



City of Broken Arrow
Meeting Agenda
Board of Adjustment

City of Broken Arrow
Council Chambers
220 S 1st Street
Broken Arrow OK
74012

Judd Hatch Chairman
Rebecca Hinkle Vice Chair
Kamara Washington Board Member
George Ghesquire Board Member
Michelle Bergwall Board Member

Monday, January 12, 2026

5:00 PM

Council Chambers

1. Call to Order

2. Roll Call

3. Consideration of Consent Agenda

[26-153](#) Approval of Board of Adjustment meeting minutes of January 22, 2025

Attachments: [1.22.2025 Minutes](#)

[26-154](#) Approval of Board of Adjustment meeting minutes of October 13, 2025

Attachments: [1.22.2025 Minutes](#)

4. Public Hearings

[26-152](#) Public hearing, consideration, and possible action regarding VAR-002576-2025, TFCU, approximately 1.37 acres, CG (Commercial General), request a variance from Highway Design Overlay District orientation regulations, located approximately one-third mile north of West Tucson Street (121st Street), and just east of South Aspen Avenue (145th East Avenue)

Attachments: [2 - Case Map](#)
[3 - Aerial](#)
[4 - Current Site Plan](#)
[5 - Applicant Letter](#)
[6 - Site Images](#)

5. General Board Business

6. Remarks, Inquiries, and/or Comments by the Board and/or Staff (No Action)

7. Adjournment

NOTICE:

- 1. IF YOU HAVE A DISABILITY AND NEED ACCOMMODATION IN ORDER TO PARTICIPATE IN THE MEETING, PLEASE CONTACT COMMUNITY DEVELOPMENT AT 918 259 8412 TO MAKE ARRANGEMENTS.**
- 2. EXHIBITS, PETITIONS, PICTURES, ETC. PRESENTED TO THE BOARD OF ADJUSTMENT MAY BE RECEIVED AND DEPOSITED IN CASE FILES TO BE MAINTAINED AT BROKEN ARROW CITY HALL.**
- 3. RINGING/SOUND ON ALL CELL PHONES AND PAGERS MUST BE TURNED OFF DURING THE MEETING.**

A paper copy of this agenda is available upon request.

POSTED this ____ day of _____, _____, at _____ a.m./p.m.

City Clerk



City of Broken Arrow

Request for Action

File #: 26-153, **Version:** 1

**Broken Arrow Board of Adjustment
01-12-2026**

To: Chairman and Board Members
From: Community Development Department
Title:

Background: Approval of Board of Adjustment meeting minutes of January 22, 2025
Minutes recorded for the Broken Arrow Board of Adjustment meeting.

Attachments: 01 22 2025 Board of Adjustment Minutes

Recommendation: Approve minutes of Board of Adjustment meeting held January 22, 2025.

Reviewed By: Jane Wyrick

Approved By: Rocky Henkel



City of Broken Arrow

Minutes

Board of Adjustment

City Hall
220 S 1st Street

Broken Arrow, OK 74012

Judd Hatch Chairman
Rebecca Hinkle Vice Chair
Kamara Washington Board Member
George Ghesquire Board Member
Michelle Bergwall Board Member

Wednesday, January 22, 2025	Time 5:00 p.m.	Board Chambers
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1. Call to Order

Chairman Judd Hatch called the meeting to order at 5:00 p.m.

2. Roll Call

Present: 5 - Michelle Bergwall, George Ghesquire, Kamara Washington, Rebecca Hinkle, Judd Hatch

3. Consideration of Consent Agenda

A. 25-90 Approval of Board of Adjustment meeting minutes of November 13, 2024

MOTION: A motion was made by George Ghesquire, seconded by Michelle Bergwall
Move to Approve Consent Agenda

The motion carried by the following vote:

Aye: 5 - Michelle Bergwall, George Ghesquire, Kamara Washington, Rebecca Hinkle, Judd Hatch

4. Public Hearings

A. 25-109 Public hearing, consideration, and possible action regarding VAR-001913-2024, 2210 South Aspen Place Variance, 0.5 acres, Commercial General (CG)/ PUD-50, request to reduce the side building setback line from 35 feet to 31 feet along the north property line of 2210 South Aspen Place, located approximately southwest of the southwest corner of West Washington Street (91st Street), and South Aspen Avenue (145th East Avenue) at 2210 South Aspen Place

Henry Bibelheimer, Planner II, presented Item 25-109. A Variance 19-13-2024 for 2210 South Aspen Place, a 0.5-acre Commercial General/PUD-zoned property with an existing building constructed in 2014 that was built at a slight angle and currently encroaches into the required northern side setback. The applicant proposes a 22-by-70-foot expansion on the west side of the building that would continue the existing building line, increasing the encroachment into the setback and requiring a setback reduction from 35 feet to 31 feet. Staff explained that the variance is intended both to bring the existing structure into conformance and to allow the proposed expansion, and reviewed the six statutory findings required for approval, concluding that the encroachment is a unique condition, was not created knowingly by the applicant, does not exist elsewhere in the area, does not alter the character of the district, and represents the minimum relief necessary. Based on this analysis, the staff recommended approval of the variance.

During the discussion of Variance 19-13-2024, board members reviewed the exhibit to better understand how the existing building and proposed expansion relate to the required setback, clarifying that the additional encroachment from the expansion is approximately six inches beyond the existing nonconformity. Staff confirmed that the expansion would not encroach on any easements and would affect only the setback line. After visual clarification, the applicant, Jefferey Lorde of Inspire Engineering, addressed the board, noting that maintaining the existing building line would help address drainage concerns and indicating his willingness to comply with the board's recommendation.

A letter by John Sporeleader was read. He is concerned with the building expansion regarding drainage.

During further discussion of the variance request, board members asked for clarification on the overall site layout, including parking, drainage, and stormwater runoff. Staff explained that

most of those issues are addressed through the site plan and engineering review processes rather than through the variance itself, which is limited to the building setback. The applicant, Jefferey Lorde, described planned grading, curb installation, and reconfiguration of the parking area to address known stormwater issues, noting that these improvements would occur within existing easements and permitting requirements. It was clarified that the proposed expansion adds only interior building space, that the west side area will serve as parking rather than building access, and that access to the parking area will be from the south side of the building.

MOTION: A motion was made by George Ghesquire, seconded by Judd Hatch
Move to Approve Item 25-109 VAR-001913-2024, 2210 South Aspen Place Variance, 0.5 acres, Commercial General (CG)/ PUD-50, request to reduce the side building setback line from 35 feet to 31 feet along the north property line of 2210 South Aspen Place, located approximately southwest of the southwest corner of West Washington Street (91st Street), and South Aspen Avenue (145th East Avenue) at 2210 South Aspen Place
The motion carried by the following vote:

Aye: 5 - Michelle Bergwall, George Ghesquire, Kamara Washington, Rebecca Hinkle, Judd Hatch

5. General Board Business – NONE

6. Remarks, Inquiries, and/or Comments by the Board and/or Staff (No Action) – NONE

7. Adjournment

The meeting was adjourned at approximately 5:15 p.m.

MOTION: A motion was made by Judd Hatch, seconded by Michelle Bergwall
Move to Adjourn

The motion carried by the following vote:
Aye: 5 - Michelle Bergwall, George Ghesquire, Kamara Washington, Rebecca Hinkle, Judd



City of Broken Arrow

Request for Action

File #: 26-154, **Version:** 1

**Broken Arrow Board of Adjustment
01-12-2026**

To: Chairman and Board Members
From: Community Development Department
Title:

Background: Approval of Board of Adjustment meeting minutes of October 13, 2025
Minutes recorded for the Broken Arrow Board of Adjustment meeting.

Attachments: 10 13 2025 Board of Adjustment Minutes

Recommendation: Approve minutes of Board of Adjustment meeting held October 13, 2025.

Reviewed By: Jane Wyrick

Approved By: Rocky Henkel

Minutes

Board of Adjustment

Judd Hatch Chairman
Rebecca Hinkle Vice Chair
Kamara Washington Board Member
George Ghesquire Board Member
Michelle Bergwall Board Member

Wednesday, January 22, 2025

Time 5:00 p.m.

Board Chambers

1. Call to Order

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The motion carried by the following vote:

Aye: 5 - Michelle Bergwall, George Ghesquire, Kamara Washington, Rebecca Hinkle, Judd Hatch

5. General Board Business – NONE

6. Remarks, Inquiries, and/or Comments by the Board and/or Staff (No Action) – NONE

7. Adjournment

The meeting was adjourned at approximately 5:15 p.m.

MOTION: A motion was made by Judd Hatch, seconded by Michelle Bergwall
Move to Adjourn

The motion carried by the following vote:
Aye: 5 - Michelle Bergwall, George Ghesquire, Kamara Washington, Rebecca Hinkle, Judd



City of Broken Arrow

Request for Action

File #: 26-152, **Version:** 1

**Broken Arrow Board of Adjustment
01-12-2026**

To: Chairman and Board Members
From: Community Development Department
Title:

Public hearing, consideration, and possible action regarding VAR-002576-2025, TFCU, approximately 1.37 acres, CG (Commercial General), request a variance from Highway Design Overlay District orientation regulations, located approximately one-third mile north of West Tucson Street (121st Street), and just east of South Aspen Avenue (145th East Avenue)

Background:

Applicant: Michael Doggett, Animas Civil Engineering
Owner: Tinker Federal Credit Union
Developer: Jason Kapka, Tinker Federal Credit Union
Surveyor: N/A
Location: Located approximately one-third mile north of West Tucson Street (121st Street), and just east of South Aspen Avenue (145th East Avenue)
Size of Tract 1.37 acres
Number of Lots: 1
Present Zoning: CG - Commercial General
Comp Plan: Level 6 - Regional Employment/Commercial

VAR-002576-202 involves 1.37 acres, which is zoned CG, is a request to waive the Highway Design Overlay District (HDOD) orientation regulations, Located approximately one-third mile north of West Tucson Street (121st Street), and just east of South Aspen Avenue (145th East Avenue.)

This property is in the process of being developed into a Tinker Federal Credit Union branch. Due to site conditions, mainly topography due to turnpike onramps, the site is not visible from the Creek Turnpike and is mostly visible from its frontage off Aspen Avenue. The applicants are requesting a variance to be granted. There are four criteria that must be met for the Board of Adjustment to grant the variance.

1. *Unnecessary Hardship.* The application of the ordinance to the particular piece of property would create unnecessary hardship;

Analysis:

This parcel has unique topographical challenges due to the slopes required for the controlled access intersection of the Creek Turnpike and Aspen Avenue.

2. *Unusual Conditions.* Such conditions are peculiar to the particular piece of property involved;

Analysis:

Other properties which abut the Creek Turnpike or OK-51 often do not have the same topographical challenges as this location.

3. *Public Good.* Relief, if granted, would not cause substantial detriment to the public good, or impair the purposes and intent of the ordinance or the comprehensive plan; and

Analysis:

Because this property is located at a lower elevation than both Aspen Avenue and the view of the site is mostly not visible from the Creek Turnpike, allowing the orientation of the building to face Aspen Avenue will not cause a substantial detriment to the public good, or impair the purposes of the ordinance or the comprehensive plan.

4. *Minimum Variance.* The variance, if granted, would be the minimum necessary to alleviate the unnecessary hardship.

Analysis:

The property could be built fronting the Creek Turnpike; however, it would be visible mostly to westbound on-ramp traffic and not those driving on the Creek Turnpike itself. Granting a variance to waive the HDOD orientation requirement will be the minimum variance to the HDOD design requirements.

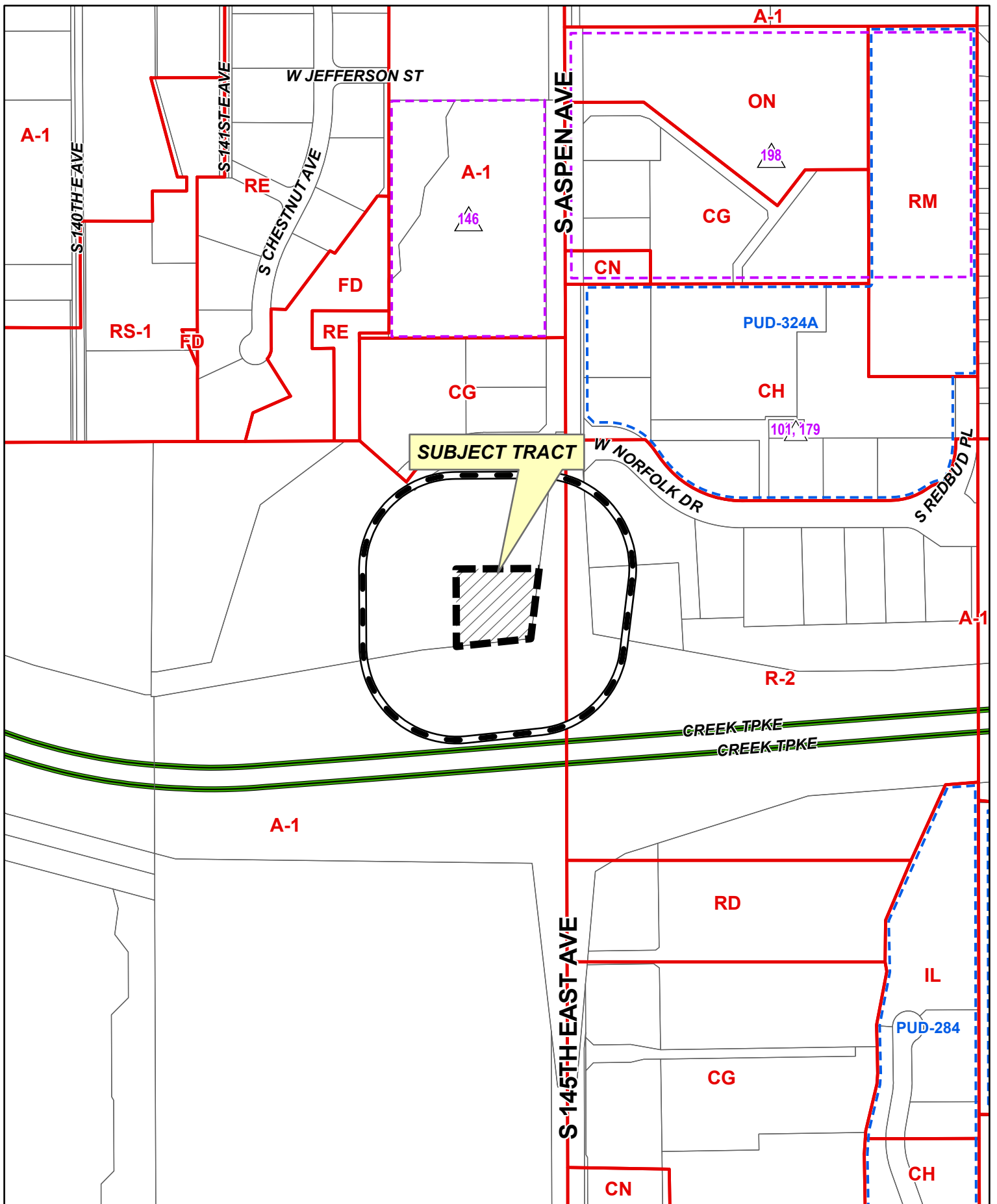
Attachments: Case map
 Aerial
 Site Plan
 Applicant Letter
 Site Photos

Recommendation:

By State law and by the City of Broken Arrow Zoning Ordinance, for a variance to be granted, all four criteria listed above must be met. In Staff's opinion, the request for a variance to waive the HDOD orientation requirements meets the four criteria for the Board to grant a variance. Therefore, Staff recommends that VAR-002576-2025 be approved.

Reviewed and Approved by: Rocky Henkel

JAJ



SUBJECT TRACT

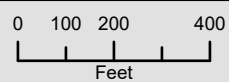


300' Radius



Subject
Tract

VAR-002576-2025



33 18-14



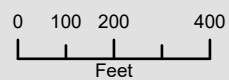


Note: Graphic overlays may not precisely align with physical features on the ground.
Aerial Photo Date: 2024



Subject
Tract

VAR-002576-2025



33 18-14



Vexcel Imaging

ZONING NOTES:

Zoned: CH - Commercial Heavy
Existing site conditions appear (from outside observations) to fall within permitted uses as listed above in the City of Broken Arrow's Zoning Regulations.
Zoning Regulations are subject to change and interpretation, for further information contact: City of Broken Arrow (phone: 918-259-2400)

Site Restrictions:

- Minimum building setbacks:
 - Front: 50 FEET
 - Side: 10/5 FEET (one side/other side)
 - Rear: 40 FEET
- Measured building tie distances: No restrictions listed.
- Minimum lot frontage: 30 FEET (min. provided: 226')
- Maximum building height: NONE (max. provided: 25')
- Maximum density: 7.60%
- Maximum floor area ratio: 0.076:1

Parking Tabulation: 29 Parking Spaces Total (27 Regular, 2 ADA spaces)
4,531 SF Building (1,300 = 16 spaces required)
125% Max. Parking Allowed = 20 spaces (Variance Granted XX/XX/2026)

GENERAL NOTES:

- The bearing base for this survey originated from General Warranty Deed, Document #2022000226.
- This property has an area of 59,631 square feet or 1.37 acres of land.
- This property is designated by Tulsa County, as Tax Map Parcel 98433-84-33-61570.
- There no observable evidence of cemeteries found at the time of this survey.
- The property has access via S. Aspen Ave., which is a public right of way.
- Interior roadways appear to be private, variable in width and unnamed, unless otherwise shown.
- The development plans for this site show no adverse impacts to offsite properties from peak stormwater flows. Refer to STR 33-18-14, Fee-In-Lieu-Of Detention Determination, Broken Arrow Determination Letter DD-121624-73.

LEGAL DESCRIPTION:

A tract of land that is a part of the Northeast Quarter of the Southeast Quarter (NE/4 SE/4) of Section Thirty-Three (33), Township Eighteen (18) North, Range Fourteen (14) East of the Indian Base and Meridian, Tulsa County, State of Oklahoma, according to the U.S. Government Survey thereof.

Being all of Lot 3, Block 1, Peak Broken Arrow Addition, recorded in Document # 7216, Tulsa County Official Plat Records.

(Containing 59,631 square feet, or 1.37 Acres, more or less).

FLOOD ZONE NOTE:

By graphic plotting only, this property is in Zone X (Unshaded) of the Flood Insurance Rate Map, Community Panel No. 40143C0452L, which bears an effective date of October 16th, 2012.

CONTACT LIST

DEVELOPER
JASON KAPKA
TFCU
PO BOX 45750
TINKER AFB, OK 73145
(405) 255-2578
KAPKAJ@TINKERFCU.ORG

ENGINEER
ANIMAS CIVIL ENGINEERING, LLC.
MICHAEL DOGGETT, P.E.
P.O. BOX 830974
RICHARDSON, TEXAS 75083
(214) 803-1099
MICHAEL@ANIMASCIVIL.COM

SURVEYOR
BEARING TREE LAND SURVEYING, LLC
JEFF JOHNSON, LSI
7100 BROADWAY EXTENSION
OKLAHOMA CITY, OKLAHOMA 73116
(405) 370-1048
JMJOHNSON@BTL.S.US

WATER / SANITARY SEWER
CITY OF BROKEN ARROW
TIMOTHY ROBINS
DIRECTOR OF UTILITIES
485 N. POPLAR AVE.
BROKEN ARROW, OK 74012
PHONE: (918) 259-7000 EXT. 3000

STREETS & STORMWATER
CITY OF BROKEN ARROW
TIM WILSON
DEPT. HEAD OF STREETS & STORM WATER
485 N. POPLAR AVE.
BROKEN ARROW, OK 74012
PHONE: (918) 259-7000 EXT. 5200

CONSTRUCTION DIVISION
CITY OF BROKEN ARROW
NATE KOHL
485 N. POPLAR AVE.
BROKEN ARROW, OK 74012
PHONE: (918) 259-7000 EXT. 3317

COMMUNITY DEVELOPMENT
CITY OF BROKEN ARROW
ROCKY HENKEL
220 SOUTH FIRST STREET
BROKEN ARROW, OK 74012
PHONE: (918) 259-7000 EXT. 2300

P01: Parking
variance granted
administratively via
email on 11/13/2025.
Please include copy
of email in final
submission

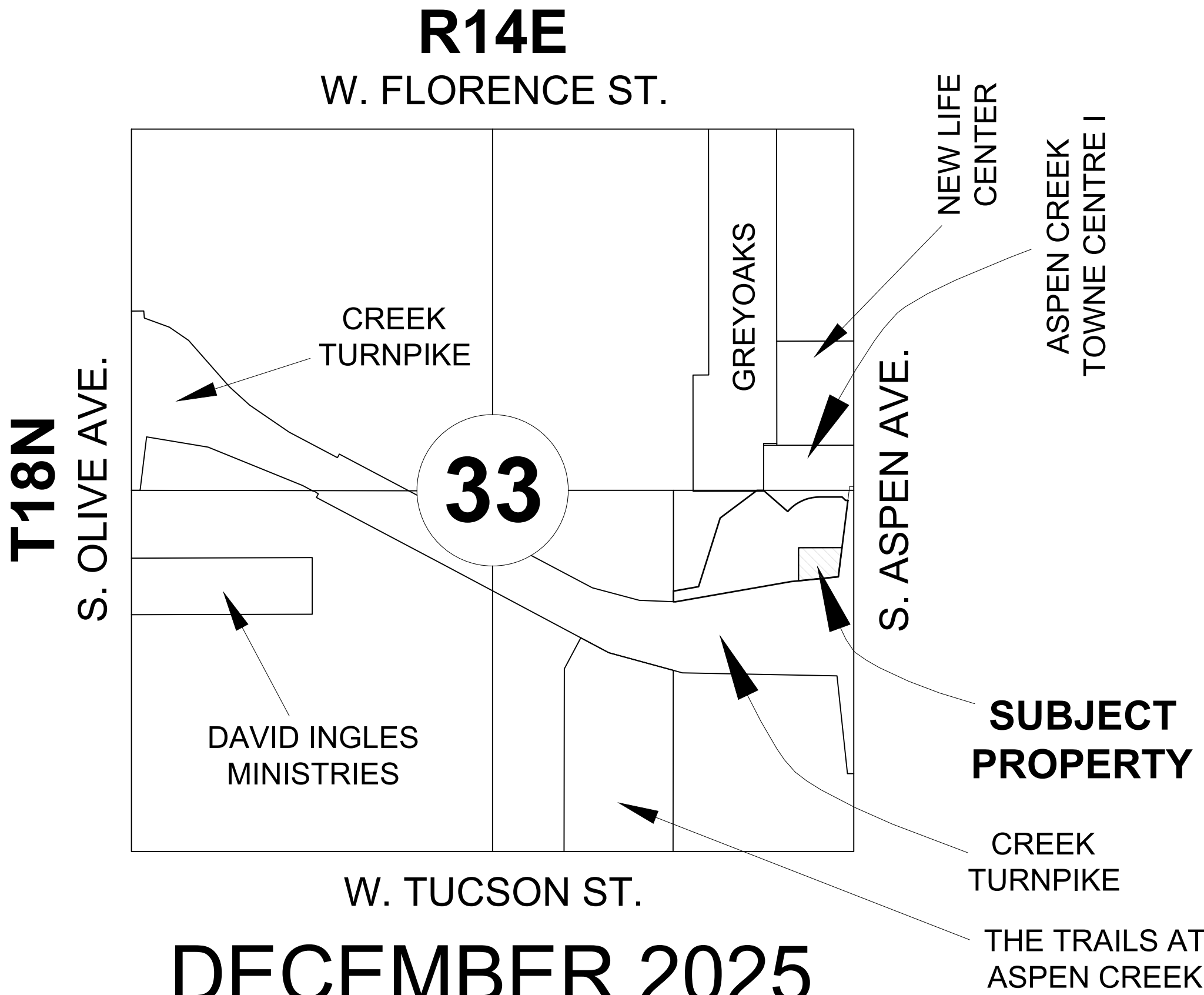
CIVIL CONSTRUCTION PLANS FOR TINKER FEDERAL CREDIT UNION

LOT 3, BLOCK 1, PEAK BROKEN ARROW ADDITION

5608 S. ASPEN AVE.

THE CITY OF BROKEN ARROW TULSA COUNTY, OKLAHOMA

VICINITY MAP (NOT TO SCALE)



THE FOLLOWING ARE OKLAHOMA DEPARTMENT OF TRANSPORTATION DETAILS SELECTED AND SHOWN ON SHEETS C-9.01 TO C-9.03:

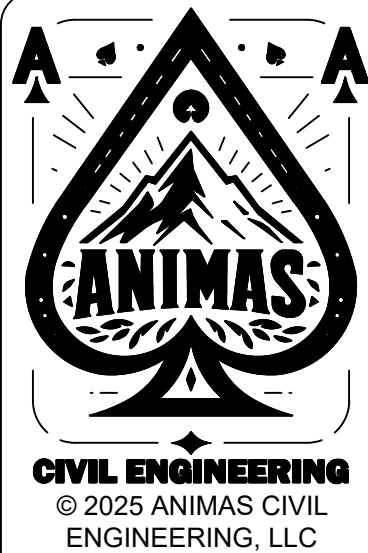
- INLET PROTECTION R-5
- STABILIZED CONSTRUCTION EXIT R-11
- REINFORCED SILT FENCE R-6

THE FOLLOWING ARE CITY OF BROKEN ARROW DETAILS SELECTED AND SHOWN ON SHEETS C-9.04 TO C-9.07:

- CURB & GUTTER DETAIL ST 05
- SIDEWALK & WHEELCHAIR RAMP DETAIL ST 06
- STANDARD CONCRETE PAVEMENT JOINTS ST 12
- COMMERCIAL DRIVEWAY ST 19
- STANDARD DETAIL FOR PAVEMENT CUTS ST 24
- CONCRETE STREET INTERSECTION LAYOUT ST 11
- STORM SEWER PIPE BEDDING DETAIL ST 01
- STORM SEWER JOINT WRAPPING DETAIL ST 02
- STORM SEWER MANHOLE RING & LID ST 25
- RECESSED CURB INLET DETAIL ST 27
- RECESSED CURB INLET DETAIL ST 27A
- WATER PIPE BEDDING DETAILS W01
- VALVE BOX DETAIL W04
- THRUST BLOCK LOCATIONS DETAILS W06
- 1" METER SETTING W12
- 2" POSITIVE DISPLACEMENT METER SETTING W15
- SANITARY SEWER PIPE BEDDING DETAIL SS01
- SANITARY SEWER TAP DETAIL SS03A

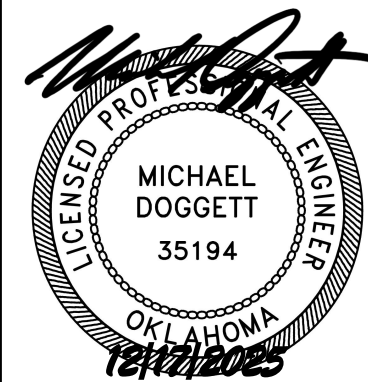
SHEET LIST TABLE

SHEET NO.	SHEET TITLE
C-1.00	COVER SHEET
C-1.01	FINAL PLAT
C-2.01	DEMOLITION PLAN
C-3.01	SITE PLAN
C-3.02	FIRE ANALYSIS PLAN
C-4.01	GRADING PLAN
C-5.01	DRAINAGE AREA MAP
C-6.01	STORM PLAN
C-6.02	STORM PROFILES
C-6.03	DRAINAGE CALCULATIONS
C-7.01	UTILITY PLAN
C-8.01	EROSION CONTROL PLAN
C-9.01	EROSION CONTROL DETAILS
C-9.02	EROSION CONTROL DETAILS
C-9.03	EROSION CONTROL DETAILS
C-9.04	PAVING DETAILS
C-9.05	DRAINAGE DETAILS
C-9.06	WATER DETAILS
C-9.07	SANITARY SEWER DETAILS
L-1.01	LANDSCAPE PLAN
L-1.02	LANDSCAPE SPECIFICATIONS & DETAILS
L-2.01	IRRIGATION PLAN
L-2.02	IRRIGATION DETAILS



ANIMAS CIVIL
ENGINEERING, LLC
P.O. BOX 830974
RICHARDSON, TEXAS 75083
P: 214-803-1099
CA # 9445 EXP. 06/30/2026
www.animascivil.com

SEAL:



TINKER FEDERAL CREDIT UNION
BROKEN ARROW
5608 S. ASPEN AVE. BROKEN ARROW, OK 74011

ACE PROJECT: 02001

REVISIONS
LABEL: DATE:

SHEET TITLE:
COVER SHEET

DATE 12/17/25

C-1.00



Benchmark Table

No.	Set	Northing	Easting	Elevation
500	1/2" Iron Pin w/ Alum cap	369622.6750	2614128.1520	675.9700
501	1/2" Iron Pin w/ Alum cap	369431.0370	2614658.4300	684.1900
502	1/2" Iron Pin w/ "GREENHEAD" cap	368895.9630	2613798.7320	669.8800

Parcel Line Table

Line #	Length	Direction	Line #	Length	Direction
L7	17.98	N49° 31' 00.05"W	L18	129.54	S1° 27' 36.65"E
L8	14.97	S49° 31' 00.05"E	L19	11.00	N88° 32' 23.35"E
L9	147.96	N88° 32' 23.35"E	L20	15.00	S1° 27' 36.65"E
L10	127.71	S88° 32' 23.35"W	L21	26.00	S88° 32' 23.35"W
L11	15.00	S1° 27' 36.65"E	L4	170.92	S49° 31' 00.05"E
L12	11.00	S88° 32' 23.35"W	L5	177.96	N49° 31' 00.05"W
L13	248.53	N1° 27' 36.65"W	L6	13.03	N88° 32' 23.35"E
L14	88.98	S1° 27' 36.65"E	L22	15.30	S51° 53' 42.61"W
L15	11.00	N88° 32' 23.35"E	L1	35.40	S89° 07' 50.00"W
L16	15.00	S1° 27' 36.65"E	L2	15.00	S0° 52' 10.00"E
L17	11.00	S88° 32' 23.35"W	L3	15.70	N89° 07' 50.00"E

Curve Table

Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	321.31	229.50	80.22	N38° 38' 53"E	295.70
C2	141.67	156.50	51.87	N24° 28' 24"E	136.88
C3	263.77	310.00	48.75	S64° 12' 19"W	255.88
C4	280.97	390.00	41.28	S19° 10' 43"W	274.93
C5	223.25	310.00	41.26	S19° 10' 16"W	218.46

Subdivision Area

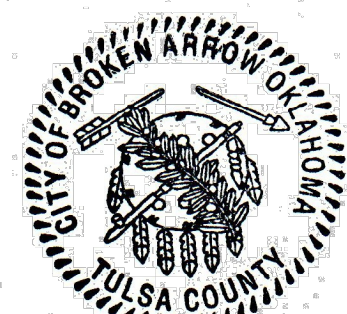
Blk	Lot	Area	Acres
1	1	55736	1.28
1	2	46010	1.06
1	3	59631	1.37
1	4	117214	2.69
1	5	95845	2.20
1	6	47052	1.08
R.O.W. Dedicated to Public		105056	2.41
Subdivision Gross		526543	12.09
Subdivision Net		421487	9.68

LEGEND:

- 1/2" IRON PIN FOUND
- 1/2" IRON PIN SET
- NATURAL GAS PIPELINE MARKER
- SEWER MANHOLE
- WATER RUNOFF INLET
- WATER METER
- FIRE HYDRANT
- WATER VALVE
- UTILITY EASEMENT
- ACCESS EASEMENT
- STATUTORY
- B/L - BUILD LINE
- ADDRESS PLACE HOLDER
- LNA - LIMITS OF NO ACCESS
- A/E - ACCESS EASEMENT
- U/E - UTILITY EASEMENT
- RESERVE AREA
- ULTIMATE R.O.W. AREA

APPROVED by the City Council of the City of Broken Arrow, Oklahoma.

Mayor: *[Signature]*
Name of City Clerk:



Peak Broken Arrow Addition

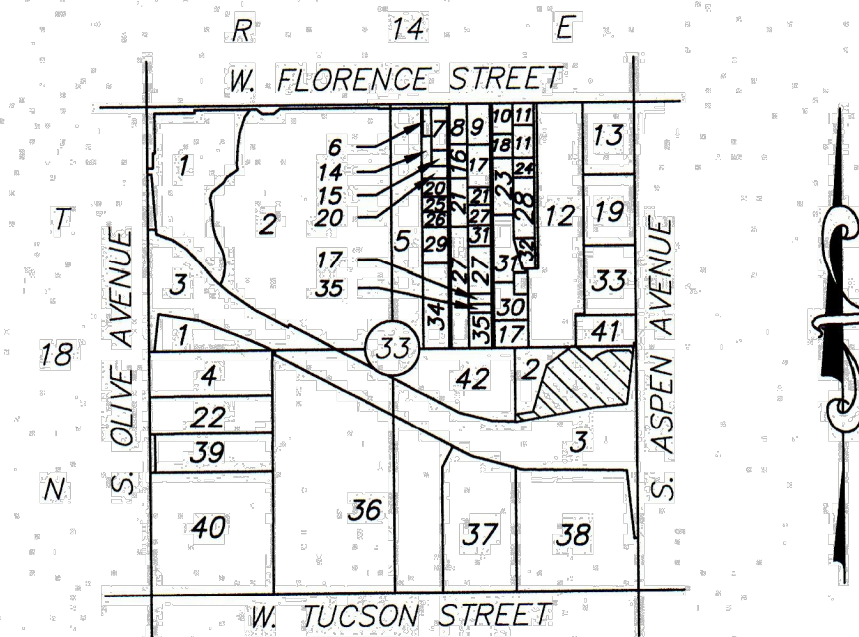
A SUBDIVISION OF PART OF THE NORTHEAST QUARTER (NE/4) OF THE SOUTHEAST QUARTER (SE/4) OF SECTION THIRTY-THREE (33), TOWNSHIP EIGHTEEN (18) NORTH, RANGE FOURTEEN (14) EAST OF THE INDIAN BASE AND MERIDIAN, CITY OF BROKEN ARROW, TULSA COUNTY, STATE OF OKLAHOMA

Owner/Developer:
Clint Anderson - Manager
Peak Broken Arrow, LLC
8235 Douglas Ave. Suite 620
Dallas, TX 75225
Phone (312) 848-6877
Email: canderson@peak-dp.com

Engineer:
Animas Civil Engineering
Oklahoma CA# 9445, Exp. 06/30/2026
1610 Mapleleaf Dr.
Wylie, TX 75098
Phone (214) 803-1099
Email: michael@animascivil.com

Surveyor:
Bearing Tree Land Surveying
Oklahoma CA# 4568, Expires 06/30/26
7100 N. Broadway Extension
Oklahoma City, Oklahoma 73116
Phone (405) 605-1081

STATE OF OKLAHOMA
COUNTY OF TULSA
I, MICHAEL WILLIS, Tulsa County Clerk, in and for the County and State above named, do hereby certify that the foregoing is a true and correct copy of a like instrument now on file in my office.
Dated the 2nd day of December 2025
MICHAEL WILLIS, Tulsa County Clerk
[Signature] Deputy



LOCATION MAP
1"=2000'

No.	Owner	No.	Owner	No.	Owner	No.	Owner
1	SIEGFRIED COMPANIES INC.	12	GREYOKS SUBDIVISION PLAT NO. 5205	23	LOWRY LIVING TRUST	34	BRYCE, PHILIP A. REV TRUST
2	BROKEN ARROW ECONOMIC DEVELOPMENT AUTHORITY	13	CORP PRESIDING BISHOP CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS	24	HF LAND & CATTLE LLC	35	PAIOTTA FAMILY TRUST
3	OKLAHOMA TURNPIKE AUTHORITY	14	ENAU, MICHAEL	25	ROSSER, STEVE E. & VICKIE L.	36	S&R DEVELOPMENT LLC
4	NORTH AMERICAN ISLAMIC TRUST INC.	15	DUPREE, JOSHUA A. & LINDSEY N.	26	PATRICK J. & JULIE A.	37	TRAILS ASPEN LLC
5	BRYCE, PHILIP A. & MARY ELIZABETH TEES	16	PAYNE, MARK S. & ADRIENNE & DIXIE	27	POPE, PHYLLIS JUNE TRUST	38	HAUSAM, JOHN REV TRUST & BURNSTEIN FAMILY INV CO LLC
6	CAUSEY, JOHN B. & JAMES R.	17	ANDERSON, ZANE & MICHELLE	28	FUH FAMILY TRUST	39	INGLES, DAVID AND SHARON
7	TROTTER, SHARLEY A. AND ANNA L. MCDONALD	18	SCHABERG, RANDY W. & DEBORA C.	29	FINCHER, GARY WILLIAM AND MONICA M.	40	SOUTH 40 GOLF PROPERTY LLC
8	CAUSEY, JOHN B. & JAMES R.	19	REV TRUST ETAL C/O CLYDE W BARTON MD	30	MYERS, JARED WALTER	41	ASPEN CREEK TOWNE CENTRE I, BLK 1
9	RENOVATED REALTY LLC	20	ZEITER, GLENN M.	31	TRUSTEES ANDERSON TRUST	42	FORCOTTEN FARM, LLC
10	AMEE MARIE & LYNDSY LANAE GUDIS	21	FRAZIER, PHIL AND SHARON	32	RUB HOLDINGS LLC		
11	JEP & KNP LLC	22	INGLES, DAVID MINISTRIES INC.	33	NEW LIFE CENTER		

LEGAL DESCRIPTION:

A tract of land that is a part of the Northeast Quarter of the Southeast Quarter (NE/4 SE/4) of Section Thirty-three (33), Township Eighteen (18) North, Range Fourteen (14) East of the Indian Base and Meridian, Tulsa County, State of Oklahoma, according to the U.S. Government Survey thereof, being more particularly described as follows:

COMMENCING at the Southeast corner of Southeast Quarter (SE/4) of said Section Thirty-three (33);
Thence along the East line of said Southeast Quarter (SE/4), N 01°18'33" W a distance of 2574.83 feet;
Thence S 88°41'27" W a distance of 42.72 feet to a point on the Right-of-Way for Oklahoma Turnpike Authority as recorded in Book 6305, Page 1920, at the Office of the Tulsa County Clerk being the Point of Beginning;
Thence along the Southerly Right-of-Way of West Norfolk Drive, dedicated by "Aspen Creek Towne Centre I", Plat #6475, as filed at the Office of the Tulsa County Clerk, S 88°34'50" W a distance of 17.29 feet;
Thence continuing along said Southerly Right-of-Way, N 46°21'44" W a distance of 35.32 feet;
Thence continuing along said Southerly Right-of-Way, S 88°34'50" W a distance of 166.32 feet;
Thence continuing along said Southerly Right-of-Way on a tangent curve to the left, having a radius of 310.00 feet, an arc length of 263.77 feet, a central angle of 48°45'02", a chord bearing of S 64°12'19" W, and a chord length of 255.88 feet;
Thence along the Southwesterly boundary of said "Aspen Creek Towne Centre I", N 50°10'12" W a distance of 234.77 feet to the Northeast corner of the Northeast Quarter of the Northeast Quarter of the Southeast Quarter (NE/4 NE/4 SE/4) of said Section Thirty-three (33);
Thence along the North line of the Northeast Quarter of the Southeast Quarter (NE/4 SE/4) of said Section Thirty-three (33), S 88°36'00" W a distance of 48.45 feet;
Thence S 51°56'48" W a distance of 337.17 feet;
Thence S 16°07'11" W a distance of 528.32 feet;
Thence S 78°45'41" W a distance of 178.59 feet;
Thence N 88°49'30" W a distance of 8.61 feet to a point on the West line of the Northeast Quarter of the Southeast Quarter (NE/4 SE/4) of said Section Thirty-three (33);
Thence along said West line, S 01°16'42" E a distance of 80.07 feet to a point on the Northerly Right-of-Way of said Oklahoma Turnpike Authority;
Thence continuing along said Right-of-Way, S 88°49'30" E a distance of 13.89 feet;
Thence continuing along said Right-of-Way, N 78°45'41" E a distance of 860.65 feet;
Thence continuing along said Right-of-Way, N 82°52'35" E a distance of 350.14 feet;
Thence continuing along said Right-of-Way, N 05°47'20" E a distance of 564.41 feet to the POINT OF BEGINNING.

(Containing 616,675 square feet, or 14.16 Acres, more or less.)

SUBDIVISION STATISTICS:

Subdivision contains six (6) lots in one (1) block.
Subdivision contains 14.16 total acres (616,675 sq ft.)

MONUMENTATION:

1/2" Iron Pins to be set at all lot corners unless otherwise noted.

BASIS OF BEARING:

The Oklahoma North - State Plane Coordinate, Zone NAD 83 (2011) was used as the Basis of Bearing for this survey.

VERTICAL DATUM:

NAVD 88

FLOOD HAZARD INFO:

Firm panel # 40143C0452M
Effective date: 9/12/2024
Subject property is located in ZONE X (Unshaded)

ZONING:

Subject property is zoned; CH (Commercial Heavy)

ADDRESS DISCLAIMER:

Addresses shown on this plat are accurate as of the time the plat was filed. Addresses are subject to change and should never be relied on in place of the legal description.

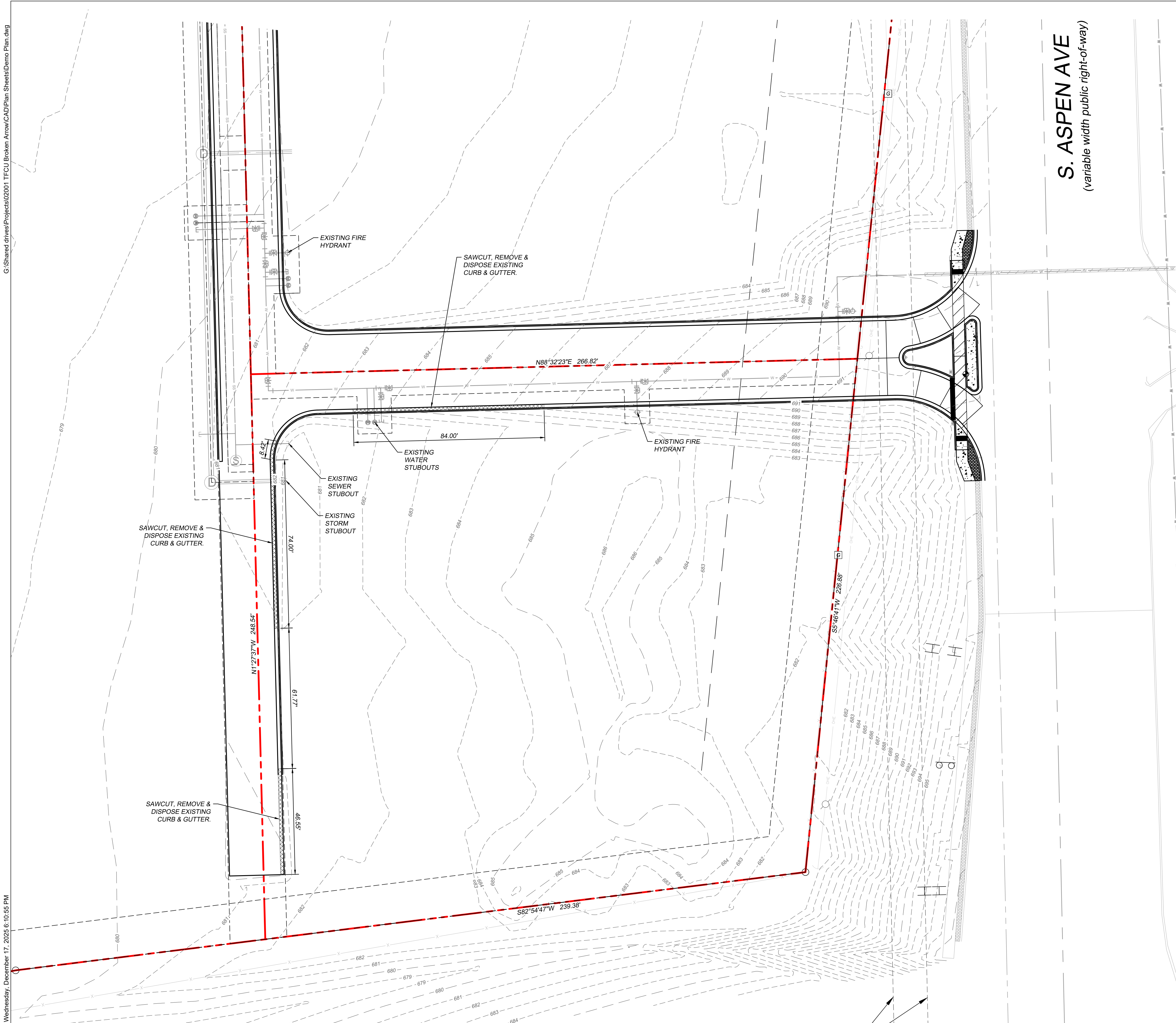
COBA PROJ. NO. PT-002460-2025

Prepared for:
Peak Broken Arrow, LLC
Page 1 of 2
Date Prepared: November 3, 2025

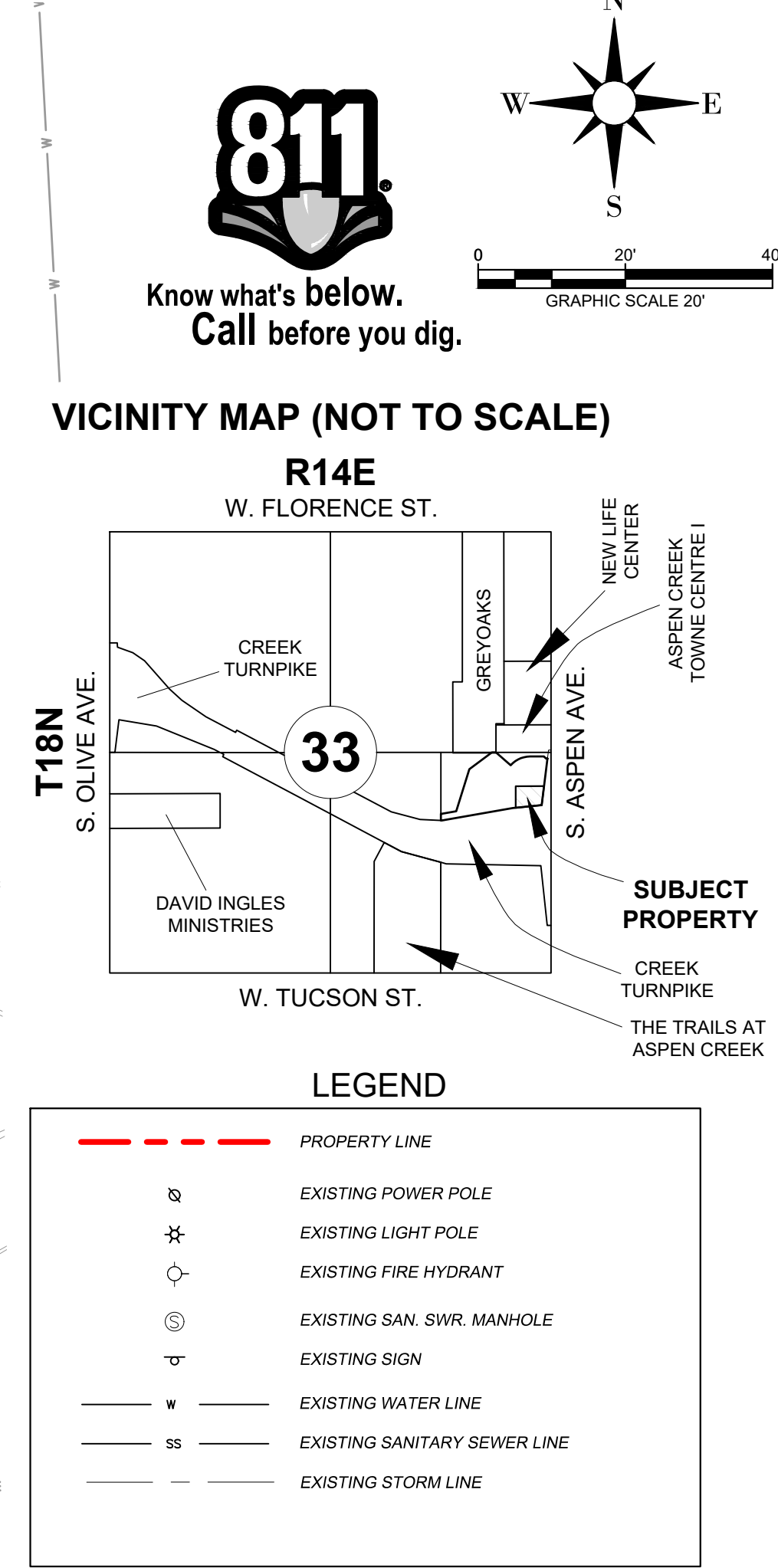
I hereby certify that all real estate taxes involved in this plat have been paid as reflected by the current tax rolls. Security as required has been provided in the amount of \$15,803.00 per trust receipt no. Taxroll to be applied to 2025 taxes. This certificate is NOT to be construed as payment of 2025 taxes in full but is given in order that this plat may be filed on record. 2025 taxes may exceed the amount of the security deposit.

Dated: 12/02/2025
John M. Fothergill
Tulsa County Clerk
By: *[Signature]* Deputy

Scale: 1" = 100'



S. ASPEN AVE
(variable width public right-of-way)



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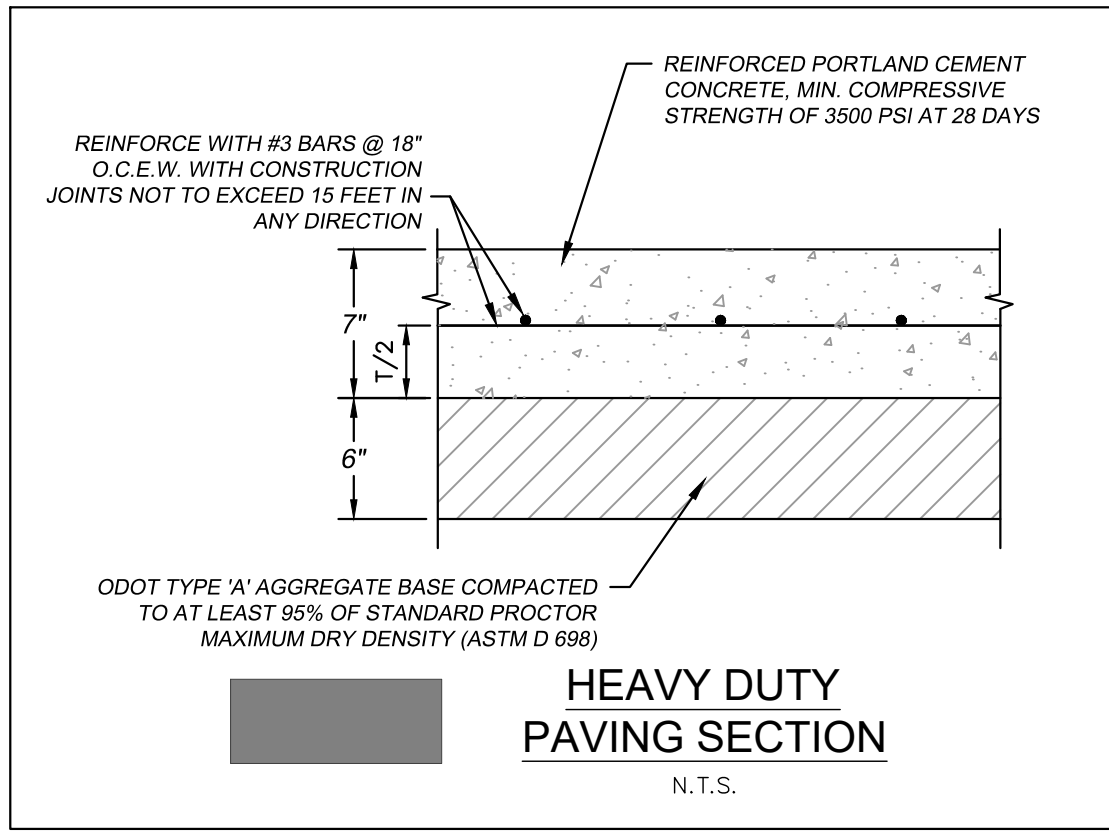
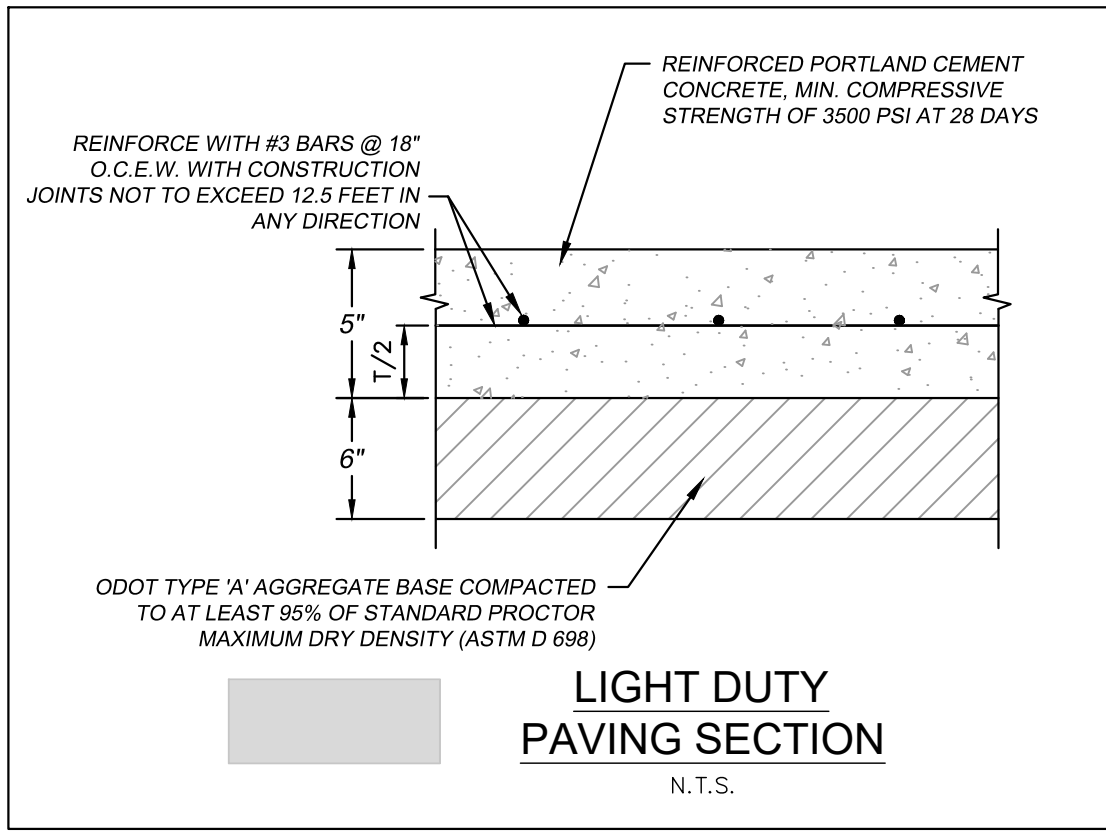
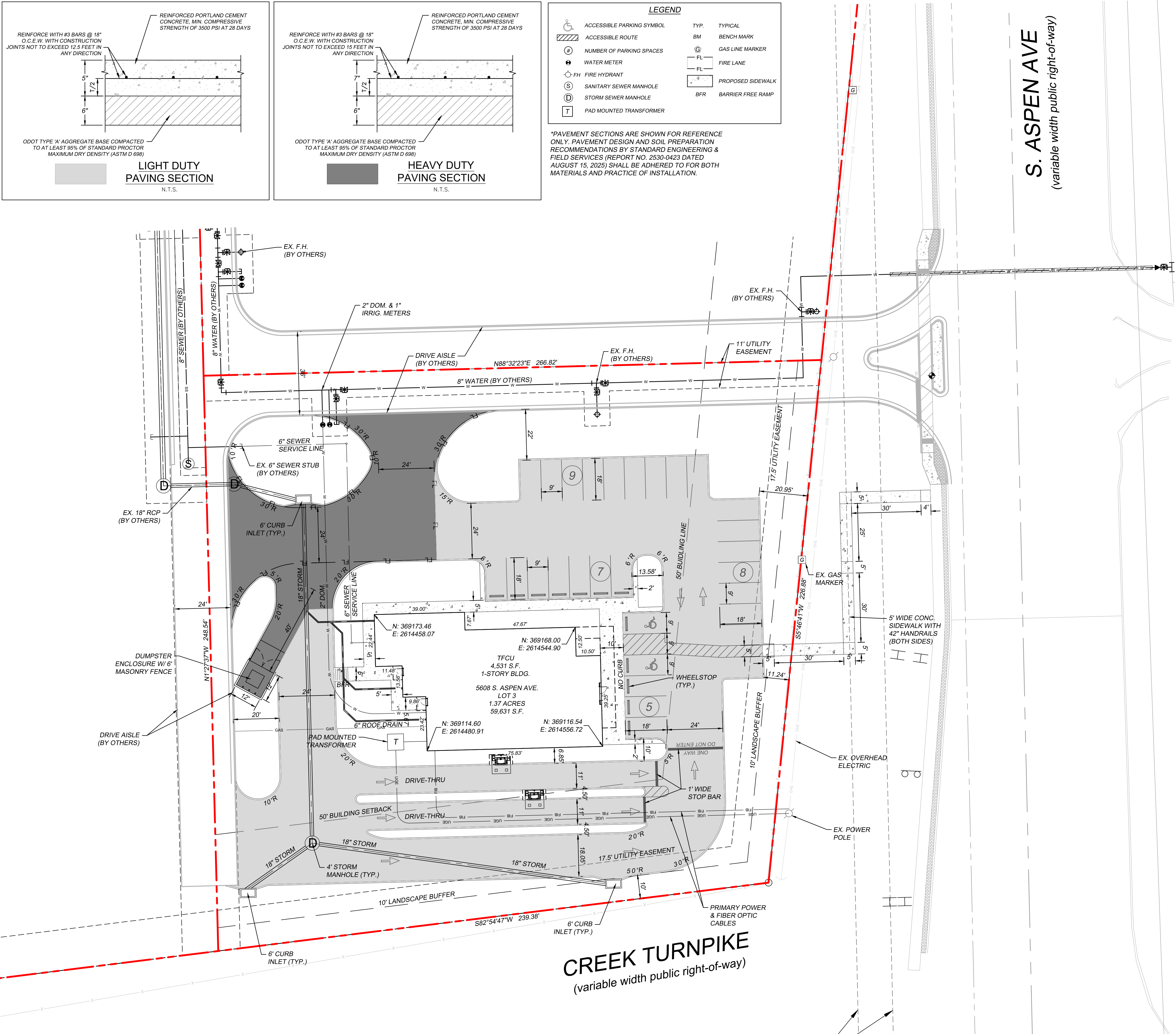
SEAL:
MICHAEL DOGGETT
35194
LICENSED PROFESSIONAL ENGINEER
OKLAHOMA
12/17/2025

TINKER FEDERAL CREDIT UNION
BROKEN ARROW
5608 S. ASPEN AVE - BROKEN ARROW, OK 74011
ACE PROJECT: 02001

REVISIONS
LABEL: DATE:

SHEET TITLE:
DEMOLITION
PLAN
DATE 12/17/25

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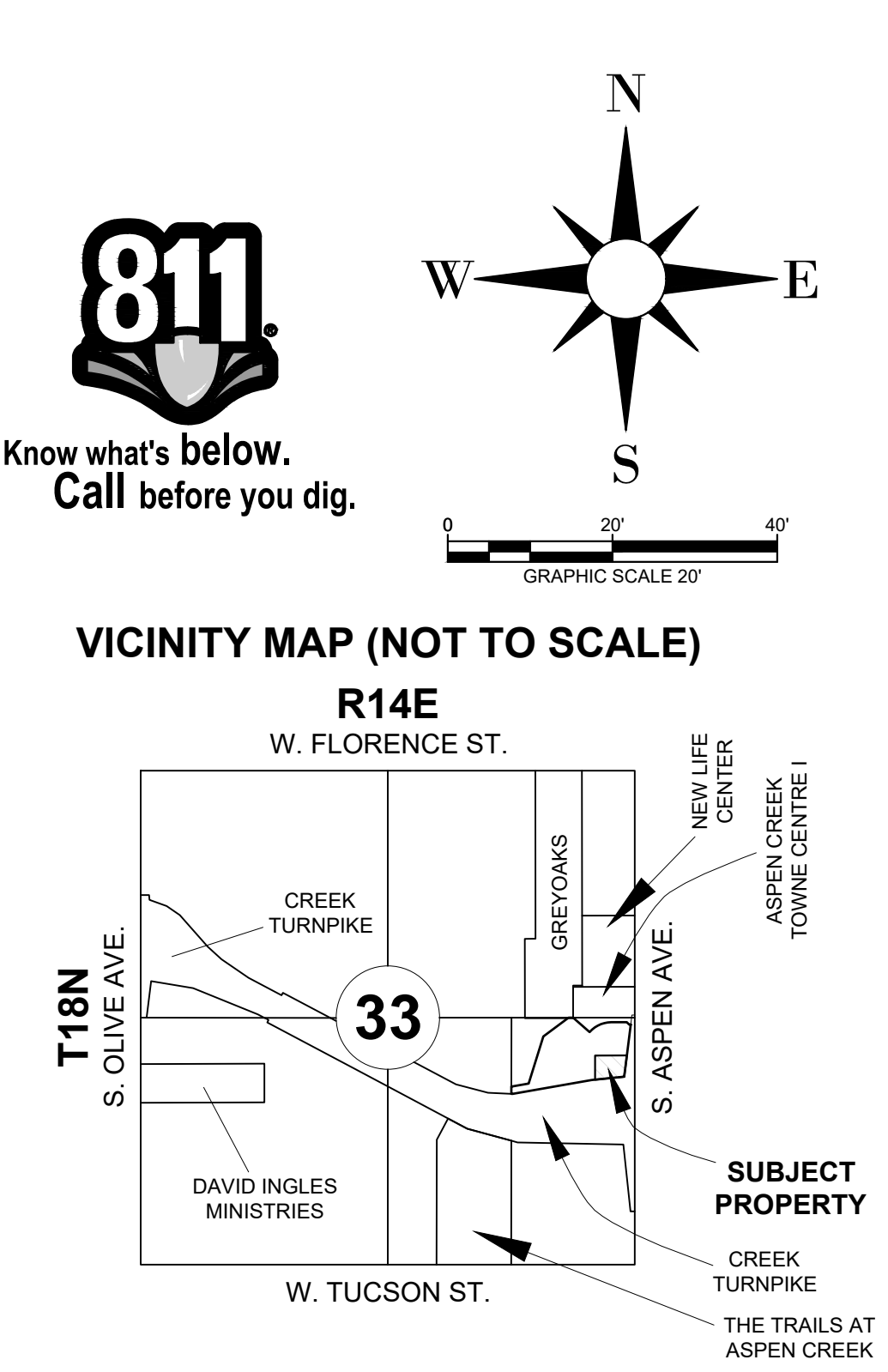


LEGEND

	ACCESSIBLE PARKING SYMBOL	TYP.	TYPICAL
	ACCESSIBLE ROUTE	BM	BENCH MARK
	NUMBER OF PARKING SPACES	GL	GAS LINE MARKER
	WATER METER	FL	FIRE LANE
	FIRE HYDRANT	FL	PROPOSED SIDEWALK
	SANITARY SEWER MANHOLE	BFR	BARRIER FREE RAMP
	STORM SEWER MANHOLE		
	PAD MOUNTED TRANSFORMER		

*PAVEMENT SECTIONS ARE SHOWN FOR REFERENCE ONLY. PAVEMENT DESIGN AND SOIL PREPARATION RECOMMENDATIONS BY STANDARD ENGINEERING & FIELD SERVICES (REPORT NO. 2530-0423 DATED AUGUST 15, 2025) SHALL BE ADHERED TO FOR BOTH MATERIALS AND PRACTICE OF INSTALLATION.

S. ASPEN AVE
(variable width public right-of-way)



SITE DATA TABLE - LOT 3	
SUBDIVISION INFO	LOT 3, BLOCK 1, PEAK BROKEN ARROW ADDITION
ZONING	CH
LAND USE	FINANCIAL INSTITUTION, WITH DRIVE-THRU
LOT AREA (SQ. FT.)	59,631
LOT AREA (ACRES)	1.37
BUILDING SIZE (SQ. FT.)	4,531
BUILDING HEIGHT (FT.)	24
LOT COVERAGE	7.6%
FLOOR AREA RATIO	0.076
IMPERVIOUS COVER (S.F.)	41368
IMPERVIOUS COVER (%)	69.4%
REQUIRED PARKING RATIO	1:300 S.F. (BANK S.F.)
TOTAL PARKING REQUIRED	16
MAX. PARKING ALLOWED (125%)	20
PARKING PROVIDED	29 (VARIANCE REQ.)
ADA PARKING REQUIRED	2
ADA PARKING PROVIDED	2

- NOTES
- VARIANCE TO HIGHWAY OVERLAY REQUIREMENTS IS REQUESTED TO ALLOW PRIMARY FACADE TO NOT FACE CREEK TURNPIKE DUE TO GRADE CHANGE BETWEEN SITE AND CREEK TURNPIKE.
 - VARIANCE TO MAXIMUM PARKING REQUIREMENTS IS REQUESTED TO ALLOW THE AMOUNT OF PARKING SHOWN ON THIS SITE PLAN DUE TO THE VOLUME OF CUSTOMERS EXPECTED BASED ON HISTORICAL DATA FROM TFCU.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING FOOTPRINT DIMENSIONS.
 - ALL DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, OR PROPERTY LINE UNLESS NOTED OTHERWISE.
 - ALL CURB RADII ARE 2' UNLESS NOTED OTHERWISE.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND FINAL GEOTECH REPORT FOR BUILDING SUBGRADE PREPARATION REQUIREMENTS.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR DUMPSTER ENCLOSURE CONSTRUCTION SPECIFICATIONS.
 - REFER TO BUILDING PLANS FOR ROOFTOP HVAC SCREENING DETAILS.
 - CONTRACTOR SHALL REFER TO M.E.P. AND LANDSCAPE PLANS FOR CONDUIT PLACEMENT PRIOR TO PAVING.
 - THE DEVELOPMENT PLANS FOR THIS SITE SHOW NO ADVERSE IMPACTS TO OFFSITE PROPERTIES FROM PEAK STORMWATER FLOWS. REFER TO STR 33-18-14, FEE-IN-LIEU-OF DETENTION DETERMINATION, BROKEN ARROW DETERMINATION LETTER DD-121624-73.
 - NO FLOODPLAIN EXISTS ON THIS PROPERTY. THIS PROPERTY IS IN ZONE X (UNSHADED) OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 40143C0452L, WHICH BEARS AN EFFECTIVE DATE OF OCTOBER 16TH, 2012.

DEVELOPER
JASON KAPKA
TFCU
PO BOX 45750
TINKER AFB, OK 73145
(405) 255-2578
KAPKAJ@TINKERFCU.ORG

ENGINEER
ANIMAS CIVIL ENGINEERING, LLC.
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(214) 803-1099
MICHAEL@ANIMASCIVIL.COM

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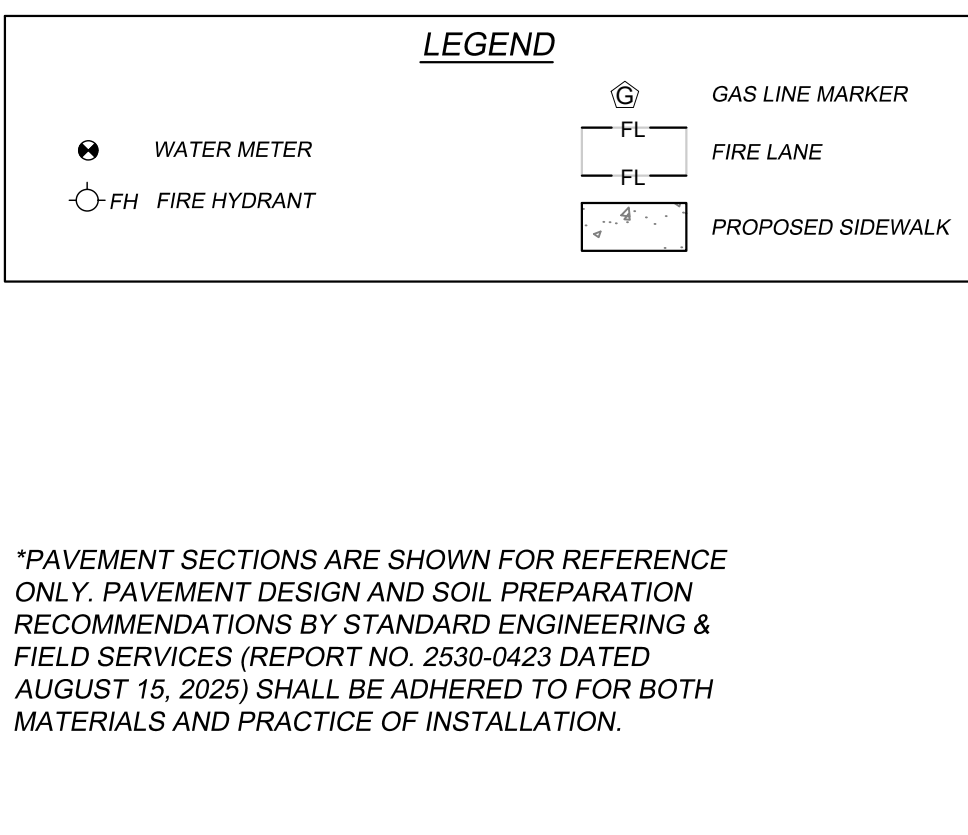
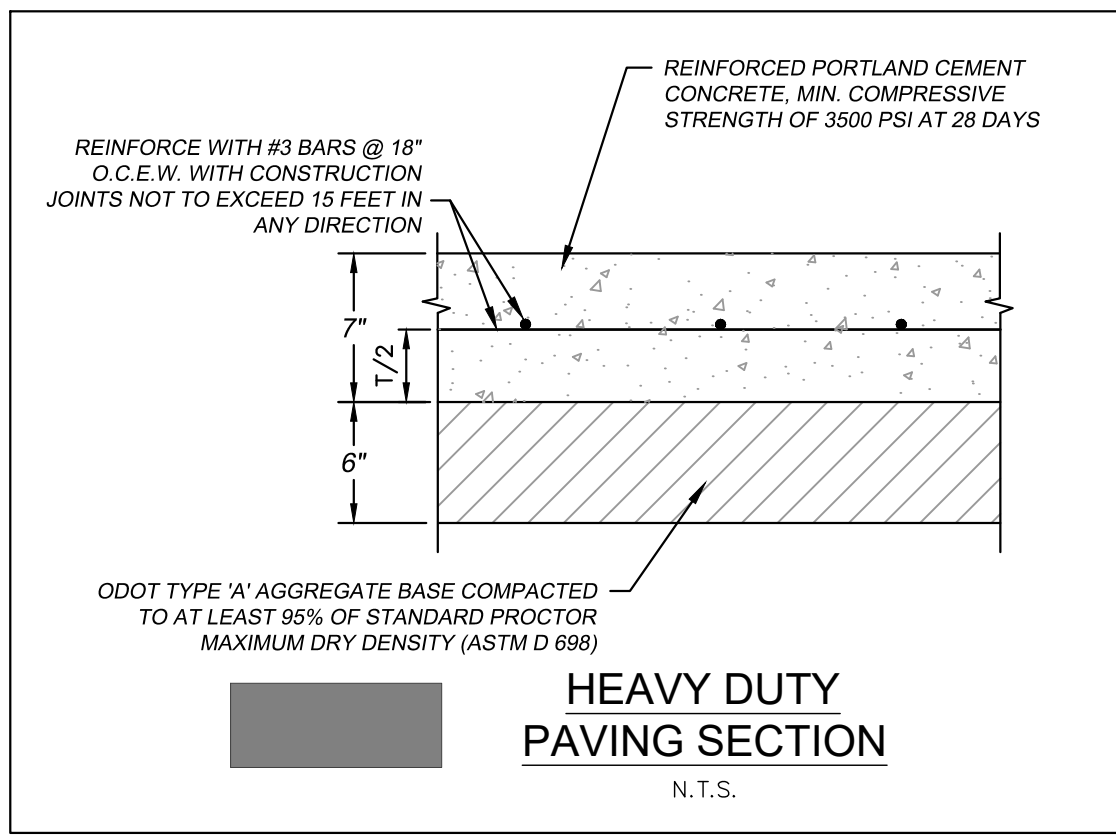
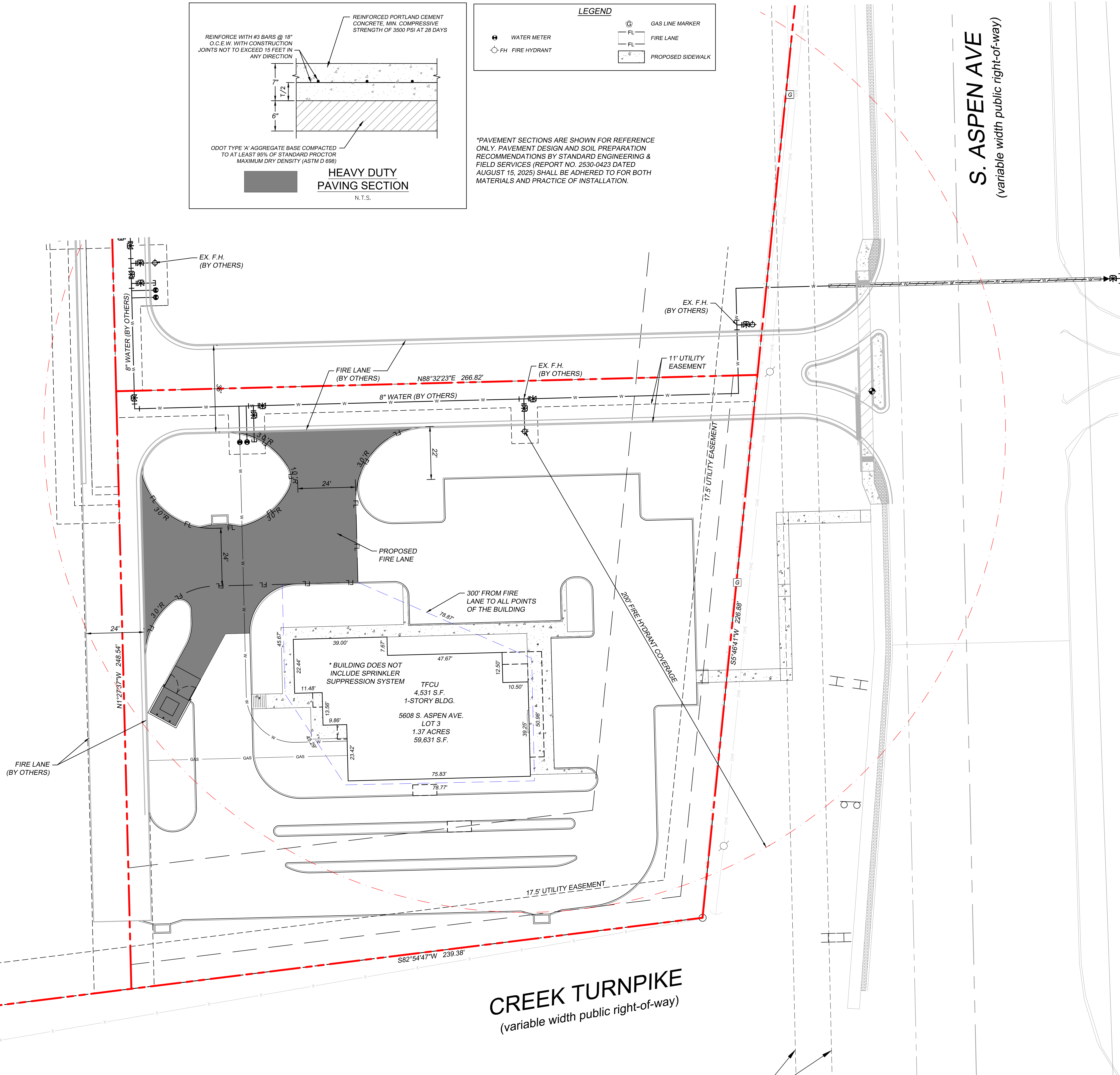
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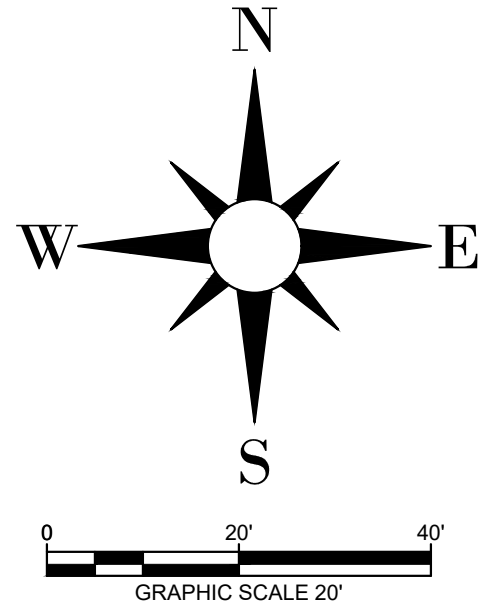
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SITE PLAN

DATE 12/17/25

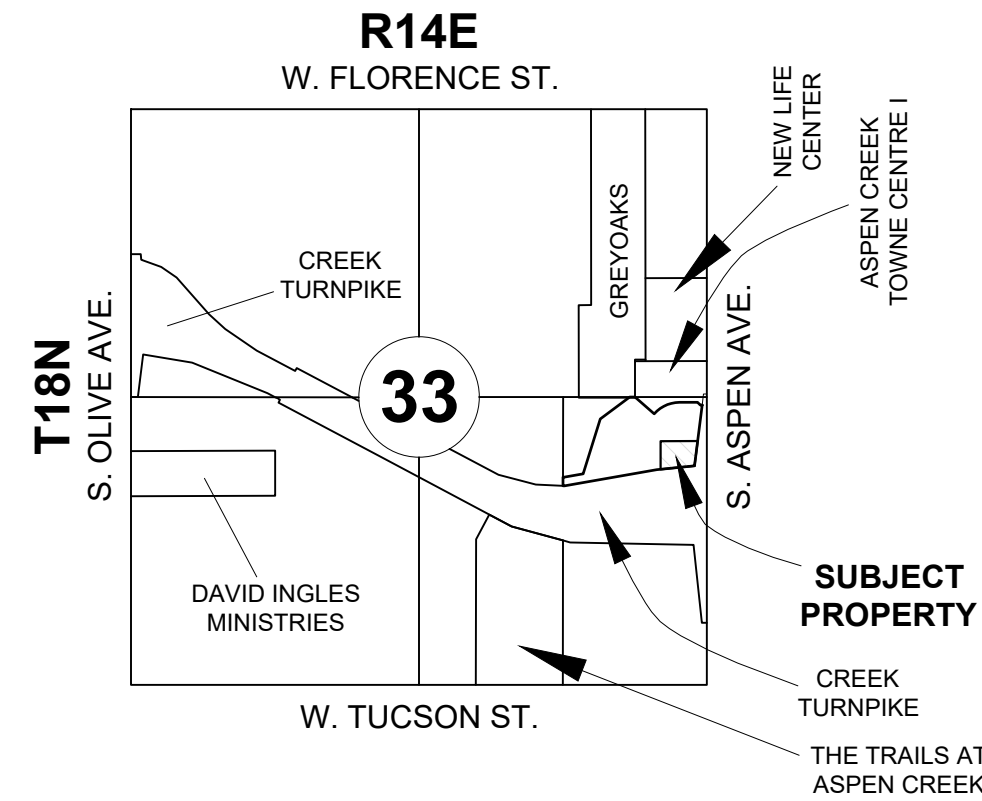
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S. ASPEN AVE
(variable width public right-of-way)



VICINITY MAP (NOT TO SCALE)



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MICHAEL DOGGETT
35194
OCT 17 2025
OKLAHOMA

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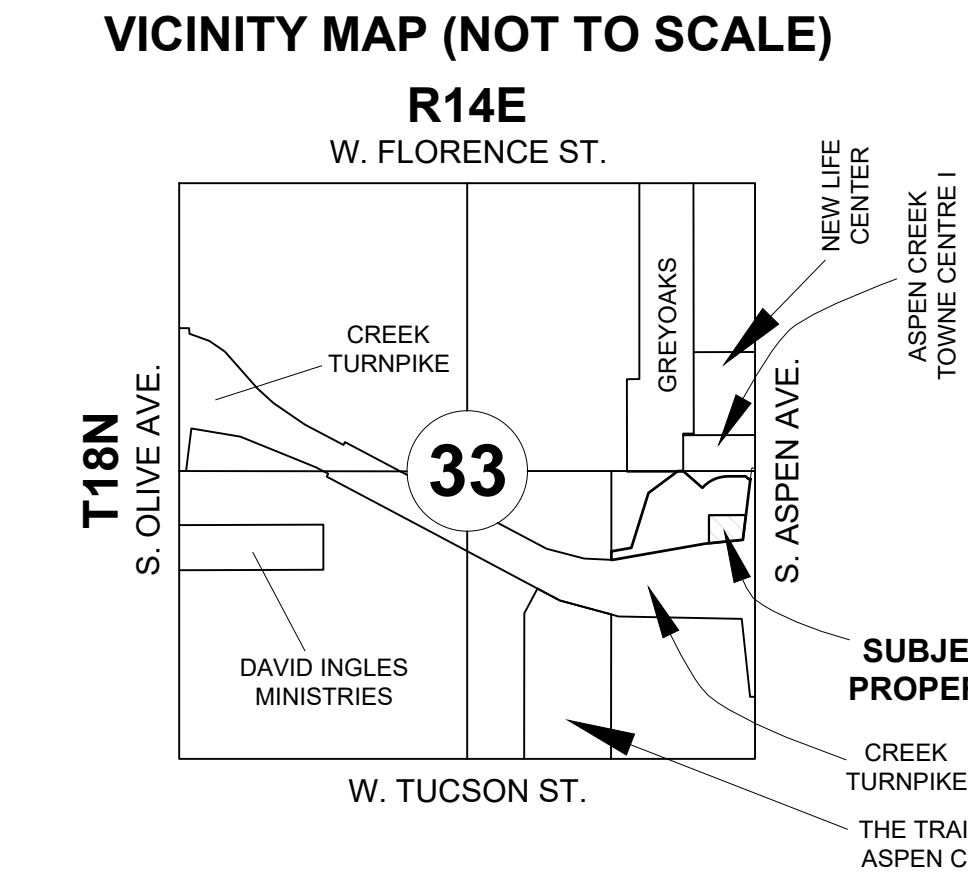
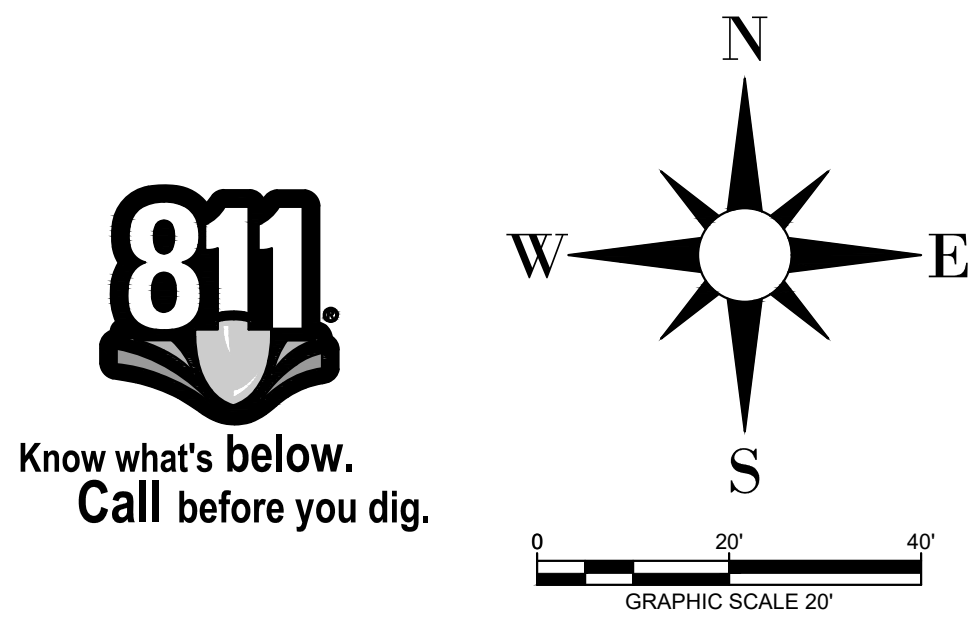
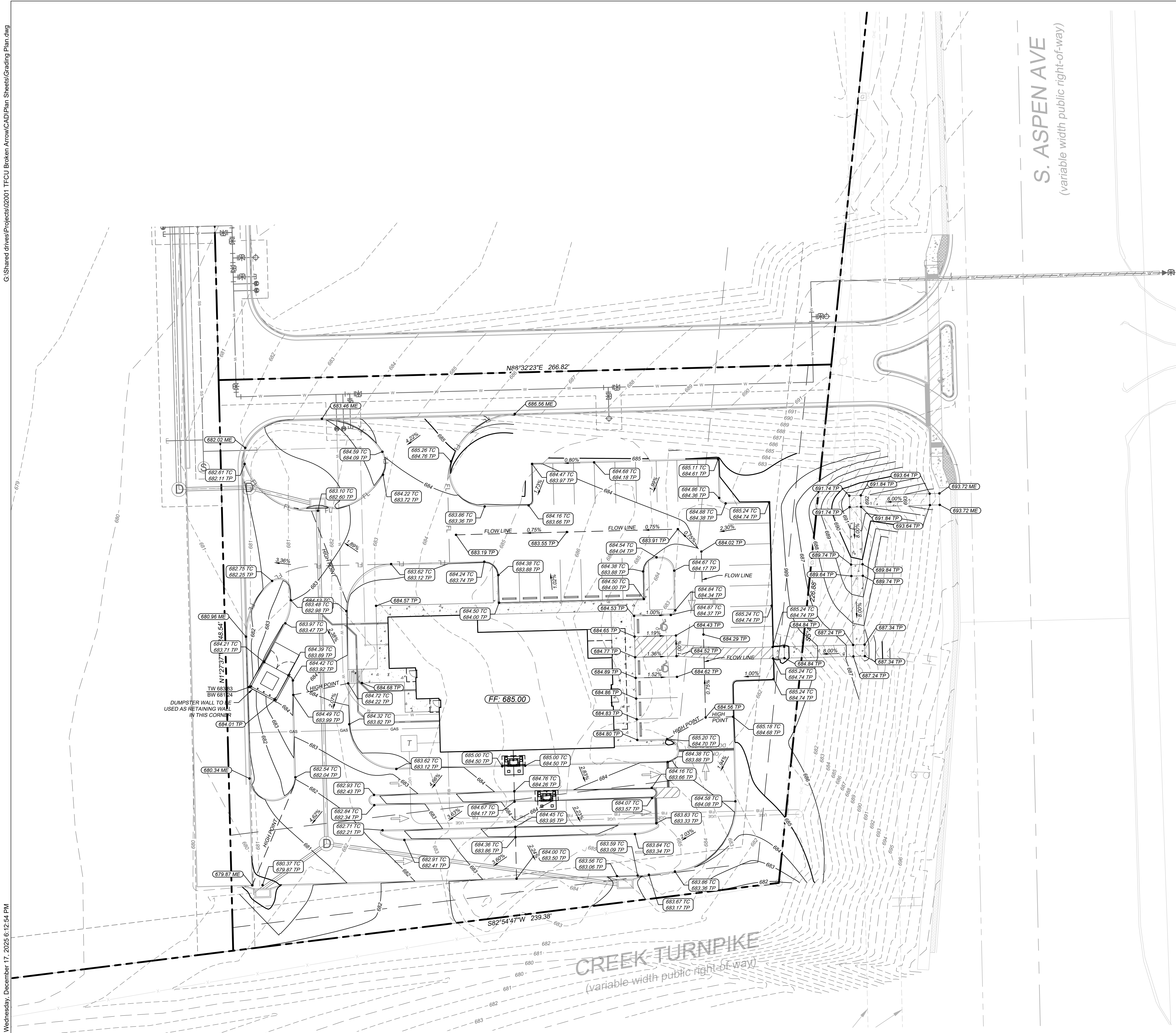
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LABEL: DATE:

SHEET TITLE:
FIRE ANALYSIS PLAN

DATE 12/17/25

C-3.02



- ### GRADING NOTES
- SPOT ELEVATIONS ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR SUBGRADE PREPARATIONS SPECIFICATIONS FOR ALL PROPOSED BUILDINGS.
 - ALL FILL MATERIAL SHALL BE COMPACTED PER GEOTECH RECOMMENDATION. REFER TO PAVING SECTION DETAILS FOR SUBGRADE PREPARATION REQUIREMENTS UNDER ALL PAVED AREAS. (REFER TO GEOTECH REPORT)
 - CONTRACTOR SHALL VERIFY ALL SIDEWALKS HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5% AND A MAXIMUM CROSS SLOPE OF 2%. IF THE CONTRACTOR IDENTIFIES SLOPES GREATER, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION.
 - SPOT ELEVATIONS IDENTIFIED AS "MATCH EXISTING" SHALL BE FIELD VERIFIED. CONTRACTOR SHALL NOTIFY CIVIL ENGINEERING CONSULTANT (CEC) OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH GRADING ACTIVITIES.

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12/17/2025

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GRADING PLAN

DATE 12/17/25

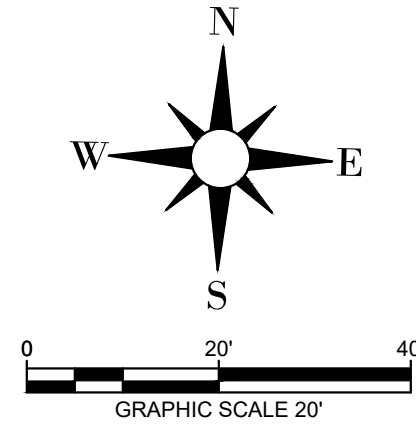
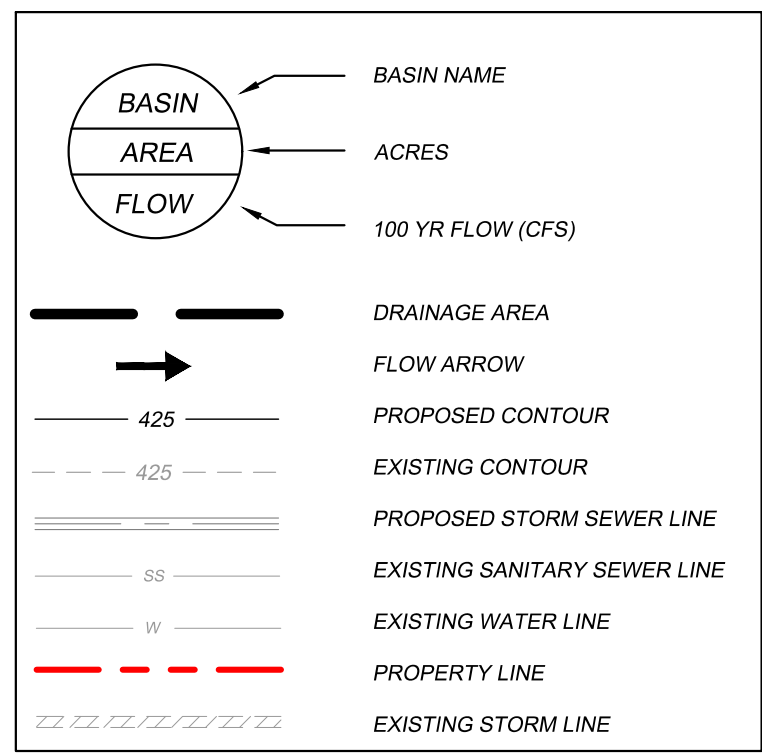
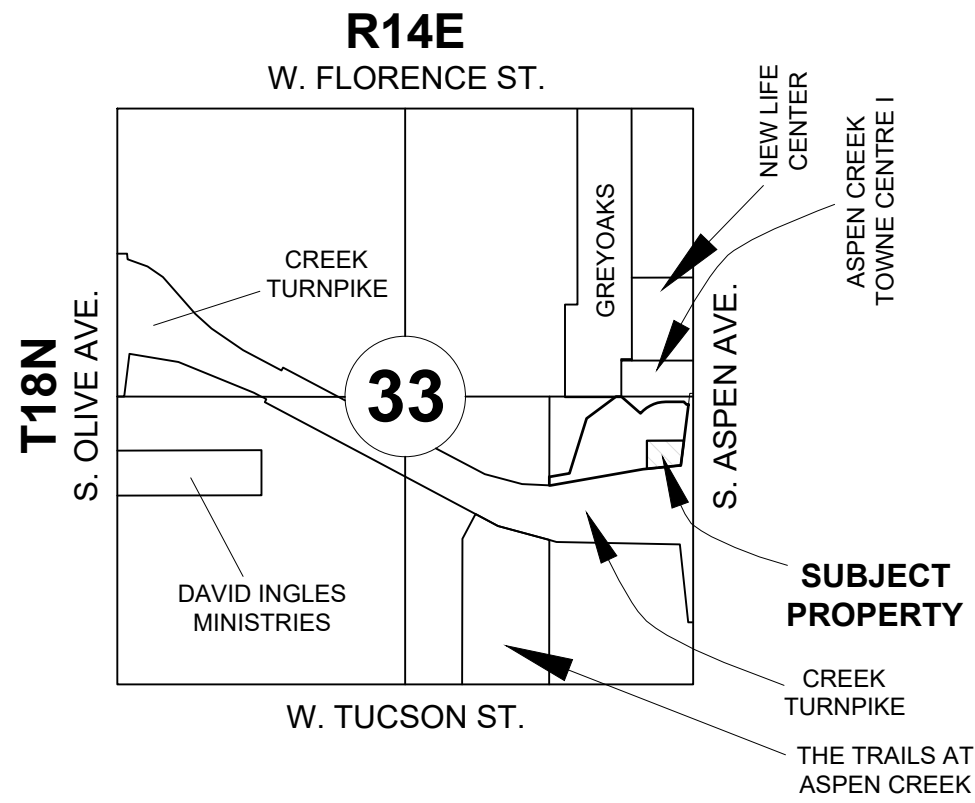
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DRAINAGE AREA TABLE								
DRAINAGE AREA NO.	AREA (ac)	RUNOFF COEFFICIENT "C"	RAINFALL INTENSITY "I" 5 (in/hr)	RAINFALL INTENSITY "I" 100 (in/hr)	TIME OF CONCENTRATION (minutes)	TOTAL FLOW Q5 (cfs)	TOTAL FLOW Q100 (cfs)	OUTFALL
A1	0.71	0.90	6.90	10.50	5.0	4.43	6.74	6" CURB INLET A1
A2	0.22	0.90	6.90	10.50	5.0	1.34	2.05	6" CURB INLET A2
A3	0.13	0.90	6.90	10.50	5.0	0.78	1.19	6" CURB INLET A3
A4	0.10	0.90	6.90	10.50	5.0	0.65	0.98	ROOF DRAIN
B1	0.11	0.90	6.90	10.50	5.0	0.68	1.04	OFFSITE CURB INLET
C2	0.21	0.90	6.90	10.50	5.0	1.31	1.99	FUTURE LOT 4
ROW1	0.08	0.35	6.90	10.50	5.0	0.19	0.29	EX. ROW DITCH

FUTURE
DEVELOPMENT
BY OTHERS

FUTURE
DEVELOPMENT
BY OTHERS

VICINITY MAP (NOT TO SCALE)



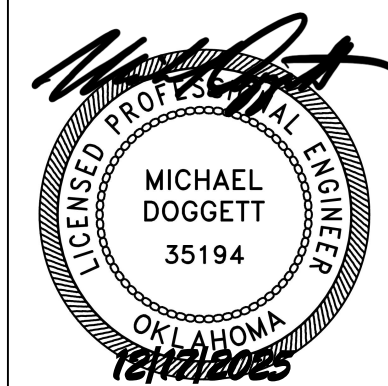
S. ASPEN AVE
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BROKEN ARROW

5808 S. ASPEN AVE - BROKEN ARROW, OK 74011

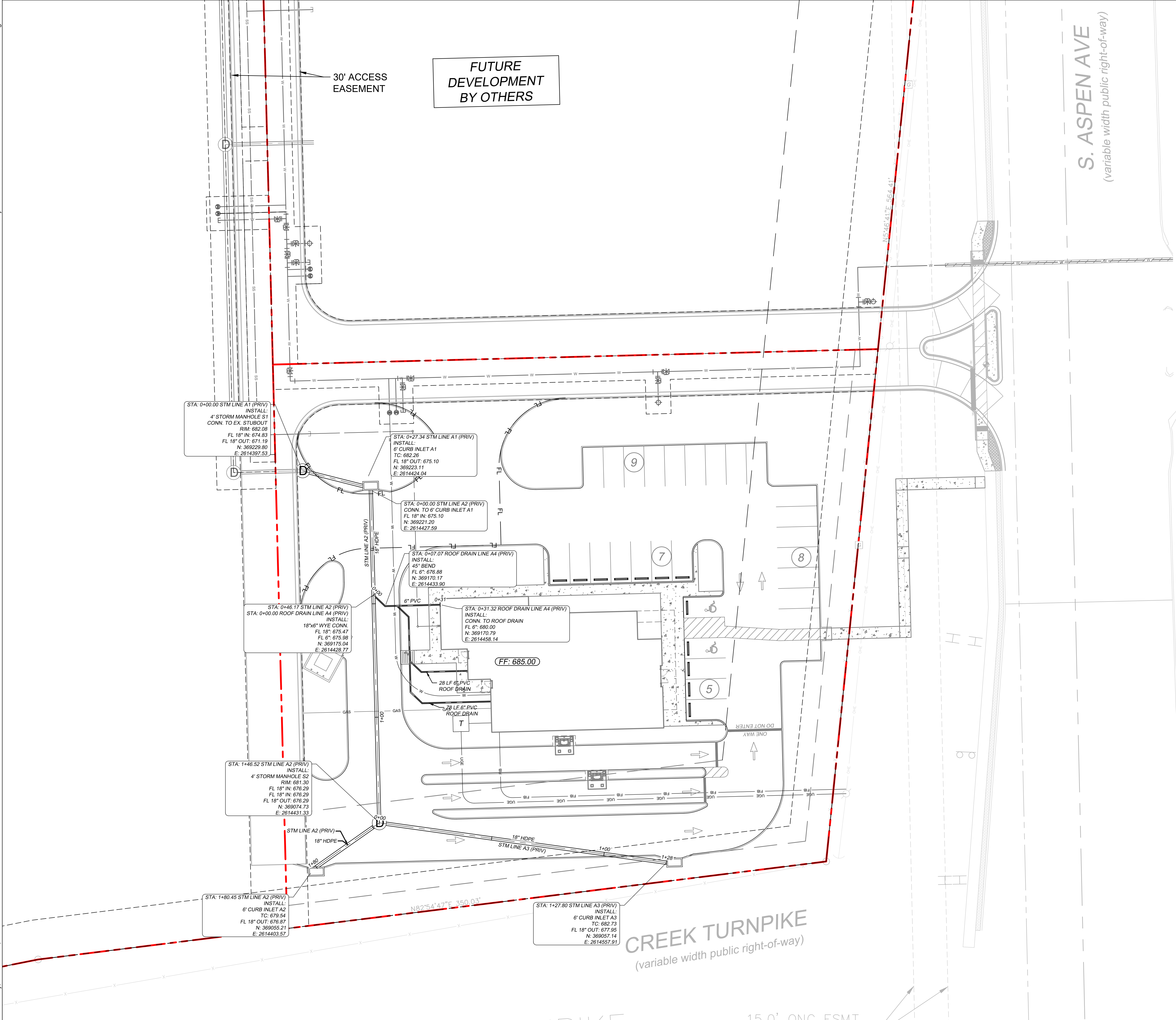
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LABEL: DATE:

SHEET TITLE:
DRAINAGE
AREA MAP

DATE 12/17/25

C-5.01



VICINITY MAP (NOT TO SCALE)

R14E
W. FLORENCE ST.

33

S. OLIVE AVE.

CREEK TURNPIKE

GREY OAKS

NEW LEE CENTER

ASPEN CREEK TOWNE CENTRE I

DAVID INGLES MINISTRIES

W. TUCSON ST.

SUBJECT PROPERTY

CREEK TURNPIKE

THE TRAILS AT ASPEN CREEK

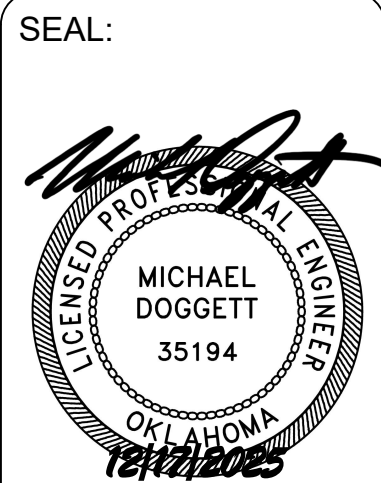
LEGEND

	PROPERTY LINE
	PROPOSED STORM LINE
	PROPOSED SANITARY SEWER SERVICE LINE
	PROPOSED WATER LINE
	EXISTING STORM LINE
	EXISTING OVERHEAD ELECTRIC
	EXISTING WATER LINE
	EXISTING SEWER LINE
	PROPOSED SANITARY SEWER MANHOLE (SS MH)
	PROPOSED FIRE HYDRANT (FH)
	PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
	EXISTING FIRE HYDRANT
	EXISTING STORM MANHOLE
	EXISTING SAN. SWR. MANHOLE

STORM DRAINAGE NOTES:

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES IN FIELD PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
A) RCP - ASTM C78 CLASS III - REQUIRED IN PUBLIC RIGHT OF WAY AND AT CONNECTION POINTS TO PUBLIC STORM SEWER.
B) HDPE - AASHTO M252 TYPE S, M294 TYPE S R ASTM F 2306 SMOOTH WALL.
- ALL EXISTING AND PROPOSED PIPES AND STRUCTURES ARE TO BE CLEANED OUT AT THE COMPLETION OF CONSTRUCTION TO REMOVE ALL SILT AND DEBRIS.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- ALL STORMWATER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
- ALL PRIVATE STORMWATER SYSTEMS ARE THE RESPONSIBILITY OF THE LANDOWNER.
- THE PROPOSED STORMWATER SYSTEM SHOWN WITHIN THESE PLANS IS PRIVATE. PRIVATE STORM LINE A4 DOES NOT COMPLY WITH SECTION 10.9.2 OF THE ENGINEERING DESIGN CRITERIA, SUBSECTION A FOR MINIMUM PIPE SIZE. THE REMAINDER OF THE PRIVATE STORMWATER SYSTEM COMPLIES WITH THE CITY'S CRITERIA FOR PUBLIC STORMWATER DESIGN STANDARDS.

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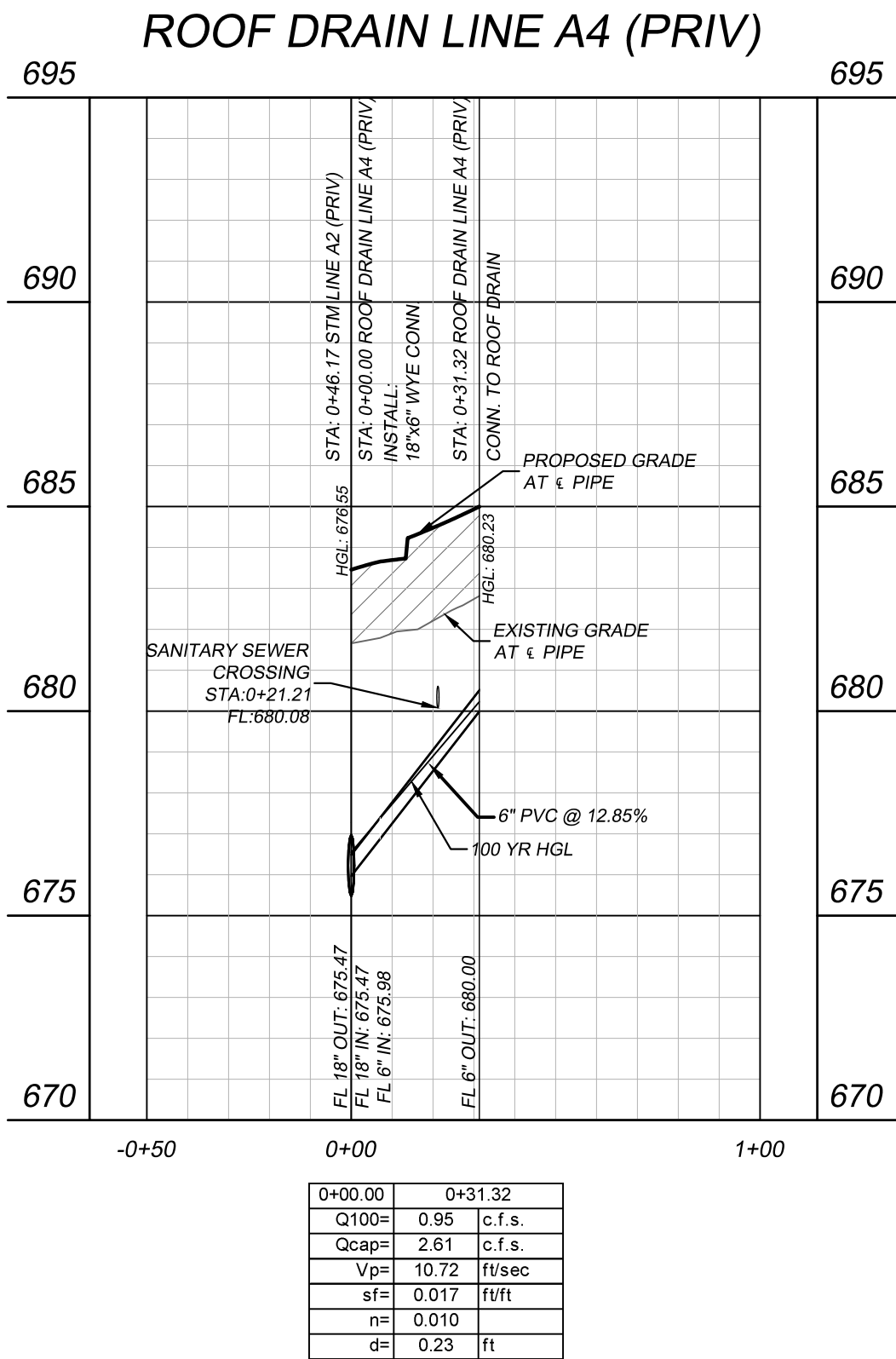
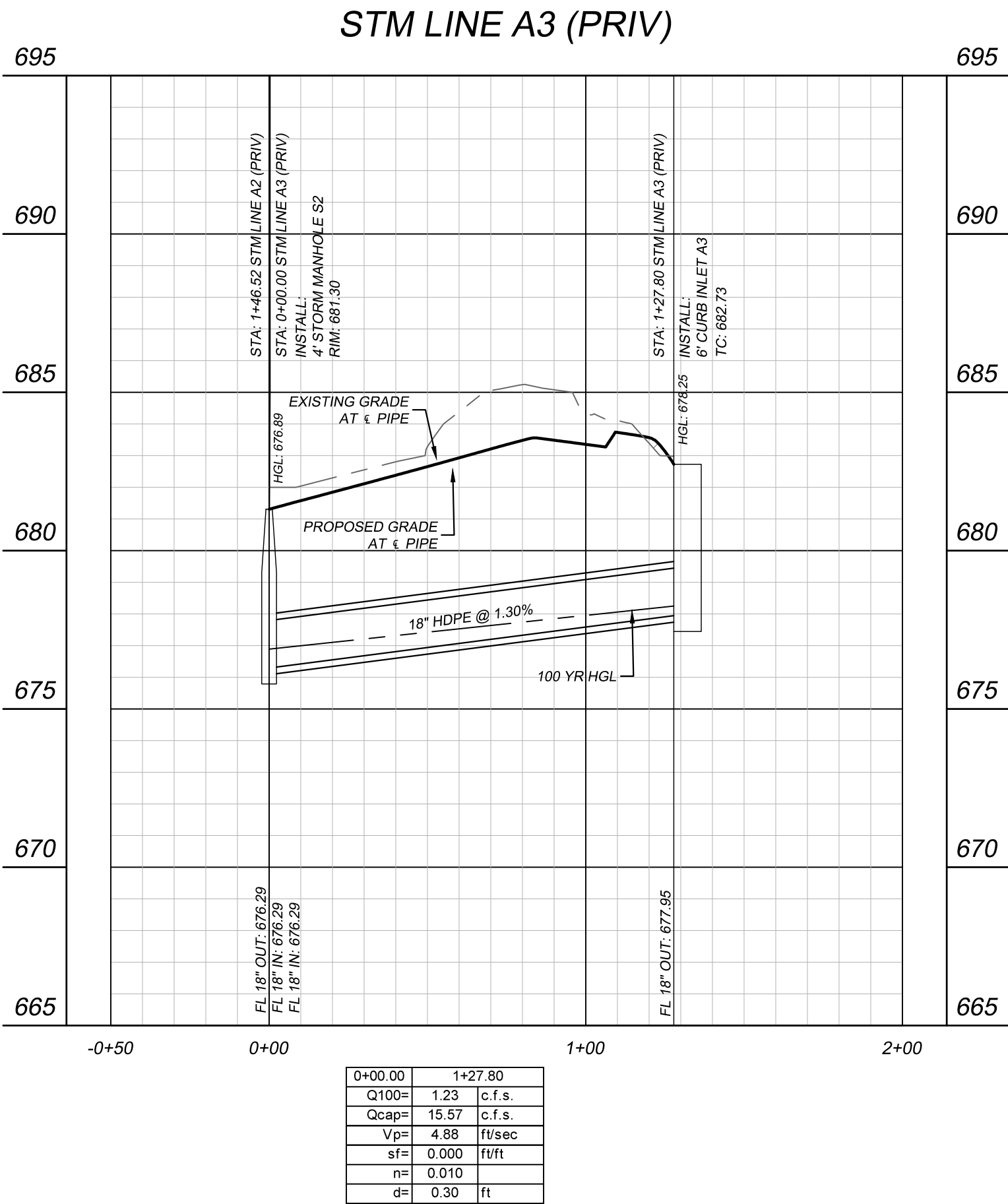
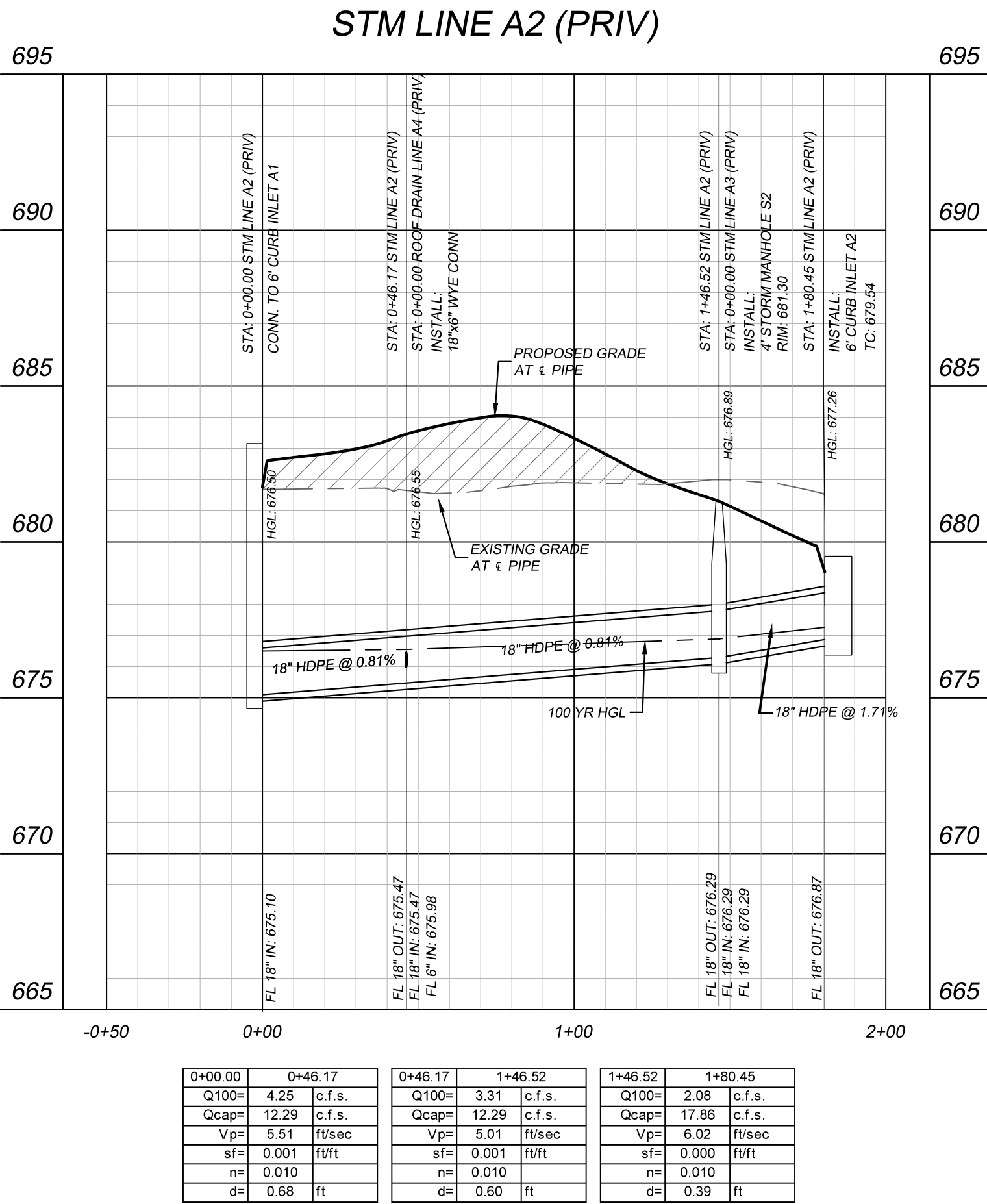
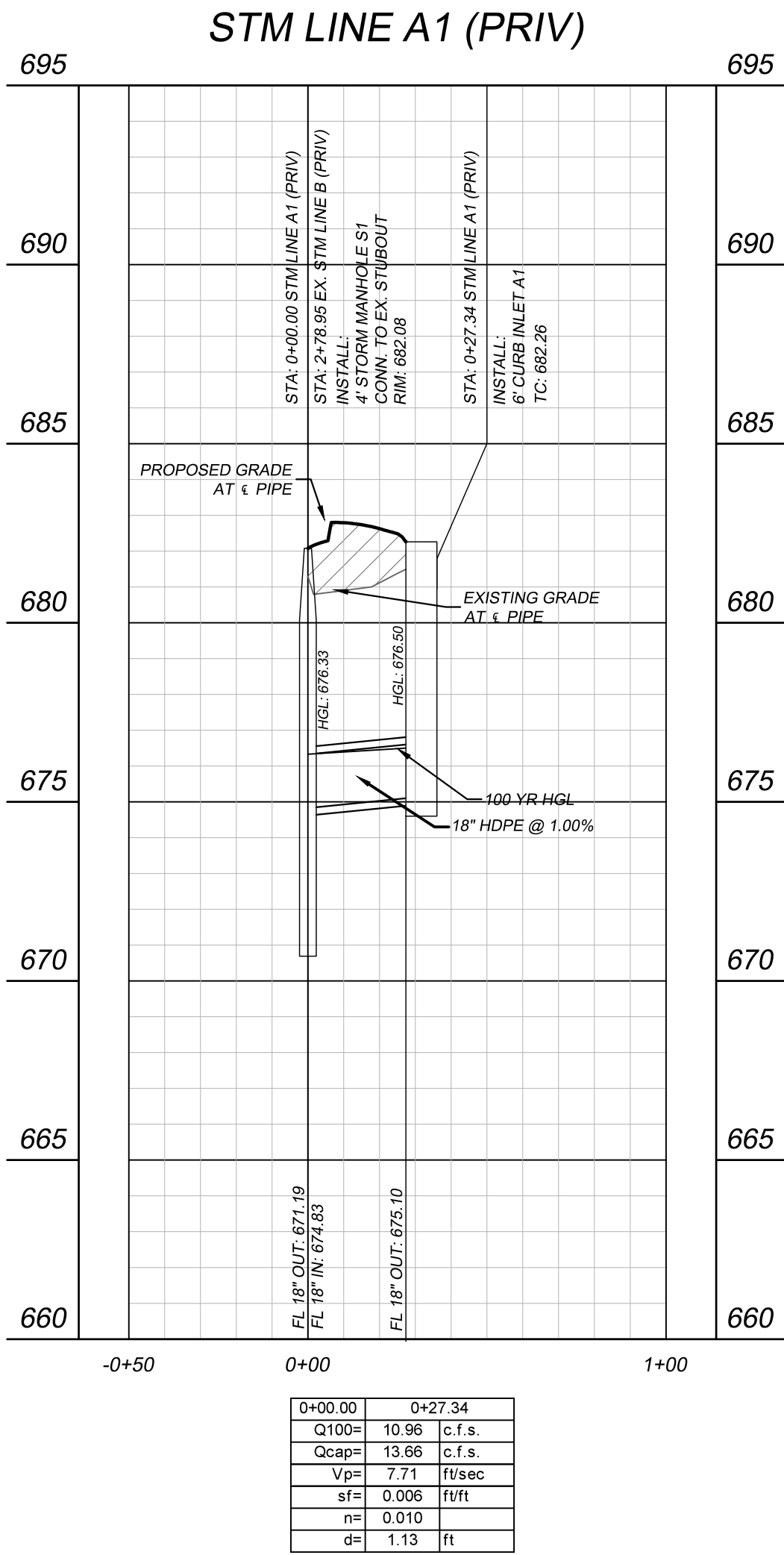
ACE PROJECT: 020001

REVISIONS
LABEL: DATE:

SHEET TITLE:
STORM PLAN

DATE 12/17/25

C-6.01



PROFILE SCALE
1"=40' HORIZONTAL
1" = 4' VERTICAL

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12/17/2025

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ACE PROJECT: 020001

REVISIONS
LABEL: DATE:

SHEET TITLE:
STORM
PROFILES

DATE 12/17/25

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STORM DRAIN HYDRAULIC CALCULATIONS TABLE																									
FROM	TO	PIPE LENGTH	DRAINAGE AREA			RUNOFF COEFF.	5-YEAR INTENSITY	100-YEAR INTENSITY	Q5 RUNOFF	Q100 RUNOFF	Q PIPE	PIPE SIZE	n	Sf	HGL		INVERT ELEV.						T/C ELEV.	COMMENTS	
			INCREMENTAL		TOTAL AREA										D/S Elev.	U/S Elev.	V1(IN) ft/sec	V2(OUT) ft/sec	V1^2/2g (FT)	V2^2/2g (FT)	FROM (FT)	TO (FT)			
		feet	NO.	AREA			"C"	(IN/HR)	(IN/HR)	(CFS)	(CFS)	(CFS)	(IN)										(FT/FT)		
1	2	3	4	5	6	7	13	14	15	16	18	19	20	21	22	23	24	25	26	27	32	33	34		
LINE A1																									
0+00.00	0+27.34	27.34	A1, A2, A3, A4	1.16	1.160	0.90	6.90	10.50	7.20	10.96	10.96	18	0.010	0.0064	676.33	676.50	0.00	7.71	0.00	0.92	674.83	675.10	682.26	6' CURB INLET A1	
LINE A2																									
1+46.52	1+80.45	33.93	A2	0.22	0.220	0.90	6.90	10.50	1.37	2.08	2.08	18	0.010	0.0002	676.89	677.26	0.00	6.02	0.00	0.56	676.29	676.87	679.54	6' CURB INLET A2	
0+46.17	1+46.52	100.35	A3	0.13	0.350	0.90	6.90	10.50	0.81	1.23	3.31	18	0.010	0.0006	676.55	676.89	6.02	5.01	0.56	0.39	675.48	676.29	681.30	STORM MANHOLE S2	
0+00.00	0+46.17	46.17	A4	0.10	0.450	0.90	6.90	10.50	0.62	0.95	4.25	18	0.010	0.0010	676.50	676.55	5.01	5.51	0.39	0.47	675.10	675.48	683.46	45° WYE LINE A4	
LINE A3																									
0+00.00	1+27.80	127.80	A3	0.13	0.130	0.90	6.90	10.50	0.81	1.23	1.23	18	0.010	0.0001	676.89	678.25	0.00	4.88	0.00	0.37	676.29	677.95	682.73	6' CURB INLET A3	
LINE A4																									
0+00.00	0+31.32	31.32	A4	0.10	0.100	0.90	6.90	10.50	0.62	0.95	0.95	6	0.010	0.0168	676.55	680.23	0.00	10.72	0.00	1.78	675.98	680.00	685.00	ROOF DRAIN	

ALL CURB INLETS SHALL BE INSTALLED PER BA ST-27 STANDARD DETAILS.

CURB INLET CAPACITY CALCULATIONS

Q = 0.65 × A × (2 × g × d)^{0.5}

A = Area of Opening

g = 32.2 ft/sec²

d = Depth of Flow above Centroid of Area

A=L (ft) * d (ft)	
L (ft)	6 Length of opening
d (ft)	0.833 full depth of flow and opening
A(sf)	5.00
Q _{cap}	23.81 cfs
C _g	0.8 Clogging Factor
Q	19.05 Intercepted Capacity

	Approach	
Inlet #	Flow (cfs)	Capacity (cfs)
A1	6.74	19.05
A2	2.05	19.05
A3	1.19	19.05

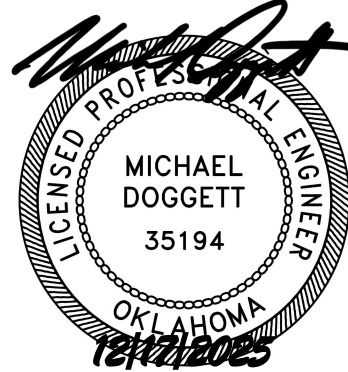
CALCULATIONS SHOWN ABOVE ARE TAKEN FROM FORMULA 811 FROM THE CITY OF TULSA'S STORMWATER MANAGEMENT CRITERIA MANUAL FOR A RECESSED METAL FRAME CURB OPENING WITH ACCESS MANHOLE BACK OF CURB IN A SUMP USING A 10-INCH HEIGHT METAL FRAME.

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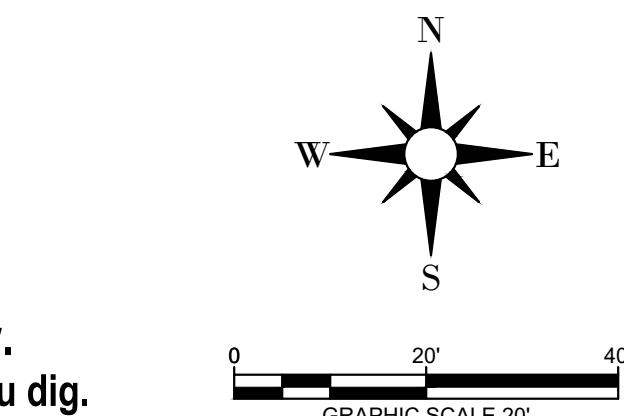
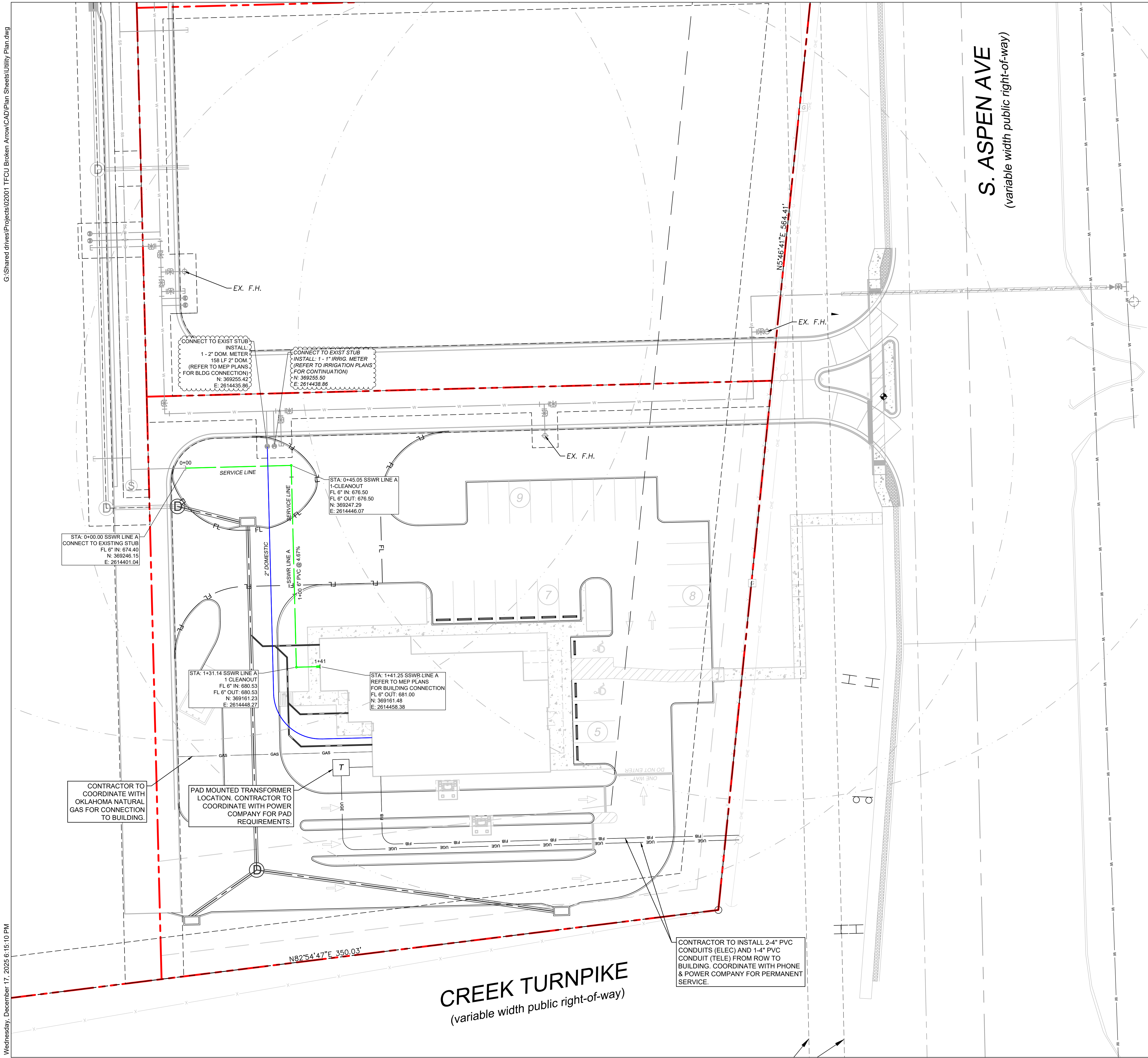
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LABEL: DATE:

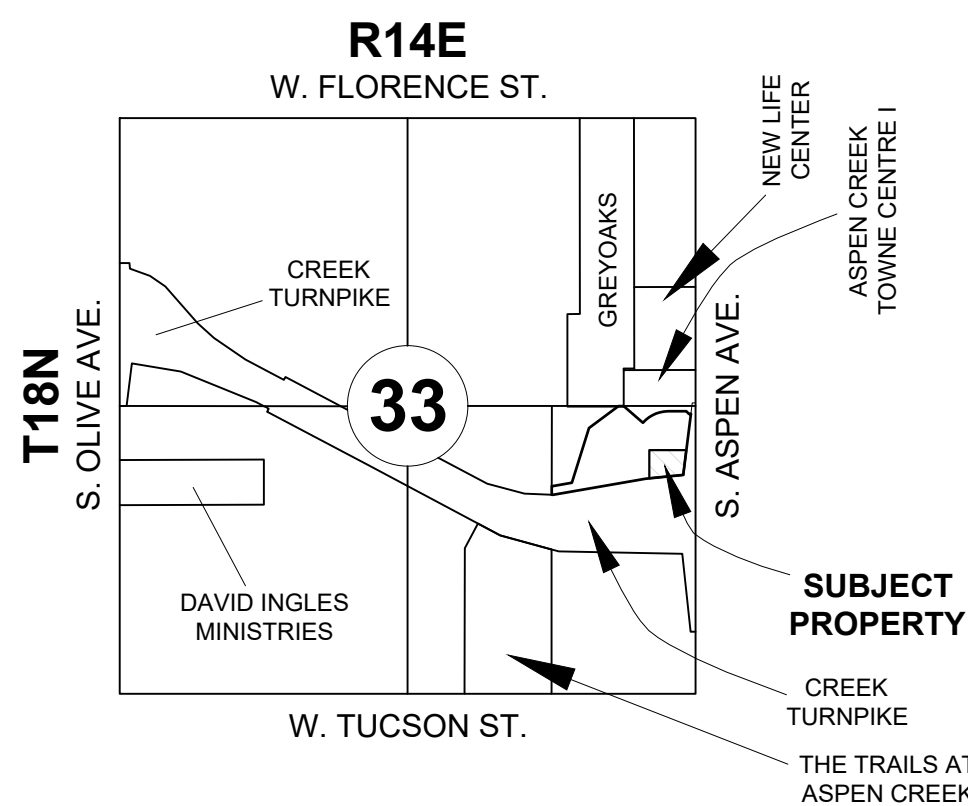
SHEET TITLE:
DRAINAGE
CALCULATIONS

DATE 12/17/25

C-6.03



VICINITY MAP (NOT TO SCALE)



LEGEND

---	PROPERTY LINE
---	SETBACK LINE
---	PROPOSED EASEMENT
---	PROPOSED FIRE HYDRANT COVERAGE
---	PROPOSED SANITARY SEWER SERVICE LINE
---	PROPOSED WATER LINE
---	PROPOSED STORM SEWER LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING WATER LINE
---	EXISTING SANITARY SEWER LINE
+	PROPOSED FIRE HYDRANT (FH)
+	PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
+	PROPOSED WATER METER
+	PROPOSED WATER VALVE
+	EXISTING FIRE HYDRANT
+	EXISTING STORM MANHOLE
+	EXISTING SAN. SWR. MANHOLE
+	EXISTING SIGN

- UTILITY NOTES
- SEE MEP PLANS FOR ALL UTILITY CONNECTIONS INTO BUILDING.
 - WATER AND SEWER LINES SHALL STUB 5 FEET FROM BUILDING FOR SERVICE CONNECTIONS UNLESS OTHERWISE NOTED.
 - A FIVE FOOT CLEARANCE SHALL BE MAINTAINED AROUND ALL FIRE HYDRANTS.
 - REFER TO DETAILS FOR WATER METER, METER BOX, FIRE HYDRANTS, VALVES, VALVE BOXES AND SERVICE INSTALLATION.
 - REFER TO DETAILS FOR TRENCHING, BEDDING, BACK FILL, AND TRENCH COMPACTION REQUIREMENTS.
 - WATER AND SANITARY SEWER PIPE SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, ASBESTOS-CEMENT PRESSURE PIPE, PRETREATED CONCRETE PIPE, OR PVC PIPE.
 - PVC SLEEVES SHALL CONSIST OF 2 - 4" SCHEDULE 40 PVC CONDUITS, BURIED 2 MIN. BELOW FINISHED GRADE. SLEEVES SHALL EXTEND A MINIMUM OF 2' BEYOND PAVING.
 - WATER AND SANITARY SEWER SEPARATION (VERTICAL AND HORIZONTAL) SHALL BE MAINTAINED IN ACCORDANCE WITH CITY AND DEQ REQUIREMENTS.

CAUTION!!!
THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE CONSTRUCTION MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE. CALL 811 AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION IN VICINITY.

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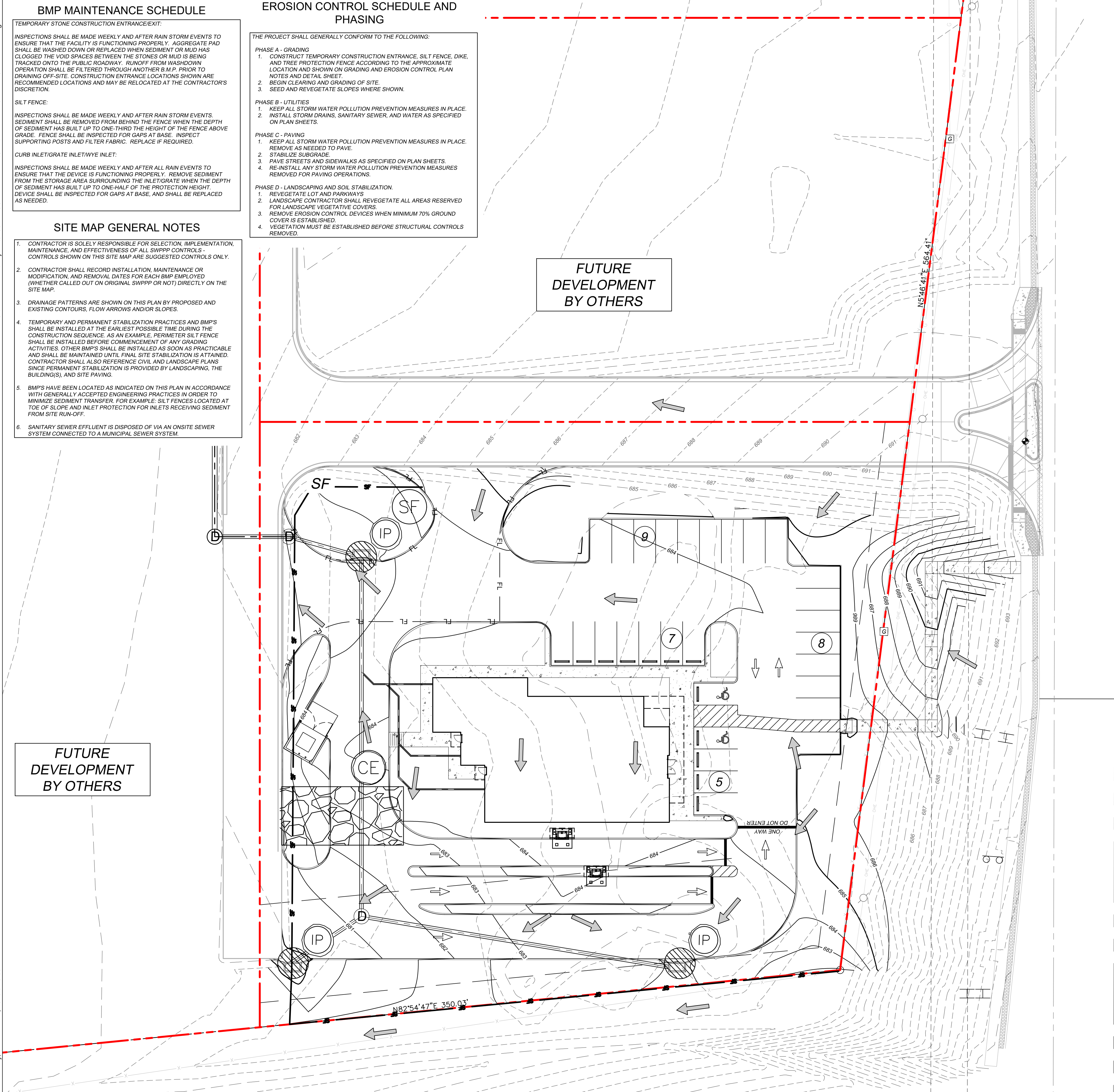
ACE PROJECT: 020001

REVISIONS
LABEL: DATE:

SHEET TITLE:
UTILITY PLAN

DATE 12/17/25

C-7.01



BMP MAINTENANCE SCHEDULE

TEMPORARY STONE CONSTRUCTION ENTRANCE/EXIT:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE FACILITY IS FUNCTIONING PROPERLY. AGGREGATE PAD SHALL BE WASHED DOWN OR REPLACED WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN THE STONES OR MUD IS BEING TRACKED ONTO THE PUBLIC ROADWAY. RUNOFF FROM WASHDOWN OPERATION SHALL BE FILTERED THROUGH ANOTHER BMP PRIOR TO DRAINING OFF-SITE. CONSTRUCTION ENTRANCE LOCATIONS SHOWN ARE RECOMMENDED LOCATIONS AND MAY BE RELOCATED AT THE CONTRACTOR'S DISCRETION.

SILT FENCE:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS. SEDIMENT SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-THIRD THE HEIGHT OF THE FENCE ABOVE GRADE. FENCE SHALL BE INSPECTED FOR GAPS AT BASE, INSPECT SUPPORTING POSTS AND FILTER FABRIC. REPLACE IF REQUIRED.

CURB INLET/GRATE INLET/WYE INLET:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER ALL RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY. REMOVE SEDIMENT FROM THE STORAGE AREA SURROUNDING THE INLET/GRATE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-HALF OF THE PROTECTION HEIGHT. DEVICE SHALL BE INSPECTED FOR GAPS AT BASE, AND SHALL BE REPLACED AS NEEDED.

SITE MAP GENERAL NOTES

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR SELECTION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.
2. CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.
3. DRAINAGE PATTERNS ARE SHOWN ON THIS PLAN BY PROPOSED AND EXISTING CONTOURS, FLOW ARROWS AND/OR SLOPES.
4. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
5. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE, SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
6. SANITARY SEWER EFFLUENT IS DISPOSED OF VIA AN ONSITE SEWER SYSTEM CONNECTED TO A MUNICIPAL SEWER SYSTEM.

EROSION CONTROL SCHEDULE AND PHASING

THE PROJECT SHALL GENERALLY CONFORM TO THE FOLLOWING:

PHASE A - GRADING

1. CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE, SILT FENCE, DIKE, AND TREE PROTECTION FENCE ACCORDING TO THE APPROXIMATE LOCATION AND SHOWN ON GRADING AND EROSION CONTROL PLAN NOTES AND DETAIL SHEET.
2. BEGIN CLEARING AND GRADING OF SITE.
3. SEED AND REVEGETATE SLOPES WHERE SHOWN.

PHASE B - UTILITIES

1. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE.
2. INSTALL STORM DRAINS, SANITARY SEWER, AND WATER AS SPECIFIED ON PLAN SHEETS.

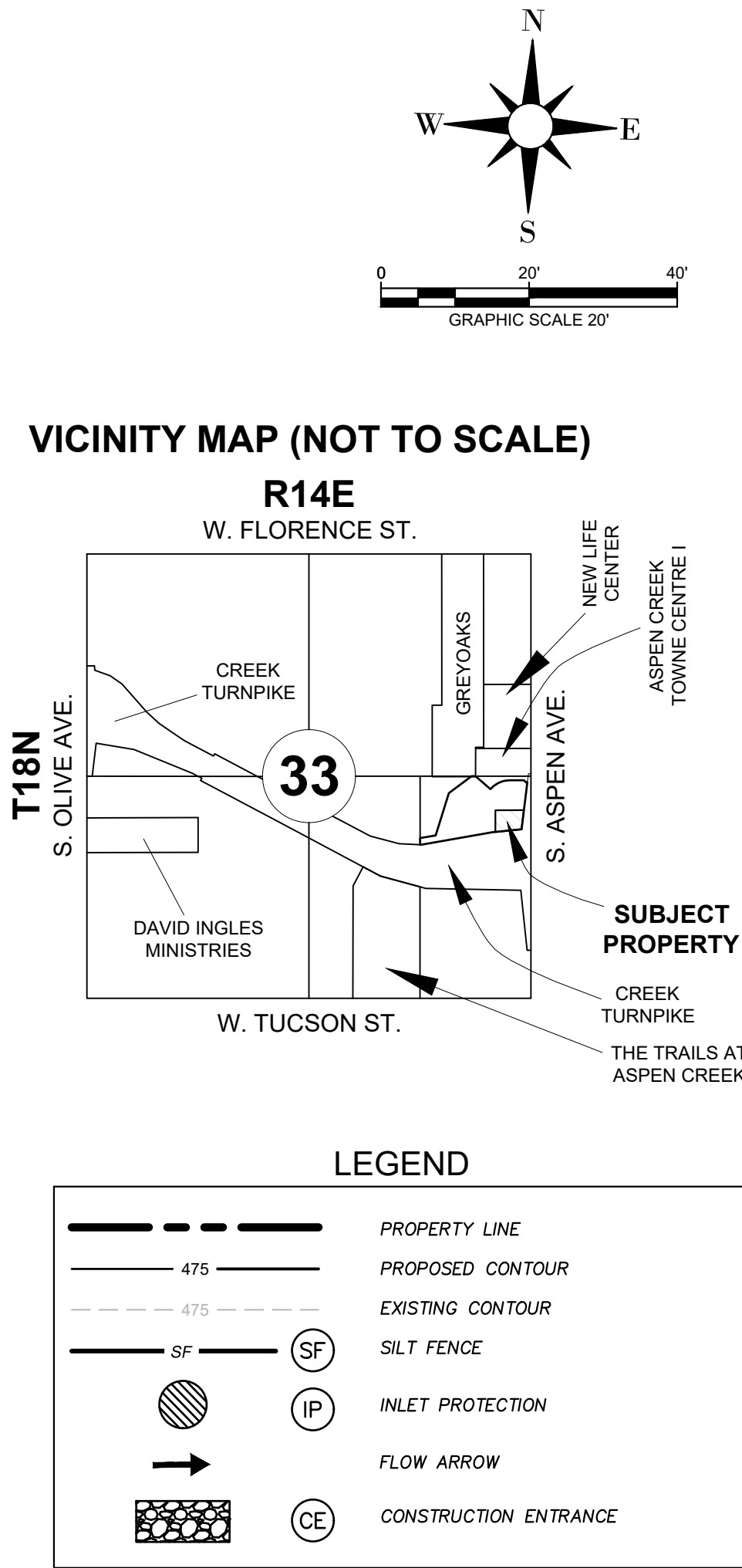
PHASE C - PAVING

1. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE. REMOVE AS NEEDED TO PAVE.
2. STABILIZE SUBGRADE.
3. PAVE STREETS AND SIDEWALKS AS SPECIFIED ON PLAN SHEETS.
4. RE-INSTALL ANY STORM WATER POLLUTION PREVENTION MEASURES REMOVED FOR PAVING OPERATIONS.

PHASE D - LANDSCAPING AND SOIL STABILIZATION

1. REVEGETATE LOT AND PARKWAYS.
2. LANDSCAPE CONTRACTOR SHALL REVEGETATE ALL AREAS RESERVED FOR LANDSCAPE VEGETATIVE COVERS.
3. REMOVE EROSION CONTROL DEVICES WHEN MINIMUM 70% GROUND COVER IS ESTABLISHED.
4. VEGETATION MUST BE ESTABLISHED BEFORE STRUCTURAL CONTROLS REMOVED.

S. ASPEN AVE
(variable width public right-of-way)



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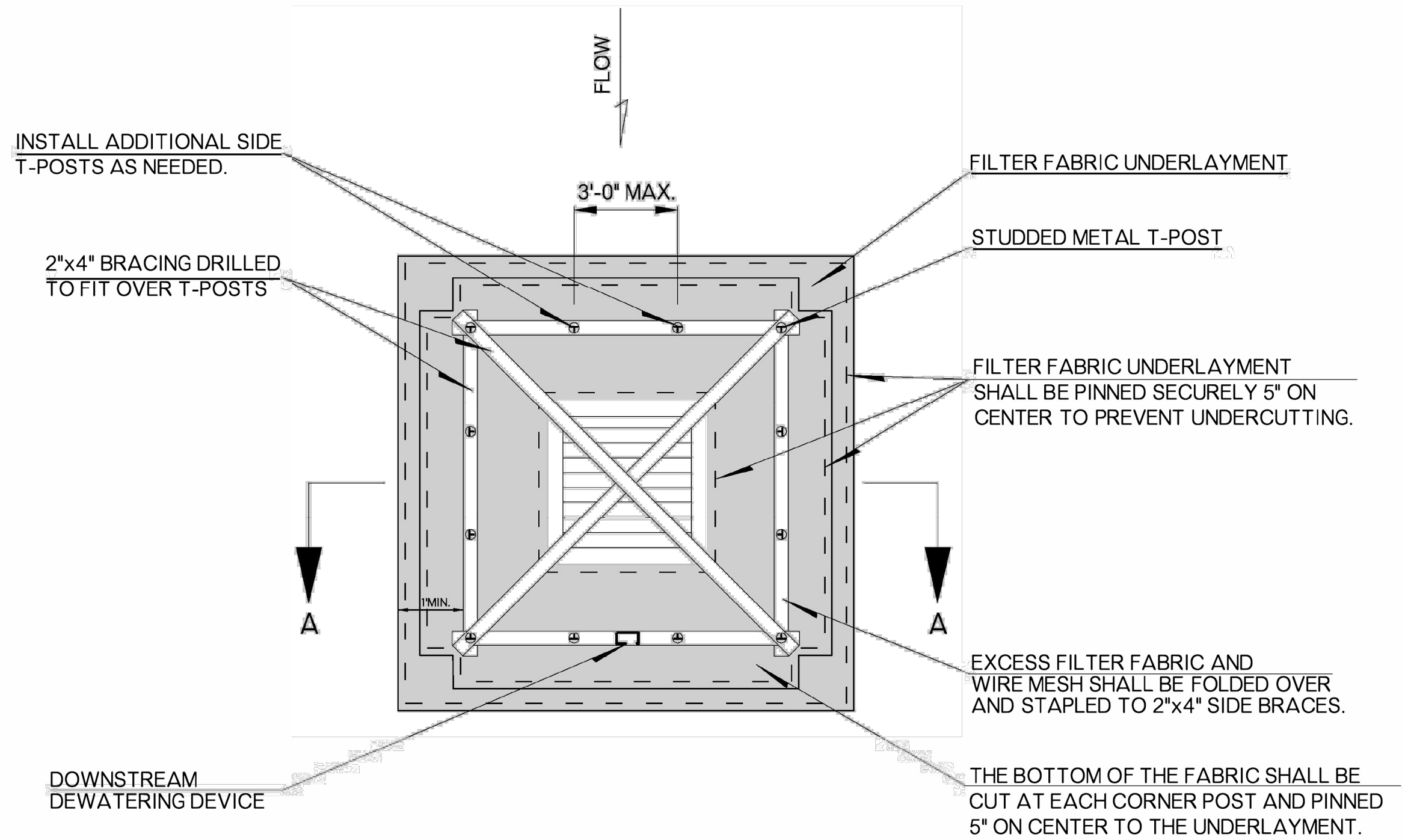
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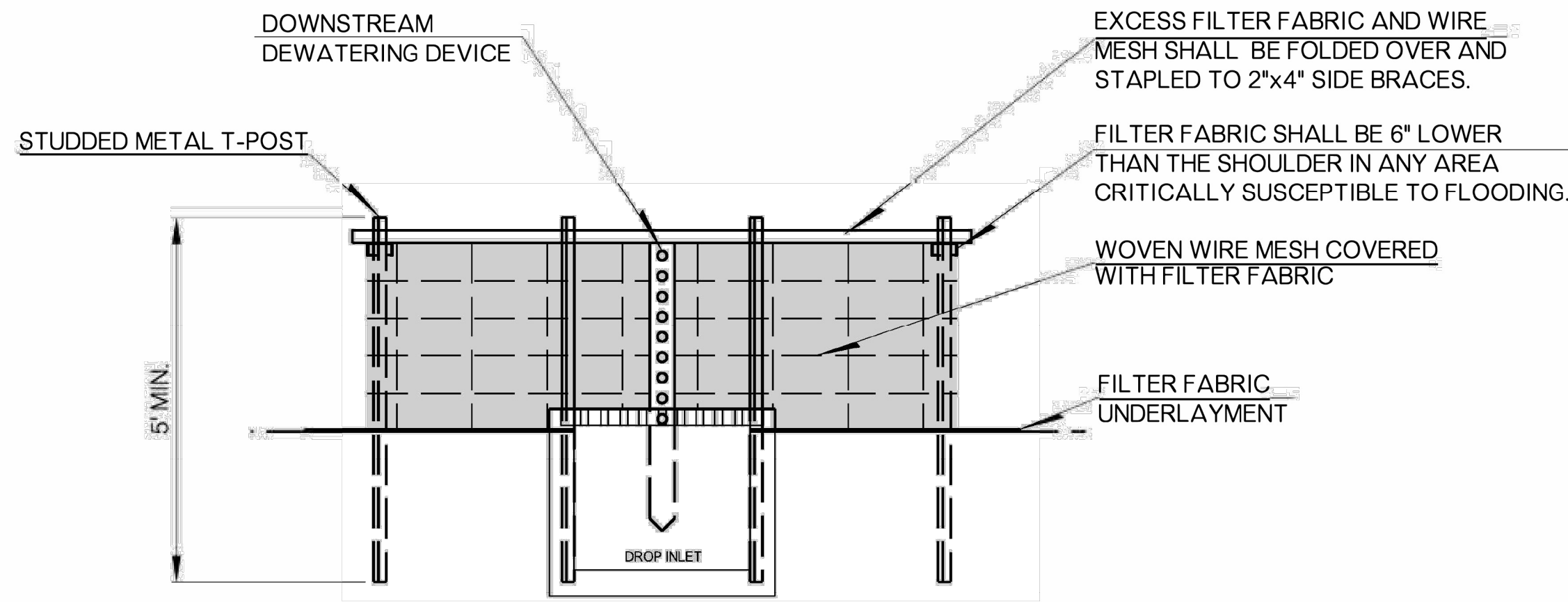
SHEET TITLE:
EROSION CONTROL PLAN

DATE 12/17/25

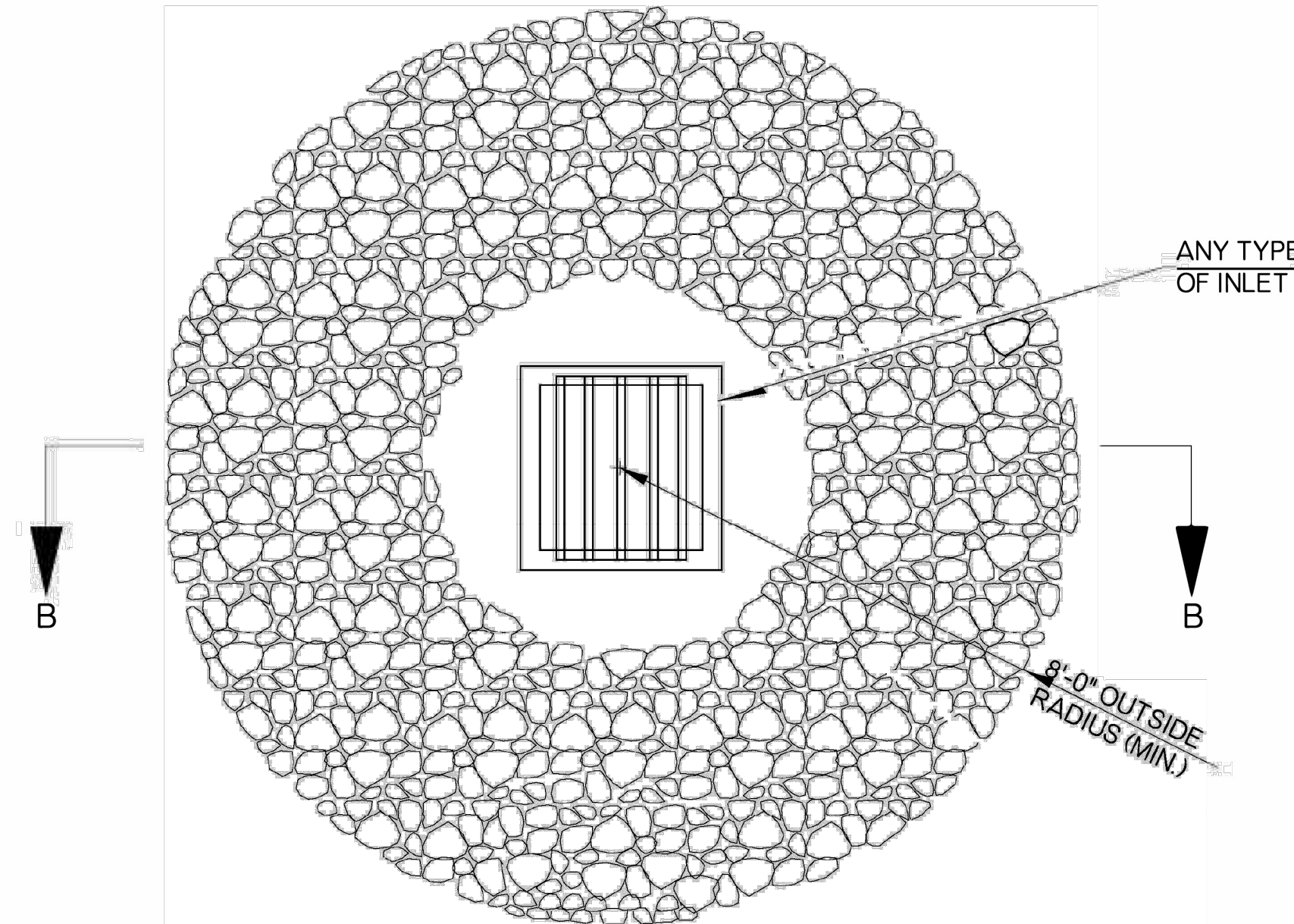
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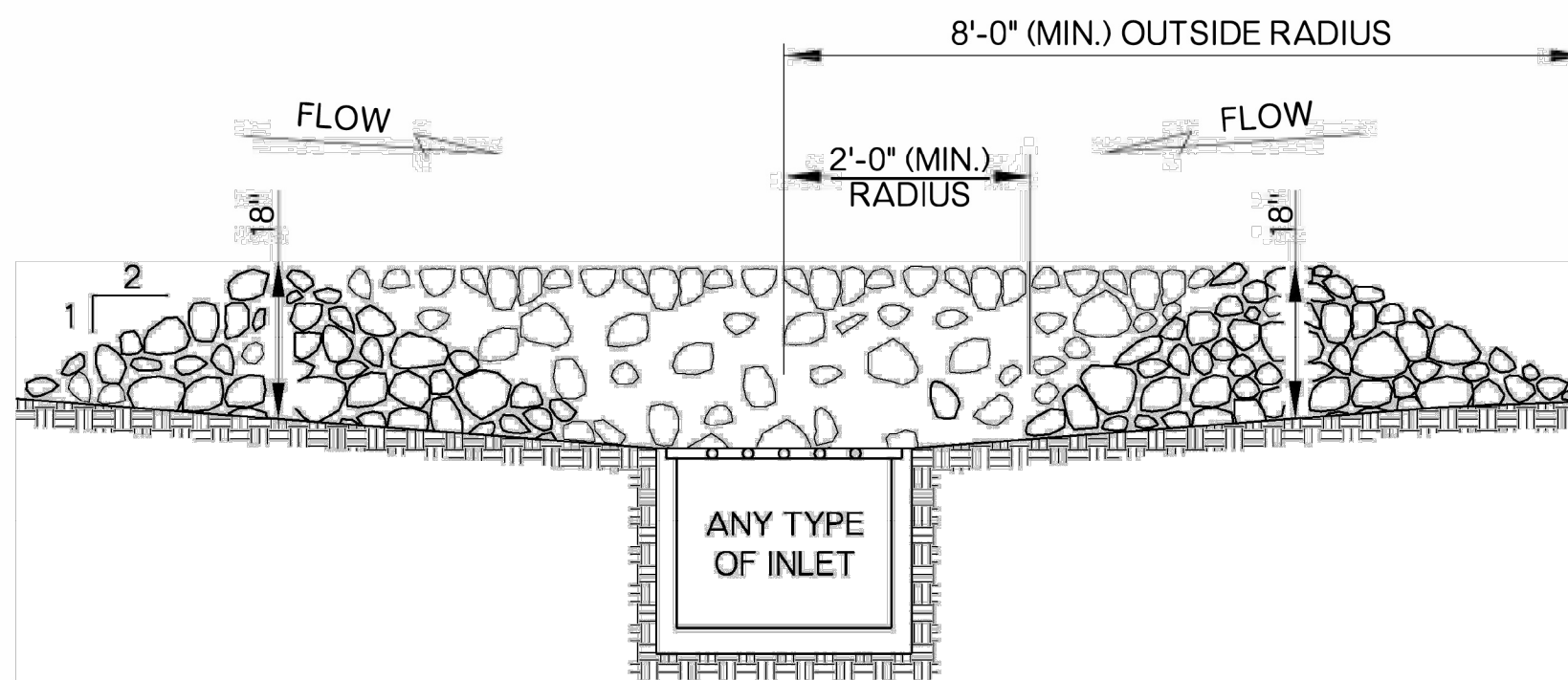
REINFORCED SILT FENCE INLET PROTECTION
MAX. Q = 5 TO 7 CFS
MAX. DRAIN AREA = 2 ACRES
PLAN VIEW



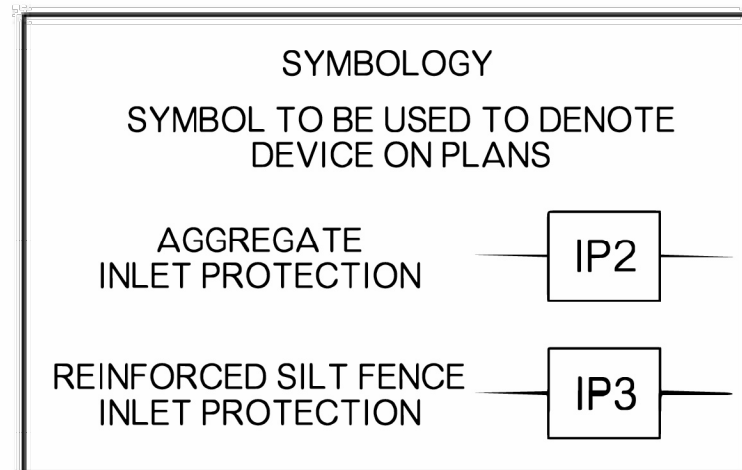
SECTION A-A



AGGREGATE INLET PROTECTION
MAX. Q = 3 TO 5 CFS
MAX. DRAIN AREA = 1 ACRE
PLAN VIEW



SECTION B-B



- GENERAL NOTES
- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
 - CONFIGURATIONS MAY BE ADJUSTED WITH APPROVAL OF THE ENGINEER FOR TRAVELWAY SAFETY, WATER FLOW, SOIL OR INSTALLATION CHALLENGES.
 - REINFORCED SILT FENCE MAY BE REQUIRED UPSLOPE OF THE INLET EXCAVATION AS DIRECTED BY THE ENGINEER.
 - IF REINFORCED SILT FENCE IS INSTALLED AROUND THE INLET EXCAVATION IT SHOULD BE PLACED IN A CONFIGURATION THAT WILL ALLOW INLET CONSTRUCTION.
 - DEWATERING HOLES IN THE DEWATERING DEVICE SHALL BE 1 TO 1 1/2 INCHES IN DIAMETER AND SPACED 2 TO 3 INCHES APART TO ALLOW FOR DEWATERING IN NO MORE THAN 48 HOURS. IF THIS DOESN'T FUNCTION PROPERLY, ANOTHER DEVICE CAN BE ADDED AT THE DIRECTION OF THE ENGINEER.
 - FASTEN DEWATERING DEVICE TO THE 2 INCHES BY 4 INCHES SIDE BRACE.
 - STAPLE FILTER FABRIC TO DEWATERING DEVICE AND CUT ACROSS SLITS IN THE FILTER FABRIC AT THE HOLE LOCATIONS TO ALLOW WATER TO FLOW THROUGH. PROVIDE FILTER FABRIC IN ACCORDANCE WITH AASHTO M 288 SPECIFICATION.
 - PRICE BID FOR THE REINFORCED SILT FENCE INLET PROTECTION WILL INCLUDE FILTER FABRIC, POSTS, WIRE MESH, WOOD BRACING, DEWATERING DEVICE AND ALL INCIDENTALS REQUIRED TO COMPLETE ITS INSTALLATION. THIS INLET PROTECTION DEVICE SHALL BE PAID FOR AS TEMPORARY INLET SEDIMENT FILTER, WITH UNITS OF EACH.
 - ROCK GRADATION FOR THE AGGREGATE INLET PROTECTION (TEMPORARY SEDIMENT FILTER) SHALL BE AS FOLLOWS:

PERCENT PASSING	SIEVE SIZE
100	4 INCH
90-100	3.5 INCH
25-60	2.5 INCH
0-15	1.5 INCH
0-5	3/4 INCH
 - COST FOR ALL MATERIALS, LABOR AND MAINTENANCE OF THE AGGREGATE INLET PROTECTION SHALL BE PAID FOR AS TEMPORARY INLET SEDIMENT FILTER, WITH UNITS OF EACH.
 - INLET PROTECTION DEVICES SHALL BE LEFT IN PLACE UNTIL THE DRAINAGE AREA IS PERMANENTLY STABILIZED WITH ESTABLISHED VEGETATION OR PAVEMENT.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
221(H)	(PL) TEMPORARY INLET SEDIMENT FILTER	EA

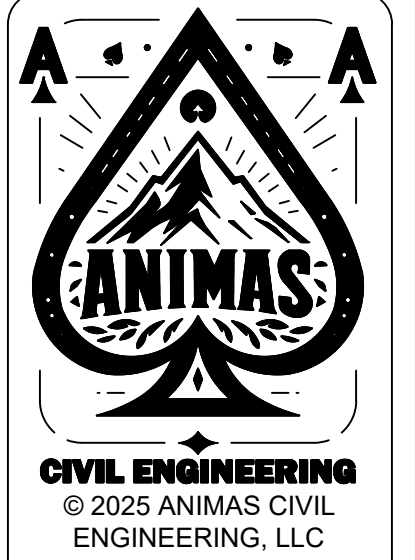
APPROVED BY ROADWAY ENGINEER: *R. R. W.* DATE: 6/24/22



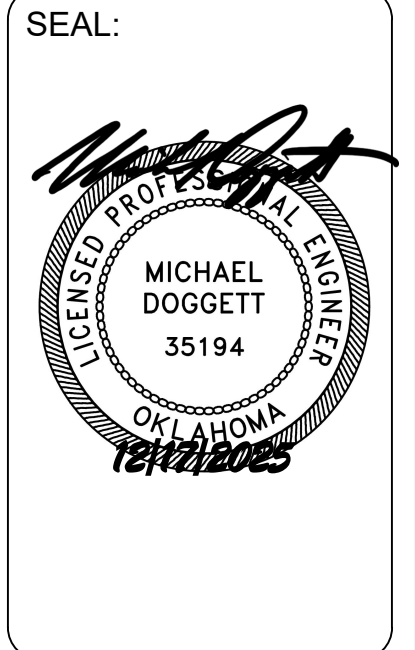
ROADWAY DESIGN DIVISION STANDARD
INLET PROTECTION
(AGGREGATE AND REINFORCED SILT FENCE APPLICATIONS)

2019 SPECIFICATIONS

IPD	0
	R-5



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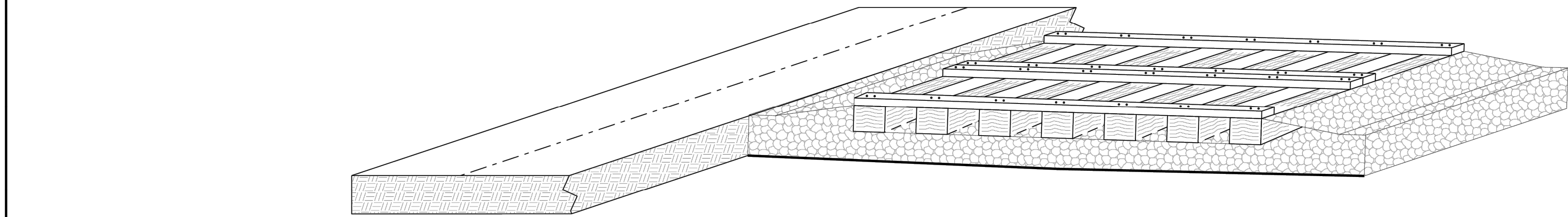
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REVISIONS
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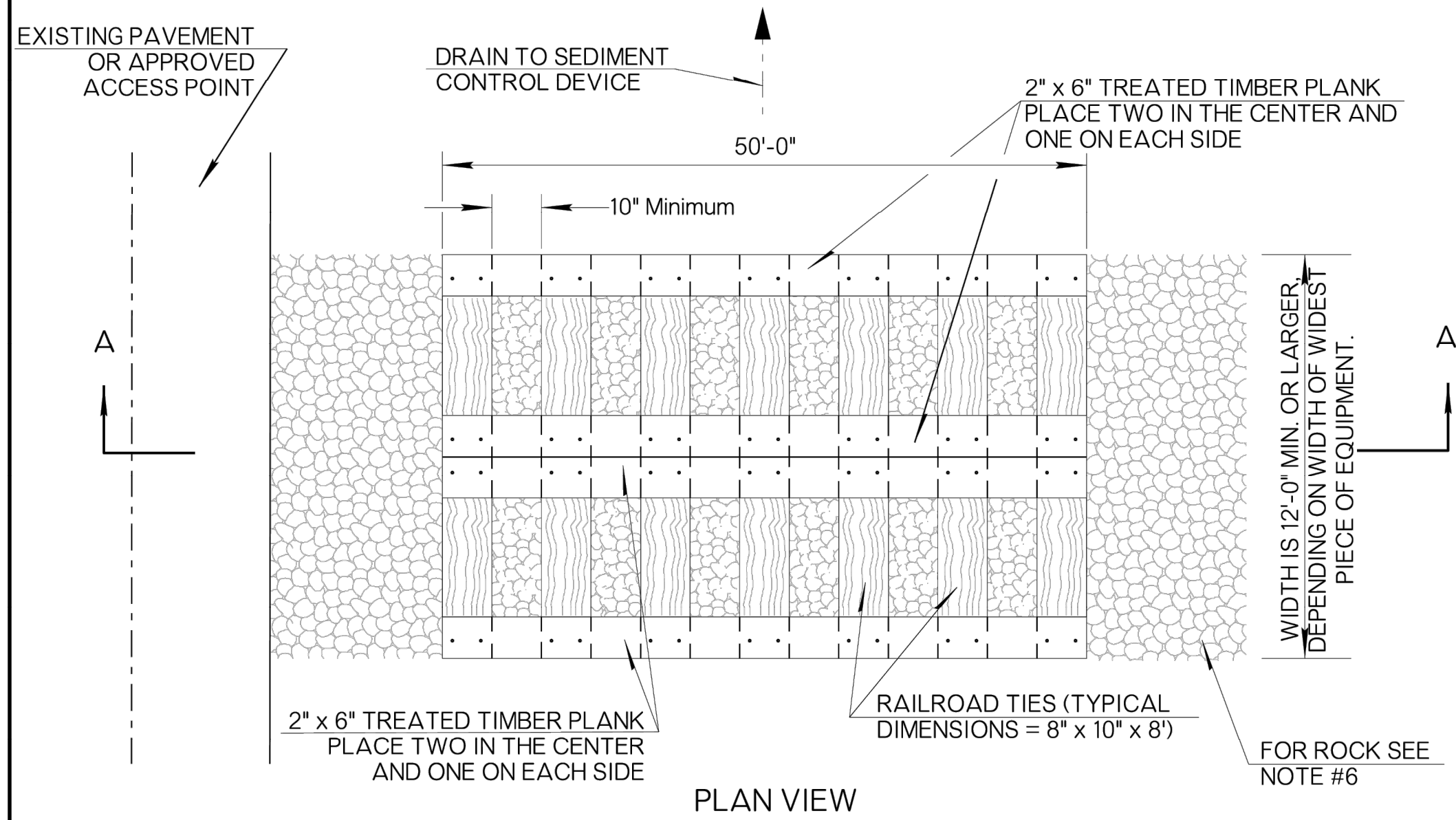
SHEET TITLE:
EROSION
CONTROL
DETAILS

DATE 12/17/25

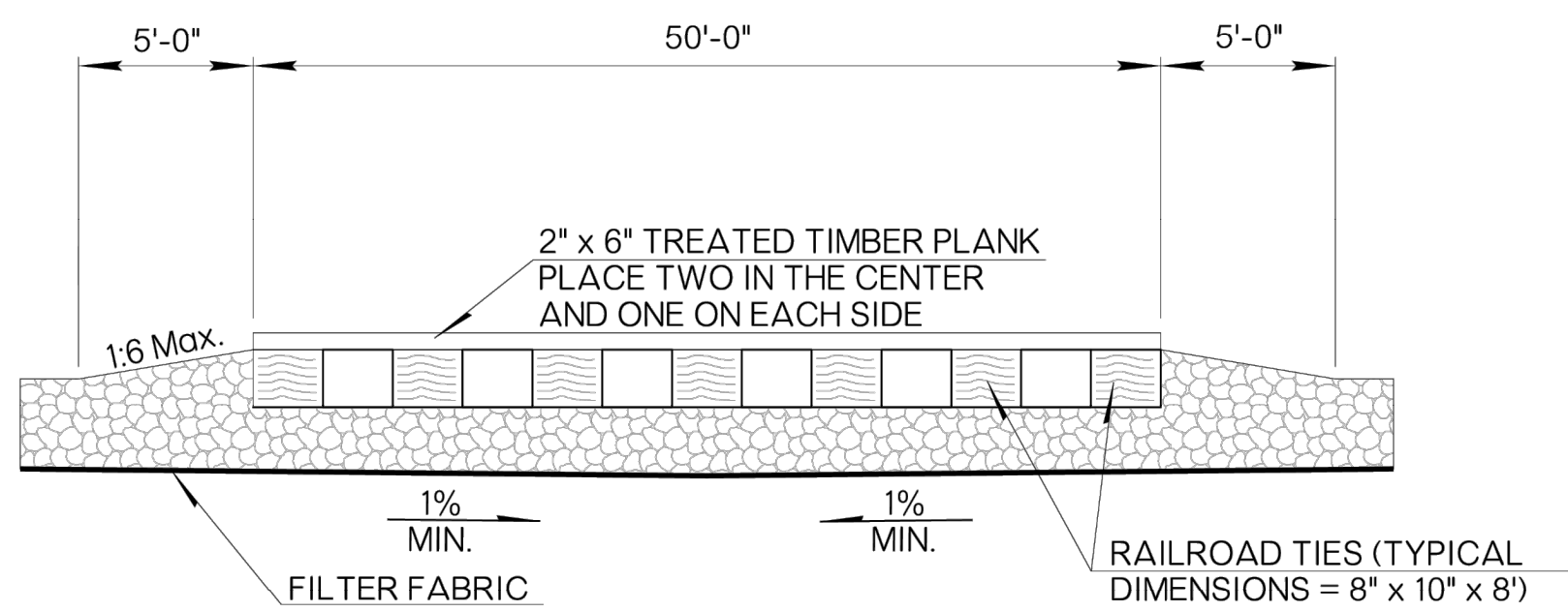
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STABILIZED CONSTRUCTION EXIT



PLAN VIEW



SEC A-A
PROFILE VIEW

- GENERAL NOTES
1. LOCATION OF STABILIZED CONSTRUCTION EXIT TO BE AS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER.
 2. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 1:6 OR AS DIRECTED BY THE ENGINEER.
 3. RUNOFF FROM THE CONSTRUCTION EXIT SHALL BE DIRECTED TO AN APPROPRIATE SEDIMENT CONTROL DEVICE AS APPROVED BY THE ENGINEER.
 4. THE TREATED TIMBER PLANKS SHALL BE #2 GRADE MINIMUM, AND SHOULD BE FREE FROM LARGE OR LOOSE KNOTS.
 5. THE TREATED TIMBER PLANKS SHALL BE ATTACHED TO THE RAILROAD TIES WITH 1/2 IN. X 6 IN. LAG BOLTS. OTHER FASTENERS MAY BE USED AS APPROVED BY THE ENGINEER.
 6. MATERIALS FOR THE ROCK BASE SHALL BE IN ACCORDANCE WITH CURRENT STANDARD SPECIFICATIONS, SEC. 713.03 "GABIONS, REVETMENT MATTRESSES, AND ROCK FILTER DAMS."
 7. ALL MATERIALS, LABOR AND MAINTENANCE TO COMPLETE THE STABILIZED CONSTRUCTION EXIT SHALL BE INCLUDED IN THE COST OF WORK, INCLUDED IN THE BID AND NOT PAID FOR SEPARATELY.
 8. MAINTENANCE INCLUDING SEDIMENT REMOVAL AND ROUTINE INSPECTION OF THE DEVICE, SHALL BE INCLUDED IN THE COST OF WORK AND PERFORMED AT THE DISCRETION OF THE ENGINEER.
 9. AN ALTERNATE DESIGN MAY BE USED, DUE TO PROJECT SPACE CONSTRAINTS, IF APPROVED BY ENGINEER. ALL MATERIALS, LABOR, INSTALLATION AND MAINTENANCE NEEDED FOR THE ALTERNATE DEVICE SHALL BE PAID FOR "STABILIZED CONSTRUCTION EXIT."

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
242	STABILIZED CONSTRUCTION EXIT	EA

SYMBOLOLOGY

SYMBOL TO BE USED TO DENOTE
DEVICE ON PLANS

SCE

APPROVED BY
ROADWAY ENGINEER: *R. S. W.* DATE: *6/24/22*

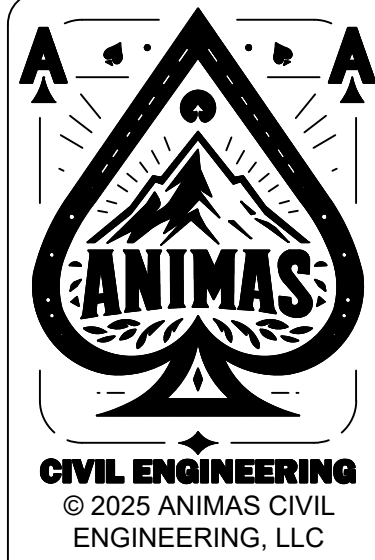
ROADWAY DESIGN DIVISION STANDARD

STABILIZED CONSTRUCTION EXIT

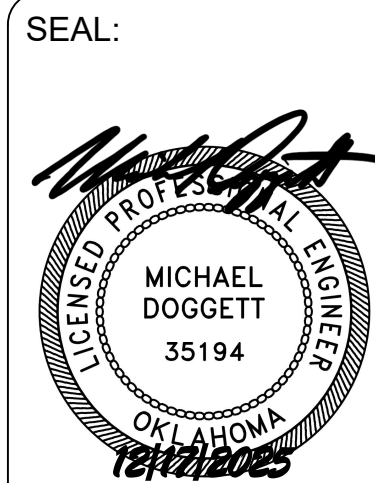
OKLAHOMA
Transportation

2019 SPECIFICATIONS

SCE	0
	R-11



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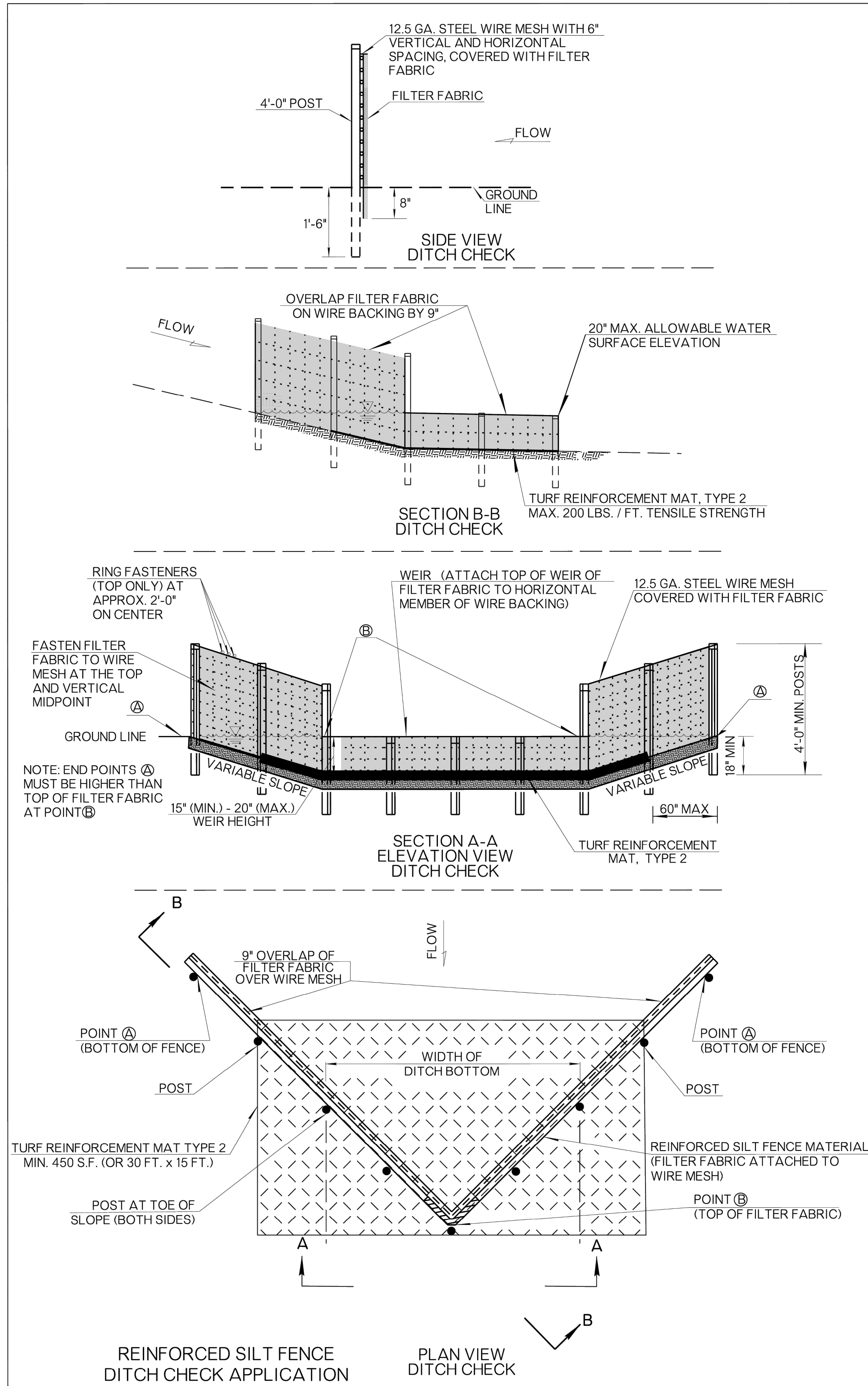
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DATE 12/17/25

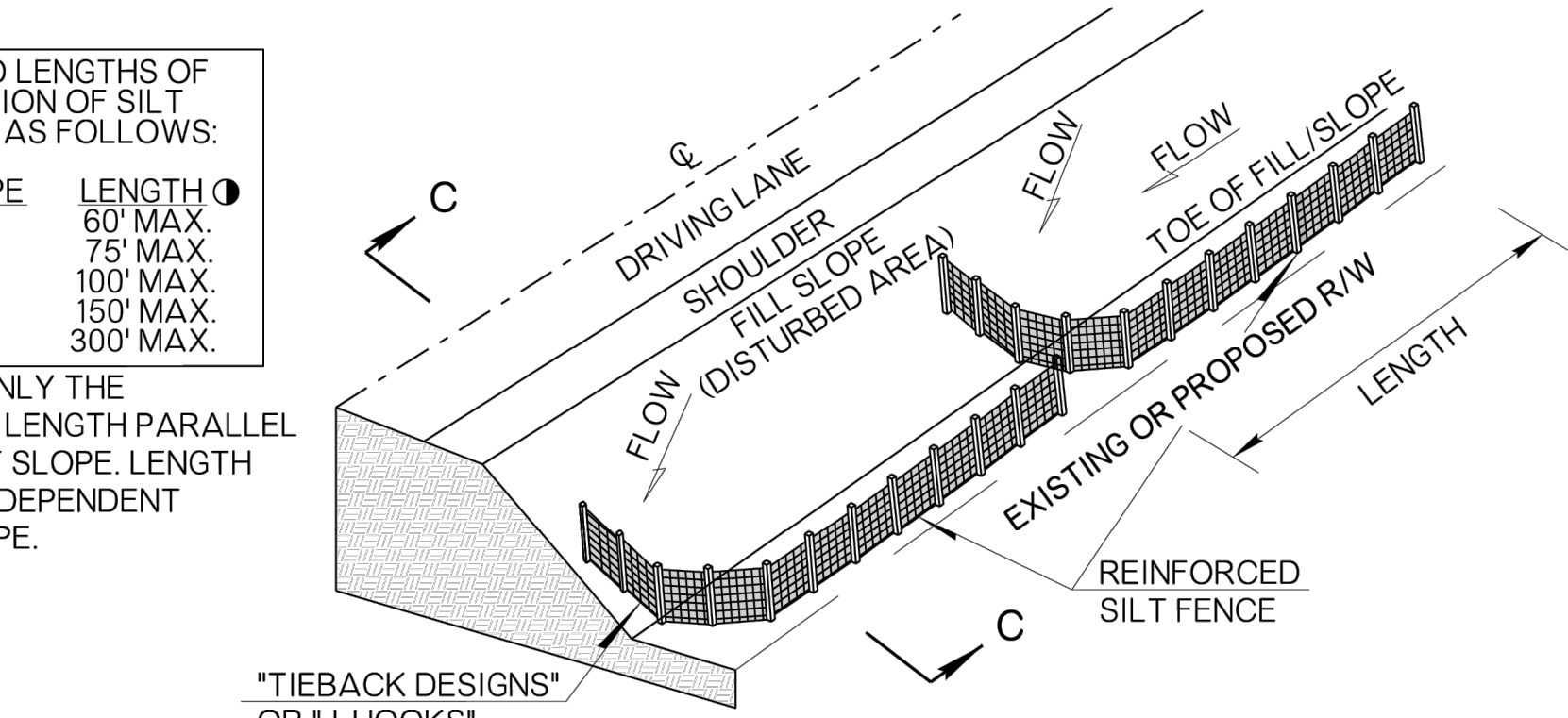
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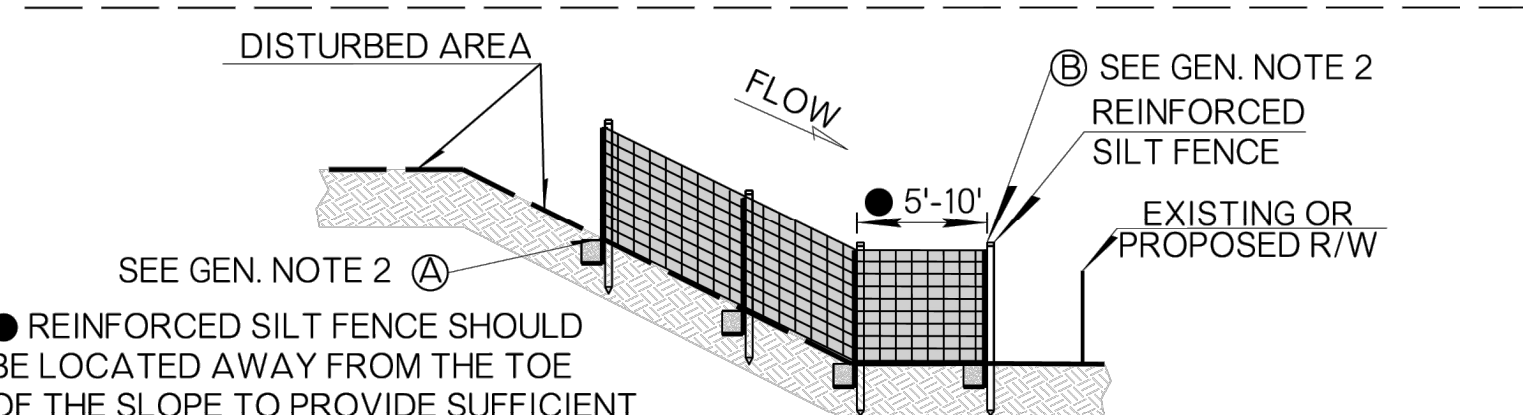
SUGGESTED LENGTHS OF EACH SECTION OF SILT FENCE ARE AS FOLLOWS:

LONG. SLOPE	LENGTH
5%	60' MAX.
4%	75' MAX.
3%	100' MAX.
2%	150' MAX.
1%	300' MAX.

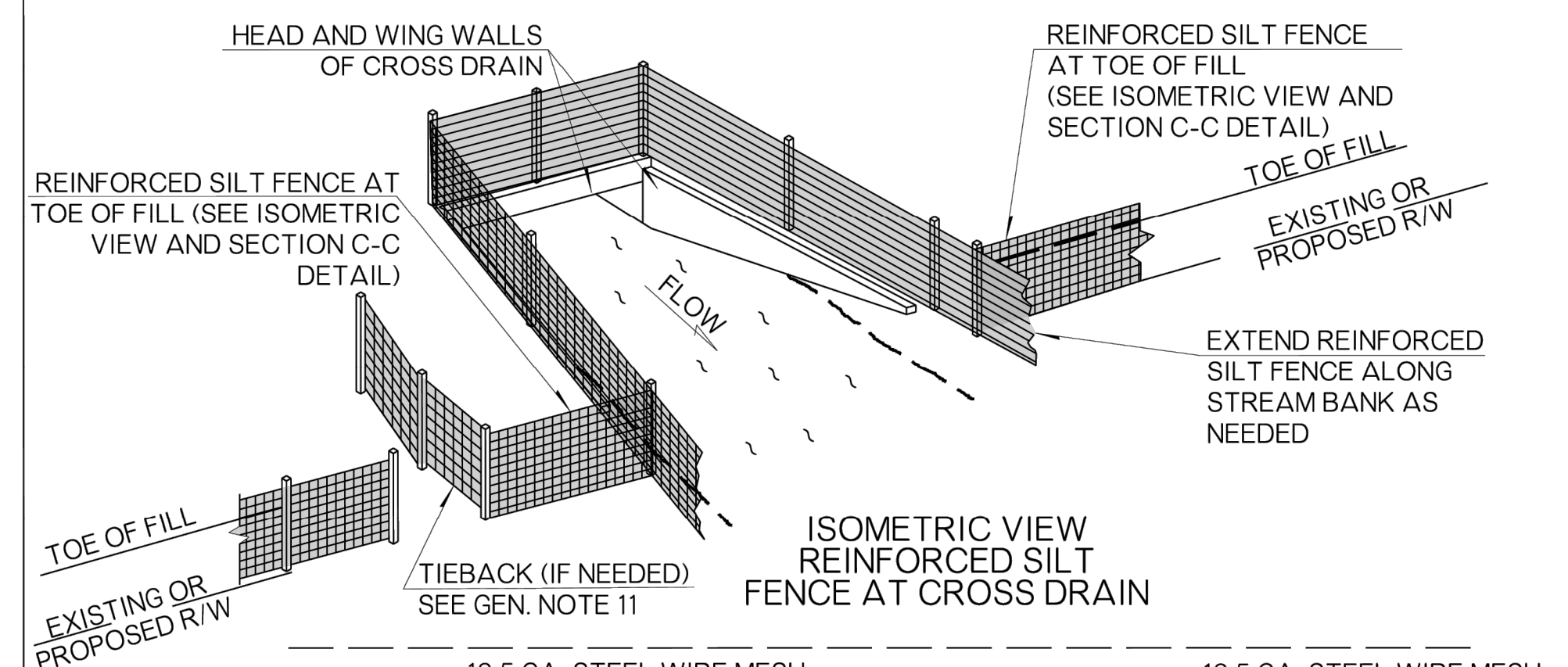
● LENGTH IS ONLY THE LONGITUDINAL LENGTH PARALLEL TO THE TOE OF SLOPE. LENGTH OF 'J-HOOK' IS DEPENDENT UPON FILL SLOPE.



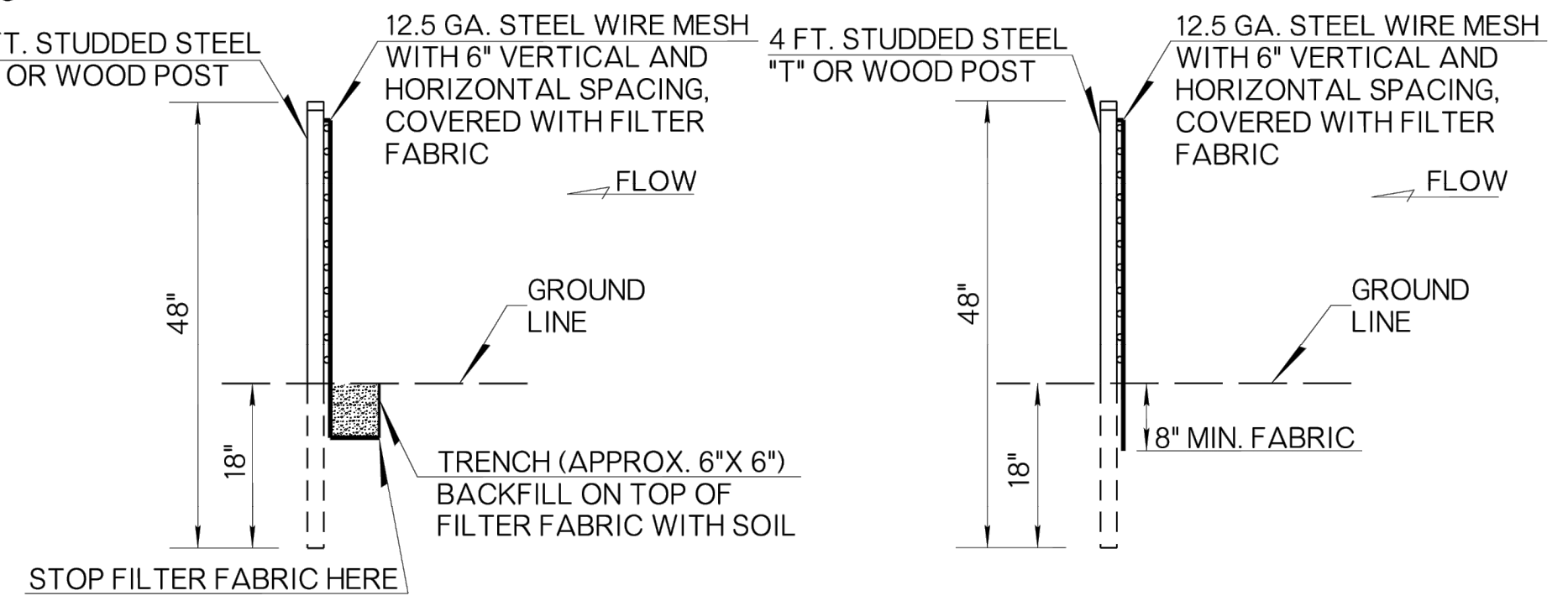
ISOMETRIC VIEW AT TOE OF SLOPE PERIMETER CONTROL



SECTION C - C PERIMETER CONTROL TOE OF SLOPE



ISOMETRIC VIEW REINFORCED SILT FENCE AT CROSS DRAIN



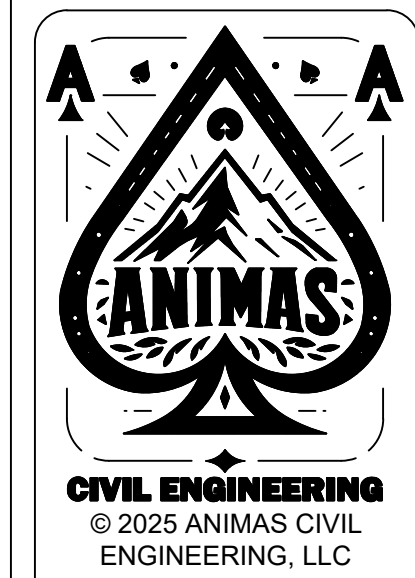
- GENERAL NOTES
- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
 - AFTER THE REINFORCED SILT FENCE IS INSTALLED IN THE DITCH, IF THE TOP OF THE FILTER FABRIC (WEIR) AT POINT B IS HIGHER THAN THE BOTTOM OF THE FENCE AT POINT A (EDGES OF FENCE) THEN NO WEIR IS REQUIRED.
 - REINFORCED SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR ADDITIONAL BEST MANAGEMENT PRACTICES SUCH AS VEGETATED BUFFERS.
 - THE CONTRACTOR MAY ELECT TO USE EITHER INSTALLATION: METHOD I OR METHOD II.
 - METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF THE DETAIL.
 - REINFORCED SILT FENCE SHALL BE A FILTER FABRIC SUPPORTED BETWEEN POSTS WITH A WIRE MESH BACKING. ATTACH THE FILTER FABRIC TO THE WIRE MESH USING 16 GA. GALVANIZED STEEL C-RING STAPLES OR OTHER SIMILAR ACCEPTABLE MEANS. PROVIDE FILTER FABRIC IN ACCORDANCE WITH AASHTO M 288 SPECIFICATION.
 - WOOD POSTS SHALL BE OF SOUND QUALITY WOOD WITH A NOMINAL CROSS SECTIONAL AREA OF 1.5 X 1.5 INCHES. STEEL POSTS SHALL BE STANDARD T AND U SECTIONS WEIGHING NOT LESS THAN 1.33 POUNDS PER LINEAR FOOT OR OTHER STEEL POSTS HAVING EQUIVALENT STRENGTH AND BENDING RESISTANCE.
 - FILTER FABRIC SHALL BE FURNISHED WITH A SUITABLE WRAPPING FOR PROTECTION AGAINST MOISTURE AND EXTENDED ULTRAVIOLET EXPOSURE PRIOR TO PLACEMENT. ROLLS SHALL BE STORED IN A MANNER WHICH PROTECTS THEM FROM THE ELEMENTS. IF STORED OUTDOORS, THEY SHALL BE ELEVATED AND PROTECTED WITH A WATERPROOF COVER.
 - WIRE MESH BACKING SHALL BE MADE OF 12.5 GAUGE STEEL. THE VERTICAL AND HORIZONTAL SPACING OF THE WIRE SHALL BE 6 INCHES. ATTACH WIRE MESH TO POSTS BY MEANS OF 11 GA. ALUMINUM FENCE WIRE TIES AT 6.5 INCHES LONG, OR APPROVED SIMILAR.
 - TIEBACK DESIGNS SHOULD BE INSTALLED SUCH THAT THE BOTTOM OF THE END OF THE SILT FENCE (WHERE THE J-HOOK IS INSTALLED ON THE SLOPE), OR POINT A, SHOULD BE AT A HIGHER ELEVATION THAN THE TOP OF THE SILT FENCE AT THE TOE OF THE FILL SLOPE, OR POINT B. SEE SECTION C-C FOR VISUAL.
 - TIEBACK DESIGNS SHOULD ONLY BE USED WHEN THERE IS RUNOFF FLOW BOTH DOWN THE FILL SLOPE AND LONGITUDINALLY IN THE DIRECTION OF THE ROAD. MEASURE SILT FENCE IN PLACE, INCLUDING THE STRAIGHT SECTION AND THE 'J-HOOK' SECTION.
 - PRICE BID FOR REINFORCED SILT FENCE SHALL INCLUDE COST OF ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE AND REMOVAL, REGARDLESS OF APPLICATION.
 - TEMPORARY (STANDARD) SILT FENCE MAY BE USED IN LIEU OF REINFORCED SILT FENCE IF APPROVED BY THE ENGINEER. TEMPORARY SILT FENCE IS TYPICALLY USED WHERE SHEET FLOW OCCURS. REINFORCED SILT FENCE IS USUALLY USED WHERE CONCENTRATION FLOW OCCURS.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
221(B)	TEMPORARY SILT FENCE	LF
221(C)	REINFORCED SILT FENCE	LF

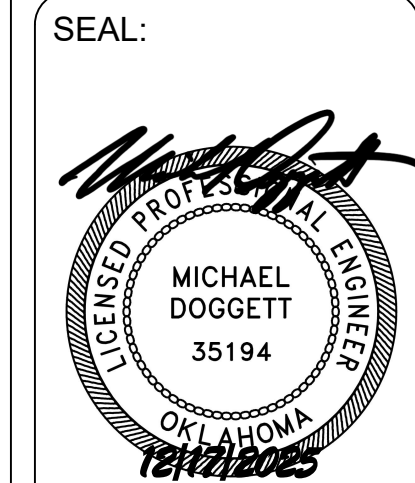
APPROVED BY ROADWAY ENGINEER: *R. G. W. S.* DATE: 6/24/22

ROADWAY DESIGN DIVISION STANDARD

REINFORCED SILT FENCE INSTALLATION AND APPLICATIONS		
2019 SPECIFICATIONS		
RSF	0	
	R-6	



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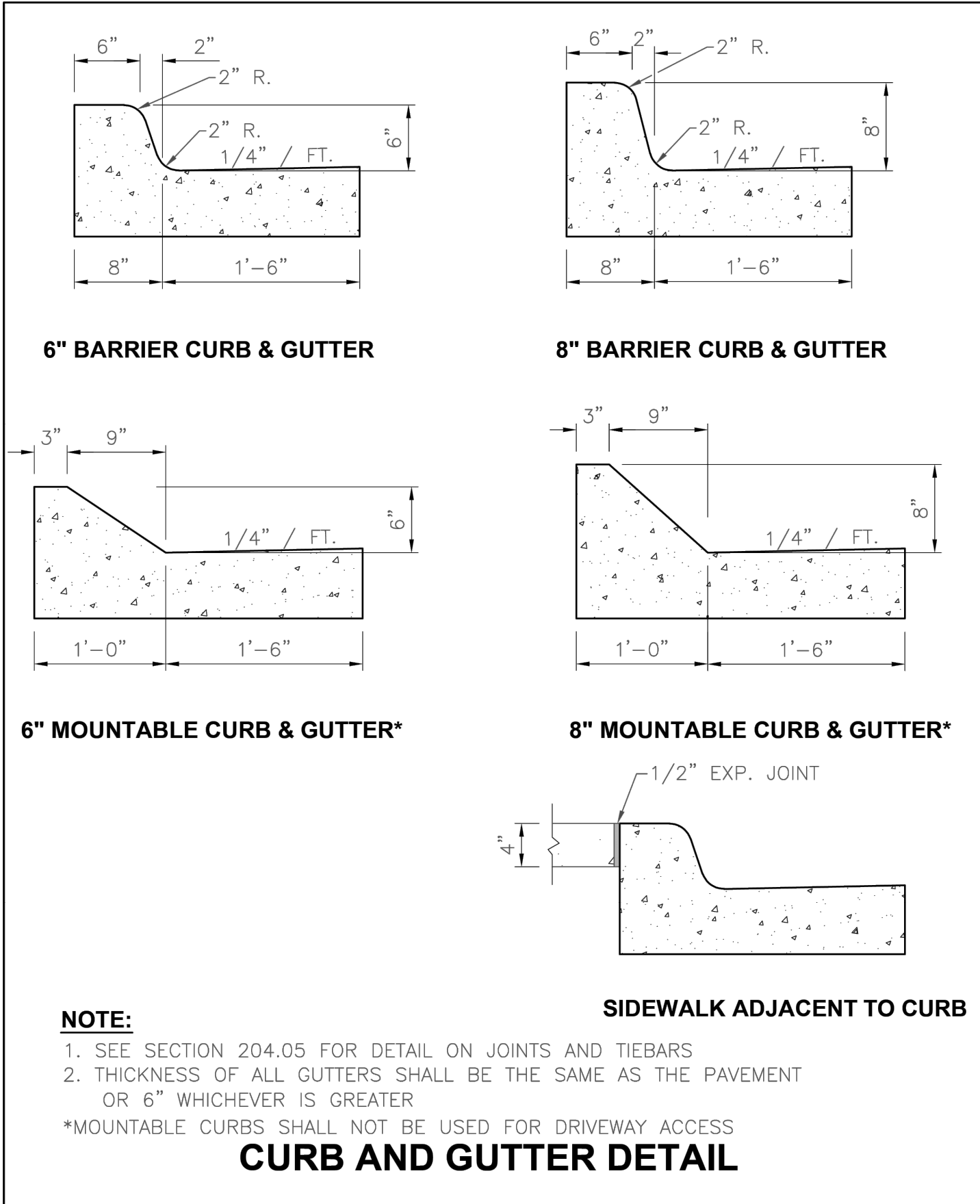
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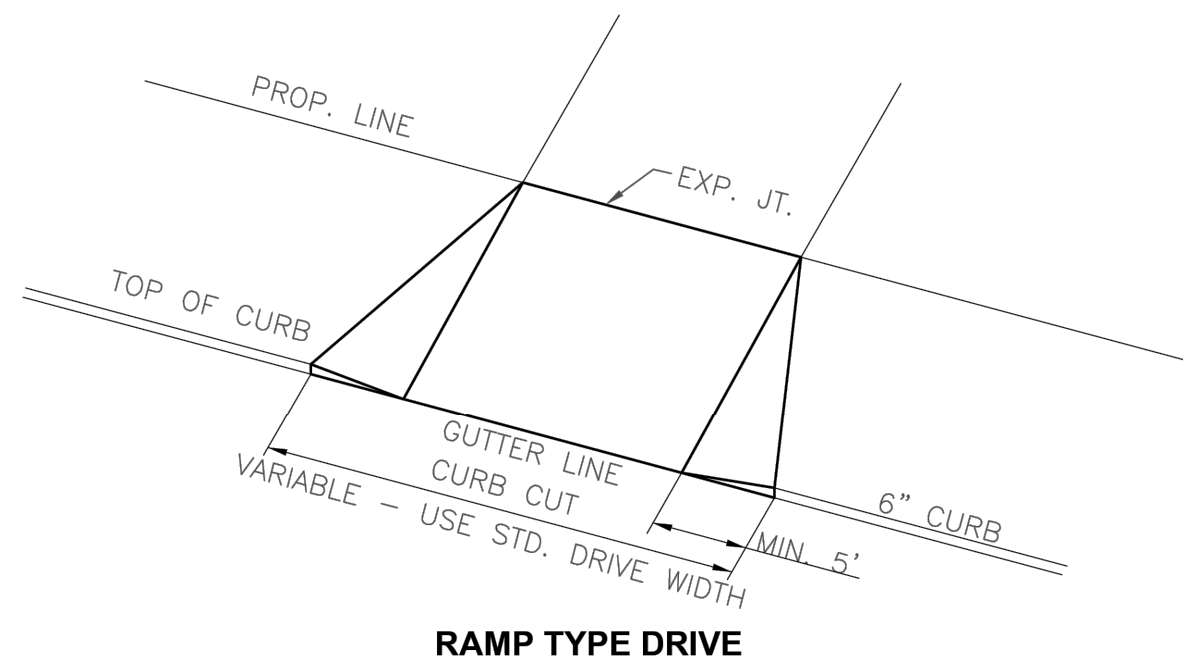
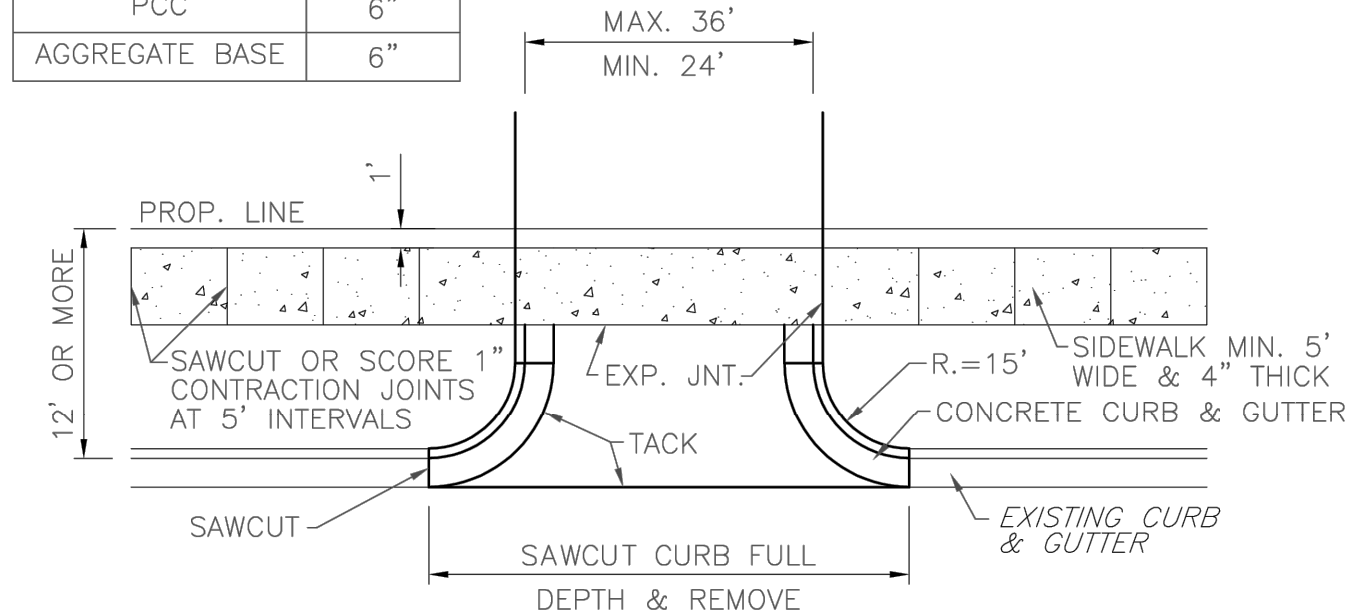
DATE 12/17/25

C-9.03



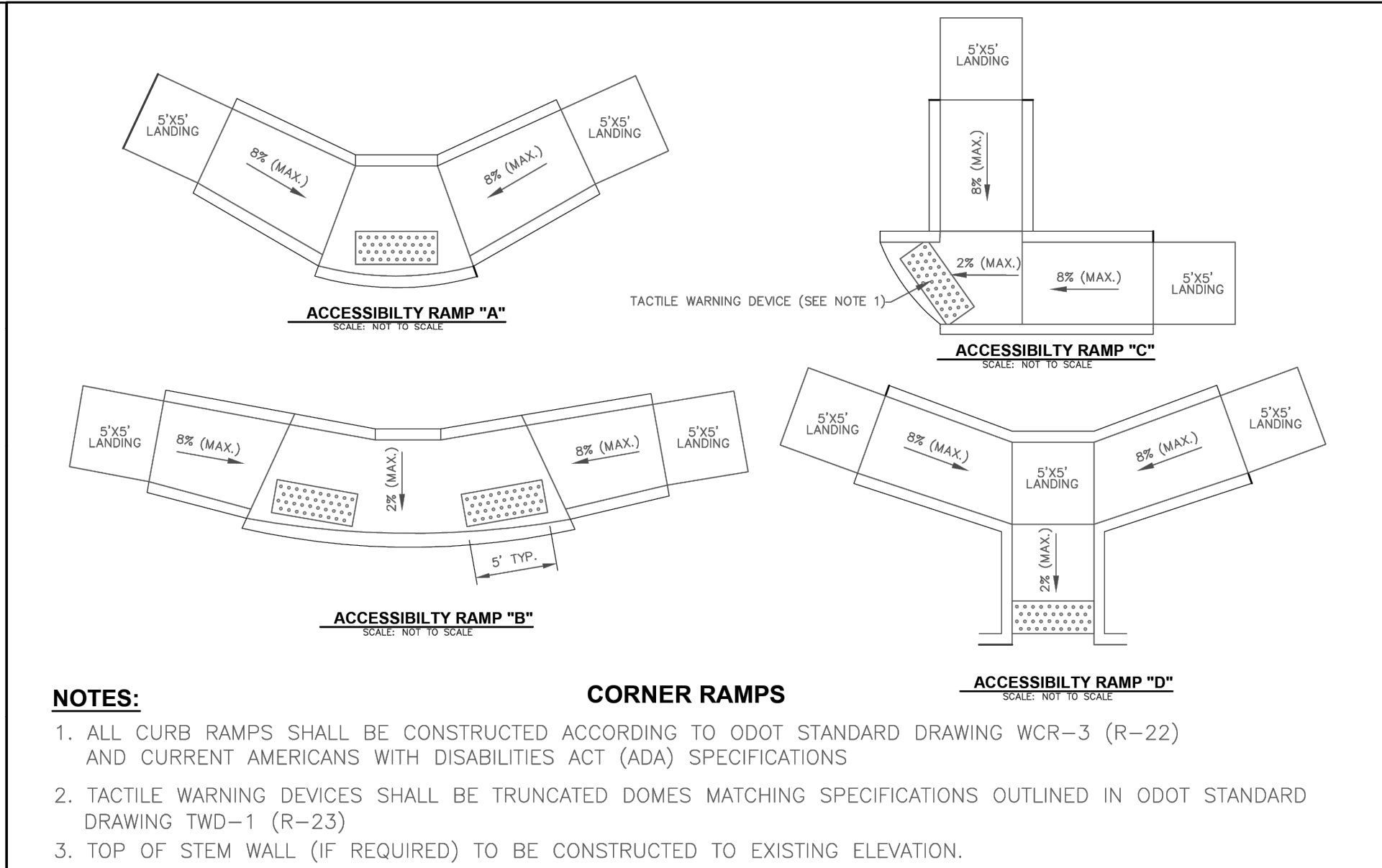
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DRAWN BY: ZSS		LAST REVISION DATE: 8/01/99	
CHECKED BY: TSR	APPROVED: KDS	DATE: 02/01/2024	

MINIMUM DRIVEWAY THICKNESSES	
AC	7.5"
PCC	6"
AGGREGATE BASE	6"

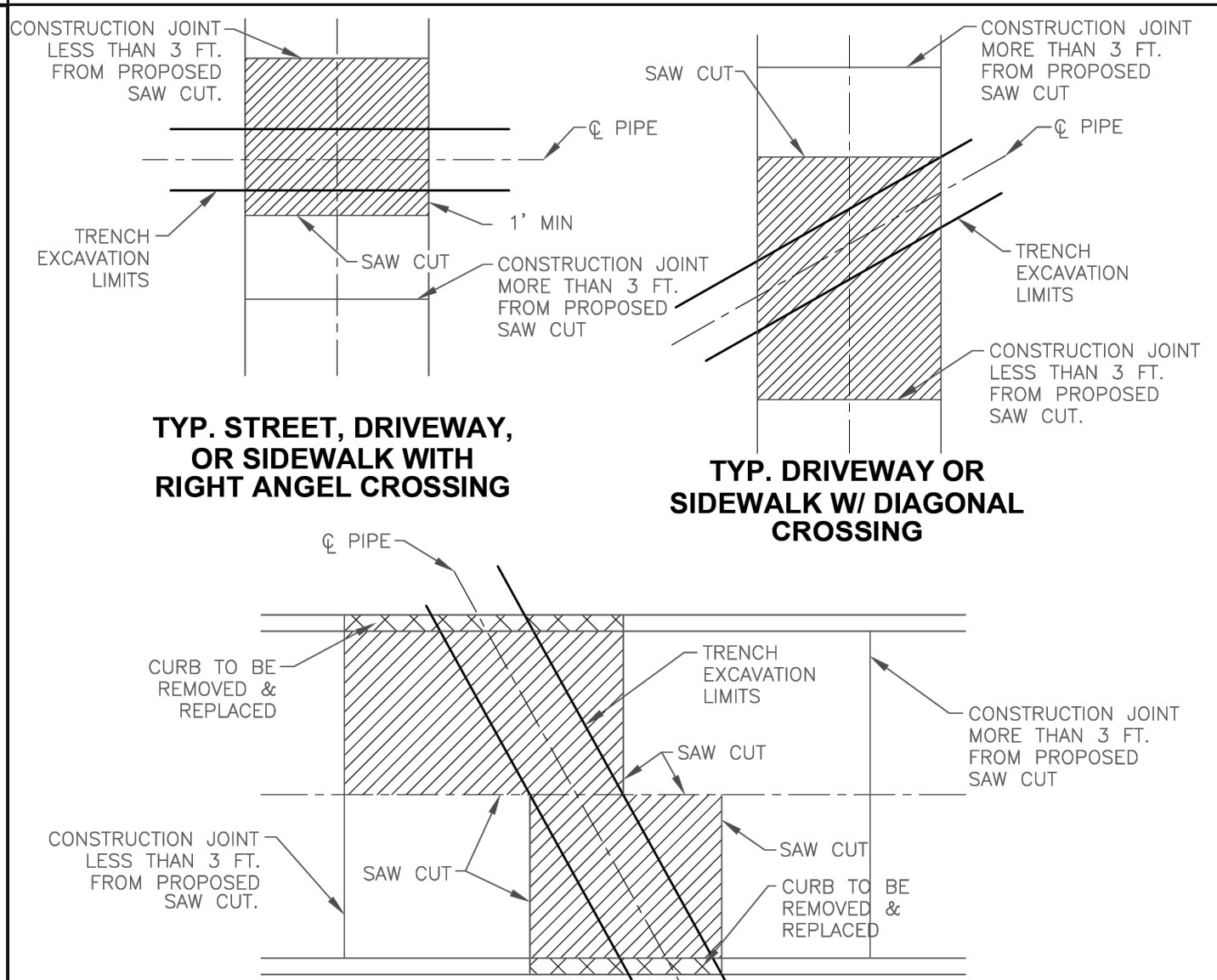


NOTE: ALL EXPANSION JOINTS SHALL BE APPROVED FIBER MATERIAL

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DRAWN BY: ZSS		LAST REVISION DATE: 8/01/1999	
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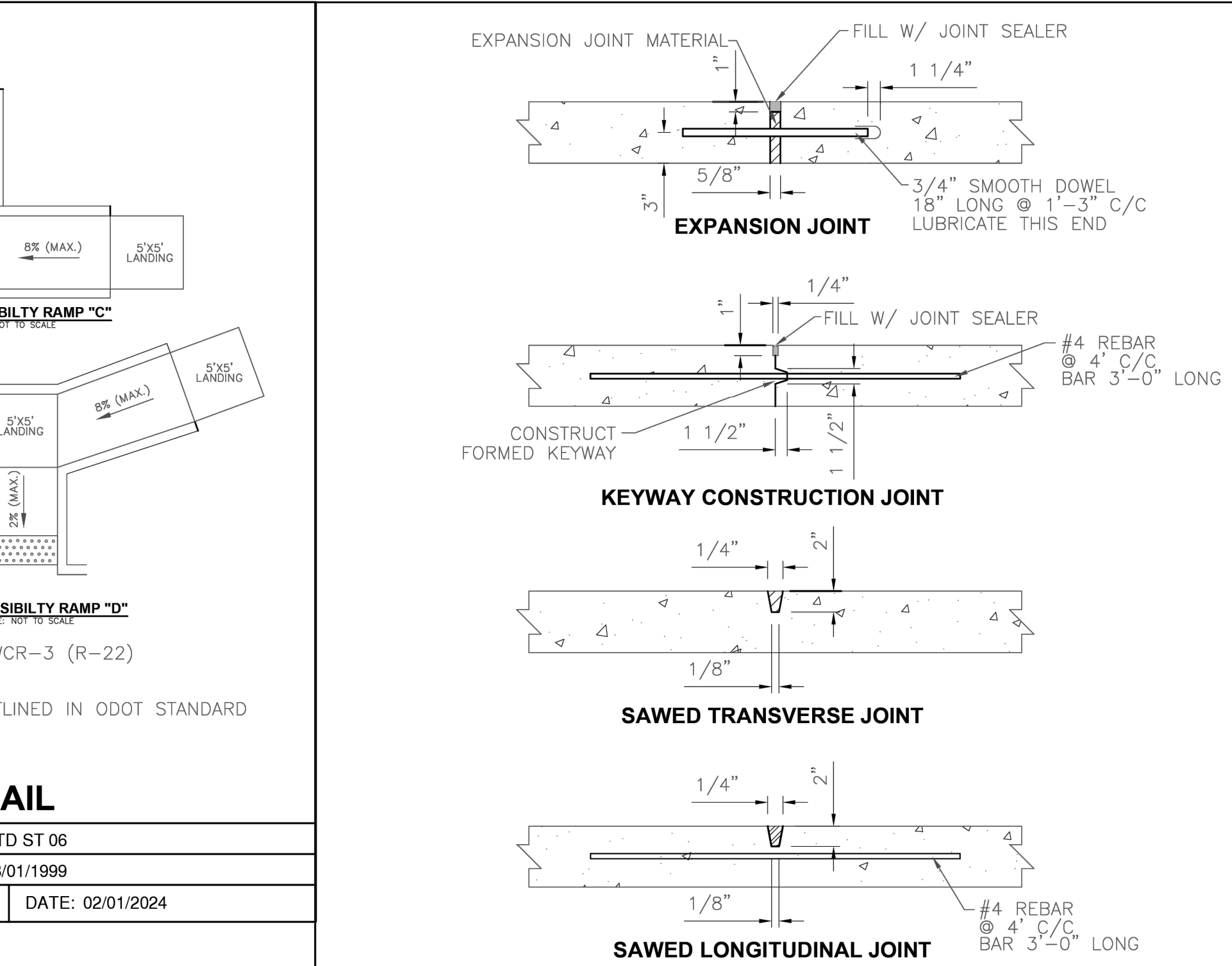


CITY OF BROKEN ARROW		STANDARD DRAWING: STD ST 06	
DRAWN BY: ZSS		LAST REVISION DATE: 08/01/1999	
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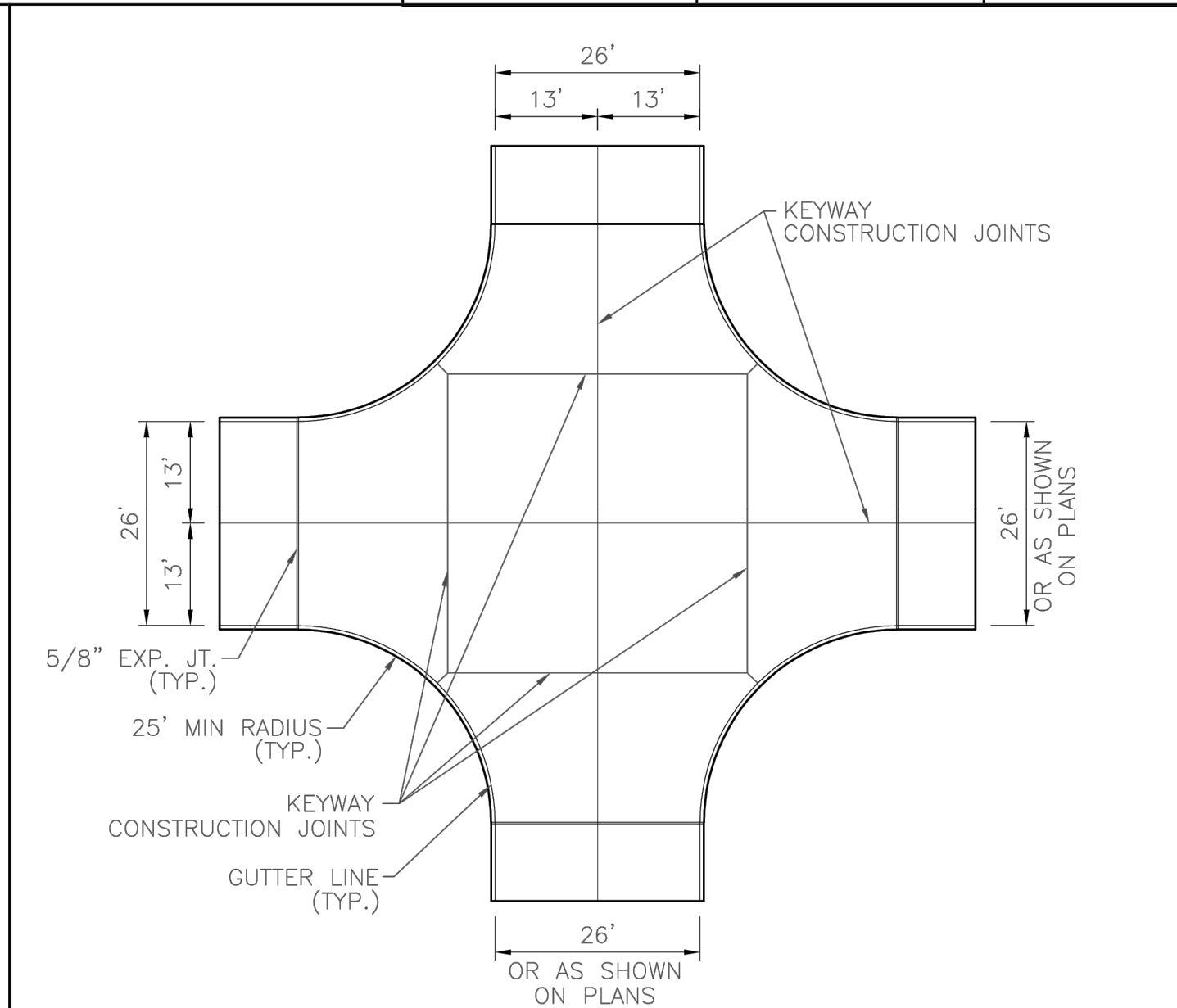
- NOTES:**
- REMOVE AND REPLACE PAVEMENT WITHIN SHADED ARE BOUNDED BY SAW CUTS AND/OR CONSTRUCTION JOINTS.
 - FOR DIAGONAL CROSSING, REPLACE PAVEMENT USING SQUARED CUTS, AS SHOWN.
 - REMOVE AND REPLACE PAVEMENT TO CONSTRUCTION JOINT IF LESS THAN 3 FT. FROM PROPOSED SAW CUT.
 - FOR LONGITUDINAL INSTALLATIONS: REMOVE AND REPLACE PAVEMENT AND CURB TO EDGE OF STREET, IF THE SAW CUT IS LESS THAN 3 FT. FROM THE OUTSIDE EDGE OF THE PAVEMENT OR CURB. AVOID SAW CUTS IN THE EXISTING WHEEL LINE.
 - TRENCHES EXCEEDING 300 L.F. SHALL BE BACKFILLED AND MADE DRIVABLE.
 - NEW PAVEMENT SHALL BE DOWELED TO THE PAVEMENT ADJACENT TO THE JOINT WHEN A PAVEMENT SECTION IS REMOVED ALONG AN EXISTING LONGITUDINAL CONSTRUCTION JOINT.

CITY OF BROKEN ARROW		STANDARD DRAWING: STD ST 24	
DRAWN BY: ZSS		LAST REVISION DATE: 8/01/1999	
CHECKED BY: TSR	APPROVED: KDS	DATE: 02/01/2024	



- NOTES:**
- SEE SECTION 204.04 FOR JOINT SPACING AND TIEBAR REQUIREMENTS.
 - SAWED JOINTS SHALL BE SEALED AS REQUIRED IN SECTION 200.

CITY OF BROKEN ARROW		STANDARD DRAWING: STD ST 12	
DRAWN BY: ZSS		LAST REVISION DATE: 8/01/1999	
CHECKED BY: TSR	APPROVED: KDS	DATE: 02/01/2024	



- NOTES:**
- SEE SECTION 204.04 FOR SPECIFIC REQUIREMENTS FOR CONCRETE STREET JOINTS AND TIEBARS.
 - SEE SECTION 204.05 FOR SPECIFIC REQUIREMENTS FOR CURB AND GUTTER JOINTS AND TIEBARS.

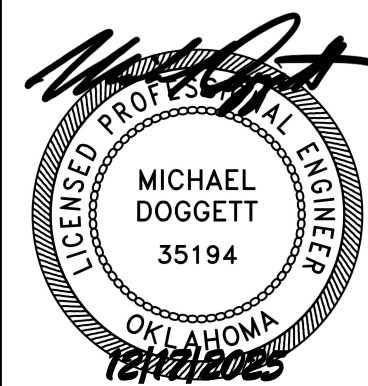
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DETAILS

DATE 12/17/25

C-9.04

STEEL INLET FRAME
(10" THROAT)

ELEVATIONS SHOWN ON PLANS ARE TOP OF INLET STRUCTURE.

1/4" PER FOOT SLOPE TO STREET

STANDARD CURB & GUTTER

SLOPE SAME AS CURB

6"

1"-0"

4-NO. 4 BARS SHALL BE PLACED SAME AS CURB & GUTTER REINFORCING.

1/4" GALV. HARDWARE CLOTH AND FILTER FABRIC (AASHTO M288 CLASS A OR APPROVED EQUAL) SHALL BE PLACED IN FRONT OF 4" DRAIN PIPE PRIOR TO PLACING # 57 STONE 15' ON ALL DIRECTIONS.

2-4" DRAIN PIPES (LOCATE TOP OF DRAIN PIPE BELOW AGGREGATE BASE COURSE)

NO. 4 BARS @ 12" CTRS (BOTH WAYS) (ALL WALLS)

CONCRETE FOOTING

PIPE FLANGE

NO. 4 BARS @

LOCATIONS SHOWN ON CONSTRUCTION PLANS ARE CENTER OF STRUCTURE.

4'-0" MIN.
6'-0" OR 8'-0" MAX.
"A"

RING & LID

8 #4 BARS AT ANGLE UNDER CURB

INSIDE WALL

STEEL INLET

#4
#4

CURB AND GUTTER

CONTRACTION JOINT
DEPTH = T/3

EXPANSION JOINT

5'-0" TRANSITION DOWNSIDE

10'-0" TRANSITION BOTH SIDES

5'-0" TRANSITION BOTH SIDES

RECESSED CURB INLET DETAIL

CITY OF BROKEN ARROW

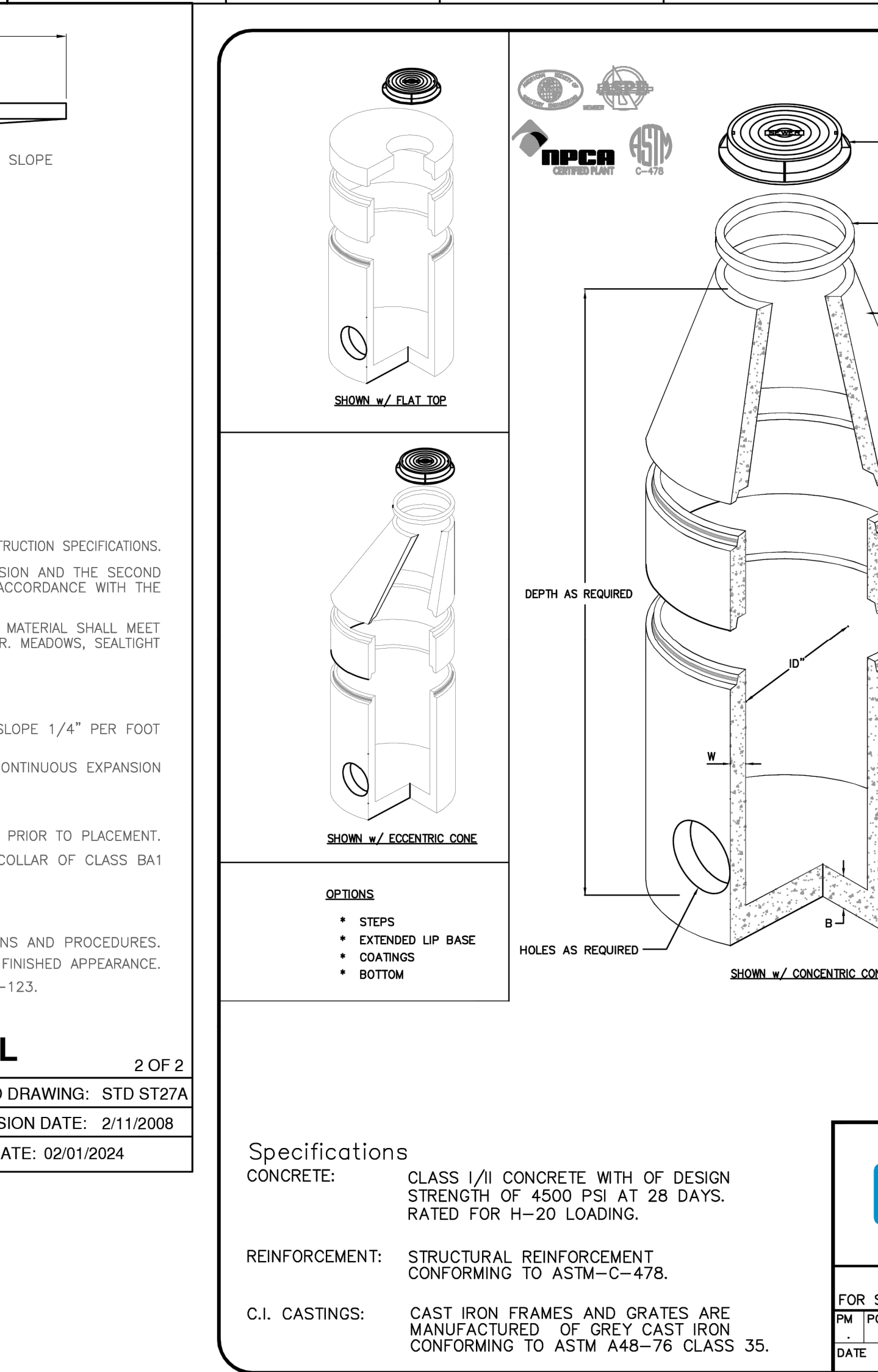
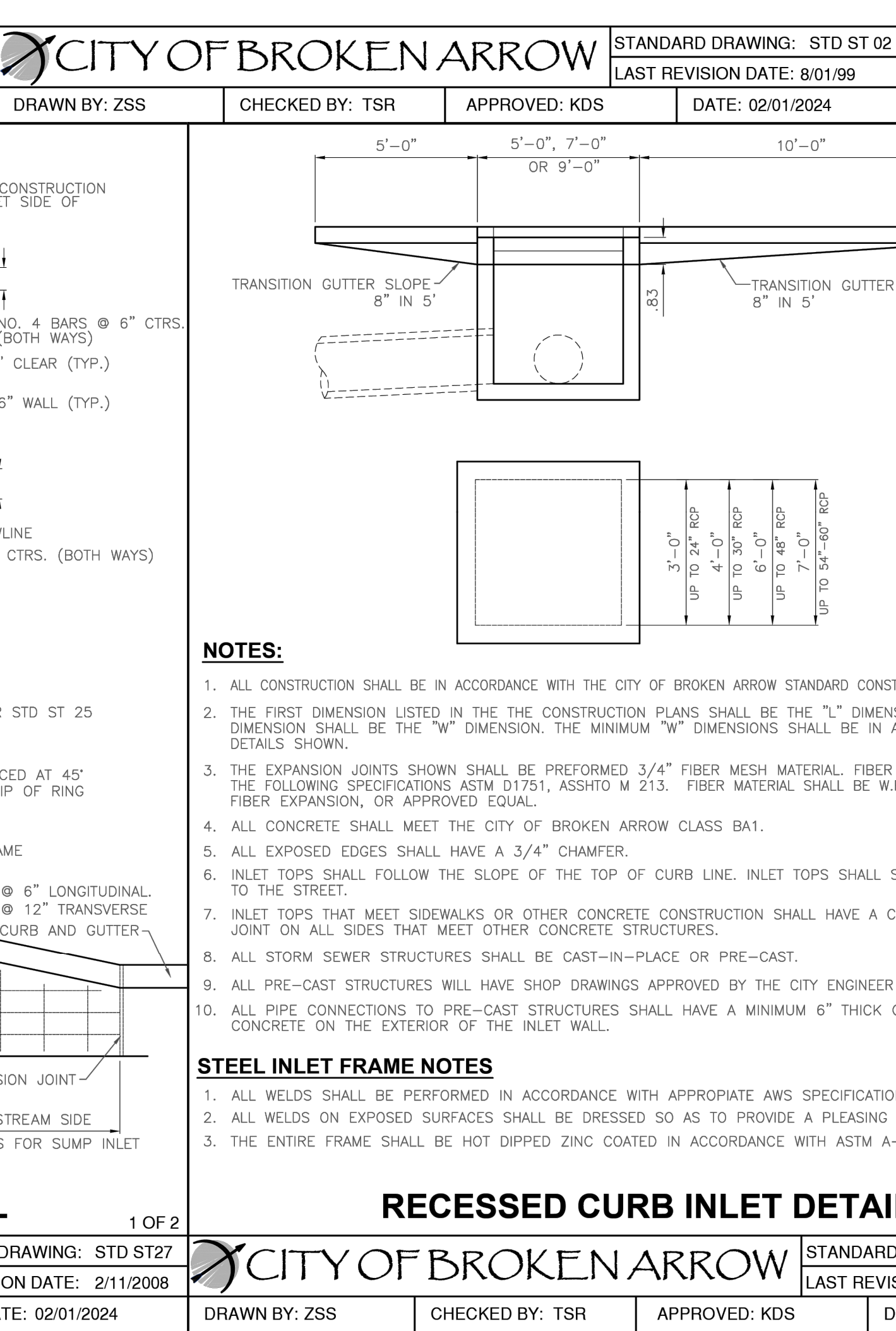
STANDARD

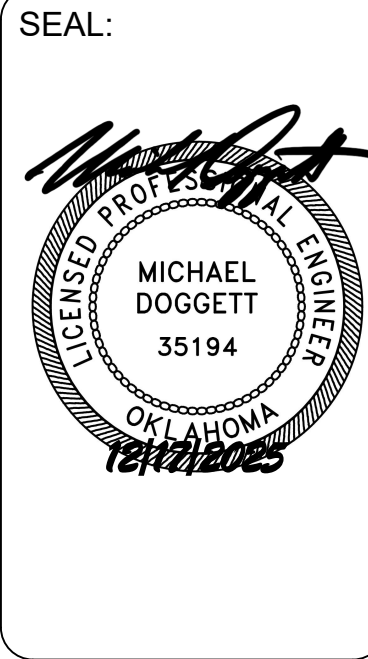
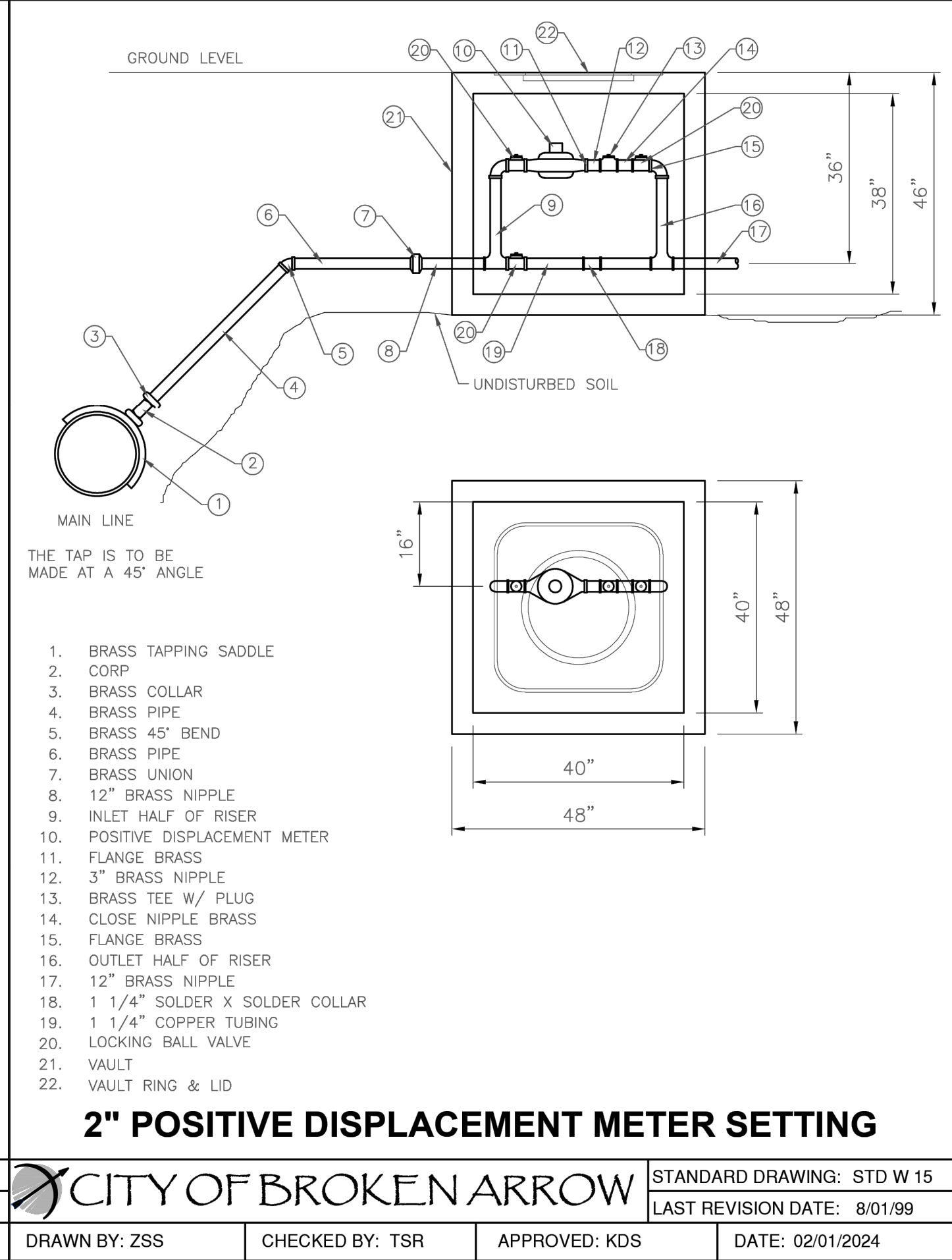
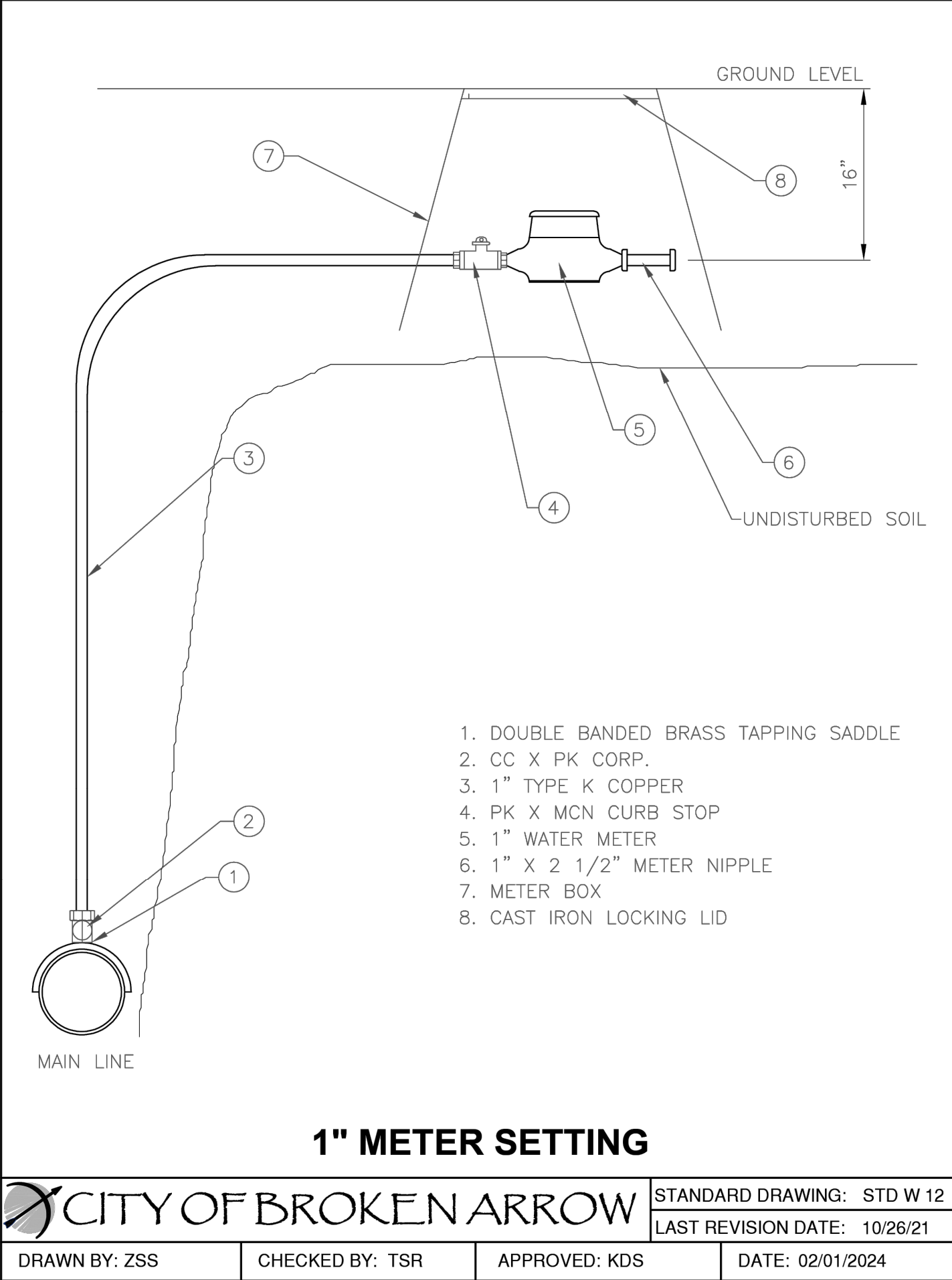
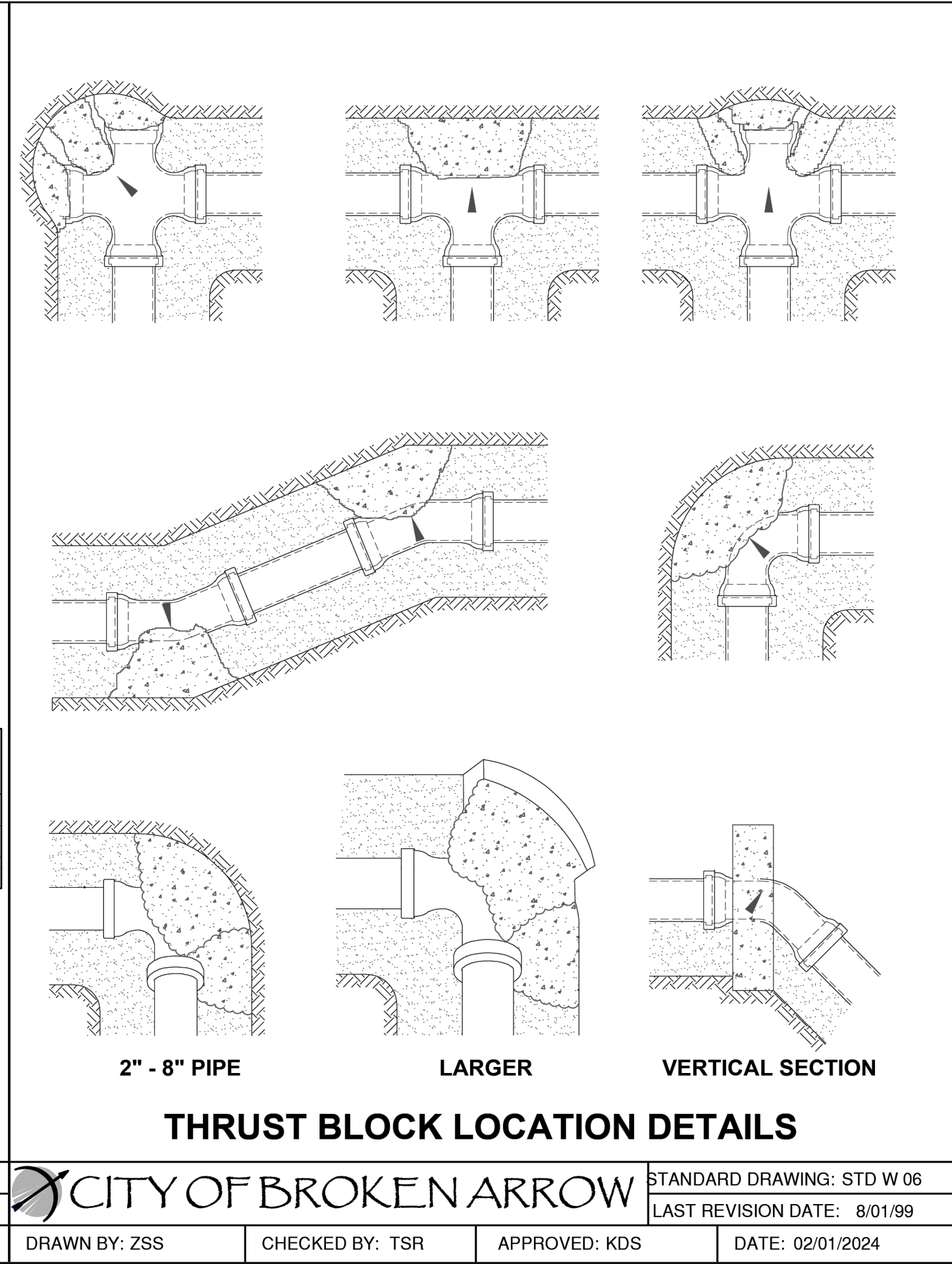
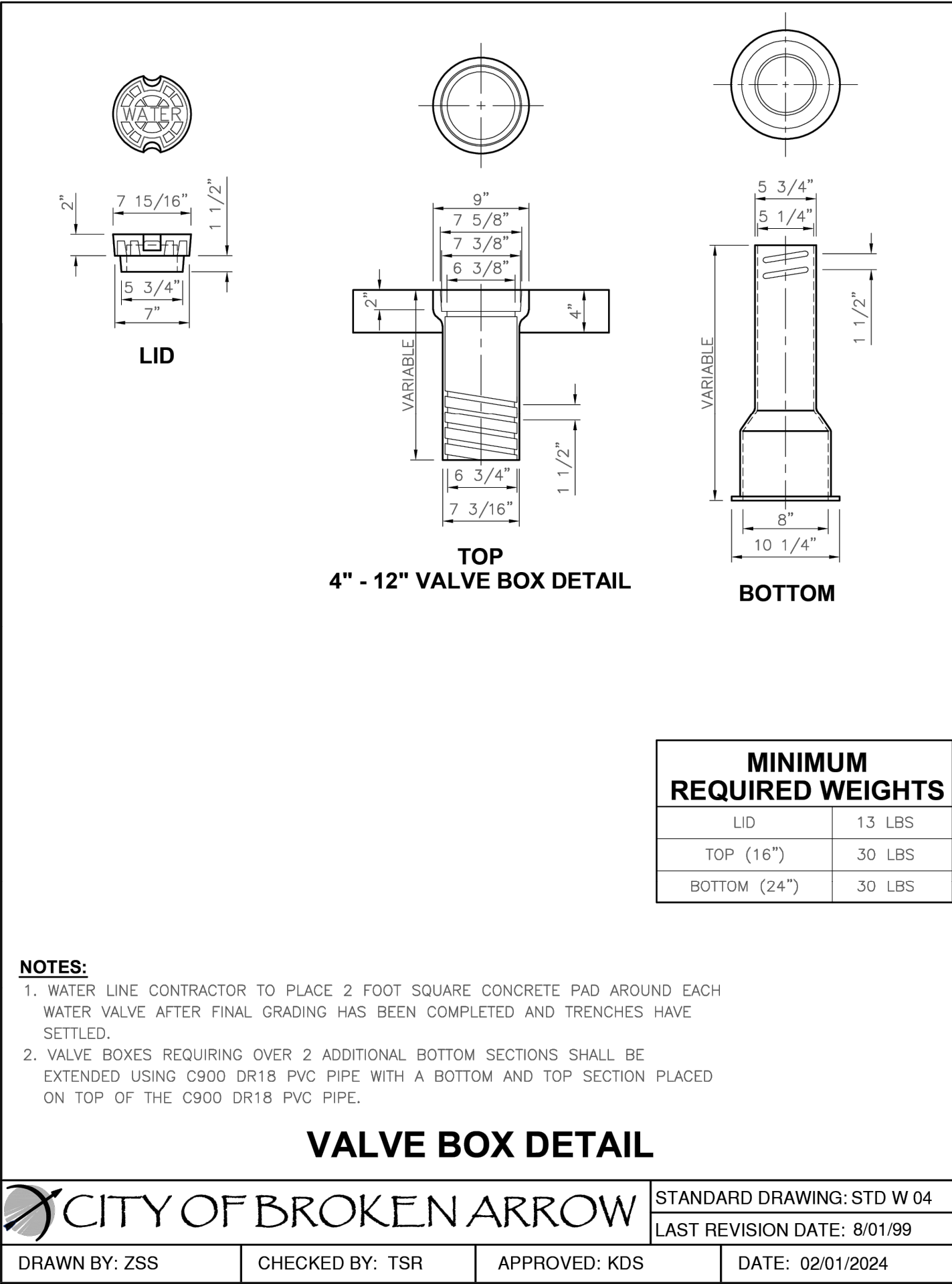
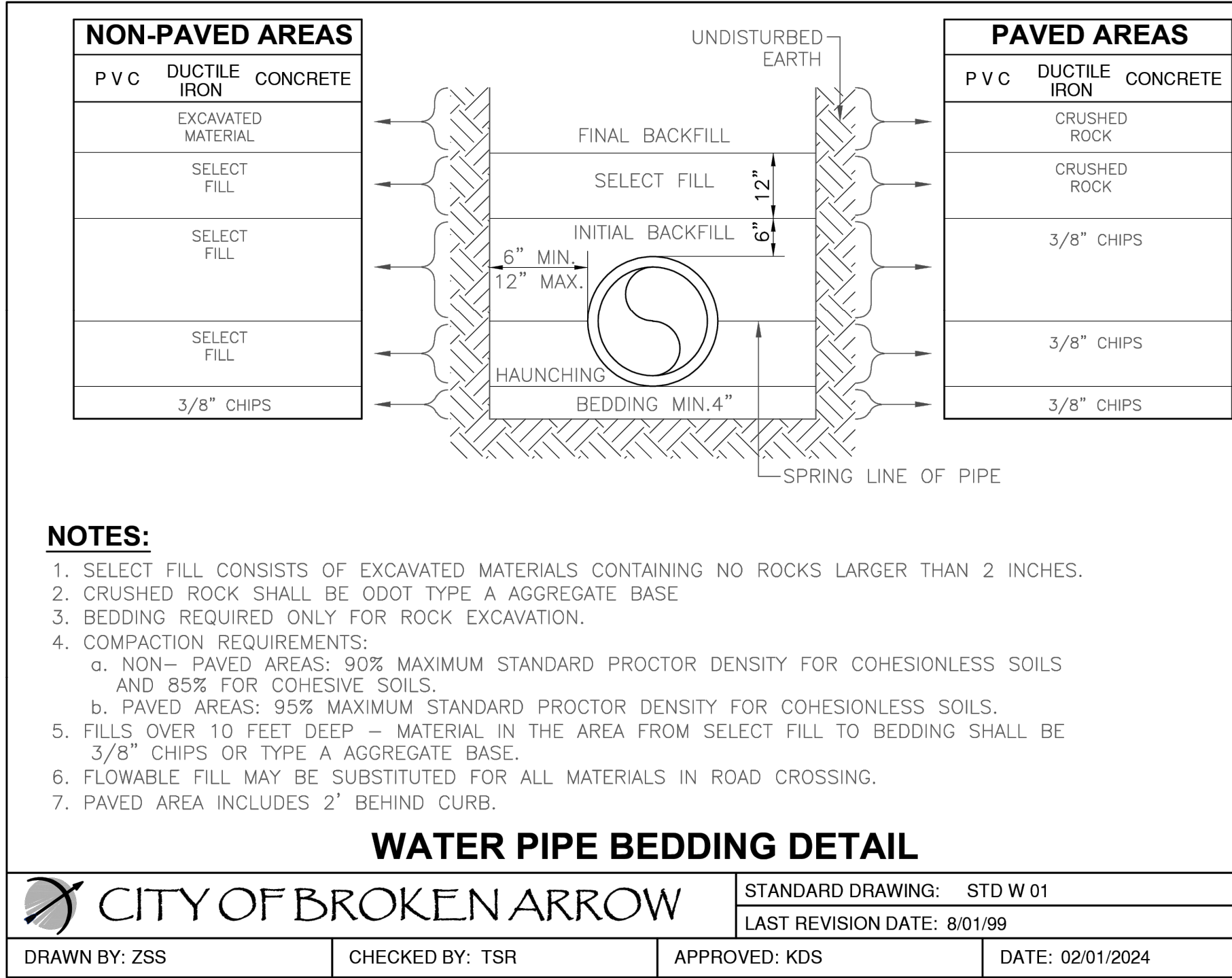
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C-9.06

NON-PAVED AREAS

PVC	DUCTILE IRON	CONCRETE
EXCAVATED MATERIAL		
SELECT FILL		
SAND		
SAND		
3/8" CHIPS		

UNDISTURBED EARTH

FINAL BACKFILL

SELECT FILL

INITIAL BACKFILL

6" MIN.
12" MAX.

HAUNCHING

BEDDING MIN. 4"

SPRING LINE OF PIPE

PAVED AREAS

PVC	DUCTILE IRON	CONCRETE
CRUSHED ROCK		
CRUSHED ROCK		
3/8" CHIPS		
3/8" CHIPS		
3/8" CHIPS		

NOTES:

1. SELECT FILL CONSISTS OF EXCAVATED MATERIALS CONTAINING NO ROCKS LARGER THAN 2 INCHES.

2. CRUSHED ROCK SHALL BE ODOT TYPE A AGGREGATE BASE.

3. BEDDING REQUIRED FOR ALL SANITARY SEWER REPLACEMENT PROJECTS IN ROCK EXCAVATION AND FOR LEVELING TRENCH IN NEW INSTALLATION.

4. COMPACTION REQUIREMENTS:

a. NON-PAVED AREAS: 90% MAXIMUM STANDARD PROCTOR DENSITY FOR COHESIONLESS SOILS AND 85% FOR COHESIVE SOILS.

b. PAVED AREAS: 95% MAXIMUM STANDARD PROCTOR DENSITY FOR COHESIONLESS SOILS.

5. FILLS OVER 10 FEET DEEP – MATERIAL IN THE AREA FROM SELECT FILL TO BEDDING SHALL BE ODOT TYPE A AGGREGATE BASE.

6. FLOWABLE FILL MAY BE SUBSTITUTED FOR ALL MATERIALS IN ROAD CROSSING.

CITY OF BROKEN ARROW

STANDARD DRAWING: STD SS 01

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FINISH GRADE

SCHEDULE 40 PVC CAP GLUED IN PLACE

4'-0" MIN.

SERVICE LINE TO BE 4" DIA. SCHEDULE 40 PVC PIPE

UNDISTURBED EARTH

SCH 40 GLUED 45° BEND

45°

STANDARD BEDDING MATERIAL

MAINLINE TEE

8" SDR 35 TEE WITH 4" SCH 40 BRANCH

STANDARD BEDDING MATERIAL

NOTES:

1. THE TAP SHALL BE LOCATED AT THE FIRST JOINT AT LEAST FIVE (5) FEET UPSTREAM FROM THE DOWNSTREAM PROPERTY LINE. THE EXACT LOCATION SHALL BE NOTED ON THE AS-BUILT PLANS AS A DISTANCE IN FEET FROM THE NEAREST MANHOLE.

2. FOR WIDE TRENCHES THE LAYOUT ON STANDARD DRAWING SS 04 WILL BE USED.

CITY OF BROKEN ARROW

STANDARD DRAWING: STD SS 03A

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Michael Doggett

MICHAEL DOGGETT

35194

OKLAHOMA

12/17/2025

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C-9.07

31

SECTION 32.9800 - LANDSCAPE
PART 1 - GENERAL

1.1 QUALIFICATIONS OF THE LANDSCAPE CONTRACTOR

- A. ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING

1.2 REFERENCE DOCUMENTS

- A. REFER TO LANDSCAPE PLANS, NOTES, SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS

1.3 SCOPE OF WORK / DESCRIPTION OF WORK

- A. WORK COVERED BY THESE SECTIONS INCLUDES: FURNISH ALL SUPERVISORS, LABOR, MATERIALS, SERVICES, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE THE WORK COVERED IN CONJUNCTION WITH THE LANDSCAPING COVERED IN LANDSCAPE PLANS AND SPECIFICATIONS INCLUDING:
1. PLANTING (TREES, SHRUBS, GRASSES)
 1. BED PREP AND FERTILIZATION
 3. NOTIFICATION OF SOURCES
 4. WATER AND MAINTENANCE UNTIL ACCEPTANCE
 5. GUARANTEE
- B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.
- C. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK

1.4 REFERENCES

- A. AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICAN ASSOCIATION OF NURSEYMEN 27 OCTOBER 1980, EDITION, BY AMERICAN NATIONAL STANDARDS INSTITUTE (Z90.1) PLANT MATERIAL
- B. AMERICAN JOINT COMMITTEE ON HORTICULTURE NOMENCLATURE, 1942 EDITION OF STANDARDIZED PLANT NAMES
- C. TEXAS ASSOCIATION OF NURSERYMEN, GRADES AND STANDARDS

1.5 SUBMITTALS

- A. PROVIDE REPRESENTATIVE QUANTITIES OF EACH SOIL, MULCH, BED MIX, GRAVEL AND STONE BEFORE INSTALLATION. SAMPLES TO BE APPROVED BY OWNERS REPRESENTATIVE BEFORE USE.
- B. SOIL AMENDMENTS AND FERTILIZERS SHOULD BE RESEARCHED AND BASED ON THE SOILS IN THE AREA
- C. BEFORE INSTALLATION, SUBMIT DOCUMENTATION THAT PLANT MATERIALS ARE AVAILABLE AND HAVE BEEN RESERVED. FOR ANY PLANT MATERIAL NOT AVAILABLE, SUBMIT REQUEST FOR SUBSTITUTION.
- 1.6 JOB CONDITIONS, DELIVERY, STORAGE AND HANDLING
- A. GENERAL CONTRACTOR TO COMPLETE WORK BEFORE LANDSCAPE CONTRACTOR TO COMMENCE.
- B. ALL PLANTING BED AREAS SHALL BE LEFT THREE INCHES BELOW FINAL GRADE OF SIDEWALKS, DRIVES AND CURBS. ALL AREAS TO RECEIVE SOLID SOD SHALL BE LEFT ONE INCH BELOW THE FINAL GRADE OF WALKS, DRIVES AND CURBS. CONSTRUCTION DEBRIS SHALL BE REMOVED PRIOR TO LANDSCAPE CONTRACTOR BEGINNING WORK.
- C. STORAGE OF MATERIALS AND EQUIPMENT AT THE JOB SITE WILL BE AT THE RISK OF THE LANDSCAPE CONTRACTOR. THE OWNER CANNOT BE HELD RESPONSIBLE FOR THEFT OR DAMAGE.
- 1.7 SEQUENCING
- A. INSTALL TREES, SHRUBS, AND LIVER STOCK PLANT MATERIALS PRIOR TO INSTALLATION OF LAWN/SOLID SOD.
- B. WHERE EXISTING TURF AREAS ARE BEING CONVERTED TO PLANTING BEDS, THE TURF SHALL BE CHEMICALLY ERADICATED TO MINIMIZE REGROWTH IN THE FUTURE. AREAS SHALL BE PROPERLY PREPARED WITH AMENDED ORGANIC MATTER
- 1.8 MAINTENANCE AND GUARANTEE
- MAINTENANCE:
- A. THE LANDSCAPE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK FROM THE TIME OF PLANTING UNTIL FINAL ACCEPTANCE BY OWNER.
- B. NO TREES, GRASS, GROUNDCOVER OR GRASS WILL BE ACCEPTED UNLESS THEY SHOW HEALTHY GROWTH AND SATISFACTORY FOLIAGE CONDITIONS.
- C. MAINTENANCE SHALL INCLUDE WATERING OF TREES AND PLANTS, CULTIVATION, WEED SPRAYING, EDGING, PRUNING OF TREES, MOWING OF GRASS, CLEANING UP AND ALL OTHER WORK NECESSARY FOR MAINTENANCE.
- D. A WRITTEN NOTICE REQUESTING FINAL INSPECTION AND ACCEPTANCE

- SHOULD BE SUBMITTED TO THE OWNER AT LEAST 7 DAYS PRIOR TO COMPLETION, AN ON SITE INSPECTION BY THE OWNERS AUTHORIZED REPRESENTATIVE WILL BE COMPLETED PRIOR TO WRITTEN ACCEPTANCE.
- E. NOTIFY OWNER OR OWNERS REPRESENTATIVE SEVEN DAYS PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD.
- F. REMOVE DEAD, UNHEALTHY AND UNSIGHTLY PLANTS DURING WARRANTY PERIOD
- G. REMOVE GUYING AND STAKING MATERIALS AFTER ONE YEAR
- H. ALL LANDSCAPE MUST BE MAINTAINED AND GRASS MOWED/EDGED ON A WEEKLY SCHEDULE UNTIL ACCEPTANCE BY OWNER. REMOVE CLIPPINGS AND DEBRIS FROM SITE PROMPTLY.
- I. REMOVE TRASH, DEBRIS, AND LITTER. WATER, PRUNE, RESTAKE TREES, FERTILIZE, WEED AND APPLY HERBICIDES AND FUNGICIDES AS REQUIRED.
- J. COORDINATE THE OPERATION OF IRRIGATION SYSTEM TO ENSURE THAT PLANTS ARE ADEQUATELY WATERED. HAND WATER AREAS NOT RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.
- K. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN ACCORDANCE TO THE MAINTENANCE SERVICE TO ENSURE THE SYSTEM IS IN PROPER WORKING ORDER WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.
- L. REAPPLY MULCH TO BARE AND THIN AREAS.
- M. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER.
- N. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
- a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
 - b. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
 - c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE, HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED OR RESEEDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED.

GUARANTEE:

- A. TREES, SHRUBS, GROUNDCOVER SHALL BE GUARANTEED (IN WRITING) FOR A 12 MONTH PERIOD (90 DAYS FOR ANNUAL PLANTING OR AT THE END OF THE SEASONAL COLOR GROWING SEASON, WHICHEVER COMES SOONER) AFTER FINAL ACCEPTANCE. THE CONTRACTOR SHALL REPLACE ALL DEAD MATERIALS AS SOON AS WEATHER PERMITS AND UPON NOTIFICATION OF THE OWNER.
- B. PLANTS INCLUDING TREES, WHICH HAVE PARTIALLY DIED SO THAT SHAPE, SIZE OR SYMMETRY HAVE BEEN DAMAGED SHALL BE CONSIDERED SUBJECT TO REPLACEMENT. IN SUCH CASES, THE OPINION OF THE OWNER SHALL BE FINAL.
- C. PLANTS USED FOR REPLACEMENT SHALL BE OF THE SAME SIZE AND KIND AS THOSE ORIGINALLY PLANTED OR SPECIFIED. ALL WORK INCLUDING MATERIALS, LABOR AND EQUIPMENT USED IN REPLACEMENTS SHALL CARRY A 12 MONTH GUARANTEE. ANY DAMAGE INCLUDING RUTS IN LAWN OR BED AREAS INCURRED AS A RESULT OF MAKING REPLACEMENTS SHALL BE IMMEDIATELY REPAIRED.
- D. WHEN PLANT REPLACEMENTS ARE MADE, PLANTS, SOIL MIX, FERTILIZER AND MULCH ARE TO BE UTILIZED AS ORIGINALLY SPECIFIED AND INSPECTED FOR FULL COMPLIANCE WITH THE CONTRACT REQUIREMENTS. ALL REPLACEMENTS ARE INCLUDED UNDER "WORK OF THIS SECTION"
- E. THE OWNER AGREES THAT FOR THE ONE YEAR WARRANTY PERIOD TO BE EFFECTIVE, HE WILL WATER PLANTS AT LEAST TWICE A WEEK DURING DRY PERIODS.
- F. THE ABOVE GUARANTEE SHALL NOT APPLY WHERE PLANTS DIE AT ACCEPTANCE BECAUSE OF DAMAGE DUE TO ACTS OF GOD, VANDALISM, INSECTS, DISEASE, INJURY BY HUMANS, MACHINES, THEFT OR NEGLIGENCE BY OWNER.
- G. ACCEPTANCE FOR ALL LANDSCAPE WORK SHALL BE GIVEN AFTER FINAL INSPECTION BY THE OWNER PROVIDED THE JOB IS IN A COMPLETE, UNDAMAGED CONDITION AND THERE IS A STAND OF GRASS IN ALL LAWN AREAS. AT THAT TIME, THE OWNER WILL ASSUME MAINTENANCE ON THE ACCEPTED WORK.

1.9 QUALITY ASSURANCE

- A. COMPLY WITH ALL FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.
- B. EMPLOY PERSONNEL WHO ARE EXPERIENCED AND FAMILIAR WITH THE REQUIRED WORK AND SUPERVISION BY A FOREMAN.
- C. MAKE CONTACT WITH SUPPLIERS IMMEDIATELY UPON OBTAINING NOTICE OF CONTRACT ACCEPTANCE TO SELECT AND BOOK MATERIALS.

- D. DEVELOP A PROGRAM OF MAINTENANCE (PRUNING AND FERTILIZATION) WHICH WILL ENSURE THE PURCHASED MATERIALS WILL MEET AND/OR EXCEED PROJECT SPECIFICATIONS.
- E. DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE LANDSCAPE MATERIAL SPECIFIED IS NOT READILY AVAILABLE, SUBMIT PROOF TO LANDSCAPE ARCHITECT ALONG WITH THE PROPOSED MATERIAL TO BE USED IN LIEU OF THE SPECIFIED PLANT.
- F. AT THE TIME BIDS ARE SUBMITTED, THE CONTRACTOR IS ASSUMED TO HAVE LOCATED THE MATERIALS NECESSARY TO COMPLETE THE JOB AS SPECIFIED.
- G. OWNERS REPRESENTATIVE SHALL INSPECT ALL PLANT MATERIAL AND RETAINS THE RIGHT TO INSPECT MATERIALS UPON ARRIVAL TO THE SITE AND DURING INSTALLATION. THE OWNERS REPRESENTATIVE MAY ALSO REJECT ANY MATERIALS THAT ARE UNSATISFACTORY OR DEFECTIVE DURING THE WORK PROCESS. ALL PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.
- 1.10 PRODUCT DELIVERY, STORAGE AND HANDLING
- A. PREPARATION
1. BALLED AND BURLAPPED BAB PLANTS: DIG AND PREPARE SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE AND FUTURE DEVELOPMENT.
 2. CONTAINER GROWN PLANTS: DELIVER PLANTS IN RIGID CONTAINER TO HOLD BALL SHAPE AND PROTECT ROOT MASS.
- B. DELIVERY
1. DELIVER PACKAGED MATERIALS IN SEALED CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED ON SITE.
 2. DELIVER ONLY PLANT MATERIALS THAT CAN BE PLANTED IN ONE DAY EXCESS ADEQUATE STORAGE AND WATERING FACILITIES ARE AVAILABLE ON SITE.
 3. PROTECT ROOT BALLS BY HEELING IN WITH SAWDUST OR OTHER APPROVED MOISTURE RETAINING MATERIAL IF NOT PLANTED WITHIN 24 HOURS OF DELIVERY.
 4. PROTECT PLANTS DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALL OR DECORATION OF LEAVES.
 5. KEEP PLANTS MOIST AT ALL TIMES. COVER ALL MATERIALS DURING TRANSPORT.
 6. NOTIFY OWNERS REPRESENTATIVE OF DELIVERY 72 HOURS PRIOR TO DELIVERY OF PLANT MATERIAL AT JOB SITE.
 7. REMOVE REJECTED PLANT MATERIAL IMMEDIATELY FROM JOB SITE.
 8. TO AVOID DAMAGE OR STRESS, DO NOT LIFT, MOVE, ADJUST TO PLUME, OR OTHERWISE MANIPULATE PLANTS BY TRUNK OR STEMS.

PART 2 - PRODUCTS

2.1 PLANT MATERIALS

- A. GENERAL: WELL FORMED NO. 1 GRADE OR BETTER NURSERY GROWN STOCK, LISTED PLANT HEIGHTS ARE FROM TOPS OF FOOT BALLS TO NOMINAL TOPS OF PLANTS. PLANT SPREAD REFERS TO NOMINAL OUTER WIDTH OF THE PLANT NOT THE OUTER LEAF TIPS. PLANTS SHALL BE INDIVIDUALLY APPROVED BY THE OWNERS REPRESENTATIVE AND THEIR DECISION AS TO THEIR ACCEPTABILITY SHALL BE FINAL.
- B. QUANTITIES: THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. ANYTHING CALLED FOR ON ONE AND NOT THE OTHER IS AS BINDING AS IF SHOWN AND CALLED FOR ON BOTH. THE PLANT SCHEDULE IS AN AD TO BIDDERS ONLY. CONFIRM ALL QUANTITIES ON PLAN.
- C. QUANTITIES AND SIZE: PLANT MATERIALS SHALL CONFORM TO THE SIZE GIVEN ON THE PLAN AND PLANTS SHALL BE HEALTHY, WELL SHAPED, FULL BRANCHED AND WELL ROOTED. SYMMETRY IS ALSO IMPERATIVE. PLANTS SHALL BE FREE FROM INSECTS, INJURY, DISEASE, BROKEN BRANCHES, DISFIGUREMENTS, INSECT EGGS AND ARE TO BE OF SPECIMEN QUALITY.
- D. APPROVAL: ALL PLANTS WHICH ARE FOUND UNSUITABLE IN GROWTH OR ARE UNHEALTHY, BADLY SHAPED OR UNDERSIZED WILL BE REJECTED BY THE OWNERS REPRESENTATIVE EITHER BEFORE OR AFTER PLANTING AND SHALL BE REMOVED AT THE EXPENSE OF THE LANDSCAPE CONTRACTOR AND REPLACED WITH ACCEPTABLE SPECIMENS.
- E. TREES SHALL BE HEALTHY, FULL BRANCHED, WELL SHAPED AND SHALL MEET THE MINIMUM REQUIREMENTS AS SPECIFIED ON THE PLANT SCHEDULE. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE IF POSSIBLE, AND WITH SIMILAR CLIMATIC CONDITIONS.
- F. PRUNING: ALL PRUNING OF TREES AND SHRUBS SHALL BE EXECUTED BY THE LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, PRIOR TO FINAL ACCEPTANCE.
- G. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED, EXCEPT THE PLANTS LARGER THAN THOSE SPECIFIED MAY BE USED. USE OF LARGER PLANTS SHALL NOT INCREASE THE CONTRACT PRICE.
- H. WHERE MATERIALS ARE PLANTED IN MASSES, PROVIDE PLANTS OF UNIFORM SIZE.
- I. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED, FIBROUS ROOT SYSTEMS, NON-POT BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING

- ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS J-SHAPED ROOTS).
- J. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED, PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
- K. TREE TRUNKS TO BE STURDY, EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS, NOT ROOT OR POT BOUND.
- L. TREES WITH DAMAGED OR CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, DISFIGURING KNOTS, OR INSECT DAMAGE WILL BE REJECTED.
- M. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER.
- N. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL.
- O. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.
- P. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS 3/4" TO 1". EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.

2.2 SOIL PREPARATION MATERIALS

A. SANDY LOAM:

1. FRIABLE, FERTILE, DARK, LOAMY SOIL, FREE OF CLAY LUMPS, SUBSOIL, STONES AND OTHER EXTRANEOUS MATERIAL AND REASONABLY FREE OF WEEDS AND FOREIGN GRASSES. LOAM CONTAINING DALLASGRASS OR NUT GRASS SHALL BE REJECTED.
 2. PHYSICAL PROPERTIES AS FOLLOWS:
 - a. CLAY - BETWEEN 7-7.7%
 - b. SILT - BETWEEN 15-25%
 - c. SAND - LESS THAN 52%
 3. ORGANIC MATTER SHALL BE 3%-10% OF TOTAL DRY WEIGHT.
 4. IF REQUESTED, LANDSCAPE CONTRACTOR SHALL PROVIDE A CERTIFIED SOIL ANALYSIS CONDUCTED BY AN APPROVED SOIL TESTING LABORATORY VERIFYING THAT SANDY LOAM MEETS THE ABOVE REQUIREMENTS.
- B. ORGANIC MATERIAL: COMPOST WITH A MIXTURE OF 80% VEGETATIVE MATTER AND 20% ANIMAL WASTE. INGREDIENTS SHOULD BE A MIX OF COARSE AND FINE TEXTURED MATERIAL.
- C. PREMIXED BEDDING SOIL AS SUPPLIED BY VITAL EARTH RESOURCES, GLADEWATER, TEXAS; PROFESSIONAL BEDDING SOIL AS SUPPLIED BY LIVING EARTH TECHNOLOGY, DALLAS, TEXAS OR ACID GLO MUNICIPAL MIX AS SUPPLIED BY SOIL BUILDING SYSTEMS, DALLAS, TEXAS OR APPROVED EQUAL.
- D. SHARP SAND: SHARP SAND MUST BE FREE OF SEEDS, SOIL PARTICLES AND WEEDS.
- E. MULCH: DOUBLE SHREDDED HARDWOOD MULCH, PARTIALLY DECOMPOSED, DARK BROWN.
- F. ORGANIC FERTILIZER: FERTILIZED, SUSTANE, OR GREEN SENSE OR EQUAL AS RECOMMENDED FOR REQUIRED APPLICATIONS. FERTILIZER SHALL BE DELIVERED TO THE SITE IN ORIGINAL UNOPENED CONTAINERS, EACH BEARING THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS.
- G. COMMERCIAL FERTILIZER: 10-20-10 OR SIMILAR ANALYSIS. NITROGEN SOURCE TO BE A MINIMUM 50% SLOW RELEASE ORGANIC NITROGEN (SCL) OR U.P. WITH A MINIMUM 8% SULFUR AND 4% IRON, PLUS MICRONUTRIENTS.
- H. PEAT: COMMERCIAL SPHAGNUM PEAT MOSS OR PARTIALLY DECOMPOSED SHREDDED PINE BARK OR OTHER APPROVED ORGANIC MATERIAL.

2.3 MISCELLANEOUS MATERIALS

- A. STEEL EDGING SHALL BE 3/16" X 4" X 16" DARK GREEN LANDSCAPE EDGING, DURAEDGE STEEL OR APPROVED EQUAL.
- B. TREE STAKING - TREE STAKING SOLUTIONS OR APPROVED SUBSTITUTE: REFER TO DETAILS.
- C. FILTER FABRIC - MIRAFI 140N BY MIRAFI INC. OR APPROVED SUBSTITUTE AVAILABLE AT LONE STAR PRODUCTS, INC. (469-923-0444) APPROVED FABRICS MUST ADHERE TO THE FOLLOWING ITEMS:
- a. NONWOVEN POLYPROPYLENE GEOTEXTILE: PROVIDE EXCELLENT WATER FLOW RATES AND DURABILITY.
 - b. CHEMICAL STABILITY: RESISTANT TO A WIDE RANGE OF AGGRESSIVE ENVIRONMENTS.
 - c. HIGH PERMITTIVITY: ALLOWS HIGH WATER FLOW RATES WHILE RETAINING SOIL.
 - d. C.D. HIGH PUNCTURE AND TEAR RESISTANCE: CAN WITHSTAND INSTALLATION STRESSES
- D. SAND - UNIFORMLY GRADED, WASHED, CLEAN, BANK RUN SAND.

- E. GRAVEL WASHED NATIVE PEA GRAVEL, GRADED 1" TO 1 1/2"
- F. DECOMPOSED GRANITE - BASE MATERIAL OF NATURAL MATERIAL MIX OF GRANITE AGGREGATE NOT TO EXCEED 1/8" IN DIAMETER COMPOSED OF VARIOUS STAGES OF DECOMPOSED NATURAL BASE.
- G. RIVER ROCK - LOCALLY AVAILABLE NATIVE RIVER ROCK BETWEEN 2"-4" IN DIAMETER.
- H. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURERS LABELED RATES.

PART 3 - EXECUTION

3.1 PREPARATION

- A. LANDSCAPE CONTRACTOR TO INSPECT ALL EXISTING CONDITIONS AND REPORT ANY DEFICIENCIES TO THE OWNER.
- B. ALL PLANTING AREAS SHALL BE CONDITIONED AS FOLLOWS:
1. PREPARE NEW PLANTING BEDS BY SCRAPING AWAY EXISTING GRASS AND WEEDS AS NECESSARY. TILL EXISTING SOIL TO A DEPTH OF SIX (6") INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. APPLY FERTILIZER AS PER MANUFACTURER'S RECOMMENDATIONS. ADD SIX (6") INCHES OF COMPOST AND TILL INTO A DEPTH OF SIX (6") INCHES OF SPECIFIED MULCH (SETTLED THICKNESS).
 2. BACKFILL FOR TREE PITS SHALL BE AS FOLLOWS: USE EXISTING TOP SOIL ON SITE (USE IMPORTED TOPSOIL AS NEEDED) FREE FROM LARGE CLUMPS, ROCKS, DEBRIS, CALICHE, SUBSOILS, ETC., PLACED IN NINE (9") INCH LAYERS AND WATERED IN THOROUGHLY.
- C. GRASS AREAS:
1. BLOCKS OF SOD SHOULD BE LAID JOINT TO JOINT (STAGGERED JOINTS) AFTER FERTILIZING THE GROUND FIRST. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE. THE JOINTS BETWEEN THE BLOCKS OF SOD SHOULD BE FILLED WITH TOPSOIL WHERE THEY ARE GAPPED OPEN, THEN WATERED THOROUGHLY.

3.2 INSTALLATION

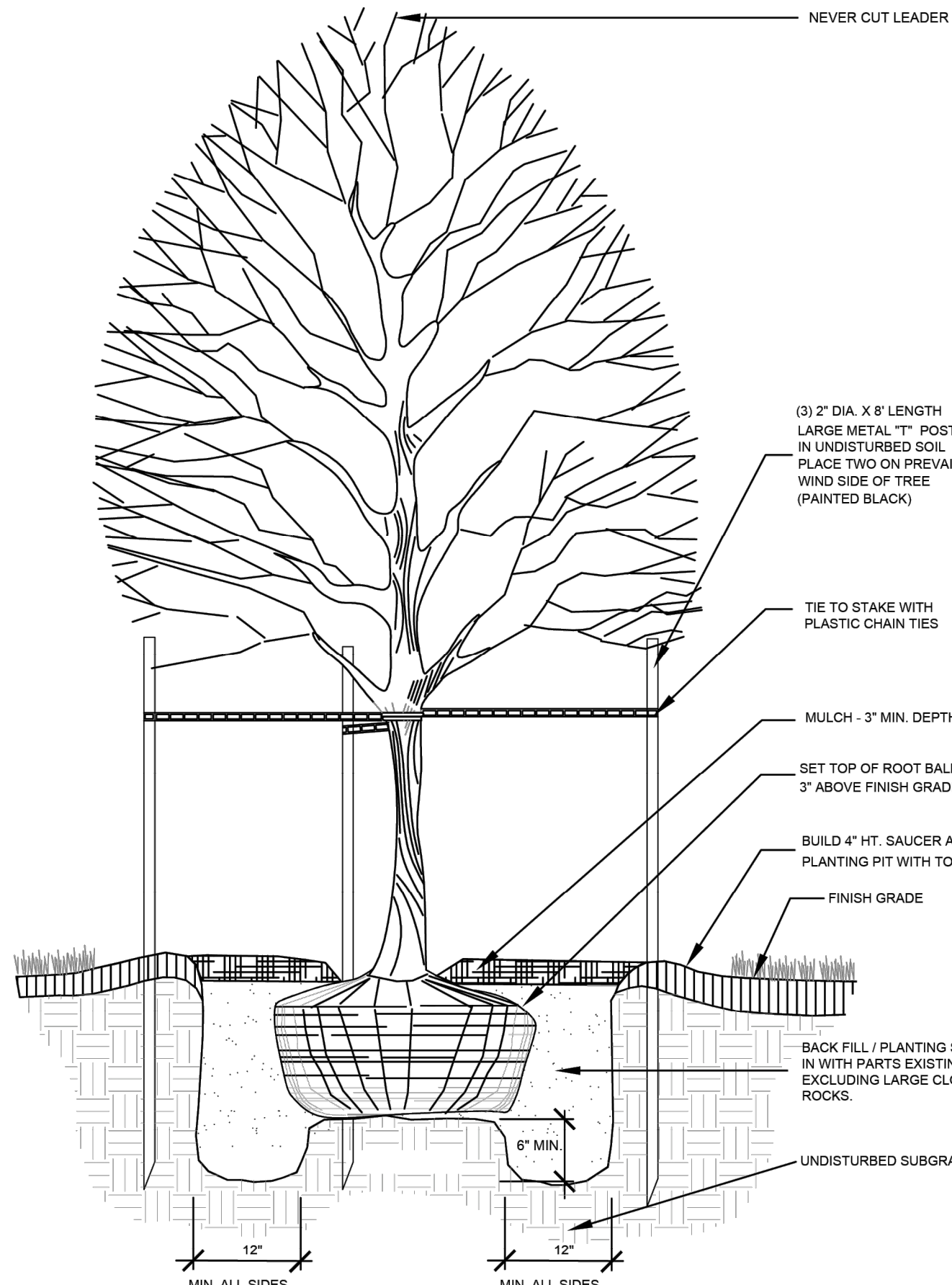
- A. MAINTENANCE OF PLANT MATERIALS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS DELIVERED TO THE SITE AND SHALL CONTINUE UNTIL ALL CONSTRUCTION HAS BEEN SATISFACTORILY ACCOMPLISHED.
- B. PLANT MATERIALS SHALL BE DELIVERED TO THE SITE ONLY AFTER THE BEDS ARE PREPARED AND AREAS ARE READY FOR PLANTING. ALL SHIPMENTS OF NURSERY MATERIALS SHALL BE THOROUGHLY PROTECTED FROM THE WINDS DURING TRANSIT. ALL PLANTS WHICH CANNOT BE PLANTED AT ONCE, AFTER DELIVERY TO THE SITE, SHALL BE WELL PROTECTED AGAINST THE POSSIBILITY OF DRYING BY WIND AND BALLS OF EARTH OF B & B PLANTS SHALL BE KEPT COVERED WITH SOIL OR OTHER ACCEPTABLE MATERIAL. ALL PLANTS REMAIN THE PROPERTY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE.
- C. POSITION THE TREES AND SHRUBS IN THEIR INTENDED LOCATION AS PER PLAN.
- D. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL POSITIONING OF PLANT MATERIALS.
- E. EXCAVATE PITS WITH VERTICAL SIDES AND HORIZONTAL BOTTOM. TREE PITS SHALL BE LARGE ENOUGH TO PERMIT HANDLING AND PLANTING WITHOUT INJURY TO BALLS OF EARTH OR ROOTS AND SHALL BE OF SUCH DEPTH THAT WHEN PLANTED AND SETTLED, THE CROWN OF THE PLANT SHALL BEAR THE SAME RELATIONSHIP TO THE FINISH GRADE AS IT DID TO THE SOIL SURFACE IN ORIGINAL PLACE OF GROWTH. THE SIDES OF THE HOLE SHOULD BE ROUGH AND JAGGED, NEVER SMOOTH OR GLAZED.
- F. SHRUB AND TREE PITS SHALL BE NO LESS THAN TWENTY-FOUR (24") INCHES WIDER THAN THE LATERAL DIMENSION OF THE EARTH BALL AND SIX (6") INCHES DEEPER THAN ITS VERTICAL DIMENSION. REMOVE AND HAUL FROM SITE ALL ROCKS AND STONES OVER THREE-QUARTER (3/4") INCH IN DIAMETER. PLANTS SHOULD BE THOROUGHLY MOIST BEFORE REMOVING CONTAINERS.
- G. PERCOLATION TEST: FILL THE HOLE WITH WATER. IF THE WATER LEVEL DOES NOT PERCOLATE WITHIN 24 HOURS, THE TREE NEEDS TO MOVE TO ANOTHER LOCATION OR HAVE DRAINAGE ADDED. INSTALL A PVC STAND PIPE PER TREE IF THE PERCOLATION TEST FAILS.
- H. BACKFILL ONLY WITH 5 PARTS EXISTING SOIL OR SANDY LOAM AND 1 PART BED PREPARATION. WHEN THE HOLE DIES IN SOLID ROCK, TOPSOIL FROM THE SAME AREA SHOULD NOT BE USED. CAREFULLY SETTLE BY WATERING TO PREVENT AIR POCKETS. REMOVE THE BURLAP FROM THE TOP 1/2 OF THE BALL, AS WELL AS ALL NYLON, PLASTIC STRING AND WIRE. CONTAINER TREES WILL USUALLY BE ROOT BOUND, SO FOLLOW STANDARD NURSERY PRACTICE OF "ROOT SCORING".
- I. DO NOT WRAP TREES.
- J. DO NOT OVER PRUNE.
- K. REMOVE NURSERY TAGS AND STAKES FROM ALL PLANTS.
- L. REMOVE BOTTOM OF PLANT BOXES PRIOR TO PLACING PLANTS. REMOVE

- SIDES AFTER PLACEMENT AND PARTIAL BACKFILLING.
- M. REMOVE UPPER THIRD OF BURLAP FROM BALLED AND BURLAPPED TREES AFTER PLACEMENT.
- N. PLACE PLANT UPRIGHT AND PLUMS IN CENTER OF HOLE. ORIENT PLANTS FOR BEST APPEARANCE.
- O. MULCH THE TOP OF THE BALL. DO NOT PLANT GRASS ALL THE WAY TO THE TRUNK OF THE TREE. LEAVE THE AREA ABOVE THE TOP OF THE BALL AND MULCH WITH AT LEAST TWO (2") INCHES OF SPECIFIED MULCH.
- P. ALL PLANT BEDS AND TREES TO BE MULCHED WITH A MINIMUM SETTLED THICKNESS OF TWO (2") INCHES OVER THE ENTIRE BED OR PIT.
- Q. OBSTRUCTION BELOW GROUND: IN THE EVENT THAT ROCK, OR UNDERGROUND CONSTRUCTION WORK OR OBSTRUCTIONS ARE ENCOUNTERED IN ANY PLANT PIT EXCAVATION WORK TO BE DONE UNDER THIS SECTION, ALTERNATE LOCATIONS MAY BE SELECTED BY THE OWNER. WHERE LOCATIONS CANNOT BE CHANGED, THE OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH OF NOT LESS THAN THREE (3") FEET BELOW GRADE AND NO LESS THAN SIX (6") INCHES BELOW THE BOTTOM OF BALL WHEN PLANT IS PROPERLY SET AT THE REQUIRED GRADE. THE WORK OF THIS SECTION SHALL INCLUDE THE REMOVAL FROM THE SITE OF SUCH ROCK OR UNDERGROUND OBSTRUCTIONS ENCOUNTERED AT THE COST OF THE LANDSCAPE CONTRACTOR.
- R. TREES AND LARGE SHRUBS SHALL BE STAKED AS SITE CONDITIONS REQUIRE. POSITION STAKES TO SECURE TREES AGAINST SEASONAL PREVAILING WINDS.
- S. PRUNING AND MULCHING: PRUNING SHALL BE DIRECTED BY THE LANDSCAPE ARCHITECT AND SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE FOLLOWING FINE PRUNING, CLASS I PRUNING STANDARDS PROVIDED BY THE NATIONAL ARBORIST ASSOCIATION.
1. DEAD WOOD, SUCKERS, BROKEN AND BADLY BRUISED BRANCHES SHALL BE REMOVED. GENERAL TIPPING OF THE BRANCHES IS NOT PERMITTED. DO NOT CUT TERMINAL BRANCHES.
 2. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
 3. IMMEDIATELY AFTER PLANTING OPERATIONS ARE COMPLETED, ALL TREE PITS SHALL BE COVERED WITH A LAYER OF ORGANIC MATERIAL TWO (2") INCHES IN DEPTH. THIS LIMIT OF THE ORGANIC MATERIAL FOR TREES SHALL BE THE DIAMETER OF THE PLANT PIT.
- Q. STEEL EDGE INSTALLATION: EDGE SHALL BE ALIGNED AS INDICATED ON PLANS. STAKE OUT LIMITS OF STEEL CURBING AND OBTAIN OWNERS APPROVAL PRIOR TO INSTALLATION.
1. ALL STEEL CURBING SHALL BE FREE OF KINKS AND ABRUPT BENDS.
 2. TOP OF EDGING SHALL BE 1/2" MAXIMUM HEIGHT ABOVE FINAL FINISHED GRADE.
 3. STAKES ARE TO BE INSTALLED ON THE PLANTING BED SIDE OF THE CURBING, AS OPPOSED TO THE GRASS SIDE.
 4. DO NOT INSTALL STEEL EDGING ALONG SIDEWALKS OR CURBS.
 5. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE EDGING MEETS SIDEWALKS OR CURBS.

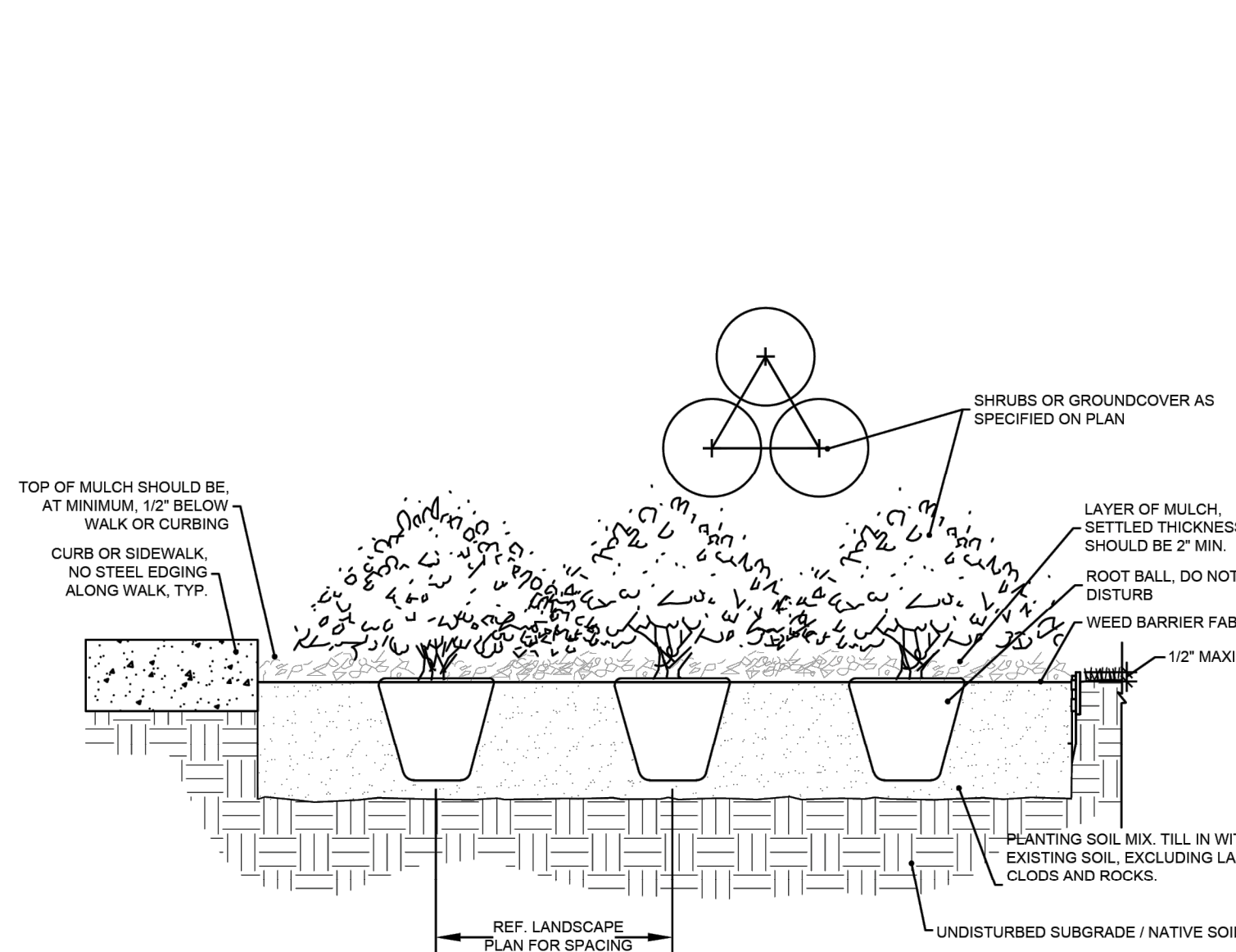
3.3 CLEANUP AND ACCEPTANCE

- A. CLEANUP: DURING THE WORK, THE PREMISES SHALL BE KEPT NEAT AND ORDERLY AT ALL TIMES. STORAGE AREAS FOR ALL MATERIALS SHALL BE SO ORGANIZED SO THAT THEY, TOO, ARE NEAT AND ORDERLY. ALL TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES. KEEP PAVED AREAS CLEAN BY SWEEPING OR HOSING THEM AT END OF EACH WORK DAY.
- B. REPAIR RUTS, HOLES AND SCARES IN GROUND SURFACES.
- C. ENSURE THAT WORK IS COMPLETE AND PLANT MATERIALS ARE IN VIGOROUS AND HEALTHY GROWING CONDITION.
- D. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTANCE.
- E. WHENEVER THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNERS SATISFACTION WITHIN 24 HOURS.
- F. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.

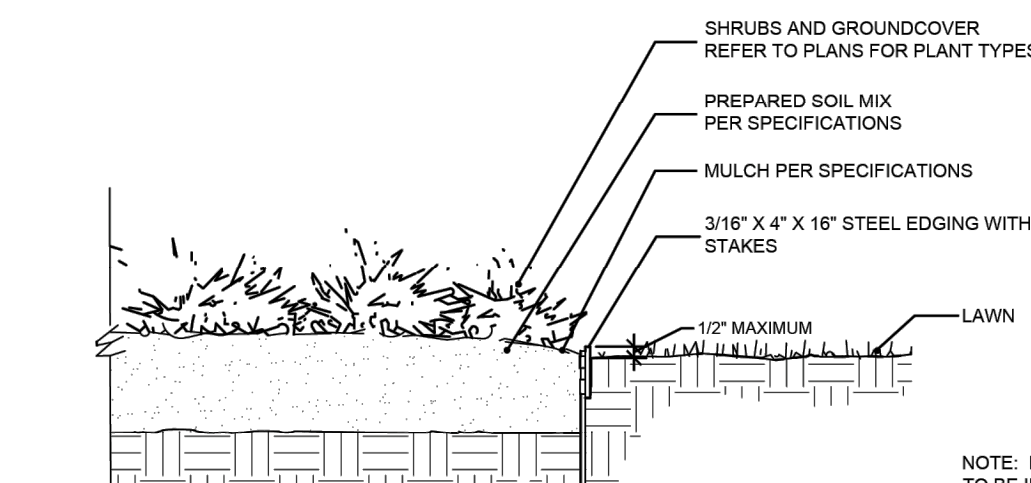
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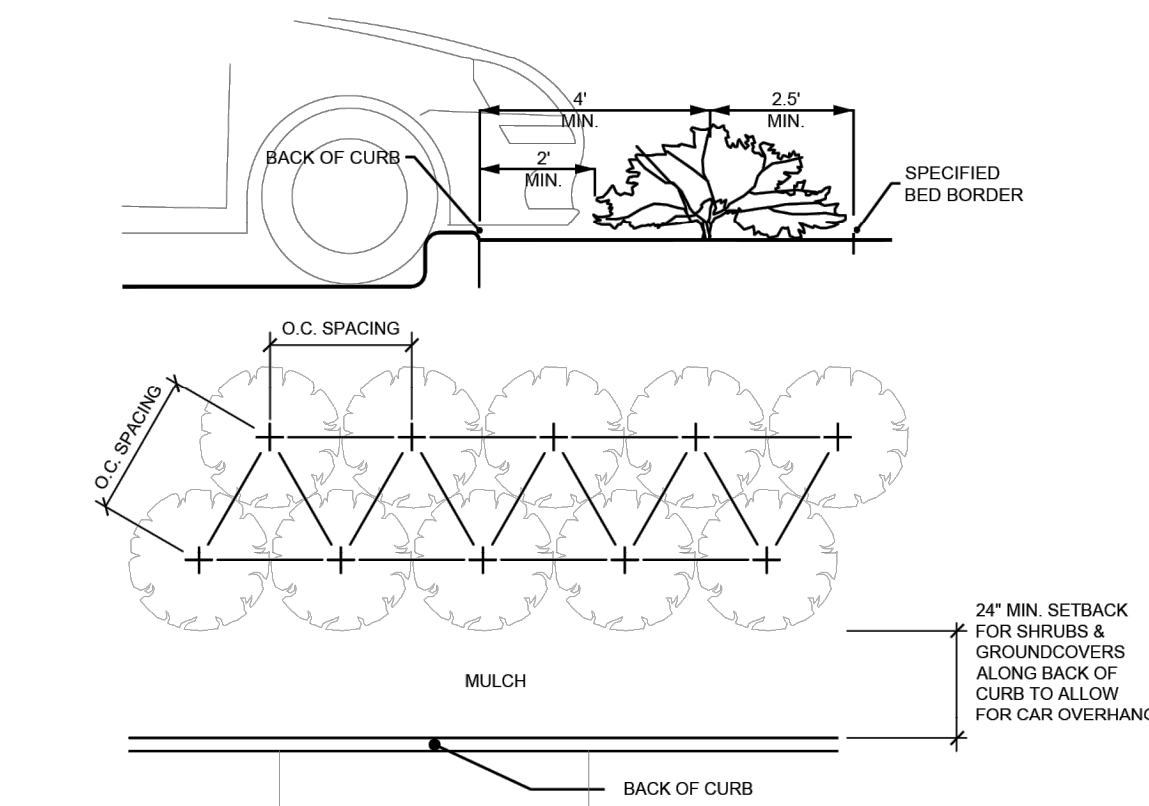
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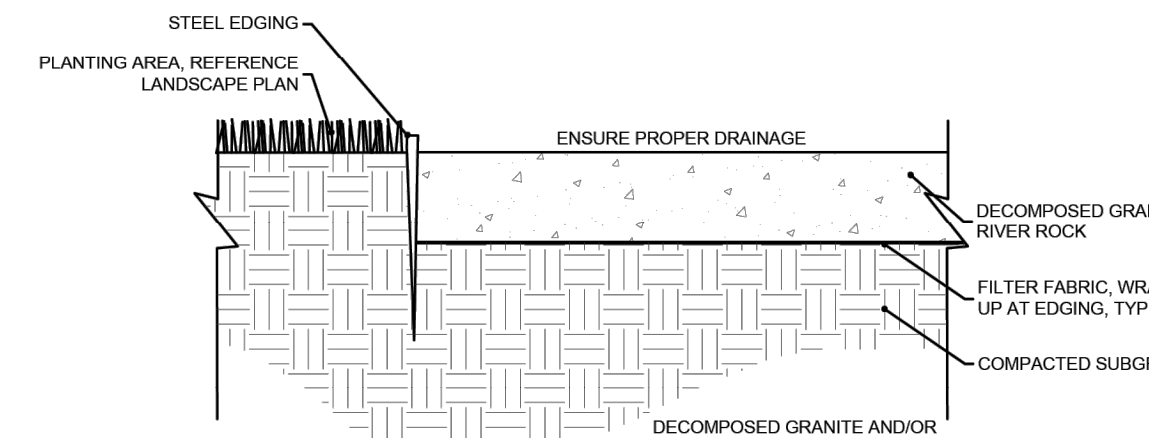
2 SHRUB PLANTING
N.T.S.



4 STEEL EDGING DETAIL
N.T.S.



3 SHRUB SPACING AND PLANTING AT B.O.C.
N.T.S.



5 DECOMPOSED GRANITE / RIVER ROCK
N.T.S.

A W R

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392
LANDSCAPE ARCHITECT

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REVISIONS
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LANDSCAPE
SPECIFICATIONS
AND DETAILS

DATE 12/17/25













L1.02

33



15.0' ONG ESMT
BK 4378 PG 581 (S/E #11)



IRRIGATION LEGEND			
SYMBOL	DESCRIPTION		
	1" IRRIGATION METER		
	HUNTER - PRO-C-12 STATION - PC-1200 WITH RAIN AND FREEZE SENSORS		
	ISOLATION VALVE		
	LATERAL PIPING		REFER TO PLAN
	MAINLINE PIPING		REFER TO PLAN
	SCH. 40 PVC, SIZED AS SHOWN		
	(INSTALL THRUST BLOCKS AND AIR/VACUUM RELIEF VALVES AS NECESSARY TO PROTECT MAINLINE SYSTEM)		
	IRRIGATION SLEEVE, SCH. 40 PVC, MIN. TWICE SIZE OF PIPE TO BE INSERTED, ONE SLEEVE PER PIPE		
	CONTROL WIRING SLEEVE, 2" SCH. 40 PVC		
	VALVE STATION # (WHERE D = DRIP TUBING, S = SPRAY, R = ROTOR, T = TREE DRIP)		
	VALVE SIZE		
	GPM		

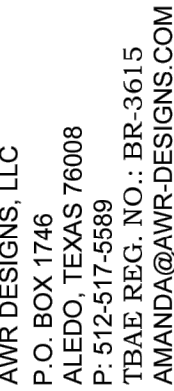
1. PIPING AND CONTROL WIRES SHALL BE INSTALLED IN SEPARATE SLEEVES UNDER PAVING. REFERENCE DRAWINGS FOR SLEEVE SIZE AND LOCATION.
2. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
3. INSTALLATION OF SLEEVES SHALL BE TWENTY-FOUR (24") BELOW TOP OF PAVEMENT OR FINISHED GRADE.
4. SLEEVES SHALL EXTEND ONE (1') FOOT BEYOND EDGE OF ALL PAVEMENT AND STAKED FOR LOCATION.
5. ALL SLEEVES SHALL BE SCHEDULE 40 PVC PIPE, CAPPED ON BOTH ENDS AND SIZED AT LEAST TWO TIMES LARGER THAN THE DIAMETER OF THE PIPE INSIDE THE SLEEVE.
6. SLEEVE LOCATIONS SHALL BE MARKED ONTO THE CURB WITH A SAWCUT OF TWO PARALLEL LINES THAT ARE TWO (2") INCHES LONG AND ONE (1") APART.
7. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF SLEEVES AND SHALL BE ALSO RESPONSIBLE FOR LOCATING ANY SLEEVE THAT CANNOT BE FOUND DURING THE INSTALLATION OF THE SYSTEM.
8. CONTRACTOR SHALL FURNISH OWNER AND IRRIGATION CONTRACTOR WITH AN AS-BUILT DRAWING SHOWING ALL SLEEVE LOCATIONS.

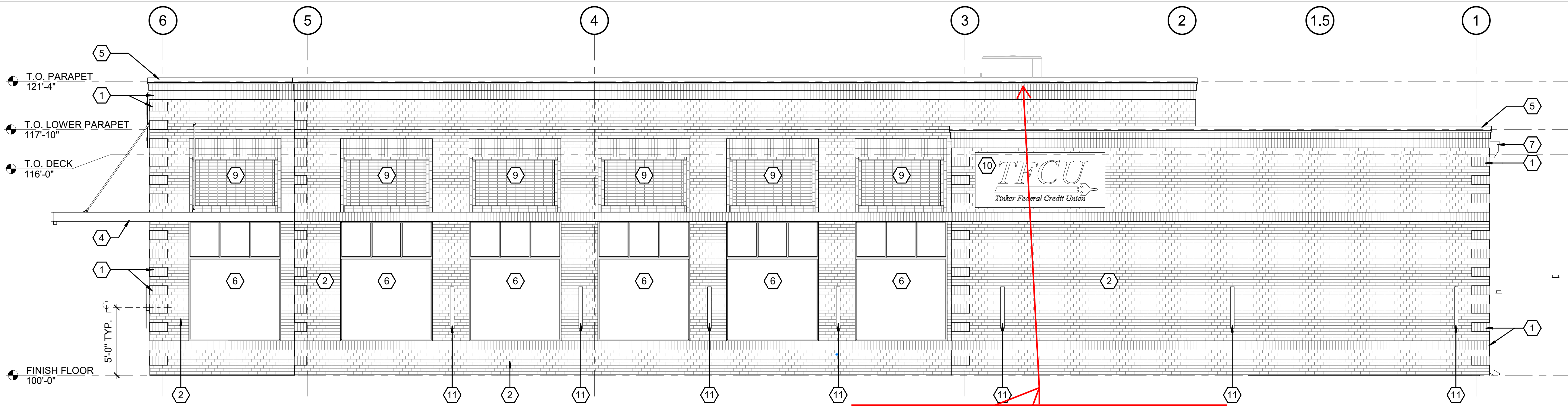
1. THE IRRIGATION CONTRACTOR SHALL COORDINATE INSTALLATION OF THE IRRIGATION SYSTEM WITH THE LANDSCAPE CONTRACTOR SO THAT ALL PLANT MATERIAL SHALL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE IRRIGATION DESIGNER OF SITE CONDITIONS OR ASSUME FULL RESPONSIBILITY FOR ANY AND ALL ON SITE REVISIONS NECESSARY.
3. CONTRACTOR TO VERIFY DESIGN AND ITS INTENT TO PROVIDE FULL COVERAGE TO ALL NEW PLANTING MATERIAL.
4. NOTIFY IRRIGATION DESIGNER OF ANY LAYOUT DISCREPANCIES PRIOR TO BIDDING.
5. LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE IRRIGATION INSTALLATION BEGINS.
6. IRRIGATION CONTRACTOR TO PROCURE ALL PERMITS, LICENSES AND GET ALL NECESSARY NOTICES THROUGHOUT THE DURATION OF THE PROJECT.
7. THE CONTRACTOR SHALL BE IN GOOD STANDING WITH BOARDS AND REGULATORS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PLANT MATERIAL LOSS OR DAMAGE DURING THE WARRANTY PERIOD FOR DAMAGE DUE TO IRRIGATION SYSTEM FAILURE.
9. ALL ASPECTS OF THE IRRIGATION INSTALLATION SHALL CONFORM WITH THE PROPER GOVERNING AUTHORITIES, CODES AND ORDINANCES.
10. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR. SLEEVE MATERIAL SHALL BE SCHEDULE 40, SIZE AS INDICATED ON PLAN. REFER TO SLEEVING NOTES.
11. ALL MAIN LINE AND LATERAL LINE PIPING IN PLANTING AND LAWN AREAS SHALL HAVE A MINIMUM OF 12 INCHES OF COVER. ALL PIPING UNDER PARKING LOT AREAS SHALL HAVE A MINIMUM OF 18 INCHES OF COVER. CONTRACTOR TO VERIFY LOCAL FREEZE DEPTHS AND ADJUST DEPTH OF COVER ACCORDINGLY.
12. ZONE VALVES SHALL NOT BE LOCATED WITHIN THREE (3) FEET OF ANY DRIVEWAY, TRAFFIC AISLE, ISLAND ETC. WHERE THEY WILL BE DAMAGED BY VEHICLES DRIVING OVER CURBS.
13. ALL NOZZLES IN PARKING LOT ISLANDS AND PLANTING BEDS SHALL BE LOW ANGLE NOZZLES TO MINIMIZE OVER SPRAY ON PAVEMENT SURFACES.
14. AUTOMATIC CONTROLLER SHALL BE INSTALLED AT LOCATION SHOWN. POWER (120V) SHALL BE LOCATED IN A JUNCTION BOX WITHIN FIVE (5) FEET OF CONTROLLER. LOCATION BY OTHER TRADES. RAIN AND FREEZE SENSORS SHALL BE INSTALLED WITH EACH CONTROLLER.
15. ELECTRICAL SPICES SHOULD BE LOCATED AT EACH VALVE AND CONTROLLER ONLY.
16. PROVIDE A 3/4" BLOW DOWN DRAIN TEE TO ALLOW WATER TO BE BLOWN FROM THE IRRIGATION LINE/SYSTEM.
17. DISTURBED AREAS IN NEED OF TURF ESTABLISHMENT MAY EXIST BEYOND COVERAGE LIMITS OF THE PERMANENT IRRIGATION SYSTEM. THESE AREAS, CONTRACTOR TO DETERMINE A TEMPORARY MEANS TO ESTABLISH PERMANENT COVER, COMPLYING WITH ENCOURAGED TO SEED TURF ESTABLISHMENT IMMEDIATELY UPON FINAL GRADE IN ACCORDANCE WITH AND TO SATISFY SWPPP.
18. PROVIDE WITH OWNER A COPY OF ALL INSTALLED EQUIPMENT AND LINES (AS BUILT PLANS).
19. PLACE COPY OF ZONE MAP WITH ALL ZONE VALVE LOCATION SHOWN AND APPROVED IRRIGATION PLAN IN PROTECTIVE JACKET IN MAIN CONTROL PANEL.

[illegible]

**TINKER FEDERAL CREDIT UNION
BROKEN ARROW**

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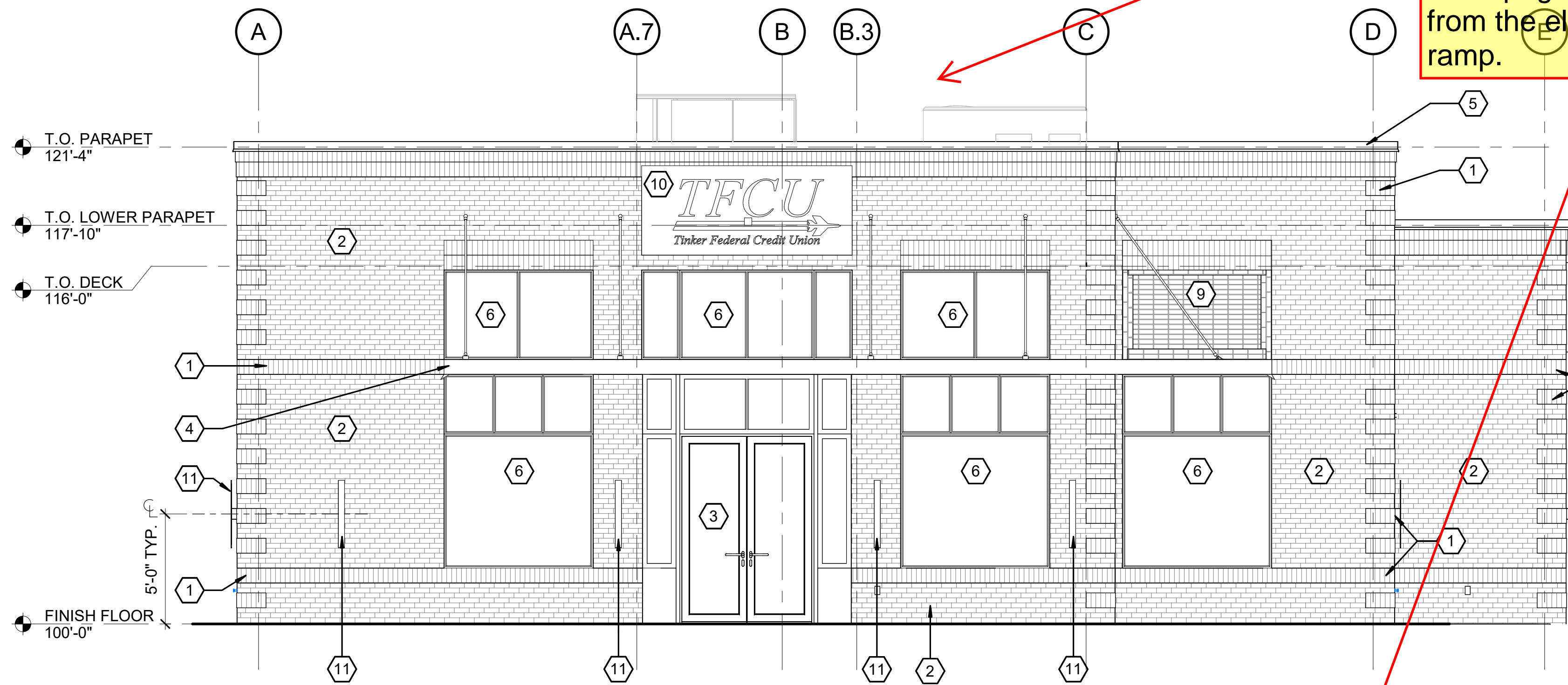




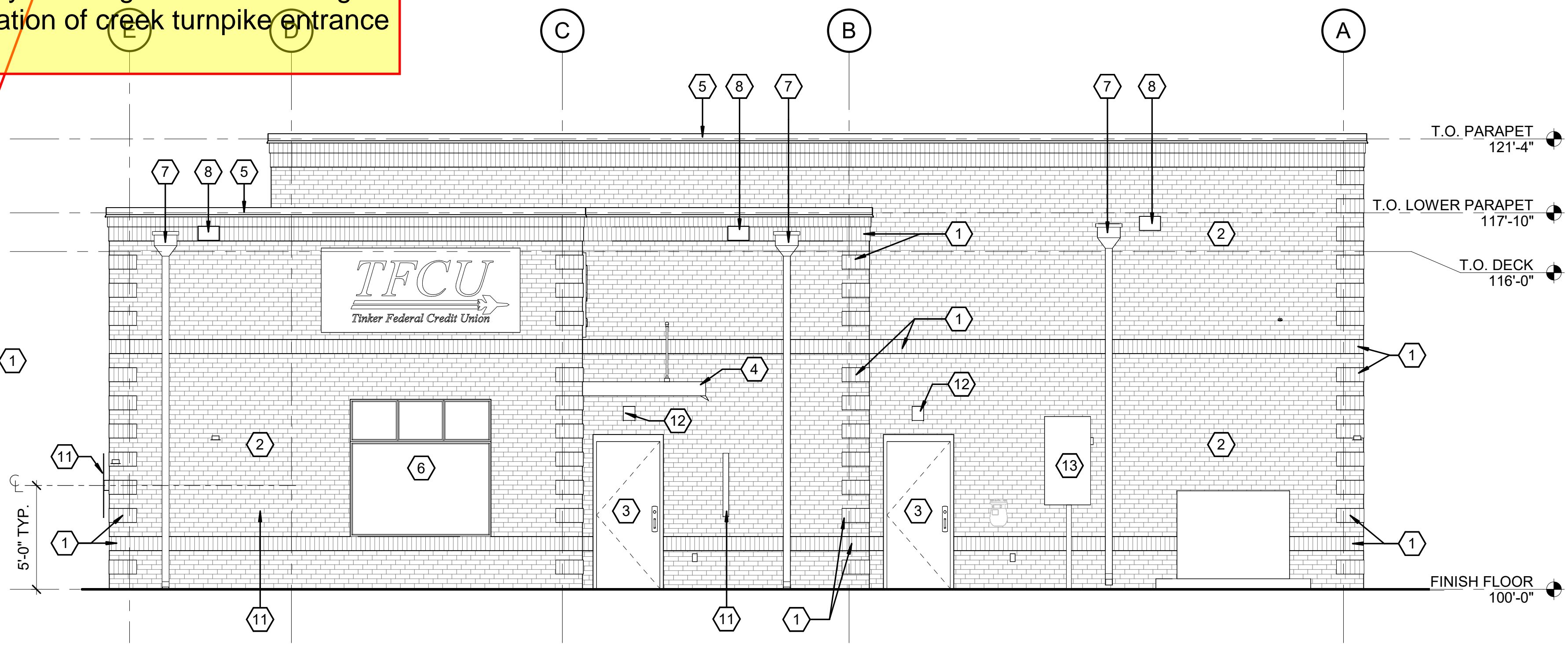
1 NORTH ELEVATION
A-201 SCALE: 1/4" = 1'-0"

P02: HVAC screening required. Screening must match height of HVAC/mechanical units.
Screening may come up during BOA meeting for orientation. I understand there are topography challenges with screening from the elevation of creek turnpike entrance ramp.

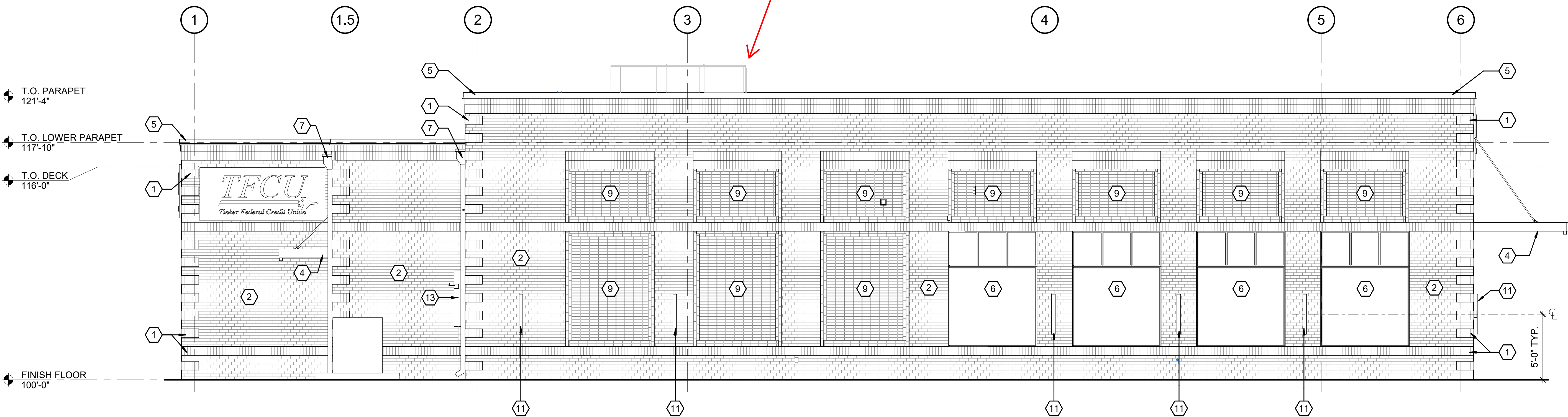
#	KEYNOTES
1	BRICK - SOLDIER COURSE. RE: 1/A-312 FOR COURSING DIMENSIONS.
2	BRICK - RUNNING BOND COURSE, TYP.
3	DOOR, RE: A-601
4	PREFABRICATED ALUM CANOPY WITH SOFFIT. RE: ELEC. FOR LIGHT. DO NOT EXPOSE LIGHT FIXTURE CONDUIT OR BREAK FIXTURE SEAL. CANOPY TO BE EXTRA DARK BRONZE COLOR & CANOPY FASCIA TO BE CUSTOM COLOR PT-3 PER EXTERIOR COLOR LEGEND. RE: A-201.
5	PREFINISH METAL PARAPET CAP.
6	ALUM. WINDOW WITH INSULATED GLAZING. RE: A-601
7	SCUPPER (OPENING 12" W X 8" H). COLLECTOR BOX, AND DOWNSPOUT (6" W X 6" D). PROVIDE CONC. SPLASH BLOCK AT GRADE. RE: A-541
8	ROOF DRAIN & THROUGH WALL OVERFLOW ROOF SCUPPER (12" W X 8" H). ROOF TO HAVE A POSITIVE 1/4" PER 1'-0" SLOPE TOWARD ROOF DRAINS. RE: A-541
9	BRICK DETAIL. RE: 8/A-551
10	BUILDING SIGNAGE TO BE SUPPLIED AND INSTALLED BY OWNER.
11	EXTERIOR LIGHTING. RE: ELEC.
12	WALL PACK. RE: ELEC.
13	ELECTRICAL PANEL. RE: ELEC.



2 EAST ELEVATION
A-201 SCALE: 1/4" = 1'-0"

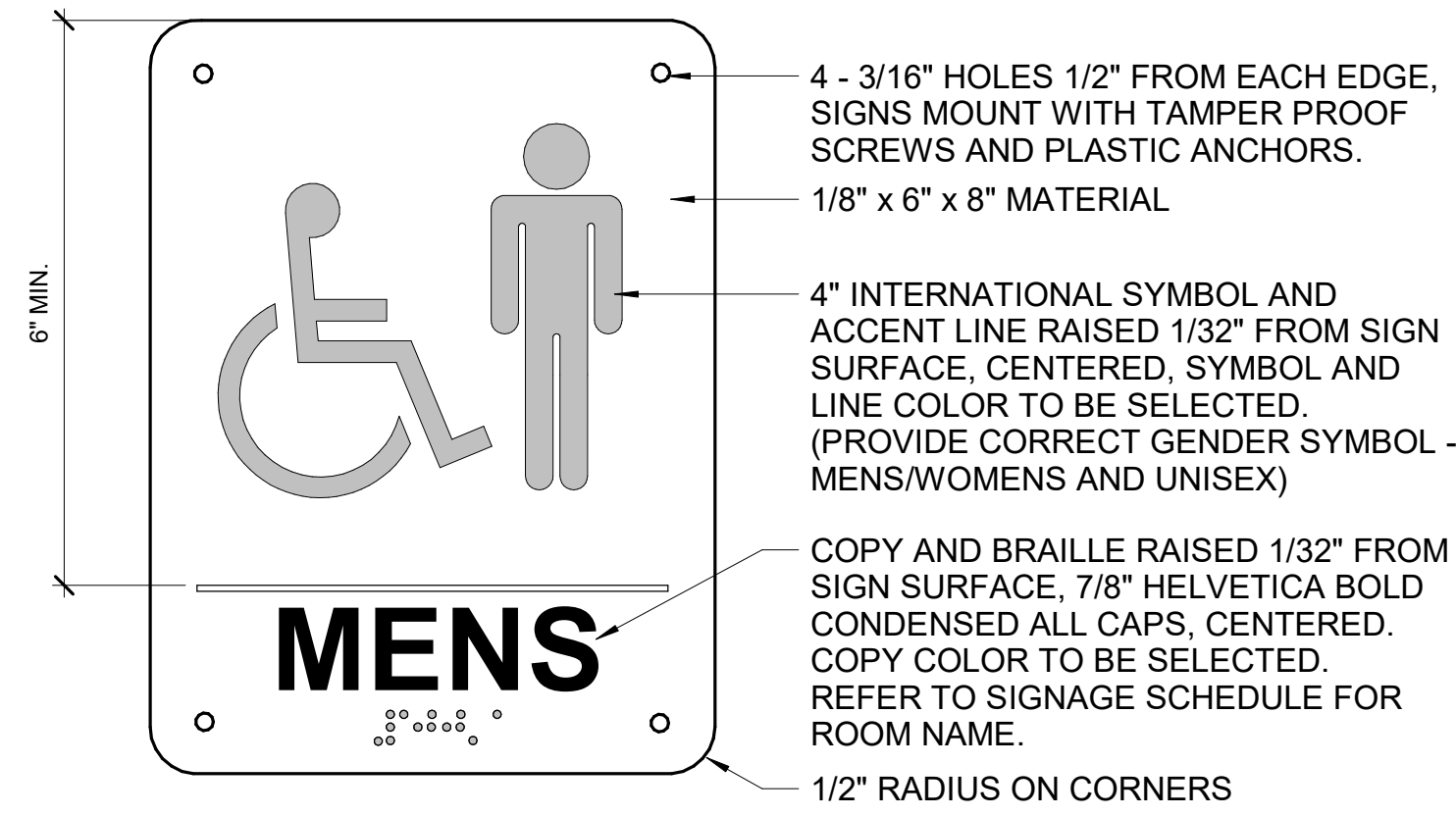


3 WEST ELEVATION
A-201 SCALE: 1/4" = 1'-0"

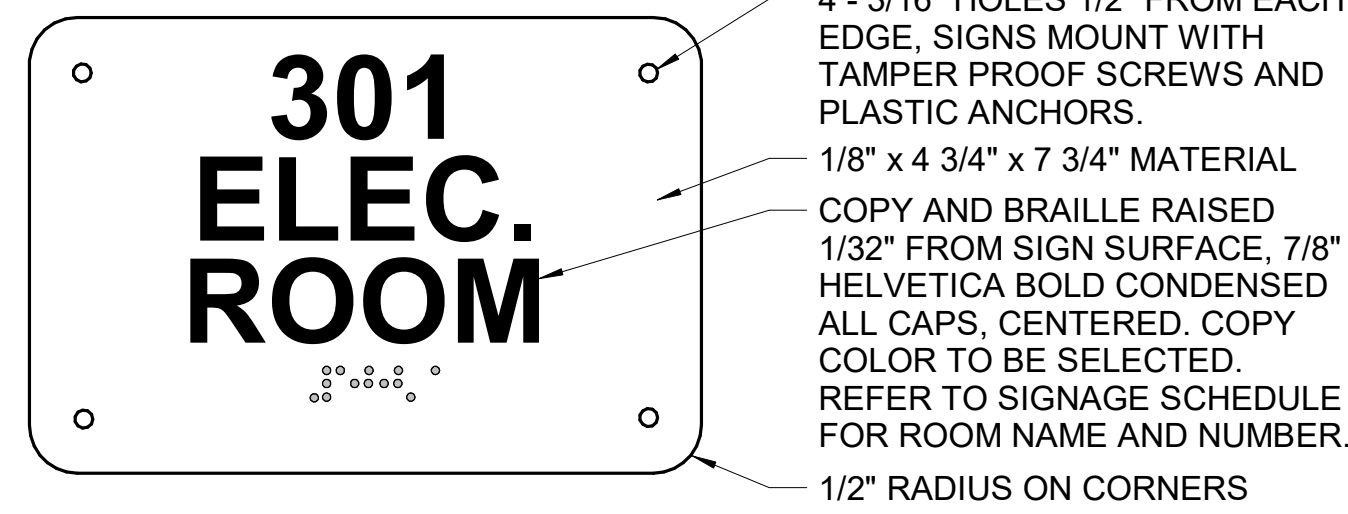


4 SOUTH ELEVATION
A-201 SCALE: 1/4" = 1'-0"

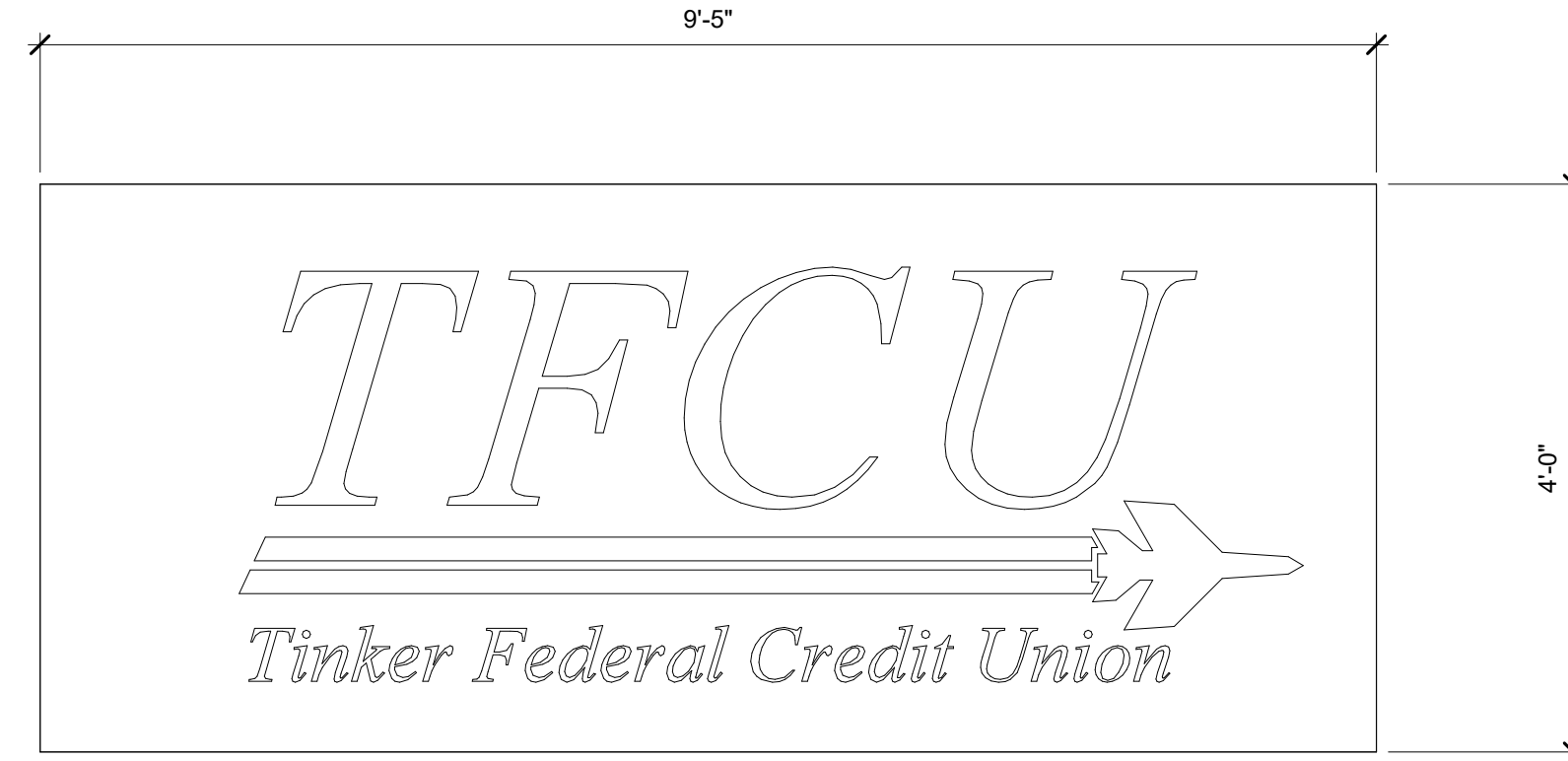
EXTERIOR COLOR LEGEND
PAINT
P2 - SHERWIN WILLIAMS SW 6991 BLACK MAGIC - HM DOORS AND FRAMES
P3 - SHERWIN WILLIAMS CUSTOM COLOR PANTONE 295C - CANOPY
P4 - LONOX SELF-CLEANING ACRYLIC COATING - FLAT LX13-50 SERIES - BACK OF DUMPSTER WALL, COLOR BY OWNER
BRICK
BRK1 - MODULAR FULL BRICK - ACME ACME SUMMIT TUMBLED OLD STANFORD
CAST STONE
CS1 - COLOR BUFF
DOWNSPOUTS
DS - BERRIDGE MATTE BLACK
METAL FLASHING
MCF - BERRIDGE MATTE BLACK
METAL SOFFIT PANEL
MSP - BERRIDGE THIN LINE PANEL MATTE BLACK - ITM
ALUMINUM FRAMES
AF - ARCHITECTURAL METALS - D113-2S CLASS 1 DARK BRONZE



SIGN TYPE 1 - PANEL SIGN
REFER TO SIGNAGE SCHEDULE FOR SIGN LOCATION



SIGN TYPE 2 - PANEL SIGN
REFER TO SIGNAGE SCHEDULE FOR SIGN LOCATION

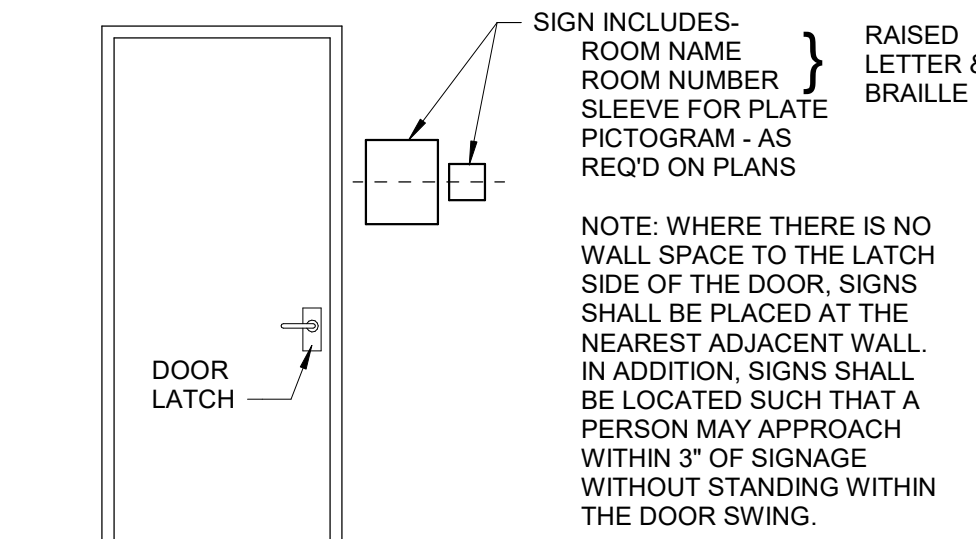


EXTERIOR BUILDING SIGNAGE
TO BE SUPPLIED AND INSTALLED
BY OWNER COORDINATE WITH
ELECTRICAL DRAWINGS.

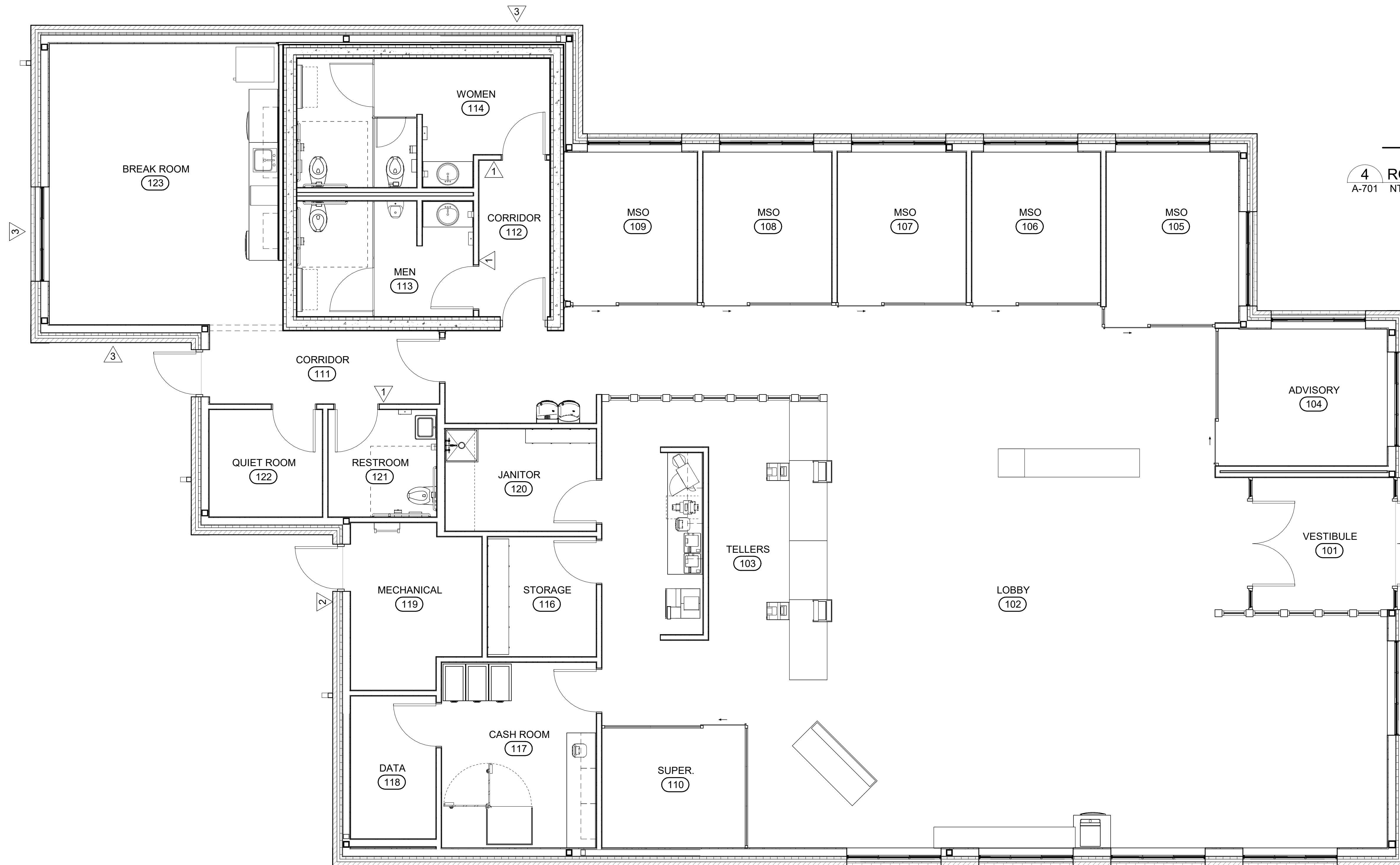
SIGNAGE LEGEND	
	SIGNAGE TYPE AND LOCATION
GENERAL NOTES	
1. LETTERS AND NUMERALS SHALL HAVE A WIDTH TO HEIGHT RATIO OF 3:5 AND A STROKE WIDTH TO HEIGHT RATIO BETWEEN 1:5 AND 1:10.	
2. LETTERS AND NUMERALS SHALL BE RAISED 1/32" AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE.	
3. RAISED CHARACTERS SHALL BE 5/8" U.N.O.	
4. PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION.	
5. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6" MINIMUM IN HEIGHT.	

SIGNAGE SCHEDULE								
DOOR NO.	CONSTRUCTION ROOM NO.	CONSTRUCTION ROOM NAME	SIGN TYPE	ROOM NO. ON SIGN	ROOM TEXT ON SIGN	QTY	NOTE	
---	---	EXTERIOR	3	-	TFCU LOGO	1	1, 7	
---	---	EXTERIOR	3	-	TFCU LOGO	1	1, 7	
---	---	EXTERIOR	3	-	TFCU LOGO	1	1, 7	
---	---	EXTERIOR	3	-	TFCU LOGO	1	1, 7	
113	112	CORRIDOR	1	-	MEN	1	1, 2, 5	
114	112	CORRIDOR	1	-	WOMEN	1	1, 3, 5	
119	119	MECH.	2	-	RISER	1	1, 6	
121	111	CORRIDOR	1	-	EMPLOYEE RESTROOM	1	1, 4, 5	

- NOTES:
1. ACTUAL ROOM NUMBERS AND TEXT FOR ALL SIGN TYPES SHALL BE COORDINATED WITH OWNER DURING THE SUBMITTAL PROCESS.
 2. SIGN TYPE SHOULD INCLUDE MALE, HANDICAP SYMBOL, AND TEXT AS INDICATED.
 3. SIGN TYPE SHOULD INCLUDE FEMALE, HANDICAP SYMBOL, AND TEXT AS INDICATED.
 4. SIGN TYPE SHOULD INCLUDE UNISEX (MALE/FEMALE), HANDICAP SYMBOL, AND TEXT AS INDICATED.
 5. ROOM SIGNAGE INTERIOR SHALL BE CAST ACRYLIC.
 6. ROOM SIGNAGE EXTERIOR SHALL BE WEATHER RESISTANT PLASTIC, SUBMIT SAMPLES TO ARCHITECT FOR APPROVAL.
 7. REFER TO EXTERIOR ELEVATIONS FOR EXTERIOR SIGNAGE LOCATION



4 ROOM SIGN MOUNTING DETAILS
A-701 NTS



3 SIGNAGE PLAN
A-701 SCALE: 1/4" = 1'-0"

SEAL:

PRELIMINARY
NOT FOR CONSTRUCTION

**TINKER FEDERAL CREDIT UNION
BROKEN ARROW**

5009 S. ASPEN AVE. BROKEN ARROW, OK 74011

REVISIONS
LABEL: DATE:

SHEET TITLE

SIGNAGE
SCHEDULE &
TYPES

DATE: 06/30/25

SHEET NUMBER

A-701

ELECTRICAL ABBREVIATIONS					
A	DEVICE MOUNTED +8" ABOVE COUNTER TOP (VERIFY LOCATION)	NIC	NOT IN CONTRACT		
AFF	ABOVE FINISHED FLOOR	NM	NONMETALLIC		
AFG	ABOVE FINISHED GRADE	NTS	NOT TO SCALE		
ATS	AUTOMATIC TRANSFER SWITCH	OC	ON CENTER		
C	CEILING	OFCI	OWNER FURNISHED		
CB	CIRCUIT BREAKER	OFOI	OWNER FURNISHED, OWNER INSTALLED		
CT	CURRENT TRANSFORMER	R	EXISTING ITEM TO BE REMOVED		
E	EXISTING ITEM TO REMAIN	RR	EXISTING ITEM TO BE REMOVED AND RELOCATED		
EC	ELECTRICAL CONTRACTOR	RN	EXISTING ITEM TO BE REMOVED AND REPLACED WITH NEW		
EM	EMERGENCY LIGHT FIXTURE	SCOR	SHORT CIRCUIT CURRENT RATING		
ER	NEW LOCATION OF EXISTING ITEM	T	TAMPER PROOF DEVICE		
F	ROUGH IN FOR FUTURE DEVICE	TCC	TEMPERATURE CONTROL CONTRACTOR		
FAAP	FIRE ALARM ANNUNCIATOR PANEL	TV	TELEVISION		
FACP	FIRE ALARM CONTROL PANEL	TYP	TYPICAL		
FSD	FIRE SMOKE DAMPER	UMO	UNLESS NOTED OTHERWISE		
G	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY		
GND	GROUND	V	VOLTS		
KVA	KILO-VOLT-AMPERES	VA	VOLT-AMPERES		
KW	KILOWATTS	WG	WIREGUARD COVER		
MC	MECHANICAL CONTRACTOR	WP	WEATHERPROOF DEVICE		
MCB	MAIN CIRCUIT BREAKER	WR	WEATHER RESISTANT DEVICE		
MDP	MAIN DISTRIBUTION PANEL		INDICATES MOUNTING HEIGHT CENTER LINE OF DEVICE TO FINISHED FLOOR		
MLO	MAIN LUGS ONLY				
N	NEW DEVICE IN EXISTING LOCATION				

GENERAL NOTES - ELECTRICAL

- COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. BEGIN INSTALLATION AND ROUGH-IN ONLY AFTER PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION IS COMPLETE. COORDINATE WITH BUILDING STRUCTURE, ARCHITECTURE, MECHANICAL, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, EQUIPMENT ACCESS/CLEARANCE, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR REWORK OF INSTALLED EQUIPMENT RESULTING FROM INSUFFICIENT COORDINATION.
- ELECTRICAL DRAWINGS ARE ONLY A PORTION OF THE COMPLETE SET OF PLANS AND CONTRACT DOCUMENTS. THE ELECTRICAL SCOPE OF WORK IS DEFINED BY THE COMPLETE SET OF CONTRACT DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO REFERENCING; ARCHITECTURAL PLANS FOR DIMENSIONS AND DETAILS; EQUIPMENT PLANS FOR ROUGH-IN REQUIREMENTS; MECHANICAL PLANS FOR EQUIPMENT SIZES AND LOCATIONS.

INSTALLATION NOTES - ELECTRICAL

- INCREASE CONDUCTOR SIZES ON 20A 120V-1 PHASE CIRCUITS EXCEEDING 100 FEET TO CENTER OF LOAD TO ACCOUNT FOR VOLTAGE DROP.
- RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE GENERAL AND APPROXIMATE LOCATIONS. LAYOUTS DO NOT ALWAYS SHOW THE TOTAL NUMBER OF RACEWAYS OR BOXES FOR THE CIRCUITS REQUIRED, NOR ARE THE LOCATIONS OF INDICATED RUNS INTENDED TO SHOW THE ACTUAL ROUTING OF THE RACEWAYS.
- LIGHT FIXTURES, SWITCHES, DEVICES, ETC. ARE SHOWN IN PREFERRED LOCATION. MODIFY CONDUIT, HANGERS, CIRCUITING, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- PROVIDE A DEDICATED GREEN INSULATED GROUND CONDUCTOR TO ALL DEVICES. DO NOT USE CONDUIT SYSTEM AS THE ONLY EQUIPMENT GROUNDING METHOD.
- DO NOT INSTALL BOXES BACK-TO-BACK ON OPPOSITE SIDES OF THE SAME WALL. MAINTAIN MINIMUM OF 8" DISTANCE BETWEEN BOXES WHEREVER APPLICABLE.
- BALANCE PANEL LOADS DURING INSTALLATION. CIRCUIT NUMBERING SHOWN ON PLANS MAY BE ADJUSTED TO ACCOMMODATE.
- PROVIDE TYPED PANEL DIRECTORY AT PROJECT COMPLETION FOR NEW PANELS AND EXISTING PANELS WITH CIRCUITS MODIFIED DURING PROJECT. USE OWNER'S CURRENT ROOM NUMBERS AND EQUIPMENT NAMES. PROVIDE UNIQUE CIRCUIT IDENTIFICATION PER NEC 408.4(A)
- CONTRACTOR IS RESPONSIBLE FOR OPENINGS IN WALLS, FLOORS, CEILINGS, AND ROOFS THAT ARE REQUIRED TO COMPLETE THEIR SCOPE OF WORK. SEAL PENETRATIONS IN ACCORDANCE WITH THE RATING OF THE AFFECTED ASSEMBLY. REFER TO ARCHITECTURAL CODE PLAN FOR RATED WALLS, FLOORS, AND CEILINGS.

CODE NOTES - ELECTRICAL

- PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES.
- THE CURRENT ADOPTED EDITION OF THE ELECTRICAL CODE IS THE STANDARD FOR THE ELECTRICAL INSTALLATION. VERIFY WITH LOCAL OFFICIALS WHEN PERMITS ARE OBTAINED. NOTIFY DESIGN TEAM OF ANY DISCREPANCIES BETWEEN THE PROJECT MANUAL OR DRAWINGS AND THE GOVERNING CODE.
- INSTALLATION SHALL FOLLOW REQUIREMENTS OF THE ADA -AMERICANS WITH DISABILITIES ACT.
- REFER TO PROJECT MANUAL AND PROJECT CODE REVIEW SHEET FOR LIST OF APPLICABLE CODES.
- PER NEC EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT AND SPECIFIC PURPOSE OR USE. CONTRACTOR TO PROVIDE FINAL CIRCUIT IDENTIFICATION FOR ALL NEW AND MODIFIED CIRCUITS AT PROJECT COMPLETION.

DEVICE INSTALLATION AND MATERIALS - ELECTRICAL

- PROVIDE NORMAL WIRING DEVICES AS WHITE UNLESS OTHERWISE NOTED.
- PROVIDE DEVICES COVER PLATES AS STAINLESS STEEL. USE 'JUMBO' SIZE AT ALL MASONRY CONDITIONS.
- PROVIDE GFCI TYPE RECEPTACLES AT ALL LOCATIONS REQUIRED BY THE NEC.
- INSTALL WALL MOUNTED RECEPTACLES AT +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
- INSTALL WALL MOUNTED LIGHT SWITCHES AT +48" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. EXCEPTION: INSTALL DEVICES ABOVE AN OBSTRUCTED HIGH FORWARD REACH OBSTACLE GREATER THEN 20 INCHES IN DEPTH AT +42"
- INSTALL ABOVE COUNTERTOP RECEPTACLES +4" ABOVE COUNTERTOP BACKSPASH OR AS OTHERWISE INDICATED.
- AT A COMMON COUNTERTOP, INSTALL ALL RECEPTACLES AND SWITCHES AT THE SAME HEIGHT UNLESS OTHERWISE SPECIFICALLY INDICATED.

LIGHTING SYMBOLS

	RECESSED LIGHT FIXTURE, LETTER INDICATES SWITCH LEG (TYPICAL), SHADING INDICATES EMERGENCY LIGHT (TYPICAL)
	ROUND LIGHT FIXTURE - SURFACE MOUNTED
	SQUARE LIGHT FIXTURE - SURFACE MOUNTED
	PENDANT MOUNTED LIGHT FIXTURE
	ROUND APERTURE RECESSED DOWNLIGHT FIXTURE, ARROW INDICATES WALLWASH
	SQUARE APERTURE RECESSED DOWNLIGHT FIXTURE, ARROW INDICATES WALLWASH
	SURFACE MOUNTED STRIP FIXTURE
	LINEAR PENDANT MOUNTED FIXTURE
	INDUSTRIAL STRIP LIGHT FIXTURE
	WALL MOUNTED STRIP LIGHT FIXTURE.
	COVE LIGHT FIXTURE
	CONTINUOUS WALL MOUNTED FIXTURE.
	TRACK LIGHTING, ELEVATION AS NOTED.
	EMERGENCY LIGHT FIXTURE, WALL MOUNT, +96" OR AS NOTED
	EMERGENCY LIGHT FIXTURE, CEILING MOUNT
	EXIT SIGN, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	EXIT SIGN, CEILING MOUNT, SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	COMBINATION EXIT SIGN & EMERGENCY LIGHT, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	COMBINATION EXIT SIGN & EMERGENCY LIGHT, CEILING MOUNT, SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
	EXTERIOR LIGHT FIXTURE, WALL MOUNT +10', OR AS NOTED
	INTERIOR LIGHT FIXTURE, WALL MOUNT
	EXTERIOR POLE MOUNTED LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
	BOLLARD LIGHT FIXTURE
	EXTERIOR FLOOD LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
	EMERGENCY REMOTE HEAD LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
	CEILING FAN
	SINGLE POLE SWITCH, WALL MOUNT, LETTER INDICATES SWITCH LEG
	THREE WAY SWITCH, WALL MOUNT, LETTER INDICATES SWITCH LEG
	PILOT LIGHT SWITCH, WALL MOUNT, LETTER INDICATES SWITCH LEG
	DIMMER SWITCH, WALL MOUNT, LETTER INDICATES SWITCH LEG
	LIGHTING CONTROLS LOW VOLTAGE SWITCH, WALL MOUNT, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	OCCUPANCY SENSOR, WALL MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	OCCUPANCY SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	DAYLIGHTING SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
	LIGHTING CONNECTION, REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE DESCRIPTION
	EMERGENCY TRANSFER DEVICE
	LIGHTING CONTRACTOR
	RELAY
	PHOTOCELL
	ROOM/ZONE CONTROLLER, MOUNT ABOVE ACCESSIBLE CEILING

GENERAL SYMBOLS

	CONDUIT SLEEVE
	CONDUIT UP, REFER TO TAG ON DRAWING FOR SIZE
	CONDUIT DOWN, REFER TO TAG ON DRAWING FOR SIZE
	JUNCTION BOX, CEILING OR FLOOR MOUNTED.
	JUNCTION BOX, WALL MOUNTED, ELEVATION AS NOTED.
	CIRCUIT HOMERUN, CONCEALED CONDUIT OR CABLE
	CIRCUIT HOMERUN, UNDER FLOOR CONDUIT OR CABLE
	KITCHEN EQUIPMENT TAG NUMBER, REFER TO KITCHEN EQUIPMENT CONNECTION SCHEDULE
	KEYNOTE
	EQUIPMENT IDENTIFICATION TAG. REFER TO EQUIPMENT CONNECTION SCHEDULE
	DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
	SECTION CUT REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
	INTERIOR ELEVATION DRAWING REFERENCE TAG
	DRAWINGS REVISION, REFER TO TITLEBLOCK FOR REVISION NAME AND DATE

FIRE DETECTION AND ALARM SYMBOLS

	MANUAL FIRE ALARM PULL STATION
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM CONTROL PANEL + EMERGENCY COMMUNICATIONS PANEL
	CARBON MONOXIDE DETECTOR
	COMBINATION CARBON MONOXIDE / SMOKE DETECTOR
	HEAT DETECTOR
	SMOKE DETECTOR
	SMOKE DETECTOR WITH 520Hz SOUNDER BASE
	DUCT SMOKE DETECTOR
	HORN
	COMBINATION HORN WITH STROBE
	COMBINATION SPEAKER WITH STROBE
	STROBE
	SPEAKER
	FIRE FIGHTER TELEPHONE STATION
	MAGNETIC DOOR HOLD
	SMOKE DAMPER
	COMBINATION FIRE/SMOKE DAMPER
	ADDRESSABLE INPUT MODULE; FS - SPRINKLER WATER FLOW SWITCH, TS - TAMPER SWITCH, PIV - POST INDICATOR VALVE
	ADDRESSABLE OUTPUT MODULE; SD - FAN SHUT DOWN RELAY, AM - AUDIO MUTE

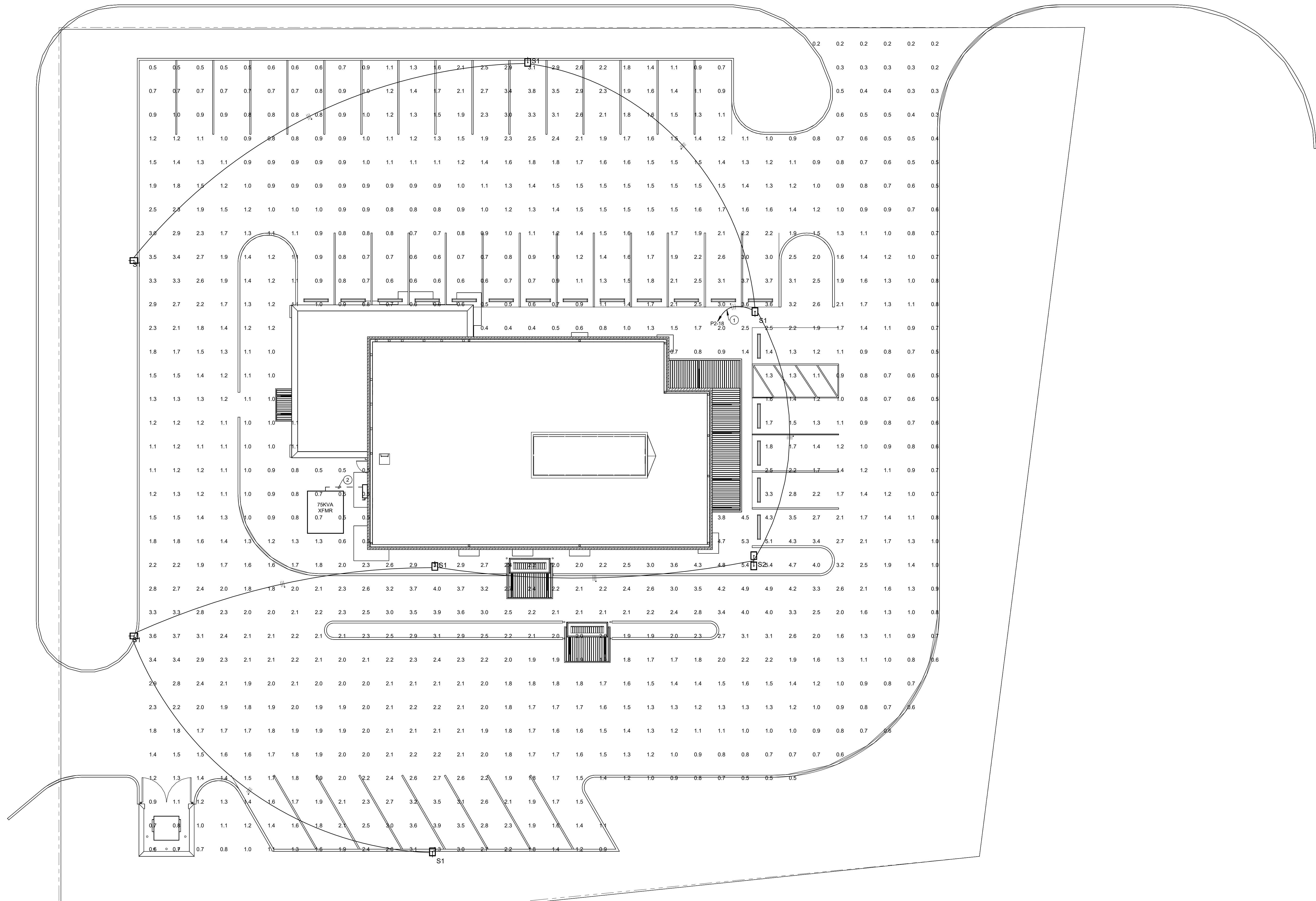
POWER SYMBOLS

	SINGLE RECEPTACLE, WALL MOUNTED
	DUPLEX RECEPTACLE, CEILING MOUNTED
	DUPLEX RECEPTACLE, WALL MOUNTED, TAMPER-RESISTANT
	DUPLEX RECEPTACLE, WALL MOUNTED, SURFACE RACEWAY
	DUPLEX RECEPTACLE, TV POWER, COORDINATE ROUGH-IN WITH AV AND DISPLAY MOUNTING HARDWARE REQUIREMENTS, ELEVATION AS NOTED.
	DUPLEX GFCI RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT, "G" INDICATES PROTECTION INCLUDED IN DEVICE, SHADING INDICATES DEVICE PROTECTED BY EITHER UPSTREAM GFCI DEVICE OR CIRCUIT BREAKER
	DUPLEX RECEPTACLE, MOUNTED WITHIN WATER COOLER HOUSING, VERIFY HEIGHT, CONNECT TO GFCI, CIRCUIT BREAKER OR REMOTE WALL DEVICE. SHADING INDICATES GFCI PROTECTED DEVICE
	DUPLEX GFCI WEATHER RESISTANT RECEPTACLE WITH WEATHER-PROOF IN-USE COVER, TAMPER-RESISTANT, WALL MOUNT
	QUADRAPLEX RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
	QUADRAPLEX GFCI RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT, "G" INDICATES PROTECTION INCLUDED IN DEVICE, SHADING INDICATES DEVICE PROTECTED BY EITHER UPSTREAM GFCI DEVICE OR CIRCUIT BREAKER
	DUPLEX RECEPTACLE IN FLOORBOX, TAMPER-RESISTANT. REFER TO SCHEDULE.
	QUADRAPLEX RECEPTACLE IN FLOORBOX, TAMPER-RESISTANT. REFER TO SCHEDULE.
	FLOOR BOX, COMBINATION POWER AND DATA ENCLOSURE. QUANTITY OF CABLES AS NOTED. DEVICES AS NOTED. REFER TO SCHEDULE.
	SPECIAL RECEPTACLE, WALL MOUNT, REFER TO EQUIPMENT CONNECTION SCHEDULE FOR RECEPTACLE TYPE. REFER TO PANEL SCHEDULES FOR GFCI PROTECTION WHERE REQUIRED
	SPECIAL RECEPTACLE, CEILING MOUNT, REFER TO EQUIPMENT CONNECTION SCHEDULE FOR RECEPTACLE TYPE. REFER TO PANEL SCHEDULES FOR GFCI PROTECTION WHERE REQUIRED
	EQUIPMENT CONNECTION, REFER TO EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE. REFER TO PANEL SCHEDULES FOR GFCI PROTECTION WHERE REQUIRED
	MOTOR CONNECTION, REFER TO EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE. REFER TO PANEL SCHEDULES FOR GFCI PROTECTION WHERE REQUIRED
	EQUIPMENT CONNECTION, WALL MOUNT, REFER TO EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE. REFER TO PANEL SCHEDULES FOR GFCI PROTECTION WHERE REQUIRED
	SAFETY DISCONNECT SWITCH
	BLANK FACE GFCI DEVICE, WALL MOUNT +48", OR AS NOTED
	MOTORIZED DOOR OPERATOR CONTROL STATION, WALL MOUNT, +48", OR AS NOTED
	DOOR PUSH BUTTON (WEATHERPROOF), +48" OR AS NOTED
	GYM EQUIPMENT CONTROLLER, WALL MOUNT +48", OR AS NOTED
	HAND DRYER, WALL MOUNT, REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
	GROUND BAR
	UTILITY TRANSFORMER
	UTILITY METER
	SURGE PROTECTIVE DEVICE
	POWER POLE RACEWAY
	VFD
	VFD WITH INTEGRAL DISCONNECT
	EMERGENCY PUSH BUTTON
	PLUG STRIP, SURFACE MOUNTED. ELEVATION AS NOTED.
	PANELBOARD - SURFACE MOUNTED
	PANELBOARD - RECESSED IN WALL
	DISTRIBUTION PANELBOARD/SWITCHBOARD - SURFACE MOUNTED AS NOTED.
	CORD REEL, CEILING MOUNTED - REFER TO DETAIL
	GENERATOR
	GROUND RING

TEMPERATURE CONTROLS SYMBOLS - DEVICES PROVIDED BY T.C.C

	THERMOSTAT JUNCTION BOX ROUGH-IN, WALL MOUNTED +48" OR AS NOTED. EXTEND 3/4" CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING.
	HUMIDISTAT JUNCTION BOX ROUGH-IN, WALL MOUNTED +48" OR AS NOTED. EXTEND 3/4" CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING.
	CARBON DIOXIDE SENSOR JUNCTION BOX ROUGH-IN, WALL MOUNTED +48" OR AS NOTED. EXTEND 3/4" CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING.
	TEMPERATURE SENSOR JUNCTION BOX ROUGH-IN, WALL MOUNTED +48" OR AS NOTED. EXTEND 3/4" CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING.

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
Site_Grmd Lvl	1.62	5.4	0.2	8.10	27.00



2 ELECTRICAL SITE PLAN

$$1'' = 1'-0''$$

SITE GENERAL NOTES

- A. UTILITIES SHOWN ON ELECTRICAL SITE PLAN ARE SCHEMATIC ONLY. ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE UNLESS DIMENSIONS VERIFY ALL SITE CONDITIONS AND DIMENSIONS ON SITE.
- B. PROVIDE TRENCHING, PLUG BOXES, BACKFILL, AND PATCHWORK AS REQUIRED TO COMPLETE SITE ELECTRICAL INSTALLATION.
- C. REFER TO ELECTRIC AND LOW VOLTAGE UTILITY ENGINEERED DRAWINGS FOR ADDITIONAL CONDUITS, BOXES, AND ROUTING REQUIREMENTS. COORDINATE POTS, PADS, PRIMARY CABLE, TRANSFORMERS, METERS PEDESTALS, ETC.
- D. COORDINATE ROUTING AND CRITICAL CROSSING POINTS OF ELECTRICAL CONDUITS WITH CIVIL AND UTILITY CONTRACTORS. ADJUST CONDUIT DEPTHS AS REQUIRED.
- E. REPAIR ALL AFFECTED SURFACES AND RESTORE TO EXISTING CONDITIONS AT COMPLETION OF PROJECT.
- F. PROVIDE ALL SITE CONDUIT AS 1" MINIMUM. ALL CONDUCTORS AS #10 AWG CU. MINIMUM.
- G. WARNING - CALL BEFORE YOU DIG. LAW REQUIRES ANYONE DOING FENCING, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. ONE-CALL 811

KEYNOTES

- 1 ROUTE (3) - #6 & (1) - #10 EG, 1" C.
2 ROUTE 2 1/2" CONDUIT. REFER TO ONE-LINE DIAGRAM ON
SHEET E400 FOR CONDUCTOR SIZING.

SEAL

SEAL:

PRELIMINARY:
NOT FOR CONSTRUCTION

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TINKER FEDERREAL CREDIT UNION - BROKEN
ARROW
LOCATION

REVISIONS
LABEL: DATE:

SHEET TITLE

ELECTRICAL SITE
PLAN

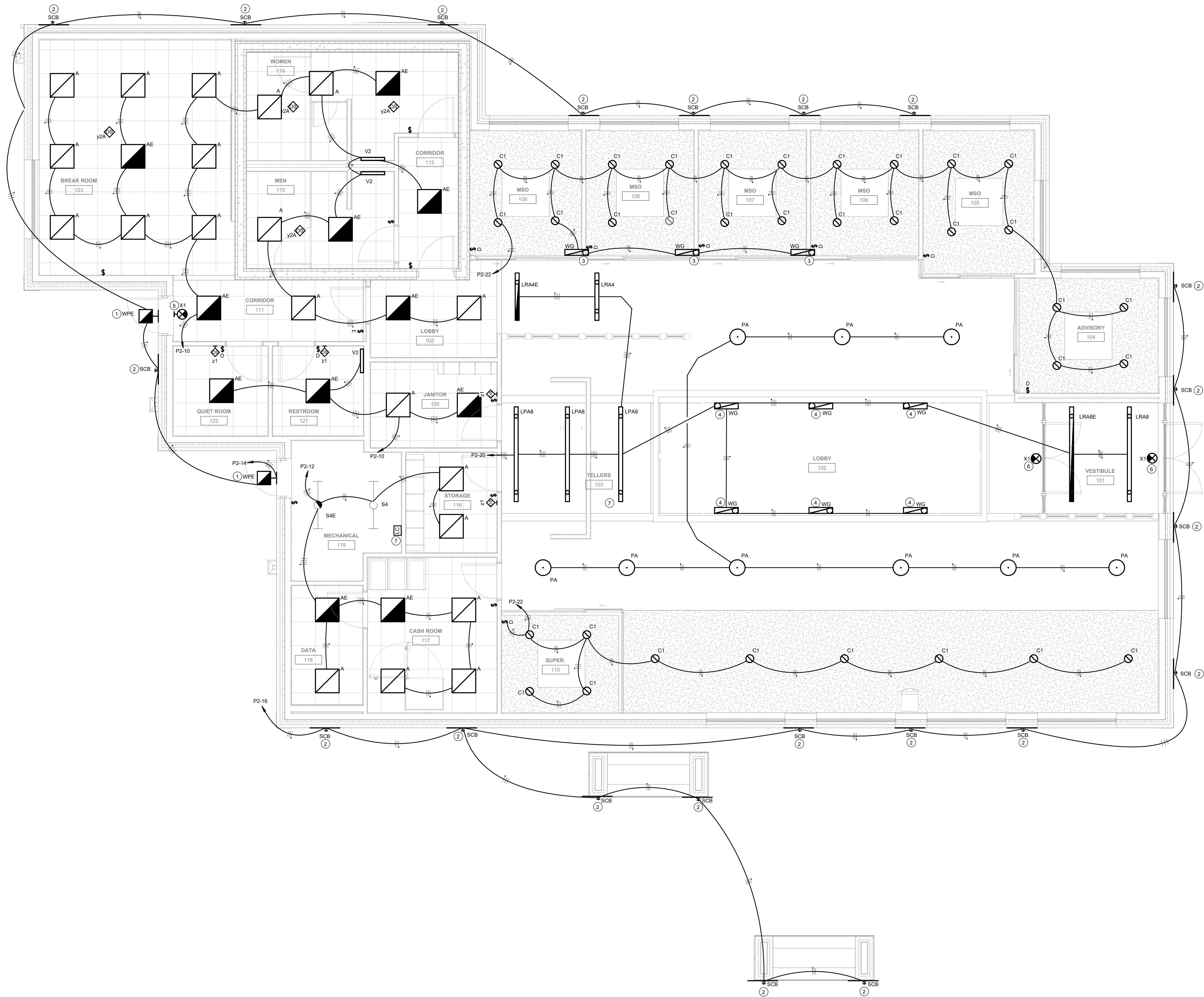
DATE: 7/13/15

SHEET NUMBER

E001

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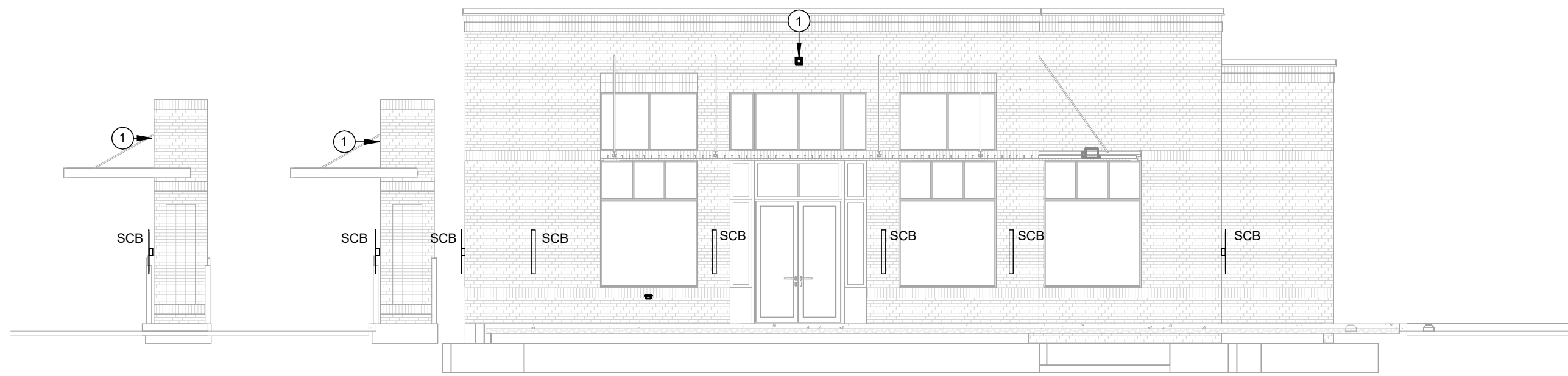
1 REFLECTED CEILING PLAN
1/4" = 1'-0"

LIGHTING GENERAL NOTES

- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT
- B. UNLESS NOTED OTHERWISE, CONNECT ALL EMERGENCY BATTERY FIXTURES WITH AN UN-SWITCHED LEG OF THE LIGHTING CIRCUIT THAT SERVES THE FIXTURES SPACE. MAINTAIN NORMAL SWITCHING SCHEME OF EMERGENCY FIXTURES UNDER NORMAL OPERATION.
- C. LIGHTING CONTROLS SENSORS SHOWN ON PLANS AT SUGGESTED LOCATIONS. VERIFY FINAL LOCATIONS AND QUANTITIES WITH MANUFACTURER'S GUIDELINES AND INSTALLATION RECOMMENDATIONS. COORDINATE RELOCATIONS WITH ARCHITECTS CEILING PLAN.
- D. ALL LIGHTING CONTROL TO BE PROVIDED VIA LUTRON VIVE CONTROL SYSTEM, UNLESS OTHERWISE INDICATED. ALL WALL STATIONS SHALL BE LUTRON PICO TYPE. COORDINATE EXACT REQUIREMENTS WITH FINAL LIGHTING CONTROL SUBMITTALS PRIOR TO ROUGH-IN.
- E. CONTRACTOR SHALL POWER LIGHT FIXTURES TYPE X1 TO THE NEAREST EMERGENCY LIGHTING NON RELAY CIRCUIT.

KEYNOTES

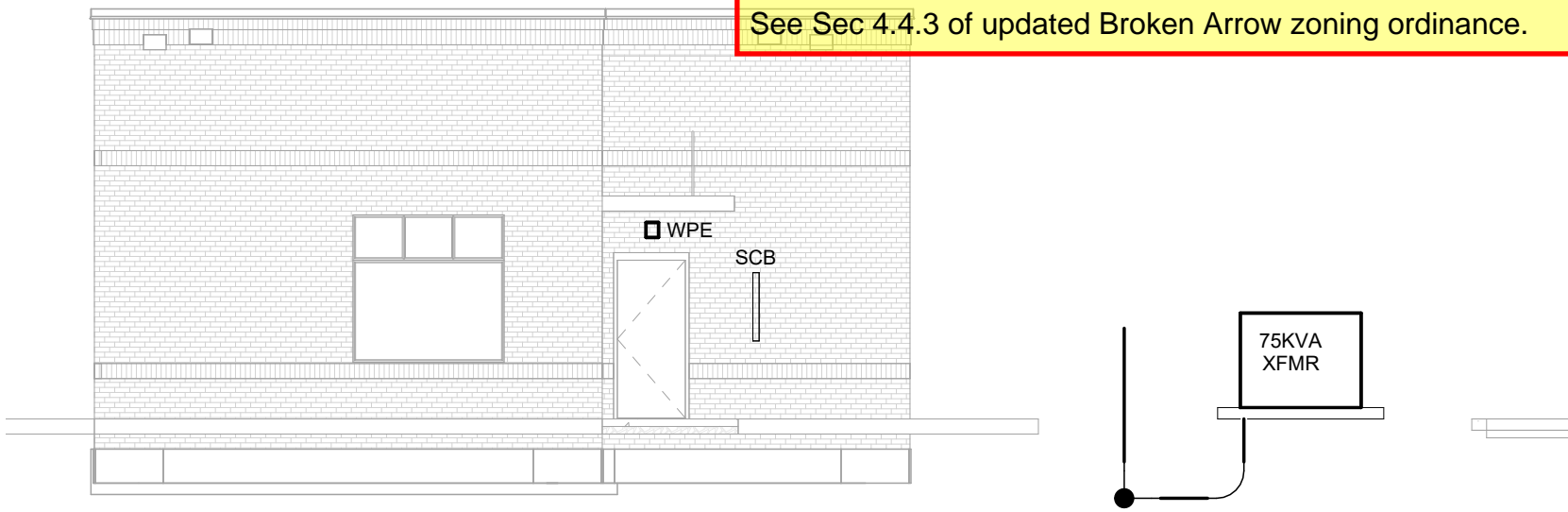
- 1 MOUNT TYPE WPE LIGHT FIXTURE 8' 0" AT BOTTOM OF FIXTURE AFG
- 2 MOUNT TYPE SCB LIGHT FIXTURE 3' 5" AT BOTTOM OF FIXTURE AFG
- 3 MOUNT TYPE WG LIGHT FIXTURE TO BACKSIDE OF BULKHEAD MINIMUM 13' 0" AT BOTTOM OF FIXTURE AFF
- 4 MOUNT TYPE WG LIGHT FIXTURE MINIMUM 15' 0" AT BOTTOM OF FIXTURE AFF
- 5 MOUNT TYPE X1 EMERGENCY LIGHT FIXTURE 8' 0" AFF
- 6 SUSPEND TYPE X1 EMERGENCY LIGHT FIXTURE MINIMUM 10' 0" AFF
- 7 ALL EXTERIOR LIGHTING SHALL BE CIRCUITED THROUGH A LIGHTING CONTACTOR CONNECTED TO AND CONTROLLED BY THE EXTERIOR LIGHTING CONTROL SYSTEM. EXTERIOR FIXTURES SHALL ILLUMINATE AT DUSK OR OTHER LOW-LIGHT CONDITIONS AND SHALL BE SHUT-OFF BY A FUNCTION OF DIGITAL TIMER SYSTEM. PROVIDE AND INSTALL INTERMATIC #ETC28254PCR (OR APPROVED EQUAL) DIGITAL CONTROL BOX ADJACENT TO PANEL P2 FOR EXTERIOR LIGHTING CIRCUITS. PROVIDE MANUAL OVERRIDE SWITCH FOR MANUAL CONTROL. LABEL OVERRIDE SWITCHES WITH "MANUAL LIGHTING OVERRIDE" AND DESCRIPTION OF LIGHTING FIXTURES CONTROLLED BY SWITCH.



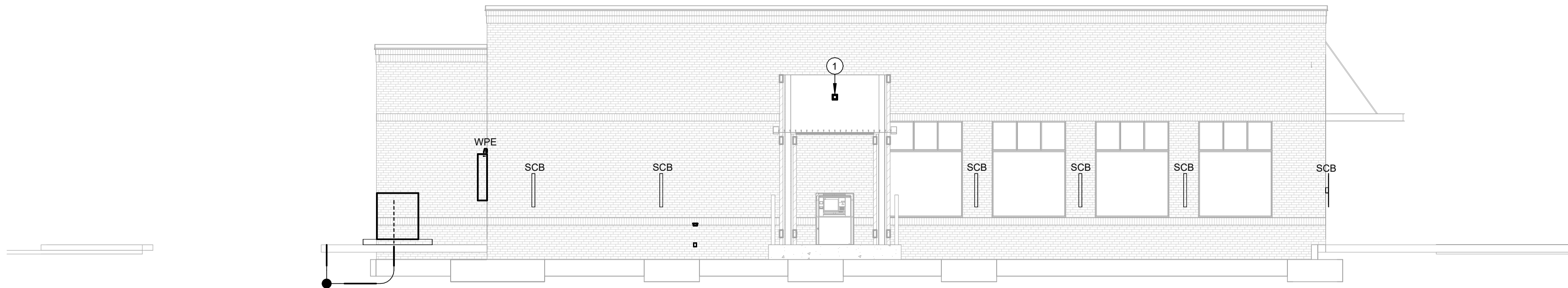
1 EXTERIOR ELEVATION - EAST
1/8" = 1'-0"

P03: Thank you for additional information. The shielding for the light fixture has to be less than 90 degrees. The following is the code:
Shielding. Light sources shall be concealed or shielded with luminaires with cut-offs with an angle not exceeding 90 degrees to minimize the potential for glare and unnecessary diffusion on adjacent property. For purposes of this standard, "cutoff angle" is defined as the angle formed by a line drawn from the direction of light rays at the light source and a line perpendicular to the ground from the light source above from which no light is emitted.

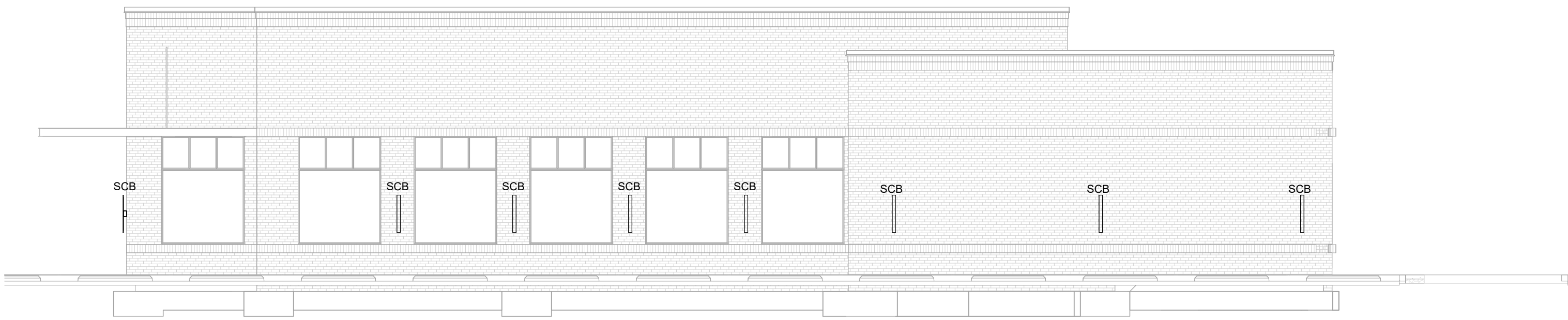
See Sec 4.4.3 of updated Broken Arrow zoning ordinance.



2 EXTERIOR ELEVATION - WEST
1/8" = 1'-0"



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



4 EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

E. LIGHTING FIXTURE SCHEDULE

NOTES:

- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
- REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.
- VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
- CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
- AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

DESIGNED BY: SMH											
TYPE	MANUFACTURER	MODEL	DESCRIPTION	LUMENS	CRI	LAMP TYPE	CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS	
A	LITHONIA	CPXTW 2X4 TUWH PROR 5000LM 80CRI SWL MVOLT	2' X 4' LED FLAT PANEL	5377 LM	80	LED	4000K	120 V	39 VA	AS APPROVED BY ENGINEER	
AE	LITHONIA	CPXTW 2X4 TUWH PROR 5000LM 80CRI SWL MVOLT E10W	2' X 4' LED FLAT PANEL, 90-MINUTE BATTERY.	5377 LM	80	LED	4000K	120 V	39 VA	AS APPROVED BY ENGINEER	
C1	LITHONIA	LDN8 AL04 40K L08 AR LSS MVOLT UGZ	8" RECESSED ROUND LED DOWNLIGHT	4152 LM	80	LED	4000K	120 V	39 VA	AS APPROVED BY ENGINEER	
LPAB	H.E. WILLIAMS	75L 8 L40/840 DMA DIM UNV	8' LONG SUSPENDED FLAT LENS	4014 LM	80	LED	4000K	120 V	34 VA	AS APPROVED BY ENGINEER	
LRA4	H.E. WILLIAMS	75L 4 L38/840 DMA DIM UNV	4' LONG SUSPENDED FLAT LENS	3936 LM	80	LED	4000K	120 V	31 VA	AS APPROVED BY ENGINEER	
LRA4E	H.E. WILLIAMS	75L 4 L38/840 DMA DIM EM/10WLP UNV	4' LONG SUSPENDED FLAT LENS, 90-MINUTE BATTERY	3936 LM	80	LED	4000K	120 V	31 VA	AS APPROVED BY ENGINEER	
LRA8	H.E. WILLIAMS	75L 8 L40/840 DMA DIM UNV	8' LONG RECESSED FLAT LENS	4014 LM	80	LED	4000K	120 V	34 VA	AS APPROVED BY ENGINEER	
LRA8E	H.E. WILLIAMS	75L 8 L40/840 DMA DIM EM/10WLP UNV	8' LONG RECESSED FLAT LENS, 90-MINUTE BATTERY	4014 LM	80	LED	4000K	120 V	34 VA	AS APPROVED BY ENGINEER	
PA	DELRAY	IL793 K W V40 L I D	METAL PENDANT RECESSED, 0-10V DIMMING	3264 LM	80	LED	4000K	120 V	32 VA	AS APPROVED BY ENGINEER	
S1	LITHONIA	RSX1 LED P2 40K R4 MVOLT SPA NLTAIR2 PIRHN DOBXD / (1)	POLE LIGHT, SQUARE POLE, 4" X 20" SQUARE STEEL POLE SINGLE MOUNT LIGHT FIXTURE	9972 LM	70	LED	4000K	120 V	72 VA	AS APPROVED BY ENGINEER	
S2	LITHONIA	RSX1 LED P2 40K R4 MVOLT SPA NLTAIR2 PIRHN DOBXD / (1)	POLE LIGHT, SQUARE POLE, 4" X 20" SQUARE STEEL POLE DOUBLE MOUNT LIGHT FIXTURES	19944 LM	70	LED	4000K	120 V	144 VA	AS APPROVED BY ENGINEER	
S4	LITHONIA	CLX L48 4000LM HEF FDL WD MVOLT GZ10 40K 80CRI	4' LED STRIP	4312 LM	80	LED	4000K	120 V	24 VA	AS APPROVED BY ENGINEER	
S4E	LITHONIA	CLX L48 4000LM HEF FDL WD MVOLT GZ10 40K 80CRI E10W	4' LED STRIP, 90-MINUTE BATTERY.	4312 LM	80	LED	4000K	120 V	24 VA	AS APPROVED BY ENGINEER	
SCB	EUREKA	3149 LED 40 120V DV CHR WHE	MINIMALIST PLATE, ALUMINUM STRUCTURE, INDIRECT LIGHTING, 0-10V DIMMING	1171 LM	80	LED	4000K	120 V	12 VA	AS APPROVED BY ENGINEER	
V2	AXIS	PS-AR-RAS-LF-400-80-2-C-UNV-DP-1-MT-RWJ	LED VANITY FIXTURE, 400LM/FT, 3.792 W/FT	400 LM	90	LED	4000K	120 V	4 VA	AS APPROVED BY ENGINEER	
WG	OCL	DA1-S1SC-27-MW-SWP-LED2-40K-UNV-DM1-SCY	LED CEILING GRAZE	1680 LM	90	LED	4000K	120 V	20 VA	AS APPROVED BY ENGINEER	
WPE	LITHONIA	WDGE2 LED P1 40K 80CRI MVOLT SRM	SURFACE MOUNTED FIXTURE, WET LOCATION RATED, 90-MINUTE BATTERY	1238 LM	80	LED	4000K	120 V	11 VA	AS APPROVED BY ENGINEER	
X1	LITHONIA	EDGE/EDGR 1 R EL	EDGE-LIT EXIT SIGN, UNIVERSAL MOUNTING, BACK-UP BATTERY			RED LED		120 V	4 VA	AS APPROVED BY ENGINEER	

LIGHTING CONTROLS SCHEDULE

NOTES:

- PROVIDE LIGHTING CONTROLS AS A COMPLETE SYSTEM AND INCLUDE MATERIAL AND INSTALLATION FOR ALL POWER PACKS, ACCESSORIES, CONTROLLERS, AND WIRING REQUIRED FOR OPERATION.
- ALL DEVICES SHALL BE U.L. OR SIMILARLY LISTED.
- ALL DEVICES PROVIDED WITH MANUFACTURER LIMITED 5 YEAR WARRANTY.
- PROVIDE LIGHTING CONTROLS WITH MANUFACTURER COMPLIANT POWER PACKS AND LOW VOLTAGE ROOM CONTROLLERS IN QUANTITY REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL SYSTEM. MANUFACTURER OR MANUFACTURERS REP TO PROVIDE DEVICE QUANTITIES, LAYOUTS AND TYPICAL WIRING DETAILS DURING SHOP SUBMITTAL PROCESS. PROVIDE DIMMING COMPATIBLE DEVICES WHERE DIMMING CONTROLS ARE SHOWN. COORDINATE DIMMING TYPE WITH LIGHTING FIXTURES SHOWN. REFER TO LUMINAIRE SCHEDULE FOR FIXTURE DIMMING TYPE.
- WHERE WIRELESS LIGHTING CONTROLS ARE PROVIDED, POWERPACKS SHALL BE PROVIDED AND INSTALLED WITHIN MANUFACTURER RECOMMENDED DISTANCES TO ENSURE CONTROLLER OPERATION.
- INSTALL LOW VOLTAGE POWER PACKS AND ROOM CONTROLLERS ABOVE NEARBY ACCESSIBLE CEILING TILES OR IN MECHANICAL/STORAGE SPACES ADJACENT TO CONTROLLED FIXTURES. DO NOT INSTALL POWERPACKS EXPOSED IN COMMON SPACES OR IN INACCESSIBLE LOCATIONS.
- PROVIDE FACTORY AUTHORIZED REPRESENTATIVE TO DEMONSTRATE TYPICAL INSTALLATION AND COMMISSIONING OF EQUIPMENT.
- WHERE APPROVED EQUAL MANUFACTURER PRODUCTS SENSOR COVERAGE OR LOAD RATINGS DIFFER FROM BASIS OF DESIGN, CONTRACTOR AND MANUFACTURER ARE RESPONSIBLE FOR PROVIDING ADDITIONAL DEVICES AS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
- ETD'S AND ALL EMERGENCY LIGHTING CONTROLS COMPONENTS SHALL BE TESTED AND LISTED AS COMPATIBLE BY MANUFACTURER WITH NORMAL LIGHTING CONTROLS IN ALL AREAS.
- UNLESS INDICATED OTHERWISE, LIGHTING CONTROL SCHEMES/OPERATION SHALL BE AS FOLLOWS:

CORRIDORS, VESTIBULES, COMMON SPACES:	SENSORS PROGRAMMED FOR OCCUPANCY MODE, AUTOMATIC ON/OFF OPERATION, 20 MINUTES MINIMUM, 30 MINUTES MAXIMUM. DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.
ALL OTHER SPACES	SENSORS PROGRAMMED FOR VACANCY MODE, MANUAL ON/AUTOMATIC OFF OPERATION 20 MINUTES MINIMUM, 30 MINUTES MAXIMUM. DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.

DESIGNED BY: INITIALS						
TYPE	DESCRIPTION	ELECTRICAL	MOUNTING	SENSOR TYPE	COVERAGE	APPROVED MANUFACTURERS
OS y2A	CEILING MOUNTED OCCUPANCY/VACANCY SENSOR, WHITE FINISH, AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 8-30 MINUTE TIMER SETTINGS, INDOOR USE.	LOW VOLTAGE	CEILING / 8'-12" MH	DUAL-TECH	1000 SQ FT / 360 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.
OS z1	WALL SWITCH OCCUPANCY SENSOR, DEVICE FINISH MATCHING WIRING DEVICES SPEC. RATED FOR MIN 1/8 HP MOTOR, INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 8-30 MINUTE TIMER SETTINGS.	120V	WALL SWITCH / SINGLE GANG	DUAL-TECH	1000 SQ FT / 180 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.

KEYNOTES

- PROVIDE AND INSTALL J-BOX FOR BUILDING MOUNTED SIGNAGE. CIRCUIT TO NEAREST LIGHTING CIRCUIT. CIRCUIT SIGNAGE THROUGH DEDICATED CONTACTOR FOR CONTROL SEPARATE FROM OTHER EXTERIOR LIGHTING.

REVISIONS
LABEL: DATE:

SHEET TITLE

LIGHTING
ELEVATIONS AND
SCHEDULES

DATE: 09/26/17

SHEET NUMBER

E202

TINKER FEDERAL CREDIT UNION - BROKEN
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LOCATION

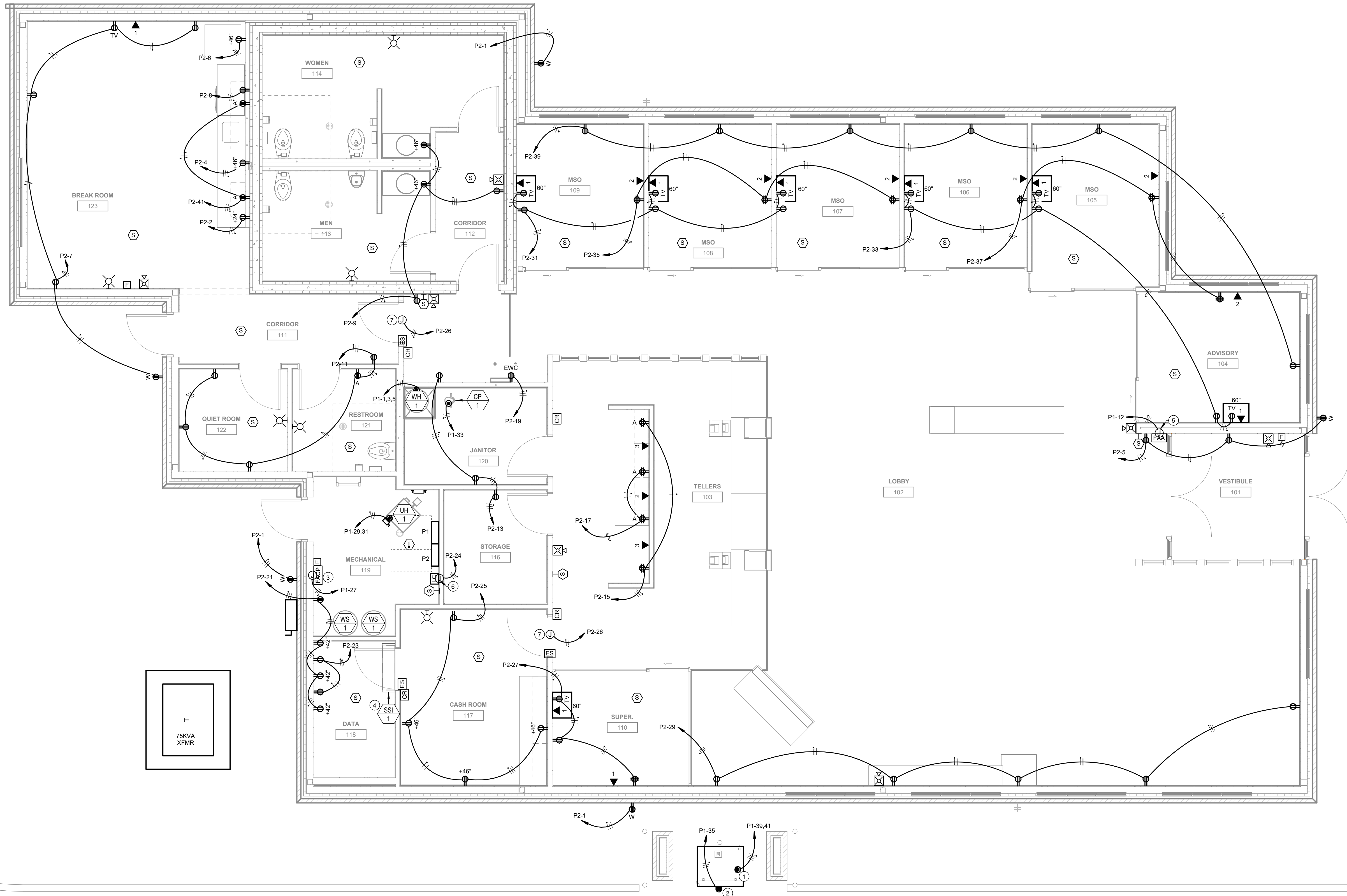
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kclengineering.com

1 ELECTRICAL POWER PLAN

1/4" = 1'-0"



POWER GENERAL NOTES

- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- B. COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH MECHANICAL CONTRACTOR AND FINAL MECHANICAL SHOP DRAWINGS.
- C. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

KEYNOTES

1. CONTRACTOR SHALL PROVIDE 208V POWER TO ATM.
2. CONTRACTOR SHALL PROVIDE 120V POWER FOR ATM DISPLAY MONITOR.
3. CONTRACTOR SHALL PROVIDE 120V POWER FOR FIRE ALARM CONTROL PANEL.
4. CONTRACTOR SHALL COORDINATE WITH INSTALLER TO SUPPLY POWER TO SSO-1 FROM THE APPLICABLE SSO-1 ON ROOF. PROVIDE LOCALIZED MEANS OF DISCONNECT AT INDOOR UNIT. REFER TO MECHANICAL SHEETS FOR SCHEDULES.
5. CONTRACTOR SHALL PROVIDE 120V POWER FOR FIRE ALARM ANNUNCIATOR.
6. CONTRACTOR SHALL PROVIDE 120V POWER FOR LIGHTING CONTRACTOR FOR EXTERIOR LIGHTING.
7. CONTRACTOR SHALL PROVIDE 120V POWER FOR ACCESS CONTROL DOORS. REFER TO DETAIL 7 ON SHEET E500 FOR ADDITIONAL INFORMATION.

REVISIONS
LABEL: DATE:

SHEET TITLE

ELECTRICAL
POWER PLAN

DATE: 09/26/17

SHEET NUMBER

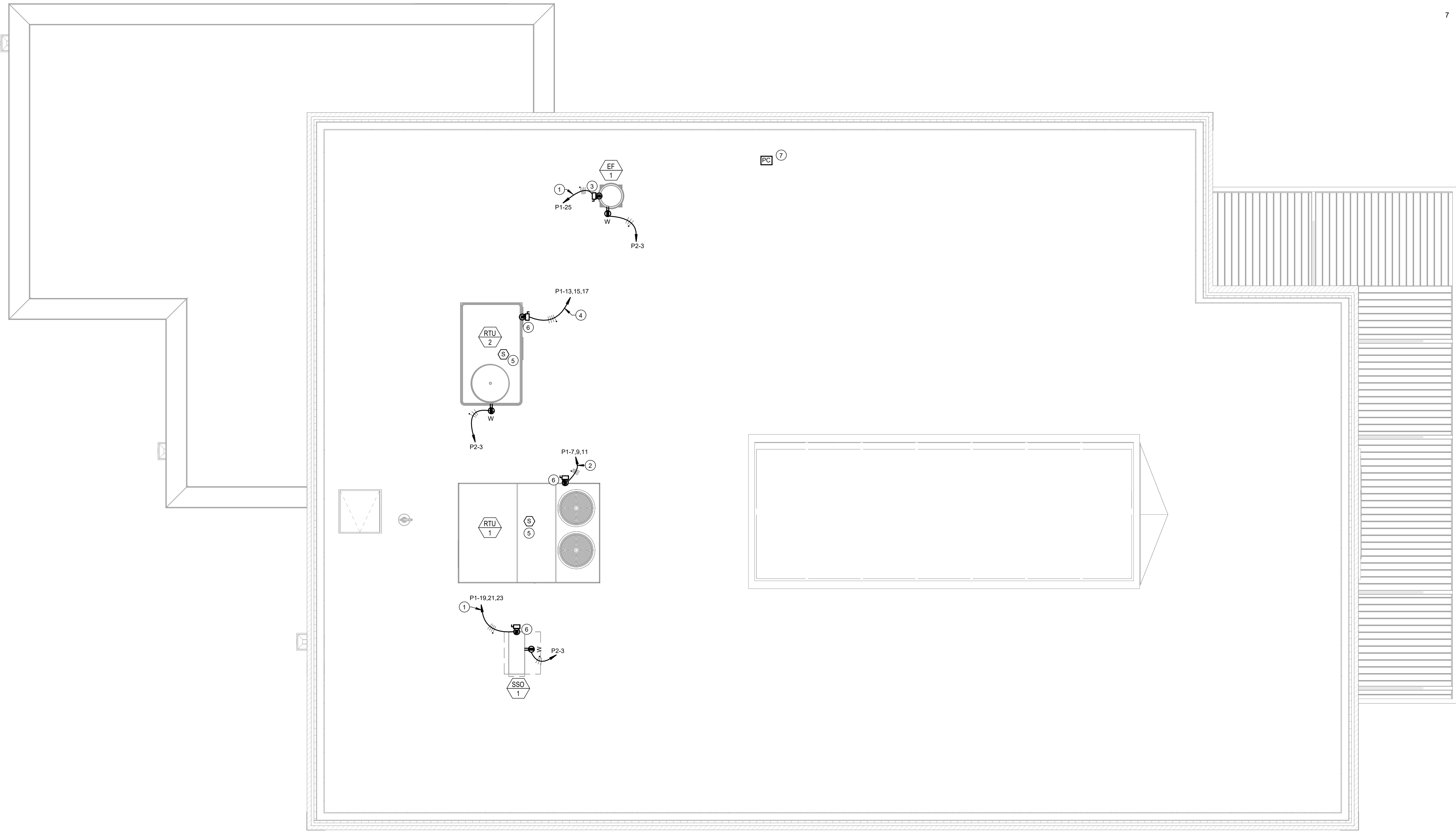
E301

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kclengineering.com



1 ELECTRICAL ROOF PLAN
1/4" = 1'-0"

- POWER GENERAL NOTES**
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- B. COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH MECHANICAL CONTRACTOR AND FINAL MECHANICAL SHOP DRAWINGS.
- C. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

- KEYNOTES** ^②
- 1 ROUTE (3) - #12 & (1) - #12 EG, 3/4"C.
- 2 ROUTE (3) - #3 & (1) - #8 EG, 1 1/4"C.
- 3 240V 30A/1P/NF NEMA 3R HEAVY DUTY DISCONNECT.
- 4 ROUTE (3) - #10 & (1) - #10 EG, 3/4"C.
- 5 CONTRACTOR SHALL PROVIDE AND INSTALL DUCT SMOKE DETECTOR INSIDE OF MECHANICAL UNIT AND MAKE FINAL CONNECTIONS TO FA SYSTEM. TYPICAL.
- 6 CONTRACTOR SHALL PROVIDE AND INSTALL ELECTRICAL DISCONNECT. REFER TO MS00 SERIES FOR MECHANICAL SCHEDULES FOR ELECTRICAL REQUIREMENTS.
- 7 PROVIDE AND INSTALL ROOF MOUNTED PHOTOCELL (TORK 2101 OR EQUAL) FOR ACTUATION OF EXTERIOR LIGHTING CIRCUITS DERIVED FROM PANEL 'P2'. MOUNT PHOTOCELL FACING NORTH. PROVIDE ALL DEVICES, ACCESSORIES, AND CABLING AS NECESSARY.

TINKER FEDERAL CREDIT UNION
TINKER FEDEREA CREDIT UNION - BROKEN
ARROW
LOCATION

REVISIONS
LABEL: DATE:

SHEET TITLE
ELECTRICAL ROOF
PLAN

DATE: 09/26/17

SHEET NUMBER
E302

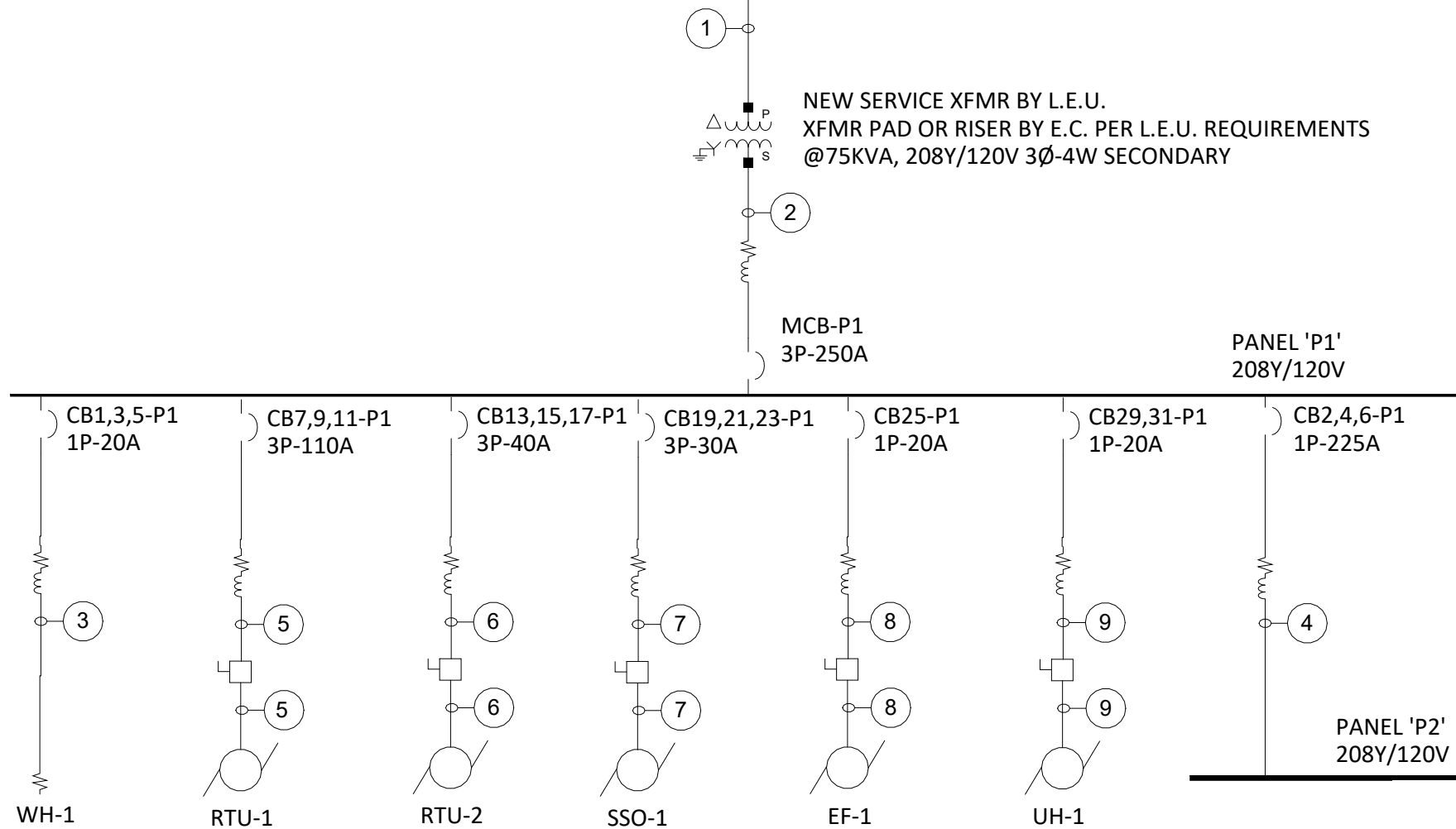
SEAL:
PRELIMINARY:
NOT FOR CONSTRUCTION

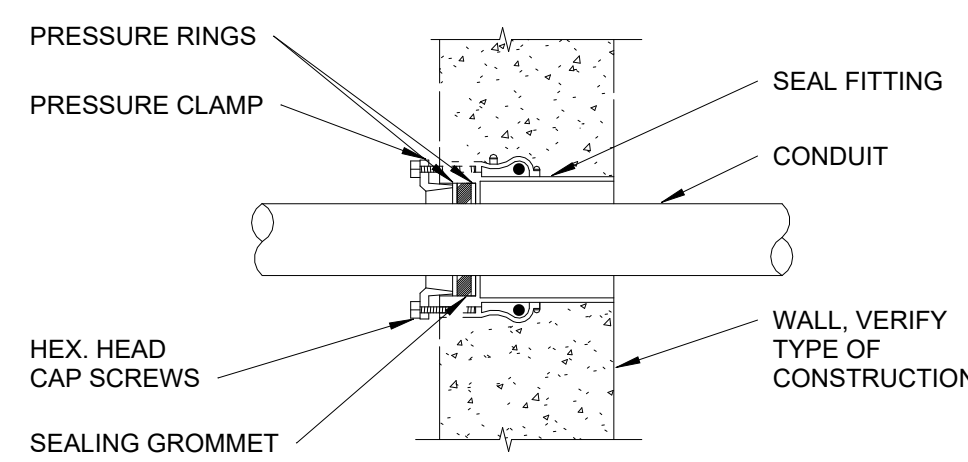
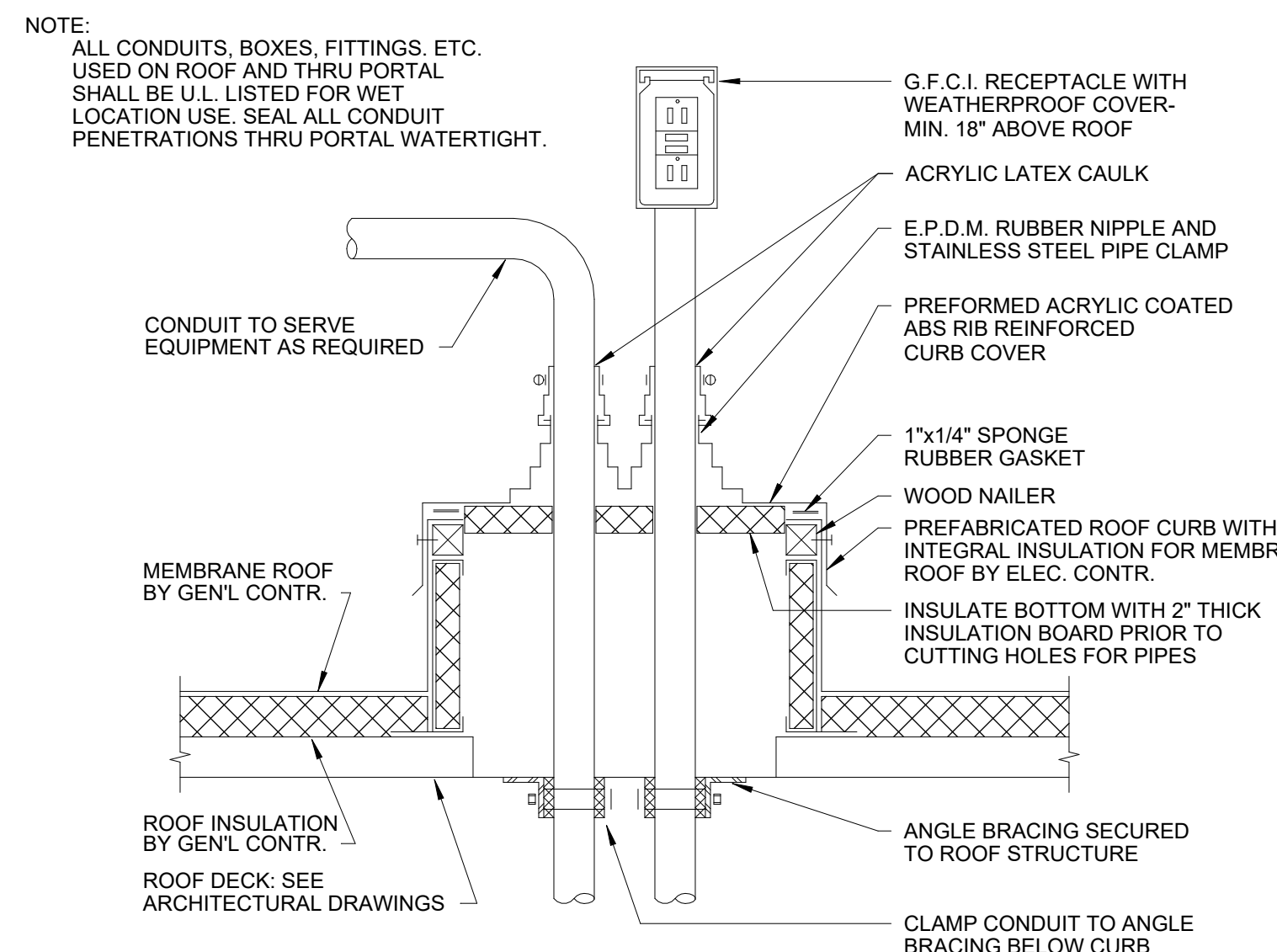
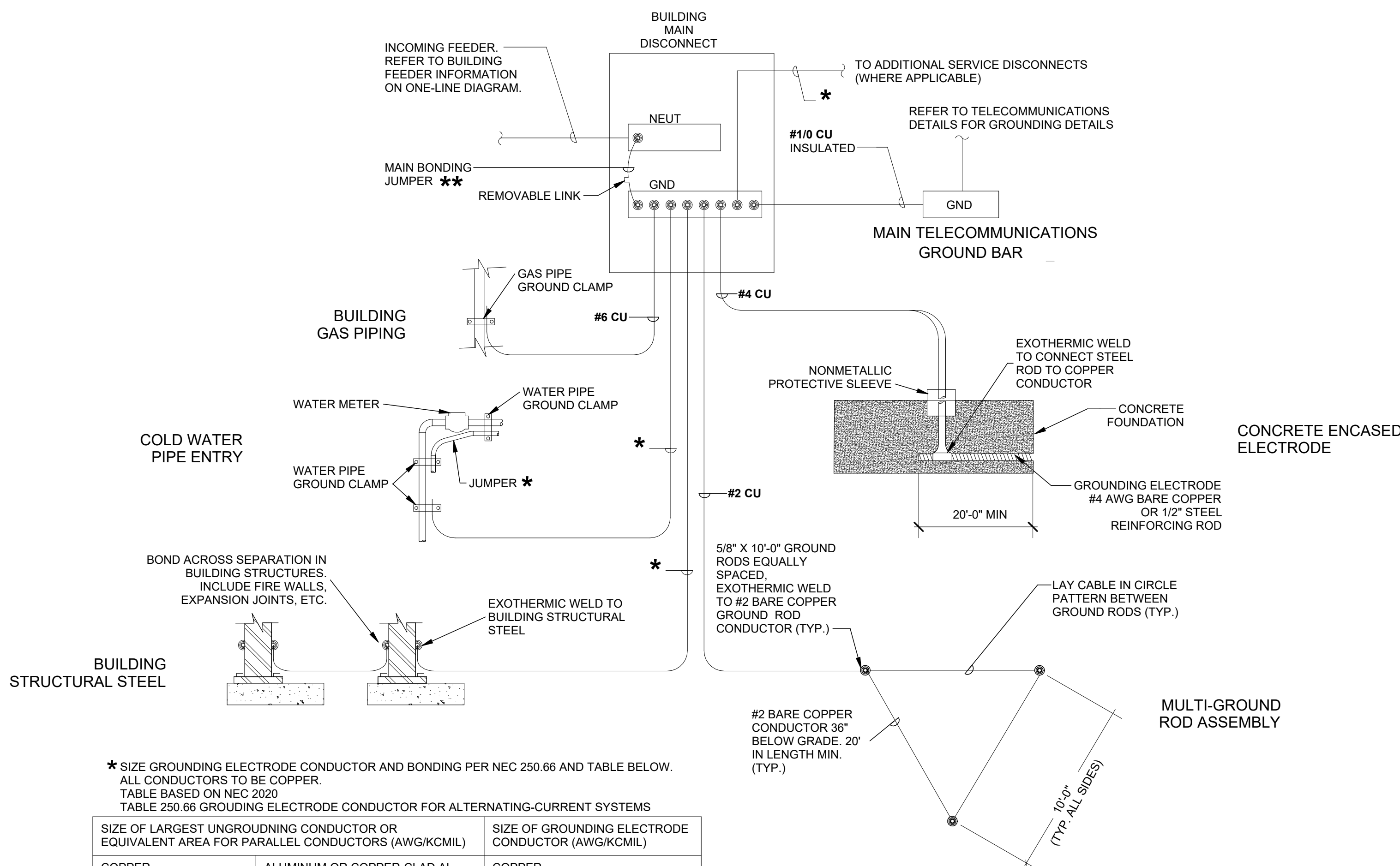
BRANCH PANEL: P1														
LOCATION: MECHANICAL 119					VOLTAGE: 120/208 WYE					SCCR RATING: 22,000				
SUPPLY FROM: UTILITY					PHASES: 3					MAINS TYPE: MCB				
MOUNTING: SURFACE					WIRES: 4					MAINS RATING: 400 A				
ENCLOSURE: TYPE 1														
NOTES:														
CIRCUIT DESCRIPTION		P	AMP	CKT NO	A		B		C		CKT NO	AMP	P	CIRCUIT DESCRIPTION
WH-1		3	30 A	1	1000	9149					2		3	P2
				3			1000	9240			4	225 A		
				5					1000	8499	6			
RTU-1		3	110 A	7	7590	1144					8	30 A	2	ATM
				9			7590	1144			10			
				11					7590	240	12	20 A		
RTU-2		3	40 A	13	2690	0					14		1	"F" FAA
				15			2690	0			16	20 A		
				17					2690	0	18	20 A		
SSO-1		3	15 A	19	1153	0					20	20 A	- 1	SPARE
				21			1153	0			22	20 A		
				23					1153	0	24	20 A		
EF-1		1	20 A	25	0	0					26	30 A	- 1	SPARE
"F" FACP		1	20 A	27			240	0			28			
UH-1		2	20 A	29					1144	0	30	20 A	- 1	SPARE
				31	1144	0				32	20 A			
CP-1		1	20 A	33			240	0			34	20 A	- 1	SPARE
ATM DISPLAY MONITOR		1	20 A	35					1320	0	36	20 A	- 1	SPARE
ATM DISPLAY MONITOR		1	20 A	37	1320	--					38	--	- 1	SPACE WITH PROVISIONS
ATM		2	30 A	39			1144	--			40	--	- 1	SPACE WITH PROVISIONS
				41					1144	--	42	--	- 1	SPACE WITH PROVISIONS
					25,190 VA		24,440 VA		24,779 VA					
					210 A		204 A		207 A					
LEGEND:														
"G" INDICATES GFCI TYPE BREAKER. "L" INDICATES PROVIDE LOCKABLE HASP														
"F" INDICATES RED LOCK-ON HASP														
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS						
LIGHTING		4,168 VA		125.00%		5,210 VA		TOTAL CONN. LOAD: 74,409 VA						
POWER		49,261 VA		100.00%		49,261 VA		TOTAL EST. DEMAND: 69,961 VA						
RECEPTACLE		20,980 VA		73.83%		15,490 VA		TOTAL CONN.: 207 A						
								TOTAL EST. DEMAND: 194 A						
NOTES:														

BRANCH PANEL: P2												
LOCATION: MECHANICAL 119				VOLTAGE: 120/208 WYE				SCCR RATING: 22,000				
SUPPLY FROM: P1				PHASES: 3				MAINS TYPE: MLO				
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 225 A				
ENCLOSURE: TYPE 1												
NOTES:												
CIRCUIT DESCRIPTION		P	AMP	CKT NO	A	B	C	CKT NO	AMP	P	CIRCUIT DESCRIPTION	
RECEPTACLES EXTERIOR		1	20 A	1	540	1600		2	20 A	1	"G" MICROWAVE	
RECEPTACLE ROOF		1	20 A	3		540	1200	4	20 A	1	COFFEE MAKER	
RECEPTACLES 101,102,EXTERIOR		1	20 A	5			540	1200	6	20 A	"G" REFRIGERATOR	
RECEPTACLES EXTERIOR, 123		1	20 A	7	900	1000		8	20 A	1	"G" DISHWASHER	
RECEPTACLES 111,113,114		1	20 A	9		720	918	10	20 A	1	LIGHTING 111,112,113,114,115,120,121,122,123	
RECEPTACLES 111,121,122		1	20 A	11			900	363	12	20 A	LIGHTING 116,117,118,119	
RECEPTACLES 111,115,116,120		1	20 A	13	540	130		14	20 A	1	EXTERIOR LIGHTING	
QUAD RECEPTACLES TELLERS 103		1	20 A	15		720	156	16	20 A	1	EXTERIOR LIGHTING	
RECEPTACLES TELLERS 103		1	20 A	17			720	576	18	20 A	SITE LIGHTING	
RECEPTACLE WATER COOLER		1	20 A	19	500	639		20	20 A	1	LIGHTING 101,102,103	
RECEPTACLES 118,119		1	20 A	21		720	1386	22	20 A	1	LIGHTING 102,105,106,107,108,109,110	
RECEPTACLES DATA 118		1	20 A	23			360	1500	24	20 A	LIGHTING CONTACTOR	
RECEPTACLES CASH ROOM 117		1	20 A	25	720	240		26	20 A	1	ACCESS CONTROL DOORS	
RECEPTACLES SUPER 110		1	20 A	27		720	0	28	20 A	- 1	SPARE	
RECEPTACLES LOBBY 102		1	20 A	29			900	0	30	20 A	- 1	SPARE
RECEPTACLES 107,108,109		1	20 A	31	1080	0		32	20 A	- 1	SPARE	
RECEPTACLES 104,105,106		1	20 A	33		1080	0	34	20 A	- 1	SPARE	
QUAD RECEPTACLES 107,108,109		1	20 A	35			1080	0	36	20 A	- 1	SPARE
QUAD RECEPTACLES 104,105,106		1	20 A	37	1260	0		38	20 A	- 1	SPARE	
RECEPTACLES 104,105,106,107,108,109		1	20 A	39		1080	0	40	20 A	- 1	SPARE	
RECEPTACLES COUNTERTOP 123		1	20 A	41			360	0	42	20 A	- 1	SPARE
					9,149 VA	9,240 VA	8,499 VA					
					77 A	78 A	71 A					
LEGEND:												
"G" INDICATES GFCI TYPE BREAKER. "L" INDICATES PROVIDE LOCKABLE HASP												
"F" INDICATES RED LOCK-ON HASP												
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS				
LIGHTING		4,168 VA		125.00%		5,210 VA		TOTAL CONN. LOAD: 26,888 VA				
POWER		1,740 VA		100.00%		1,740 VA		TOTAL EST. DEMAND: 22,440 VA				
RECEPTACLE		20,980 VA		73.83%		15,490 VA		TOTAL CONN.: 75 A				
								TOTAL EST. DEMAND: 62 A				
NOTES:												

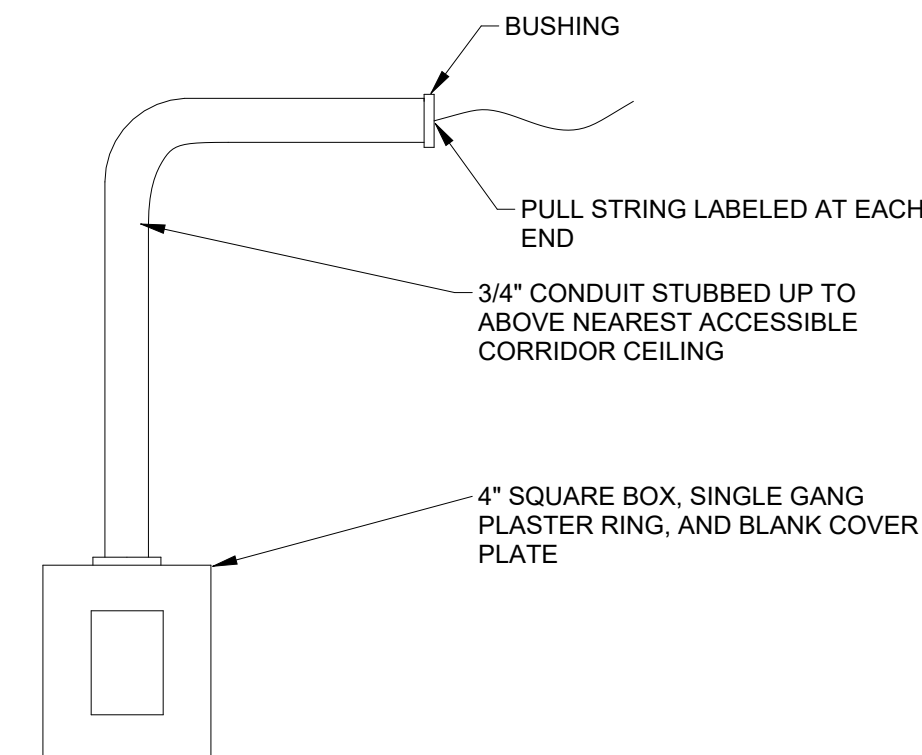
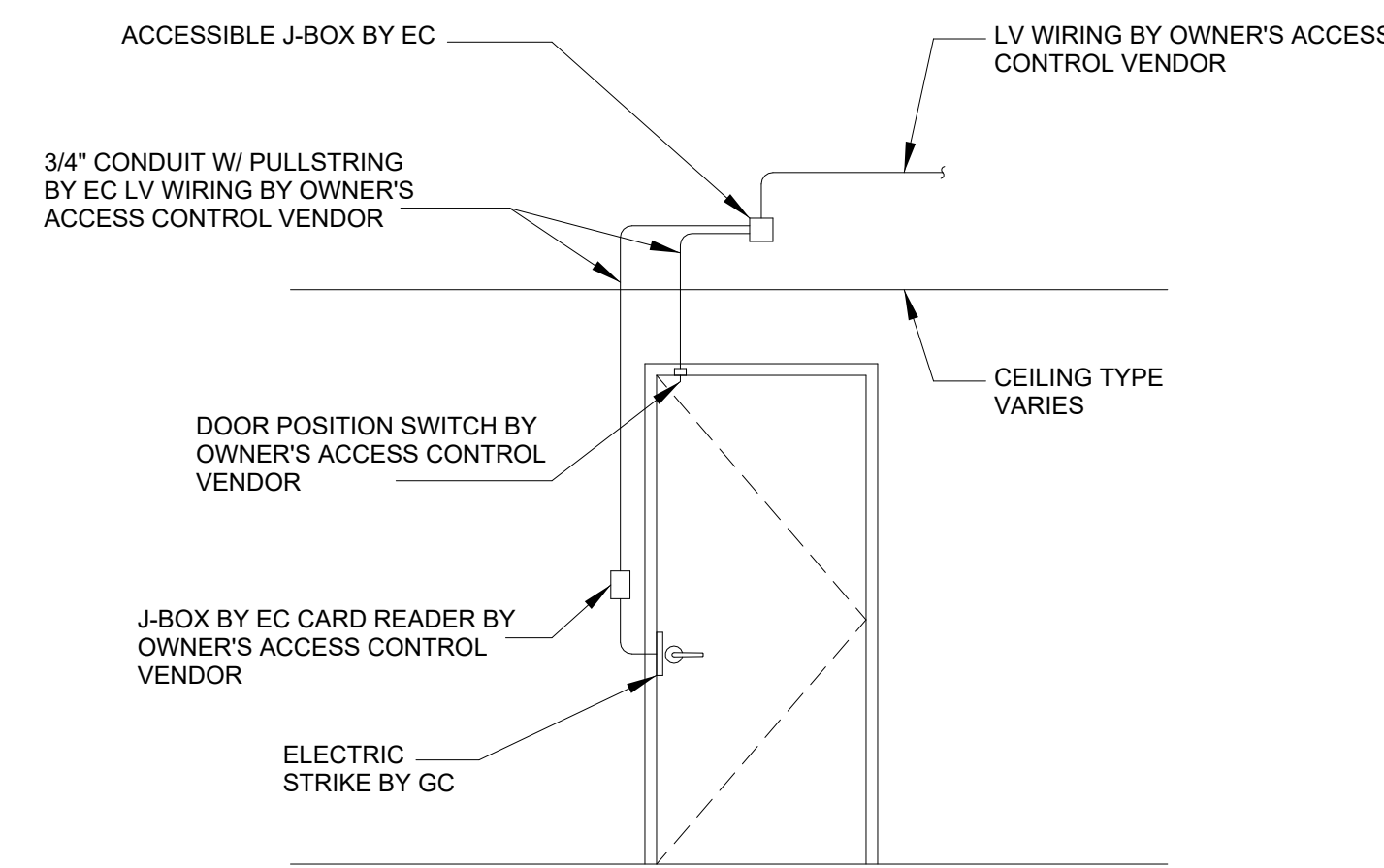
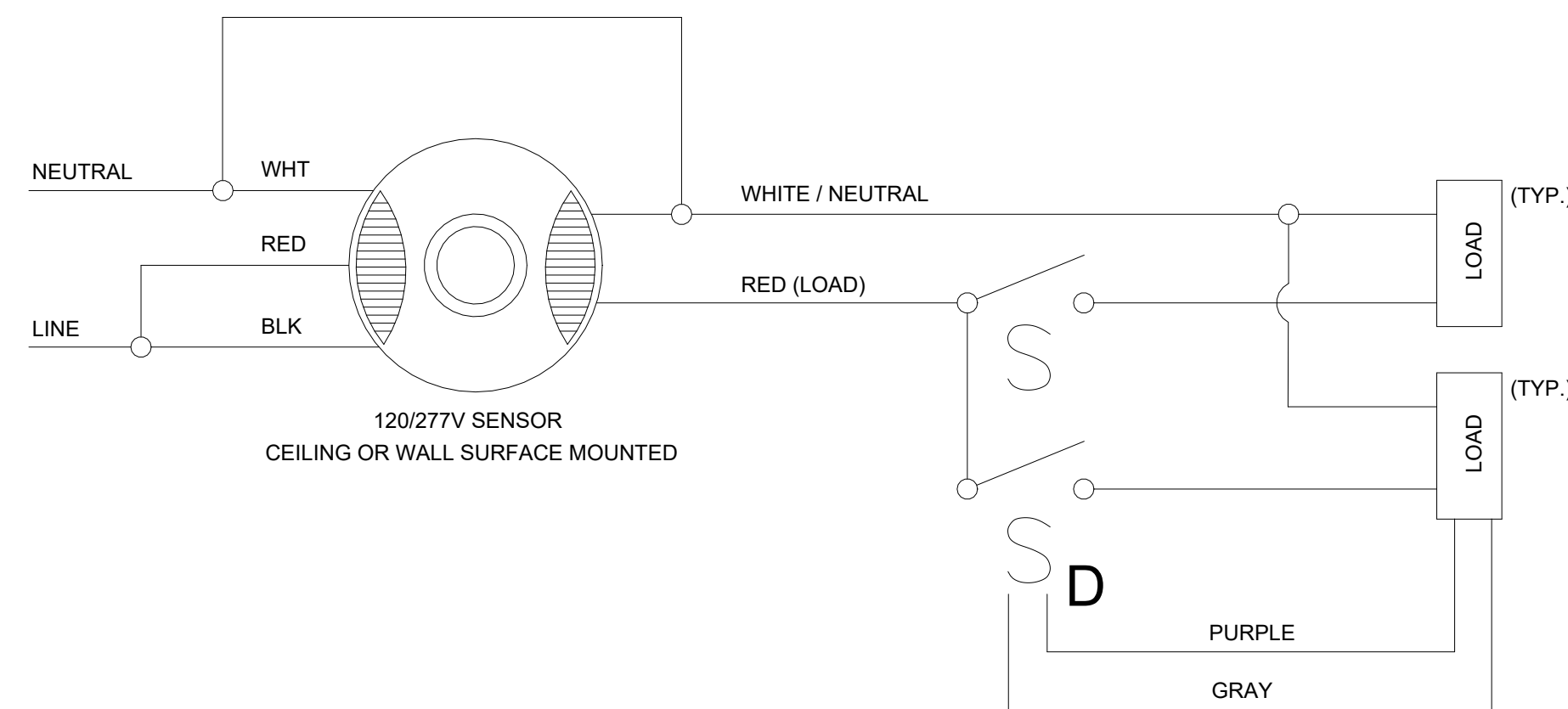
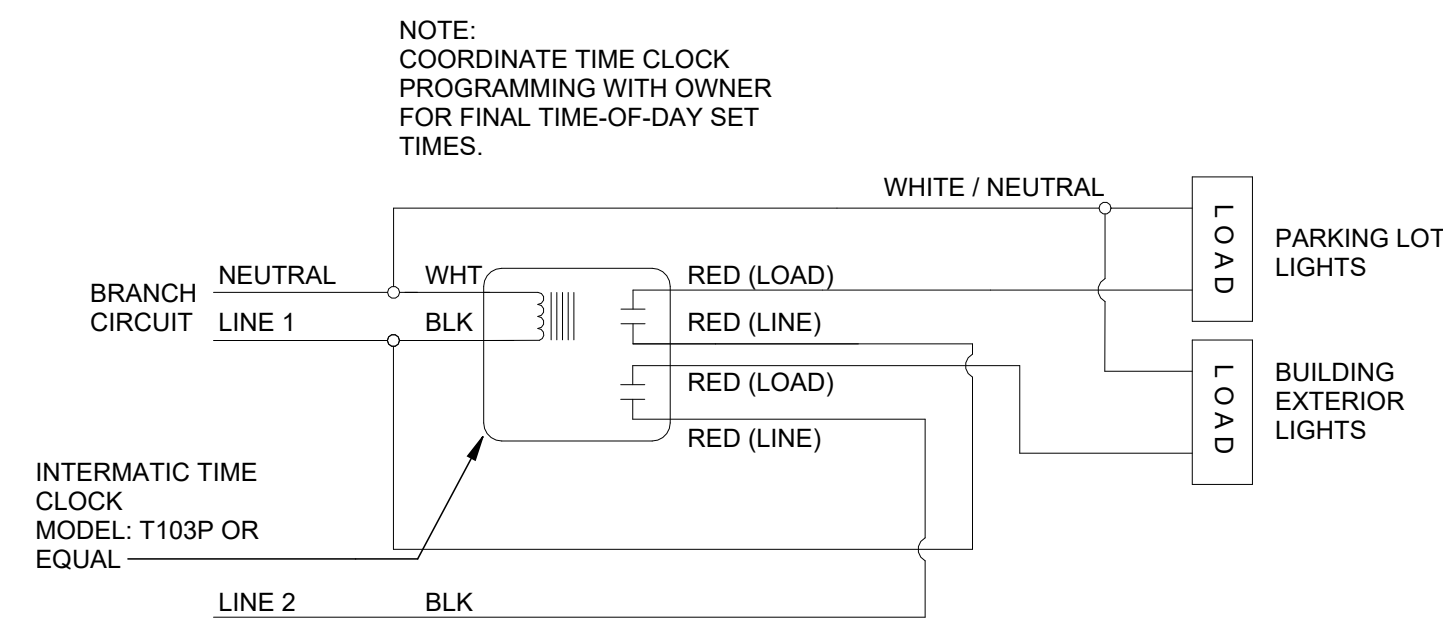
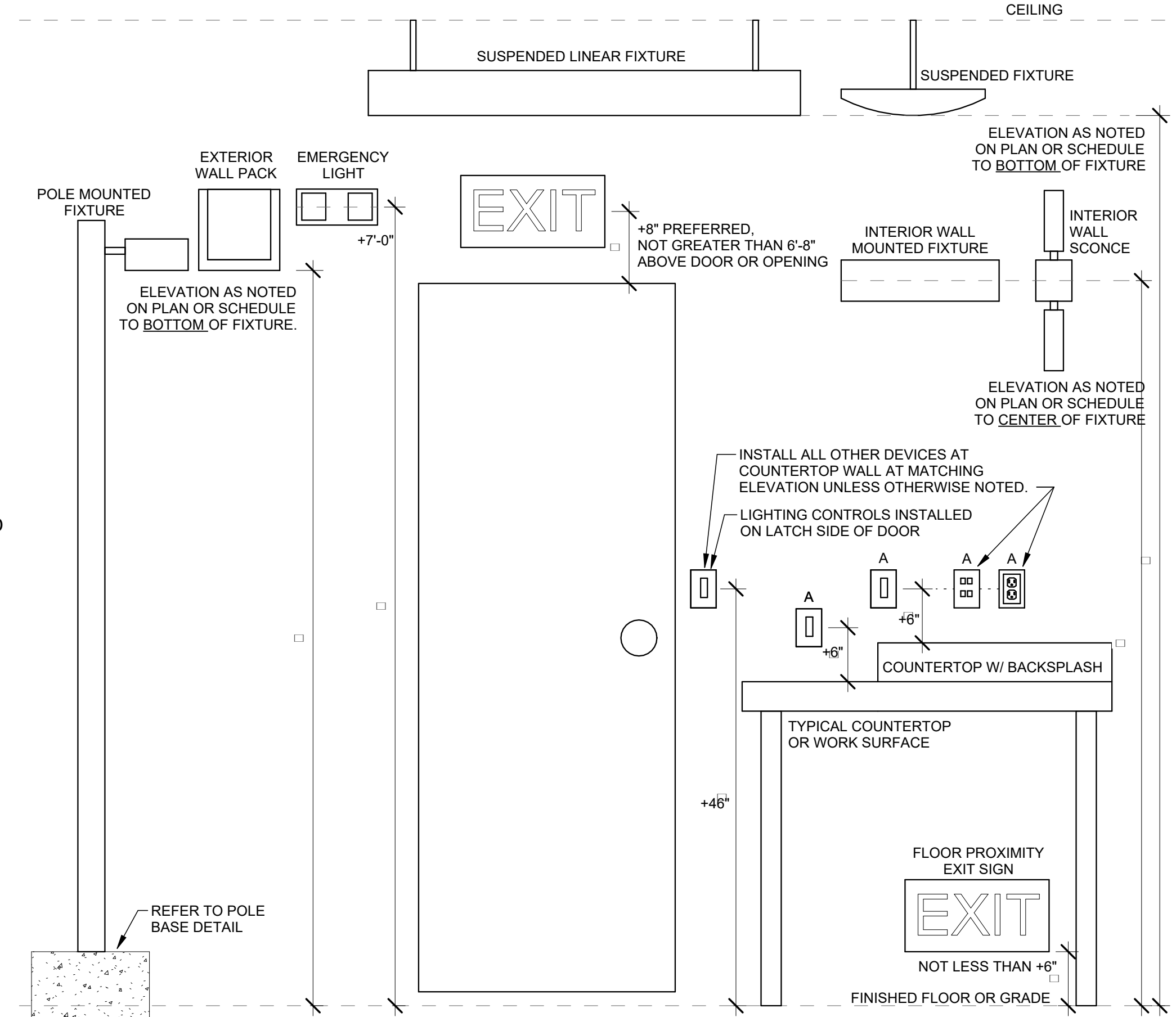
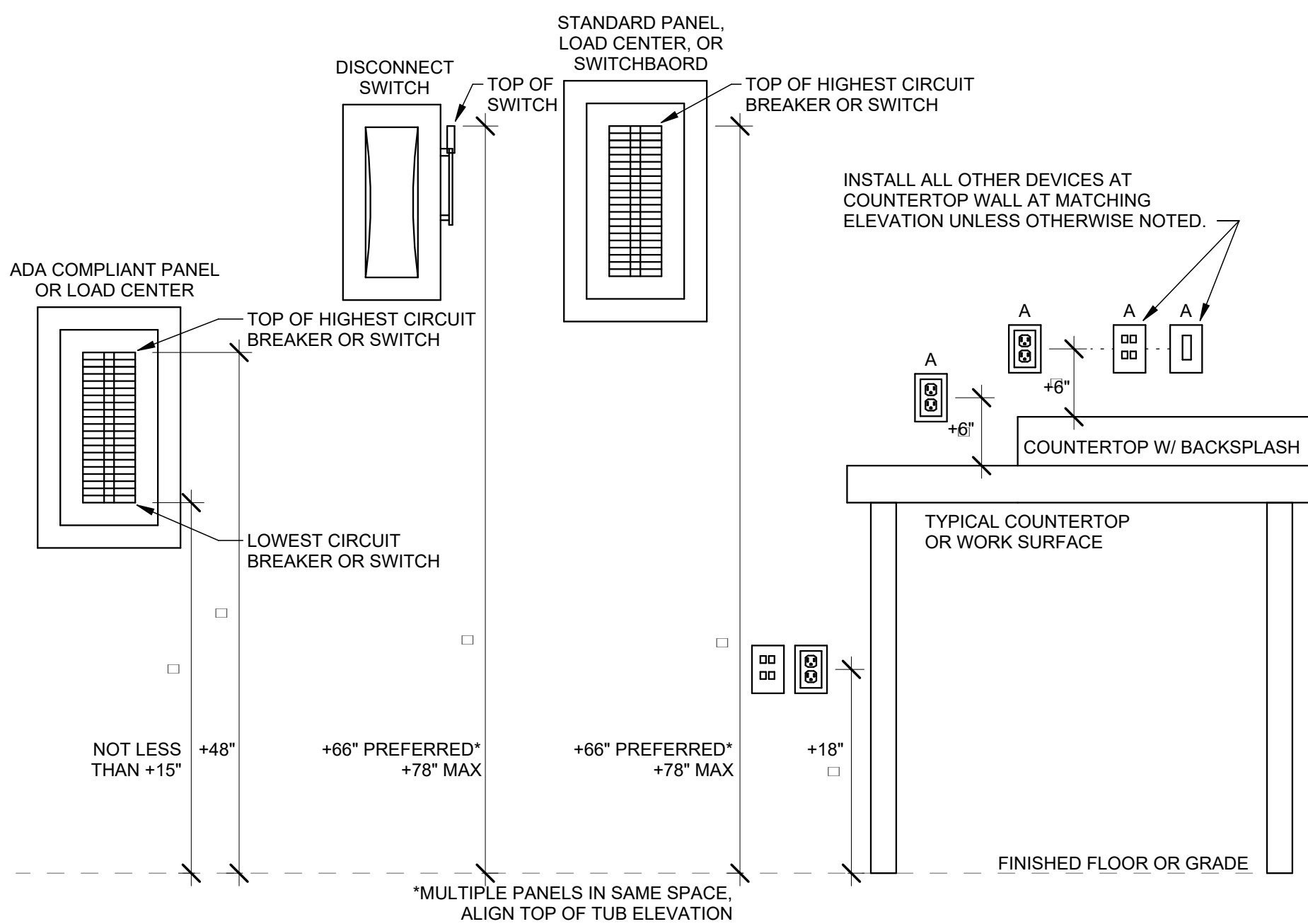
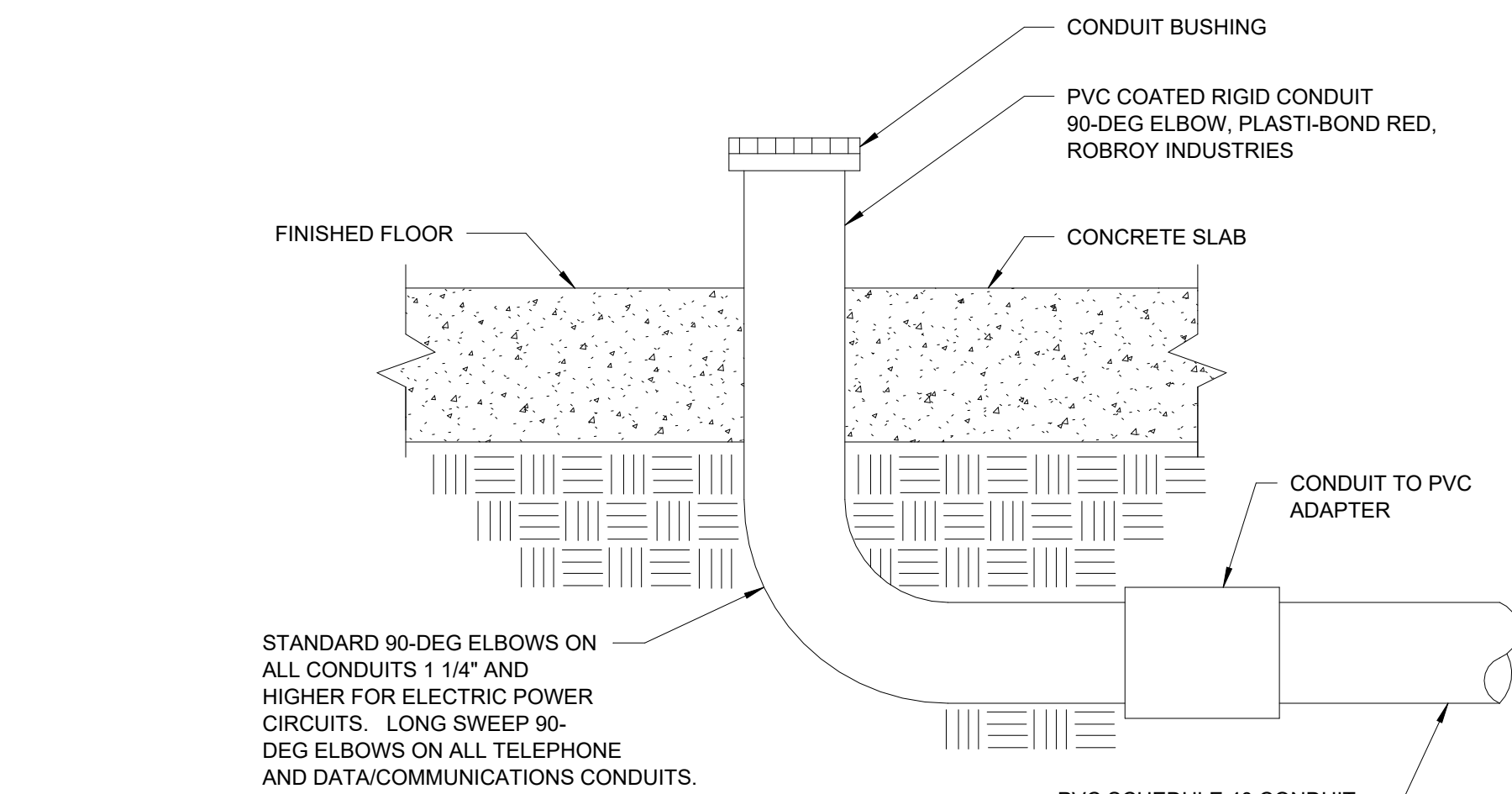
SERVICE RESPONSIBILITY MATRIX				
NOTES: 1. ITEMS NOT LISTED ARE CONTRACTOR FURNISHED/CONTRACTOR INSTALLED UNLESS OTHERWISE NOTED.				
ABBREVIATIONS: CP/CI : CONTRACTOR PROVIDED / CONTRACTOR INSTALLED. CP/UI : CONTRACTOR PROVIDED / UTILITY INSTALLED. UP/UI : UTILITY PROVIDED / UTILITY INSTALLED. UP/CI : UTILITY PROVIDED / CONTRACTOR INSTALLED.				
LABEL	CP/CI	CP/UI	UP/UI	UP/CI
PRIMARY CONDUIT	●			
PRIMARY CONDUCTORS			●	
XFR PAD	●			
SECONDARY CONDUIT	●			
SECONDARY CONDUCTORS	●			
METER ENCLOSURE	●			
METER				●
CT CABINET	●			
CURRENT TRANSFORMERS			●	
POTENTIAL TRANSFORMERS			●	
CT TERMINATION, XFR to CT			●	
SECONDARY TERMINATIONS			●	
METER-CT CONDUIT	●			

ELECTRIC PRIMARY BY L.E.U.





- NOTES
- ALL AVAILABLE GROUNDING ELECTRODES WHICH ARE PRESENT AT THE BUILDING OR STRUCTURE SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM (GES). ADDITIONAL CODE-REQUIRED GROUNDING CONNECTIONS NOT SHOWN SHALL BE PROVIDED. CONNECTIONS WHICH ARE ENCASED, UNDERGROUND, OR INACCESSIBLE SHALL BE EXOTHERMIC WELD.
 - ALL BONDING JUMPERS CONNECTING GROUNDING ELECTRODES TO THE GES SHALL BE SIZED EQUAL TO THE GROUNDING ELECTRODE CONDUCTOR (GEC) IN ACCORDANCE WITH NEC 250.33(C). OTHER BONDING JUMPERS SHALL BE SIZED AS OTHERWISE DESCRIBED IN NEC ARTICLE 250. CONDUCTORS SHALL BE BARE COPPER UNLESS OTHERWISE NOTED.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL PRODUCT AND MATERIAL REQUIREMENTS. GROUNDING AND BONDING METHODS AND MATERIALS SHALL COMPLY WITH NEC ARTICLE 250.
 - REFER TO TECHNOLOGY DETAILS FOR ADDITIONAL REQUIREMENTS RELATED TO TELECOM GROUNDING.

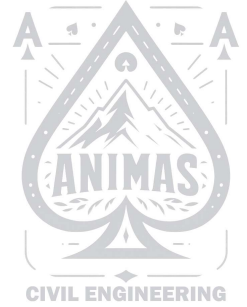


ANIMAS CIVIL ENGINEERING

P.O. BOX 830974, RICHARDSON, TEXAS 75083

PH: 214-803-1099

OKLAHOMA ENGINEERING FIRM REG. NO. CA-9445



Jose Jimenez Rubio
Community Development
City of Broken Arrow
220 S. First Street
Broken Arrow, OK 74012

RE: TFCU – Lot 3
5608 S. Aspen Drive
Variance Request

Mr. Rubio:

Please accept this letter on behalf of the current owner, Peak Broken Arrow, LLC, and the developer, Tinker Federal Credit Union, as our formal request for Variances to the subdivision code.

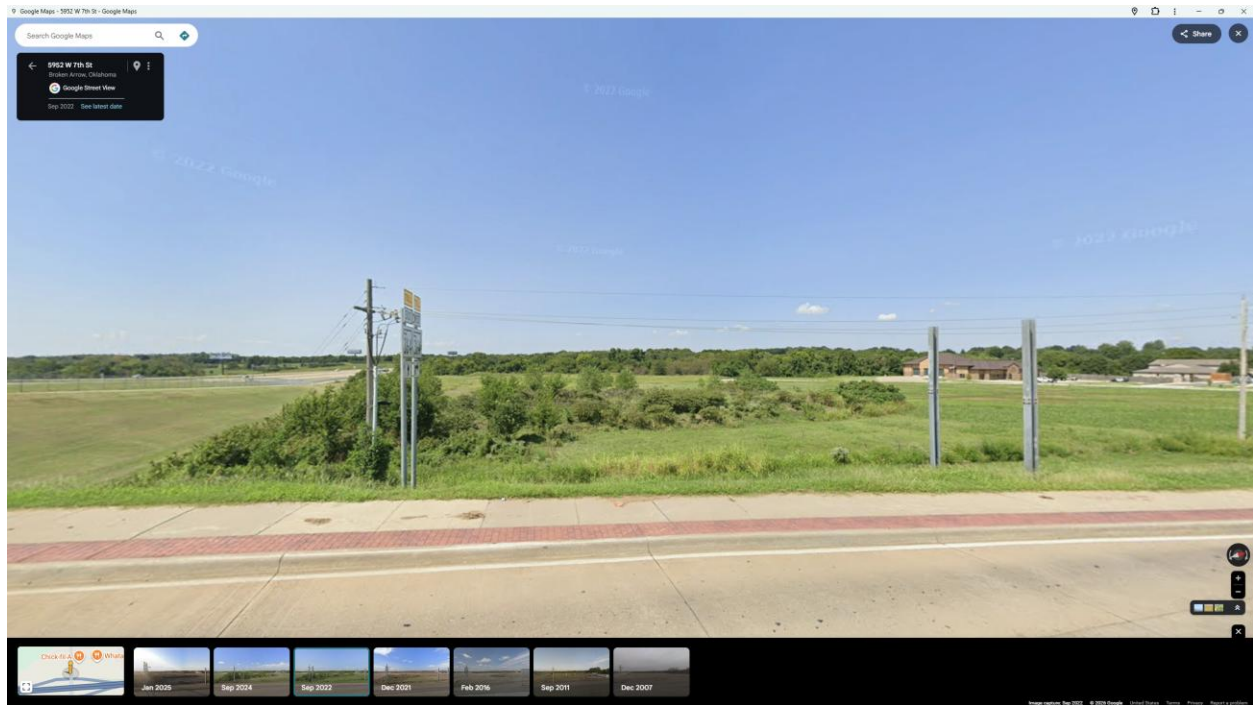
1. The property is located within the Highway Overlay Design District and requires the building orientation to face Creek Turnpike. Our request is to grant a variance to allow the building to face Aspen Avenue as there is significant topography between Creek Turnpike and the building location. The building is more visible from Aspen Avenue and has been designed to feature the primary façade along Aspen Avenue.
2. The maximum allowable parking is 125% of the code minimum requirements. A bank is required to park at 1 space per 300 square feet. The proposed bank is 4,531 square feet which requires 16 parking spaces and only allows 20 parking spaces based on code. Our request is to grant a variance to allow the site to provide additional parking as shown on the attached Site Plan (currently 38 spaces shown). TFCU expects a high volume of customers at this location similar to their other facilities throughout Oklahoma.

Should you have any additional comments or questions, please give me a call to discuss.

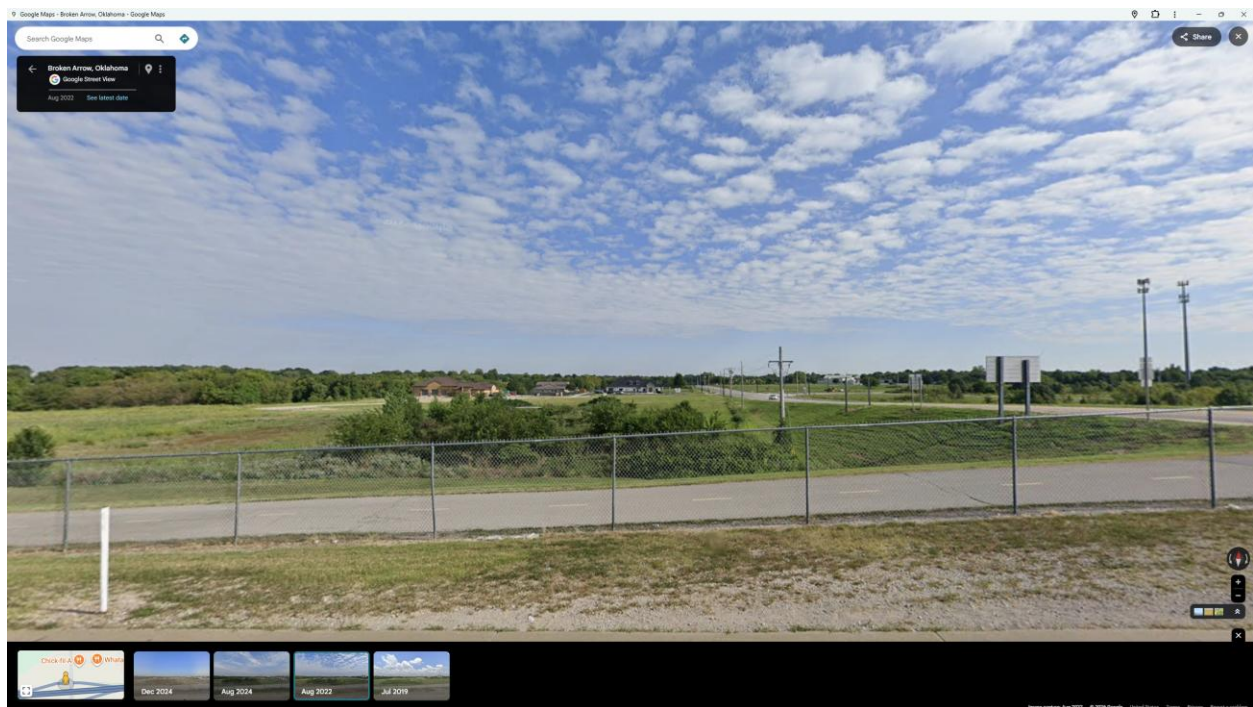
Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Doggett', is positioned above the printed name.

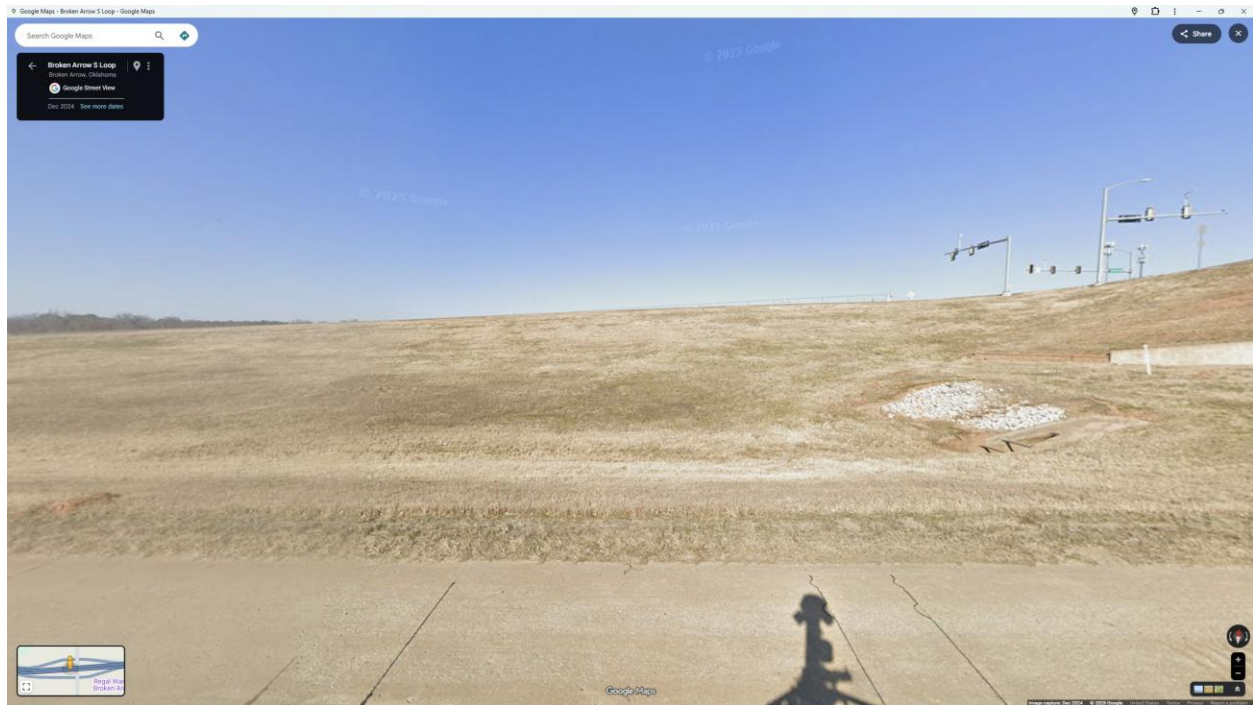
Michael Doggett, P.E.
President
Animas Civil Engineering



View from Aspen Avenue looking West



View from Westbound Creek Turnpike On Ramp looking North



View from Creek Turnpike Westbound looking North