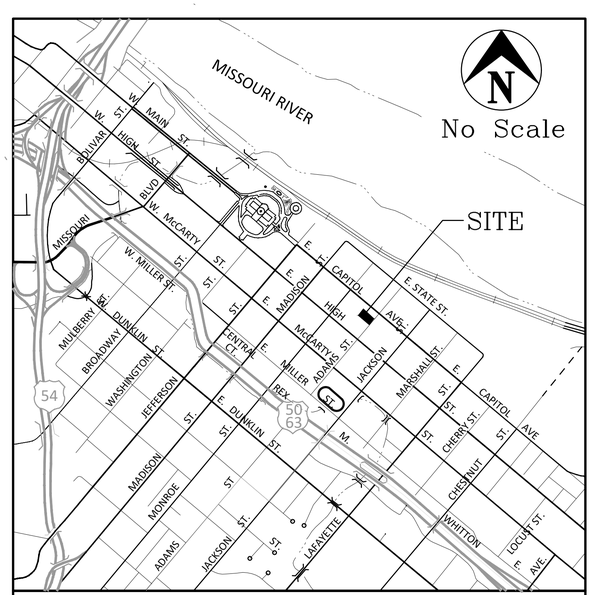
CARNEGIE BUILDING SITE IMPROVEMENTS
210 ADAMS STREET
JEFFERSON CITY, MISSOURI

PROJECT NO. 2022-23
BID DATE: JULY 22, 2022



SITE LOCATION MAP

SHEET INDEX

COLE COUNTY
Missouri
Est. 1820

LEGEND

EXISTING (Light or Dashed)		TEL. PEDESTAL	MAIL BOX
PROPOSED (Heavy or Solid)		POWER POLE	PROPERTY CORNER
EASEMENT		GUY WIRE	TREE
CENTERLINE		WATER VALVE	SANITARY MANHOLE
APPROX. EXISTING PROPERTY LINE		FIRE HYDRANT	GAS VALVE
SECTION LINE		WATER METER	LIGHT POLE
FENCE	—X—X—X—X—X—X—X—X—X—	STREET SIGN	SATELLITE DISH
ELECTRIC LINE	UGE		
FIBER OPTIC LINE	FO		
GAS LINE	G		
SAN. SEWER LINE	S		
TELEPHONE LINE	T		
WATER LINE	W		

ABBREVIATIONS: E-ELECTRIC, FO-FIBER OPTIC, G-GAS, S-SAN SEWER
SC-SIGNAL CABLE, T-TELEPHONE, W-WATER
PL-PROPERTY, CL-CENTER, R/W-RIGHT OF WAY
Ø-DIAMETER, R-RADIUS
UG-UNDERGROUND, O-OVERHEAD

CALL BEFORE YOU
DIG — DRILL — BLAST
1-800-344-7483
(TOLL FREE)
MISSOURI ONE CALL SYSTEM, INC.

UTILITY STATEMENT:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM VISIBLE FIELD SURVEY INFORMATION AND MISSOURI ONE-CALL MARKINGS IN PUBLIC RIGHT-OF-WAYS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE AND ONE-CALL MARKINGS. WHERE UTILITY ELEVATIONS ARE SHOWN ON THE PLANS, THE SURVEYOR HAS PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY COMPANIES

ELECTRIC:	AMEREN MISSOURI
GAS:	AMEREN MISSOURI
SANITARY SEWER:	CITY OF JEFFERSON
TELEPHONE, FIBER OPTIC:	CENTURYLINK
TELEPHONE, CABLE TV:	MEDIACOM
FIBER OPTIC:	SHO-ME TECHNOLOGIES, BLUEBIRD, SOCKET
WATER:	MISSOURI AMERICAN WATER

APPROVED BY: Eric Landwehr Date: 6/24/22
Eric Landwehr, P.E.
County Public Works Director

P:\2011\11-059\Carnegie\11-059-Carnegie Site-Wall.dwg, 6/24/2022 8:53:12 AM

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY JEFFERSON CITY, MISSOURI 65101
(573) 634-3455
(573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001558

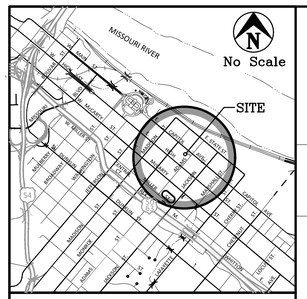
STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22
PAUL SAMSON, PE - ENGINEER
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

CMPS JOB No. 11-059
DRN. BY: PPK
CKD. BY: PLS
SCALE:

SHEET TITLE
TITLE SHEET

SHEET NUMBER
C000



SITE LOCATION MAP

1 inch = 10 feet

0 5 10 20 30

(Graphic Scale – Feet)

Cosimo Properties, LLC
324 E. Capitol Ave

Missouri Crossing, LLC
326 E. Capitol Avenue

P A R 99 Properties, LLC
328 E. Capitol Avenue

Exist. Building

Exist. Building

Exist. Building

297
Δ 625.92
RPPK

299
636.96
RPPK

UNNAMED ALLEY

Exist. Asphalt

Exist. Asphalt

Elec. Trans.

Fiber HH

CATV Ped.

Elec. Trans.

A/C

Elec. Panel

First United Methodist Church of Jefferson City
201 Monroe Street

Exist. Building Approximate FF=620.00

Exist. Asphalt

FF =635.61

Cole County Carnegie Building
210 Adams Street

Exist. Building

200
Δ 640.82
RPIP

ADAMS STREET

Fiber HH

Metal Steps

Ex. Fiber Box

FF =635.56

Ex. 4" Drain
TC =635.31

298
Δ 636.52
RPPK

5005
Δ 642.63
RPIP

Tel HH

Exist. Sidewalk

Exist. Asphalt

To be abandoned

7' w.c.

Exist. Asphalt

Exist. Asphalt

50 psi

COMMERCIAL WAY

San. MH
TC: 637.20
FL (SE): 631.75
FL (NW): 631.65

GENERAL NOTES:

1. All work shall comply with the Jefferson City, Missouri Codes and Standards, Technical Specifications, and all other applicable requirements.

2. It is the contractor's responsibility to obtain all necessary permits associated with the construction, notify municipal and state agencies and utility companies having jurisdiction, and to coordinate all inspections required.

3. Location of existing utilities are from best information available. Exact location and completeness are not guaranteed. Prior to construction the Contractor shall contact all utility companies concerned. (1-800-DIG-RITE Missouri One Call) If this data is not complete, make test pits and other field locations necessary in order to determine the exact locations of the concerned utilities. Any existing utilities, structures, trees, or other objects which could interfere with the correct completion of the project are also to be located by the Contractor. Any conflicts are to be addressed to the Engineer prior to construction. Additional work resulting from a failure to initially address these items will be at the expense of the Contractor.

4. Contractor to be responsible for the protection of new and existing structures, vegetation, walkways, or improvements. No trees outside cuts and fills are to be removed without the approval of the Engineer. No fill is to be placed around existing trees. Damages resulting from construction activities are to be repaired by Contractor at no additional cost to Owner. Any damages shall be brought to the immediate attention of the Engineer.

5. All written dimensions, coordinates, bearings, and other written data govern. Prior to starting work all data is to be verified by the contractor.

6. Consult Engineer regarding proposed changes, relocation, or modifications prior to the start of work.

7. New concrete is to match the existing concrete. Use existing concrete joints to tie new concrete to the existing. Maximum spacing on concrete joints shall be 10 feet.

8. All exposed areas of disturbed earth are to be finish graded and sodded/seeded as per the requirements of a local nursery licensed by the State of Missouri.

9. All fill under pavement is to have 95% compaction. All cut areas under pavement are to be treated as the final lift of fill and compacted to 95%. Non compressible fill materials such as crushed rock with minimal fines may be used instead of compacted fill in trenches.

10. The Cole County Department of Public Works will provide material testing and inspection for this project. The contractor shall coordinate all material testing and inspection with The Cole County Department of Public Works and provide adequate dates and time information for material testing and inspection to occur.

CONTROL POINTS				
Point #	Northing	Easting	Elevation	Description
200	998365.24	1735350.44	640.82	RPIP
297	998481.34	1735283.42	625.92	RPPK
298	998395.32	1735237.47	636.52	RPPK
299	998393.77	1735386.02	636.96	RPPK
5000	998465.96	1735537.58	629.84	RPPK /SET

SITE DEMOLITION NOTES:

All removals shall be disposed of by the contractor. Removals are shown for the convenience of the contractor and may not include all items requiring removal, no additional payment will be made for removal of additonal items necessitated by the proposed improvements.

- A SAW CUT LINE.
- B REMOVE TO CLOSEST JOINT.
- C REMOVE EXISTING CONCRETE, CURB AND GUTTER, SIDEWALK, ASPHALT AND STEPS AND DISPOSE OF OFF SITE.
- D EXISTING STONE STRUCTURE, USE IN PLACE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE TOP CONCRETE SLAB IN A MANNER THAT DOES NOT DAMAGE UNDERLYING STONE STRUCTURE.
- E REMOVE EXISTING HANDRAIL.
- F CUT OFF HANDRAIL FLUSH WITH EXISTING CONCRETE. GROUT HANDRAIL HOLE SHUT AND PAINT ANY EXPOSED METAL TO MATCH CONCRETE
- G REMOVE & RELOCATE SIGN.
- H REMOVE SIGN. SALVAGE TO COUNTY
- I REMOVE SEGMENTAL BLOCK RETAINING WALL.
- J REMOVE BOLLARDS. TYPICAL FIVE (5) LOCATIONS.
- K REMOVE LIGHT POLE. COORDINATE WITH AMEREN
- L REMOVE HANDRAIL AND CONC. RETAINING WALL TO A MINIMUM OF 3' BELOW PROPOSED FINISHED GRADE.
- M REMOVE METAL FABRICATED STEPS AND HANDRAIL.
- N CENTURY LINK TO ADJUST PEDESTALS AND REMOVE TELEPHONE POLE
- O MEDIACOM TO RELOCATE PEDESTAL AND INSTALL TRAFFIC RATED VAULT
- P 2" ASPHALT COLDMILL

CALL BEFORE YOU DIG – DRILL – BLAST
1–800–344–7483
(TOLL FREE)

MISSOURI ONE CALL SYSTEM, INC.

NOTE: The Contractor will be responsible to call the MIssouri One Call System 1-800-344-7483 and have the underground utilities marked or remarked prior to any construction.

NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES, HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY
JEFFERSON CITY, MISSOURI 65101
(573) 634-3455
(573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001558

STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER

6/24/22

PAUL SAMSON, PE - ENGINEER
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

CMPS JOB No. 11-059

DRN. BY: PPK

CKD. BY: PLS

SCALE: 1"=10'

SHEET TITLE

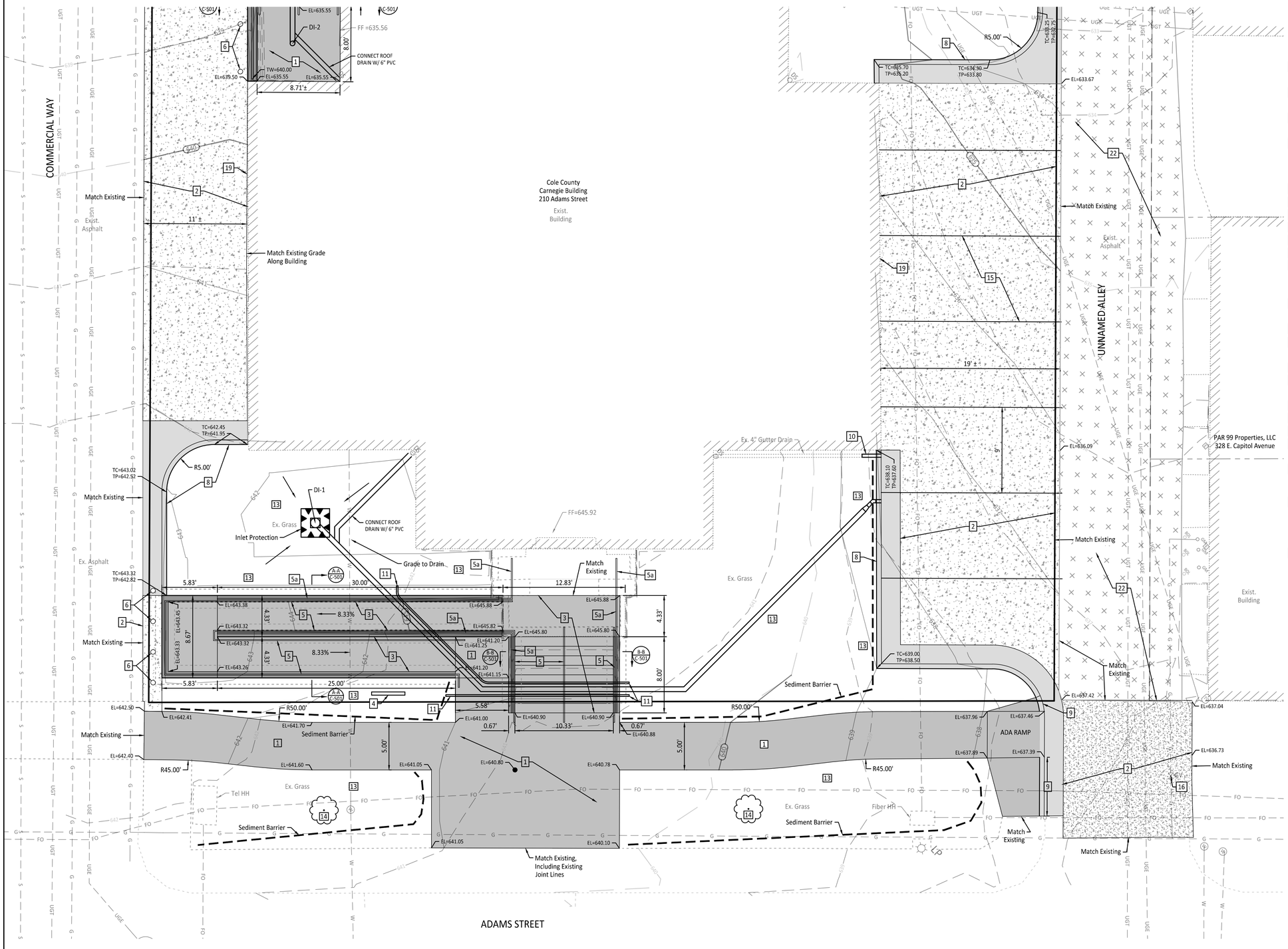
TOPOGRAPHIC SURVEY & DEMOLITION PLAN

SHEET NUMBER

C100

1 OF 8 SHEETS

P:\2011\11-059\Carnegie\11-059-Carnegie Site Wall.dwg, 6/24/2022 8:32:16 AM



1 inch = 5 FEET

0 2.5 5 10 15

(Graphic Scale – Feet)

SITE IMPROVEMENT NOTES:

1. 4" CONCRETE SIDEWALK ON 4" OF MODOT TYPE 5 BASE ROCK. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS.
2. 6" NON-REINFORCED CONCRETE PAVEMENT ON 4" OF MODOT TYPE 5 BASE ROCK. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS. SAWED JOINTS @ MIN. 12' O.C.
3. CONCRETE STEPS AND ADA RAMP. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS, PROVIDE 4 LBS. OF COLOR 288 PER YARD OF CONCRETE. SEE SHEET C501 FOR DETAILS.
4. RELOCATED SIGN. PROTECT EXISTING SIGN AND REINSTALL AT LOCATION SHOWN. THE CONTACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF SIGN IF DAMAGED DURING STORAGE AND/OR RELOCATION. MOUNT SIGN PLUMB AND SOLIDLY IN PLACE USING THE SAME METHOD OF THE ORIGINAL INSTALLATION.
5. HANDRAIL. SEE SHEET C501 FOR DETAILS.
5a. 42" GUARDRAIL. SEE SHEET C501 FOR DETAILS.
6. 6" PIPE BOLLARDS. SEE SHEET C503 FOR DETAILS.
7. NOT USED
8. CITY OF JEFFERSON CONCRETE CURB AND GUTTER.
9. CURB TRANSITION. TRANSITION CURB FROM 6" CURB HEIGHT TO 0".
10. EXTEND EXISTING 4" GUTTER DRAIN TO DISCHARGE AT GUTTER LINE. MODIFY DEPTH OF GUTTER DRAIN TO PROVIDE ADEQUATE COVER, PROVIDE PVC PIPING AND NECESARY FITTINGS. REFER TO CITY OF JEFFERSON STANDARD PLAN 23.05 FOR CONNECTING PVC PIPE TO CURB AND GUTTER DETAIL.
11. 4" CONDUIT. PROVIDE CONDUIT FOR FUTURE IRRIGATION AND/OR ELECTRICAL CONNECTIONS. PROVIDE LONG RADIUS SWEEP ELBOWS AT ALL BENDS.
12. NOT USED
13. SEED, FERTILIZE AND MULCH ALL DISTURBED AREAS. TYPICAL OF ANY AREA OF DISTURBANCE. BACKFILL ALL AREAS WITH A MINIMUM OF 6" OF TOP SOIL TO ALLOW FOR VEGETATION GROWTH.
14. 2" CALIPER PRINCETON SENTRY COLUMNAR GINKGO TREE.
15. 4" SOLID WATER-BORN PAVEMENT MARKING PAINT. REGULAR PARKING STALLS - WHITE; ADA PARKING SPACES, AISLES AND ADA SYMBOL-BLUE
16. ADJUST GAS VALVE TO NEW FINISHED GRADE.
17. NOT USED
18. CONCRETE RETAINING WALL. SEE SHEET C501 FOR DETAILS.
19. 1/2" PREFORMED EXPANSION JOINT FILLER MATERIAL. THE TOP 1" OF THE FILLER SHALL BE REMOVED AND JOINT SEALED WITH COLD APPLIED SELF LEVELING SEALANT - COLOR GRAY.
20. 4" CONCRETE SIDEWALK ON 4" OF MODOT TYPE 5 BASE ROCK. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS. PROVIDE THICKENED EDGE SIDEWALK EDGE ADJACENT TO PARKING LOT.
21. ADJUST GRADE OF FIBER OPTIC BOX TO ACCOMMODATE NEW SIDEWALK GRADES. REMOVE EXISTING FIBER LINE AND CONDUIT, PATCH STONE WITH NON-SHRINK GROUT. DRILL NEW ACCESS POINT AT HIGHER ELEVATION, PROVIDE NEW CONDUIT AND FITTINGS AND RECONNECT FIBER LINE. INCLUDES ADJUSTMENT OF CONDUIT AND BOX INSIDE OF BUILDING. COORDINATE ALL WORK WITH COLE COUNTY MAINTENANCE DIRECTOR.
22. 2" ASPHALT OVERLAY, MODOT BP-1 MIX.

STORM DRAINAGE INLETS:

DI-1 - 10" NYLOPLAST INLINE DRAIN
W/ STANDARD GRATE
TG=741.00, FL OUT=638.50

DI-2 6" NYLOPLAST DROP IN GRATE
TG=635.47
FL OUT = 633.50

SEE STORM SEWER PROFILES ON SHEET C505.

CALL BEFORE YOU DIG – DRILL – BLAST
1–800–344–7483
(TOLL FREE)
MISSOURI ONE CALL SYSTEM, INC.

NOTE: The Contractor will be responsible to call the MIssouri One Call System 1-800-344-7483 and have the underground utilities marked or remarked prior to any construction.

NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES, HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY (573) 634-3455
JEFFERSON CITY, MISSOURI 65101 (573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001588

STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22
Paul Samson, PE - Engineer
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

CMPS JOB No. 11-059

DRN. BY:	CKD. BY:
PPK	PLS

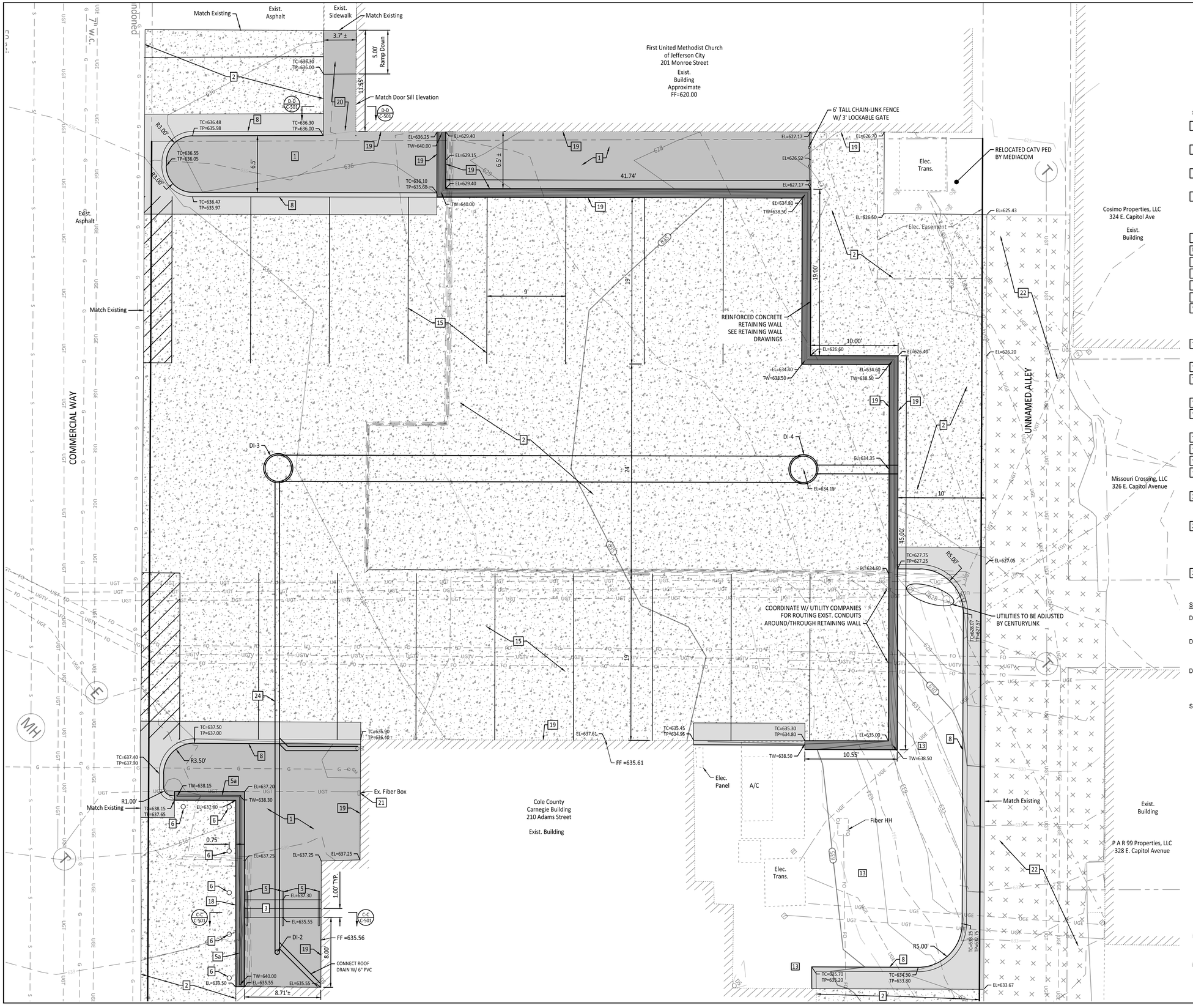
SCALE: 1"=5'

SHEET TITLE
SITE PLAN
EAST SIDE

SHEET NUMBER
C101

2 OF 8 SHEETS

P:\2011\11-059\Carnegie\11-059-Carnegie Site Wall.dwg, 6/24/2022 8:32:23 AM



1 inch = 5 FEET

0 2.5 5 10 15

(Graphic Scale – Feet)

SITE IMPROVEMENT NOTES:

1. 4" CONCRETE SIDEWALK ON 4" OF MODOT TYPE 5 BASE ROCK. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS.
2. 6" NON-REINFORCED CONCRETE PAVEMENT ON 4" OF MODOT TYPE 5 BASE ROCK. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS. SAWED JOINTS @ MIN. 12' O.C.
3. CONCRETE STEPS AND ADA RAMP. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS. PROVIDE 4 LBS. OF COLOR 288 PER YARD OF CONCRETE. SEE SHEET C501 FOR DETAILS.
4. RELOCATED SIGN. PROTECT EXISTING SIGN AND REINSTALL AT LOCATION SHOWN. THE CONTACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF SIGN IF DAMAGED DURING STORAGE AND/OR RELOCATION. MOUNT SIGN PLUMB AND SOLIDLY IN PLACE USING THE SAME METHOD OF THE ORIGINAL INSTALLATION.
5. HANDRAIL. SEE SHEET C501 FOR DETAILS.
5a. 42" GUARDRAIL. SEE SHEET C501 FOR DETAILS.
6. 6" PIPE BOLLARDS. SEE SHEET C503 FOR DETAILS.
7. NOT USED
8. CITY OF JEFFERSON CONCRETE CURB AND GUTTER.
9. CURB TRANSITION. TRANSITION CURB FROM 6" CURB HEIGHT TO 0".
10. EXTEND EXISTING 4" GUTTER DRAIN TO DISCHARGE AT GUTTER LINE. MODIFY DEPTH OF GUTTER DRAIN TO PROVIDE ADEQUATE COVER. PROVIDE PVC PIPING AND NECESARY FITTINGS. REFER TO CITY OF JEFFERSON STANDARD PLAN 23.05 FOR CONNECTING PVC PIPE TO CURB AND GUTTER DETAIL.
11. 4" CONDUIT. PROVIDE CONDUIT FOR FUTURE IRRIGATION AND/OR ELECTRICAL CONNECTIONS. PROVIDE LONG RADIUS SWEEP ELBOWS AT ALL BENDS.
12. NOT USED
13. SEED, FERTILIZE AND MULCH ALL DISTURBED AREAS. TYPICAL OF ANY AREA OF DISTURBANCE. BACKFILL ALL AREAS WITH A MINIMUM OF 6" OF TOP SOIL TO ALLOW FOR VEGETATION GROWTH.
14. 2" CALIPER PRINCETON SENTRY COLUMNAR GINKGO TREE.
15. 4" SOLID WATER-BORN PAVEMENT MARKING PAINT. REGULAR PARKING STALLS - WHITE; ADA PARKING SPACES, AISLES AND ADA SYMBOL-BLUE
16. ADJUST GAS VALVE TO NEW FINISHED GRADE.
17. NOT USED
18. CONCRETE RETAINING WALL. SEE RETAINING WALL DRAWINGS.
19. 1/2" PREFORMED EXPANSION JOINT FILLER MATERIAL. THE TOP 1" OF THE FILLER SHALL BE REMOVED AND JOINT SEALED WITH COLD APPLIED SELF LEVELING SEALANT - COLOR GRAY.
20. 4" CONCRETE SIDEWALK ON 4" OF MODOT TYPE 5 BASE ROCK. CONCRETE MIX DESIGN PER CITY OF JEFFERSON STREET SPECIFICATIONS. PROVIDE THICKENED EDGE SIDEWALK EDGE ADJACENT TO PARKING LOT.
21. ADJUST GRADE OF FIBER OPTIC BOX TO ACCOMMODATE NEW SIDEWALK GRADES. REMOVE EXISTING FIBER LINE AND CONDUIT, PATCH STONE WITH NON-SHRINK GROUT, DRILL NEW ACCESS POINT AT HIGHER ELEVATION, PROVIDE NEW CONDUIT AND FITTINGS AND RECONNECT FIBER LINE. INCLUDES ADJUSTMENT OF CONDUIT AND BOX INSIDE OF BUILDING. COORDINATE ALL WORK WITH COLE COUNTY MAINTENANCE DIRECTOR.
22. 2" ASPHALT OVERLAY, MODOT BP-1 MIX.

STORM DRAINAGE INLETS:

DI-2 - 6" NYLOPLAST DROP IN GRATE
TG=635.47
FL OUT = 633.50

DI-3 - 36" NYLOPLAST DRAIN BASIN
W/ SOLID COVER
TC=636.06
FL OUT=629.57

DI-4 - 36" NYLOPLAST DRAIN BASIN W/
3'X3' ROAD AND HIGHWAY GRATE
INTERNAL WEIR PLATE
TG=634.15
FL OUT=627.00

SEE STORM SEWER PROFILES ON SHEET C505.

CALL BEFORE YOU
DIG – DRILL – BLAST
1–800–344–7483
(TOLL FREE)

MISSOURI ONE CALL SYSTEM, INC.

NOTE: The Contractor will be responsible to call the MIssouri One Call System 1-800-344-7483 and have the underground utilities marked or remarked prior to any construction.

NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES, HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY (573) 634-3455
JEFFERSON CITY, MISSOURI 65101 (573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001598

STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22

Paul Samson, PE - Engineer
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

CMPS JOB No. 11-059

DRN. BY:	CKD. BY:
PPK	PLS

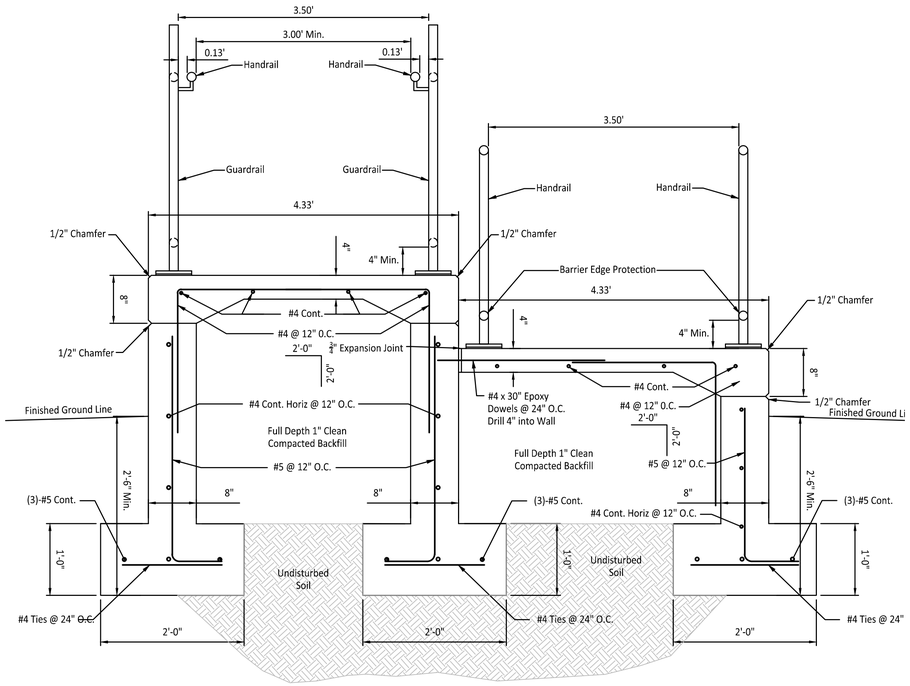
SCALE: 1"=5'

SHEET TITLE
SITE PLAN
WEST SIDE

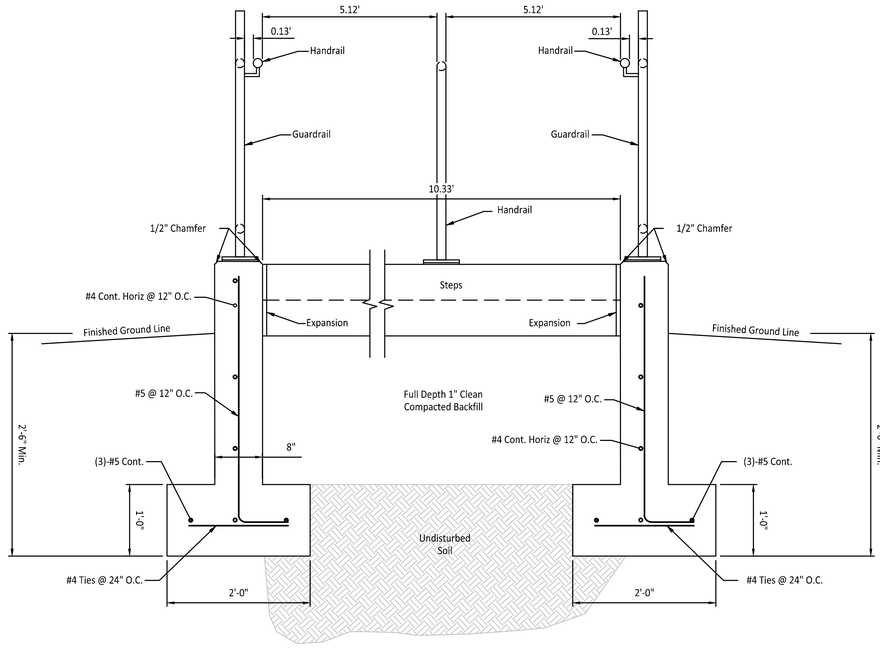
SHEET NUMBER
C102

3 OF 8 SHEETS

P:\2011\11-059\Carnegie\11-059-Carnegie Site Wall.dwg, 6/24/2022 8:32:28 AM



FRONT ENTRY ADA RAMP
SECTION A-A
NOT TO SCALE



FRONT ENTRY STEPS
SECTION B-B
NOT TO SCALE

GENERAL NOTES - RETAINING WALL QUALITY ASSURANCE

1. Contractor shall obtain all permits from applicable authorities.

2. Contractor to verify all dimensions and conditions on drawings and report any discrepancy to Engineer.

BRACING AND SHORING
1. Temporary bracing for backfill against foundation wall to be designed by the contractor.

FOUNDATIONS
1. Foundation design is based upon 2,000 psf bearing.

2. All footings to bear on and be formed by clean, undisturbed, virgin, sub-soil or engineered fill with safe bearing pressures of 2,000 psf.

CONCRETE
1. Reinforced concrete shall be normal weight concrete with a 28 day compressive strength of 4000 psi.

2. Provide protection for reinforcing bars as follows:
Footings....3" Slabs...1" Walls....2"
Or as indicated on the wall detail.

3. All concrete exposed to weather shall be air entrained with 5% to 8%.

4. Concrete walls shall have a clean rubbed finish.

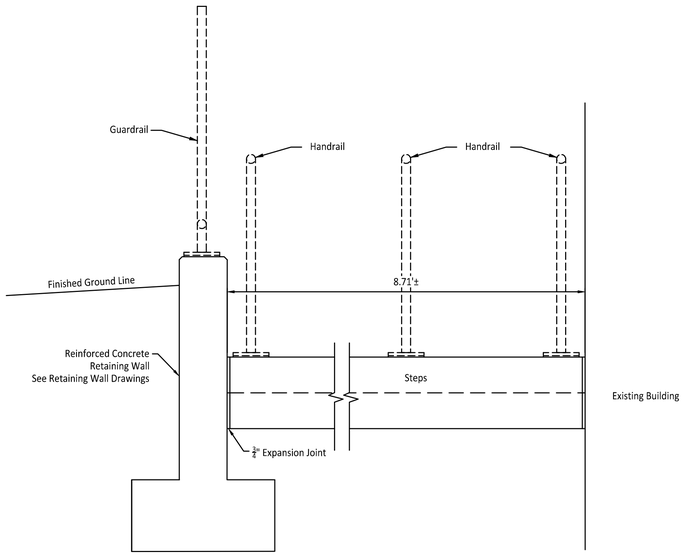
REINFORCING FOR CONCRETE
1. All reinforcing steel to be ASTM A615, grade 60 unless noted otherwise.

2. All reinforcing bars to be detailed and placed in accordance with the ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" specifications. Continuous bars to be lapped.

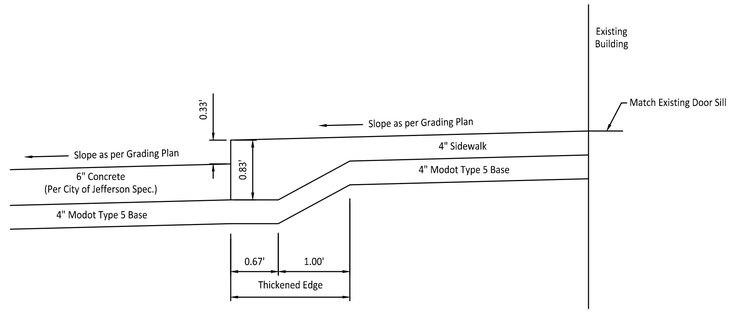
3. Under no circumstances will welding to 60 ksi yield strength reinforcing be allowed.

4. All reinforcing shall be lapped or doweled as follows:
#4 bars -- 20" #5 bars -- 26" #6 bars -- 32" #7 bars -- 44"
#8 bars -- 60"

5. Dowels between footings and walls shall be installed, and shall be the same grade, size, and spacing as the vertical wall reinforcing, unless noted otherwise. Dowels shall be tied in place.



SIDE ENTRY STEPS & RETAINING WALL
SECTION C-C
NOT TO SCALE



THICKENED EDGE SIDEWALK
SECTION D-D
NOT TO SCALE

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY (573) 634-3455
JEFFERSON CITY, MISSOURI 65101 (573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001598

STATE OF MISSOURI
PAUL PAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22
Paul Samson, PE - Engineer
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

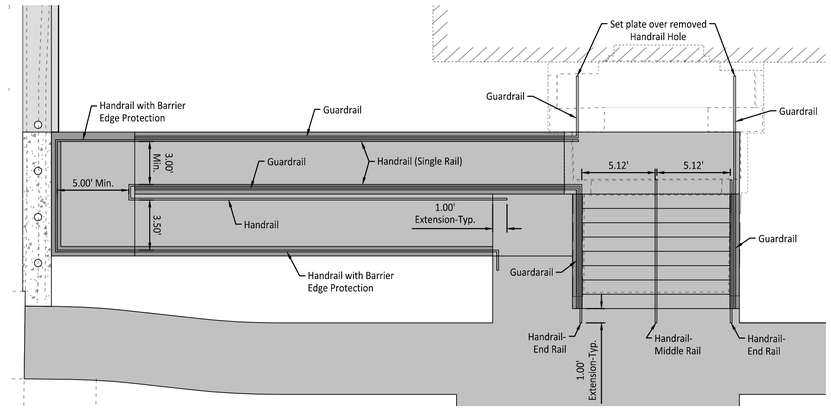
CMPS JOB No. 11-059
DRN. BY: PPK
CKD. BY: PLS
SCALE: AS SHOWN

SHEET TITLE
SITE IMPROVEMENT CROSS SECTIONS

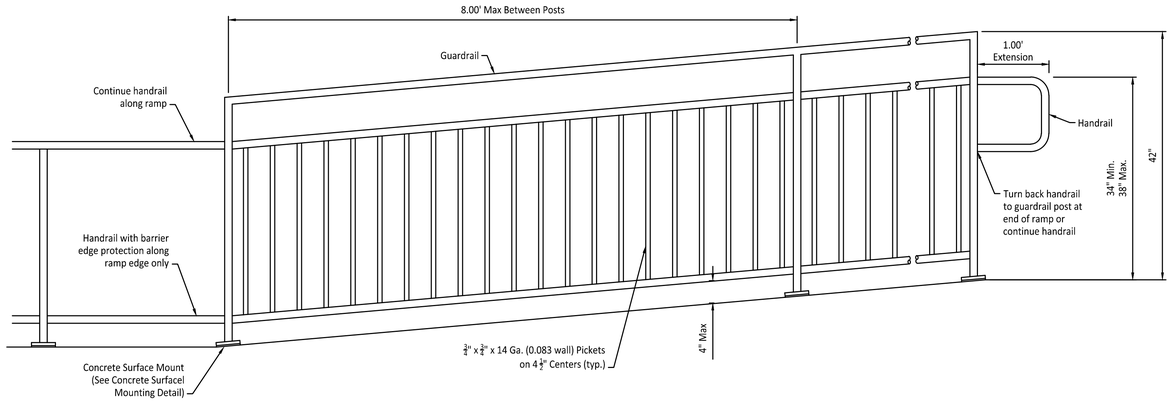
SHEET NUMBER
C501

4 OF 8 SHEETS

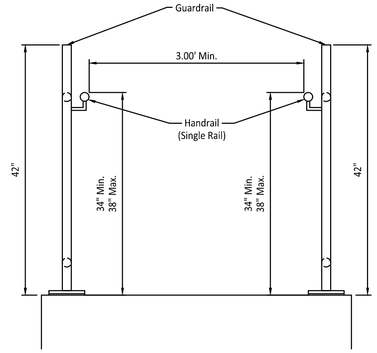
P:\2011\11-059\Carnegie\11-059_Carnegie Site Wall.dwg, 6/24/2022 8:32:34 AM



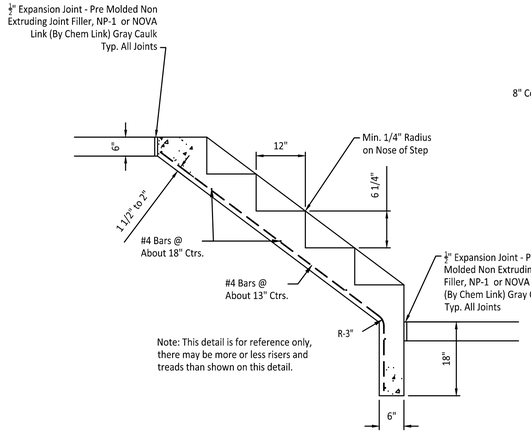
FRONT ENTRANCE GUARDRAIL/HANDRAIL LAYOUT DETAIL
NOT TO SCALE

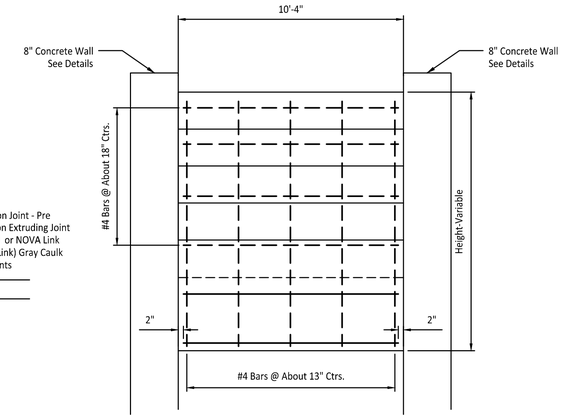


PEDESTRIAN GUARDRAIL/HANDRAIL DETAIL
NOT TO SCALE

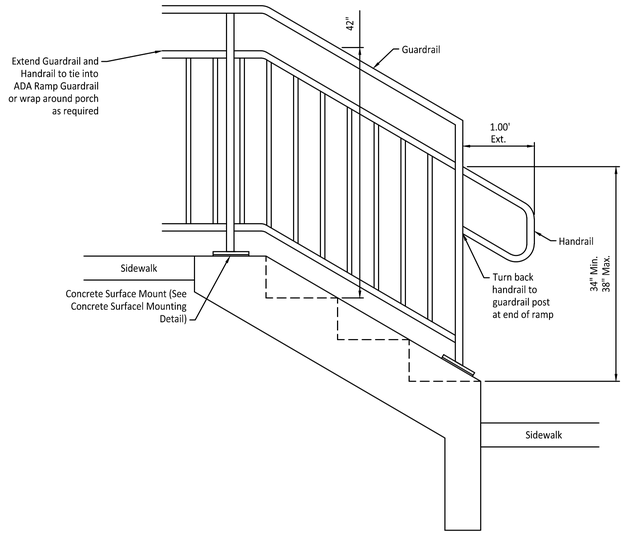


FRONT ENTRANCE PEDESTRIAN GUARDRAIL/HANDRAIL DETAIL
NOT TO SCALE

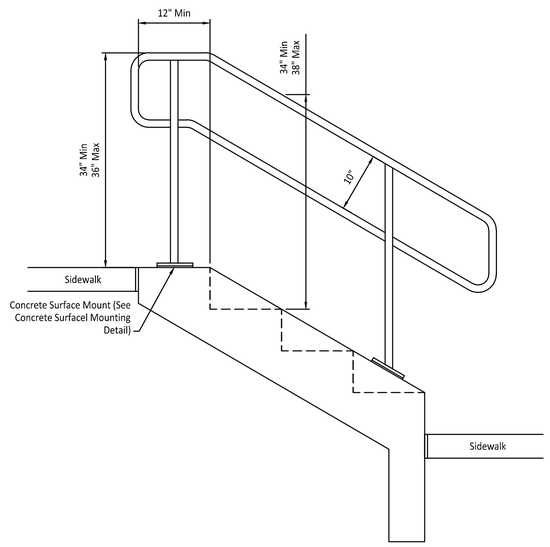




FRONT ENTRANCE CONCRETE STEPS REINFORCEMENT DETAIL
NOT TO SCALE



FRONT ENTRANCE STEP GUARDRAIL/HANDRAIL DETAIL - END RAILS
NOT TO SCALE



FRONT ENTRANCE STEP HANDRAIL DETAIL - MIDDLE RAIL
NOT TO SCALE

GUARDRAIL/HANDRAIL NOTES:

1. Handrails are required on both sides of stairs and or ramps.

2. The top of gripping surfaces of handrails shall be no less than 34" and no more than 38" vertically above the walking surface, stair nosings, and ramp surfaces. Handrails shall be a consistent height above the walking surface and stair nosings.

3. At the top of a stair flight, handrail shall extend horizontally above the landing for a minimum of 12" beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

4. At the bottom of a stair flight, handrail shall extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the hand rail of an adjacent stair flight.

5. Handrail griping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of the handrail gripping surfaces shall not be obstructed for more than 20% of their length.

6. Handrail gripping surfaces with a circular cross section shall have an outside diameter of not less than 1 ¼" and not more than 2". Handrail gripping surfaces with a non-circular cross section shall have a perimeter of not less than 4" or more than 6 ¼". The longest cross sectional dimension shall not exceed 2 ¾".

7. Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20% of their length.

8. Refer to U.S. Department of Justice currently effective "ADA Standards for Accessible Design" for additional information and requirements.

9. Guardrail height shall be 42" vertically above the adjacent surface and as indicated by plans.

GUARDRAIL/HANDRAIL MATERIAL REQUIREMENTS:

1. Railings and posts shall be constructed from ASTM A53, Type F or Type S, Grade A, Standard Weight (Schedule 40) Steel.
2. Plates, Shapes, and Bars shall be constructed from ASTM A36 Steel.
3. Fasteners shall be Type 304 stainless-steel or hot-dip zinc-coated steel fastners complying with ASTM A153 or ASTM 2329.
4. Steel Railings, posts, plates, shapes, and bars shall be powder coated after fabrication. Powder coat meeting AAMA 2605 shall be applied according to coating manufacturer's specifications at a minimum of 2 mil thickness.
5. All joints shall be continuous welded and ground smooth.
6. Metal safety rail shall be compliant with the ADA Accessibility Guidelines. Any area of non-compliance shall be removed and corrected at the Contractor's Expense.
7. Expansion joints shall be placed in railings after every third post. The joints shall be constructed as shown on the Expansion Detail.
8. All posts shall have a ¼" weep hole immediately above the mounting plate.
9. When installed, the posts shall be plumb and railings shall match the slope of the ramp.

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY (573) 634-3455
JEFFERSON CITY, MISSOURI 65101 (573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001598

STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22
Paul Samson, PE - Engineer
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

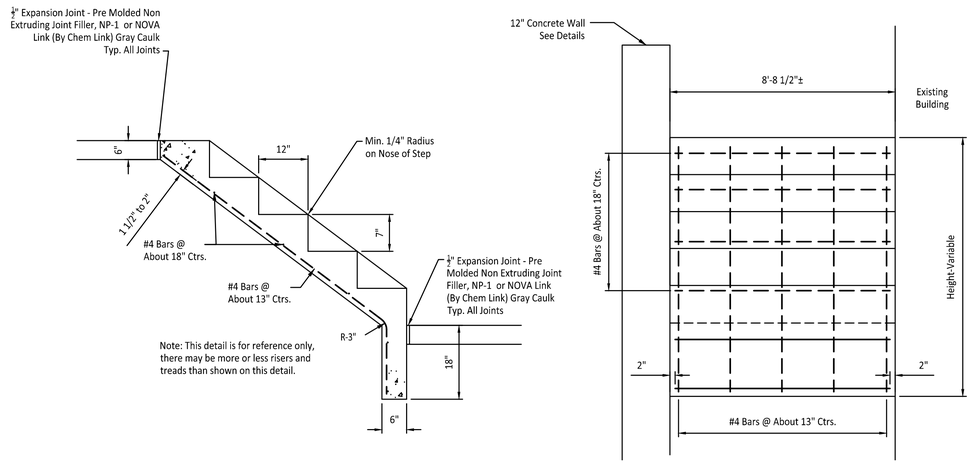
CMPS JOB No. 11-059
DRN. BY: PPK
CKD. BY: PLS
SCALE: AS INDICATED

SHEET TITLE
FRONT ENTRANCE STEP, HANDRAIL & GUARDRAIL DETAILS

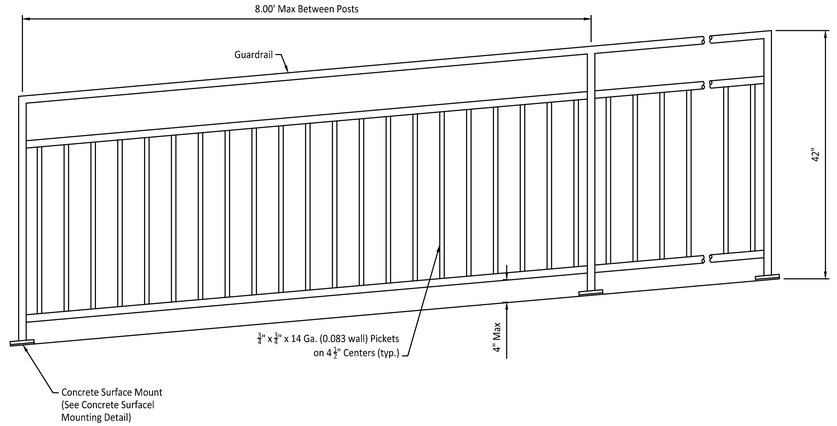
SHEET NUMBER
C502

5 OF 8 SHEETS

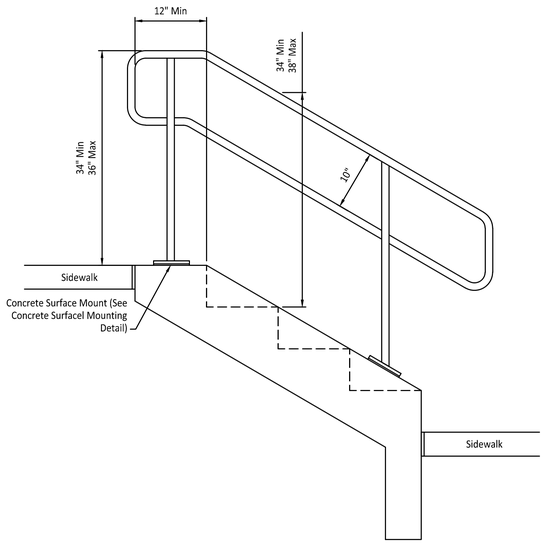
P:\2011\11-059\Carnegie\11-059-Carnegie Site Wall.dwg, 6/24/2022 8:32:38 AM



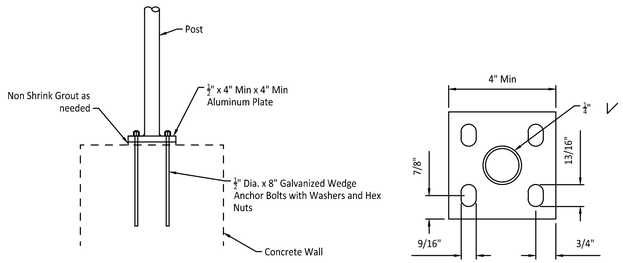
CONCRETE STEPS REINFORCEMENT DETAIL
NOT TO SCALE



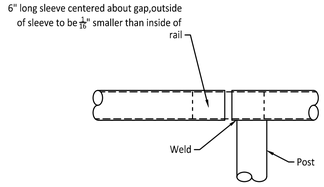
PEDESTRIAN GUARDRAIL/HANDRAIL DETAIL
NOT TO SCALE



STEP HANDRAIL DETAIL
NOT TO SCALE



GUARDRAIL/HANDRAIL SURFACE MOUNTING DETAIL
NOT TO SCALE



GUARDRAIL/HANDRAIL EXPANSION DETAIL
NOT TO SCALE

GUARDRAIL/HANDRAIL NOTES:

1. Handrails are required on both sides of stairs and or ramps.
2. The top of gripping surfaces of handrails shall be no less than 34" and no more than 38" vertically above the walking surface, stair nosings, and ramp surfaces. Handrails shall be a consistent height above the walking surface and stair nosings.
3. At the top of a stair flight, handrail shall extend horizontally above the landing for a minimum of 12" beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.
4. At the bottom of a stair flight, handrail shall extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the hand rail of an adjacent stair flight.
5. Handrail griping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of the handrail gripping surfaces shall not be obstructed for more than 20% of their length.
6. Handrail gripping surfaces with a circular cross section shall have an outside diameter of not less than 1 ¼" and not more than 2". Handrail gripping surfaces with a non-circular cross section shall have a perimeter of not less than 4" or more than 6 ¼". The longest cross sectional dimension shall not exceed 2 ¼".
7. Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20% of their length.
8. Refer to U.S. Department of Justice currently effective "ADA Standards for Accessible Design" for additional information and requirements.
9. Guardrail height shall be 42" vertically above the adjacent surface and as indicated by plans.

GUARDRAIL/HANDRAIL MATERIAL REQUIREMENTS:

1. Railings and posts shall be constructed from ASTM A53, Type F or Type S, Grade A, Standard Weight (Schedule 40) Steel.
2. Plates, Shapes, and Bars shall be constructed from ASTM A36 Steel.
3. Fasteners shall be Type 304 stainless-steel or hot-dip zinc-coated steel fastners complying with ASTM A153 or ASTM 2329.
4. Steel Railings, posts, plates, shapes, and bars shall be hot-dip galvanized after fabrication in accordance with ASTM A123.
5. All joints shall be continuous welded and ground smooth.
6. Metal safety rail shall be compliant with the ADA Accessibility Guidelines. Any area of non-compliance shall be removed and corrected at the Contractor's Expense.
7. Expansion joints shall be placed in railings after every third post. The joints shall be constructed as shown on the Expansion Detail.
8. All posts shall have a ¼" weep hole immediately above the mounting plate.
9. When installed, the posts shall be plumb and railings shall match the slope of the ramp.

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY
JEFFERSON CITY, MISSOURI 65101
(573) 634-3455
(573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001558

STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22
Paul Samson, PE - Engineer
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

CMPS JOB No. 11-059

DRN. BY:	CKD. BY:
PPK	PLS

SCALE: AS INDICATED

SHEET TITLE
SIDE ENTRANCE STEP, HANDRAIL & GUARDRAIL DETAILS

SHEET NUMBER
C503

6 OF 8 SHEETS

P:\2021\11-059-Carnegie\11-059-Carnegie Site Wall.dwg, 6/24/2022 8:32:43 AM

EROSION AND SEDIMENT CONTROL NOTES

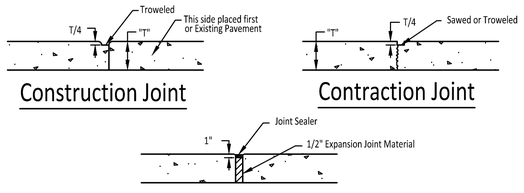
This Site is less than 1 acre, therefore a Missouri DNR Land Disturbance Permit is not required. An abridged SWPPP is outlined below.

The Erosion Control Items and details are not intended to dictate construction phasing but are intended to indicate Best Management Practices that should be in place during various phases of construction. The contractor shall be responsible for updating and modifying the Erosion Control Plan based on his construction sequence, and to address field conditions.

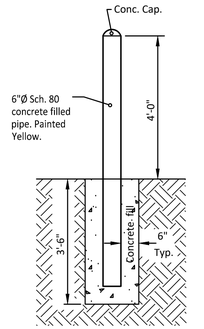
All phases of construction shall utilize a sedimentation barrier (silt fence or straw wattles) as shown on the plan and be used in place until pavement base and grading areas are stabilized. Straw wattles may be used in areas where stormwater flow is not concentrated and used to minimize sediment movement across site. A construction staging area shall be chosen by the contactor at the time of construction. All concrete trucks shall utilize a concrete wash out area on site, provide a container on site for washout or return to the plant of origin to perform washout and cleanup activities. No fuel or chemicals shall be stored on site.

In addition, the contractor is encouraged to reference the document "Protecting Water Quality", January 2011 edition, as Prepared by the Missouri Department of Natural Resources for further guidance on installation and maintenance of construction site erosion, sediment and stormwater control practices.

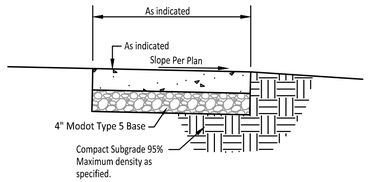
1. Contractor shall provide all materials, tools, equipment and labor as necessary to install and maintain adequate erosion and siltation controls required to prevent soil erosion from leaving the project site. It shall be the Contractor's sole responsibility to ensure that methods utilized are adequate and comply with requirements of the specifications and other governmental agencies having jurisdiction over the work.
2. The Contractor shall have the responsibility for resolving complaints in the event that complaints or damage claims are filed due to damages occurring adjacent to or downstream from property by sediment resulting from erosion on the project site.
3. The Contractor shall install erosion control measures as shown on the drawings and any other they deem necessary prior to beginning earthwork operations.
4. The Contractor shall maintain and inspect all sediment control measures during construction as required by all applicable permits.
5. All sediment shall remain on site and surrounding streets shall be kept clear of all mud and debris.
6. The contractor shall phase grading operations to minimize the amount of disturbed area.
7. Sediment Barrier Fence, is to be installed as shown on the plans. The barrier shall be constructed of either: (a.) A continuous line of silt fence securely staked to prevent movement. (b) A continuous line of securely staked straw wattles.
8. Accumulated sediment shall be removed and the sedimentation barriers maintained as needed to prevent sedimentation bypass of the barrier. Removed sediment shall be disposed of in a location where sediment will not again erode into the construction area or into natural waterways.
9. Slopes shall be left in a rough condition during grading operations.
10. Stormwater Inlet Sedimentation Barriers are to be installed around inlets upon their installation at locations shown on the plans. Inlet barriers shall be block and gravel, secured straw bales, silt fence, or an approved pre-manufactured system.
11. Erosion control measures are to remain in place until 70% ground cover has been established.
12. Sediment shall be removed from storm water drainage systems. Removed sediment shall be captured and disposed of in a location where sediment will not again erode into the construction area or into natural waterways.
13. Contractor shall be responsible for installing any additional erosion control measures as they, the City, the engineer, or consultants deem necessary. Upon installing additional erosion control measures, or making modifications to the erosion control plan, the contractor shall update Erosion Control Plan.
14. Temporary seeding shall be used to stabilize disturbed areas that will not be brought to final grade within 30 days, or when the season is not suitable for permanent seeding. A qualified professional shall be consulted to recommend necessary soil amendments, and seeding mixtures.
15. At completion of site grading and other related construction activities, all disturbed areas within the project site shall be seeded, sodded, or landscaped as shown on the Plans.
16. The Contractor shall be responsible for conducting regular site inspections to assure proper function of soil erosion, sedimentation and stormwate control measures. Inspectons should be conducted every seven calandar days and within 48 hours of a rainfall event resulting in runoff from the site.



TYPICAL CONCRETE JOINT DETAILS
NOT TO SCALE

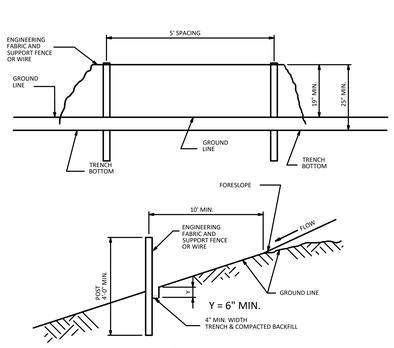


BOLLARD DETAIL
NOT TO SCALE



TYPICAL SIDEWALK SECTION
NOT TO SCALE

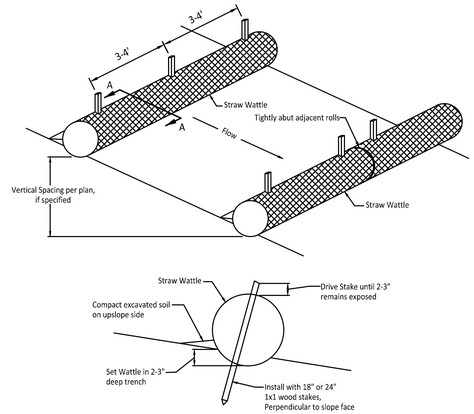
1. JOINTS LAYOUT PER ARCHITECTURAL PLANS.
2. INSTALL EXPANSION JOINTS WHERE SIDEWALK ABUTS A CURB, ANOTHER SIDEWALK OR A SOLID STRUCTURE.



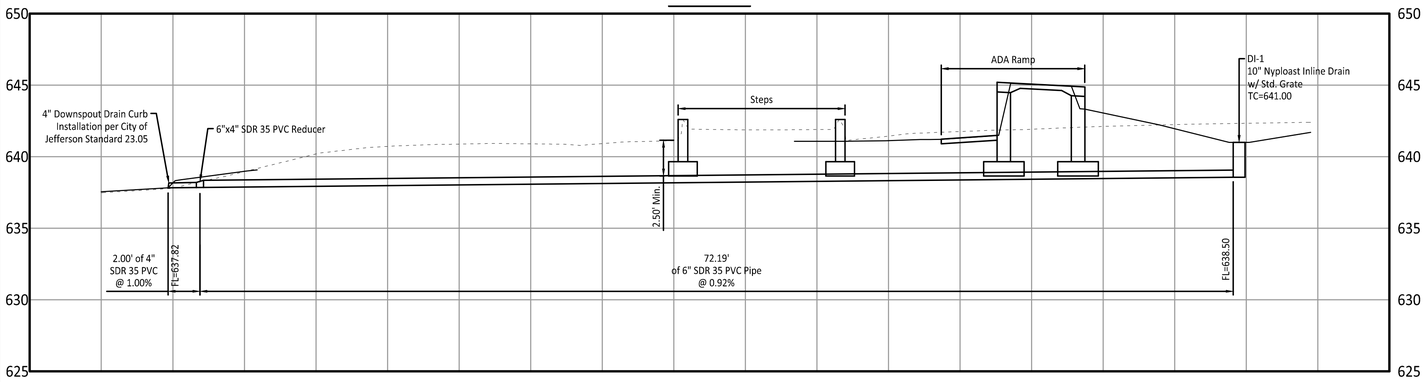
TYPICAL SECTION

Note: For Reinforced Silt Fencing attach Filter Fabric to a 6-inch (max) Mesh Wire Screen which has been Fastened to the Post.

SEDIMENT BARRIER-SILT FENCE DETAIL
NOT TO SCALE

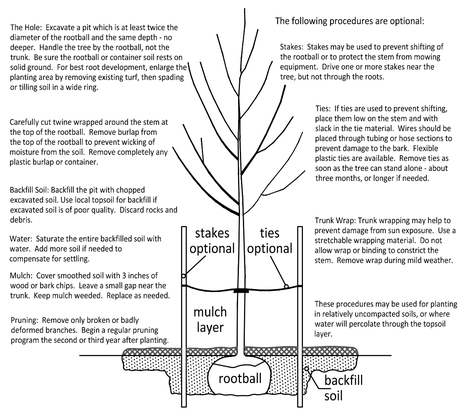


SEDIMENT BARRIER-STRAW WATTLE
NOT TO SCALE

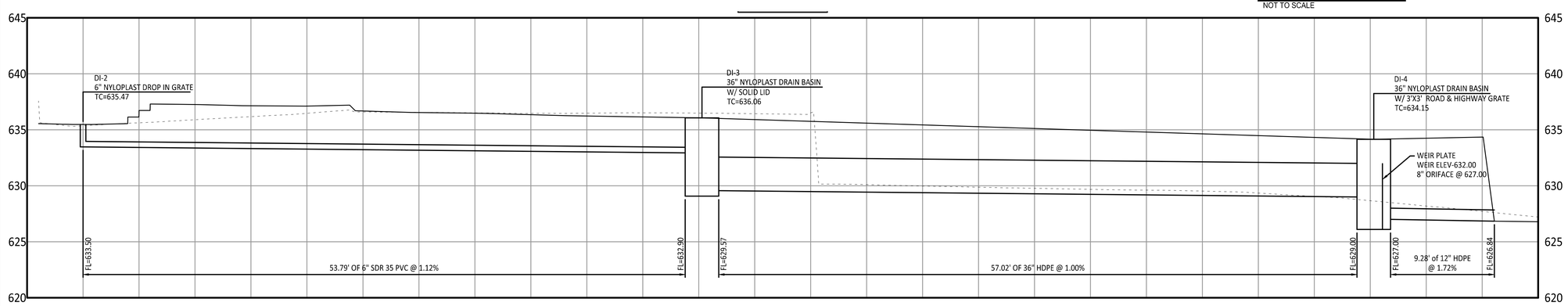


Reference: City of Jefferson Zoning Ordinance - Appendix B.1

STANDARD TREE PLANTING DETAIL



TREE PLANTING DETAIL
NOT TO SCALE



PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY JEFFERSON CITY, MISSOURI 65101
(573) 634-3455
(573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001558

STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22
Paul Samson, PE - Engineer
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

CMPS JOB No. 11-059

DRN. BY:	CKD. BY:
PPK	PLS

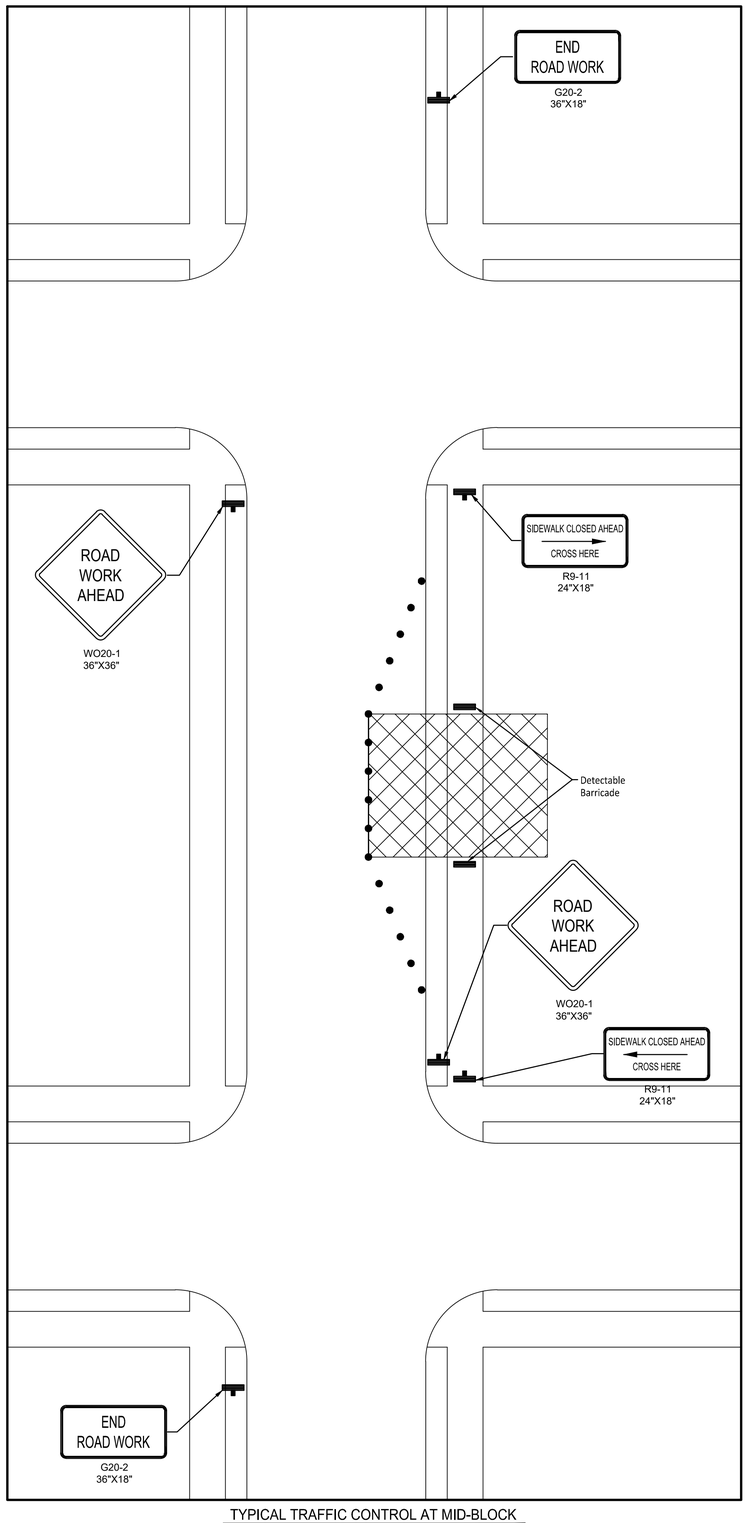
SCALE: AS INDICATED

SHEET TITLE
SITE DETAILS

SHEET NUMBER
C504

7 OF 8 SHEETS

P:\2011\11-059\Carnegie\11-059Carnegie Site Wall.dwg, 6/24/2022 2:32:45 AM



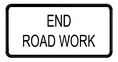
TYPICAL TRAFFIC CONTROL AT MID-BLOCK
NOT TO SCALE

WO20-1
36"X36"

Sign shall be placed on the street before entering a work zone with road work occurring. If work is at an intersection signs shall be placed on all approaches.

WO20-1
36"X36"

Sign shall be placed on the street before entering the work zone when non-road work is occurring. If work is at an intersection, signs shall be placed on all approaches. An approved alternate is a W21-1 (worker) series sign.



G20-2
36"X18"

Sign shall be placed on the street after existing the work zone. If work is at an intersection signs shall be placed on all approaches.

R9-11
24"X18"

Sign shall be placed at the start to any block where the sidewalk is restricted to less than 3' or closed. Sign shall be placed on a detectable barricade placed such that a 3' sidewalk area is clear around the sign. This sign can be omitted if a sidewalk closed (R9-9) sign is within 30' of it.

R9-9
24"X12"

Sign shall be placed on the sidewalk just prior to any sidewalk that is restricted to less than 3' or closed. At intersections sign shall be placed at ramps that lead to the closed sidewalk. Sign shall be placed on a detectable barricade. Barricade and related cones (or other) shall block the entire sidewalk.

LEGEND

- Channelizing Device
- Traffic Control Sign
- Work Zone
- Detectable Barricade

TRAFFIC CONTROL NOTES:

1. All traffic control devices shall conform to the Manual on Uniform Traffic Control Devices (MUTCD)
2. When flaggers are required, advanced signing shall be as required by the MUTCD. Flaggers shall meet the requirements of the MUTCD.
3. The contractor shall be responsible for maintaining, positioning, cleaning and replacing damaged traffic control devices.
4. Traffic control signs shall be covered or removed when no work is in progress and the roadway is unrestricted to the traveling public.
5. Adequate clearance and positioning of equipment and work vehicles at intersections shall be maintained to provide proper site distance and safe operation of vehicles.
6. Channeling "devices" include, but are not limited to barricades, barriers, cones, drums and vertical panels.
   - 6.1. Preferred distances between devices in the taper is 15' and should not exceed 20'.
   - 6.2. Preferred distance between devices in the work zone is 20' and should not exceed 40'.
7. Two-way traffic shall be maintained at all times with 10' travel lanes, unless otherwise indicated or approved. Flagging operations are an approved alternative.
8. Any parking signs should be removed or covered when parking is removed from area.
9. The traffic control plan indicated hereon, shows a typical layout of one scenario of what would be expected by the contractor. The contractor is responsible for construction phasing and all traffic control on the site. Phasing shall be coordinated with the Owner.
10. The Contractor shall perform site work with minimal disruption to City Street traffic.

CALL BEFORE YOU
DIG – DRILL – BLAST
1–800–344–7483
(TOLL FREE)

MISSOURI ONE CALL SYSTEM, INC.

NOTE: The Contractor will be responsible to call the MIssouri One Call System 1-800-344-7483 and have the underground utilities marked or remarked prior to any construction.

NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES, HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.

PRINTS ISSUED
June 24, 2022

REVISIONS:

Central Missouri Professional Services, Inc.
ENGINEERING – SURVEYING – MATERIALS TESTING
2500 E. McCARTY (573) 634-3455
JEFFERSON CITY, MISSOURI 65101 (573) 634-8898
Central Missouri Professional Services, Inc.
Missouri State Certificate of Authority #001598

STATE OF MISSOURI
PAUL SAMSON
NUMBER PE-2002016730
PROFESSIONAL ENGINEER
6/24/22
Paul Samson, PE - Engineer
MO# PE-2002016730

CARNEGIE BUILDING
SITE IMPROVEMENTS
COLE COUNTY
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

CMPS JOB No. 11-059
DRN. BY: PPK
CKD. BY: PLS
SCALE: AS INDICATED

SHEET TITLE
TRAFFIC CONTROL PLAN

SHEET NUMBER
C505

8 OF 8 SHEETS

P:\2011\11-059\Carnegie\11-059-Carnegie Site Wall.dwg, 6/24/2022 8:32:53 AM

Carnegie Retaining Wall

Jefferson City, Cole County, Missouri

GENERAL NOTES

ELEVATION DATUM
SEE ARCHITECTURAL DRAWINGS OR SITE PLAN FOR FINISH FLOOR ELEVATIONS

DESIGN SPECIFICATIONS
2018 INTERNATIONAL BUILDING CODE

EARTHWORK
EARTHWORK OPERATIONS SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL TESTING AGENCY TO ASSURE COMPLIANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT BY CROCKETT GTL DATED MAY 25, 2022.

CONCRETE

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 305 SPECIFICATIONS FOR HOT WATER CONCRETE, AND ACI 306 SPECIFICATIONS FOR COLD WEATHER CONCRETE, WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

1. CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY MINIMUM COMPRESSIVE STRENGTH:
   - FOUNDATIONS – 3,000 PSI
   - CAST-IN-PLACE WALLS – 4,000 PSI
   - FLOOR SLAB – 4,000 PSI
   - EXTERIOR SLABS, WALLS AND CURBS – 4,000 PSI
2. ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL.
3. CHLORIDE- BASED ADMIXTURES ARE PROHIBITED IN ALL REINFORCED CONCRETE.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A615, A616, OR A617, GRADE 60.
5. ALL CONTINUOUS REINFORCING STEEL THAT MEETS AT A CORNER SHALL BE TIED TOGETHER WITH A CORNER BAR THAT HAS SUFFICIENT LAP DISTANCE IN EACH DIRECTION
6. CONTINUOUS REINFORCING BARS LAP LENGTH SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE
7. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- 1" (ASTM C- 143) AS DELIVERED IN THE FIELD. CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY. NO WATER MAY BE ADDED TO THE CONCRETE MIX ON SITE UNLESS WATER IS WITHHELD AT THE BATCHING FACILITY. IF WATER IS WITHHELD AT THE BATCHING FACILITY IT SHOULD BE REFLECTED ON THE LOAD TICKET. THE TOTAL AMOUNT OF WATER IN THE MIX SHALL NOT EXCEED WHAT IS NOTED ON THE APPROVED MIXED. THIS SHALL BE NOTED IN THE SPECIAL INSPECTOR'S RECORDS.
8. CONCRETE EXPOSED TO WEATHER, VEHICLES, AND/OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED WITH 6% (+/-) 1.5% ENTRAINED AIR BY VOLUME AT POINT OF DISCHARGE. DO NOT ALLOW AIR CONTENT OF TROWELED FINISHED FLOORS TO EXCEED 3%.
9. SUBMIT CONCRETE MIX PROPORTIONS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE PRODUCTION UNTIL MIXES HAVE BEEN REVIEWED AND ARE ACCEPTABLE TO THE ENGINEER.
10. READY MIX CONCRETE SHALL COMPLY WITH REQUIREMENTS OF ASTM C94.
11. CONCRETE WORK EXECUTION
    - A. CONSTRUCT FORMS TO CORRECT SIZE, SHAPE, ALIGNMENT, ELEVATION AND POSITION; AND TO SUPPORT VERTICAL AND LATERAL LOADS.
    - B. POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE, UNLESS NOTED OTHERWISE ON THE DRAWINGS:
      - CAST AGAINST AND EXPOSED TO EARTH.....3 INCHES
      - EXPOSED TO EARTH OR WEATHER.....2 INCHES
      - NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH.....1 ½ INCHES
    - C. PROVIDE CONTROL JOINTS IN SLABS-ON-GRADE AT NOT GREATER THAN 15 FEET ON CENTER IN EACH DIRECTION. SAW CUT CONTROL JOINTS MINIMUM ¼ OF SLAB DEPTH, AS SOON AFTER SLAB FINISHING WITHOUT DISLODGING AGGREGATE.
    - D. STEEL TROWEL FINISH ALL INTERIOR CONCRETE SLABS, BROOM FINISH ALL EXTERIOR CONCRETE SLABS.
    - E. CURE ALL CONCRETE IN COMPLIANCE WITH ACI 301, USING A LIQUID TYPE MEMBRANE, NON-RESIDUAL, CURING COMPOUND COMPLYING WITH ASTM C309. ASSURE COMPATIBILITY WITH FINISH FLOOR COVERING.

RETAINING WALL:

TECHNICAL REQUIREMENTS

1. PRIOR TO CONSTRUCTION OF THE WALLS, THE GRADING CONTRACTOR SHALL CLEAR AND GRUB THE REINFORCED BACKFILL ZONE AREA, REMOVING TOP SOILS, BRUSH, SOD OR OTHER ORGANIC OR DELETERIOUS MATERIALS. ANY UNSUITABLE SOILS SHALL BE OVER-EXCAVATED, REPLACED AND COMPACTED WITH REINFORCED BACKFILL MATERIAL TO PROJECT SPECIFICATIONS OR OTHERWISE DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER.
2. THE GEOTECHNICAL ENGINEER SHALL CONFIRM THAT THE SITE HAS BEEN PROPERLY PREPARED AND THE DESIGN PARAMETERS IN DESIGN PARAMETERS SECTION ARE APPROPRIATE PRIOR TO FILL PLACEMENT. A WRITTEN CONFIRMATION SHALL BE PROVIDED TO CROCKETT ENGINEERING PRIOR TO FILL PLACEMENT.
3. FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 10 INCHES IN UNCOMPACTED THICKNESS FOR HEAVY COMPACTION EQUIPMENT. FOR ZONES WHERE COMPACTION IS ACCOMPLISHED WITH HAND OPERATED EQUIPMENT, FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN UNCOMPACTED THICKNESS. ONLY HAND-OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN THREE FEET OF THE BACK FACE OF WALL.
4. FILL SHALL BE COMPACTED AS SPECIFIED BY PROJECT SPECIFICATIONS OR TO A MINIMUM 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-698.
5. TESTING METHODS AND FREQUENCY, AND VERIFICATION OF MATERIAL SPECIFICATIONS AND COMPACTION SHALL BE THE RESPONSIBILITY OF THE OWNER'S GEOTECHNICAL ENGINEER. A COPY OF THE REPORT SHALL BE PROVIDED TO CROCKETT ENGINEERING.
6. FILL WALL EVENLY EACH SIDE PRIOR TO BACKFILLING.

DRAINAGE

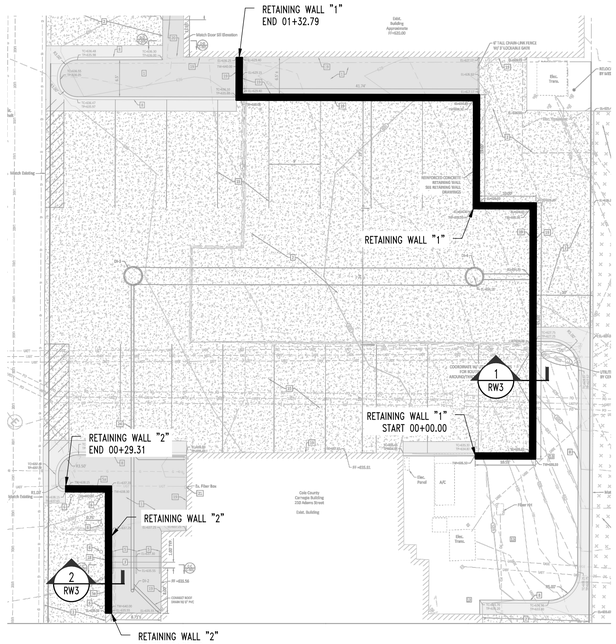
1. AT THE END OF EACH WORK DAY, BACKFILL SURFACE SHALL BE COMPACTED WITH A SMOOTH PLATE COMPACTOR TO MINIMIZE PONDING OF WATER AND SATURATION OF THE BACKFILL.
2. PERMANENT SURFACE WATER DIVERSION SHALL BE AS REQUIRED AND PROVIDED BY THE OWNER OR OWNER'S REPRESENTATIVE.

DESIGN PARAMETERS

1. DESIGN OF THE REINFORCED SOIL STRUCTURE IS BASED ON THE FOLLOWING PARAMETERS:
   - BEARING CAPACITY = 1,700 PSF
   - LATERAL PRESSURES
     - ACTIVE = 40 PCF (CLEAN GRAVEL)
     - PASSIVE = 270 PCF
   - SLIDING RESISTANCE
     - COEFFICIENT OF FRICTION = 0.32
2. EXTERNAL STABILITY:
   - MINIMUM FACTOR OF SAFETY FOR OVERTURNING = 2.0
   - MINIMUM FACTOR OF SAFETY FOR SLIDING = 1.5
3. SURCHARGE LOADING
   - LIVE LOAD TRAFFIC AREAS = 100 PSF PARKING AREA
4. GLOBAL STABILITY DESIGN WAS CONSIDERED AS PART OF THE WALL DESIGN.

SPECIAL PROVISIONS

1. THE DESIGN PRESENTED HEREIN IS BASED ON SOIL PARAMETERS, FOUNDATION CONDITIONS, GROUNDWATER CONDITIONS AND LOADINGS.
2. WALL ELEVATION VIEWS AND LOCATIONS AND GEOMETRY OF EXISTING STRUCTURES AND GRADE ABOVE AND BELOW THE WALLS MUST BE VERIFIED BY THE CONTRACTOR, TO MATCH ELEVATIONS SHOWN IN THE CONTRACT DOCUMENTS, PRIOR TO CONSTRUCTION.



1 RW1 **RETAINING WALL "1" PLAN**
NOT TO SCALE

N PLAN NORTH

NOTES

1. REFER TO TYPICAL STAIR DETAIL ON SHEET RW3 FOR DETAIL.

INDEX OF SHEETS

REVISIONS:

No.	Date
PERMIT SET	06/23/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF MISSOURI
GREGORY L. LINNEMAN
NUMBER PE-2005001013

GREGORY L. LINNEMAN - PE
MO LICENSE - 2005001013

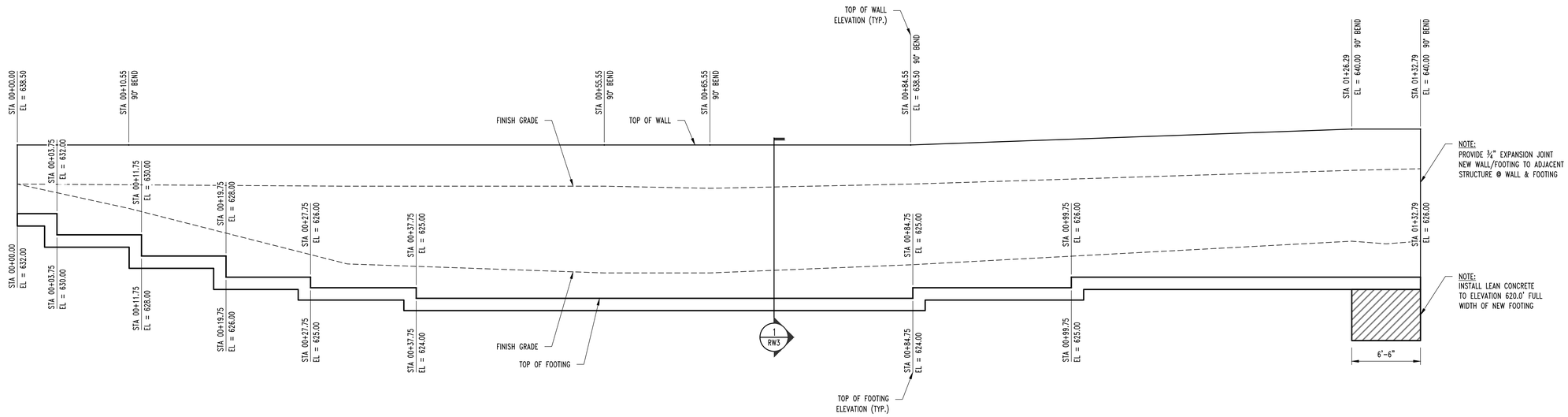
STRUCTURAL ENGINEER:
CROCKETT
ENGINEERING CONSULTANTS
1000 West Nifong Blvd. Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2006015501

CLIENT:
CENTRAL MISSOURI PROFESSIONAL SERVICES INC.
2500 E. MCCARTY STREET
JEFFERSON CITY, MISSOURI

CARNEGIE RETAINING WALL
210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

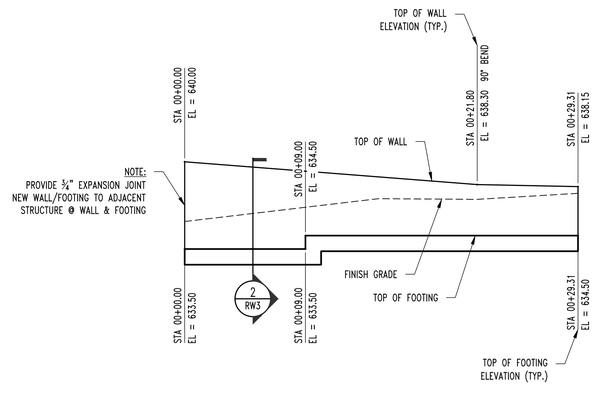
DRAWING INCLUDES:
GENERAL
STRUCTURAL DATA

DESIGNED: GLL
DRAWN: SEH
PROJECT NO.: 210619
SHEET: RW1



1 RW2 RETAINING WALL "1" PROFILE

SCALE: 3/16" = 1'-0"



2 RW2 RETAINING WALL "2" PROFILE

SCALE: 3/16" = 1'-0"

REVISIONS:

No.	Date
PERMIT SET	06/23/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF MISSOURI
GREGORY L. LINNEMAN
NUMBER PE-2005001013

GREGORY L. LINNEMAN - PE
MO LICENSE - 2005001013

STRUCTURAL ENGINEER:
CROCKETT
ENGINEERING CONSULTANTS
1000 West Nifong Blvd. Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2006015501

CLIENT:
CENTRAL MISSOURI PROFESSIONAL SERVICES INC.
2500 E. MCCARTY STREET
JEFFERSON CITY, MISSOURI

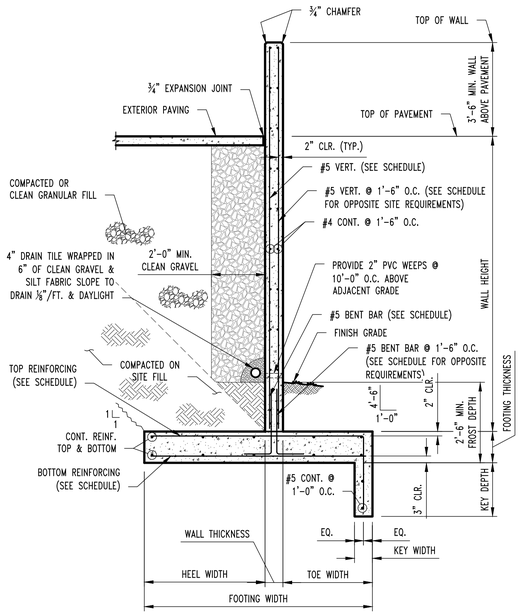
CARNEGIE RETAINING WALL

210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

DRAWING INCLUDES:

PARTIAL SITE PLAN

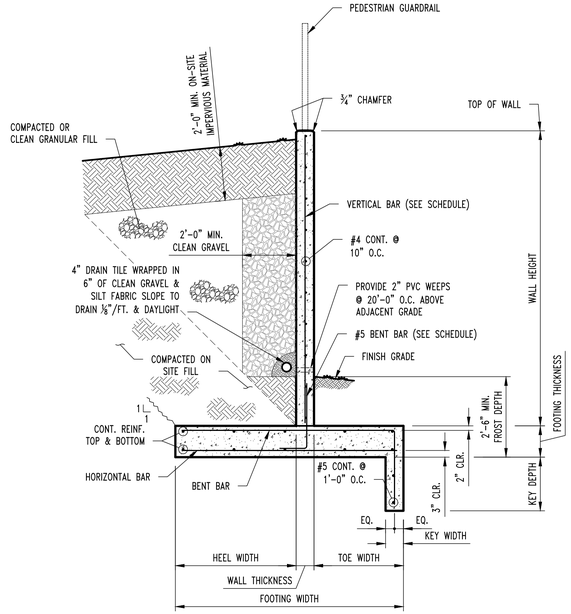
DESIGNED:	GLL
DRAWN:	SEH
PROJECT NO.:	210619
SHEET:	RW2



1 S100 **RETAINING WALL DETAIL**

SCALE: ⅜" = 1'-0"

NOTE:
WALL APPEARANCE SHALL BE CLASS A PER ACI, ALTERNATELY PROVIDE RUBBED FINISH



2 S100 **RETAINING WALL DETAIL**

SCALE: ⅜" = 1'-0"

NOTE:
WALL APPEARANCE SHALL BE CLASS A PER ACI, ALTERNATELY PROVIDE RUBBED FINISH

RETAINING WALL SCHEDULE

WALL INFORMATION				FOOTING INFORMATION							KEY INFORMATION	
WALL HEIGHT	WALL THICKNESS	VERTICAL REINFORCING (SOIL SIDE OF WALL)	BENT BARS AT BASE OF WALL (SOIL SIDE OF WALL)	FOOTING DEPTH	FOOTING WIDTH	TOE WIDTH	HEEL WIDTH	CONT. REINFORCING	TOP REINFORCING	BOTTOM REINFORCING	KEY THICKNESS /WIDTH	KEY DEPTH
8'-0"	1'-0"	#5 BARS AT 1'-6" O.C.	#5 BARS AT 1'-6" O.C. 4'-6" H, 1'-0" L	1'-2"	3'-6"	1'-0"	1'-6"	4-#5 CONT., BOTTOM ONLY	NA	#5x3'-0" AT 3'-0" O.C.	NA	NA
10'-0"	1'-0"	#5 BARS AT 1'-6" O.C.	#5 BARS AT 1'-6" O.C. 4'-6" H, 1'-0" L	1'-2"	5'-6"	1'-6"	3'-0"	6-#5 CONT., BOTTOM ONLY	NA	#5x5'-0" AT 3'-0" O.C.	1'-0"	0'-4"
12'-0"	1'-0"	#5 BARS AT 1'-6" O.C.	#5 BARS AT 0'-9" O.C. 4'-6" H, 1'-0" L	1'-2"	6'-3"	2'-6"	2'-9"	4-#5 CONT., TOP & BOTTOM	#5 AT 1'-0" O.C., 5'-6"L, 1'-10"H	#5x5'-9" AT 1'-0" O.C.	1'-0"	1'-0"
14'-6"	1'-0"	#5 BARS AT 1'-4" O.C.	#5 BARS AT 0'-8" O.C. 4'-6" H, 1'-0" L	1'-2"	8'-6"	3'-6"	4'-0"	5-#5 CONT., TOP & BOTTOM	#5 AT 0'-10" O.C., 7'-9"L, 2'-5"H	#5x8'-0" AT 0'-10" O.C.	1'-0"	1'-8"

RETAINING WALL SCHEDULE

WALL INFORMATION				FOOTING INFORMATION							KEY INFORMATION	
WALL HEIGHT	WALL THICKNESS	VERTICAL REINFORCING	BENT BARS AT BASE OF WALL	FOOTING DEPTH	FOOTING WIDTH	TOE WIDTH	HEEL WIDTH	CONT. REINFORCING	TOP REINFORCING	BOTTOM REINFORCING	KEY THICKNESS	KEY DEPTH
4'-0"	0'-8"	#5 BARS AT 1'-6" O.C.	#5 BARS AT 1'-6" O.C. 4'-6" H, 1'-0" L	1'-2"	3'-3"	1'-0"	1'-7"	4-#5 CONT., BOTTOM ONLY	NA	#5x2'-9" AT 3'-0" O.C.	NA	NA
6'-6"	0'-8"	#5 BARS AT 1'-2" O.C.	#5 BARS AT 1'-2" O.C. 4'-6" H, 1'-0" L	1'-2"	4'-6"	1'-6"	2'-4"	5-#5 CONT., BOTTOM ONLY	NA	#5x4'-0" AT 2'-4" O.C.	1'-0"	0'-8"

REVISIONS:

No.	Date
PERMIT SET	06/23/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF MISSOURI
GREGORY L. LINNEMAN
NUMBER PE-2005001013

GREGORY L. LINNEMAN - PE
MO LICENSE - 2005001013

STRUCTURAL ENGINEER:
CROCKETT
ENGINEERING CONSULTANTS
1000 West Nifong Blvd. Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#2006015501

CLIENT:
CENTRAL MISSOURI PROFESSIONAL SERVICES INC.
2500 E. MCCARTY STREET
JEFFERSON CITY, MISSOURI

CARNEGIE RETAINING WALL

210 ADAMS STREET
JEFFERSON CITY, COLE COUNTY, MISSOURI

DRAWING INCLUDES:

RETAINING WALL DETAILS

DESIGNED: GLL
DRAWN: SEH
PROJECT NO.: 210619

SHEET:
RW3