# Final Development Plan

NW ½ Section 16, Township 47 North, Range 31 West Lee's Summit, Jackson County, Missouri

1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. 2 ~ ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR ON THE FINAL PLAT.

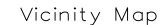
3 ~ ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. 4 ~ THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR

TO ANY LAND DISTURBANCE WORK AT (816) 969-1200. 5 ~ THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.

6 ~ THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND OBTAIN THE APPROPRIATE BLASTING PERMITS FOR A REQUIRED BLASTING. IF BLASTING IS ALLOWED, ALL BLASTING SHALL CONFORM

TO STATE REGULATIONS AND LOCAL ORDINANCES.

# SE 16th Ter



# **UTILITY COMPANIES:**

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS. EVERGY ~ 298-1196 MISSOURI GAS ENERGY ~ 756-5261 SOUTHWESTERN BELL TELEPHONE ~ 761-5011 COMCAST CABLE ~ 795-1100 WILLIAMS PIPELINE ~ 422-6300 CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800 CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTIONS ~ 969-1800 CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900

PROPERTY DESCRIPTION

Lot 294, Newberry Landings 1st Plat

MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

SITE IS LOCATED ON FIRM PANEL 29095C0438G, DATED JANUARY 20, 2017 THE SITE IS LOCATED IN ZONE "X".

# **INDEX OF SHEETS:**

C.001 ~ COVER SHEET C.050 ~ ESC PHASE 1 PLAN

C.051 ~ ESC PHASE 2 PLAN

C.052 ~ ESC PHASE 3 PLAN

C.100 ~ SITE PLAN C.101 ~ DIMENSION PLAN

C.200 ~ GRADING PLAN

C.201 ~ SPOT ELEVATIONS

C.202 ~ PRE-DEVELOPMENT DRAINAGE AREAS

C.203 ~ POST-DEVELOPMENT DRAINAGE AREAS C.300 ~ ROOF DRAIN PLAN

C.400 ~ UTILITY PLAN GENERAL LAYOUT

C.401 ~ STANDARD DETAIL SHEET

L.100 ~ LANDSCAPE PLAN L.100 ~ LANDSCAPE DETAILS

DETENTION BASIN Building #294 21,250 sf FF = 1006.50' FUTURE LOT 2

ALL PAVING ON THE PARKING LOT WILL COMPLY WITH THE UNIFIED DEVELOPMENT ORDINANCE ARTICLE 12 IN TERMS



FINAL DEVELOPMENT PLAN

SCALE: 1" = 40'

# Site Data Table:

77,968 sq. ft (1.79 Ac.)

17,937.50 sq. ft. (0.41 Acres) Building Area - Warehouse Building Area - Office 3,312.50 sq. ft. (0.08 Acres) 21,250 sq. ft. (0.49 Acres) Total Building Area

31,750 sq. ft. (0.73 Acres) Parking/Sidewalk 53,000 sq. ft. (1.22 Acres) 67.98% of Site Impervious Area

27.25%

**Total Parking** 

Floor-Area-Ratio

32 Standard (1 ADA Accessible 1 ADA Van Accessible)

4 Spaces per 1000 sq.ft. = 3.31 x 4 = 14 Spaces 1 Spaces per 1000 sq.ft. = 17.94 x 1 = 18 Spaces Warehouse/Storage: 32 Spaces

PI - Planned Industrial **Current Zoning:** Current Use: Commercial Office / Warehouse Proposed Use

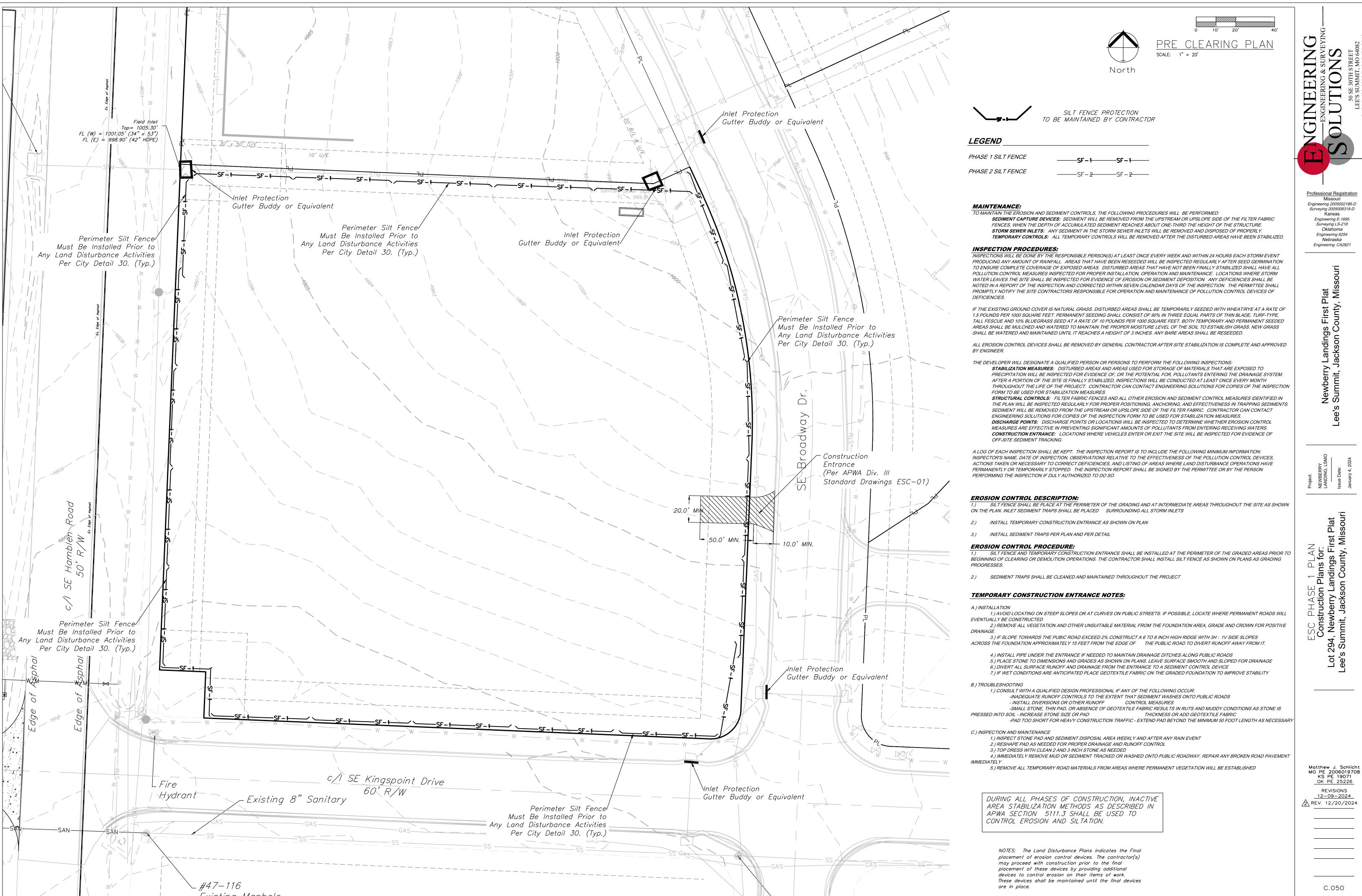
Sanitary Sewer Service Sanitary service will be provided from the existing sanitary sewer located on the east side of

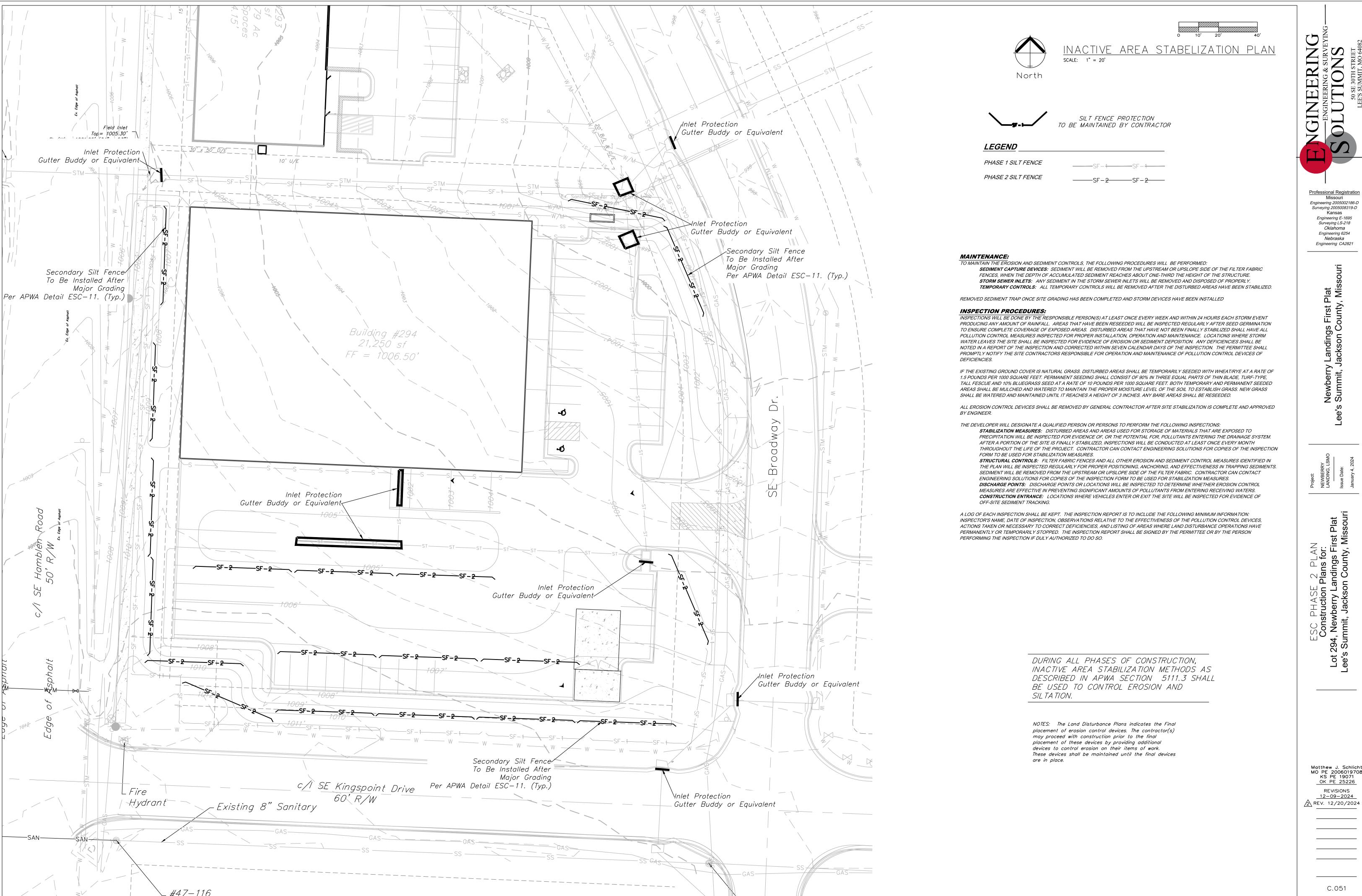
Water service will be provided from the existing main located on the east side of the property.

Professional Registration Engineering 2005002186-D Surveying 2005008319-D Engineering E-1695 Surveying LS-218 Engineering 6254 Engineering CA2821

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2 REV. 12/20/2024

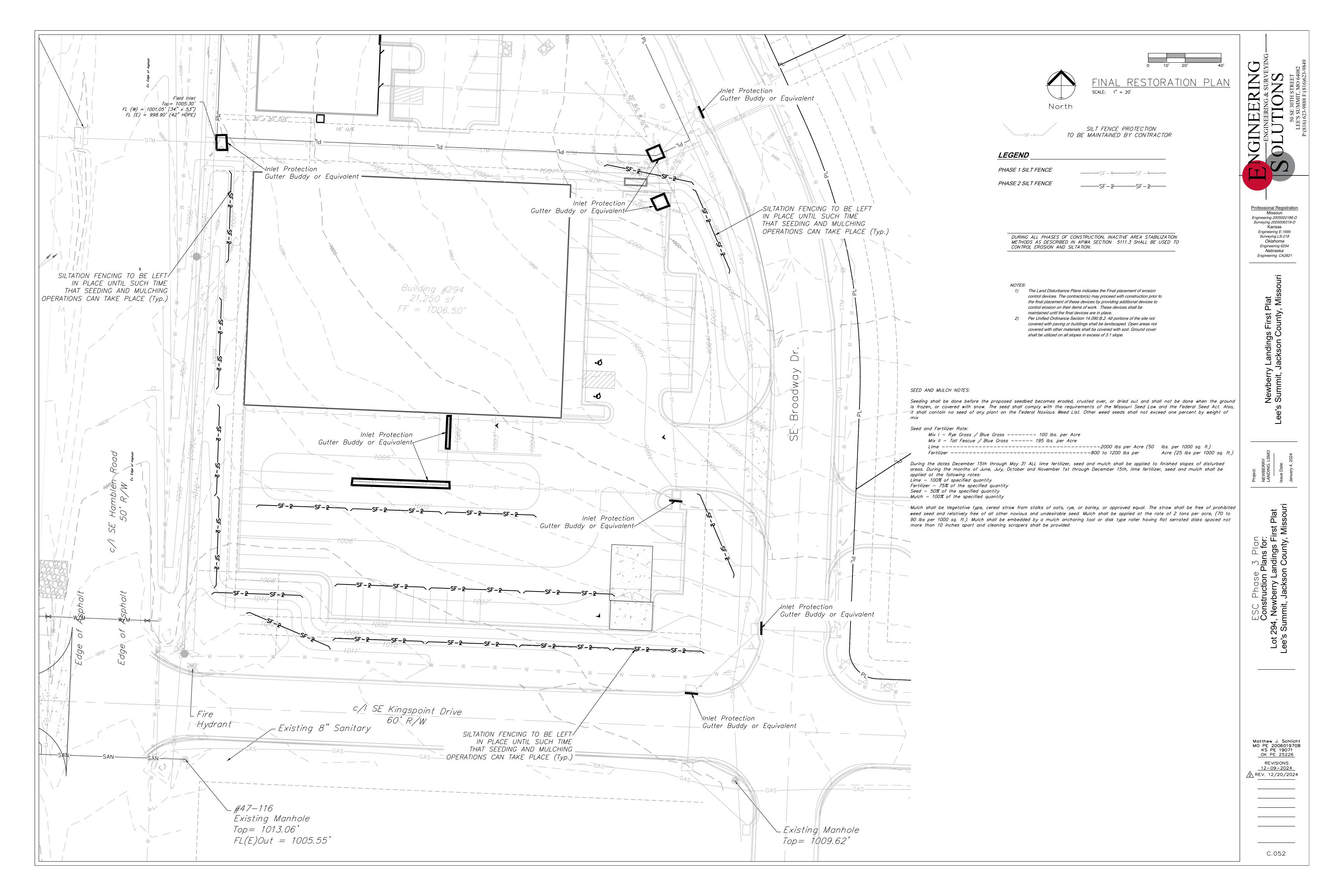


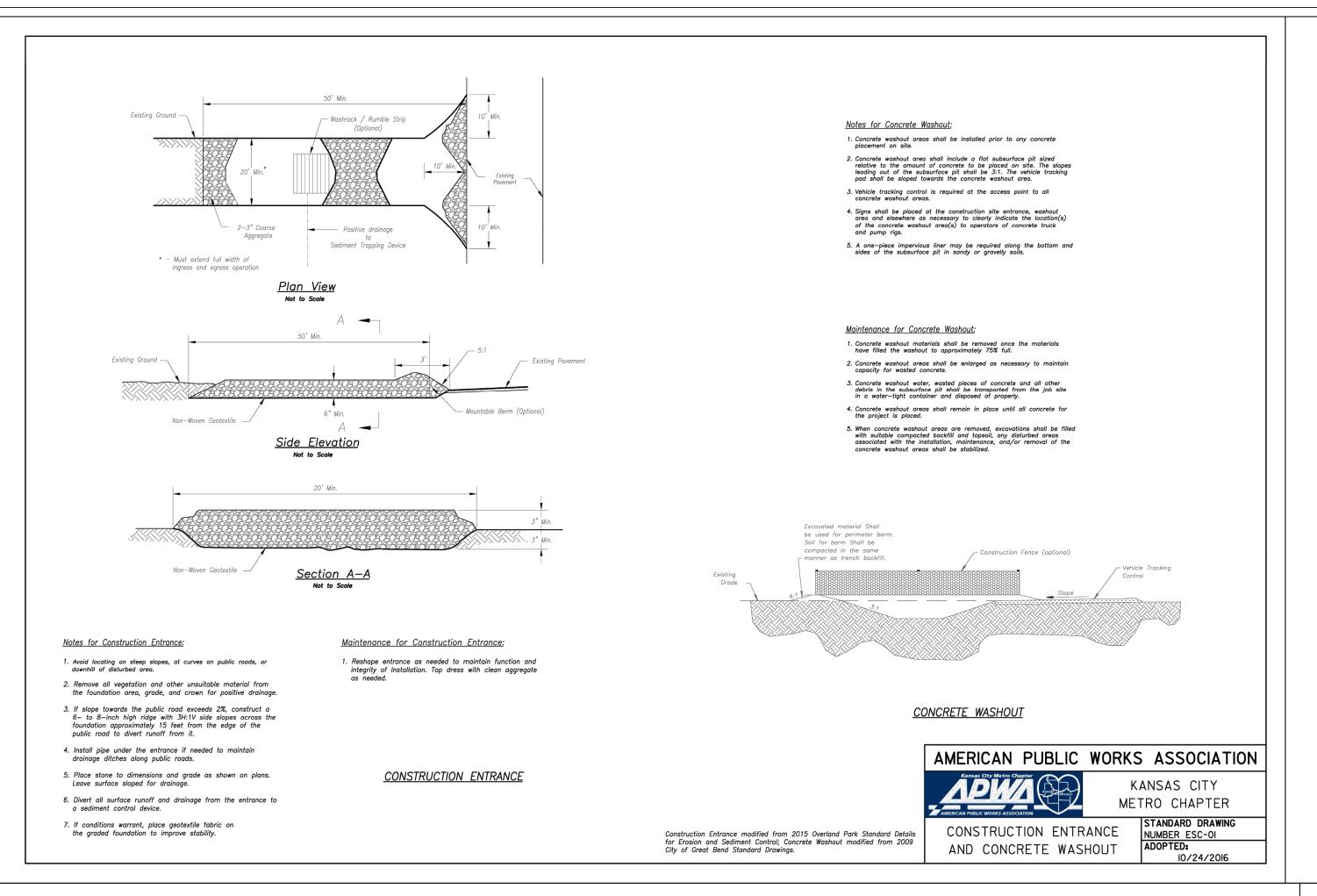


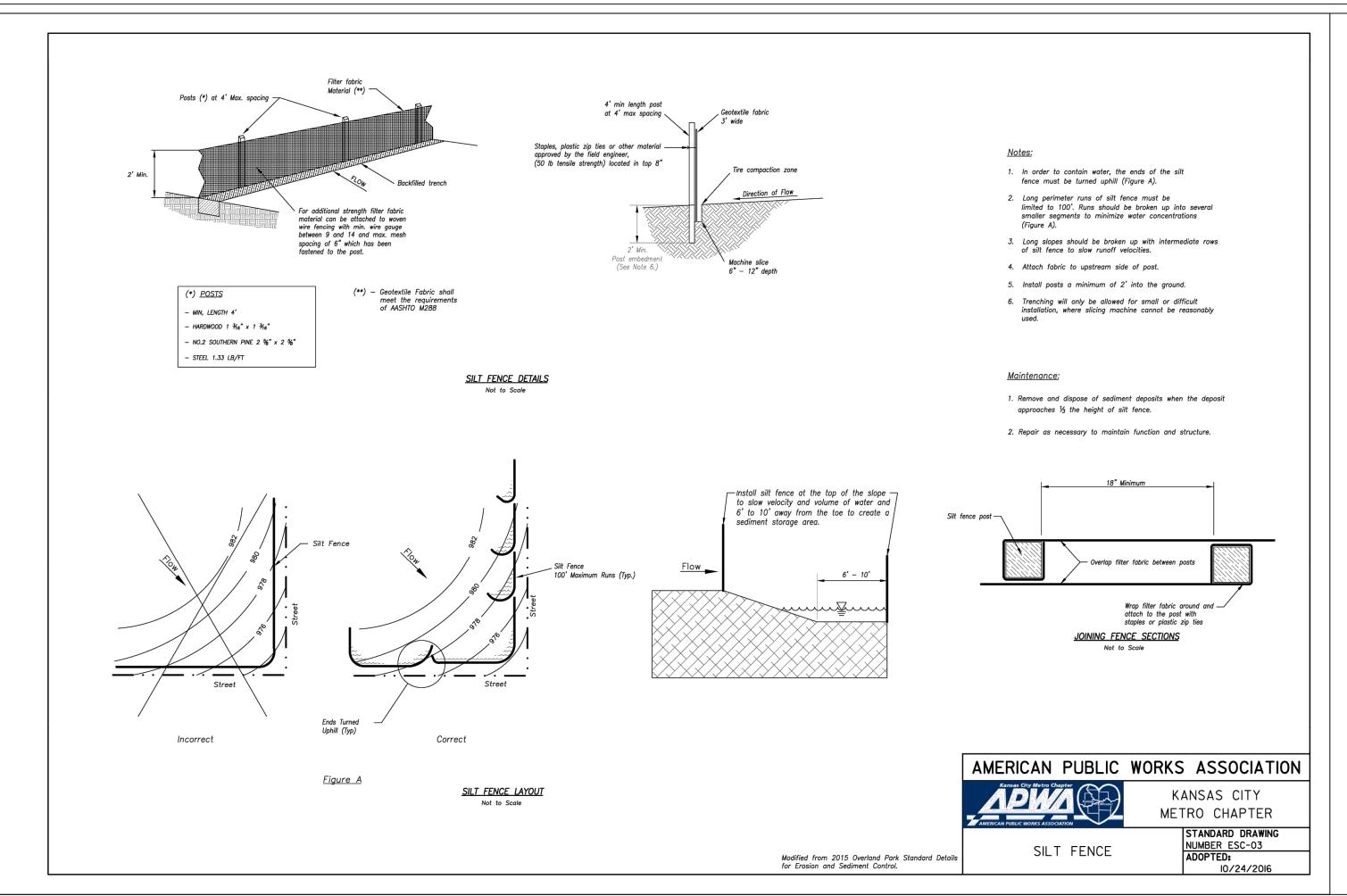
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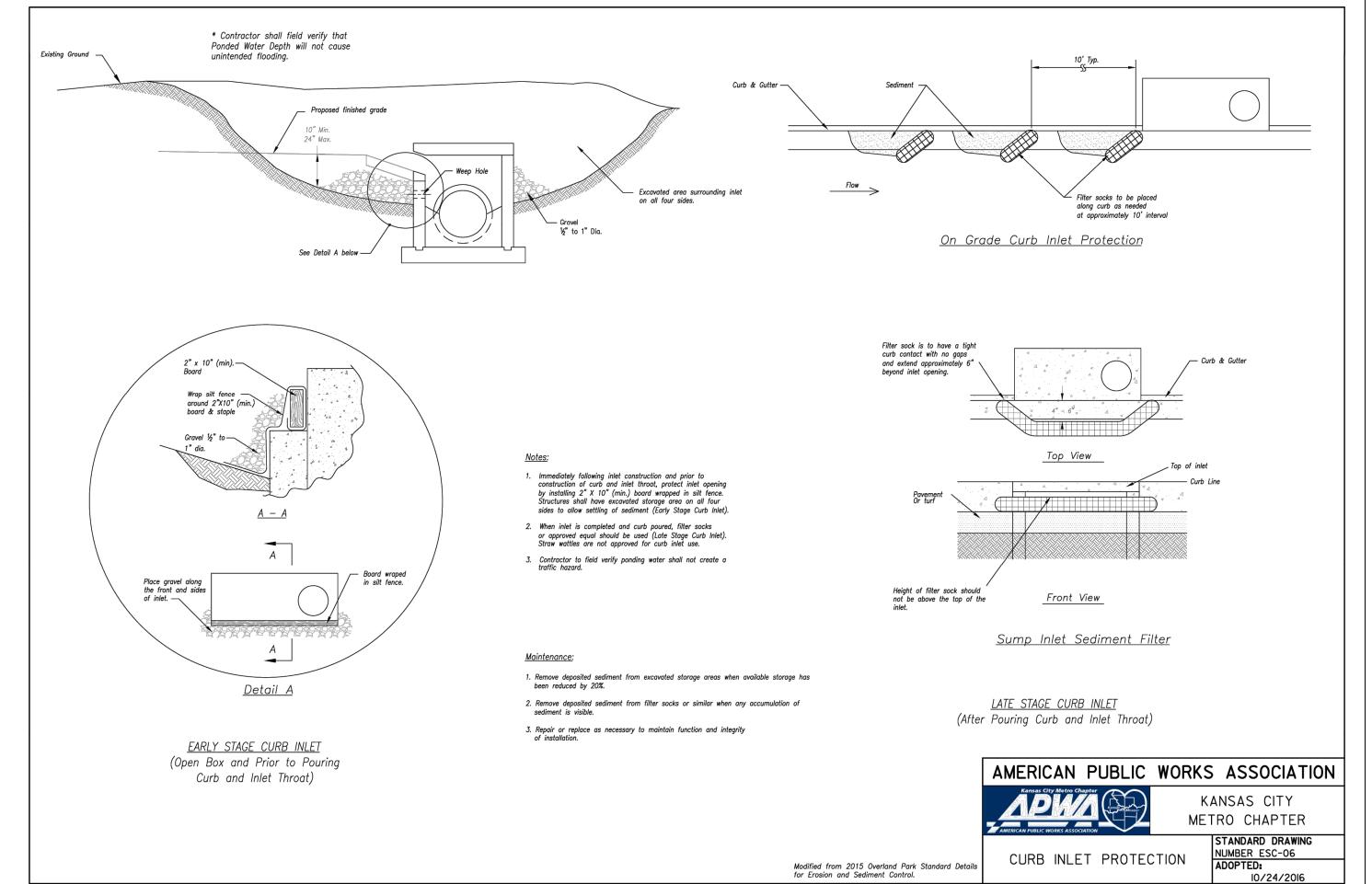
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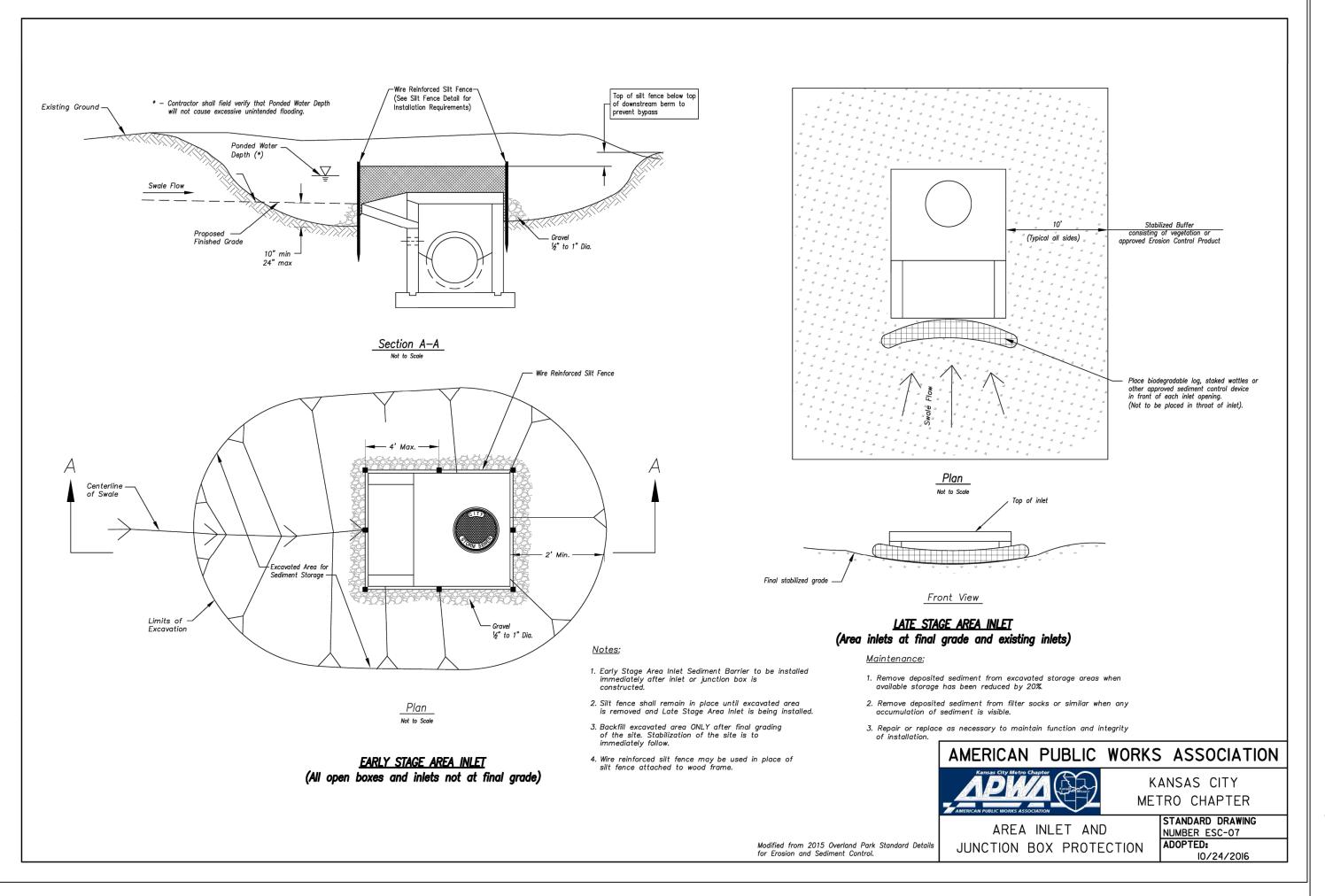
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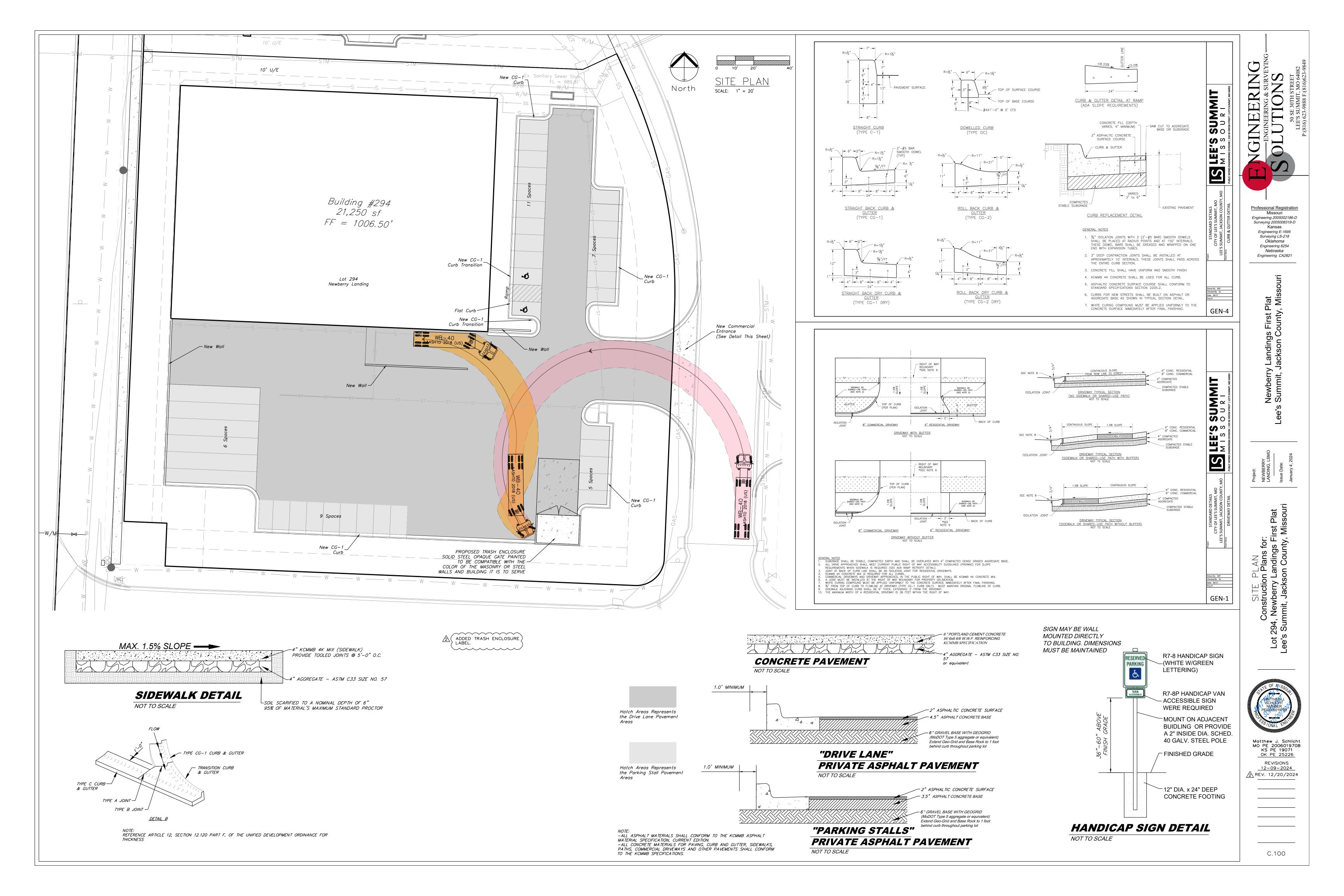
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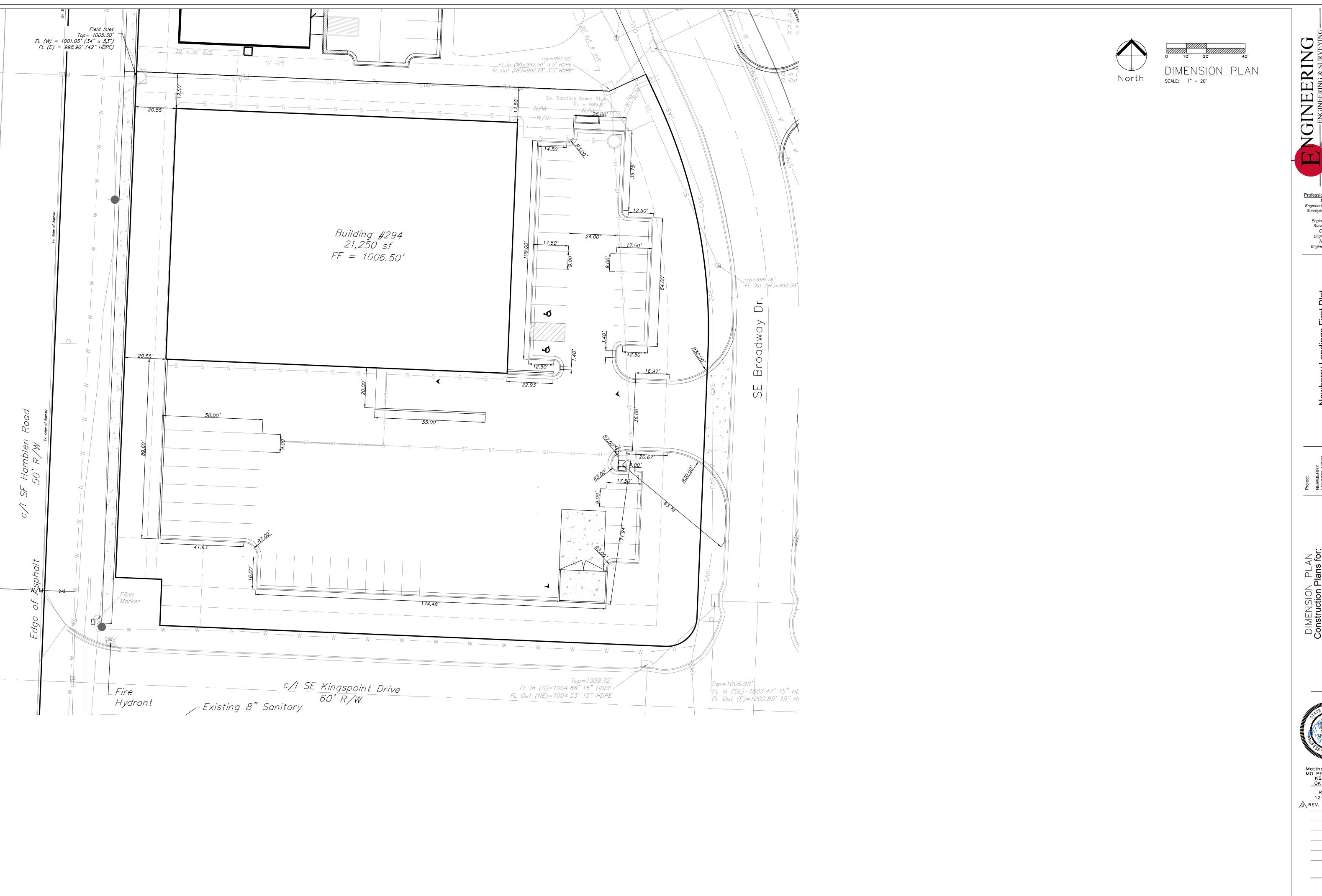
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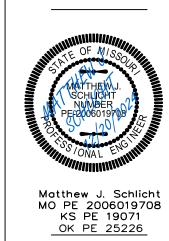
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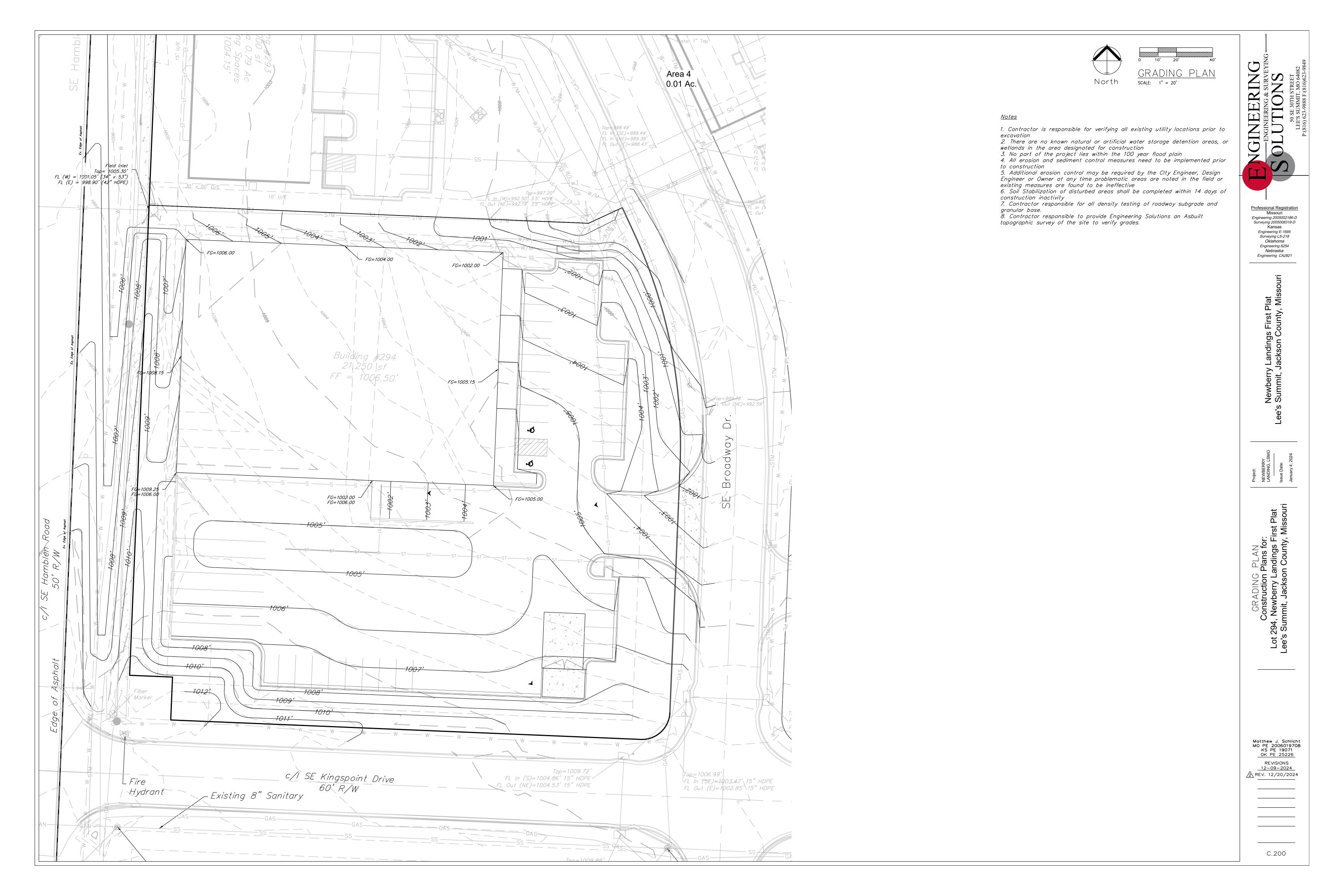


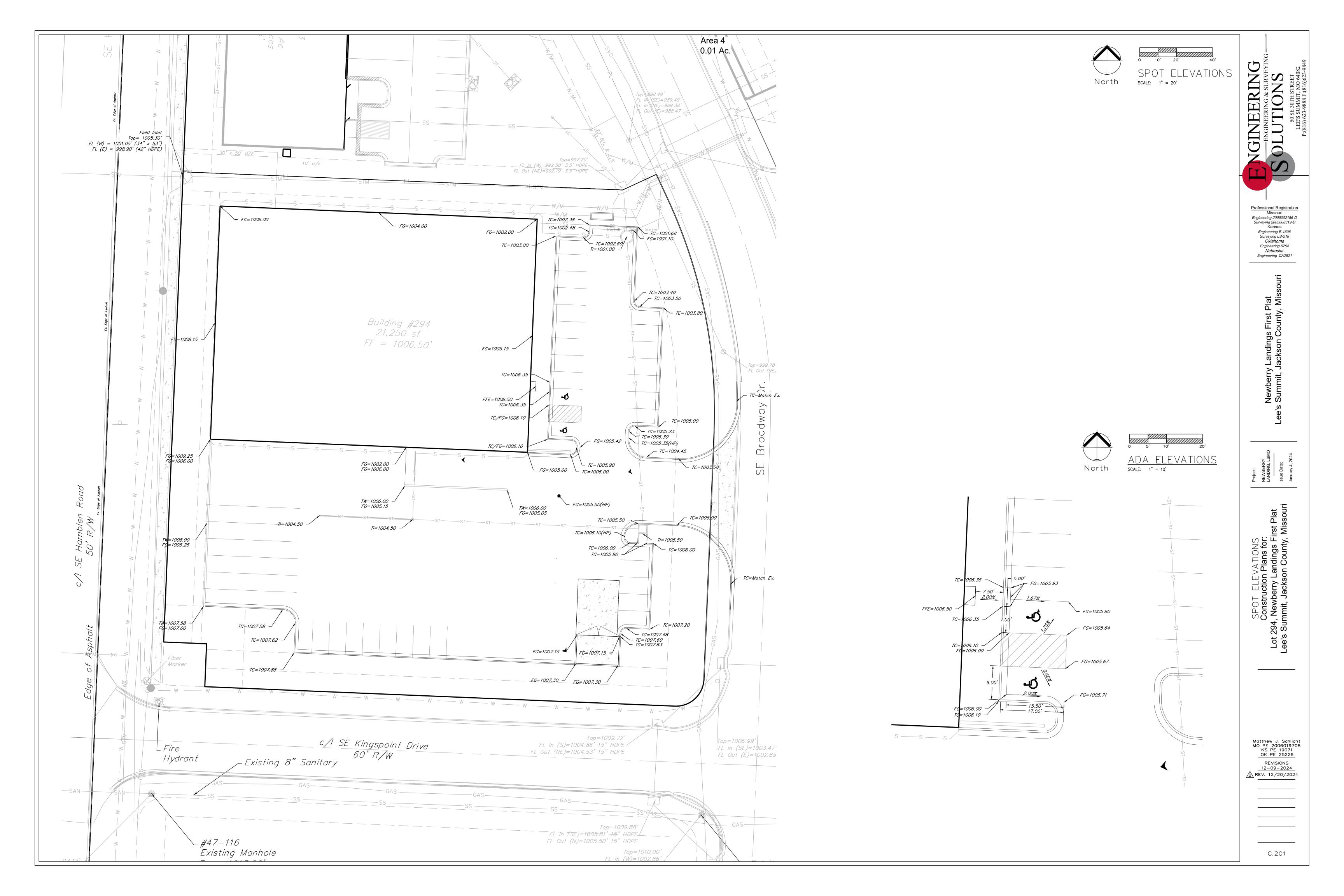


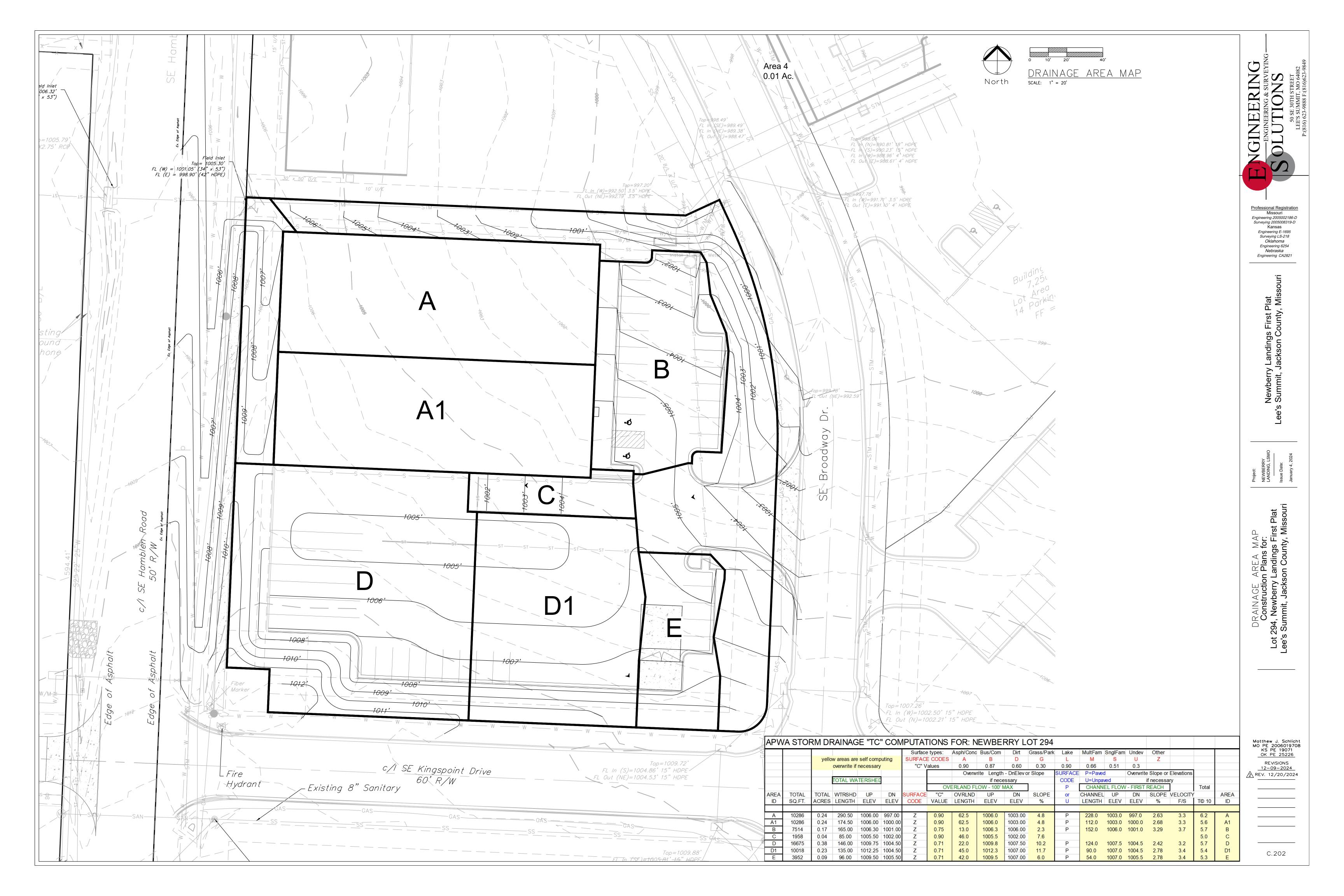
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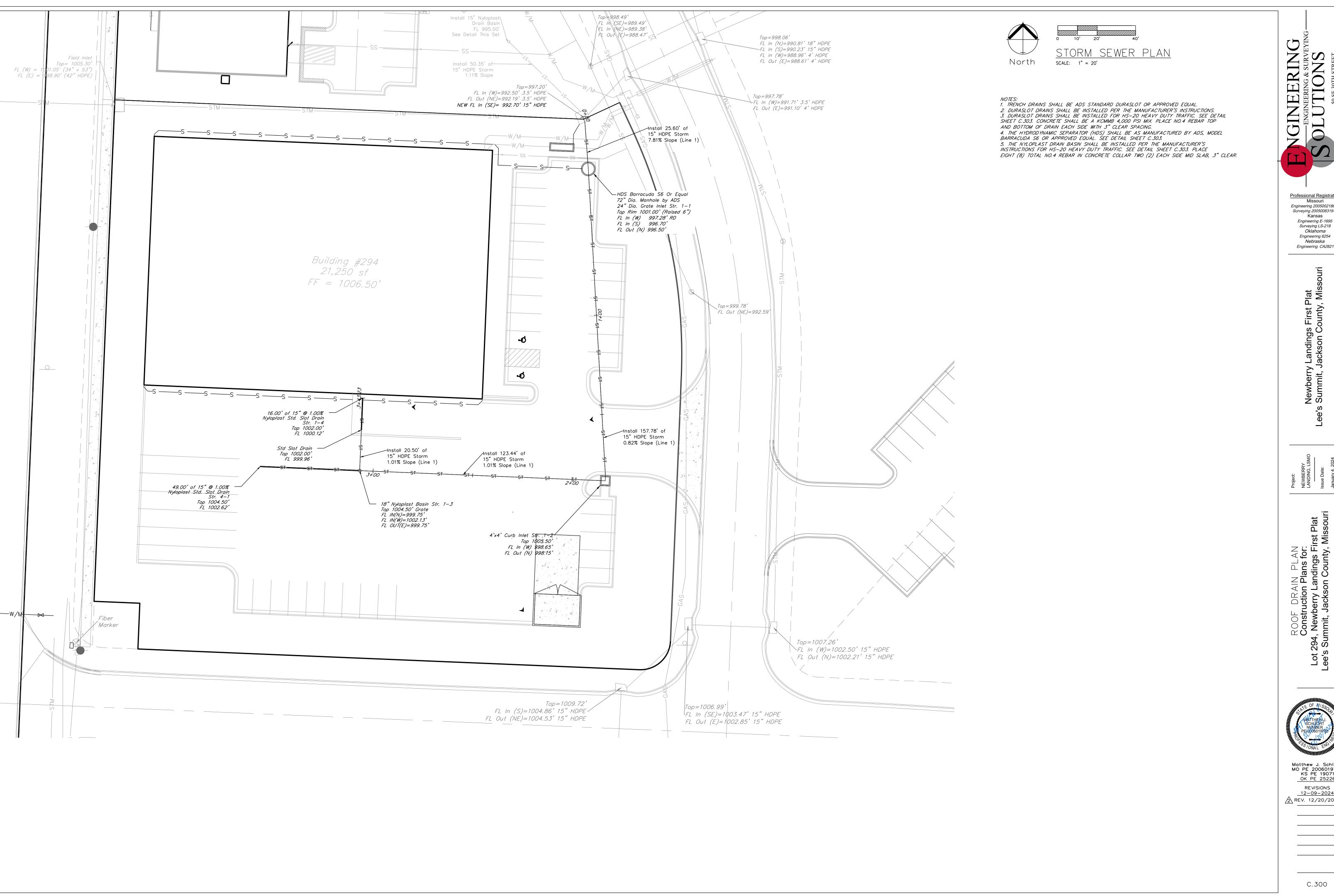


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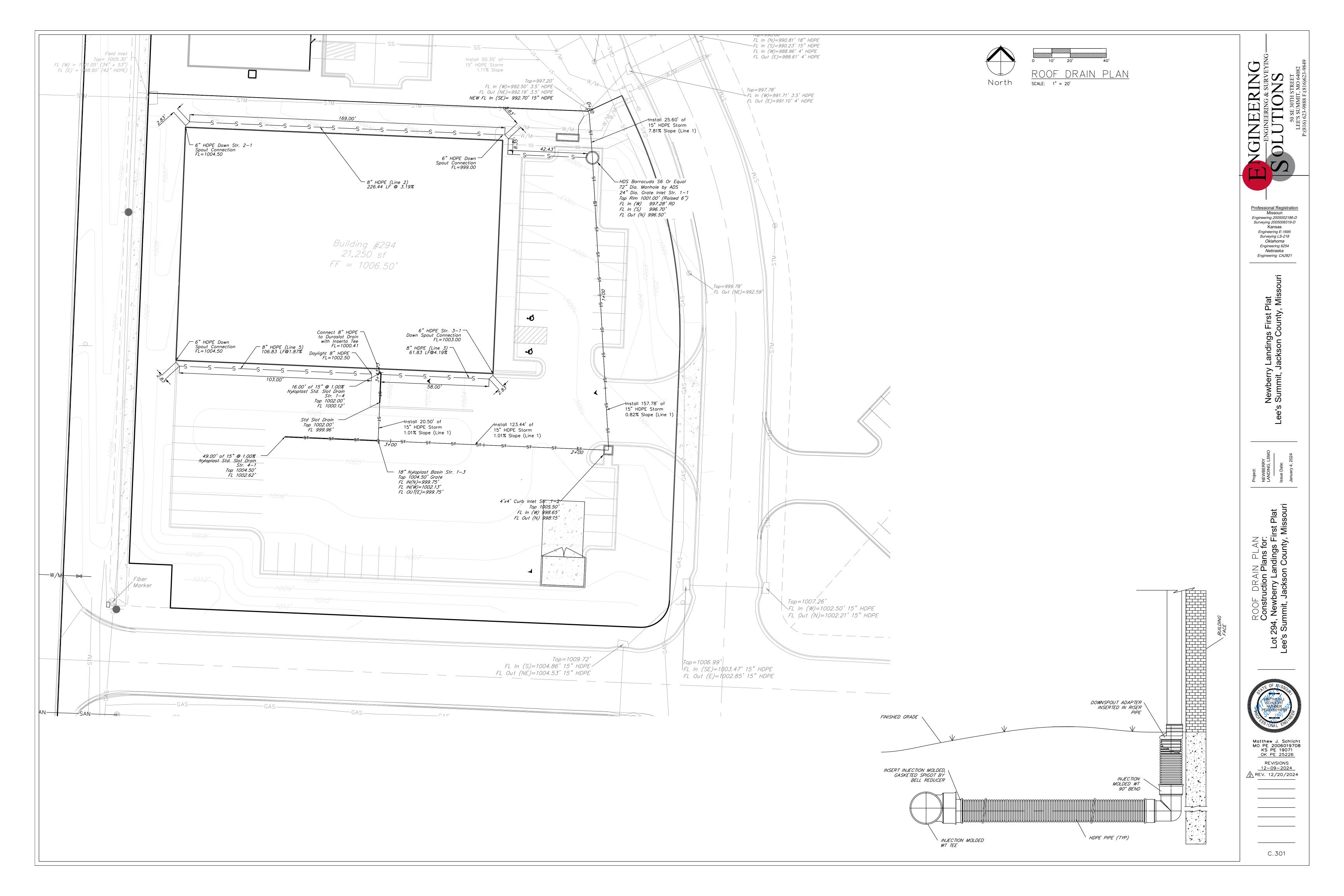


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# STORM LINE 1

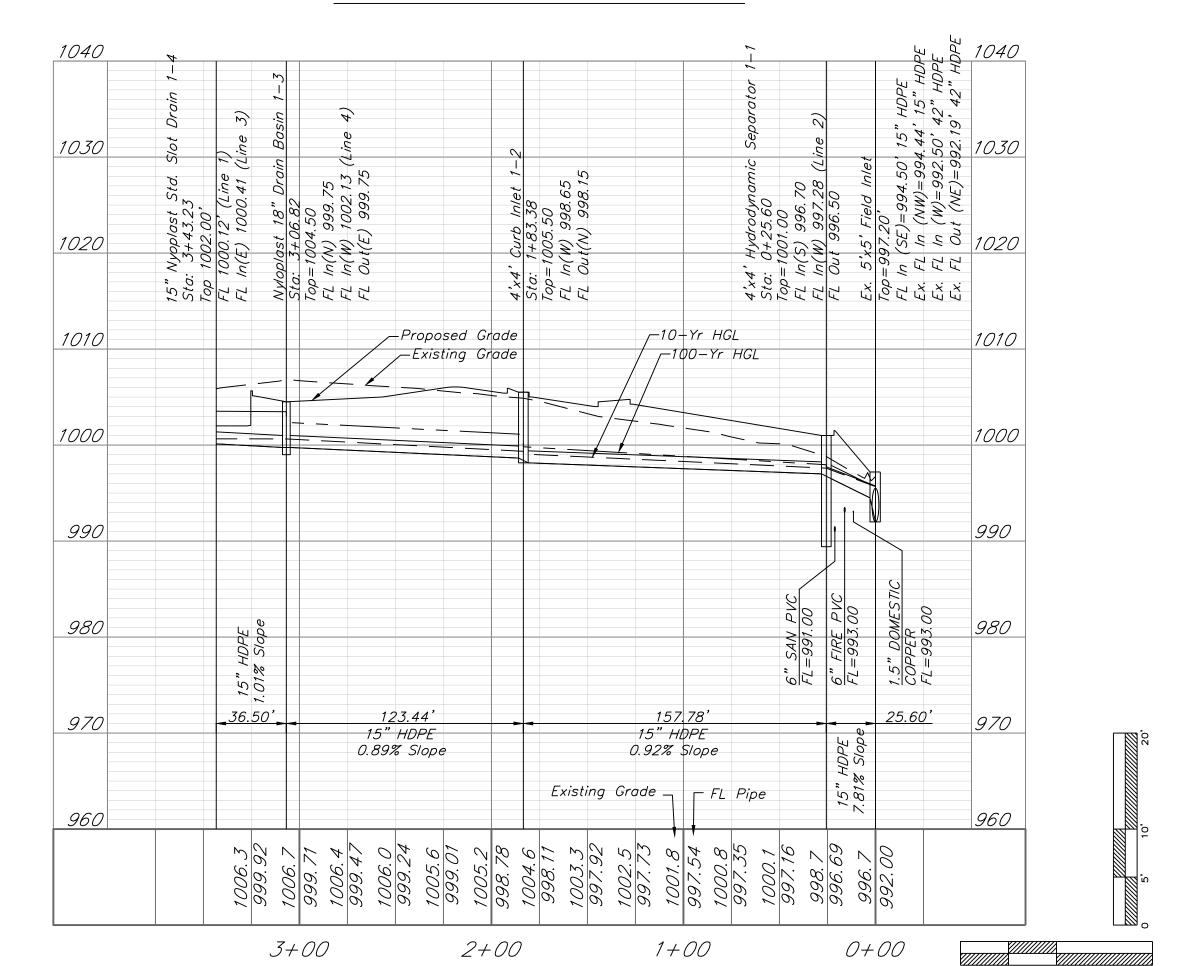
Top=1009.55' FL In (S)=1006.75' 15" HDPE / FL Out (NW)=1006.68' 15" HDPE

|Field Inlet | Top= | 1006.32" | | FL (E) = 1001.82" (31" x 53")

iop=1005.79' FL Out (E)=1001.27' 4.5'X2.75' RCP\

> Existing/ Underground Telephone

FUTURE LOT 2



												10-YR	Structure									
D.S. Str.	Str. No	o. Area	InletTime	Int.	RunoffCoeff	. Q =CIA	QCaptured	QBypassed	JunctType	CurbHeight	CurbLength	GrateArea	GrateLength	GrateWidth	GutterSlope	GutterWidth	CrossSlope, Sw	CrossSlope, Sx	Local Depr.	InletDepth	GutterDepth	GutterSpread
		(ac)	(min)	(in/hr)	(C)	(cfs)	(cfs)	(cfs)		(in)	(ft)	(sqft)	(ft)	(ft)	(ft/ft)	(ft)	(ft/ft)	(ft/ft)	(in)	(ft)	(ft)	(ft)
Ex.	1-1	0.17	5.7	7.14	0.75	0.91	0.91	0	Dp-Grate			2	2	1	Sag	2	0.02	0.02		0.14	0.14	N/A
1-1	1-2	0.09	5.3	7.26	0.71	0.46	0.46	0	Curb	5.8	4		****		Sag	2	0.05	0.02	9	0.9	0.15	4.44
1-2	1-3	0.23	5.7	7.14	0.71	1.17	1.17	0	Dp-Grate			1.77	1.33	1.33	Sag	2	0.02	0.02		0.17	0.17	N/A
1-3	1-4	0.2	5	7.34	0.9	1.32	1.32	0	Dp-Grate			2.4	0.15	16	Sag	2	0.02	0.02		0.06	0.06	N/A
1-1	2-1	0.24	6.2	7	0.9	1.51			MH			••••					****	••••				
1-4	3-1	0.08	5.6	7.17	0.9	0.52			MH								••••					
1-3	4-1	0.38	5.7	7.14	0.71	1.93	1.93	0	Dp-Grate			7.35	0.15	49	Sag	2	0.02	0.02		0.03	0.03	N/A

											10-YR Pipe											
D.S. Str.	U.S. Str.	LineLength	Incr.Area	TotalArea	RunoffCoeff.	IncrC x A	TotalC x A	InletTime	TimeConc	RnfalInt	TotalRunoff	TotalFlow	CapacFull	Veloc	PipeSize	PipeSlope	Inv ElevDn	Inv ElevUp	HGLDn	HGLUp	Grnd/RimDn	Grnd/RimUp
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
Ex.	1-1	25.6	0.17	1.39	0.75	0.13	1.09	5.7	6.9	6.8	7.44	7.44	23.46	6.41	15	7.81	994.50	996.50	995.67	997.59	0.00	1001.00
1-1	1-2	157.78	0.09	0.98	0.71	0.06	0.75	5.3	6.4	6.9	5.2	5.2	8.05	5.47	15	0.92	996.70	998.15	997.59	999.07	1001.00	1005.50
1-2	1-3	123.44	0.23	0.89	0.71	0.16	0.69	5.7	6.1	7	4.82	4.82	7.92	5.96	15	0.89	998.65	999.75	999.35	1000.64	1005.50	1004.50
1-3	1-4	36.5	0.2	0.28	0.9	0.18	0.25	5	5.9	7.1	1.79	1.79	8.45	2.76	15	1.01	999.75	1000.12	1000.64	1000.65	1004.50	1002.00
1-1	2-1	183.01	0.24	0.24	0.9	0.22	0.22	6.2	6.2	7	1.51	1.51	3.12	6.8	8	3.95	997.28	1004.50	997.61	1005.07	1001.00	1001.00
1-4	3-1	61.83	0.08	0.08	0.9	0.07	0.07	5.6	5.6	7.2	0.52	0.52	3.21	3.73	8	4.19	1000.41	1003.00	1000.65	1003.34	1002.00	1005.00
1-3	4-1	49	0.38	0.38	0.71	0.27	0.27	5.7	5.7	7.1	1.93	1.93	8.39	4.62	15	1	1002.13	1002.62	1002.54	1003.17	1004.50	1004.50

												100-YR S	Structure									
D.S. Str.	Str. No.	Area	InletTime	Int.	RunoffCoeff.	Q =CIA	QCaptured	QBypassed	JunctType	CurbHeight	CurbLength	GrateArea	GrateLength	GrateWidth	GutterSlope	GutterWidth	CrossSlope, Sw	CrossSlope, Sx	Local Depr.	InletDepth	GutterDepth	GutterSpread
		(ac)	(min)	(in/hr)	(C)	(cfs)	(cfs)	(cfs)		(in)	(ft)	(sqft)	(ft)	(ft)	(ft/ft)	(ft)	(ft/ft)	(ft/ft)	(in)	(ft)	(ft)	(ft)
Ex.	1-1	0.17	5.7	12.57	0.75	1.6	1.6	0	Dp-Grate			2	2	1	Sag	2	0.02	0.02		0.2	0.2	N/A
1-1	1-2	0.09	5.3	12.75	0.71	0.81	0.81	0	Curb	5.8	4				Sag	2	0.05	0.02	9	0.94	0.19	6.47
1-2	1-3	0.23	5.7	12.57	0.71	2.05	2.05	0	Dp-Grate			1.77	1.33	1.33	Sag	2	0.02	0.02		0.25	0.25	N/A
1-3	1-4	0.2	5	12.9	0.9	2.32	2.32	0	Dp-Grate			2.4	0.15	16	Sag	2	0.02	0.02		0.08	0.08	N/A
1-1	2-1	0.24	6.2	12.34	0.9	2.67			MH								••••					
1-4	3-1	0.08	5.6	12.61	0.9	0.91			MH								••••					
1-3	4-1	0.38	5.7	12.57	0.71	3.39	3.39	0	Dp-Grate			7.35	0.15	49	Sag	2	0.02	0.02		0.05	0.05	N/A

											100-YR Pipe											
D.S. Str.	U.S. Str.	LineLength	Incr.Area	TotalArea	a RunoffCoeff.	IncrC x A	TotalC x A	InletTime	TimeConc	RnfalInt	TotalRunoff	TotalFlow	CapacFull	Veloc	PipeSize	PipeSlope	Inv ElevDn	Inv ElevUp	HGLDn	HGLUp	Grnd/RimDn	Grnd/RimUp
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
Ex.	1-1	25.6	0.17	1.39	0.75	0.13	1.09	5.7	6.9	12	13.16	13.16	23.46	10.76	15	7.81	994.50	996.50	995.74	997.73	0.00	1001.00
1-1	1-2	157.78	0.09	0.98	0.71	0.06	0.75	5.3	6.5	12.2	9.14	9.14	8.05	7.45	15	0.92	996.70	998.15	997.95	999.82	1001.00	1005.50
1-2	1-3	123.44	0.23	0.89	0.71	0.16	0.69	5.7	6.2	12.3	8.45	8.45	7.92	6.88	15	0.89	998.65	999.75	1001.11	1002.36	1005.50	1004.50
1-3	1-4	36.5	0.2	0.28	0.9	0.18	0.25	5	6	12.4	3.13	3.13	8.45	2.55	15	1.01	999.75	1000.12	1003.47	1003.52	1004.50	1002.00
1-1	2-1	183.01	0.24	0.24	0.9	0.22	0.22	6.2	6.2	12.3	2.67	2.67	3.12	8.86	8	3.95	997.28	1004.50	997.75	1005.15	1001.00	1001.00
1-4	3-1	61.83	0.08	0.08	0.9	0.07	0.07	5.6	5.6	12.6	0.91	0.91	3.21	2.6	8	4.19	1000.41	1003.00	1003.67	1003.88	1002.00	1005.00
1-3	4-1	49	0.38	0.38	0.71	0.27	0.27	5.7	5.7	12.6	3.39	3.39	8.39	3.33	15	1	1002.13	1002.62	1003.47	1003.46	1004.50	1004.50

Newberry Landings First Plat Summit, Jackson County, Missouri

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218

Engineering 6254 Nebraska Engineering CA2821

STORM PLAN & PROFILE Construction Plans for: Lot 294, Newberry Landings First Plat Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

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12-09-2024

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RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS.

- ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM

- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO

ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL),

ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

SEE DRAWING NO. 7001-110-065.

BUFORD, GA 30518

PHN (770) 932-2443

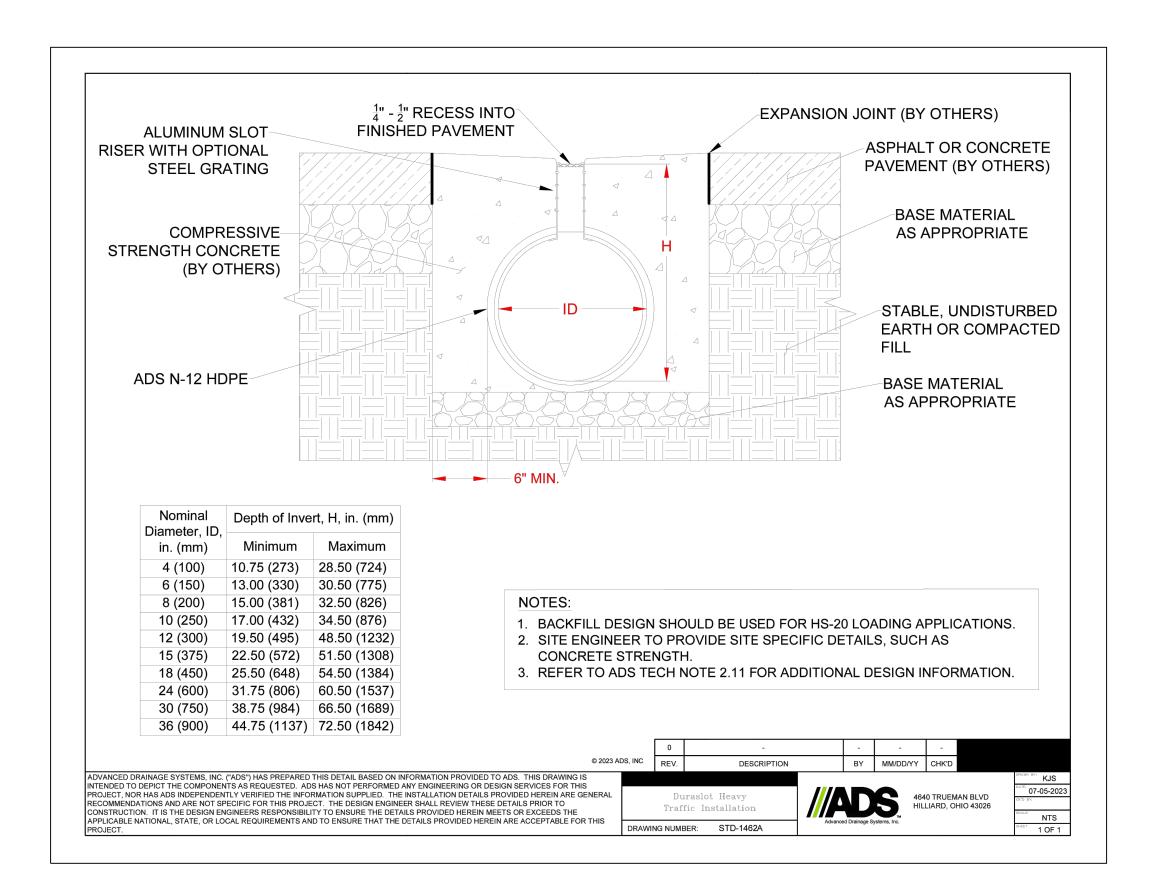
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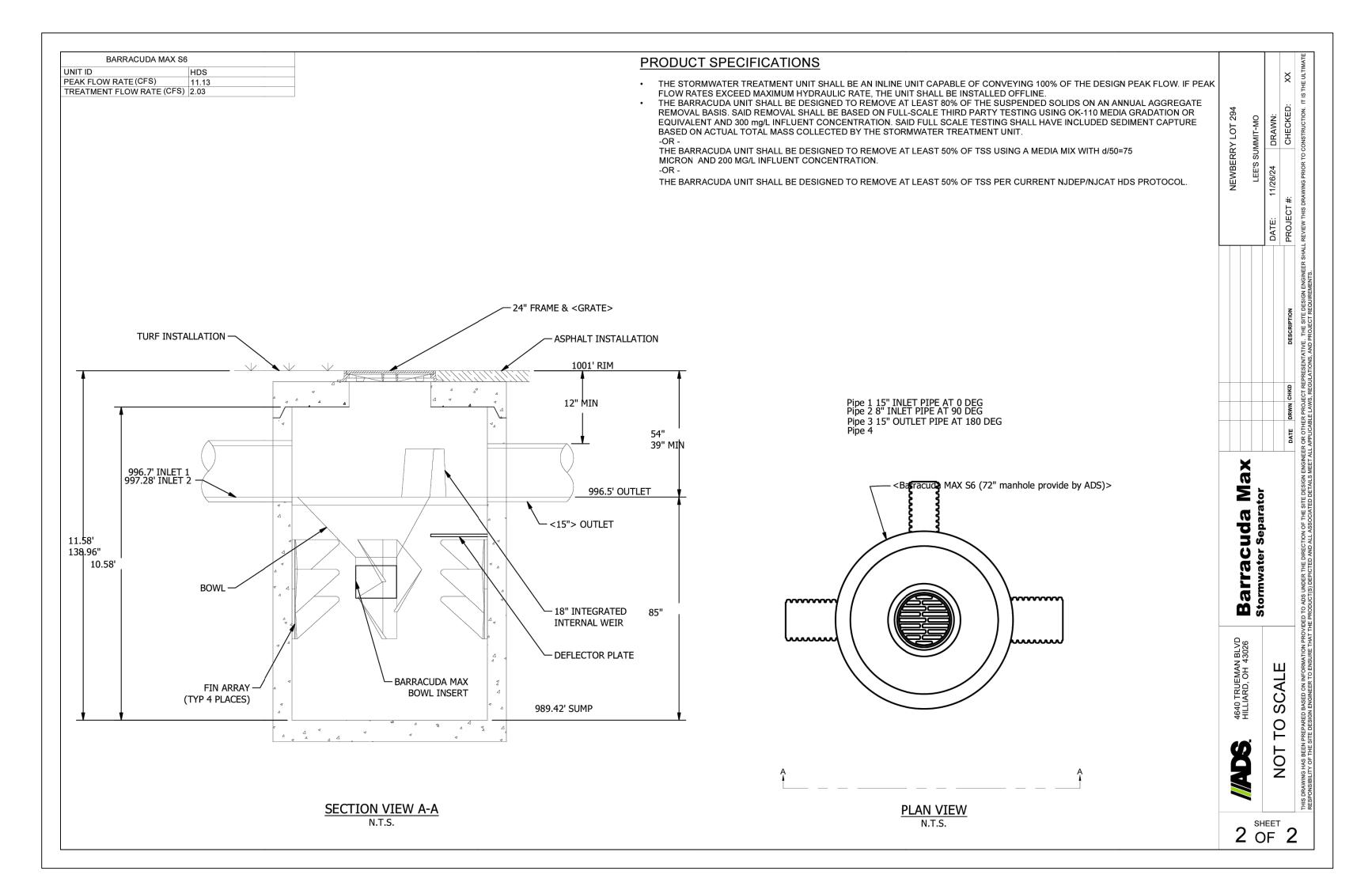
18 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

7001-110-191 REV E

DWG SIZE A SCALE 1:30 SHEET 1 OF 1 DWG NO.

www.nyloplast-us.com

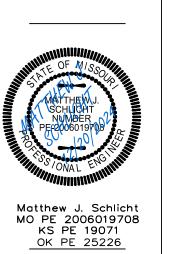




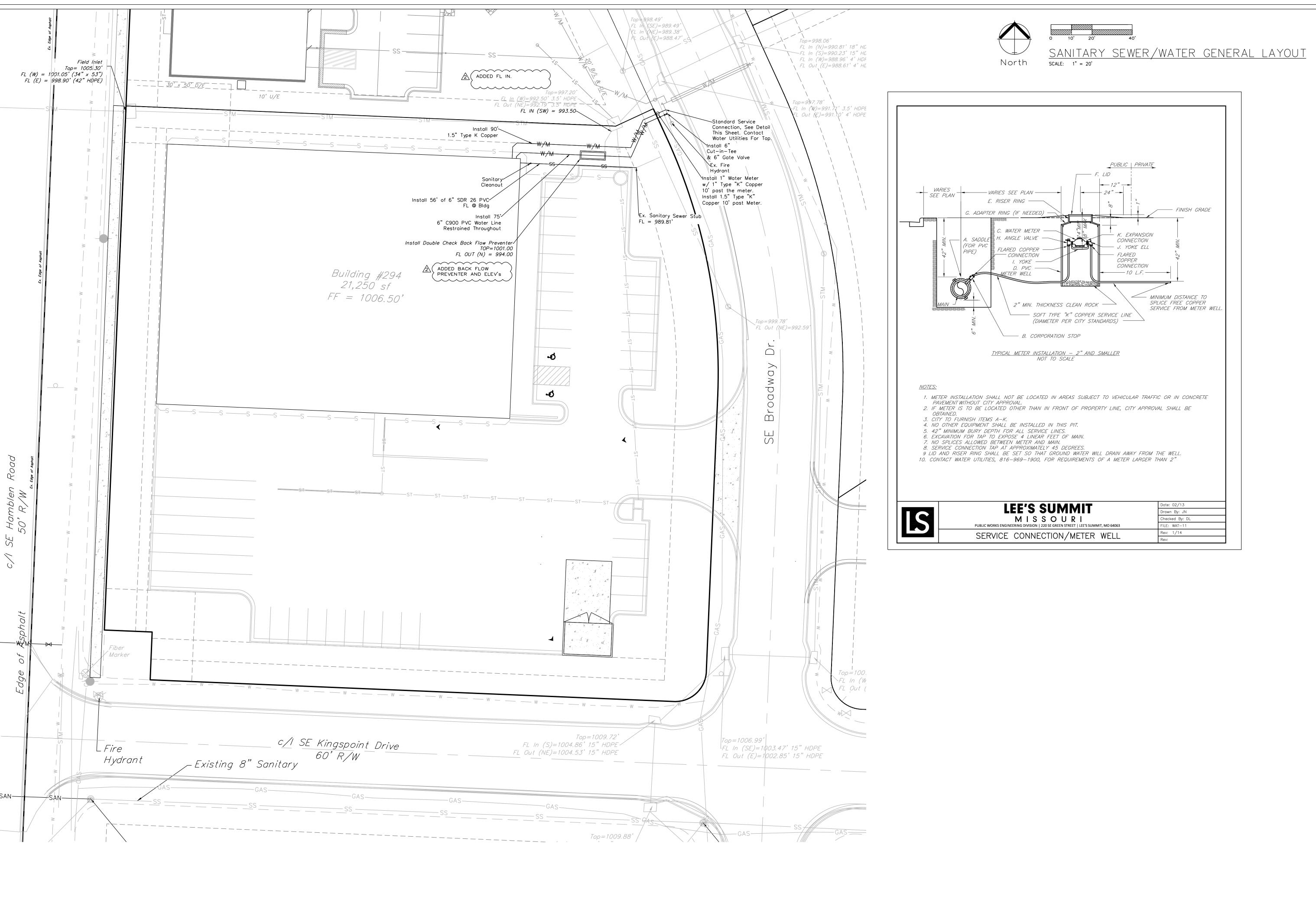


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Oklahoma
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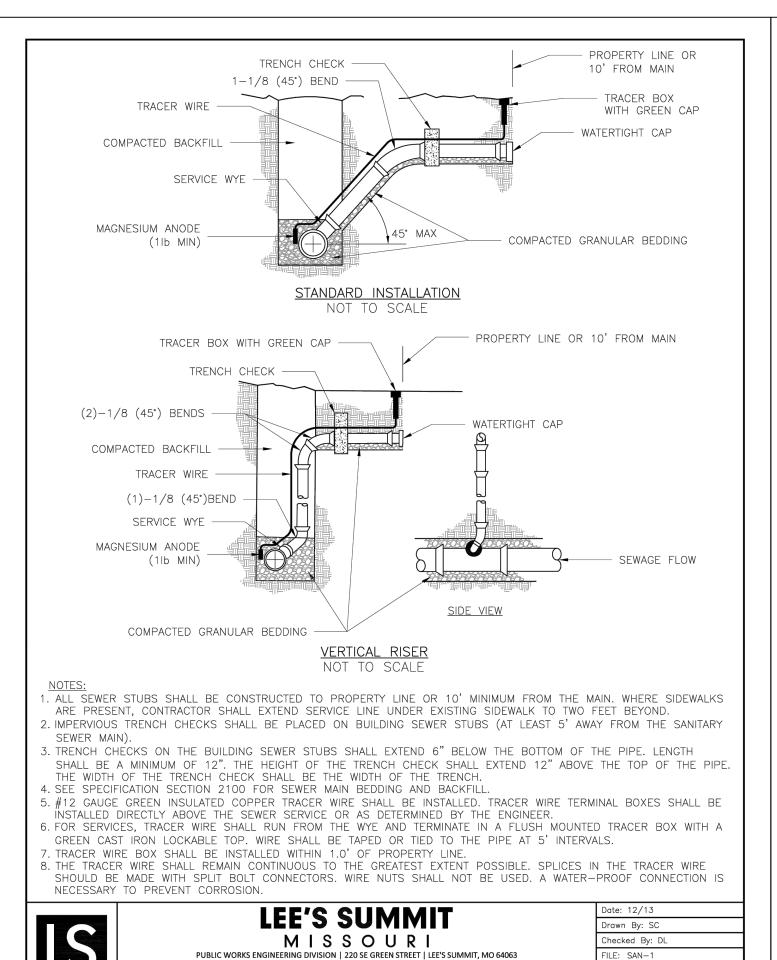
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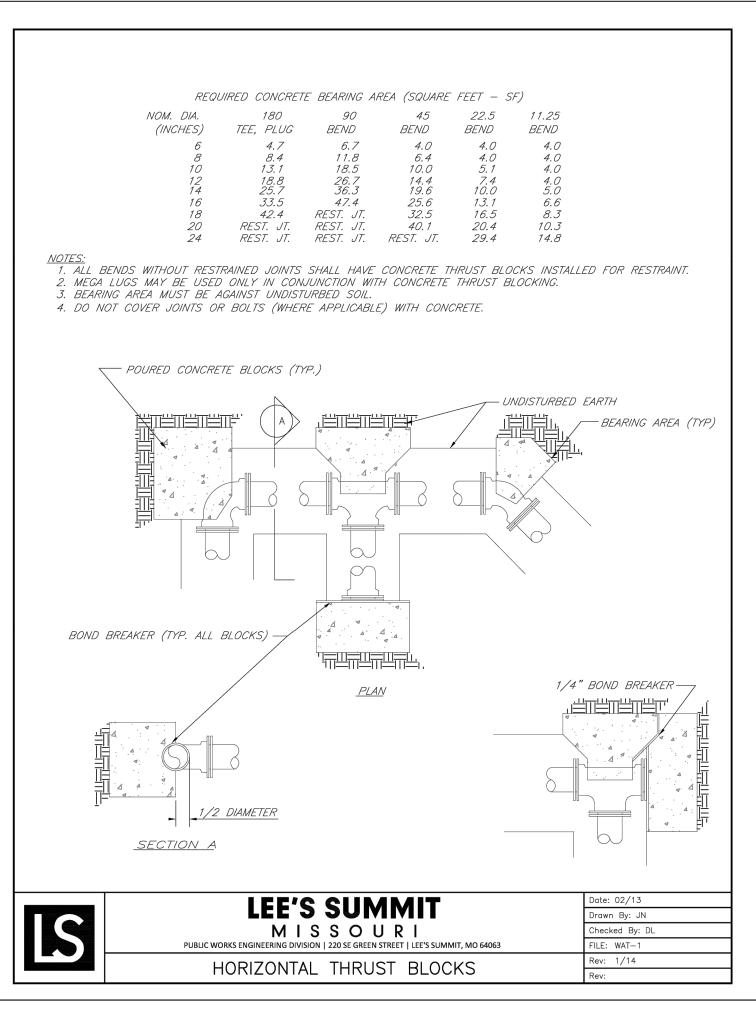
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Issue Date:

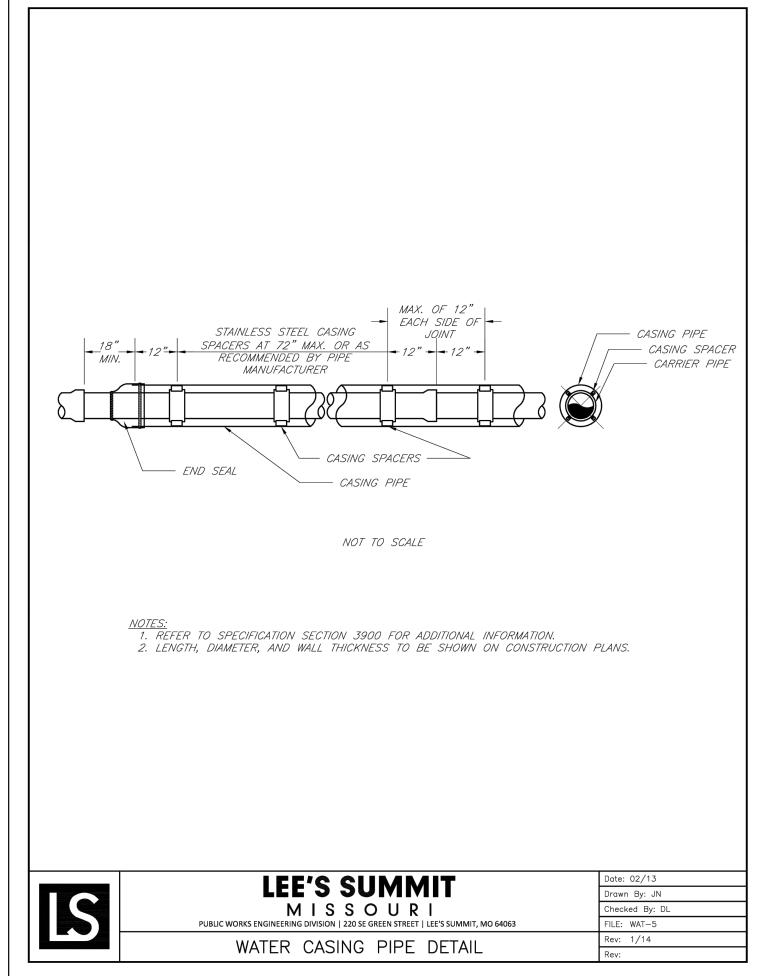
UTILITY PLAN GENERAL LAYOUT Construction Plans for: Lot 294, Newberry Landings First Plat Lee's Summit, Jackson County, Missour

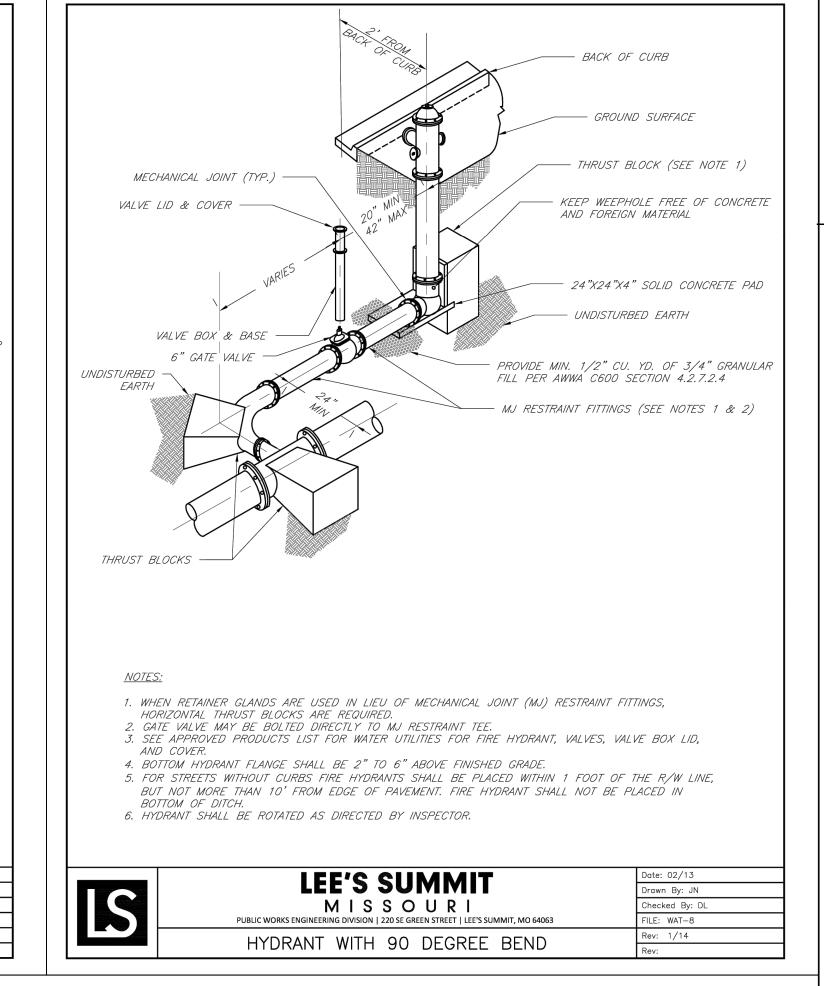
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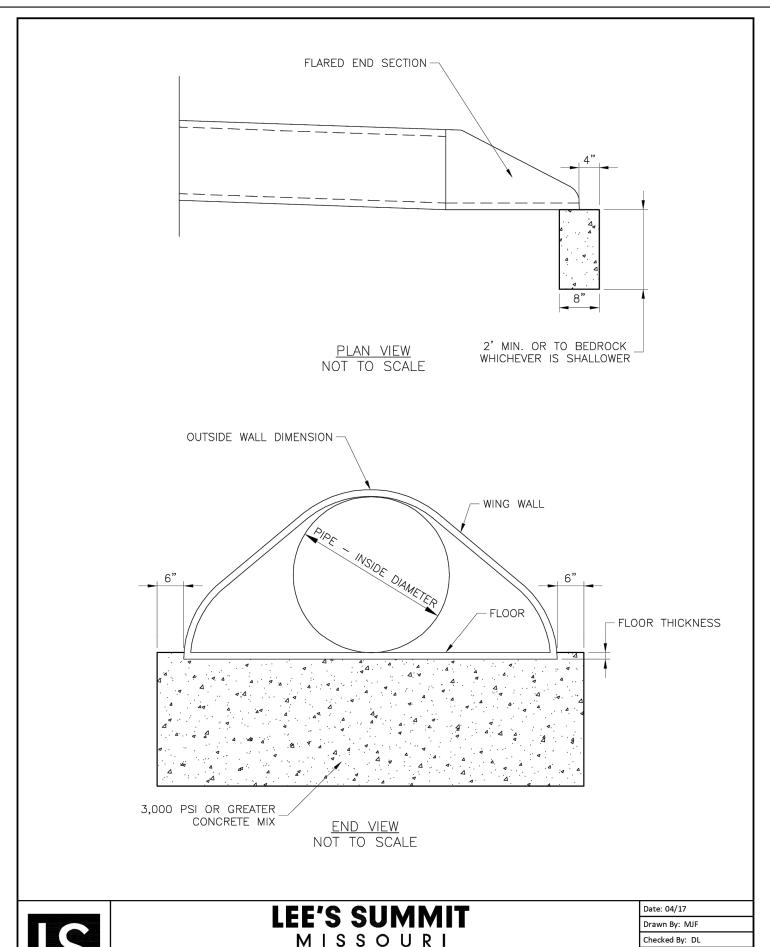
Matthew J. Schlicht MO PE 2006019708 KS PE 19071 OK PE 25226 REVISIONS 12-09-2024 REV. 12/20/2024







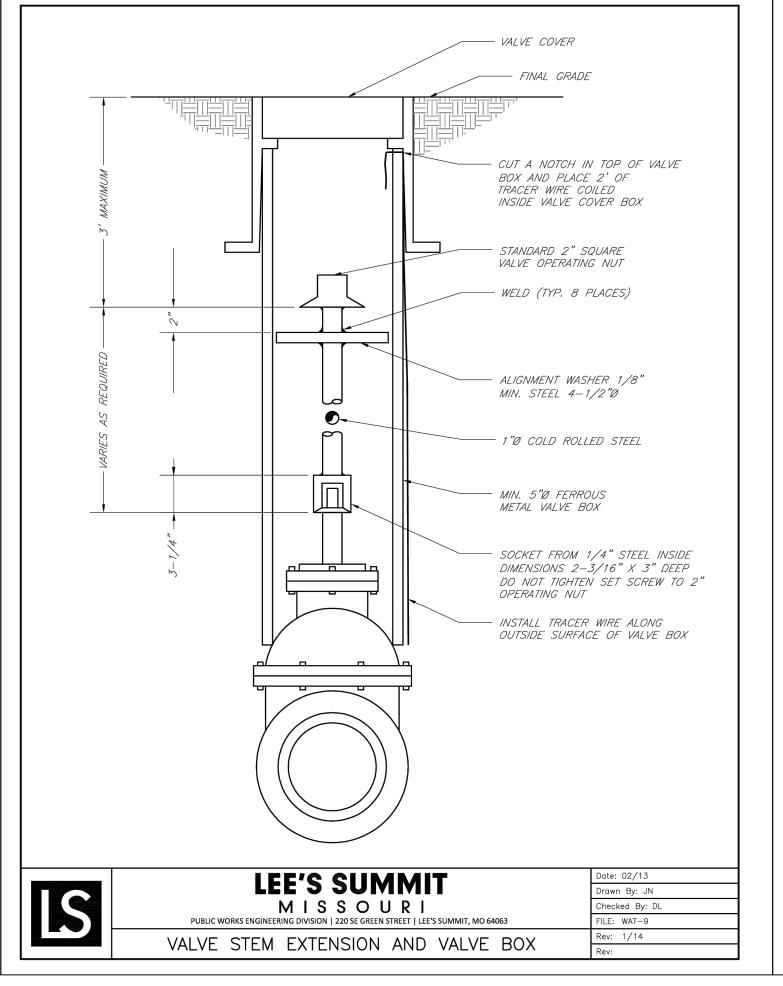


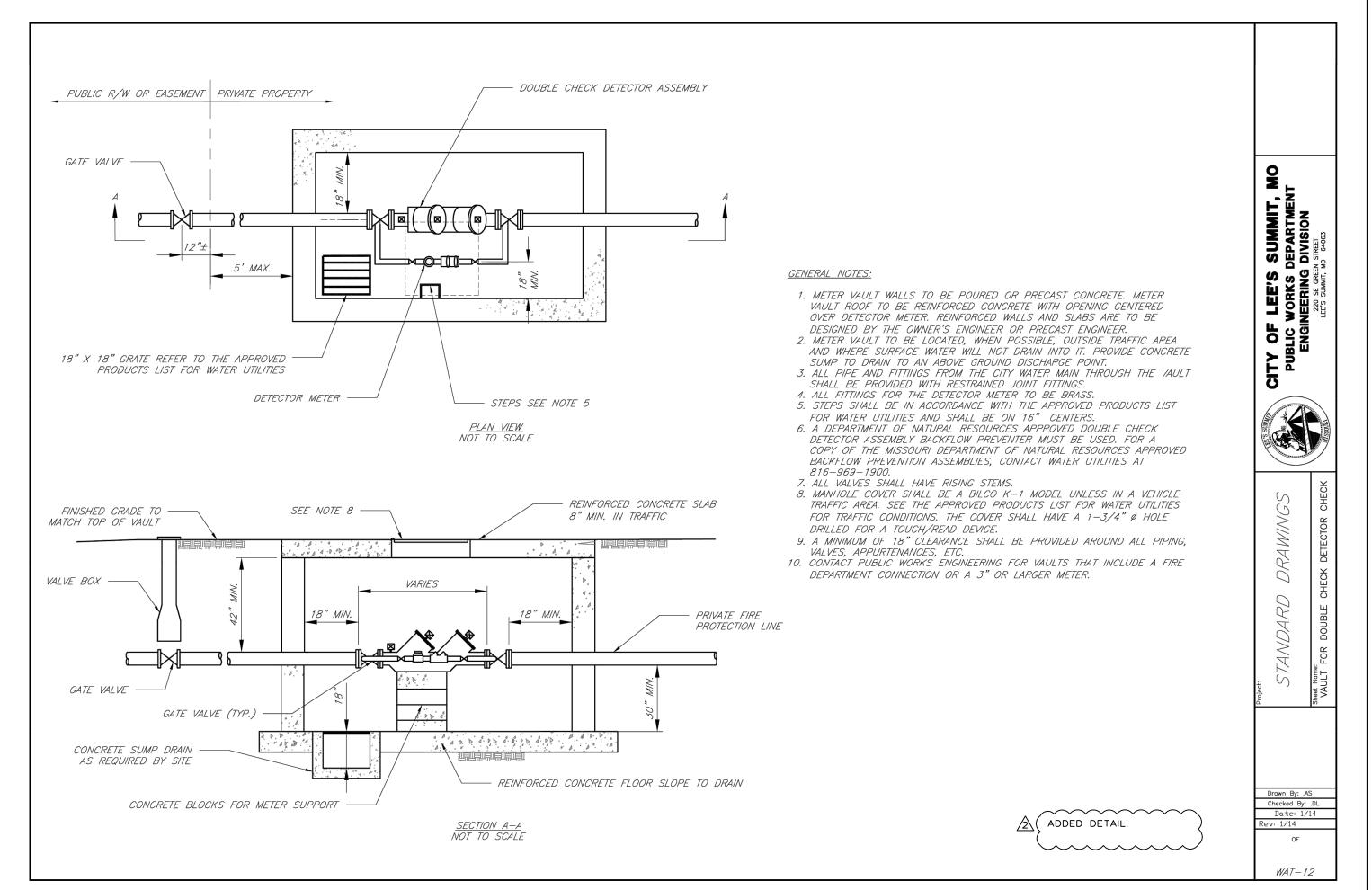


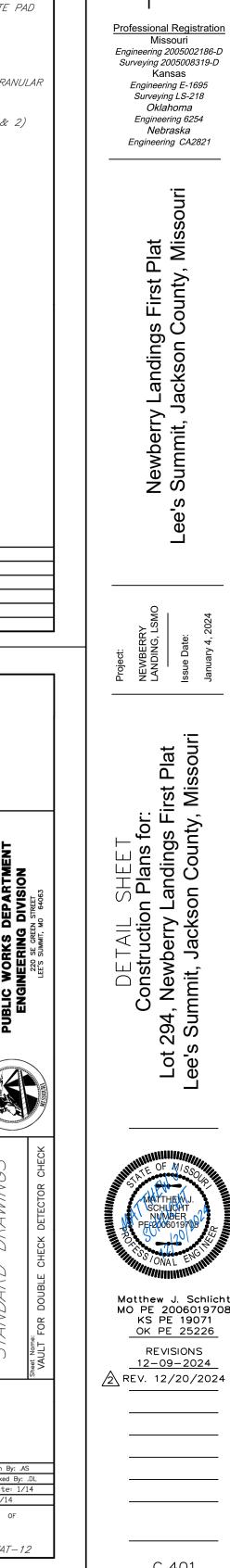
FLARED END SECTION SUPPORT DETAIL

STM-5

BUILDING SEWER STUB AND RISER







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MO PE 2006019708 KS PE 19071 OK PE 25226 REVISIONS 12-09-2024 /2\ REV. 12/20/2024

REQUIRED FOR THIS SITE REQUIREMENT LANDSCAPE 14.090.A.I Street Frontage 1 tree per 30 feet of 287 ft. of street frontage 10 Trees Provided Trees (SE Broadway Drive) street frontage /30= 10 trees required 14.090.A.3 Street Frontage 1 shrub per 20 feet of 287 ft. of street frontage 20 shrubs provided Shrubs (SE Broadway Drive) /20= 15 shrubs required street frontage 14.090.A.I Street Frontage 1 tree per 30 feet of 310 ft. of street frontage 10 Trees Provided Trees (SE Kingspoint Drive) street frontage /30= 10 trees required 14.090.A.3 Street Frontage 1 shrub per 20 feet of 310 ft. of street frontage 20 shrubs provided Shrubs (SE Kingspoint Drive) /20= 15 shrubs required street frontage 14.090.A.I Street Frontage 1 tree per 30 feet of 252 ft. of street frontage 9 Trees Provided /30= 9 trees required Trees (SE Hamblen Road) street frontage 252 ft. of street frontage 14.090.A.3 Street Frontage 1 shrub per 20 feet of 18 shrubs provided Shrubs (SE Hamblen Road) /20= 13 shrubs required street frontage 2 shrubs per 5000 sq. ft. of total lot total lot area excluding building footprint 77,968 sq. ft. of total lot area minus 21,250 sq.ft. of bldg. footprint 56,718 sq.ft. 14.090.B.I Open 23 shrubs Yard Shrubs  $/5,000 \times 2 = 23 \text{ shrubs}$ 

1 tree per 5000 sq. ft. of total 77,968 sq. ft. of total lot

area minus 21,250 sq. ft. of bldg. footprint= 56,718 sq.ft.

31,750 sq. ft. of parking area 2,430 sq. ft.

ft./5,000 = 11 trees

required

x .05 = 1,588 sq. ft. of

445 linear feet/40 x 12

134 shrubs required.

landscape parking lot islands

LANDSCAPE WORKSHEET

14.090.B.3 Open

Yard Trees

14.110. Parking

Lot Landscape

14.120 Screening

of Parking Lot,

ORDINANCE

\*STREET SHRUBS ARE SATISFIED WITH PARKING LOT SCREENING REQUIREMENTS. \*\*ONLY ORNAMENTAL TREES AND SHRUBS MAY BE PLANTED WITHIN UTILITY EASEMENTS. \*\*\*ALL GROUND MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED PER UDO.

lot area excluding building

5% of entire parking area

parking bay, min. 9' wide

(spaces, aisles &: drives); 1 island at end of every

12 shrubs per 40 linear feet

(must be 2.5 feet tall; berms may be combined with shrubs) GINEERING & SURVEYING
)LUTIONS NOILO.

PROPOSED

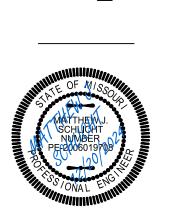
11 Required

11 Provided

134 shrubs provided

0 Existing

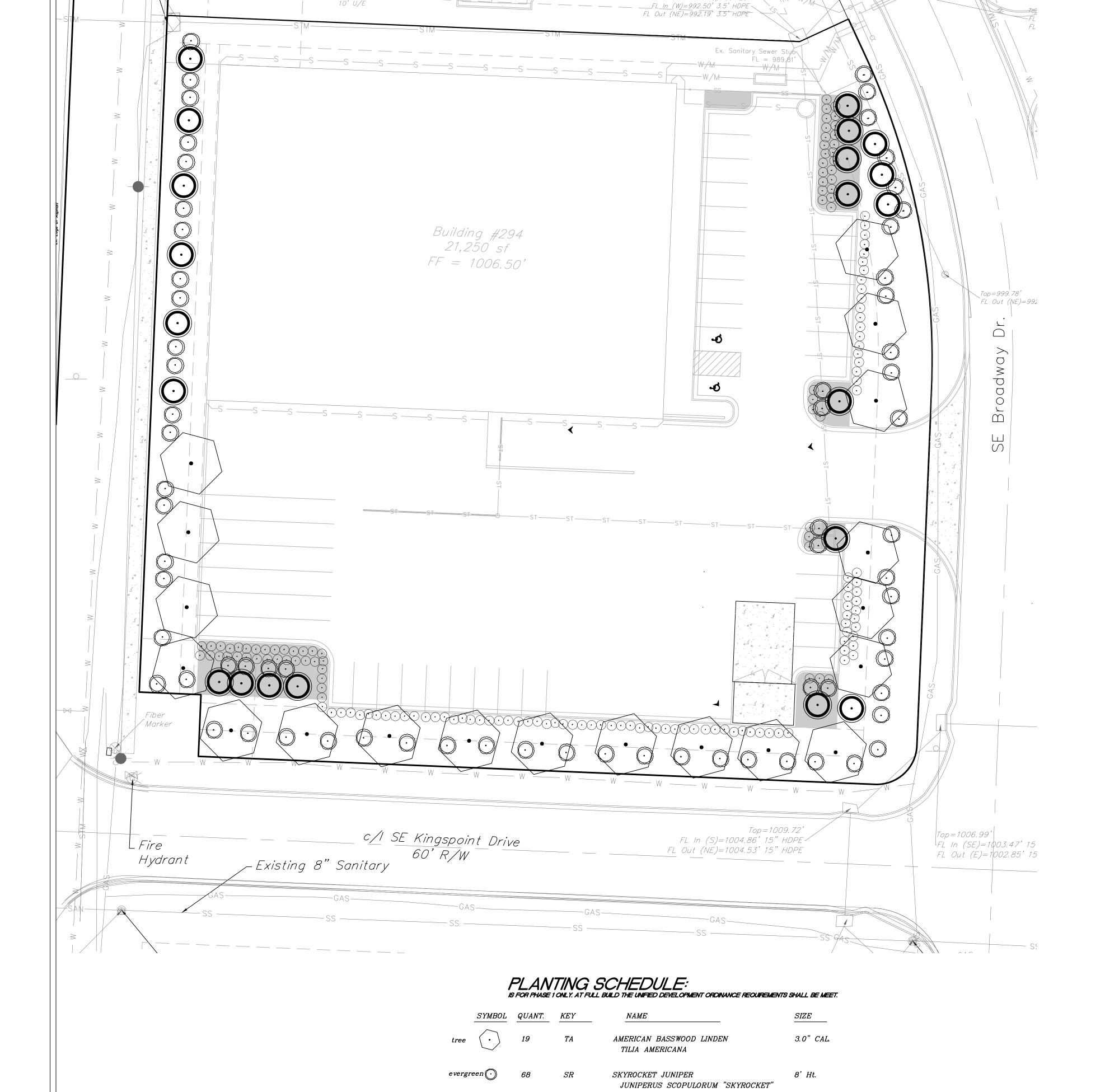
Professional Registration Engineering 2005002186-D Surveying 2005008319-D Kansas Engineering E-1695 Surveying LS-218 Oklahoma Engineering 6254 Nebraska Engineering CA2821



Matthew J. Schlicht MO PE 2006019708 KS PE 19071 OK PE 25226 REVISIONS 12-09-2024

REV. 12/20/2024

L.100



OKLAHOMA REDBUD

BURNING BUSH

CERCIS RENIFORMIS "OKLAHOMA"

EUONYMUS ALATA "COMPACTUS"

3.0" CAL.

2 Gallon Pot

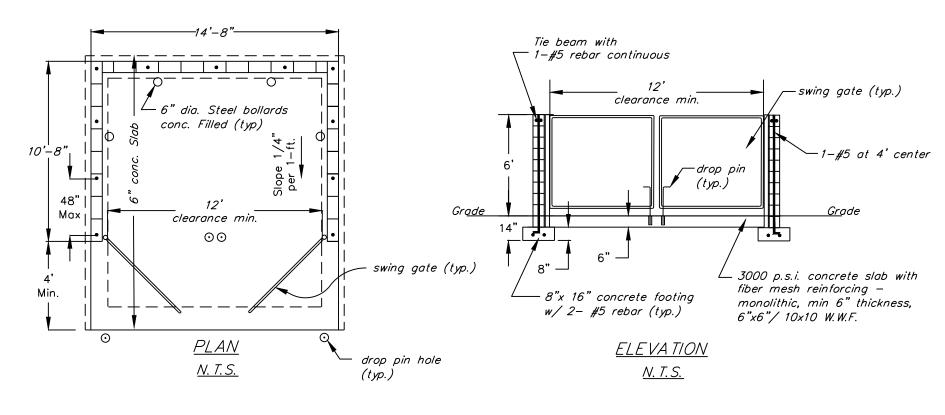
Top=997.20'

a. AS CONSTRUCTED LOCATION OF ALL COMPONENTS

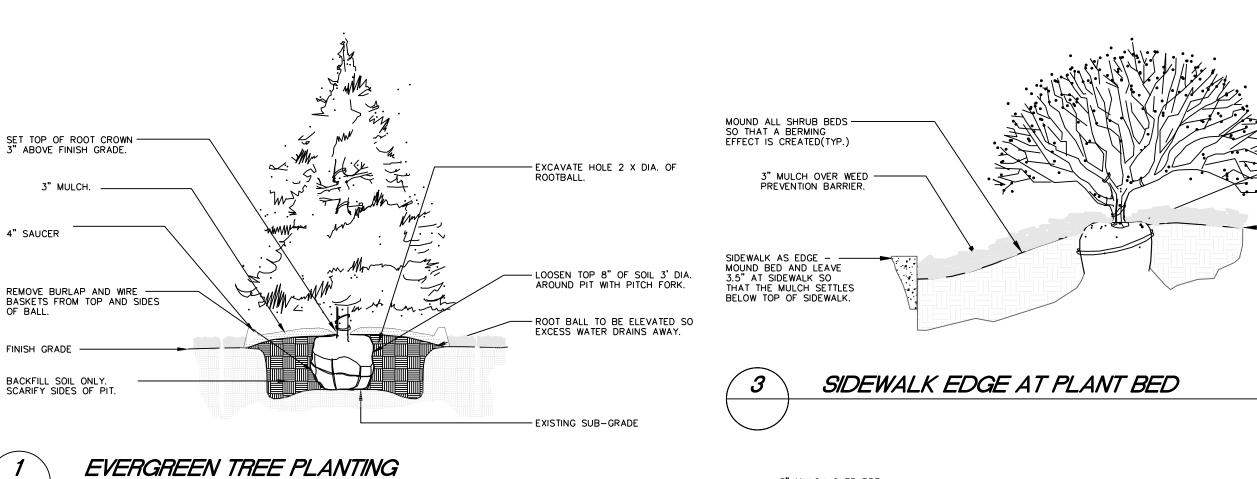
b. COMPONENT NAME, MANUFACTURER, MODEL INFORMATION, SIZE AND QUANTITY

d. INDICATION OF SPRINKLER HEAD SPRAY PATTERN

e. CIRCUIT IDENTIFICATION SYSTEM



# DUMPSTER ENCLOSURE SINGLE NON-TRAFFIC BEARING N.T.S.



- EXCAVATE HOLE 2 X DIA. OF

LOOSEN TOP 8" OF SOIL 3' DIA.
 AROUND PIT WITH PITCH FORK.

- ROOT BALL TO BE ELEVATED SO EXCESS WATER DRAINS AWAY.

EXISTING SUB-GRADE.

ROOTBALL.

NEVER CUT LEADER. PRUNE – ONLY DEAD OR DAMAGED BRANCHES-DO NOT LEAVE STUBS.

SET TOP OF ROOT CROWN -

3" MULCH.

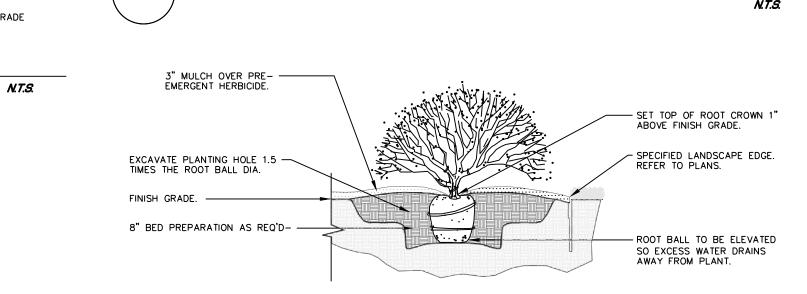
3" ABOVE FINISH GRADE.

4" SAUCER

FINISH GRADE

BACKFILL SOIL ONLY - SCARIFY SIDES OF PIT.

DECIDUOUS TREE PLANTING



# GENERAL LANDSCAPE NOTES: PLANT MATERIAL

ALL PLANT MATERIAL SHALL BE FIRST CLASS REPRESENTATIVES OF SPECIFIED SPECIES, VARIETY OR CULTIVAR, IN HEALTHY CONDITION WITH NORMAL WELL DEVELOPED BRANCHES AND ROOT PATTERNS. PLANT MATERIAL MUST BE FREE OF OBJECTIONABLE FEATURES. PLANTS SHALL COMPLY IN ALL APPLICABLE RESPECTS WITH PROPER STANDARDS AS SET FORTH IN THE AMERICAN ASSOCIATION OF NURSERYMEN'S "AMERICAN STANDARD OF NURSERY STOCK", ANSI Z60,1-2004 SHRUBS SHALL BE CONTAINER GROWN AND WILL BE FREE OF DISEASE AND PESTS. NO BARE ROOT. ALL

PLANT BEDS TO BE MULCHED TO A DEPTH OF 3" WITH DARK BROWN, HARDWOOD MULCH. PLANTING BEDS ARE TO

BE FREE OF WEEDS AND GRASS. TREAT BEDS WITH A PRE-EMERGENT HERBICIDE PRIOR TO PLANTING AND MULCH PLACEMENT. APPLY IN ACCORDANCE WITH STANDARD TRADE PRACTICE. HOLE AREA FOR TREE TO BE TWICE (2x) THE DIAMETER OF THE ROOT BALL AND ROOT BALL SHALL BE SLIGHTLY MOUNDED FOR WATER RUN-OFF. ALL PLANT MATERIALS SHALL BE PROTECTED FROM THE DRYING ACTION OF THE SUN AND WIND AFTER BEING DUG, WHILE BEING TRANSPORTED, AND WHILE AWAITING PLANTING. BALLS OF PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY SHALL BE PROTECTED FROM DRYING ACTION BY COVERING THEM WITH MOIST MULCH. PERIODICALLY, APPLY WATER TO MULCH-COVERED BALLS TO KEEP MOIST. IF PLANTING SHOULD OCCUR DURING GROWING SEASON, APPLY ANTI-DESICCANT TO LEAVES BEFORE TRANSPORT TO REDUCE THE LIKELIHOOD OF WINDBURN. REAPPLY ANTI- DESICCANT AFTER PLANTING TO REDUCE TRANSPIRATION. REMOVE TWINE AND BURLAP FROM ROOT BALLS. SOIL ON TOP OF CONTAINERIZED OR BALLED PLANTS IS TO BE REMOVED UNTIL ALL PLANTS' ROOT FLARES ARE EXPOSED. THIS IS THE NATIVE SOIL LINE AT WHICH PLANTING DEPTHS SHOULD BE MEASURED. 5. AFTER PLANTING IS COMPLETED, PRUNE MINIMALLY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES. PRUNE IN SUCH A MANNER AS NOT TO CHANGE THE NATURAL HABIT OR SHAPE OF THE PLANT. MAKE CUTS BACK TO BRANCH COLLAR, NOT FLUSH. DO NOT PAINT ANY CUTS WITH WITH TREE PAINT. CENTRAL LEADERS SHALL

6. GUARANTEE TREES, SHRUBS, GROUND COVER PLANTS FOR ONE CALENDAR YEAR FOLLOWING PROVISIONAL ACCEPTANCE OF THE OVERALL PROJECT. DURING THE GUARANTEE PERIOD, PLANTS THAT DIE DUE TO NATURAL CAUSES OR THAT ARE UNHEALTHY OR UNSIGHTLY IN CONDITION, SHALL BE REPLACED BY THE CONTRACTOR.

# LAWN AND TURF AREAS

7. ALL LAWN AREAS TO BE SODDED AS SHOWN ON PLANS. SOD SHALL COMPLY WITH US DEPT. OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT AND EQUAL IN QUALITY TO STANDARDS FOR CERTIFIED SEED. SOD SHALL BE HEALTHY, THICK TURF HAVING UNDERGONE A PROGRAM OF REGULAR FERTILIZING, MOWING AND WEED CONTROL. SEED AND SOD SHALL BE A TURF-TYPE TALL FESCUE (3 WAY) BLEND. SEED BLEND SHALL CONSIST OF THE FOLLOWING: TURF-TYPE TALL FESCUE KENTUCKY BLUEGRASS

# INSTALLATION

' ABOVE FINISH GRADE

THE INSTALLATION OF ALL PLANT MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT, MO. AND LANDSCAPE INDUSTRY STANDARDS. 10. ALL LANDSCAPE AREAS TO BE FREE OF ALL BUILDING DEBRIS AND TRASH, BACK FILLED WITH CLEAN FILL

SOIL AND TOP DRESSED WITH 4" OF TOPSOIL. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 7 AND A 4% ORGANIC MATERIAL MINIMUM, ASTM D5268. PLANT BEDS TO BE "MOUNDED". ALL PLANT MATERIAL, PLANT BEDS, MULCH AND DUG EDGE ARE TO BE INSTALLED PER LANDSCAPE PLANS, DETAILS, AND MANUFACTURER'S RECOMMENDATIONS. 12. REESTABLISH FINISH GRADES TO WITHIN ALLOWABLE TOLERANCES ALLOWING 3/4" FOR SOD AND 3" FOR MULCH IN PLANT BEDS. HAND RAKE ALL AREAS TO SMOOTH EVEN SURFACES FREE OF DEBRIS, CLODS, ROCKS, AND VEGETATIVE MATTER GREATER THAN 1".

13. ALL PLANT BEDS, SHRUBS AND TREES SHALL BE MULCHED WITH 3" OF DARK BROWN, HARDWOOD MULCH, EXCEPT IF NOTED AS ROCK. DARK BROWN, HARDWOOD MULCH SHALL BE INSTALLED OVER DEWITT PRO 5 WEED CONTROL FABRIC IN PLANT BEDS ONLY. 14. CONTRACTOR IS RESPONSIBLE FOR INITIAL WATERING UPON INSTALLATION. DUG EDGES ARE TO BE DUG WHERE MULCH BEDS ARE ADJACENT TO TURF AREAS. NO EDGING IS REQUIRED ADJACENT TO PAVEMENT OR CURB.

16. THE EXACT LOCATION OF ALL UTILITIES, STRUCTURES, AND UNDERGROUND UTILITIES SHALL BE DETERMINED AND VERIFIED ON SITE BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION OF THE MATERIALS. DAMAGE TO EXISTING UTILITIES AND OR STRUCTURES SHALL BE REPLACED TO THEIR ORIGINAL CONDITION BY THE LANDSCAPE CONTRACTOR AT NO COST TO THE OWNER. 17. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND APPROVALS AND REQ'D INSPECTIONS BY LEGAL AUTHORITIES.

18. PROVISIONS SHALL BE MADE FOR READILY ACCESSIBLE IRRIGATION WITHIN 100' MAX. OF ALL LANDSCAPED AREAS INCLUDING ALL PLANT BEDS, INDIVIDUAL TREES, AND TURF AREAS. ALL LAWN AREAS (AS SHOWN ON PLANS) WILL BE IRRIGATED BY AN AUTOMATIC SPRINKLER SYSTEM. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL IRRIGATION COMPONENTS, SLEEVING, PIPE AND CONTROL DESIGN DRAWINGS OF IRRIGATION SYSTEM SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT AND OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. 19. ANY SUBSTITUTIONS OR DEVIATIONS SHALL BE REQUESTED IN WRITING BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIALS. ALL PLANTS ARE TO

# BE LOCATED AS SPECIFIED ON DRAWINGS. MAINTENANCE BY OWNER

20. ALL SHRUBS ARE TO BE MAINTAINED IN THEIR NATURAL SHAPE TO ALLOW EVENTUAL GROWTH INTO A HEDGE. 21. MAINTAIN NATURAL HABIT OF ALL SPECIFIED PLANT MATERIAL.

22. NEW SOD TO BE THOROUGHLY WATERED UNTIL ROOTS "TAKE HOLD" OF SOD BED. CONTINUE WATERING AS REQUIRED, UNTIL COMPLETELY ESTABISHED.

# IRRIGATION PERFORMANCE SPECIFICATION:

- THE FOLLOWING CRITERIA SHALL BE CONSIDERED MINIMUM STANDARDS FOR DESIGN AND INSTALLATIONOF LANDSCAPE IRRIGATION SYSTEM: 1. GENERAL - IRRIGATION SYSTEM TO INCLUDE DRIP IRTRIGATION OF SHRUB BEDS ADJACENT TO BUILDINGS, SPRAY HEADS IN THE PARKING ISLANDS, AND ROTORS AROUND THE PERIMETER OF THE PARKING LOTS. HEADS SHALL THROW AWAY FROM BUILDING AND ACOID
- 2. IRRIGATION SYSTEM SHALL CONFORM TO ALL INDUSTRY STANDARDS AND ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING DESIGN
- 3. WATERLINE TYPW, SIZE LOCATION, PRESSURE AND FLOW SHALL BE FIELD VERIFIED PRIOR TO SYSTEM DESIGN AND INSTALLATION. 4. ALL MATERIALS SHALL BE FROM NEW STOCK FREE OF DEFECTS AND CARRY A MINIMUM ONE YEAR WARRANTY FROM THE DATE OF SUBSTANTIAL COMPLETION.
- 5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED IN SUCH A WAY THAT ALL SYSTEM COMPONENTS OPERATE WITHIN THE GUIDELINES ESTABLISHED BY THE MANUFACTURER.
- 6. LAWN AREA AND SHRUB BEDS SHALLBE ON SEPARATE CIRCUITS.
- 7. PROVIDE WATER TAP, METER SET, METER VAULT AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER FOR IRRIGATION SHALL CONFORM TO LOCAL WATER GOVERNING AUTHORITY CUIDELINES AND STANDARDS.
- 8. BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH STATE AND LOCAL REQULATIONS.
- 9. IRRIGATION CONTROLLER TO BE LOCATED IN UTILITY ROOM INSIDE BUILDING, AS IDENTIFIED BY OWNER.

10. IRRIGATION CONTROLLER STATIONS SHALL BE LABELED TO CORRESPOND WITH THE CIRCUIT IT CONTROLS.

- 11. CONTRACTOR SHALL PROVIDE TO THE OWNER WRITTEN OPERATION INFORMATION FOR ALL SYSTEM COMPONENTS.
- 12. CONTRACTOR SHALL PROVIDE O THE OWNER ALL KEYS, ACCESS TOOLS, WRENCHES AND ADJUSTING TOOLS NECESSARY TO GAIN ACCESS,
- 13. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- 14. AN AUTOMATIC RAIN SHUT-OFF OR MOISTURE DEVICE SHALL BE INSTALLED. 15. INSTALL SCHEDULE 40 PVC SLEEVES UNDER ALL CURBS, PAVING AND SIDEWALKS. SLEEVES TO BE TWICE THE SIZE OF THE LINE IT HOUSES.
- 16. INSTALL MANUAL DRAIN BALBES AT LOWEST POSSIBLE ELEVATION ON IRRIGATION MAIN TO ALLOW GRAVITY DRAINING OF MAIN DURING WINTER MONTHS. PROVIE QUICK COUPLERS AT MULTIPLE LOCATIONS TO ALLOW FOR EASY "BLOWING OUT" OF LATERAL AND MAIN

# 17. ZONES OR NOZZLES SHALL BE DESIGNED WITH MATCHED PRECIPITATION RATES.

# 18. MINIMUM LATERAL DEPTH IS 15" AND MAIN DEPTH IS 18".

19. SUBMIT DESGN DRAWING WITH BID TO ALLOW OWNER TO EVALUATE SYSTEM. INCLUDE CUT SHEETS OF ALL COMPONENTS AND ZONE TABLE ILLUSTRATING FLOWS AND ANTICIPATED PRESSURE AT FURTHEST HEAD.

20. AN "AS-BUILT" SCALED DRAWING SHALL BE PROVIDED TO THE OWNER BY THE CONTRACTOR AND SHALL INCLUDE UT NOT BE LIMITED TO

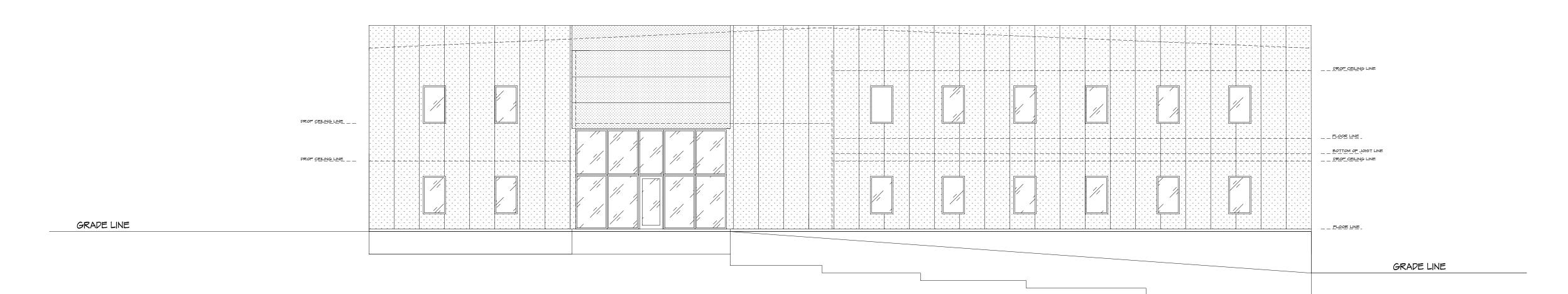
- c. PIPE SIZE AND QUANTITY

- f. DETAILED METHOD OF WINTERIZED SYSTEM

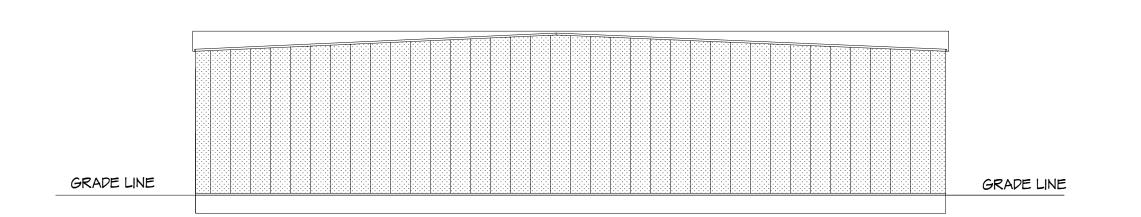
SUBMIT AS-BUILT DRAWING IN FULL SIZE DRAWING FORM AS WELL AS PDF ELECTRONIC FORMAT. (SCANNING FULL SIZE COPY OF PLAN IS ACCEPTABLE IF IT CAN BE PRINTED TO SCALE.

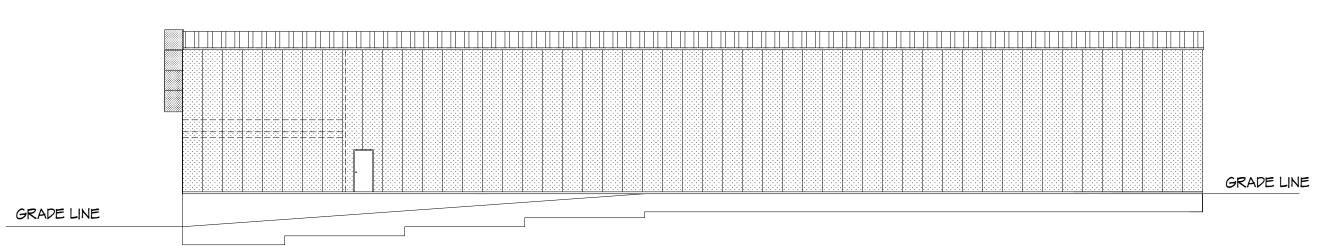
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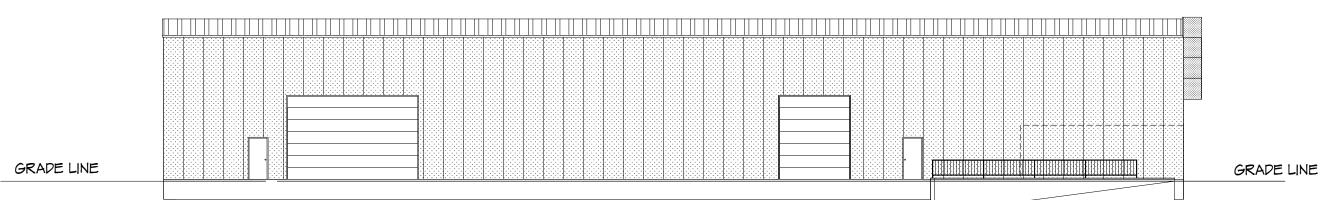


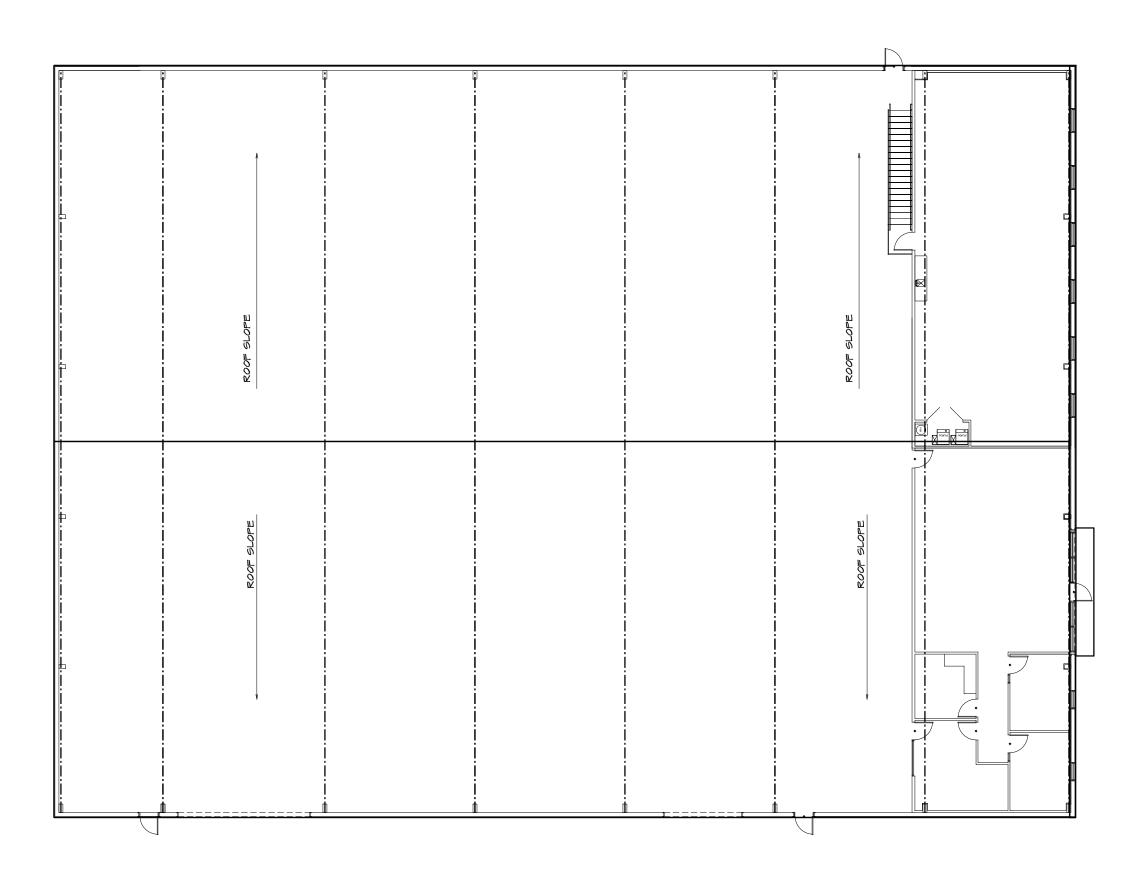
# FRONT ELEVATION 1/8" = 1'0"





1/16" = 1'0"





# ROOF ELEVATION

1/16" = 1'0"

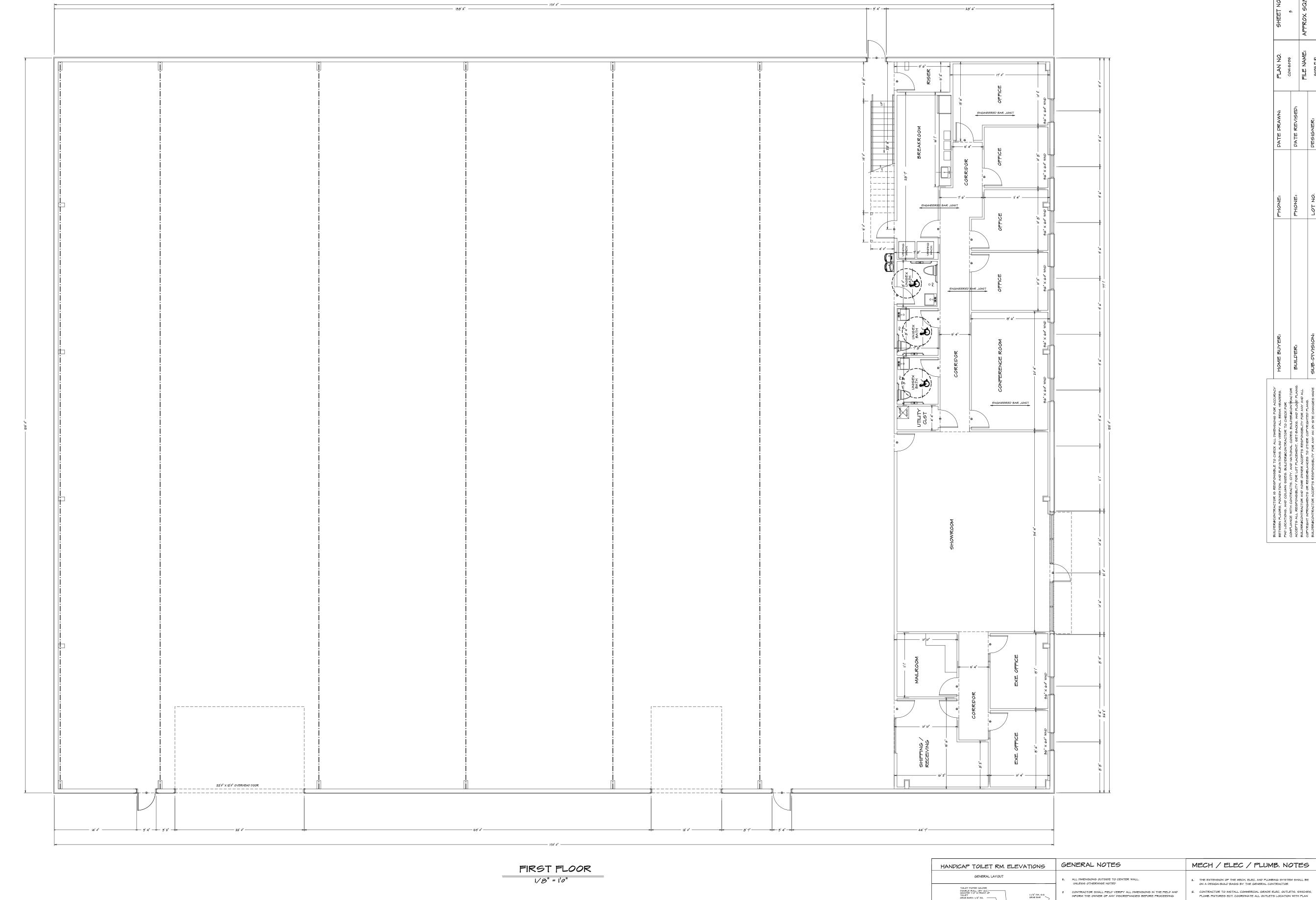
CODE NOTES

	ALL CONSTRUCTION FOR THIS PROJECT SHALL COMFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES ALL AS AMENDED BY THE CITY OF LEE! SUMMIT	1.	ALL DIMENSIONS INSIDE TO INSIDE WALL, UNLESS OTHERWISE NOTED
	2019 INTERNATIONAL BUILDING CODE 2019 INTERNATIONAL MECHANICAL CODE 2019 INTERNATIONAL FLUMBING CODE	2	CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS IN THE FEILD AND INFORM THE OWNER OF ANY DISCREPANCIES BEFORE PROCEEDING
	2019 INTERNATIONAL FUEL GAS CODE 2019 INTERNATIONAL FIRE CODE & LIFE SAFTY CODE 2017 NATIONAL ELECTRIC CODE	3.	PROVIDE 2X BLOCKING IN ALL WALLS AS REQUIRED FOR SUPPORT
~111111111	ICC/ANSI AII7.I-2009, ACCESSIBLE & USABLE BUILDING AND FACILITIES UNIFIED DEVELOPMENT ORDINANCE	4.	CONTRACTOR TO DESIGN, COORDINATE, INSTALL, ETC. ALL CASEWORK/MILLWORK WITH OWNER
OF MISSELL	SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABLITIES ACT TENANT USE: OCCUPANCY CLASSIFICATION (PRIMARY) GROUP S-I	5.	COORDINATE ALL FINAL OUTLET, WALL AND DOOR LOCATION W/ OWNER BEFORE CONSTRUCTION
AARON DELAND	(SECONDARY) GROUP B TYPE OF CONSTRUCTION (IBC 602): TYPE V-B	6.	COORDINATE ALL FINISHES WITH OWNER
WAY AND DELAME! />B	AUTOMATIC SPRINKLER SYSTEM : N/A	7.	PROVIDE FIRE EXINGUISHERS AS REQUIRED BY FIRE MARSHAL
OBER MILLER X	TENANT AREA = OFFICE: FIRST FLOOR = 3224 SECOND FLOOR = 1668	8.	FIELD VERIFY ALL DIMENSIONS AND SITE CONDITIONS
1 (1) · 6.24	STORAGE: WAREHOUSE = 17682 OCCUPANT LOAD (TABLE 1004.1.2):	9.	CONTRACTOR TO COORDINATE W/ OWNER ON ALL ITEMS SUPPLIED AND APPECTING THE CONTRACTORS WORK
NUMBER PE OMBO19580	OFFICE: 9224/00 - 32 WAREHOUSE: 17692/900 - 36 PLUMBING REQUIREMENTO (TABLE 2002.1):	10.	NEW WALL CONSTRUCTION SHALL BE 24-GAUGE STUPS, TRACK AND BLOCKING, STUPS SET 24" OC MIN. W/ I/2 GYPSUM BOARD
The second	USE GROUP B WATER CLOSETS: * (UNISEX)   PER SO =		WALL STUPS SHALL BE PESIGNEP IN ACCORPANCE WITH EITHER AISI SZII OR AISI SI00
WIND TO NALE OF THE PARTY OF TH	SERVICE SINK -   USE GROUP S-  WATER CLOSETS: = (UNISEX)   PER 100 =   SERVICE SINK -	.   "	WALL COVERING IN PROPOSED BATHROOM TO HAVE TILE OR OTHER NONABSORBENT SURPACE, TO A HEIGHT NOT LESS THEN 40° O.F.F.
	DRINKING FOUNTIAN -   PER 1000 =		

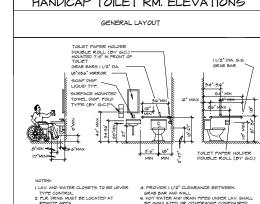
LOCATION PLAN / KEY PLAN

GENERAL NOTES



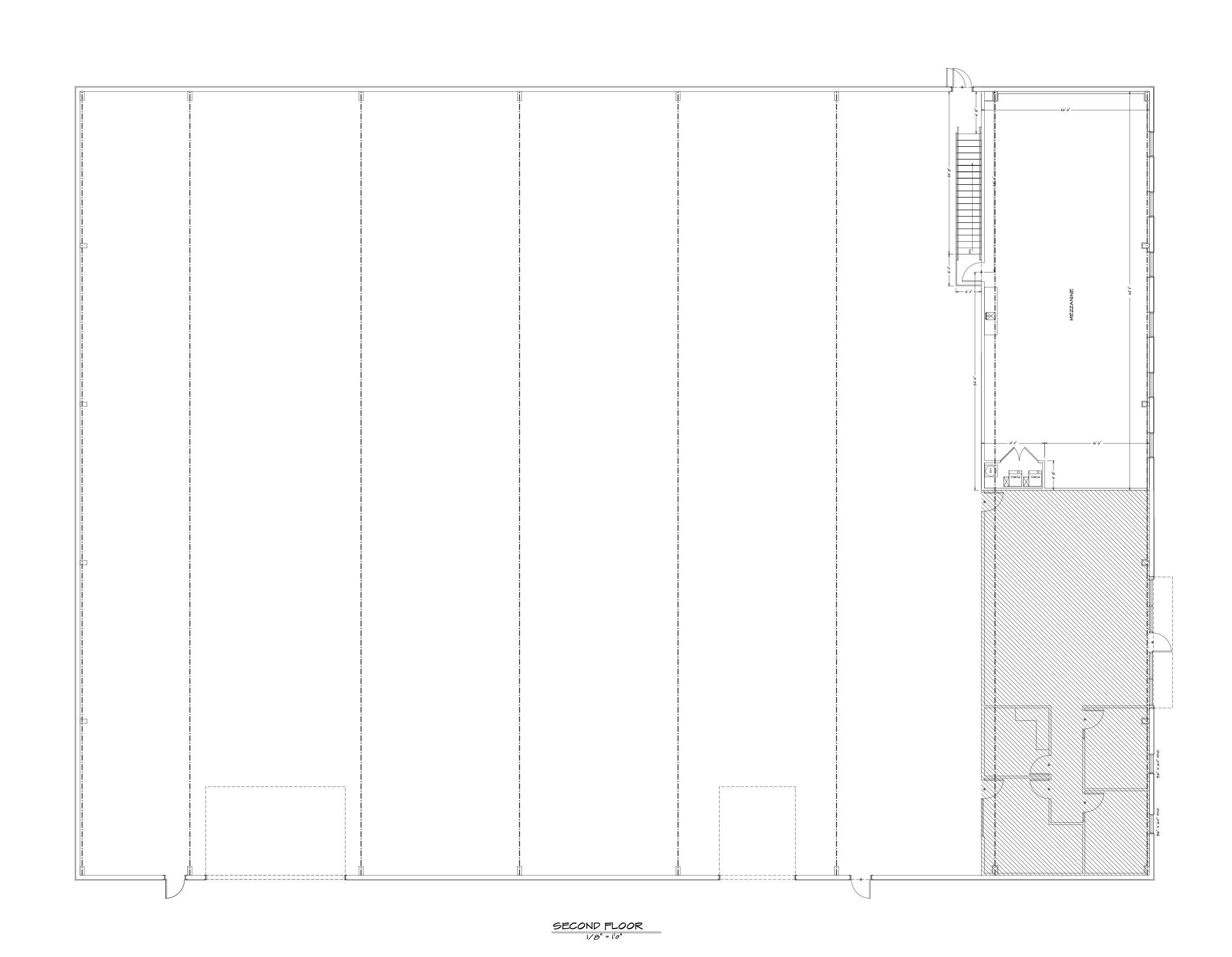


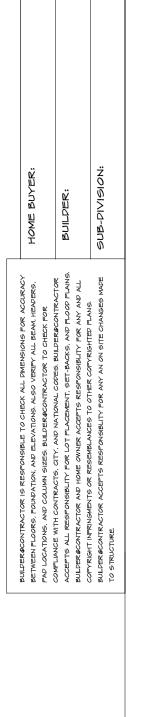




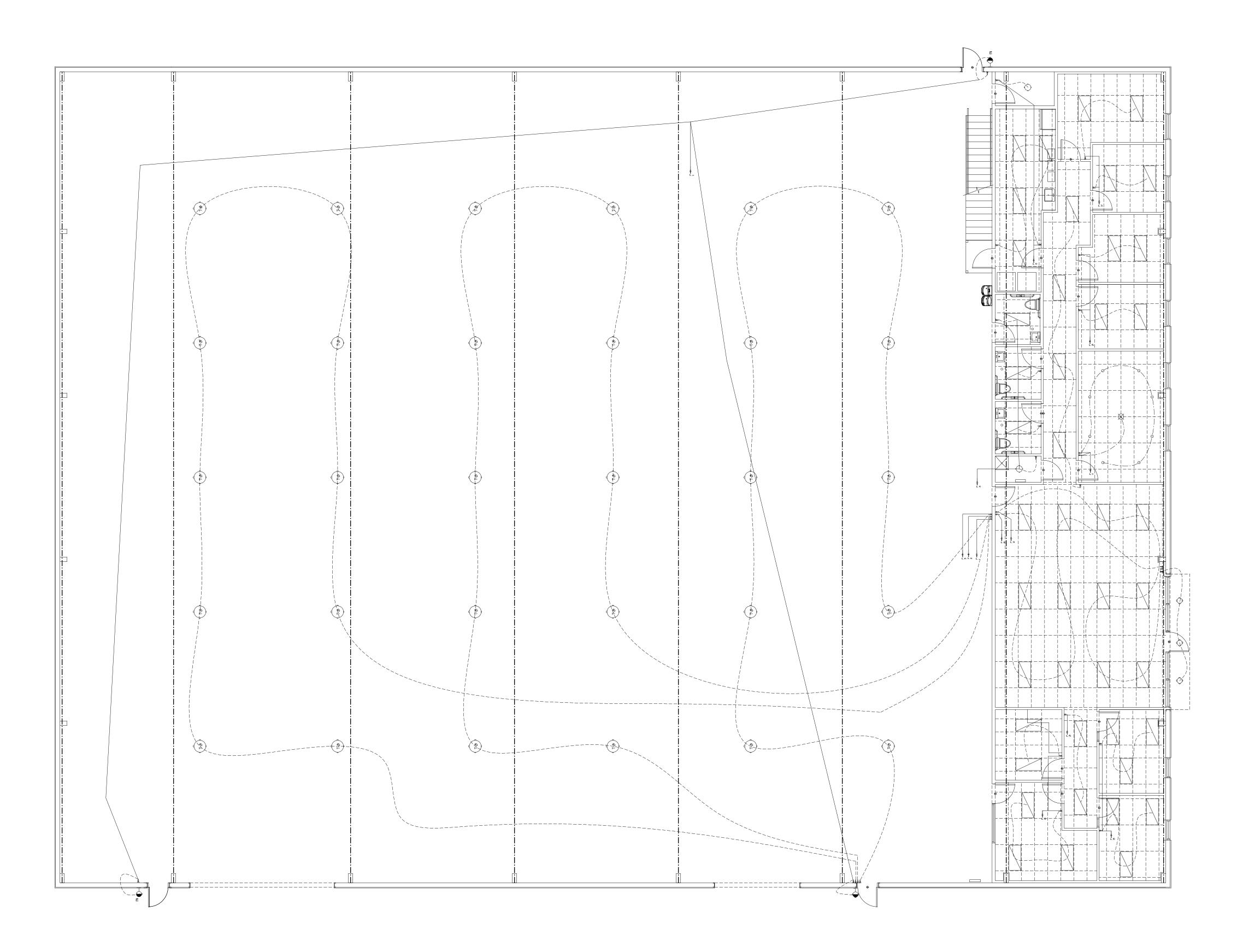
- PROVIDE BLOCKING IN ALL WALLS AS REQUIRED FOR SUPPORT
- CONTRACTOR TO PESIGN, COORDINATE, INSTALL, ETC. ALL CASEWORK/MILLWORK WITH OWNER
- COORDINATE ALL FINAL OUTLET, WALL AND DOOR LOCATION W/OWNER BEFORE CONSTRUCTION

- PROVIDE FIRE EXINGUISHERS AS REQUIRED BY FIRE MARSHAL FIELD VERIFY ALL DIMENSIONS AND SITE CONDITIONS
- CONTRACTOR TO COORDINATE W/ OWNER ON ALL ITEMS SUPPLIED AND APPECTING THE CONTRACTORS WORK INTERIOR WALL CONSTRUCTION SHALL BE 24 GAUGE STUPS, TRACK AND BLOCKING, STUPS SET 24" OC MIN. W/ I/2 GYPSUM BOARD WALL STUPS SHALL BE DESIGNED IN ACCORDANCE WITH EITHER AISI SZII OR AISI SI40
- WALL COVERING IN PROPOSED BATHROOM TO HAVE TILE OR OTHER NONABSORBENT SURFACE, TO A HEIGHT NOT LESS THEN 40° OFF.
- 3. HVAC AND DUCT TO BE DESIGNED BY OTHERS
- 4. ALL ELECTRICAL WORK SHALL COMPLY WITH 2018 NEC
- g. ALL WIRING SHALL BE IN EMT CONDUIT OR MC CABLE, MINIMUM WIRE SIZE SHALL BE #12 AWG. MINIMUM CONDUIT SIZE SHALL BE  $1/2^{\circ}$
- ELECTRICAL PANEL IS 400 AMP-3P W/ 4-#3/0 CU THWN , #6GRD IN 2 I/2" EMT CONDUIT, VOLTAGE 208/120
- PROVIDE EXIT SIGNS AND EMERGENCY LIGHTS TO BE IN ACCORDANCE WITH ALL COPES AND REGULATIONS

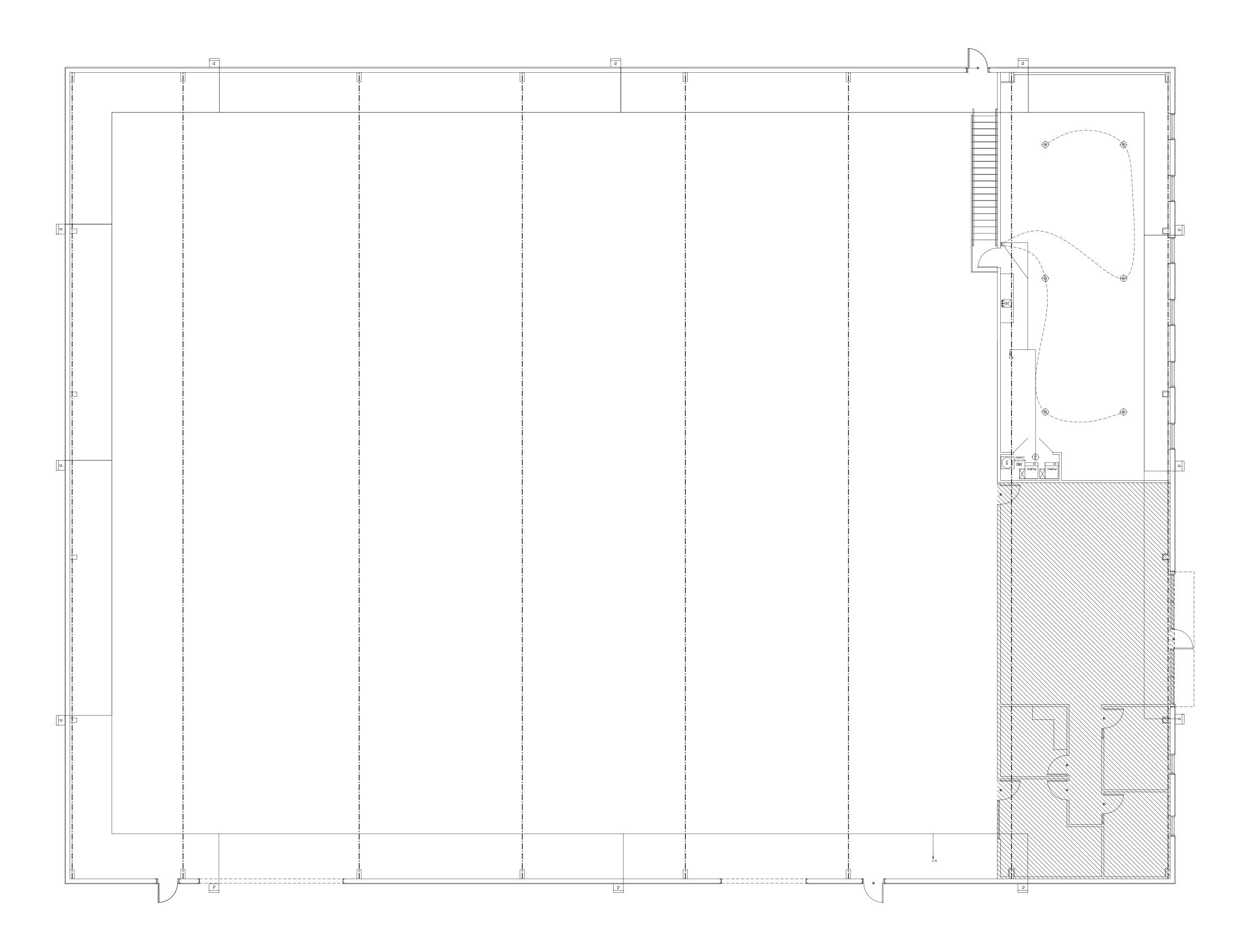








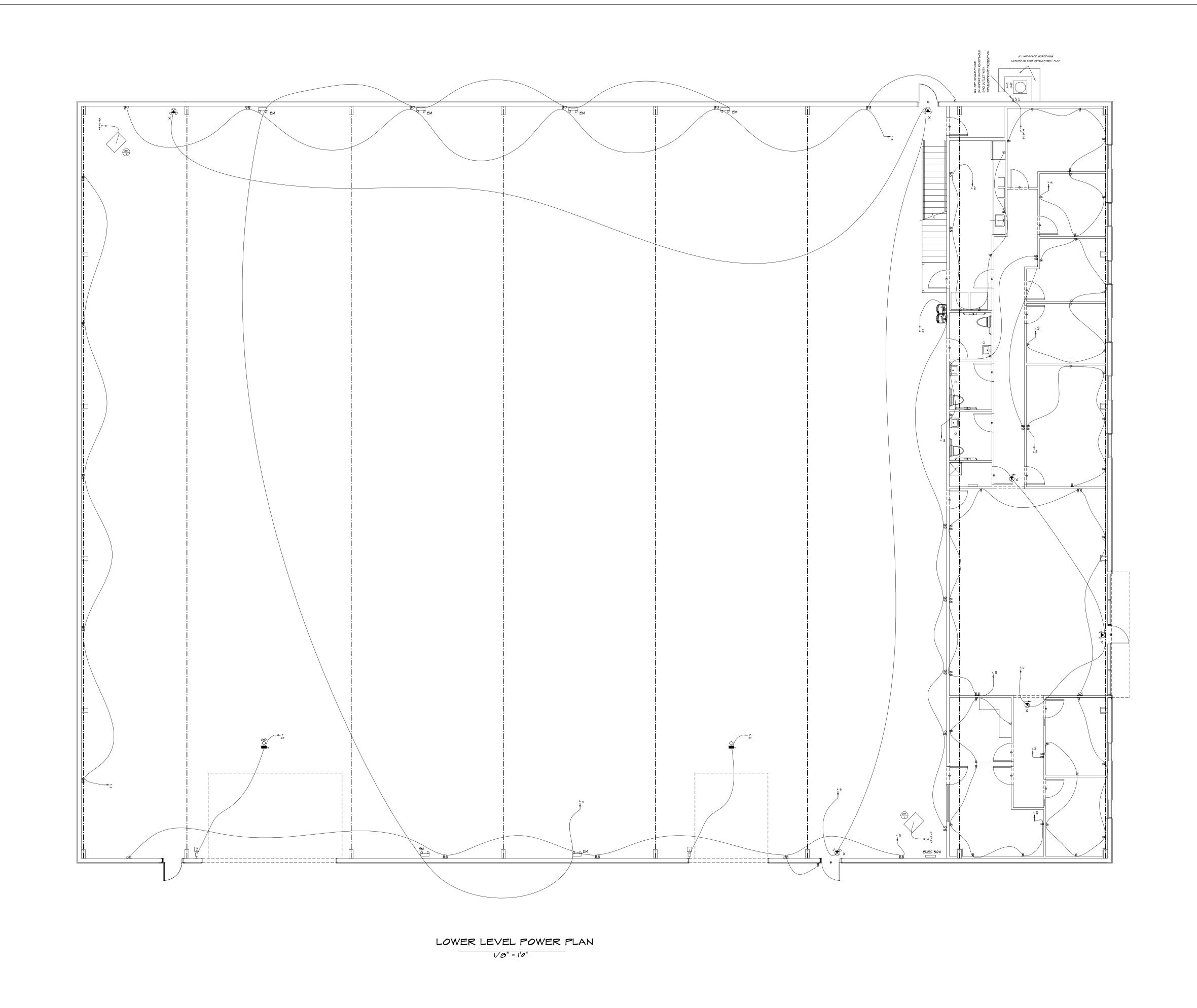




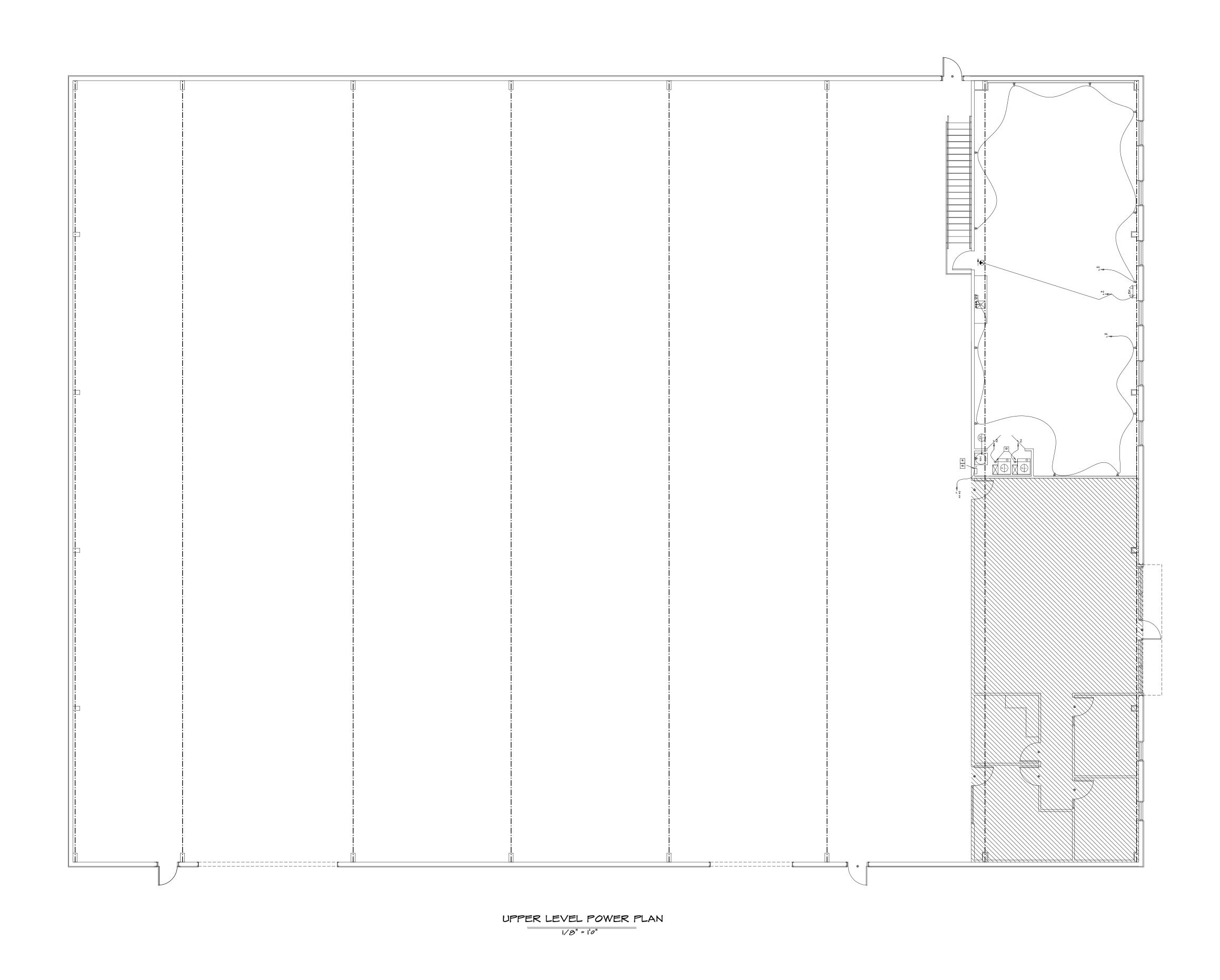




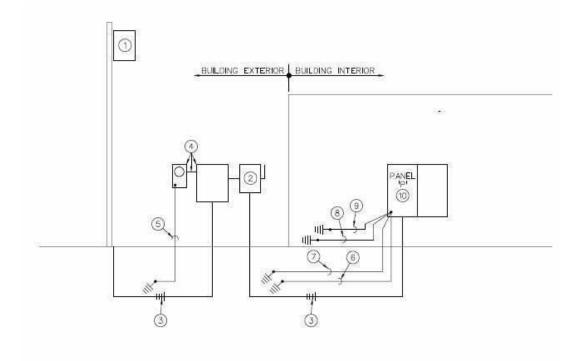
HOME BUYER:
PHONE:
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# ELECTRICAL RISER DIAGRAM

# RISER DIAGRAM NOTES

I. UTILITY COMPANY POLE MOUNTED TRANSFORMER WITH 208Y/I20V, 3-PHASE 4-WIRE SECONDARY, VERIFY AFC AT TRANDFORMER SECONDARY WITH UTILITY COMPANY.

2. 400A/3P, NON-FUSED, NEMA 3R DISCONNECT SWITCH.

3. (2) 2" PVC CONDUITS WITH 4-#3/0 (CU) IN EACH. INSTALL CONDUITS WITH TOP MINIMUM 3'-6" BELOW FINSHED GRADE.

4 UTILITY COMPANY C.T. CABINET AND METER CAN/SOCKET, I-1/4" CONDUIT FOR METERING CABLES.

5. #6 (CU) GROUND WIRE. CONNECT TO 1/2" ROUND X  $8^1$ -0" LONG COPPER CLAD STEEL DRIVEN GROUND ROD.

6. 1/2" C, 1-#1/0 (CU) GROUND WIRE, CONNECT TO 3/4" ROUND X  $10^1-0$ " LONG COPPER CLAD STEEL DRIVEN GROUND ROD.

7. I/2" C,  $I-\#I/\theta$  (CU) GROUND WIRE, CONNECT TO  $2\theta^I-\theta^I$  LONG CONDUCTOR IN CONCRETE BUILDING FOOTING.

8. 1/2" C, 1-#1/0 (CU) GROUNG WIRE. CONNECT TO COLD WATER SERVICE PIPE, AHEAD OF MAIN SHUT-OFF VALVE.

9. I/2" C, I-#I/0 (CU) GROUNG WIRE. CONNECT TO BUILDING STEEL.

10. PANEL 'P' SHALL HAVE SERVICE ENTRANCE LABEL.

# ELECTRICAL GENERAL NOTES

I. INSTALLATION SHALL COMPLY WITH LATEST EDITION OF N.E.C. AND LOCAL AUTHORITY HAVING JURISDICTION

2. CONTRACTOR SHALL BE LICENSED TO PREFORM WORK IN MUNICIPALITY WHERE PROJECT IS LOCATED.

3. ALL WIRING SHALL BE INSTALLED IN CONDUIT, EMT CONDUIT WITH SET SCREW FITTINGS MAY BE UTILIZED WHERE PERMITTED BY CODE, MINIMUM CONDUIT SIZE SHALL BE 1/2". IN WOOD FRAMING CONVENTIONAL NM ROMEX WIRE SHALL BE USED

4. ALL WIRING SHALL BE COPPER WITH 600 VOLT INSULATION AND COLOR CODED.

5. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMIT AND INSPECTION FEES.

6. INSTALL BLANK COVER PLATE ON ALL PULL BOXES AND JUNCTION BOXES.

7. TYPEWRIIEN PANELBOARD DIRECTORY SHALL BE PROVIDED FOR PANELBOARD AND CORRECTLY FILLED OUT.

8. ALL WIRING DEVICES SHALL BE RATED 20 AMP, OR AS NOTED.

9. ALL NEW BRANCH CIRCUIT CONDUITS SHALL BE INSTALLED CONCEALED ABOVE LAY-IN CEILING OR IN WALLS.

10. CONTRACTOR SHALL FIELD VERIFY EXACT ROUTING OF ALL CONDUITS TO NEW EQUIPMENT.

II. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE, NEMA I FOR INDOOR AND NEMA 3R FOR OUTDOOR INSTALLATIONS, MANUFACTURED BY SQUARE D, ITE/SIEMENS, GE, CUTLER-HAMMER, OR EQUAL.

12. FURNISH MATERIALS AND LABOR FOR A COMPLETE AND OPERATIONAL ELECTRICAL INSTALLATION.

13. MATERIAL AND EQUIPMENT SHALL BE NEW AND SHALL BEAR THE 'UL' LABELS AS REQUIRED.

14 EMERGENCY AND EXIT LIGHT FIXTURES SHALL BE PROVIDED WITH BATTERY BACK-UP FOR MINIMUM OF (90) MINTES. EMERGENCY AND EXIT LIGHT FIXTURES SHALL BE CONNECTED TO HOT LEG OF CIRCUIT, NOT SWITCHED.

IG. E.C. SHALL VERIFY RATINGS, LOCATIONS, AND CONNECTIONS OF ALL EQUIPMENT PROVIDED BY OTHERS AND INSTALLED AND/OR CONNECTED BY THE ELECTRICAL CONTRACTOR.

16. NEW PANELBOARDS SHALL BE ITE/SIEMENS TYPE 'P2' OR EQUAL, WITH BOLT-ON CIRCUIT BREAKERS, ALUMINUM BUS. NEMA I ENCLOSURE, GROUND, AND NEUTRAL BUS. AIC RATING TO MATCH EXISTING SYSTEM, EQUALS BY SQUARE 'D'. G.E., CUTLER-HAMMER OR EQUAL.

17. NEW CIRCUIT BREAKERS INSTALLED IN EXISTING PANELBOARD SHALL MATE/MATCH PANEL CONSTRUCTION AND AIC RATING.

# ELECTRICAL SYMBOLS

سياسيا	CINICAL DIMPOLD
	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL, ARROWS INDICATE HOMERUNS TO PANEL. ALL CONDUCTORS ARE #12 EXCEPT AS NOTED.
— —III— — —	CONDUIT RUN UNDERGROUND OR BENEATH FLOOR SLAB
	GROUNDING CONDUCTOR #12 EXCEPT AS NOTED
HŪ	WALL MOUNTED JUNCTION BOX
(J)	CEILING MOUNTED JUNCTION BOX
	PANELBOARD (SURFACE MOUNTED). INSTALLED W/TOP 6'0" AFF
	DISCONNECT SWITCH. SIZE AS NOTED
<b>—</b>	DISCONNECT SWITCH FURNISHED WITH EQUIPMENT
⊗ OR ⊗↓	EXIT LIGHT - SINGLE FACE - ARROW AS SHOWN
$\downarrow \Theta \downarrow$	EXIT LIGHT - DOULBE FACEARROW AS SHOWN
	COMBINATION EXIT/EMERGENCY LIGHT FIXTURE WITH (2) HEADS
	CEILING OR WALL MOUNTED EMERGENCY LIGHTING UNIT WITH (2) HEADS.
	2'X4' LIGHT FIXTURE
	NIGHT LIGHT FIXTURE, FIXTURE SHALL BE ON 27/7
	FLUORESCENT STRIP FIXTURE
$\Diamond$	CEILING LIGHT FIXTURE
$\vdash \Diamond$	WALL MOUNTED LIGHT FIXTURE
$\vdash \bigcirc$	REMOTE WEATHERPROOF EMERGENCY LIGHT FIXTURE
	WALL PACK LIGHT, 100W COMERCIAL LED, WALL PACK 120-277V 50,000 - HR. LIFE 1P65 COMPLY WITH SECT. 7.260 OF THE UDO
(T-8)	T-8 HIGH BAY LIGHT FIXTURE
\$	SINGLE POLE SWITCH. +3'-10" AFF
\$3	THREE-WAY SWITCH. +3'-10" AFF
\$4	FOUR-WAY SWITCH. +3'-10" AFF
\$05	OCCUPANCY SENSOR. +3'-10" AFF
\$ <sup>0</sup>	DIMMER SWITCH +3'10" AFF. SIZE AS NOTED
PP	OCCUPANCY SENSOR POWER PACK
(os)	OCCUPANCY SENSOR.
Ф	DUPLEX RECEPTACLE. +1'-6" AFF OR AS NOTED
-	DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP
₩P	DUPLEX RECEPTACLE WITH WEATHERPROOF PLATE. HEIGHT AS NOTED

DUPLEX RECEPTACLE WITH WEATHERPROOF PLATE. HEIGHT AS NOTED

DUPLEX RECEPTACLE W/GROUND FAULT PROTECTION . +1'-6" AFF OR

FOURPLEX RECEPTACLE. +1'-6" AFF OR AS NOTED

ELECTRIC WATER HEATER AND NUMBER

EXHAUST FAN AND NUMBER

FURNACE AND NUMBER

FAN COIL UNIT AND NUMBER

ABOVE FINISHED FLOOR

ELECTRICAL CONTRACTOR

ELECTRIC DRINKING FOUNTAIN

NIGHT LIGHT FIXTURE SHALL BE ON 24/7

HEAT PUMP UNIT AND NUMBER

CONDENSING UNIT AND NUMBER

WH - I

F - I

FC - 1

# ELECTRICAL PLAN NOTES

- I. INSTALL OUTLET BOX FOR WIRING DEVICE WITH TOP 48" AFF OF GROUND FLOOR
- ON/OFF/STOP PUSH-BUTTON INSTALLED AT 48" AFF OF GROUND FLOOR FOR OVERHEAD DOOR MOTOR CONTROLE.
- 3. 30A, 250V, 2-POLE, 3-WIRE DISCONNECTING MEANS
- 4. 3/4" CONDUIT, 2-#10 AND 1-#10 GROUND WIRE
- 5. 20A, IZOV, I-POLE DISCONNECTING MEANS

PANEL P	120/20	8V	OLTS		400_ A.	BUS		□ S	ERVICE ENTRANCE
		3	PHASE		<u>400</u> A.	MAIN BR	EAKEF	l 🗆 F	EED TRU LUGS
SECTION 1 OF	1	4	WIRE	□ N	ΛΑΙΝ LI	JGS ONL	Y	□ S	SUB FEED LUGS
DESCRIPTION	Wire			Circ	Circ		AMPS	Wire	DESCRIPTION
DESCRIPTION	Size	AMPS	Watts	#	#	Watts	AIVIPS	Size	DESCRIPTION
LIGHTS (BAY)	12	20	1500	1	2	1500	20	12	LIGHTS (BAY)
LIGHTS (BAY)	12	20	1500	3	4	1500	20	12	LIGHTS (BAY)
LIGHTS	12	20	1500	5	6	1500	20	12	LIGHTS
LIGHTS	12	20	1500	7	8	1500	20	12	LIGHTS
LIGHTS	12	20	1500	9	10	1500	20	12	LIGHTS
EXTERIOR LIGHTS	12	20	1500	11	12	1500	20	12	LIGHTS
LIGHTS	12	20	1920	13	14	1300	20	12	RECEPTACLES (BAY)
LIGHTS	12	20	1920	15	16	1300	20	12	RECEPTACLES (BAY)
EM/EXIT LIGHTS	12	20	1920	17	18	1300	20	12	RECEPTACLES (BAY)
EM/EXIT LIGHTS	12	20	1920	19	20	1300	20	12	RECEPTACLES
EMERGENCY LIGHTS	12	20	1920	21	22	1300	20	12	RECEPTACLES
RECEPTACLES	12	20	1920	23	24	1300	20	12	RECEPTACLES
RECEPTACLES	12	20	1920	25	26	1300	20	12	RECEPTACLES
OHD OPERATOR	12	20	1920	27	28	1300	20	12	RECEPTACLES
OHD OPERATOR	12	20	1920	29	30	1300	20	12	RECEPTACLES
RECEPTACLES	12	20	1920	31	32	1300	20	12	RECEPTACLES
RECEPTACLES	12	20	1920	33	34	1300	20	12	EM/EXIT LIGHTS
OPEN				35	36	1920	20	12	F - 1
		\30	2500	37	38	1920	20	12	F - 2
CU-1	10		2500	39	40	4500	/30		WATER HEATER
		3 \	2500	41	42	4500	2	8	WATER HEATER
		35	3300	43	44	3300	35		
UH-1	8		3300	45	46	3300		8	UH-2
		3	3300	47	48	3300	3		

TYPE	MANUFACTURER	LAMP	WATTS/VOLTS	PISCRIPTION
P	BY OWNER	LEP	ТВР	EXTERIOR WALL PACK
E	BY OWNER	LEP	ТВР	EXTERIOR RATED ARCHITECTURAL FIXTURE
EM	BY OWNER	LEP	ТВР	EMERGENCY LIGHTING UNIT, 90 MIN. BATTERY
X	BY OWNER	LEP	ТВР	EXIT SIGN, UNIVERSAL MOUNT, 90 MIN. BATTERY

INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL, PLUMBING AND FUEL GAS CODES, NFPA 90A AND 101 AND ALL STATE AND LOCAL CODES, ORDINANCES AND REGULATIONS.

DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO INDICATE THE GENERAL DESIGN CONCEPT. THEY DO NOT NECESSARILY INDICATE EACH AND EVERY FITTING OR FEATURE. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT.

REFER TO STRUCTURAL DRAWINGS FOR SPECIFIC REQUIREMENTS CONCERNING FOLIPMENT PAD CONSTRUCTION STRUCTURAL SUPPORTS AND MOUNTINGS FOR

MECHANICAL EQUIPMENT AND SUPPLEMENTAL STEEL.

INSTALL ALL MECHANICAL EQUIPMENT LEVEL, ON PAD, THAT EXTEND A MINIMUM OF 4" BEYOND THE EQUIPMENT FOOTPRINT.

COOLING EQUIPMENT LOCATED WHERE DAMAGE FROM OVERFLOW COULD OCCUR AND ELSEWHERE AS INDICATED, SHALL BE MOUNTED IN SECONDARY CONTAINMENT PANS WITH HIGH WATER ALARM SENSOR TO SHUT DOWN THE EQUIPMENT. THE DRAIN PAN SHALL BE PIPED TO FLOOR DRAIN, TO EXTERIOR OR ELSEWHERE AS

COORDINATE EXACT LOCATIONS AND ORIENTATION OF EQUIPMENT WITH ARCHITECTURAL AND STRUCTURAL REQUIREMENTS. EQUIPMENT SHALL BE SCREENED IN ACCORDANCE WITH LOCAL JURISDICTION REQUIREMENTS AND AS SHOWN ON ARCHITECTURAL DRAWINGS.

DUCTWORK FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH

ALL DUCTWORK SHALL BE SHEET METAL, CONSTRUCTED TO SMACNA STANDARDS, MINIMUM OF 2" WG PRESSURE CLASS AND SEAL CLASS 'C' MINIMUM. ALL LONGITUDINAL AND TRANSVERSE JOINTS TO BE SEALED, EXCEPT AS OTHERWISE NOTED. ROUND AND FLEX DUCT CONNECTIONS SHALL BE MADE WITH SPIN COLLARS WITH EXTRACTORS AND VOLUME DAMPERS.

DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS. CONTRACTOR SHALL INCLUDE AN ALLOWANCE FOR 1" DUCT LINER IN LOW VELOCITY DUCTS WHERE

SUPPORT ALL SUSPENDED EQUIPMENT, DUCTWORK AND PIPING INDEPENDANTLY, DIRECTLY FROM STRUCTURAL MEMBERS, NOT METAL DECK.

PROVIDE FLEXIBLE FABRIC CONNECTORS AT ALL DUCTWORK CONNECTIONS TO ROTATING EQUIPMENT. CONNECTORS EXPOSED TO SUNLIGHT SHALL BE MADE OF

UV RESISTANT MATERIAL.

ROUND OR OVAL EXPOSED DUCT SHALL BE SPIRAL DUCT, PAINT GRADE IF TO BE PAINTED.

ALL ROOF MOUNTING, FLASHINGS AND PENETRATION WORK ASSOCIATED WITH MECHANICAL AND PLUMBING WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE ROOFING MANUFACTURER'S WARRANTY REQUIREMENTS.

IN GENERAL, KEEP DUCTWORK AND PIPING HIGH AS POSSIBLE. IN NO EVENT SHALL HORIZONTAL WORK BE INSTALLED SO THAT HEADROOM IS LESS THAN 7'-6" ABOVE FINISH FLOOR WITHOUT PRIOR APPROVAL.

ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE INSTALLED TO PROVIDE MANUFACTURER'S RECOMMENDED OPERATING AND SERVICE CLEARANCES FOR ALL EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS AND DIFFERING CLEARANCE REQUIREMENTS OF ACTUAL EQUIPMENT FURNISHED.

ALL FIXTURES AND EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS AND PER LISTINGS.

IN GENERAL AND EXCEPT AS OTHERWISE NOTED, DUCTWORK AND PIPING SHALL BE INSTALLED PARALLEL TO COLUMN AND BUILDING WALL LINES. THEY SHALL BE

CONCEALED ABOVE CEILINGS, IN CHASES OR WALL CONSTRUCTION OR BELOW

SUPPORT ALL PIPING SYSTEMS IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS AND INDUSTRY STANDARDS TO PREVENT SAGS AND DIPS. PROVIDE STRUTS AND AND PIPE CLAMPS ON 8' CENTERS AND SUPPORT ALL PIPING RISERS AT BASE OF RISER. THE USE OG RISER CLAMPS TO SUPPORT

VERTICAL PIPING IS PROHIBITED.

ALL WATER BEARING PIPING SHALL BE SLOPED FOR DRAINAGE WITH BALL DRAIN VALVES AT LOW POINTS.

SUPPORT ALL SUSPENDED EQUIPMENT, DUCTWORK AND PIPING INDEPENDANTLY, DPROVIDE ACCESS PANELS TO PROVIDE ACCESS TO INACCESSIBLE VALVES,

DAMPERS ANY ANY OTHER EQUIPMENT/DEVICES THAT REQUIRE ADJUSTMENT OR

DRAINAGE PIPING SHALL BE SLOPED IN ACCORDANCE WITH CODE, BUT NOT LESS THAN 1/8" PER FOOT FOR 3" AND LARGER PIPING AND 1/4" PER FOOT FOR 2-1/2" AND SMALLER PIPING. ALL INVERT ELEVATIONS SHALL BE COORDINATED WITH THE STRUCTURAL FOOTINGS.

COORDINATE ALL UNDERGROUND PIPING WITH GRADE BEAMS, WALL FOOTINGS, COLUMN FOUNDATIONS AND OTHER STRUCTURAL CONDITIONS.

PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR METALS.

TRAP ALL CHILLED CONDENSATE DRAINS AS DETAILED OR AS REQUIRED. PROVIDE A TRAP DEPTH 1" GREATER THAT SYSTEM FAN DEVELOPED STATIC PRESSURE. INSURE AND CERTIFY THAT CONDENSATE DRAINS ARE POSITIVELY SLOPED AT 1"/20" MINIMUM IN DIRECTION OF FLOW.

CAULK AND SEAL ALL DUCT AND PIPING PENETRATIONS OF EXTERIOR OR DEMISING WALLS.

MANUFACTURER'S STANDARD PRE-CHARGED LINE SETS WITH COMPRESSION JOINTS.

ALL REFRIGERANT PIPING SHALL BE SIZED AND WITH ALL ACCESSORIES AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

REFRIGERANT SUCTION LINES TO BE INSULATED WITH 1" UNICELLULAR

REFRIGERANT PIPING SHALL BE TYPE 'ACR' COPPER WITH BRAZED JOINTS OR

INSULATION, ALL JOINTS SEALED. INSULATION SHALL BE 25/50 SMOKE AND FIRE RATED. PAINT ALL EXTERIOR INSULATION WITH UV RESISTANT PAINT.

ABOVE GROUND WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC WITH

SOLVENT CEMENT JOINTS, EXCEPT USE STANDARD WEIGHT NO-HUB CAST IRON IN AIR PLENUMS. VENT PIPING MAY BE SCHEDULE 40 GALVANIZED STEEL WITH SCREWED JOINTS. PAINT ALL EXTERIOR PIPING WITH UV RESISTANT PAINT.

ABOVE GROUND WATER PIPING SHALL BE TYPE 'L' HARD COPPER WITH LEAD FREE SOLDER JOINTS.

NATURAL GAS PIPING (ABOVE GROUND) SHALL BE SCHEDULE 40 BLACK STEEL WITH THREADED JOINTS. CONNECT USING JOINT COMPOUND SUITABLE FOR NATURAL GAS PIPING. ALL EXPOSED BLACK STEEL NATURAL GAS PIPING SHALL BE PROTECTED WITH A RUST INHIBITING COATING IN ACCORDANCE WITH THE PLUMBING CODE.

SERVICE VALVES FOR WATER PIPING SYSTEMS UP THRU 2" SHALL BE 1/4 TURN, 150 LB. BALL VALVE WITH BRONZE CHROME PLATED BALL AND TFE SEATS, NIBCO S-585-70.

DOMESTIC WATER PIPING SHALL BE INSULATED WITH 1" FIBERGLASS WITH ALL SERVICE JACKET OR COMPARABLE UNICELLULAR INSULATION WITH SMOKE/FLAME RATING OF 25/50. WHEN INSTALLED WITHIN A CHASE ALONG AN EXTERIOR WALL, THE INSULATION SHALL BE 1-1/2" FIBERGLASS AND THE PIPING SHALL BE LOCATED ON THE INTERIOR SIDE OF THE BUILDING WALL INSULATION.

GAS SERVICE VALVES TO BE LUBRICATED PLUG COCKS, ROCKWELL 142 OR 143. CONNECTIONS TO EQUIPMENT SHALL HAVE SERVICE VALVES, 6" MINIMUM DIRT LEG AND UNION OR AT CONTRACTOR OPTION, UL LISTED APPLIANCE FLEXIBLE CONNECTORS MAY BE USED.

PROVIDE PLUMBING FIXTURES AS SCHEDULED OR SELECTED BY OWNER WITH ALL REQUIRED TRIM AND ACCESSORIES FOR A COMPLETE WORKING AND CODE COMPLIANT INSTALLATION. PROVIDE STOP VALVES AND WATER HAMMER ARRESTORS, SIZED AS INDICATED OR PER MANUFACTURER FOR EACH FIXTURE OR EACH GROUP OF FIXTURES. REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATION OF THE FIXTURES.

MEET ALL REQUIREMENTS OF THE ADA FOR ALL FIXTURES REQUIRED TO BE HANDICAP ACCESSIBLE. INSULATE PIPING BENEATH HANDICAP FIXTURES PER ADA, HANDI-LAV-GARD SYSTEM OR EQUIVALENT.

ALL POWER WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. DISCONNECT SWITCHES AND MOTOR STARTERS SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR, EXCEPT WHERE SPECIFICALLY INDICATED TO BE FURNISHED BY THE MECHANICAL CONTRACTOR. COORDINATE REQUIRED POWER FOR EQUIPMENT WITH THE ELECTRICAL CONTRACTOR.

ALL CONTROL DEVICES AND INTERLOCK WIRING SHALL THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. CONTRACTOR SHALL FURNISH LOCKING GUARDS FOR DEVICES WHERE INDICATED AND WHERE REQUIRED TO PROTECT THEM FROM PHYSICAL DAMAGE. PROVIDE INSULATED SUBBASES WHERE SENSORS ARE INSTALLED ON 'COLD' OR EXTERIOR WALLS. MOUNT CONTROL DEVICES SUCH AS THERMOSTATS AND SENSORS AT 46" AFF.

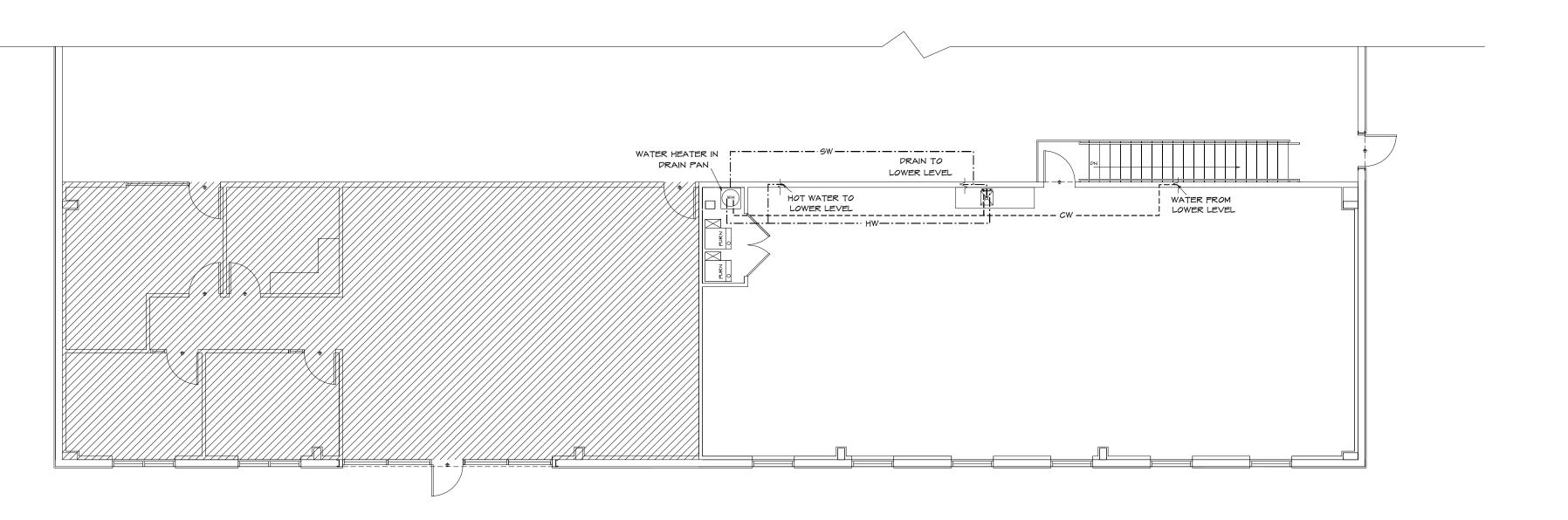
CONTRACTOR SHALL BE RESPONSIBLE FOR EQUIPMENT HANDLING AND TRANSPORT FOR ITEMS HE FURNISHES AND/OR INSTALLS. HE SHALL BE RESPONSIBLE FOR PROVIDING FOR ACCESS INTO SPACES WHERE WORK IS TO OCCUR.

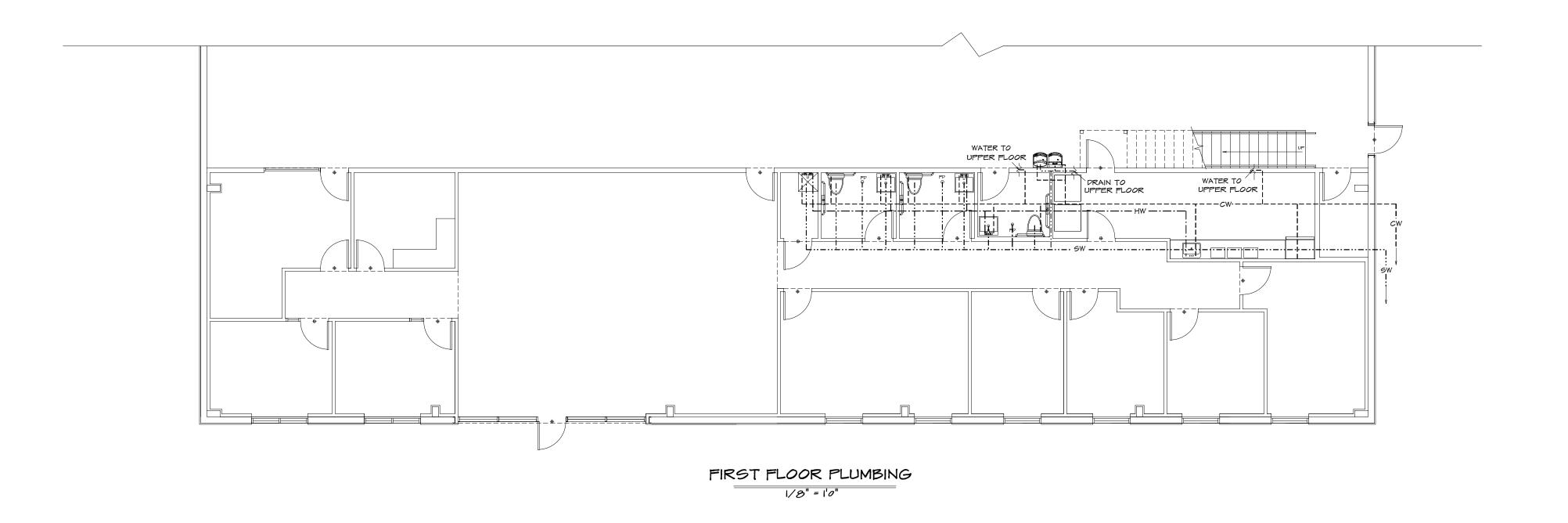
CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FLASHING AND REPAIR OF ROOFS, BUILDING STRUCTURE, COMPONENTS AND FINISHES ASSOCIATED WITH HIS WORK.

CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES ASSOCIATED WITH CONSTRUCTION ACTIVITY. HE SHALL RESTORE REPAIRED OR REMODELED AREAS TO EXISTING CONDITIONS AND NEW CONSTRUCTION AREAS TO NEW CONDITION. ALL REPAIRS SHALL BE IN ACCORDANCE WITH THE APPLICABLE ARCHITECTURAL AND STRUCTURAL PROVISIONS. TO THE GREATEST EXTENT POSIBLE, EXISTING BUILDING MATERIALS SHALL NOT BE DISTURBED.

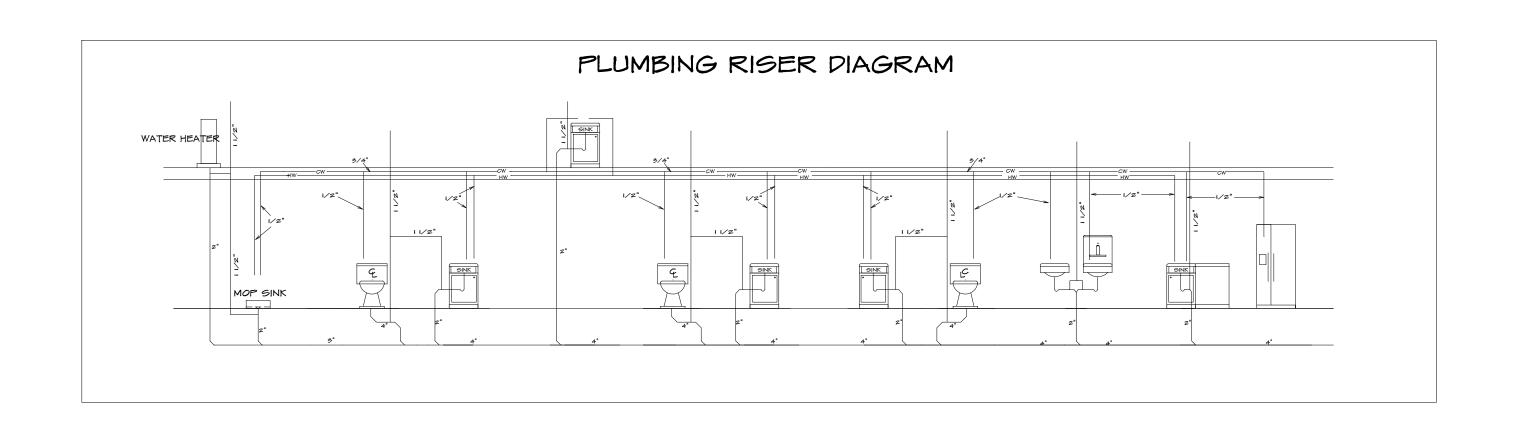
TEST AND CLEAN PIPING SYSTEMS PER INDUSTRY STANDARDS. PRESSURE TEST OF PRESSURE PIPING SHALL BE AT 1-1/2 TIMES THE ANTICIPATED OPERATING PRESSURE, BUT NOT LESS THAN 50 PSIG FOR 2 HOURS. NON-PRESSURIZED SYSTEMS SHALL BE TESTED WITH 10' WATER COLUMN ABOVE NORMAL OPERATING CONDITIONS OR 5 PSI FOR 2 HOURS. THERE SHALL BE NO MEASURABLE DROP DURING THE TEST PERIOD.







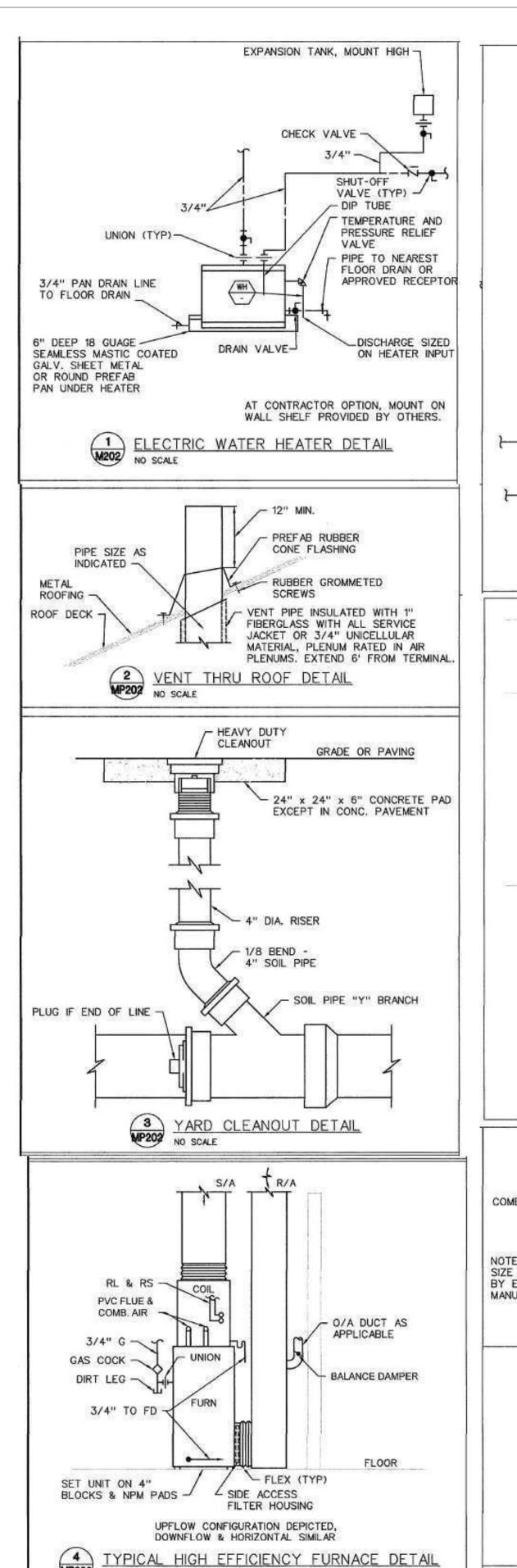
SECOND FLOOR PLUMBING





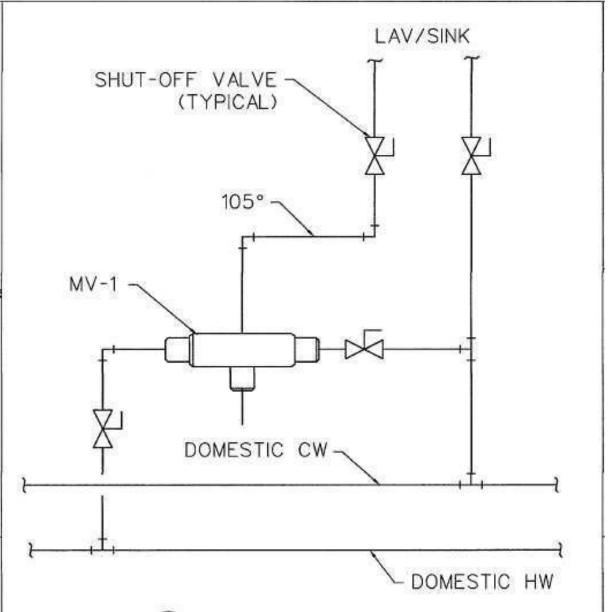
HOME BUYER:
PLAN NO. SHEET N
SULLPER:
COM-9009
PLAN NO. SHEET N
COM-9009
PLE NAME:
PLAN NO. SHEET N
SUB-DIVISION:
COM-9009
PEDIGNER:
SUB-DIVISION:
SUB-DIVIS

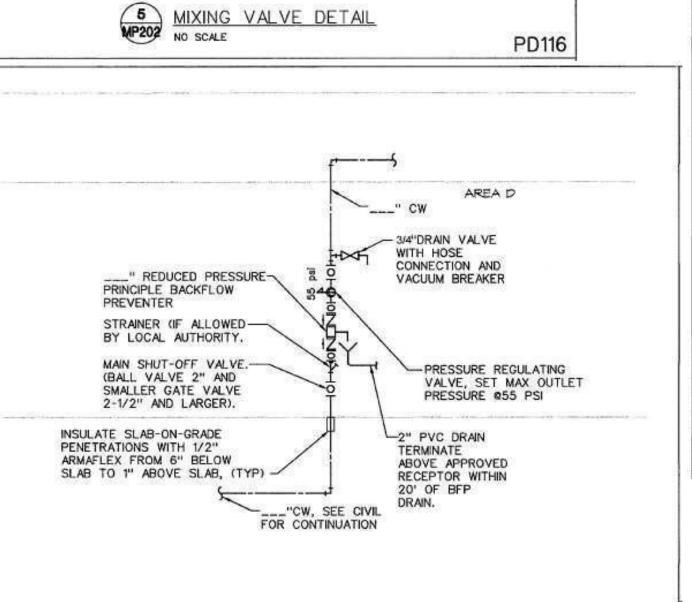
EN PLOORS, FOUNDATION, AND ELEVATIONS, ALSO VERITY ALL BEAM, HEADERS,
NOTIONS, AND COLUMN SIZES, BULDER & CONTRACTOR TO CHECK FOR
INNER WITH CONTRACTS, CITY, AND NATIONAL CODES, BULDER & CONTRACTOR
TS ALL RESPONSIBILITY FOR LOT PLACEMENT, SET-BACKS, AND FLOOD FLANS,
RECONTRACTOR AN HOME OWNER ACCETS RESPONSIBILITY FOR ANY AND ALL
REPRINGUENTS OR RESEMBLANCES TO OTHER COPYRIGHTED FLANS.
SECONTRACTOR ACCETS RESPONSIBILITY FOR ANY AN ON SITE CHANGES MADE
UNCTURE.

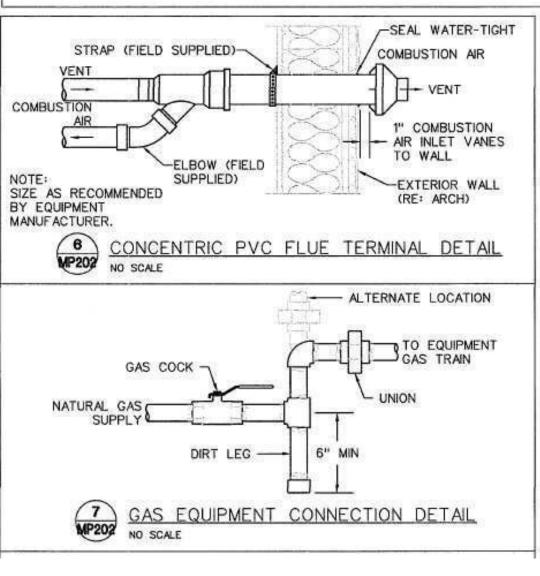


NO SCALE

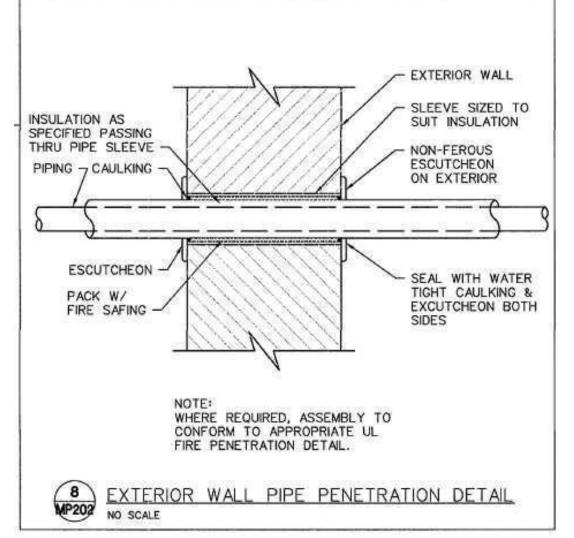
UP THRU 4 TONS

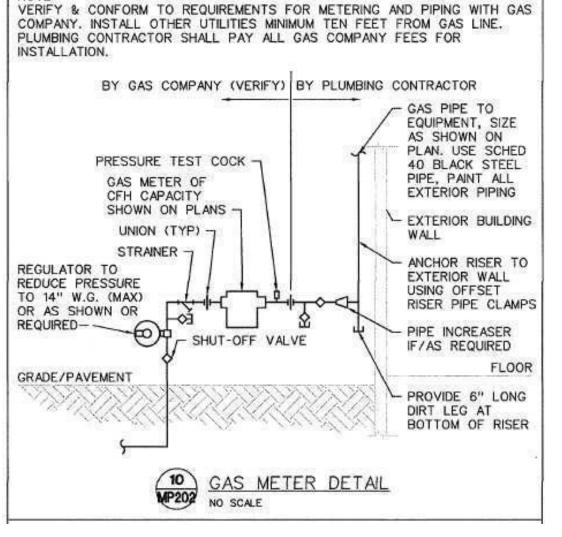






9 DOMESTIC WATER SERVICE ENTRANCE





# MANUFACTURER SUPPLIED CONCENTRIC TERMINATION KIT INSTALL PER MANUFACTURERS INSTRUCTIONS. ROOF ATTACH HANGERS TO NEW PVC VENT STRUCTURAL MEMBERS VIBRATION ISOLATERS NG PIPING -DIRECTIONAL LOUVERS UNIT HEATER AIR FLOW GAS COCK -6" DIRT LEG REQUIRED NO PIPING BELOW CASING DISCHARGE CONDENSATE DRAIN TO AN APPROVED RECEPTOR GAS FIRED UNIT HEATER

# 605.3 Water service pipe.

Water service pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.3. Water service pipe or tubing, installed underground and outside of the structure, shall have a working pressure rating of not less than 160 psi (1100 kPa) at 73.4°F (23°C). Where the water pressure exceeds 160 psi (1100 kPa), piping material shall have a working pressure rating not less than the highest available pressure. Water service piping materials not third-party certified for water distribution shall terminate at or before the full open valve located at the entrance to the structure. Ductile iron water service piping shall be cement mortar lined in accordance with AWWA C104.

MARK NO.	MANUFACTURER	MODEL	TYPE	ASME	TANK	STORAGE	RECOVERY	TEMP RISE	DISCH. SET		ELECTRIC	AL		REMARKS
NO.	MANUFACTORER	NO.	LEBE	HOWE	LINING	(GALLONS)	GAL/HR	*F	POINT *F	KW	VOLT	Ø	HZ	(SEMANN)
1	LOCHINVAR	KSA030KD	TANK	N	GL	28	<del>- 1</del>		120	4.5	208	38	60	1

# TABLE 605.3

INSTALL IN DRAIN PAN. SEE DETAIL ON SHEET MP202.

MATERIAL	STANDARD
ylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 1527; ASTM D 2282
ss pipe	ASTM B 43
orinated polyvinyl chloride (CPVC) plastic pipe	ASTM D 2846; ASTM F 441; ASTM F 442; CSA B137.6
orinated polyvinyl chloride/aluminum/chlorinated polyvinyl oride	ASTM F 2855
oper or copper-alloy pipe	ASTM B 42; ASTM B 302
oper or copper-alloy tubing (Type K, WK, L, WL, M or WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447
ss-linked polyethylene (PEX) plastic pipe and tubing	ASTM F 876; ASTM F 877; AWWA C904; CSA B137.5
ss-linked polyethylene/aluminum/cross-linked polyethylene X-AL- () pipe	ASTM F 1281; ASTM F 2262; CSA B137.10
ss-linked polyethylene/aluminum/high-density polyethylene X-AL-HDPE)	ASTM F 1986
tile iron water pipe	AWWA C151/A21.51, AWWA C115/A21.15
vanized steel pipe	ASTM A 53
vethylene (PE) plastic pipe	ASTM D 2239; ASTM D 3035; AWWA C901; CSA B137:11
yethylene (PE) plastic tubing	ASTM D 2737; AWWA C901; CSA B137.1
yethylene/aluminum/polethylene (PE-AL-PE) pipe	ASTM F 1282; CSA B137.9
yethylene of raised temperature (PE-RT) plastic tubing	ASTM F 2769
propylene (PP) plastic pipe or tubing	ASTM F 2389; CSA B137.11
yvinyl chloride (PVC) plastic pipe	ASTM D 1785; ASTM D 2241; ASTM D 2672; CSA B137.3
inless steel pipe (Type 304/304L)	ASTM A 312; ASTM A 778
inless steel pipe (Type 316/316L)	ASTM A 312; ASTM A 778

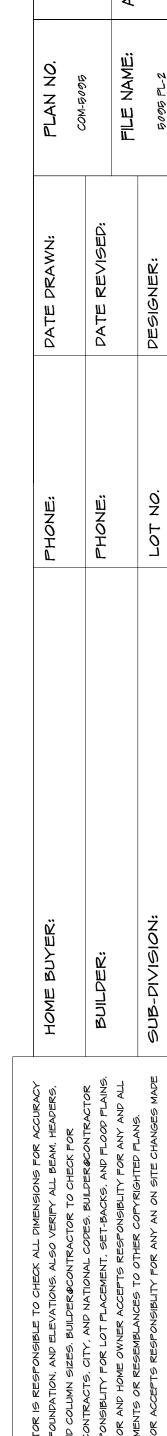
FIXTURE	WASTE	VENT	COLD	HOT
Water Closet (ft)	4"	2"	1/2"	
Water Closet (fv)	4"	2"	1"	-
Urinal	2"	1 1/2"	3/4"	92005
Lavatory	1 1/2"	1 1/2"	1/2"	1/2"
Sink	2"	1 1/2"	1/2"	1/2"
Triple Sink	2"	1 1/2"	(2) ½"	(2) 1/2
Shower, Tub	2"	1 1/2"	1/2"	1/2"
Water Fountain	1 1/2"	1 1/2"	1/2"	-
Janitor Sink (flr)	3"	2"	3/4"	3/4"
Janitor Sink (wall)	2"	1 1/2"	1/2"	1/2"
Floor Drain	2"	1 1/2"		
Floor Sink	3"	2"	19 <del>21/17/21</del>	-
Egpt Floor Drain	3"	2"	3007757555	3
Hub Drain	2"	1 1/2"	16-11-12-11	
Dishwasher	2"	1 1/2"	Fe <del>ctors</del>	1/2"
Washer Box	2"	1 1/2"	1/2"	1/2"
Ice Maker	2222		1/2"	
FPWH, HB		- 11 mark	3/4"	19-200-00-00-00-00-00-00-00-00-00-00-00-00

- grade shall be 2".

  2. Size as shown on drawings and diagrams, but not less than listed.
- PLUMBING FIXTURE SCHEDULE
  - 1. INSTALL PLUMBING FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. VERIFY ROUGH-IN REQUIREMENTS WITH MANUFACTURER'S DRAWINGS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE WATER-CONSERVING FIXTURES AND APPURTENANCES IF/AS REQUIRED BY LOCAL AUTHORITIES. CONFIRM ALL LOCATION AND MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS. CAULK FIXTURES TO WALL/FLOOR. SET COUNTER MOUNTED SINKS AND LAVATORIES IN A BED OF CAULK. THE SPECIFIED PLUMBING FIXTURES, OR APPROVED EQUALS, SHALL BE USED UNLESS OTHERWISE NOTED OR INDICATED
  - 2. WATER CLOSET, TOTO #CSC744SL.01, FLOOR MOUNTED, CONSTRUCTED OF VITREOUS CHINA, MEETING ANSI A-117.1 AND ADA BARRIER-FREE REQUIREMENTS, 17" HIGH, 1.6-GALLON FLUSH, CLOSE-COUPLED TANK DESIGN WITH ELONGATED BOWL AND SIPHON JET ACTION. TANK SHALL BE VITREOUS CHINA WITH COVER, 3/8" FLEXIBLE RISER WITH LOOSE KEY ANGLE STOP VALVE, CHROME-PLATED BRASS TRIP LEVER AND MANUFACTURER'S BOLT CAPS. PROVIDE BENKE #527 WHITE ELONGATED OPEN FRONT SEAT LESS COVER, PERMA BUMPER.
  - 3. LAVATORY, TOTO #LT307.4 (20"X18"), WALL-HUNG TYPE,
    CONSTRUCTED OF VITREOUS CHINA, MEETING ANSI A-117.1 AND ADA BARRIER-FREE
    REQUIREMENTS, LAVATORY SHALL HAVE 4-INCH FAUCET CENTERS AND DRILLED
    FOR CONCEALED ARM CARRIER. PROVIDE 3/8-INCH FLEXIBLE RISER W/ANGLE
    SUPPLIES WITH LOOSE KEYY STOPS, 1-1/4-INCH INLET 1-1/2-INCH OUTLET CHROME
    PLATED CAST BRASS "P" TRAP W/CLEANOUT PLUG AND ESCUTCHEON W/SET
    SCREW. PROVIDE DELTA #523-WFOGHDF HEAVEY DUTY SINGLE LEVER FAUCET,
    4-INCH CENTERS, VANDAL-RESISTANT 2.2 GPM AERATOR, PERFORATED OFFSET
    GRID DRAIN (W. 1-1/4" TAILPIPE) AND VANDAL-RESISTANT SINGLE LEVER
    HANDLE, PROVIDE WITH J.R. SMITH CARRIER (TO MATCH WALL TYPE). MOUNT
    AT ADA HEIGHT AND MAINTAIN CLEARANCES UNDER LAVATORY AS REQUIRED BY
    ADA REGULATIONS. INSULATE WASTE AND HOT WATER SUPPLY UNDER
    LAVATORY WITH UNDERSINK PROTECTIVE PIPE COVER, MOLDED, ANTIMICROBIAL,
  - 4. ALL FIXTURES USED SPECIFICALLY FOR HANDWASHING PURPOSES (LAVATORIES, HAND SINKS, ECT.) SHALL BE PROVIDED WITH A TEMPERING VALVE TO TEMPER THE HOT WATER TO THE FIXTURE (MAXIMUM OF 105-DEGREES F).

WITH FLUSH REUSABLE FASTENERS, TRUEBRO LAV GUARD.

- 5. ALL SINKS AND ASSOCIATEDFAUCETS ARE PROVIDED BY THE KEG. PC TO PROVIDE BASKET STRAINER DRAIN, TAILPIPE, 3/8-INCH FLEXIBLE RISER W/ANGLE SUPPLIES WITH LOOSE KEYY STOPS, 1-1/4-INCH INLET 1-1/2-INCH OUTLET CHROME PLATED CAST BRASS "P" TRAP W/CLEANOUT PLUG AND ESCUTCHEON W/SET SCREW. PC TO PROVIDE OWNER FAUCETS (DELTA OR EQUAL) TO GO ALONG WITH FIXTURES PROVIDED BY THE KEC UNLESS OTHERWISE NOTED.
- 6. ELECTRIC WATER COOLER, BI-LEVEL BARRRIER FREE WITH STAINLESS STEEL TOP WITH SATIN FINISH, GRANITE POWDER COAT FINISH ON GALVANIZED STEEL CABINET, FRONT AND SIDE TOUCHPAD OPERATORS, FLEX GUARD BUBBLER, 8 GPH @ 90 DEGREES F AMBIENT. PROVIDE 3/8-INCH FLEXIBLE RISER W/ANGLE SUPPLIES WITH LOOSE KEY STOP, AND 1-1/4-INCH INLET 1-1/2-INCH OUTLET CHROME-PLATED CAST BRASS "P" TRAP W/CLEANOUT PLUG AND ESCUTCHEON W/SET SCREW. MOUNT PER MANUFACTURER'S INSTRUCTIONS AND AS SHOWN ON THE ARCHITECTURAL PLANS



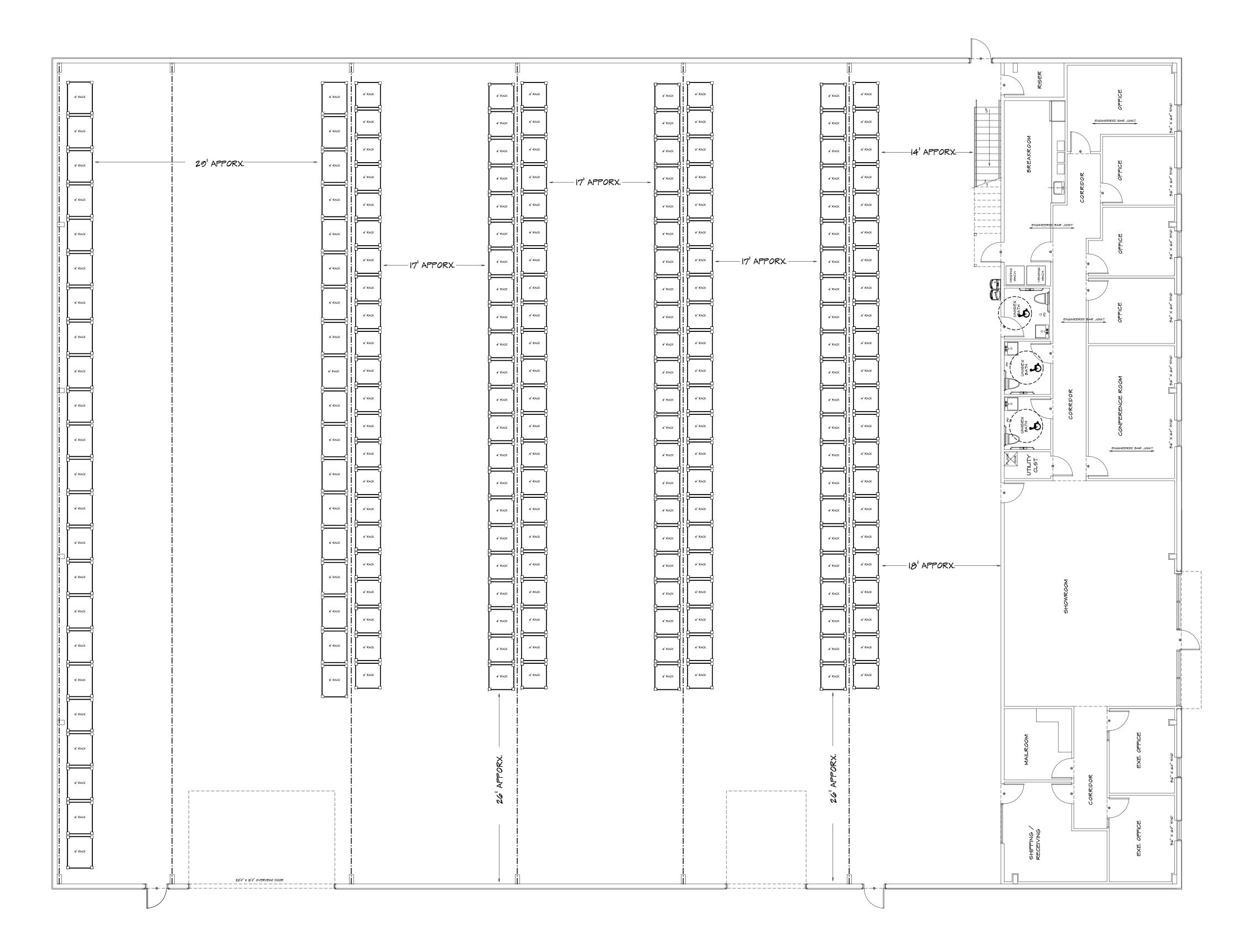


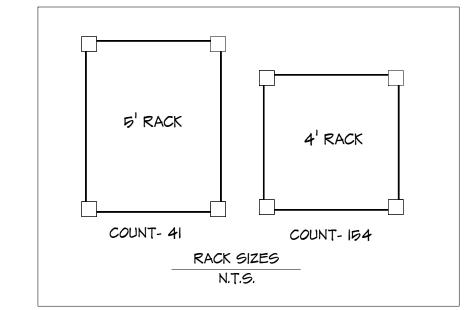


















# BUTLERSUPPLY "Dedicated To Our Oustomers' Success"

# Quotation

600 NW Libby Lane Lee's Summit MO 64063 www.butlersupply.com Phone:816-357-9800 Fax:816-600-5161

age

1 of 1

# Sold-to Party Address

INTERSTATE CONSTRUCTION SERVICE PO BOX 847 LEES SUMMIT MO 64063

Ship-to Party Address

INTERSTATE CONSTRUCTION SERVICE

PO BOX 847

LEES SUMMIT MO 64063

Information

Quotation No.:

950542520

**Document Date:** 

09/10/2024

**Customer No.:** 

980114

Quoted By:

MHOLCOMB

Purchase Order No.: NEWBERRY LOT 294

Incoterms:

WC

Text Messages:

ltem	Material Description	Quantity	Unit Price	Amount
10	383667LITH#ARC2LEDP340K-MVOLT/ DDBXD	12 EA	244.00 EA	2928.00
			* Total Sales	2,928.00
			* Tax Amount	248.15

- All quotations are subject to approval.
- Prices are subject to change without notice.
- Materials purchased from this quotation may not be refundable.
- Merchandise that is returned may be subject to a restocking fee.
- Projects funded with federal stimulus money may require a re-quote and price adjustments due to manufacturing requirements mandated by the US government.(FAR CODES)



# **ARC2 LED**

# Architectural Wall Luminaire



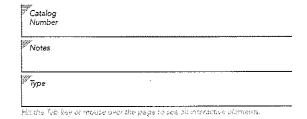






D2





# Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC2 delivers up to 6,500 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. It offers integrated emergency battery backup options, including an 8W cold temperature option, making it suitable for pedestrian scale applications in any environment.

# **Specifications**

Depth (D1):

9.25"

Depth (D2):

7.5"

Height:

5"

Width:

14"

Weight: (without options)

11 lbs



# ARC LED Family Overview

Lommaire	Standard EM : 0. C	SCORE CONTRACTOR CONTR	P1	Ap	proximate Lumens (400 P3	P4	Ps -
ARC1 LED	4W		1,500	2,000	3,000	_	
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500

# Ordering Information

# **EXAMPLE:** ARC2 LED P2 40K MVOLT PE DDBXD

Series	Package		Volkage	Options		Finish	
ARC2 LED	P1 1,500 Lumens P2 2,000 Lumens P3 3,000 Lumens P4 4,000 Lumens P5 6,500 Lumens	30K 3000K 40K 4000K 50K 5000K	MVOLT 347	E4WH E8WC PE DMG SPD6KV FAO LDS18	Emergency battery backup, CEC compliant (4W, 0°C min) ¹ Emergency battery backup, CEC compliant (8W, -20°C min) ¹ Button type photocell for dusk-to-dawn operation 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) ² 6kV surge protection ¹ Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100% ² 18" Fixture leads	DDBXD DBLXD DWHXD DWHXD DSSXD DDBTXD DBLBXD DNATXD DWHGXD DSSTXD	Dark bronze Black Natural aluminum White Sandstone Textured dark bronze Textured black Textured natural aluminum Textured white Textured sandstone

# Accessories

WSBBW DDBXD U

Surface - mounted back box (specify finish)

COMMERCIAL OUTDOOR

# NOTES

- 347V not available with E4WH, E8WC and SPD6KV.
- 2 FAO not available with DMG.



# Performance Data

# **Lumen Output**

Lurnen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance	System Watts		30/630	00K to t	RI)			401 (41	0.014. 80.0	80			508/5	000)(3.84)	GN)	
Package		Lumens	LPI	1	U	ď	Lumens	ar V	Ü	U	C.				1.	G
PI	11W	1,502	142	0	0	1	1,587	150	0	0 .	1.	1,598	151	0	0	1
P2	16W	2,250	140	0	0	1	2,377	147	0	0	1	2,393	148	0	0	1
Р3	24W	3,206	135	0	0	1	3,387	143	0	0	1	3,410	144	. 0	0	1
P4	30W	3,903	128	1	0	1	4,124	136	1	0	1	4,152	136	1	0	1
P5	51W	6,260	122	1	0	1	6,615	129	1	0	Í	6,659	130	1.	0	1

# **Electrical Load**

Performance				Oment (a		
Parkage	System Watts	1201	2089	2407	2770	3479
P1	11W	0,090	0.055	0.049	0.046	0.045
P2	16W	0.141	0.081	0.072	0.064	0.059
P3	24W	0.202	0,117	0,103	0.091	0.079
P4	30W	0.280	0.162	0.144	0.128	0.095
PS	51W	0.471	0.272	0.239	0.212	0:158

# Lumen Output in Emergency Mode (4000K, 80 CRI)

C+AAL:	593
E8WC	1,413

# **Lumen Ambient Temperature (LAT) Multipliers**

Use these factors to determine relative lumen output for average ambient temperatures from 0-40  $^{\circ}$  C (32-104  $^{\circ}$  F).

Amb	ient	Lumen Multiplie
0°C	32°F	1.04
10°C	50°F	1.03
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.97

# **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.93	>0.88

# Photometric Diagrams

To see complete photometric reports or download lies files for this product, visit the Lithonia Lighting ARC LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

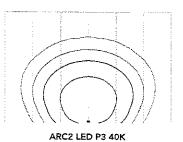
LEGEND

0.25 fc

0.5 fc 1.0 fc

3.0 fc

MH = 15ft Grid = 15ft x 15ft



COMMERCIAL OUTDOOR



# Emergency Egress Options

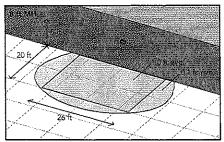
# **Emergency Battery Backup**

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

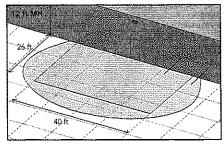
Applicable codes: NFPA 70/NEC - section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode.

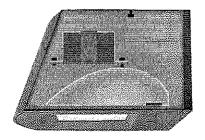
 $Grid = 10ft \times 10ft$ 



ARC2 LED 40K MVOLT E4WH



ARC2 LED 40K MVOLT E8WC



Self-contained solution for clean aesthetic

# Mounting, Options & Accessories



E4WH and E8WC - Emergency Battery Backup

D = 6.5"

H = 5"

W = 11"



BBW ~ Standard Back Box

D = 1.5''

H = 4"

W = 5.5"

For surface conduit applications. 3/4" conduit entry holes.

# **FEATURES & SPECIFICATIONS**

# INTENDED USE

The clean architectural shape of the ARC LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long-life LEDs and driver make this luminaire nearly maintenance-free.

# CONSTRUCTION

The die-cast aluminum housing and door act as heat sinks to optimize thermal transfer from the light engine and driver to promote long-life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

# FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGiC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

# OPTICS

Recessed lens to cut off high angle light and reduce glare. Combination of diffused lens and reflector design has low surface brightness creating a visually comfortable environment with great distribution. LEDs are fully hidden from view to eliminate pixelization and harsh glare. The ARC LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

# ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long-life (up to L88/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire is 0-10V dimmable.

# INSTALLATION

The universal wall plate, supplied with the luminaire, fits multiple size junction boxes and supports it during wiring for easy installation. Built-in wet location wiring compartment on the luminaire to accommodate wiring connections for applications with no junction box. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

# LISTINGS

CSA certified to U.S. and Canadian standards, Luminaire is IP65 rated, DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at <a href="https://www.designlights.org/CPL">www.designlights.org/CPL</a> to confirm which versions are qualified. International DarkSky Association (IDA) Fixture Seal of approval (FSA) is available for all products on this page utilizing 3000K color temperature only. Rated for -40°C minimum ambient.

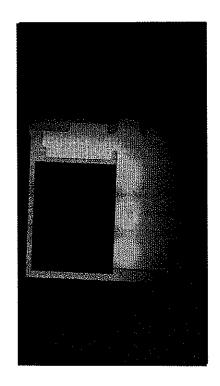
# WARRANTY

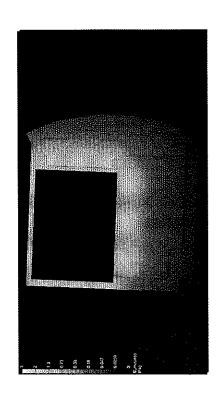
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: see acquisite and some amount of the see acquisite and see a see acquisite and see a see

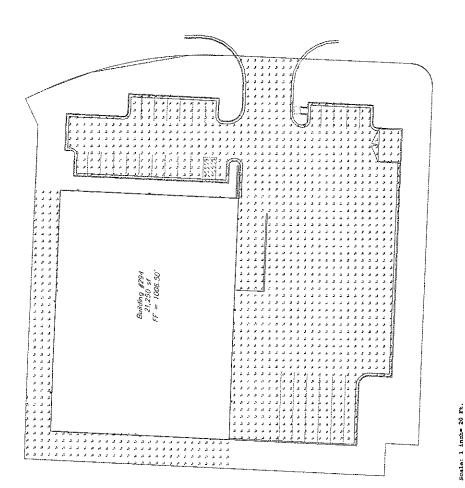
**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



* KREIIII EKIICHIINC & CONIBOLI	11005		PREMIER LIGHTING & CONTROLS	of 1
PDEMILD	Since Comments (C)	Drawn By: CJ Perries Checked By: Premier Lighting Date:9/10/2024	PES TOI YAMBENAN	Page 1







| Control | Cont

CALCULATION NOTES:
CALCE POINTS: 0'
REFLECTANCES: 504 MALLS, 204 FLOGRES
LLE? 0.51