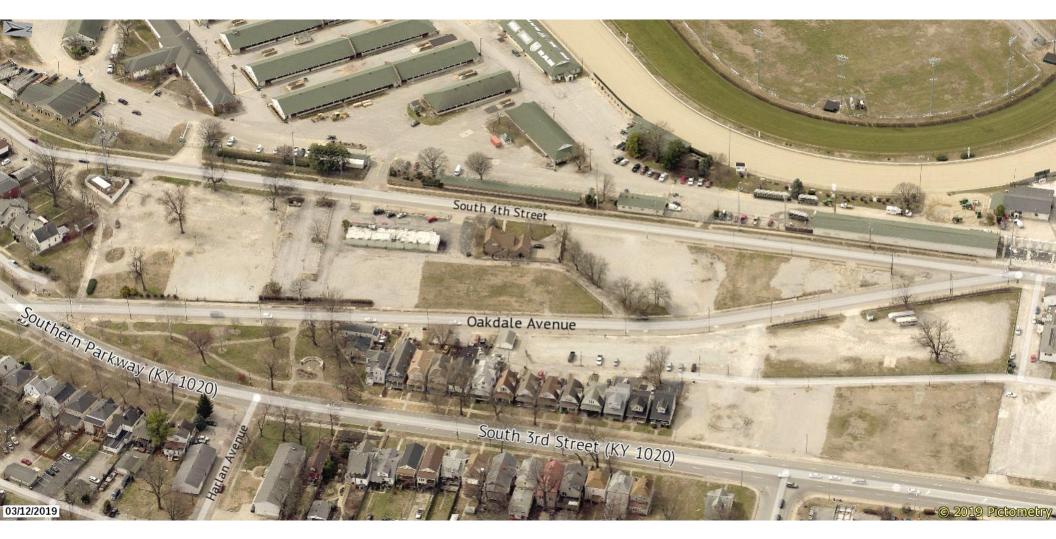
# Churchill Downs 4<sup>th</sup> Street / Oakdale Terrace Closure & Barn Facilities



## LD&T August 22, 2019



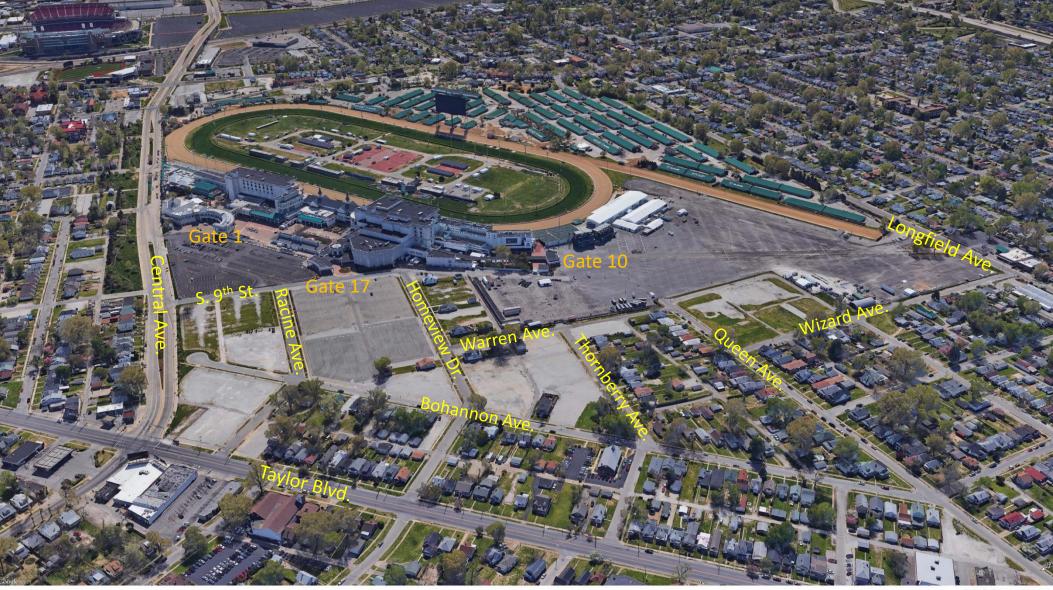
### Major Capital Improvements at Churchill Downs Since 2010

- 2010 Permanent Lighting for Track
- 2013 Paddock Plaza and The Mansion
- 2014 Big Board and Grandstand Pavilion
- 2015 Winners Circle Suites and The Courtyard
- 2016 Stakes Room and Turf Club
- 2017 Loft at Aristides Lounge and 2<sup>nd</sup> Floor Clubhouse
- 2018 Starting Gate Suites and Colonnade, Parking, and Transportation Project





## West Parking Lot Prior to Improvements



\*GOOGLE EARTH



## West Parking Lot Improvements





## West Parking Lot



## West Parking Lot



#### Plaza Area

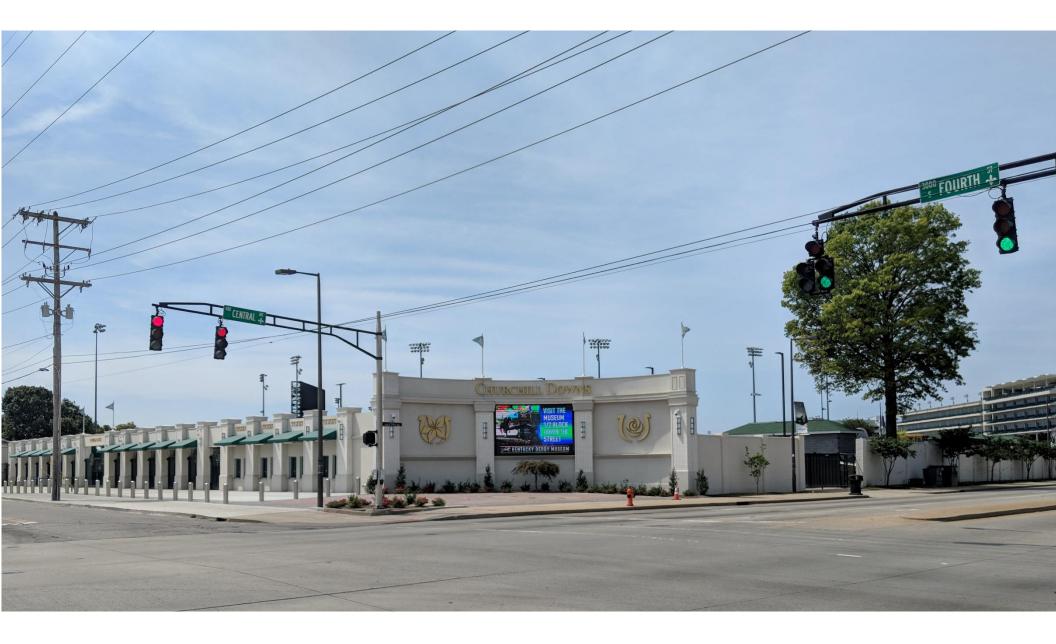


## West Parking Lot



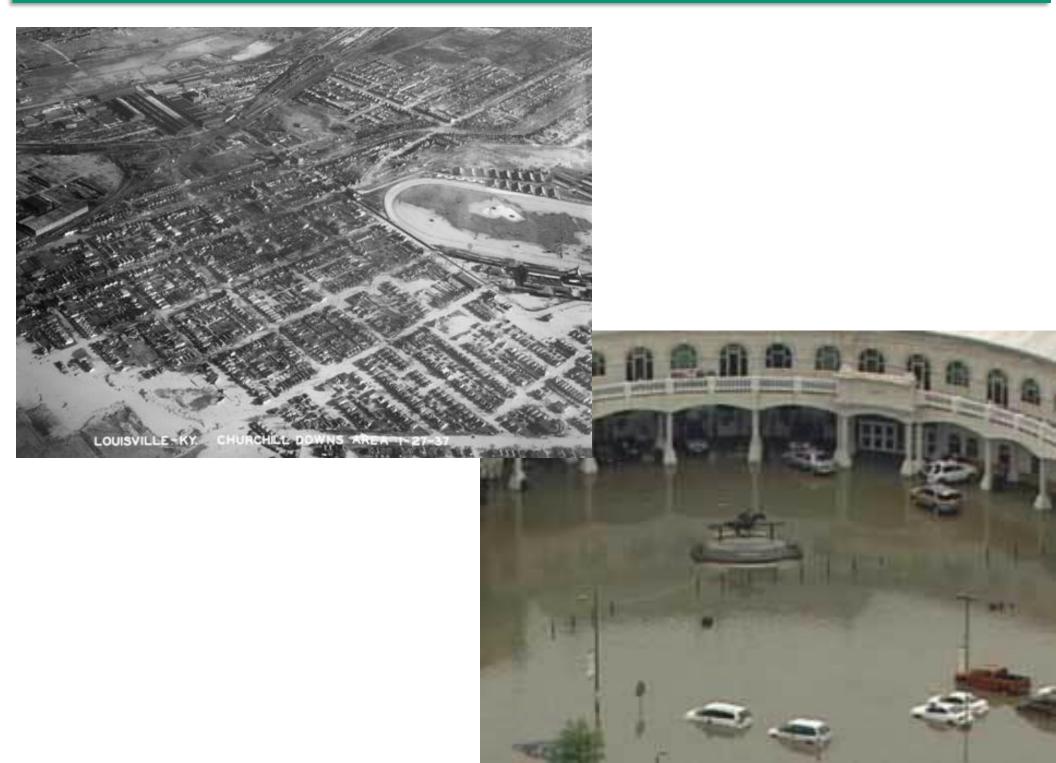








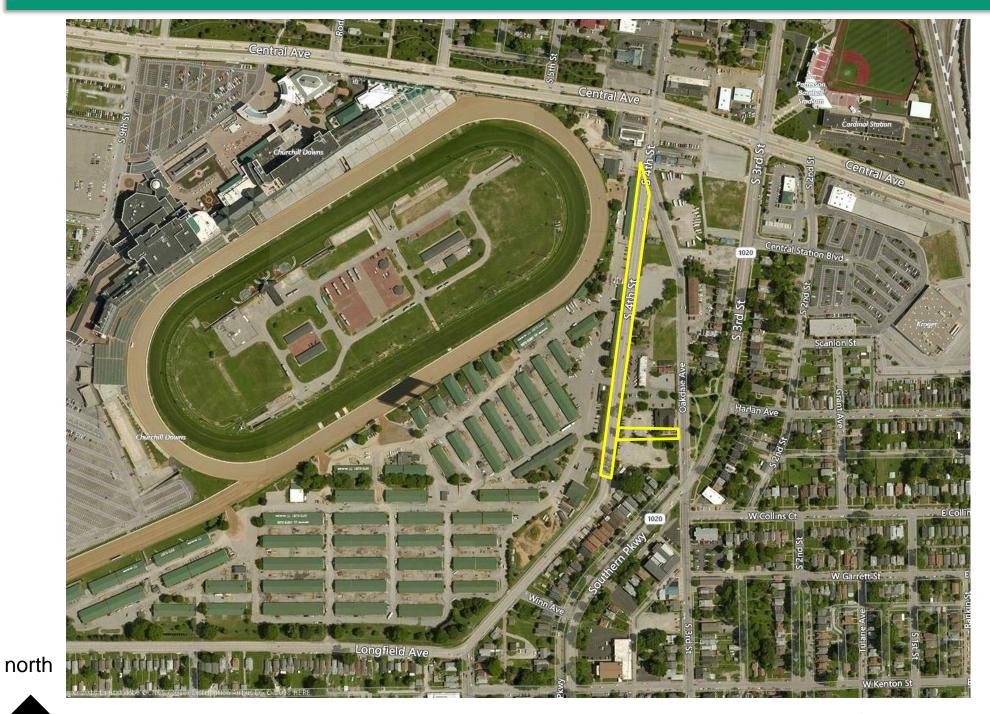
## A History of Flooding



## **Infiltration Basin Construction – Photo Overlay**

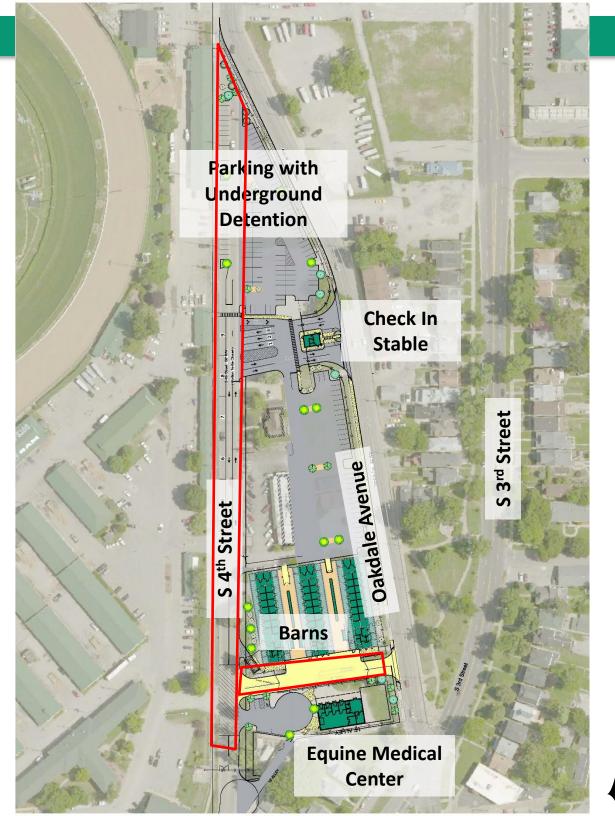


#### Aerial Vicinity & Closure Area: S 4<sup>th</sup> Street & Oakdale Terrace



CHURCHILL DOWNS

#### Site Plan



CHURCHILL DOWNS

north



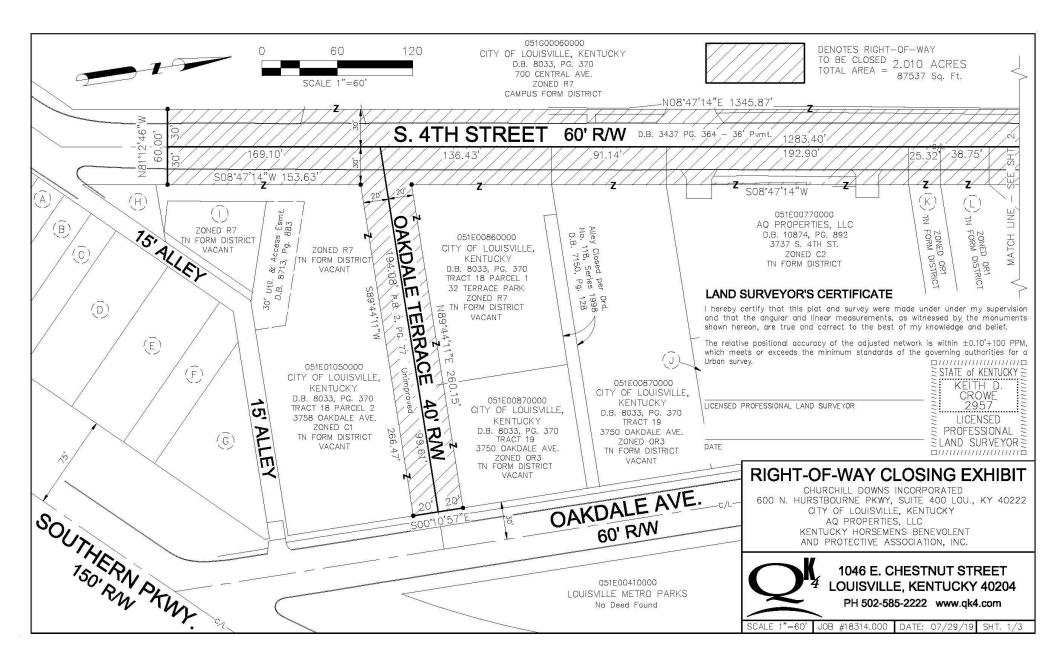
#### Architectural Renderings



#### Neighborhood Meeting – 8/7/19 at 6:00 pm

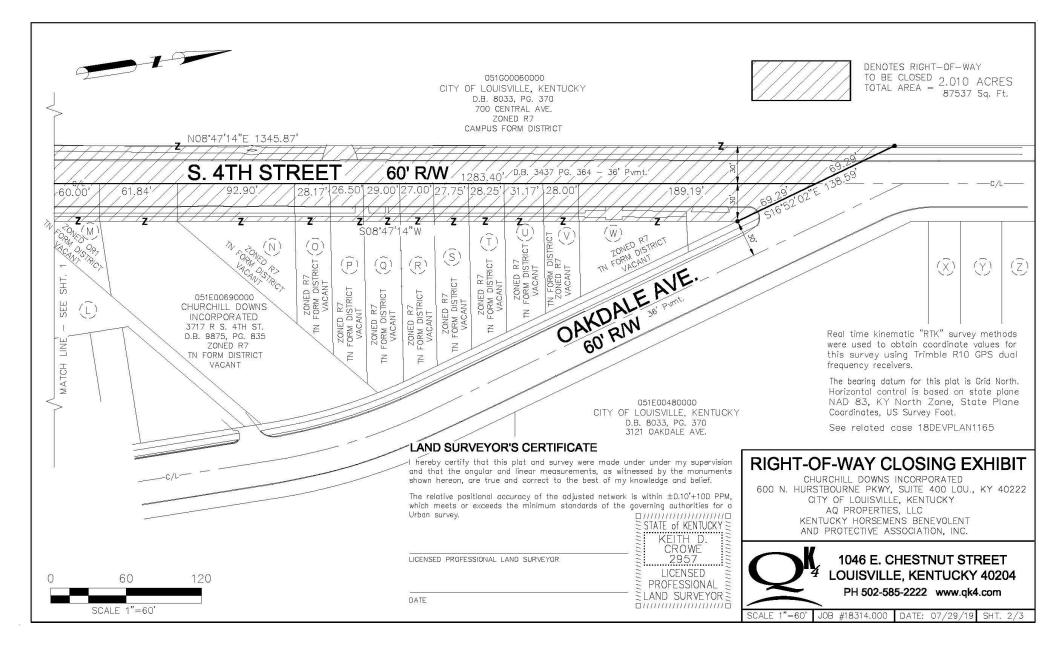








#### **Closure Plat**



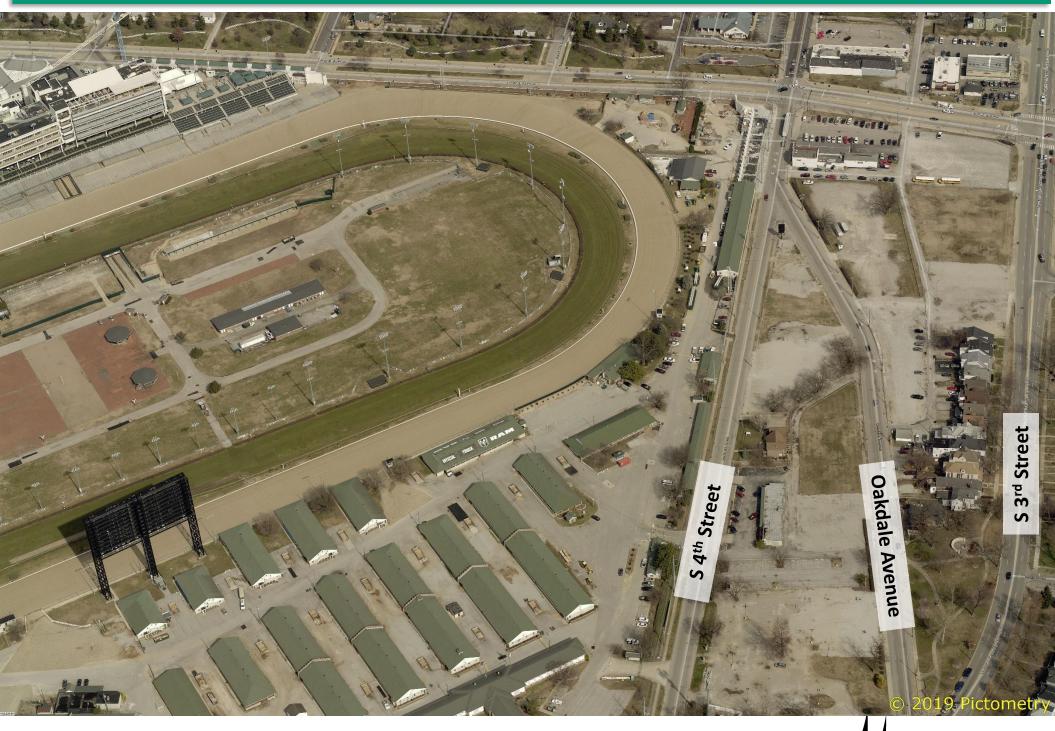


#### **Closure Plat**

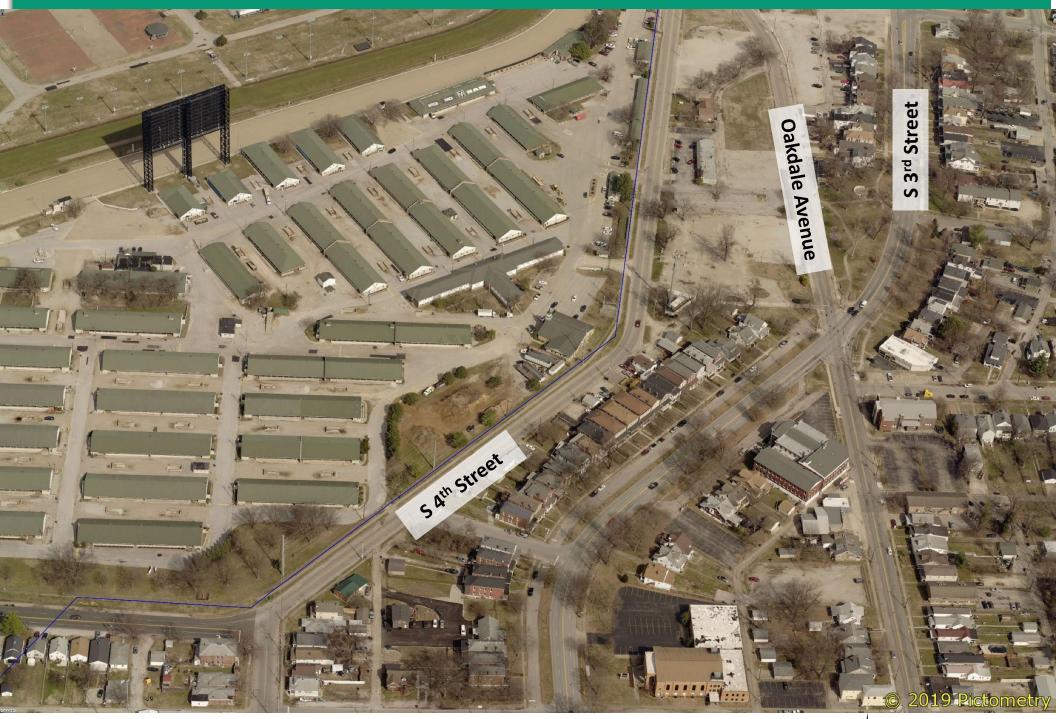
(A) MICHAEL BELL STEPHANIE BELL D.B. 9312, PG. 381 3814 SOUTHERN PKWY	ADJACENT PROPERTY OWNERS	051E00600000 CHURCHILL DOWNS INCORPORATED D.B. 7206, PG. 448 3701 S. 4TH ST.	
(B) 051F100340000 GENE C. BELL D.B. 6191, PG. 547 3812 SOUTHERN PKWY	051E00680000 (N) CHURCHILL DOWNS INCORPORATED D.B. 9875, PG. 835 3717 S. 4TH ST. 051E00670000	051E00590000 (W) CHURCHILL DOWNS INCORPORATED D.B. 7146, PG. 680 3141 S. 4TH ST. 051E00460000	CHURCHILL DOWNS
(C) ERIC JAMIESON D.B. 10330, PG. 21 3810 SOUTHERN PKWY	<ul> <li>CHURCHILL DOWNS INCORPORATED</li> <li>D.B. 9710, PC. 593</li> <li>3715 S. 4TH ST.</li> <li>051E00660000</li> </ul>	<ul> <li>CHURCHILL DOWNS INCORPORATED</li> <li>D.B. 6050, PG. 684</li> <li>3117 S. 4TH ST.</li> <li>051E00450000</li> <li>CITY OF LOUISVILLE, KENTUCKY</li> </ul>	SOUTHERN PKWY S. 4TH ST.
(D) JOHN R. ELLIS, III JANE M. ELLIS, III JANE M. ELLIS D.B. 9420, PG. 918 3806 SOUTHERN PKWY 051F00370000	<ul> <li>(P) CITY OF LOUISVILLE, KENTUCKY</li> <li>D.B. 8033, PG. 370</li> <li>3713 S. 4TH ST.</li> <li>051E00650000</li> <li>(Q) CHURCHILL DOWNS INCORPORATED</li> <li>D.B. 7138, PG. 495</li> <li>3711 S. 4TH ST.</li> </ul>	<ul> <li>D.B. 8033, PG. 370</li> <li>3113 S. 4TH ST.</li> <li>051E00440000</li> <li>CHURCHILL DOWNS INCORPORATED</li> <li>D.B. 5855, PG. 778</li> <li>3111 S. 4TH ST.</li> </ul>	S. 3RD ST.
(Ê) GEORGE T. PAYNE D.B. 4985, PG. 730 3804 SOUTHERN PKWY	(R) 051E00640000 OTY OF LOUISVILLE, KENTUCKY D.B. 7885, PG. 40 3709 S. 41H ST.	APPLICANTS	S. 2ND ST. HANDRAND
051F00380000 (F) KEVIN D. TRIPLETT D.B. 7700, PG. 842 3802 SOUTHERN PKWY	(S) CHURCHILL DOWNS INCORPORATED D.B. 9371, PG. 88 3707 S. 4TH ST.	CHURCHILL DOWNS INCORPORATED 600 n. hurstbourne pkwy, ste 400 louisville, ky 40222-5389	S. ISS ST. IF IS
(G) CHURCHILL DOWNS INCORPORATED D.B. 5917, PG. 204 3800 SOUTHERN PKWY.	0545000000	CITY OF LOUISVILLE, KENTUCKY 527 w. jefferson street louisville, ky 40202–2814	CLOSURE NOTES: 1. BLANKET CROSS ACCESS AGREEMENT TO BE RECORDED AT OR
(H) OS1600070000 CITY OF LOUISVILLE, KENTUCKY D.B. 8033, PG. 370 051E01040000	05100 3. 41H 31. 051E00610000 (U) CHURCHILL DOWNS INCORPORATED D.B. 10308, PG. 961 3703 S. 4TH ST.	AQ PROPERTIES, LLC 600 n. hurstbourne pkwy, ste 400 Louisville, ky 40222-5389	BEFORE THE TIME OF ROAD CLOSURE RECORDING. 2. PROPOSED USE OF AREA OF ROAD CLOSURE IS INTERNAL CIRCULATION FOR EXPANDED BACKSIDE OPERATIONS AT CHURC
() D.B. 8713, PG. 883 TRACT 1 3756 OAKDALE AVE.	(V) 051E00600000 CHURCHILL DOWNS INCORPORATED D.B. 7206, PG. 448 3701 S. 4TH ST.	KENTUCKY HORSEMENS BENEVOLENT AND PROTECTIVE ASSOCIATION, INC. 3733 S. 4TH STREET	DOWNS RACE TRACK. 3. UPON CLOSURE, 4TH STREET RIGHT-OF-WAY TO BE DEDICATE A JOINT PUBLIC UTILITY EASEMENT TO SERVE THE EXISTING
(J) CHURCHILL DOWNS INCORPORATED D.B. 9541, PG. 545 3750 OAKDALE AVE.	LAND SURVEYOR'S	LOUISVILLE, KY 40214-1712	UTILITIES TO REMAIN WITHIN THE 4TH STREET CORRIDOR INCLU BUT NOT LIMITED TO ELECTRIC, GAS TELECOMMUNICATIONS, AN SEWER.
(K) AND PROTECTIVE ASSOCIATION, INC D.B. 9681, PG. 547 3731 S. 4TH ST.	c. and that the angular and lin- shown hereon, are true and c	t and survey were made under under my supervision ear measurements, as witnessed by the monuments correct to the best of my knowledge and belief.	RIGHT-OF-WAY CLOSING EXHIB CHURCHILL DOWNS INCORPORATED 600 N. HURSTBOURNE PKWY, SUITE 400 LOU., KY 402
(L) AND PROTECTIVE ASSOCIATION, IN D.B. 9681, PG. 547 3729 S. 4TH ST.	which meets or exceeds the r NT Urban survey.	cy of the adjusted network is within ±0.10 <sup>+</sup> +100 PPM, minimum standards of the governing authorities for a STATE of KENTUCKY KEITH D. SURVEYOR	CITY OF LOUISVILLE, KENTUCKY AQ PROPERTIES, LLC KENTUCKY HORSEMENS BENEVOLENT AND PROTECTIVE ASSOCIATION, INC.
(M) 051E00700000 KENTUCKY HORSEMENS BENEVOLET AND PROTECTIVE ASSOCIATION, INF D.B. 9681, PG. 547 3727 S. 41H ST.	C	SURVEYOR 2957 LICENSED PROFESSIONAL	4 1046 E. CHESTNUT STREET LOUISVILLE, KENTUCKY 40204 PH 502-585-2222 www.qk4.com
	DATE		JOB #18314.000 DATE: 07/29/19 SHT. 3



## Aerial Image

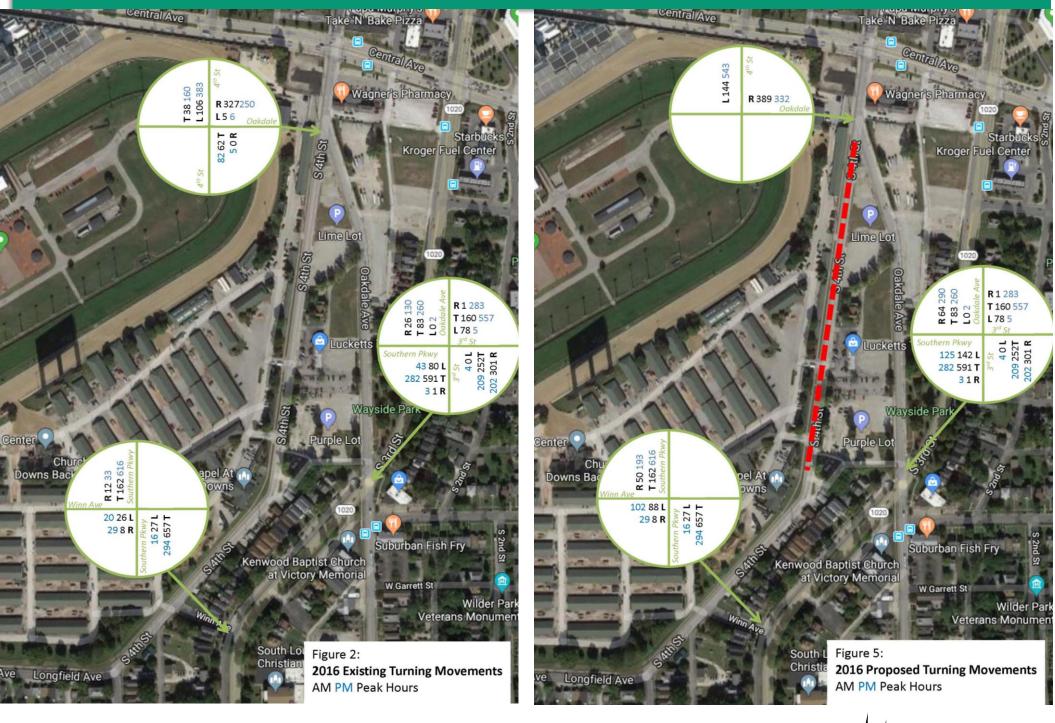


## Aerial Image



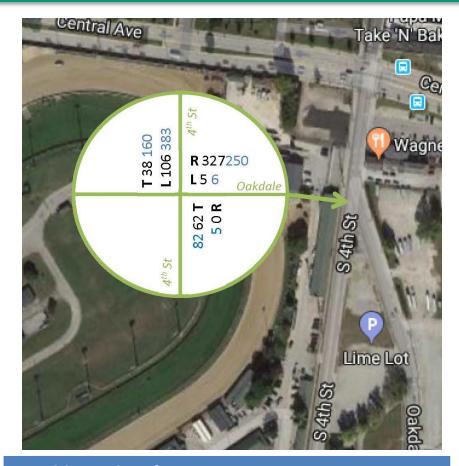


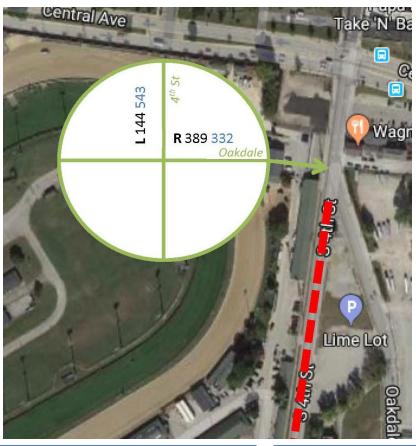
#### **Traffic Study Summary**





#### Traffic Study Summary – 4<sup>th</sup>/Oakdale Intersection





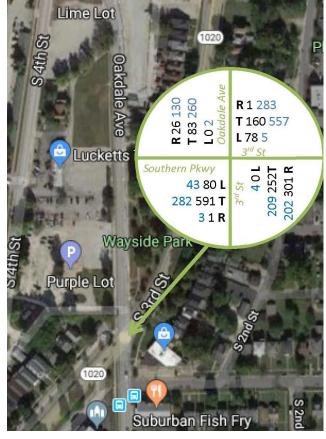
Southbound, Left					
	AM	PM	LOS (AM/PM)		
Existing	106	383	A/A		
Proposed	144	543	N/A		
Northbound, Left/Right					
Northbound	, Left/Right				
Northbound	, Left/Right AM	PM	LOS (AM/PM)		
Northbound Existing			LOS (AM/PM) B/C		

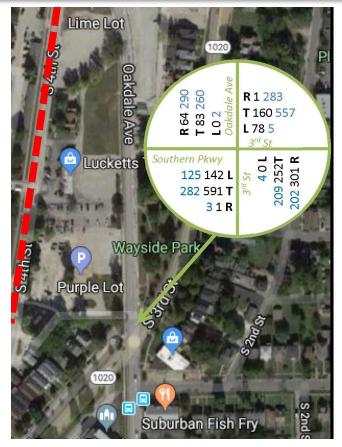
Southbound	, Left		Sc
	AM	PM	A
Increase	38	160	PN

Southbound, Left				
AM	AM 0.6 car/minute			
PM	PM 2.6 cars/minute			

Northbound, Left/Right			Northbound, Left/Right		
	AM	PM	AM	1.0 car/minute	
Increase	62	82	PM	1.4 cars/minute	
				Churchill Downs	

#### Traffic Study Summary – 3<sup>rd</sup> /Oakdale Intersection





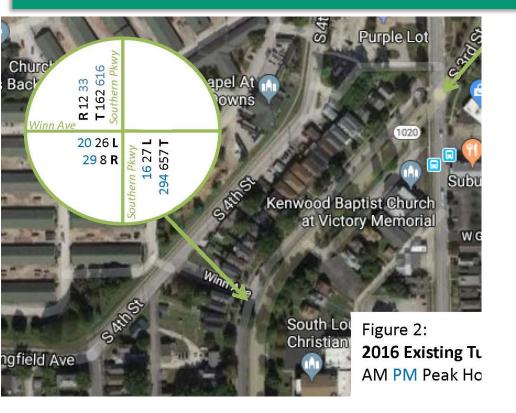
Southbound, Right		Southbound, Right		Southbound, Right				
	AM	PM	LOS (AM/PM)		AM	PM	AM	0.6 car/minute
Existing	26	130	C/C	Increase	38	160	PM	2.7 cars/minute
Proposed	64	290	C/C					

Eastbound, Left					
	AM	PM	LOS (AM/PM)		
Existing	80	43	C/C		
Proposed	142	125	C/C		

Eastbound	, Left		Eastb	ound, I
	AM	PM	AM	1.0 c
Increase	62	82	PM	1.4 c

Eastbound, Left					
١M	1.0 car/minute				
PM	1.4 cars/minute				
4	Churchill Downs				

#### **Traffic Study Summary – Winn/Southern Parkway Intersection**





Southbound, Right					
	AM	PM	LOS (AM/PM)		
Existing	12	33	A/A		
Proposed	50	193	A/A		

Southbound, Right			Southbound, Right		
A	M	PM	AM	0.6 car/minute	
Increase 3	8	160	PM	2.7 cars/minute	

Eastbound, Left				
	AM	PM	LOS (AM/PM)	
Existing	26	20	B/B	
Proposed	88	102	B/C	

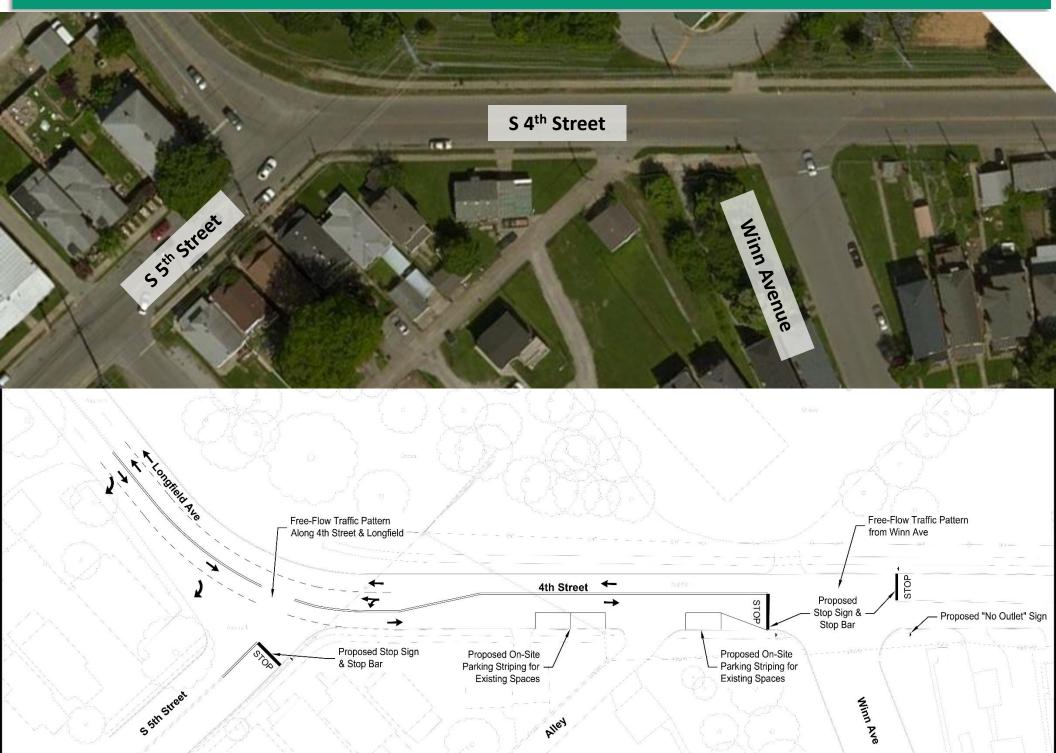
Eastbound, Left			Eastbound, Left/Thru	
	AM	PM	AM	1.0 car/minute
Increase	62	82	PM	1.4 cars/minute
				Churchill Down

#### LOS Drop Impacts

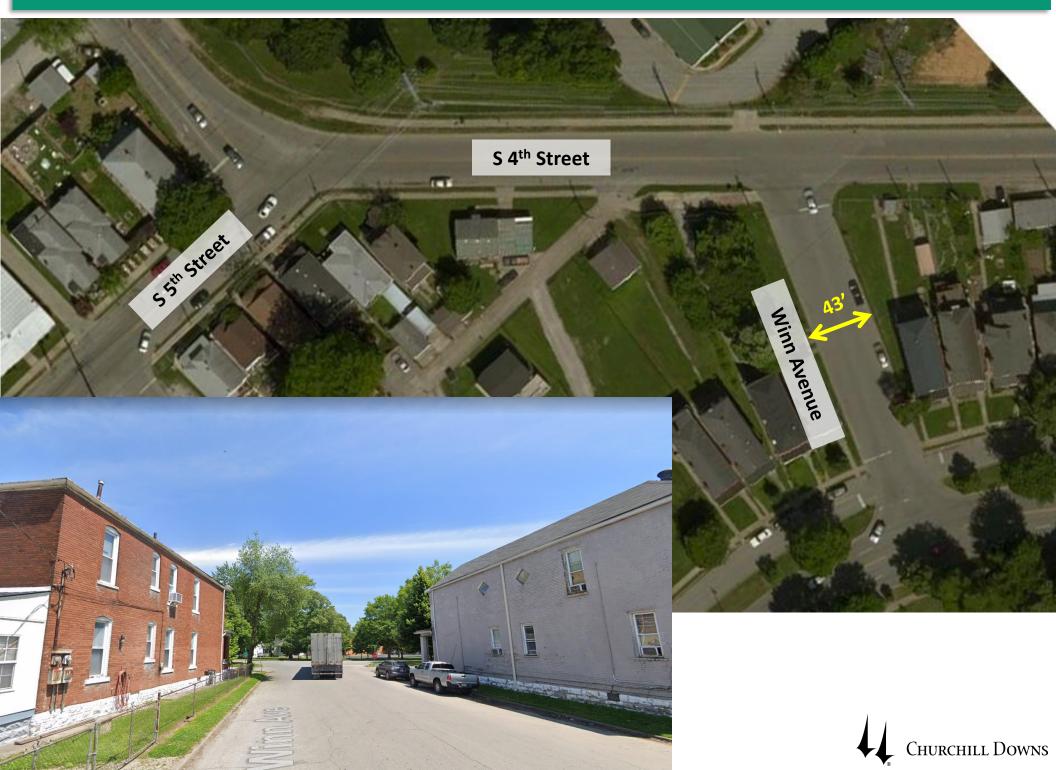




#### **Striping & Signage Improvements**

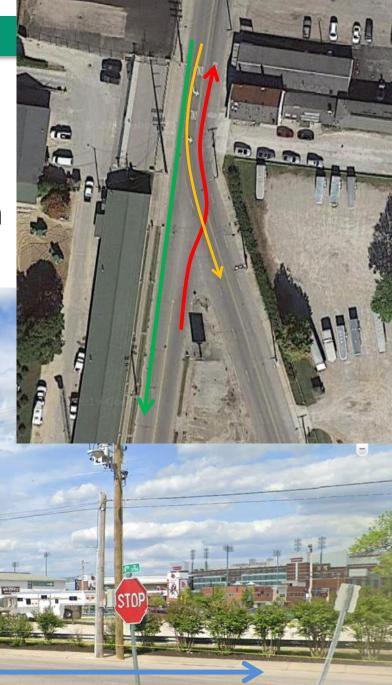


#### Winn Avenue – Existing Conditions



#### **Existing Conditions / Possible Conflict Points**

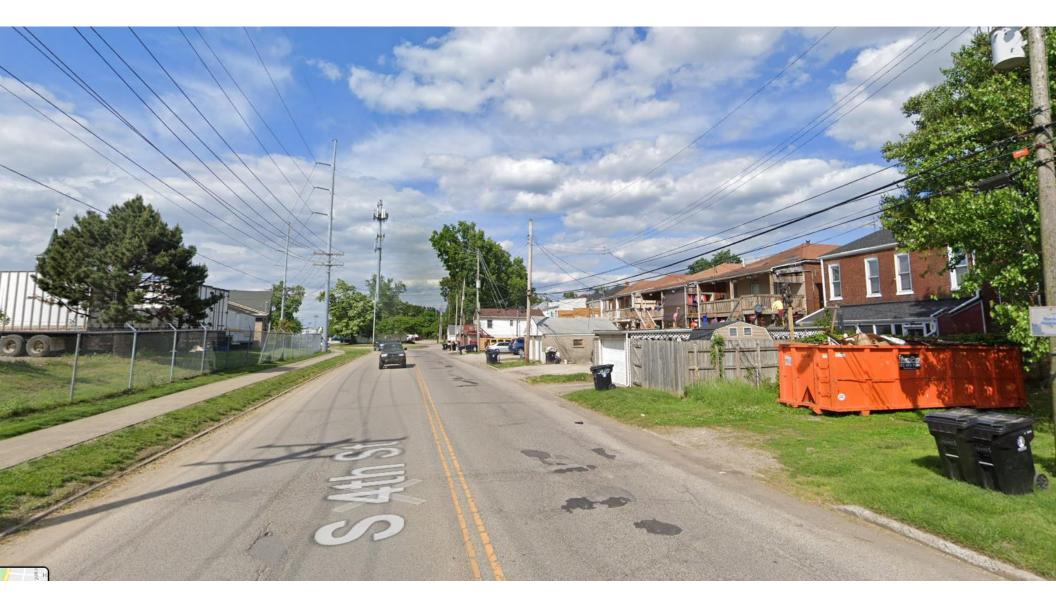
- Non-signalized intersection w/ poor sightlines
- 2 crashes / Million Vehicles (KSP)
- Detour path through lighted intersection w/ 1.3 crashes/million cars



# Safety Improvements – Removal of Backside Traffic and Associated Early Morning Truck Noise from Deliveries on 4<sup>th</sup>



Churchill Downs

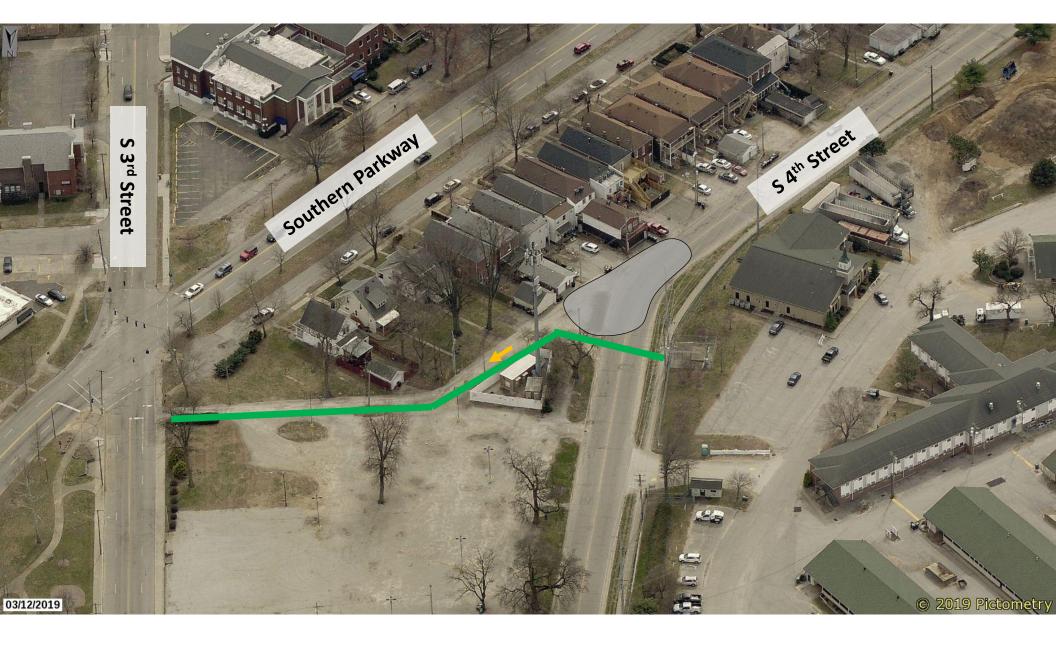




## Safety Improvements – Existing Route into Backside via Southern Pkwy./Oakdale



#### Alley Modifications – One Way East





#### Alley Modifications – One Way West





#### Alley Modifications – Combination of Convert to Pedestrian & Two Way

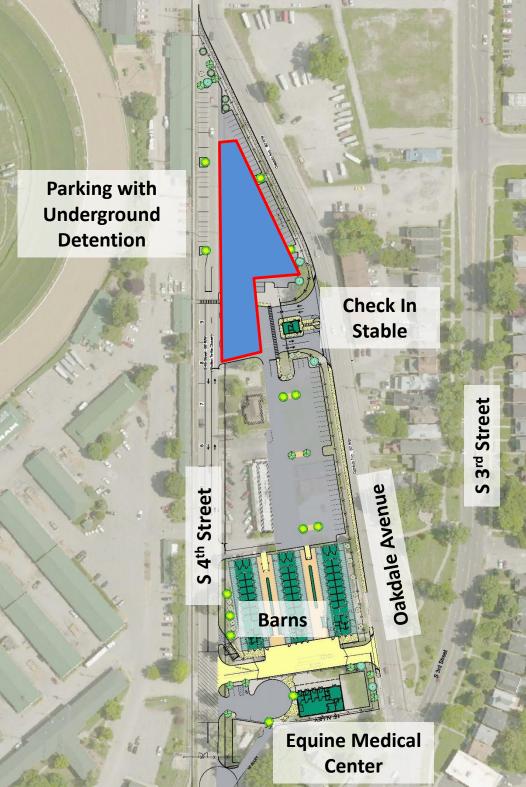




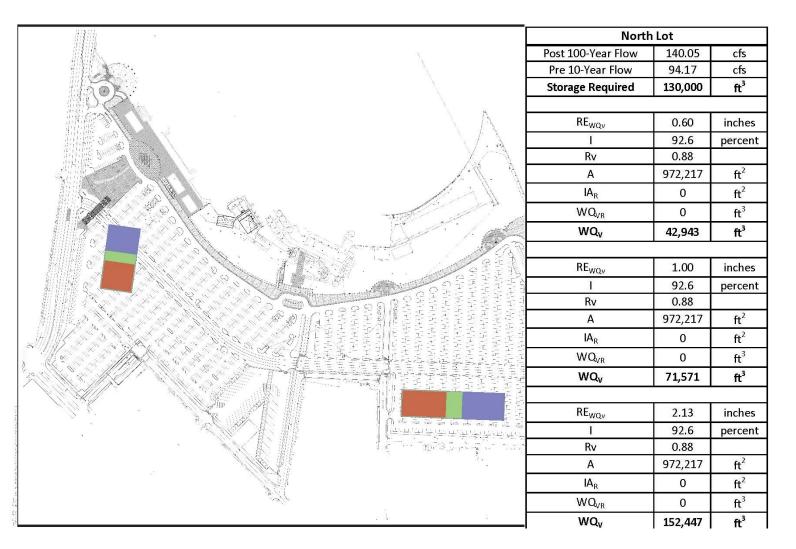
## **Proposed Underground Detention**



north



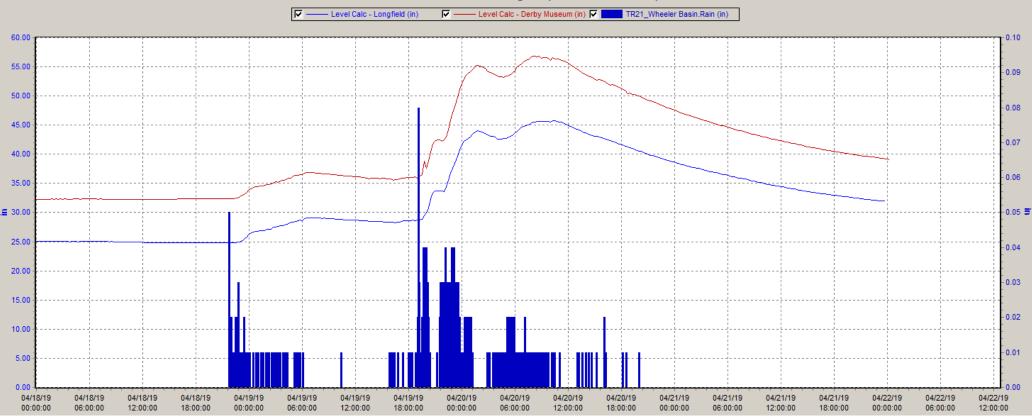
## **Underground Infiltration/Detention Sizing**



South Lot & Interior Wall					
Post 100-Year Flow	231.87	cfs			
Pre 10-Year Flow	170.39	cfs			
Storage Required	165,000	ft <sup>3</sup>			
RE <sub>WQv</sub>	0.60	inches			
L	91.6	percent			
Rv	0.87				
А	1,370,383	ft <sup>2</sup>			
IA <sub>R</sub>	0	ft <sup>2</sup>			
WQ <sub>VR</sub>	0	ft <sup>3</sup>			
WQv	59,913	ft <sup>3</sup>			
RE <sub>WQv</sub>	1.00	inches			
I	91.6	percent			
Rv	0.87				
А	1,370,383	ft <sup>2</sup>			
IA <sub>R</sub>	0	ft <sup>2</sup>			
WQ <sub>VR</sub>	0	$ft^3$			
WQ <sub>v</sub>	99,855	ft <sup>3</sup>			
RE <sub>WQv</sub>	2.13	inches			
I	91.6	percent			
Rv	0.87				
А	1,370,383	ft <sup>2</sup>			
IA <sub>R</sub>	0	ft <sup>2</sup>			
WQ <sub>VR</sub>	0	ft <sup>3</sup>			
WQ <sub>v</sub>	212,692	ft <sup>3</sup>			



### **Post Construction – Performance**

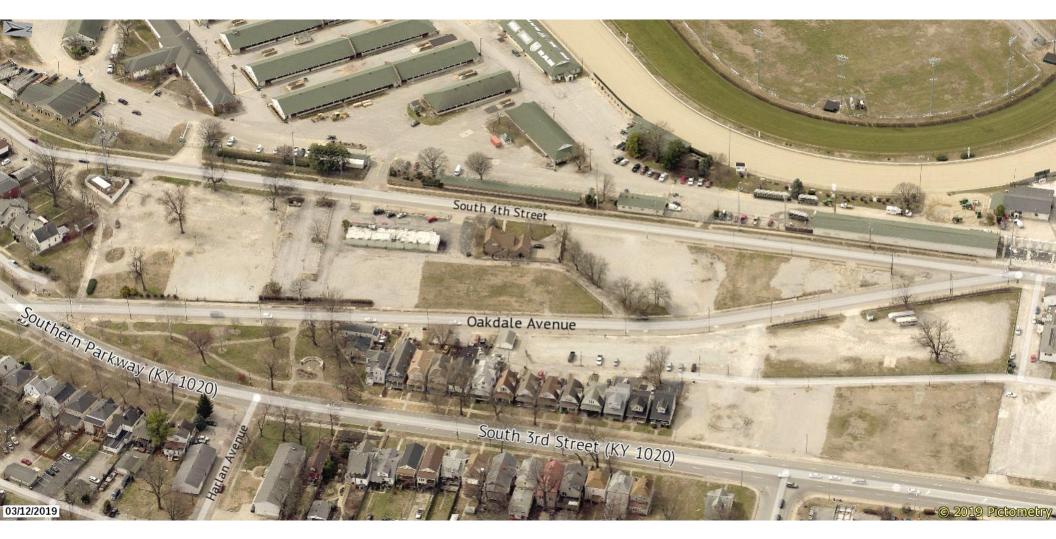


Churchill Downs Monitoring Site (04/18/19 to 04/22/19)

- Level sensors installed in both systems in March 2019
- System Designed for 2.13" prior to bypass to Combined System
- April 2019 Rain Event:
  - Wheeler Basin Rain Gauge (1.5 miles SW) recorded 2.93"
  - Total infiltration of runoff witnessed (No bypass to combined)

Churchill Downs

# Churchill Downs 4<sup>th</sup> Street / Oakdale Terrace Closure & Barn Facilities



## LD&T August 22, 2019

