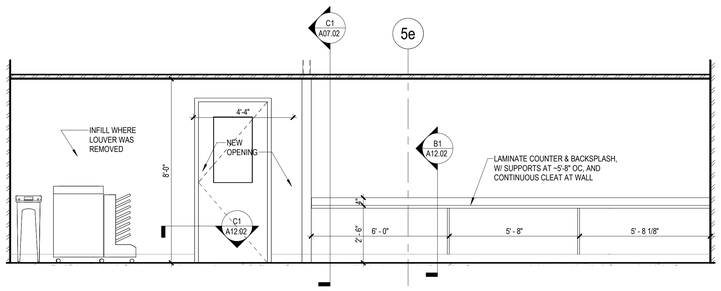
B2 EXPANDED RESTROOM / BREAKROOM PLAN
1/4" = 1'-0"



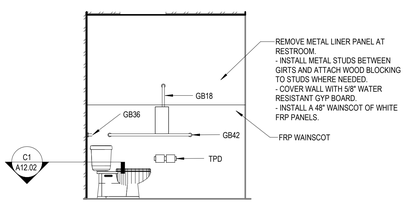
B6 SECTION AT EAST WALL
1 1/2" = 1'-0"



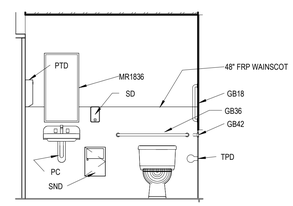
A1 NORTH ELEV - OFFICE BREAK ROOM
3/8" = 1'-0"



A3 OFFICE AREA COUNTER
3/8" = 1'-0"



A5 TYP. SIDE WALL @ RESTRM
3/8" = 1'-0"



A6 RESTROOM ELEVATION
3/8" = 1'-0"

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Southeast Polk Community School District

8415 NE University Ave.
Pleasant Hill Iowa 50327

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 08.18.2025
PROJECT NO: R3007.000.00

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SOUTHEAST POLK TRANSPORTATION BUILDING

INT ELEV'S & DETAILS

A12.02

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE UNIVERSITY AVENUE, PLEASANT HILL, IA 50327

ELECTRICAL SYMBOLS LIST

NOTE: NOT ALL SYMBOLS SHOWN MAY BE REQUIRED FOR THIS PROJECT

WIRING DEVICES

- DUPLEX WALL RECEPTACLE
- DUPLEX RECEPTACLE ON BACKUP POWER
- DUPLEX WALL RECEPTACLE ABOVE COUNTER BACKSPLASH OR AS INDICATED
- DUPLEX WALL RECEPTACLE ABOVE COUNTER BACKSPLASH OR AS INDICATED ON BACKUP POWER
- DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
- DUPLEX TAMPER-RESISTANT RECEPTACLE
- DUPLEX WEATHERPROOF GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE WITH COVER
- DUPLEX RECEPTACLE WITH USB CHARGER PORT
- DUPLEX RECEPTACLE INSTALLED HORIZONTALLY
- QUADRUPLEX RECEPTACLE
- QUADRUPLEX RECEPTACLE ON BACKUP POWER
- QUADRUPLEX RECEPTACLE ABOVE COUNTER BACKSPLASH OR AS INDICATED
- QUADRUPLEX RECEPTACLE ABOVE COUNTER BACKSPLASH OR AS INDICATED ON BACKUP POWER
- SIMPLEX WALL RECEPTACLE, VERIFY POWER NEEDS
- SIMPLEX WALL RECEPTACLE, ON BACKUP POWER
- DUPLEX CEILING RECEPTACLE
- JUNCTION BOX
- WIREMOLD/PLUGHOLD W/ENTRANCE FITTING AS SPECIFIED AND RECEPTACLES & DEVICES AS INDICATED
- 208V WALL RECEPTACLE, VERIFY POWER NEEDS
- 208V WALL RECEPTACLE ON BACKUP POWER
- HAND DRYER (BY OTHERS)
- AUTOMATIC FAUCET/VALVE
- EMERGENCY PUSH BUTTON (GENERATORS/BOILERS)
- ADA PUSH BUTTON (BY OTHERS)

EQUIPMENT WIRING

- DISCONNECTING MEANS
- WEATHERPROOF DISCONNECTING MEANS
- FUSED DISCONNECTING MEANS
- MOTOR STARTER - REFER TO SPECIFICATIONS 26 28 16, AUTOMATIC CONTROLLERS
- MOTOR RATED SWITCH
- VARIABLE FREQUENCY DRIVE W/INTEGRAL DISCONNECT

SWITCHES - LOW VOLTAGE (DIGITAL)

(REFER TO LIGHTING SEQUENCE OF OPERATION FOR ADDITIONAL INFORMATION)

- WALL SWITCH/STATION
- OCCUPANCY SENSOR WALL SWITCH
- CEILING MOUNT OCCUPANCY SENSOR
- DAYLIGHT PHOTOSENSOR
- EXTERIOR PHOTOCELL

SWITCHES - LINE VOLTAGE (120/277V)

(REFER TO LIGHTING SEQUENCE OF OPERATION FOR ADDITIONAL INFORMATION)

- SINGLE POLE
- DIMMING SWITCH
- 3-WAY SWITCH
- 4-WAY SWITCH
- SINGLE POLE KEYED SWITCH
- 3-WAY KEYED SWITCH
- PILOT LIGHT SWITCH
- MOMENTARY LIGHT SWITCH
- OCCUPANCY SENSOR WALL SWITCH
- CEILING MOUNT OCCUPANCY SENSOR

DISTRIBUTION

- SURFACE-MOUNT PANEL
- FLUSH-MOUNT PANEL
- TRANSFORMER
- C/T CABINET
- METER

COMMUNICATIONS SYSTEMS

- DATA OUTLET IN WALL W/ # OF JACKS
- DATA OUTLET ABOVE COUNTER BACKSPLASH
- DATA OUTLET IN CEILING
- WIRELESS ACCESS POINT
- AUDIO VISUAL OUTLET IN WALL

FIRE ALARM & DETECTION

- DUCT SMOKE DETECTOR
- SMOKE DETECTOR - CEILING MOUNTED
- HEAT DETECTOR
- FIRE ALARM PULL STATION
- FIRE ALARM HORN/STROBE - WALL MOUNTED
- FIRE ALARM HORN/STROBE - CEILING MOUNTED
- FIRE ALARM STROBE LIGHT - WALL MOUNTED
- FIRE ALARM STROBE LIGHT - CEILING MOUNTED
- FIRE ALARM RELAY
- SPRINKLER TAMPER SWITCH MONITORING
- SPRINKLER FLOW SWITCH MONITORING
- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR PANEL

ACCESS CONTROL

- DOOR CONTACT
- PROXIMITY CARD READER
- MULLION MOUNT CARD READER
- REQUEST TO EXIT (WALL OR CEILING MOUNTED)
- TELEPHONE ENTRY SYSTEM
- SECURITY CAMERA

LUMINAIRES

- 1'x4' RECESSED TROFFER FIXTURE W/TYPE NUMBER
- 2'x2' RECESSED TROFFER FIXTURE W/TYPE NUMBER
- 2'x4' RECESSED TROFFER FIXTURE W/TYPE NUMBER
- RECESSED LINEAR FIXTURE W/TYPE NUMBER
- 2'x2' SURFACE MOUNT TROFFER FIXTURE W/TYPE NUMBER
- 2'x4' SURFACE MOUNT TROFFER FIXTURE W/TYPE NUMBER
- SURFACE MOUNT LINEAR FIXTURE W/TYPE NUMBER
- WALL MOUNT LINEAR FIXTURE W/TYPE NUMBER
- SURFACE/CEILING MOUNT STRIP FIXTURE W/TYPE NUMBER
- SUSPENDED MOUNT STRIP FIXTURE W/TYPE NUMBER
- COVE LIGHT FIXTURE W/TYPE NUMBER
- SURFACE MOUNT FIXTURE W/TYPE NUMBER
- RECESSED DOWNLIGHT FIXTURE W/TYPE NUMBER
- PENDANT MOUNT FIXTURE W/TYPE NUMBER
- WALL MOUNT FIXTURE W/TYPE NUMBER
- TRACK MOUNT FIXTURE W/TYPE NUMBER
- INGROUND FIXTURE W/TYPE NUMBER
- POLE MOUNT FIXTURE W/TYPE NUMBER
- GROUND MOUNT FLOOD LIGHT FIXTURE W/TYPE NUMBER
- TREE UPLIGHT FIXTURE W/TYPE NUMBER

EXIT & EMERGENCY

- SINGLE FACE CEILING MOUNTED EXIT SIGN W/ILLUMINATED FACE AND DIRECTION
- DOUBLE FACE CEILING MOUNTED EXIT SIGN W/ILLUMINATED FACE(S) AND DIRECTION INDICATED
- WALL MOUNTED EXIT SIGN W/DIRECTION INDICATED
- EDGE MOUNTED EXIT SIGN W/ILLUMINATED FACE(S) AND DIRECTION INDICATED
- EMERGENCY BATTERY PACK
- ROUND CEILING MOUNT EMERGENCY LIGHT FIXTURE W/ TYPE AND CIRCUIT INDICATED ON PLANS (FULL SHADE)
- RECTANGULAR CEILING MOUNT EMERGENCY LIGHT FIXTURE W/ TYPE AND CIRCUIT INDICATED ON PLANS (FULL SHADE)

MISCELLANEOUS

- EX — EXISTING - TO REMAIN
- EXR — EXISTING - TO BE RELOCATED
- ER — EXISTING - TO BE REMOVED
- CONDUIT
- SWITCH-LEG IN CONDUIT
- UC — UNDER GROUND CONDUIT
- EC — EMPTY CONDUIT
- POINT OF NEW CONNECTION
- DEMOLISH TO THIS POINT AND PREPARE FOR NEW CONNECTION
- DEMOLISH TO THIS POINT AND CAP
- WP — WEATHERPROOF
- AFF — ABOVE FINISHED FLOOR
- AFG — ABOVE FINISH GRADE
- WM — DEVICE ON WIREMOLD
- WG — WIRE GUARD
- [FS] — FIRE STOP
- EZ — PASS-THROUGH

TELECOMMUNICATION SYSTEM ROUGH IN COORDINATION SCHEDULE		
SYSTEM	**FURNISHED BY**	**INSTALLED BY**
GROUNDING AND BONDING		
TELECOMMUNICATIONS BONDING BACKBONE(TBB)	DIV 26	DIV 26
TELECOMMUNICATIONS GROUNDING BUS BAR(TGB)	DIV 26	DIV 26
AC EQUIPMENT GROUND CONNECTIONS TO TGB	DIV 26	DIV 26
CONNECTION OF CONDUIT PATHWAY	DIV 26	DIV 26
CONNECTIONS OF COMMUNICATIONS EQUIPMENT, PANELS, AND RACKS	DIV 27	DIV 27
TELECOMMUNICATION ROOM		
EQUIPMENT RACKS	DIV 27	DIV 27
BACKBOARDS	GC	GC
CABLE MANAGEMENT	DIV 27	DIV 27
EQUIPMENT (POWER SUPPLIES AND PANELS)	DIV 28	DIV 28
EQUIPMENT (ACTIVE: DVR, CONTROLLERS, SOFTWARE)	DIV 28	DIV 28
BACKBOARDS	GC	GC
CABLE MANAGEMENT ACCESS CONTROL	DIV 28	DIV 28
CABLE MANAGEMENT SECURITY CAMERAS	DIV 27	DIV 27
TELECOMMUNICATION CABLE SUPPORT AND PATHWAYS		
J-HOOKS OR STRAPS	DIV 27	DIV 27
J-HOOKS OR STRAPS ACCESS CONTROL	DIV 28	DIV 28
CONDUIT PATHWAY(including J-boxes, pull boxes)	DIV 26	DIV 26
BACK BOXES AND STUB UPS	DIV 26	DIV 26
CONCRETE WALL/ FLOOR CORES	DIV 26	DIV 26
FIRE RATED PATHWAY DEVICES	DIV 26	DIV 26
FIRE STOP OF CONDUIT PATHWAYS	DIV 27	DIV 27
FIRE STOP OF CABLE TRAY PENETRATIONS	DIV 27	DIV 27

RESPONSIBILITY MATRIX (FOR REFERENCE ONLY)		
SYSTEM	**FURNISHED BY**	**INSTALLED BY**
HOTSY		
EQUIPMENT & ACCESSORIES	OWNER	OWNER
SOFT WATER INLET CONNECTION	PC	PC
POWER	EC	EC
COMPRESSED AIR SYSTEM		
AIR COMPRESSOR	OWNER	OWNER
AIR DRYER AND FILTERS	OWNER	OWNER
PIPING & ACCESSORIES	OWNER	OWNER
HOSE REELS	OWNER	OWNER
POWER	EC	EC
FLUIDS		
OIL	OWNER	OWNER
GREASE	OWNER	OWNER
TRANSMISSION	OWNER	OWNER
ANTI-FREEZE	OWNER	OWNER
MISC. FLUIDS	OWNER	OWNER
TANKS & PUMPS	OWNER	OWNER
PIPING AND ACCESSORIES	OWNER	OWNER
HOSE REELS		
OIL	OWNER	OWNER
GREASE	OWNER	OWNER
TRANSMISSION	OWNER	OWNER
ANTI-FREEZE	OWNER	OWNER
MISC. FLUIDS	OWNER	OWNER
COMPRESSED AIR	OWNER	OWNER
POWER	EC	EC
PARTS WASHER		
EQUIPMENT	OWNER	OWNER
DUCTWORK	MC	MC
PIPING	MC	MC
POWER	EC	EC
ALL OTHER SYSTEMS	REFER TO DRAWINGS & SPECS	

NOTES:
1. REFER TO DRAWINGS FOR ADDITIONAL SCOPE INFORMATION FOR PLUMBING, MECHANICAL, ELECTRICAL CONTRACTORS.
2. PC = PLUMBING CONTRACTOR; MC = MECHANICAL CONTRACTOR; EC = ELECTRICAL CONTRACTOR; OWNER = THIRD PARTY CONTRACTOR HIRED BY OWNER

TELECOMMUNICATION SYSTEM EQUIPMENT AND STRUCTURED CABLING COORDINATION SCHEDULE								
	EQUIPMENT			**CABLING**				
SYSTEM	EQUIPMENT FURNISHED BY	EQUIPMENT INSTALLED BY	TEST/ CERTFIED	WIRING FURNISHED BY	WIRING INSTALLED BY	FINAL TERMINATION BY	LABELED BY	TEST/ CERTIFIED
INFORMATION SYSTEMS/DATA/VOICE								
TELECOM ROOM NETWORK SWITCH	OWNER	OWNER	OWNER	NA	NA	NA	NA	NA
CROSS CONNECTS/PATCH CORDS AT TELECOM ROOM	DIV 27	DIV 27	DIV 27	NA	NA	NA	NA	NA
JACKS AND FACEPLATES	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27
COPPER DATA CABLE AND TERMINATIONS	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27
FIBER OPTIC CABLE AND TERMINATIONS	NA	NA	NA	OWNER	OWNER	OWNER	OWNER	OWNER
FIBER OPTIC CABLE DISTRIBUTION	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27
COMMUNICATION SYSTEMS EQUIPMENT AND CABLING COORDINATION								
WIRELESS ACCESS POINTS								
WIRELESS ACCESS POINTS	OWNER	DIV 27	OWNER	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27
PATCH CABLES	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27	NA
SECURITY SYSTEM EQUIPMENT AND CABLING COORDINATION SCHEDULE								
SECURITY CAMERAS								
SECURITY CAMERA AND MOUNTS	OWNER	DIV 28	DIV 28	DIV 27	DIV 27	DIV 27	DIV 27	DIV 27
EQUIPMENT- DVR, CONTROLLERS, PANELS, SOFTWARE	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28
ACCESS CONTROL								
CARD READERS	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28
MAN DOOR - POSITION SWITCHES, REQUEST TO EXIT	08 7100	08 7100	08 7100	08 7100	08 7100	08 7100	08 7100	08 7100
VEHICLE DOOR - DOOR POSITION SWITCHES	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28	DIV 28

NOTE:
1. ALL SYSTEMS SHOWN MAY NOT BE PRESENT IN PROJECT. REFER TO FLOOR PLANS FOR SYSTEMS INCLUDED IN PROJECT
2. GC - GENERAL CONTRACTOR
DI 7100 - DOOR HARDWARE CONTRACTOR
DIV 26- ELECTRICAL CONTRACTOR
DIV 27 - TELECOMMUNICATIONS CONTRACTOR
DIV 28 - SECURITY CONTRACTOR
OWNER- OWNER OR OWNER'S 3RD PARTY CONTRACTOR HIRED DIRECTLY BY THE OWNER....

MECHANICAL SYMBOLS LIST

NOTE: NOT ALL SYMBOLS SHOWN MAY BE REQUIRED FOR THIS PROJECT

SHEET METAL

- SQUARE CEILING DIFFUSER WITH ROUND NECK
- SQUARE CEILING RETURN AIR GRILLE
- SQUARE CEILING EXHAUST OR RELIEF AIR GRILLE
- LINEAR SLOT DIFFUSER
- FLOOR REGISTER OR GRILLE
- SIDEWALL REGISTER OR GRILLE
- FLEX DUCT
- 18x12 — DUCT SIZE: HORIZONTAL (IN PLANE) WIDTH x VERTICAL (OUT OF PLANE) HEIGHT (NET OUTSIDE SHEET METAL DIMENSION)
- RECTANGULAR ELBOW WITH TURNING VANES
- CONCENTRIC DUCT REDUCER
- ECCENTRIC DUCT REDUCER
- EXISTING DUCTWORK TO BE REMOVED
- EXISTING DUCTWORK TO REMAIN
- SUPPLY AIR DUCT SECTION UP OR TOWARDS
- RETURN AIR DUCT SECTION UP OR TOWARDS
- EXHAUST AIR DUCT SECTION UP OR TOWARDS
- OUTSIDE AIR DUCT SECTION UP OR TOWARDS
- SUPPLY AIR DUCT SECTION DOWN OR AWAY
- RETURN AIR DUCT SECTION DOWN OR AWAY
- EXHAUST AIR DUCT SECTION DOWN OR AWAY
- OUTSIDE AIR DUCT SECTION DOWN OR AWAY
- DIRECTIONAL FLOW ARROW
- HORIZONTAL DAMPER
- FSD — FSD = FIRE/SMOKE DAMPER, FD = FIRE DAMPER, SD = SMOKE DAMPER
- CD — CD = CONTROL DAMPER
- VOLUME CONTROL DAMPER
- GRILLE/DIFFUSER TAG WITH TYPE NUMBER AND CFM QUANTITY S = SUPPLY, R = RETURN, E = EXHAUST
- GRILLE/DIFFUSER TAG WITH TYPE NUMBER AND CFM QUANTITY S = SUPPLY, R = RETURN, E = EXHAUST
- VAV 7 — VARIABLE AIR VOLUME (VAV) BOX WITH TYPE NUMBER
- T — THERMOSTAT
- TS — TEMPERATURE SENSOR
- H — HUMIDISTAT
- CO2 — CARBON DIOXIDE SENSOR
- NOX — NITROGEN OXIDE SENSOR
- CO — CARBON MONOXIDE SENSOR
- DP — DIFFERENTIAL PRESSURE SENSOR
- DUCT RISE
- DUCT DROP
- FLEXIBLE DUCT CONNECTOR CONED TAKEOFF WITH DAMPER

PLUMBING

- DOMESTIC COLD WATER LINE - CW
- DOMESTIC HOT WATER LINE - HW
- DOMESTIC HOT WATER CIRCULATING LINE - HWC
- TW — TEMPERED WATER LINE
- SCW — SOFT COLD WATER LINE
- SHW — SOFT HOT WATER LINE
- SS — SANITARY SEWER LINE
- GSS — GREASE SANITARY SEWER LINE
- ST — STORM SEWER LINE
- OFO — STORM SEWER OVERFLOW LINE
- AW — ACID WASTE LINE
- V — PLUMBING VENT LINE
- AV — ACID PLUMBING VENT LINE
- CD — CONDENSATE DRAIN LINE
- G — NATURAL GAS LINE
- LP — LIQUEFIED PETROLEUM GAS LINE
- RL — REFRIGERANT LIQUID LINE
- RS — REFRIGERANT SUCTION LINE
- HG — REFRIGERANT HOT GAS BYPASS LINE
- PD — PUMPED DISCHARGE LINE
- WW — WELL WATER LINE
- CO — CLEANOUT IN FLOOR
- CO — CLEANOUT AT OR ABOVE CEILING
- CO — CLEANOUT IN WALL
- SHOWERHEAD
- FLOOR DRAIN
- ROOF DRAIN
- S-2 — PLUMBING FIXTURE (SINK) ON ASSOCIATED LEVEL
- S — PLUMBING FIXTURE (SINK) ON LEVEL ABOVE

PIPING SPECIALTIES

- PIPE RISER
- PIPE DROP
- UNION
- PIPE CAP
- BFP — BACKFLOW PREVENTER
- FLEXIBLE PIPE CONNECTOR
- FLOAT & THERMOSTATIC TRAP
- THERMOSTATIC TRAP
- STRAINER
- STRAINER W/DRAIN VALVE
- V — AIR VENT
- PRESSURE GAUGE
- EXPANSION JOINT
- GLOBE VALVE
- BUTTERFLY VALVE
- BALL VALVE
- LUBRICATED PLUG VALVE
- GATE VALVE
- 3WAY CONTROL VALVE
- 2WAY CONTROL VALVE
- CALIBRATED BALANCE VALVE
- AUTOMATIC FLOW LIMITING VALVE
- VENTURE FLOW MEASURING STATION
- VENTURE FLOW BALANCING STATION
- CHECK VALVE
- GLOBE BALANCING VALVE
- TRIPLE DUTY VALVE
- HB — HOSE BIBB
- WH — WALL HYDRANT
- THERMOMETER
- TEMPERATURE WELL
- P/T PORT
- CURB STOP
- PRV — SPRINKLER POST INDICATOR VALVE
- PRESSURE REDUCING VALVE
- SIGHT FLOW INDICATOR

FIRE EXTINGUISHING SYSTEM

- SPR — SPRINKLER LINE
- DSPR — DRY TYPE SPRINKLER LINE
- DRY SPRINKLER HEAD
- TW — WET SPRINKLER HEAD
- SIDE MOUNT SPRINKLER HEAD
- FDC — PEDESTAL FIRE DEPARTMENT CONNECTION
- FDC — FIRE DEPARTMENT CONNECTION
- FS — FLOW SWITCH
- TS — SPRINKLER LINE TAMPER SWITCH

TEMPERATURE CONTROLS

- BDD — BACKDRAFT DAMPER
- MOTORIZED CONTROL DAMPER
- AF — AIR FLOW MEASURING STATION
- LP — LOW PRESSURE CUTOFF
- HP — HIGH PRESSURE CUTOFF
- SP — STATIC PRESSURE SENSOR
- DP — DIFFERENTIAL PRESSURE SENSOR
- LT — LOW TEMPERATURE CUTOFF
- T — DUCT TEMPERATURE SENSOR
- PIPE TEMPERATURE SENSOR
- CURRENT SENSOR
- RH — RELATIVE HUMIDITY SENSOR
- FILTER
- FAN

MISCELLANEOUS

- EXISTING LINE TO REMAIN
- EXISTING LINE TO BE REMOVED (ON DEMOLITION PLANS)
- POINT OF NEW CONNECTION
- DEMOLISH TO THIS POINT AND PREPARE FOR NEW CONNECTION
- DEMOLISH TO THIS POINT AND CAP
- EX — EXISTING TO REMAIN
- ER — EXISTING TO BE REMOVED
- EXR — EXISTING TO BE RELOCATED

SHEET INDEX

SHEET NUMBER	SHEET NAME
ME0.00	MEPT COVER SHEET
ME0.01	MEPT SITE DEMOLITION PLAN
ME0.02	MEPT SITE PLAN
F01.01	SPRINKLER FLOOR PLAN
PD02.01	DEMOLITION PIPING PLAN - OPERATIONS
P02.01	PLUMBING PLANS - OPERATIONS
P00.01	PLUMBING UNDERFLOOR PLAN - BUS BARN
P01.01	PLUMBING PLAN - BUS BARN
P05.01	PLUMBING DETAILS AND SCHEDULES
M01.01	MECHANICAL PLAN - BUS BARN
M02.01	MECHANICAL PLAN - OPERATIONS
M05.01	MECHANICAL DETAILS
M06.01	MECHANICAL SCHEDULES
E01.01	ELECTRICAL PLAN - BUS BARN
E01.02	ELECTRICAL PLAN - OPERATIONS
E02.01	LIGHTING PLAN - BUS BARN
E02.02	LIGHTING PLAN - OPERATIONS
E05.01	ELECTRICAL DETAILS
E06.01	ELECTRICAL SCHEDULES
E06.02	ELECTRICAL SCHEDULES
T01.01	LOW VOLTAGE FLOOR PLAN - BUS BARN
T01.02	LOW VOLTAGE FLOOR PLANS - OPERATIONS
T02.01	LOW VOLTAGE CEILING PLAN - BUS BARN
T05.01	LOW VOLTAGE DETAILS
T05.02	LOW VOLTAGE DETAILS

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Southeast Polk Community School District

KEY PLAN

ISSUANCE: 08/28/25

PROJECT NO: 3007.090.00

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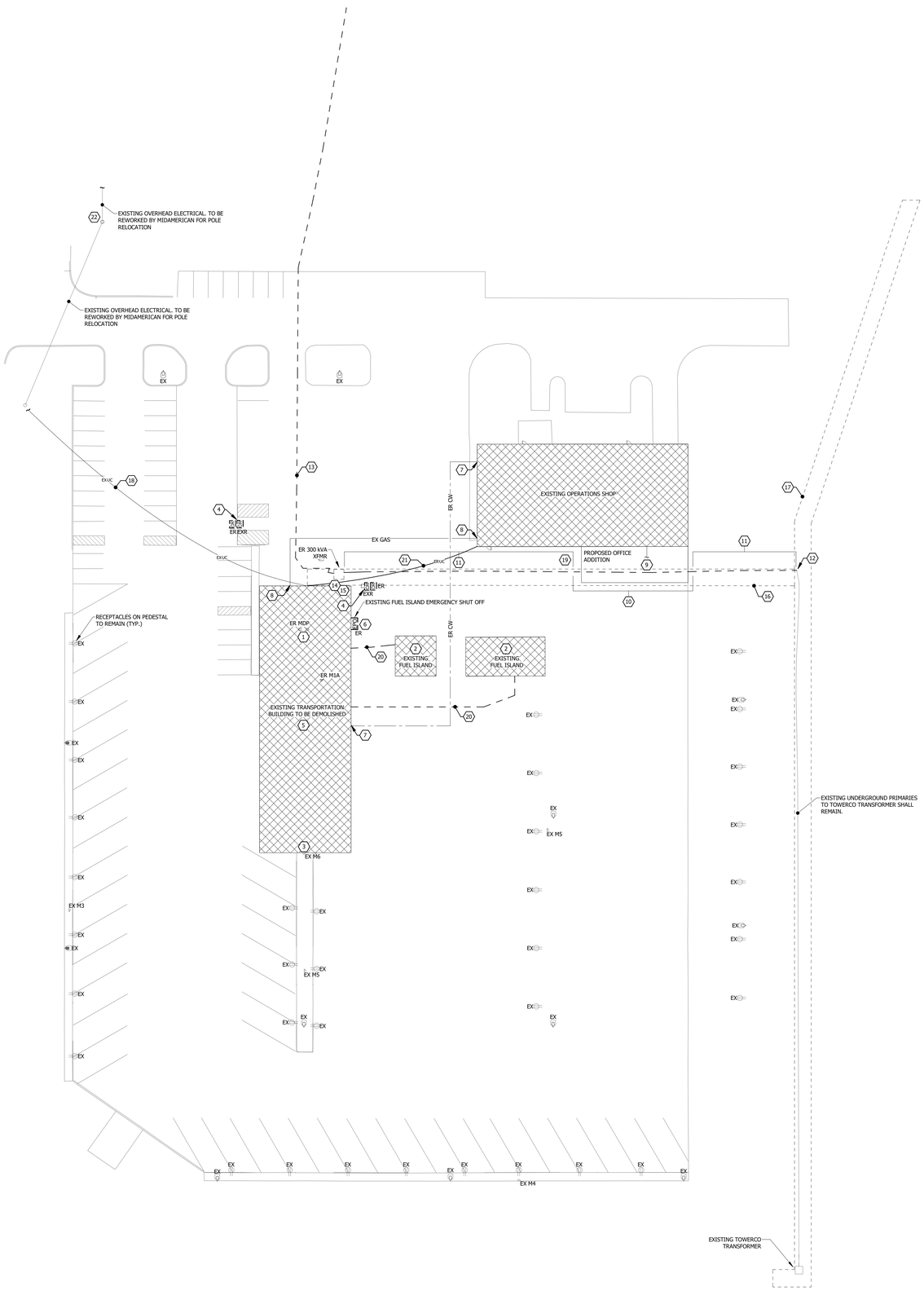
SOUTHEAST POLK TRANSPORTATION BUILDING

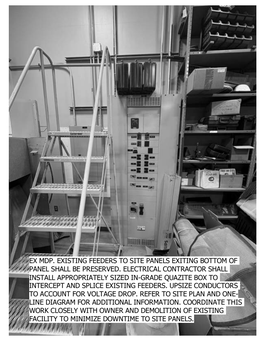
MEPT COVER SHEET

ME0.00

8/28/2025 4:21:51 PM



1 EXISTING SITE PLAN
1" = 30'-0"



EX MDP. EXISTING FEEDERS TO SITE PANELS EXITING BOTTOM OF PANEL SHALL BE PRESERVED. ELECTRICAL CONTRACTOR SHALL INSTALL APPROPRIATELY SIZED IN-GRADE QUAZITE BOX TO INTERCEPT AND SPLICE EXISTING FEEDERS. UPSIZE CONDUCTORS TO ACCOUNT FOR VOLTAGE DROP. REFER TO SITE PLAN AND ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION. COORDINATE THIS WORK CLOSELY WITH OWNER AND DEMOLITION OF EXISTING FACILITY TO MINIMIZE DOWNTIME TO SITE PANELS.

2 EXISTING MDP
No Scale

GENERAL NOTES:

A. UTILITIES SHOWN ARE INDICATED SCHEMATICALLY. CONTRACTORS SHALL VERIFY ALL DEPTHS AND ALL LOCATIONS/ DIMENSIONS PRIOR TO EXCAVATING. ALL UTILITIES MAY NOT BE SHOWN.

B. REFER TO CIVIL DRAWINGS FOR ADDITIONAL SITE UTILITIES.

C. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION ON EXISTING AND NEW SITE CONDITIONS.

D. ALL UNDERGROUND UTILITIES, PIPING, ETC. SHALL BE LOCATED EXACTLY BEFORE DIGGING.

E. ANY BACKFILL SHALL BE TAMPED AND COMPACTED TO PREVENT FUTURE SETTLING. ALL EXCESS DIRT SHALL BE CLEARED FROM THE AREA AND DISPOSED OF.

F. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL REPAIR ALL DISTURBED SURFACES SUCH AS SIDEWALKS, DRIVEWAYS, STREETS, GRASS, AND CONCRETE. REPLACED SURFACES SHALL MATCH EXISTING.

G. INVERT ELEVATIONS ARE FOR REFERENCE ONLY. CONTRACTOR TO CALCULATE REQUIRED INVERTS.

H. COORDINATE ALL EXTERIOR SITE LIGHTING FIXTURES WITH DESIGN TEAM PRIOR TO INSTALLATION.

I. CONTRACTOR IS RESPONSIBLE FOR DOING ALL WORK PER LOCAL RESPECTIVE UTILITY REQUIREMENTS.

J. VERIFY EXACT LOCATIONS OF UTILITY CONNECTIONS, PRIOR TO START OF WORK.

REFERENCED NOTES: (#)

1. PRESERVE BELOW GRADE FEEDERS FROM EX MDP TO ALL SITE PANELS. NEW SPLICE BOX SHALL BE INSTALLED IN THIS LOCATION TO INTERCEPT EXISTING SITE PANEL FEEDERS. REFER TO DETAIL AND NEW WORK PLANS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE THIS WORK WITH OWNER AND PLANNED DEMOLITION OF EXISTING BUILDING TO MINIMIZE DOWNTIME TO SITE PANELS.
2. ELECTRICAL CONTRACTOR SHALL REMOVE CONDUCTORS SERVING ALL FUEL ISLAND CIRCUITS BACK TO EXISTING TRANSPORTATION BUILDING. CONDUIT SHALL BE ABANDONED IN PLACE. CUT AND CAP BELOW GRADE. PREPARE FUEL ISLAND EQUIPMENT TO BE REFED FROM NEW PANEL. SEE NEW WORK PLANS FOR ADDITIONAL INFORMATION.
3. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW UNISTRUT MOUNT FOR EX PANEL M6 UPON DEMOLITION OF EXISTING BUILDING. REFER TO DETAIL ON SHEET E05.01 FOR ADDITIONAL INFORMATION.
4. GATE ACCESS CONTROL CARD READER SHALL BE REWIRED TO CONTROL PANEL IN EXISTING OPERATIONS BUILDING. PROVIDE NEW DOOR CONTROL PANELS AS NEEDED. SEE LOW VOLTAGE FLOOR PLANS - OPERATIONS FOR FURTHER INFORMATION.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND REMOVAL OF EXISTING ELECTRICAL SERVICE WITH MIDAMERICAN ENERGY. EXISTING SERVICE SHALL NOT BE DISCONNECTED UNTIL NEW SERVICE IS PREPARED AND OPERATIONAL. NOTE THAT EXISTING SITE PANELS, FUEL ISLANDS CIRCUITS, GATE/CARD READERS, AND SITE LIGHTING ARE FED FROM BUILDING TO BE DEMOLISHED. ELECTRICAL CONTRACTOR SHALL IDENTIFY ALL EXISTING CIRCUITS, INCLUDING THOSE INDICATED, TO REMAIN AND REFEED FROM NEW SERVICE. CLOSELY COORDINATE TIMING OF DEMOLITION WITH OWNER AND DESIGN TEAM TO MINIMIZE DOWNTIME.
6. EXISTING EMERGENCY FUEL ISLAND SHUTOFF SHALL BE REMOVED. NEW CIRCUIT SHALL BE PROVIDED. SEE NEW WORK PLANS FOR ADDITIONAL INFORMATION.
7. AFTER NEW TRANSPORTION BUILDING IS OPERATIONAL AND PRIOR TO EXISTING TRANSPORTATION BUILDING BEING REMOVED, REMOVE EXISTING WATER PIPING TO EXISTING TRANSPORTATION BUILDING AT WATER ENTRANCE INSIDE EXISTING SHOP BUILDING. BLOW OUT WATER IN PIPING AND CAP INSIDE EXISTING SHOP BUILDING.
8. PREPARE FOR CONNECTION TO NEW GAS METER PRIOR TO EXISTING TRANSPORTATION BUILDING BEING DEMOLISHED AND NEW TRANSPORTATION BUILDING IS OPERATIONAL. REFER TO CIVIL SITE PLANS FOR ADDITIONAL INFORMATION. COORDINATE EXISTING GAS METER REMOVAL FROM TRANSPORTATION BUILDING AND INSTALLATION OF NEW GAS METER AT OPERATIONS BUILDING WITH CURT GAUSE AT MIDAMERICAN ENERGY COMPANY.
9. EXISTING 4" SS SHALL REMAIN. REFER TO CIVIL PLANS FOR CONTINUATION.
10. ELECTRICAL CONTRACTOR SHALL CUT AND REMOVE EXISTING ELECTRICAL CONDUIT WITHIN EXTENTS OF NEW OFFICE ADDITION FOOTPRINT.
11. ELECTRICAL PRIMARY CONDUCTORS NOT TO BE REUSED SHALL BE DISCONNECTED AND REMOVED BY MIDAMERICAN. CONDUITS SHALL BE ABANDONED IN PLACE. ELECTRICAL CONTRACTOR SHALL CUT AND CAP ANY CONDUITS NOT TO BE REUSED BELOW GRADE.
12. ELECTRICAL CONTRACTOR SHALL PREPARE TO EXTEND PRIMARY CONDUITS FROM THIS POINT TO NEW UTILITY TRANSFORMER SERVING NEW TRANSPORTATION BUILDING. MIDAMERICAN SHALL PULL PRIMARY CONDUCTORS BACK TO BE RELANDED ON NEW UTILITY TRANSFORMER. REFER TO NEW SITE WORK PLAN FOR ADDITIONAL INFORMATION.
13. UNDERGROUND PRIMARY CONDUCTORS SHALL BE DISCONNECTED AND REMOVED BY MIDAMERICAN FROM ER UTILITY TRANSFORMER TO OVERHEAD LINES NORTH OF NE UNIVERSITY AVE. CONDUITS SHALL BE ABANDONED IN PLACE. ELECTRICAL CONTRACTOR SHALL CUT AND CAP CONDUITS BELOW GRADE.
14. ELECTRICAL CONTRACTOR SHALL REMOVE THE FOLLOWING
    A. EXISTING SECONDARY CONDUCTORS FROM UTILITY TRANSFORMER TO ER MDP. SECONDARY CONDUITS SHALL BE ABANDONED IN PLACE (CUT AND CAP BELOW GRADE).
    B. EXISTING TRANSFORMER PAD
    C. EXISTING CT CABINET AND METER SOCKET.
15. MIDAMERICAN SHALL REMOVE THE FOLLOWING:
    A. UTILITY TRANSFORMER
    B. METER
    C. PRIMARY CONDUCTORS
16. EXISTING UTILITY EASEMENT TO BE ABANDONED. EXTENTS SHOWN FOR REFERENCE ONLY. REFER TO CIVIL SITE PLAN FOR ADDITIONAL EASEMENT INFORMATION.
17. EXISTING UTILITY EASEMENT SHALL REMAIN. INSTALL NEW UNDERGROUND ELECTRICAL PRIMARY CONDUITS WITHIN EXTENTS OF EXISTING EASEMENT TO REMAIN. EXTENTS SHOWN FOR REFERENCE ONLY. REFER TO CIVIL SITE PLAN FOR ADDITIONAL EASEMENT INFORMATION.
18. PRESERVE AND PROTECT EXISTING FIBER PATHWAY.
19. RELOCATE EXISTING MINI SPLIT CONDENSING UNITS. REFER TO MECHANICAL PLANS FOR PROPOSED LOCATIONS.
20. ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING CONDUCTORS FROM FUEL ISLAND BACK TO BUILDING TO BE DEMOLISHED. EXISTING CONDUIT SHALL BE ABANDONED. CUT AND CAP CONDUIT BELOW GRADE.
21. APPOXIMATE LOCATION OF EXISTING FIBER SERVICE BETWEEN BUILDINGS. COORDINATE DEMOLITION TIME WITH OWNER PRIOR TO CONSTRUCTION. SEE ME0.02 FOR FUTURE COORDINATION.
22. EXISTING OVERHEAD ELECTRICAL POLE SHALL BE RELOCATED BY MIDAMERICAN FOR NEW SANITARY LINE EXCAVATION AND INSTALLATION. ELECTRICAL CONTRACTOR SHALL COORDINATE THIS WORK TO BE COMPLETED WITH MIDAMERICAN. REFER CIVIL SITE PLAN FOR ADDITIONAL INFORMATION.

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KEY PLAN

SOUTHEAST POLK TRANSPORTATION BUILDING

ISSUANCE 08/22/25
PROJECT NO. 3007.090.00

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MEPT SITE DEMOLITION PLAN

ME0.01

8/20/2025 4:21:56 PM

GENERAL NOTES:

A. UTILITIES SHOWN ARE INDICATED SCHEMATICALLY. CONTRACTORS SHALL VERIFY ALL DEPTHS AND ALL LOCATIONS/ DIMENSIONS PRIOR TO EXCAVATING. ALL UTILITIES MAY NOT BE SHOWN.

B. REFER TO CIVIL DRAWINGS FOR ADDITIONAL SITE UTILITIES.

C. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION ON EXISTING AND NEW SITE CONDITIONS.

D. ALL UNDERGROUND UTILITIES, PIPING, ETC. SHALL BE LOCATED EXACTLY BEFORE DIGGING.

E. ANY BACKFILL SHALL BE TAMPED AND COMPACTED TO PREVENT FUTURE SETTLING. ALL EXCESS DIRT SHALL BE CLEARED FROM THE AREA AND DISPOSED OF.

F. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL REPAIR ALL DISTURBED SURFACES SUCH AS SIDEWALKS, DRIVEWAYS, STREETS, GRASS, AND CONCRETE. REPLACED SURFACES SHALL MATCH EXISTING.

G. INVERT ELEVATIONS ARE FOR REFERENCE ONLY. CONTRACTOR TO CALCULATE REQUIRED INVERTS.

H. COORDINATE ALL EXTERIOR SITE LIGHTING FIXTURES WITH DESIGN TEAM PRIOR TO INSTALLATION.

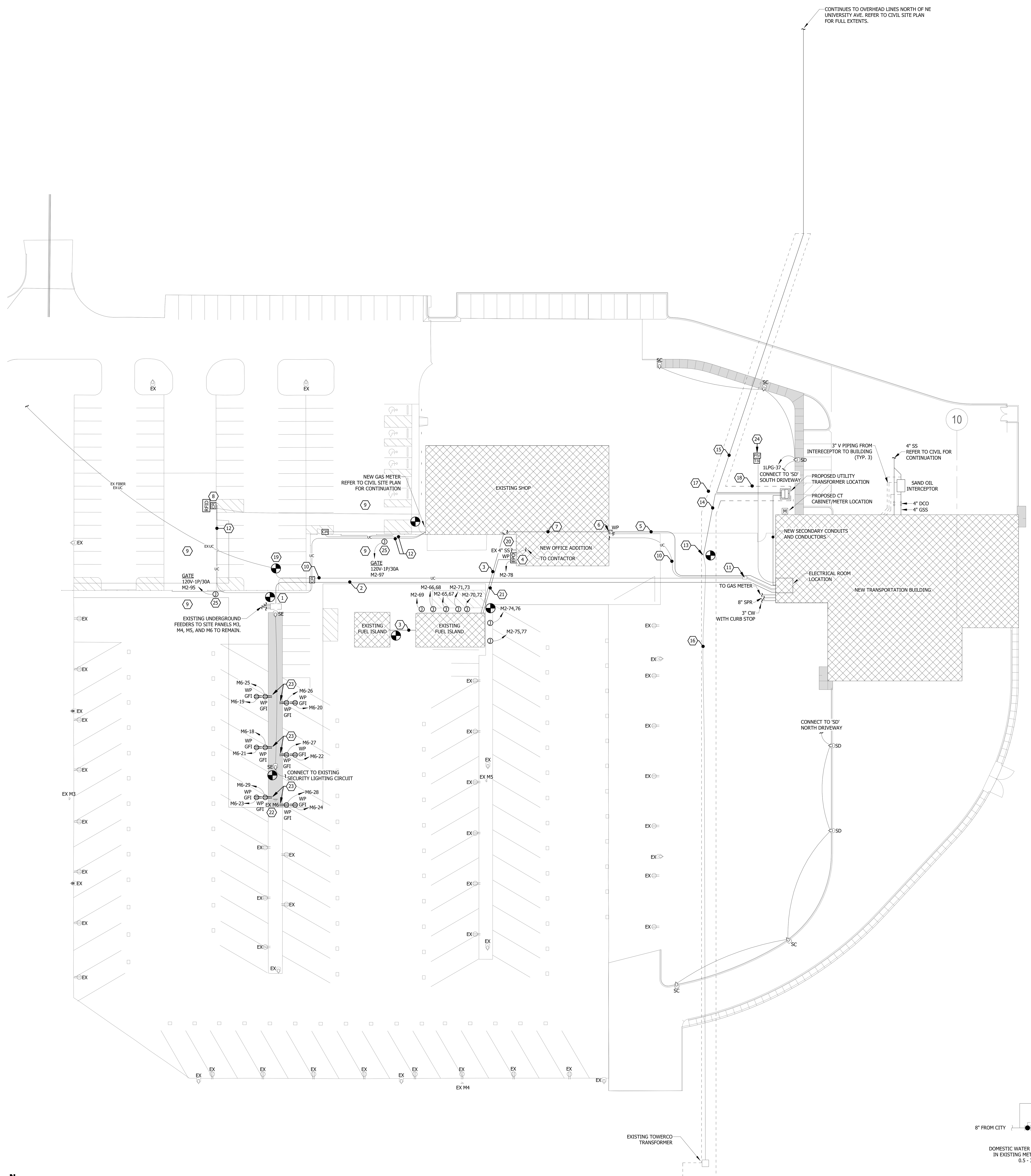
I. CONTRACTOR IS RESPONSIBLE FOR DOING ALL WORK PER LOCAL RESPECTIVE UTILITY REQUIREMENTS.

J. VERIFY EXACT LOCATIONS OF UTILITY CONNECTIONS, PRIOR TO START OF WORK.

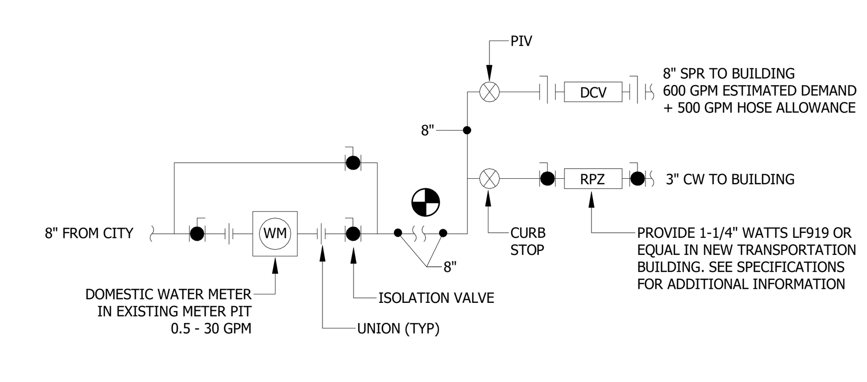
K. **ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL UTILITY WORK WITH MIDAMERICAN AND THE NEW AND EXISTING UTILITY EASEMENTS. NOTIFY THE DESIGN TEAM IMMEDIATELY OF ANY DISCREPANCY BETWEEN THE DESIGN DOCUMENTS AND REQUIREMENTS OF UTILITY COMPANY.**

REFERENCED NOTES: (#)

1. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW APPROPRIATELY SIZED TRAFFIC-RATED SPLICE BOX IN LOCATION OF EXISTING SITE PANEL FEEDERS. SPLICE NEW CONDUCTORS FROM NEW MDP TO EXISTING SITE PANEL FEEDERS. COORDINATE PHASING OF THIS WORK CLOSELY WITH OWNER AND GENERAL CONTRACTOR TO LIMIT DOWNTIME TO SITE CIRCUITS.
2. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL (4) SETS OF CONDUIT AND CONDUCTORS TO NEW SPLICE BOX. TRENCH WITH NEW SANITARY. COLOCATE CONDUIT IN SANITARY TRENCH. COORDINATE EXACT TRENCH LOCATION PRIOR TO ROUGH-IN. SEE ONE LINE DIAGRAM ON SHEET E05.01 FOR ADDITIONAL INFORMATION.
3. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW CONDUIT AND CONDUCTORS TO FUEL ISLAND. RECONNECT EXISTING FUEL ISLAND EQUIPMENT TO NEW PANEL. CIRCUIT CONNECTIONS ARE SHOWN SCHEMATICALLY. ELECTRICAL CONTRACTOR SHALL VERIFY CONNECTION/STUB-UP LOCATION BASED ON INSTALLED CONDITION. SEE PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
4. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW EMERGENCY PUSHBUTTON SHUT OFF FOR FUEL ISLAND EQUIPMENT. PROVIDE NEW CIRCUIT FROM EXISTING SHOP BUILDING. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
5. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW TRENCHED CONDUIT AND CONDUCTORS FROM NEW MDP TO NEW PANEL M2. SEE ONE LINE DIAGRAM ON SHEET E05.01 FOR ADDITIONAL INFORMATION.
6. ELECTRICAL CONTRACTOR SHALL PENETRATE EXISTING BUILDING FOR NEW FEEDERS. CAULK AND SEAL NEW PENETRATION.
7. ELECTRICAL CONTRACTOR SHALL ROUTE INCOMING FEEDER CONDUITS OVERHEAD WITHIN EXISTING FACILITY TO NEW PANELBOARD. COORDINATE CONDUIT ROUTING PRIOR TO ROUGH-IN.
8. ACCESS CONTROL BOLLARD. ACCESS CONTROL CONTRACTOR SHALL PROVIDE NEW ACCESS CONTROL CABLING. ACCESS CONTROL CONTRACTOR SHALL PROVIDE RFID READER. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE 1" CONDUIT FOR GATE CLOSED LOOP SENSORS. SEE CLOSED LOOP MANUFACTURER'S INSTRUCTIONS FOR FURTHER INFORMATION PRIOR TO ROUGH-IN. COORDINATE LOCATION WITH GATE CONTRACTOR PRIOR TO ROUGH-IN. SEE ARCHITECTURAL SITE PLAN DRAWINGS FOR FURTHER COORDINATION.
10. ELECTRICAL CONTRACTOR PROVIDED (1) 2" CONDUIT WITH PULL STRING FOR OWNER'S OUTSIDE PLANT FIBER CABLING CONTRACTOR PROVIDED FIBER OPTIC CABLING. SEE T01.01 AND T01.02 FOR FURTHER INFORMATION.
11. ELECTRICAL CONTRACTOR PROVIDED 2' X 3' HANDHOLE TO SERVE FIBER OPTIC CABLING. COORDINATE LOCATION WITH OWNER AND ALL TRADES PRIOR TO ROGUH-IN.
12. ELECTRICAL CONTRACTOR SHALL PROVIDE 1-1/2" CONDUIT WITH PULL STRING FROM ACCESS CONTROLLED LOCATION TO GATE OPERATOR AND OPERATIONS BUILDING. COORDINATE LOCATIONS WITH GATE CONTRACTOR AND OWNER PRIOR TO ROUGH-IN.
13. ELECTRICAL CONTRACTOR SHALL PROVIDE (2) 4" CONDUITS FROM THIS LOCATION TO NEW UTILITY TRANSFORMER. CONNECT TO EXISTING CONDUITS. ROUTE NEW CONDUITS WITHIN EXISTING UTILITY EASEMENT. CONDUITS SHALL BE FOR PRIMARY CONDUCTORS TO BE REWORKED BY MIDAMERICAN. COORDINATE WITH MIDAMERICAN ON EXACT CONDUIT TIE-IN LOCATION AND CONDUIT SIZE REQUIREMENTS.
14. ELECTRICAL CONTRACTOR SHALL PROVIDE (2) 4" CONDUITS FOR TOWERCO TRANSFORMER PRIMARIES TO BE REWORKED BY MIDAMERICAN. VERIFY CONDUIT SIZES, ROUTING, AND ADDITIONAL REQUIREMENTS WITH MIDAMERICAN.
15. ELECTRICAL CONTRACTOR SHALL PROVIDE (2) 4" UNDERGROUND PRIMARY CONDUITS FROM NEW UTILITY TRANSFORMER TO NORTHSIDE OF NE UNIVERSITY AVE. SEE SITE CIVIL PLAN FOR FULL EXTENTS. COORDINATE CONDUIT TERMINATION POINT WITH MIDAMERICAN. LOCATE CONDUITS WITHIN EXISTING UTILITY EASEMENT.
16. EXISTING UNDERGROUND PRIMARIES TO TOWERCO TRANSFORMER SHALL REMAIN.
17. EXISTING UTILITY EASEMENT SHALL REMAIN. INSTALL NEW UNDERGROUND ELECTRICAL PRIMARY CONDUITS WITHIN EXTENTS OF EXISTING EASEMENT TO REMAIN. EXTENTS SHOWN FOR REFERENCE ONLY. REFER TO CIVIL SITE PLAN FOR ADDITIONAL EASEMENT INFORMATION.
18. NEW UTILITY EASEMENT. EXTENTS SHOWN FOR REFERENCE ONLY. NEW ELECTRICAL WORK SHALL OCCUR WITHIN AGREED EXPANDED EASEMENT EXTENTS.
19. ELECTRICAL CONTRACTOR SHALL TIE IN NEW 2" CONDUIT TO EXISTING FIBER CONDUIT.
20. RELOCATE EXISTING MINI SPLIT CONDENSING UNITS. REFER TO MECHANICAL PLANS FOR QUANTITIES AND LOCATIONS.
21. PROVIDE NEW CONDUIT/WIRE TO EXISTING FUEL ISLAND SOLENOIDS/FUEL PUMP TO SHUT OFF ALL FUEL SUPPLY.
22. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW UNISTRUT MOUNT FOR EX PANEL M6 UPON DEMOLITION OF EXISTING BUILDING. REFER TO DETAIL ON SHEET E05.01 FOR ADDITIONAL INFORMATION.
23. PROVIDE STEEL PEDESTAL FOR MOUNTING RECETACLES. REFER TO ENGINE HEATER RECEPTACLE MOUNTING DETAIL FOR ADDITIONAL DETAILS AND REQUIREMENTS.
24. FIRE ALARM CONTRACTOR SHALL PROVIDE MONITORING OF SPRINKLER POST INDICATOR VALVE. COORDINATE LOCATION WITH SITE UTILITY CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE (1) 1" CONDUIT TO ELECTRICAL ROOM.
25. EXISTING GATE OPERATOR SHALL BE RELOCATED. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CIRCUIT FROM PANEL M2 AT NEW LOCATION. COORDINATE EXACT ELECTRICAL REQUIREMENTS AND FUNCTIONS WITH EXISTING OPERATOR AND ACCESS CONTROL CONTRACTOR AND OWNER PRIOR TO ROUGH-IN. SEE CIVIL PLANS FOR LOCATIONS OF GATE CONTROLLERS.



1 NEW SITE PLAN
1" = 30'-0"



2 WATER ENTRANCE SITE PLAN DETAIL
No Scale

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	08/28/25
PROJECT NO:	3007.090.00

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MEPT SITE PLAN

ME0.02

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GENERAL NOTES:

A. LAYOUT AND ROUTING SHOWN IS DIAGRAMMATIC AND SCHEMATIC IN NATURE. NOT ALL OFFSETS MAY BE SHOWN. CONTRACTOR SHALL VERIFY EXACT ROUTING REQUIRED AND NUMBER OF OFFSETS AND TRANSITIONS.

B. MAINTAIN SERVICE CLEARANCE IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT AND ACCESS. DO NOT INSTALL EQUIPMENT OR ROUTE DUCTS IN CLEARANCE SPACE. REFER TO EQUIPMENT INSTALLATION AND INSTRUCTIONS.

C. COORDINATE THERMOSTAT LOCATIONS WITH CASEWORK, WALL TYPES, AND FURNISHINGS PRIOR TO ROUGH-IN.

D. PROVIDE VOLUME CONTROL BALANCING DAMPERS ON ALL SUPPLY, RETURN, EXHAUST AIR TAPS IN ACCESSIBLE LOCATIONS FOR AIR BALANCING. INSTALL CABLE OPERATED DAMPER OR ACCESS PANEL IF DAMPER IS LOCATED ABOVE GYP CEILINGS.

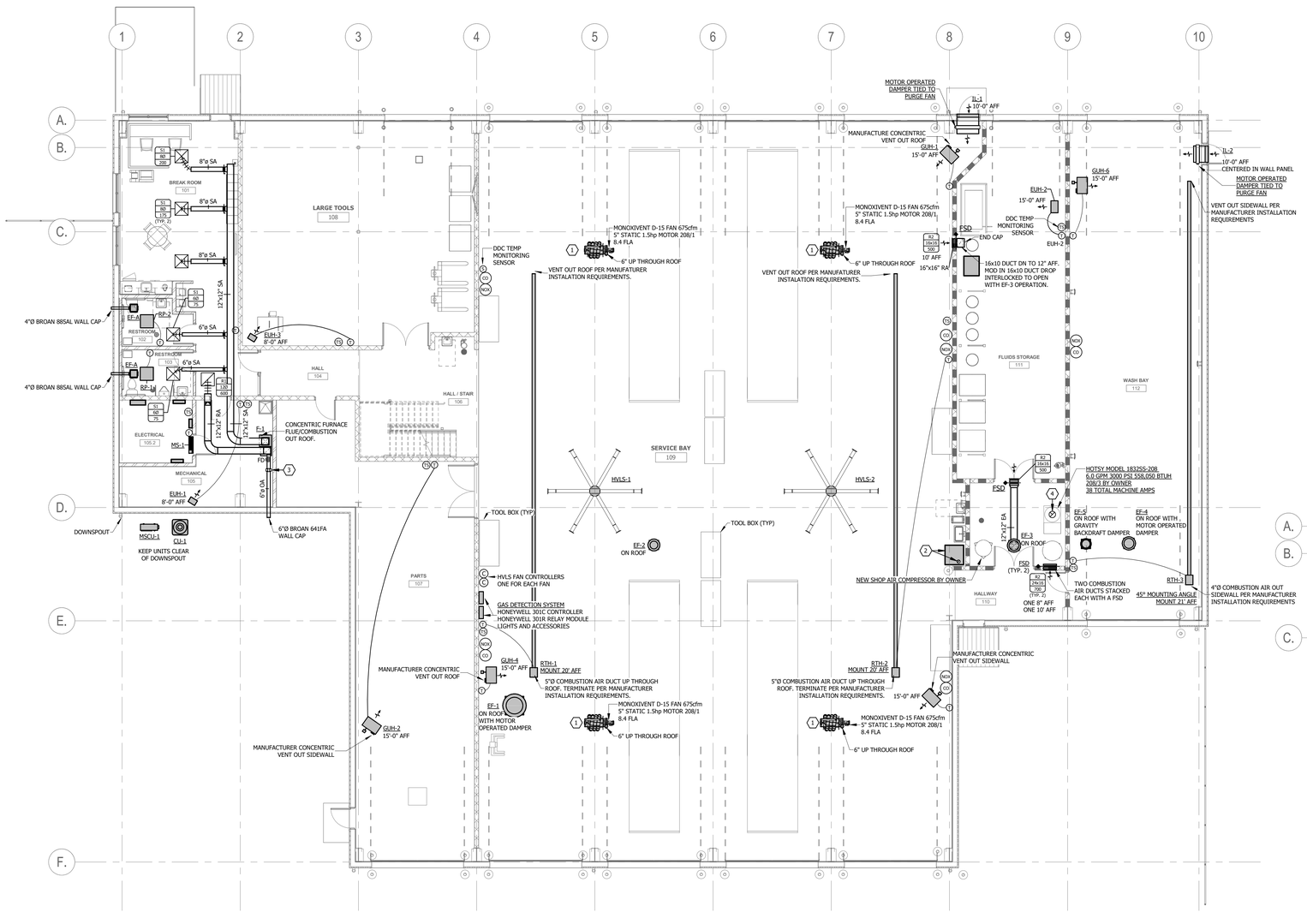
E. COORDINATE DUCT ROUTING WITH STRUCTURAL AND ALL TRADES.

F. COORDINATE ALL EXPOSED DUCTWORK ROUTING WITH DESIGN TEAM PRIOR TO ROUGH-IN.

G. COORDINATE SUPPLY, RETURN, AND EXHAUST GRILLE/DIFFUSER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN AND ALL TRADES.

REFERENCED NOTES: (#)

1. MONOXIVENT SWITCH OPERATED HOSE REEL MODEL 9000-W 18" DIAMETER DRUM, PROVIDE LOOSE SHIPPED MONOXIVENT 4-BUTTON WALL MOUNT UP/DN & ON/OFF SWITCH PROVIDED BY MECHANICAL & INSTALLED BY ELECTRICAL, VERIFY WITH MANUFACTURER PRIOR TO ORDERING THE FAN MOTOR VOLTAGE IS COMPATIBLE WITH SWITCH MODEL. PROVIDE 32" DRUM WIDTH AND 32' OF 5" HOSE. PROVIDE WITH OPTIONAL MOUNTING FLANGE FOR DIRECT MOUNT FAN. MOUNT REEL WITH UNISTRUT TO JOISTS. PROVIDE WITH TAILPIPE NOZZLE ADAPTER. TAILPIPE NOZZLE TO BE MODEL TCA-5 WITH 5" INLET AND 7" MOUTH, VISE GRIP CLAMP, RUBBER GRIP HANDLE AND INLET DEBRIS SCREEN. PROVIDE SYSTEM WITH A BACKDRAFT DAMPER. ROUTE EXHAUST UP TO ROOF AND TERMIATE WITH WATER TIGHT GOOSNECK ELBOW PER MANUFACTURER INTALLATION INSTRUCTIONS.
2. EXISTING AALADIN 2040E PARTS WASHER. PROVIDE AND INSTALL NEW 6" ALUMINUM VENT STACK UP AND OUT ROOF, TERMINATE WITH ALUMINUM ROOF THIMBLE. FLEXIBLE ALUMINUM DRYER VENT MAY BE USED TO TRANSITION FROM THE UNIT TO THE STACK. SEE MANUFACTURERS INSTALLATION MANUAL FOR ANY ADDITIONAL VENTING REQUIREMENTS.
3. FIELD CONTROLS 100cfm 6" FAVC DAMPER, SENSORS AND CONTROLER SET TO ECONOMY MODE FOR NORTHERN CLIMATE. ROUTE OUT SOUTH WALL WITH IAH-6 WALL INTAKE HOOD.
4. G.C TO COORDINATE AND CUT ROOF VENT OPENING AND REQUIRED ROOF FLASHING FOR OWNER PROVIDED HOTSY.



1 MECHANICAL PLAN - BUS BARN
1/8" = 1'-0"

2 MEZZANINE MECHANICAL PLAN
1/8" = 1'-0"

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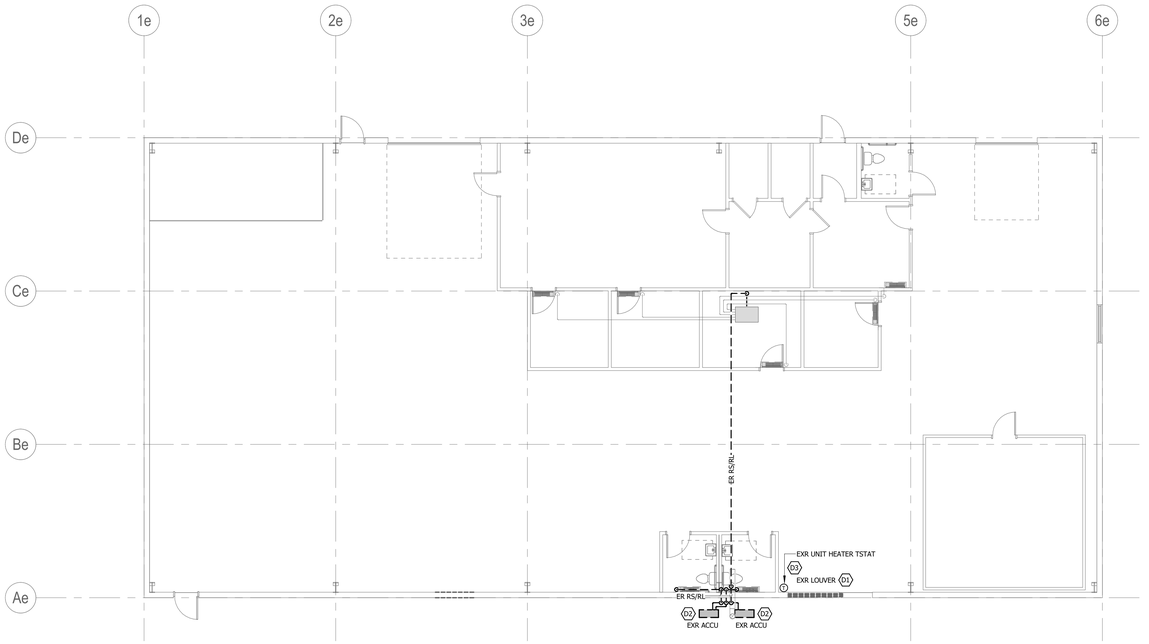
SOUTHEAST POLK TRANSPORTATION BUILDING

MECHANICAL PLAN - BUS BARN

M01.01



N

2 MECHANICAL DEMOLITION PLAN - OPERATIONS
1/8" = 1'-0"

DEMOLITION GENERAL NOTES:

A. DEMOLITION DRAWINGS ARE BASED ON EXISTING AVAILABLE DRAWINGS AND CASUAL FIELD OBSERVATION. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL FIELD VERIFY THE SITE AND INCLUDE ALL REQUIRED DEMOLITION IN THE BID.

B. ALL REQUIRED DEMOLITION IS NOT INDICATED. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL MECHANICAL AND ELECTRICAL SYSTEMS (NOT TO BE REUSED OR EXTENDED) BE REMOVED. COORDINATE WITH ARCHITECTURAL DRAWINGS.

C. REFER TO SPECIFICATIONS AND OTHER SHEETS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

D. REMOVE ALL ELECTRICAL CONNECTIONS, WIRING, AND CONDUIT SERVING ALL MECHANICAL EQUIPMENT TO BE REMOVED.

E. MAINTAIN FIRE RATINGS OF AFFECTED WALLS AND FLOORS.

F. EXISTING MECHANICAL AND ELECTRICAL SYSTEMS LOCATED IN WALLS AND CHASES NOT BEING REMOVED OR REUSED FOR NEW SYSTEMS MAY BE ABANDONED IN PLACE. CAP AT MAINS OR IN A CONCEALED LOCATION IF REQUIRED.

G. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS ON FLOOR CUTTING AND CEILING REMOVAL. CONTRACTOR SHALL COORDINATE WORK TO BE CONSISTENT WITH SCOPE OF GENERAL CONTRACTOR'S DEMOLITION.

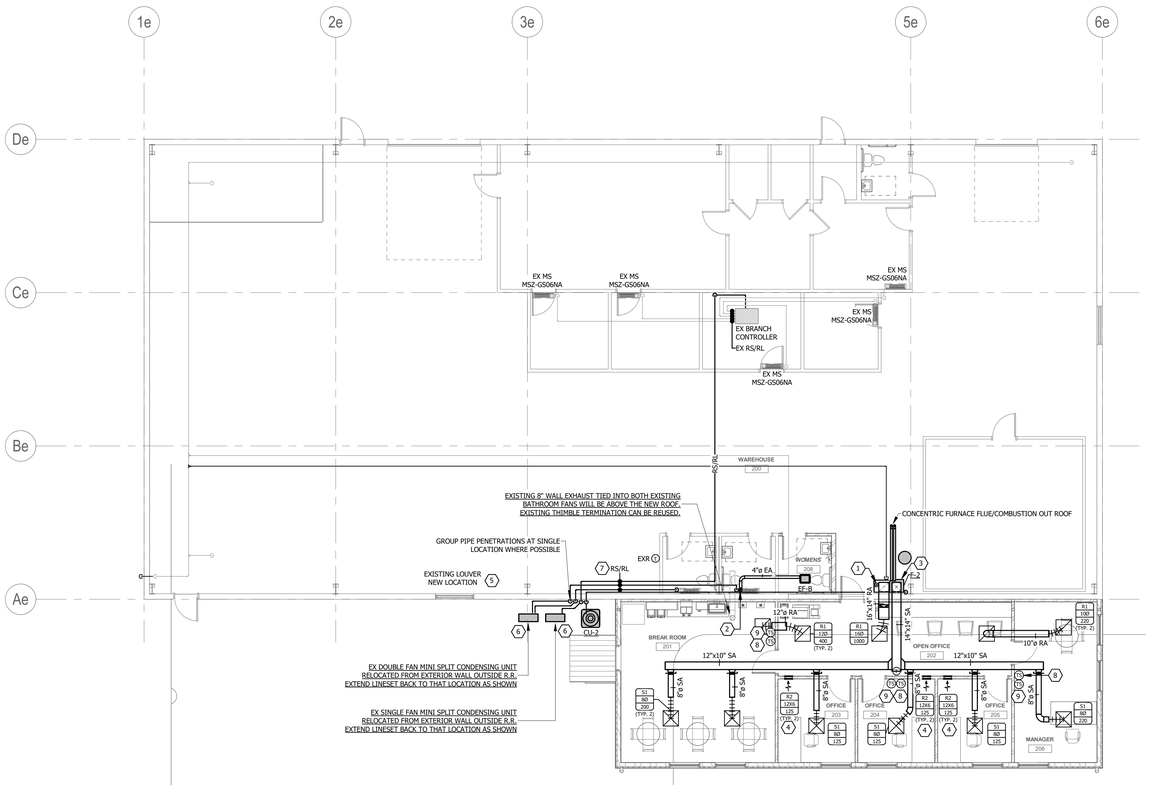
H. ALL EXTERIOR FREE-STANDING ELECTRICAL AND MECHANICAL DEVICES SHALL BE REMOVED UNDER BASE BID UNLESS OTHERWISE NOTED. PATCH OPENING TO MATCH SURROUNDING SURFACES.

REFERENCED NOTES: D#

D1. REMOVE EXISTING WALL LOUVER AND ASSOCIATED POWER, WIRING, CONDUIT, AND CONTROLS. PREPARE FOR RELOCATION TO NEW LOCATION.

D2. RELOCATE EXISTING CONDENSING UNIT AND ASSOCIATED PIPING, REFRIGERANT, POWER, WIRING, CONTROLS, ACCESSORIES, AND UNIT SUPPORTS. PREPARE SYSTEM FOR EXTENSION TO NEW LOCATION.

D3. RELOCATE EXISTING UNIT HEATER THERMOSTAT. REMOVE EXISTING CONDUIT AND WIRING AND EXTEND TO NEW LOCATION.



N

1 MECHANICAL PLAN - OPERATIONS
1/8" = 1'-0"

GENERAL NOTES:

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C. COORDINATE THERMOSTAT LOCATIONS WITH CASEWORK, WALL TYPES, AND FURNISHINGS PRIOR TO ROUGH-IN.

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REFERENCED NOTES:

1. FIELD CONTROLS 100cfm 6" FAVC DAMPER, SENSORS AND CONTROLER SET TO ECONOMY MODE FOR NORTHERN CLIMATE. ROUTE OUT SOUTH WALL WITH IAH-6 WALL INTAKE HOOD. KEEP 2' ABOVE NEW ROOF AND 10' FROM ANY EXHAUST.
2. 4" BATHROOM EXHAUST UP AND OUT SOUTH WALL 2' ABOVE NEW ROOF. TERMINATE WITH BROAN WALL EXHAUST CAP 885AL.
3. ROUTE 3/4" INSULATED CONDENSATE TO NEW FLOOR DRAIN. SEE PLUMBING PLANS FOR LOCATION.
4. MOUNT OFFICE SIDE REGISTER LOW IN STUD WALL POCKET AND HIGH ON OPEN OFFICE SIDE.
5. RELOCATE EXISTING LOUVER AND EXTEND ASSOCIATED POWER, WIRING, ACCESSORIES, AND CONTROLS TO NEW LOCATION.
6. RELOCATE EXISTING CONDENSING UNIT AND SUPPORTS. PROVIDE NEW INSULATED REFRIGERANT PIPING SIZED FOR NEW LOCATION. EXTEND ASSOCIATED POWER, WIRING, ACCESSORIES, AND CONTROLS TO NEW LOCATION. RECHARGE SYSTEM REFRIGERANT AS REQUIRED FOR PROPER OPERATION.
7. PROVIDE NEW REFRIGERANT LINESETS TO SERVE EXISTING EQUIPMENT.
8. DDC SENSOR (SEE SPEC)
9. THERMOSTAT SENSOR (SEE FURNACE SCHEDULE)

3 SOUTH WALL - OPERATIONS DEMOLITION PLAN
No Scale

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Southeast Polk Community School District

KEY PLAN

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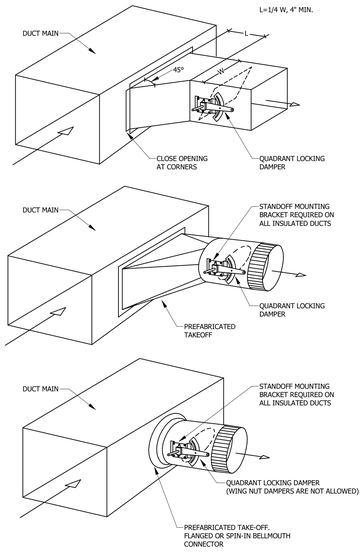
MECHANICAL PLAN - OPERATIONS

M02.01



1 45 BRANCH CONNECTION DETAIL
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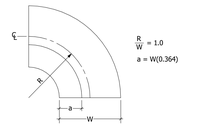

2 ELBOW AND WYE WITH VANE DETAIL
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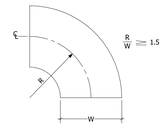

3 ELBOW AND WYE WITHOUT VANE DETAIL
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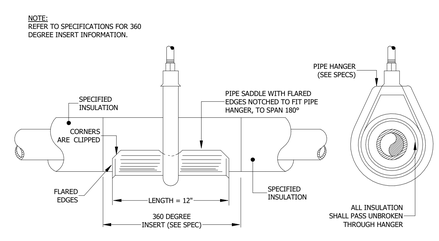

4 INSULATED PIPE HANGER DETAIL
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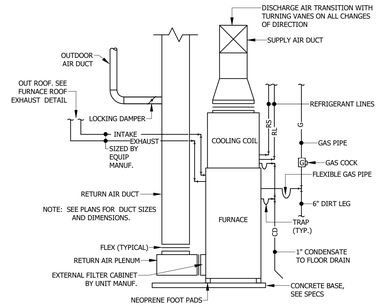

5 FURNACE DETAIL
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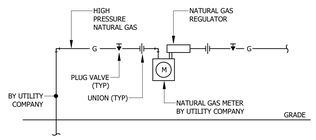

6 TRANSPORTATION BUILDING GAS METER DETAIL
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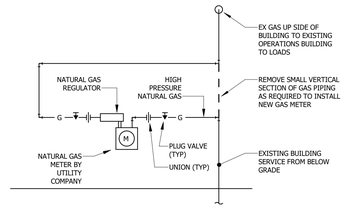

7 OPERATIONS BUILDING GAS METER DETAIL
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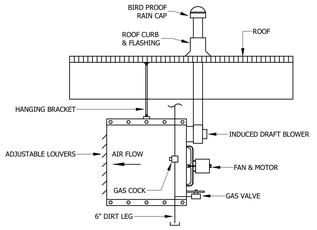

8 GAS FIRED UNIT HEATER DETAIL
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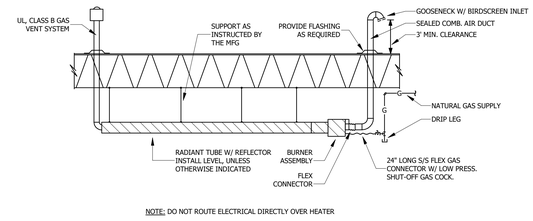

NOTE: DO NOT ROUTE ELECTRICAL DIRECTLY OVER HEATER

9 RADIANT TUBE HEATER DETAIL
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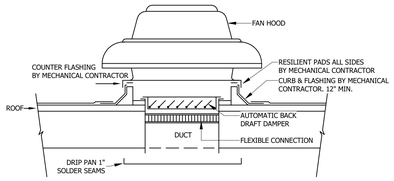
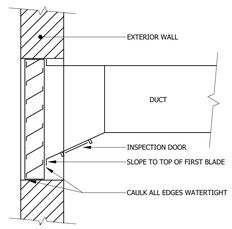


10 ROOF MOUNTED EXHAUST FAN DETAIL
No Scale



11 LOUVER DUCT CONNECTION DETAIL
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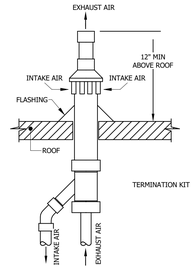

12 FURNACE ROOF EXHAUST DETAIL
No Scale

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MECHANICAL DETAILS

M05.01

ELECTRIC UNIT HEATER SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	MOUNTING TYPE	AIRFLOW (CFM)	POWER (KW)	ELECTRICAL		
						TOTAL AMPS (A)	MOCP	VOLTAGE/PHASE
EUH-1	INDEECO	UIHR	WALL BRACKET	350	2.5	12.3	15	208/1
EUH-2	INDEECO	UIHR	WALL BRACKET	650	10	28.46	35	208/3
EUH-3	INDEECO	UIHR	WALL BRACKET	650	10	28.46	35	208/3

NOTES:
1. EUH-1 TO HAVE INTEGRAL FACTORY STAT.
2. EUH-2 & EUH-3 PROVIDE WITH LOW VOLTAGE WALL STAT, ADD 24V CONTROL OPTION.

GRILLES, REGISTERS, AND DIFFUSERS SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	MATERIAL	SYSTEM TYPE	NECK SIZE	FACE SIZE	RANGE	MAX N.C.	NOTE
S1	TITUS	OMNI	STEEL	SUPPLY	SEE PLANS	24x24	VARIES	20	1,2
R1	TITUS	PAR	STEEL	RETURN	SEE PLANS	24x24	VARIES	20	1,2
R2	TITUS	350FL	ALUMINUM	RETURN	SEE PLANS	-	VARIES	20	1

NOTES:
1. STANDARD WHITE.
2. VERIFY CEILING TYPES.

EXHAUST FAN SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	SERVES	AIRFLOW (CFM)	ESP (IN. WG)	MOTOR BHP	MOTOR HP	FAN SPEED (RPM)	DRIVE TYPE	SOUND LEVEL (SONES)	MCA	MOP	VOLTAGE/PH	NOTES
EF-1	GREENHECK	G-240-VG	SERVICE BAY PURGE	6200	0.4	1.03	2	737	DIRECT	14.7	15.6	25	208/1	
EF-2	GREENHECK	G-090-VG	SERVICE BAY CONSTANT	410	0.4	0.03	1/10	1207	DIRECT	4.9	1.9	15	115/1	
EF-3	GREENHECK	G-095-VG	FLUID STORAGE	800	0.5	0.1	1/6	1489	DIRECT	8.1	3.5	15	115/1	1
EF-4	GREENHECK	G-120-VG	WASHBAY PURGE	1200	0.3	0.13	1/4	1134	DIRECT	8.4	4.8	15	115/1	
EF-5	GREENHECK	CUE-060-G	WASHBAY CONSTANT	100	0.14	0.01	1/100	1300	DIRECT	2.5	-	15	115/1	
EF-A	BROAN	A110	RESTROOM 102 & 103	100	0.25	-	-	-	DIRECT	3.0	.4	15	115/1	
EF-B	BROAN	AER80X	WOMEN'S 208	60	0.25	-	-	-	DIRECT	0.7	.3	15	115/1	

NOTES:
1. EF-3 TO OPERATE WITH ROOM OCCUPANCY SENSOR. EF-3 IS SELECTED AT 800cfm BUT WILL BE BALANCED TO 500cfm.
2. EF-1 AND EF-4 SHALL BE CONTROLLED BY GAS DETECTION SYSTEM CONTROLLER. ELECTRICAL CONTRACTOR SHALL PROVIDE A WALL OVERRIDE SWITCH FOR EF-4 MANUAL OPERATION OF FAN. SWITCH SHALL BE WIRED TO ALLOW GAS DETECTION SYSTEM TO CONTROL EXHAUST FAN ON WHEN MANUAL SWITCH IS ON OR OFF.

FURNACE SCHEDULE

UNIT TAG	MANUFACTURER	FURNACE MODEL	COIL MODEL	AFUE	AIRFLOW (CFM)	HEAT INPUT	HEAT OUTPUT	ELECTRICAL			NOTES
								MCA	MOCP	VOLTAGE/PHASE	
F-1	DAIKIN	DM92SN0603BN	CAPTA3026B3	92	700	60,000	55,200	7	15	120/1	1,3
F-2	DAIKIN	DM92SN0603BN	CAPTA3626B3	92	1000	60,000	55,200	7	15	120/1	2,3

NOTES:
1. SEE CONTROLS SPEC FOR THERMOSTAT TYPE.
2. FURNISH HONEYWALL T9 SMART THERMOSTAT WITH THREE ROOM SENSORS AS SHOWN ON PLANS. PROGRAM ROOM NAMES INTO THERMOSTAT SETTINGS, COORDINATE OCCUPANCY TIME SETTINGS AND SENSOR PRIORITIES WITH OWNER.
3. FURNACES TO HAVE CONVENTIONAL THERMOSTAT INTERFACE.

CONDENSING UNIT SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	REFRIGERANT	SEER2	VOLTAGE	PHASE	MCA	MOCP
CU-1	DAIKIN	DC5SEA1810	R-32	16	208/230	1	11.1	15
CU-2	DAIKIN	DC5SEA2410	R-32	16	208/230	1	13.8	20

NOTES:
1. G.C. TO INSTALL 4" CONCRETE HOUSEKEEPING PAD FOR CONDENSING UNITS. COORDINATE FINAL SIZE AND LOCATION WITH MECHANICAL CONTRACTOR.

HIGH VOLUME LOW SPEED FAN SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	LOCATION	DIAMETER (FT)	HEIGHT (IN)	WEIGHT (LBS)	SPEED (RPM)	BLADE QUANTITY	MOUNTING HEIGHT (FT)	MOTOR HP	ELECTRICAL		
											VOLTAGE/PH	FLA	MOCP
HVLS-1	BIG ASS FANS	BASIC 6	SERVICE BAY	14	57.5	192	96	6	21	1.5	208/1	-	20
HVLS-2	BIG ASS FANS	BASIC 6	SERVICE BAY	14	57.5	192	96	6	21	1.5	208/1	-	20

NOTES:
1. PROVIDE AND INSTALL WITH FACTORY WALL CONTROLLER (STANDARD). COMMUNICATION BETWEEN THE FAN VFD AND WALL CONTROLLER IS A SHIELDED 18/4 CABLE(CONTRACTOR SUPPLIED).
2. HVLS-1 & 2 WILL BE DAISY CHAINED TOGETHER AND OPERATED AT THE SAME SPEEDS FROM THE CONTROLLER LISTED ABOVE.

RADIANT TUBE HEATER SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	LOCATION	TOTAL LENGTH (FT)	HIGH FIRE (MBH)	LOW FIRE (MBH)	COMBUSTION/FLUE SIZE	REFLECTORS	ELECTRICAL
RTH-1	SCHWANK	SST-TB22-60	SERVICE BAY	60'	225	135	5"/5"	26ga ALUMINIZED STEEL	120/1
RTH-2	SCHWANK	SST-TB22-60	SERVICE BAY	60'	225	135	5"/5"	26ga ALUMINIZED STEEL	120/1
RTH-3	SCHWANK	SST-SX18-60-CN	WASH BAY	59'-9"	180	N/A	5"/5"	STAINLESS STEEL	120/1

NOTES:
1. UNITS COME WITH 4' LENGTH 16/3 ELECTRICAL SUPPLY CORD WITH 3 PIN GROUNDED PLUG.
2. RTH-1 & 2 PROVIDED WITH FACTORY TWO-STAGE WALL THERMOSTAT.
3. RTH-3 PROVIDED WITH FACTORY MOISTURE PROOF THERMOSTAT-ONE STAGE AND COVER.

GAS UNIT HEATER SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	EFF	BTU	CFM	MOTOR HP	VOLT	MOP
GUH-1	MODINE	HD 100	82%	100,000	1490	1/6	115	15
GUH-2	MODINE	HD 60	82%	60,000	990	1/6	115	15
GUH-3	MODINE	HD 60	82%	60,000	990	1/6	115	15
GUH-4	MODINE	HD 75	82%	75,000	1160	1/6	115	15
GUH-5	MODINE	HD 75	82%	75,000	1160	1/6	115	15
GUH-6	MODINE	PTX 150	82%	150,000	2140	1/6	115	15

NOTES:
1. PROVIDE GUH-6 WITH OPTIONAL STAINLESS STEEL HEAT EXCHANGER.

DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM SCHEDULE

INDOOR UNIT							OUTDOOR UNIT						ELECTRICAL		
UNIT TAG	MANUFACTURER	MODEL	LOCATION	EDB/EWB (°F/°F)	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	UNIT TAG	MODEL	COMPRESSOR TYPE	COOLING MINIMUM OPERATING TEMPERATURE (°F)	HEATING MINIMUM OPERATING TEMPERATURE (°F)	EFFICIENCY (SEER2)	MCA	MOCP	VOLTAGE/ PHASE
MS-1	DAIKIN	FTXM12WVJU9	ELECTRICAL 105.2	80/67	12,000	13,600	MSCU-1	RXM12WVJU9U	INVERTER	-4	-13	25.2	12.3	15	208/1

NOTES:
1. PROVIDE AND INSTALL WITH DAIKIN ONE LITE FACTORY WALL THERMOSTAT.
2. PROVIDE AND INSTALL WITH FACTORY AIR ADJUSTMENT GRILLE FOR LOW AMBIENT COOLING OPERATION.
3. PROVIDE AND INSTALL WITH FACTORY DRAIN PAN HEATER.

LOUVER SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	UNIT SERVED	FACE VELOCITY (FPM)	AIFLOW (CFM)	PRESSURE DROP (IN WC)	LOUVER WIDTH (IN)	LOUVER HEIGHT (IN)	FREE AREA (SQ FT)
IL-1	GREENHECK	ESD-635	SHOP VENTILATION	722	6200	0.07	40	56	9.3
IL-2	GREENHECK	ESD-635	BUS WASH VENTILATION	514	1200	0.04	30	24	2.3

NOTES:
1. COLOR BY ARCHITECT.

RADIANT PANEL CEILING HEATER SCHEDULE

Mark	MANUFACTURER	MODEL	MOUNTING TYPE	WATTS	TOTAL AMPS	ELECTRICAL		
						VOLTAGE	PHASE	MOP
RP-1	INDEECO	AS-24x24	CEILING GRID	375	3.1	120	1	15
RP-2	INDEECO	AS-24x24	CEILING GRID	375	3.1	120	1	15

NOTES:
1. STANDARD WHITE FINISH.

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	08/28/25
PROJECT NO:	3007.000.00

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MECHANICAL SCHEDULES

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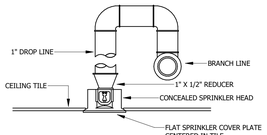

3 CONCEALED SPRINKLER HEAD DETAIL
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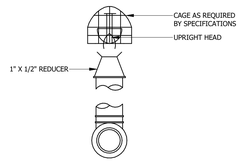

4 UPRIGHT SPRINKLER HEAD DETAIL
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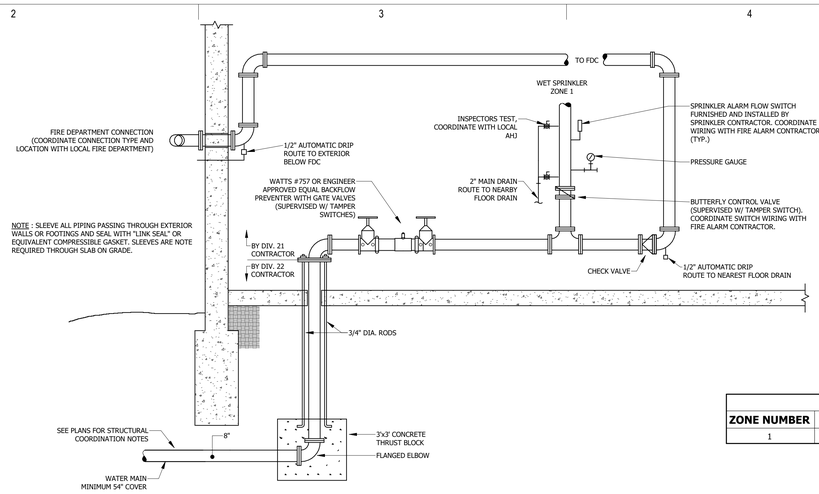


5 SPRINKLER ENTRANCE DETAIL
No Scale

SPRINKLER ZONE SCHEDULE				
ZONE NUMBER	ZONE DESCRIPTION	ZONE TYPE	OCCUPANCY CLASSIFICATION	AREA (SF)
1	BUS REPAIR GARAGE	WET	EXTRA HAZARD GROUP 1	15,500

GENERAL NOTES:

A. SPRINKLER SYSTEMS SHALL BE DESIGNED TO 100% COVERAGE BY NFPA-13 AND OTHER APPLICABLE CODES. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL NUMBER OF HEADS AND HEAD SPACING REQUIRED TO PROTECT THE AREA IN ACCORDANCE WITH NFPA REQUIREMENTS FOR THE APPROPRIATE HAZARD CLASSIFICATION. USE RETURN BENDS TO LOCATE SPRINKLER HEADS IN THE CENTER OF CEILING TILES.

B. THE DRAWINGS ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND TO INDICATE THE GENERAL ARRANGEMENT AND APPROXIMATE ROUTING. CONTRACTOR SHALL FIELD ROUTE PIPING THROUGH THE (EXISTING) BUILDING TO AVOID INTERFERENCE'S WITH (EXISTING) STRUCTURE, EQUIPMENT, DUCTWORK, PIPING, LIGHTING, AND CONDUIT. CONCEAL PIPING WHERE POSSIBLE.

C. THE CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, PATCHING, PAINTING, AND FIRE-STOPPING OF (EXISTING) WALLS, FLOORS AND CEILINGS NECESSARY FOR THE INSTALLATION OF WORK UNLESS NOTED OTHERWISE. ALL PENETRATIONS THRU RATED WALLS, FLOORS, AND CEILING SHALL BE FIRE-STOPPED/WATER-PROOFED TO MATCH THE RATING OF THE WALL, FLOOR, AND/OR CEILING.

D. ALL SPRINKLER PIPING SHALL BE INSTALLED SUCH THAT THE SYSTEM WILL COMPLETELY DRAIN BACK TO MAIN. IF A SECTION OF PIPING CANNOT BE SLOPED BACK TO MAIN, AN AUXILIARY DRAIN VALVE WITH PERMANENT LABEL AND HOSE THREAD CONNECTION MUST BE INSTALLED BY THIS CONTRACTOR. ALL AUXILIARY DRAINS SHOULD BE CONCEALED FROM THE OCCUPIED SPACE.

E. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS ON OTHER SHEETS FOR ADDITIONAL INFORMATION ON CONSTRUCTION AND COORDINATION NEEDS OF OTHER TRADES.

F. SPRINKLER SYSTEM SHALL BE EXTENDED TO SERVE MECHANICAL MEZZANINES, AND CANOPIES WHERE REQUIRED BY CODE.

G. COORDINATE SPRINKLER HEAD LOCATIONS WITH BUILDING STRUCTURE AND OTHER TRADES PRIOR TO INSTALLATION TO AVOID POSSIBLE CONFLICTS.

H. SPRINKLER CONTRACTOR SHALL USE CONCEALED HEADS IN ALL FINISHED SPACES AND EXPOSED HEADS IN OPEN CEILING SPACES. REFER TO SPECIFICATIONS FOR SECURITY CAGE LOCATIONS.

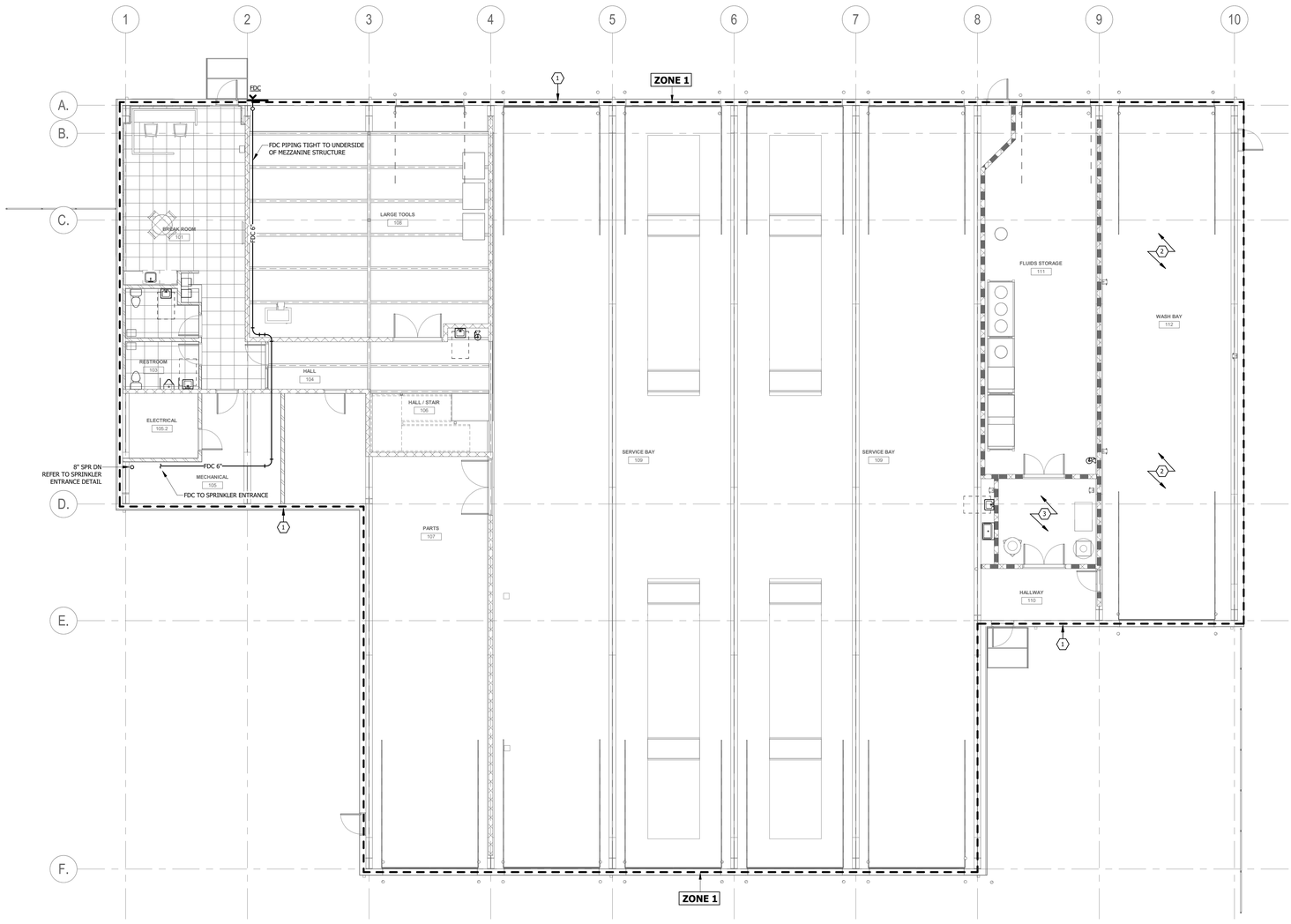
I. ROUTE MAINS AND BRANCH PIPING ABOVE BOTTOM OF JOISTS WHEN PARALLEL TO JOISTS AND THROUGH JOISTS WHEN THEY RUN PERPENDICULAR TO JOISTS.

J. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES AND CLERESTORY LOCATIONS.

K. FACILITY IS SERVED THROUGHOUT BY VARIOUS TYPES OF GAS FIRED AND ELECTRIC HEATERS, ENSURE PLACEMENT OF ALL SPRINKLER HEADS IS COORDINATED WITH FINAL PLACEMENT OF HEATERS TO MAINTAIN MINIMUM CLEARANCE FROM OUTLET OF HEATERS.

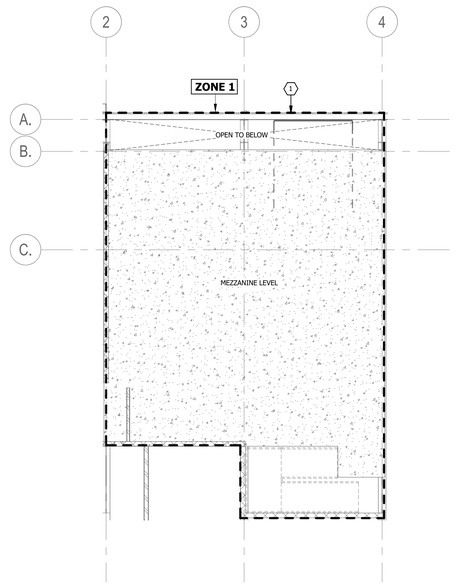
REFERENCED NOTES: (#)

1. BUILDING SPRINKLER SYSTEMS SHALL BE DESIGNED TO 100% COVERAGE BY NFPA-13 AND OTHER APPLICABLE CODES. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL NUMBER OF HEADS, HEAD SPACING, AND FLOW REQUIRED TO PROTECT THE AREA IN ACCORDANCE WITH NFPA REQUIREMENTS FOR THE APPROPRIATE HAZARD CLASSIFICATION. USE RETURN BENDS TO LOCATE SPRINKLER HEADS IN THE CENTER OF CEILING TILES.
2. ALL SPRINKLER HEADS LOCATED IN WASH BAY AREA SHALL BE CORROSION RESISTANT STYLE. ALL PIPING SHALL BE PAINTED TO MATCH STRUCTURE WITH RUST RESISTANT PAINT.
3. LOCATION OF WASH BAY HOTSY WATER HEATER, PROVIDE HIGH TEMPERATURE HEADS WITHIN THIS ROOM AND LOCATE HEADS WITH SUFFICIENT CLEARANCE TO HEATER.



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

HYDRANT FLOW TEST	
DATE:	JULY 25, 2025 @ 1:00 PM
ADDRESS:	8443 NE UNIVERSITY AVENUE
FLOW HYDRANT:	H1339-003
PRESSURE HYDRANT:	H1339-002
STATIC PRESSURE:	78 PSI
RESIDUAL PRESSURE:	61 PSI
PITOT PRESSURE:	46 PSI
NOZZLE FACTOR:	0.85
ORIFICE SIZE:	2.5"
CALCULATED FLOW:	1,075 GPM
FLOW AT 20 PSI:	2,085 GPM



2 MEZZANINE SPRINKLER PLAN
1/8" = 1'-0"

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Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE: 08/28/25
PROJECT NO: 3007.090.00

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SPRINKLER FLOOR PLAN

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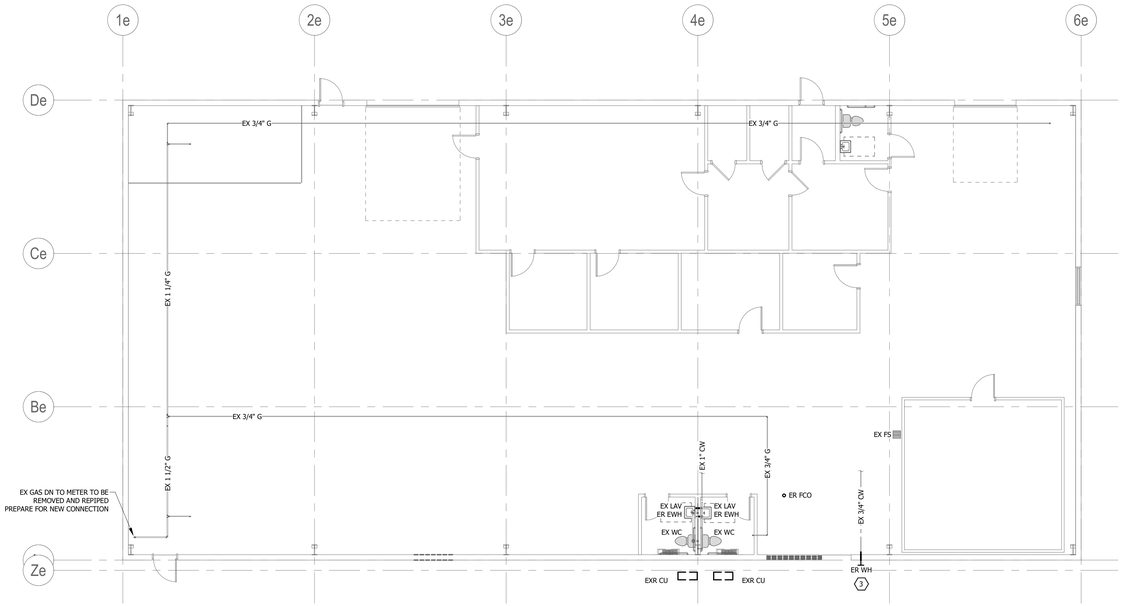

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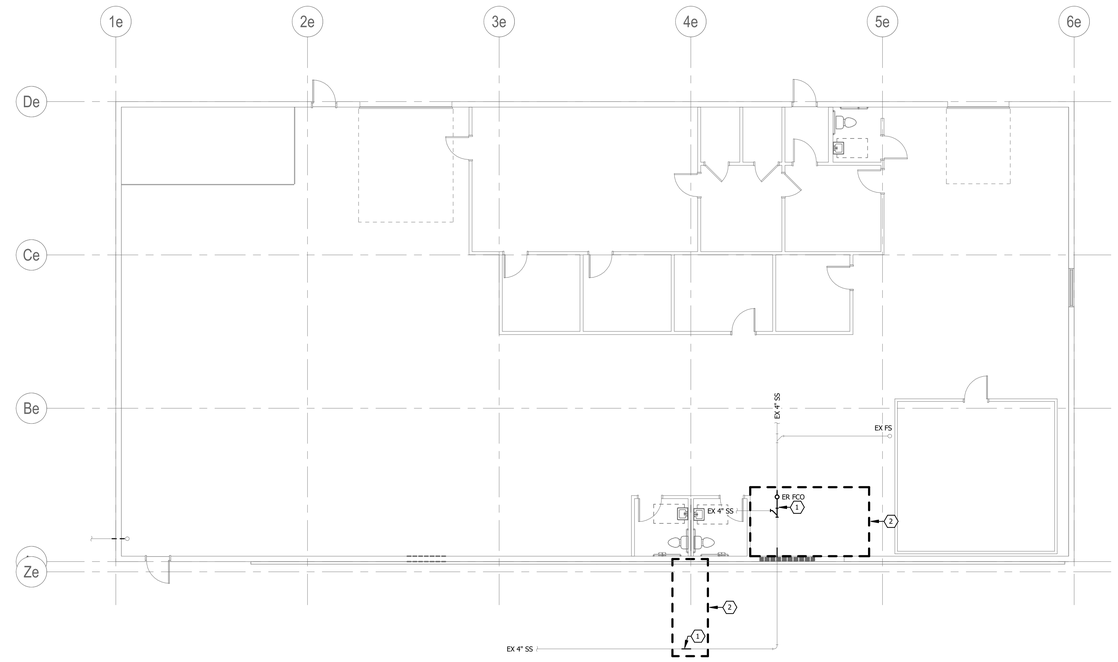
1 PLUMBING DEMOLITION PLAN - OPERATIONS
1/8" = 1'-0"



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2 UNDERFLOOR PLUMBING DEMOLITION PLAN - OPERATIONS
1/8" = 1'-0"

DEMOLITION GENERAL NOTES:

A. DEMOLITION DRAWINGS ARE BASED ON EXISTING AVAILABLE DRAWINGS AND CASUAL FIELD OBSERVATION. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL FIELD VERIFY THE SITE AND INCLUDE ALL REQUIRED DEMOLITION IN THE BID.

B. ALL REQUIRED DEMOLITION IS NOT INDICATED. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL MECHANICAL AND ELECTRICAL SYSTEMS (NOT TO BE REUSED OR EXTENDED) BE REMOVED. COORDINATE WITH ARCHITECTURAL DRAWINGS.

C. REFER TO SPECIFICATIONS AND OTHER SHEETS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

D. REMOVE ALL ELECTRICAL CONNECTIONS, WIRING, AND CONDUIT SERVING ALL PLUMBING EQUIPMENT TO BE REMOVED.

E. MAINTAIN FIRE RATINGS OF AFFECTED WALLS AND FLOORS.

F. EXISTING PLUMBING SYSTEMS LOCATED IN WALLS AND CHASES NOT BEING REMOVED OR REUSED FOR NEW SYSTEMS SHALL BE REMOVED.

G. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS ON FLOOR CUTTING AND CEILING REMOVAL. CONTRACTOR SHALL COORDINATE WORK TO BE CONSISTENT WITH SCOPE OF GENERAL CONTRACTOR'S DEMOLITION.

REFERENCED NOTES: (#)

1. PREPARE FOR NEW CONNECTION. SEE NEW WORK PLANS FOR ADDITIONAL INFORMATION.
2. APPROXIMATE AREA OF FLOOR CUTTING AND PATCHING.
3. DEMOLISH EXISTING HOSE BIB AND ASSOCIATED PLUMBING BACK TO CEILING AND PREPARE FOR NEW CONNECTION. SEE NEW WORK PLANS FOR ADDITIONAL INFORMATION.

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DEMOLITION PIPING PLAN - OPERATIONS

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PLUMBING FIXTURE CONNECTION SCHEDULE

ITEM	WASTE SIZE	VENT SIZE	WATER SIZE	
			HOT	COLD
WATER CLOSET (TANK)	4"	2"	-	3/4"
URINAL	2"	1-1/2"	-	1"
LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"
SINK	1-1/2"	1-1/2"	1/2"	1/2"
FLOOR SINK/FLOOR DRAIN	3"	1-1/2"	-	-
JANITOR SINK	3"	1-1/2"	3/4"	3/4"
DRINKING FOUNTAIN	1-1/2"	1-1/2"	-	1/2"

NOTES:
1. ALL SANITARY SEWER BELOW GRADE SHALL BE A MINIMUM OF 3" UNLESS OTHERWISE NOTED.
2. ALL VENT BELOW GRADE SHALL BE A MINIMUM OF 2" UNLESS OTHERWISE NOTED.
3. NOT ALL FIXTURES ON THIS SCHEDULE MAY BE USED.

GENERAL NOTES:

A. INSTALLATION PLANS ARE SCHEMATIC IN NATURE. CONTRACTOR TO VERIFY PLACEMENT OF NEW EQUIPMENT/FIXTURES PRIOR TO INSTALLATION.

B. MAINTAIN SERVICE CLEARANCE AROUND ALL MECHANICAL EQUIPMENT AND ABOVE ELECTRICAL EQUIPMENT. DO NOT ROUTE PIPING IN CLEARANCE SPACE.

C. COORDINATE PIPING LAYOUT AND ELEVATIONS WITH FOOTINGS, FLOW LINES, LOCAL PLUMBING CODE AND THE SPECIFICATIONS.

D. VERIFY ALL SITE CONDITIONS PRIOR TO START OF WORK.

E. COORDINATE ALL PLUMBING AND PIPING ROUTING WITH BUILDING STRUCTURE AND OTHER TRADES PRIOR TO INSTALLATION TO ALLOW FOR PROPER CLEARANCES AND FLOW REQUIREMENTS.

F. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL WATER HAMMER ARRESTORS ON ALL GROUP BATHROOM COLD WATER PIPE LOCATIONS. PROVIDE WITH SHUT-OFF BALL VALVE. REFER TO SPECIFICATIONS.

G. ALL CONDENSATE DRAIN PIPING SHALL BE 3/4" COPPER WITH INSULATION UNLESS NOTED OTHERWISE.

H. COORDINATE ALL VENTS THROUGH ROOF WITH STRUCTURAL DRAWINGS AND MAINTAIN 10FT REQUIRED DISTANCE FROM MECHANICAL EQUIPMENT INTAKES. OFFSET PIPING AS NECESSARY.

I. ROUTE AS MUCH STORM PIPING AS HIGH IN JOIST SPACE AS POSSIBLE.

J. COORDINATE ALL EXPOSED PIPE ROUTING WITH DESIGN TEAM PRIOR TO ROUGH-IN. SPECIFIC RACKING REQUIREMENTS MAY BE REQUIRED.

K. COORDINATE ALL FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT AND RESPECTIVE TRADES PRIOR TO ROUGH-IN.

L. COORDINATE STORM AND SANITARY SEWER CONNECTIONS WITH STRUCTURAL DRAWINGS TO MAINTAIN REQUIRED SLOPING AND PROPER ELEVATIONS.

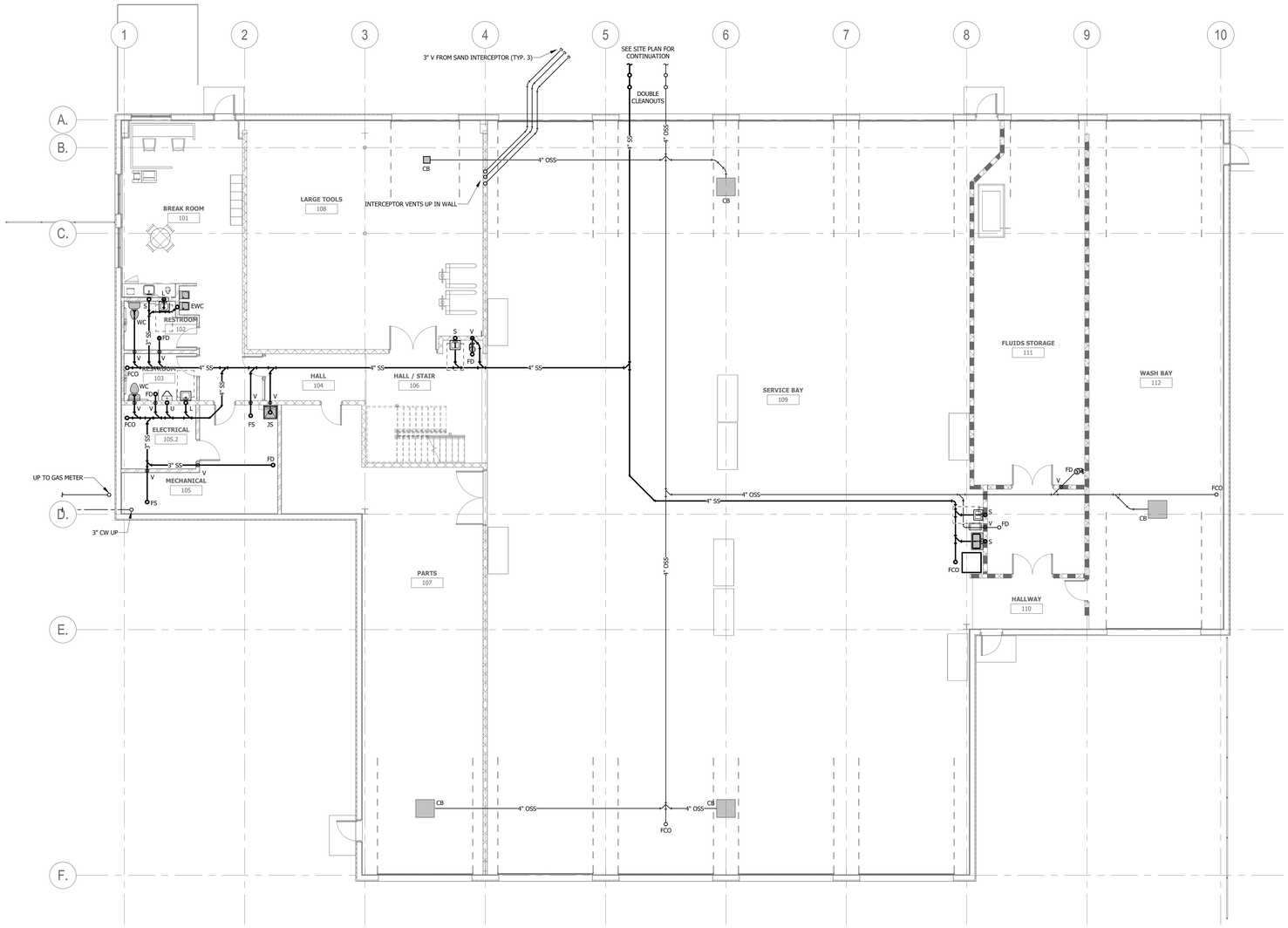
M. SEE PLUMBING FIXTURE CONNECTION SCHEDULE FOR FIXTURE CONNECTION SIZES.

N. MECHANICAL CONTRACTOR SHALL REFER TO ELEVATOR INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.

O. FIELD VERIFY ALL NEW AND EXISTING PIPE ROUTING WITH EXISTING CONDITIONS PRIOR TO ROUGH-IN. MAKE NECESSARY OFFSETS AS REQUIRED.

P. COORDINATE ALL WALL CLEANOUT LOCATIONS WITH DESIGN TEAM PRIOR TO ROUGH-IN. COORDINATE ALL FLOOR CLEANOUT LOCATIONS BEING INSTALLED IN TILE, TERRAZZO OR OTHER SPECIALTY FLOOR AREAS WITH DESIGN TEAM PRIOR TO ROUGH-IN.

Q. PROVIDE ISOLATION BALL VALVES ON BRANCH PIPING TAPS FROM MAIN ON ALL COLD AND HOT WATER PIPES. ENSURE VALVES ARE INSTALLED IN ACCESSIBLE LOCATIONS.



1 UNDERFLOOR PIPING PLAN
1/8" = 1'-0"

8/28/2025 4:22:00 PM

95% CONSTRUCTION DOCUMENTS

SOUTHEAST POLK TRANSPORTATION BUILDING

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Southeast Polk Community School District

KEY PLAN

ISSUANCE: 08/28/25

PROJECT NO: 3007.090.00

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PLUMBING UNDERFLOOR PLAN - BUS BARN

P00.01

PLUMBING FIXTURE CONNECTION SCHEDULE

ITEM	WASTE SIZE	VENT SIZE	WATER SIZE HOT	WATER SIZE COLD
WATER CLOSET (TANK)	4"	2"	-	3/4"
URINAL	2"	1-1/2"	-	1"
LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"
SINK	1-1/2"	1-1/2"	1/2"	1/2"
FLOOR SINK/FLOOR DRAIN	3"	1-1/2"	-	-
JANITOR SINK	3"	1-1/2"	3/4"	3/4"
DRINKING FOUNTAIN	1-1/2"	1-1/2"	-	1/2"

NOTES:
1. ALL SANITARY SEWER BELOW GRADE SHALL BE A MINIMUM OF 3" UNLESS OTHERWISE NOTED.
2. ALL VENT BELOW GRADE SHALL BE A MINIMUM OF 2" UNLESS OTHERWISE NOTED.
3. NOT ALL FIXTURES ON THIS SCHEDULE MAY BE USED.

GENERAL NOTES:

A. INSTALLATION PLANS ARE SCHEMATIC IN NATURE. CONTRACTOR TO VERIFY PLACEMENT OF NEW EQUIPMENT/FIXTURES PRIOR TO INSTALLATION.

B. MAINTAIN SERVICE CLEARANCE AROUND ALL MECHANICAL EQUIPMENT AND ABOVE ELECTRICAL EQUIPMENT. DO NOT ROUTE PIPING IN CLEARANCE SPACE.

C. COORDINATE PIPING LAYOUT AND ELEVATIONS WITH FOOTINGS, FLOW LINES, LOCAL PLUMBING CODE AND THE SPECIFICATIONS.

D. VERIFY ALL SITE CONDITIONS PRIOR TO START OF WORK.

E. COORDINATE ALL PLUMBING AND PIPING ROUTING WITH BUILDING STRUCTURE AND OTHER TRADES PRIOR TO INSTALLATION TO ALLOW FOR PROPER CLEARANCES AND FLOW REQUIREMENTS.

F. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL WATER HAMMER ARRESTORS ON ALL GROUP BATHROOM COLD WATER PIPE LOCATIONS. PROVIDE WITH SHUT-OFF BALL VALVE. REFER TO SPECIFICATIONS.

G. ALL CONDENSATE DRAIN PIPING SHALL BE 3/4" COPPER WITH INSULATION UNLESS NOTED OTHERWISE.

H. COORDINATE ALL VENTS THROUGH ROOF WITH STRUCTURAL DRAWINGS AND MAINTAIN 10FT REQUIRED DISTANCE FROM MECHANICAL EQUIPMENT INTAKES. OFFSET PIPING AS NECESSARY.

I. ROUTE AS MUCH STORM PIPING AS HIGH IN JOIST SPACE AS POSSIBLE.

J. COORDINATE ALL EXPOSED PIPE ROUTING WITH DESIGN TEAM PRIOR TO ROUGH-IN. SPECIFIC RACKING REQUIREMENTS MAY BE REQUIRED.

K. COORDINATE ALL FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT AND RESPECTIVE TRADES PRIOR TO ROUGH-IN.

L. COORDINATE STORM AND SANITARY SEWER CONNECTIONS WITH STRUCTURAL DRAWINGS TO MAINTAIN REQUIRED SLOPING AND PROPER ELEVATIONS.

M. SEE PLUMBING FIXTURE CONNECTION SCHEDULE FOR FIXTURE CONNECTION SIZES.

N. MECHANICAL CONTRACTOR SHALL REFER TO ELEVATOR INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.

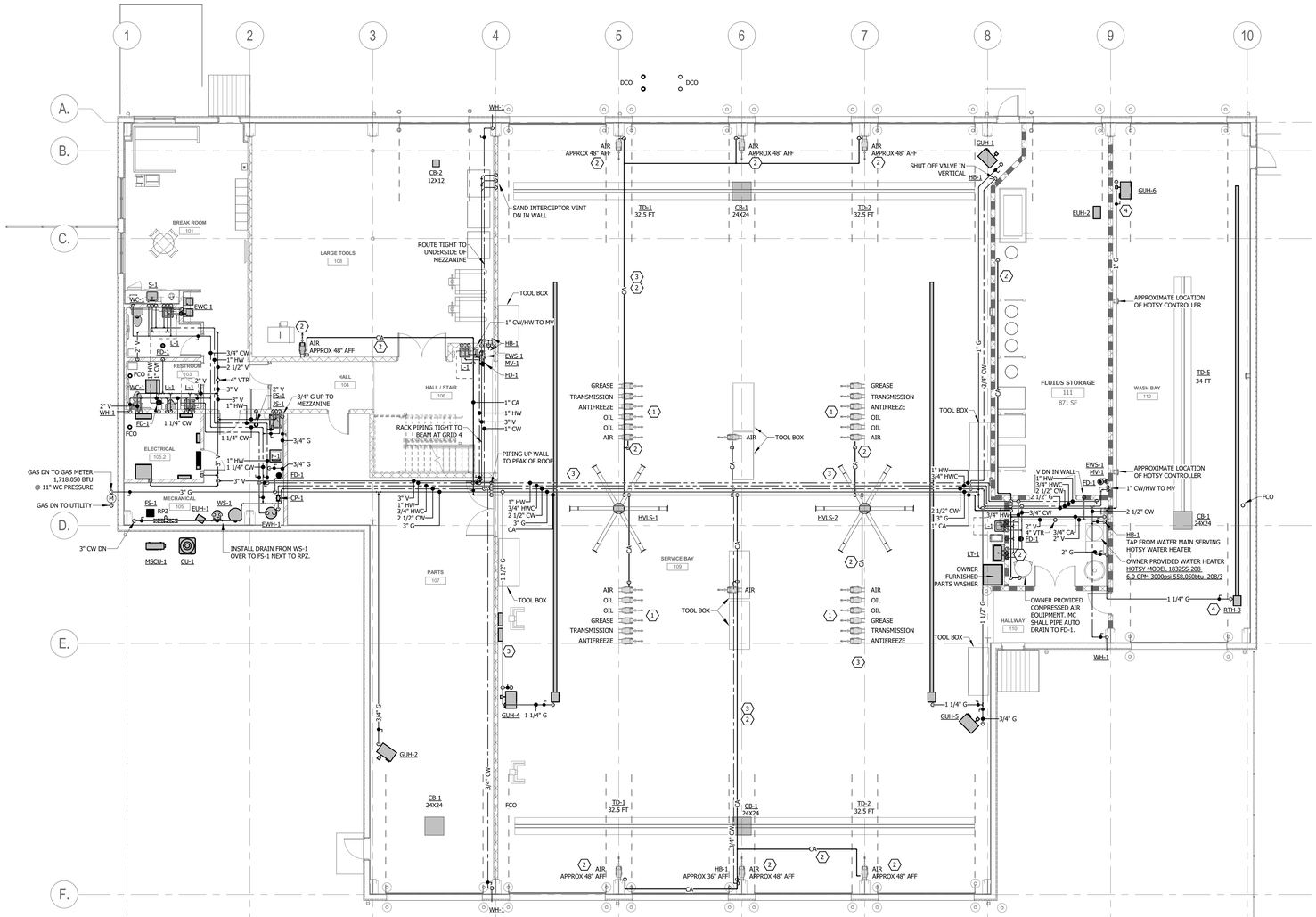
O. FIELD VERIFY ALL NEW AND EXISTING PIPE ROUTING WITH EXISTING CONDITIONS PRIOR TO ROUGH-IN. MAKE NECESSARY OFFSETS AS REQUIRED.

P. COORDINATE ALL WALL CLEANOUT LOCATIONS WITH DESIGN TEAM PRIOR TO ROUGH-IN. COORDINATE ALL FLOOR CLEANOUT LOCATIONS BEING INSTALLED IN TILE, TERRAZZO OR OTHER SPECIALTY FLOOR AREAS WITH DESIGN TEAM PRIOR TO ROUGH-IN.

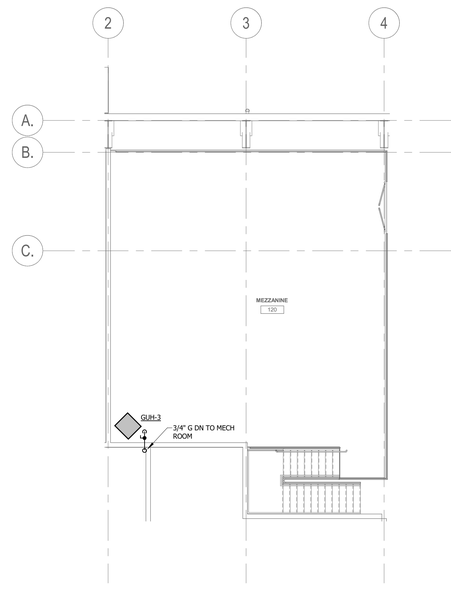
Q. PROVIDE ISOLATION BALL VALVES ON BRANCH PIPING TAPS FROM MAIN ON ALL COLD AND HOT WATER PIPES. ENSURE VALVES ARE INSTALLED IN ACCESSIBLE LOCATIONS.

REFERENCED NOTES: (#)

1. **HOSE REELS PROVIDE BY OWNER: (2) MOTOR OIL (1) ANTIFREEZE (1) TRANSMISSION FLUID (1) GREASE (1) AIR. ALL MAINTENANCE EQUIPMENT, REELS AND ASSOCIATED PIPING CONNECTING TO FLUID STORAGE CONTAINERS IS BY OWNER.**
2. **COMPRESSED AIR SYSTEM INCLUDING BUT NOT LIMITED TO: AIR COMPRESSOR, AIR DRYER, AIR FILTERS, REGULATORS, PIPING AND ACCESSORIES FURNISHED AND INSTALLED BY OWNER.**
3. IT IS THE INTENTION THAT ALL PIPING ROUTING NORTH/SOUTH TOWARDS EXTERIOR WALLS BE MOUNTED TIGHT TO THE SIDE OF THE BEAMS AND DOWN TO CONNECTION LOCATIONS. PIPING ROUTING EAST/WEST TO BE KEPT HIGH THROUGH SERVICE BAY SPACE.
4. PAINT GAS PIPING WITH TWO COATS OF RUST RESISTENT PAINT. COORDINATE COLOR WITH ARCHITECT. PROVIDE EQUIPMENT AND ASSOCIATED ACCESSORIES RATED FOR A WET ENVIRONMENT.



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



2 MEZZANINE PLUMBING PLAN
1/8" = 1'-0"

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KEY PLAN

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PLUMBING PLAN - BUS BARN

P01.01

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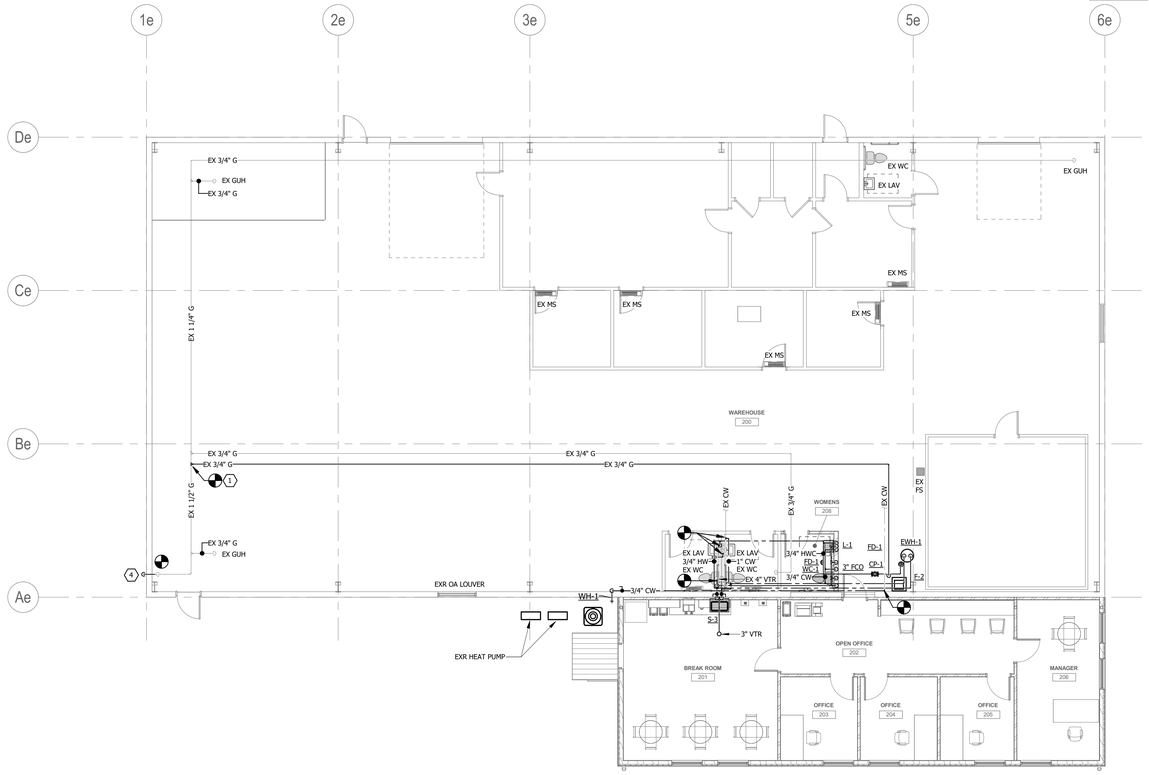
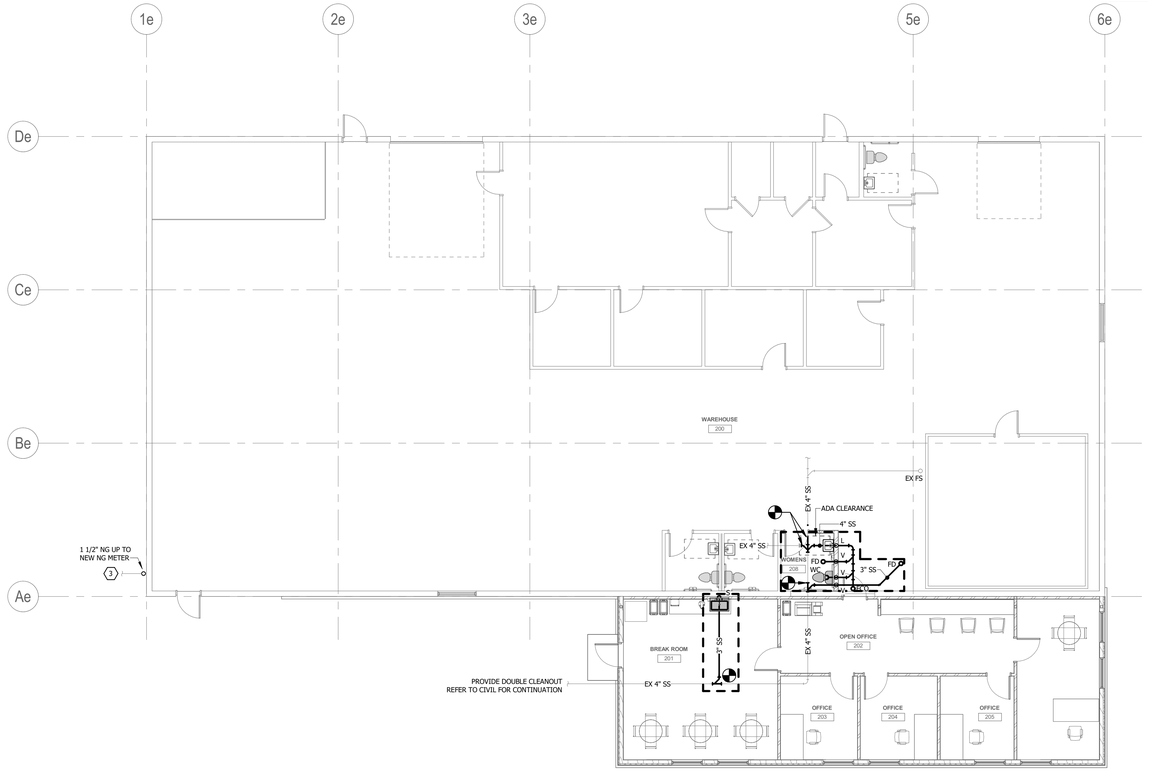


N

2 PLUMBING PLAN - OPERATIONS
1/8" = 1'-0"



N

1 UNDERFLOOR PLUMBING PLAN - OPERATIONS
1/8" = 1'-0"

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REFERENCED NOTES: (#)

1. CONNECT NEW 3/4" NATURAL GAS PIPE TO SERVE NEW FURNACE INTO EXISTING 1 1/2" OR LARGER PIPE.
2. PROVIDE NEW NATURAL GAS METER AND CONNECT INTO EXISTING NATURAL GAS PIPING WITHIN BUILDING.
3. SEE ME0.02-NEW SITE PLAN AND ME0.01-DEMOLITION SITE PLAN FOR ADDITIONAL INFORMATION
4. NEW GAS METER LOCATION. SEE ME0.02-NEW SITE PLAN FOR ADDITIONAL INFORMATION.

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PLUMBING PLANS - OPERATIONS

P02.01

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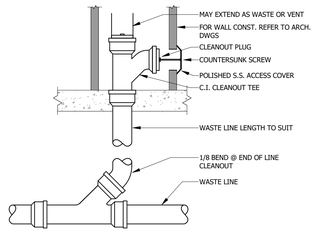
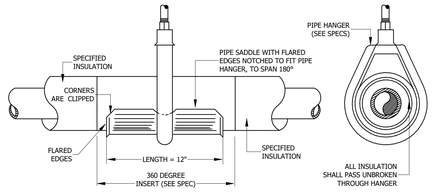


7 WALL CLEANOUT DETAIL
No Scale



10 INSULATED PIPE SUPPORTDETAIL
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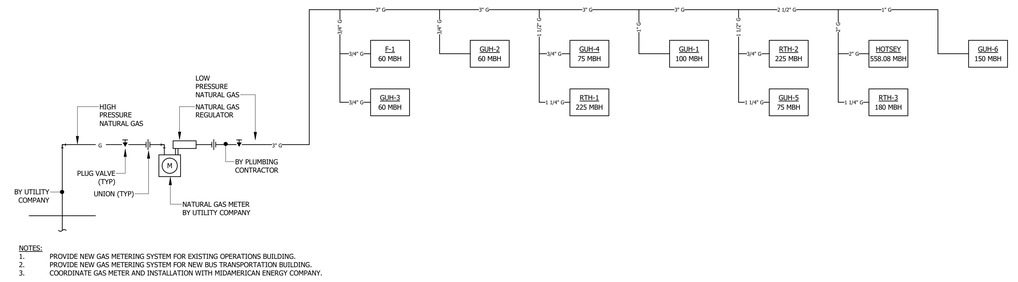
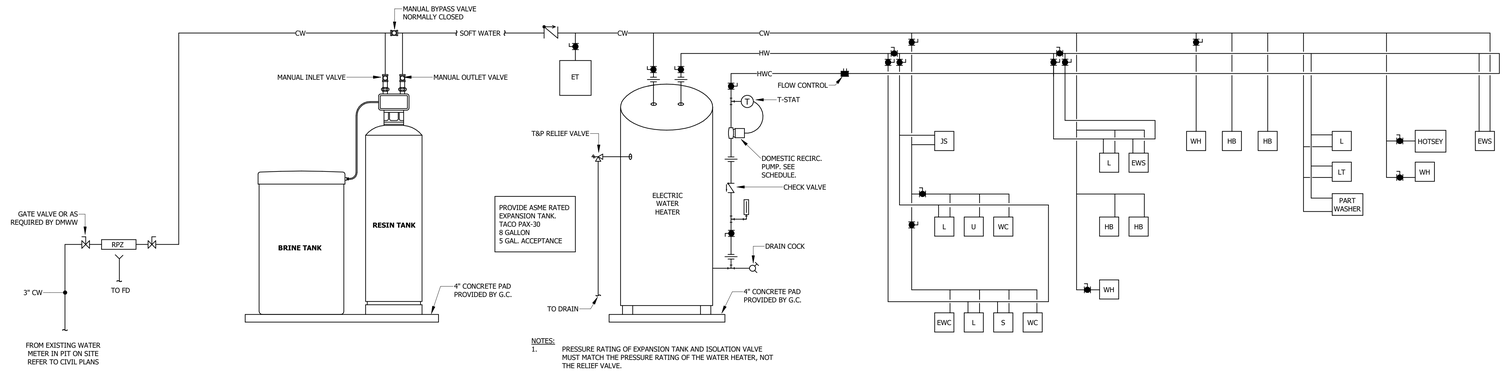


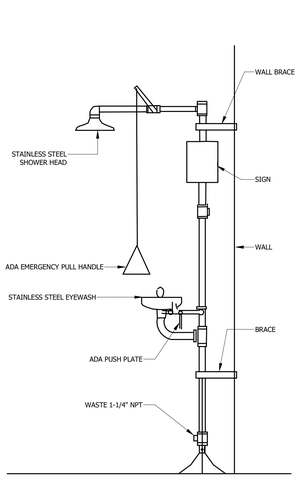
NOTES:
1. PROVIDE NEW GAS METERING SYSTEM FOR EXISTING OPERATIONS BUILDING.
2. PROVIDE NEW GAS METERING SYSTEM FOR NEW BUS TRANSPORTATION BUILDING.
3. COORDINATE GAS METER AND INSTALLATION WITH MIDAMERICAN ENERGY COMPANY.

12 NATURAL GAS SYSTEM SCHEMATIC
No Scale

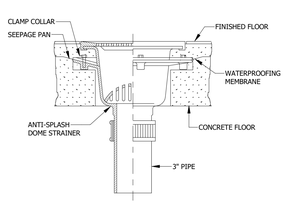


NOTES:
1. PRESSURE RATING OF EXPANSION TANK AND ISOLATION VALVE MUST MATCH THE PRESSURE RATING OF THE WATER HEATER, NOT THE RELIEF VALVE.

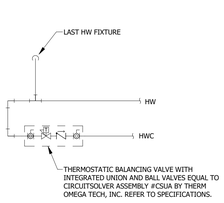
1 DOMESTIC WATER SYSTEM SCHEMATIC
No Scale



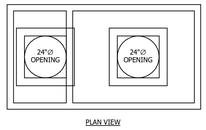
2 EMERGENCY EYE WASH SHOWER
No Scale



9 FLOOR SINK DETAIL
No Scale



5 HWC PIPING DETAIL
No Scale

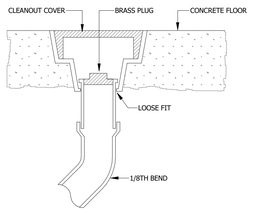


PLAN VIEW

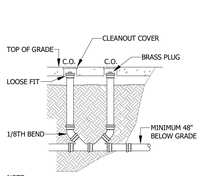
SECTION VIEW

NOTES:
1. BEFORE RUNNING INTERIOR SEWERS, MECHANICAL CONTRACTOR SHALL UNCOVER OUTFALL SEWER AND DETERMINE GRADES TO BE MET.
2. DIMENSIONS SHOWN ARE SUGGESTED ONLY. ALTERNATE DIMENSIONS FOR COMPARTMENTS MAY BE USED TO MAINTAIN THE SAME PROPORTION.

3 SAND OIL INTERCEPTOR DETAIL
No Scale



8 FLOOR CLEANOUT DETAIL
No Scale



NOTE:
EXTERIOR CLEANOUTS SHOWN IN GRASSY AREAS SHALL HAVE 24"X24"X4" CONCRETE PAD AROUND CLEANOUT. CONCRETE BY MECHANICAL CONTRACTOR.

6 SIAMESE CLEANOUT DETAIL
No Scale

PLUMBING PUMP SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	SYSTEM	LOCATION	FLOW RATE (GPM)	TOTAL HEAD (FT)	EFFICIENCY (%)	MOTOR HP	SPEED (RPM)	VOLTAGE/ PHASE
CP-1	BELL & GOSSETT	LR-15BWR	HWC	OPERATIONS BUILDING	2	14		1/12	2950	120/1

ELECTRIC WATER HEATER SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	STORAGE CAPACITY (GAL)	MIN. RECOVERY AT 90°F RISE (GPH)	NUMBER OF ELEMENTS	TOTAL POWER (KW)	ELECTRICAL		
							FLA	MOCP	VOLTAGE/PHASE
EWH-1	AO SMITH	DEL-20	20	18	1	4			208/1

PLUMBING FIXTURE SCHEDULE

UNIT	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	COLOR	ADA	FIXTURE DESCRIPTION	MISCELLANEOUS	TRIM	APPROVED EQUALS
EWC-1	ELECTRIC WATER COOLER	ELKAY	EZSTL8WSLK	STAINLESS STEEL/PLASTIC	GRAY/STEEL	YES	BI-LEVEL ELECTRIC WATER COOLER WITH INTEGRAL AIR-COOLED CHILLER, AUTOMATIC STREAM REGULATOR, ANTI-SQUIRT BUBBLER WITH STREAM GUARD BOTTLE FILL WITH NO TOUCH SENSOR ACTIVATION, 20 SEC AUTO SHUT-OFF, FILTERED	CAPACITY: 8.0 GPH OF 50 DEGREE FARENHEIGHT WATER WITH INLET AT 80 DEGREE FARENHEIGHT AND ROOM TEMP OF 90 DEGREE FARENHEIGHT, MAX 1/5 HP COMPRESSOR, 120V/1PHASE, WARRANTY: 1 YEAR ELECTRONIC COMPONENT, 5 YEAR REFRIGERATION SYSTEM	-	HALSEY TAYLOR, ENGINEER APPROVED EQUAL
EWS-1	EMERGENCY SHOWER/EYE WASH	GUARDIAN	G8F1909	STEEL AND PLASTIC	ORANGE AND STEEL	SEE ARCH.	COMBINATION EMERGENCY SHOWER AND EYE/FACE WASH, ADA COMPLIANT PULL ROD WITH TRIANGULAR HANDLE, EYEWASH TRAP AND CHROME PLATED BALL VALVE WITH PUSH HANDLE, 11" STAINLESS STEEL ROUND BOWL, 1-1/2" NPT SUPPLY	GUARDIAN G6040 SERIES TERMOSTATIC MIXING VALVE, 3-50 GPM AT 30 PSI PRESSURE DROP, CHROME WALL BRACKET AND UNIVERSAL SIGN, 3.7 GPM FLOW CONTROL FOR EYE/FACEWASH, 20 GPM FLOW CONTROL FOR SHOWERHEAD. VERIFY MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.	EWSA-1	HAWS, SPEAKMAN, STINGRAY
JS-1	JANITORIAL SINK	FIAT	MSB2424	MOLDED STONE	WHITE	NO	MOLDED STONE 24"x24"x10" DEEP FLOOR MOUNTED MOP SERVICE BASIN WITH 1" WIDE SHOULDERS.	[DESIGNER NOTE: ENGINEER TO SPECIFY MOP HANGER (889-CC), SST WALL GUARD (MSG2424), VINYL BUMPERGUARD (E-77-AA), AND HOSE/HOSE BRACKET (832-AA)]	JSF-1	STERN WILLIAMS, ENGINEER APPROVED EQUAL
L-1	LAVATORY	KOHLER	KINGSTON K-2005-0	VITREOUS CHINA	WHITE	SEE ARCH.	21-1/4" X 18-1/8" WALL MOUNTED LAVATORY, THREE HOLE, 4" CENTERS	WATTS WCA-411 FLOOR MOUNTED LAVATORY CARRIER. VERIFY MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.	LF-1	AMERICAN STANDARD, SLOAN
L-2	LAVATORY	KOHLER	KINGSTON K-2005-0	VITREOUS CHINA	WHITE	SEE ARCH.	21-1/4" X 18-1/8" WALL MOUNTED LAVATORY, THREE HOLE, 4" CENTERS	WATTS CA-462 CONCEALED ARM LAVATORY CARRIER. VERIFY MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.	LF-1	AMERICAN STANDARD, SLOAN
LT-1	LAUNDRY TUB	FIAT	SF1F	PLASTIC POLYMER	WHITE	NO	20"x23-7/8"x14-3/8" DEEP MOLDED PLASTIC POLYMER, STEEL ANGLE LEGS, PLASTIC STOPPER AND TAILPIECE NUT WITH WASHER.	-	LTF-1	ENGINEER APPROVED EQUAL
S-1	SINK	ELKAY	LRAD191865	STAINLESS STEEL	STEEL	YES	19"x18"x6-1/2" DEEP SINGLE BOWL DROP-IN ADA, 304SS, 18 GA, UNDERCOATED, COORDINATE HOLES WITH FAUCET	COORDINATE WITH CASEWORK DIMENSIONS. SEE ARCHITECTURAL DRAWINGS.	SF-1	JUST, ENGINEER APPROVED EQUAL
U-1	URINAL	KOHLER	BARDON K-4991-ET-0	VITREOUS CHINA	WHITE	YES	0.125 GPF, WALL HUNG, HIGH EFFICIENCY WASHOUT FLUSHING ACTION, INTEGRAL TRAP, VANDAL RESISTANT OUTLET STRAINER, 3/4 INCH TOP SPUD, TWO INCH THREADED OUTLET	-	AMERICAN STANDARD, SLOAN
WC-1	WATER CLOSET	KOHLER	HIGHLINE K-3999-0	VITREOUS CHINA	WHITE	YES	1.28 GPF, FLOOR MOUNTED, SIPHON JET, CLASS FIVE FLUSHING SYSTEM, LEFT-HAND TRIP LEVER [DESIGNER NOTE: 1.28 GPF IS TYPICAL. VERIFY WITH OWNER IF THERE IS A NEED TO INCREASE TO 1.6 GPF]	CLOSE COUPLED TANK AND SUPPLY WITH LOOSE KEY STOP	WCA-1	AMERICAN STANDARD, SLOAN

PLUMBING FIXTURE TRIM SCHEDULE

UNIT	TYPE	MANUFACTURER	MODEL	COLOR	FIXTURE DESCRIPTION	MISCELLANEOUS	APPROVED EQUALS
EWSA-1	THERMOSTATIC MIXING VALVE	GUARDIAN	G6040	BRASS	3-50 GPM FLOW, STAINLESS STEEL BASKET FILTER, INTERNAL CHECK STOPS, THERMOSTATIC PROTECTION	-	HAWS, SPEAKMAN, STINGRAY, ENGINEER APPROVED EQUAL
JSF-1	SERVICE SINK FAUCET	DELTA	28C2384	CHROME	EXPOSED WALL MOUNT, TWO HANDLE, WALL BRACE, INCLINE VACUUM BREAKER, 4" WRIST BLADES, 8" CENTERS	FIAT #1453-BB STAINLESS STRAINER	ENGINEER APPROVED EQUAL
LF-1	LAVATORY FAUCET	DELTA	523LF-HGMHDF	CHROME	MANUAL, 0.5 GPM LAMINAR FLOW VANDAL-RESISTANT AERATOR, METAL GRID STRAINER, SINGLE LEVER	METAL GRID STRAINER WITH 1-1/2" 17 GA CHROME PLATED P-TRAP, OFFSET TAILPIECE AS REQUIRED, TRU-BRO LAV GUARD, 1/4 TURN LOOSE KEY STOPS	ENGINEER APPROVED EQUAL
LTF-1	LAUNDRY TUB FAUCET	AMERICAN STANDARD	7074240	CHROME	TWO-HANDLE LAUNDRY FAUCET WITH BRASS SWING SPOUT, LEVER HANDLES, 1.5 GPM NON-AERATING HOSE END, 4" CENTERS, DECK MOUNT.	DEARBORN BRASS 16 GRID STRAINER, 17 GA 1-1/2" CHROME PLATED P-TRAP W/ CLEANOUT, 1/4 TURN LOOSE KEY STOPS	DELTA, ENGINEER APPROVED EQUAL
SF-1	SINK FAUCET	DELTA	9113-DST	CHROME	9" GOOSENECK, 1.58 GPM AERATOR, PULL-DOWN SPRAYER, 3-HOLE, MOUNTS ON 8" CENTERS	DEARBORN BRASS 16 GRID STRAINER, 17 GA 1-1/2" CHROME PLATED P-TRAP W/ CLEANOUT, 1/4 TURN LOOSE KEY STOPS	ENGINEER APPROVED EQUAL
UFV-1	URINAL FLUSH VALVE	SLOAN	ROYAL 186-.05	CHROME	0.5 GPF, DUAL FILTERED FIXED BYPASS, DIAPHRAGM TYPE MANUAL URINAL FLUSHOMETER, FITS ¾" TOP STUD, ADA COMPLIANT, VANDAL RESISTANT STOP CAP, SWEAT SOLDER ADAPTER	PROVIDE SLOAN EBV500A RETROFIT FLUSH VALVE KIT WITH OVERRIDE BUTTON, CHROME-PLATED METALCOVER, ADA COMPLIANT BATTERY POWERED INFRARED SIDE MOUNT SENSOR FOR AUTOMATIC OPERATION, SENSOR WITH AUTOMATIC RANGE ADJUSTMENT, FOUR (4) SIZE C BATTERIES WITH "LOW BATTERY" FLASHING LED, NON-HOLD-OPEN TRUE MECHANICAL OVERRIDE FULL FLUSH BUTTON; CONTROLS FOR FLUSH VALVES MOUNT ON THE WIDE SIDE.	ENGINEER APPROVED EQUAL
WCA-1	SEAT	KOHLER	STRONGHOLD K-4731-SC	WHITE	ELONGATED OPEN-FRONT SEAT, INTEGRATED HANDLE, HEAVY DUTY, SELF-SUSTAINING CHECK HINGE, STAINLESS STEEL BOLTS, [NOT STANDARD]	-	BEMIS, ENGINEER APPROVED EQUAL

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95% CONSTRUCTION DOCUMENTS

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Southeast Polk Community School District

KEY PLAN

SOUTHEAST POLK TRANSPORTATION BUILDING

ISSUANCE 08/28/25

PROJECT NO: 3007.090.00

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PLUMBING DETAILS AND SCHEDULES

P05.01

GENERAL NOTES:

A. ALL DISCONNECTS ON MECHANICAL EQUIPMENT SHALL BE MOUNTED ON STRUCTURE TO ALLOW REMOVAL OF THE EQUIPMENT FOR MAINTENANCE WITH A MINIMUM OF WIRING WORK. VERIFY NEC CLEARANCE REQUIREMENTS ARE MET PRIOR TO ROUGH-IN.

B. MAINTAIN SERVICE CLEARANCE AROUND ALL MECHANICAL & ELECTRICAL EQUIPMENT. DO NOT ROUTE PIPING OR CONDUIT IN CLEARANCE SPACE.

C. SURFACE RACEWAY SHALL NOT BE USED IN ANY FINISHED AREAS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

D. ALL RECEPTACLE CIRCUITS SHALL HAVE DEDICATED NEUTRALS.

E. INSTALL DEVICES SUCH THAT NO TWO DEVICES ON OPPOSITE SIDES OF SAME WALL ARE WITHIN 6" OF EACH OTHER.

F. PROVIDE CONDUIT SLEEVES WITH INSULATED BUSHINGS SERVING ALL LOW VOLTAGE CABLING. DO NOT EXCEED 40% FILL.

G. PRIOR TO ROUGH-IN, COORDINATE ALL WALL DEVICES WITH FINAL CASEWORK ELEVATIONS AND OTHER TRADES. CONFLICTS SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.

H. PROVIDE AN ADDITIONAL 20A-1P BREAKER IN LOCAL PANEL FOR CONNECTION TO FIRE SMOKE DAMPERS (FSD). SEE HVAC PLANS FOR EXACT LOCATIONS. CLEARLY INDICATE ON AS-BUILT DRAWINGS.

I. REFER TO T-SHEETS FOR ADDITIONAL ROUGH-IN INFORMATION. ALL AUDIO INPUTS SHALL BE ROUGHED IN ADJACENT TO RECEPTACLES SHOWN ON THIS PLAN UNLESS NOTED OTHERWISE.

J. REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS FOR SPECIFIC DEVICE ROUGH-IN AND PLACEMENT. ANY DEVIATIONS FROM THE ARCHITECTURAL ELEVATIONS AND RCP'S SHALL BE REVIEWED AND APPROVED BY THE DESIGN TEAM PRIOR TO ROUGH-IN. IF A DEVICE IS REQUIRED PER SPECIFICATION, REQUIRED FOR OPERATION, OR IS DIFFERENT IN CONFIGURATION THAN SHOWN ON ELEVATIONS AND RCP'S, CLARIFICATION AND DIRECTION MUST BE GIVEN BY THE DESIGN TEAM BEFORE ROUGH-IN. DEVIATIONS OR ADDITIONAL DEVICES NOT APPROVED PRIOR TO INSTALLATION SHALL BE CORRECTED AT CONTRACTORS EXPENSE. THIS INCLUDES BUT IS NOT LIMITED TO THERMOSTATS, CONTROL SYSTEM SENSORS, ELECTRICAL DEVICES, SWITCHES, DIMMERS, TECHNOLOGY DEVICES, A/V DEVICES, SPEAKERS, FIRE ALARM DEVICES, ETC.

K. CEILING CONTRACTOR SHALL PROVIDE AND INSTALL CEILING ACCESS PANELS FOR ACCESSIBILITY TO ELECTRICAL JUNCTION BOXES, PLUMBING VALVES, BALANCING DAMPERS, CIRCUIT SETTERS, ETC. WHERE ABSOLUTELY NECESSARY. LOCATIONS WILL NEED TO BE APPROVED AND COORDINATED WITH THE DESIGN TEAM PRIOR TO INSTALLATION.

L. ELECTRICAL CONTRACTOR SHALL VERIFY ELECTRICAL REQUIREMENTS FOR ALL OWNER PROVIDED EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

M. **COORDINATE RECEPTACLE PLACEMENT WITH OWNER AND DESIGN TEAM FOR ALL PROPOSED OWNER PROVIDED EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL SCHEDULE FOR OWNER PROVIDED EQUIPMENT LIST.**

REFERENCED NOTES: (#)

(NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET)

1. RECEPTACLE FOR TECHNICIAN TOOLBOX. ELECTRICAL CONTRACTOR SHALL COORDINATE FINAL LOCATION WITH WITH OWNER AND TECHNICIAN PRIOR TO ROUGH-IN.
2. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT PATHWAYS FOR SENSORS, CONTROLLER AND POWER TO THE MOTOR FOR EACH OVERHEAD DOOR. OVERHEAD DOOR CONTRACTOR SHALL FURNISH AND INSTALL THE OVERHEAD DOOR, ALL LOW VOLTAGE WIRING, AND ASSOCIATED OPENERS AND SENSORS. COORDINATE ALL WORK WITH OVERHEAD DOOR CONTRACTOR PRIOR TO ROUGH-IN.
3. ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING PANEL M2 AND SUB-PANEL. REPLACE WITH NEW DOUBLE TUB 400A PANEL. ELECTRICAL CONTRACTOR PROVIDE NEW BREAKERS, THAT MATCH EXISTING BREAKER CHARACTERISTICS, FOR ALL EXISTING EQUIPMENT TO REMAIN.
4. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL 400A SERVICE ENTRANCE DISCONNECT. REFER TO ONE-LINE AND SITE PLAN FOR ADDITIONAL INFORMATION.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT ROUGH-IN LOCATION OF TV ELECTRICAL AND LOW VOLTAGE DEVICES WITH TV MOUNTING SYSTEM AND OWNER'S DESIRED MOUNTING HEIGHT TO ENSURE DEVICES ARE CONCEALED.
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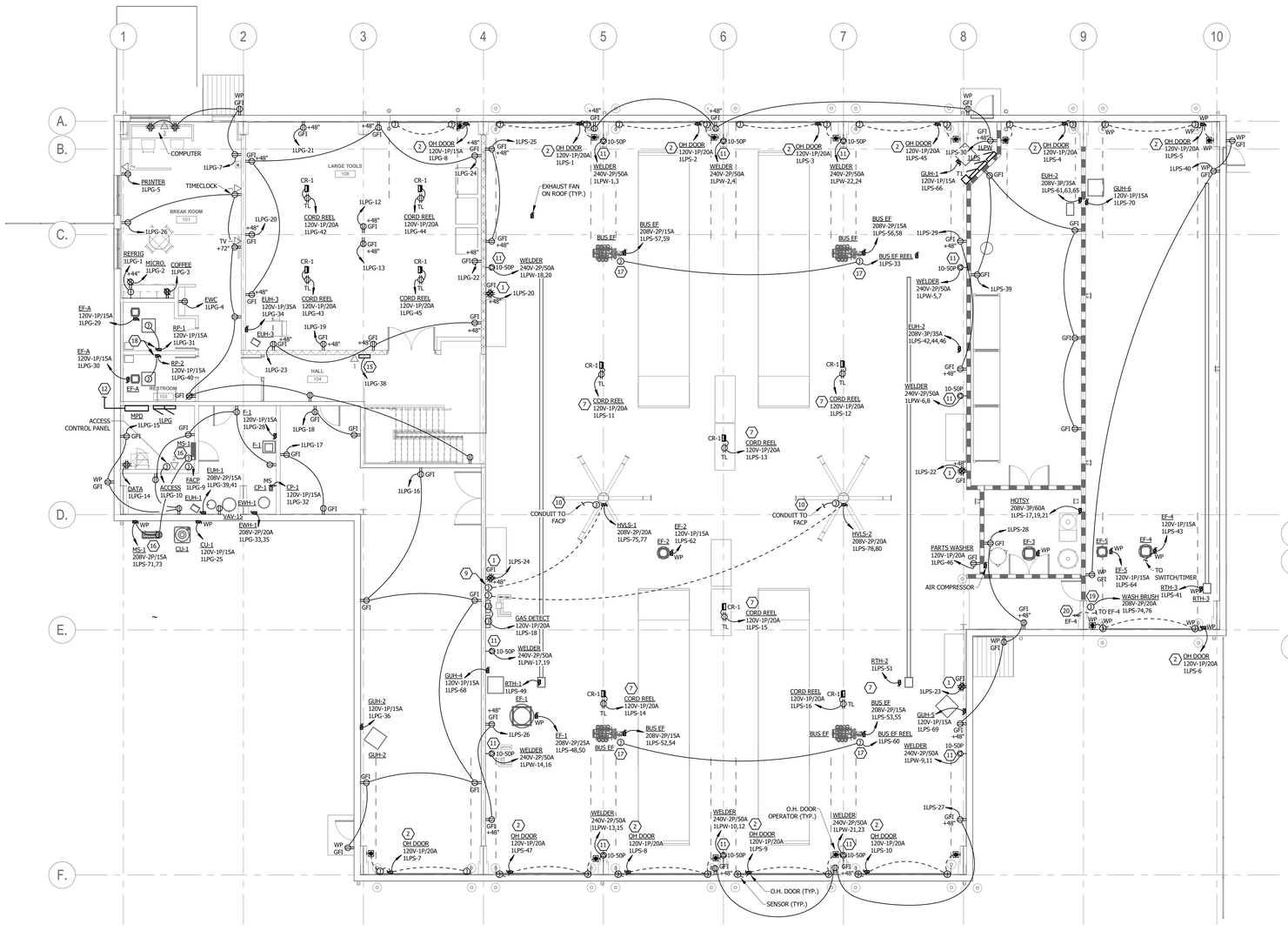
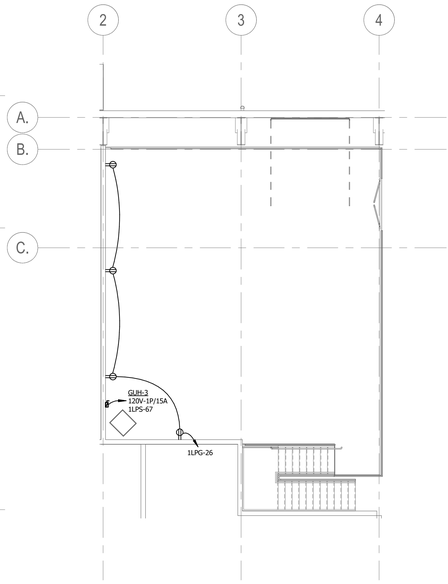
8. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEMA 4X DISCONNECTS AND JUNCTION BOXES FOR EQUIPMENT WITHIN THE WASHBAY. ALL JUNCTION BOXES, RACEWAY, AND HANGERS/SUPPORTS SHALL BE CORRISION RESISTANT. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE BACKBOX FOR FAN CONTROLLER. ONE PER FAN. ELECTRICAL CONTRACTOR SHALL PROVIDE 3/4" CONDUIT FROM CONTROLLER TO EACH FAN. REFER TO MECHANICAL SHEETS FOR ADDITIONAL INFORMATION. CONFIRM ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.
10. ELECTRICAL CONTRACTOR SHALL PROVIDE 3-BOX FOR RELAY (FURNISHED BY FMS CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR). PROVIDE CONDUIT FROM FAN RELAY TO FIRE ALARM CONTROL PANEL.
11. OWNER PROVIDED WELDER. COORDINATE EXACT WELDER ELECTRICAL REQUIREMENTS WITH OWNER. FINAL RECEPTACLE LOCATIONS SHALL BE COORDINATED WITH OWNER PRIOR TO ROUGH-IN.
12. REFER TO SITE PLAN FOR SECONDARY CONDUIT CONTINUATION. COORDINATE WALL PENETRATION AND ELBOWS WITH STRUCTURAL FOUNDATION WALLS.
13. FUEL LEAK DETECTION CONTROL BOXES (STP-CBS) SHALL BE RELOCATED FROM EXISTING TRANSPORTATION BUILDING. COORDINATE FINAL LOCATION WITH DESIGN TEAM AND OWNER.
14. PROVIDE NEW CONTACTOR MATCHING EXISTING FOR FUEL DISPENSING PUMPS. 30A 3-POLE CONTACTOR SHALL BE CONFIRMED BY ELECTRICAL CONTRACTOR PRIOR TO ORDERING. RE-ROUTE FUEL DISPENSING PUMP CIRCUITS THROUGH NEW CONTACTOR FOR ON/OFF CONTROL. PROVIDE TOGGLE SWITCH TO MATCH EXISTING LABELED "FUEL PUMPS". CONTRACTOR SHALL BE CONTROLLED FROM TOGGLE SWITCH AND EPO SHOWN ON SITE PLAN.
15. RELOCATE EXISTING FUEL DISPENSING CONTROL EQUIPMENT. (NANO CONTROLLER). PROVIDE 120V CIRCUIT(S) AND DATA AS REQUIRED TO MATCH EXISTING INSTALLED CONDITION. PROVIDE NEW CONDUIT AND WIRE FROM THIS LOCATION TO FUEL ISLAND. SEE DETAIL FOR ADDITIONAL INFORMATION.
16. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE POINT ELECTRICAL CONNECTION BETWEEN MS-1 INDOOR AND OUTDOOR UNITS.
17. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION AND REQUIREMENTS OF BUS EXHAUST FAN CORD REEL WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
18. INSTALL DISCONNECT SWITCH ABOVE ACCESSIBLE CEILING.
19. EXISTING MOBILE WASH BAY BRUSH SHALL BE RELOCATED FROM EXISTING FACILITY. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CIRCUIT MATCHING EXISTING CHARACTERISTICS. CABLE MANAGEMENT SYSTEM SHALL BE RELOCATED AND INSTALLED WITHIN WAHSBAY BY HOTSY TO MATCH EXISTING INSTALLATION. THIS SHALL INCLUDE: AIRCRAFT CABLE, TRACK PULLEYS, AND FLEXIBLE CABLES. FLEXIBLE CABLES SHALL BE TERMINATED AT NEW JUNCTION BOX/CIRCUIT PROVIDED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL COORDINATE ROUGH-IN LOCATION WITH HOTSY REPRESENTATIVE. REFER TO DETAIL AND MATRIX OF RESPONSIBILITY FOR ADDITIONAL INFORMATION.
20. ELECTRICAL CONTRACTOR SHALL PROVIDE A WALL OVERRIDE SWITCH TIMER FOR EF-4 MANUAL OPERATION OF WASH BAY FAN. SWITCH SHALL BE WIRED TO ALLOW ASSOCIATED GAS DETECTION CONTROL SYSTEM TO OPERATE EXHAUST FAN ON WHEN MANUAL SWITCH IS IN THE ON OR OFF POSITION. LOCATE NEXT TO MANUAL LIGHTING CONTROL IN THIS HALLWAY AND LABEL TIMER "EF-4".



1 LEVEL 1 BUS BARN ELECTRICAL POWER PLAN
1/8" = 1'-0"



2 MEZZANINE ELECTRICAL POWER PLAN
1/8" = 1'-0"

95% CONSTRUCTION DOCUMENTS

SOUTHEAST POLK TRANSPORTATION BUILDING

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KEY PLAN

ISSUANCE 08/28/25

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ELECTRICAL PLAN - BUS BARN

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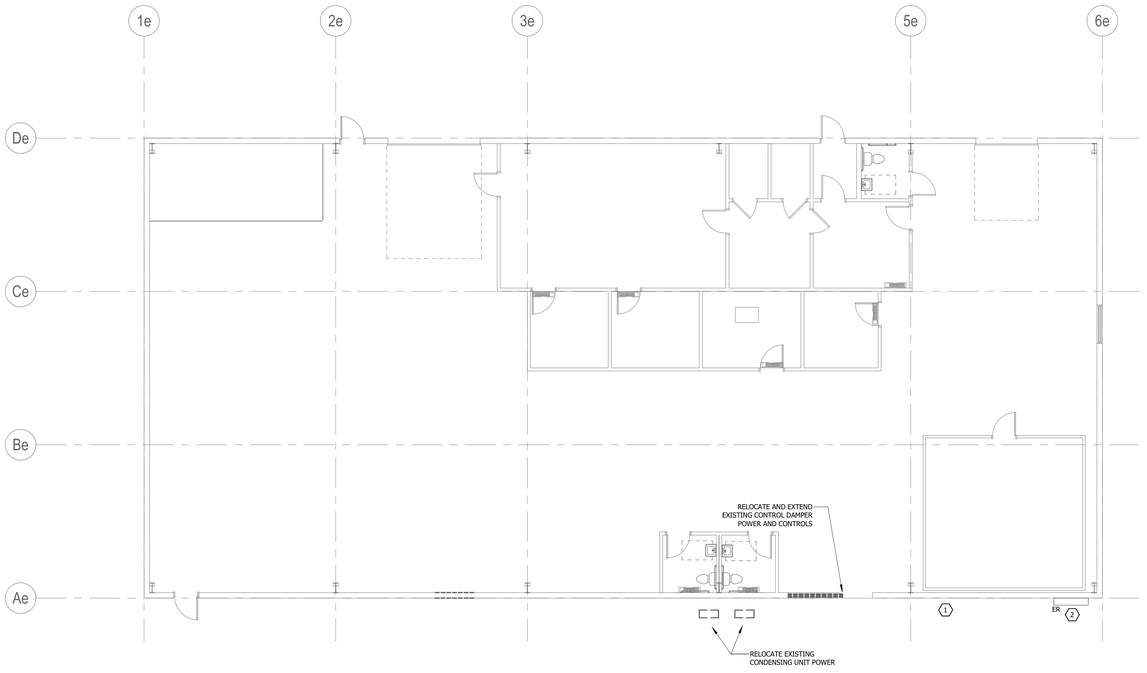

N

1 LEVEL 1 OFFICE RENOVATION ELECTRICAL DEMOLITION
1/8" = 1'-0"

DEMOLITION GENERAL NOTES:

A. DEMOLITION DRAWINGS ARE BASED ON EXISTING AVAILABLE DRAWINGS AND CASUAL FIELD OBSERVATION. ELECTRICAL CONTRACTORS SHALL FIELD VERIFY THE SITE AND INCLUDE ALL REQUIRED DEMOLITION IN THE BID.

B. ALL REQUIRED DEMOLITION IS NOT INDICATED. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL MECHANICAL AND ELECTRICAL SYSTEMS (NOT TO BE REUSED OR EXTENDED) BE REMOVED. COORDINATE WITH ARCHITECTURAL DRAWINGS.

C. REFER TO SPECIFICATIONS AND OTHER SHEETS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

D. REMOVE ALL ELECTRICAL CONNECTIONS, WIRING, AND CONDUIT SERVING ALL MECHANICAL EQUIPMENT TO BE REMOVED.

E. MAINTAIN FIRE RATINGS OF AFFECTED WALLS AND FLOORS.

F. EXISTING ELECTRICAL SYSTEMS LOCATED IN WALLS AND CHASES NOT BEING REMOVED OR REUSED FOR NEW SYSTEMS MAY BE ABANDONED IN PLACE. CAP AT MAINS OR IN A CONCEALED LOCATION IF REQUIRED.

G. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS ON FLOOR CUTTING AND CEILING REMOVAL. CONTRACTOR SHALL COORDINATE WORK TO BE CONSISTENT WITH SCOPE OF GENERAL CONTRACTOR'S DEMOLITION.

H. EXTERIOR FREE-STANDING ELECTRICAL AND MECHANICAL DEVICES NOT BEING REUSED SHALL BE REMOVED UNDER BASE BID UNLESS OTHERWISE NOTED. PATCH OPENING TO MATCH SURROUNDING SURFACES.

DEMOLITION REFERENCED NOTES: (#)

(NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET)

1. ELECTRICAL CONTRACTOR SHALL REMOVE ALL MECHANICAL EQUIPMENT CONNECTIONS ON EXTERIOR WALL WHERE NEW ADDITION IS PLANNED.
2. EXISTING SOLAR BATTERY TENDER SHALL BE REMOVED BY OWNER PRIOR TO CONSTRUCTION ON ADDITION.

N

2 LEVEL 1 OFFICE RENOVATION ELECTRICAL POWER PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. ALL DISCONNECTS ON MECHANICAL EQUIPMENT SHALL BE MOUNTED ON STRUCTURE TO ALLOW REMOVAL OF THE EQUIPMENT FOR MAINTENANCE WITH A MINIMUM OF WIRING WORK. VERIFY NEC CLEARANCE REQUIREMENTS ARE MET PRIOR TO ROUGH-IN.

B. MAINTAIN SERVICE CLEARANCE AROUND ALL MECHANICAL & ELECTRICAL EQUIPMENT. DO NOT ROUTE PIPING OR CONDUIT IN CLEARANCE SPACE.

C. SURFACE RACEWAY SHALL NOT BE USED IN ANY FINISHED AREAS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

D. ALL RECEPTACLE CIRCUITS SHALL HAVE DEDICATED NEUTRALS.

E. INSTALL DEVICES SUCH THAT NO TWO DEVICES ON OPPOSITE SIDES OF SAME WALL ARE WITHIN 6" OF EACH OTHER.

F. PROVIDE CONDUIT SLEEVES WITH INSULATED BUSHINGS SERVING ALL LOW VOLTAGE CABLING. DO NOT EXCEED 40% FILL.

G. PRIOR TO ROUGH-IN, COORDINATE ALL WALL DEVICES WITH FINAL CASEWORK ELEVATIONS AND OTHER TRADES. CONFLICTS SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.

H. PROVIDE AN ADDITIONAL 20A-1P BREAKER IN LOCAL PANEL FOR CONNECTION TO FIRE SMOKE DAMPERS (FSD). SEE HVAC PLANS FOR EXACT LOCATIONS. CLEARLY INDICATE ON AS-BUILT DRAWINGS.

I. REFER TO T-SHEETS FOR ADDITIONAL ROUGH-IN INFORMATION. ALL AUDIO INPUTS SHALL BE ROUGHED IN ADJACENT TO RECEPTACLES SHOWN ON THIS PLAN UNLESS NOTED OTHERWISE.

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M. **COORDINATE RECEPTACLE PLACEMENT WITH OWNER AND DESIGN TEAM FOR ALL PROPOSED OWNER PROVIDED EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL SCHEDULE FOR OWNER PROVIDED EQUIPMENT LIST.**

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15. RELOCATE EXISTING FUEL DISPENSING CONTROL EQUIPMENT. (NANO CONTROLLER). PROVIDE 120V CIRCUIT(S) AND DATA AS REQUIRED TO MATCH EXISTING INSTALLED CONDITION. PROVIDE NEW CONDUIT AND WIRE FROM THIS LOCATION TO FUEL ISLAND. SEE DETAIL FOR ADDITIONAL INFORMATION.
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19. EXISTING MOBILE WASH BAY BRUSH SHALL BE RELOCATED FROM EXISTING FACILITY. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CIRCUIT MATCHING EXISTING CHARACTERISTICS. CABLE MANAGEMENT SYSTEM SHALL BE RELOCATED AND INSTALLED WITHIN WAHSBAY BY HOTSY TO MATCH EXISTING INSTALLATION. THIS SHALL INCLUDE: AIRCRAFT CABLE, TRACK PULLEYS, AND FLEXIBLE CABLES. FLEXIBLE CABLES SHALL BE TERMINATED AT NEW JUNCTION BOX/CIRCUIT PROVIDED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL COORDINATE ROUGH-IN LOCATION WITH HOTSY REPRESENTATIVE. REFER TO DETAIL AND MATRIX OF RESPONSIBILITY FOR ADDITIONAL INFORMATION.
20. ELECTRICAL CONTRACTOR SHALL PROVIDE A WALL OVERRIDE SWITCH TIMER FOR EF-4 MANUAL OPERATION OF WASH BAY FAN. SWITCH SHALL BE WIRED TO ALLOW ASSOCIATED GAS DETECTION CONTROL SYSTEM TO OPERATE EXHAUST FAN ON WHEN MANUAL SWITCH IS IN THE ON OR OFF POSITION. LOCATE NEXT TO MANUAL LIGHTING CONTROL IN THIS HALLWAY AND LABEL TIMER "EF-4".

8/28/2025 4:20:23 PM

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Phone: (515) 251-7280

SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	08/28/25
PROJECT NO:	3007.090.00

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ELECTRICAL PLAN - OPERATIONS

E01.02

GENERAL NOTES:

A. SURFACE RACEWAY SHALL NOT BE USED IN ANY FINISHED AREAS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

B. INSTALL DEVICES SUCH THAT NO TWO DEVICES ON OPPOSITE SIDES OF SAME WALL ARE WITHIN 6" OF EACH OTHER.

C. COORDINATE ALL DEVICES WITH ARCHITECTURAL PLANS AND CASEWORK SUBMITTALS.

D. OCCUPANCY AND DAYLIGHT SENSORS SHALL BE LOCATED PER MANUFACTURER'S RECOMMENDATIONS. IN EVENT OF CONFLICT OF DESIGNED DRAWINGS AND MANUFACTURER RECOMMENDATIONS, ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

E. REFER TO SPECIFICATION SECTION 26 0943 FOR ADDITIONAL DETAILS ASSOCIATED WITH THE LIGHTING CONTROLS. EACH AREA OF CONTROL SHALL HAVE A DEDICATED POWER PACK WITH ALL DEVICES SHOWN ON PLANS OPERATING TOGETHER.

F. ALL LIGHTING FIXTURES SHALL BE INSTALLED IN SUCH WAY THAT DRIVERS ARE ACCESSIBLE WITHOUT CUTTING OF CEILING. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF AREAS WHERE THIS IS NOT POSSIBLE.

G. ALL WALL-MOUNTED FIXTURES SHALL HAVE EXACT ROUGH-IN LOCATION DETERMINED BY DESIGN TEAM PRIOR TO ROUGH-IN.

H. THE ELECTRICAL CONTRACTOR SHALL EXTEND AN "UNSWITCHED" HOT CONDUCTOR FROM THE NEAREST NORMAL LIGHTING CIRCUIT TO EVERY UL924 LISTED EMERGENCY POWER PACK/TRANSFER DEVICE AND EXIT SIGNS REQUIRED FOR EMERGENCY EGRESS OPERATION. THE "UNSWITCHED" HOT CONDUCTOR SHALL BE USED FOR SENSING PURPOSES ONLY.

I. UNLESS NOTED OTHERWISE BY DESIGNATED "LIGHTING CONTROL ZONES", SWITCHES SHOWN WILL CONTROL ALL FIXTURES IN THE ROOM SHOWN.

J. PROGRAMMABLE DEVICES SHALL BE CONFIGURED WITH THE CONTROL ZONES SHOWN ON THE PLANS AND SCENES PER CLIENT DIRECTION DURING COMMISSIONING.

K. ALL LIGHTING CONTROL SHALL OPERATE "MANUAL ON/AUTO OFF" PER CODE (IECC OR ASHRAE 90.1) UNLESS OTHERWISE NOTED IN THE SEQUENCE OF OPERATIONS OR THESE REFERENCE NOTES.

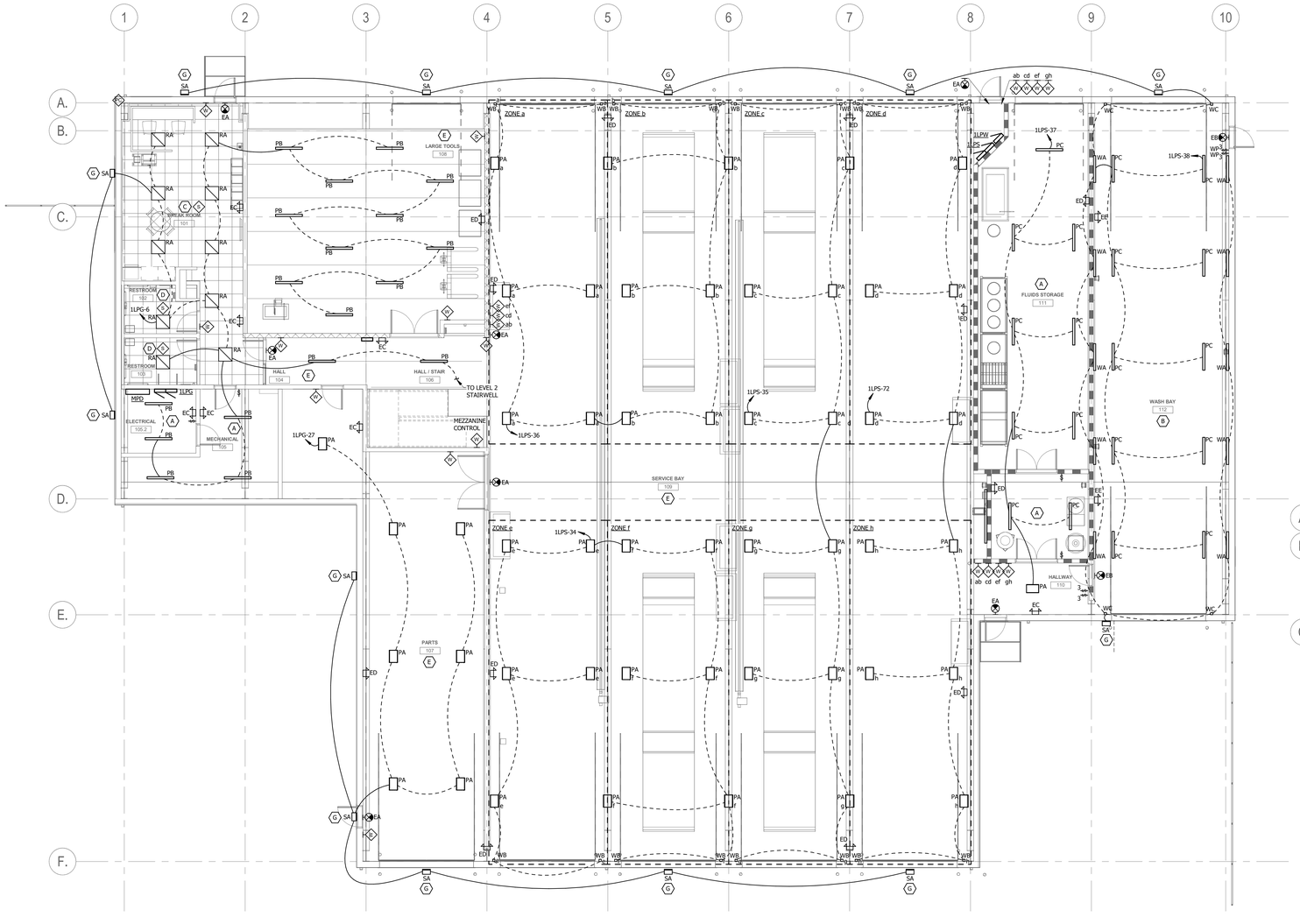
L. REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS FOR SPECIFIC DEVICE ROUGH-IN AND PLACEMENT. ANY DEVIATIONS FROM THE ARCHITECTURAL ELEVATIONS AND RCP'S SHALL BE REVIEWED AND APPROVED BY THE ARCHITECT PRIOR TO ROUGH-IN. IF A DEVICE IS REQUIRED PER SPECIFICATION, REQUIRED FOR OPERATION, OR IS DIFFERENT IN CONFIGURATION THAN SHOWN ON ELEVATIONS AND RCP'S, CLARIFICATION AND DIRECTION MUST BE GIVEN BY THE ARCHITECT BEFORE ROUGH-IN. DEVIATIONS OR ADDITIONAL DEVICES NOT APPROVED PRIOR TO INSTALLATION SHALL BE CORRECTED AT CONTRACTORS EXPENSE. THIS INCLUDES BUT IS NOT LIMITED TO THERMOSTATS, CONTROL SYSTEM SENSORS, ELECTRICAL DEVICES, SWITCHES, DIMMERS, TECHNOLOGY DEVICES, A/V DEVICES, SPEAKERS, FIRE ALARM DEVICES, ETC.

M. CEILING CONTRACTOR SHALL PROVIDE AND INSTALL CEILING ACCESS PANELS FOR ACCESSIBILITY TO ELECTRICAL JUNCTION BOXES, PLUMBING VALVES, BALANCING DAMPERS, CIRCUIT SETTERS, ETC. WHERE ABSOLUTELY NECESSARY. LOCATIONS WILL NEED TO BE APPROVED AND COORDINATED WITH THE DESIGN TEAM PRIOR TO INSTALLATION.

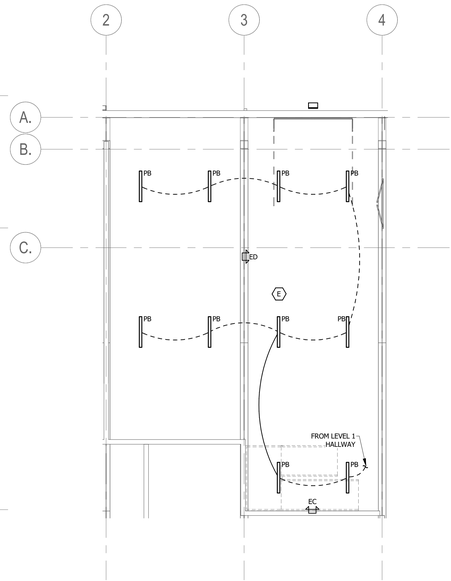
REFERENCED NOTES: (#)

(NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET)

1. COORDINATE LIGHTING MOUNTED IN THIS AREA WITH MECHANICAL EQUIPMENT. LIGHTING SHALL BE MOUNTED BELOW EQUIPMENT AT ALL TIMES. OFFSET AS REQUIRED.
2. NO EXPOSED RACEWAY SHALL BE ROUTED IN THIS AREA. HOLD RACEWAY TIGHT TO STRUCTURE ABOVE IF REQUIRED TO CROSS. CONFIRM ROUTING OF ALL RACEWAY IN THESE AREAS WITH DESIGN TEAM.
3. PROVIDE AND INSTALL LOW-VOLTAGE OCCUPANCY SENSOR OVERRIDE SWITCHES.
4. CONNECT LOW VOLTAGE MOMENTARY SWITCH TO LIGHTING CONTROL PANEL SERVING LIGHTING CONTROLLING THE SPACE. SWITCHES SHALL OPERATE LIGHTS INDICATED. SEE SPECIFICATIONS FOR DETAILS.
5. SEE LIGHTING CONTROL PANEL SCHEDULE FOR CIRCUIT AND CONTROL INFORMATION.
6. CONNECT TO EXISTING BREAKER SERVING LIGHTING IN THIS SPACE.



1 BUS BARN ELECTRICAL LIGHTING PLAN
1/8" = 1'-0"



2 MEZZANINE ELECTRICAL LIGHTING PLAN
1/8" = 1'-0"

8/28/2025 4:25:27 PM

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

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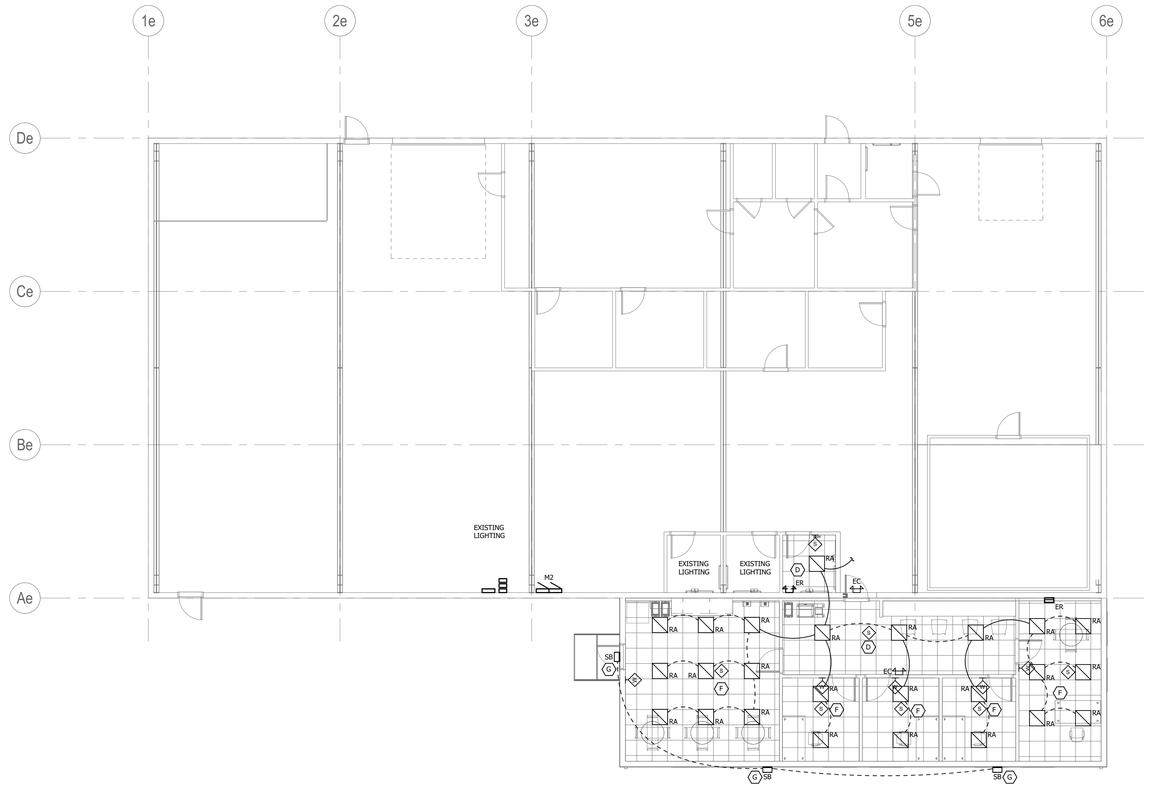
LIGHTING PLAN - BUS BARN

E02.01



1 OFFICE RENOVATION ELECTRICAL LIGHTING PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. SURFACE RACEWAY SHALL NOT BE USED IN ANY FINISHED AREAS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

B. INSTALL DEVICES SUCH THAT NO TWO DEVICES ON OPPOSITE SIDES OF SAME WALL ARE WITHIN 6" OF EACH OTHER.

C. COORDINATE ALL DEVICES WITH ARCHITECTURAL PLANS AND CASEWORK SUBMITTALS.

D. OCCUPANCY AND DAYLIGHT SENSORS SHALL BE LOCATED PER MANUFACTURER'S RECOMMENDATIONS. IN EVENT OF CONFLICT OF DESIGNED DRAWINGS AND MANUFACTURER RECOMMENDATIONS, ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

E. REFER TO SPECIFICATION SECTION 26 0943 FOR ADDITIONAL DETAILS ASSOCIATED WITH THE LIGHTING CONTROLS. EACH AREA OF CONTROL SHALL HAVE A DEDICATED POWER PACK WITH ALL DEVICES SHOWN ON PLANS OPERATING TOGETHER.

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K. ALL LIGHTING CONTROL SHALL OPERATE "MANUAL ON/AUTO OFF" PER CODE (IECC OR ASHRAE 90.1) UNLESS OTHERWISE NOTED IN THE SEQUENCE OF OPERATIONS OR THESE REFERENCE NOTES.

L. REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS FOR SPECIFIC DEVICE ROUGH-IN AND PLACEMENT. ANY DEVIATIONS FROM THE ARCHITECTURAL ELEVATIONS AND RCP'S SHALL BE REVIEWED AND APPROVED BY THE ARCHITECT PRIOR TO ROUGH-IN. IF A DEVICE IS REQUIRED PER SPECIFICATION, REQUIRED FOR OPERATION, OR IS DIFFERENT IN CONFIGURATION THAN SHOWN ON ELEVATIONS AND RCP'S, CLARIFICATION AND DIRECTION MUST BE GIVEN BY THE ARCHITECT BEFORE ROUGH-IN. DEVIATIONS OR ADDITIONAL DEVICES NOT APPROVED PRIOR TO INSTALLATION SHALL BE CORRECTED AT CONTRACTORS EXPENSE. THIS INCLUDES BUT IS NOT LIMITED TO THERMOSTATS, CONTROL SYSTEM SENSORS, ELECTRICAL DEVICES, SWITCHES, DIMMERS, TECHNOLOGY DEVICES, A/V DEVICES, SPEAKERS, FIRE ALARM DEVICES, ETC.

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REFERENCED NOTES: (#)

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3. PROVIDE AND INSTALL LOW-VOLTAGE OCCUPANCY SENSOR OVERRIDE SWITCHES.
4. CONNECT LOW VOLTAGE MOMENTARY SWITCH TO LIGHTING CONTROL PANEL SERVING LIGHTING CONTROLLING THE SPACE. SWITCHES SHALL OPERATE LIGHTS INDICATED. SEE SPECIFITACIONS FOR DETAILS.
5. SEE LIGHTING CONTROL PANEL SCHEDULE FOR CIRCUIT AND CONTROL INFORMATION.
6. CONNECT TO EXISTING BREAKER SERVING LIGHTING IN THIS SPACE.

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KEY PLAN

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LIGHTING PLAN - OPERATIONS

E02.02

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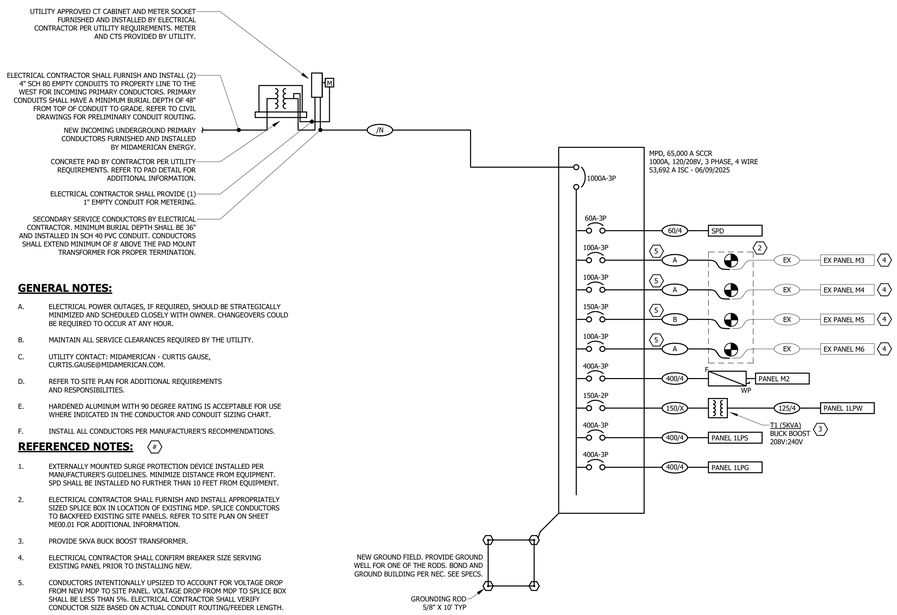


GENERAL NOTES:

A. ELECTRICAL POWER OUTAGES, IF REQUIRED, SHOULD BE STRATEGICALLY MINIMIZED AND SCHEDULED CLOSELY WITH OWNER. CHANGEOVERS COULD BE REQUIRED TO OCCUR AT ANY HOUR.

B. MAINTAIN ALL SERVICE CLEARANCES REQUIRED BY THE UTILITY.

C. UTILITY CONTACT: MIDAMERICAN - CURTIS GAUSE, CURTIS.GAUSE@MIDAMERICAN.COM.

D. REFER TO SITE PLAN FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.

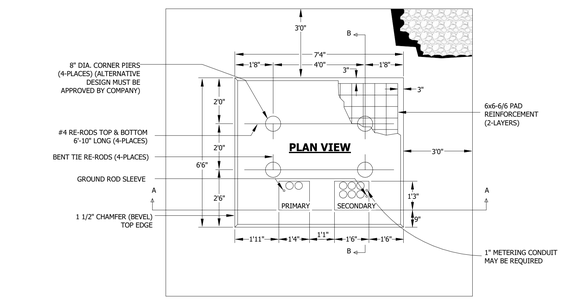
E. HARDENED ALUMINUM WITH 90 DEGREE RATING IS ACCEPTABLE FOR USE WHERE INDICATED IN THE CONDUCTOR AND CONDUIT SIZING CHART.

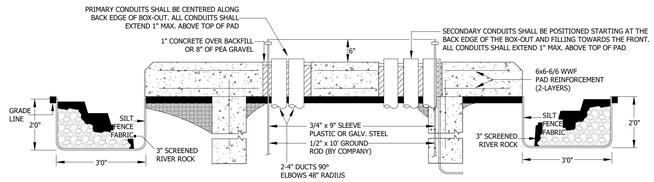
F. INSTALL ALL CONDUCTORS PER MANUFACTURER'S RECOMMENDATIONS.

REFERENCED NOTES: (#)

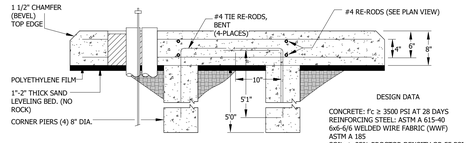
1. EXTERNALLY MOUNTED SURGE PROTECTION DEVICE INSTALLED PER MANUFACTURER'S GUIDELINES. MINIMIZE DISTANCE FROM EQUIPMENT. SPD SHALL BE INSTALLED NO FURTHER THAN 10 FEET FROM EQUIPMENT.
2. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL APPROPRIATELY SIZED SPLICE BOX IN LOCATION OF EXISTING MDP. SPLICE CONDUCTORS TO BACKFEED EXISTING SITE PANELS. REFER TO SITE PLAN ON SHEET ME00.01 FOR ADDITIONAL INFORMATION.
3. PROVIDE 5KVA BUCK BOOST TRANSFORMER.
4. ELECTRICAL CONTRACTOR SHALL CONFIRM BREAKER SIZE SERVING EXISTING PANEL PRIOR TO INSTALLING NEW.
5. CONDUCTORS INTENTIONALLY UPSIZED TO ACCOUNT FOR VOLTAGE DROP FROM NEW MDP TO SITE PANEL. VOLTAGE DROP FROM MDP TO SPLICE BOX SHALL BE LESS THAN 5%. ELECTRICAL CONTRACTOR SHALL VERIFY CONDUCTOR SIZE BASED ON ACTUAL CONDUIT ROUTING/FEEDER LENGTH.

1 ONE-LINE DIAGRAM
No Scale



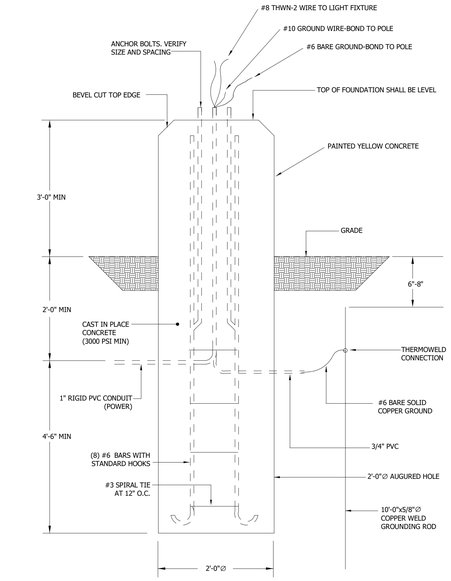


SECTION "A-A"



SECTION "B-B"

2 MIDAMERICAN 75-500 KVA TRANSFORMER PAD DETAIL
No Scale



GENERAL NOTES:

A. COORDINATE FINAL MOUNTING REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO INSTALLATION.

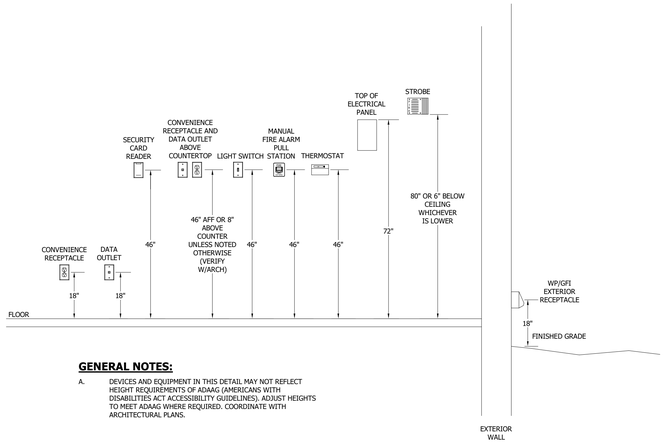
B. MIN. DIMENSIONS APPLY TO LOWEST GROUND LINE.

C. MAKE NO WIRE CONNECTIONS OUTSIDE OF POLE WITH EXCEPTION OF THE BARE GROUND.

D. TOP OF FOUNDATION SHALL BE TROWELLED SMOOTH AND LEVEL.

E. REFER TO SITE PLAN FOR ADDITIONAL CIRCUIT INFORMATION.

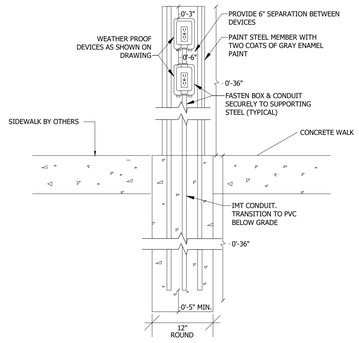
3 TYPICAL SITE LIGHT POLE FOUNDATION MOUNTING DETAIL
No Scale



GENERAL NOTES:

A. DEVICES AND EQUIPMENT IN THIS DETAIL MAY NOT REFLECT HEIGHT REQUIREMENTS OF ADAAG (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES). ADJUST HEIGHTS TO MEET ADAAG WHERE REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS.

4 TYPICAL DEVICE ELEVATION DETAIL
No Scale



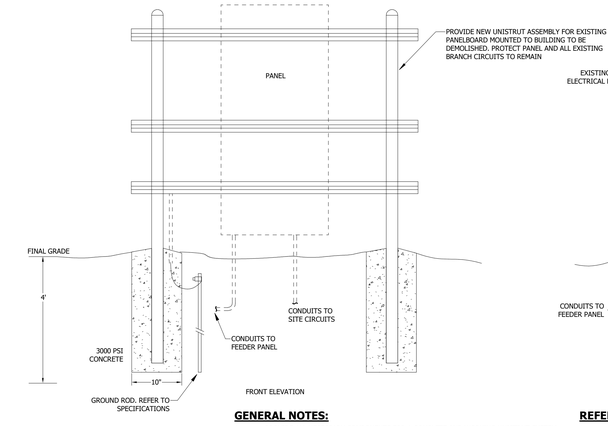
SECTION/ELEVATION

GENERAL NOTES:

A. COORDINATE FINAL MOUNTING REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO INSTALLATION.

B. REFER TO SITE PLAN FOR ADDITIONAL CIRCUIT INFORMATION.

5 ENGINE HEATER RECEPTACLE MOUNTING
No Scale



GENERAL NOTES:

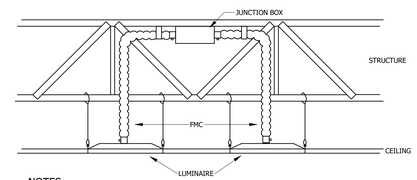
A. PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND WORKING UNISTRUT SYSTEM.

B. ALL GROUNDING FIELDS ESTABLISHED AT DISTRIBUTION/CT LOCATIONS SHALL BE BONDED TOGETHER FOR ONE SINGLE/COMPLETE GROUNDING SYSTEM. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

REFERENCED NOTES:

1. ---

6 SITE PANELBOARD DETAIL
No Scale



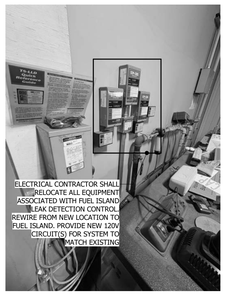
NOTES:

A. MAXIMUM TOTAL LENGTH OF FMC LIMITED TO 6 FEET WITHOUT SEPARATE EQUIPMENT GROUND CONDUCTOR.

B. LUMINAIRES SHALL NOT BE DAISY CHAINED TOGETHER WITH FMC.

C. REFER TO ARTICLE 250.118(5)D FOR ADDITIONAL DETAILS.

7 TYPICAL LIGHT FIXTURE WIRING DETAIL
No Scale



8 EXISTING FUEL CONTROL SYSTEM
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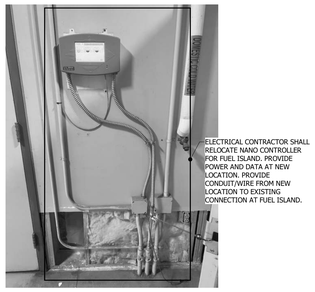
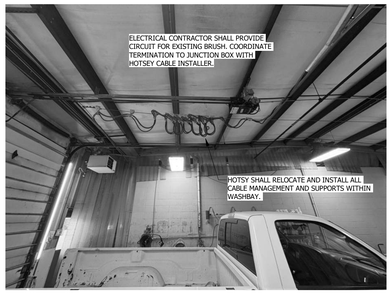


9 EXISTING NANO FUEL CONTROLLER
No Scale



10 EXISTING WASHBAY BRUSH
No Scale

8/20/2025 4:22:31 PM

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ELECTRICAL DETAILS

E05.01

BRANCH 1LPS

Location: SERVICE BAY 109
Supply From: MPD
Mounting: Surface
Enclosure: Type 1
Available Isc: 14,137 A

Volts: 120/208 Wye
Phases: 3
Wires: 4

S.C.C.R. Rating: 22,000 A
Mains Type: MLO
Mains Rating: 400 A
MCB Rating: --
SPD: NONE

Notes:

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1LPS-1	OH DOOR		20 A	1	1356	1356					1	20 A		OH DOOR	1LPS-2
1LPS-3	OH DOOR		20 A	1			1356	1044			1	20 A		OH DOOR	1LPS-4
1LPS-5	OH DOOR		20 A	1					1356	1356	1	20 A		OH DOOR	1LPS-6
1LPS-7	OH DOOR		20 A	1	1356	996					1	20 A		OH DOOR	1LPS-8
1LPS-9	OH DOOR		20 A	1			1356	1356			1	20 A		OH DOOR	1LPS-10
1LPS-11	CORD REEL		20 A	1					1500	1500	1	20 A		CORD REEL	1LPS-12
1LPS-13	CORD REEL		20 A	1	1500	1500					1	20 A		CORD REEL	1LPS-14
1LPS-15	CORD REEL		20 A	1			1500	180			1	20 A		CORD REEL	1LPS-16
1LPS-17	HOTSY		60 A	3					5760	0	1	20 A		GAS DETECT	1LPS-18
1LPS-19	--		--	--	5760	360					1	20 A		TOOL BOX RCPT	1LPS-20
1LPS-21	--		--	--			5760	360			1	20 A		TOOL BOX RCPT	1LPS-22
1LPS-23	TOOL BOX RCPT		20 A	1					360	360	1	20 A		TOOL BOX RCPT	1LPS-24
1LPS-25	RECEPTS		20 A	1	360	360					1	20 A		RECEPTS	1LPS-26
1LPS-27	RECEPTS		20 A	1			540	720			1	20 A		RM 109/110/11/EXT. RCPT	1LPS-28
1LPS-29	RECEPTS		20 A	1					360	720	1	20 A		Power	1LPS-30
1LPS-31															1LPS-32
1LPS-33	BUS EF REEL		20 A	1			0	1854			1	20 A		BAY ZONE D/E LITES	1LPS-34
1LPS-35	BAY ZONE C/F LITES		20 A	1					1697	1854	1	20 A		BAY ZONE A/B LITES	1LPS-36
1LPS-37	Lighting		20 A	1	977	2127					1	20 A		WASHBAY 112 LITES	1LPS-38
1LPS-39	FLUIDS 111 RCPT		20 A	1			900	540			1	20 A		SERVICE BAY/EXT. RCPT	1LPS-40
1LPS-41	RTH-3		20 A	1					0	3336	3	35 A		EUH-2	1LPS-42
1LPS-43	EF-4		15 A	1	576	3336					--	--		--	1LPS-44
1LPS-45	OH DOOR		20 A	1			1176	3336			--	--		--	1LPS-46
1LPS-47	OH DOOR		20 A	1					1176	1622	2	25 A		EF-1	1LPS-48
1LPS-49	RTH-1		20 A	1	0	1622					--	--		--	1LPS-50
1LPS-51	RTH-2		20 A	1			0	874			2	15 A		BUS EF	1LPS-52
1LPS-53	BUS EF		15 A	2					874	874	--	--		--	1LPS-54
1LPS-55	--		--	--	874	874					2	15 A		BUS EF	1LPS-56
1LPS-57	BUS EF		15 A	2			874	874			--	--		--	1LPS-58
1LPS-59	--		--	--					874	0	1	20 A		BUS EF REEL	1LPS-60
1LPS-61	EUH-2		35 A	3	2669	228					1	15 A		EF-2	1LPS-62
1LPS-63	--		--	--			2669	100			1	15 A		EF-5	1LPS-64
1LPS-65	--		--	--					2669	528	1	15 A		GUH-1	1LPS-66
1LPS-67	GUH-3		15 A	1	576	528					1	15 A		GUH-4	1LPS-68
1LPS-69	GUH-5		15 A	1			528	528			1	15 A		GUH-6	1LPS-70
1LPS-71	MS-1		15 A	2					1023	1634	1	20 A		Lighting	1LPS-72
1LPS-73	--		--	--	1023	750					2	20 A		WASH BRUSH	1LPS-74
1LPS-75	HVLS-1		20 A	2			1040	750			--	--		--	1LPS-76
1LPS-77	--		--	--					1040	1040	2	20 A		HVLS-2	1LPS-78
1LPS-79						1040					--	--		--	1LPS-80
1LPS-81															1LPS-82
1LPS-83															1LPS-84
1LPS-85															1LPS-86
1LPS-87															1LPS-88
1LPS-89															1LPS-90
1LPS-91															1LPS-92
1LPS-93															1LPS-94
1LPS-95															1LPS-96
1LPS-97															1LPS-98
1LPS-99															1LPS-100
1LPS-101															1LPS-102
1LPS-103															1LPS-104
1LPS-105															1LPS-106
1LPS-107															1LPS-108
				Total Load:	30112 VA		30214 VA		31160 VA						
				Total Amps:	251 A		252 A		260 A						

Type Legend:
N=NORMAL G=GFI M=MOTORIZED E=EXISTING ST=SHUNT TRIP A=ARC FAULT H=HANDLE LOCK

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	33365 VA	100.00%	33365 VA		
Motor	8309 VA	109.76%	9120 VA	**Total Conn. Load:**	91.5 kVA
Other	0 VA	0.00%	0 VA	**Total Est. Demand:**	94.8 kVA
Power	11340 VA	100.00%	11340 VA	**Total Conn. Current:**	254 A
Heating	20702 VA	100.00%	20702 VA	**Total Est. Demand Current:**	263 A
Cooling	2047 VA	100.00%	2047 VA		
Receptacles	5580 VA	100.00%	5580 VA		
Lighting - Exterior	432 VA	125.00%	540 VA		
Lighting	9711 VA	125.00%	12139 VA		

Notes:

CORD REEL SCHEDULE

TYPE	MANUFACTURER	MODEL	MOBILE END DEVICE	DESCRIPTION
CR-1	HUBBELL	--	(1) 20A QUADRUPLEX GFI RECEPTACLE	CEILING/STRUCTURE MOUNTED CABLE REEL WITH 35' LENGTH. ELECTRICAL CONTRACTOR SHALL INSTALL TWISTLOCKING CORD/PLUG FOR FEED END. ARCHITECT SHALL SELECT REEL AND RECEPTACLE FINISH.

LIGHTING FIXTURE SCHEDULE

TYPE	BOD MANUFACTURER	MODEL NUMBER	DESCRIPTION	LAMP/CCT/CRI	CONTROL	DELIVERED LUMENS	WATTS	VOLTS	EQUALS
EA	LITHONIA	LQC-X-1-R-EL N	CAST ALUMINUM LED EXIT SIGN WITH BACKUP BATTERY.	LED/RED	-	-	-	UNV	DUAL-LITE, MULE, SURE-LITES
EB	LITHONIA	WTLE-X-1-R-EL-SD	THERMOPLASTIC SEALED EXIT SIGN FOR WET LOCATIONS. BACKUP BATTERY.	LED/RED	-	-	-	UNV	ENGINEER APPROVED
EC	LITHONIA	ELM2L-SDRT	LED BATTERY LIGHT WITH AIMABLE HEADS FOR EMERGENCY EGRESS OPERATION.	LED/5000K	-	-	-	UNV	DUAL-LITE, MULE, SURE-LITES
ED	LITHONIA	ELM6L-UVOLT-LTP-SDRT	LED BATTERY LIGHT WITH AIMABLE HEADS FOR EMERGENCY EGRESS OPERATION.	LED/5000K	-	-	-	UNV	ENGINEER APPROVED
EE	LITHONIA	ELM6L-UVOLT-LTP-SDRT-WPVS	LED BATTERY LIGHT WITH AIMABLE HEADS FOR EMERGENCY EGRESS OPERATION. WET LOCATION PROTECTIVE SHIELD.	LED/5000K	-	-	-	UNV	ENGINEER APPROVED
PA	HE WILLIAMS	GP2-L200-8-50-M-VBY-2-DRV-UNV	LED HIGH BAY FIXTURE.	LED/5000K/80	NON-DIM	20,000 (NOM)	157	UNV	ENGINEER APPROVED
PB	LITHONIA	CLX-L48-5000LM-SEF-FDL--MVOLT-GZ10-50K-80CRI-HA-HC36 M12	LED LINEAR STRIP LIGHT.	LED/5000K/80	0-10V	5,000 (NOM)	31.8	UNV	ENGINEER APPROVED
PC	COLUMBIA	LXEW4-50L-FAW-EU-93302310	WET RATED GASKETED LED LINEAR STRIP LIGHT.	LED/5000K/80	NON-DIM	11,000 (NOM)	91.1	UNV	ENGINEER APPROVED
PD	HE WILLIAMS								
RA	COLUMBIA	CBT22-A-LSCS-EDD	2x2 LED FLAT PANEL FOR LAY-IN CEILINGS. SELECTABLE LUMENS AND CCT.	LED/SELECTABLE/80	0-10V TO 1%	2,750 - 4,600 (NOM)	24 - 38	UNV	LITHONIA, DAY-BRITE CFI, METALUX
SA	HE WILLIAMS	VWPH-L8S-7-50-TFT-X-SDGL-DIM-UNV	LED WALLPACK. FORWARD THROW DISTRIBUTION.	LED/5000K/70	NON-DIM	8,500 (NOM)	72	UNV	ENGINEER APPROVED
SB	HE WILLIAMS	VWMH-L20-750-T3-X-SDGL-DIM-UNV	LED WALLPACK. TYPE III DISTRIBUTION.	LED/5000K/70	NON-DIM	2,000 (NOM)	27	UNV	ENGINEER APPROVED
SC	LITHONIA	FIXTURE: RSX1-P2-50K-R2-MVOLT-RPA-DBLXD POLE: RSS-20-4B-DM19AS-VD-DBLXD	FIXTURE: LED COBRAHEAD POLE-MOUNTED SITE LIGHT. TYPE II DISTRIBUTION. POLE: 20-FT ROUND STEEL POLE. VIBRATION DAMPENER. ANCHOR BOLT FASTENING TO 3-FT HIGH, 2-FT DIA. PRECAST CONCRETE BASE.	LED/5000K/70	NON-DIM	9,878	72	UNV	ENGINEER APPROVED
SD	LITHONIA	FIXTURE: RSX1-P2-50K-R4-MVOLT-RPA-DBLXD POLE: RSS-20-4B-DM19AS-VD-DBLXD	FIXTURE: LED COBRAHEAD POLE-MOUNTED SITE LIGHT. TYPE IV DISTRIBUTION. POLE: 20-FT ROUND STEEL POLE. VIBRATION DAMPENER. ANCHOR BOLT FASTENING TO 3-FT HIGH, 2-FT DIA. PRECAST CONCRETE BASE.	LED/5000K/70	NON-DIM	9,972	72	UNV	ENGINEER APPROVED
SE	LITHONIA	FIXTURE: RSX1-P2-50K-R5-MVOLT-RPA-DBLXD POLE: RSS-20-4B-DM19AS-VD-DBLXD	FIXTURE: LED COBRAHEAD POLE-MOUNTED SITE LIGHT. TYPE V DISTRIBUTION. POLE: 20-FT ROUND STEEL POLE. VIBRATION DAMPENER. ANCHOR BOLT FASTENING TO 3-FT HIGH, 2-FT DIA. PRECAST CONCRETE BASE.	LED/5000K/70	NON-DIM	14,397	109	UNV	ENGINEER APPROVED
WA	COLUMBIA	LXEM4-50VL-RFA-E-U	WET RATED GASKETED LED LINEAR STRIP LIGHT.	LED/5000K/80	NON-DIM	7,971	61.6	UNV	ENGINEER APPROVED
WB	LITHONIA	CLX-L48-3000LM-SEF-FDL--MVOLT-GZ10-50K-80CRI	LED LINEAR STRIP LIGHT.	LED/5000K/80	0-10V	3,000 (NOM)		UNV	ENGINEER APPROVED
WC	COLUMBIA	LXEM4-50ML-RFA-E-U	WET RATED GASKETED LED LINEAR STRIP LIGHT.	LED/5000K/80	NON-DIM	5,306	42	UNV	ENGINEER APPROVED

NOTES:

1. PROVIDE ALL PARTS AND PIECES FOR A COMPLETE AND FULLY FUNCTIONAL LIGHTING SYSTEM.
2. CONTRACTOR SHALL INSTALL ALL FIXTURES PER MANUFACTURER RECOMMENDATIONS IN LOCATIONS SHOWN ON DRAWING AND NOTIFY DESIGN TEAM IF THIS IS NOT POSSIBLE PRIOR TO ROUGH-IN.
3. VERIFY ALL WALL MOUNTED FIXTURE LOCATIONS WITH THE LIGHTING DESIGNER AND ARCHITECT PRIOR TO ROUGH-IN.
4. ARCHITECT SHALL SELECT ALL FINISH/COLORS AT TIME OF SUBMITTAL.
5. COORDINATE ALL DRIVERS WITH CONTROLS TO INSURE FULL COMPATIBILITY.
6. VERIFY ALL FINAL CEILING TYPES AND MOUNTING CONFIGURATIONS PRIOR TO RELEASE OF FIXTURES.

LIGHT FIXTURE SCHEDULE BY: ADAM VANDER HELM, LC

LIGHTING CONTROL - SEQUENCE OF OPERATION

TAG	ACTIVATION	DESCRIPTION	SCHEDULE
A	MANUAL ON/ OFF	MANUAL LINE VOLTAGE TOGGLE SWITCH.	N/A
B	MANUAL ON/ OFF	WET RATED MANUAL LINE VOLTAGE TOGGLE SWITCH IN THE WASH BAY, LINE VOLTAGE TOGGLE SWITCHES OUTSIDE WASH BAY.	N/A
C	MANUAL ON/ AUTO-OFF	MANUAL ON AND AUTO-OFF w/ WALL CONTROL, CEILING OR CORNER SENSOR(S) AND ROOM CONTROLLER(S).	30 MINUTE TIMEOUT
D	AUTO ON/ AUTO OFF	AUTO ON/AUTO OFF w/ WALL MOUNTED SENSOR OR CEILING MOUNTED SENSOR(S), AS APPROPRIATE.	30 MINUTE TIMEOUT
E	MANUAL ON/ AUTO-OFF w/ DIMMING	MANUAL ON AND AUTO-OFF w/ MULTI-ZONE WALL CONTROL ON/OFF AND TIMECLOCK PROGRAMMED SWEEP OFF. ZONES AS INDICATED ON PLANS. PROVIDE DIMMING IN SERVICE BAY 109.	30 MINUTE TIMEOUT
F	MANUAL ON/ AUTO-OFF w/ DIMMING	MANUAL ON AND AUTO-OFF w/ WALL CONTROL, CEILING SENSOR(S) AND ROOM CONTROLLER(S). PROVIDE DAYLIGHT DIMMING, AS REQUIRED, ZONED, AND INDICATED ON PLANS.	30 MINUTE TIMEOUT
G	AUTO ON/ AUTO OFF	AUTO ON/AUTO OFF w/ LINE VOLTAGE PHOTOCELL.	DUSK TO DAWN

NOTES:

1. REFER TO SPECIFICATION 26 0943 FOR FURTHER INFORMATION.
2. OCCUPANCY SENSORS SHALL BE PROGRAMMED TO A 30-MINUTE TIME DELAY UNLESS NOTED OTHERWISE.
3. PROVIDE PROPER NUMBER OF POWER PACKS FOR A FULLY FUNCTIONAL SYSTEM.
4. EXACT DEVICE AND POWER PACK QUANTITIES SHALL BE DETERMINED DURING CONSTRUCTION BY THE LIGHTING CONTROLS MANUFACTURER.

95% CONSTRUCTION DOCUMENTS

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE 08/28/25

PROJECT NO: 3007.090.00

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ELECTRICAL SCHEDULES

E06.01

8/28/2025 4:22:34 PM

BRANCH EX M6

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1
Available Isc:

Volts: 120/208 Wye
Phases: 3
Wires: 4

S.C.C.R. Rating:
Mains Type: MCB
Mains Rating: 100 A
MCB Rating: 100A
SPD: NONE

Notes:

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
M6-1	EX LOAD	E	20 A	1	0	0					1	20 A	E	EX LOAD	M6-2
M6-3	EX LOAD	E	20 A	1			0	0			1	20 A	E	EX LOAD	M6-4
M6-5	EX LOAD	E	20 A	1					0	0	1	20 A	E	EX LOAD	M6-6
M6-7	EX LOAD	E	20 A	1	0	0					1	20 A	E	EX LOAD	M6-8
M6-9	EX LOAD	E	20 A	1			0	0			1	20 A	E	EX LOAD	M6-10
M6-11	EX LOAD	E	20 A	1					0	0	1	20 A	E	EX LOAD	M6-12
M6-13	EX LOAD	E	20 A	1	0	0					1	20 A	E	EX LOAD	M6-14
M6-15	EX LOAD	E	20 A	1			0	0			1	20 A	E	EX LOAD	M6-16
M6-17	EX LOAD	E	20 A	1					0	180	1	20 A		HTR RECEPTS	M6-18
M6-19	HTR RECEPTS		20 A	1	180	180					1	20 A		HTR RECEPTS	M6-20
M6-21	HTR RECEPTS		20 A	1			180	180			1	20 A		HTR RECEPTS	M6-22
M6-23	HTR RECEPTS		20 A	1					180	180	1	20 A		HTR RECEPTS	M6-24
M6-25	HTR RECEPTS		20 A	1	180	180					1	20 A		HTR RECEPTS	M6-26
M6-27	HTR RECEPTS		20 A	1			180	180			1	20 A		HTR RECEPTS	M6-28
M6-29	HTR RECEPTS		20 A	1					180						M6-30
			Total Load:		720 VA		720 VA		720 VA						
			Total Amps:		6 A		6 A		6 A						

Type Legend:
N=NORMAL G=GFI M=MOTORIZED E=EXISTING ST=SHUNT TRIP A=ARC FAULT H=HANDLE LOCK

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	2160 VA	100.00%	2160 VA		
				Total Conn. Load:	2.2 kVA
				Total Est. Demand:	2.2 kVA
				Total Conn. Current:	6 A
				Total Est. Demand Current:	6 A

Notes:

BRANCH 1LPW

Location: SERVICE BAY 109
Supply From:
Mounting: Surface
Enclosure: Type 1
Available Isc: 5,469 A

Volts: 120/240 Single
Phases: 1
Wires: 3

S.C.C.R. Rating: 10,000 A
Mains Type: MCB
Mains Rating: 225A
MCB Rating: 150 A
SPD: NONE

Notes:

CKT	Circuit Description	Type	Trip	Poles	A		B		Poles	Trip	Type	Circuit Description	CKT
1LPW-1	WELDER	G	50 A	2	4800	4800			2	50 A	G	WELDER	1LPW-2
1LPW-3	--	--	--	--			4800	4800	--	--	--	--	1LPW-4
1LPW-5	WELDER	G	50 A	2	4800	4800			2	50 A	G	WELDER	1LPW-6
1LPW-7	--	--	--	--			4800	4800	--	--	--	--	1LPW-8
1LPW-9	WELDER	G	50 A	2	4800	4800			2	50 A	G	WELDER	1LPW-10
1LPW-11	--	--	--	--			4800	4800	--	--	--	--	1LPW-12
1LPW-13	WELDER	G	50 A	2	4800	4800			2	50 A	G	WELDER	1LPW-14
1LPW-15	--	--	--	--			4800	4800	--	--	--	--	1LPW-16
1LPW-17	WELDER	G	50 A	2	4800	4800			2	50 A	G	WELDER	1LPW-18
1LPW-19	--	--	--	--			4800	4800	--	--	--	--	1LPW-20
1LPW-21	WELDER		50 A	2	4800	4800			2	50 A		WELDER	1LPW-22
1LPW-23	--		--	--			4800	4800	--	--		--	1LPW-24
1LPW-25													1LPW-26
1LPW-27													1LPW-28
1LPW-29													1LPW-30
1LPW-31													1LPW-32
1LPW-33													1LPW-34
1LPW-35													1LPW-36
1LPW-37													1LPW-38
1LPW-39													1LPW-40
1LPW-41													1LPW-42
			Total Load:		57600 VA		57600 VA						
			Total Amps:		480 A		480 A						

Type Legend:
N=NORMAL G=GFI M=MOTORIZED E=EXISTING ST=SHUNT TRIP A=ARC FAULT H=HANDLE LOCK

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	115200 VA	100.00%	115200 VA		
				Total Conn. Load:	115.2 kVA
				Total Est. Demand:	115.2 kVA
				Total Conn. Current:	480 A
				Total Est. Demand Current:	480 A

Notes:

BRANCH M2

Location: WAREHOUSE 200
Supply From: MPD
Mounting: Surface
Enclosure: Type 1
Available Isc: 14,890 A

Volts: 120/208 Wye
Phases: 3
Wires: 4

S.C.C.R. Rating: 22,000 A
Mains Type: MCB
Mains Rating: 400A
MCB Rating: 400A
SPD: NONE

Notes:
ELECTRICAL CONTRACTOR SHALL PROVIDE NEW BREAKERS FOR ALL EXISTING LOADS TO REMAIN. VERIFY EXISTING BREAKER CHARACTERISTICS AND PROVIDE MATCHING. PRIOR TO ORDERING NEW PANEL.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
M2-1	EXISTING LOAD	N	100 A	3	0	0					2	50 A	N	EXISTING LOAD	M2-2
M2-3	--	--	--	--			0	0			--	--	--	--	M2-4
M2-5	--	--	--	--					0	0	2	40 A	N	EXISTING LOAD	M2-6
M2-7	EXISTING LOAD	N	30 A	2	0	0					--	--	--	--	M2-8
M2-9	--	--	--	--			0	0			2	20 A	N	EXISTING LOAD	M2-10
M2-11	EXISTING LOAD	N	30 A	2					0	0	--	--	--	--	M2-12
M2-13	--	--	--	--	0	0					1	20 A	N	EXISTING LOAD	M2-14
M2-15	EXISTING LOAD	N	20 A	1			0	0			1	20 A	N	EXISTING LOAD	M2-16
M2-17	EXISTING LOAD	N	20 A	1					0	0	1	20 A	N	EXISTING LOAD	M2-18
M2-19	EXISTING LOAD	N	20 A	1	0	0					1	20 A	N	EXISTING LOAD	M2-20
M2-21	EXISTING LOAD	N	20 A	1			0	0			1	20 A	N	EXISTING LOAD	M2-22
M2-23	EXISTING LOAD	N	20 A	1					0	0	1	20 A	N	EXISTING LOAD	M2-24
M2-25	EXISTING LOAD	N	20 A	1	0	0					3	100 A	N	EXISTING LOAD	M2-26
M2-27	EXISTING LOAD	N	20 A	1			0	0			--	--	--	--	M2-28
M2-29	EXISTING LOAD	N	20 A	1					0	0	--	--	--	--	M2-30
M2-31	EXISTING LOAD	N	20 A	1	0	0					1	20 A	N	EXISTING LOAD	M2-32
M2-33	EXISTING LOAD	N	20 A	1			0	0			1	20 A	N	EXISTING LOAD	M2-34
M2-35	EXISTING LOAD	N	20 A	1					0	0	1	20 A	N	EXISTING LOAD	M2-36
M2-37	EXISTING LOAD	N	20 A	1	0	0					1	20 A	N	EXISTING LOAD	M2-38
M2-39	EXISTING LOAD	N	20 A	1			0	0			1	20 A	N	EXISTING LOAD	M2-40
M2-41	EXISTING LOAD	N	20 A	1					0	0	1	20 A	N	EXISTING LOAD	M2-42
M2-43	EXISTING LOAD	N	50 A	2	0	0					2	20 A	N	EXISTING LOAD	M2-44
M2-45	--	--	--	--			0	0			--	--	--	--	M2-46
M2-47	EXISTING LOAD	N	40 A	2					0	0	2	20 A	N	EXISTING LOAD	M2-48
M2-49	--	--	--	0	0						--	--	--	--	M2-50
M2-51	EXISTING LOAD	N	60 A	3			0	0			1	20 A	N	EXISTING LOAD	M2-52
M2-53	--	--	--	--					0	0	1	20 A	N	EXISTING LOAD	M2-54
M2-55	--	--	--	--	0	0					1	20 A	N	EXISTING LOAD	M2-56
M2-57	EXISTING LOAD	N	60 A	2			0	0			1	20 A	N	EXISTING LOAD	M2-58
M2-59	--	--	--	--					0	0	1	20 A	N	EXISTING LOAD	M2-60
M2-61	OFFICE 203 RCPT		20 A	1	900	900					1			OFFICE 204 RCPT	M2-62
M2-63	OFFICE 205 RCPT		20 A	1			900	500			1	20 A		LEAK DETECTION	M2-64
M2-65	FUEL ISLAND		20 A	2					0	0	2	20 A		FUEL ISLAND	M2-66
M2-67	--		--	--	0	0					--	--		--	M2-68
M2-69	FUEL LTG		20 A	1			0	0			2	20 A		FUEL PUMP 1	M2-70
M2-71	FUEL ISLAND		20 A	2					0	0	--	--		--	M2-72
M2-73	--		--	--	0	0					2	20 A		Power	M2-74
M2-75	Power		20 A	2			0	0			--	--		--	M2-76
M2-77	--		--	--					0	180	1	20 A		Power	M2-78
M2-79	Power		20 A	1	540	1080					1	20 A		BREAK RM/EXT. RCPT	M2-80
M2-81	REFRIG.	G	20 A	1			180	180			1	20 A	G	MICRO.	M2-82
M2-83	COFFEE	G	20 A	1					180	180	1	20 A	G	COFFEE	M2-84
M2-85	OFFICE 206 RCPT		20 A	1	1080	180					1	20 A		COPIER	M2-86
M2-87	CU-2		20 A	2			1148	360			1	20 A		TIME CLOCK	M2-88
M2-89	--		--	--					1148	840	1	15 A		F-2	M2-90
M2-91	RM 200/208 RCPT		20 A	1	360	36					1	20 A		EF-B	M2-92
M2-93	CP-1		15 A	1			0	0			2	20 A		EWH-1	M2-94
M2-95	GATE		30 A	1					1920	0	--	--		--	M2-96
M2-97	GATE		30 A	1	1920										M2-98
M2-99															M2-100
M2-101															M2-102
M2-103															M2-104
M2-105															M2-106
M2-107															M2-108
			Total Load:		6996 VA		3268 VA		4448 VA						
			Total Amps:		60 A		27 A		39 A						

Type Legend:
N=NORMAL G=GFI M=MOTORIZED E=EXISTING ST=SHUNT TRIP A=ARC FAULT H=HANDLE LOCK

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	2296 VA	100.00%	2296 VA		
Power	11540 VA	100.00%	11540 VA	**Total Conn. Load:**	14.7 kVA
Heating	876 VA	100.00%	876 VA	**Total Est. Demand:**	14.7 kVA
Lighting	0 VA	0.00%	0 VA	**Total Conn. Current:**	41 A
				Total Est. Demand Current:	41 A

Notes:
DOUBLE TUB/FEED THRU LUGS TO PROVIDE 108 SPACES

BRANCH 1LPG

Location: ELECTRICAL 105.2
Supply From: MPD
Mounting: Surface
Enclosure: Type 1
Available Isc: 65,000 A

Volts: 120/208 Wye
Phases: 3
Wires: 4

S.C.C.R. Rating: 45,653 A
Mains Type: MLO
Mains Rating: 400 A
MCB Rating: --
SPD: NONE

Notes:

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1LPG-1	REFRIG		20 A	1	500	1000					1	20 A		MICRO.	1LPG-2
1LPG-3	COFFEE		20 A	1			300	300			1	20 A		EWC	1LPG-4
1LPG-5	PRINTER		20 A	1					500	1270	1	20 A		WEST/MEZZ LITES	1LPG-6
1LPG-7	RECEPTS		20 A	1	1080	1044					1	15 A		OH DOOR	1LPG-8
1LPG-9	FACP		20 A	1			500	500			1	20 A		ACCESS	1LPG-10
1LPG-11	Power		20 A	1					180	180	1	20 A		LARGE TOOLS 108 RCPT	1LPG-12
1LPG-13	LARGE TOOLS 108 RCPT		20 A	1	180	360					1	20 A		DATA	1LPG-14
1LPG-15	MCH 105/ELEC 105.2...		20 A	1			1260	1080			1	20 A		PARTS 107 RCPT	1LPG-16
1LPG-17	PARTS 107 RCPT		20 A	1					360	360	1	20 A		PARTS 107 RCPT	1LPG-18
1LPG-19	LARGE TOOLS 108 RCPT		20 A	1	180	180					1	20 A		LARGE TOOLS 108 RCPT	1LPG-20
1LPG-21	LARGE TOOLS 108 RCPT		20 A	1			180	180			1	20 A		LARGE TOOLS 108 RCPT	1LPG-22
1LPG-23	LARGE TOOLS 108 RCPT		20 A	1					540	720	1	20 A		LARGE TOOLS 108 RCPT	1LPG-24
1LPG-25	CU-1		15 A	1	1847	1800					1	20 A		LOFT RCPT.	1LPG-26
1LPG-27	PARTS 107/EXT. LITES		20 A	1			1459	840			1	15 A		F-1	1LPG-28
1LPG-29	EF-A		15 A	1					36	36	1	15 A		EF-A	1LPG-30
1LPG-31	RP-1		15 A	1	372	0					1	15 A		CP-1	1LPG-32
1LPG-33	EWH-1		20 A	2			0	8196			1	35 A		EUH-3	1LPG-34
1LPG-35	--		--	--					0	528	1	15 A		GUH-2	1LPG-36
1LPG-37	SITE LIGHTS		20 A	1	504	500					1	20 A		NANO CNTL	1LPG-38
1LPG-39	EUH-1		15 A	2			1023	372			1	15 A		RP-2	1LPG-40
1LPG-41	--		--	--					1023	180	1	20 A		CORD REEL	1LPG-42
1LPG-43	CORD REEL		20 A	1	180	180					1	20 A		CORD REEL	1LPG-44
1LPG-45	CORD REEL		20 A	1			180	180			1	20 A		PARTS WASHER	1LPG-46
1LPG-47															1LPG-48
1LPG-49															1LPG-50
1LPG-51															1LPG-52
1LPG-53															1LPG-54
1LPG-55															1LPG-56
1LPG-57															1LPG-58
1LPG-59															1LPG-60
1LPG-61															1LPG-62
1LPG-63															1LPG-64
1LPG-65															1LPG-66
1LPG-67															1LPG-68
1LPG-69															1LPG-70
1LPG-71															1LPG-72
1LPG-73															1LPG-74
1LPG-75															1LPG-76
1LPG-77															1LPG-78
1LPG-79															1LPG-80
1LPG-81															1LPG-82
1LPG-83															1LPG-84
			Total Load:		9907 VA		16551 VA		5914 VA						
			Total Amps:		88 A		143 A		49 A						

Type Legend:
N=NORMAL G=GFI M=MOTORIZED E=EXISTING ST=SHUNT TRIP A=ARC FAULT H=HANDLE LOCK

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	1847 VA	100.00%	1847 VA		
Motor	72 VA	112.50%	81 VA	**Total Conn. Load:**	32.4 kVA
Other	504 VA	100.00%	504 VA	**Total Est. Demand:**	32.9 kVA
Power	12164 VA	100.00%	12164 VA	**Total Conn. Current:**	90 A
Heating	12355 VA	100.00%	12355 VA	**Total Est. Demand Current:**	91 A
Receptacles	900 VA	100.00%	900 VA		
Water Heater	0 VA	0.00%	0 VA		
Lighting - Exterior	360 VA	125.00%	450 VA		
Kitchen Equipment	1800 VA	90.00%	1620 VA		
Lighting	2369 VA	125.00%	2962 VA		

Notes:

95% CONSTRUCTION DOCUMENTS

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RDG PLANNING ● DESIGN

SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	08/28/25
PROJECT NO:	3007.000.00

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ELECTRICAL SCHEDULES

E06.02

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GENERAL NOTES:

A. SURFACE RACEWAY IS NOT TO BE USED IN ANY FINISHED AREAS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.

B. PROVIDE CONDUIT SLEEVES WITH INSULATED BUSHINGS SERVING ALL LOW VOLTAGE CABLING. DO NOT EXCEED 40% PIPE FILL. WHERE HORIZONTAL LOW VOLTAGE CABLING NEEDS TO PENETRATE A WALL, ELECTRICAL CONTRACTOR SHALL PROVIDE A MINIMUM OF (1) 2" CONDUIT SLEEVE.

C. INSTALL DEVICES SUCH THAT NO TWO DEVICES ON OPPOSITE SIDES OF SAME WALL ARE WITHIN 6" OF EACH OTHER.

D. COORDINATE ELECTRICAL REQUIREMENTS WITH DOOR CONTRACTOR PRIOR TO INSTALLATION.

E. COORDINATE ALL DEVICES WITH ARCHITECTURAL PLANS, CASEWORK SUBMITTALS, & OWNER PROVIDED EQUIPMENT.

F. ALL DEVICES CALLED OUT TO BE INSTALLED AT NON-STANDARD HEIGHTS SHALL BE VERIFIED WITH DESIGN TEAM PRIOR TO ROUGH-IN.

G. ALL NEW WORK INDICATED IN EXISTING WALLS SHALL BE INSTALLED WITH CONCEALED WIRING AND FLUSH-MOUNTED DEVICES. CUTTING AND PATCHING SHALL BE BY GENERAL CONTRACTOR.

H. FIRE ALARM INITIATING DEVICES SHALL NOT BE INSTALLED WITHIN 36 INCHES HORIZONTALLY FROM FORCED AIR HVAC DIFFUSERS OR THE END OF CEILING FAN BLADES.

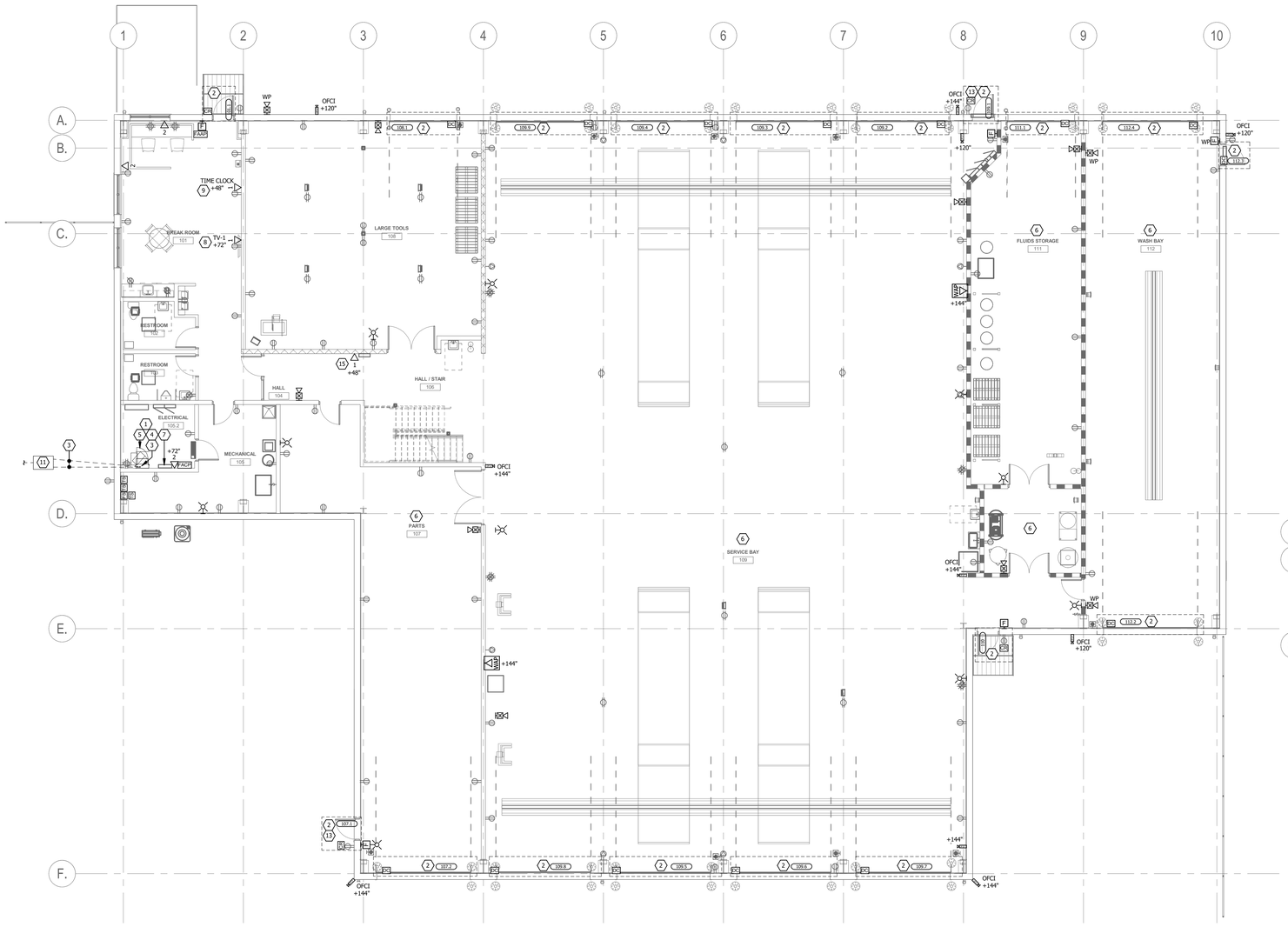
I. OWNER FURNISHED, CONTRACTOR INSTALLED, WIRELESS ACCESS POINTS. OWNER'S STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (2) CATEGORY 6A CABLES TERMINATED ABOVE CEILING TO A BISCUIT JACK. PROVIDE FINAL PATCH CABLES FOR OWNER TO PATCH TO FIELD DEVICE.

J. OWNER FURNISHED VIDEO SURVEILLANCE CAMERA. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A TERMINATED IN WALL BOX OR ON A BISCUIT JACK ABOVE CEILING. SECURITY CAMERAS SHALL BE INSTALLED AND CONNECTED BY SECURITY CONTRACTOR. COORDINATE ALL CAMERA LOCATIONS WITH OWNER PRIOR TO ROUGH-IN. INSTALLING CONTRACTOR SHALL COORDINATE ALL FINAL CAMERA ADJUSTMENTS WITH OWNER.

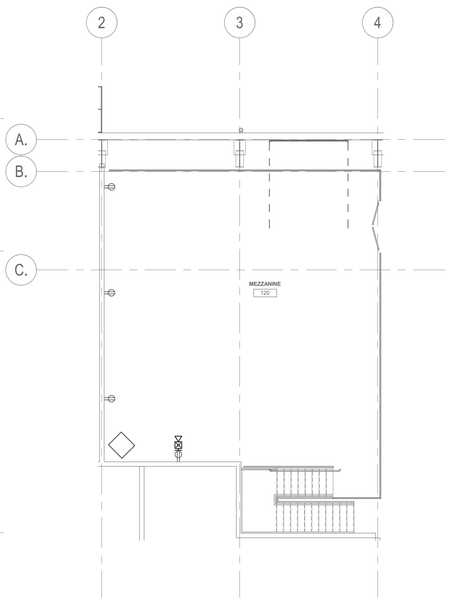
REFERENCED NOTES: (#)

(NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET)

1. THIS ROOM HOUSES ALL NETWORK SYSTEMS, FIRE ALARM, AND SECURITY SYSTEMS FOR THIS BUILDING.
2. ACCESS CONTROL LOCATION. REFER TO LOW VOLTAGE DETAILS AND ARCHITECTURAL SPECIFICATION SECTION 08-7100 FOR OPERATION AND FURTHER ROUGH-IN/BIDDING INFORMATION. COORDINATE ALL DOORHOLDS, CARD READERS, ADA PUSHBUTTONS, AND OTHER ACCESSORIES WITH DESIGN TEAM PRIOR TO ROUGH-IN.
3. ELECTRICAL CONTRACTOR PROVIDED (2) 2" CONDUITS WITH PULL STRINGS. CONDUITS SHALL BE STUBBED 6" ABOVE FINISHED FLOOR IN BUS BARN MECHANICAL ROOM TO HANDHOLE. (1) SHALL BE CAPPED IN HANDHOLE FOR FUTURE USE. SEE SITE PLAN FOR FURTHER DETAIL
4. OWNER'S OUTSIDE PLANT FIBER CABLING CONTRACTOR SHALL PROVIDE (1) 12-STRAND SINGLE-MODE INDOOR OUTDOOR RATED CABLE FROM EXISTING OPERATIONS BUILDING MDF TO BUS BARN BUILDING MECHANICAL ROOM. SEE CIVIL PLANS AND ME0.02 FOR FURTHER COORDINATION AND INFORMATION.
5. TELECOMMUNICATIONS RACK CONTRACTOR FURNISHED CONTRACTOR INSTALLED CHATSWORTH 11790-718 (BASIS OF DESIGN) TELECOM RACK. ELECTRICAL CONTRACTOR SHALL COORDINATE POWER AND DATA LOCATIONS WITH OWNER PRIOR TO ROUGH IN.
   - WALL SHALL BE LINED WITH 4' X 8' SHEETS OF 3/4" RETARDANT PLYWOOD.
   - NEATLY BUNDLE AND MANAGE ALL CABLING AND SUPPORT WITH D-RINGS AND VELCRO STRAPS AS NECESSARY.
   - PROVIDE TELECOM GROUNDING BUSBAR. GROUND AND BOND ALL EQUIPMENT AS IDENTIFIED IN THE TELECOMMUNICATIONS GROUNDING AND BONDING DETAIL.
6. ALL STRUCTURED CABLING SERVING THIS AREA SHALL BE IN CONDUIT. CONDUIT SHALL NOT EXCEED 40% FILL RATE.
7. ACCESS CONTROL CONTRACTOR PROVIDED DOOR CONTROL PANEL. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CAT 6A. COORDINATE LOCATION WITH OTHER TRADES AND ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. OWNER FURNISHED, CONTRACTOR INSTALLED TV DISPLAY AND MOUNT. COORDINATE EXACT HEIGHT FOR ROUGH-IN AND DISPLAY MOUNTING. ALL CABLING SHALL BE HIDDEN BY DISPLAY WHEN MOUNTED. REFER TO ARCHITECTURAL ELEVATIONS.
9. OWNER FURNISHED OWNER INSTALLED EMPLOYEE TIME CLOCK. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CAT6A NETWORK DROP. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
10. FIRE ALARM CONTRACTOR PROVIDED RELAY. FIRE ALARM SHALL SHUT DOWN FANS UPON FIRE ALARM ACTIVATION. COORDINATE FUNCTION AND LOCATION WITH FAN CONTRACTOR PRIOR TO ROUGH-IN.
11. ELECTRICAL CONTRACTOR PROVIDED 2' X 3' HANDHOLE TO SERVE FIBER OPTIC CABLING. SEE ME0.02 SITE PLAN AND TS.01 LOW VOLTAGE DETAILS FOR FURTHER INFORMATION.
12. ELECTRICAL CONTRACTOR PROVIDED 2" CONDUIT SERVING OUTSIDE PLANT (OSP) FIBER SHALL BE CONNECTED TO CONTRACTOR PROVIDED JUNCTION BOX MOUNTED ON EXTERIOR OF BUILDING AT HEIGHT TO ALLOW PASS THROUGH TO ADJACENT ACCESSIBLE CEILING. JUNCTION BOX SIZE AND LOCATION SHALL BE COORDINATED WITH OWNERS OSP CONTRACTOR PRIOR TO ROUGH-IN. SEE ME0.02 FOR FURTHER COORDINATION.
13. PROVIDE ROUGH-IN FOR FUTURE CARD ACCESS SYSTEM. DOOR POSITION SWITCH AND MONITORING SHALL BE PROVIDED AS PART OF THIS PROJECT.
14. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE J-HOOK FOR STRUCTURED CABLING AT CEILING LEVEL. CABLE SHALL ROUTE NEATLY ALONG CEILING STRUCTURE FROM MDF ROOM TO ACCESSIBLE CEILING IN ADDITION.
15. COORDINATE LOCATION OF NETWORK JACK ROUGH-IN WITH FUEL SYSTEM CONTRACTOR PRIOR TO ROUGH-IN. SEE E SHEETS FOR FURTHER INFORMATION.
16. FIRE ALARM CONTRACTOR SHALL PROVIDE CODE COMPLIANT SMOKE DETECTION FOR FIRE SMOKE DAMPER (FSD). FOLLOW NFPA 72 AND FSD MANUFACTURER RECOMMENDATIONS FOR INSTALLATION. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.



1 LEVEL 1 BUS BARN LOW VOLTAGE FLOOR PLAN
1/8" = 1'-0"



2 LEVEL 2 LOW VOLTAGE PLAN
1/8" = 1'-0"

8/20/2025 4:22:39 PM

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE: 08/28/25

PROJECT NO: 3007.090.00

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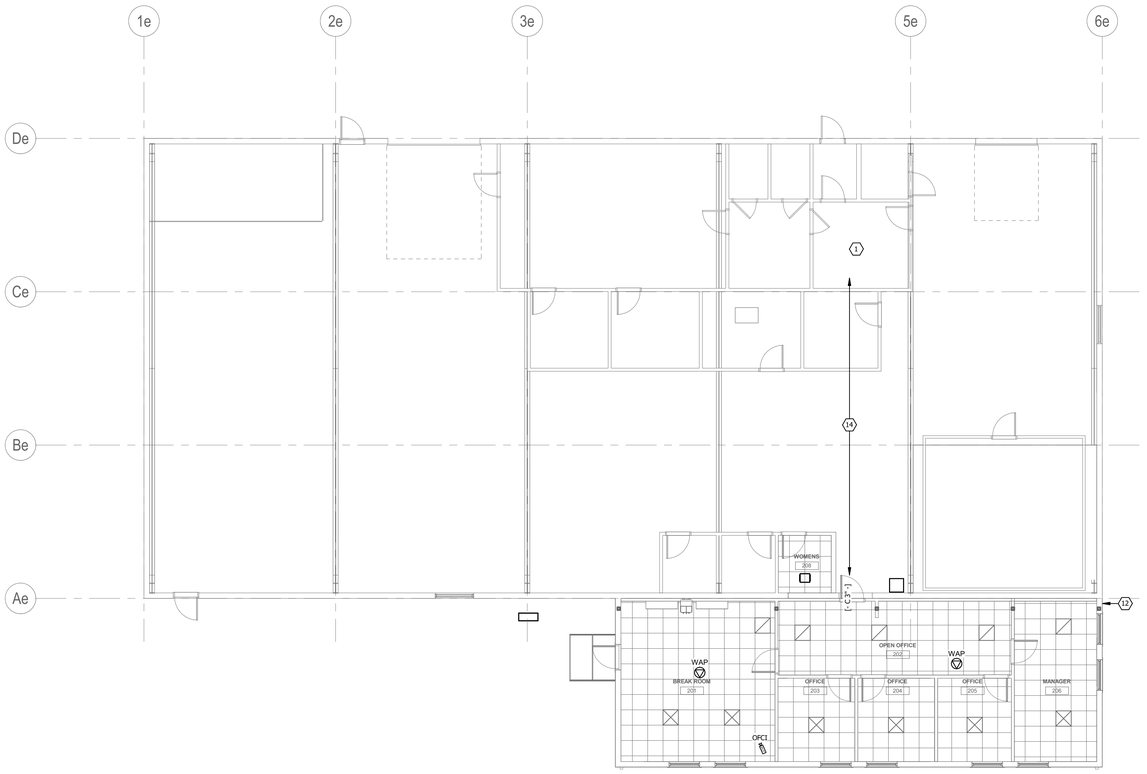
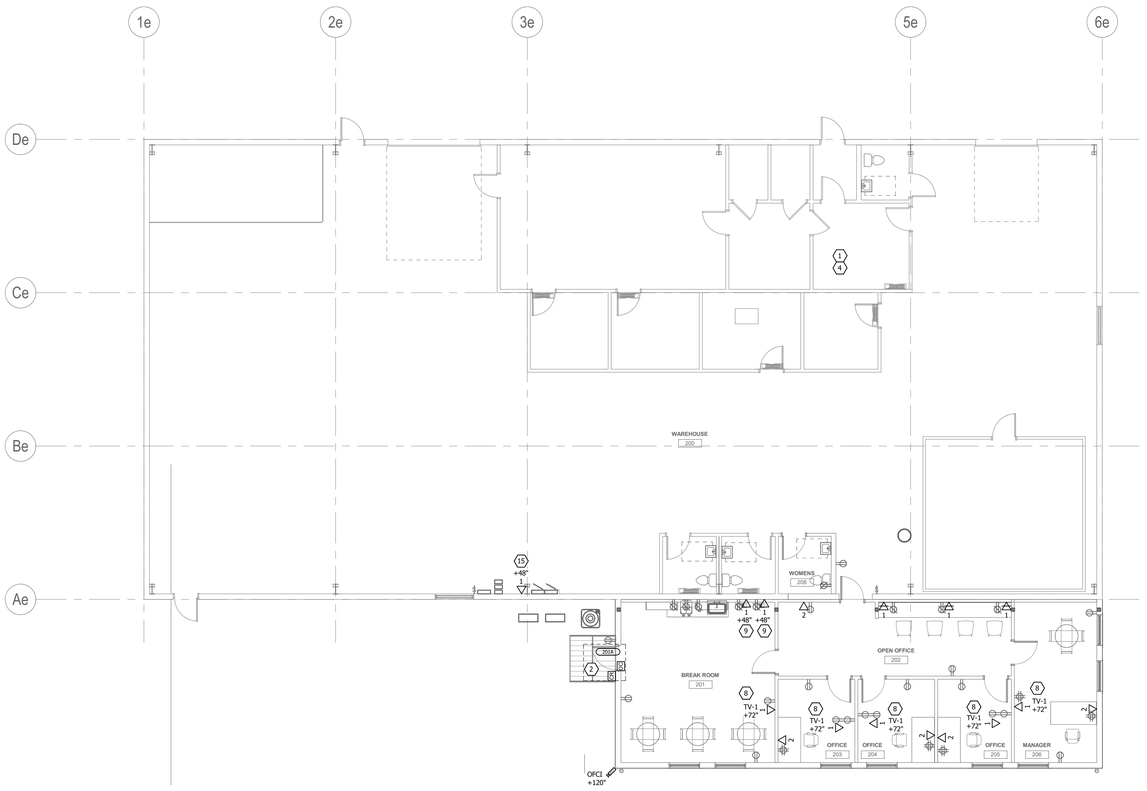
LOW VOLTAGE FLOOR PLAN - BUS BARN

T01.01



N

2 LEVEL 1 OFFICE RENOVATION LOW VOLTAGE CEILING PLAN
1/8" = 1'-0"



N

1 LEVEL 1 OFFICE RENOVATION LOW VOLTAGE FLOOR PLAN
1/8" = 1'-0"

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F. ALL DEVICES CALLED OUT TO BE INSTALLED AT NON-STANDARD HEIGHTS SHALL BE VERIFIED WITH DESIGN TEAM PRIOR TO ROUGH-IN.

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REFERENCED NOTES: (#)

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   - PROVIDE TELECOM GROUNDING BUSBAR. GROUND AND BOND ALL EQUIPMENT AS IDENTIFIED IN THE TELECOMMUNICATIONS GROUNDING AND BONDING DETAIL.
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10. FIRE ALARM CONTRACTOR PROVIDED RELAY. FIRE ALARM SHALL SHUT DOWN FANS UPON FIRE ALARM ACTIVATION. COORDINATE FUNCTION AND LOCATION WITH FAN CONTRACTOR PRIOR TO ROUGH-IN.
11. ELECTRICAL CONTRACTOR PROVIDED 2' X 3' HANDHOLE TO SERVE FIBER OPTIC CABLING. SEE ME0.02 SITE PLAN AND TS.01 LOW VOLTAGE DETAILS FOR FURTHER INFORMATION.
12. ELECTRICAL CONTRACTOR PROVIDED 2" CONDUIT SERVING OUTSIDE PLANT (OSP) FIBER SHALL BE CONNECTED TO CONTRACTOR PROVIDED JUNCTION BOX MOUNTED ON EXTERIOR OF BUILDING AT HEIGHT TO ALLOW PASS THROUGH TO ADJACENT ACCESSIBLE CEILING. JUNCTION BOX SIZE AND LOCATION SHALL BE COORDINATED WITH OWNERS OSP CONTRACTOR PRIOR TO ROUGH-IN. SEE ME0.02 FOR FURTHER COORDINATION.
13. PROVIDE ROUGH-IN FOR FUTURE CARD ACCESS SYSTEM. DOOR POSITION SWITCH AND MONITOKING SHALL BE PROVIDED AS PART OF THIS PROJECT.
14. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE J-HOOK FOR STRUCTURED CABLING AT CEILING LEVEL. CABLE SHALL ROUTE NEATLY ALONG CEILING STRUCTURE FROM MDF ROOM TO ACCESSIBLE CEILING IN ADDITION.
15. COORDINATE LOCATION OF NETWORK JACK ROUGH-IN WITH FUEL SYSTEM CONTRACTOR PRIOR TO ROUGH-IN. SEE E SHEETS FOR FURTHER INFORMATION.
16. FIRE ALARM CONTRACTOR SHALL PROVIDE CODE COMPLIANT SMOKE DETECTION FOR FIRE SMOKE DAMPER (FSD). FOLLOW NFPA 72 AND FSD MANUFACTURER RECOMMENDATIONS FOR INSTALLATION. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
Pleasant Hill, Iowa 50327

Southeast Polk Community School District

KEY PLAN

ISSUANCE	08/28/25
PROJECT NO:	3007.090.00

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LOW VOLTAGE FLOOR PLANS - OPERATIONS

T01.02

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GENERAL NOTES:

A. SURFACE RACEWAY IS NOT TO BE USED IN ANY FINISHED AREAS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.

B. PROVIDE CONDUIT SLEEVES WITH INSULATED BUSHINGS SERVING ALL LOW VOLTAGE CABLING. DO NOT EXCEED 40% PIPE FILL. WHERE HORIZONTAL LOW VOLTAGE CABLING NEEDS TO PENETRATE A WALL, ELECTRICAL CONTRACTOR SHALL PROVIDE A MINIMUM OF (1) 2" CONDUIT SLEEVE.

C. INSTALL DEVICES SUCH THAT NO TWO DEVICES ON OPPOSITE SIDES OF SAME WALL ARE WITHIN 6" OF EACH OTHER.

D. COORDINATE ELECTRICAL REQUIREMENTS WITH DOOR CONTRACTOR PRIOR TO INSTALLATION.

E. COORDINATE ALL DEVICES WITH ARCHITECTURAL PLANS, CASEWORK SUBMITTALS, & OWNER PROVIDED EQUIPMENT.

F. ALL DEVICES CALLED OUT TO BE INSTALLED AT NON-STANDARD HEIGHTS SHALL BE VERIFIED WITH DESIGN TEAM PRIOR TO ROUGH-IN.

G. ALL NEW WORK INDICATED IN EXISTING WALLS SHALL BE INSTALLED WITH CONCEALED WIRING AND FLUSH-MOUNTED DEVICES. CUTTING AND PATCHING SHALL BE BY GENERAL CONTRACTOR.

H. FIRE ALARM INITIATING DEVICES SHALL NOT BE INSTALLED WITHIN 36 INCHES HORIZONTALLY FROM FORCED AIR HVAC DIFFUSERS OR THE END OF CEILING FAN BLADES.

I. OWNER FURNISHED, CONTRACTOR INSTALLED, WIRELESS ACCESS POINTS. OWNER'S STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (2) CATEGORY 6A CABLES TERMINATED ABOVE CEILING TO A BISCUIT JACK. PROVIDE FINAL PATCH CABLES FOR OWNER TO PATCH TO FIELD DEVICE.

J. OWNER FURNISHED VIDEO SURVEILLANCE CAMERA. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A TERMINATED IN WALL BOX OR ON A BISCUIT JACK ABOVE CEILING. SECURITY CAMERAS SHALL BE INSTALLED AND CONNECTED BY SECURITY CONTRACTOR. COORDINATE ALL CAMERA LOCATIONS WITH OWNER PRIOR TO ROUGH-IN. INSTALLING CONTRACTOR SHALL COORDINATE ALL FINAL CAMERA ADJUSTMENTS WITH OWNER.

REFERENCED NOTES: (#)

(NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET)

1. THIS ROOM HOUSES ALL NETWORK SYSTEMS, FIRE ALARM, AND SECURITY SYSTEMS FOR THIS BUILDING.
2. ACCESS CONTROL LOCATION. REFER TO LOW VOLTAGE DETAILS AND ARCHITECTURAL SPECIFICATION SECTION 08-7100 FOR OPERATION AND FURTHER ROUGH-IN/BIDDING INFORMATION. COORDINATE ALL DOORHOLDS, CARD READERS, ADA PUSHBUTTONS, AND OTHER ACCESSORIES WITH DESIGN TEAM PRIOR TO ROUGH-IN.
3. ELECTRICAL CONTRACTOR PROVIDED (2) 2" CONDUITS WITH PULL STRINGS. CONDUITS SHALL BE STUBBED 6" ABOVE FINISHED FLOOR IN BUS BARN MECHANICAL ROOM TO HANDHOLE. (1) SHALL BE CAPPED IN HANDHOLE FOR FUTURE USE. SEE SITE PLAN FOR FURTHER DETAIL
4. OWNER'S OUTSIDE PLANT FIBER CABLING CONTRACTOR SHALL PROVIDE (1) 12-STRAND SINGLE-MODE INDOOR OUTDOOR RATED CABLE FROM EXISTING OPERATIONS BUILDING MDF TO BUS BARN BUILDING MECHANICAL ROOM. SEE CIVIL PLANS AND ME0.02 FOR FURTHER COORDINATION AND INFORMATION.
5. TELECOMMUNICATIONS RACK CONTRACTOR FURNISHED CONTRACTOR INSTALLED CHATSWORTH 11790-718 (BASIS OF DESIGN) TELECOM RACK. ELECTRICAL CONTRACTOR SHALL COORDINATE POWER AND DATA LOCATIONS WITH OWNER PRIOR TO ROUGH IN.
   - WALL SHALL BE LINED WITH 4' X 8' SHEETS OF 3/4" RETARDANT PLYWOOD.
   - NEATLY BUNDLE AND MANAGE ALL CABLING AND SUPPORT WITH D-RINGS AND VELCRO STRAPS AS NECESSARY.
   - PROVIDE TELECOM GROUNDING BUSBAR. GROUND AND BOND ALL EQUIPMENT AS IDENTIFIED IN THE TELECOMMUNICATIONS GROUNDING AND BONDING DETAIL.
6. ALL STRUCTURED CABLING SERVING THIS AREA SHALL BE IN CONDUIT. CONDUIT SHALL NOT EXCEED 40% FILL RATE.
7. ACCESS CONTROL CONTRACTOR PROVIDED DOOR CONTROL PANEL. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CAT 6A. COORDINATE LOCATION WITH OTHER TRADES AND ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. OWNER FURNISHED, CONTRACTOR INSTALLED TV DISPLAY AND MOUNT. COORDINATE EXACT HEIGHT FOR ROUGH-IN AND DISPLAY MOUNTING. ALL CABLING SHALL BE HIDDEN BY DISPLAY WHEN MOUNTED. REFER TO ARCHITECTURAL ELEVATIONS.
9. OWNER FURNISHED OWNER INSTALLED EMPLOYEE TIME CLOCK. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CAT6A NETWORK DROP. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
10. FIRE ALARM CONTRACTOR PROVIDED RELAY. FIRE ALARM SHALL SHUT DOWN FANS UPON FIRE ALARM ACTIVATION. COORDINATE FUNCTION AND LOCATION WITH FAN CONTRACTOR PRIOR TO ROUGH-IN.
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13. PROVIDE ROUGH-IN FOR FUTURE CARD ACCESS SYSTEM. DOOR POSITION SWITCH AND MONITORING SHALL BE PROVIDED AS PART OF THIS PROJECT.
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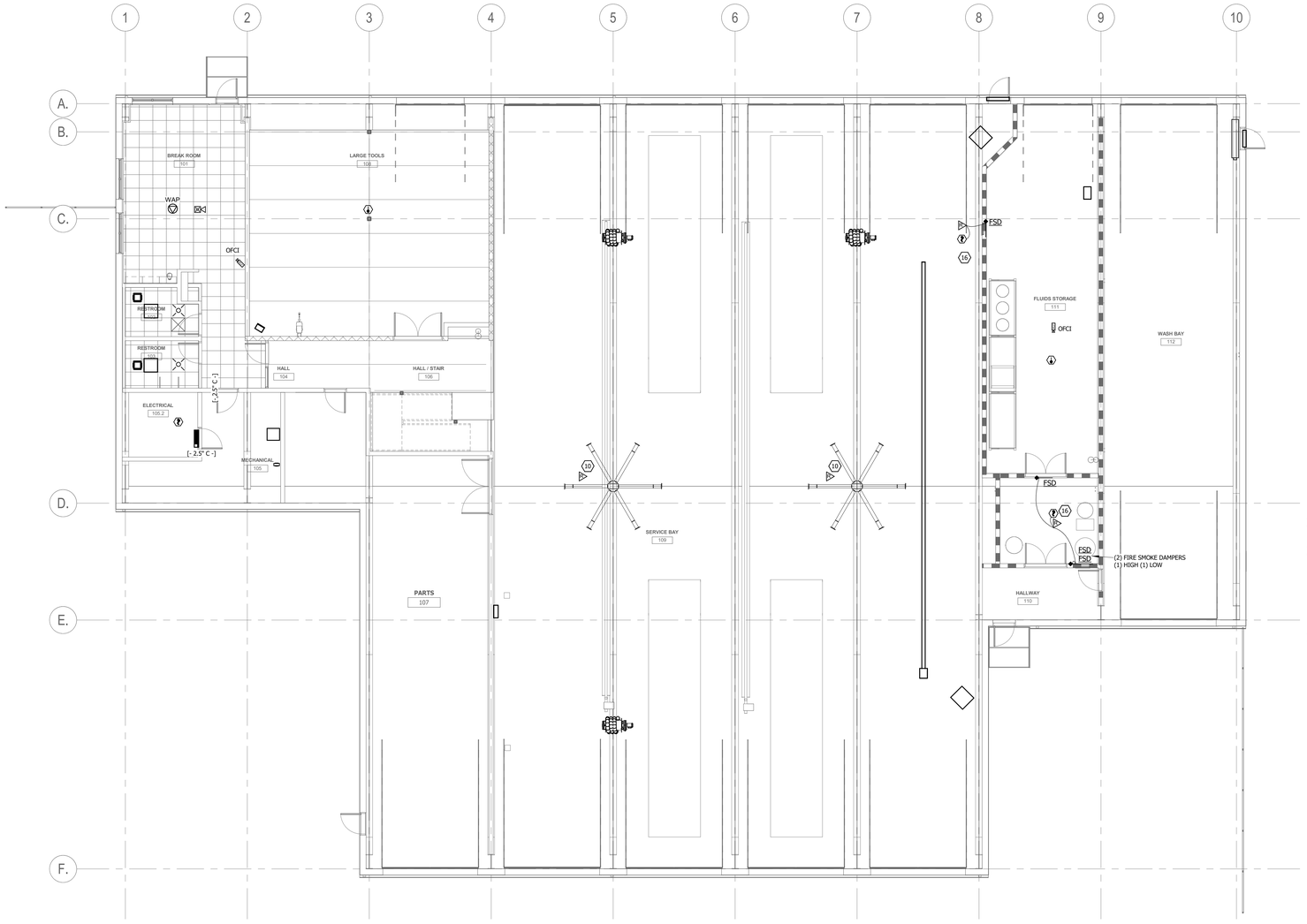
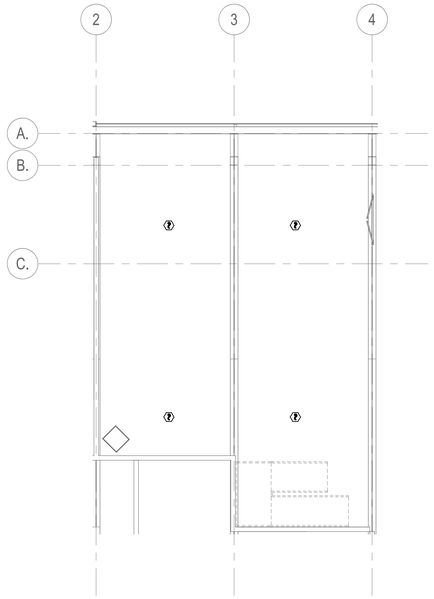


1 LEVEL 1 BUS BARN LOW VOLTAGE CEILING PLAN
1/8" = 1'-0"



2 LEVEL 2 LOW VOLATAGE CEILING PLAN
1/8" = 1'-0"

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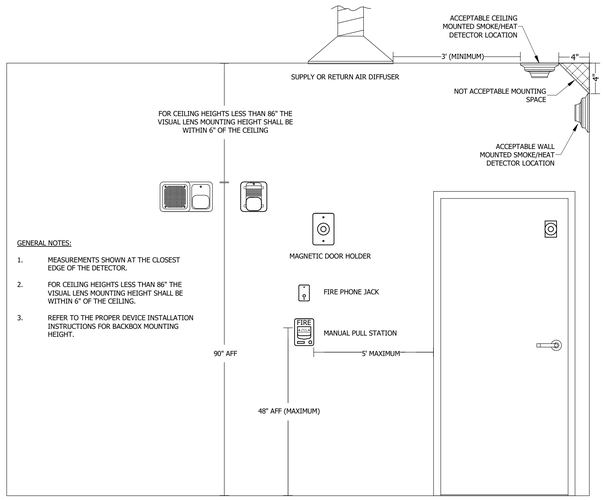
SOUTHEAST POLK TRANSPORTATION BUILDING

LOW VOLTAGE CEILING PLAN - BUS BARN

T02.01



1 FIRE ALARM MOUNTING DETAILS
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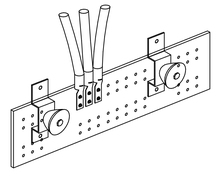
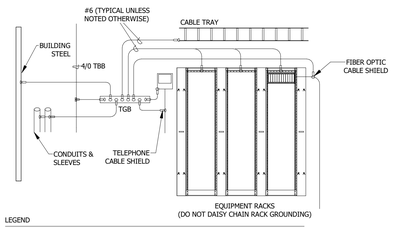


GROUND BAR NOTES:

1. INSTALL A 1/4" X 4" X 24" SOLID COPPER GROUND BAR WITH INSULATORS AND BRACKETS EQUAL TO ERITECH "EGBA" SERIES GROUND BAR ADJACENT TO EACH SERVICE ENTRANCE.
2. GROUND BAR SHALL HAVE A MINIMUM AMPACITY EQUIVALENT TO THE MINIMUM SIZE OF THE GROUNDING ELECTRODE CONDUCTOR ALLOWED BY NEC TABLE 250.66
3. GROUND BAR SHALL HAVE 50% OF ITS OPENINGS UNUSED.

2 LOW VOLTAGE GROUND BAR DETAIL
No Scale



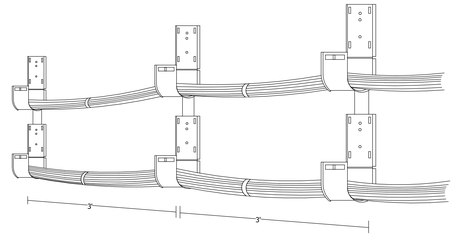
LEGEND

⊣⊢	DOUBLE LUG CONNECTOR	**TGB**	TELECOMMUNICATIONS GROUNDING BUSBAR
⊩	CRIMP STYLE IRREVERSIBLE CONNECTION (H-TAP)	**TBB**	TELECOMMUNICATIONS BONDING BACKBONE

NOTES:

1. PROVIDE GROUND CONDUCTOR TO MAIN TELECOM GROUND BUS BAR OR MAIN ELECTRICAL SERVICE PANEL.

3 LOW VOLTAGE GROUNDING DIAGRAM
No Scale



J-HOOK PATHWAY GENERAL NOTES:

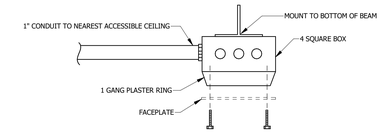
A. **THIS DETAIL ILLUSTRATES ACCEPTABLE INSTALLATION PRACTICES IN ACCESSIBLE CEILING AREAS. IN EXPOSED CEILING LOCATIONS, CABLING SHALL BE CONCEALED IN CONDUIT.**

B. J-HOOKS SHALL BE SPACED 3 FEET APART ON CENTER AND AT A MAXIMUM OF NO MORE THAN 5 FEET APART IN SPACES WHERE 3 FEET IS NOT AN OPTION. LOOSELY BUNDLE CABLE AND MANAGE UTILIZING VELCRO STRIPS.

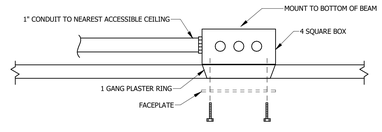
C. KEEP ALL DATA CABLING ISOLATED FROM OTHER SYSTEMS. J-HOOK SYSTEM SHALL ALLOW OTHER HOOKS TO ATTACH IN A STACKING METHOD. KEEP FIRE ALARM CABLING IN ITS OWN HOOK PATHWAY.

D. WHEN CABLING IS ROUTED TO A CEILING DEVICE, CABLING SHALL BE SUPPORTED AND CABLING KEPT OFF OF ALL CEILING TILES AND ABOVE CEILING EQUIPMENT.

4 J-HOOK PATHWAY DETAIL
No Scale

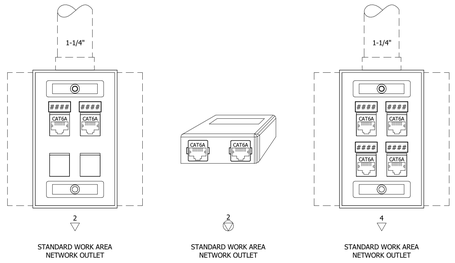


FOR EXPOSED CEILING



FOR HARD CEILING

5 LOW VOLTAGE CEILING ROUGH-IN DETAIL
No Scale



STANDARD WORK AREA NETWORK OUTLET

STANDARD WORK AREA NETWORK OUTLET

STANDARD WORK AREA NETWORK OUTLET

NOTES:

A. MINIMUM CONDUIT SIZE FOR LOW VOLTAGE WIRING SHALL BE 1-1/4". REFER TO SPECIFICATIONS FOR DETAILS.

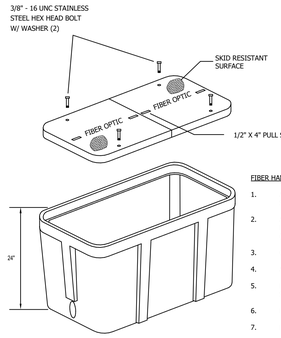
B. ALL STANDARD WORK AREA OUTLETS SHALL BE PROVIDED WITH TWO (2) CATEGORY 6[A] CABLES.

C. DETAILS ARE DRAWN BASED ON STUD TYPE CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL PROVIDE ONE (1) 4-11/16" BACKBOX FOR ALL LOW VOLTAGE OUTLETS WITH A SINGLE GANG OPENING. IF OUTLET IS LOCATED INSIDE A CONCRETE WALL, ELECTRICAL CONTRACTOR SHALL UTILIZE A SINGLE GANG DEEP MASONRY BOX FOR ROUGH-IN PURPOSES.

D. STRUCTURED CABLING SUBCONTRACTOR SHALL PROVIDE 4-PORT FACEPLATE AS SHOWN. PROVIDE BLANKS FOR ANY UNUSED OPENINGS. REFER TO SPECIFICATION 27 1005 FOR FURTHER DETAIL.

E. LOCATIONS SHOWING A QUANTITY OF "0" NETWORK DROPS SHALL BE ROUGH-IN FOR FUTURE USE. ELECTRICAL CONTRACTOR SHALL PROVIDE BLANK PLATE.

6 TELECOM DEVICE DETAIL CAT6A
No Scale



FIBER HANDHOLES:

1. ALL HANDHOLES SHALL BE PLACED OUTSIDE OF SIDEWALKS AND PAVED AREAS WITH RADIUS SWEEPS AS NECESSARY WHERE CONDUIT IS PUSHED UNDER WALKS.
2. ALL PENETRATIONS INTO HANDHOLES SHALL BE CORE-DRILLED A MINIMUM OF 2-IN ABOVE BASE (FLOOR) OF HANDHOLE. IF KNOCKOUTS ARE UTILIZED THESE SHALL BE 2-IN ABOVE BASE (FLOOR).
3. CONDUIT SHALL NOT ENTER FROM THE BOTTOM OF THE HANDHOLE.
4. ALL PENETRATIONS SHALL BE SEALED WITH HYDRAULIC CEMENT.
5. DO NOT TRIM EXTRA CONDUIT FROM HANDHOLES UNTIL CONDUIT HAS ADEQUATE TIME TO SHRINK. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SHRINKAGE.
6. PLUGS SHALL BE INSTALLED TIGHT AND PER MANUFACTURER'S RECOMMENDATIONS.
7. PROVIDE GROUND ROD AT ALL HANDHOLES.

THE PRECAST-POLYMER CONCRETE HANDHOLE SHALL BE 24" X 36" WITH THE LEGEND "FIBER OPTIC" ON THE 20K LID. THE LID SHALL BE TWO-PIECE. A MINIMUM OF FOUR (4) CABLE HOOKS WILL BE INSTALLED IN EACH HANDHOLE TO SUPPORT CABLES. TWELVE INCHES OF COARSE AGGREGATE WILL BE PLACED UNDER THE HANDHOLE. A MARKER LOCATOR BALL SHALL BE PLACED IN THE HANDHOLE.

PRECASE POLYMER-CONCRETE HANDHOLE (QUAZITE OR APPROVED EQUAL)

7 QUAZITE BOX DETAIL
No Scale

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LOW VOLTAGE DETAILS

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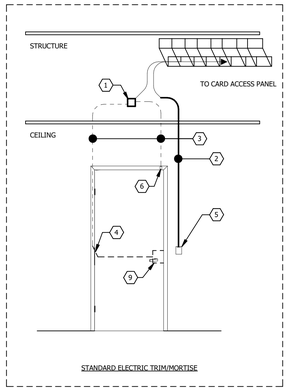
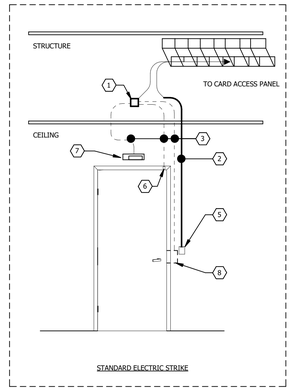


STANDARD ELECTRIC TRIM/MORTISE



STANDARD ELECTRIC STRIKE

ACCESS CONTROL GENERAL NOTES:

A. DETAIL DRAWINGS ARE INTENDED TO REFLECT ACCEPTABLE INSTALLATION PRACTICES. INDIVIDUAL DOOR OPENINGS ARE NOT SHOWN AND WILL NEED TO BE COORDINATED WITH DIV 08 7100 SPECIFICATION. FINAL ROUGH IN DRAWINGS FOR INDIVIDUAL DOORS SHALL BE PROVIDED BY SECURITY CONTRACTOR.

B. COORDINATE FIRE ALARM DOOR RELEASE CONNECTIONS WITH FIRE ALARM CONTRACTOR.

C. COORDINATE EXACT LOCATIONS OF PUSH BUTTONS, CARD READERS, AND DURESS BUTTONS WITH OWNER.

ACCESS CONTROL REFERENCED NOTES:

1. 4 SQ JUNCTION BOX - PROVIDED BY ELECTRICAL CONTRACTOR IN ACCESSIBLE CEILING SPACE ON SECURE SIDE OF DOOR.
2. 3/4" CONDUIT RACEWAY WITH STRING - PROVIDED BY ELECTRICAL CONTRACTOR
3. 1/2" FLEX RACEWAY WITH STRING - PROVIDED BY ELECTRICAL CONTRACTOR
4. POWER TRANSFER HINGE - PROVIDED BY DOOR HARDWARE CONTRACTOR COORDINATE WITH DIVISION 08 CONTRACTOR ON FINAL LOCK CONNECTIONS WITH SYSTEMS BEING PROVIDED.
5. CARD READER - PROVIDED BY SECURITY CONTRACTOR
6. DOOR POSITION SWITCH - COORDINATE LOCATION WITH DOOR HARDWARE CONTRACTOR
7. MOTION REQUEST TO EXIT - PROVIDED BY SECURITY CONTRACTOR
8. ELECTRIFIED STRIKE - PROVIDED BY DOOR HARDWARE CONTRACTOR
9. MORTISE LOCK - PROVIDED BY DOOR HARDWARE CONTRACTOR

1 ACCESS CONTROL DETAIL
No Scale

MATRIX OF RESPONSIBILITIES FOR DOOR HARDWARE

ELECTRICAL CONTRACTOR (SPECIFICATION SECTION 26)

ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL OF THE FOLLOWING ITEMS AS IT RELATES TO THE ACCESS CONTROL SYSTEM AND DOOR HARDWARE COMPONENTS:

- CONDUIT PATHWAYS, SLEEVES AND PENETRATIONS FROM ACCESS CONTROL HEAD END LOCATION TO EACH DOOR'S RESPECTIVE JUNCTION BOX. TREAT EACH THROUGH PENETRATION AS A ONE HOUR RATED WALL AND PROVIDE APPROPRIATE FIRE STOPPING REQUIRED.
- ALL CONDUIT PATHWAYS FROM EACH RESPECTIVE DOOR'S JUNCTION BOX OR ACCESS CONTROL ENCLOSURE TO THE FRAME OF THE DOOR FOR EACH REQUIRED DEVICE.
- ALL CONDUIT PATHWAYS AS IT IS REQUIRED FOR THE AUTOMATIC DOOR OPERATORS AND ACTUATORS.
- ALL REQUIRED ROUGH-IN AND JUNCTION BOXES FOR ACCESS CONTROL SYSTEM'S PROXIMITY CARD READERS, AUTOMATIC DOOR OPENER ACTUATORS, AUXILIARY ALARM DEVICES AND J-BOX WIRING POINTS AS SHOWN IN THE DETAILS.
- ALL 110VAC CIRCUITS FOR ACCESS CONTROL POWER SUPPLIES, AUTOMATIC DOOR OPERATORS AND ANY CENTRALIZED POWER SUPPLIES AT THE ACCESS CONTROL HEAD END. COORDINATE WITH INSTALLING CONTRACTORS FOR THE ACCESS CONTROL SYSTEM, AUTOMATIC DOOR OPERATORS AND DOOR HARDWARE PROVIDERS ON SPECIFIC NEEDS. REFER TO POWER PLANS FOR CIRCUITING INFORMATION.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PULLING THE HARDWARE CABLING THROUGH THE FRAME AND SHALL EITHER COORDINATE WITH THE HARDWARE INSTALLER OR THEIR ACCESS CONTROL SUB TO ENSURE THAT THIS GETS DONE APPROPRIATELY DURING ROUGH-IN AND FRAME INSTALLATION AND/OR RETROFITTING OF EXISTING DOORS.

DOOR HARDWARE CONTRACTOR (SPECIFICATION SECTION 08 7100)

DOOR HARDWARE CONTRACTOR SHALL PROVIDE AND INSTALL ALL OF THE FOLLOWING ITEMS AS IT RELATES TO THE ACCESS CONTROL SYSTEM AND DOOR HARDWARE COMPONENTS:

- ALL ELECTRIFIED LOCKSETS, STRIKES, PANIC BARS AND INTEGRATED PROXIMITY READER/MAGSTRIPE LOCKSETS SHALL BE PROVIDED AND INSTALLED BY DOOR HARDWARE CONTRACTOR.
- ADA OPERATORS SHALL BE PROVIDED BY DOOR HARDWARE CONTRACTOR AND INSTALLED ONLY BY A CERTIFIED AUTO OPERATOR INSTALLER. FINAL POWER CONNECTION SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- COORDINATE ALL POWER REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
- ALL OTHER MECHANICAL AND NON-ELECTRIFIED DOOR HARDWARE COMPONENTS INCLUDING BUT NOT LIMITED TO, LOCKSETS, CYLINDERS, HINGES, KICKPLATES, SEALS, WALL STOPS, GASKETS, CLOSERS AND PUSHPLATES SHALL ALL BE PROVIDED AND INSTALLED BY THE DOOR HARDWARE CONTRACTOR.
- DOOR HARDWARE SUPPLIER SHALL SUPPLY ALL APPROPRIATE POWER SUPPLIES NEEDED TO CONTROL AND HANDLE THE APPROPRIATE POWER REQUIREMENTS OF THE ELECTRIFIED HARDWARE THEY ARE PROVIDING.
- COORDINATE ALL INTEGRAL ACCESS CONTROL DEVICES SUCH AS INTEGRAL CARD READERS WITH THE ACCESS CONTROL CONTRACTORS FOR SEAMLESS INTEGRATION.

ACCESS CONTROL CONTRACTOR

ACCESS CONTROL CONTRACTOR SHALL PROVIDE AND INSTALL ALL OF THE FOLLOWING ITEMS AS IT RELATES TO THE ACCESS CONTROL SYSTEM AND DOOR HARDWARE COMPONENTS:

- **THIS CONTRACTOR SHALL AT BID TIME, COORDINATE ALL COMPONENTS/DEVICES AS SPECIFIED IN 08 7100. LOOK FOR DOOR POSITION SWITCHES, INTEGRAL AND SPECIAL CARD READERS, AND POWER SUPPLY DISCREPANCIES THAT MAY EFFECT COUNTS OR BID. ALL CONCERNS SHALL BE BROUGHT TO ENGINEER FOR CLARIFICATION DURING ADDENDA PHASE.**
- COORDINATE FRAME PREP REQUIREMENTS WITH DOOR FRAME CONTRACTOR. ACCESS CONTROL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF PULLING AND TERMINATION OF ALL LOW VOLTAGE CONNECTIONS TO THE CARD ACCESS SYSTEM FOR OPERATION.
- MOTION DETECTORS SHALL BE INSTALLED WHERE NOTED TO SHUNT ALARMS ON THE ACCESS SYSTEM WHILE ALLOWING EGRESS.
- STANDALONE PROXIMITY READERS SHALL BE INSTALLED AT LOCATIONS IDENTIFIED ON THE FLOOR PLANS.
- ALL HEAD END SERVERS, ENCLOSURES, CONTROLLERS, READERS, INPUT/OUTPUT BOARDS AND LOCAL POWER SUPPLIES REQUIRED TO CREATE A FULLY FUNCTIONAL ACCESS CONTROL SYSTEM.
- ACCESS CONTROL CABLING AND TERMINATIONS FOR ALL ACCESS CONTROL RELATED DOOR HARDWARE COMPONENTS AT BOTH THE HEAD END LOCATION AND AT EACH DOOR LOCATION. DATA CABLE AND POWER OVER ETHERNET SWITCH SHALL BE OWNER PROVIDED.
- SOFTWARE PROGRAMMING FOR EACH INDIVIDUAL OPENING. COORDINATE ALL LOCK/UNLOCK DOOR SCHEDULES AND DOOR LABELING SCHEME WITH OWNER PRIOR TO PROGRAMMING.
- ACCESS CONTROL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ELECTRICAL CONTRACTOR AND AUTOMATIC OPERATOR CONTRACTOR WITH LOCATIONS HAVING BOTH AUTOMATIC DOOR OPERATORS AND ACCESS CONTROL.
- ACCESS CONTROL CONTRACTOR SHALL PROVIDE FREE EGRESS FUNCTIONALITY. UPON PRESSING THE INTERIOR ACTUATOR, THE DOOR SHALL BOTH SIMULTANEOUSLY UNLOCK AND OPEN. PROVIDE ALL WIRING AND RELAY INTERFACES WITH THE DOOR OPERATOR TO CREATE THIS FUNCTIONALITY.
- ACCESS CONTROL CONTRACTOR IS RESPONSIBLE FOR COORDINATING EACH OPENING'S NEED FOR FUNCTIONALITY DURING THE EVENT OF A FIRE. COORDINATE SPECIFIC CABLE DROP AND/OR FIRE ALARM RELAY NEEDS WITH FIRE ALARM CONTRACTOR.
- FINAL PERFORMANCE TESTING OF EACH LOCATION SHALL BE PROVIDED BY THE ACCESS CONTROL CONTRACTOR.
- INTEGRATE WITH ALL AUXILIARY INPUTS AND OUTSIDE SYSTEM INFLUENCES SUCH AS, BUT NOT LIMITED TO, VIDEO SURVEILLANCE, AUXILIARY LOCK DOWN OR DOOR RELEASE BUTTONS, FIRE ALARM, BURGLAR SYSTEMS, ETC.

ADDITIONAL SPECIFICATION SECTION 27 ITEMS

SECTION 27 CONTRACTOR SHALL PROVIDE AND INSTALL ALL OF THE FOLLOWING ITEMS AS IT RELATES TO THE ACCESS CONTROL SYSTEM AND DOOR HARDWARE COMPONENTS:

- ALL CATEGORY 6 OR 6A CABLING TO A WORK AREA OUTLET FOR EACH COORDINATED ACCESS CONTROL PANEL LOCATION.
- FINAL PATCH CORD TO EQUIPMENT.

ADDITIONAL OWNER ITEMS

OWNER SHALL PROVIDE AND INSTALL ALL OF THE FOLLOWING ITEMS AS IT RELATES TO THE ACCESS CONTROL SYSTEM AND DOOR HARDWARE COMPONENTS:

- POWER OVER ETHERNET SWITCHES FOR THE ACCESS CONTROL PANELS AND ELECTRIC STRIKES.
- IP ADDRESS SCHEME FOR ALL IP DEVICES. ACCESS CONTROL CONTRACTOR SHALL COORDINATE CLOSELY WITH THE OWNER FOR THIS INFORMATION.

2 MATRIX OF RESPONSIBLITY FOR ACCESS CONTROL
No Scale

95% CONSTRUCTION DOCUMENTS

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SOUTHEAST POLK TRANSPORTATION BUILDING

8443 NE University Avenue
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Southeast Polk Community School District

KEY PLAN

ISSUANCE 08/28/25

PROJECT NO: 3007.090.00

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LOW VOLTAGE DETAILS

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