# **Uncovering the Past** Emergency Replacement of 21" Sewer in Downtown OKC

Kimley **»Horn** 

#### **About me**

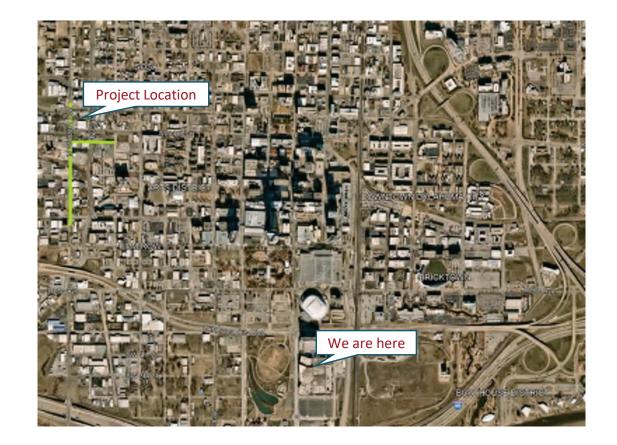
#### **Underground Infrastructure Conference** Construction. Rehabilitation. Asset Management.

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# **Setting the Stage**

- Project background
- Fast tracked nature
- Stretch goals





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		. 6 A.T	
8			
PWC .	PROP		
AT 0.	21"	: LINE (194.)	STA
PROP. FL 21*: 1184-59 OUT (S)			BNI
PL 217: 1184.61 OUT (SE) 2	-28	1	STA: 14+25.56 UNE A
PROP. FL 21*: 1184, k1 IN (N) PROP. FL 0*: 1191, 84, N (N) PR	OP. 1		NH: 11 INSTALL: 1-5' DIA. DROP STND MI
0.1	21"	EX.	
0%		5	CONNECT TO EDOSTING B" SS (M) CONNECT TO EDOSTING B" SS (E)
	-PR	L1 ± CP 15.0	
	OP. 2	EX. 1	-
	21 <b>-</b> P	<u><u></u></u>	
38 (F	VC AT		
OF 2	0.10	EX.	
24 - 6	2	21*	
PVC (S		10 REM.	
0R-3		419-	
PROP. FL 211: 1184.52 OUT (S) 5		ſ	STA 15+34.59 UNE A
(N) NI 76-6011 : 17		7	NSTALL: 1-5' DIA. STND MH
303	•		RIM: 1199.16 NORTHIND: 171898.0181
4) BY	-PRO		2" UG
OPEN	. 21 <b>-</b>	(	6.5
CUT-	PVC	A WAT	
	AT 0.	n;	
	10%	8 CP	Бх. (A
		86.1	ADE
F. 21": 1184.62	ļ	1	STA: 16+27.51 UNE A
PROP. FL B": 1187.87 N (W)	-		INSTALL: 1-5' DIA. STND DROP MH
	PROF		CONVECT TO EDSTING B" SS (W) RIM: 1199.41
	2, 21'	* 040	NORTHINE: 17/1990.9405 EASTING: 2108436.9822
	PVC AT C		
FL 21 <sup>*</sup> : 1184.68	10%		STA: 16+89.12 UNE A
PROP. FL 217. 1154.55 IN (N)			HW DULS VID 2-2, DIV SUND
	K		NORINAND: 172052/5470 EASTING: 2108/55.9822
	-SEE EN		
	ND COR		
	NNE		

## **The Fast and Furious**

- Survey and design
- Deliverable approach
- Flexibility and adaptability
- Room for unknowns



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2	2	NTP	0 days	Mon 9/5/22	Mon 9/5/22		9/5 🖝 NTP
3	2	Design Survey	3.7 wks	Wed 9/7/22	Mon 10/3/22	2F5+2 days	9/7 Design Survey 10/3
5	2	Geotechnical	3.7 wks	Wed 9/7/22	Mon 10/3/22	2F5+2 days	9/7 Geotechnical 10/3
5	2	SUE Level C/D	2.5 wks	Wed 9/7/22	Fri 9/23/22	2F5+2 days	9/7 9/23
6	2	SUE Level A	3 wks	Mon 9/26/22	Fri 10/14/22	8	9/26 SUE Level A 10/14
7	2	Sewer Line Design	10.5 wks	Mon 9/5/22	Wed 11/16/22	2	9/5 Sewer Line Design 11/16
8	2	30% In Process Design Review Meeting	0 days	Fri 9/23/22	Fri 9/23/22	755+3 wks	9/23 30% In Process Design Review Meeting
9	2	60% In-Process Design Review Meeting	0 days	Tue 10/18/22	Tue 10/18/22	8F5+3.3 wks	10/18 5.60% In:Process Design Review Meeting
0	2	100% In-Process Design Review Meeting	0 days	Fri 11/4/22	Tri 11/4/22	915+2.6 wks	11/4 🖕 100% In-Process Design Review Meeting
1	2	Final Construction Documents	0 days	Wed 11/16/22	Wed 11/16/22	7	11/16 🗸 Final Construction Documents
2	2	Pipe Procurement	8 wits	Mon 9/26/22	Fri 11/18/22	8	9/26 Pipe Procurement 11/18
3	2	UPRR Permitting	2 mors	Mon 9/26/22	Fri 11/18/22	8	9/26 UPRR Permitting 11/18
14	2	Task 3 - Bidding	7 days	Mon 11/7/22	Wed 11/16/22		
s	2	Bid Advertisement	1 wk	Mon 11/7/22	Mon 11/14/22	toFS+1 day	Bid Advertisement 11/7 11/14
16	2	Bid Opening	0 days	Mon 11/14/22	Mon 11/14/22	15	11/14 Slid Opening
17	2	Award	2 days	Mon 11/14/22	Wed 11/16/22	16	Award 11/14 11/16
18	2	Task 4 - CCA	180 days	Mon 11/21/22	Mon 7/31/23		
19	2	Construction NTP	0 days	Mon 11/21/22	Mon 11/21/22	17FS+3 days	11/21 S Construction NTP

# Navigating the Unknown

- Unexpected discoveries
- Quick thinking, teamwork, innovative solutions
- Adverse soil conditions

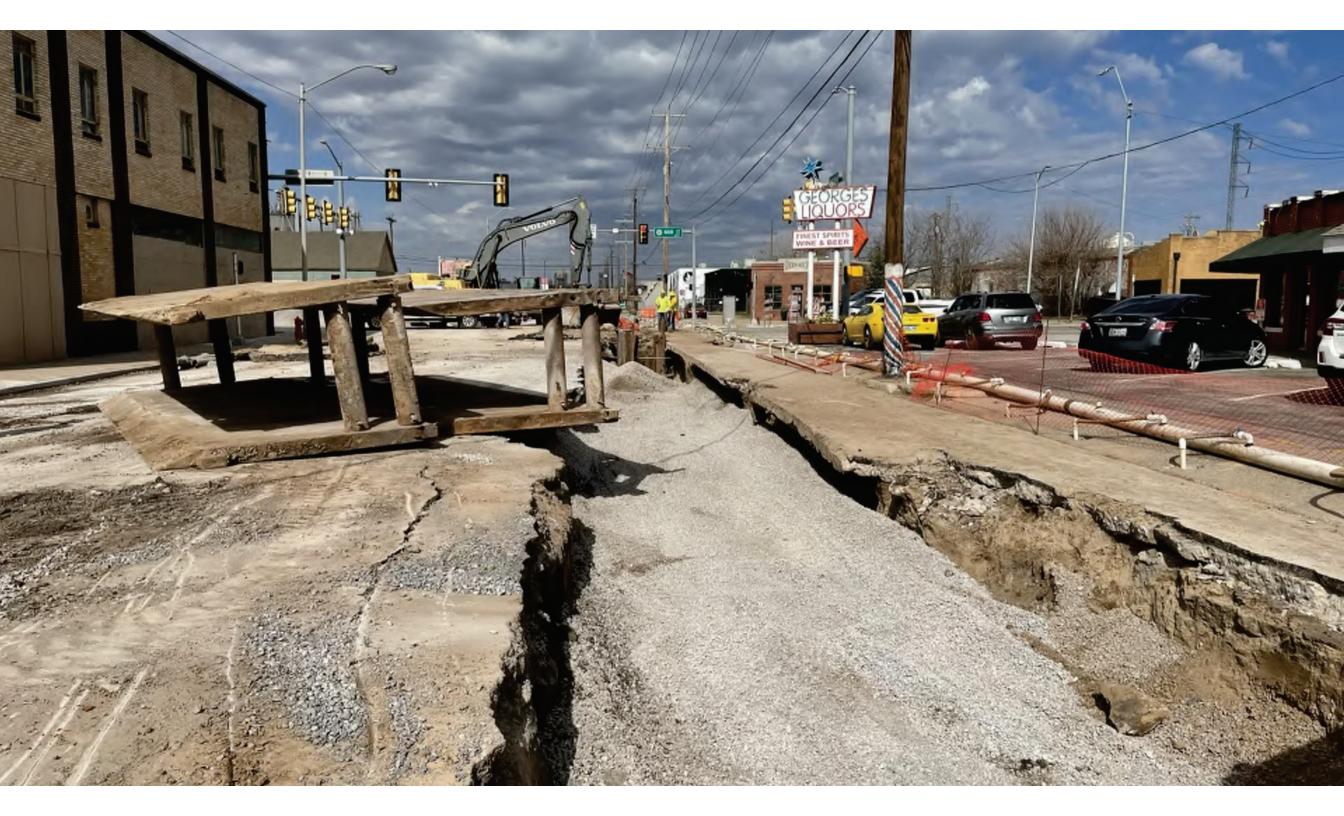




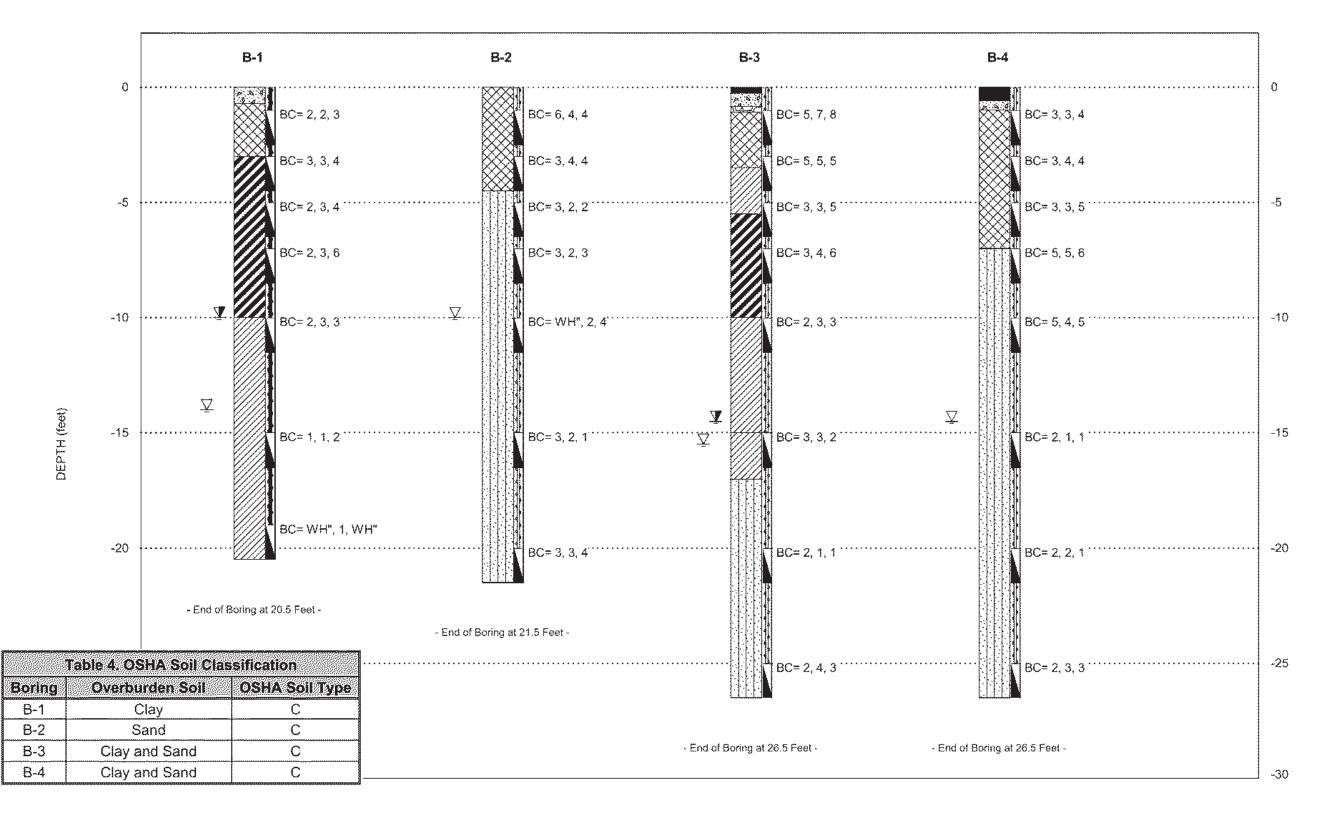


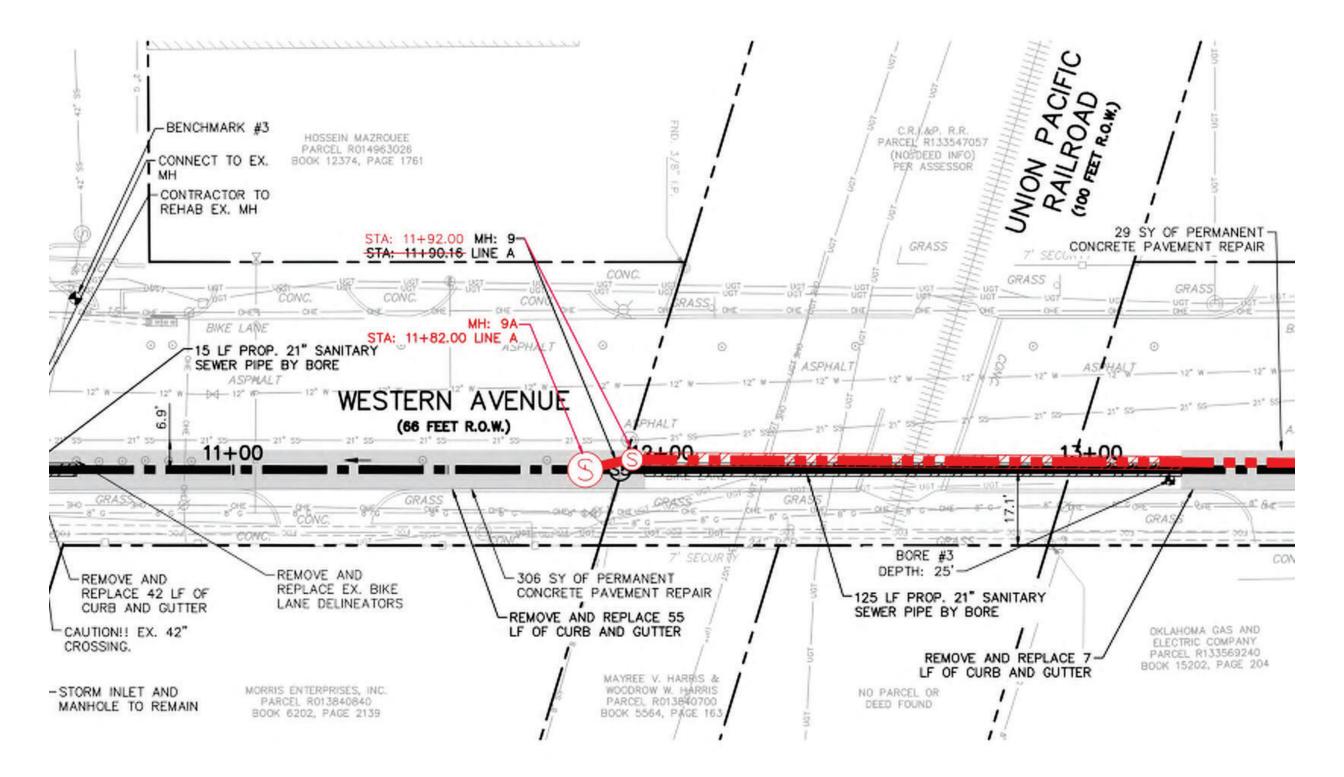




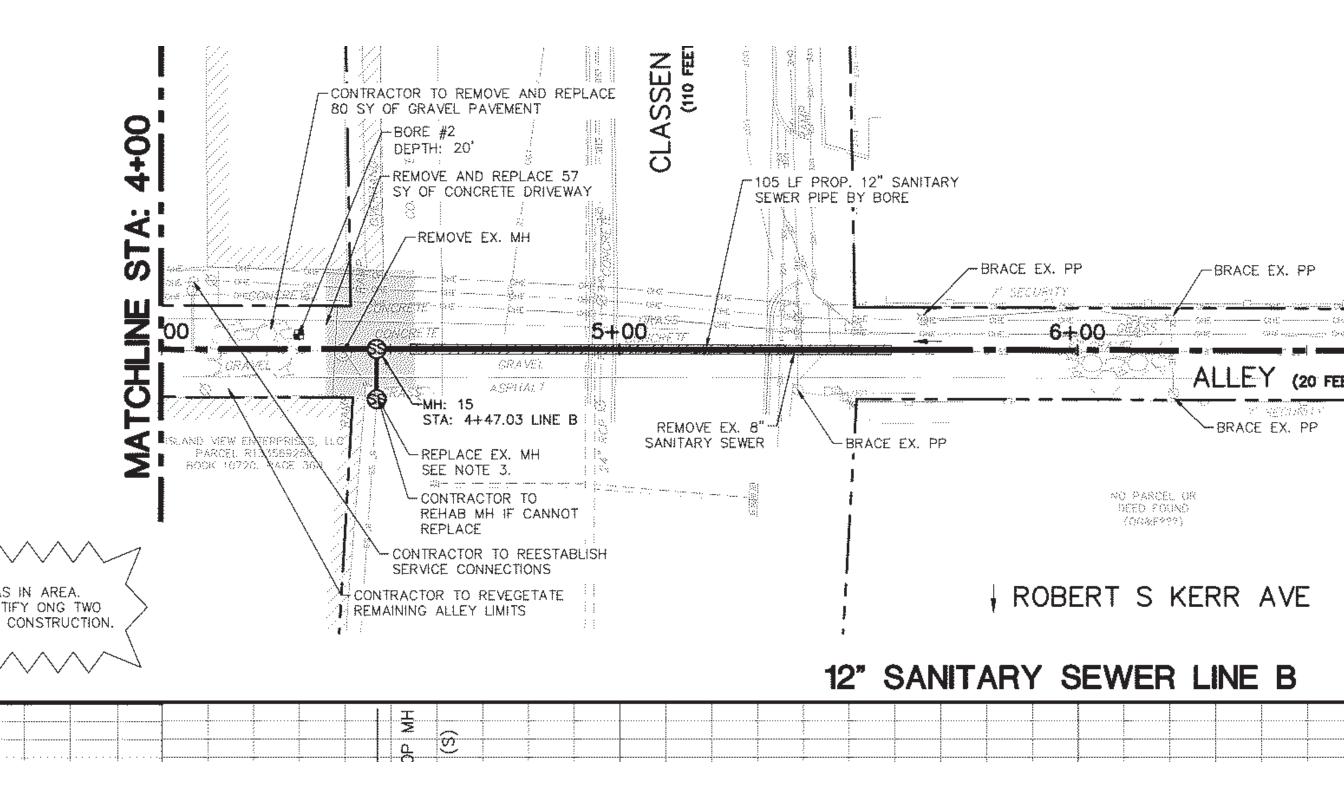












## **Coordinating the Chaos**

- Streets and Traffic Divisions
- Full street shutdown
- Water main break
- Working with multiple departments



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## **Lessons Learned**

- Teamwork and collaboration
- Prepare for the unexpected
- Stay positive & solution oriented



## Conclusion

• Henry Ford: "Coming together is a beginning, staying together is progress, and working together is success."



## **THANK YOU!**

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