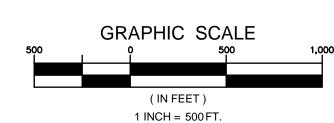


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SCALE

SEAL

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S. MOUNT JOY ST./RIDGE RD
AND GROFF AVE: SHEET C-202
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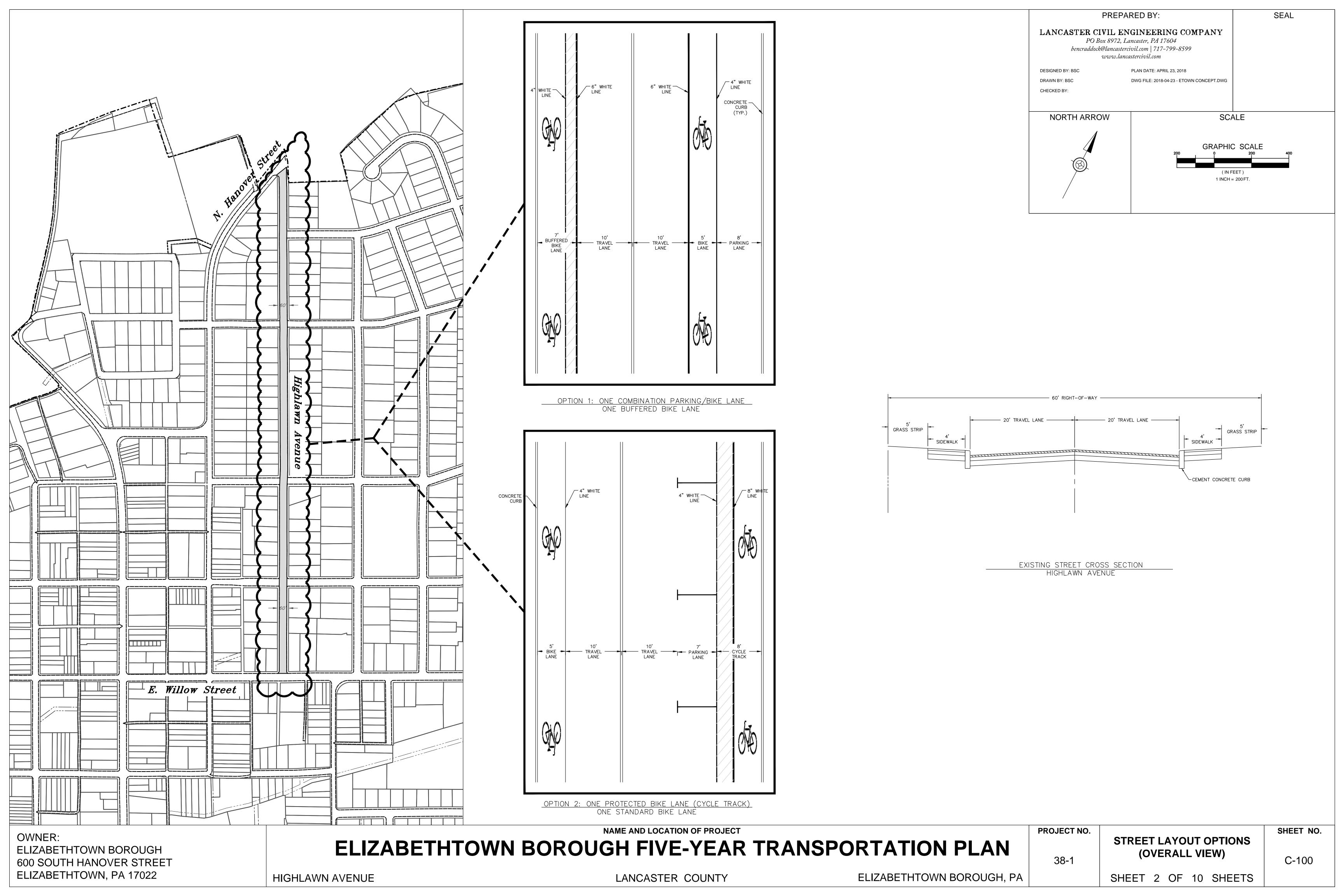
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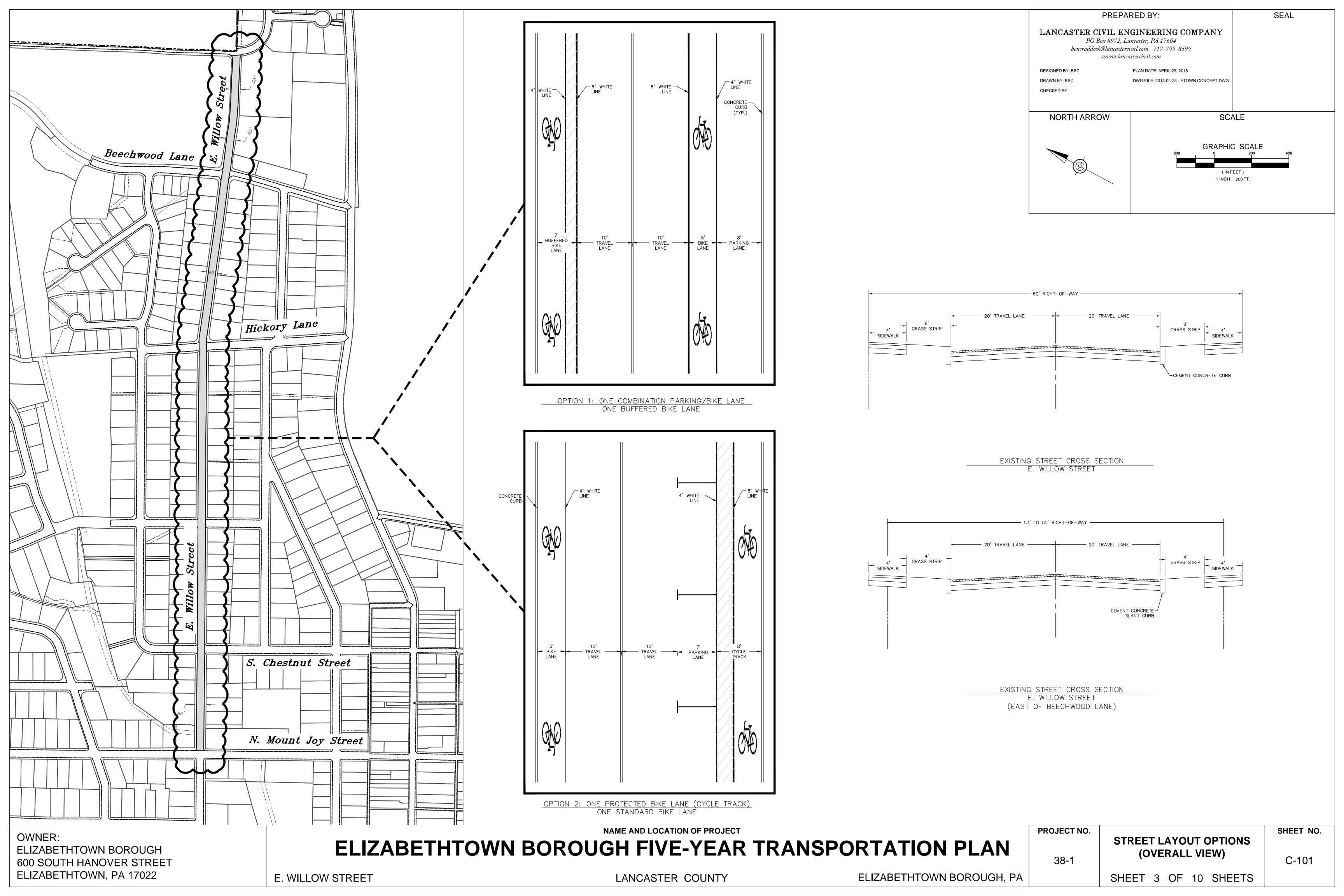
OVERALL VIEW

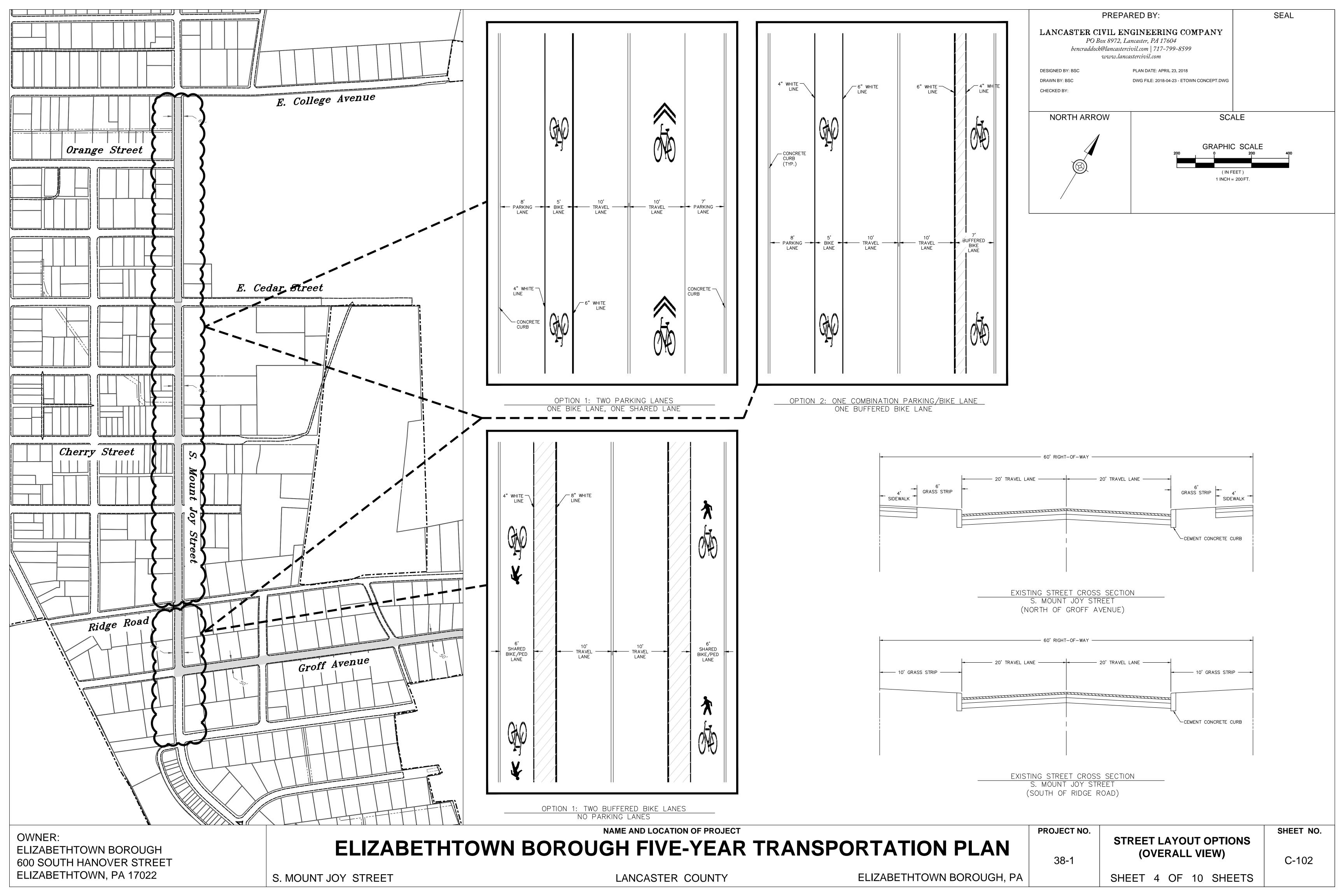
ELIZABETHTOWN BOROUGH 600 SOUTH HANOVER STREET

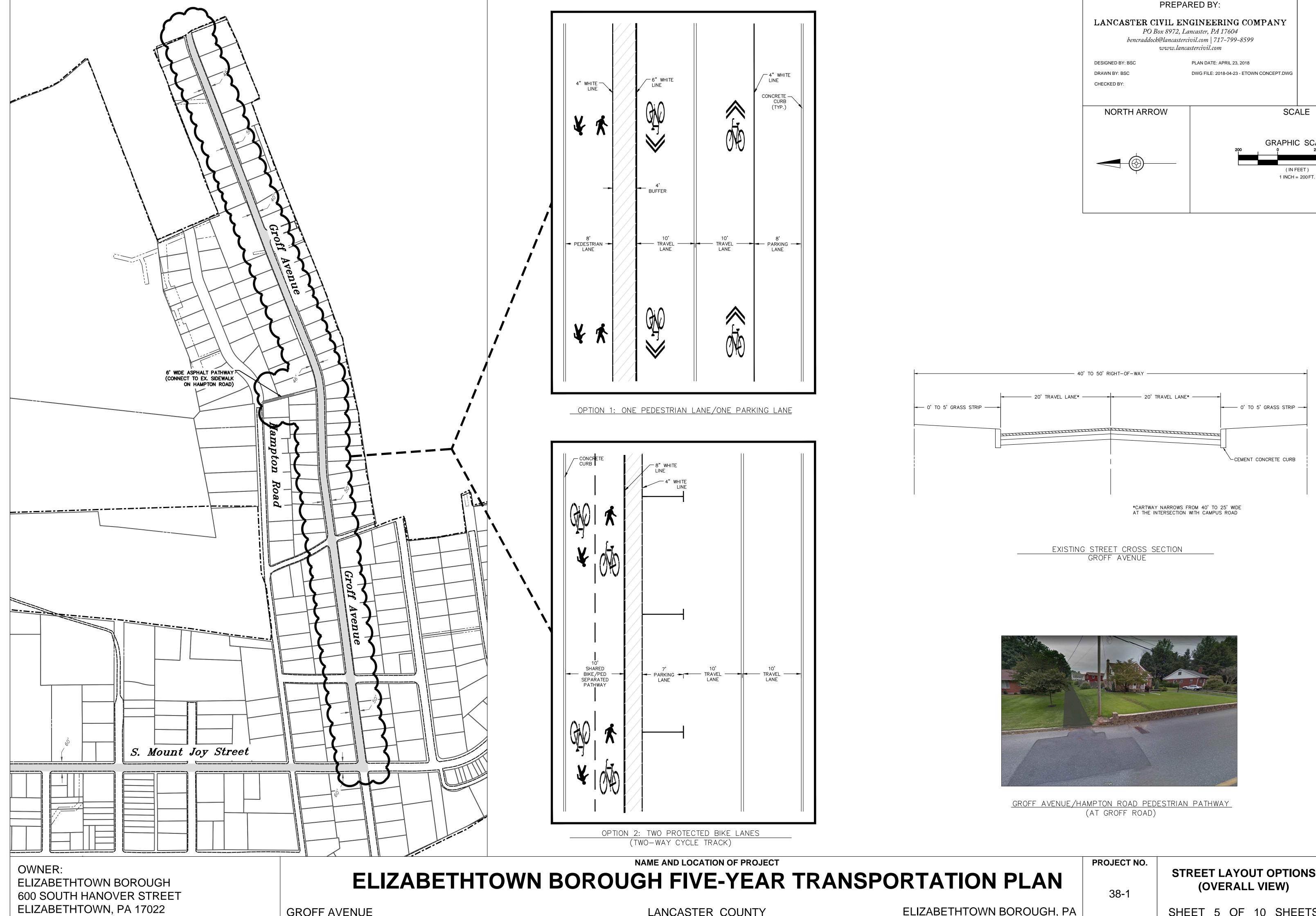
SHEET 1 OF 10 SHEETS

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LANCASTER COUNTY

GROFF AVENUE

STREET LAYOUT OPTIONS (OVERALL VIEW)

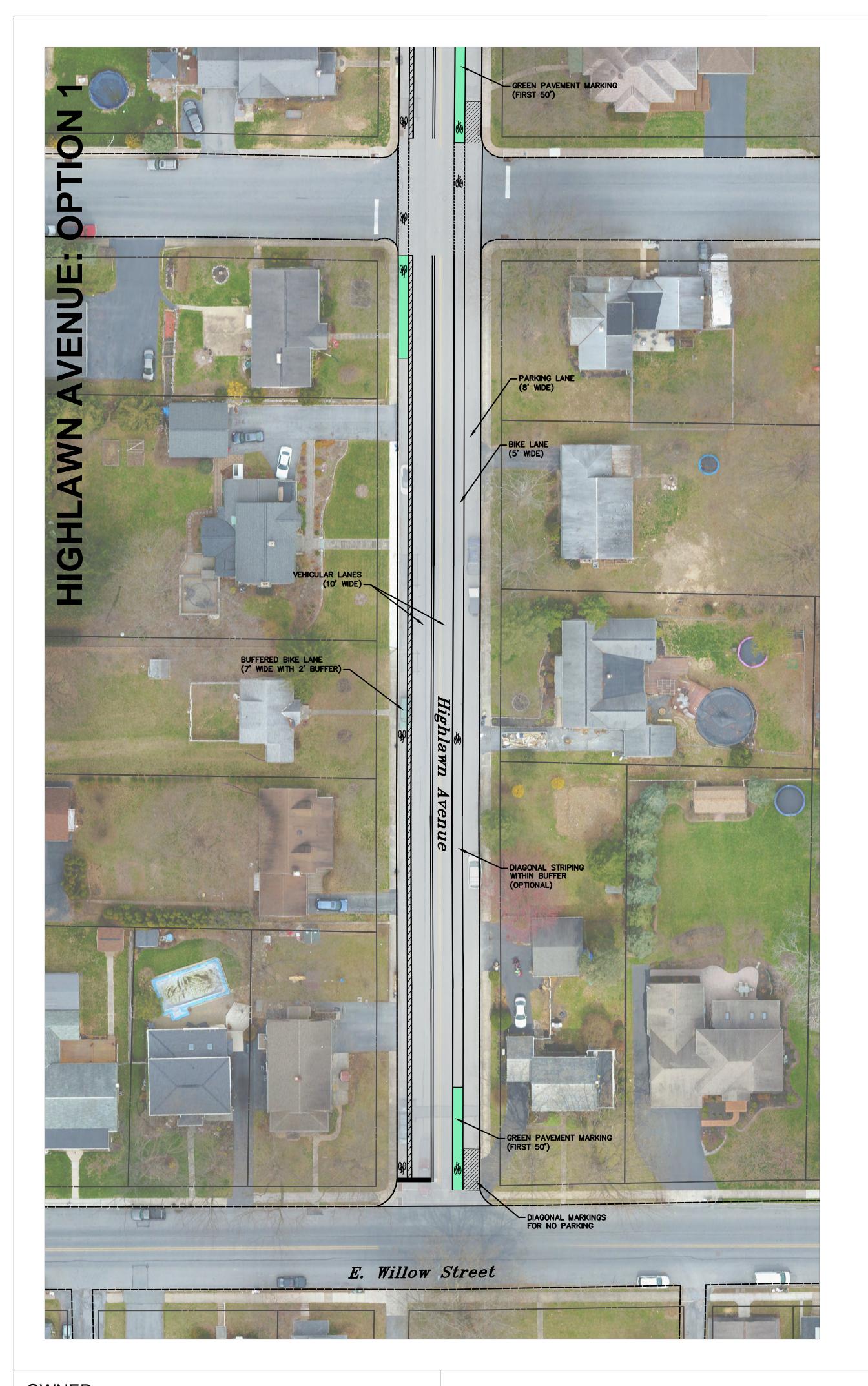
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ELIZABETHTOWN BOROUGH, PA

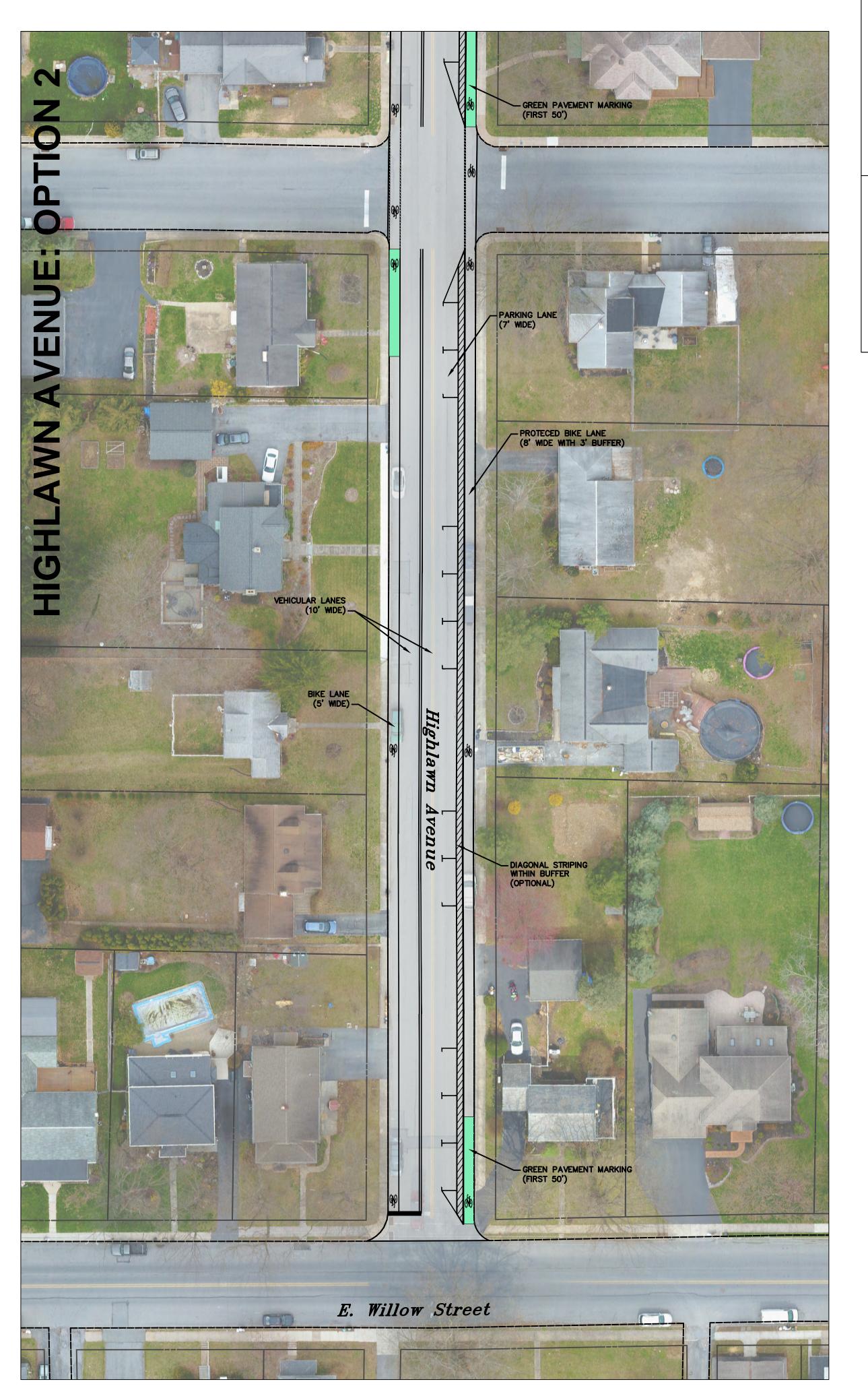
C-103

SHEET NO.

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HIGHLAWN AVENUE



PREPARED BY:

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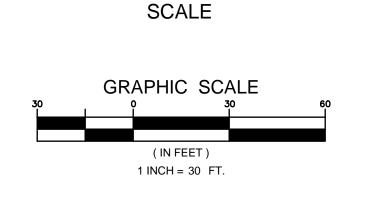
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<u> HIGHLAWN AVENUE: OPTION 1</u>

<u>ADVANTAGES</u>

- 1. PROVIDES ON-STREET PARKING ON EAST (UPHILL) SIDE OF STREET WITH A STANDARD 5' BIKE LANE.
- 2. PROVIDES BUFFERED BIKE LANE ON WEST (DOWNHILL) SIDE OF STREET. NO PARKED CARS AVOIDS CONFLICTS WITH OPEN DOORS.
- 3. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 4. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF
- 5. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY.
- 6. SNOW REMOVAL IS SIMILAR TO CURRENT CONDITIONS, EXCEPT THAT THE PARKING RESTRICTION ON THE WEST SIDE WILL ALLOW FOR LESS CONFLICTS WITH PARKED CARS.

<u>DISADVANTAGES</u>

- 1. ON-STREET PARKING IS RESTRICTED ON THE WEST SIDE.
- 2. THE EASTERN BIKE LANE IS SUSCEPTIBLE TO CONFLICTS FROM OPENING VEHICLE DOORS.

HIGHLAWN AVENUE: OPTION 2

- 1. PROVIDES ON-STREET PARKING ON EAST (UPHILL) SIDE OF STREET WITH A PROTECTED 5' BIKE LANE.
- 2. PROVIDES STANDARD BIKE LANE ON WEST (DOWNHILL) SIDE OF STREET. NO PARKED CARS AVOIDS CONFLICTS
- 3. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 4. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF BICYCLES.
- 5. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY.

<u>DISADVANTAGES</u>

- 1. ON-STREET PARKING IS RESTRICTED ON THE WEST SIDE.
- 2. THE VEHICULAR LANES ARE NOT CENTERED WITHIN THE RIGHT-OF-WAY. THIS OFFSET MAY CAUSE CONFUSION WITH SOME MOTORISTS.
- 4. SNOW REMOVAL FOR THE PROTECTED BIKE LANE IS MORE CHALLENGING.
- 5. THIS OPTION INCLUDES MORE STRIPING THAN OPTION 1 (PARKING SPACES).

OWNER: **ELIZABETHTOWN BOROUGH** 600 SOUTH HANOVER STREET ELIZABETHTOWN, PA 17022

ELIZABETHTOWN BOROUGH FIVE-YEAR TRANSPORTATION PLAN

NAME AND LOCATION OF PROJECT

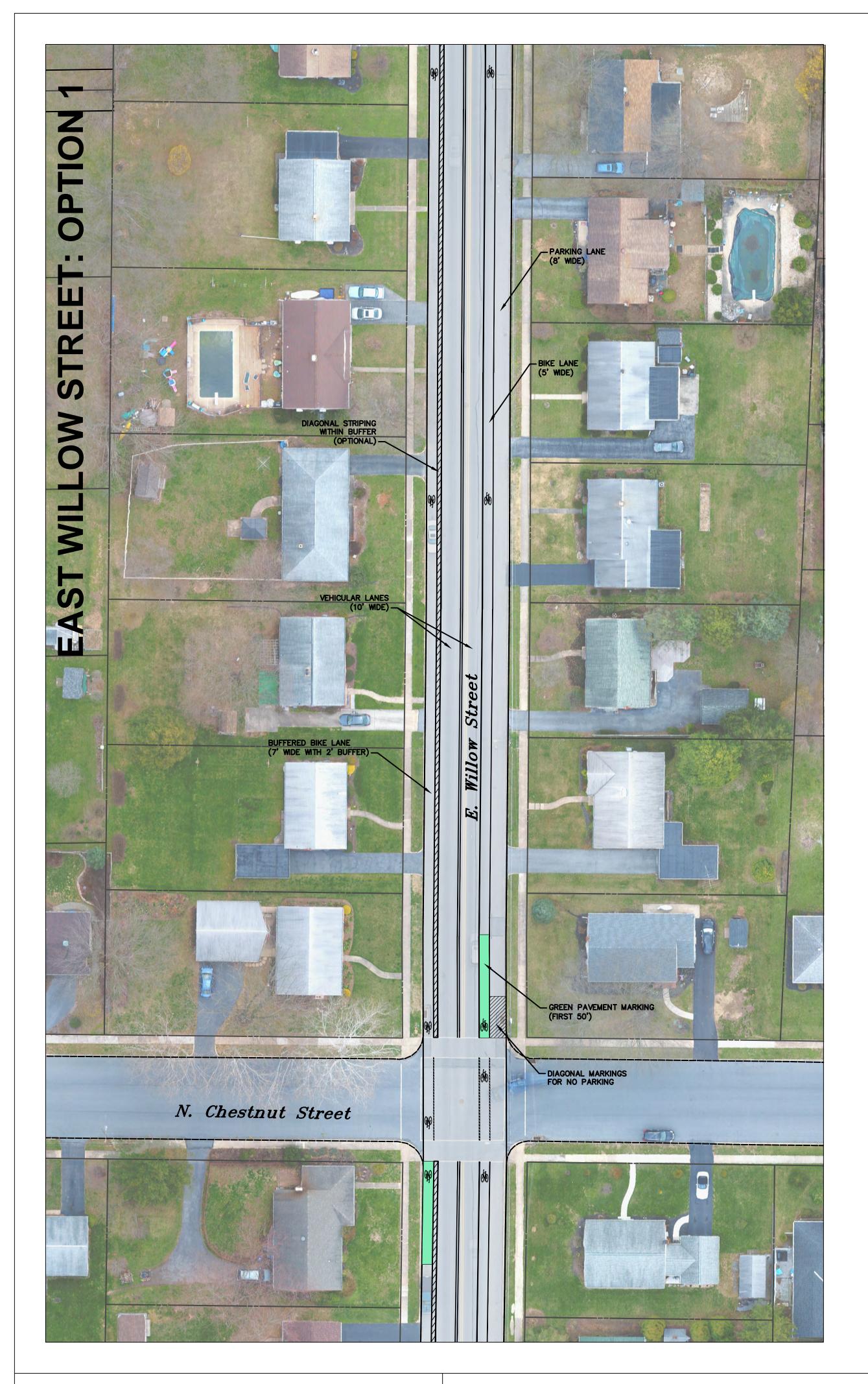
38-1

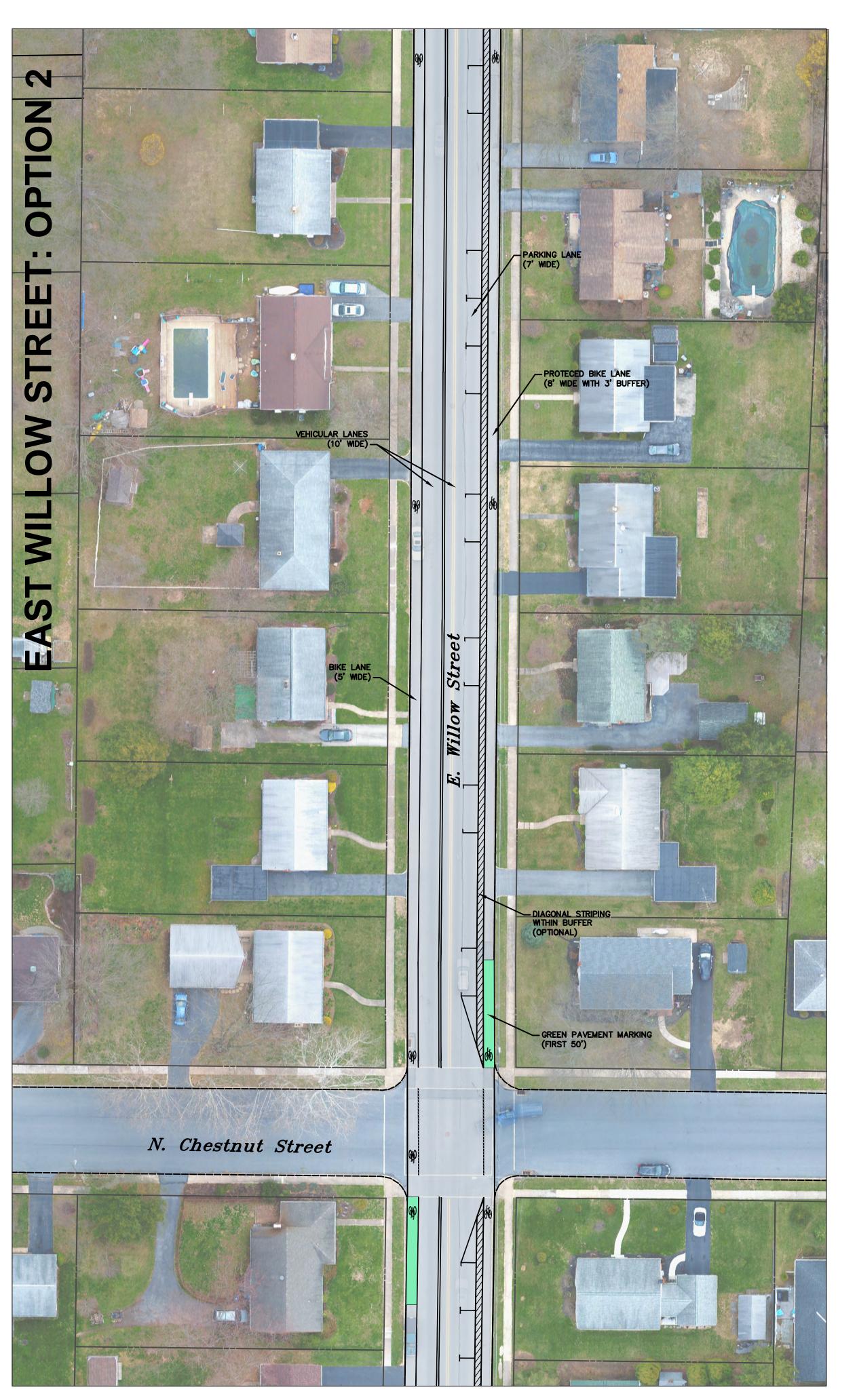
PROJECT NO.

STREET LAYOUT OPTIONS (DETAILED VIEW)

C-200 SHEET 6 OF 10 SHEETS

SHEET NO.





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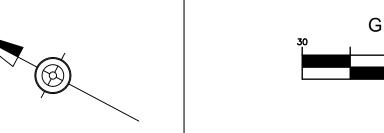
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CHECKED BY:

NORTH ARROW



SCALE

1 INCH = 30 FT.

EAST WILLOW STREET: OPTION 1

<u>ADVANTAGES</u>

- 1. PROVIDES ON-STREET PARKING ON EAST (UPHILL) SIDE OF STREET WITH A STANDARD 5' BIKE LANE.
- 2. PROVIDES BUFFERED BIKE LANE ON WEST (DOWNHILL) SIDE OF STREET. NO PARKED CARS AVOIDS CONFLICTS WITH OPEN DOORS.
- 3. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 4. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF
- 5. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY.
- 6. SNOW REMOVAL IS SIMILAR TO CURRENT CONDITIONS, EXCEPT THAT THE PARKING RESTRICTION ON THE WEST SIDE WILL ALLOW FOR LESS CONFLICTS WITH PARKED CARS.

<u>DISADVANTAGES</u>

- 1. ON-STREET PARKING IS RESTRICTED ON THE WEST SIDE.
- 2. THE EASTERN BIKE LANE IS SUSCEPTIBLE TO CONFLICTS FROM OPENING VEHICLE DOORS.

EAST WILLOW STREET: OPTION 2

- 1. PROVIDES ON-STREET PARKING ON EAST (UPHILL) SIDE OF STREET WITH A PROTECTED 5' BIKE LANE.
- 2. PROVIDES STANDARD BIKE LANE ON WEST (DOWNHILL) SIDE OF STREET. NO PARKED CARS AVOIDS CONFLICTS
- 3. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 4. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF
- 5. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY.

<u>DISADVANTAGES</u>

- 1. ON-STREET PARKING IS RESTRICTED ON THE WEST SIDE.
- 2. THE VEHICULAR LANES ARE NOT CENTERED WITHIN THE RIGHT-OF-WAY. THIS OFFSET MAY CAUSE CONFUSION WITH SOME MOTORISTS.
- 3. VEHICLES TURNING INTO DRIVEWAYS PROPOSE CONFLICTS.
- 4. SNOW REMOVAL FOR THE PROTECTED BIKE LANE IS MORE CHALLENGING.
- 5. THIS OPTION INCLUDES MORE STRIPING THAN OPTION 1 (PARKING SPACES).

OWNER: **ELIZABETHTOWN BOROUGH** 600 SOUTH HANOVER STREET

ELIZABETHTOWN, PA 17022

NAME AND LOCATION OF PROJECT ELIZABETHTOWN BOROUGH FIVE-YEAR TRANSPORTATION PLAN

38-1

PROJECT NO.

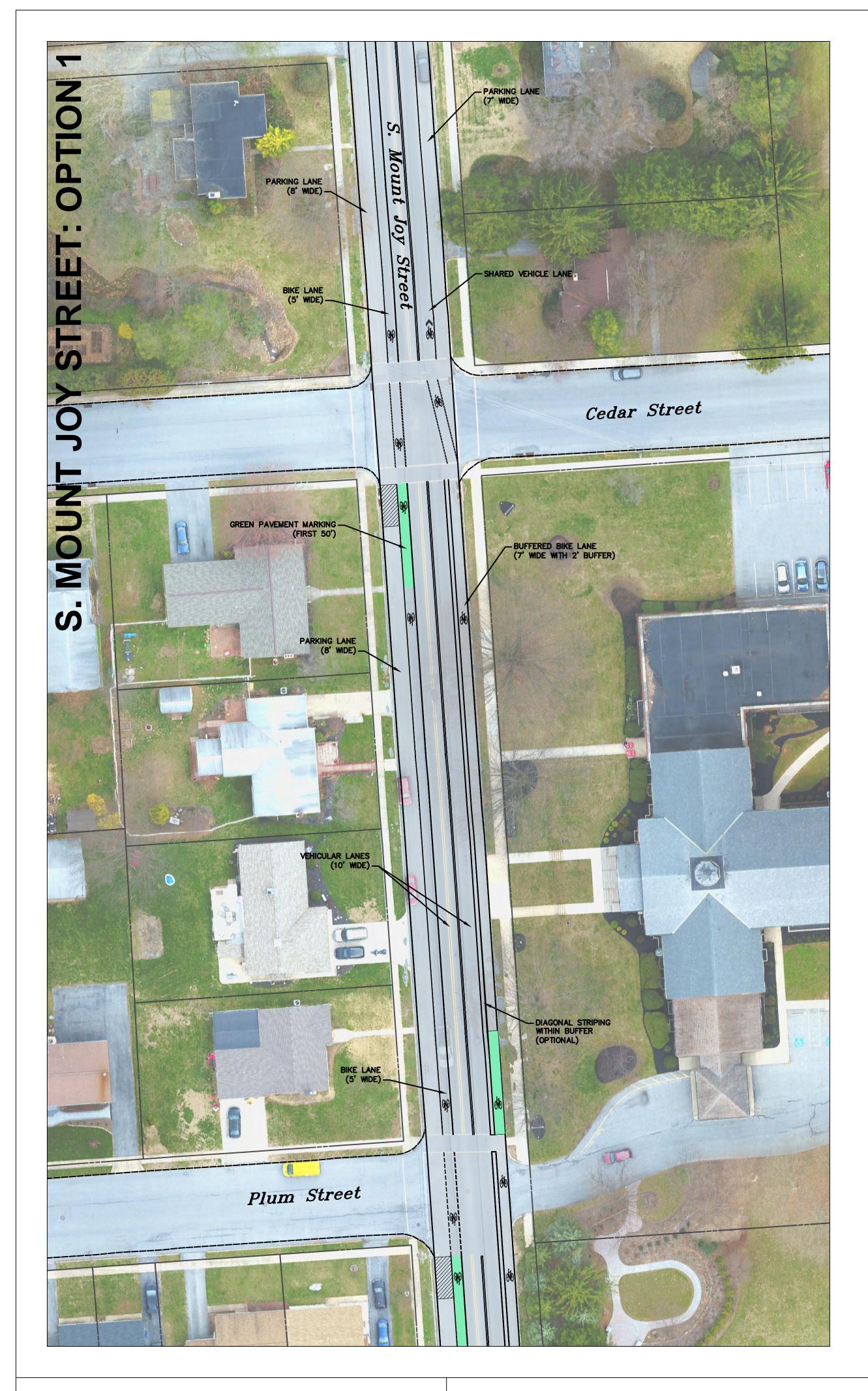
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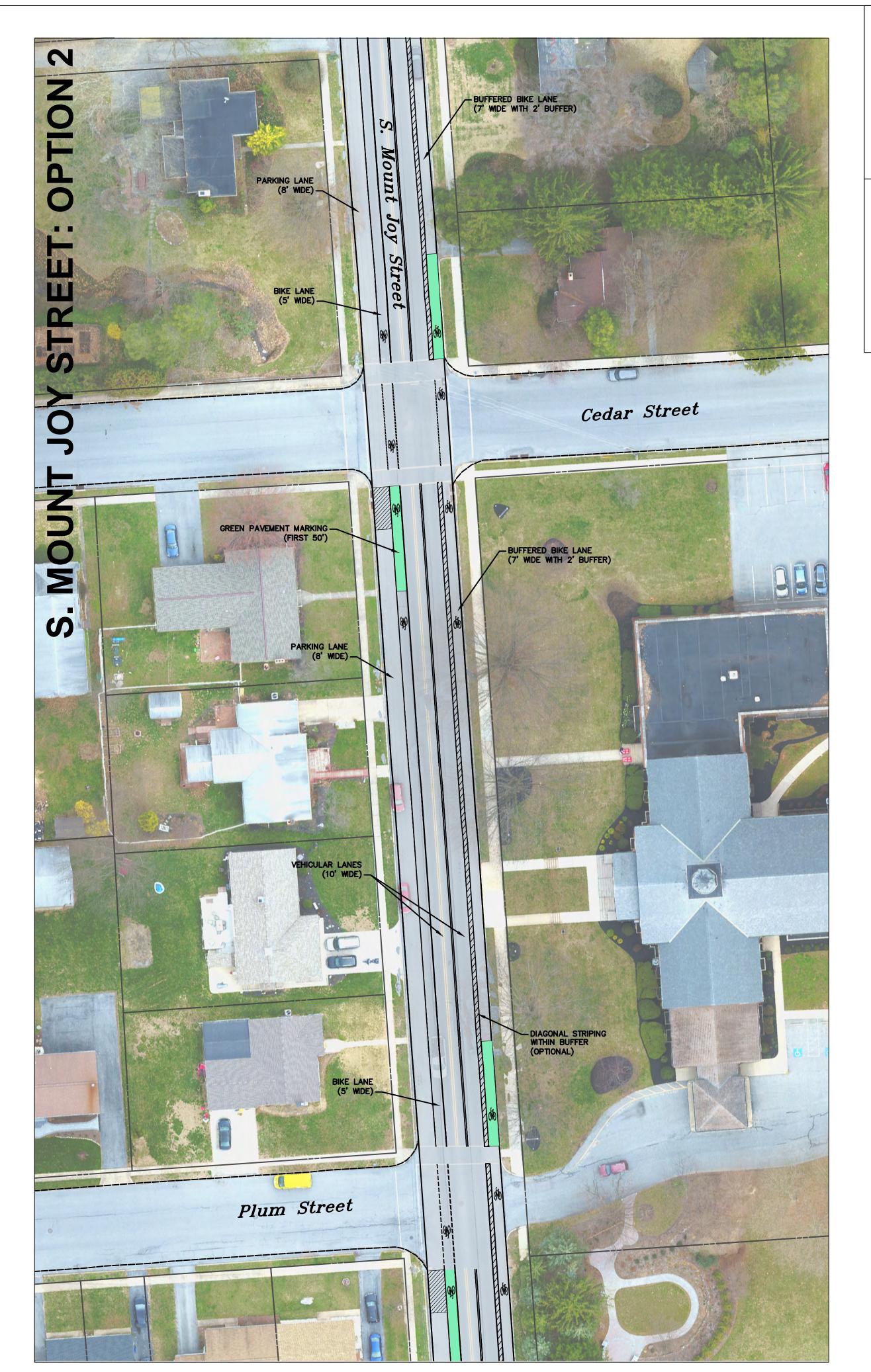
SHEET 7 OF 10 SHEETS

C-201

SHEET NO.

ELIZABETHTOWN BOROUGH, PA E. WILLOW STREET LANCASTER COUNTY





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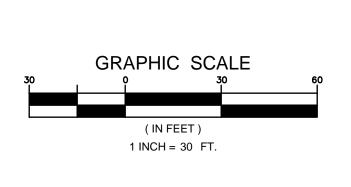
DESIGNED BY: BSC DRAWN BY: BSC

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PLAN DATE: APRIL 23, 2018

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NORTH ARROW



SCALE

S. MOUNT JOY STREET: OPTION 1

<u>ADVANTAGES</u>

- 1. PROVIDES ON-STREET PARKING ON BOTH SIDES OF THE STREET.
- 2. PROVIDES A STANDARD 5' BIKE LANE ON THE EAST (UPHILL) SIDE OF STREET.
- 3. PROVIDES SHARED BIKE/VEHICLE LANE ON WEST (DOWNHILL) SIDE OF STREET.
- 4. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 5. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF BICYCLES.
- 6. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY.
- 7. SNOW REMOVAL IS SIMILAR TO CURRENT CONDITIONS.

<u>DISADVANTAGES</u>

- 1. NO DEDICATED BIKE LANE IS PROVIDED ON THE EAST SIDE.
- 2. BIKE LANES ARE SUSCEPTIBLE TO CONFLICTS FROM OPENING VEHICLE DOORS, ESPECIALLY ON THE EAST SIDE.

S. MOUNT JOY STREET: OPTION 2

<u>ADVANTAGES</u>

- 1. PROVIDES ON-STREET PARKING ON EAST (UPHILL) SIDE OF STREET WITH A STANDARD 5' BIKE LANE.
- PROVIDES BUFFERED BIKE LANE ON WEST (DOWNHILL) SIDE OF STREET. NO PARKED CARS AVOIDS CONFLICTS WITH OPEN DOORS.
- 3. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 4. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF
- 5. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY. 6. SNOW REMOVAL IS SIMILAR TO CURRENT CONDITIONS, EXCEPT THAT THE PARKING RESTRICTION ON THE EAST

- 1. ON-STREET PARKING IS RESTRICTED ON THE EAST SIDE.
- 2. THE WESTERN BIKE LANE IS SUSCEPTIBLE TO CONFLICTS FROM OPENING VEHICLE DOORS.

OWNER: **ELIZABETHTOWN BOROUGH** 600 SOUTH HANOVER STREET ELIZABETHTOWN, PA 17022

NAME AND LOCATION OF PROJECT

ELIZABETHTOWN BOROUGH FIVE-YEAR TRANSPORTATION PLAN

38-1

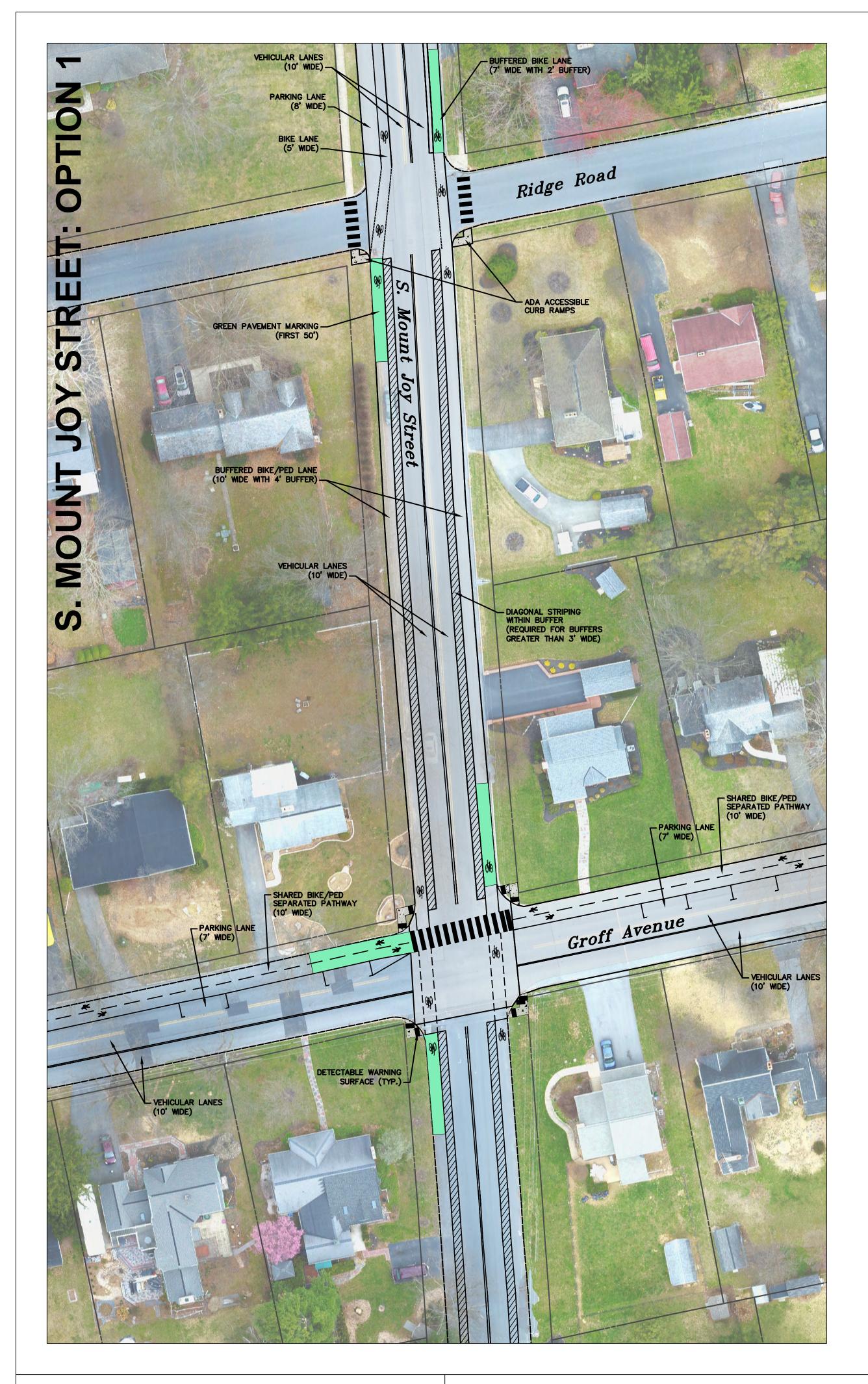
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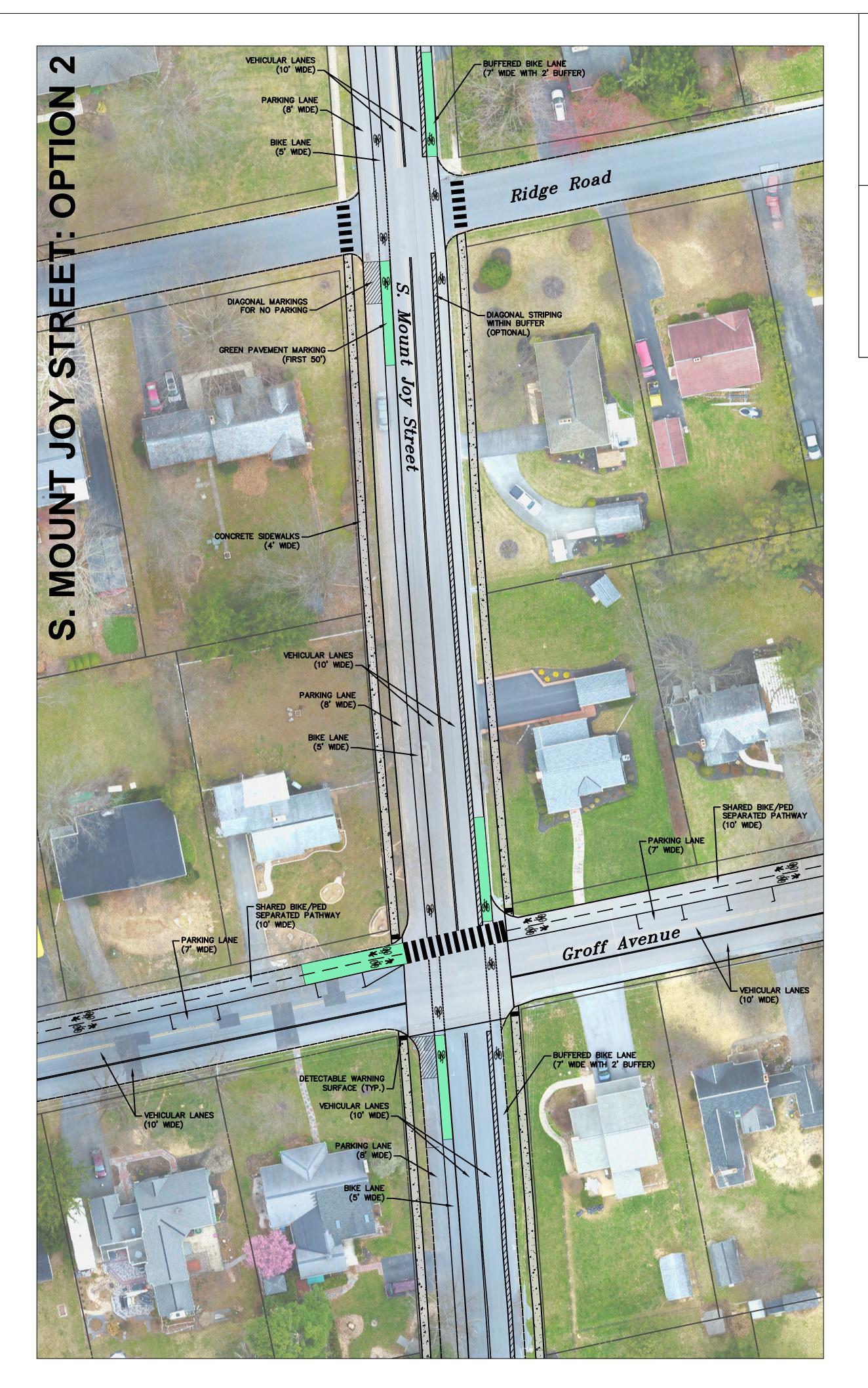
STREET LAYOUT OPTIONS (DETAILED VIEW)

SHEET NO.

C-202

SHEET 8 OF 10 SHEETS





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DRAWN BY: BSC

CHECKED BY:

PLAN DATE: APRIL 23, 2018

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NORTH ARROW

SCALE

GRAPHIC SCALE

(IN FEET)

1 INCH = 30 FT.

S. MOUNT JOY STREET: OPTION 1

<u>ADVANTAGES</u>

- 1. PROVIDES A BUFFERED BIKE LANE ON THE BOTH SIDES OF STREET.
- 2. PEDESTRIANS MAY USE BIKE LANE (A GENEROUS BUFFER LANE IS PROVIDED).
- 3. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 4. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF BICYCLES.
- 5. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY.
- 6. SNOW REMOVAL IS SIMILAR TO CURRENT CONDITIONS.
- 7. PEDESTRIAN FACILITIES ARE PROVIDED WITHIN EXISTING RIGHT-OF-WAY.

DISADVANTAGES

- 1. NO ON-STREET PARKING IS PROVIDED ON EITHER SIDE OF THE STREET.
- 2. NO DEDICATED PEDESTRIAN WALKWAYS ARE PROVIDED.

S. MOUNT JOY STREET: OPTION 2

<u>ADVANTAGE</u>

- 1. PROVIDES ON-STREET PARKING ON EAST (UPHILL) SIDE OF STREET WITH A STANDARD 5' BIKE LANE.
- 2. PROVIDES BUFFERED BIKE LANE ON WEST (DOWNHILL) SIDE OF STREET. NO PARKED CARS AVOIDS CONFLICTS WITH OPEN DOORS.
- 3. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 4. PAINTING THE FIRST 50' OF BIKE LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE OF BICYCLES.
- 5. BIKE LANES ARE CARRIED THROUGH INTERSECTIONS WITH DASHED LINES AND A BICYCLE PAVEMENT MARKING. THESE THRU LANES CAN BE PAINTED GREEN FOR ADDITIONAL VISIBILITY.6. SNOW REMOVAL IS SIMILAR TO CURRENT CONDITIONS, EXCEPT THAT THE PARKING RESTRICTION ON THE EAST
- SIDE WILL ALLOW FOR LESS CONFLICTS WITH PARKED CARS.

 7. CONCRETE SIDEWALK IS PROVIDED ON EACH SIDE OF THE STREET.

DISADVANTAGES

- ON-STREET PARKING IS RESTRICTED ON THE EAST SIDE.
- 2. THE WESTERN BIKE LANE IS SUSCEPTIBLE TO CONFLICTS FROM OPENING VEHICLE DOORS.
- 3. ADDITIONAL COSTS FOR CONCRETE SIDEWALK.



S. MOUNT JOY STREET/GROFF AVENUE INTERSECTION
ADA-ACCESSIBLE CURB RAMP/SIDEWALK LAYOUT

OWNER: ELIZABETHTOWN BOROUGH 600 SOUTH HANOVER STREET ELIZABETHTOWN, PA 17022 NAME AND LOCATION OF PROJECT

ELIZABETHTOWN BOROUGH FIVE-YEAR TRANSPORTATION PLAN

S. MOUNT JOY STREET LANCASTER COUNTY ELIZABETHTOWN BOROUGH, PA

PROJECT NO.

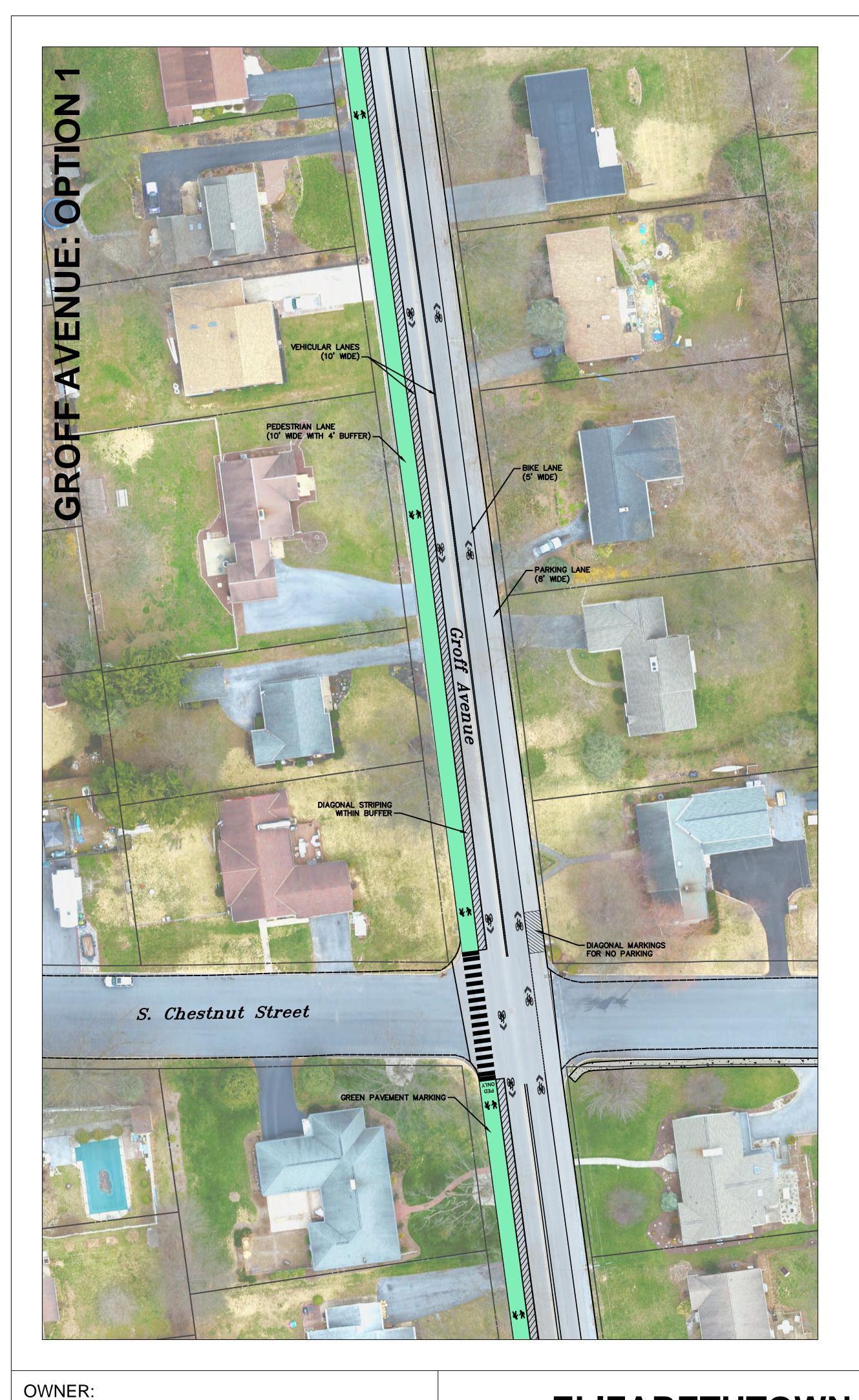
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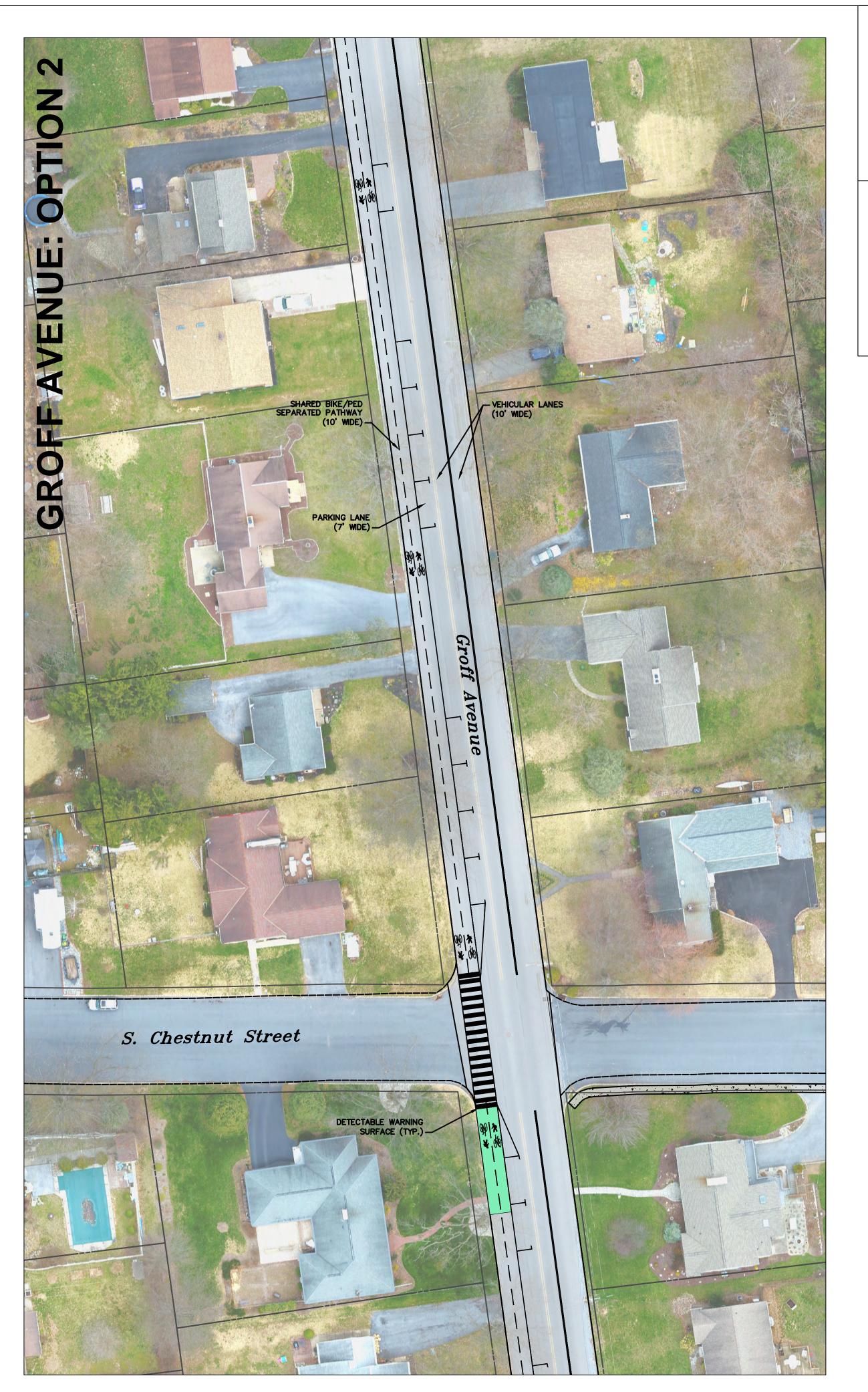
STREET LAYOUT OPTIONS (DETAILED VIEW)

SHEET 9 OF 10 SHEETS

C-203

SHEET NO.





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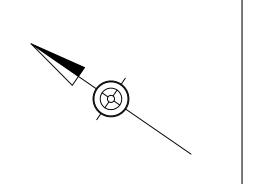
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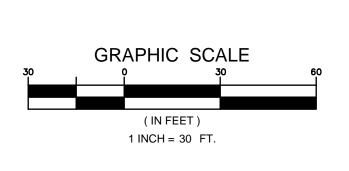
DESIGNED BY: BSC PLAN DATE: APRIL 23, 2018

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DRAWN BY: BSC CHECKED BY:

> SCALE **NORTH ARROW**





GROFF AVENUE: OPTION 1

<u>ADVANTAGES</u>

- 1. PROVIDES ON-STREET PARKING ON SOUTH SIDE OF THE STREET.
- 2. PROVIDES A PAINTED PEDESTRIAN LANE ON THE NORTH SIDE OF THE STREET.
- 3. PROVIDES A SHARED BIKE/VEHICLES LANES.
- 4. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 6. SNOW REMOVAL IS SIMILAR TO CURRENT CONDITIONS, EXCEPT THAT THE PARKING RESTRICTION ON THE NORTH SIDE WILL ALLOW FOR LESS CONFLICTS WITH PARKED CARS.

<u>DISADVANTAGES</u>

1. ON-STREET PARKING IS RESTRICTED ON THE NORTH SIDE.

5. PEDESTRIAN CROSSWALKS ARE CARRIED THROUGH INTERSECTIONS.

- 2. SHARED BIKE/VEHICLE LANES ARE SUSCEPTIBLE TO CONFLICTS FROM OPENING VEHICLE DOORS, ESPECIALLY ON THE EAST SIDE.
- 3. BIKES MAY ENCROACH UPON PEDESTRIAN LANE.
- 4. CONSTRUCTION TOLERANCES ARE LOW TO ENSURE THAT PEDESTRIAN LANE MEETS ADA REQUIREMENTS.

GROFF AVENUE: OPTION 2

<u>ADVANTAGES</u>

- 1. PROVIDES ON-STREET PARKING ON NORTH SIDE OF THE STREET WITH A PROTECTED SHARED BIKE/PEDESTRIAN SEPARATED PATHWAY.
- 2. PROVIDES 10' WIDE TRAVEL LANES ADEQUATE FOR VEHICLES AND LIKELY TO LOWER SPEEDS.
- 3. PAINTING THE FIRST 50' OF BIKE/PED LANE GREEN WILL ALERT TURNING VEHICLES TO THE POSSIBLE PRESENCE
- 5. PEDESTRIAN CROSSWALKS ARE CARRIED THROUGH INTERSECTIONS.

<u>DISADVANTAGES</u>

- 1. ON-STREET PARKING IS RESTRICTED ON THE SOUTH SIDE.
- 2. SNOW REMOVAL FOR THE PROTECTED BIKE/PED LANE IS MORE CHALLENGING.
- 4. CONSTRUCTION TOLERANCES ARE LOW TO ENSURE THAT PEDESTRIAN LANE MEETS ADA REQUIREMENTS

NAME AND LOCATION OF PROJECT

ELIZABETHTOWN BOROUGH FIVE-YEAR TRANSPORTATION PLAN

38-1

PROJECT NO.

SHEET 10 OF 10 SHEETS

SHEET NO.

ELIZABETHTOWN BOROUGH

ELIZABETHTOWN, PA 17022

600 SOUTH HANOVER STREET