CITY OF WASHINGTON, ILLINOIS
Committee of the Whole Agenda Communication

Meeting Date: 9-11-2023

Prepared By: Dennis Carr – City Engineer

Agenda Item: Catherine Street – Brick Crosswalk Locations

Explanation: In June, Council discussed the pavement selection for Catherine Street. The consensus at that time was for Catherine Street to be reconstructed in Hot-Mix Asphalt with some crosswalks to be reconstructed using some of the existing bricks. Council gave the direction to bring back different options for the crosswalk locations to a future COW meeting.

The attachments have different options ranging from 1-block from the square all the way up to all crosswalks.

Fiscal Impact:

Option	Description	Number of Crosswalks	Total Cost *
1	Crosswalks within 1 block radius of Washington Square	6	$28,092.00
2	Crosswalks perpendicular to Catherine Street (North-South) beginning to end	14	$65,548.00
3	Crosswalks parallel to Catherine Street (East-West) beginning to end	13	$60,866.00
4	All crosswalks along Catherine Street beginning to end	27	$126,414.00

Action Requested: Staff requests discussion on location and number of brick crosswalks for the Catherine Street project.

Catherine Street Reconstruction Brick Options

The City of Washington wants to explore various options to maintain a brick element to Catherine Street, which is in an original brick street neighborhood. The four options investigated and priced include Crosswalks within 1 Block radius of Washington Square, crosswalks perpendicular to Catherine Street, crosswalks parallel to Catherine Street, and all crosswalks along Catherine Street beginning to end. The chart below summarizes the cost for each option. See subsequent pages for additional breakdown of costs.

Option	Description	Number of Crosswalks	Total Cost *
1	Crosswalks within 1 block radius of Washington Square	6	$28,092.00
2	Crosswalks perpendicular to Catherine Street (North-South) beginning to end	14	$65,548.00
3	Crosswalks parallel to Catherine Street (East-West) beginning to end	13	$60,866.00
4	All crosswalks along Catherine Street beginning to end	27	$126,414.00

*Note: Cost of crosswalk items. This is in addition to the total roadway reconstruction cost.

Option 1: All crosswalks within 1 block of Washington Square

Description: Option 1 includes the addition of brick crosswalks within one block of Washington Square. The square currently utilizes brick crosswalks on the West side as well as brick sidewalks and bump-outs throughout. The brick crosswalks will carry the brick aesthetic from the square to the surrounding area. Exhibit A below is an example of a brick crosswalk with the newly poured asphalt pavement.

Cost: Cost per crosswalk: = ~28' wide x 7' long = 196 SQ FT = 21.78 SQ YD

1: Brick Pavers: $20.00 per SQ FT

2: Hot-Mix Asphalt (HMA) Binder Course, 3": $125.00 per TON

3: Aggregate Base Course, 8": $30.00 per TON

Conversion for HMA: 0.056 tons/sq yd/ inch

Conversion for Aggregate Base: 0.05833 tons/sq yd/ inch

Cost: 196($20.00) + 21.78(3")(0.056)($125.00) + 21.78(8")(0.05833)($30.00) = $4,682.00

Number of crosswalks: = 1 (beginning) + 1 (Ford Lane) + 4 (Intersection of Catherine Street and S High Street)

= 6 total crosswalks

Total Cost of crosswalks: = 6 x $4,682.00 = **$28,092.00**

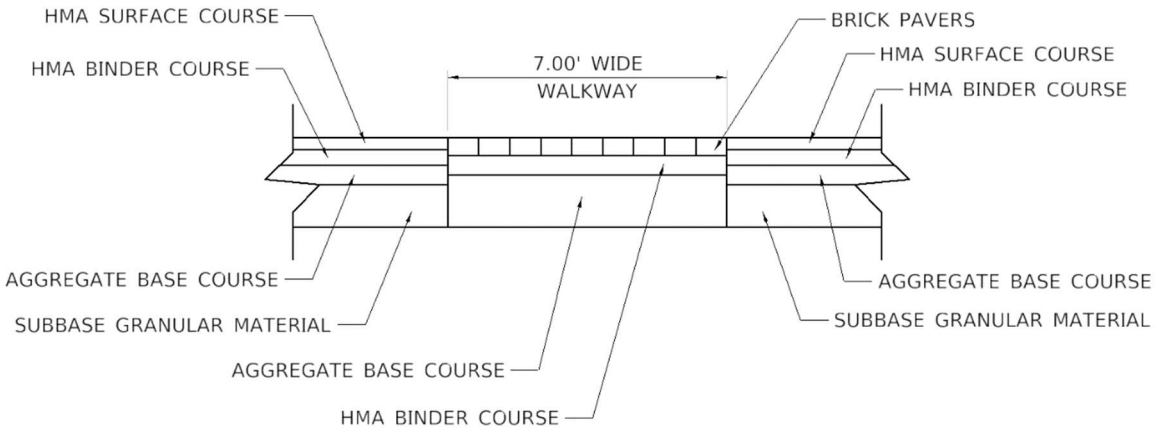


Exhibit A: Example HMA Street

Option 2: Crosswalks perpendicular to Catherine Street (North-South) beginning to end

Description: Option 2 includes the addition of brick crosswalks perpendicular to Catherine Street. The brick crosswalks will be used in conjunction with crosswalk markings to call attention to the new crosswalks across Catherine Street. Exhibit A above is an example of a brick crosswalk with the newly poured asphalt pavement.

Cost: Cost per crosswalk: = ~28' wide x 7' long = 196 SQ FT = 21.78 SQ YD

1: Brick Pavers: $20.00 per SQ FT

2: Hot-Mix Asphalt (HMA) Binder Course, 3": $125.00 per TON

3: Aggregate Base Course, 8": $30.00 per TON

Conversion for HMA: 0.056 tons/sq yd/ inch

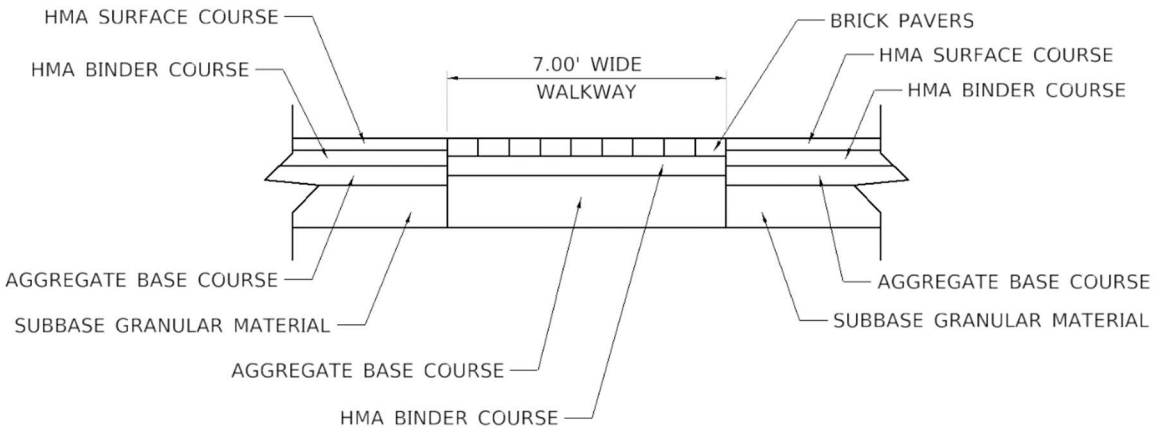
Conversion for Aggregate Base: 0.05833 tons/sq yd/ inch

Cost: 196($20.00) + 21.78(3")(0.056)($125.00) + 21.78(8")(0.05833)($30.00) = $4,682.00

Number of crosswalks: = 1 (beginning) + 12 (2 per intersection) + 1 (end)

= 14 total crosswalks

Total Cost of crosswalks: = 14 x $4,682.00 = **$65,548.00**



Option 3: Crosswalks parallel to Catherine Street (East-West) beginning to end

Description: Option 3 includes the addition of brick crosswalks parallel to Catherine Street. The brick crosswalks will be used in conjunction with crosswalk markings to call attention to the new crosswalks parallel to Catherine Street. Exhibit A above is an example of a brick crosswalk with the newly poured asphalt pavement.

Cost: Cost per crosswalk: = ~28' wide x 7' long = 196 SQ FT = 21.78 SQ YD

1: Brick Pavers: $20.00 per SQ FT

2: Hot-Mix Asphalt (HMA) Binder Course, 3": $125.00 per TON

3: Aggregate Base Course, 8": $30.00 per TON

Conversion for HMA: 0.056 tons/sq yd/ inch

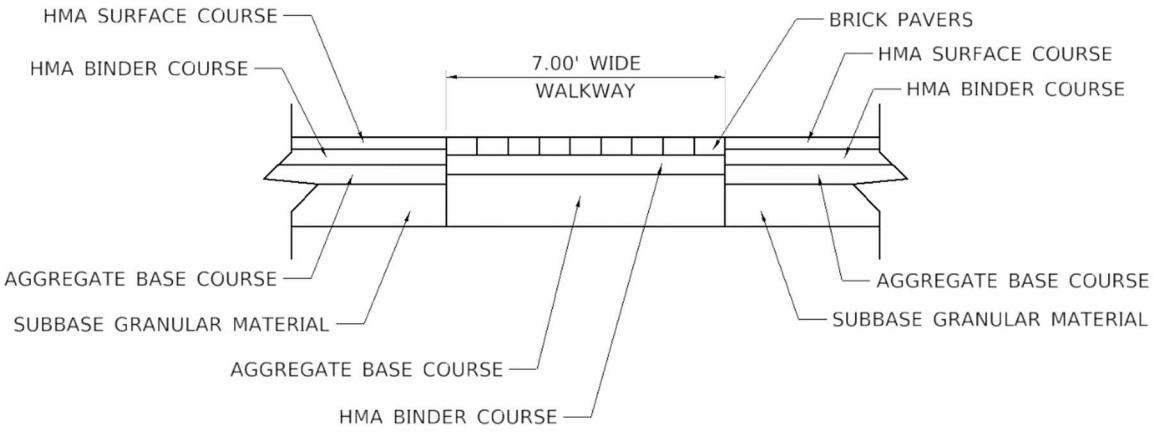
Conversion for Aggregate Base: 0.05833 tons/sq yd/ inch

Cost: 196($20.00) + 21.78(3")(0.056)($125.00) + 21.78(8")(0.05833)($30.00) = $4,682.00

Number of crosswalks: = 1 (Ford Lane) + 12 (2 per intersection)

= 13 total crosswalks

Total Cost of crosswalks: = 13 x $4,682.00 = **$60,866.00**



Option 4: Crosswalks parallel to Catherine Street (East-West) beginning to end

Description: Option 4 includes the addition of brick crosswalks at all intersections. The brick crosswalks will be used in conjunction with crosswalk markings to call attention to the new crosswalks at all intersections. Exhibit A above is an example of a brick crosswalk with the newly poured asphalt pavement.

Cost: Cost per crosswalk: = ~28' wide x 7' long = 196 SQ FT = 21.78 SQ YD

1: Brick Pavers: $20.00 per SQ FT

2: Hot-Mix Asphalt (HMA) Binder Course, 3": $125.00 per TON

3: Aggregate Base Course, 8": $30.00 per TON

Conversion for HMA: 0.056 tons/sq yd/ inch

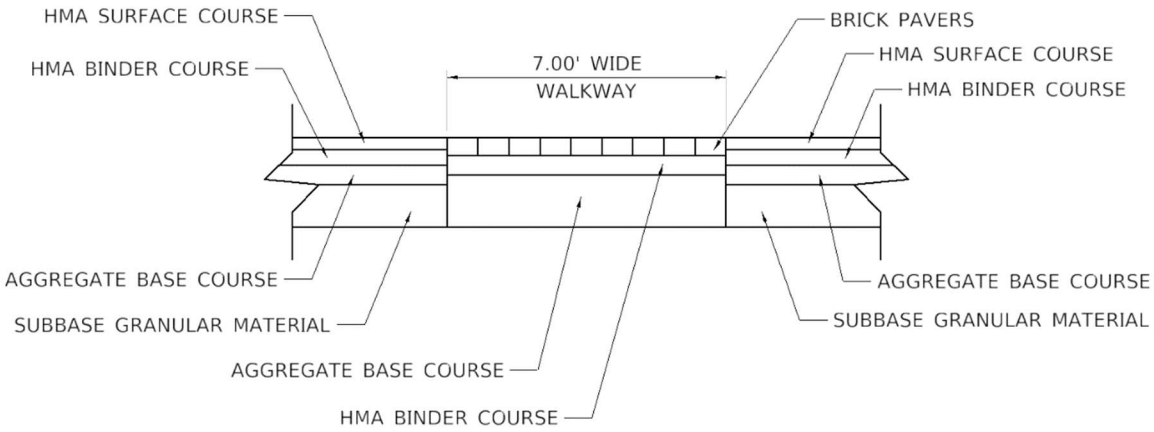
Conversion for Aggregate Base: 0.05833 tons/sq yd/ inch

Cost: 196($20.00) + 21.78(3")(0.056)($125.00) + 21.78(8")(0.05833)($30.00) = $4,682.00

Number of crosswalks: = 1 (beginning) + 1 (Ford Lane) + 24 (4 per intersection) + 1 (end)

= 27 total crosswalks

Total Cost of crosswalks: = 27 x $4,682.00 = **$126,414.00**



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			DRAWN - XXX	REVISED -			
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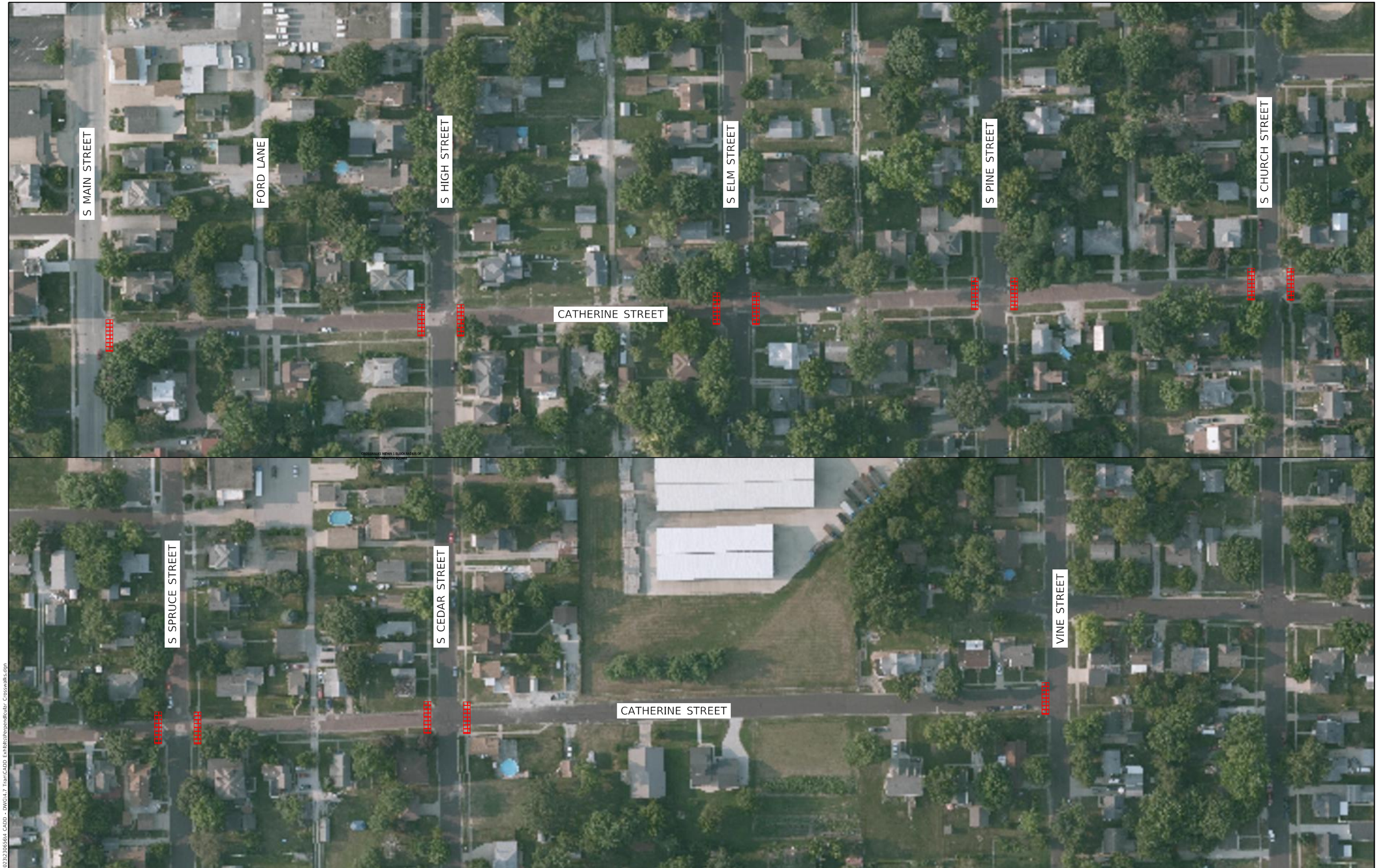
		PLOT DATE = 9/6/2023	DATE - XXXXXXX	REVISED -			

XXX RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXX	23-00133-77-EG	TAZEWELL		
		CONTRACT NO. XXXXX		
	ILLINOIS FED. AID PROJECT			



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		PLOT DATE = 9/6/2023	DATE - XXXXXXX

REVISED -	WASHINGTON ILLINOIS	**CITY OF WASHINGTON**
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CROSSWALKS PERPENDICULAR TO CATHERINE STREET

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

XXX RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXX	23-00133-77-EG	TAZEWELL		
		CONTRACT NO. XXXXX		
	ILLINOIS	FED. AID PROJECT		

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			DRAWN - XXX	REVISED -	CITY OF WASHINGTON
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		PLOT DATE = 9/6/2023	DATE - XXXXXXX	REVISED -	

CROSSWALKS PARALLEL TO CATHERINE STREET

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

XXX RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. XXXXX		
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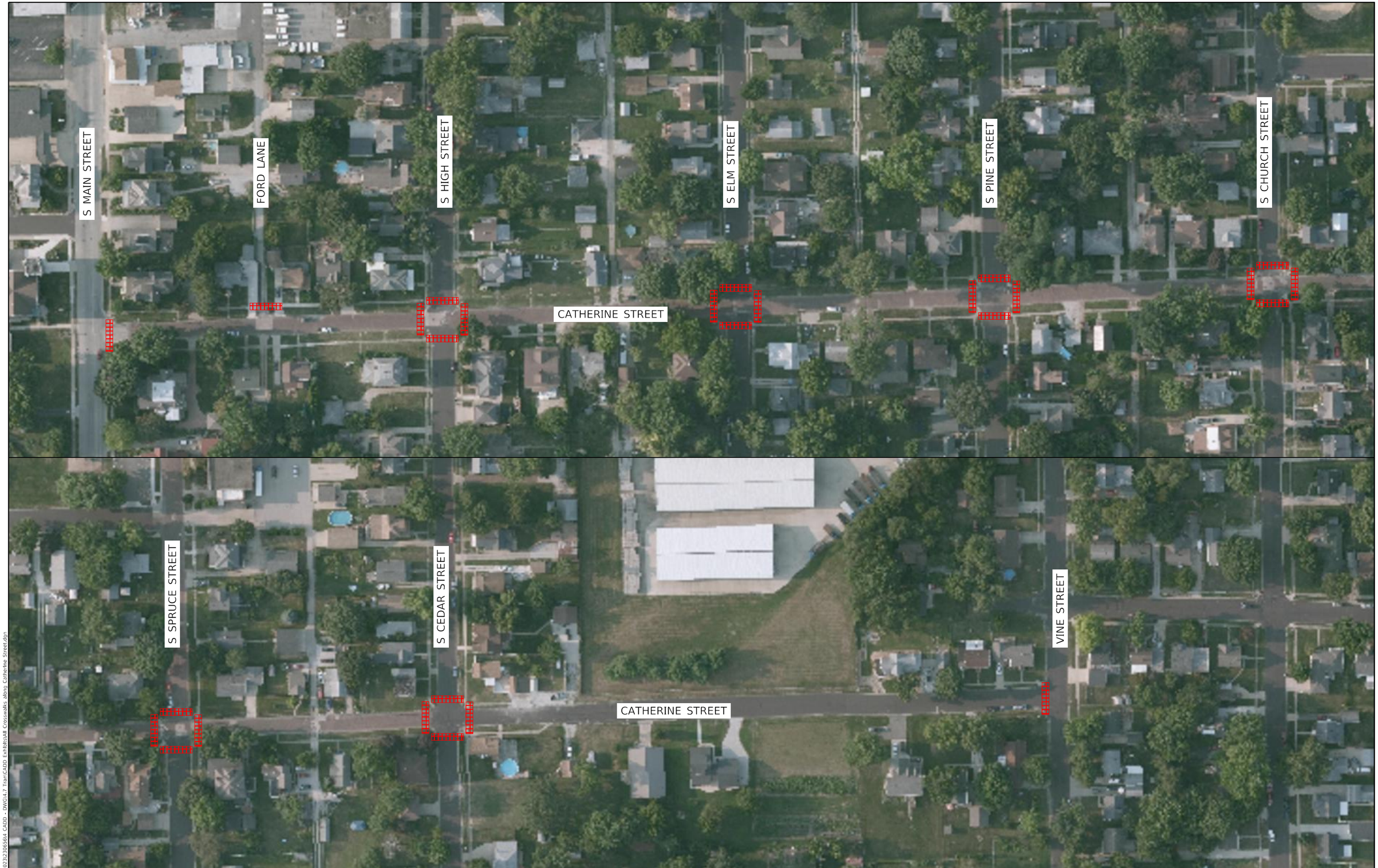

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		PLOT DATE = 9/6/2023	CHECKED - XXX / REVISED -
			DATE - XXXXXXX / REVISED -

WASHINGTON ILLINOIS

CITY OF WASHINGTON

ALL CROSSWALKS ALONG CATHERINE STREET

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

XXX RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XXX	23-00133-77-EG	TAZEWELL		
		CONTRACT NO. XXXXX		
	ILLINOIS	FED. AID PROJECT		