




APPENDIX H - PLAN SHEETS & TECHNICAL PLATES

RIVERPOINTE

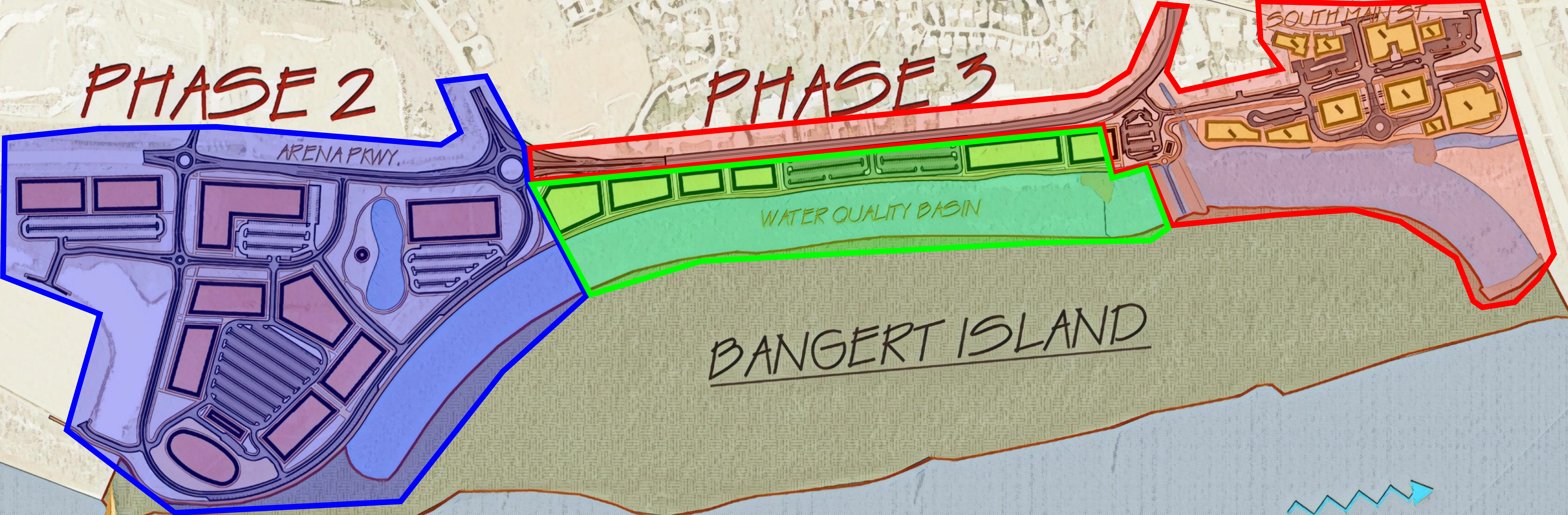


-  PHASE 1 CONSTRUCTION
-  PHASE 2 CONSTRUCTION
-  PHASE 3 CONSTRUCTION

PHASE 2

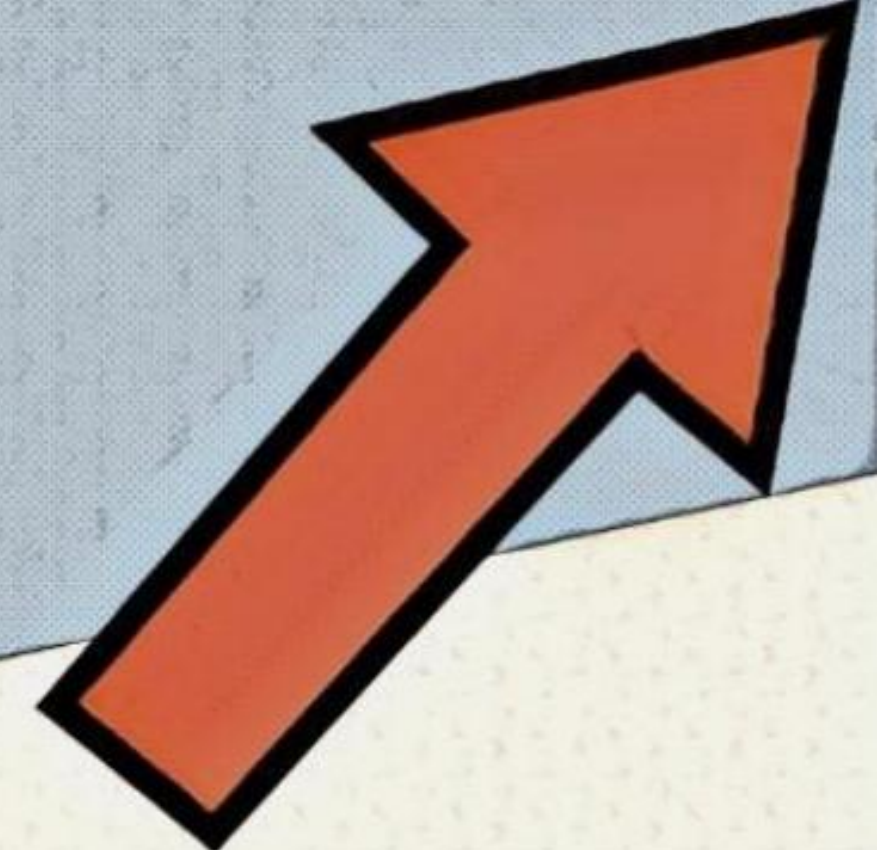
PHASE 3

PHASE 1

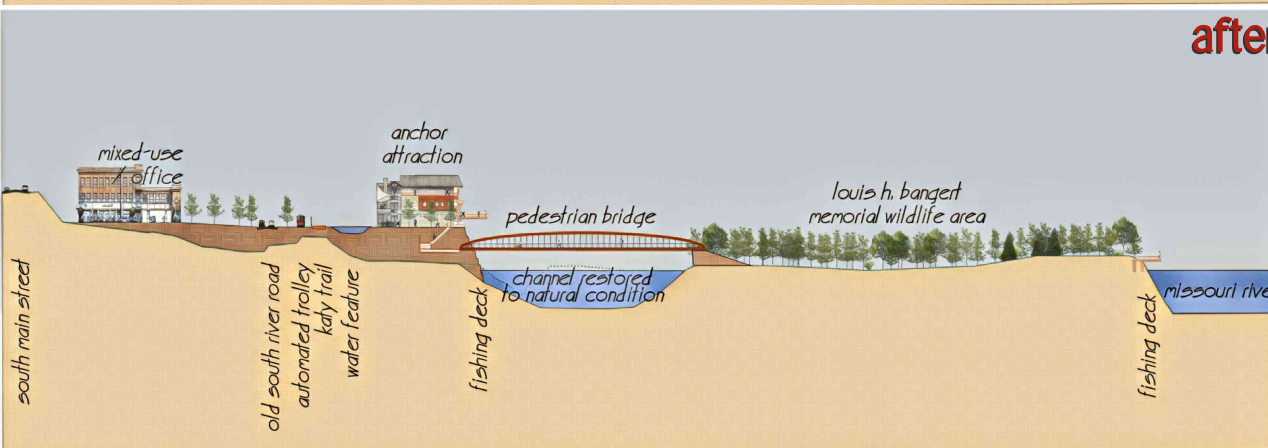
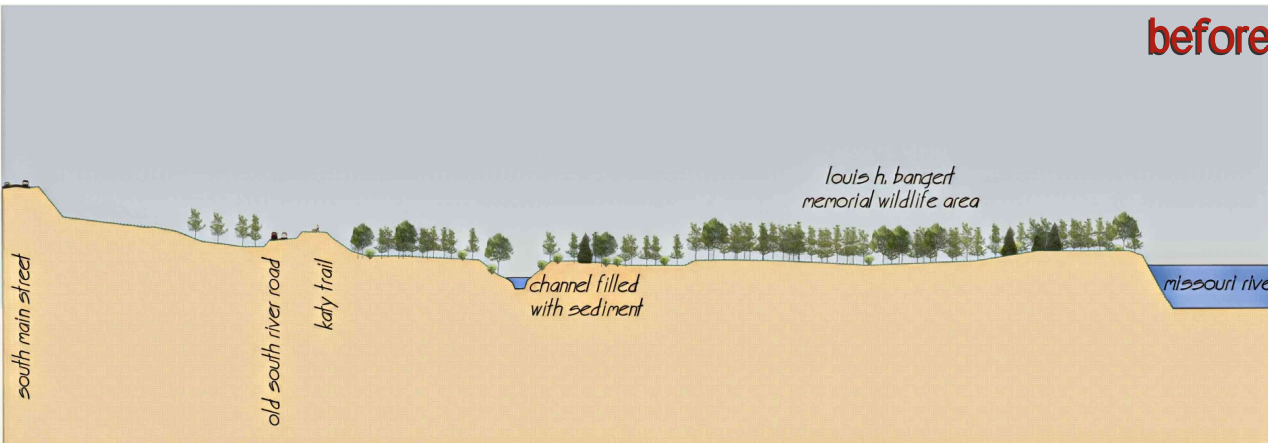


BANGERT ISLAND

MISSOURI RIVER

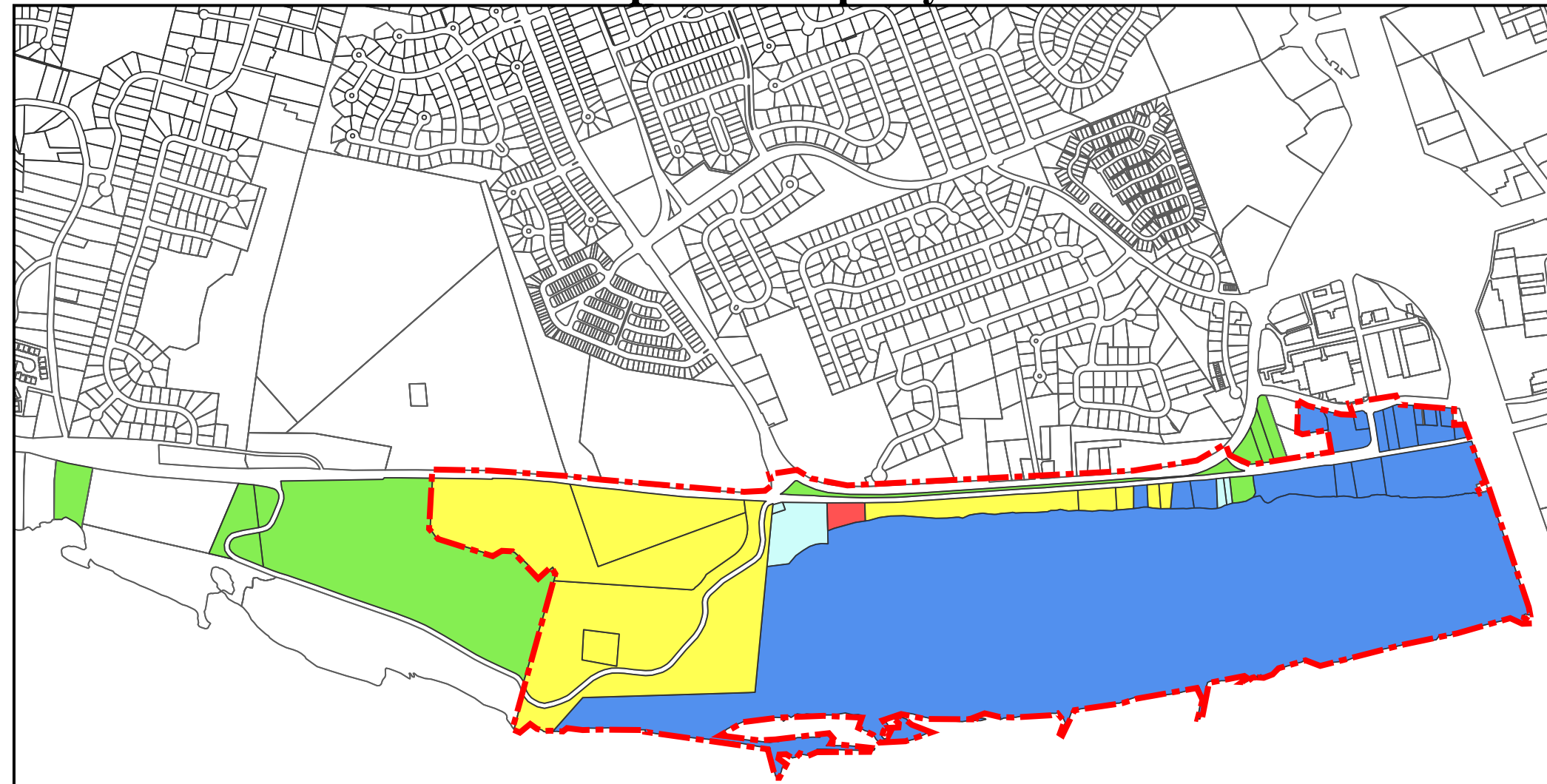


Recreation | Access | Habitat | Water Quality | Economic Development



RIVERPOINTE

Riverpointe Property Status



Riverpointe Properties

Property Status

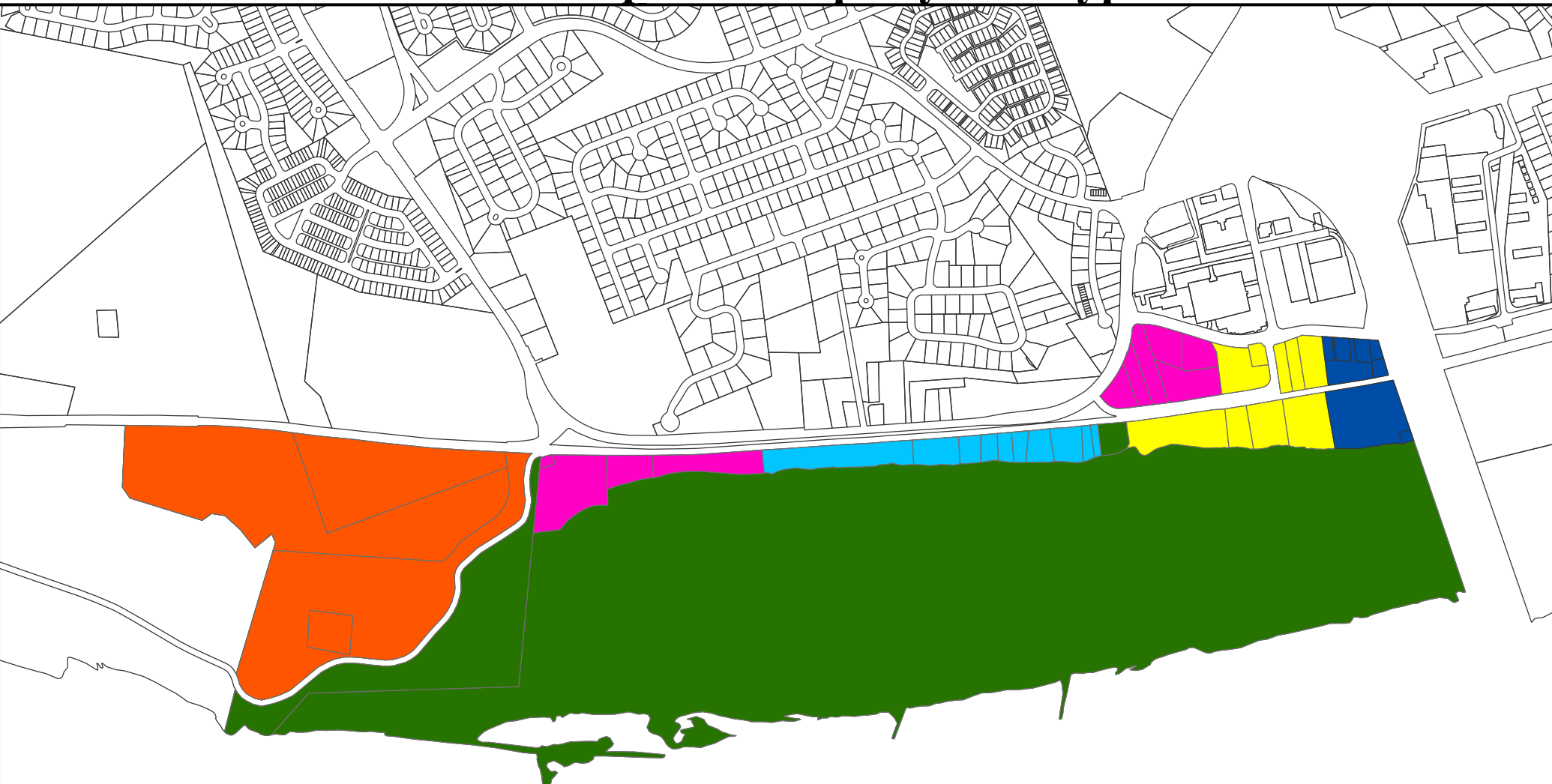
-  To be Aquired
-  In Negotiations
-  Under Contract
-  City Owned
-  County Owned
-  Not Required

 Project Area



NOT TO SCALE
DATE: 4/8/2020

Riverpointe Property Use Type



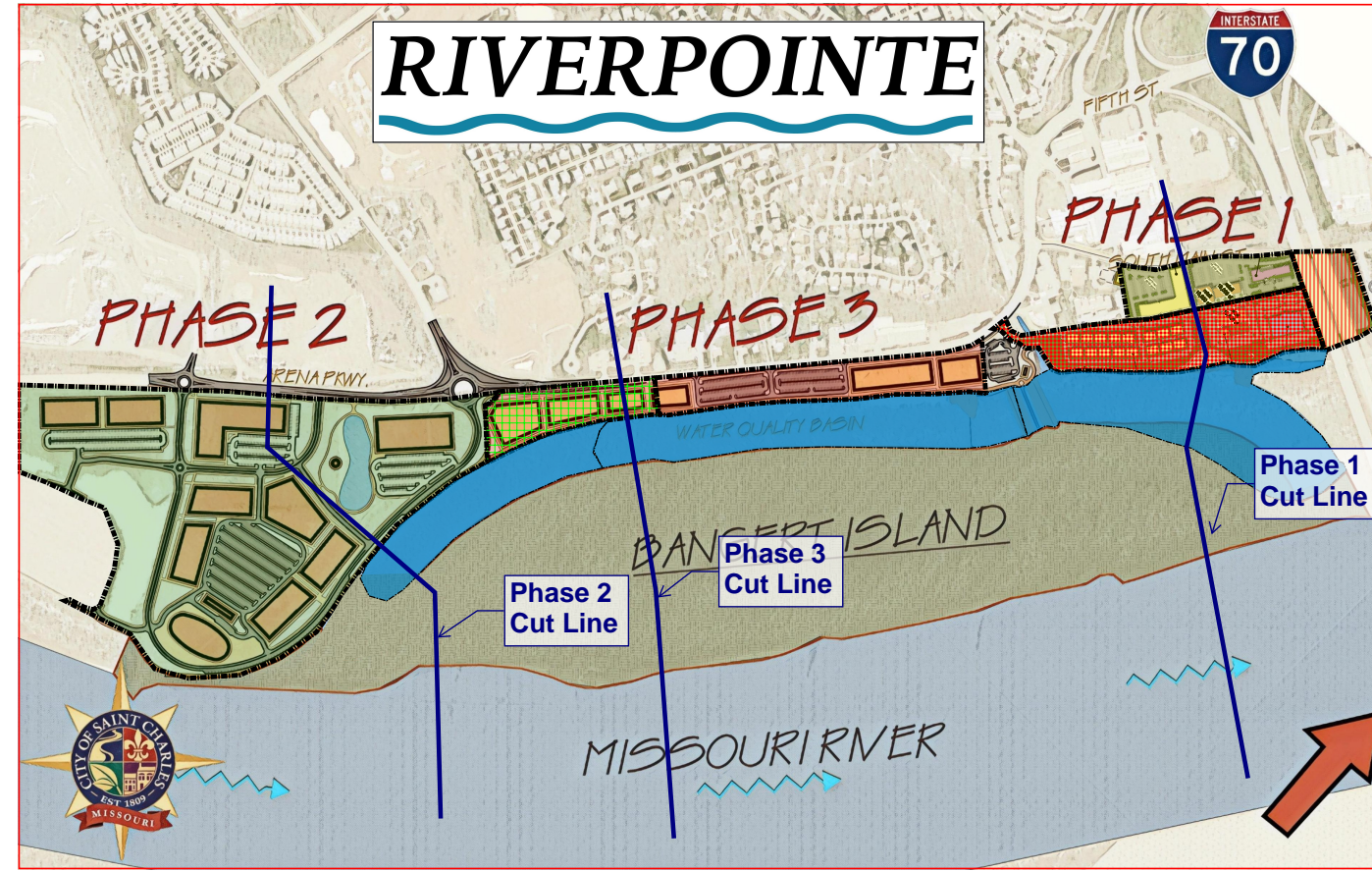
- Use Type
- Office
 - Entertainment / Hotel
 - Mixed Use
 - Parks / Recreation
 - Residential
 - Government / Not-For-Profit
 - Future Mixed- Use Development

REGULATING PLAN PERMITTED USE MAP

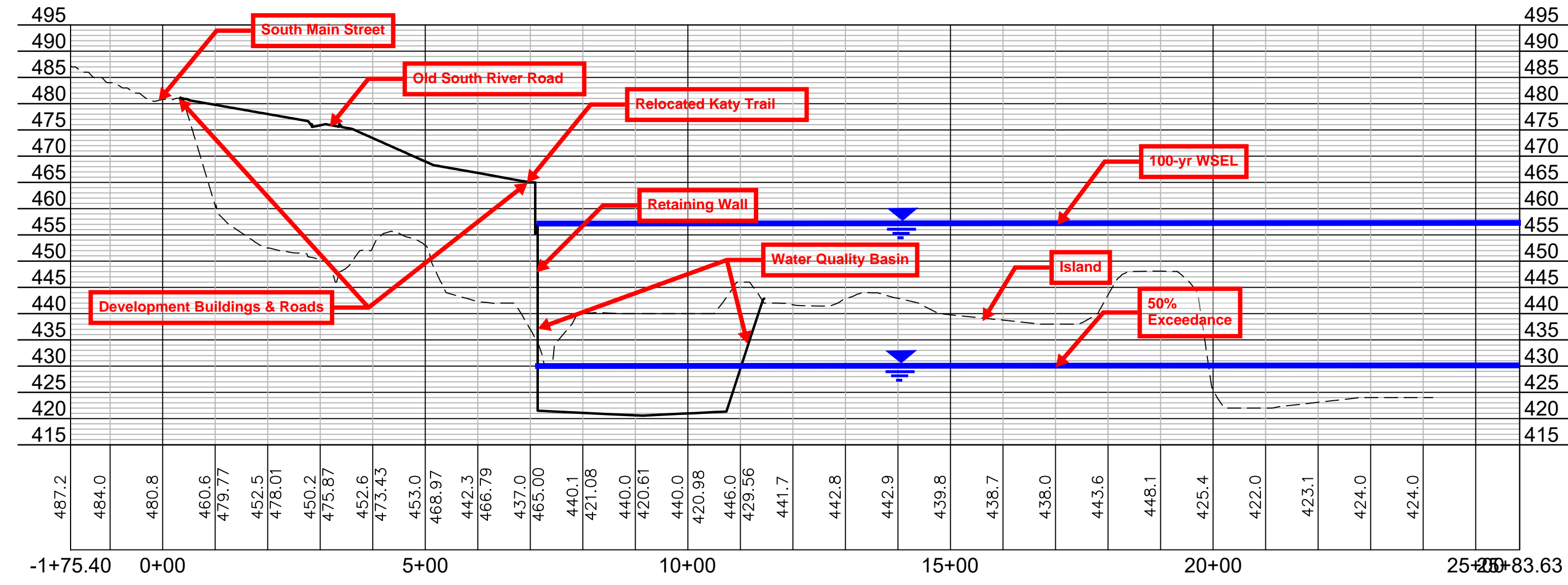


NOT TO SCALE
DATE: 5/13/2020

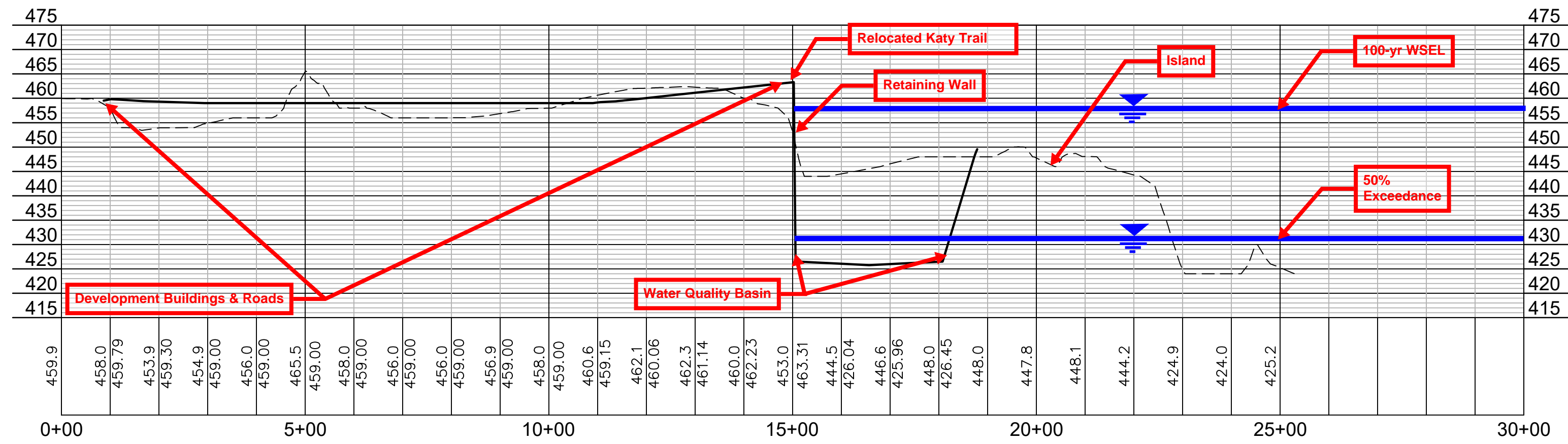
Note: All development elevations to be protected to above 500-year flood levels except where tying to existing infrastructure (i.e. Arena Parkway)



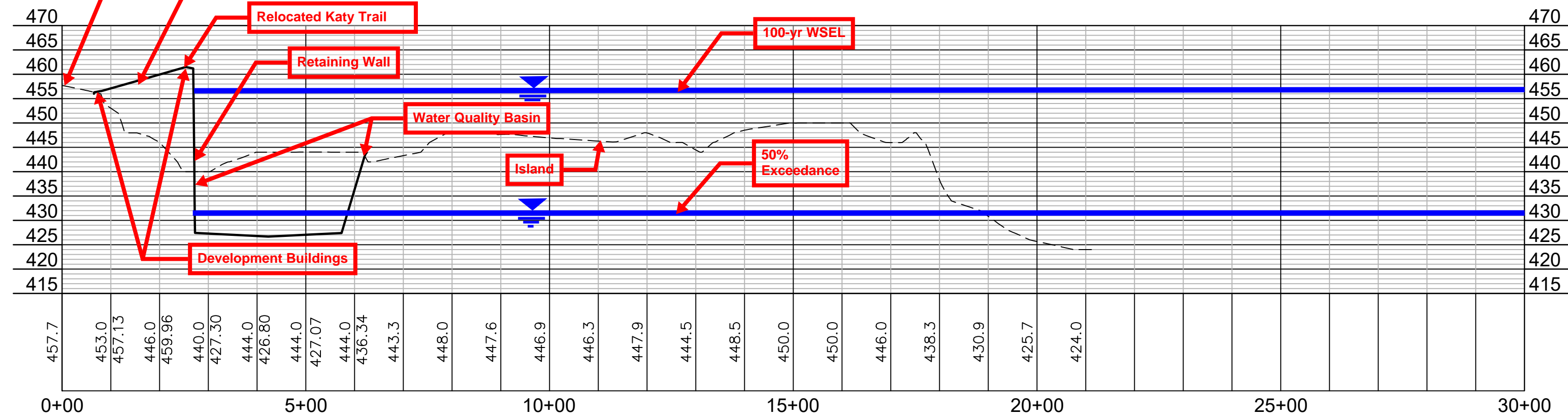
xs - phase 1



xs - phase 2



xs - phase 3



BEFORE



AFTER



BEFORE



AFTER



BEFORE




AFTER

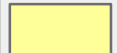

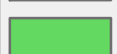




Legend

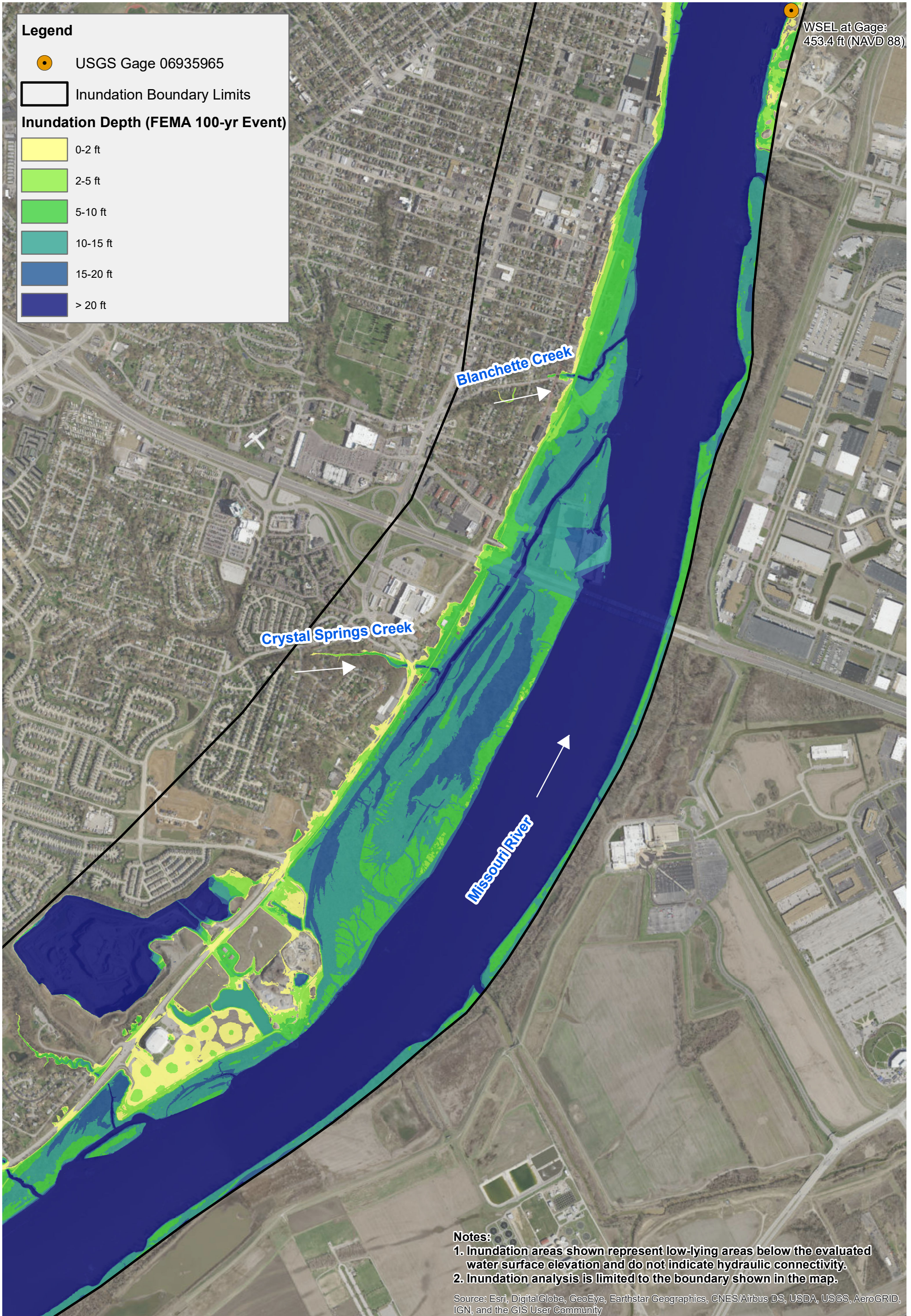
 USGS Gage 06935965

 Inundation Boundary Limits

Inundation Depth (FEMA 100-yr Event)

-  0-2 ft
-  2-5 ft
-  5-10 ft
-  10-15 ft
-  15-20 ft
-  > 20 ft

WSEL at Gage:
453.4 ft (NAVD 88)



Notes:

1. Inundation areas shown represent low-lying areas below the evaluated water surface elevation and do not indicate hydraulic connectivity.
2. Inundation analysis is limited to the boundary shown in the map.

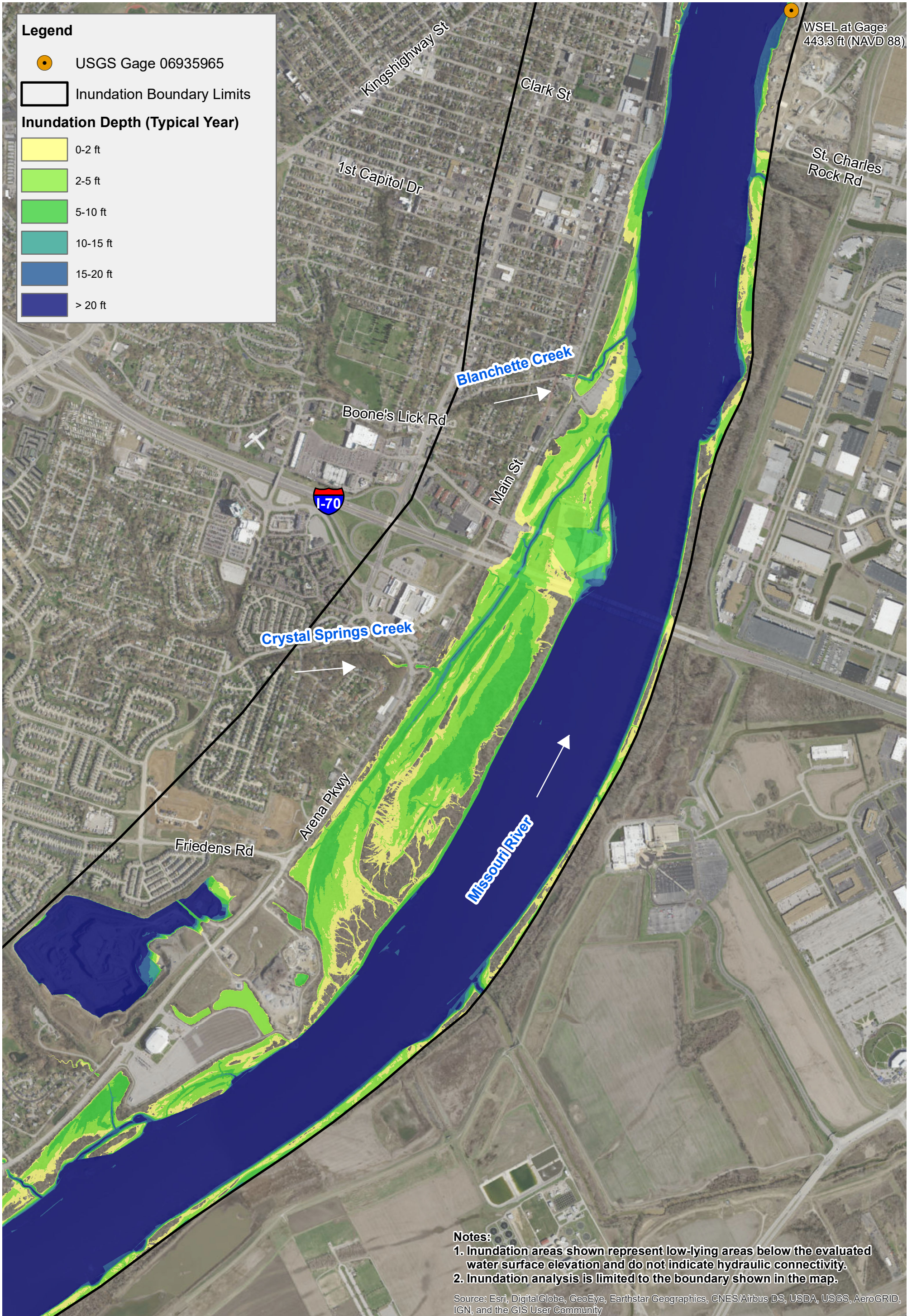
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FIGURE X - INUNDATION DEPTH (1% ANNUAL CHANCE OCCURRENCE)

THE INUNDATION MAPPING SHOWN ON THIS FIGURE IS BASED ON FEMA FIS PROFILE DATA, WHICH PRESENTS ANNUAL PERCENT CHANCE OCCURRENCE (100-YR RETURN PERIOD).

JAN. 2020





Legend

- USGS Gage 06935965
- Inundation Boundary Limits

Inundation Depth (Typical Year)

0-2 ft
2-5 ft
5-10 ft
10-15 ft
15-20 ft
> 20 ft

WSEL at Gage:
443.3 ft (NAVD 88)

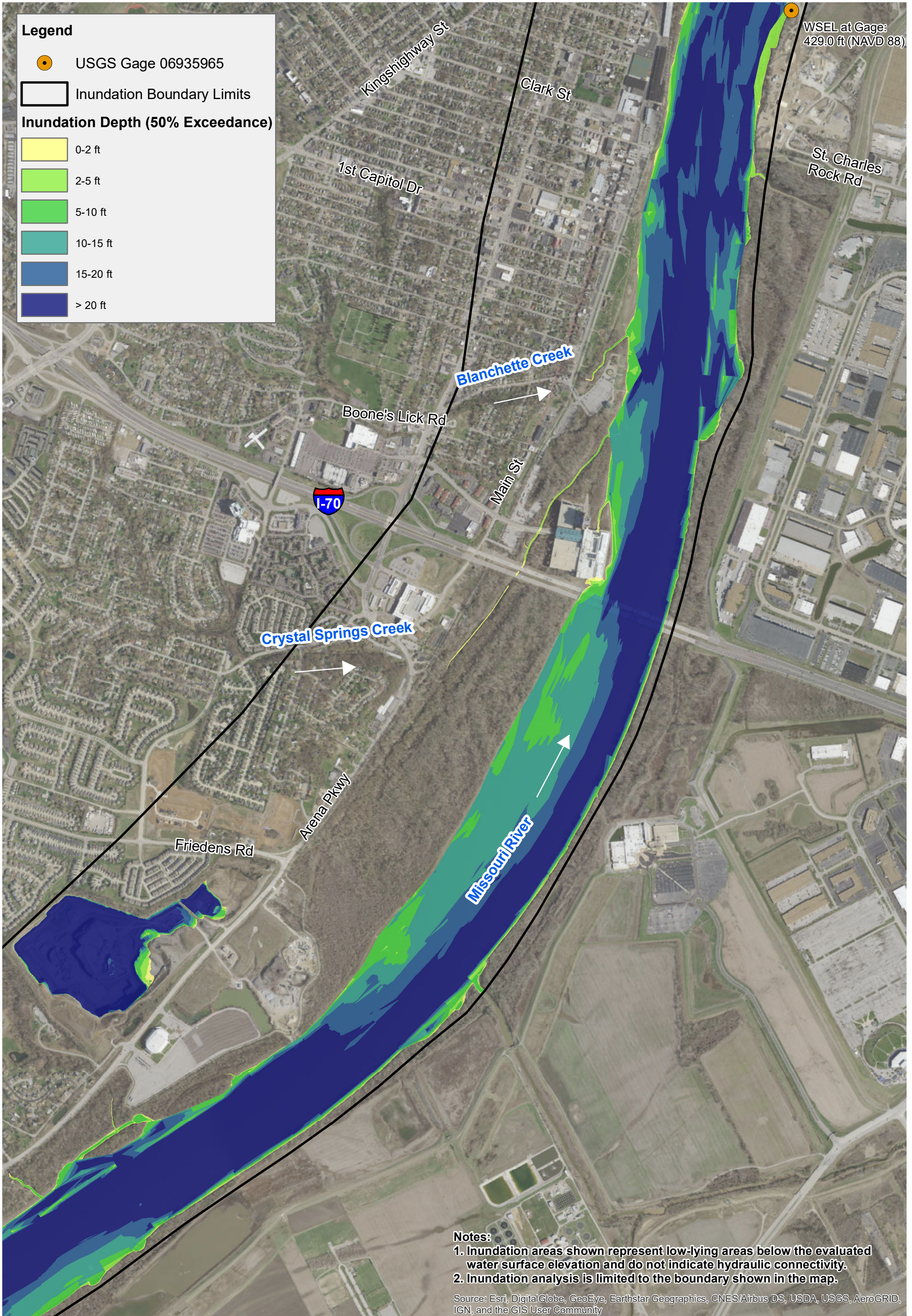
Notes:

1. Inundation areas shown represent low-lying areas below the evaluated water surface elevation and do not indicate hydraulic connectivity.
2. Inundation analysis is limited to the boundary shown in the map.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



FIGURE X - INUNDATION DEPTH TYPICAL YEAR
THE INUNDATION MAPPING SHOWN ON THIS FIGURE IS BASED ON THE MEDIAN VALUE FROM ANNUAL USGS GAGE DATA.
FEB. 2020



Legend

- USGS Gage 06935965
- Inundation Boundary Limits

Inundation Depth (50% Exceedance)

- 0-2 ft
- 2-5 ft
- 5-10 ft
- 10-15 ft
- 15-20 ft
- > 20 ft

WSEL at Gage:
429.0 ft (NAVD 88)

Notes:

1. Inundation areas shown represent low-lying areas below the evaluated water surface elevation and do not indicate hydraulic connectivity.
2. Inundation analysis is limited to the boundary shown in the map.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FIGURE X - INUNDATION DEPTH 50% EXCEEDANCE
 THE INUNDATION MAPPING SHOWN ON THIS FIGURE IS BASED ON
 STATISTICAL ANALYSIS OF DAILY USGS GAGE DATA.
 JAN. 2020



BANGERT ISLAND RIVERFRONT TRANSFORMATION PROJECT PHASE I



BANGERT ISLAND

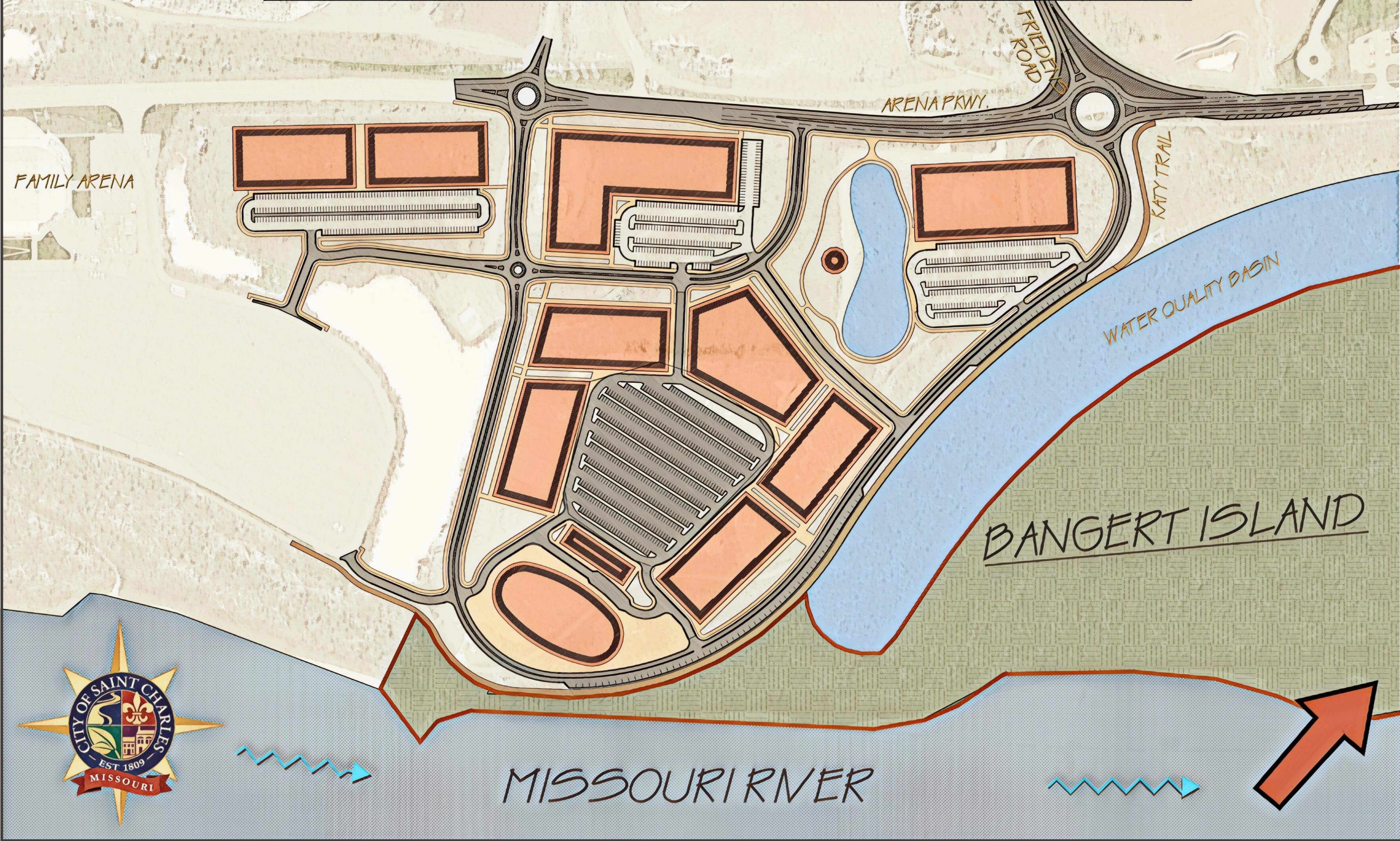


MISSOURI RIVER

AMERISTAR CASINO



BANGERT ISLAND RIVERFRONT TRANSFORMATION PROJECT PHASE II



MISSOURI RIVER

BANGERT ISLAND

WATER QUALITY BASIN

ARENAPKWAY.

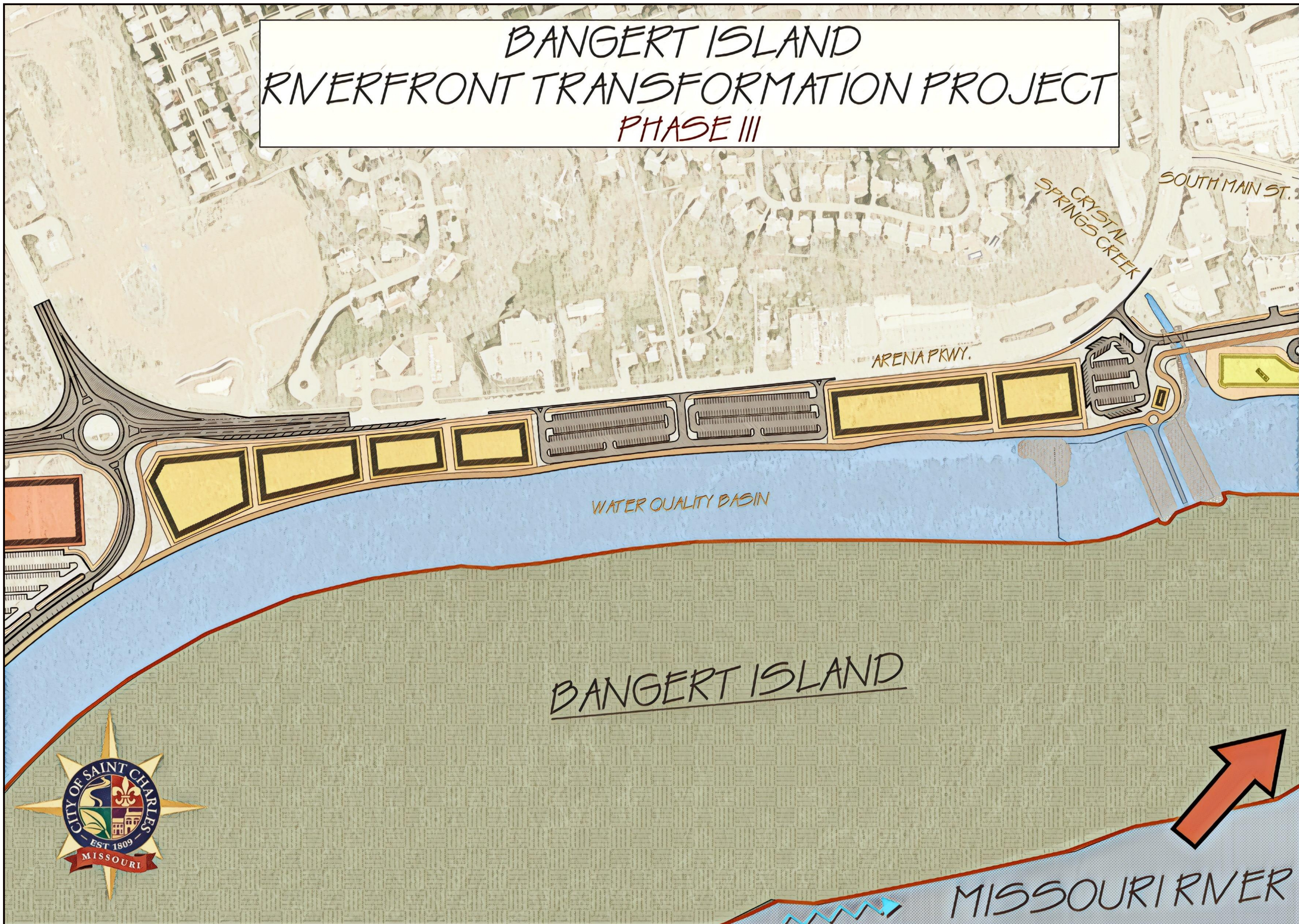
FRIEDEN ROAD

KATY TRAIL

FAMILY ARENA



BANGERT ISLAND
RIVERFRONT TRANSFORMATION PROJECT
PHASE III

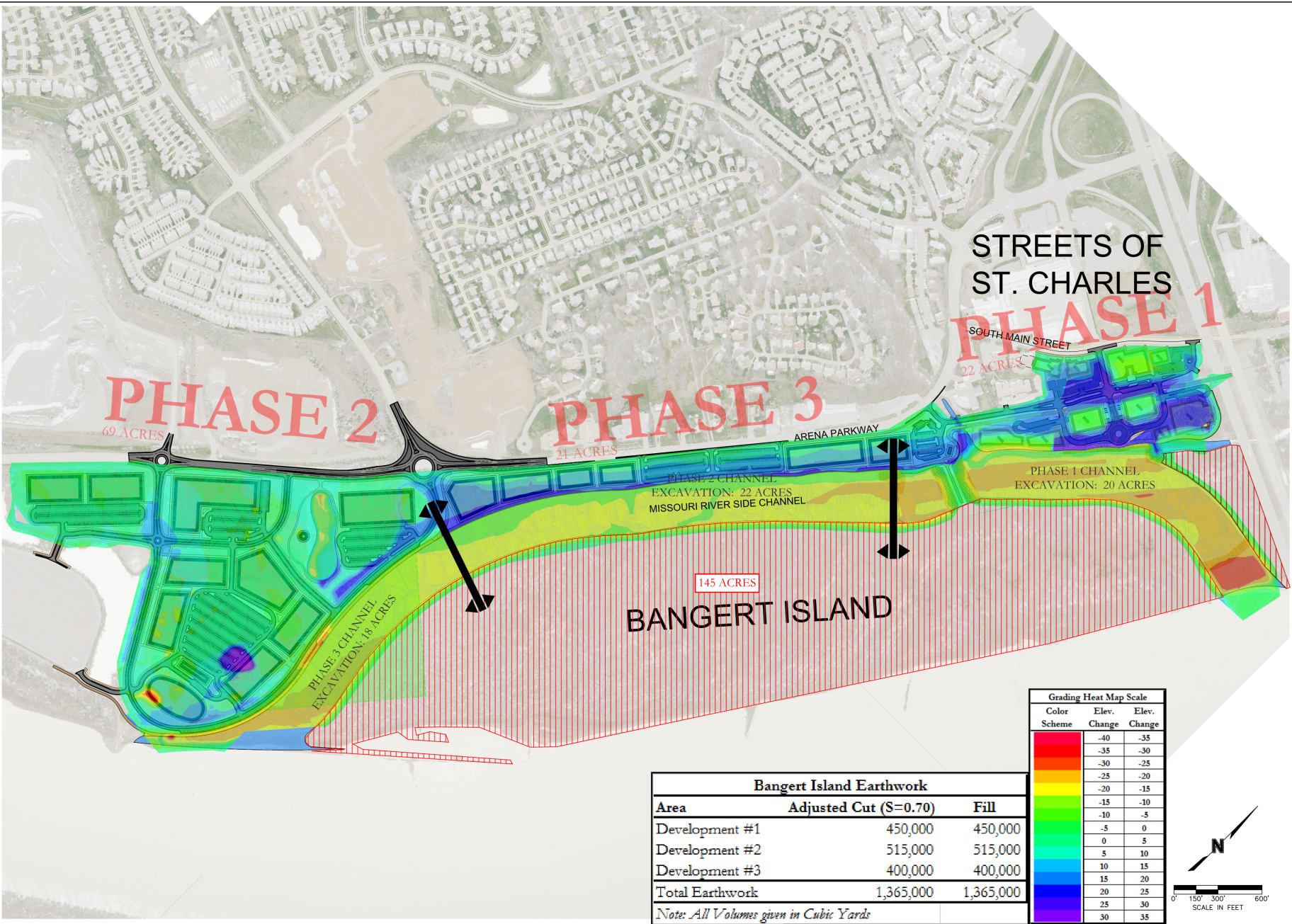


BANGERT ISLAND

MISSOURI RIVER



DWG: S:\ENGINEERS\Don Momm\Bongert Island\Bongert Island Improvements\DESIGN\CAD\Waste\KeeFs\ALL PHASE_DISPLAY.dwg USER: dondell.momm
DATE: Feb 16, 2018 11:46am PLOTS: PHASE - ALT 1 PHATCH - PH3 - ALT1 PHATCH - PH2 - ALT1 PHATCH - PH1 - ALT1 PHATCH - PH0 - ALT1 PHASE - PH3 - ALT1 PHASE - PH2 - ALT1 PHASE - PH1 - ALT1 PHASE - PH0 - ALT1



CITY OF SAINT CHARLES
DEPARTMENT OF ENGINEERING
200 NORTH SECOND STREET
SAINT CHARLES, MO 63301
JAN. 08.2007
www.saintcharlesmo.gov/222/engineering

REV. NO.	DATE	REVISION DESCRIPTION

BY: _____
REVISIONS

GENERAL LAYOUT

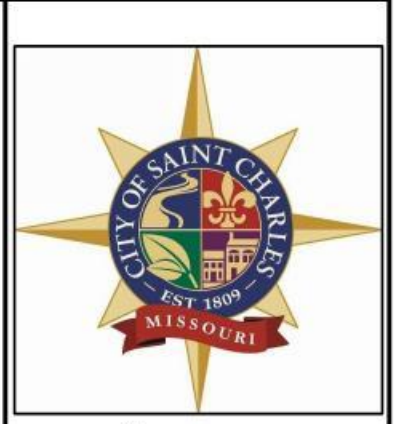
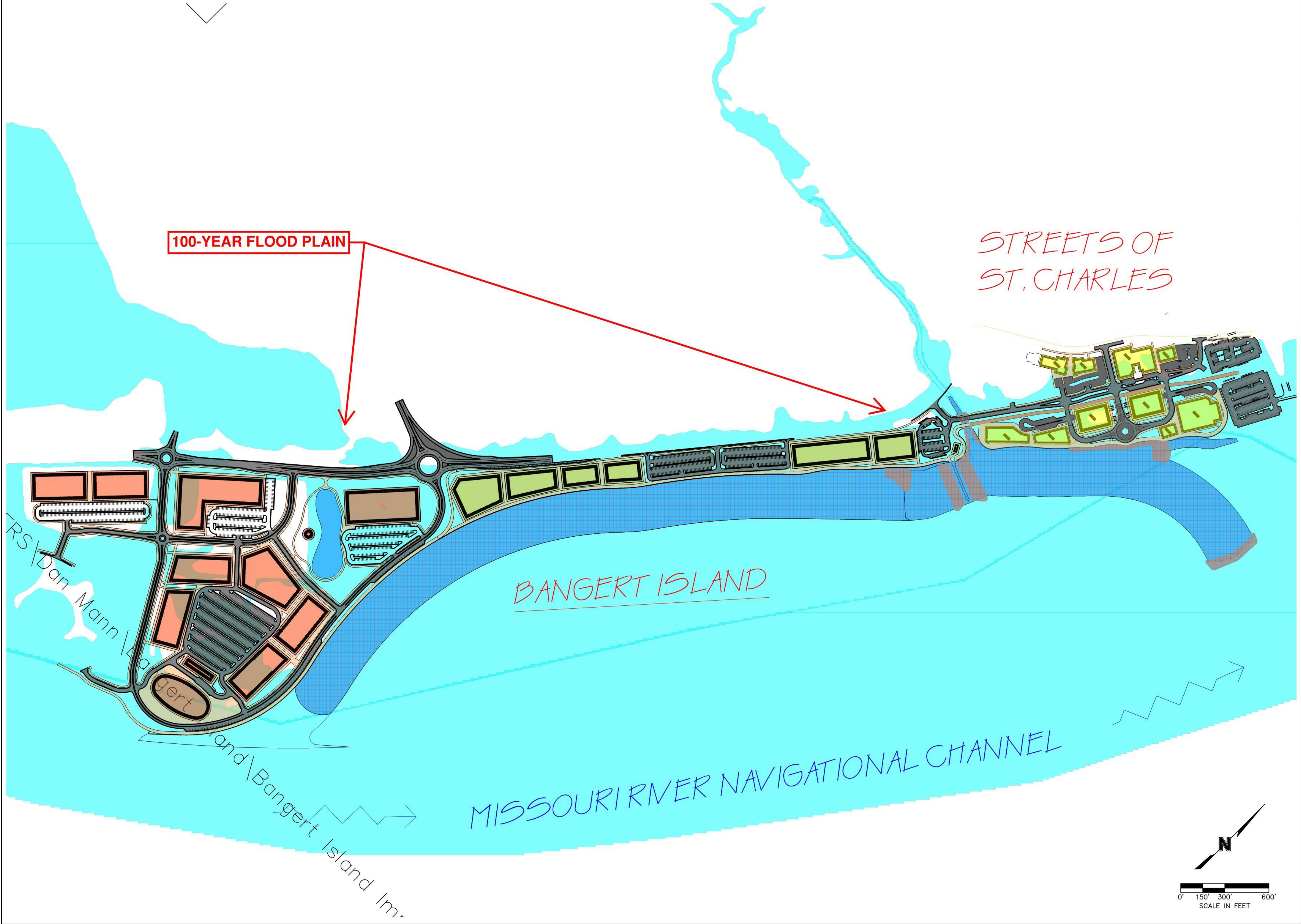
**BANGERT ISLAND DEVELOPMENT
PUBLIC INFRASTRUCTURE IMPROVEMENTS**

2017

SAINT CHARLES, MISSOURI

drawn by: _____
checked by: _____
approved by: _____
GA/DC by: _____
project no.: _____
drawing no.: _____
date: _____

DWG: S:\PROJECTS\19ENG1 - Riverpointe (Bangert Island)\MasterXrefs\FLOODMAP.dwg
DATE: May 14, 2020 11:12am
USER: daniel.mann
PHATCH - ALT 1
PHATCH - PH2 - ALT1
PHATCH - PH3 - ALT1
PBASE - PH2 - ALT1
PTBLK - ALT 1
FloodLimits

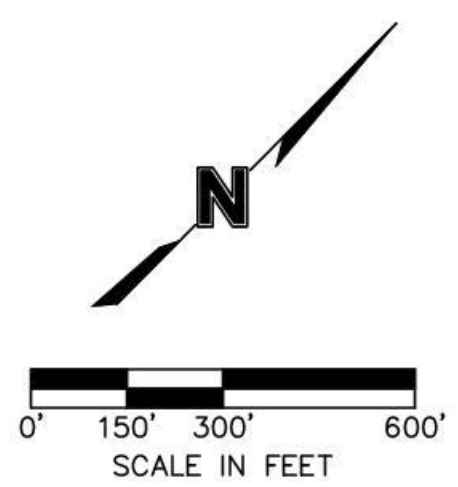


CITY OF SAINT CHARLES
DEPARTMENT OF ENGINEERING
200 NORTH SECOND STREET
SAINT CHARLES, MO 63301
TEL 636.949.3237
FAX 636.940.4601
www.sicharlescitymo.gov/202/engineering

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

GENERAL LAYOUT	2019
BANGERT ISLAND DEVELOPMENT PUBLIC INFRASTRUCTURE IMPROVEMENTS	
SAINT CHARLES, MISSOURI	

drawn by: _____	checked by: _____
approved by: _____	QA/QC by: _____
project no.: _____	drawing no.: _____
date: _____	



GENERAL NOTES

- ALL UTILITY SERVICE LINES SHALL BE KEPT IN SERVICE AND PROTECTED DURING CONSTRUCTION OPERATIONS. THE DRAWINGS INDICATE THE LOCATION OF KNOWN EXISTING UTILITY SERVICE LINES AS COULD BEST BE DETERMINED. HOWEVER, SUCH LOCATIONS ARE NOT GUARANTEED AND THE PLANS MAY NOT SHOW THE LOCATION OF ALL EXISTING UTILITY LINES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND LOCATE ALL EXISTING UTILITY SERVICE LINES AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS AND DISCREPANCIES.
- NO AREA SHALL BE CLEARED WITHOUT PERMISSION OF THE COUNTY ENGINEER.
- THIS PROJECT SHALL BE ADMINISTERED IN ACCORDANCE WITH THE ST. CHARLES COUNTY ROAD UTILITY RELOCATION ACT.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ST. CHARLES COUNTY STANDARD SPECIFICATIONS FOR ARTERIAL HIGHWAY CONSTRUCTION, 2006.

CONVENTIONAL SYMBOLS (USED IN PLANS)

⊠ CURB/AREA INLET	⊙ LIGHT STANDARD
⊕ STORM SEWER MANHOLE	⊙ TREE
⊙ SANITARY SEWER MANHOLE	⊙ BUSH
⊕ ELECTRIC METER	⊙ TREE STUMP
⊕ GAS METER	⊙ FOUND MONUMENT
⊕ WATER METER	⊕ CROSS
⊕ GAS DRIP	⊕ WATER VALVE
⊕ GAS VALVE	⊕ FIRE HYDRANT
⊕ MAILBOX	⊕ YARD DRAIN
⊕ SIGN	⊕ CLEANTOP
⊕ POWER POLE	⊕ DOWNSPOUT
⊕ GUY WIRE	⊕ LANDSCAPED AREA
⊕ YARD LIGHT	⊕ EXIST. GRAVEL
⊕ EXIST. CONCRETE	⊕ EXIST. RIP RAP
⊕ EXIST. ASPHALT	
⊕ PROPOSED ASPHALT PAVEMENT	
⊕ PROPOSED SIDEWALK	

UTILITY NOTES

THE UNDERGROUND UTILITIES SHOWN HEREIN ARE TAKEN FROM UTILITY LOCATIONS AS CONTRACTED THROUGH DIGRITS AND MARKED IN THE FIELD BY VARIOUS UNDERGROUND UTILITY LOCATORS, INCLUDING UJIC.

DIGRITS TICKET NUMBERS: #66472476, #66472476, #60701484, #60701504 AND #60701540. NO RESPONSE TICKETS SUBMITTED: #60763500, #60763504, #60760954. NO RESPONSE TO NO RESPONSE TICKET SUBMITTED: #60810559.

AMEREN MISSOURI ELECTRIC BURIED UTILITIES MARKED BY LOCATOR AS SHOWN HEREON.

AT&T DISTRIBUTION: SURVEY CORRIDOR CONTAINS HIGH PROFILE FACILITIES ACCORDING TO EMAIL MESSAGE FROM AT&T DISTRIBUTION. BURIED UTILITIES PARTIALLY MARKED BY LOCATOR AS SHOWN HEREON.

CHARTER COMMUNICATIONS: NO MARKS BEARING CHARTER COMMUNICATIONS FLAGS WERE FOUND.

LACLEDE GAS COMPANY: BURIED UTILITIES PARTIALLY MARKED BY LOCATOR AS SHOWN HEREON.

CITY OF ST. CHARLES: A FIBER OPTIC LINE WAS MARKED BY UTILITY LOCATOR ON EAST SIDE OF SOUTH RIVER ROAD AND IS SHOWN HEREON. THE WATER LINE WAS PARTIALLY MARKED ON THE EAST SIDE OF SOUTH RIVER ROAD AND IS SHOWN HEREON. THE WATER LINE ON THE WEST SIDE OF SOUTH RIVER ROAD AND THE REMAINDER OF THE WATER LINE ON THE EAST SIDE OF SOUTH RIVER ROAD WAS NOT MARKED AND IS SHOWN PER BASE MAPS.

ALL MANHOLES ARE LABELED "SANITARY" OR "STORM" PER BASE MAPS PROVIDED BY THE CITY OF ST. CHARLES. MANHOLES WERE NOT UNCOVERED IN THE FIELD TO VERIFY TYPE OR TO INVESTIGATE CONNECTIONS OR DEPTHS.

UTILITIES ARE ALSO SHOWN HEREON AS SCALED FROM MAPS OBTAINED FROM LACLEDE GAS AND THE CITY OF ST. CHARLES AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND UTILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 315, RSMO.

SITE IS SUBJECT TO PRIVATE UTILITY INSTALLATIONS. PRIVATE UTILITY INSTALLATIONS DO NOT APPEAR ON UTILITY BASE MAPS, NOR DO UTILITY LOCATORS MARK PRIVATE UTILITIES.

SAINT CHARLES COUNTY HIGHWAY CONSTRUCTION PLANS FOR PROPOSED SOUTH RIVER ROAD IMPROVEMENTS

STP-5414(630)

JULY 2018



ABBREVIATIONS (USED IN PLANS)

SLOPE LIMIT	SL
RIGHT-OF-WAY	ROW
PERMANENT DRAINAGE EASEMENT	PDE
TEMPORARY CONSTRUCTION EASEMENT	TCE
REMOVE	(TBR)
REMOVE & REPLACE	(TBR&R)
REMOVE & RELOCATE	(TBR&REL)
TO BE ABANDONED & FILLED	(TBA&F)
TO BE ABANDONED	(TBA)
USE IN PLACE	(UIP)
DO NOT DISTURB	(DND)
TO BE REMOVED BY OTHERS	(TBRBO)
ADJUST TO GRADE	(ATG)

LOCATION MAP (NTS)

SAINT CHARLES COUNTY
301 NORTH THIRD STREET
SAINT CHARLES, MO 63301

SCALES (FULL SIZE: 22"X34")

PLAN ----- 1" = 20'
CROSS SECTION ----- 1" = 10'(H)
1" = 10'(V)

APPROVED: _____
COUNTY ENGINEER

DATE: _____

HOLD IT! CALL BEFORE YOU DIG!

PRIVATE DIG SITE
CONTRACTOR TO CONTACT UTILITIES PRIOR TO ANY EXCAVATION OR RELOCATION FOR THE LOCATION OF ANY PIPES, CABLES, LINES OR WIRING. THE CONTRACTOR SHALL ALSO COORDINATE ANY DISCONNECTS REQUIRED WITH THE VARIOUS UTILITY COMPANIES AND/OR GOVERNMENTAL AGENCIES SERVING THE SITE.
TOLL FREE 800-344-7483
800-3IG-RITE

UTILITY COMPANIES

UTILITY COMPANIES	CONTACT NAME	ADDRESS	TELEPHONE NUMBER	EMAIL ADDRESS
AMEREN MISSOURI	FELICIA CHILDS	2100 BLUESTONE DR, ST CHARLES, MO 63303	(636) 925-3206	fchilids@ameren.com
AT&T	KATHY SMITH	402 NORTH THIRD ST, ST CHARLES, MO 63301	(636) 949-1312	ks9340@att.com
CITY OF ST. CHARLES W&S	MATT SEGGERMAN	200 NORTH SECOND ST, ST CHARLES, MO 63301	(636) 940-4617	Matthew.Seggerman@stcharlescitymo.gov
SPIRE	FARRON OWEN	6400 GRAHAM RD, BERKLEY, MO 63134	(314) 575-8423	Farron.Owen@spireenergy.com

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
QUANTITIES	Q1-Q3
TYPICAL SECTIONS	TS1-TS4
COORDINATE POINTS	CC-1
PLAN SHEETS	P1-P6
ROW SHEETS	ROW1-ROW6
DRIVEWAY CROSS SECTIONS	DRWY1-DRWY5
EROSION CONTROL SHEETS	SWPPP1-SWPPP6
TRAFFIC CONTROL SHEETS	TCP1-TCP15
SIGNING & STRIPING SHEETS	SS1-SS6
CROSS SECTIONS	CS1-CS24

DATE SUBMITTED: OCT 2018
COUNTY: ST. CHARLES
STP NUMBER: STP-5414(630)
PROJECT NO.:

DESCRIPTION	DATE

CONTROL DATUM NOTES

THE HORIZONTAL COORDINATES WERE ESTABLISHED AND VERIFIED BY GPS OBSERVATIONS USING A CELLULAR EQUIPPED TRIMBLE RFX600 ROVER AND TRIMBLE TSC3 DATA COLLECTOR AND BASED ON THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK FOR CONTINUOUS OPERATING REFERENCE STATIONS, WHICH UTILIZES THE NAD83(2011) EPOCH 2010.00 GPS NETWORK.

PROJECT COORDINATES ARE MODIFIED MISSOURI STATE PLANE, EAST ZONE, COORDINATES AND WERE GENERATED BY SCALING THE COORDINATES BY THE INVERSE OF THE COMBINED GRID FACTOR CALCULATED ABOUT CONTROL POINT 100. THE INVERSE OF SAID COMBINED GRID FACTOR WAS CALCULATED AS 1.000083409. THE COORDINATES WERE THEN CONVERTED TO FEET BY MULTIPLYING THE METRIC VALUES BY 3.280833333 (39.27 INCHES PER METER/12 INCHES PER FOOT).

TO THE BEST OF OUR KNOWLEDGE, THE MODIFIED MISSOURI STATE PLANE, EAST ZONE, COORDINATES MEET THE ACCURACY STANDARDS OF THE CURRENT MISSOURI MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS (20 CSR 2009-16) AS AN URBAN CLASS SURVEY.

PROJECT ELEVATIONS UTILIZE THE NAVD 88 VERTICAL DATUM AND ARE REFERENCED TO THE MONUMENT "Q-149" WITH A PID OF J20051. SAID MONUMENT HAS A PUBLISHED ELEVATION OF 160.823M (527.73 FT). Q-149 IS DESCRIBED AS A STANDARD DISK, STAMPED 0149 1035 AND SET IN THE TOP OF A CONCRETE POST LOCATED IN THE ASPHALT PARKING LOT/PLAYGROUND FOR ST. CHARLES BORROWED CHURCH. THE POST PROJECTS ABOUT 15 CM ABOVE THE ASPHALT. THE CORNER OF CONCRETE POST IS MISSING AND THE POST IS NOT PLUMB.

DESIGN CRITERIA

A.A.D.T. - 2015	13059
A.A.D.T. - 2035	19405
POSTED SPEED LIMIT	40 MPH
DESIGN SPEED LIMIT	45 MPH
RADIUS (MIN.)	711'
MAX GRADIENT	8%

FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

LENGTH OF PROJECT

BEGINNING OF PROJECT	STA. 3 + 86.83
END OF PROJECT	STA. 38 + 39.42
APPARENT LENGTH	3452.59 FEET
EQUATIONS AND EXCEPTIONS:	NONE
TOTAL CORRECTIONS	0.00 FEET
NET LENGTH OF PROJECT	3452.59 FEET
STATE LENGTH	0.65 MILES

SAINT CHARLES COUNTY HIGHWAY DEPARTMENT

301 N. THIRD STREET
ST. CHARLES, MO 63301
636-949-7300

CHRISTOPHER KYLE BOSTIC
PROFESSIONAL ENGINEER
LICENSE NO. E-30083

SHEET NUMBER
TITLE-1

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
ROADWAY ITEMS			
201-20.10	CLEARING AND GRUBBING	LS	1
202-20.10	REMOVAL OF IMPROVEMENTS	LS	1
202-20.20	BACKFILL AND ABANDON EXISTING STORM SEWER	CY	21.8
203-99.10	UNSUITABLE SUBGRADE	CY	1,000.0
207-10.01	LINEAR GRADING	STA	34.5
304-05.04	TYPE 5 AGGREGATE FOR BASE (4 IN. THICK)	SY	21677.2
401-16.00	BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)	TONS	2260.8
405-10.00	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	TONS	8471.4
407-10.05	TACK COAT	GAL	1016
502-11.07	CONCRETE PAVEMENT (7 IN. NON-REINF)	SY	1062.7
604-20.00	ADJUST TO GRADE (SEWER MANHOLE)	EA	10
609-10.10	CONCRETE CURB (6" HEIGHT AND UNDER) TYPE S	LF	196
609-10.43	1.5 FT CONCRETE CURB AND GUTTER (6 IN.)	LF	500
609-20.11	INTEGRAL CURB (6 IN. HEIGHT AND UNDER) TYPE A	LF	458
612-10.25	CHANNELIZER (TRIM LINE)	EA	334
613-10.14	SAWCUT (ANY DEPTH)	LF	5376
614-99.10	DRIVEWAY TRENCH DRAIN	LF	53
616-10.00	TYPE III MOVEABLE BARRICADE	EA	9
618-10.00	MOBILIZATION	LS	1
619-10.00	PAVEMENT EDGE TREATMENT	LF	2850
627-40.00	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1
731-00.01	REPLACE MANHOLE LID	EA	2
731-00.02	REPLACE DOUBLE CURB INLET TOP (LOCKING LID)	EA	11
731-00.03	REPLACE SINGLE CURB INLET TOP (LOCKING LID)	EA	2
731-00.04	GRATE INLET (LOCKING LID)	EA	1
731-01.00	CONVERT TO MANHOLE, ADJUST TO GRADE	EA	6
731-99.10	REMOVE AND REPLACE TOP W/ SUMP BRIDGE TOP - DOUBLE	EA	2
803-10.00A	SODDING	SY	1453
805-20.00	SEEDING AND MULCHING	ACRE	0.4
806-10.00	INLET CHECK	EA	43
806-70.00	SILT FENCE	LF	5722
SIGNING, STRIPING, SIGNALS, AND LIGHTING ITEMS			
612-10.05	CONSTRUCTION SIGNS	SF	2226
612-50.00	PROJECT INFORMATION SIGNS	LS	1
620-20.01	4 IN SOLID WHITE EXTRUDED THERMOPLASTIC PAVEMENT MARKING PAINT	LF	5106
620-20.02	4 IN INTERMITTENT WHITE EXTRUDED THERMOPLASTIC PAVEMENT MARKING PAINT	LF	6290
620-20.03	4 IN SOLID YELLOW EXTRUDED THERMOPLASTIC PAVEMENT MARKING PAINT	LF	5872
620-20.04	24 IN SOLID WHITE EXTRUDED THERMOPLASTIC PAVEMENT MARKING PAINT	LF	11
620-20.05	WHITE BICYCLE SYMBOL & ARROW PAVEMENT MARKING PAINT	EA	7
620-20.06	24 IN SOLID DIAGONAL YELLOW EXTRUDED THERMOPLASTIC PAVEMENT MARKING PAINT	LF	24
620-26.01	TEMPORARY PAVEMENT MARKING 4 IN., WHITE	LF	4430
620-26.02	TEMPORARY PAVEMENT MARKING 4 IN., YELLOW	LF	9333
903-50.04A	PERMANENT SIGNAGE	SF	59
BIKE AND PEDESTRIAN ITEMS			
608-60.04	4" THICK CONCRETE SIDEWALK	SY	1294.6

EXCEPT FROM SOUTH RIVER ROAD IMPROVEMENTS

SOUTH RIVER ROAD SIDEWALK & PAVEMENT IMPROVEMENTS

DATE SUBMITTED: **OCT 2018**

COUNTY: **ST. CHARLES**

STP - 5414(630)

STP NUMBER:

PROJECT NO.:

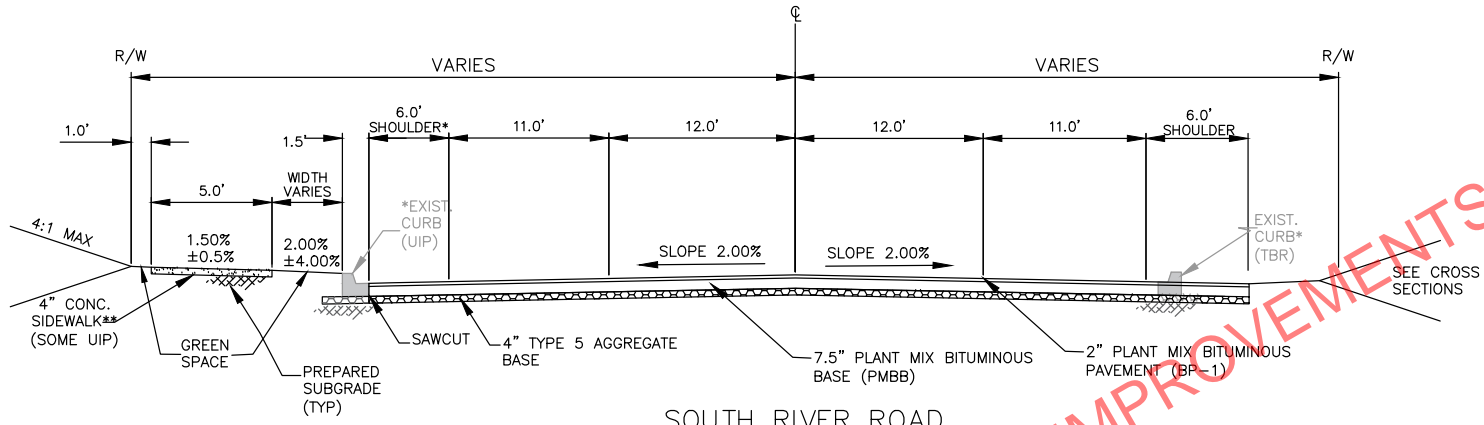
DATE	DESCRIPTION

SAINT CHARLES COUNTY, MISSOURI

301 N. THIRD STREET
ST. CHARLES, MO 63301
636-949-7305

ST. CHARLES COUNTY
HIGHWAY DEPARTMENT

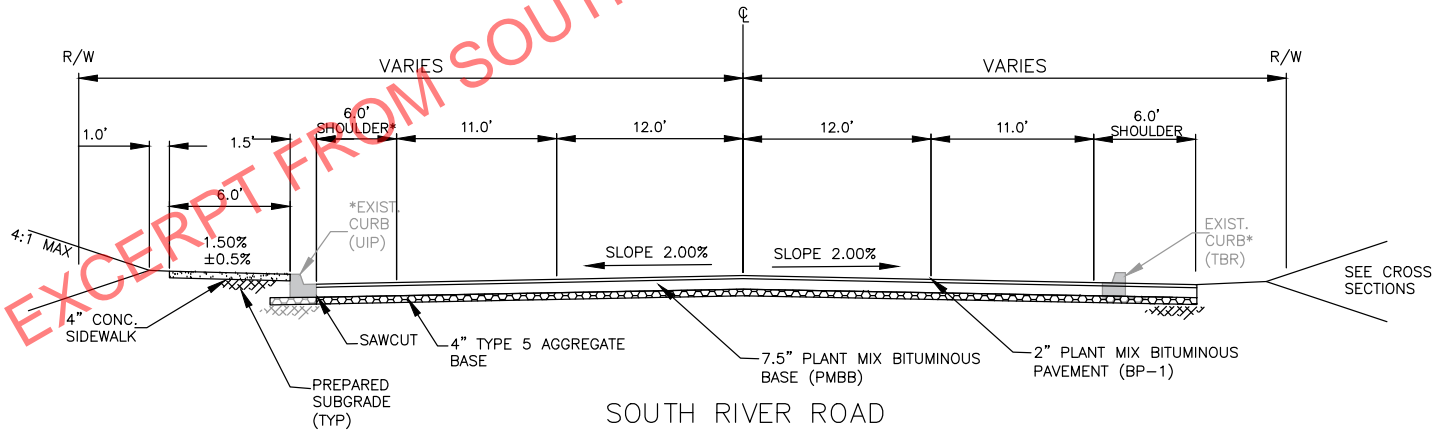
CHRISTOPHER KYLE BOSTIC
PROFESSIONAL ENGINEER
LICENSE NO. E-30083
SHEET NUMBER
Q-1



SOUTH RIVER ROAD
SIDEWALK W/ TREE LAWN
TYPICAL SECTION

NOT TO SCALE
STA: 3+86.83 TO STA: 15+30
STA: 16+90 TO STA: 23+30
STA: 27+50 TO STA: 28+68

* WIDTH VARIES SEE PLANS
**(INTERMITTENT SIDEWALK--SEE PLANS FOR AREAS WHERE EXISTING SIDEWALK WILL BE USED IN PLACE)



SOUTH RIVER ROAD
SIDEWALK AT BACK OF CURB
TYPICAL SECTION

NOT TO SCALE
STA: 15+30 TO STA: 16+90
STA: 23+30 TO STA: 26+75

NOTES:
EXISTING CURB TO BE SAWCUT, REMOVED,
AND REPLACED IN KIND AT LOCATIONS AS
DIRECTED BY THE COUNTY ENGINEER.

SOUTH RIVER
ROAD
SIDEWALK &
PAVEMENT
IMPROVEMENTS

DATE SUBMITTED
OCT 2018
COUNTY
ST. CHARLES
STP-5414(630)
STP NUMBER

PROJECT NO.

DESCRIPTION

DATE

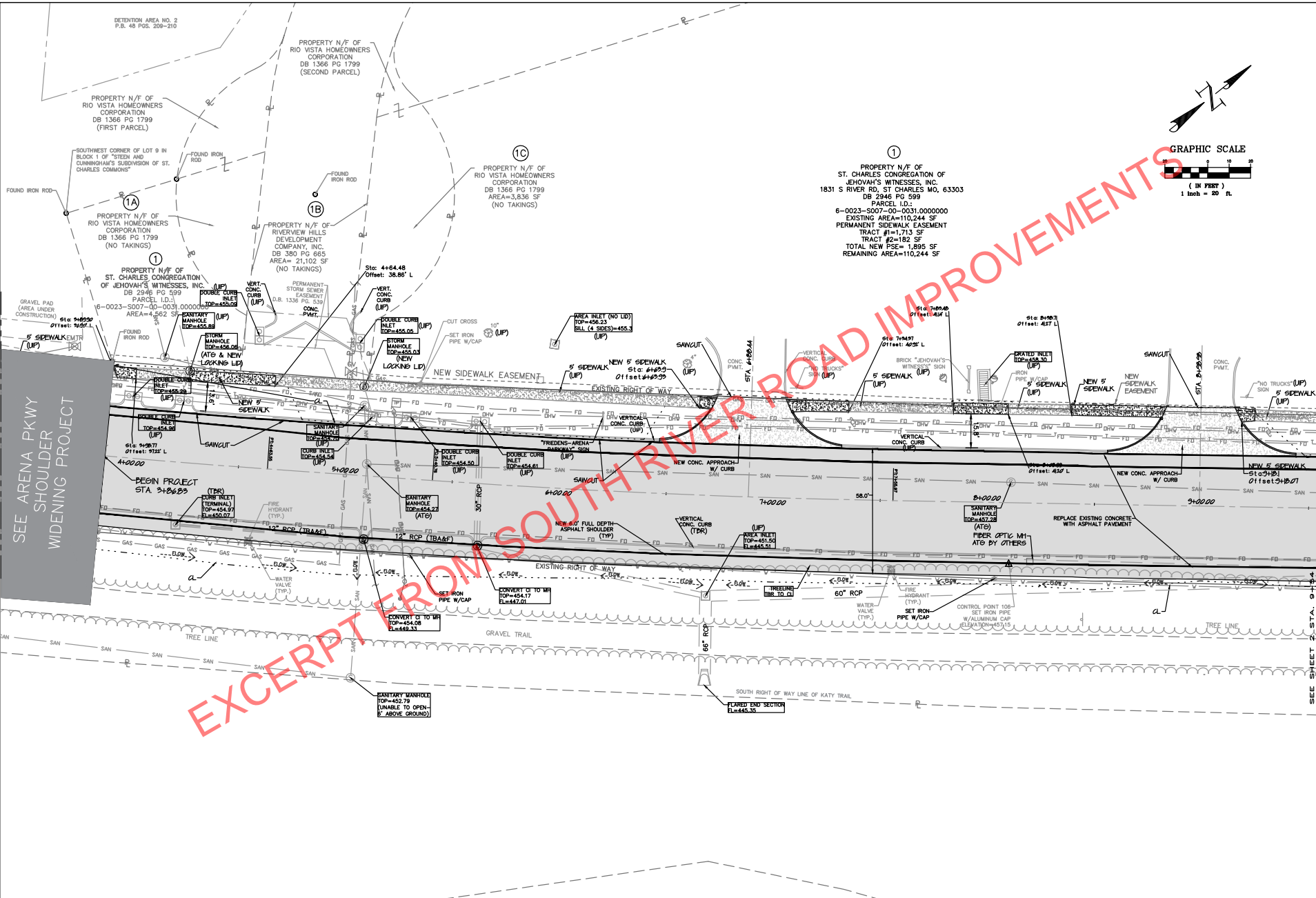
SAINT CHARLES COUNTY,
MISSOURI
301 N. THIRD STREET
ST. CHARLES, MO 63301
636-949-7305

ST. CHARLES
COUNTY
HIGHWAY
DEPARTMENT



CHRISTOPHER KYLE BOSTIC
PROFESSIONAL
ENGINEER
LICENSE NO. E-30083

SHEET NUMBER
TS-1

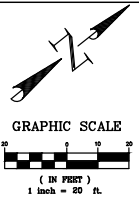
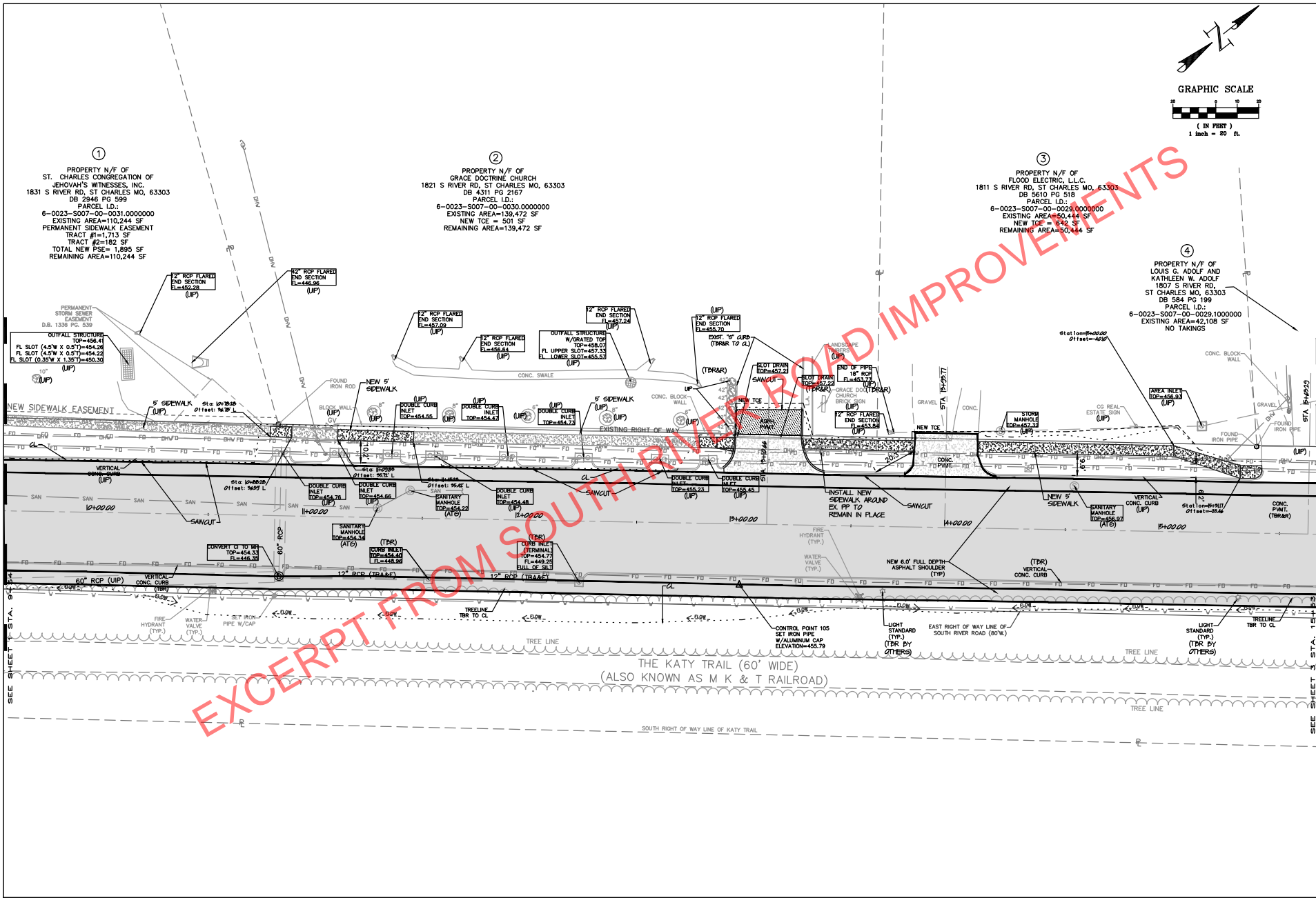


SOUTH RIVER ROAD SIDEWALK & PAVEMENT IMPROVEMENTS	DATE SUBMITTED	OCT 2018
	COUNTY	ST. CHARLES
	PROJECT NO.	STP-5414(630)
	DESCRIPTION	SAINT CHARLES COUNTY, MISSOURI
	DATE	301 N. THIRD STREET ST. CHARLES, MO 63301 636-949-7305

CHRISTOPHER KYLE BOSTIC PROFESSIONAL ENGINEER LICENSE NO. E-30083
SHEET NUMBER P-1

SEE ARENA PKWY SHOULDER WIDENING PROJECT

EXCERPT FROM SOUTH RIVER ROAD IMPROVEMENTS



①
PROPERTY N/F OF
ST. CHARLES CONGREGATION OF
JEHOVAH'S WITNESSES, INC.
1831 S RIVER RD, ST CHARLES MO, 63303
DB 2946 PG 599
PARCEL I.D.:
6-0023-5007-00-0031.0000000
EXISTING AREA=110,244 SF
PERMANENT SIDEWALK EASEMENT
TRACT #1=1,713 SF
TRACT #2=182 SF
TOTAL NEW PSE= 1,895 SF
REMAINING AREA=110,244 SF

②
PROPERTY N/F OF
GRACE DOCTRINE CHURCH
1821 S RIVER RD, ST CHARLES MO, 63303
DB 4311 PG 2167
PARCEL I.D.:
6-0023-5007-00-0030.0000000
EXISTING AREA=139,472 SF
NEW TCE = 501 SF
REMAINING AREA=139,472 SF

③
PROPERTY N/F OF
FLOOD ELECTRIC, L.L.C.
1811 S RIVER RD, ST CHARLES MO, 63303
DB 5610 PG 518
PARCEL I.D.:
6-0023-5007-00-0029.1000000
EXISTING AREA=50,444 SF
NEW TCE = 842 SF
REMAINING AREA=50,444 SF

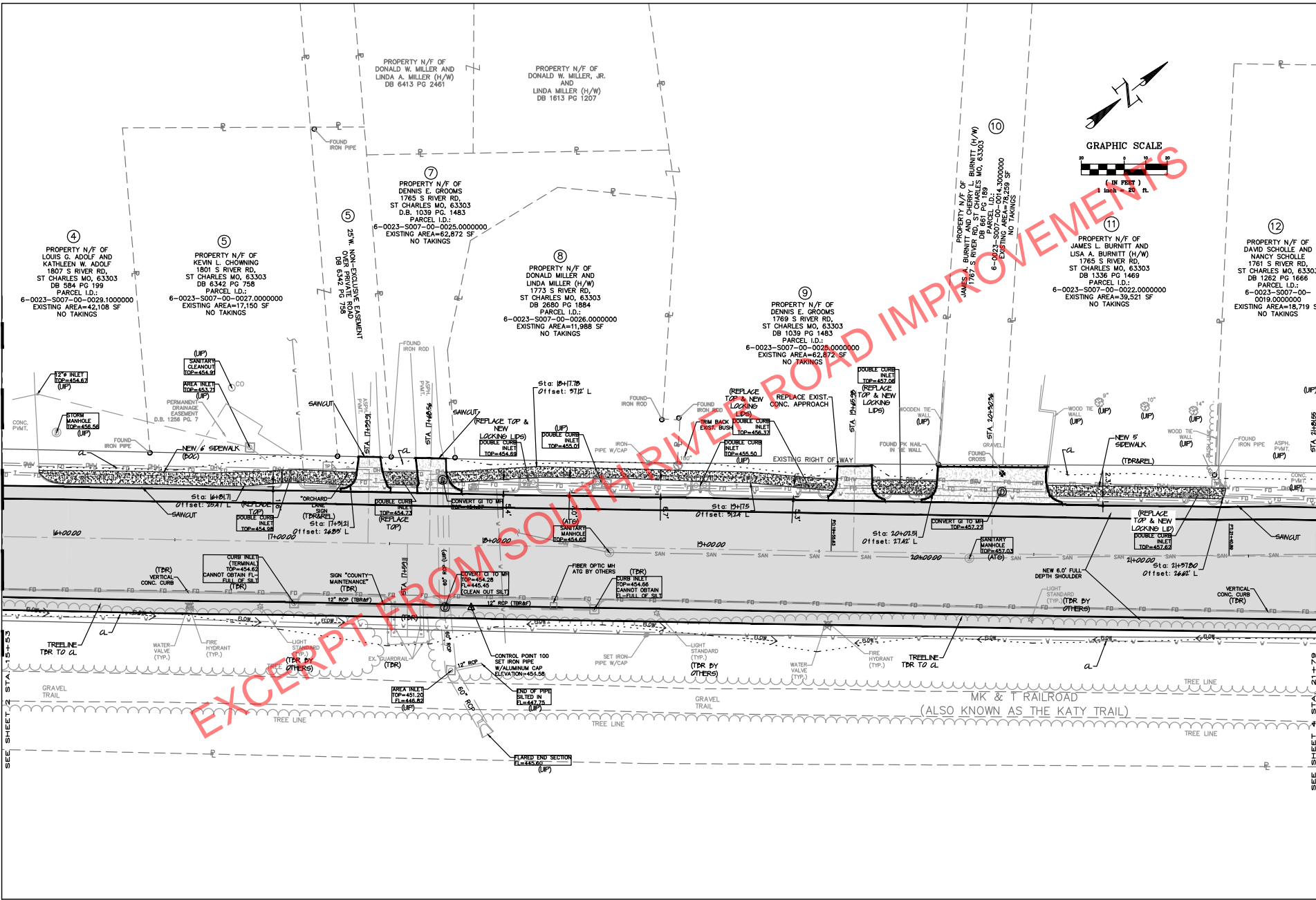
④
PROPERTY N/F OF
LOUIS G. ADOLF AND
KATHLEEN W. ADOLF
1807 S RIVER RD,
ST CHARLES MO, 63303
DB 584 PG 199
PARCEL I.D.:
6-0023-5007-00-0029.1000000
EXISTING AREA=42,108 SF
NO TAKINGS

SOUTH RIVER ROAD SIDEWALK & PAVEMENT IMPROVEMENTS	DATE SUBMITTED	OCT 2018
	COUNTY	ST. CHARLES
	PROJECT NO.	STP-5414(630)
	SIP NUMBER	
DESCRIPTION	DATE	
	DATE	
SAINT CHARLES COUNTY, MISSOURI	DATE	
301 N. THIRD STREET ST. CHARLES, MISSOURI 63101-4205	DATE	
SEE SHEET 3, ST. A. 1-15	DATE	

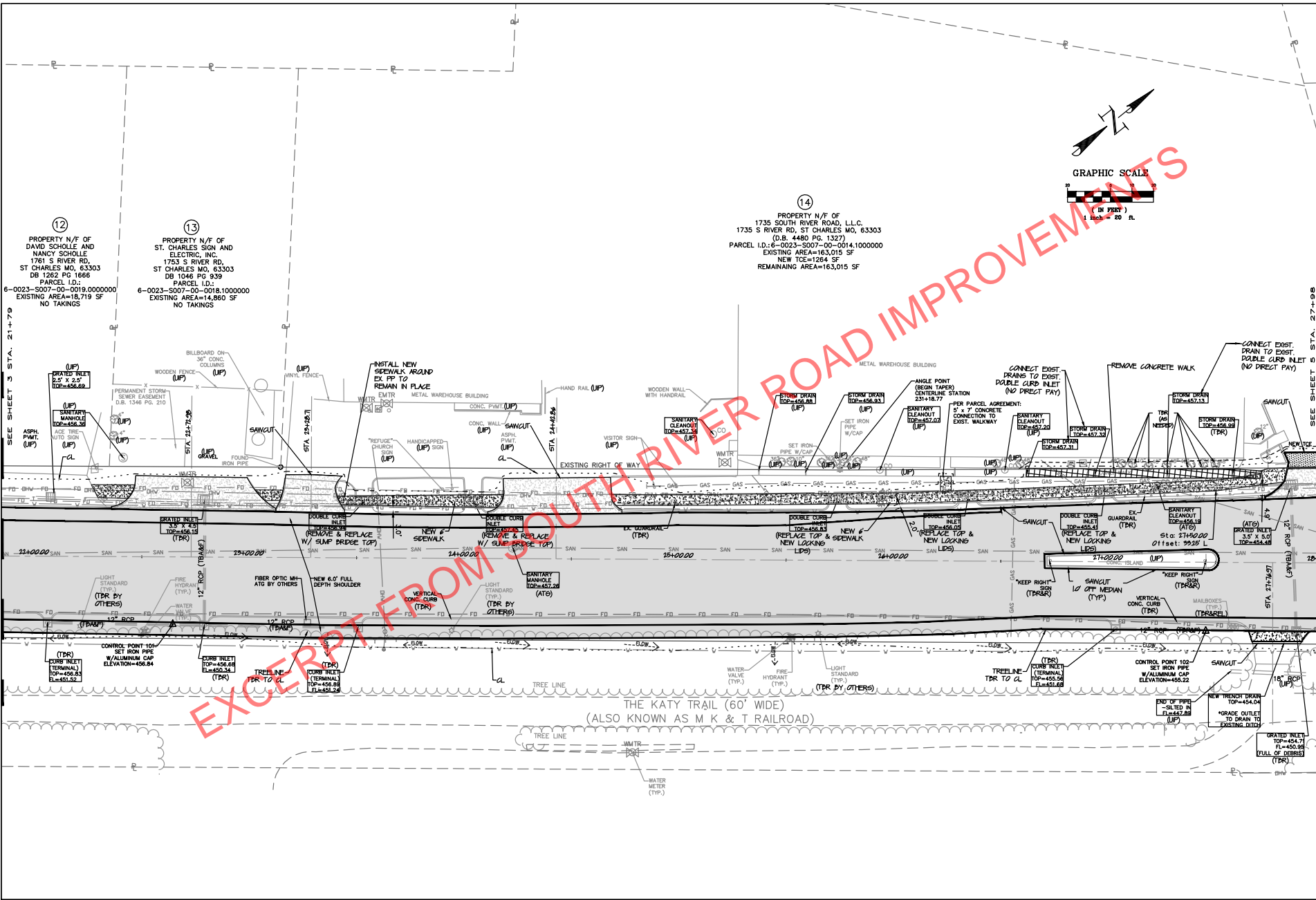
ST. CHARLES COUNTY
HIGHWAY DEPARTMENT

CHRISTOPHER KYLE BOSTIC
PROFESSIONAL ENGINEER
LICENSE NO. E-30063

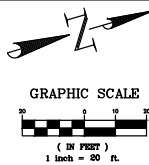
SHEET NUMBER
P-2



SOUTH RIVER ROAD SIDEWALK & PAVEMENT IMPROVEMENTS	
DATE SUBMITTED	OCT 2018
COUNTY	ST. CHARLES
STP NUMBER	STP-5414(630)
PROJECT NO.	
DESCRIPTION	
DATE	
SAINT CHARLES COUNTY, MISSOURI	
301 N. THIRD STREET ST. CHARLES, MO 63301 800-949-7300	
SEE SHEET 2	SEE SHEET 4
CHRISTOPHER KYLE BOSTIC PROFESSIONAL ENGINEER LICENSE NO. E-30083	
SHEET NUMBER P-3	



SOUTH RIVER ROAD SIDEWALK & PAVEMENT IMPROVEMENTS	
DATE SUBMITTED	OCT 2018
COUNTY	ST. CHARLES
STP NUMBER	STP-5414(630)
PROJECT NO.	
DESCRIPTION	
DATE	
SAINT CHARLES COUNTY, MISSOURI	SEE SHEET 5 STA. 27+98
301 N. THIRD STREET ST. CHARLES, MISSOURI 63105-2705	
ST. CHARLES COUNTY HIGHWAY DEPARTMENT	
CHRISTOPHER KYLE BOSTIC PROFESSIONAL ENGINEER LICENSE NO. E-30083	
SHEET NUMBER	P-4



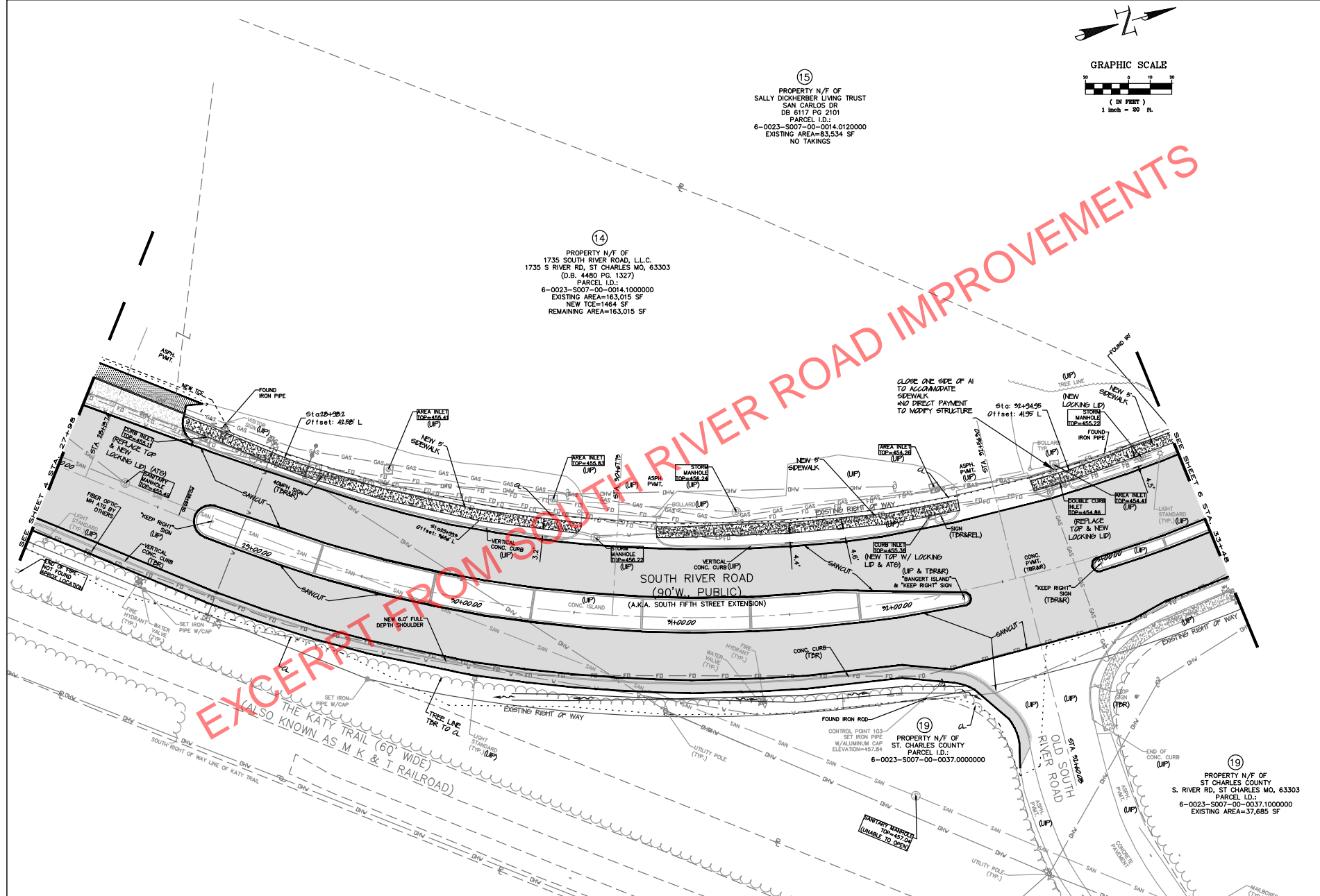
15
 PROPERTY N/F OF
 SALLY DICKHEBER LIVING TRUST
 SAN CARLOS DR
 DB 6117 PG 2101
 PARCEL I.D.:
 6-0023-S007-00-0014.0120000
 EXISTING AREA=83,534 SF
 NO TAKINGS

14
 PROPERTY N/F OF
 1735 SOUTH RIVER ROAD, L.L.C.
 1735 S RIVER RD, ST CHARLES MO, 63303
 (D.B. 4480 PG. 1327)
 PARCEL I.D.:
 6-0023-S007-00-0014.1000000
 EXISTING AREA=163,015 SF
 NEW TCE=1464 SF
 REMAINING AREA=163,015 SF

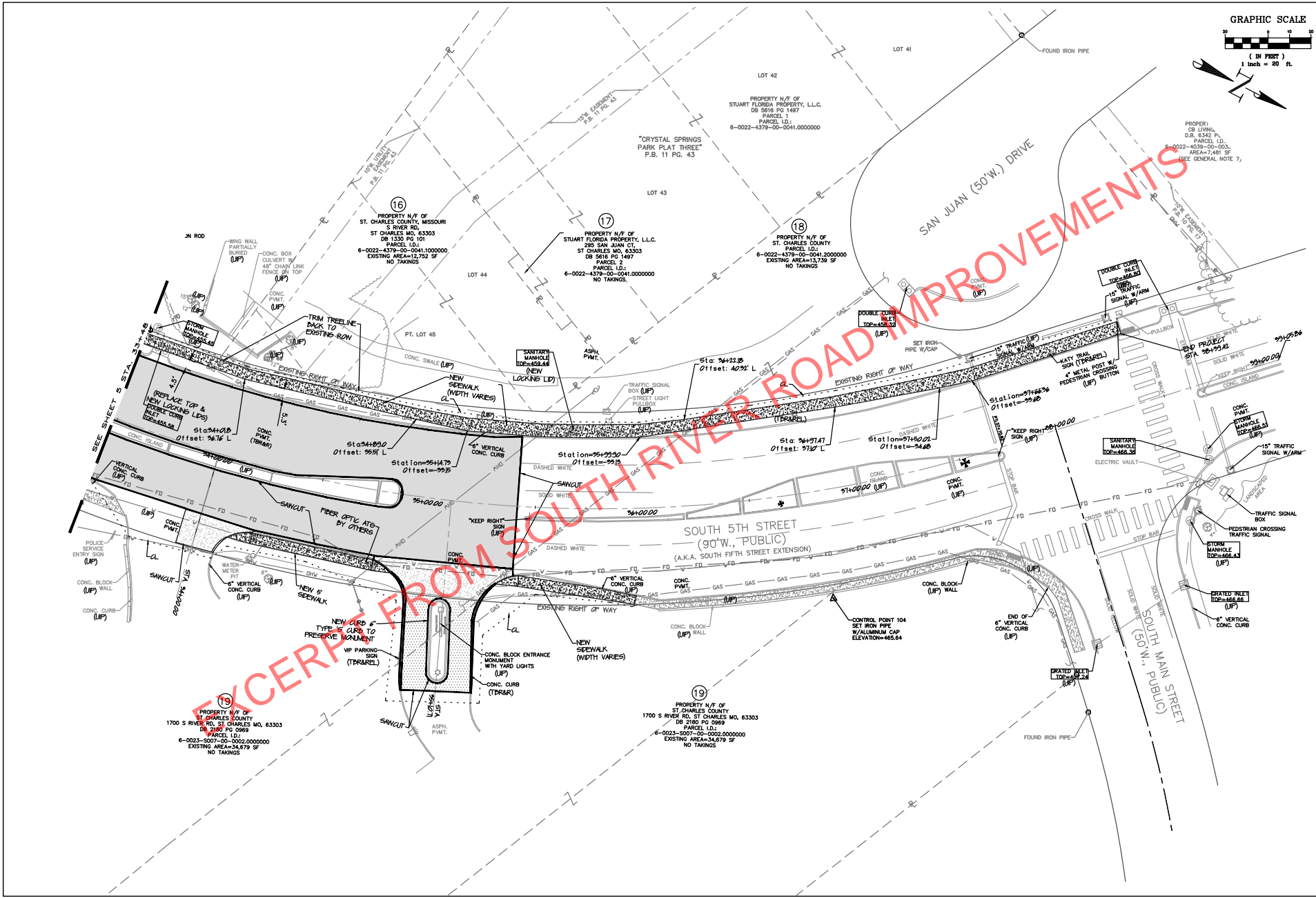
19
 PROPERTY N/F OF
 ST. CHARLES COUNTY
 PARCEL I.D.:
 6-0023-S007-00-0037.0000000

19
 PROPERTY N/F OF
 ST CHARLES COUNTY
 S. RIVER RD, ST CHARLES MO, 63303
 PARCEL I.D.:
 6-0023-S007-00-0037.1000000
 EXISTING AREA=37,685 SF

EXCERPT FROM SOUTH RIVER ROAD IMPROVEMENTS



SOUTH RIVER ROAD SIDEWALK & PAVEMENT IMPROVEMENTS	
DATE SUBMITTED	OCT 2018
COUNTY	ST. CHARLES
STP NUMBER	STP-5414(630)
PROJECT NO.	
DESCRIPTION	
DATE	
SANITARY MANHOLES UNABLE TO OPEN	
SAINT CHARLES COUNTY, MISSOURI	301 N. THIRD STREET ST. CHARLES 636-949-7305
CHRISTOPHER KYLE BOSTIC PROFESSIONAL ENGINEER LICENSE NO. E-30083	
SHEET NUMBER	
P-5	



EXCERPT FROM SOUTH RIVER ROAD IMPROVEMENTS

SOUTH RIVER ROAD SIDEWALK & PAVEMENT IMPROVEMENTS	
DATE SUBMITTED	OCT 2018
COUNTY	ST. CHARLES
PROJECT NO.	STP-5414(630)
DESCRIPTION	
DATE	
SAINT CHARLES COUNTY, MISSOURI	301 N. THIRD STREET ST. CHARLES, MISSOURI 63301-7305
CHRISTOPHER KYLE BOSTIC PROFESSIONAL ENGINEER LICENSE NO. E-30083	
SHEET NUMBER P-6	

19 ENG 1 RIVERPOINTE PUBLIC INFRASTRUCTURE PROJECT

PHASE 1A - BANK IMPROVEMENTS AND MASS GRADING

BID NUMBER 4492

CITY OF ST. CHARLES, ST. CHARLES COUNTY, MISSOURI
APRIL 2, 2020

CITY OF ST. CHARLES GENERAL NOTES

- ALL IMPROVEMENTS CONSTRUCTED HEREIN SHALL COMPLY WITH THE CODE OF ORDINANCES OF THE CITY OF ST. CHARLES.
- A LAND DISTURBANCE PERMIT, OBTAINED BY THE CONTRACTOR, FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES IS REQUIRED PRIOR TO COMMENCING ANY DEMOLITION, CLEARING OR CONSTRUCTION ON SITE. PROVIDE COPY OF APPROVAL FROM THE DEPARTMENT OF NATURAL RESOURCES TO THE DEPARTMENT OF ENGINEERING.
- SILTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE SWPPP PLAN. ADDITIONAL SILTATION CONTROL MAY BE REQUIRED AS DIRECTED BY THE CITY ENGINEER. (CODE SECTION 510.090.B)
- WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED FOR MORE THAN 30 DAYS, PERMANENT GRASS MUST BE ESTABLISHED TO CONTROL EROSION. (CODE SECTION 510.090.D.1)
- ALL MUD AND DEBRIS FROM CONSTRUCTION SITE TO BE KEPT OFF OF CITY MAINTAINED STREETS. STREETS SHALL BE SWEEPED TWICE DAILY. (CODE SECTION 510.090.E)
- CONTRACTOR SHALL PROTECT THE PUBLIC FROM CONSTRUCTION ACTIVITIES AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES AND AS APPROVED BY THE CITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TRAFFIC CONTROL PER THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL CLOSURE PERMITS FROM THE CITY AS REQUIRED.
- GRADES CANNOT EXCEED A 3:1 SLOPE. (CODE SECTION 510.090.A)
- CONSTRUCTION ACTIVITIES SHALL ABIDE BY THE NOISE RESTRICTIONS AS OUTLINES IN CODE SECTION 230.
- EXISTING TOPOGRAPHIC INFORMATION USED IN THESE PLANS WERE DEVELOPED THROUGH A COMBINATION OF INFORMATION PROVIDED BY THE CITY (HDR) AND SUPPLEMENTAL INFORMATION COLLECTED BY CMT AND COLE AND ASSOCIATES. CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE EXISTING KATY TRAIL SHALL REMAIN CLEAR AND ACCESSIBLE TO THE PUBLIC AT ALL TIMES.
- MAINTAIN ACCESS TO CELL SITE TOWER AT ALL TIMES CONTRACTOR SHALL PROTECT AS REQUIRED.
- ACCESS TO THE SITE SHALL BE OFF OLD SOUTH RIVER ROAD ONLY.

SITE DATA

OWNER	=	CITY OF ST. CHARLES
SITE ADDRESS	=	1440 S MAIN STREET ST. CHARLES, MO
SITE ACREAGE	=	8.35 AC
DISTURBED LAND	=	6.60 AC
EXISTING ZONING	=	C-2 GENERAL BUSINESS DISTRICT R-1E SINGLE FAMILY RESIDENTIAL DISTRICT
PROPOSED ZONING	=	C-2 GENERAL BUSINESS DISTRICT R-1E SINGLE FAMILY RESIDENTIAL DISTRICT
SCHOOL DISTRICT	=	ST. CHARLES
WUNNENBERGS	=	46N 5E
WATERSHED	=	MISSOURI RIVER
FEMA MAP PANEL	=	29183C0288G ZONE AE

BENCHMARK

NGS MONUMENT Q-149 (PID JC0051), STANDARD DISK, STAMPED Q149 1935 SET IN THE TOP OF A CONCRETE POST LOCATED IN THE ASPHALT PARKING LOT FOR THE ST. CHARLES BORROMEO CHURCH.
NAVD ELEV: 527.73 FT

SITE BENCHMARK:

BMK 1	CHISELED SQUARE ON LIGHT POLE BASE ELEV: 474.93 1067931.7300 N, 822834.2920 E
BMK 3	CHISELED SQUARE ON SW CORNER OF STORMBOX ELEV: 450.80 1067348.988 N, 822726.5070 E
CP 102	CPT 1/2" IB ELEV: 486.85 1067766.9390 N, 822596.4990 E
CP 102	CPT 1/2" IB ELEV: 472.40 1067958.6870 N, 822856.9200 E



LOCATION MAP
(NOT TO SCALE)

UTILITIES DATA

WATER SERVICE =	CITY OF ST. CHARLES 200 NORTH SECOND ST. ST. CHARLES, MO 63301 (636)949-3550 CONTACT: JOHN PHILLIPS john.phillips@stcharlescitymo.gov DENNIS KELLY dennis.kelly@stcharlescitymo.gov	TELEPHONE =	AT&T 402 NORTH THIRD ST. ST. CHARLES, MO 63301 (314) 277-0683 CONTACT: MATT THOMPSON mt4308@att.com
SEWER DISTRICT =	CITY OF ST. CHARLES 200 NORTH SECOND ST. ST. CHARLES, MO 63301 (636)949-3237 CONTACT: JOHN ZIMMERMAN john.zimmerman@stcharlescitymo.gov	ELECTRIC SERVICE =	AMEREN UE ST. CHARLES DISTRICT 2100 BLUESTONE DR ST. CHARLES, MO 63303 (636)925-3206 CONTACT: FELICIA CHILDS fchilids@ameren.com
CABLE SERVICE =	CHARTER COMMUNICATIONS 4282 SHORELINE DR. EARTH CITY, MO 63045 (636)387-6643 CONTACT: JOHN DANOWSKI john.danowski@charter.com	CABLE SERVICE =	SPIRE 6400 GRAHAM ROAD BERKLEY, MO 63134 (816)472-3489 CONTACT: RICHARD FROCK richard.frock@spireenergy.com

UTILITY INFORMATION:

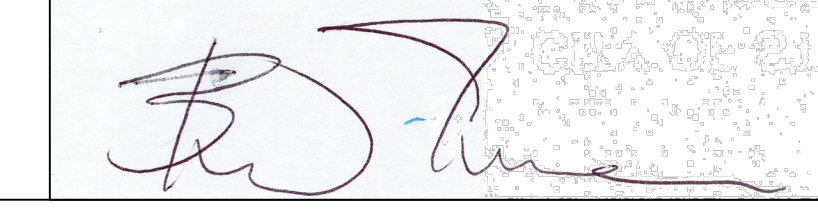
UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS, AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

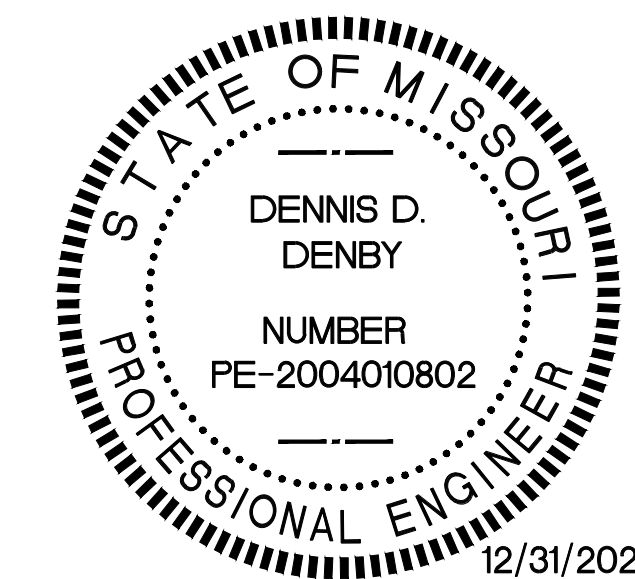


CALL 1-800-DIG-RITE (MISSOURI ONE CALL) TO HAVE LOCATIONS MARKED IN THE FIELD (SUBSCRIBING UTILITIES REQUIRE 48 HOURS NOTICE PRIOR TO CONSTRUCTION).

SHEET INDEX

SHEET	PAGE		REVISIONS				
			1	2	3	4	5
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C-1.0	2	OVERALL PLAN					
C-1.1	3	DEMOLITION PLAN 1					
C-1.2	4	DEMOLITION PLAN 2					
C-1.3	5	SITE CONTROL PLAN					
C-2.1	6	GRADING & DRAINAGE PLAN 1					
C-2.2	7	GRADING & DRAINAGE PLAN 2					
C-3.1	8	UTILITY PLAN 1					
C-3.2	9	UTILITY PLAN 2					
C-3.3	10	SANITARY SEWER 1 PLAN & PROFILE					
C-3.4	11	SANITARY SEWER 2 PROFILE & DETAILS					
C-4.1	12	EROSION CONTROL PLAN (SWPPP) 1					
C-4.2	13	EROSION CONTROL PLAN (SWPPP) 2					
C-4.3	14	EROSION CONTROL (SWPPP) DETAILS					
C-8.1	15	CROSS SECTIONS 1					
C-8.2	16	CROSS SECTIONS 2					
C-8.3	17	CROSS SECTIONS 3					
C-8.4	18	CROSS SECTIONS 4					
C-8.5	19	CROSS SECTIONS 5					

X 
DIRECTOR OF ENGINEERING



DENNIS D. DENBY - ENGINEER
MO PE-2004010802



PREPARED FOR:
CITY OF ST. CHARLES, MO
200 NORTH SECOND STREET
ST. CHARLES, MO 63301

CMT
CRAWFORD, MURPHY & TILLY, INC.
ENGINEERS & CONSULTANTS
ONE MEMORIAL DRIVE SUITE 500
ST. LOUIS, MO 63102
PH (314)436-5500
www.cmtengr.com
CMT JOB NO.: 19043402
License No. 184-000631

RIVERPOINTE PUBLIC
INFRASTRUCTURE
PROJECT

- PHASE 1A -
MASS GRADING

OWNER :



CITY OF ST. CHARLES, MO

MARK	DATE	DESCRIPTION

PROJECT NO:

CAD DWG FILE: 02-C1.0-GENPLAN.DWG

DESIGNED BY: DGS

DRAWN BY: DGS

CHECKED BY: DDD

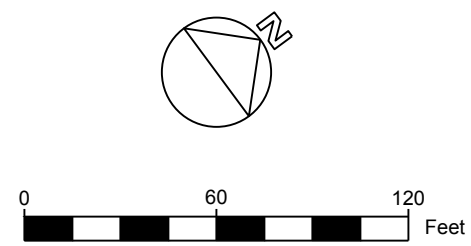
APPROVED BY: DDD

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SHEET TITLE

OVERALL PLAN

C-1.0

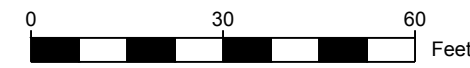
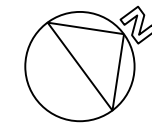


LEGEND

GENERAL WORK AREA

BID QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
1	MOBILIZATION	L.S.	1
2	DEMOLITION	L.S.	1
3	EMBANKMENT IN PLACE (ONSITE RECOMPACTED)	CU. YD.	46,900
4	EMBANKMENT IN PLACE (AMERISTAR BORROW SOURCE)	CU. YD.	36,000
5	EMBANKMENT IN PLACE (CONTRACTOR FURNISHED)	CU. YD.	27,175
6	8" PVC SDR 35 GRAVITY SEWER, OPEN CUT	L.F.	125
7	12" PVC SDR 26 GRAVITY SEWER, OPEN CUT	L.F.	96
8	36" PVC PS115 GRAVITY SEWER, OPEN CUT	L.F.	650
9	36" PVC PS115 GRAVITY SEWER, OPEN CUT, WITH UNSUITABLE MATERIAL	L.F.	189
10	PRECAST CONCRETE MANHOLE, 6' DIA.	EACH	3
11	PRECAST CONCRETE DROP MANHOLE, 6' DIA.	EACH	1
12	PRECAST CONCRETE SETOVER MANHOLE, 6' DIA.	EACH	2
13	PRECAST CONCRETE SETOVER MANHOLE, 5' DIA.	EACH	1
14	BYPASS PUMPING	L.S.	1
15	REMOVE EXISTING MANHOLE	EACH	3
16	ABANDON EXISTING SANITARY SEWER	L.S.	1
17	TEMPORARY EROSION CONTROL	L.S.	1
18	FINAL SEEDING OF DISTURBED AREA	ACRE	6.9
19	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	L.S.	1
20	VENT AND GROUT PORT COMPLETE	L.S.	1
21	RAISE EXISTING SANITARY MANHOLE	L.S.	1
22	AGGREGATE BASE COURSE, 12"	SQ. YD.	283
23	PIPE CULVERT, 15" RCP	L.F.	34
24	AS-BUILT PLANS	L.S.	1

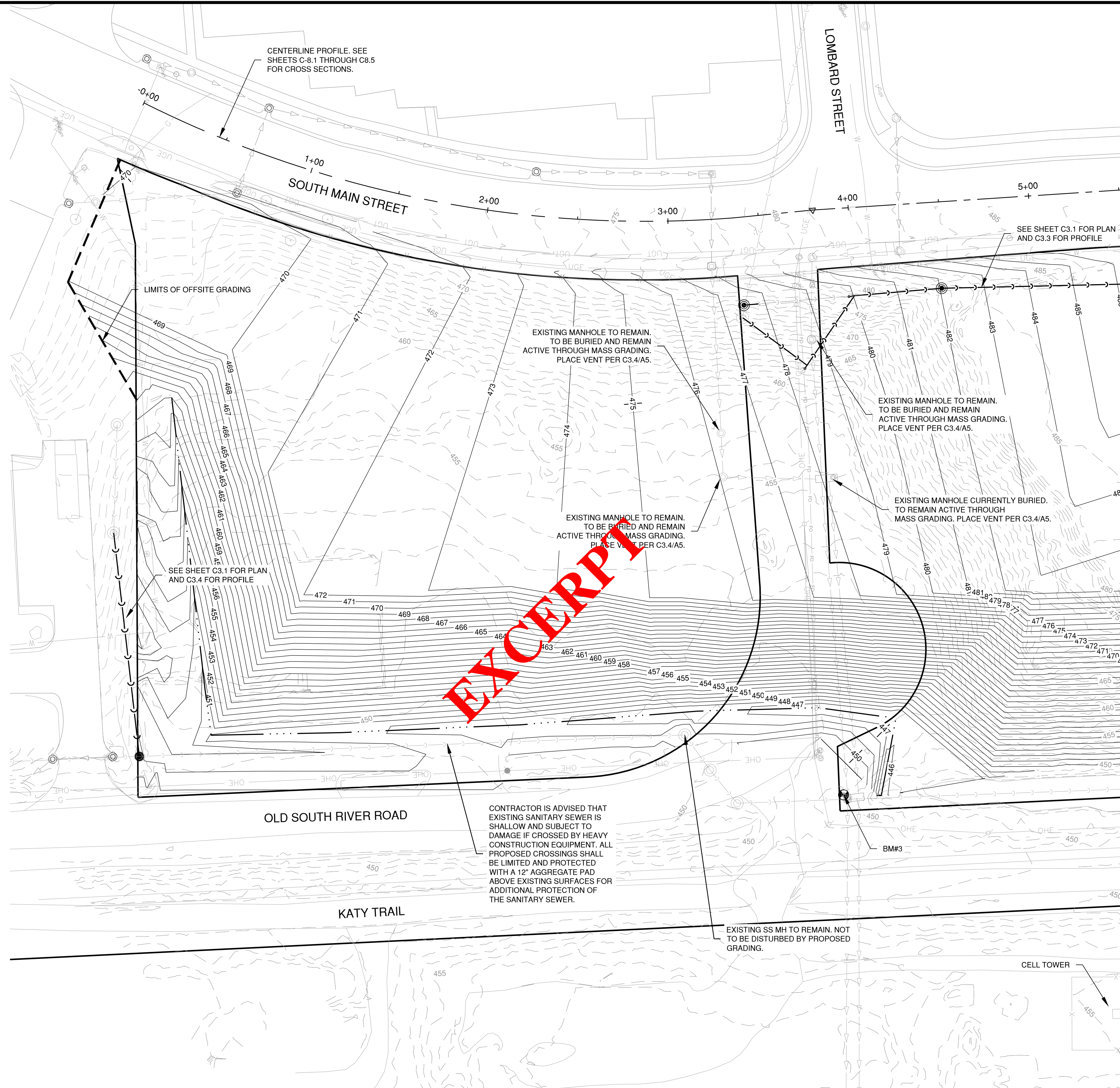


LEGEND

- BOUNDARY
- - - LIMITS OF GRADING OFFSITE
- 592 — PROPOSED CONTOUR
- >—>—> PROPOSED STORM SEWER
- - -> PROPOSED SANITARY SEWER
- 592 - - - EXISTING CONTOUR
- · - · - · - · PROPOSED DITCHLINE
- W W W EXISTING WATER LINE
- - -> EXISTING SANITARY SEWER
- - -> EXISTING STORM SEWER
- OHE EXISTING OVERHEAD ELECTRIC
- UGE EXISTING UNDERGROUND ELECTRIC
- G G EXISTING NATURAL GAS
- T T EXISTING UNDERGROUND TELEPHONE
- EXISTING POWER POLE
- EXISTING SEWER MANHOLE
- EXISTING SIGN
- ⊗ EXISTING VALVE
- ⊕ EXISTING FIRE HYDRANT

GRADING NOTES

1. UTILITIES SHOWN HAVE BEEN TAKEN FROM HDR AND COLE'S SURVEY, UTILITY COMPANY MAPS, AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. EXISTING UTILITIES SHALL REMAIN UNDISTURBED. IF ANY EXISTING UTILITIES ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
3. THE APPROXIMATE EXTENTS OF ONSITE UNDOCUMENTED FILL TO BE REMOVED AND RECOMPACTED ON SITE IS SHOWN ON DEMOLITION PLAN. THE REMAINING FILL NEEDED TO BRING THE SITE UP TO PROPOSED GRADES SHOWN ON THE GRADING AND DRAINAGE PLAN WILL BE FROM OFFSITE IMPORT, OTHER THAN THE ADDITIONAL ONSITE FILL MATERIAL MENTIONED IN NOTE #4 BELOW. OPTIONS FOR ACCEPTABLE FILL MATERIAL AND COMPACTION REQUIREMENTS FOR PLACEMENT OF THE ONSITE FILL ARE PROVIDED IN THE JOB SPECIAL PROVISIONS.
4. CONTRACTOR IS ADVISED THAT FILL MATERIAL HAS BEEN ADDED TO THE SITE SINCE THE TOPOGRAPHIC SURVEY. THE ADDITIONAL FILL MATERIAL IS NOT COMPACTED AND CONTAINS SOME UNSUITABLE MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE UNSUITABLE MATERIAL AND DISPOSING IT OFFSITE, AND FOR PROPERLY PLACING AND COMPACTING THE REMAINING FILL MATERIAL TO THE PROPOSED GRADES SHOWN ON THESE PLANS. THIS WORK SHALL BE INCIDENTAL TO THE EARTHWORK ITEMS IN THE CONTRACT. SEE THE JOB SPECIAL PROVISIONS.



MATCHLINE - SEE SHEET C-2.2



License No. 184-000613
CONSULTANTS

FINAL PLANS
APRIL 2, 2020

**RIVERPOINTE PUBLIC
INFRASTRUCTURE
PROJECT
- PHASE 1A -
MASS GRADING**

OWNER :



CITY OF ST. CHARLES, MO

MARK DATE DESCRIPTION

PROJECT NO:	
CAD DWG FILE:	05-C2.1-GRADING.DWG
DESIGNED BY:	DGS
DRAWN BY:	DGS
CHECKED BY:	DDD
APPROVED BY:	DDD
COPYRIGHT:	CRAWFORD, MURPHY & TILLY, INC. 2020

SHEET TITLE

**GRADING & DRAINAGE
PLAN 1**

C-2.1

FINAL PLANS
APRIL 2, 2020

RIVERPOINTE PUBLIC
INFRASTRUCTURE
PROJECT
- PHASE 1A -
MASS GRADING

OWNER :



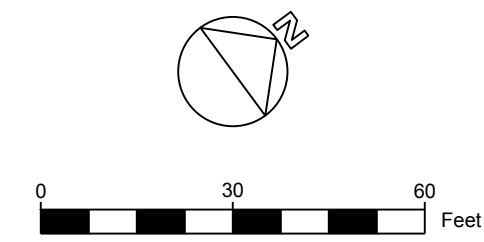
CITY OF ST. CHARLES, MO

MARK	DATE	DESCRIPTION

PROJECT NO:
CAD DWG FILE: 05-C2.1-GRADING.DWG
DESIGNED BY: DGS
DRAWN BY: DGS
CHECKED BY: DDD
APPROVED BY: DDD
COPYRIGHT: CRAWFORD, MURPHY & TILLY, INC. 2020

SHEET TITLE
**GRADING & DRAINAGE
PLAN 2**

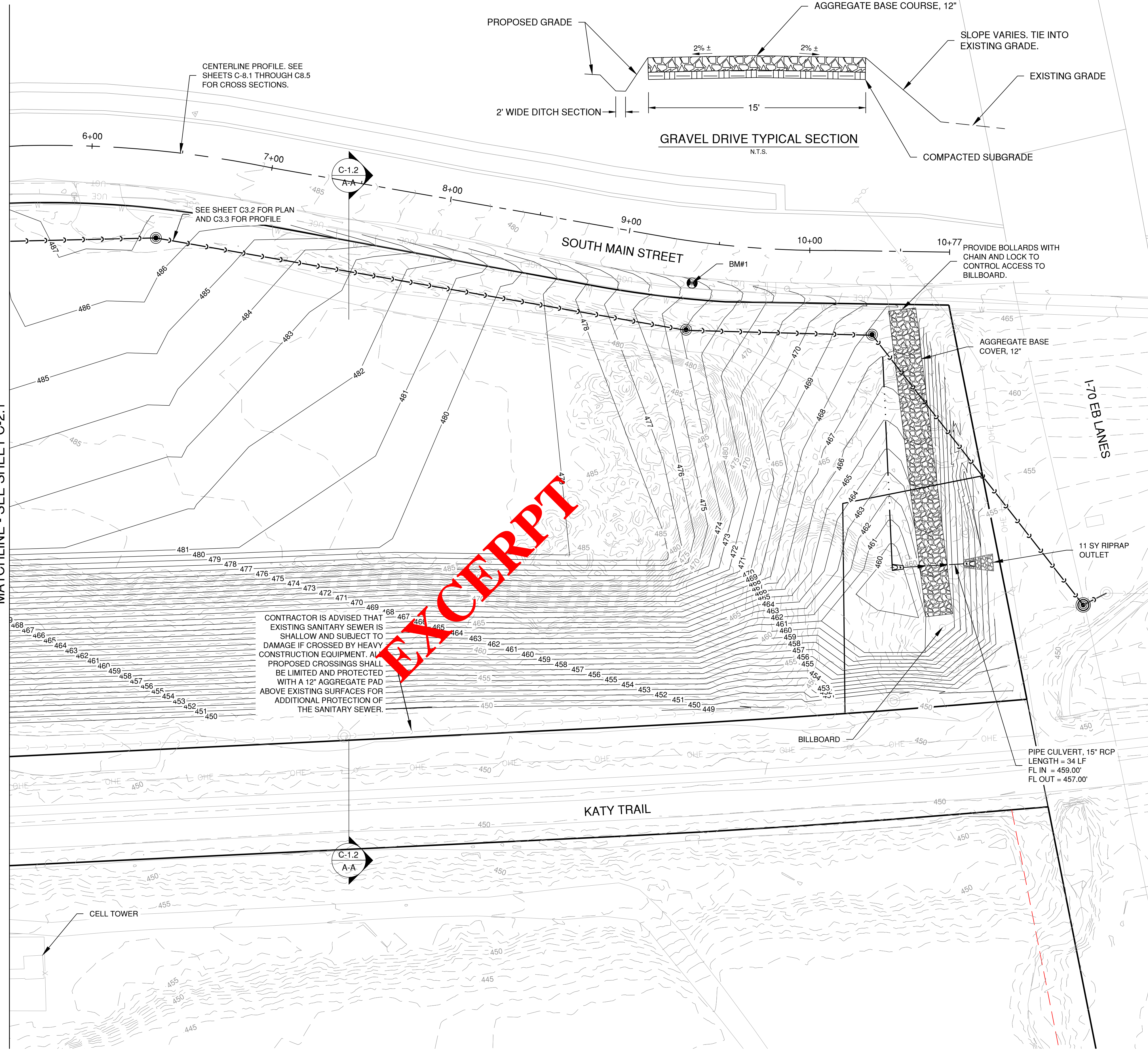
C-2.2
SHEET 7 OF 19



LEGEND

- BOUNDARY
- 592 PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- - - 592 EXISTING CONTOUR
- PROPOSED DITCHLINE
- W W W EXISTING WATER LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- OHE EXISTING OVERHEAD ELECTRIC
- UGE EXISTING UNDERGROUND ELECTRIC
- G EXISTING NATURAL GAS
- T EXISTING UNDERGROUND TELEPHONE
- EXISTING POWER POLE
- EXISTING SEWER MANHOLE
- ⊠ EXISTING SIGN
- ⊕ EXISTING VALVE
- ⊕ EXISTING FIRE HYDRANT

MATCHLINE - SEE SHEET C-2.1



EXCERPT

RIVERPOINTE PUBLIC INFRASTRUCTURE PROJECT

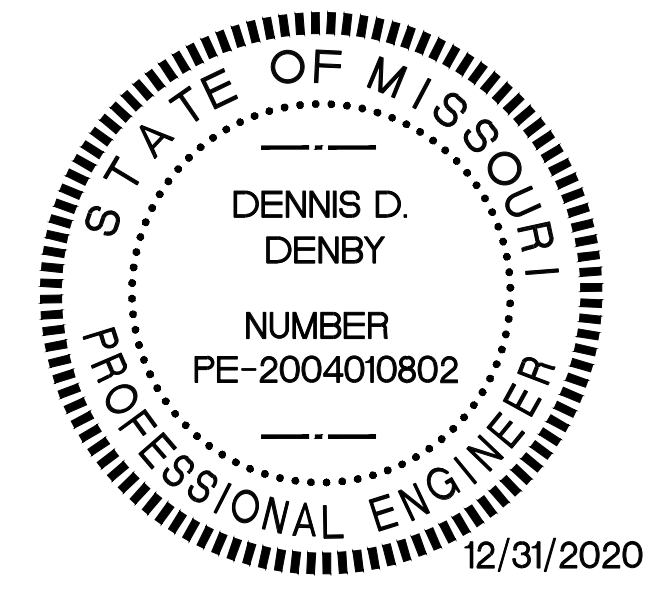
CITY OF ST. CHARLES, ST. CHARLES COUNTY, MISSOURI

JANUARY 9, 2020

BID NUMBER 4473

PHASE 1- TREE REMOVAL PLANS

ISSUED FOR CONSTRUCTION
1-9-2020



DENNIS D. DENBY - ENGINEER
MO PE-2004010802

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X _____
DIRECTOR OF ENGINEERING

UTILITY INFORMATION:
UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS, AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.



CALL 1-800-DIG-RITE (MISSOURI ONE CALL) TO HAVE LOCATIONS MARKED IN THE FIELD (SUBSCRIBING UTILITIES REQUIRE 48 HOURS NOTICE PRIOR TO CONSTRUCTION).

CITY OF ST. CHARLES GENERAL NOTES

- ALL IMPROVEMENTS CONSTRUCTED HEREIN SHALL COMPLY WITH THE CODE OF ORDINANCES OF THE CITY OF ST. CHARLES.
- IF PROPERTY IS GREATER THAN 1 ACRE, A LAND DISTURBANCE PERMIT FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES IS REQUIRED PRIOR TO COMMENCING ANY DEMOLITION, CLEARING OR CONSTRUCTION ON SITE. PROVIDE COPY OF APPROVAL FROM THE DEPARTMENT OF NATURAL RESOURCES TO THE PUBLIC WORKS DEPARTMENT. (PERMIT #MO-RA15071)
- SILTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE SWPPP PLAN. ADDITIONAL SILTATION CONTROL MAY BE REQUIRED AS DIRECTED BY THE CITY ENGINEER. (CODE SECTION 510.090.B)
- WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED FOR MORE THAN 30 DAYS, PERMANENT GRASS MUST BE ESTABLISHED TO CONTROL EROSION. (CODE SECTION 510.090.D.1)
- ALL MUD AND DEBRIS FROM CONSTRUCTION SITE TO BE KEPT OFF OF CITY MAINTAINED STREETS. STREETS SHALL BE SWEEPED TWICE DAILY. (CODE SECTION 510.090.E)
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO PROVIDE TRAFFIC CONTROL PER THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- GRADES CANNOT EXCEED A 3:1 SLOPE. (CODE SECTION 510.090.A)
- CONSTRUCTION ACTIVITIES SHALL ABIDE BY THE NOISE RESTRICTIONS AS OUTLINES IN CODE SECTION 230.



LOCATION MAP
(NOT TO SCALE)

UTILITIES DATA

WATER SERVICE =	CITY OF ST. CHARLES 200 NORTH SECOND ST. ST. CHARLES, MO 63301 (636)949-3550 CONTACT: JOHN PHILLIPS john.phillips@stcharlescitymo.gov	PHONE SERVICE =	AT&T 402 NORTH THIRD ST. ST. CHARLES, MO 63301 (314) 277-0683 CONTACT: MATT THOMPSON mt4308@att.com
SEWER DISTRICT =	CITY OF ST. CHARLES 200 NORTH SECOND ST. ST. CHARLES, MO 63301 (636)949-3237 CONTACT: JOHN ZIMMERMAN john.zimmerman@stcharlescitymo.gov	ELECTRIC SERVICE =	AMEREN UE ST. CHARLES DISTRICT 2100 BLUESTONE DR ST. CHARLES, MO 63303 (636)925-3206 CONTACT: FELICIA CHILDS fchilds@ameren.com
CABLE SERVICE =	CHARTER COMMUNICATIONS 4282 SHORELINE DR. EARTH CITY, MO 63045 (636)387-6643 CONTACT: JOHN DANOWSKI john.danowski@charter.com	CABLE SERVICE =	SPIRE 6400 GRAHAM ROAD BERKLEY, MO 63134 (616)472-3489 CONTACT: RICHARD FROCK richard.frock@spireenergy.com

PERTINENT DATA

OWNER =	CITY OF ST. CHARLES
SITE ADDRESS =	1440 S MAIN STREET ST. CHARLES, MO
SITE ACREAGE =	6.48 AC
DISTURBED LAND =	3.72 AC
EXISTING ZONING =	C-2 GENERAL BUSINESS DISTRICT R-1E SINGLE FAMILY RESIDENTIAL DISTRICT
PROPOSED ZONING =	C-2 GENERAL BUSINESS DISTRICT R-1E SINGLE FAMILY RESIDENTIAL DISTRICT
SCHOOL DISTRICT =	ST. CHARLES
WUNNENBERGS =	46N 5E
WATERSHED =	MISSOURI RIVER
FEMA MAP PANEL =	29183C0288G ZONE AE

BENCHMARK

NGS MONUMENT Q-149 (PID JC0051), STANDARD DISK, STAMPED Q149 1935 SET IN THE TOP OF A CONCRETE POST LOCATED IN THE ASPHALT PARKING LOT FOR THE ST. CHARLES BORROMEO CHURCH. NAVD ELEV: 527.73 FT

SITE BENCHMARK:

BMK 1	CHISLED SQUARE ON LIGHT POLE BASE ELEV: 447.93 1067931.7300 N, 22834.2920 E
-------	---







CMT
CRAWFORD, MURPHY & TILLY, INC.
ENGINEERS & CONSULTANTS
ONE MEMORIAL DRIVE SUITE 500
ST. LOUIS, MO 63102
PH (314)436-5500
www.cmtengr.com
CMT JOB NO.: 19043402
License No. 184-000631

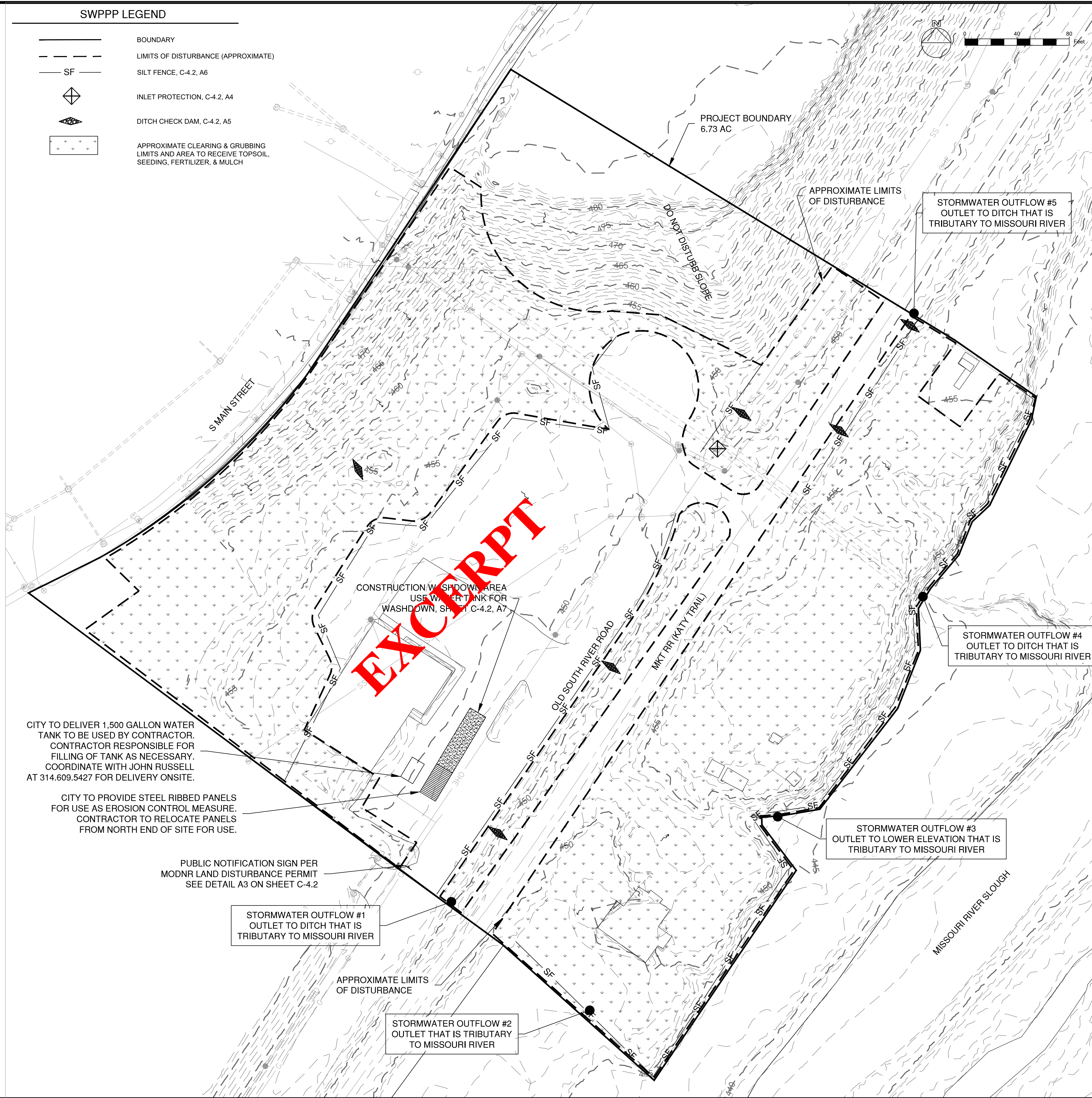
EROSION CONTROL GENERAL NOTES

1. SITE OWNER: CITY OF ST. CHARLES
2. SITE ADDRESS: 1440 S MAIN STREET, ST. CHARLES, MO 63303
3. RUNOFF COEFFICIENTS: UNDEVELOPED- 0.47
DEVELOPED- 0.47
4. TOTAL LAND ESTIMATED TO BE DISTURBED- APPROXIMATELY 4 ACRES
5. DESCRIPTION OF B.M.P.'S TO CONTROL EROSION AND SEDIMENT (INTERIM & PERMANENT STABILIZATION PRACTICES)
 - 5.1. CONTRACTOR SHALL ESTABLISH PERIMETER SILTATION CONTROL PRIOR TO ANY CONSTRUCTION ACTIVITIES. AREAS REQUIRING MINOR CLEARING &/OR GRADING PRIOR TO INSTALLATION OF SILTATION CONTROL SHALL BE COMPLETED IN A TIMELY MANNER AND SILTATION CONTROL ESTABLISHED IMMEDIATELY FOLLOWING.
 - 5.2. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE THE ACCESS AREAS INTERSECT WITH PUBLIC ACCESS WAYS. DURING MUDDY CONDITIONS, DRIVERS OF VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING THE ROADWAY. WHERE SEDIMENT IS TRANSPORTED ONTO PUBLIC ACCESS WAYS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROAD BY SHOVELING OR SWEEPING. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
 - 5.3. UPON COMMENCEMENT OF INITIAL CLEARING AND GRUBBING OPERATIONS, AS WELL AS FUTURE GRADING OPERATIONS, TOPSOIL MUST BE STRIPPED FROM GRADED AREAS AND STOCKPILED FOR IN FINAL GRADING AND/OR EXCESS REMOVAL. THE STOCKPILES WILL BE KEPT ON SITE BUT MUST STAY CLEAR OF ALL CONSTRUCTION ACTIVITY. THE STOCKPILE MUST BE STABILIZED WITH TEMPORARY VEGETATION, OR COVERED AT THE END OF EACH WORKDAY, OR PERIMETER CONTROLS MUST BE IN PLACE TO PREVENT SOIL LOSS AND SEDIMENT TRANSPORT FROM THE STOCKPILE ITSELF UNTIL NEEDED.
 - 5.4. CONTRACTOR SHALL CLEAR AND GRUB THOSE AREAS OF SITE REQUIRED FOR CONSTRUCTION. AREAS NOT SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL NOT BE CLEARED OF ESTABLISHED VEGETATION UNTIL REQUIRED. REMAINDER OF SITE SHALL BE GRADED, AS REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF SILTATION CONTROL THROUGHOUT THE DURATION OF THE PROJECT.
 - 5.5. IF SEEDING OF ANOTHER VEGETATIVE EROSION CONTROL METHOD IS USED, IT SHALL BECOME ESTABLISHED WITHIN TWO WEEKS OR THE SITE SHALL BE RE-SEEDED OR A NON-VEGETATIVE OPTION EMPLOYED.
 - 5.6. TECHNIQUES SHALL BE EMPLOYED TO ENSURE STABILIZATION ON STEEP SLOPES AND IN DRAINAGE WAYS.
 - 5.7. THE ENTIRE SITE MUST BE STABILIZED, USING HEAVY MULCH LAYER OR ANOTHER METHOD THAT DOES NOT REQUIRE GERMINATION TO CONTROL EROSION, AT THE CLOSE OF THE CONSTRUCTION SEASON. REFER TO DETAIL A2 ON SHEET C-4.2 FOR MULCHING RATES.
 - 5.8. TECHNIQUES SHALL BE EMPLOYED TO PREVENT THE BLOWING OF DUST OR SEDIMENT FROM THE SITE.
 - 5.9. TECHNIQUES SHALL BE EMPLOYED TO DIVERT UPLAND RUNOFF PAST DISTURBED SLOPES.
 - 5.10. ALL PROPOSED TURF AREAS, ONCE CONSTRUCTED TO FINAL GRADES, SHALL BE SEEDED/SODDED WITHIN THIRTY DAYS AFTER FINAL GRADING OF THE SITE WHERE SHOWN ON THE PLAN. SHOULD WEATHER CAUSE DELAYS IN EARTHWORK OPERATIONS, ADDITIONAL SILTATION CONTROL MEASURES MAY BE REQUIRED.
 - 5.11. ANY DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR FIVE DAYS OR MORE SHALL BE STABILIZED WITH SEEDING AND MULCHING PER SPECIFICATIONS WITHIN FIVE DAYS. IF SEASONAL CONDITIONS PROHIBIT SEEDING, MULCHING, OR MATTING SHALL BE USED.
 - 5.12. PROTECTION FOR ADJACENT PROPERTIES BY THE USE OF VEGETATED BUFFER STRIP IN COMBINATION WITH PERIMETER CONTROLS (WHERE APPLICABLE).
 - 5.13. SEDIMENTATION CONTROLS SHALL ONLY BE REMOVED AFTER THE SITE IS COMPLETELY STABILIZED, VEGETATION IS WELL ESTABLISHED, AND ALL PAVEMENT AREAS ARE INSTALLED.
6. DESCRIPTION OF B.M.P.'S TO PREVENT POTENTIAL POLLUTANTS
 - 6.1. SOLID NON-HAZARDOUS CONSTRUCTION WASTE- DISPOSE OF IN TRASH DUMPSTERS OR APPROVED EQUIVALENT IN A LOCATION APPROVED BY THE OWNER. POTENTIALLY SOLUBLE OR LEACHABLE SOLID WASTE SHALL BE STORED OFF THE GROUND AND IN COVERED LEAK-PROOF CONTAINERS. SOLID WASTE SHALL BE PROPERLY DISPOSED OF OFF-SITE ON A REGULAR BASIS.
 - 6.2. HAZARDOUS WASTE- HAZARDOUS WASTE SHALL BE SEGREGATED FROM NON-HAZARDOUS CONSTRUCTION SITE DEBRIS. LIQUID OR SEMI-LIQUID HAZARDOUS WASTE SHALL BE STORED IN APPROPRIATE CONTAINERS (CLOSED DRUMS OR SIMILAR) AND SHALL BE KEPT UNDER COVER. GRANULAR, SOLUBLE, OR LEACHABLE HAZARDOUS WASTE MATERIALS SHALL BE STORED OFF THE GROUND AND IN COVERED LEAK-PROOF CONTAINERS. THE OWNER SHALL PROPERLY APPROVE ANY HAZARDOUS WASTE STORAGE AREA LOCATIONS.
 - 6.3. HAZARDOUS WASTE SHALL BE PROPERLY DISPOSED OF OFF-SITE ON A REGULAR BASIS BY A REPUTABLE, LICENSED HAZARDOUS WASTE HAULER.
 - 6.4. IT IS NO THE INTENT OF THIS SWPPP TO SUPERSEDE OR REPLACE NORMAL SITE ASSESSMENT AND REMEDIATION PROCEDURES CONCERNING HAZARDOUS MATERIALS. SIGNIFICANT SPILLS AND/OR CONTAMINATION WARRANT AN IMMEDIATE RESPONSE BY TRAINED PROFESSIONALS. SUSPECTED JOB SITE CONTAMINATION SHOULD IMMEDIATELY BE REPORTED TO REGULATORY AUTHORITIES AND PROTECTIVE MEASURE TAKEN.
 - 6.5. ONSITE FUELING FACILITIES ARE REQUIRED TO ADHERE TO ALL APPLICABLE FEDERAL AND STATE REGULATIONS CONCERNING STORAGE AND DISPENSERS.
 - 6.6. PROVISIONS SHALL BE MADE SO THAT A SUFFICIENT NUMBER OF TEMPORARY TOILET FACILITIES ARE AVAILABLE TO SERVE THE NUMBER OF WORKERS ON SITE.
 - 6.7. PROVISIONS SHALL BE MADE FOR LITTER CONTROL.
7. DESCRIPTIONS OF B.M.P.'S TO REMAIN AFTER CONSTRUCTION
 - 7.1. TURF AREAS- TURF AREAS SHALL BE MAINTAINED TO INSURE SITE AREAS REMAIN STABILIZED UPON COMPLETION OF CONSTRUCTION ACTIVITIES.
 - 7.2. PAVED AREAS AND WALKWAYS- AREAS SUBJECT TO FOOT AND VEHICLE TRAFFIC SHALL BE PAVED AND KEPT IN GOOD REPAIR FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES.
8. CONTRACTOR TO COORDINATE WITH THE CITY AND DEVELOPER FOR OFF STREET PARKING AREA (WHEN APPLICABLE).
9. REFER TO B.M.P.'S DESCRIPTIONS IN SWPPP MANUAL AND THE SWPPP PLAN TO REFERENCE ALL EROSION AND SEDIMENT CONTROL MEASURE REQUIRED FOR THIS SITE.
10. REFER TO SEEDING RATES/MIXTURES DETAIL A1 SHEET C-4.2.
11. PLANNED RESPONSE TO LOSS OF CONTAINED SEDIMENT:

B.M.P.'S SHALL BE REPAIRED AND/OR REPLACED IMMEDIATELY, AS REQUIRED, TO STABILIZE SITE AND CONTAIN SEDIMENT LADEN RUNOFF. OFFSITE AREAS SHALL BE REVIEWED FOR EXTEND OF IMPACT FROM B.M.P FAILURE. PERMIT HOLDER SHALL BE REQUIRED TO PROVIDE DOCUMENTATION OF THE B.M.P. MEASURE, INSTALLED AND SCHEDULED MAINTENANCE, AND REPAIRS.
12. PERMIT HOLDER
 - 12.1. PERMIT HOLDER SHALL NOTIFY ALL CONTRACTORS AND OTHER ENTITIES (INCLUDING UTILITY CREWS, CITY EMPLOYEES, OR THEIR AGENTS) THAT WILL PERFORM WORK AT THE SITE, OF THE EXISTENCE OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND WHAT ACTIONS OR PRECAUTION SHALL BE TAKEN WHILE ON SITE TO MINIMIZE THE POTENTIAL FOR EROSION AND THE POTENTIAL FOR DAMAGING ANY B.M.P.'S.
 - 12.2. PERMIT HOLDER SHALL DETERMINE THE NEED FOR AND ESTABLISH TRAINING PROGRAMS TO ENSURE THAT ALL SITE WOKRES HAVE BEEN TRAINED, AT A MINIMUM, IN EROSION CONTROL, MATERIAL HANDLING AND STORAGE, AND HOUSEKEEPING.
 - 12.3. PROVIDE COPIES OF THE SWPPP TO ALL PARTIES WHO ARE RESPONSIBLE FOR INSTALLATION, OPERATION, OR MAINTENANCE FOR ANY B.M.P.'S.
 - 12.4. MAINTAIN A CURRENT COPY OF THE SWPPP ON SITE AT ALL TIMES.
13. PRIOR TO ANY MAJOR LAND DISTURBANCE ACTIVITY, A LAND DISTURBANCE PERMIT FROM THE STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES, WILL BE REQUIRED.
14. ANY LAND CLEARING, CONSTRUCTION, OR DEVELOPMENT INVOLVING THE MOVEMENT OF EARTH SHALL BE IN ACCORDANCE WITH THE SWPPP.
15. CONTRACTOR SHALL KEEP SILT FROM ENTERING INTO THE STORM SEWER SYSTEM AND ALL KEEP WATER FROM PONDING ON THE PAVEMENT THAT IS PART OF THE VEHICLE OR PEDESTRIAN TRAVEL WAY. INLET PROTECTION SHALL ONLY BE USED AS NECESSARY TO KEEP SILT FROM ENTERING INTO THE STORM SEWER SYSTEM.

SWPPP LEGEND

-  BOUNDARY
-  LIMITS OF DISTURBANCE (APPROXIMATE)
-  SILT FENCE, C-4.2, A6
-  INLET PROTECTION, C-4.2, A4
-  DITCH CHECK DAM, C-4.2, A5
-  APPROXIMATE CLEARING & GRUBBING LIMITS AND AREA TO RECEIVE TOPSOIL, SEEDING, FERTILIZER, & MULCH



CITY TO DELIVER 1,500 GALLON WATER TANK TO BE USED BY CONTRACTOR. CONTRACTOR RESPONSIBLE FOR FILLING OF TANK AS NECESSARY. COORDINATE WITH JOHN RUSSELL AT 314.609.5427 FOR DELIVERY ONSITE.

CITY TO PROVIDE STEEL RIBBED PANELS FOR USE AS EROSION CONTROL MEASURE. CONTRACTOR TO RELOCATE PANELS FROM NORTH END OF SITE FOR USE.

PUBLIC NOTIFICATION SIGN PER MODNR LAND DISTURBANCE PERMIT SEE DETAIL A3 ON SHEET C-4.2

STORMWATER OUTFLOW #1
OUTLET TO DITCH THAT IS
TRIBUTARY TO MISSOURI RIVER

STORMWATER OUTFLOW #2
OUTLET THAT IS TRIBUTARY
TO MISSOURI RIVER

STORMWATER OUTFLOW #3
OUTLET TO LOWER ELEVATION THAT IS
TRIBUTARY TO MISSOURI RIVER

STORMWATER OUTFLOW #4
OUTLET TO DITCH THAT IS
TRIBUTARY TO MISSOURI RIVER

STORMWATER OUTFLOW #5
OUTLET TO DITCH THAT IS
TRIBUTARY TO MISSOURI RIVER



License No. 184-000613
CONSULTANTS

ISSUED FOR
CONSTRUCTION
JANUARY 9, 2020

RIVERPOINTE PUBLIC
INFRASTRUCTURE
PROJECT- PHASE 1

TREE REMOVAL PLANS

CITY OF ST. CHARLES, MO
200 N SECOND STREET
ST. CHARLES, MO

ST. CHARLES, MISSOURI

MARK	DATE	DESCRIPTION
------	------	-------------

PROJECT NO:	19043402-00
CAD DWG FILE:	SWPPP.DWG
DESIGNED BY:	CMH
DRAWN BY:	CMH
CHECKED BY:	DDD
APPROVED BY:	DDD
COPYRIGHT:	CRAWFORD, MURPHY & TILLY, INC. 2018

SHEET TITLE	
SWPPP	
C-4.1	
SHEET	3 OF 4

SOUTH MAIN STREET PROPERTY

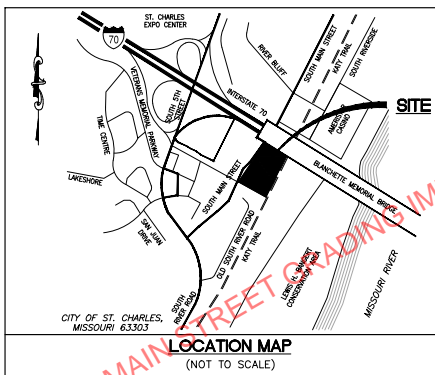
A TRACT OF LAND BEING PART OF LOT 57 IN BLOCK 9 OF STEEN & CUNNINGHAM'S SURVEY OF THE COMMONS OF ST. CHARLES AND LOTS 5 AND 6 IN BLOCK 1 OF EVANS SURVEY OF THE ST. CHARLES COMMONS
TOWNSHIP 46 NORTH, RANGE 5 EAST
CITY OF ST. CHARLES, ST. CHARLES COUNTY, MISSOURI

CITY REVISIONS 12/8/2017

LEGEND

EXISTING		PROPOSED
460	CONTOURS	460
450		459
460.15		TOP OF CURB
	SPOT GRADE	621.25
	TREE LINE	
	TREE	
	BUSH	
	STORM MANHOLE	
	AREA INLET	
	CURB INLET	
	GRADED INLET	
	FLARED END SECTION	
12" RCP	STORM SEWER	
	GRADED MANHOLE	
	STORM DESIGNATOR	
	DOWNSPOUT	
	DRAINAGE PIPE	
	SWALE/SLOPE INDICATOR	
	SANITARY MANHOLE	
8" VCP	SANITARY SEWER	SS
	CLEAN OUT	CO
	SANITARY DESIGNATOR	
	UTILITY POLE	
	GUIDE WIRE	OU
	OVERHEAD UTILITY	UE
	UNDERGROUND ELECTRIC	UE
	ELECTRIC MARKER	
	ELECTRIC METER	
	ELECTRIC BOX	
	ELECTRIC PULL BOX	
	ELECTRIC TRANSFORMER	
	ELECTRIC MANHOLE	UT
	UNDERGROUND TELEPHONE	
	FIBER OPTIC MARKER	
	CABLE MARKER	
	GAS LINE	C
	GAS VALVE	M/GV
	GAS METER	GM
	GAS MARKER	
	WATER LINE	W
	WATER VALVE	M/V
	WATER METER	
	FIRE HYDRANT	
	SIGN	
	MAIL BOX	
	TEST HOLE	
	LIGHT STANDARD	
	FENCE	X
	BOLLARD	
	RETAINING WALL	
	CONCRETE PAVEMENT	
	SILTATION FENCE	
	AIR CONDITIONER	
	FLAG POLE	
	MONITORING WELL	
	PARKING METER	
	PLANTER	
	SPRINKLER CONTROL BOX	
	SPRINKLER	
	SPRINKLER VALVE	
	TRAFFIC CONTROL BOX	
	TRAFFIC POLE	
	YARD LIGHT	
	GUARD RAIL	
	PROPERTY LINE	
	EASEMENT	
	SETBACK	
	INLET PROTECTION	
	WATTLE	
	CHECK DAM	
	USE IN PLACE	(UIP)
	TO BE REMOVED	(TBR)
	ADJUST TO GRADE	(ATG)
	TO BE REMOVED & RELOCATED	(TBR&R)
	TYPICAL	(TYP)
	NOT TO SCALE	N.T.S.
	HIGH POINT IN GRADE	HP
	LOW POINT IN GRADE	LP
	TOP OF WALL	TW
	BOTTOM OF WALL	BW
	NOT IN CONTRACT	(NIC)

MASS GRADING PLANS



PERTINENT DATA

OWNER = CITY OF ST. CHARLES
SITE ADDRESS = MAIN STREET
ST. CHARLES, MO 63303
SITE ACREAGE = 4.104 AC
DISTURBED LAND = 3.976 AC
EXISTING ZONING = C-2, R-1E
PROPOSED ZONING = C-2, R-1E
SCHOOL DISTRICT = ST. CHARLES
WARRANTY = PLS. 48' FROM DD-19
WATERSHED = MISSOURI RIVER
TEAM MAP PANEL = 2913/2928 G.
(ZONE X)

UTILITIES

<p>WATER SERVICE = CITY OF ST. CHARLES 200 NORTH SIZONO ST. ST. CHARLES, MO 63301 (636) 949-3200 CONTACT: JOHN PHILLIPS JONAS KELLY</p>	<p>FIRE DISTRICT = CITY OF ST. CHARLES FIRE DEPARTMENT 200 NORTH SIZONO ST. ST. CHARLES, MO 63301 (636) 949-3242 FIRE MARSHALL: CHRIS NEWBOLD</p>
<p>SEWER DISTRICT = CITY OF ST. CHARLES 200 NORTH SIZONO ST. ST. CHARLES, MO 63301 (636) 949-3237 CONTACT: Greg Tannen JOHN ZIMMERMAN</p>	<p>ELECTRIC SERVICE = AMEREN UE ST. CHARLES DISTRICT 2100 BLUESTONE DR. ST. CHARLES, MO 63303 (636) 925-2206 CONTACT: JIAN-KUANG FELICIA CHILDS</p>
<p>CABLE SERVICE = CHARTER COMMUNICATIONS 4325 SHARPLEY CIR. DARTY CITY, MO 63045 (636) 307-6643 CONTACT: JOHN DANOWSKI</p>	<p>GAS SERVICE = LADLER-GAS COMPANY 3800 FOREST-PARK BLVD. BERKELEY, MO 63134 (314) 498-8437 CONTACT: HEINT-THOMAS DAVID SHERMAN</p>
<p>PHONE SERVICE = AT&T 402 NORTH THIRD ST. ST. CHARLES, MO 63301 (636) 949-3300 CONTACT: SARA WELLS (314) 277-0883 MATT THOMPSON</p>	

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C3.1	GRADING PLAN					
C4.1	SWPPP					
C4.2	SWPP DETAILS					

BENCHMARK

BENCHMARK INFORMATION: CITY OF ST. CHARLES SURVEY DISK STAMPED OSC 04
2003, KNOWS ELEVATION OF 562.77 (5.0 FT.)

SITE BENCHMARK: SOUTH BOLT ON FIRE HYDRANT 193' NORTHEAST OF THE
CENTERLINE INTERSECTION OF MAIN STREET AND LOMBARD STREET 130' NORTH
OF A LIGHT POLE NORTHEAST OF 540' INTERSECTION AND 5.7' EAST OF THE
EASTERN CURB ON MAIN STREET
HAVING AN ELEVATION OF 484.0 FEET.

UTILITY INFORMATION:
UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS,
UTILITY COMPANY MAPS AND PHYSICAL PROPERTY INSPECTION. THE
LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE
ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN
SHOWN ON THIS SURVEY. THE CONTRACTOR WILL BE RESPONSIBLE FOR
THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR
CONSTRUCTION.



CALL 1-800-000-RITE (MISSOURI ONE CALL) TO HAVE LOCATIONS
MARKED IN THE FIELD (SUBSCRIBING UTILITIES REQUIRE 48 HOURS
NOTICE PRIOR TO CONSTRUCTION).

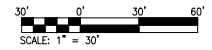
STATE OF MISSOURI
CITY OF ST. CHARLES
SOUTH MAIN STREET
ST. CHARLES, MO 63301
PHONE (636) 949-3207



SOUTH MAIN STREET PROPERTY
MASS GRADING PLAN
ST. CHARLES, MISSOURI 63303
COVER SHEET

COLE ENGINEERING, INC.
11511 LAMAR AVENUE
ST. CHARLES, MISSOURI 63303
PHONE (636) 949-3207
FAX (636) 949-3208
WWW.COLE-ENGINEERING.COM

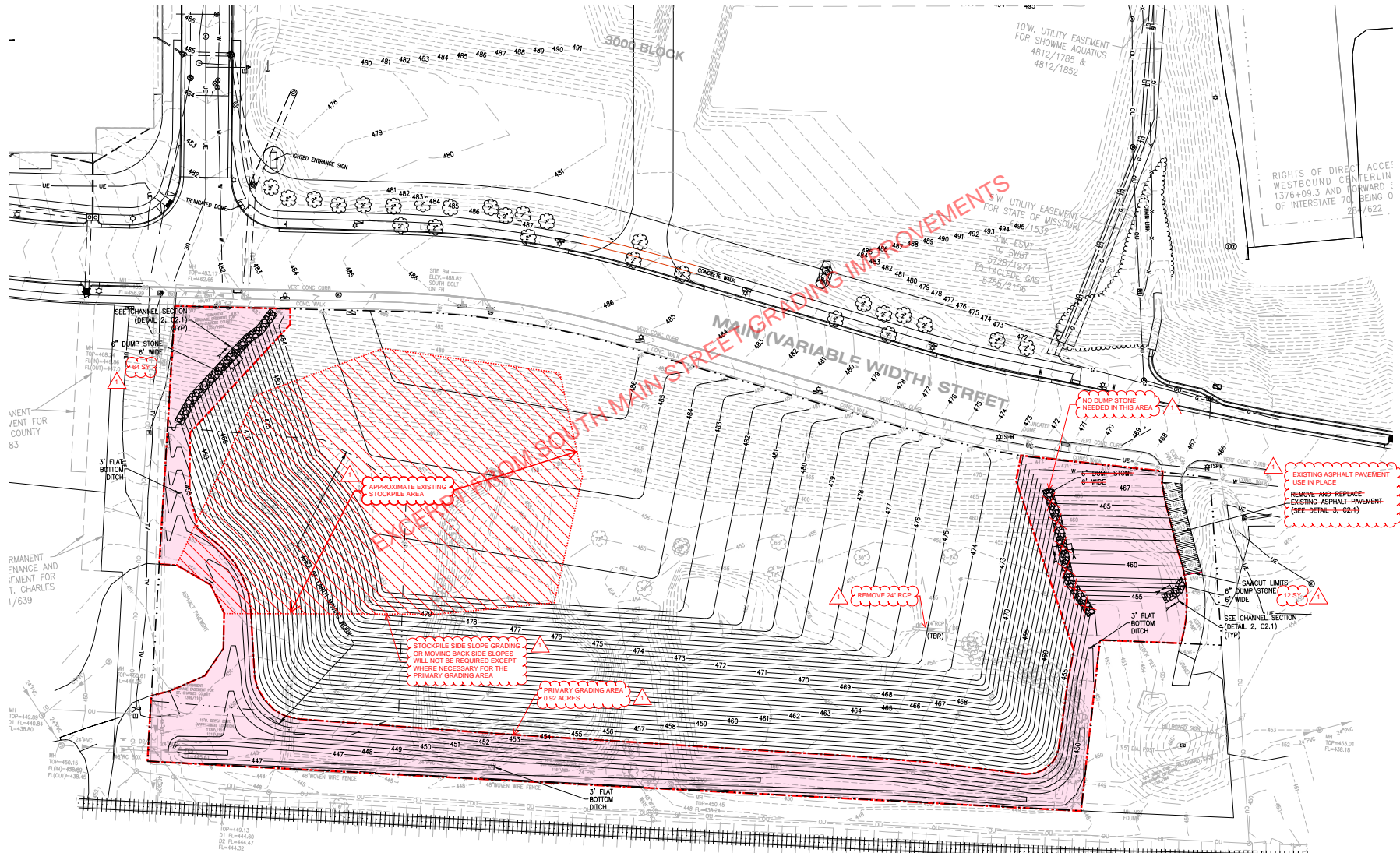
DESIGN/SCALE BY: MTS
DRAWN BY: MTS
CHECKED BY: TDB
DRAWING SCALE: -
DATE: 04/26/2016
Job Number: 16-0057
Sheet Number: C1.0



- GRADING NOTES:**
- CONTRACTOR SHALL MOVE EARTHWORK ON-SITE TO THE PROPOSED ELEVATIONS WITHIN THE PRIMARY GRADING AREA. ANY FILL MATERIAL NEEDED SHALL BE TAKEN FROM THE ON-SITE EXISTING STOCKPILE AREA.
 - THIS IS AN ACTIVE FILL SITE FOR THE CITY. CONTRACTOR SHALL EXPECT COORDINATION WITH OTHER CONTRACTORS AND PROVIDE GUIDANCE ON PLACEMENT OF NEW FILL MATERIAL ON-SITE DURING CONSTRUCTION OF THIS PROJECT.
 - AFTER GRADING OPERATIONS HAVE CEASED, THE PRIMARY GRADING AREA SHALL BE SEEDED.
 - EROSION CONTROL DEVICES INCLUDING SILT FENCE, CHECK DAMS, AND CONSTRUCTION WASHDOWN AREA SHALL REMAIN IN PLACE AFTER PROJECT IS COMPLETED.

UTILITY INFORMATION:

UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THIS SURVEY. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.



NOTE: ALL TREES WITHIN GRADING LIMITS ARE TO BE REMOVED.

COLE ENGINEERS & ARCHITECTS, INC. 1001 W. 11TH ST. SUITE 100 ST. CHARLES, MO 63304
 DATE: JAN 14, 2016 10:47 AM
 DRAWING: SOUTH MAIN STREET GRADING IMPROVEMENTS - FINAL GRADING - 16-0057.dwg

NO.	REVISION DESCRIPTION

DEVELOPER/OWNER: CITY OF ST. CHARLES
 300 N. SECOND STREET
 ST. CHARLES, MO 63304
 PHONE (636) 948-9207



SOUTH MAIN STREET PROPERTY
 MASS GRADING PLAN
 ST. CHARLES, MISSOURI 63303
 GRADING PLAN



DESIGN/CALC BY	MJS
DRAWN BY	MJS
CHECKED BY	TDB
DRAWING SCALE	
DATE	04/26/2016
Job Number	16-0057
Sheet Number	C3.1

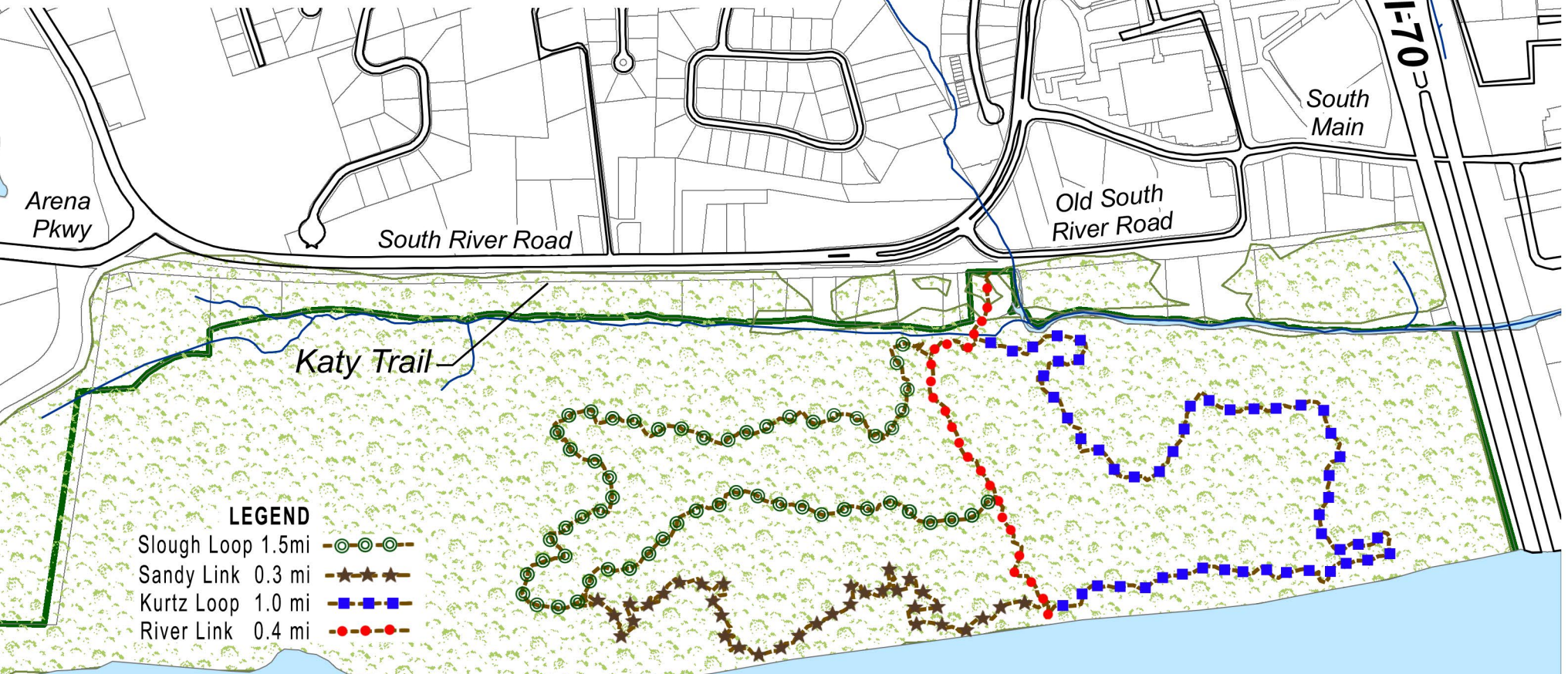
Bangert Island
1704 S. River Road
St. Charles, MO 63303

Bangert Island is
160 acres in size.

Directions:
From I-70 go south on
Fifth St./S. River Rd.
for 0.5 mi. Turn left on
Old South River Rd. to
entrance (along Katy Trail).

Trail Closure Info:
(636) 707-0011

To sign-up for alerts or
use the free app click
on **Rainout Line**
at www.stccparks.org



LEGEND

- Slough Loop 1.5mi
- Sandy Link 0.3 mi
- Kurtz Loop 1.0 mi
- River Link 0.4 mi

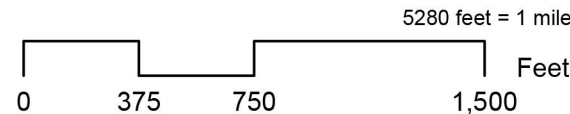
MISSOURI RIVER

Scan QR Code
To View Map
or visit stccmo.org



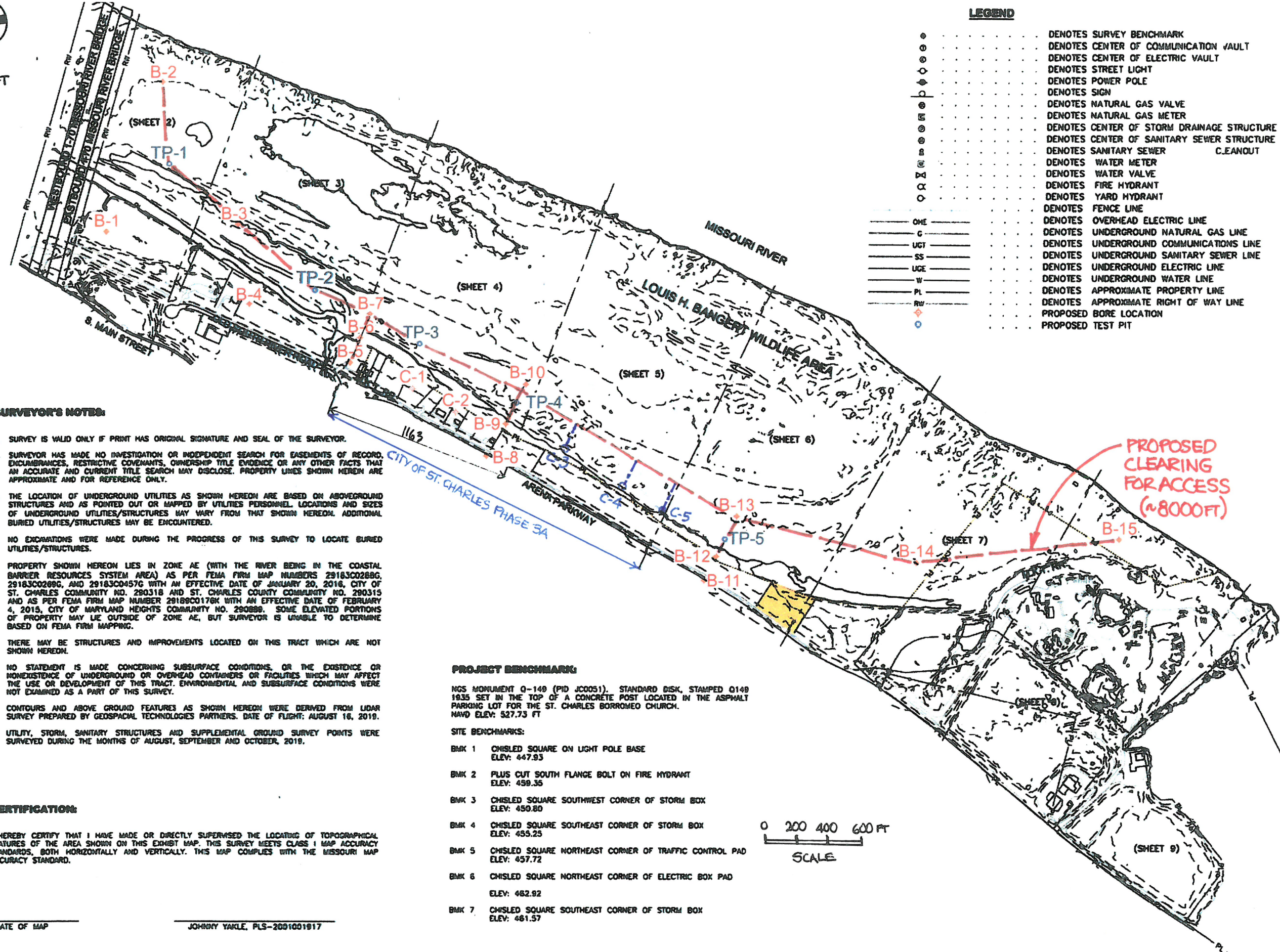
**St. Charles County
Bangert Island**

St. Charles County Parks, 201 N. Second St., S. 510, St. Charles, MO, 63301 636.949.7535 www.stccparks.org





1" = 600 FT



VICINITY MAP
NOT TO SCALE

LEGEND

- DENOTES SURVEY BENCHMARK
- DENOTES CENTER OF COMMUNICATION VAULT
- DENOTES CENTER OF ELECTRIC VAULT
- DENOTES STREET LIGHT
- DENOTES POWER POLE
- DENOTES SIGN
- DENOTES NATURAL GAS VALVE
- DENOTES NATURAL GAS METER
- DENOTES CENTER OF STORM DRAINAGE STRUCTURE
- DENOTES CENTER OF SANITARY SEWER STRUCTURE
- DENOTES SANITARY SEWER C.EANOUT
- DENOTES WATER METER
- DENOTES WATER VALVE
- DENOTES FIRE HYDRANT
- DENOTES YARD HYDRANT
- DENOTES FENCE LINE
- DENOTES OVERHEAD ELECTRIC LINE
- DENOTES UNDERGROUND NATURAL GAS LINE
- DENOTES UNDERGROUND COMMUNICATIONS LINE
- DENOTES UNDERGROUND SANITARY SEWER LINE
- DENOTES UNDERGROUND ELECTRIC LINE
- DENOTES UNDERGROUND WATER LINE
- DENOTES APPROXIMATE PROPERTY LINE
- DENOTES APPROXIMATE RIGHT OF WAY LINE
- DENOTES PROPOSED BORE LOCATION
- DENOTES PROPOSED TEST PIT

SURVEYOR'S NOTES:

1. SURVEY IS VALID ONLY IF PRINT HAS ORIGINAL SIGNATURE AND SEAL OF THE SURVEYOR.
2. SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. PROPERTY LINES SHOWN HEREIN ARE APPROXIMATE AND FOR REFERENCE ONLY.
3. THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVEGROUND STRUCTURES AND AS POINTED OUT OR MAPPED BY UTILITIES PERSONNEL. LOCATIONS AND SIZES OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM THAT SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.
4. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES.
5. PROPERTY SHOWN HEREON LIES IN ZONE AE (WITH THE RIVER BEING IN THE COASTAL BARRIER RESOURCES SYSTEM AREA) AS PER FEMA FIRM MAP NUMBERS 29183C0288G, 29183C0289G, AND 29183C0457G WITH AN EFFECTIVE DATE OF JANUARY 20, 2016, CITY OF ST. CHARLES COMMUNITY NO. 290318 AND ST. CHARLES COUNTY COMMUNITY NO. 290315 AND AS PER FEMA FIRM MAP NUMBER 29183C0176K WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2015, CITY OF MARYLAND HEIGHTS COMMUNITY NO. 290889. SOME ELEVATED PORTIONS OF PROPERTY MAY LIE OUTSIDE OF ZONE AE, BUT SURVEYOR IS UNABLE TO DETERMINE BASED ON FEMA FIRM MAPPING.
6. THERE MAY BE STRUCTURES AND IMPROVEMENTS LOCATED ON THIS TRACT WHICH ARE NOT SHOWN HEREON.
7. NO STATEMENT IS MADE CONCERNING SUBSURFACE CONDITIONS, OR THE EXISTENCE OR NONEXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES WHICH MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT. ENVIRONMENTAL AND SUBSURFACE CONDITIONS WERE NOT EXAMINED AS A PART OF THIS SURVEY.
8. CONTOURS AND ABOVE GROUND FEATURES AS SHOWN HEREON WERE DERIVED FROM LIDAR SURVEY PREPARED BY GEOSPACIAL TECHNOLOGIES PARTNERS. DATE OF FLIGHT: AUGUST 16, 2019.
9. UTILITY, STORM, SANITARY STRUCTURES AND SUPPLEMENTAL GROUND SURVEY POINTS WERE SURVEYED DURING THE MONTHS OF AUGUST, SEPTEMBER AND OCTOBER, 2019.

CERTIFICATION:

I HEREBY CERTIFY THAT I HAVE MADE OR DIRECTLY SUPERVISED THE LOCATING OF TOPOGRAPHICAL FEATURES OF THE AREA SHOWN ON THIS EXHIBIT MAP. THIS SURVEY MEETS CLASS 1 MAP ACCURACY STANDARDS, BOTH HORIZONTALLY AND VERTICALLY. THIS MAP COMPLIES WITH THE MISSOURI MAP ACCURACY STANDARD.

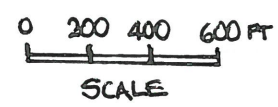
DATE OF MAP: _____ SURVEYOR: JOHNNY YARLE, PLS-2001001917

PROJECT BENCHMARK:

NGS MONUMENT 0-149 (PID JC0051). STANDARD DISK, STAMPED 0149 1935 SET IN THE TOP OF A CONCRETE POST LOCATED IN THE ASPHALT PARKING LOT FOR THE ST. CHARLES BORROMEO CHURCH. NAVD ELEV: 527.73 FT

SITE BENCHMARKS:

- BMK 1 CHISLED SQUARE ON LIGHT POLE BASE
ELEV: 447.93
- BMK 2 PLUS CUT SOUTH FLANGE BOLT ON FIRE HYDRANT
ELEV: 439.35
- BMK 3 CHISLED SQUARE SOUTHWEST CORNER OF STORM BOX
ELEV: 450.80
- BMK 4 CHISLED SQUARE SOUTHEAST CORNER OF STORM BOX
ELEV: 455.25
- BMK 5 CHISLED SQUARE NORTHEAST CORNER OF TRAFFIC CONTROL PAD
ELEV: 457.72
- BMK 6 CHISLED SQUARE NORTHEAST CORNER OF ELECTRIC BOX PAD
ELEV: 482.92
- BMK 7 CHISLED SQUARE SOUTHEAST CORNER OF STORM BOX
ELEV: 481.57



MISSOURI CERTIFICATE OF AUTHORITY # 00000
10400 HOLMES ROAD, SUITE 650
KANAS CITY, MO 64114

PROJECT MANAGER	J. DENLINGER
SURVEY MANAGER	J. YARLE, RLS
PROJECT SURVEYOR	J. JASPER, RLS

DRAFT

USACE KANSAS CITY DISTRICT
BANGERT ISLAND SECTION 22 PAS
Flood Risk and Riverfront Transformation
ST. CHARLES, MISSOURI

TOPOGRAPHIC SURVEY
AND BORINGS LOCATION MAP



Note: Date of Google Earth™ photo is October 16, 2018.

Approximate Scale: 1 inch = 140 feet

St. Charles Riverpointe, Phase 1 – Mass Fill Site
AERIAL VIEW OF SITE AND APPROXIMATE
LOCATIONS OF BORINGS

REPORT
2019011217

**PRELIMINARY GEOTECHNICAL INVESTIGATION FOR
RIVERPOINTE, PHASE 1 – MASS FILL SITE
ST. CHARLES, MISSOURI**

Prepared for



City of St. Charles, Missouri

Prepared by



**GEOTECHNICAL
INVESTIGATIONS EXCERPT**



January 3, 2020

The Professional whose signature and personal seal appear hereon assumes responsibility only for what appears in the attached report and disclaims (pursuant to Section 327.411 RSMo) any responsibility for all other plans, estimates, specifications, reports, or other documents or instruments not sealed by the undersigned Professional relating to or intended to be used for any part or parts of the project to which this report refers.



January 3, 2020

City of St. Charles, Missouri
200 N. Second Street
St. Charles, Missouri 63301-2851

Attention: Mr. Daniel Mann, P.E.
Assistant City Engineer – Development
Department of Engineering

RE: Report of Preliminary Geotechnical Investigation for
Riverpointe Development, Phase 1 – Mass Fill Site
St. Charles, Missouri

This report presents our findings and recommendations from our preliminary geotechnical investigation of the mass fill site along the southeast side of South Main Street, immediately upstream of the eastbound I-70 bridge over the Missouri River. This area will be part of Phase 1 of the Riverpointe Development. The purposes of this preliminary investigation are to characterize the mass fill that has been placed on this portion of the 20-acre site and to make general recommendations for the further development of the full site. The investigation was done under Reitz & Jens' Engineering Services Contract (2019-09-30) with the City of St. Charles, Missouri ("City") which was signed October 9, 2019. Subsequent geotechnical investigations will be required once specific site improvement plans have been developed.

SITE DESCRIPTION

The site for this investigation includes about 5 acres, from the southeast end of Lombard Street to an access drive along the I-70 eastbound bridge, and from South Main Street to the Katy Trail. An aerial photo of the site is reproduced in Figure 1. This photo is dated October 16, 2018. The site has changed drastically since then. The City has been stockpiling fill and demolition debris on the site since about October 2018, and has had Gershenson Construction Company periodically spread the materials over the site with a dozer. Some early piles of fill are visible in Figure 1. Gershenson has not been compacting the materials other than tracking with the dozer. The top of the fill is now about even with South Main Street (el 480 to 485) from Lombard Street and about 300 feet toward the northeast. While South Main Street drops in elevation toward the I-70 bridge to about el. 468, the existing fill remains relatively level, such that there is a steep slope, about 10 feet or more in height, at the northeast end (just past Boring B-6 in Figure 1). The relatively flat portion of the fill is generally covered with soil, with some exposed concrete and asphalt concrete rubble. As observed periodically by Reitz & Jens, some piles of materials were placed during October and November which contained large precast concrete, large asphalt debris, wood, plastic conduit, tree limbs, and bags of topsoil and straw. The lower northeast end of the site (by the I-70 bridge) was initially covered with large concrete rubble and was impassable. When our borings were done in late November, the site had been generally leveled, with some piles around the north end. Borings B-4, B-7 and B-9 were drilled close to the south and east limits of the level fill area.

It appears that the original ground surface along Old South River Road and the Katy Trail is at about el. 450 to 453. Therefore, there is now up to about 35 feet of fill over this portion of the site. The original embankment for South Main Street is visible in the photo in Figure 1. So, a portion of the fill in the vicinity of Borings B-4 and B-5 is part of this original embankment fill.

The remainder of the 20-acre site extends to the south along Old South River Road. Some of the stockpiled fill will be placed in this area. Borings B-1, B-2 and B-3 were made in this area along Old South River Road, as shown in Figure 1. The building visible in Figure 1 had been recently demolished when our borings were made. The rubble from the building was left on site.

PROJECT DESCRIPTION

The long-term plan is to move some of the fill material to the properties to the southwest, and that the general grade will be about 3 feet above the 500-year flood level of the Missouri River, or about el. 458. A conceptual plan for Phase 1 is reproduced in Figure 1A. The site which is the subject of this investigation is between South Main Street along the northwest side to Old South River Road and the Katy Trail along the southeast side. The conceptual plan shows a large, multi-story building along the north side of the extension of Lombard Street. Smaller buildings are planned along the southeast side of South Main Street, with surface parking along the river side of these buildings and at the northeast end of the site along the I-70 bridge.

FIELD INVESTIGATION

The borings were completed on November 26 and 27, 2019, by Midwest Drilling, Inc. under a subcontract with Reitz & Jens. The borings were made with a CME 550 ATV-mounted drill rig. The rig is equipped with an automatic Standard Penetration Test (SPT) hammer. The borings were advanced using 4.25-inch diameter solid-stem continuous-flight augers (CFA) or 2.25-inch I.D. continuous-flight hollow-stem augers (HSA).

The borings were staked prior to drilling by Reitz & Jens. However, because the final grading extended the level area of the fill, the borings were relocated. Boring B-8 was omitted. The borings were located using a hand-held GPS with an accuracy of about ± 15 feet. The elevation of the ground surface at the borings were surveyed with a level and rod by Reitz & Jens and using temporary benchmarks set by HDR Engineering, Inc. for the USACE Kansas City District's evaluation of the Bangert Island Riverfront Transformation Project.

Reitz & Jens had a geotechnical engineer in the field to direct the investigation, collect samples, and log the borings. The drilling and sampling were done in general accordance with ASTM procedures. All of the borings were completed to the planned depth of 35 feet. Auger or sampler refusal on rubble occurred in Boring B-4 at 21.7 feet; the boring was offset 8 feet and was re-drilled. The borings were logged in the field based upon cuttings, drilling characteristics and recovered samples. The boring logs were subsequently modified as appropriate based on laboratory test results. The boring logs are presented in Figures 2-1 through 2-8. The key to the boring logs and notes are presented in Figure 2-0.

Samples of subsurface soils were obtained at about 5-foot intervals. Samples were taken using either: 1) a hydraulically pushed, 3-inch O.D., thin-wall Shelby tube sampler in general accordance with ASTM