# CONCRETE PARKING IMPROVEMENTS

# RICHMOND READINESS CENTER RICHMOND, MISSOURI

STATE OF MISSOURI OWNER:

MIKE KEHOE, GOVERNOR

DEPARTMENT OF THE MISSOURI NATIONAL GUARD

OFFICE OF THE ADJUTANT GENERAL FACILITIES MANAGEMENT OFFICE

**PROJECT** DEPARTMENT OF THE MISSOURI NATIONAL GUARD

MANAGEMENT:

OFFICE OF THE ADJUTANT GENERAL FACILITIES MANAGEMENT OFFICE

SHEET INDEX:

C-501

**COVER SHEET** G-001 C-101 **EXISTING SITE PLAN** C-102 SITE PLAN **GRADING PLAN** C-103 LIGHTING PLAN E-101

**DETAIL SHEET** 

MITCH STROTHER PE **DESIGNER:** 

MISSOURI ARMY NATIONAL GUARD

PROJECT NUMBER: T252201

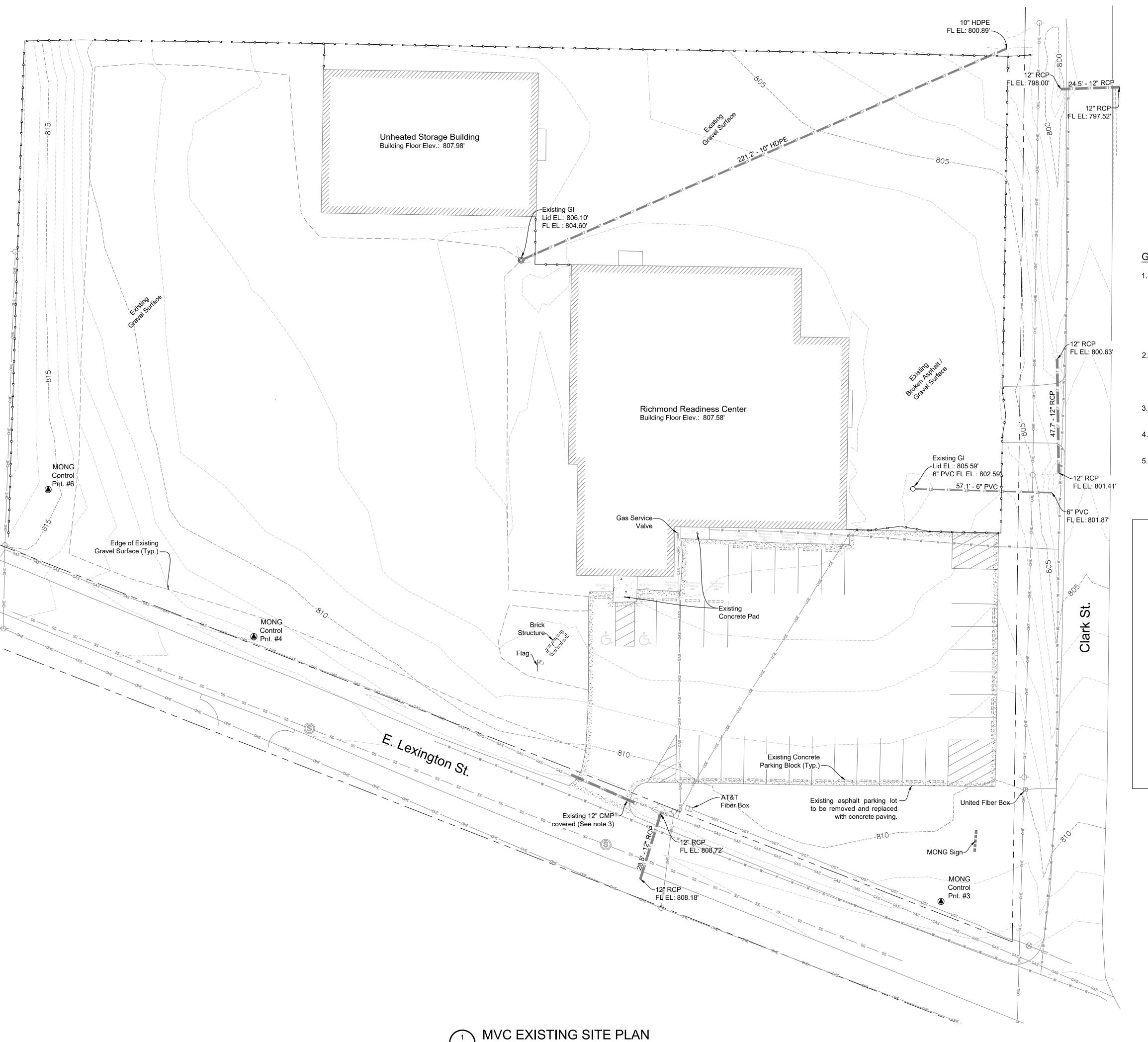
6266 SITE NUMBER:

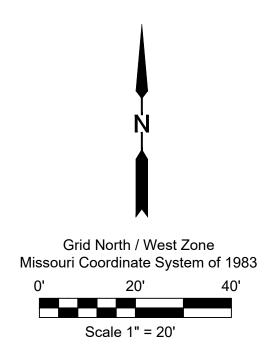
ASSET NUMBER: 8136266001



PROJECT LOCATION ADDRESS: 860 EAST LEXINGTON STREET RICHMOND, MO 64085 UNITED STATES

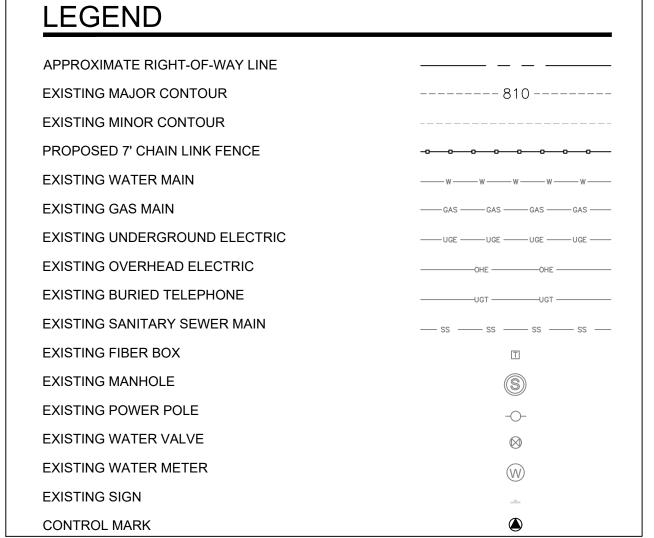
COORDINATES: 39.273, -93.958



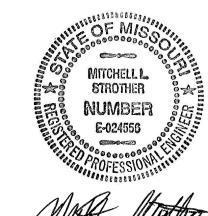


#### **GENERAL NOTES:**

- 1. EXISTING UTILITIES DEPICTED ON THESE PLANS ARE BASED ON AVAILABLE SURVEYS AND RECORDS; THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES, THE EXISTENCE OF WHICH, AT PRESENT, IS NOT KNOWN. VERIFICATION OF THE LOCATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, UTILITY LOCATES WILL BE REQUIRED PRIOR TO CONSTRUCTION. CONTACT THE MISSOURI ONE CALL SYSTEM AT 1-800-DIG-RITE (1-800-344-7483) PRIOR TO EXCAVATION OR DEMOLITION.
- 2. HORIZONTAL & VERTICAL CONTROL WERE DERIVED FROM THE MISSOURI DEPARTMENT OF TRANSPORTATION'S REAL-TIME NETWORK. THE HORIZONTAL CONTROL IS UTILIZING THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE, CONVERTED TO U.S. SURVEY FEET AND THE VERTICAL CONTROL IS BASED FROM NAVD88 DATUM.
- 3. EXISTING 12" CMP IS COVERED. EXISTING CMP IS LOCATED OVER AN EXISTING GAS MAIN AND SHALL BE LEFT IN PLACE.
- 4. CONTRACTOR SHALL REMOVE ALL EXCESS EXCAVATED MATERIAL AND LEGALLY DISPOSE OF OFF OWNERS' SITE.
- 5. CONTRACTOR SHALL REMOVE ALL EXISTING SIGN POSTS DURING DEMOLITION AND INSTALL EXISTING SIGNS ON NEW SIGN POSTS IN THE ORIGINAL LOCATIONS UNLESS NOTED OTHERWISE ON SHEET C-102.



STATE OF MISSOURI MIKE KEHOE, **GOVERNOR** 



PROFESSIONAL ENGINEER - E-024556



DEPARTMENT OF THE MISSOURI NATIONAL GUARD

> **OFFICE OF THE** ADJUTANT GENERAL

FACILITIES MANAGEMENT **OFFICE** 

**CONCRETE PARKING IMPROVEMENTS** 

**RICHMOND** READINESS CENTER 860 E. LEXINGTON ST. RICHMOND, MO 64085

PROJECT # T252201 6266 ASSET # 8136266001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 07/16/2025

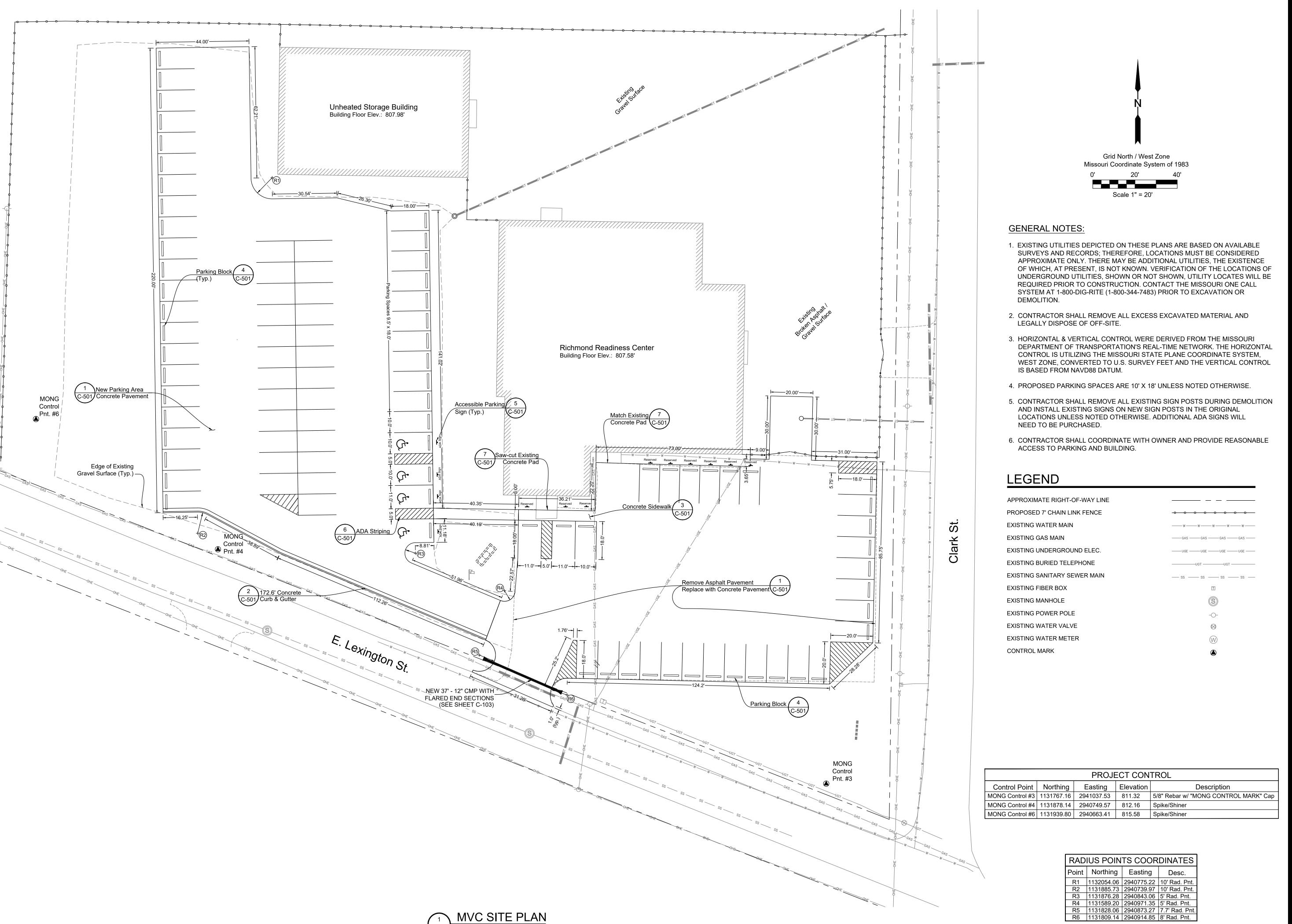
CAD DWG FILE: POVPARKINGIMP
DRAWN BY: RLH
CHECKED BY: MLS DESIGNED BY: RLH/MLS

SHEET TITLE:

**EXISTING** SITE PLAN

SHEET NUMBER:

SHEET: 2 OF 6 DATE: 07/16/2025



STATE OF MISSOURI MIKE KEHOE, GOVERNOR



07/16/2025 MITCHELL L. STROTHER PROFESSIONAL ENGINEER - E-024556



DEPARTMENT OF THE MISSOURI NATIONAL GUARD

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CONCRETE PARKING IMPROVEMENTS

RICHMOND READINESS CENTER 860 E. LEXINGTON ST. RICHMOND, MO 64085

PROJECT # T252201 SITE # 6266 ASSET # 8136266001

REVISION:
DATE:
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DATE:
REVISION:
DATE:
DATE:

ISSUE DATE: 07/16/2025

CAD DWG FILE: RICHMOND-POV
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

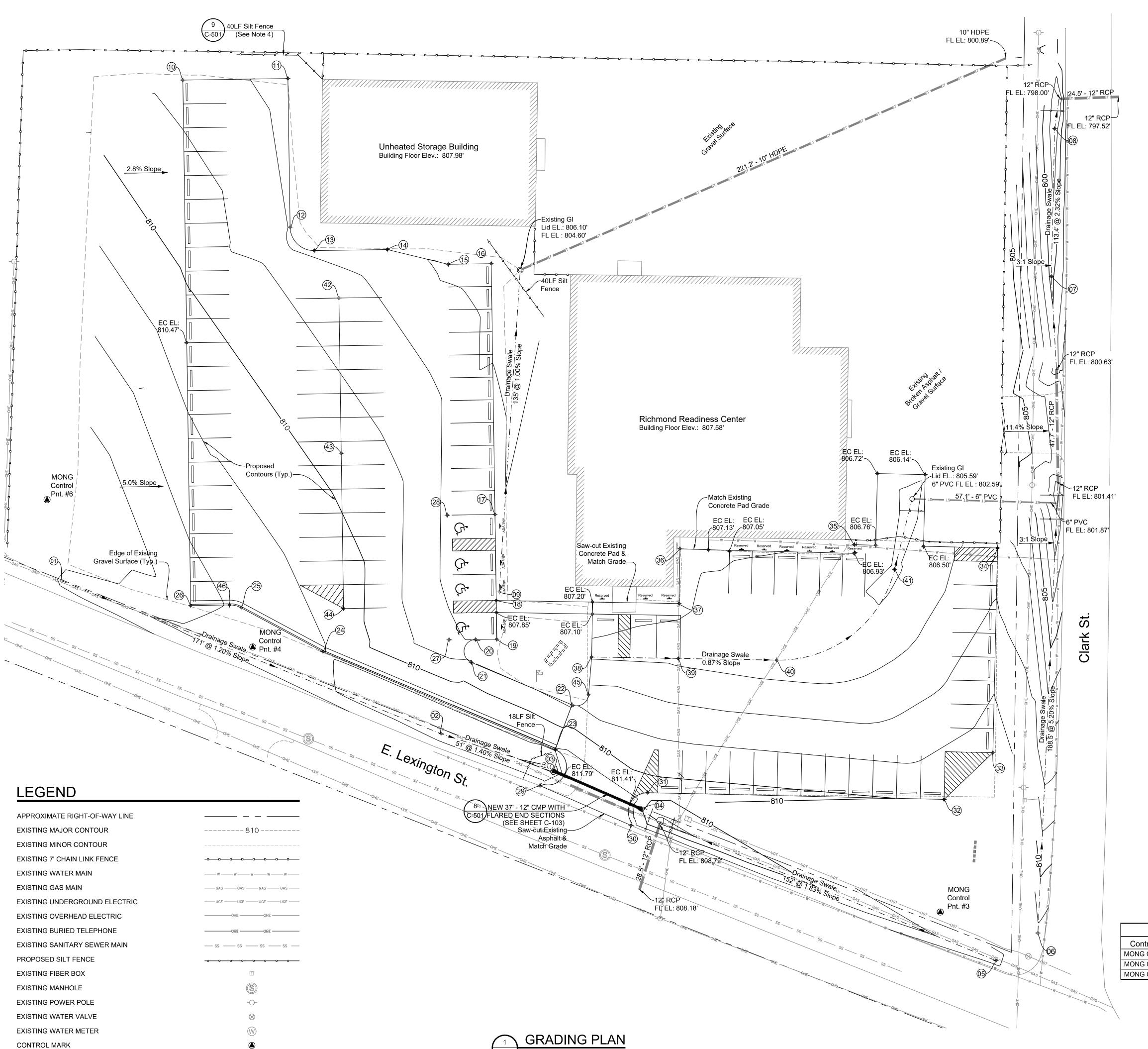
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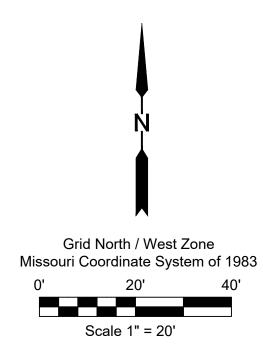
POV PARKING IMPROVEMENTS SITE PLAN

SHEET NUMBER:

C-102

SHEET: 3 OF 6 DATE: 07/16/2025





#### **GENERAL NOTES:**

- 1. EXISTING UTILITIES DEPICTED ON THESE PLANS ARE BASED ON AVAILABLE SURVEYS AND RECORDS; THEREFORE, LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES, THE EXISTENCE OF WHICH, AT PRESENT, IS NOT KNOWN. VERIFICATION OF THE LOCATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, UTILITY LOCATES WILL BE REQUIRED PRIOR TO CONSTRUCTION. CONTACT THE MISSOURI ONE CALL SYSTEM AT 1-800-DIG-RITE (1-800-344-7483) PRIOR TO EXCAVATION OR DEMOLITION
- 2. CONTRACTOR SHALL REMOVE ALL EXCESS EXCAVATED MATERIAL AND LEGALLY DISPOSE OF OFF-SITE.
- 3. HORIZONTAL & VERTICAL CONTROL WERE DERIVED FROM THE MISSOURI DEPARTMENT OF TRANSPORTATION'S REAL-TIME NETWORK. THE HORIZONTAL CONTROL IS UTILIZING THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE, CONVERTED TO U.S. SURVEY FEET AND THE VERTICAL CONTROL IS BASED FROM NAVD88 DATUM.
- 4. SILT FENCE LOCATIONS ARE ALL 10LF UNLESS NOTED OTHERWISE (158LF OF SILT FENCE ESTIMATED FOR THIS PROJECT).

CONCRETE & DRAINAGE POINTS						
Point	Northing	Easting	Elev.	Desc.		
01	1131905.78	2940669.63	812.47	DS		
02	1131841.80	2940828.43				
03	1131826.46	2940875.22	809.79	FL IN		
04	1131810.29	2940912.36	809.38	FL OUT		
05	1131746.81	2941060.86	811.50	DS		
06	1131758.38	2941078.42	811.22	DS		
07	1132033.33	2941084.03	799.72	DS		
80	1132095.09	2941085.46	798.29	DS		
09	1131901.19	2940852.79	807.45	DS		
10	1132115.46	2940720.29	808.68	EC		
11	1132116.11	2940764.29	807.62	EC		
12	1132053.91	2940765.22	807.96	EC		
13	1132044.06	2940775.36	807.72	EC		
14	1132044.52	2940805.90	807.26	EC		
15	1132038.33	2940831.46	806.86	EC		
16	1132038.60	2940849.45	806.58	EC		
17	1131933.61	2940851.02	807.63	EC		
18	1131897.62	2940851.56	807.82	EC		
19	1131881.41	2940851.80	807.93	EC		
20	1131881.28	2940842.99	808.05	EC		
21	1131871.67	2940841.12	809.23	EC		
22	1131853.91	2940883.28	88.808	EC		
23	1131835.16	2940876.26	811.56	TC		
24	1131876.16	2940778.97	811.56	TC		
25	1131894.54	2940744.70	812.39	TC		
26	1131895.48	2940723.57	813.00	TC		
27	1131881.11	2940831.80	808.13	CE		
28	1131933.31	2940831.02	807.83	CE		
29	1131820.03	2940869.92	811.46	EA		
30	1131803.44	2940908.03	811.47	EA		
31	1131817.14	2940914.95	810.47	EC		
32	1131814.31	2941039.17	809.91	EC		
33	1131833.85	2941059.57	809.61	EC		
34	1131919.58	2941061.53	807.04	EC		
35	1131920.95	2941001.53	807.04	EC		
36	1131919.23	2940928.50	807.16	EC		
37	1131896.32	2940928.12	807.08	EC		
38	1131873.93	2940891.52	806.92	EC		
39	1131873.32	2940927.74	806.80	DS		
40	1131872.63	2940969.05	806.44	DS		
41	1131910.58	2941018.41	805.86	DS		
42	1132024.21	2940785.66	808.43	CE		
43	1131959.22	2940786.63	809.60	CE		
44	1131894.23	2940787.60	810.54	CE		
45	1131858.10	2940890.20	808.61	CE		
46	1131895.73	2940739.82	812.42	TC		

DS = Centerline Drainage Swale

EC = Edge of Concrete

TC = Top of Curb - Subtract 0.5' for EC

CE = Concrete Elevation EA = Edge of Existing Asphalt

PROJECT CONTROL							
Control Point Northing Easting Elevation Description				Description			
MONG Control #3	1131767.16	2941037.53	811.32	5/8" Rebar w/ "MONG CONTROL MARK" Cap			
MONG Control #4	1131878.14	2940749.57	812.16	Spike/Shiner			
MONG Control #6	1131939.80	2940663.41	815.58	Spike/Shiner			





07/16/2025
MITCHELL L. STROTHER
PROFESSIONAL ENGINEER - E-024556



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FACILITIES MANAGEMENT OFFICE

CONCRETE PARKING IMPROVEMENTS

RICHMOND READINESS CENTER 860 E. LEXINGTON ST. RICHMOND, MO 64085

PROJECT # T252201 SITE # 6266

ASSET # 8136266001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
DATE:

ISSUE DATE: 07/16/2025

CAD DWG FILE: RICHMOND-POV
DRAWN BY: RLH
CHECKED BY: MLS
DESIGNED BY: RLH/MLS

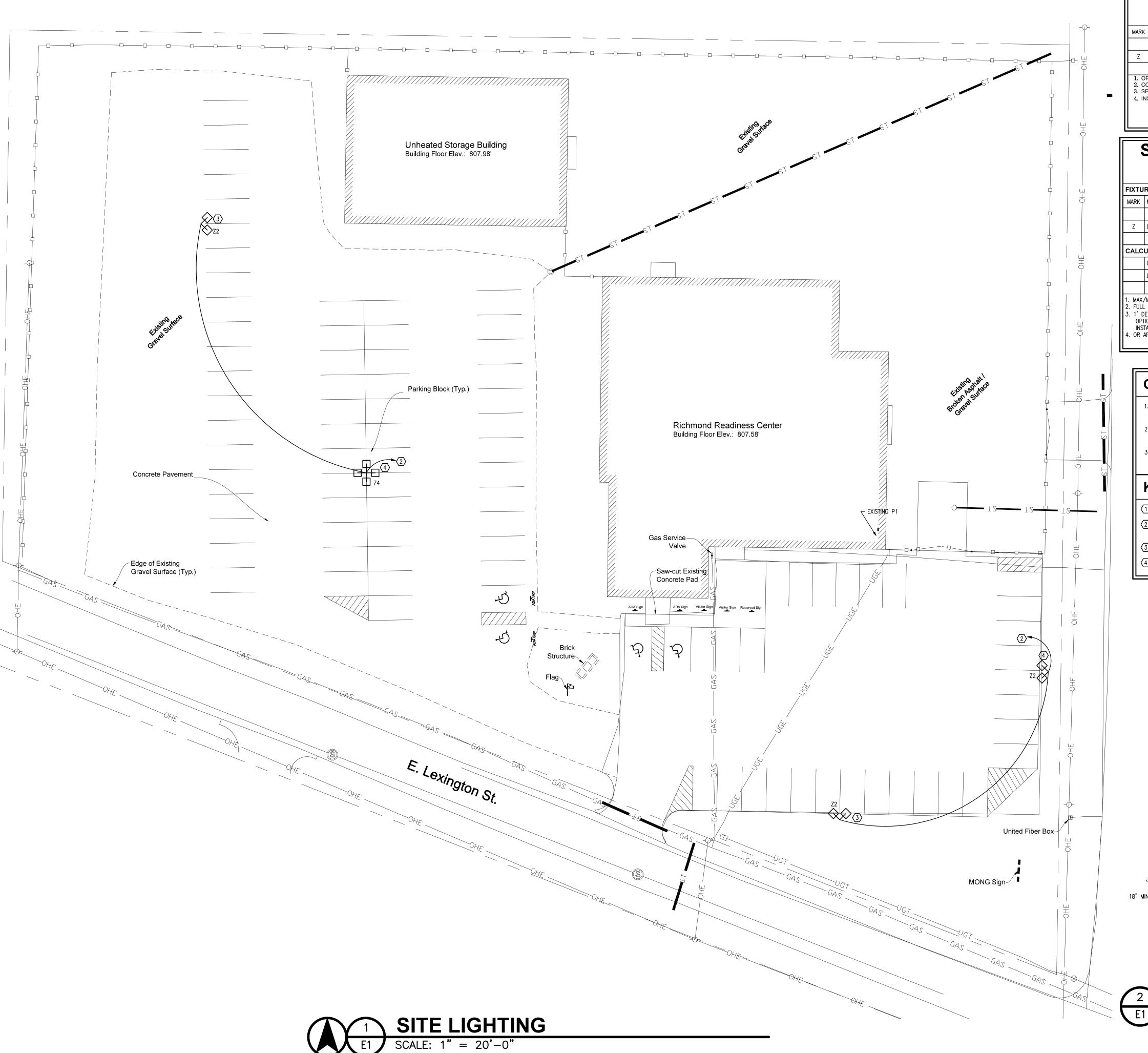
SHEET TITLE:

POV PARKING IMPROVEMENTS GRADING PLAN

SHEET NUMBER:

C-103

SHEET: 4 OF 6 DATE: 07/16/2025



### LIGHTING FIXTURE SCHEDULE (BASIS OF DESIGN) TYPE LAMPS MOUNTING REMARKS MARK MANUFACTURER AND MODEL NUMBER

Z	LSI MRL-LED-50L-SIL-5W-UNV-DIM-40-70CRI-BRZ	LED	_	353	20' POLE	1,2,3,4
						'
2. CO 3. SE	APPROVED EQUAL BY COOPER, WILLIAMS, OR GE. NTROLLED VIA INTERMATIC STO1 SERIES TIMBER AND K E SHEET E-101 FOR LOCATION/ORIENTATION AND NUMBI STALLED ON LSI-4SQ-B3-S11G-20-#-BRZ (# - SEE SHEET E-	ER OF H	EADS P	ER POL	E.	POLE.

## SITE LIGHTING SCHEDULE (BASIS OF DESIGN)

FIXTURES							
			#	SIZE			
Z	LSI MRL-LED-50L-SIL-5W-UNV-DIM-40-70CRI-BRZ	LED	1	353	20' POLE	2,3,4	0.95/ABS
CALC	ULATIONS						
	CALCULATION ZONE	AVG	MAX	MIN	MX/MN (1)	AV/MN (1)	AREA/LEN
	LOT	3.6	40.7	0.0	N/A	_	_

1. MAX/MIN RATIO USING THE MIDDLE 95% OF DATA POINTS
2. FULL CUTOFF FIXTURE
3. 1' DEEP FIXTURE ON 22' POLE ON 3' BASE.
OPTIONAL CHANCE T1122014 LIGHTING FOUNDATION
INSTALLED ON LSI-5SQB5-A188-25-1-BRZ
4. OR APPROVED EQUAL BY COOPER, WILLIAMS, OR GE.

#### **GENERAL NOTES:**

VERIFY PLUMBING, HVAC, POWER, AND LIGHTING REQUIREMENTS FOR OWNER'S SPECIFIC EQUIPMENT PRIOR TO ROUGH-IN.

2. COORDINATE INSTALLATION OF EQUIPMENT WITH MANUFACTURERS' INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN.

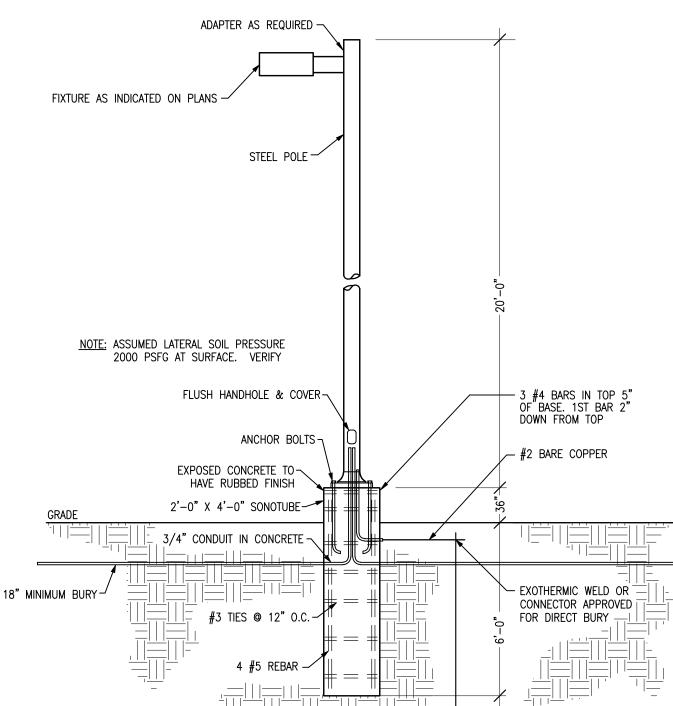
3. CONTRACTOR SHALL MAINTAIN FIRE RATING OF ANY PENETRATION AND SHALL SEAL ANY PENETRATION IN A FLOOR, CEILING, OR EXTERIOR WALL.

#### **KEYED NOTES:**

(1) CONTROLLED VIA INTERMATIC STO1 SERIES TIMER AND K4221C PHOTOCONTROL. (2) CONNECT TO NEW 20A-2P BREAKER (CIRCUITS 39,41) IN EXISTING ELECTRICAL PANEL (P1). VERIFY LOCATION, SPACE, AND CAPACITY.

(3) WIRE SIZE: 2-#10, 1-#12 GROUND.

4 WIRE SIZE: 2-#8, 1-#12 GROUND.



# LIGHT POLE BASE DETAIL

5/8" X 8' GROUND ROD

STATE OF MISSOURI MIKE KEHOE, **GOVERNOR** 

FREDDIE L. MALICOAT PROFESSIONAL ENGINEER - E-16897



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**FACILITIES MANAGEMENT OFFICE** 

#### **POV PARKING IMPROVEMENTS**

**RICHMOND** READINESS CENTER 860 E. LEXINGTON ST. RICHMOND, MO 64085

PROJECT # T252201 6266 ASSET # 8136266001

REVISION: **REVISION: REVISION:** ISSUE DATE: 07/16/2025

CAD DWG FILE: 25139
DRAWN BY: FM
CHECKED BY: FM
DESIGNED BY: FM

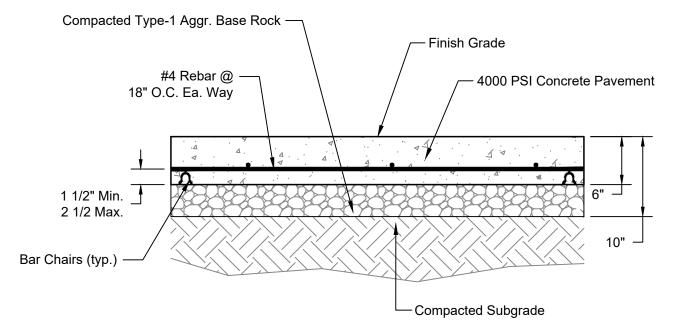
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LIGHTING PLAN & DETAILS

SHEET NUMBER:

E-101

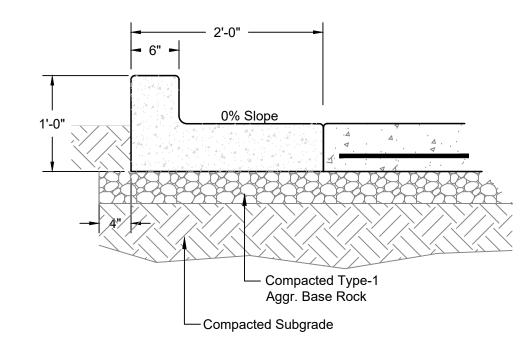
SHEET: 5 OF 6 DATE: 07/16/2025



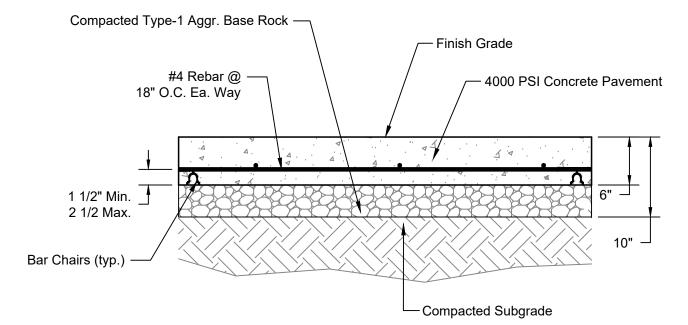
1. 1/8"W X 2"D SAWED JOINTS AT 12' CENTERS (MAXIMUM) REQUIRED FOR ALL CONCRETE

- 2. REINFORCING STEEL SHALL BE SUPPORTED WITH BAR CHAIRS W/ CONTINUOUS RUNNERS SPACED AT 4 FEET C/C MAXIMUM.
- 3. CURING MATERIALS SHALL BE USED FOR ALL CONCRETE FLATWORK IN ACCORDANCE WITH
- SECTION 321313 PART 2.5 OF THE SPECIFICATIONS.





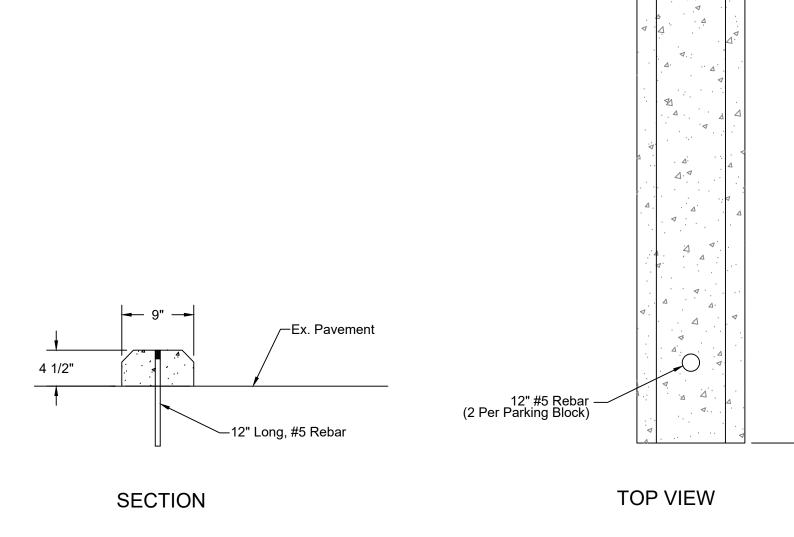
TYPICAL CURB DETAIL



1. 1/8"W X 2"D SAWED JOINTS AT 6' CENTERS (MAXIMUM) REQUIRED FOR ALL CONCRETE

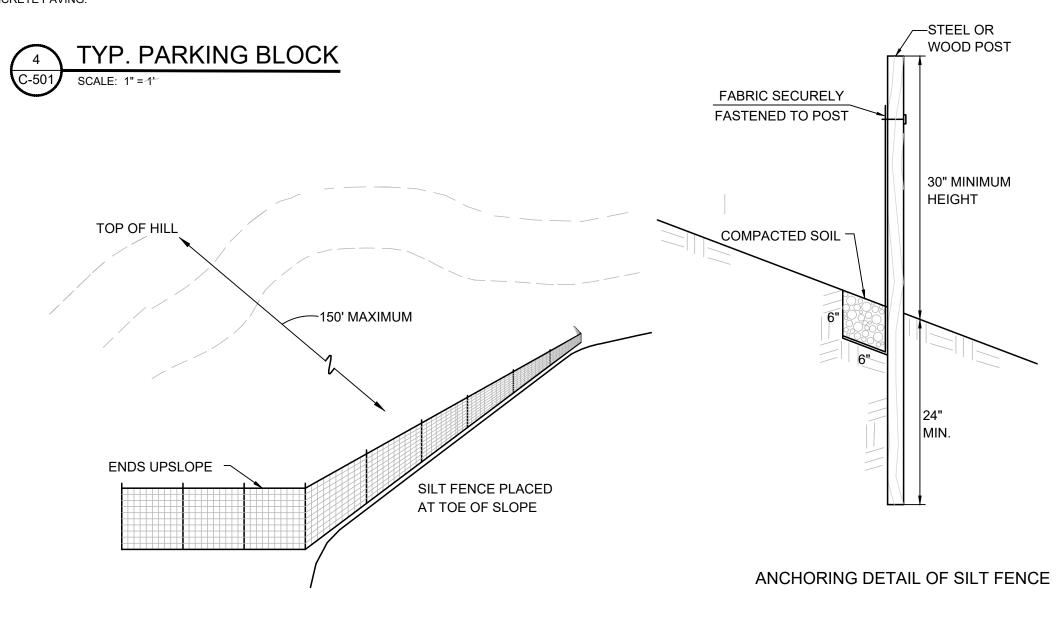
- 2. REINFORCING STEEL SHALL BE SUPPORTED WITH BAR CHAIRS W/ CONTINUOUS RUNNERS
- SPACED AT 4 FEET C/C MAXIMUM. 3. CURING MATERIALS SHALL BE USED FOR ALL CONCRETE FLATWORK IN ACCORDANCE WITH
- SECTION 321313 PART 2.5 OF THE SPECIFICATIONS.

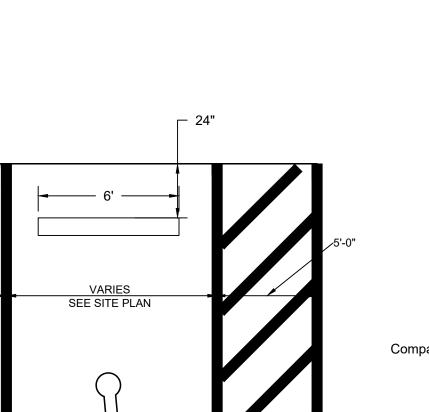


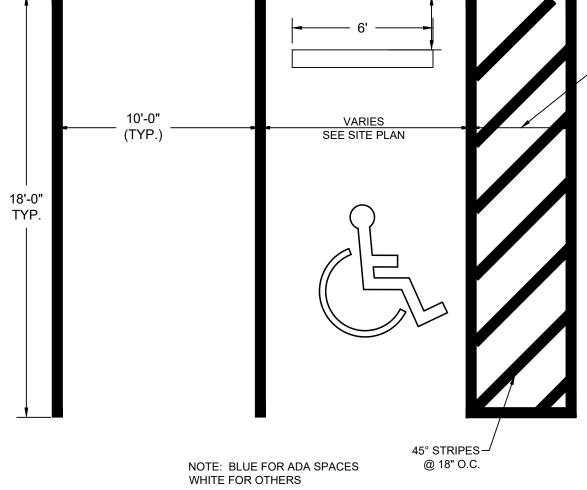


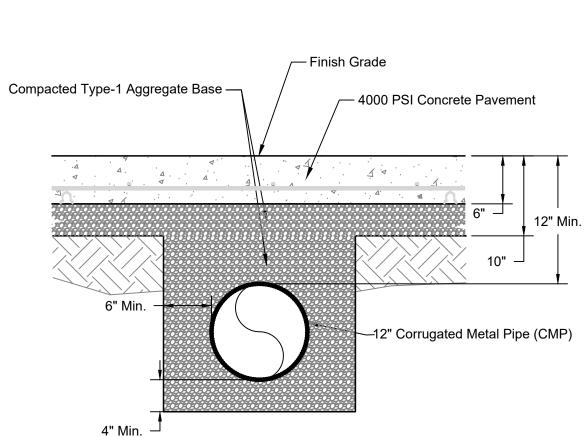
NOTES:

- 1. PRECAST CONCRETE PARKING BLOCKS SHALL BE STEEL-REINFORCED, AIR-ENTRAINED CONCRETE WITH A 4000 PSI MINIMUM COMPRESSION STRENGTH. TOP OF THE PARKING BLOCK WILL HAVE TWO CHAMFERED CORNERS, AND TWO FACTORY-FORMED OR DRILLED VERTICAL HOLES AS DEPICTED ON DETAIL.
- 2. PARKING BLOCKS SHALL BE INSTALLED 24" FROM THE EDGE OF THE PROPOSED CONCRETE PAVING.









TYP. CONSTRUCTION JOINT

Concrete Pavement

#4 Deformed Bar

24" Long @ 30" O.C.

PIPE INSTALLATION DETAIL

Existing-

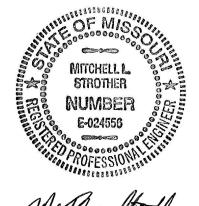
Concrete Pavement

#### **CONSTRUCTION SPECIFICATIONS:**

- 1. FABRIC FENCES MAY BE CONSTRUCTED WITH SUPPORTING FENCES, SUCH AS SNOW FENCES OR WIRE MESH FENCES. THE SUPPORTING FENCES SHALL BE STRONG ENOUGH TO WITHSTAND THE LOAD FROM POND WATER AND TRAPPED SEDIMENT. THE SUPPORT POSTS SHALL BE SPACED AT 10 FEET OR LESS, AND SHALL BE PLACED OR DRIVEN AT LEAST 2 FEET INTO THE GROUND. POSTS SHALL BE 4-INCH DIAMETER WOOD POSTS OR STEEL POSTS.
- WHEN A FABRIC FENCE IS INSTALLED WITHOUT A SUPPORTING FENCE, THE POSTS SHALL BE SPACED AT 4 FEET OR LESS. POSTS SHALL BE SPACED OR DRIVEN AT LEAST 2 FEET INTO THE GROUND. POSTS SHALL BE 2-INCH SQUARE OR HEAVIER WOOD POSTS OR STANDARD STEEL POSTS.
- 2. A TRENCH FOR ANCHORING THE FABRIC SHALL BE DUG ALONG THE UPSLOPE SIDE OF THE POSTS. THE TRENCH SHALL BE AT LEAST 6 INCHES WIDE AND 6 INCHES DEEP. THE FABRIC SHALL BE LAID IN THE TRENCH, WHICH THEN SHALL BE BACKFILLED AND COMPACTED TO PREVENT WATER AND SEDIMENT FROM PASSING UNDERNEATH THE FABRIC FENCE.
- 3. THE FILTER FABRIC SHALL BE FURNISHED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE SILT FENCE TO AVOID SPLICES. WHEN SPLICES ARE NECESSARY, THE FABRIC SHALL BE SPLICED AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP, FOLDED OVER, AND SECURELY FASTENED.
- 4. THE SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF POLYPROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN UNIFORM IN TEXTURE AND APPEARANCE AND FREE FROM DEFECTS, FLAWS, OR TEARS THAT WOULD AFFECT ITS PHYSICAL PROPERTIES. WHEN INSTALLING FABRIC FOR SILT FENCES, FOLLOW MANUFACTURER'S RECOMMENDATIONS.

SYNTHETIC FILTER FABRIC EROSION CONTROL DETAIL

#### **STATE OF MISSOURI** MIKE KEHOE, **GOVERNOR**



PROFESSIONAL ENGINEER - E-024556



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FACILITIES MANAGEMENT **OFFICE** 

**POV PARKING IMPROVEMENTS** 

**RICHMOND** READINESS CENTER 860 E. LEXINGTON ST. RICHMOND, MO 64085

813630013

PROJECT # T24MP21 6300

ASSET#

**REVISION: REVISION** DATE **REVISION:** 

ISSUE DATE: 07/16/2025

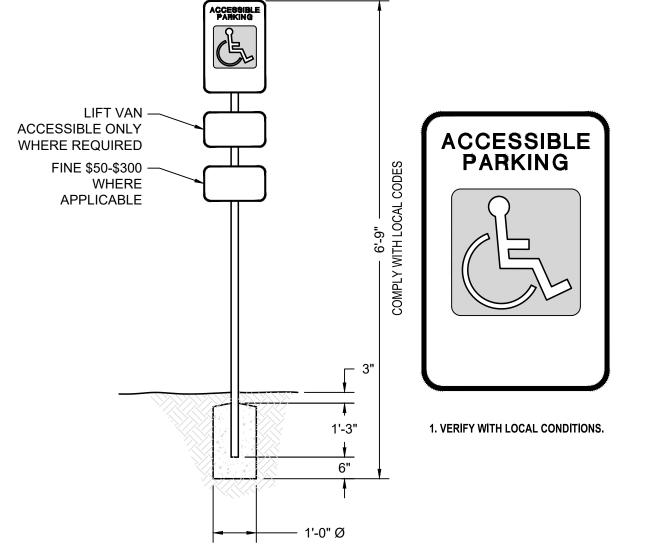
CAD DWG FILE: <u>C-501MISCDET</u> DRAWN BY: <u>RLH</u> CHECKED BY: MLS DESIGNED BY: RLH/MLS

SHEET TITLE:

**DETAIL SHEET** 

SHEET NUMBER:

SHEET: 6 OF 6 DATE: 07/16/2025



ACCESSIBILITY SIGN DETAIL

**ADA STRIPING DETAIL**