



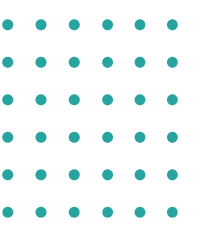
# Sadler Avenue At-Grade Railroad Crossing Mitigation

Public Meeting

July 18, 2024

**NDOT**

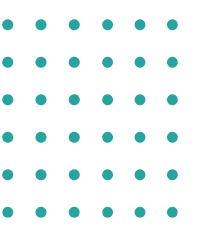
# Agenda



1. Introductions
2. Project History
3. Existing Conditions
4. Design Considerations
5. Alternate Alignments
6. Proposed Improvements
7. Cost
8. Visualizations
9. Questions



# Introductions



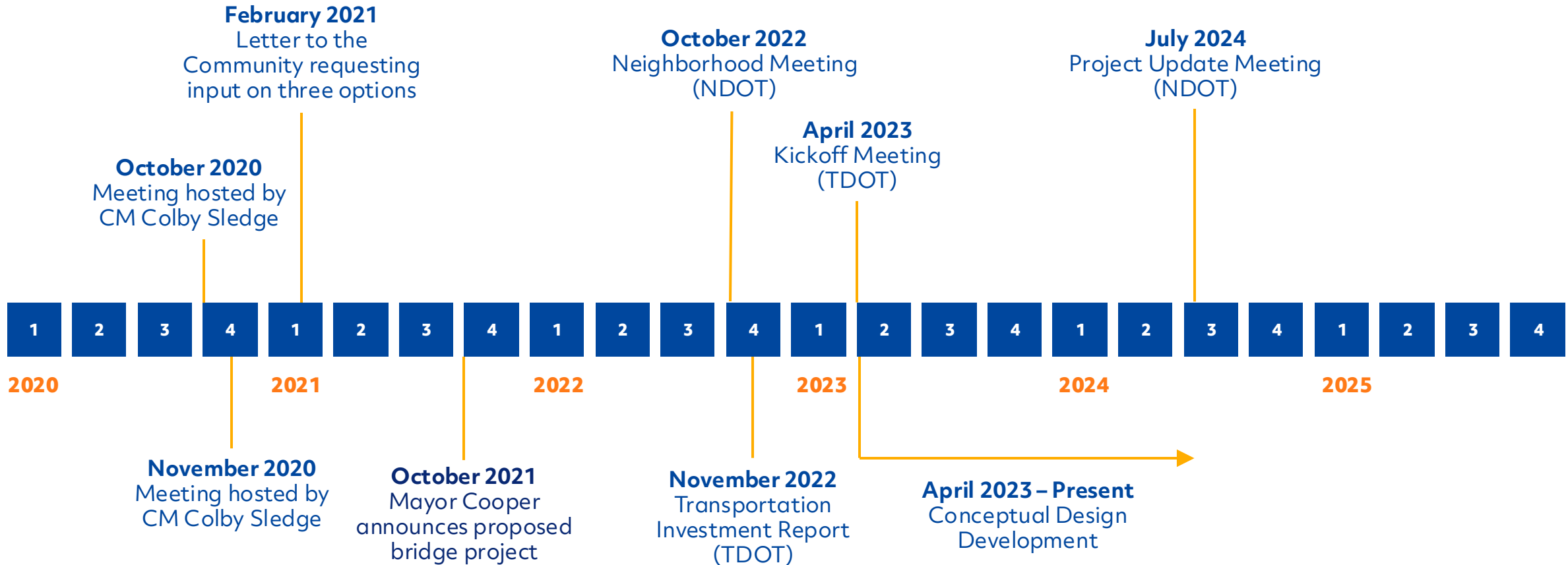
Brad Freeze, P.E.  
Deputy Director



Katrina Jones, P.E.  
Capital Projects



# Project History



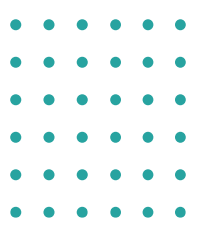


# Existing Conditions





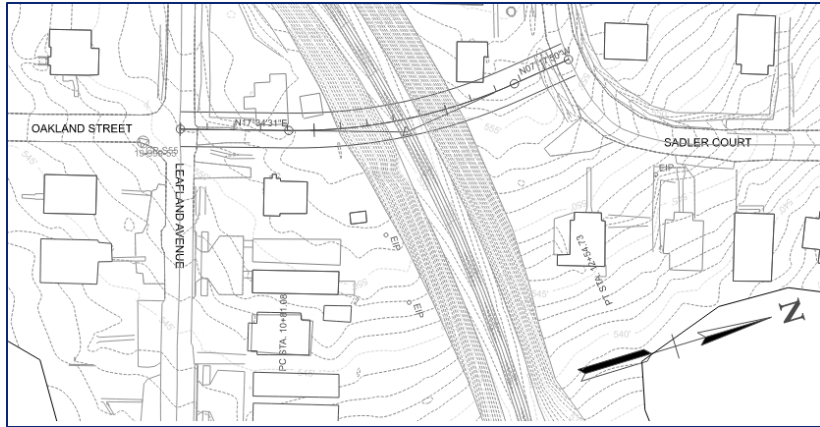
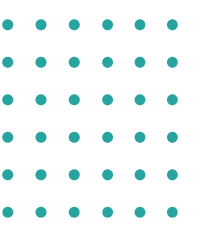
# Design Considerations



- Topography
- Right-of-way Impacts
- Railroad considerations
- Neighborhood connectivity
- Constructability
- Allowable grade percentages
- Relocations
- Cost



# Alternate Alignments



Alignment 1



Alignment 2



Alignment 3

# Alignment 1

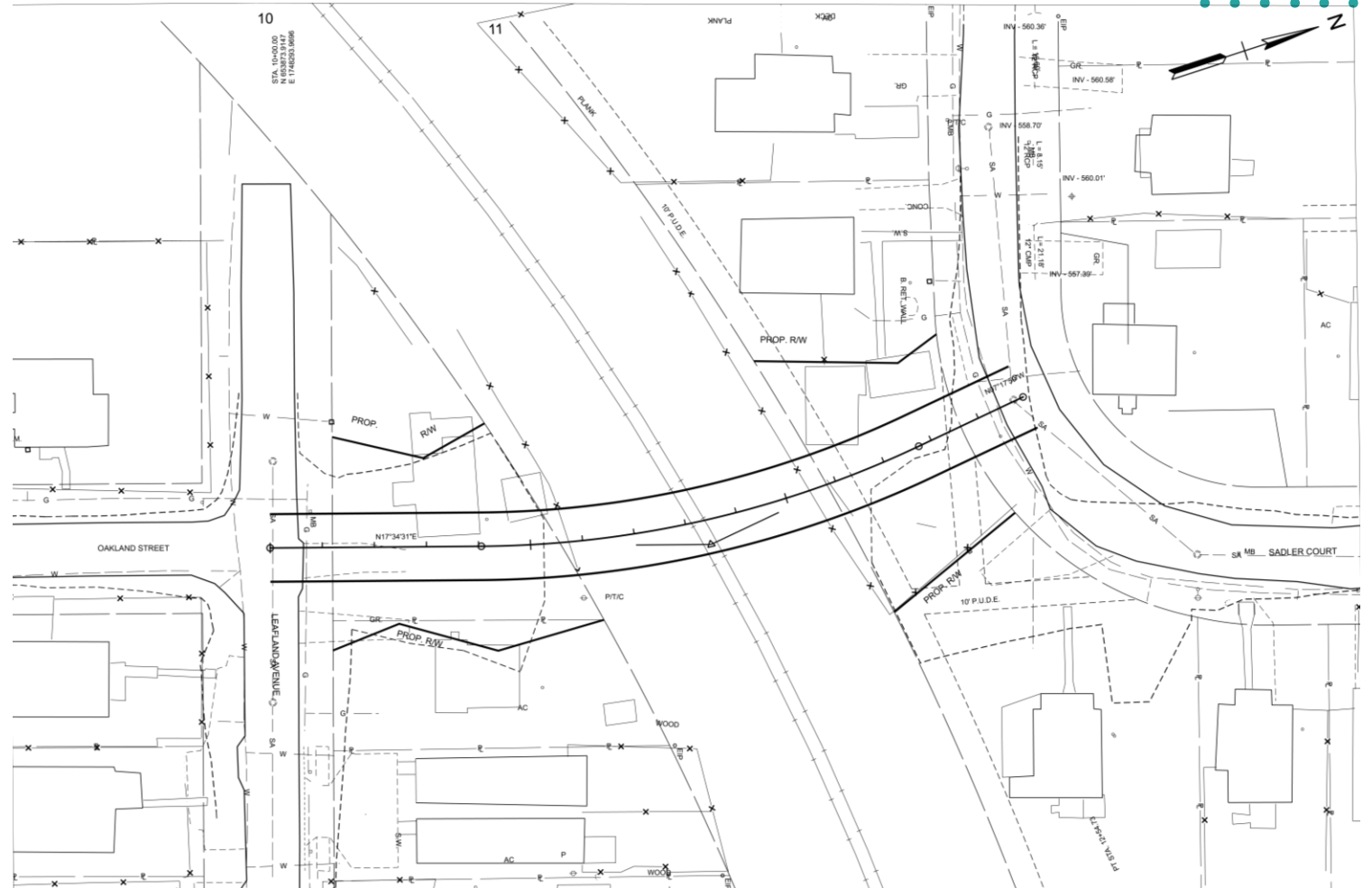
From Oakland St. to Sadler Ct.

## Pros

- Shortest and least impactful
  - ROW Acquisitions
  - Utility Relocations

## Cons

- Requires grades exceeding maximum allowable to clear rail line
- Steep slopes and bridge skew makes construction expensive and difficult



**NDOT**

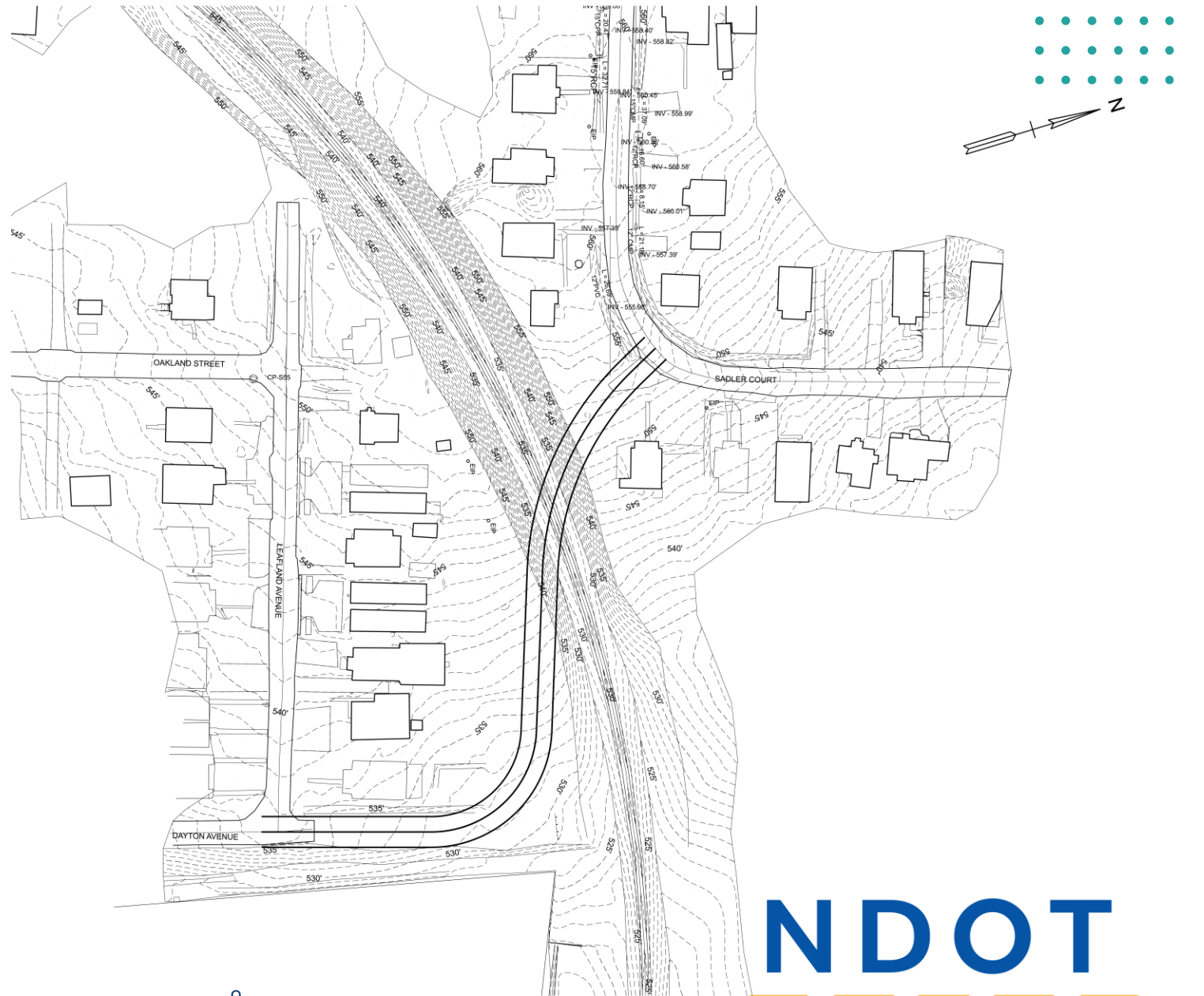


# Alignment 2

## Dayton Ave. to Sadler Ct.

### Cons

- Large amount of fill needed
  - Requires 20 foot retaining walls
- Larger bridge needed due to skew and span length (approx. 200 feet)



# Alignment 3

## Dayton Ave. to Sadler Ct.

### Cons

- Large amount of fill needed
  - Requires 20 foot retaining walls
- Larger bridge needed due to skew and span length (approx. 200 feet)

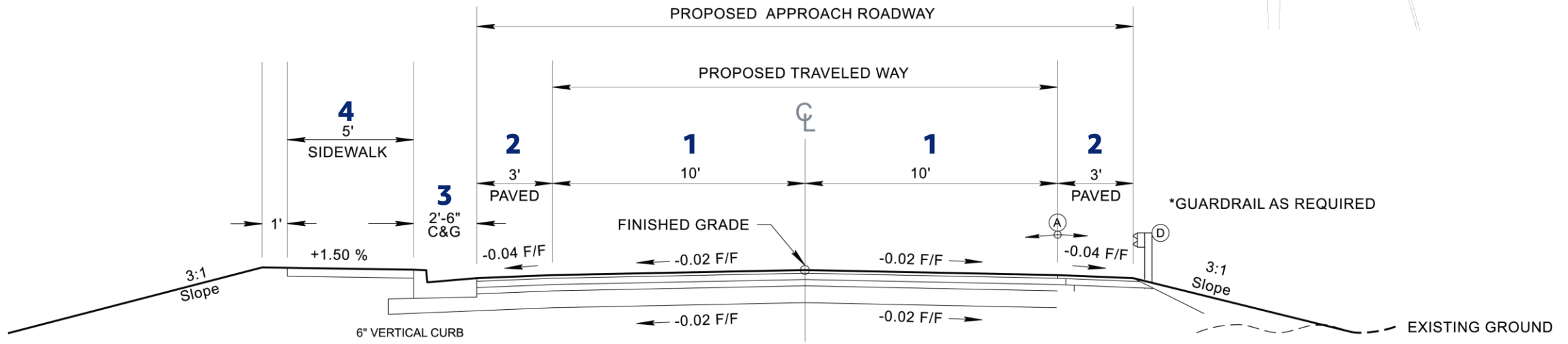
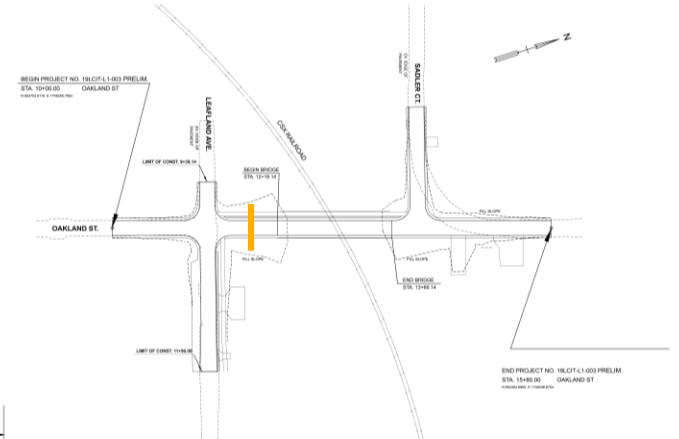




# Proposed Improvements – Oakland Street



1. Two 10-foot travel lanes
2. Three-foot shoulders
3. Curb and gutter
4. Five-foot sidewalk on western side



**NDOT**





BEGIN PROJECT NO. 19LCIT-L1-003 PRELIM.

STA. 10+00.00 OAKLAND ST

N 653753.6116 E 1748255.7953

CSX RAILROAD

LIMIT OF CONST. 9+39.14

LEAFLAND AVE. S72°08'03"E

BEGIN BRIDGE  
STA. 12+18.14

PROP. R.W.

PROP. R.W.

AIR RIGHTS

SADLER CT. S72°38'41"E

CONST. EASEMENT

STA. 14+03.96 - OAKLAND  
STA. 10+00.00 - SADLER  
N 654137.42 E 1748381.78

FILL SLOPE

N18°10'17"E

STA. 11+25.56 - OAKLAND  
STA. 10+00.00 - LEAFLAND  
N 653872.91 E 1748294.95

PROP. R.W.

CONST. EASEMENT

FILL SLOPE

PROP. R.W.

END BRIDGE  
STA. 13+69.14

FILL SLOPE

PROP. R.W.

PROP. R.W.

CONST. EASEMENT

CONST. EASEMENT

STA. 12+96.96 OAKLAND ST =  
STA. RAILROAD  
N 654035.7636 E 1748348.4066

END PROJECT NO. 19LCIT-L1-003 PRELIM.

STA. 15+80.00 OAKLAND ST

N 654304.6655 E 1748436.6764

END P.V.M.T. TRANSITION  
STA. 11+00.00  
OFF. 12.26

LIMIT OF CONST. 11+90.00



# TIR Estimated Cost

## Estimate

<b>Preliminary Engineering</b>	<b>\$218,000</b>
Other	\$568,000
ROW – \$538,000	
Utilities – \$30,000	
Construction	\$2,180,000
<b>Total Project Cost</b>	<b>\$2,966,000</b>

## Inflated Estimate

<b>Preliminary Engineering</b>	<b>\$278,000</b>
Other	\$568,000
ROW – \$687,000	
Utilities – \$38,000	
Construction	\$2,780,000
<b>Total Project Cost</b>	<b>\$3,790,000</b>

- Estimated cost of construction from Transportation Investment Report (TIR) developed by TDOT
- Approximately 0.28 acres of right-of-way is expected to be acquired
- Inflated cost estimate summary is based on a rate of 5% per year for five years
- Estimate from TIR assumes bridge could be constructed without raising the grade of Oakland Street or requiring the relocation of three residences

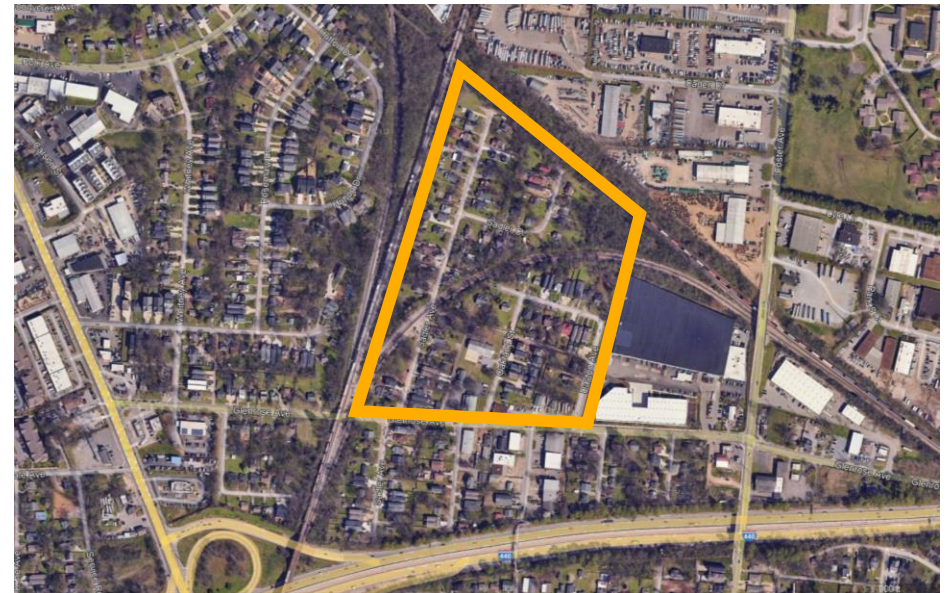


# Line and Grade Cost

<b>Engineering and Construction*</b>	<b>\$8,729,448.82</b>
Other** ROW – \$2,800,000 Utilities – \$610,000 Incentives – 2%	3,505,805.81
<b>Total Adjusted Cost</b>	<b>\$12,235,254.63</b>

\* Includes contingencies and RR impacts

\*\* Includes relocation of three residences







3

Oakland St

4

Sadler Ct

2

Leafland Ave

1

Oakland St



1

Leafland Ave

LEAFLAND

Oakland St





2

Oakland St

STOP

316B

Leafland Ave





3



Sadler Ct

Oakland St



4

Sadler Ct

Oakland St

STOP









# Questions?

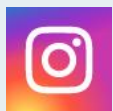
# Contact Info


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