

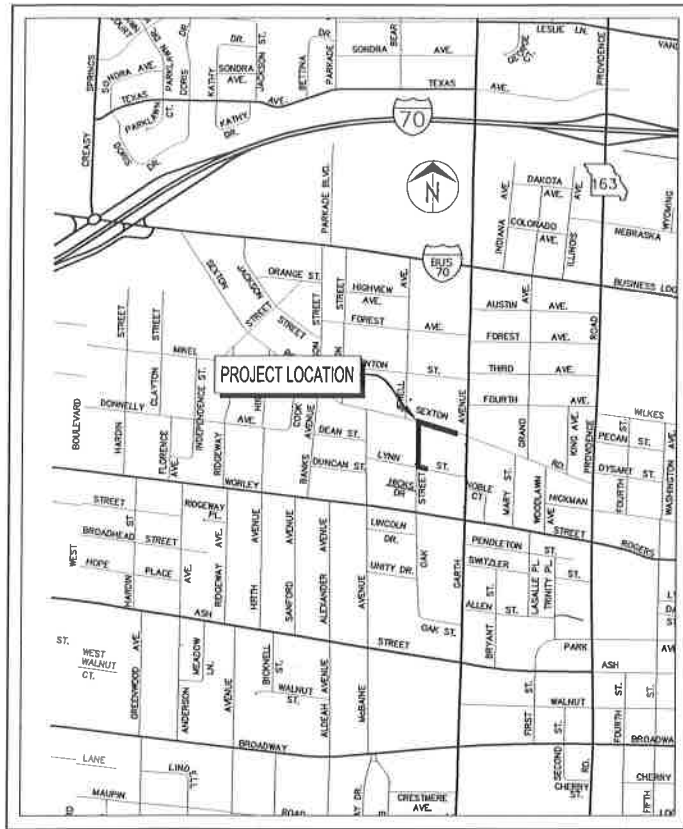
City of Columbia, Missouri

Department of Public Works



LYNN/OAK/SEXTON SIDEWALK

PROJECT NO: C00685



LOCATION MAP

LEGEND OF SYMBOLS

POWER POLE	
TELEPHONE POLE	
GUY ANCHOR	
GUY POLE	
STREET LIGHT POLE	
YARD LIGHT (SOLAR)	
WATER METER	
GAS METER	
GAS VALVE	
WATER VALVE	
FIRE HYDRANT	
PIPE BREAKLINE	
SANITARY MANHOLE	
SANITARY CLEANOUT	
SANITARY LATERAL CLEANOUT	
TRAVERSE POINT	
MoDOT ROW MARKER	
BENCHMARK	
SIGN	
MAIL BOX	
PROPERTY IRON	
BUSH	
STUMP	
TREE REMOVAL	
TREE	
TREE LINE	
SILT FENCE/TREE PROTECT	
EXISTING PUBLIC SANITARY SEWER	
EXISTING SANITARY SEWER LATERAL	
EXISTING SANITARY SEWER TO BE ABANDONED	
PROPOSED SEWER MAIN AND LATERALS	
FENCE	
CABLE TELEVISION	
TELEPHONE	
ELECTRIC	
TELEPHONE OR ELECTRIC MANHOLE	
WATER MAIN	
GAS MAIN	
FIBER OPTIC	
FLOW LINE	
PROPERTY LINE	
LOT LINE	
EXISTING RIGHT OF WAY LINE	
EXISTING EASEMENT	
PERMANANT UTILITY EASEMENT	
PROPOSED SANITARY SEWER EASEMENT	
PROPOSED PERMANENT DRAINAGE EASEMENT	
PROPOSED RIGHT OF WAY	
TEMPORARY ACCESS EASEMENT	
TEMPORARY CONSTRUCTION EASEMENT	
GRADING LIMIT	

GENERAL NOTES

- All construction to be in accordance with "City of Columbia Street, Storm Drain and Sanitary Specifications" (Current edition), except for traffic signal items, which shall conform to the Missouri Standard Specifications for Highway Construction (Current Edition). Where there is a conflict, these plans prevail over the Standard Specifications.
- The information shown in these plans concerning type and locations of underground utilities is not guaranteed to be accurate or all inclusive. It shall be the sole responsibility of the contractor to locate, protect, and restore all existing utilities encountered on this project. Notify Missouri One-Call (1-800-DIG-RITE) for the location of the utilities at least 5 days prior to construction. Contractor is to be aware that some utilities do not participate in the Missouri "One-Call" system. These utilities will need to be contacted individually.
- All removal of driveway pavements should be verified by field engineer.
- All excavation to be in accordance with Sections 319.010-319.050, Revised Statutes of the State of Missouri. Such compliance shall not, however, excuse any person making any excavation from doing so in a careful and prudent manner, nor shall it excuse such person from liability for any damage or injury to underground utilities resulting from the excavation.
- All disturbed earth areas shall be restored as per City Specification 203 (Seeding and mulching) and TS-X.
- Remove all pavement surfaces, inlets, pipes and sidewalks within the construction limits as per TS-X, except those noted to remain. The field inspector shall verify removal of all driveway pavement.
- Construction shall meet ADA Requirements. Any construction that does not meet ADA requirements must be removed and replaced at the contractor's expense.
- Sidewalk landings shall have maximum of 2% cross slope in both directions.
- Removal of trees and bushes shall be verified by field inspectors. Exercise caution when working near the construction limits to minimize disturbance to adjacent trees and shrubs that are not being removed by construction activities.
- Contractor is responsible for replacing any property or Right-of-Way monuments that are removed with this project.
- No open trenches will be allowed overnight outside of the "road closed" area. Asphaltic "cold mix" shall be used as a temporary patch overnight. Temporary patching shall be considered incidental to the work.

UTILITY COMPANIES:

TELEPHONE CenturyLink 625 Cherry Street Columbia, MO 65205 573-886-3505	WATER City of Columbia P.O. Box 6015 City Utilities Columbia, MO 65205 573-874-2489
NATURAL GAS Ameren Missouri 2001 Maguire Boulevard Columbia, MO 65201 573-876-3063	ELECTRIC City of Columbia P.O. Box 6015 City Utilities Columbia, MO 65205 573-874-2489
CABLE TELEVISION Mediacom 901 N. College Avenue Columbia, MO 65201 573-443-1536 ext 354	SANITARY SEWER City of Columbia P.O. Box 6015 City Utilities Columbia, MO 65205 573-874-2489

LOCATES
Missouri One Call Inc.
1022 B Northeast Drive
Jefferson City, MO 65109
1-800-344-7483

CONTROL POINTS

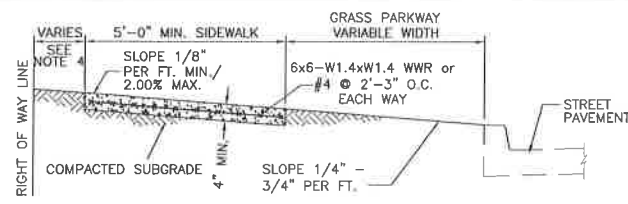
NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	1138516.39	1686255.80	727.67	NS IP CONT
2464	1138660.305	1686038.993	730.07	SET 60D NAIL
2667	1138776.22	1685753.57	733.11	SET 60D NAIL
2670	1138315.28	1685731.90	740.81	SET 60D NAIL

INDEX OF SHEETS

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City of Columbia, Missouri Department of Public Works			
No.	Date	By	Revision
File No. C00685	Des. A.N.H.	Sheet	1 of 10
Scale: None	Dwn. C.N.S.		
Date: 12/18/18	Chk. A.A.A.		
LYNN/OAK/SEXTON SIDEWALK			
Approved By _____			
Director of Public Works		Date	

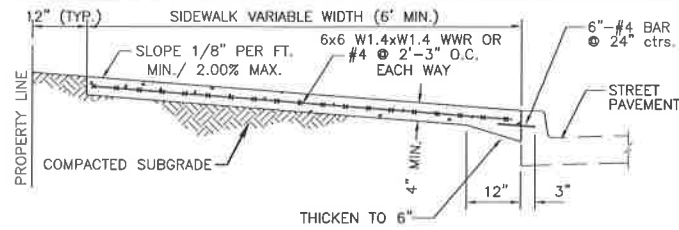
David Allen Nichols
Registered Professional Engineer
E-24212



SIDEWALK WITH GRASS PARKWAY

NOTE:

1. SIDEWALK SHALL BE 4" THICK MoDOT PAVEMENT CONCRETE.
2. INSTALL 1/2" EXPANSION JOINTS AT INTERSECTIONS, RAMPS, STRUCTURES, DRIVEWAY APPROACHES, OR EVERY 100'.
3. INSTALL TRANSVERSE SAW JOINTS AT SPACING EQUAL TO SIDEWALK WIDTH.
4. STANDARD SIDEWALK PLACEMENT IS 12" FROM RIGHT OF WAY LINE.
5. NO STEEL TO BE PLACED THROUGH EXPANSION JOINT.
6. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.00%.
7. DAMAGED SIDEWALK MUST BE PINNED TO EXISTING SIDEWALK.
8. WWR OR REBAR SHALL BE ACCURATELY PLACED AND FIRMLY HELD IN PLACE DURING CONCRETE PLACEMENT BY APPROVED METHODS, SEE SECTION 238.9.

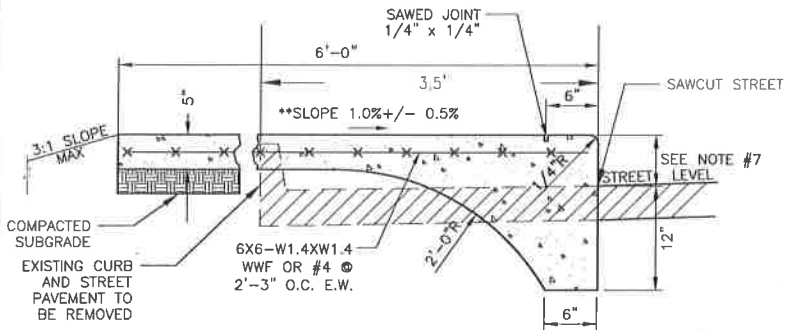


SIDEWALK AT BACK OF CURB

Sidewalk at Back of Curb
NOT TO SCALE

NOTE:

1. SIDEWALK SHALL BE 4" THICK MoDOT PAVEMENT CONCRETE.
2. INSTALL 1/2" TRANSVERSE EXPANSION JOINTS TO MATCH STREET OR CURB AND GUTTER EXPANSION JOINTS AND AT ALL DRIVEWAY APPROACHES, AND SIDEWALK RAMPS.
3. INSTALL TRANSVERSE SAW JOINTS AT SPACING EQUAL TO SIDEWALK WIDTH.
4. FOR DOWNTOWN SIDEWALK DETAIL SEE SECTION 1000.
5. NO STEEL TO BE PLACED THROUGH EXPANSION JOINT.
6. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.00%.
7. NEW SIDEWALK MUST BE PINNED TO EXISTING SIDEWALK.
8. WWR OR REBAR SHALL BE ACCURATELY PLACED AND FIRMLY HELD IN PLACE DURING CONCRETE PLACEMENT BY APPROVED METHODS, SEE SECTION 238.9.

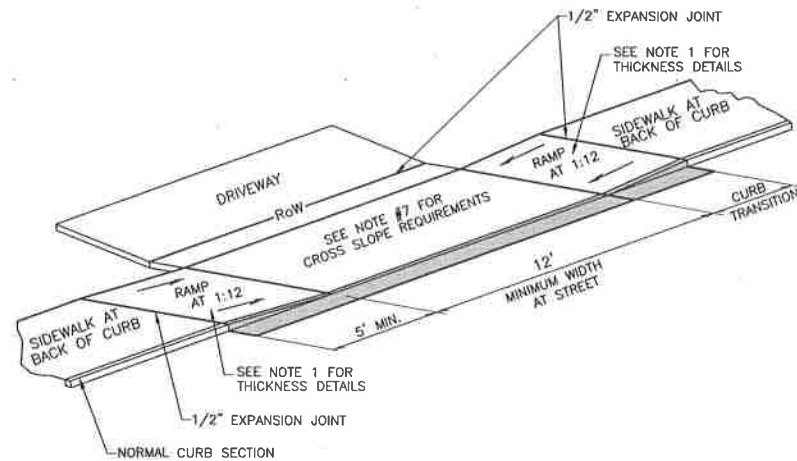


6' WIDE SIDEWALK W/INTEGRAL CURB

STA 1+00 TO 5+15.30

NOTE: ** SLOPE AWAY FROM STREET

1. SIDEWALK SHALL BE 5" THICK MoDOT PAVEMENT CONCRETE.
2. INSTALL 1/2" EXPANSION JOINTS AT INTERSECTIONS, RAMPS, STRUCTURES, DRIVEWAY APPROACHES, OR EVERY 100'.
3. INSTALL TRANSVERSE SAW JOINTS AT SPACING EQUAL TO SIDEWALK WIDTH.
4. NO STEEL TO BE PLACED THROUGH EXPANSION JOINT.
5. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.00%.
6. WWR OR REBAR SHALL BE ACCURATELY PLACED AND FIRMLY HELD IN PLACE DURING CONCRETE PLACEMENT BY APPROVED METHODS, SEE SECTION 238.9.
7. CURB FACE HEIGHT SHALL BE BETWEEN 4" AND 8" ALLOWING FOR FLUCTUATION IN THE STREET.
8. CURB FACE TO BE BROOM FINISHED.



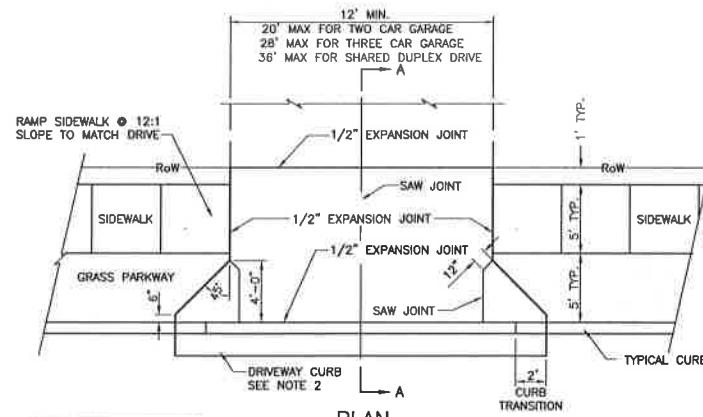
NOTE:

1. RAMP SHALL BE 6" THICK MoDOT PAVEMENT CONCRETE FOR RESIDENTIAL, 7" THICK MoDOT PAVEMENT CONCRETE FOR COMMERCIAL.
2. EXPANSION JOINT SHALL BE 1/2" PREFORMED CORK OR BITUMINOUS EXPANSION JOINT MATERIAL.
3. DRIVEWAY CROSS SLOPE SHALL NOT EXCEED 2.00%.
4. ALL SLOPES ARE MEASURED FROM THE HORIZONTAL.
5. REPLACE STANDARD CURB SECTION DRIVEWAY CURB SECTION - DETAIL 400.02 OR 400.03
6. RAMP LENGTH IS DEPENDENT UPON 1:12 MAX. SLOPE AT 5' MINIMUM TRANSITION AREA. USE FLATTER WHEN POSSIBLE.
7. A PEDESTRIAN ACCESSIBLE ROUTE SHALL BE PROVIDED THAT IS 4'-0" WIDE MINIMUM WITH A MINIMUM CROSS SLOPE OF 1/8" PER FOOT AND MAXIMUM CROSS SLOPE OF 2.00%.
8. DRIVEWAY MAY BE REINFORCED AT OWNERS OPTION. ON CITY BID PROJECTS DO NOT REINFORCE.

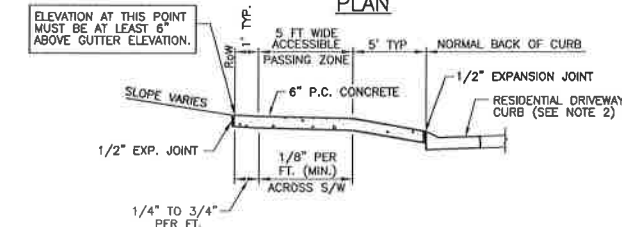
SIDEWALK DRIVEWAY DETAIL

Sidewalk at Back of Curb

NOT TO SCALE



PLAN

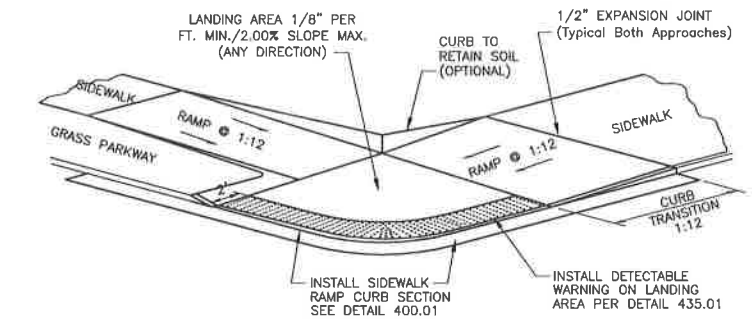
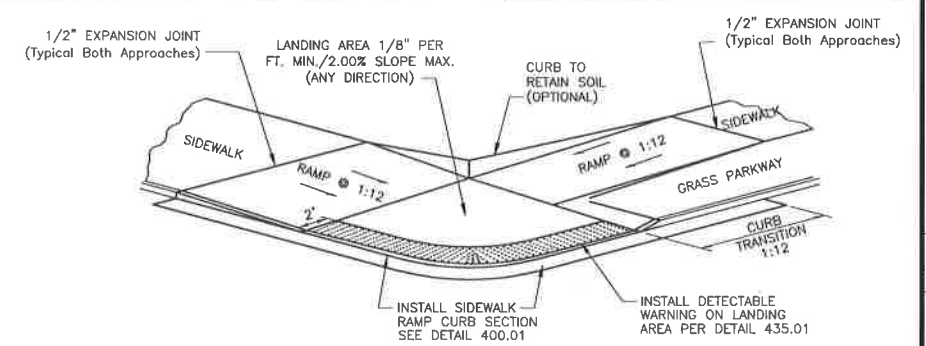


SECTION A-A

NOTES:

1. DRIVEWAY APPROACH SHALL BE 6" THICK MoDOT PAVEMENT CONCRETE ON COMPACTED SUBGRADE.
2. REPLACE STANDARD CURB & GUTTER SECTION WITH DRIVEWAY CURB SECTION. SEE DETAIL 400.02.
3. EXPANSION JOINT SHALL BE 1/2" PREFORMED CORK OR BITUMINOUS EXPANSION JOINT MATERIAL.
4. ALL DRIVEWAY APPROACHES SHALL SLOPE TOWARD THE STREET.
5. ALL DRIVEWAY APPROACHES SHALL BE CONSTRUCTED TO ACCOMMODATE SIDEWALKS. (EXISTING AND FUTURE) STANDARD SIDEWALK LOCATION IS 1' FT OFF OF ROW LINE
6. DRIVEWAY APPROACH SHALL PROVIDE A MINIMUM 5' WIDE ACCESSIBLE SIDEWALK PASSING ZONE.
7. DRIVEWAY SLOPE ACROSS ACCESSIBLE SIDEWALK PASSING ZONE IS 1/8" PER FT. CROSS SLOPE SHALL NOT EXCEED 2.00%.
8. MINIMIZE SIDEWALK WARPING ADJACENT TO DRIVEWAY APPROACH.
9. GREENSPACE SLOPE WITHIN RIGHT OF WAY SHALL NOT EXCEED 3/4" PER FOOT.
10. DRIVEWAY MAY BE REINFORCED AT OWNER'S OPTION. ON CITY BID PROJECTS DO NOT REINFORCE.
11. MEASURE FROM TOP OF CURB.

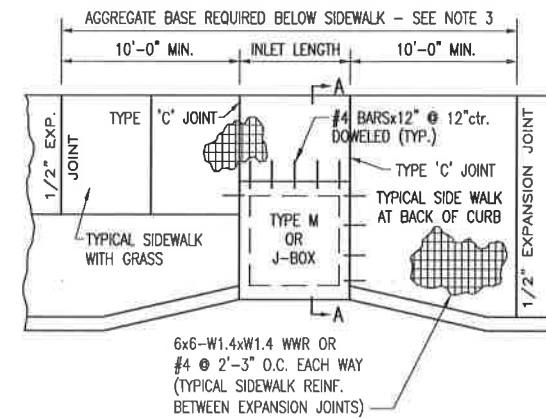
DRIVEWAY
(Residential, 28' street)



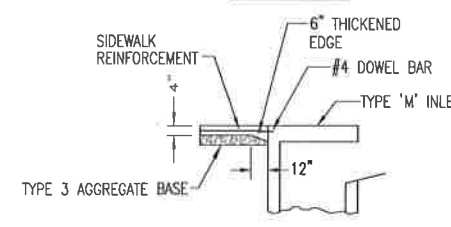
SIDEWALK RAMP
Sidewalk at Back of Curb/W GRASS PARKWAY

NOTES:

1. RAMP AND LANDING SHALL BE 6" THICK REINFORCED MoDOT PAVEMENT CONCRETE W/#4 BARS @ 12" O.C.
2. EXPANSION JOINT SHALL BE 1/2" PREFORMED CORK OR BITUMINOUS EXPANSION JOINT MATERIAL.
3. MAXIMUM RAMP CROSS SLOPE IS 2.00%.
4. ALL SLOPES ARE MEASURED FROM THE HORIZONTAL.
5. REPLACE STANDARD CURB SECTION WITH SIDEWALK RAMP CURB SECTION - DETAIL 400.01
6. RAMP LENGTH IS DEPENDENT ON 1:12 MAX. SLOPE. USE FLATTER WHEN POSSIBLE.
7. LANDING AREA SHALL BE 4'-0" MIN WIDTH.
8. USE TYPE "B" RAMP ONLY IF TYPE "A" IS NOT FEASIBLE.



PLAN VIEW



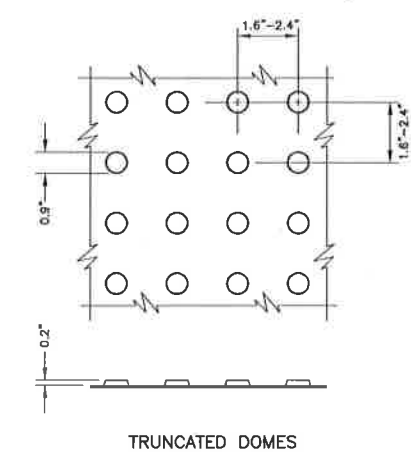
SECTION A-A

NOTES:

1. SIDEWALK SHALL BE 4" THICK MoDOT PAVEMENT CONCRETE
2. REINFORCING STEEL SHALL BE GRADE 60
3. 4" THICK PROPERLY PLACED TYPE 3 AGGREGATE BASE
4. ALL DRILLED DOWEL BARS SHALL BE EXPOSED.

SIDEWALK REINFORCEMENT
AT DRAINAGE STRUCTURE

NOT TO SCALE



TRUNCATED DOMES

NOTES:

1. DETECTABLE WARNING SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF 0.9", A HEIGHT OF NOMINAL 0.2", AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35". AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, ACHIEVED BY THE INSTALLATION OF ADA SOLUTIONS 2436 REPB, 2448 REPB, OR 2450 REPB (OR APPROVED EQUAL) AND SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
2. ADA SOLUTIONS 24RADREPB OR APPROVED EQUAL TO BE USED WITH DETAIL 430.02, 432.02, AND 1000.08.
3. DETECTABLE WARNING SURFACES SHALL BE 24" WIDE AND SPAN THE FULL WIDTH (WITHIN 2") OF THE RAMP OR LANDING.
4. DETECTABLE WARNING STRIP SHALL BE COLORED "BRICK RED" AND BE EMBEDDED INTO THE CONCRETE. THE DETECTABLE WARNING STRIP SHALL BE PREFORMED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PRODUCTS THAT ARE BONDED TO THE SURFACE OF THE CONCRETE SHALL NOT BE ALLOWED IN NEW INSTALLATIONS. STAMPED CONCRETE DETECTABLE WARNINGS WILL NOT BE ALLOWED.
5. FINISHED SIDEWALK SHALL BE SLIP RESISTANT AND SHALL NOT POND WATER.

DETECTABLE WARNING

NOT TO SCALE

Revision	
By	
Date	
No.	

Lynn/Oak/Sexton Sidewalk
Details Sheet

City of Columbia, Missouri

Department of Public Works

David Allen Nichols
Registered Professional Engineer
E-24212

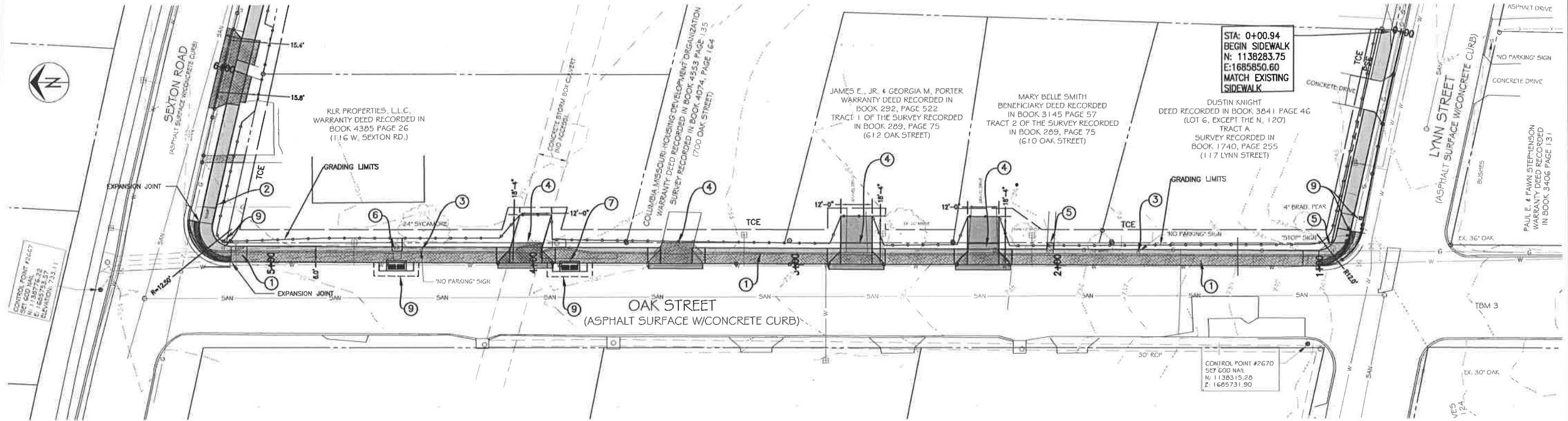
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Date: 12/18/2018
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Dwn. C.N.S.
Chk. A.A.A.

Sheet
2 of 10

- ① SAWCUT & REMOVE P.C.C. CURB & GUTTER AND PAVEMENT.
- ② CONSTRUCT 4" REINFORCED P.C.C. SIDEWALK PAVEMENT PER DETAIL & PLAN DIMENSIONS.
- ③ REMOVE & RELOCATE SIGN OUTSIDE NEW SIDEWALK.
- ④ INSTALL P.C.C. DRIVEWAY PAVEMENT PER DETAIL & PLAN DIMENSIONS.
- ⑤ RELOCATE EXISTING FIRE HYDRANT BY OTHERS.

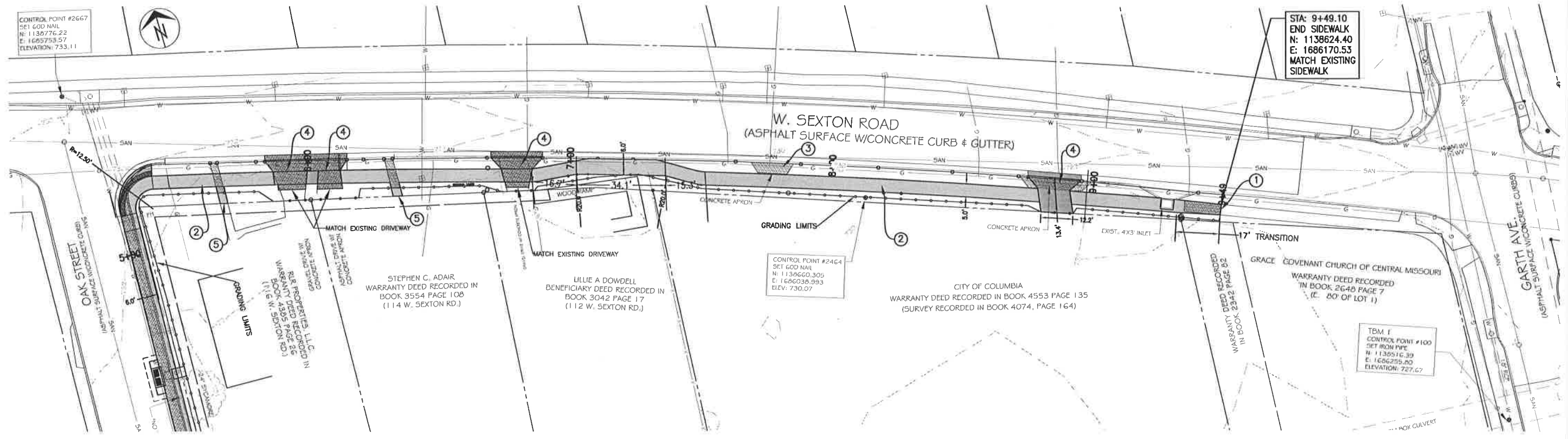
- ⑥ REMOVE BOTH EXISTING INLET GRATE & TOP SLAB. CONSTRUCT A DOUBLE TYPE-A INLET PER PLAN, DIMENSION, AND SPECIFICATIONS. RECONSTRUCT INLET TOP SLAB WITH A LID, MATCHING WITH THE NEW SIDEWALK GRADE. CONNECT NEW INLET WITH THE EXISTING TYPE A INLET WITH AN 18" RCP OR HP PIPE. TOP OF GRATE INLET= 731.50, 1' LONG 18" RCP OR HP PIPE @ 5%, FL. IN = 729.55, FL. OUT = 729.60.
- ⑦ REMOVE EXISTING INLET & TOP SLAB. CONSTRUCT A DOUBLE TYPE A INLET PER PLAN, DIMENSION AND SPECIFICATIONS. RECONSTRUCT INLET TOP SLAB WITH LID, MATCHING WITH THE NEW SIDEWALK GRADE. CONNECT NEW INLET WITH THE EXISTING INLET WITH AN 18" RCP OR HP PIPE. TOP OF GRATE INLET= 731.95, 6' LONG 18" RCP OR HP PIPE @ 2%, FL. IN = 729.83, FL. OUT = 729.95.

- ⑧ REMOVE & REINSTALL STOP & STREET NAME SIGNS.
- ⑨ PATCH WITH CONCRETE PAVEMENT.



- ① SAWCUT & REMOVE EXISTING SIDEWALK UP TO JOINT.
- ② CONSTRUCT 4" REINFORCED P.C.C. SIDEWALK PAVEMENT PER DETAIL & PLAN DIMENSIONS.
- ③ REMOVE EXISTING DRIVEWAY.

- ④ SAWCUT & REMOVE P.C.C. CURB & GUTTER & DRIVEWAY PAVEMENT. INSTALL P.C.C. DRIVEWAY PAVEMENT PER DETAIL & PLAN DIMENSIONS.
- ⑤ SAWCUT & REMOVE EXISTING CONCRETE WALKWAY. REPLACE CONCRETE WALKWAY TO CONNECT WITH SIDEWALK.
- ⑥ CONSTRUCT 4" REINFORCED P.C.C. SIDEWALK AT BACK OF CURB PER DETAIL AND PLAN DIMENSIONS (EXISTING CURB TO STAY IN PLACE).

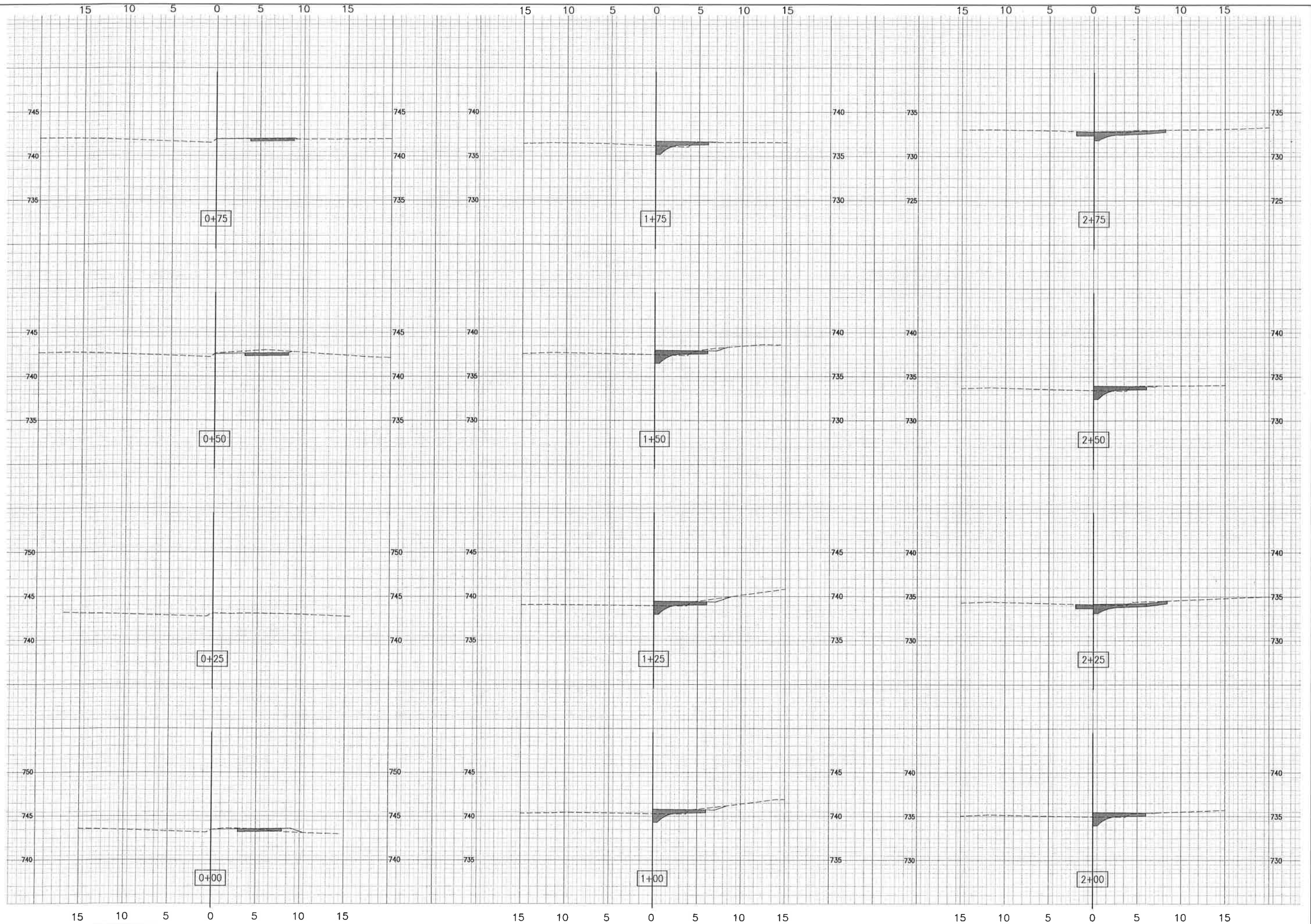


No.	Date	By	Revision

Lynn/Oak/Sexton Sidewalk
Plan Sheet - Sta. 00+82.68 to Sta. 9+48.97

City of Columbia, Missouri
Department of Public Works

David Allen Nichols Registered Professional Engineer E-24212
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Sheet 3 of 10



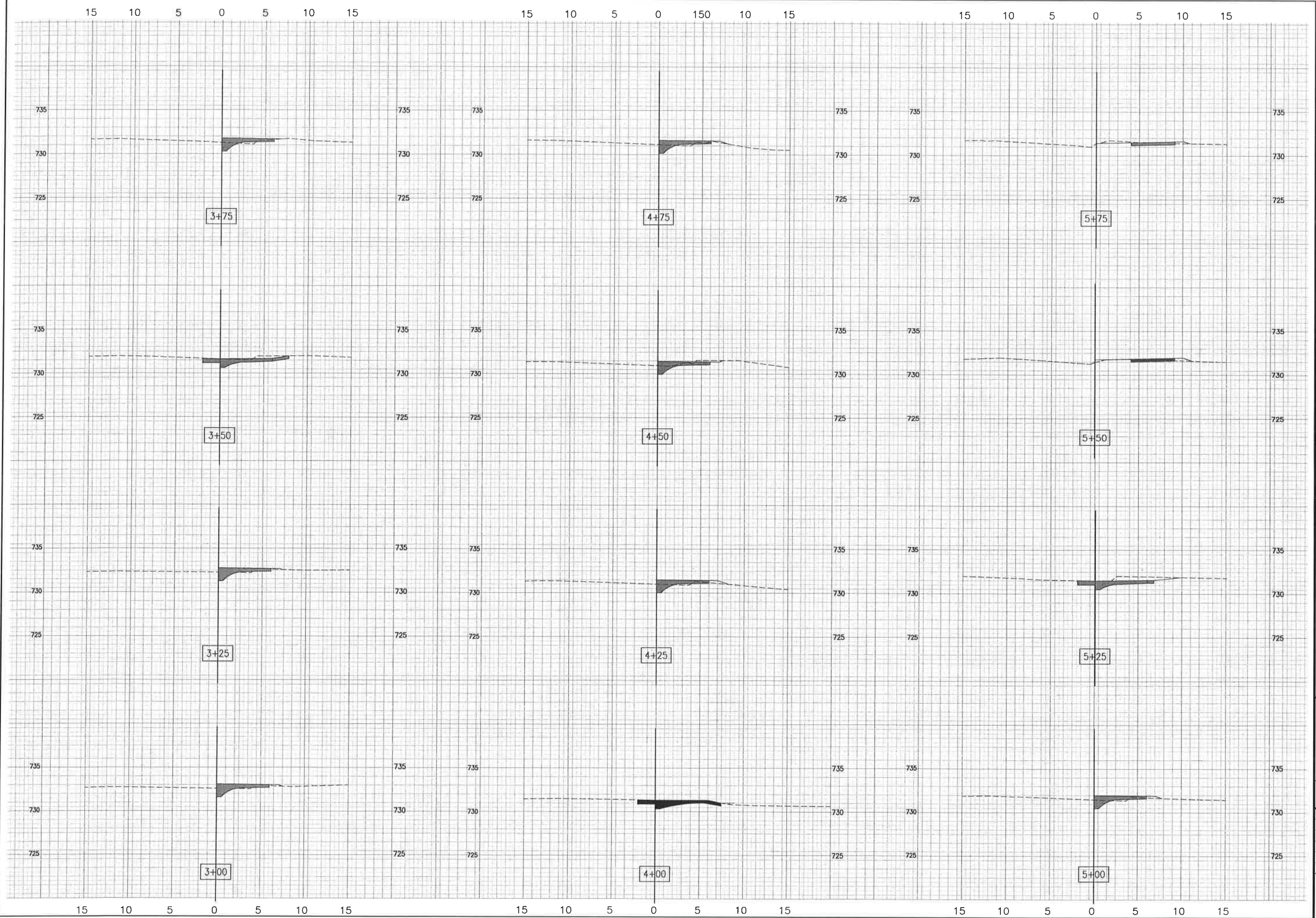
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By	
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Lynn/Oak/Sexton Sidewalk
CROSS SECTIONS

City of Columbia, Missouri
Department of Public Works

David Allen Nichole
Registered Professional Engineer
E-24212

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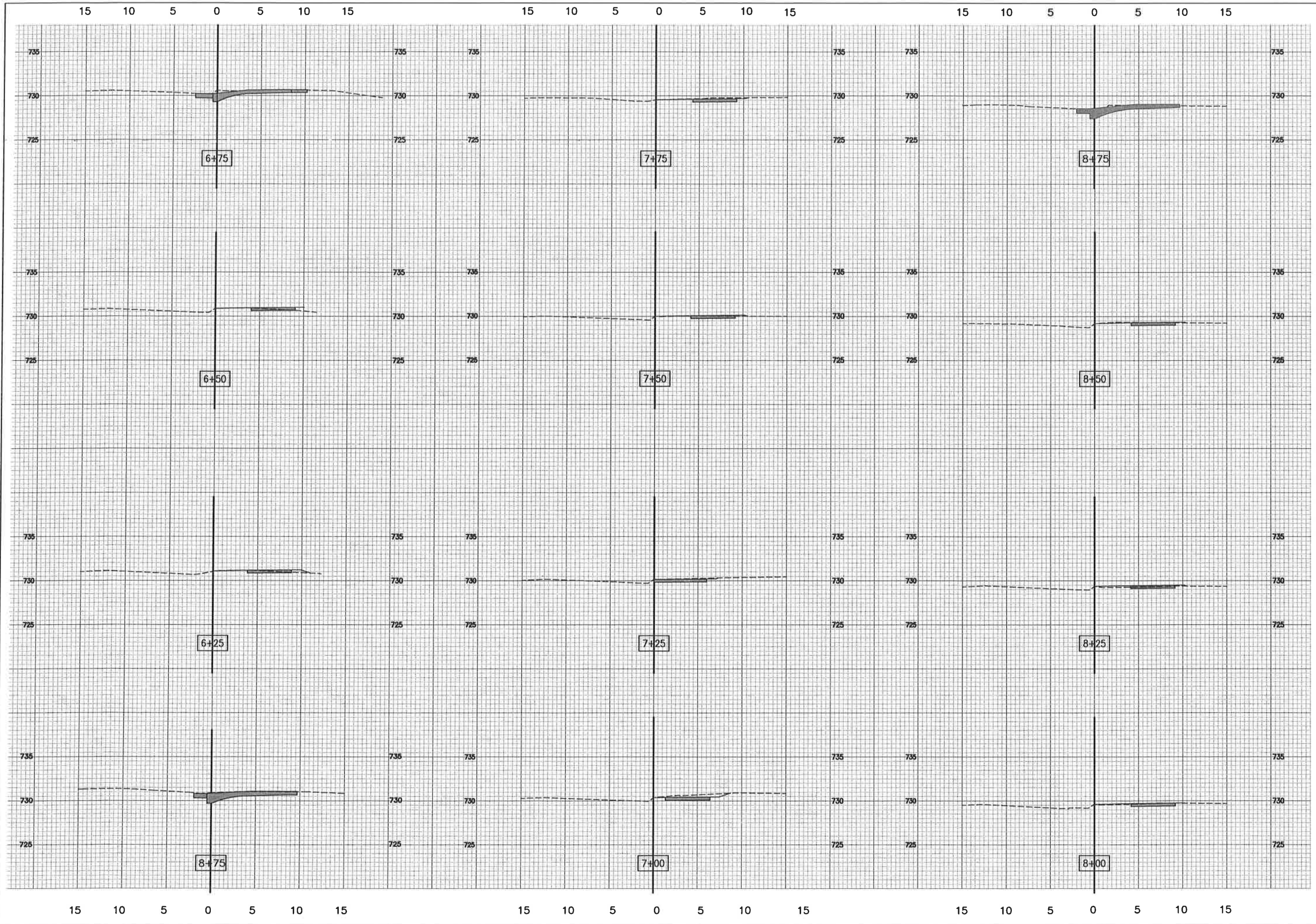
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Lynn/Oak/Sexton Sidewalk
CROSS SECTIONS

City of Columbia, Missouri
Department of Public Works

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Dwn. J.L.H.
Chk. A.A.A.



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LYNN/OAK/SEXTON SIDEWALK
CROSS SECTIONS

City of Columbia, Missouri
Department of Public Works

David Allen Nichols
Registered Professional Engineer
E-24212

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