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DESIGN ANALYSIS REPORT



MARTINS LANE BICYCLE ACCESS FEASIBILITY STUDY

Introduction

This design report summarizes the analysis and preliminary designs for new bicycle lanes along Martins Lane between Mannakee Street and N. Washington Street. In the City of Rockville's 2017 Bikeway Master Plan, bicycle lanes were recommended along this section of Martins Lane. The objective of the study is to provide a high-quality, safe, and convenient bicycle facility that improves connectivity and safety that benefits all roadway users. This study analyzed proposed alternative facility impacts on abutting properties, existing traffic patterns, on-street parking and pedestrian and bicycle traffic.

The design team developed three bicycle lane concept alternatives on Martins Lane and assessed the impact on traffic operations; pedestrian safety; the quality of the bicycle and pedestrian experience and safety; parking; and abutting properties.

Design Considerations

The design team considered the following items during the development of the three concepts, and weighed the impact and effect on each when developing the design details:

- Safety and accessibility for bicyclists and pedestrians
- Pedestrian walking patterns, particularly for mid-block crosswalk locations
- Construction cost
- Private property impact
- Truck accessibility
- Traffic capacity
- Residential parking from 150' west of Bickford Avenue to Ivy League Lane
- Event parking for sports fields near Rock Terrace School and the Rockville Swim and Fitness Center

Each of these items has been addressed in the analysis of the three bicycle lane concepts.

Concept Alternatives

Three concept designs were developed during the study. These concepts include:

- Concept 1: Separated bicycle lanes in both directions
- Concept 2: Separated bicycle lane in the eastbound direction, and a shared vehicle and bicycle lane with sharrows in the westbound direction
- Concept 3: Two-way shared use path on the north side, and a separated eastbound bicycle lane on the south side.

Concept 1: This concept would reconfigure Martins Lane to have two 10.5- to 11-foot-wide vehicle travel lanes, 5-foot-wide dedicated bike lanes with 1-foot buffers from the vehicle lanes. It would allow part-time event parking in the bicycle lanes for events when the no-parking signs would be covered temporarily. It is recognized that permitting on-street parking at certain times does not encourage safer travel behavior by motorists. It is expected that no more than ten events occur per year which would



require permitting on-street parking. It will be necessary for the city to conduct appropriate enforcement to help ensure that motorists only park on-street when it is permitted for these special events. This concept maximizes cyclist safety within the existing roadway footprint.

Concept 2: This concept would reconfigure Martins Lane to have two 10.5- to 11-foot-wide vehicle travel lanes, 1-foot buffers between eastbound travel lane and bicycle lane and adds 5-foot-wide dedicated bike lanes headed eastbound. On the westbound side, a 7-foot-wide dedicated parking lane would be added, and bicycles would share the vehicle travel lane marked with sharrows. This concept is a compromise between maintaining parking and providing a safe cycling route.

Concept 3: This concept would reconfigure Martins Lane to have two 10.5- to 11-foot-wide vehicle travel lanes, a 5-foot-wide dedicated eastbound bike lane with 1-foot buffer from the vehicle lane. On the westbound side, a 7-foot-wide dedicated parking lane would be added, and a new 8- to 10-foot-wide shared use path would be constructed north of the existing curb, which would accommodate bicyclists and pedestrians. This concept maximizes cyclist safety and level of comfort, as well as accommodating parking. It would require roadway narrowing near N Washington Street.

Common Elements: each of the concepts include the following elements:

- Green bike crossings: Green-painted pavement markings at intersections to highlight designated bike crossing areas, improving cyclist awareness for motorists and pedestrians.
- New pavement marking paint and signage: Freshly painted lane markings and symbols to clearly
 delineate travel lanes, bike lanes, and pedestrian crossings, enhancing overall safety and
 visibility on the road.
- Pedestrian crossing by the Post Office: Implementation of ADA-compliant pedestrian crossing near the post office, ensuring accessibility and promoting safe pedestrian street crossing.

Concept Alternative Analysis

The three concept designs were analyzed during the study to understand the best value and the downsides of each option. This analysis included a cost estimate, parking impact analysis, and traffic impact study.

Cost Estimate: A planning-level construction cost estimate was developed for each concept. The detailed cost estimate is included in the appendix, and the summary is below:

- Concept 1: \$55,000
- Concept 1a: \$63,000 (with an additional crosswalk at Rockville Swim and Fitness Center)
- Concept 2: \$52,000
- Concept 3: \$552,000

Concepts 1 and 2 are very similar in cost, and the cost of concept 3 is larger due to the concrete construction of the shared use path. In addition, concepts 1 and 2 would take less time to design and construct, and since the cost for concept 3 is also significantly higher, a separate capital improvement project will likely need to be developed and budgeted for accordingly, which may also take additional time for implementation. Concept 1a includes an additional crosswalk at Rockville Swim and Fitness Center, which could be added to Concept 2 or 3.



Parking Impact Analysis: While it is not preferred, all options include the ability for the city to permit onstreet parking on the bike lane during the large events hosted by the Rockville Swim and Fitness Center. As noted above, it is expected that no more than ten events will be held per year when on-street parking will be necessary. The effect on residential and event parking was analyzed during the study, and has been summarized below:

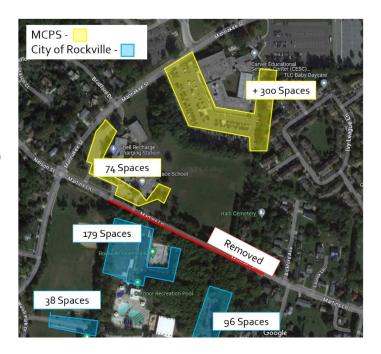
- Existing Condition:
 - o Eastbound: Approximately 1100 feet of street parking
 - o Westbound: Approximately 900 feet of street parking
- Concept 1: Temporary event parking would be allowed, and permanent street parking would be removed
- Concept 2:
 - o Eastbound: Temporary event parking would be allowed, and permanent street parking would be removed
 - o Westbound: Approximately 900 feet of street parking would remain
- Concept 3:
 - o Eastbound: Temporary event parking would be allowed, and permanent street parking would be removed
 - o Westbound: Approximately 900 feet of street parking would remain

The study team reviewed the potential impact to removing street parking in the residential area. Parking is currently allowed from 5pm to 7:30am from Ivy League Lane to Bickford Avenue. Houses on this block have driveways for daytime parking, so removing parking is feasible. Full-time parking is allowed west of Bickford Lane, and there are seven residences in this immediate area that have driveways for parking. In addition, parking is allowed on Bickford Avenue if additional parking is needed, so removing parking in this area is feasible also. Residents on Martins Lane have raised concerns related to removing on street parking for the residential uses.



The study team reviewed current off-street parking locations for events at and near the Rockville Swim and Fitness Facility. Rock Terrace School. The study revealed adequate capacity to handle almost all events within the immediate area. A summary of the off-street parking availability is below:

- MCPS Educational Services Center: 300 spaces
- Rock Terrace School: 74 spaces
- Rockville Swim and Fitness Center North Lot: 179 spaces
- Rockville Swim and Fitness Center East Lot: 96 spaces
- Welsh Park Playground: 38 spaces This analysis shows a total of more than 687 parking spaces, and this is adequate for most events. While many of these parking spaces are



further from the Rockville Swim and Fitness Center and the field than the on-street parking spaces that would be removed, they are still within walking distance and can serve motorists during times when the Rockville Swim and Fitness Center is hosting a large event and Rock Terrace School field is in use. Additionally, the Montgomery County Public School Education Services Center parking lot is immediately north of the field and includes a direct access between the parking lot and field. The study team documented the actual use of on- and off-street parking during sports events, and parking is available in this lot.

Traffic Analysis: The study included a traffic capacity and level of service analysis to compare the existing road condition to the proposed. Since all concepts maintain the existing travel and turn lane configuration, the study found that all three concepts would have negligible impact on traffic delay, queue lengths, and level of service. The results of the traffic analysis have been included in the appendix.

Public Input: The study team hosted a virtual public meeting on March 12th, 2024. A summary of the three concepts were presented, and the detailed concept plans were reviewed. At the end of the presentation, the meeting was opened for public questions and comments. A summary of the question-and-answer section is below:

- Attendees noted that a shared bicycle and vehicle lane with sharrows are not preferred, and separated bike facilities are safer.
- Attendees noted that current pavement markings and crosswalks could use an update, and the study team noted that all three options would address the faded crosswalks and pavement markings.
- Many attendees agreed that the shared use path of concept three is favored.
- Some attendees noted that removing residential parking would inconvenience residents of Martins Lane.



- There was concern that adding bicycle lanes on Martins Lane would make traffic delay worse, but the study team noted that there would be no impact to traffic.
- Prior to the meeting, the US Postal Service shift manager noted the new crossing would be very helpful to increase worker safety, as the USPS employee parking lot is south of Martins Lane.
- Buses and firetrucks were noted to be accommodated in all three concepts. Concept three would require more design to account for curb relocation at N Washington St. It was noted that semitrucks typically use Maryland Ave instead of Martins Lane.

The meeting summary is included in the appendix.

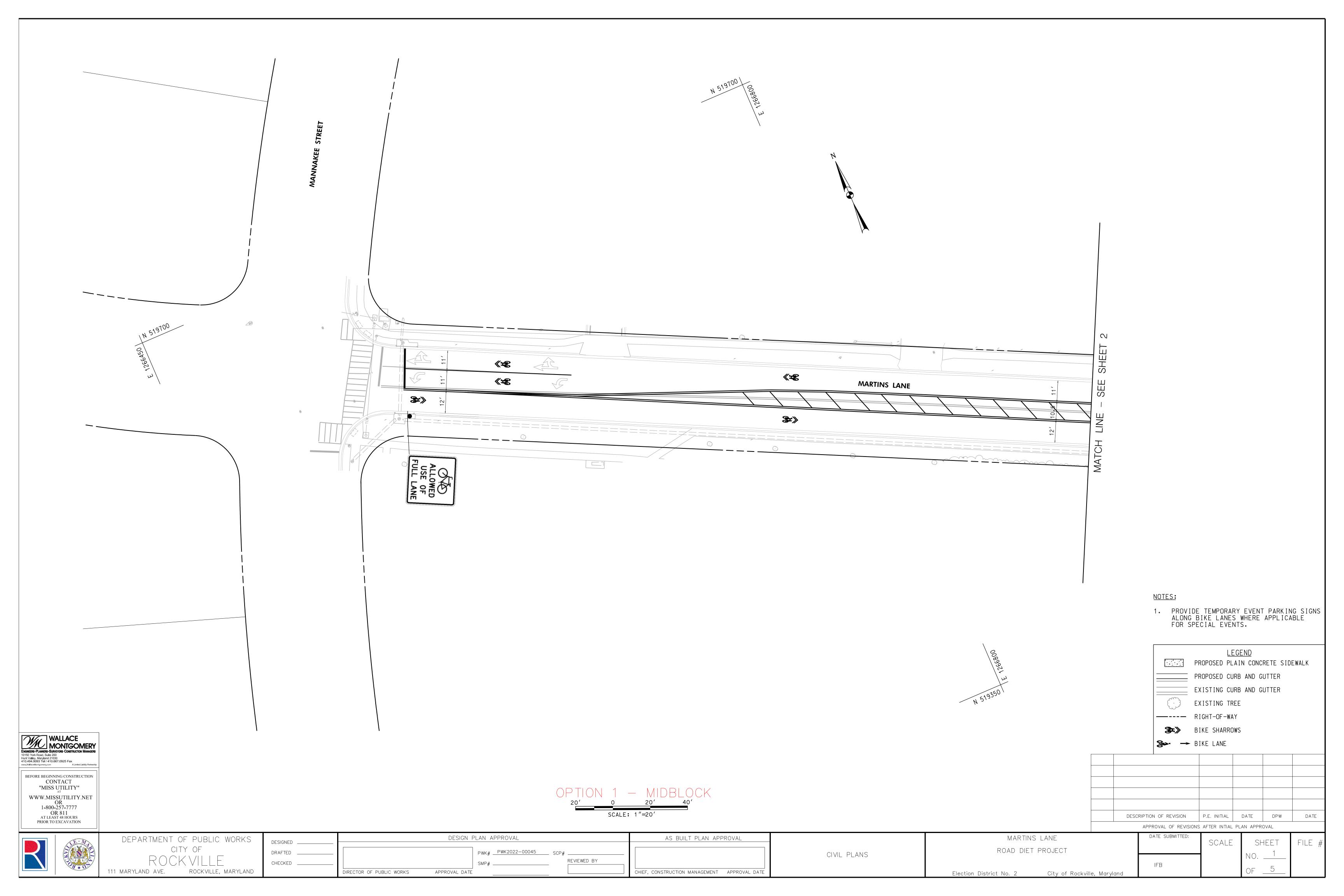
Best Value and Impact Analysis: The study team found that the best solution for a safe pedestrian and bicycle facility is the shared use path in concept three, however it is the costliest. Of the two other concepts, the separated bicycle lane in concept one is the best option for safe on-street bicycle lanes. The compromise with this option is the removal of residential and athletic event on-street parking.

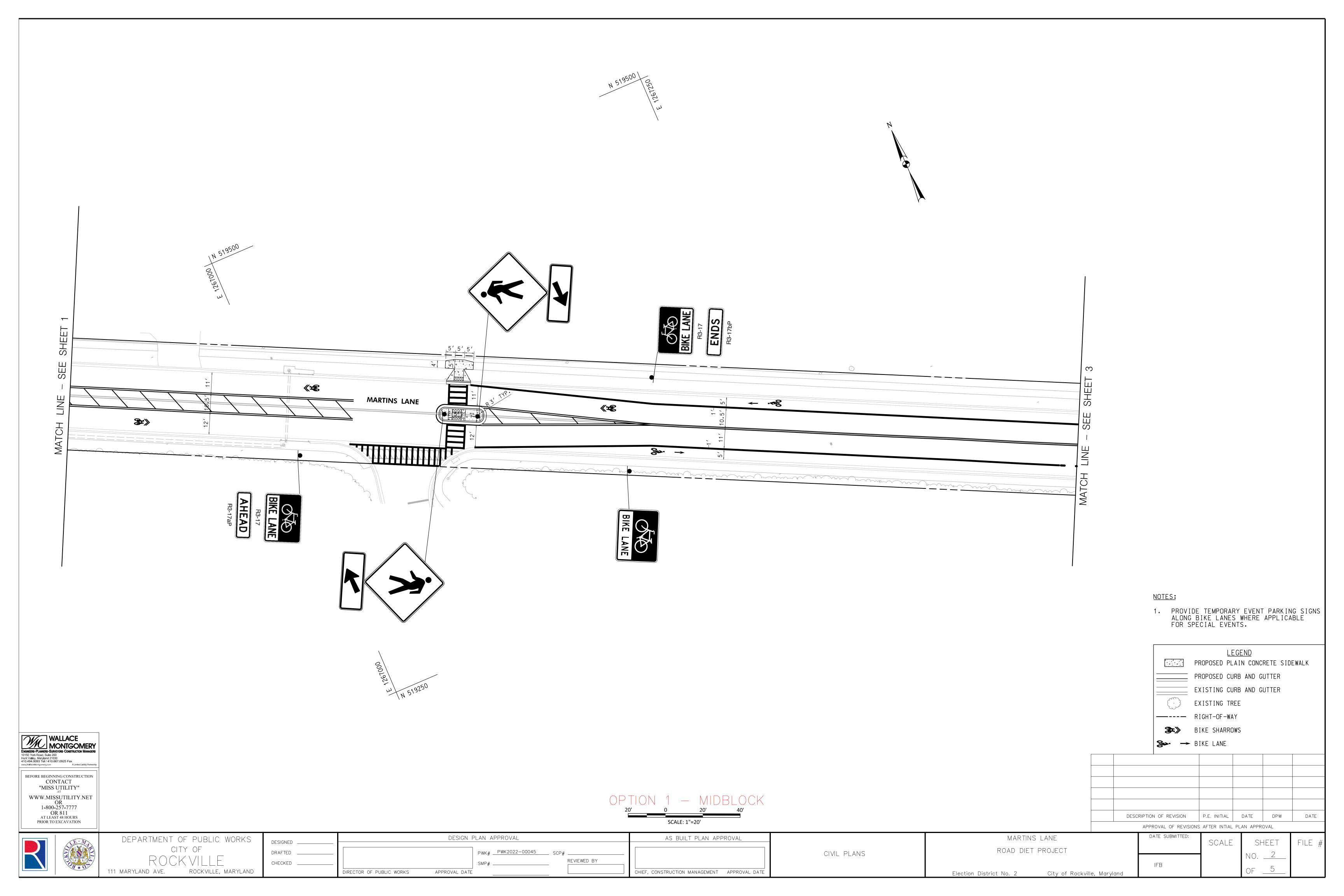
Next Steps

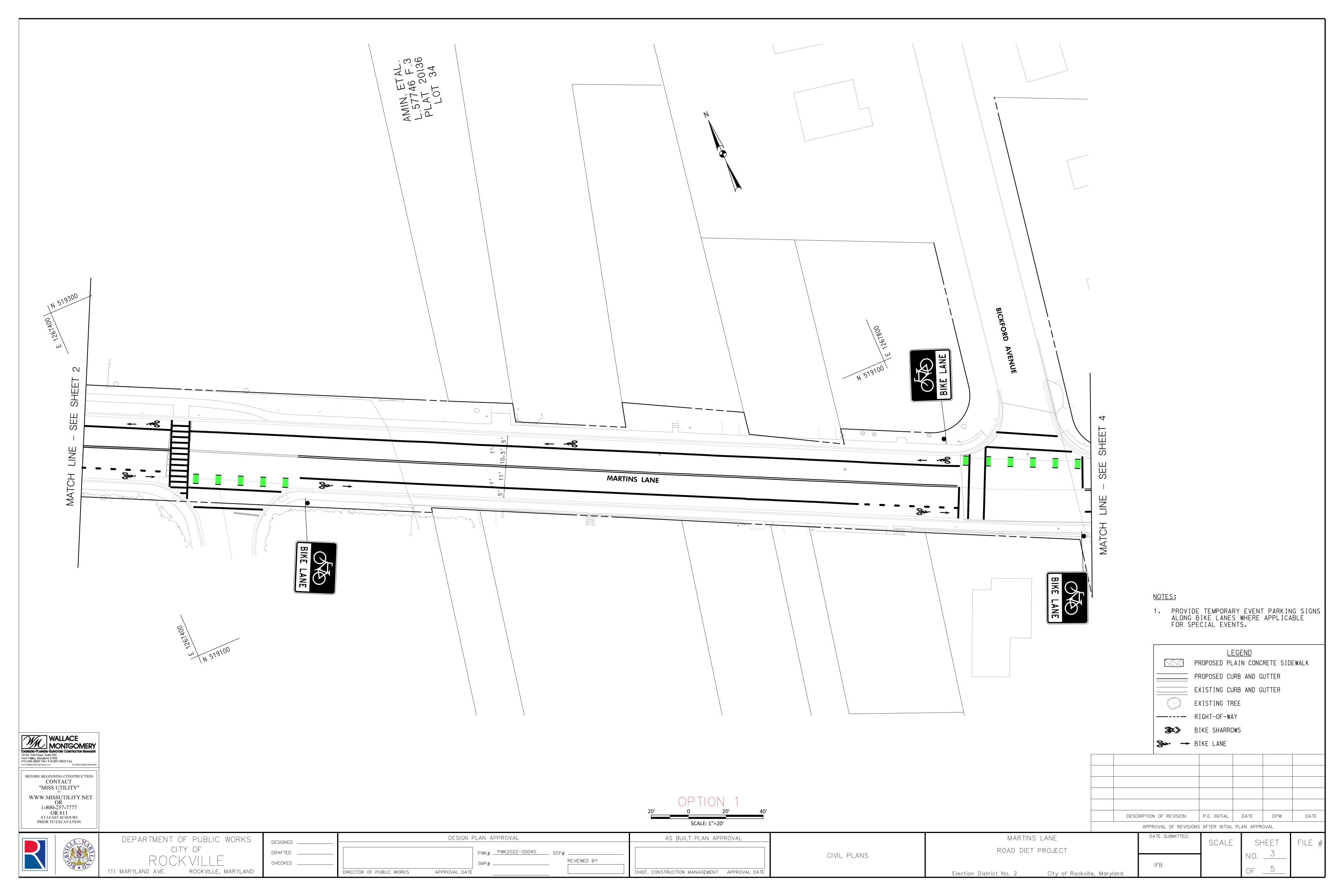
Recognizing that the best option may be cost prohibitive at this point, a phased approach may be best. The phased approach would implement concept one, or a mixture of concept one and two in the short-term, and plan for a shared use path as the long-term goal.

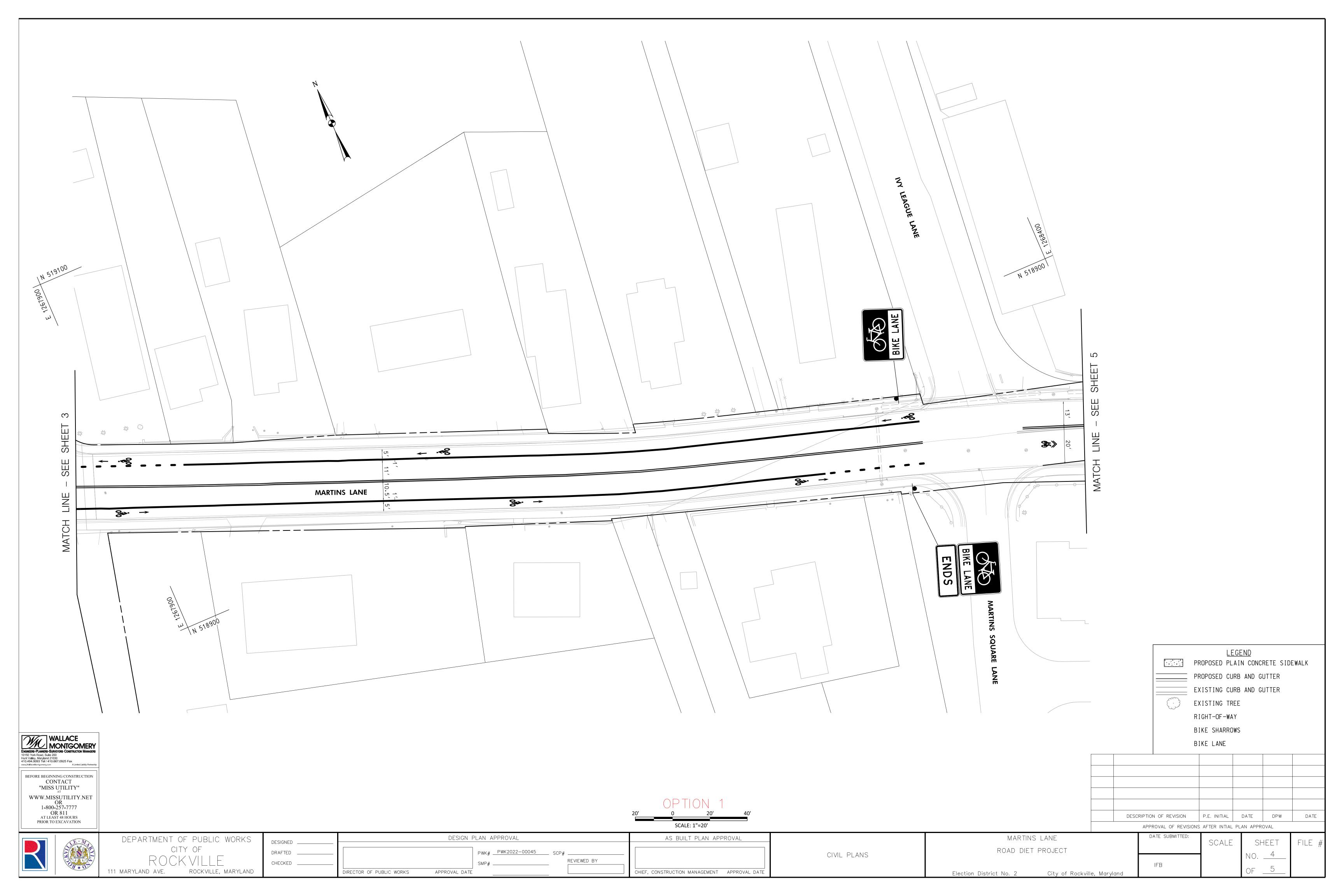
Appendix

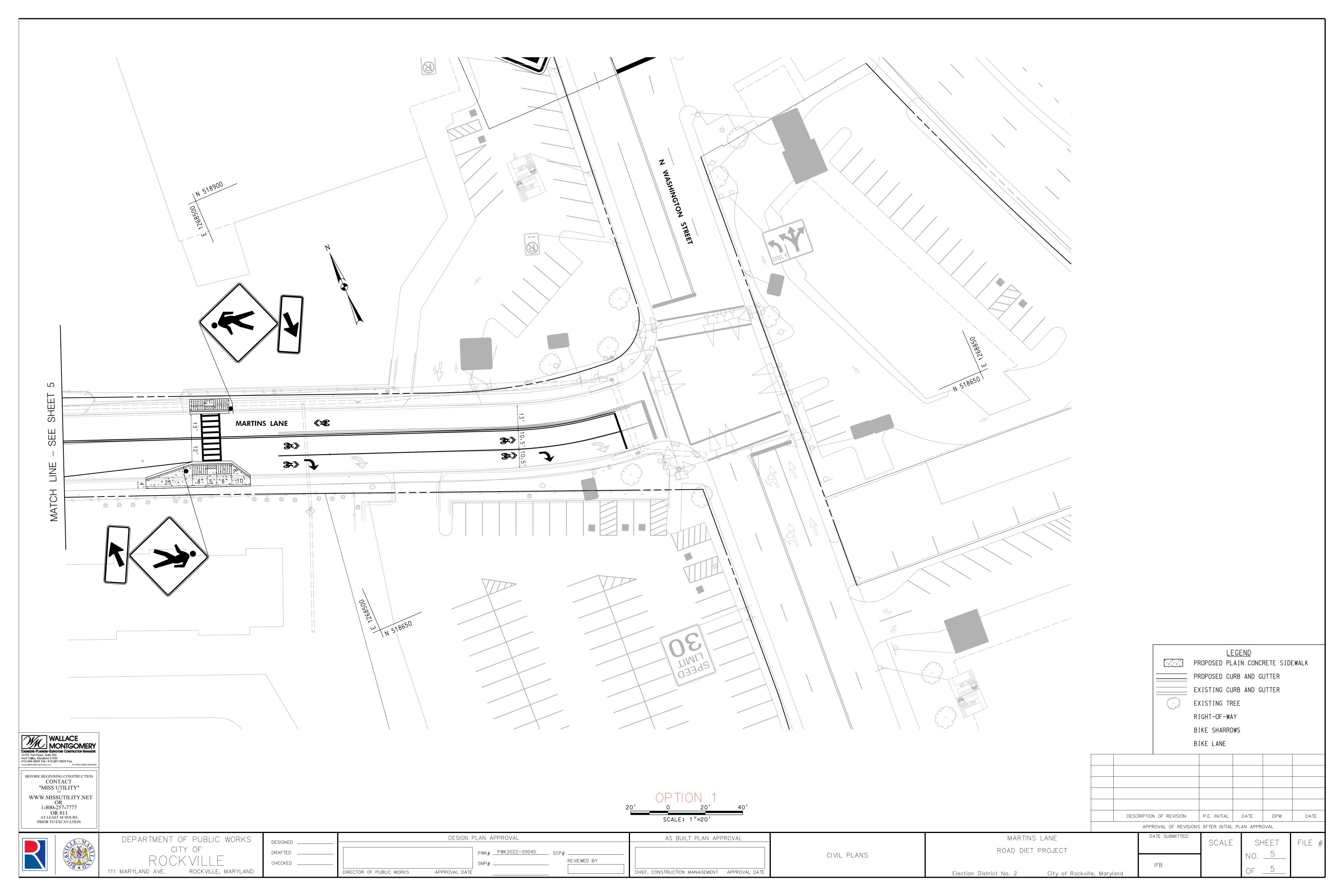
- Concept plans
- Cost estimate
- Public meeting presentation
- Meeting summary
- Public comments and responses
- Traffic delay and queue analysis

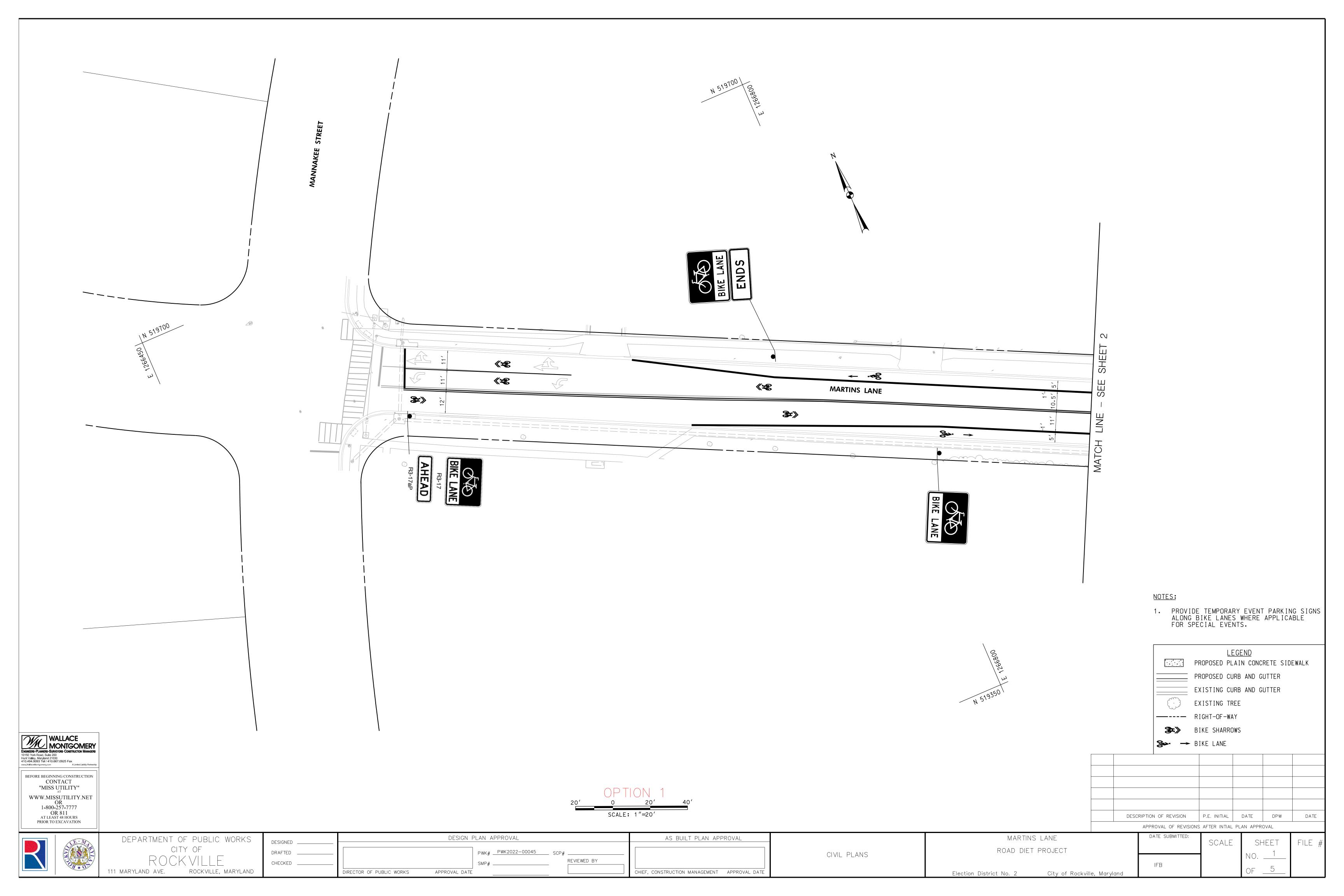


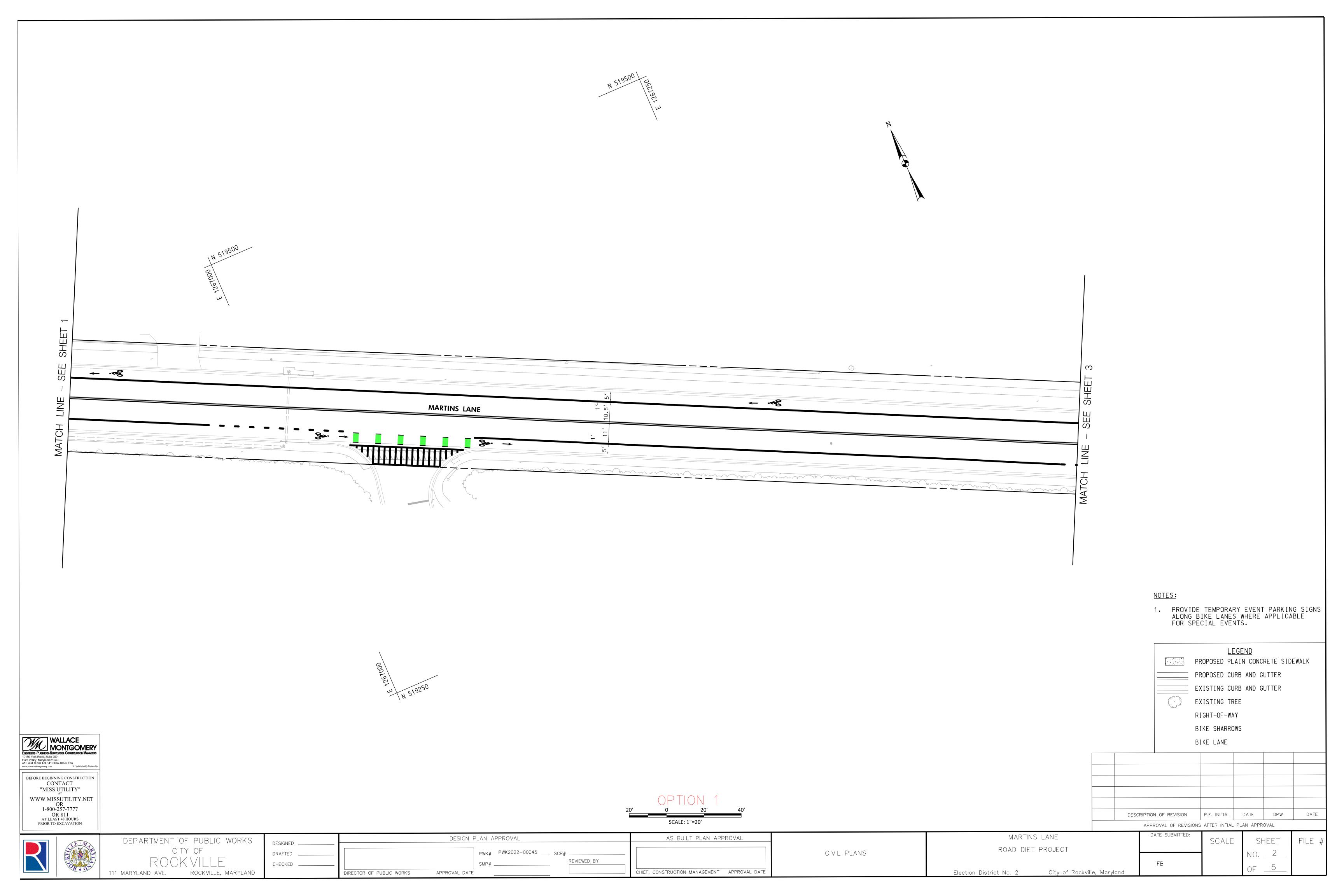


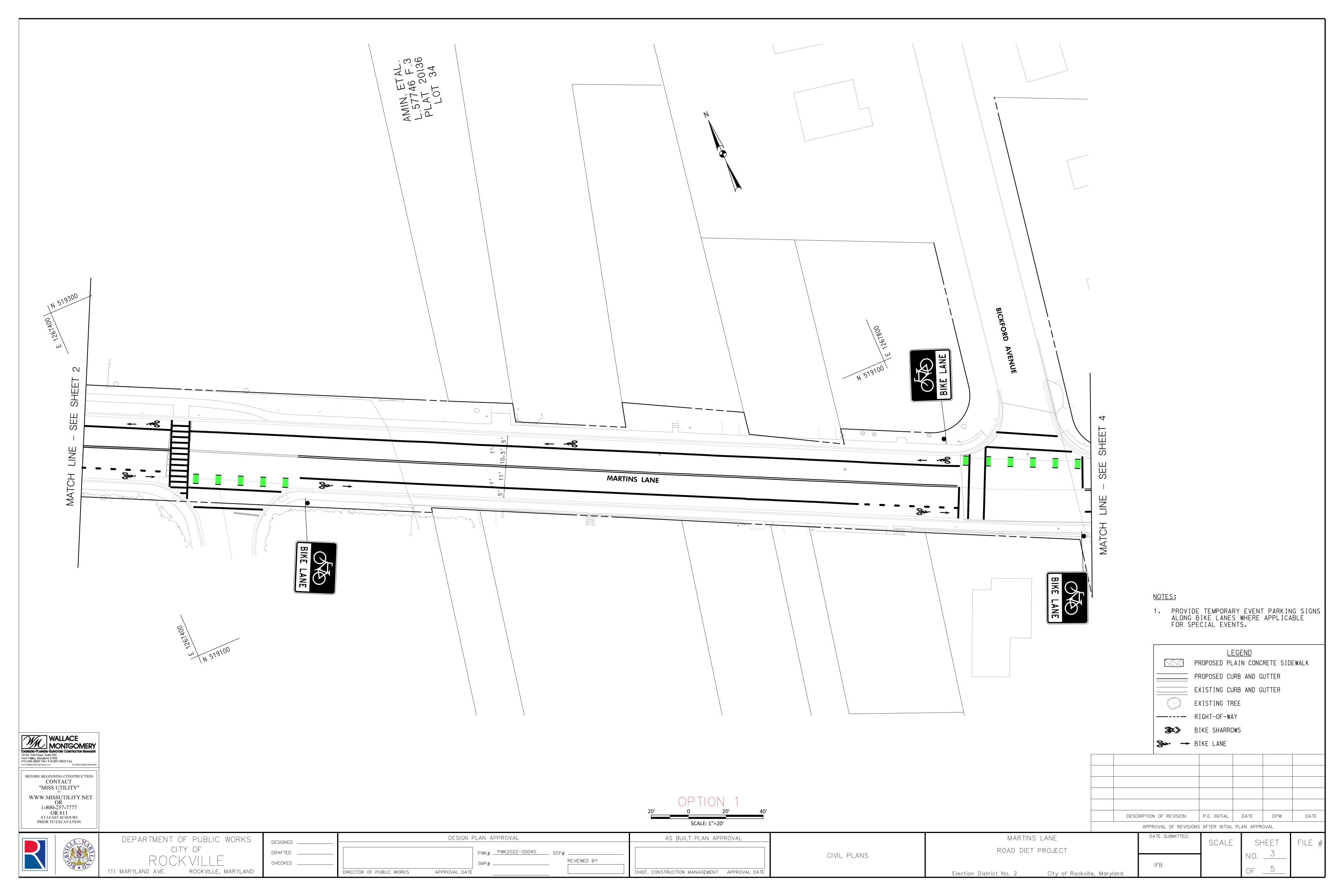


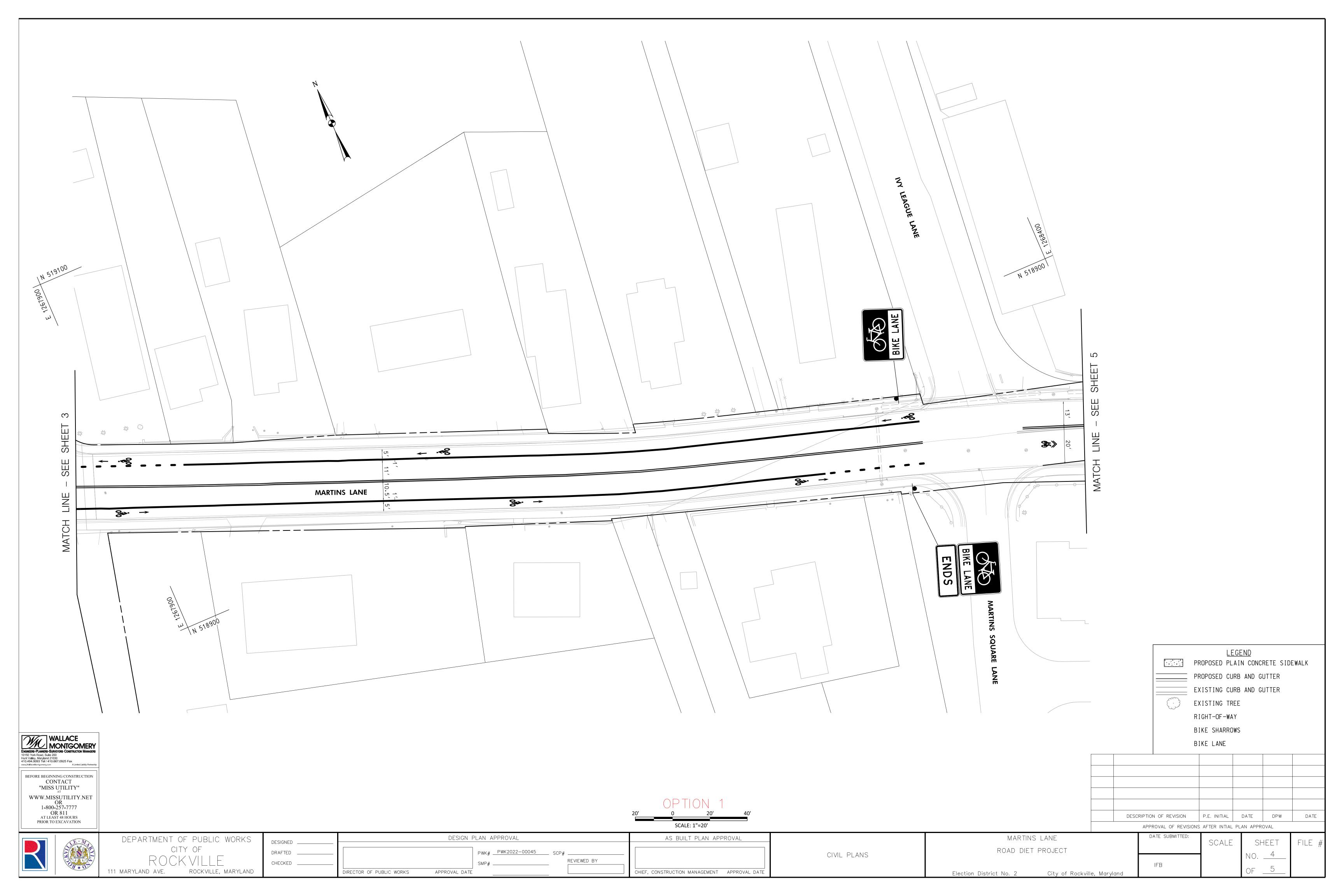


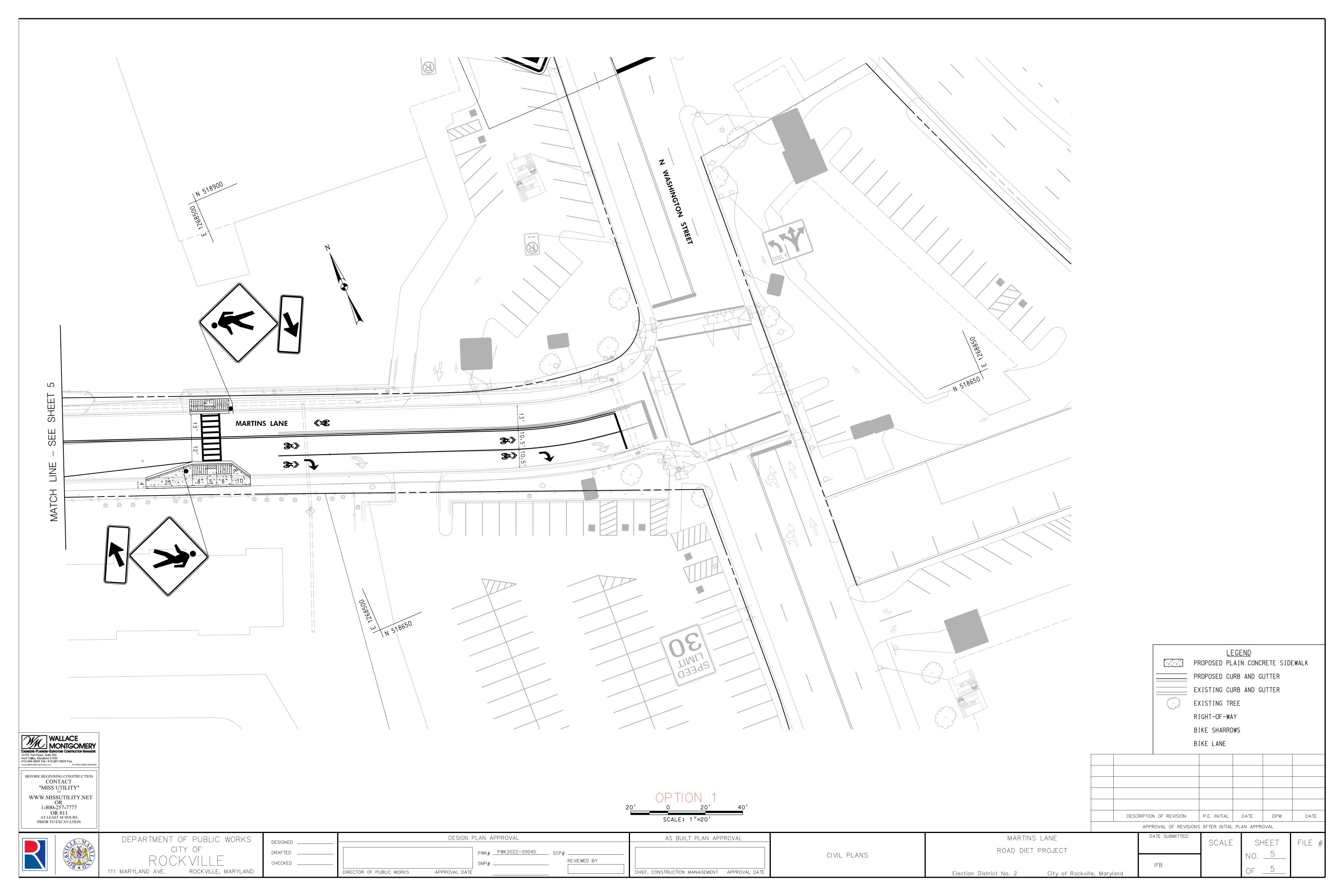


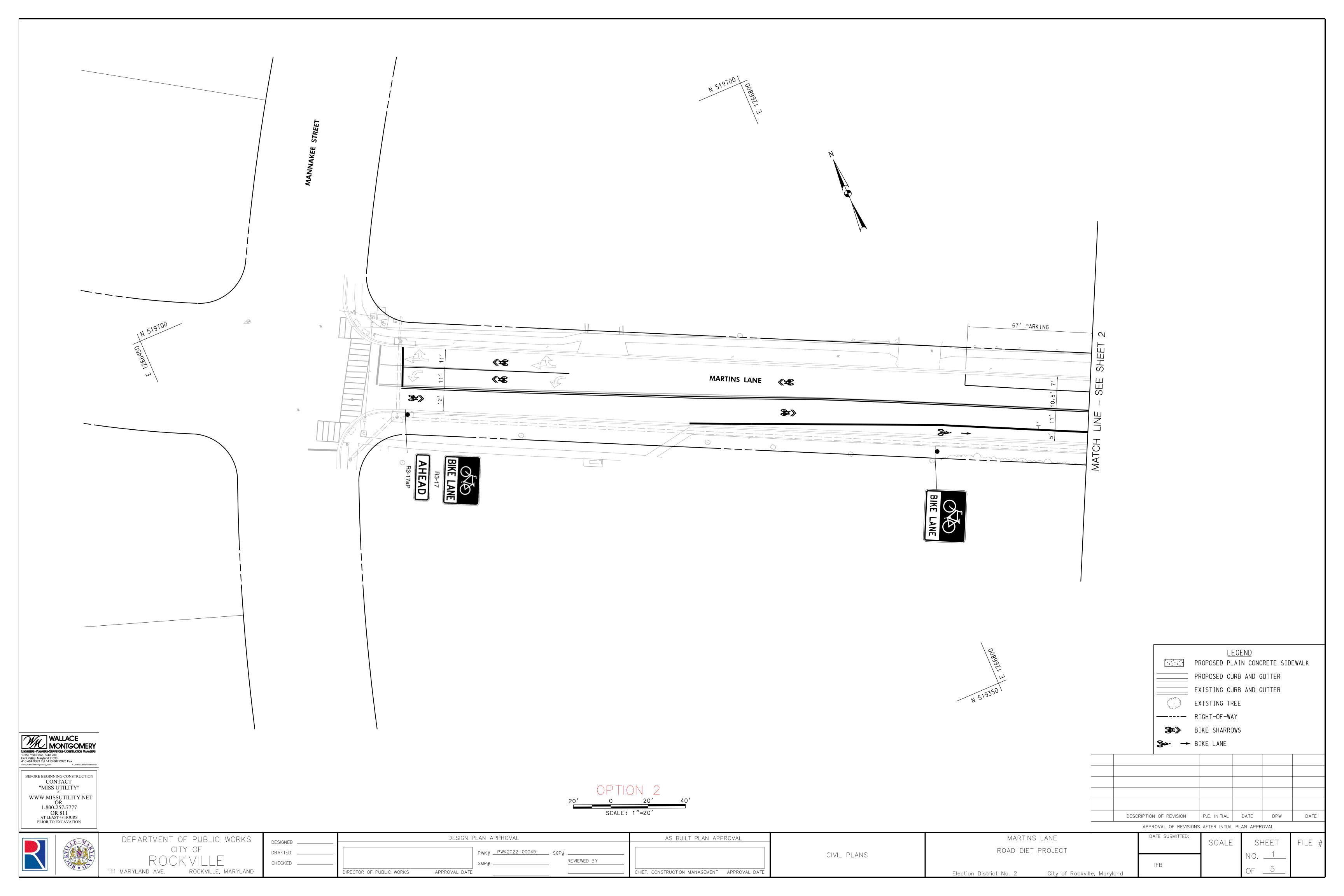


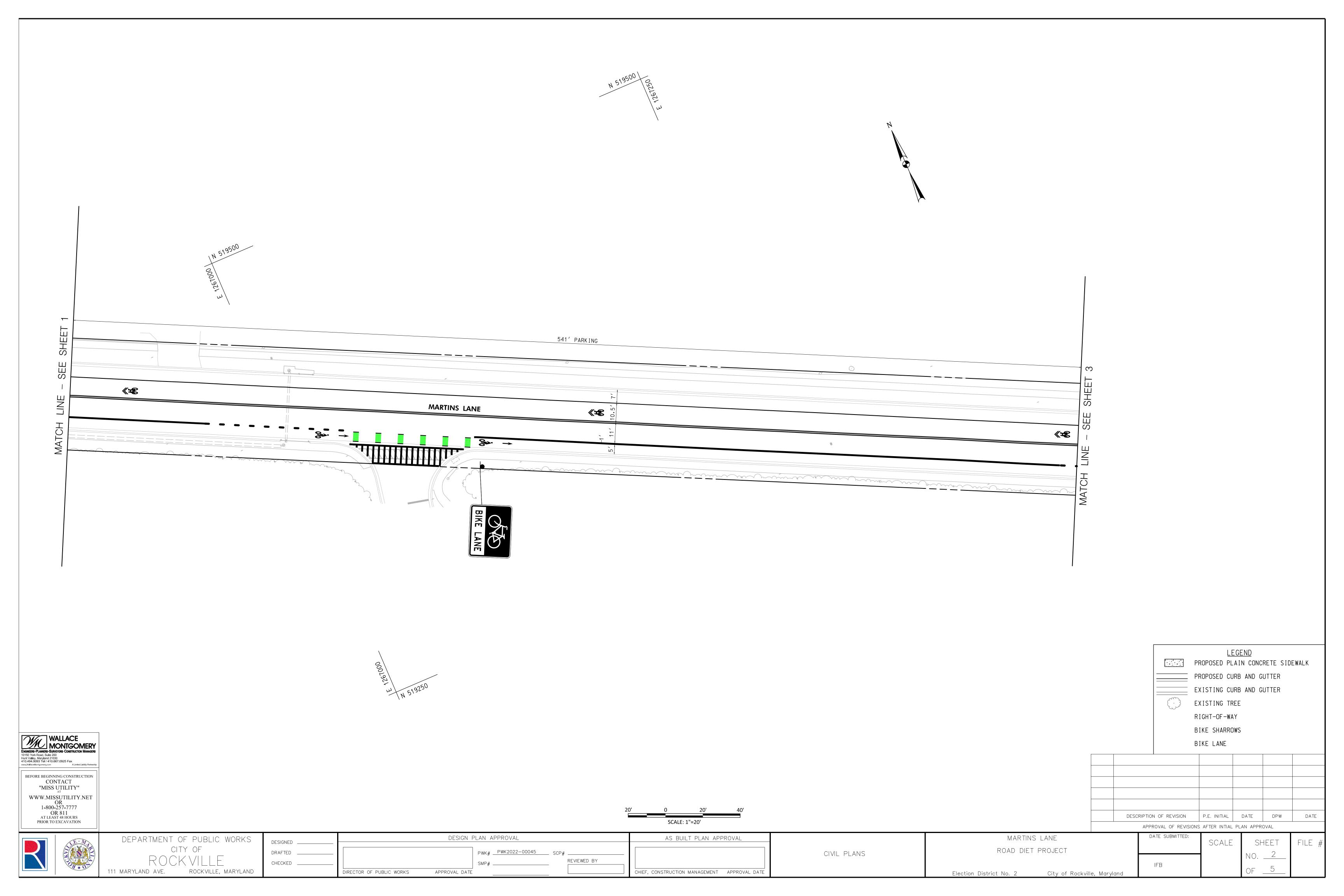


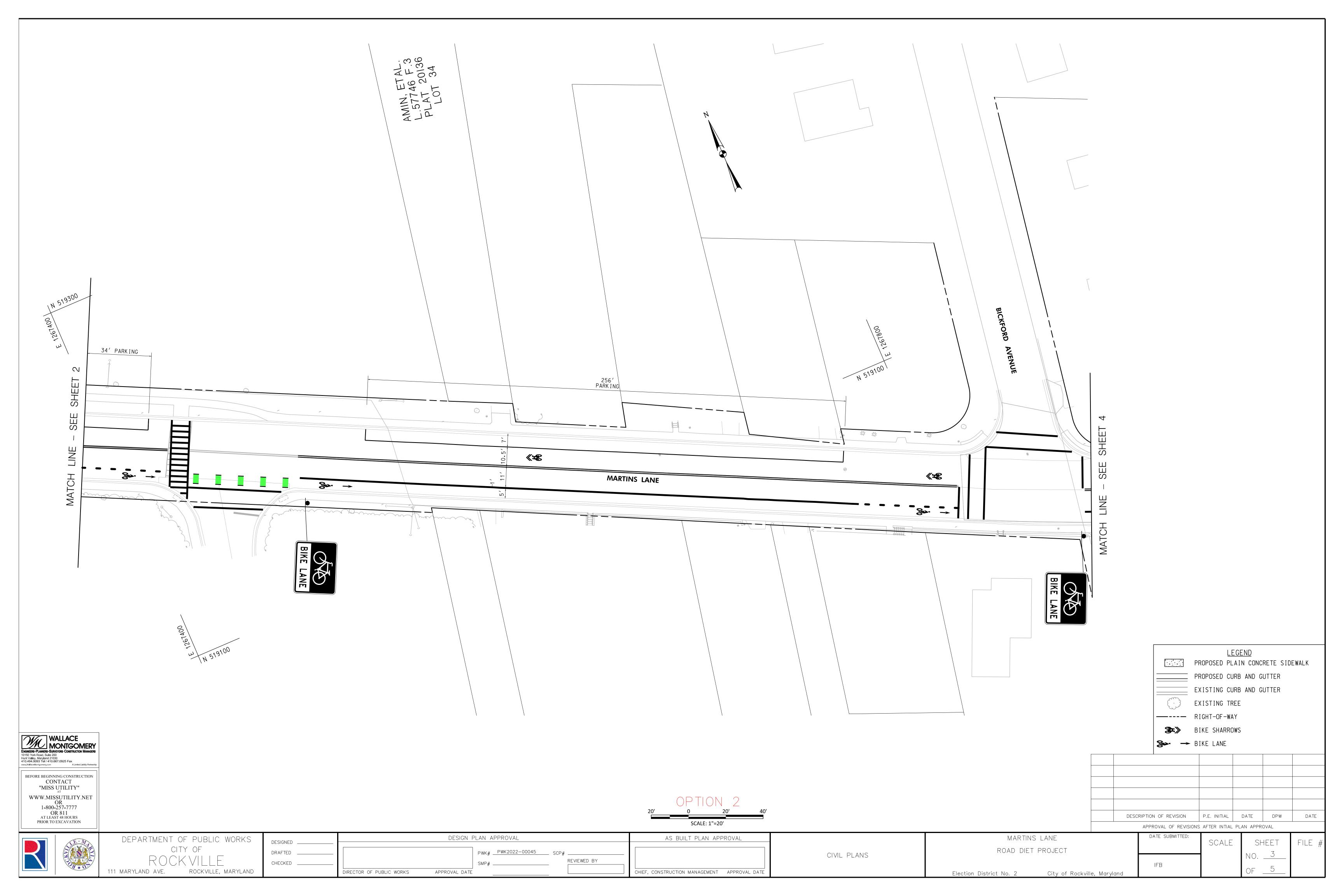


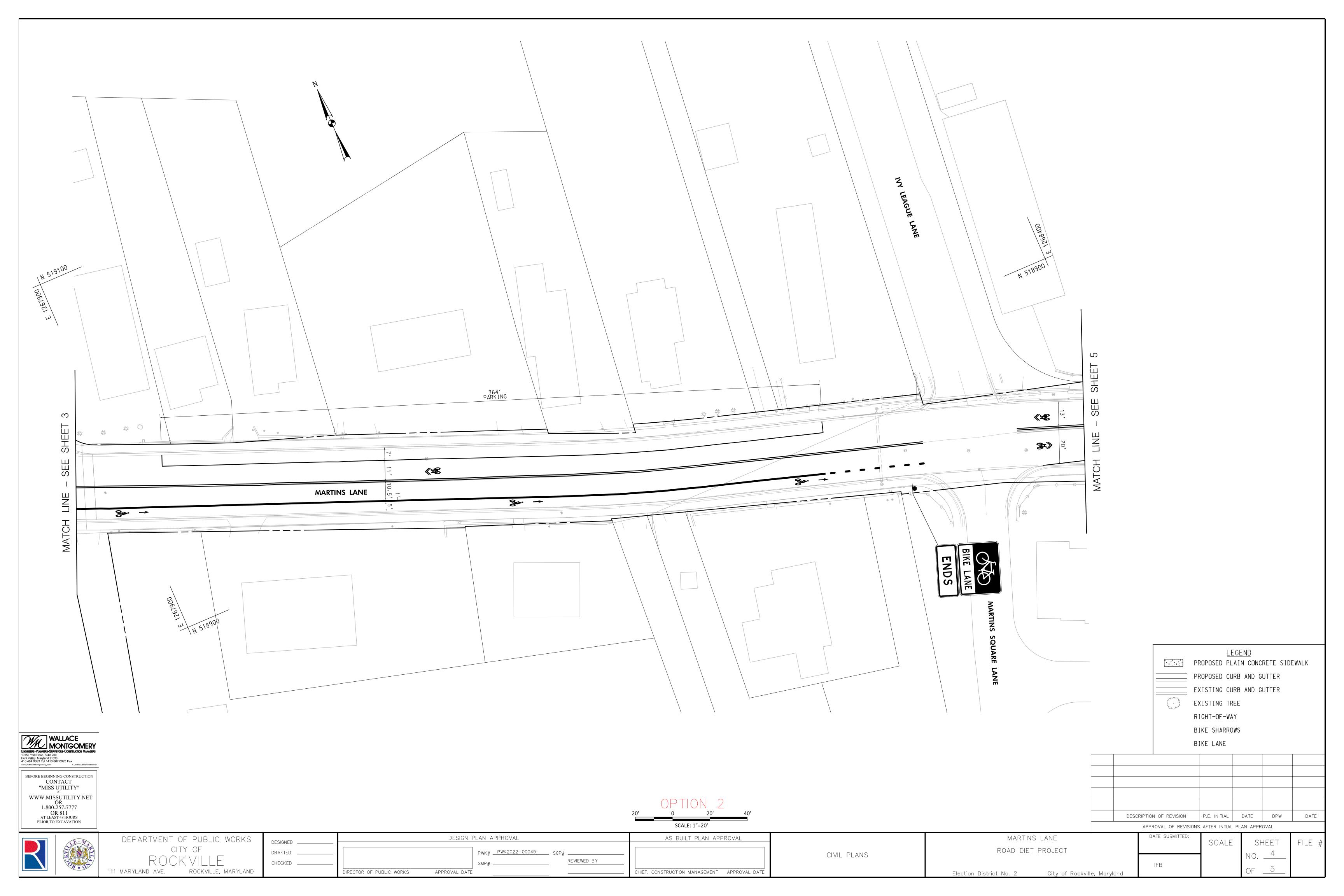


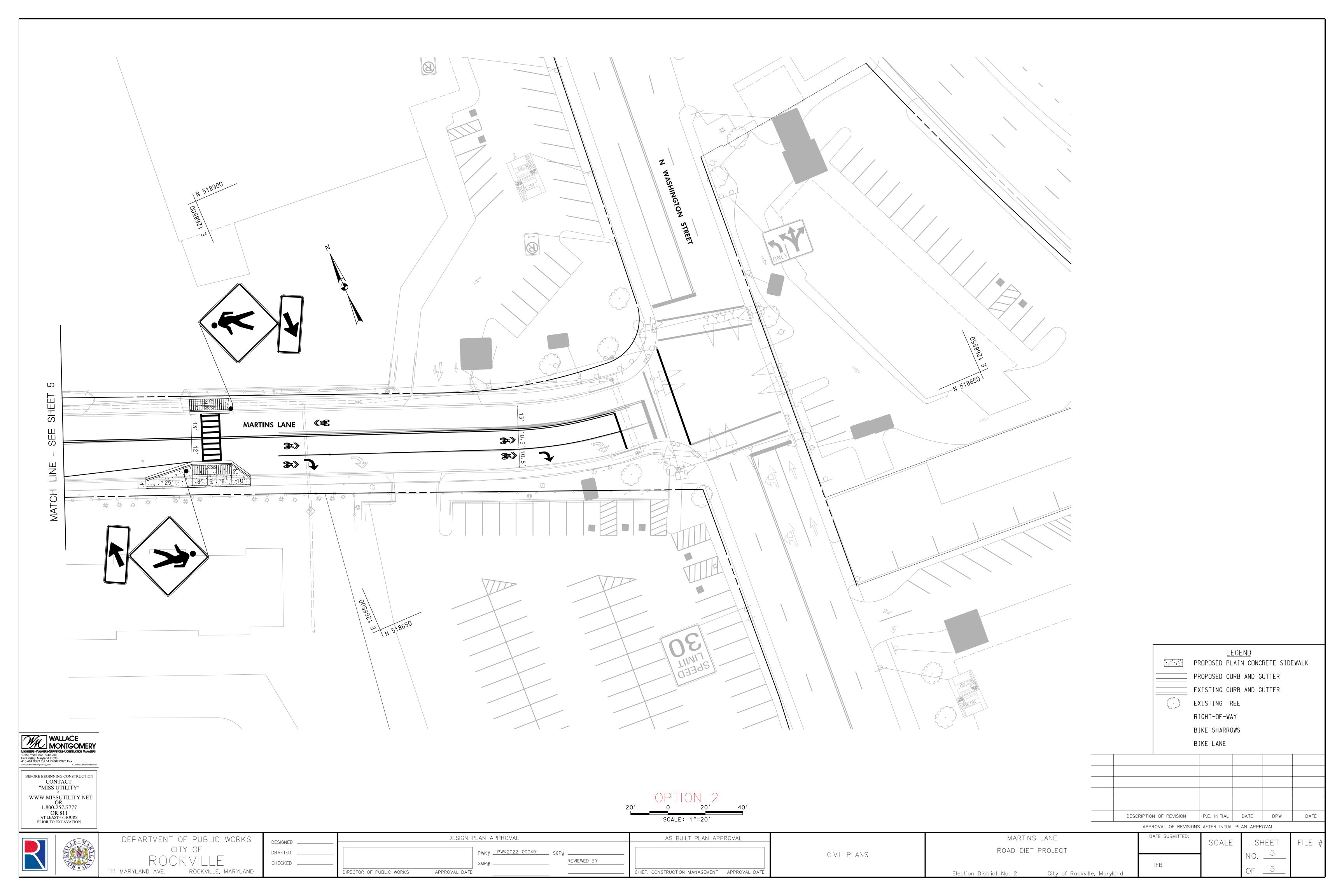


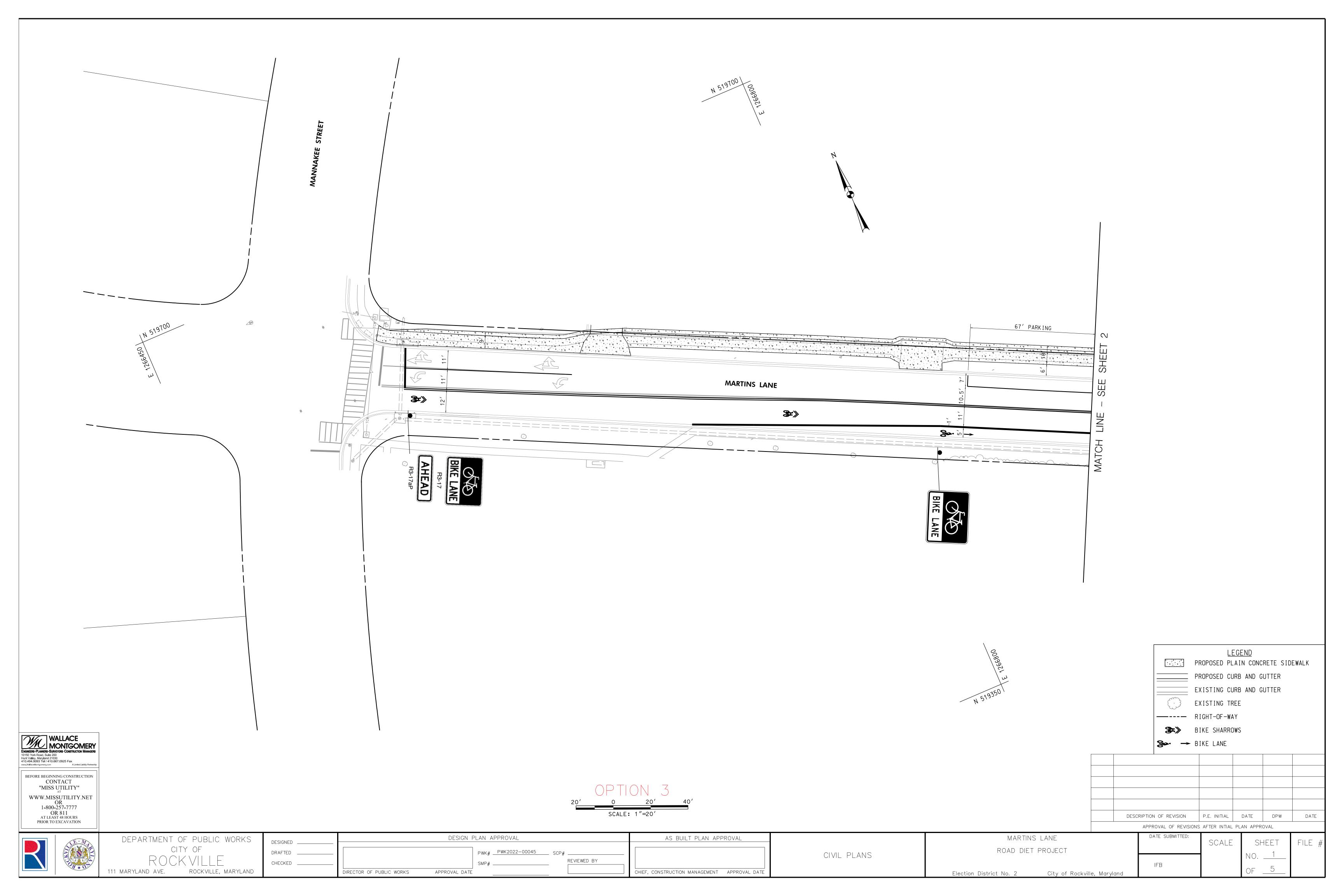


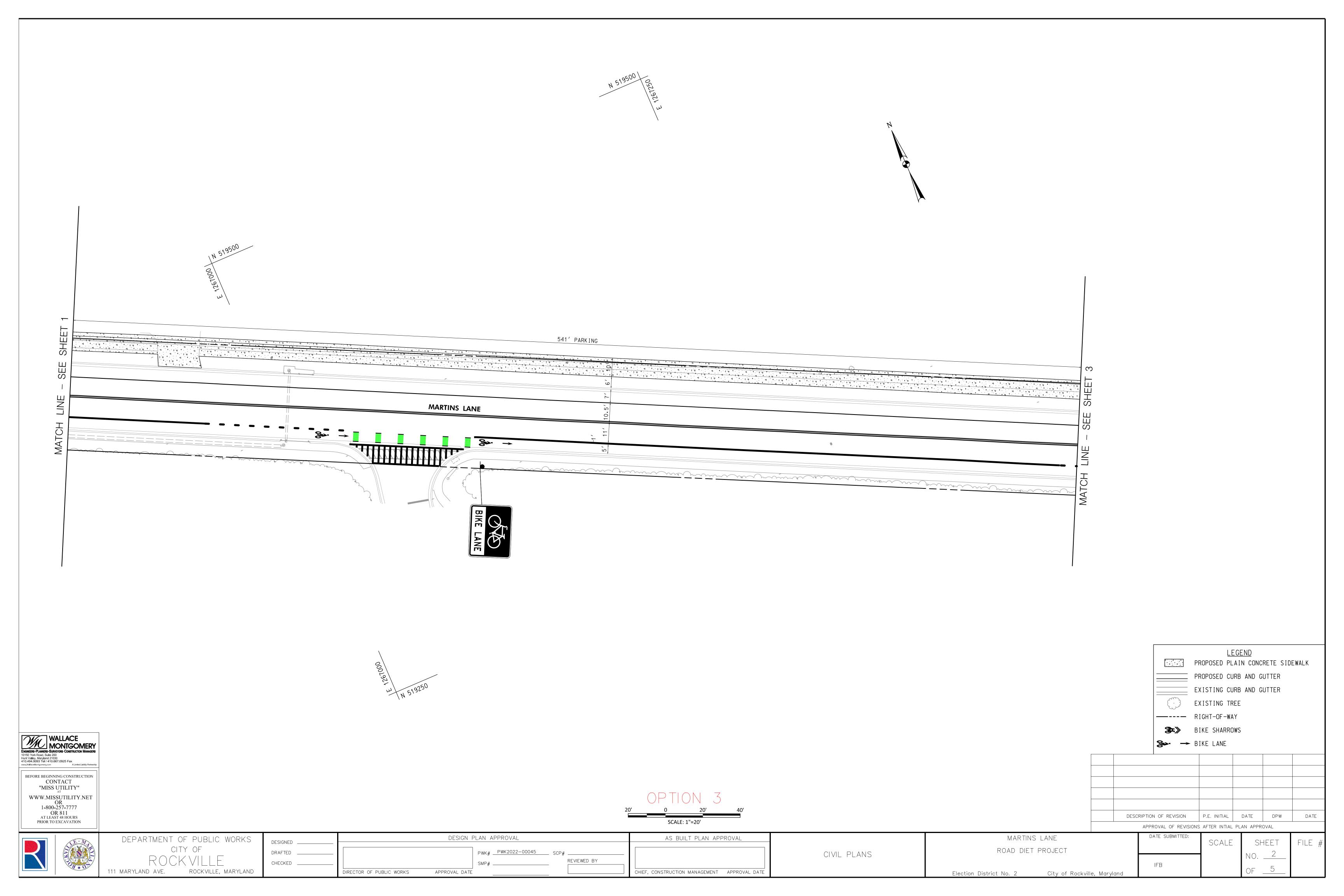


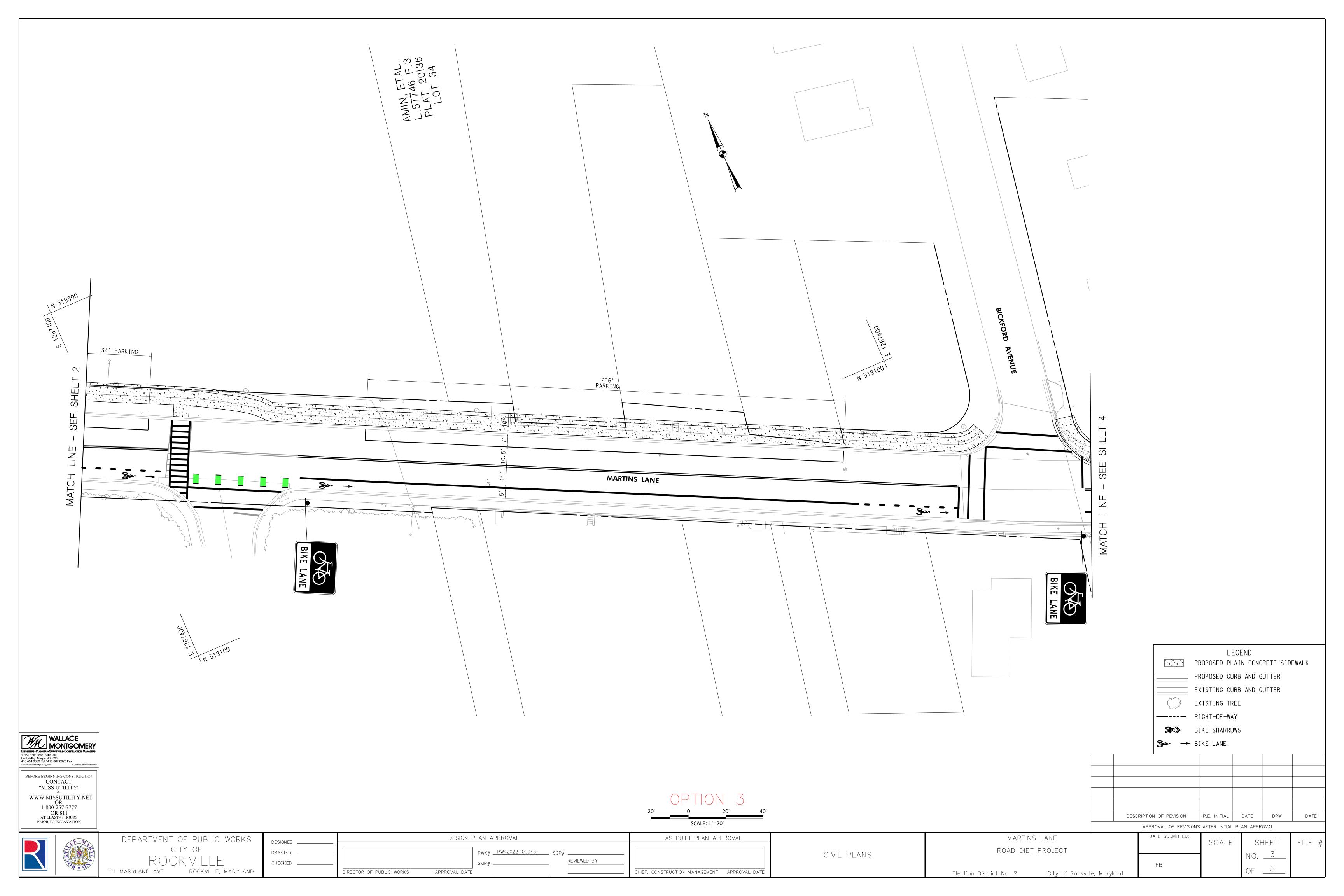


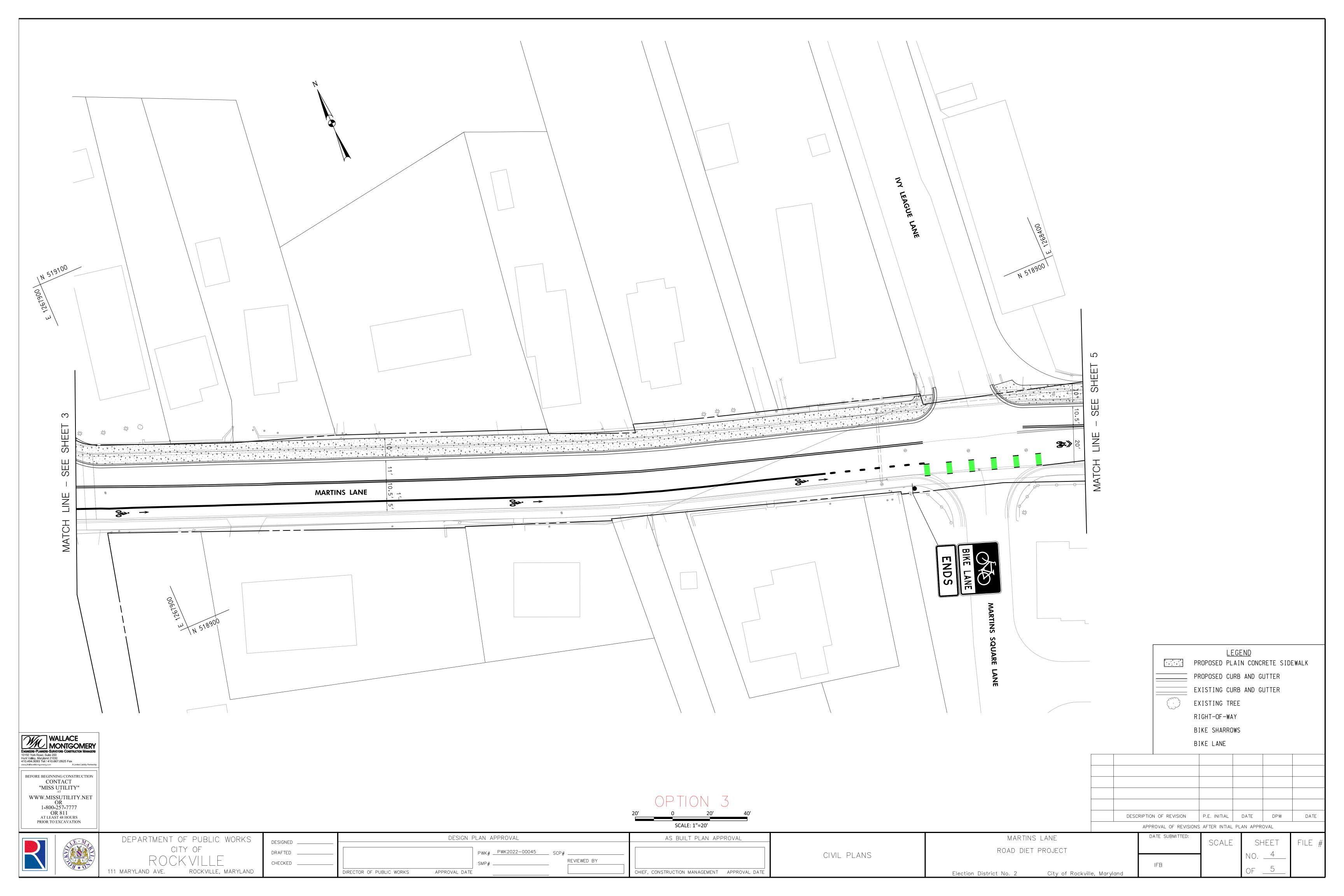


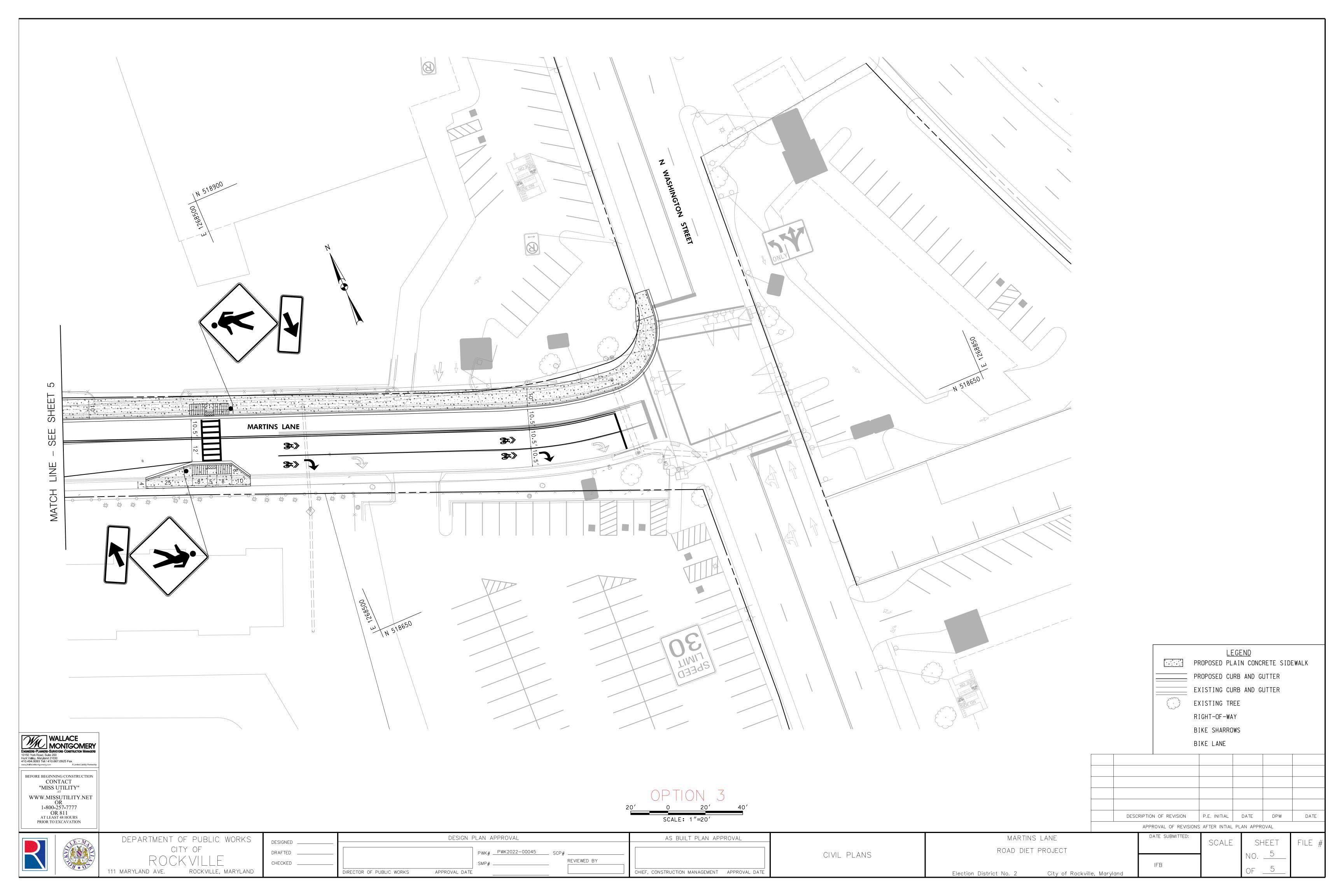












Martins Lane Road Diet Project Concept Estimate - Option 1 (w/o Midblock) Apr-24

NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
				_	_
1001	MAINTENANCE OF TRAFFIC	LS	1	\$2,000.00	\$2,000.00
1002	CONSTRUCTION STAKEOUT	LS	1	\$0.00	\$0.00
1003	MOBILIZATION	LS	1	\$2,000.00	\$2,000.00
1004	TEMPORARY TRAFFIC SIGNS	SF	0	\$13.00	\$0.00
1005	TYPE III BARRICADES FOR MOT	EA	0	\$210.00	\$0.00
1006	CONCRETE AND ASPHALT DEMOLITION	LS	0	\$5,000.00	\$0.00
				SUB-TOTAL	\$4,000.00
4001	STANDARD TYPE "A" CURB & GUTTER - MC-100.01	LF	81	\$35.00	\$2,835.00
4002	TYPE "A" CURB - ANY HEIGHT, BACKER CURB	LF	0	\$50.00	\$0.00
4003	DEPRESSED CURB ENTRANCE	LF	0	\$35.00	\$0.00
4004	4" PLAIN CONCRETE SIDEWALK	SF	648	\$12.00	\$7,776.00
4005	BRICK PAVERS	SF	0	\$27.00	\$0.00
4006	DETECTABLE WARNING SURFACE	SF	20	\$50.00	\$1,000.00
4007	9" CONCRETE DRIVEWAY PAVEMENT	SF	0	\$14.00	\$0.00
4008	PRECAST BARRIER CURB	EA	0	\$150.00	\$0.00
				SUB-TOTAL	\$11,611.00
5001	PLACING SALVAGED TOPSOIL 2 INCH DEPTH	SY	0	\$2.00	\$0.00
5002	TURFGRASS ESTABLISHMENT	SY	0	\$10.00	\$0.00
5003	TREE REMOVAL	EA	0	\$100.00	\$0.00
5004	TREE PLANTING	EA	0	\$500.00	\$0.00
5005	LANDSCAPE PLANTING	LS	1	\$5,000.00	\$5,000.00
5006	5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	437	\$0.45	\$196.65
5007	5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS	LF	4260	\$0.45	\$1,917.00
5008	10 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	0	\$0.75	\$0.00
5009	12 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	4071	\$1.75	\$7,124.25
5010	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	0	\$4.00	\$0.00
5011	GREEN BIKE LANE THERMOPLASTIC PAVEMENT MARKINGS	SF	939	\$7.00	\$6,573.00
5012	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS	SF	0	\$150.00	\$0.00
5013	BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING WITH ARROW	EA	28	\$150.00	\$4,200.00
5014	SHARED BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING	SF	0	\$150.00	\$0.00
				SUB-TOTAL	\$25,010.9
				TOTAL	\$40,62
			CONTING	ENCY AT 35%	\$14,21

Martins Lane Road Diet Project Concept Estimate - Option 1 (w/ Midblock) Apr-24

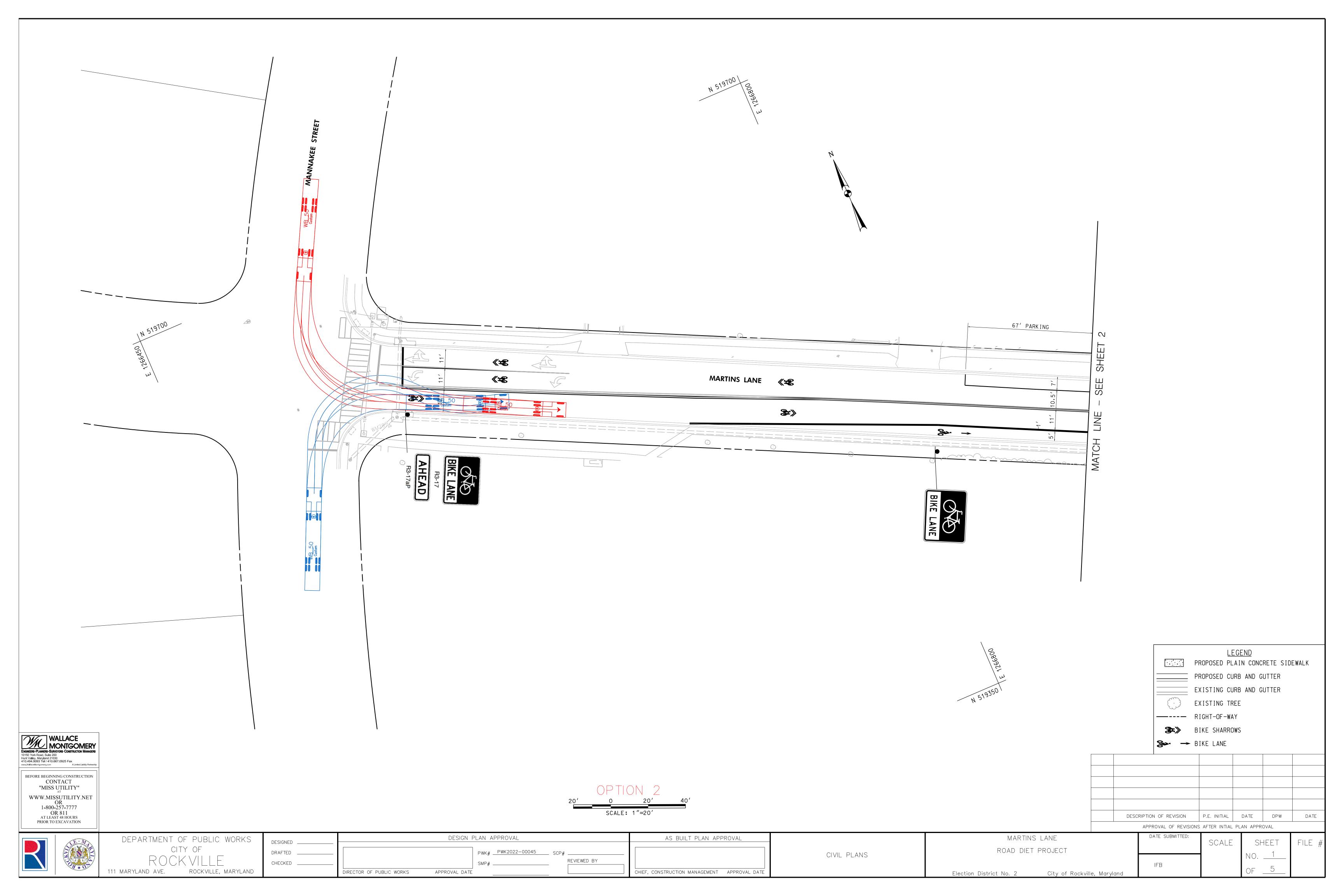
ITEM NO.					
	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1001	MAINTENANCE OF TRAFFIC	LS	1	\$2,000.00	\$2,000.00
1002	CONSTRUCTION STAKEOUT	LS	1	\$0.00	\$0.00
1003	MOBILIZATION	LS	1	\$2,000.00	\$2,000.00
1004	TEMPORARY TRAFFIC SIGNS	SF	0	\$13.00	\$0.00
1005	TYPE III BARRICADES FOR MOT	EA	0	\$210.00	\$0.00
1006	CONCRETE AND ASPHALT DEMOLITION	LS	0	\$5,000.00	\$0.00
				SUB-TOTAL	\$4,000.00
4001	STANDARD TYPE "A" CURB & GUTTER - MC-100.01	LF	152	\$35.00	\$5,320.00
4002	TYPE "A" CURB - ANY HEIGHT, BACKER CURB	LF	0	\$50.00	\$0.00
4003	DEPRESSED CURB ENTRANCE	LF	0	\$35.00	\$0.00
4004	4" PLAIN CONCRETE SIDEWALK	SF	837	\$12.00	\$10,044.00
4005	BRICK PAVERS	SF	0	\$27.00	\$0.00
4006	DETECTABLE WARNING SURFACE	SF	50	\$50.00	\$2,500.00
4007	9" CONCRETE DRIVEWAY PAVEMENT	SF	0	\$14.00	\$0.00
4008	PRECAST BARRIER CURB	EA	0	\$150.00	\$0.00
				SUB-TOTAL	\$17,864.00
5001	PLACING SALVAGED TOPSOIL 2 INCH DEPTH	SY	0	\$2.00	\$0.00
5002	TURFGRASS ESTABLISHMENT	SY	0	\$10.00	\$0.00
5003	TREE REMOVAL	EA	0	\$100.00	\$0.00
5004	TREE PLANTING	EA	0	\$500.00	\$0.00
5005	LANDSCAPE PLANTING	LS	1	\$5,000.00	\$5,000.00
5006	5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	337	\$0.45	\$151.65
5007	5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS	LF	4260	\$0.45	\$1,917.00
5008	10 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	0	\$0.75	\$0.00
5009	12 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	4208	\$1.75	\$7,364.00
5010	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	0	\$4.00	\$0.00
5011	GREEN BIKE LANE THERMOPLASTIC PAVEMENT MARKINGS	SF	849	\$7.00	\$5,943.00
5012	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS	SF	0	\$150.00	\$0.00
5013	BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING WITH ARROW	EA	28	\$150.00	\$4,200.00
5014	SHARED BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING	SF	0	\$150.00	\$0.00 \$24,575.65
				TOTAL	\$46,440
			CONTINGENCY AT 35%		\$16,254
			CONSTRU	CTION TOTAL	\$63,000

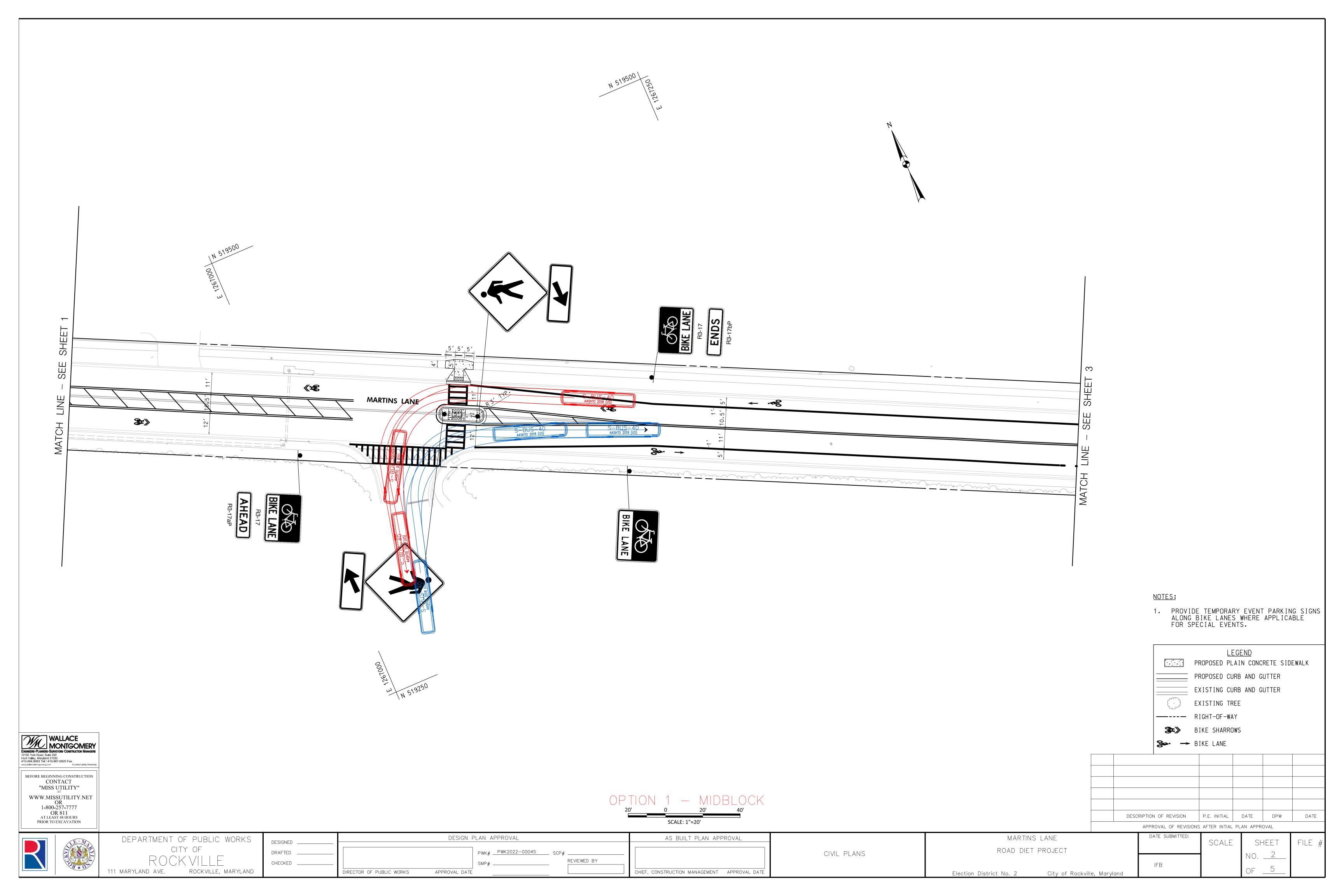
Martins Lane Road Diet Project Concept Estimate - Option 2 Apr-24

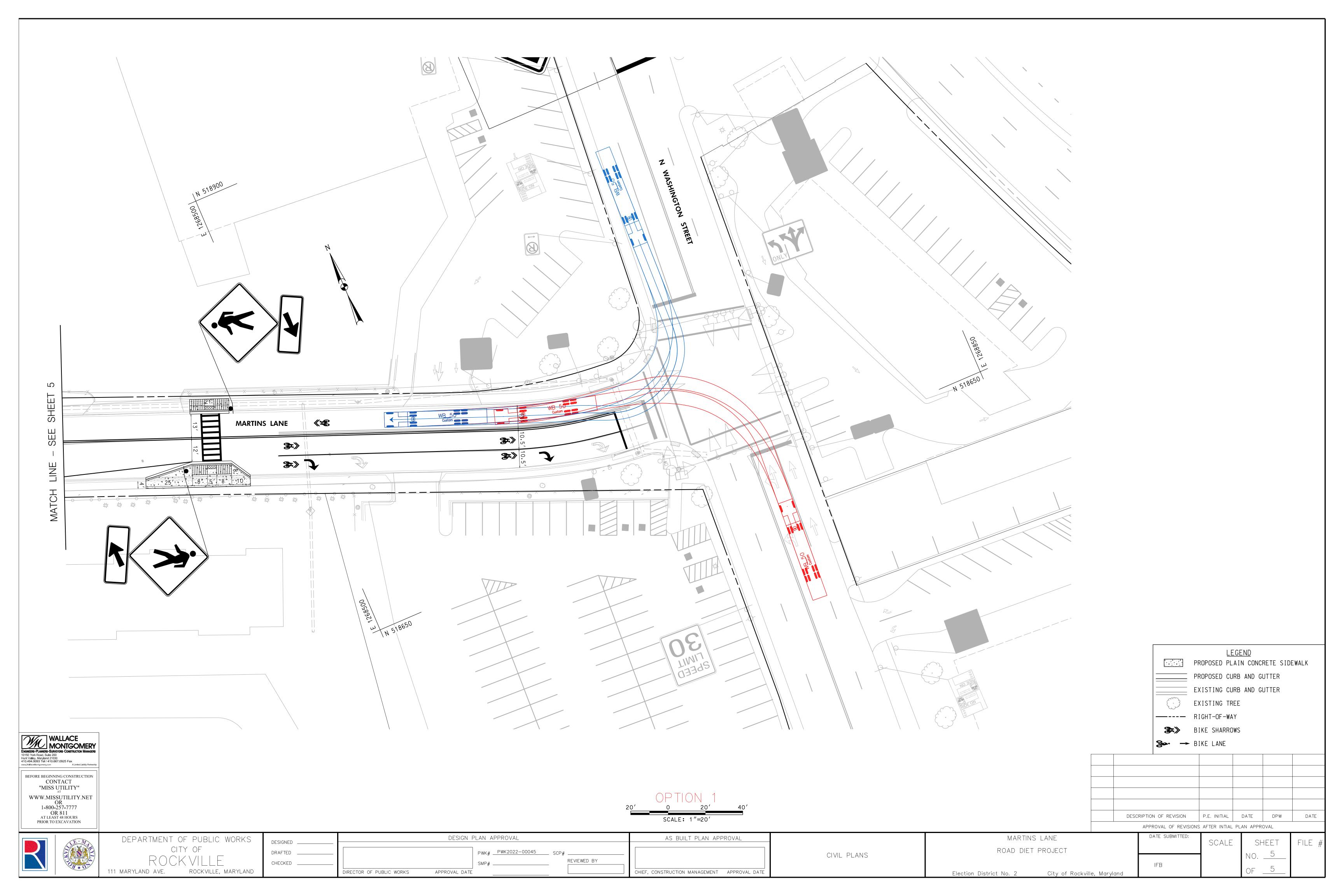
NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1001	MAINTENANCE OF TRAFFIC	LS	1	\$2,000.00	\$2,000.00
1002	CONSTRUCTION STAKEOUT	LS	1	\$0.00	\$0.00
1003	MOBILIZATION	LS	1	\$2,000.00	\$2,000.00
1004	TEMPORARY TRAFFIC SIGNS	SF	0	\$13.00	\$0.00
1005	TYPE III BARRICADES FOR MOT	EA	0	\$210.00	\$0.00
1006	CONCRETE AND ASPHALT DEMOLITION	LS	0	\$5,000.00	\$0.00
				SUB-TOTAL	\$4,000.00
4001	STANDARD TYPE "A" CURB & GUTTER - MC-100.01	LF	81	\$35.00	\$2,835.00
4002	TYPE "A" CURB - ANY HEIGHT, BACKER CURB	LF	0	\$50.00	\$0.00
4003	DEPRESSED CURB ENTRANCE	LF	0	\$35.00	\$0.00
4004	4" PLAIN CONCRETE SIDEWALK	SF	648	\$12.00	\$7,776.00
4005	BRICK PAVERS	SF	0	\$27.00	\$0.00
4006	DETECTABLE WARNING SURFACE	SF	20	\$50.00	\$1,000.00
4007	9" CONCRETE DRIVEWAY PAVEMENT	SF	0	\$14.00	\$0.00
4008	PRECAST BARRIER CURB	EA	0	\$150.00	\$0.00
				SUB-TOTAL	\$11,611.00
5001 5002 5003 5004 5005 5006 5007 5008 5009 5010 5011 5012 5013	PLACING SALVAGED TOPSOIL 2 INCH DEPTH TURFGRASS ESTABLISHMENT TREE REMOVAL TREE PLANTING LANDSCAPE PLANTING 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS 5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS 10 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS 12 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS 12 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS GREEN BIKE LANE THERMOPLASTIC PAVEMENT MARKINGS WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING WITH ARROW	SY SY EA EA LS LF LF LF SF SF EA	0 0 0 1 1667 4260 0 2346 0 939 0	\$2.00 \$10.00 \$100.00 \$500.00 \$5,000.00 \$0.45 \$0.45 \$0.75 \$1.75 \$4.00 \$7.00 \$150.00	\$0.00 \$0.00 \$0.00 \$0.00 \$5,000.00 \$750.15 \$1,917.00 \$0.00 \$4,105.50 \$0.00 \$6,573.00 \$0.00
5014	SHARED BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING	SF	0	\$150.00 SUB-TOTAL	\$0.00 \$22,545.6 5
				COD TOTAL	Ψ22,040.00
				TOTAL	\$38,157
			CONTING	ENCY AT 35%	\$13,355
			CONSTRU	CTION TOTAL	\$52,000

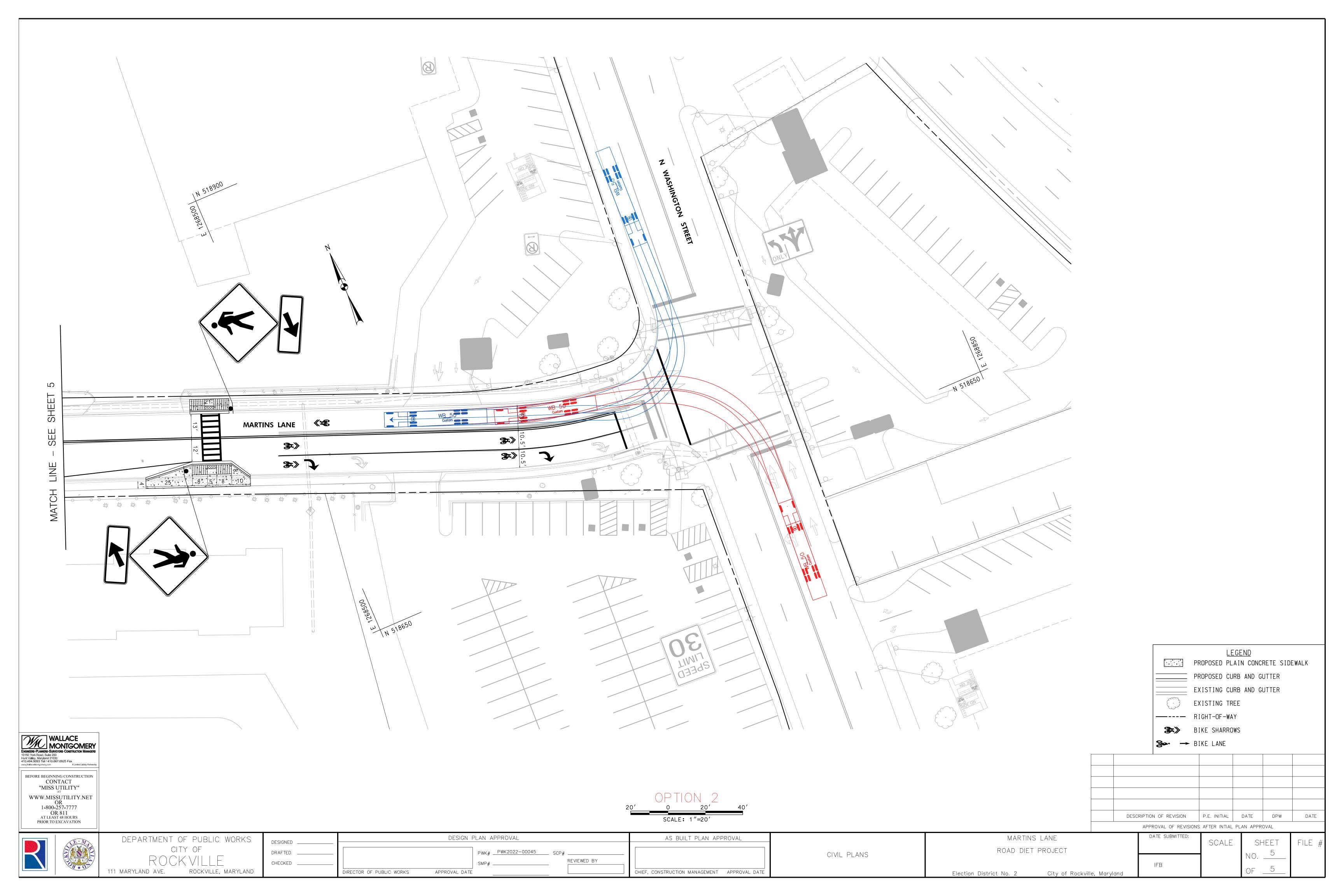
Martins Lane Road Diet Project Concept Estimate - Option 3 Apr-24

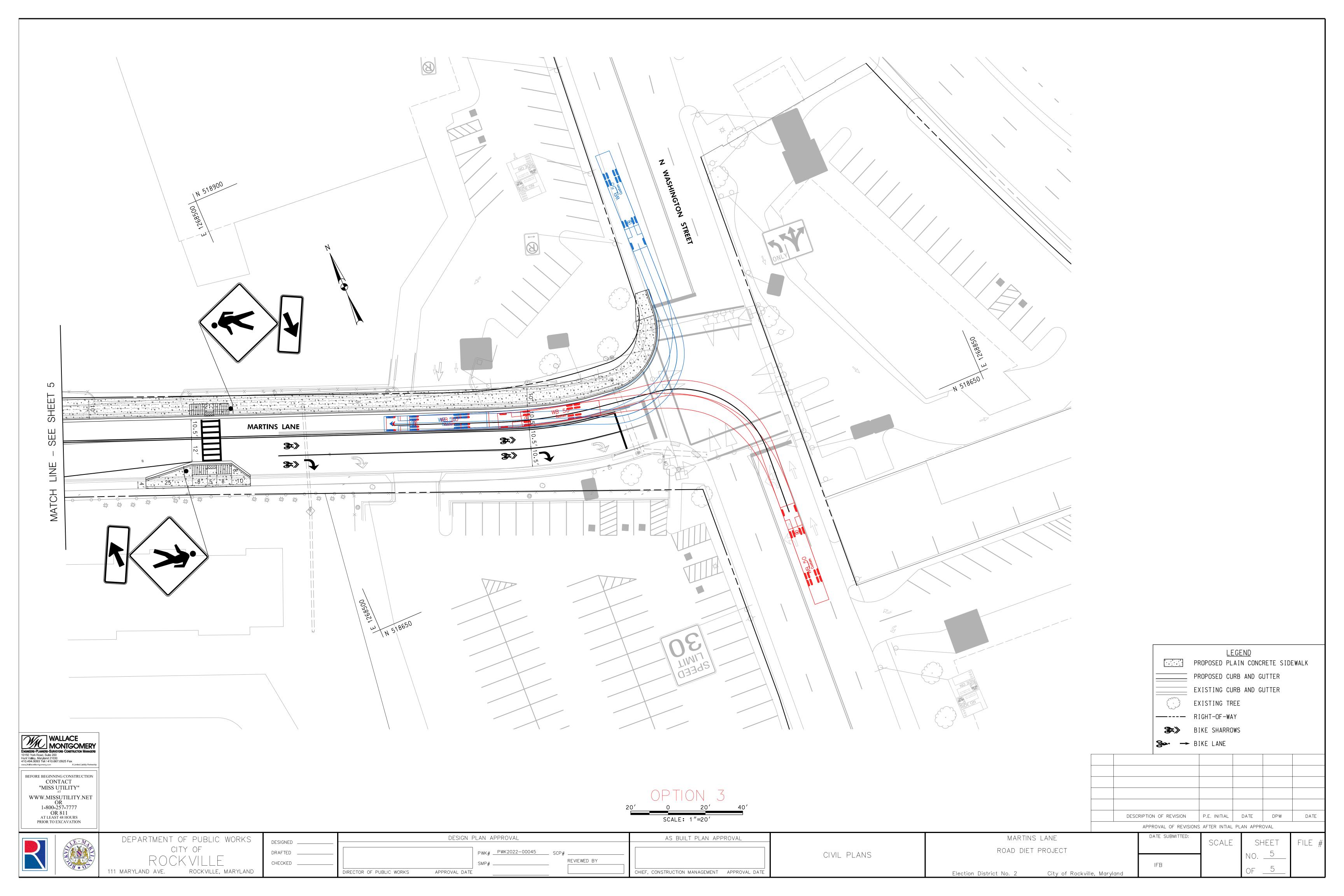
1001 MAINTENANCE OF TRAFFIC 1002 CONSTRUCTION STAKEOUT 1003 MOBILIZATION 1004 TEMPORARY TRAFFIC SIGNS 1005 TYPE III BARRICADES FOR MOT 1006 CONCRETE AND ASPHALT DEMOLITION	LS LS LS	1 1	\$18,000.00	AMOUNT \$18,000.00
1002 CONSTRUCTION STAKEOUT 1003 MOBILIZATION 1004 TEMPORARY TRAFFIC SIGNS 1005 TYPE III BARRICADES FOR MOT	LS LS SF	1		\$18,000,00
1003 MOBILIZATION 1004 TEMPORARY TRAFFIC SIGNS 1005 TYPE III BARRICADES FOR MOT	LS SF			φ10,000.00
1004 TEMPORARY TRAFFIC SIGNS 1005 TYPE III BARRICADES FOR MOT	SF	4	\$4,000.00	\$4,000.00
1005 TYPE III BARRICADES FOR MOT		1	\$18,000.00	\$18,000.0
	Ε.	0	\$13.00	\$0.0
1006 CONCRETE AND ASPHALT DEMOLITION	EA	0	\$210.00	\$0.00
	LS	1	\$6,000.00	\$6,000.00
			SUB-TOTAL	\$46,000.00
4001 STANDARD TYPE "A" CURB & GUTTER - MC-100.01	LF	979	\$35.00	\$34,265.00
4002 TYPE "A" CURB - ANY HEIGHT, BACKER CURB	LF	483	\$50.00	\$24,150.0
4003 DEPRESSED CURB ENTRANCE	LF	0	\$35.00	\$0.00
4004 4" PLAIN CONCRETE SIDEWALK	SF	23716	\$12.00	\$284,592.00
4005 BRICK PAVERS	SF	0	\$27.00	\$0.00
4006 DETECTABLE WARNING SURFACE	SF	20	\$50.00	\$1,000.00
4007 9" CONCRETE DRIVEWAY PAVEMENT	SF	0	\$14.00	\$0.00
4008 PRECAST BARRIER CURB	EA	0	\$150.00	\$0.00
			SUB-TOTAL	\$344,007.00
5001 PLACING SALVAGED TOPSOIL 2 INCH DEPTH	SY	0	\$2.00	\$0.00
5002 TURFGRASS ESTABLISHMENT	SY	0	\$10.00	\$0.00
5003 TREE REMOVAL	EA	0	\$100.00	\$0.00
5004 TREE PLANTING	EA	0	\$500.00	\$0.00
5005 LANDSCAPE PLANTING	LS	1	\$5,000.00	\$5,000.00
5006 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	1299	\$0.45	\$584.55
5007 5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS	LF	4260	\$0.45	\$1,917.00
5008 10 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	0	\$0.75	\$0.00
5009 12 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	2346	\$1.75	\$4,105.50
5010 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	0	\$4.00	\$0.00
5011 GREEN BIKE LANE THERMOPLASTIC PAVEMENT MARKINGS	SF	690	\$7.00	\$4,830.00
5012 WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS	SF	0	\$150.00	\$0.00
5013 BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING WITH ARROW	EA	16	\$150.00	\$2,400.00
5014 SHARED BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING	SF	0	\$150.00	\$0.00
			SUB-TOTAL	\$18,837.05
			TOTAL	\$408,84
		CONTING	SENCY AT 35%	\$143,095
		CONSTRU	CTION TOTAL	\$552,000











MARTINS LANE BICYCLE LANES FEASIBILITY PROJECT



Introduction & Meeting Purpose

- ■Present three (3) Concept
 Designs for Bicycle Lanes along
 Martins Lane in between
 Mannakee Street and North
 Washington Street
- Take comments from residents before moving to final design and construction



Option 1:

□Two 10.5-11' travel lanes

□1' buffers between travel lanes and bike lanes

□5' dedicated bike lanes

■ Allow part-time event parking in bike lanes

□ Focus on accommodating cyclists with separate lanes

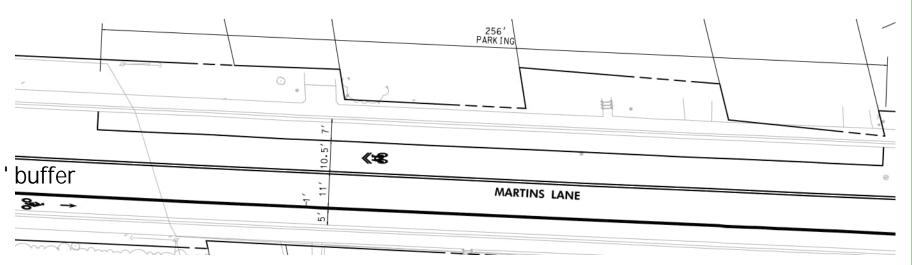




Option 2:

□Eastbound:

■ 10.5'-11' travel lane with 1' buffer and 5' bike lane



■Westbound:

- 10.5'-11' travel lane with bike sharrows
- □ Dedicated 7' street parking
- Westbound prioritizes parking availability over separate bike lanes



Option 3:

- **■**Eastbound:
 - □ 10.5'-11' travel lane with 1' buffer and 5' bike lane
- ■Westbound:
 - 10.5'-11' travel lane
 - □ Dedicated 7' street parking
 - ■8'-10' shared-use path for pedestrians and bikers
- ■Curb relocation near N.
 Washington St intersection to accommodate the shared-use path.



256' PARKING

MARTINS LANE

Options 1-3 Commonality:

■Bike Boxes:

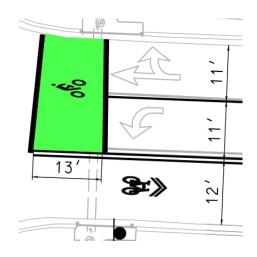
■ Designated areas at intersections for cyclists to wait ahead of motor vehicles, enhancing cyclist visibility and safety.

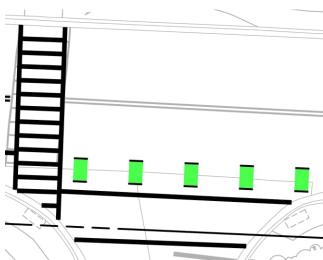
□ Green Bike Crossings:

Green-painted markings at intersections to highlight designated bike crossing areas, improving cyclist awareness for motorists and pedestrians.

■New Striping Paint:

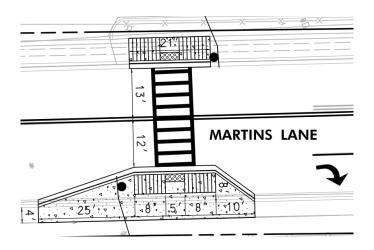
□ Freshly painted lane markings and symbols to clearly delineate travel lanes, bike lanes, and pedestrian crossings, enhancing overall safety and visibility on the road.





□ADA Crossing by the Post Office:

■ Implementation of ADA-compliant pedestrian crossing near the post office, ensuring accessibility and promoting safer pedestrian street crossing.



Plan Sheet Review

Parking Impact:

- ■Existing Condition:
 - Eastbound: Approx. 1100' Street Parking
 - Westbound: Approx. 900' Street Parking

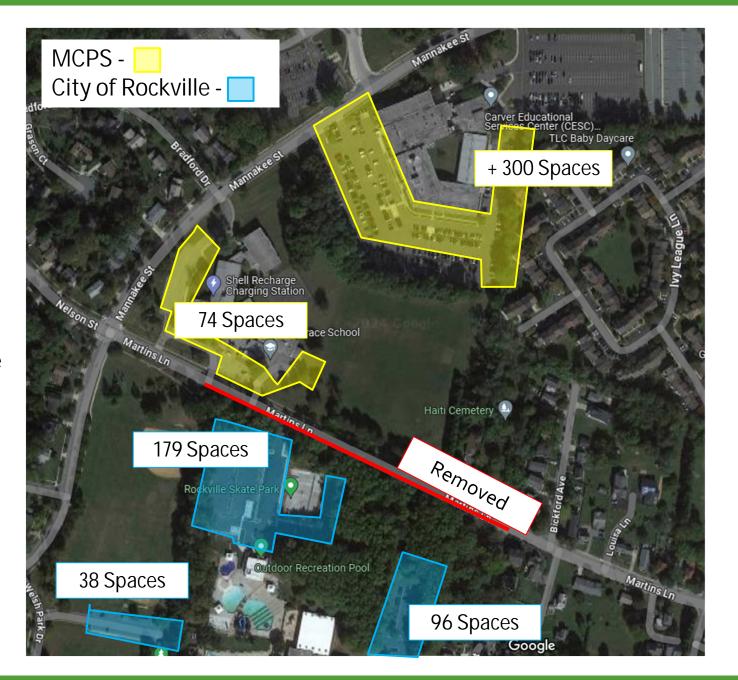
- ■Option 1:
 - Temporary Event Parking
 - Permanent street parking removed

- ■Option 2:
 - Eastbound: Parking removed + Temporary event parking allowed
 - Westbound: Approx. 900' Designated parking
- ■Option 3:
 - Eastbound: Permanent street parking removed
 - + Temporary event parking allowed
 - Westbound: 900' Designated parking

Parking Impact:

Rockville Swim at Fitness Center + Rock Terrace School fields

- □Off-street parking can replace on-street parking.
- □During Rockville Swim and FitnessCenter events (e.g. swim meets), bicycle lanes can be used for parking.



Cost Estimate

□OPTION 1: \$55,000

□OPTION 2: \$ \$52,000

□OPTION 3: \$552,000

■Recap:

□ Prioritizes Bike Lanes

□Permanent street parking removed, except for events

■ New Lane Configurations

■Recap:

□Bike Lane EB + Sharrows WB

■Designated Parking Westbound

■Remove Parking Eastbound

■ New Lane Configurations

□Recap:

■Separated Shared Use Path WB

■Designated Parking Westbound

■ Remove Parking Eastbound

■ New Lane Configurations

Next Steps:

- The City will finalize design expected to be completed in June 2024.
- Option 1 or 2 Design and Construction Fall 2024
- Option 3 Design and Construction Fall 2025





Questions? Comments?

- Please submit comments to Bryan Barnett-Woods at <u>bbwoods@rockvillemd.gov</u>
 - Comment period will be open until April 15, 2024.
- The Concept plans are available on the City's website:
- https://www.rockvillemd.gov/2393/Vision-Zero-Projects