PRELIMINARY ENGINEERING NOISE SCREENING

For The

BRISTOL ROAD EXTENSION

SR 2025, SECTION 002

Chalfont Borough, New Britain Borough, and New Britain Township

Bucks County, PA

MPMS#12923

Prepared For



PENNDOT District 6-0

7000 Geerdes Boulevard King of Prussia, PA 19406

Prepared By



Traffic Planning and Design, Inc. 2500 East High Street Suite 650 Pottstown, PA 19464

> September 3, 2024 Rev. August 2025

TABLE OF CONTENTS

TIVE SUMMARY	i
INTRODUCTION	1
METHODOLOGY	2
EXISTING HIGHWAY TRAFFIC NOISE ENVIRONMENT	4
Existing Site Conditions	
Existing Noise Levels	5
FUTURE HIGHWAY TRAFFIC NOISE ENVIRONMENT	6
HIGHWAY TRAFFIC NOISE CONSIDERATION AND ABATEMENT ALTERNATIVES	.15
CONSTRUCTION NOISE CONDSIDERATION AND ABATEMENT OPPORTUNITIES	.15
PUBLIC INVOLVEMENT PROCESS	.15
LIST OF QUALIFICATIONS	16
F TABLES	
– Hourly Weighted Sound Levels dB(A) for Various Land Use Activity Categories	
² A, 2B, 2C – NSA Summary	
BA, 3B, 3C – Modeled Results Comparison	
l – Future Noise Summary by NSA	.13
	INTRODUCTION METHODOLOGY EXISTING HIGHWAY TRAFFIC NOISE ENVIRONMENT Existing Site Conditions Existing Noise Levels FUTURE HIGHWAY TRAFFIC NOISE ENVIRONMENT HIGHWAY TRAFFIC NOISE CONSIDERATION AND ABATEMENT ALTERNATIVES CONSTRUCTION NOISE CONDSIDERATION AND ABATEMENT OPPORTUNITIES PUBLIC INVOLVEMENT PROCESS LIST OF QUALIFICATIONS FTABLES - Hourly Weighted Sound Levels dB(A) for Various Land Use Activity Categories

APPENDICES

Appendix A – Figures

Appendix B – TNM Runs

Appendix C – Traffic Data

Appendix D – Preliminary Engineering Plans

Preliminary Engineering Noise Screening Bristol Road Extension Rev. Sept. 2024, August 2025

EXECUTIVE SUMMARY

The proposed project involves the construction of the Bristol Road Extension, a new roadway connecting Butler Avenue (SR 4042) and Park Avenue (SR 1006) near Chalfont in Bucks County, PA.

This report documents the existing and future noise levels associated with the Bristol Road Extension Project. There are three main components to the project: Bristol Road Extension (extending Bristol from current termini at Butler Ave to Park Ave), Main Street and Park Avenue intersection improvements (addition of turn lane), and Park Avenue/Callowhill Road/Ferry Road intersection improvements (intersection upgrade converting an existing three way stop condition to a signalized intersection). As the three portions of the project are not contiguous, three separate noise models were developed to analyze potential impacts.

Based on results of the analysis, design year (2042) build noise levels are predicted to approach the Noise Abatement Criteria Levels (NAC) at two receptor locations, exceed the NAC at two receptor locations, and have a substantial increase at an additional receptor. All three models have impacted receptors. These receptors include residences and a cemetery. All the impacted receptor locations have access driveways onto adjacent existing roadways.

Barriers were determined warranted at one location in NSA 7 in the proposed build condition for the Bristol Road Extension portion of the project, near the intersection of Forrest Park Drive and the Bristol Road Extension. Barriers at these locations are not considered feasible as they could not be constructed without introducing safety concerns at the intersection or impacts to driveway and pedestrian access. Barriers were found to be warranted at two locations, one in NSA 1 and one in NSA 4 at the Main Street and Park Avenue intersection in downtown Chalfont. Barriers at these locations are not considered feasible as they could not be constructed without introducing safety concerns at the intersection, or without introducing additional Section 4(f) impacts, and impacts to driveway and pedestrian access due to the improvement being located within a downtown setting. Barriers were found to be warranted at two locations, one in NSA 13 and one in NSA 15 at the Park Avenue, Callowhill Road, and Ferry Road intersection. Barriers at these locations are not considered feasible as they could not be constructed without introducing safety concerns at the intersection or impacts to driveway access.

; ______ www.TrafficPD.com

1.0 INTRODUCTION

The following Preliminary Engineering Noise Screening was completed by Traffic Planning and Design, Inc. (TPD) in accordance with *PennDOT Publication 24: Project Level Highway Traffic Noise Handbook* (May 2019). This study was completed on behalf of PennDOT, District 6-0. Refer to Appendix A for a project location map (Figure 1) and plan sheets from preliminary engineering plans (Appendix D). The project is considered a Type 1 Project, highway on a new alignment. This project will involve the extension of Bristol Road (SR 2025) from the existing terminus at Butler Avenue (SR 4202) to the new proposed terminus at Park Avenue (SR 1006). Intersection and approach roadway improvements outside the extension area are necessary to improve the overall local traffic network. There are three main components to the project as follows:

Bristol Road Extension (new roadway segment, proposed bridge, intersection with Park Avenue and intersection with Butler Avenue) - Referred to as BRE in the remainder of this report

The Bristol Road Extension new roadway segment will extend Bristol Road from the existing terminus at Butler Avenue to Park Avenue. This section of proposed new roadway will consist of two lanes and shoulders. The proposed new roadway will be widened from two lanes to three lanes at the Bristol Road/Butler Avenue intersection and the Bristol Road/Park Avenue intersection to allow for left turn lanes. Within this new roadway segment, a new multi-span bridge carrying Bristol Road over Pine Run will be constructed. Span configuration, superstructure type, and substructure type will be determined during preliminary engineering. The proposed roadway extension between Butler Avenue and Park Avenue will be designed to minimize impacts to existing open space, wetlands, and floodplain to maximize efforts to comply with the associated NPDES permit. Additionally, a SEPTA rail line crosses the proposed Bristol/Butler intersection.

Lane configuration for the proposed new roadway and intersecting portion of Park Avenue are outlined below:

- Proposed Bristol Road Extension: two (2) 11' travel lanes and associated turn lanes, 43' total width.
- Reconstructed Park Ave at the intersection with the proposed Bristol Road Extension: two (2) 11' travel lanes, 44' total width.

Intersection upgrades at the Bristol Road Extension/Park Avenue intersection will include left and right turn lanes at each approach and the addition of a traffic signal. A multi-use trail will be constructed parallel to the new roadway.

Improvements at the Bristol Road and Butler Avenue intersection will include the following:

- Improvements at this intersection will incorporate the addition of the Bristol Road Extension and other associated improvements such as channelized vehicle movements, additional safety gates, pedestrian accommodations, and improvements to the railroad warning system and railroad signalization. The proposed improvements at Butler Avenue include left turn lane additions or extensions approaching the intersection (the improvements will extend approximately 800 feet in the southbound direction and approximately 1,300 feet in the northbound direction).
- The left turn lane along Bristol Road will extend approximately 200 feet to the east and west of Butler Avenue.

Preliminary Engineering Noise Screening Bristol Road Extension Rev. Sept. 2024, August 2025

Lane configuration for each roadway section are outlined below:

- Reconstructed Bristol Road east of the Butler Avenue intersection: two (2) 11' travel lanes, width varies from 32 feet to 57 feet total width.
- Reconstructed Butler Avenue 1300 feet northbound to 800 feet southbound of the Butler Avenue intersection: two (2) 12' travel lanes and associated turning lanes, width varies from 36 feet to 54 feet.

Park Avenue and Main Street Intersection Improvements – Referred to as MP in the remainder of this report

The proposed project will include the widening of Park Avenue to add a left turn lane. Lane configuration for each roadway segment are outlined below:

Reconstructed Park Avenue at Main Street Intersection: three (3) travel lanes, 32' total width.

Park Avenue, Ferry Road, and Callowhill Road Intersection Improvements – Referred to as PFC in the remainder of this report

Intersection improvements will involve widening of Ferry Road to accommodate a right turn lane, widening of Callowhill Road to accommodate a left turn lane/taper, and widening of Park Avenue to accommodate a lane taper. A new traffic signal will be installed at the intersection. Lane configuration for each roadway segment are outlined below:

- Reconstructed portion of Park Avenue at this intersection: three (3) 11' travel lanes, 10' median, two (2) 4' shoulders, 51' total width.
- Reconstructed portion of Ferry Road at this intersection: three (3) 11' travel lanes, two (2) 4' shoulders, 41' total width.
- Reconstructed portion of Callowhill Road at this intersection: three (3) 11' travel lanes, one 4' shoulder, one 6' shoulder, 45' total width.

2.0 METHODOLOGY

This noise screening document used PennDOT's Noise Abatement Criteria to evaluate noise impacts. Predicted noise levels were determined using Version 2.5 of the FHWA Traffic Noise Model (TNM). The proposed project involves the construction of a new roadway and associated intersection improvements. The project involves receptors that include existing/proposed residential development, daycare, restaurants, cemetery, open space, Section 4(f) properties, utilities, emergency services, retail, light industrial, and offices (Land Use Activity Category B, C, and E). Noise Abatement Criteria (NAC) for each land use categories are listed in Table 1. The NAC's are based on criteria in 23 CFR 772 and guidelines from PennDOT Pub 24.

The Federal Highway Administration (FHWA)'s procedures require the State to define the level(s) that "approach" the abatement criteria. PennDOT considers the NAC to be approached if the traffic noise levels are within one decibel of the values shown in Table 1.

TABLE 1 NOISE ABATEMENT CRITERIA

ACTIVITY CATEGORY	Leq(h) ¹	DESCRIPTION OF LAND USE ACTIVITY CATEGORY
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ²	67 (exterior)	Residential
C ²	67 (exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E ²	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other undeveloped lands, properties or activities not included in A-D or F.
F		Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.

¹ Impact thresholds should not be used as design standards for noise abatement purposes.

If the criteria is approached or exceeded at any receptor, noise abatement is considered warranted (Phase 1). Noise barrier Feasibility (Phase 2) deals specifically with acoustical and engineering considerations such as:

- Ability of barrier to reduce noise levels by at least 5 dBA at the majority of impacted receptor units.
- Ability of barrier to be physically constructed at the proposed location.
- Ability of barrier to be constructed without causing safety issues.
- Ability of barrier to be constructed without pedestrian or vehicular access restrictions.
- Ability of barrier to be accessed for maintenance.
- Allowance for utilities and drainage to adequately function.
- Other noise sources in the area.

Noise impacts are also considered when the design year noise levels substantially exceed the exceed the existing noise levels (substantial noise increase). PennDOT has developed substantial noise increase criteria for all activity categories (Land Use Activity Categories A, B, C, D, and E) where the future noise level increases by 10 (dB(A) or more above the existing level. Receptor units that satisfy these criteria warrant further consideration of noise abatement.

These factors can affect the feasibility determination for particular areas. The proximity of a local street and/or a private driveway can greatly reduce the effectiveness of noise barriers because the existence of one requires the termination of the noise barrier to allow for access. These potential "breaks" in the barrier can reduce its effectiveness by allowing noise to propagate around the barrier's terminus points.

² Includes undeveloped lands permitted for this activity category.

Preliminary Engineering Noise Screening Bristol Road Extension Rev. Sept. 2024, August 2025

Essentially, the "breaks" in the noise barrier (for access reasons) often make achieving the required 5 dBA reductions (which are necessary to be found feasible) unlikely. If noise barriers are found to be Warranted and Feasible, the Reasonableness (Phase 3) of the barriers are then analyzed. A Reasonableness Analysis involves the examination of the following factors:

- PennDOT's noise barrier cost reasonableness value (2,000 ft² per benefited receptor) with all receptors achieving a noise reduction of 5 dBA or more being counted toward the total number of benefited receptors
- Noise reduction design criteria and goals
- Consideration of viewpoints of all benefited receptors

Traffic counts using the standard TNM categories were conducted on December 12, 2019 to determine the AM and PM peak hourly volumes at several locations within the project area via Miovision. The PM data was determined to be the most representative of field conditions (worst-case peak hour data) and was used in the models. A third component to the project was added at the Park/Ferry/Callowhill Road intersection subsequent to the initial traffic data collection. Miovision traffic data was collected on April 21, 2022. The traffic information was then entered into TNM Version 2.5.

The existing traffic data was projected to the design year (2042). These traffic data projections included redistribution of area traffic to account for the new local travel patterns from the introduction of a new roadway. Appendix C contains information pertaining to the traffic counts and calculation of the future traffic volumes used in this noise analysis, completed by the traffic engineers for the project (*Bristol Road Ext. Traffic Report 03-24-2019*).

Existing year (2019 and 2022), design year (2042) build, and design year (2042) no-build conditions were modeled and compared as part of this noise study. Traffic speeds used in the model correspond to the posted roadway speeds for the existing year (2019 & 2022) and design year (2042) no-build models. The design year (2042) build model used the design speed.

For simplification purposes, the model has been broken into three separate models as the project area is not contiguous between all the components described in Section 1.0. These individual models will be referred to as the following in this report:

- Bristol Road Extension (BRE)
- Main/Park (MP)
- Park/Ferry/Callowhill (PFC).

3.0 EXISTING HIGHWAY TRAFFIC NOISE ENVIRONMENT

3.1 Existing Site Conditions

Topography within the project is rolling. Elevation ranges from approximately 288 feet above mean sea level (ASL) to 242 feet ASL in the BRE area, 284 ASL to 270 ASL in the MP area, and 368 to 320 ASL in the PFC area. Land use in the BRE area consists of residential, railroad, commercial, offices, restaurants, and township open space. It was determined by FHWA that this area is not considered park and therefore does not qualify as a Section 4(f) property. There is one partially constructed/planned residential development at the southwestern corner of Bristol Road and Butler Avenue. This development is accounted for in the models. Primary land use in the MP area is commercial, apartments, residential, inactive church (currently vacant and advertised for commercial rental), a cemetery, an ice cream shop, and railroad.

This area of the project is located within a National Register Eligible Historic District which has contributing elements adjacent to the improvements. Coordination regarding Section 106 clearance is finished and resulted in needing a Section 4(f) evaluation. A Section 4(f) De Minimis No Adverse Use Form was completed and approved for the Chalfont Historic District. Land use in the PFC area consists of residential and a music studio/school. One property is listed on the National Register. Section 106 coordination is finished which required a Section 4(f) evaluation. A Section 4(f) De Minimis No Adverse Use Form was completed and approved for the Morgan James Homestead. A Level 2 CEE is anticipated for the project.

3.2 Existing Noise Levels

For a preliminary noise screening per the guidance in PennDOT Pub 24, model validation and noise monitoring are not required. Points representing all sensitive receptors within the project area were entered into the existing model of the local roadways. Receptors within the project area included existing/proposed residential development, schools, restaurants/bars, open space, emergency services, retail, and offices. Sixteen (16) NSA's are located within the project area. The location and characteristics of the NSA are listed in Table 2 below. NSA locations are shown on Figure 2 in Appendix A.

TABLE 2A NSA SUMMARY PARK/MAIN

NSA NUMBER	LOCATION	RECEPTOR NUMBERS	NAC TYPES
1	West of Main Street, north of SEPTA in Chalfont Borough	317, 329-342	Residential (B)
2	West of Main Street, south of SEPTA in Chalfont Borough	298, 299	Residential (B)
3	East of Main Street, north of Park Avenue	313-316, 318- 328, 344, 346, 348-362, 368	Residential (B)/Office (E)
4	East of Main Street, south of between SEPTA and Park Avenue	303-312, 364, 369, 370	Residential, restaurant, and cemetery (B/C/E)
5	East of Main Street, south of SEPTA	300, 301	Residential (B)

TABLE 2B
NSA SUMMARY BRISTOL ROAD EXTENSION

NSA NUMBER	LOCATION	RECEPTOR NUMBERS	NAC TYPES
6	West of Park Avenue and Bristol Road Ext intersection	225-227	Residential (B)
7	South of Park Avenue and east of Bristol Road	244-277	Residential (B)
7A	North of Butler Avenue and west of Bristol Road	300, 319	Residential, restaurant (B/C)

NSA NUMBER	LOCATION	RECEPTOR NUMBERS	NAC TYPES
8	South of Butler Avenue and west of Bristol Road	69-129, 137- 139, 140-146, 301-316, 318, 320, 321	Residential, restaurants, and daycare (B/C/E)
9	South of Butler Avenue and east of Bristol Road	164	Residential and commercial (B/E)
10	East of Bristol Road Extension and north of Butler Avenue	171-175, 188- 224	Residential (B)
11	South of Butler Avenue and north of SEPTA	165	Daycare and commercial (B/E)

TABLE 2C
NSA SUMMARY PARK/FERRY/CALLOWHILL

NSA NUMBER	LOCATION	RECEPTOR NUMBERS	NAC TYPES
12	North of Callowhill Road and west of Ferry Road	3-6, 18-20, 30- 33	Residential (B)
13	South of Callowhill Road and west of Peace Valley Road	1, 16	Residential (B)
14	South of Callowhill Road and east of Peace Valley Road	7, 11	Residential (B)
15	North of Callowhill Road and east of Ferry Road	8-10, 21-23, 25, 27-28	Residential/music studio (B/C)

One area located in the central portion of the project area is municipal owned open space. The nature of this open space in relation to its qualification as a Section 4(f) resource was determined by FHWA as not qualifying, as it is not used for active recreation. TNM runs are located in Appendix B. The location of receptors and their numbers are shown on Figure 3 – Receptor Location Plan in Appendix A.

An active rail line is located either adjacent to or within NSA's 1, 2, 4, and 5 for Park/Main and NSA's 7A, 8, 9, 10, and 11 for the Bristol Road Extension sections of the project. The Chalfont Train Station is located southwest of the Park/Main intersection. Trains stop at the station approximately twice an hour. The rail line is located adjacent to Butler Avenue on the eastern side of the Bristol Road Extension portion of the project and crosses through the Butler Ave and Bristol Road intersection. The railroad is considered an existing noise factor within the project area.

4.0 FUTURE HIGHWAY TRAFFIC NOISE ENVIRONMENT

Two scenarios for future highway noise were modeled for the 2042 design year: No-build and Full Build. The no-build would be the existing traffic alignment/configuration with natural traffic growth (increases). The future build would be the 2042 full design. The comparison between the existing modeled levels and the future conditions is shown in Table 3. It was determined that the PM peak traffic hour was likely the worst case scenario based upon the existing use data collected for the traffic engineering report.

TABLE 3A
PARK AVE/MAIN STREET
MODELED RESULTS COMPARISON

Category		I	ı	ı		
NSA 1	Receiver	Land Use	Criteria	Existing	Design	Design
NSA 1 SA 1 SA 2 SA 330 SA 66 62 63 63 63 63 63 63			Level			
NSA 1		Category		FIVI		, ,
329 B 66 62 63 63 330 B 66 62 63 63 331 B 66 62 63 62 332 B 66 62 63 62 333 B 66 65 64 64 4334 B 66 65 65 65 65 335 B 66 68 69 68 335 B 66 60 61 59 337 B 66 57 58 57 58 57 338 B 66 57 58 57 3339 B 66 53 54 53 344 53 344 53 344 53 344 B 66 54 55 54 341 B 66 56 57 57 37 342 B 66 56 57 57 <th></th> <th></th> <th>NSA</th> <th>1</th> <th>1 111</th> <th>Dana 1 IVI</th>			NSA	1	1 111	Dana 1 IVI
330 B 66 62 63 63 331 B 66 62 63 62 332 B 66 63 63 63 333 B 66 65 64 64 334 B 66 65 65 65 335 B 66 68 69 68 336 B 66 60 61 59 337 B 66 57 58 57 338 B 66 57 58 57 339 B 66 53 54 53 340 B 66 56 57 58 57 341 B 66 56 57 57 347 342 B 66 56 57 57 317 B 66 63 64 63 64 63 64 63 64	329	В		l	63	63
331 B 66 62 63 62 332 B 66 63 63 63 333 B 66 65 65 65 334 B 66 65 65 65 335 B 66 68 69 68 336 B 66 60 61 59 337 B 66 60 61 59 337 B 66 57 58 57 338 B 66 57 58 57 339 B 66 53 54 53 340 B 66 56 57 57 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B<					1	+
332 B 66 63 63 63 333 B 66 65 64 64 334 B 66 65 65 65 65 335 B 66 68 69 68 336 B 66 60 61 59 337 B 66 60 61 59 337 B 66 57 58 57 338 B 66 57 58 57 3339 B 66 53 54 53 344 53 340 B 66 54 55 54 341 B 66 56 57 57 342 B 66 56 57 57 342 B 66 56 57 57 57 342 B 66 63 64 63 63 64 63 64 63 63 64 63 64 63 64 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
333 B 66 65 64 64 334 B 66 65 65 65 335 B 66 68 69 68 336 B 66 60 61 59 337 B 66 57 58 57 338 B 66 57 58 57 339 B 66 53 54 53 340 B 66 56 57 57 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 66 63 64 63 NSA 3 313 B 66 59 59 61 314 B 66 59 59		В	66	63	63	63
334 B 66 65 65 65 335 B 66 68 69 68 336 B 66 60 61 59 337 B 66 57 58 57 338 B 66 57 58 57 339 B 66 53 54 53 340 B 66 56 57 57 341 B 66 56 57 57 342 B 66 56 57 57 342 B 66 56 57 57 342 B 66 63 64 63 NSA 2 298 B 66 63 64 63 NSA 3 313 B 66 59 59 61 314 B 66 59 59 61		В				
336 B 66 60 61 59 337 B 66 57 58 57 338 B 66 57 58 57 339 B 66 53 54 53 340 B 66 54 55 54 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 63 64 63 NSA 3 313 B 66 59 59 61 314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 59 59 61 318 B 66 52 53 53		В	66	65	65	65
337 B 66 57 58 57 338 B 66 57 58 57 339 B 66 53 54 53 340 B 66 54 55 54 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 63 64 63 NSA 3 NSA 5	335	В	66	68	69	68
338 B 66 57 58 57 339 B 66 53 54 53 340 B 66 54 55 54 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 61 61 61 299 B 66 63 64 63 NSA 3 313 B 66 63 64 63 NSA 3 314 B 66 59 59 61 314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 59 59 61 318 B 66		В			61	59
339 B 66 53 54 53 340 B 66 54 55 54 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 61 61 61 299 B 66 63 64 63 NSA 3 313 B 66 63 64 63 NSA 3 313 B 66 59 59 61 314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 59 59 61 318 B 66 52 53 53 319 B 66	337	В	66	57	58	57
339 B 66 53 54 53 340 B 66 54 55 54 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 61 61 61 299 B 66 63 64 63 NSA 3 313 B 66 63 64 63 NSA 3 313 B 66 59 59 61 314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 59 59 61 318 B 66 52 53 53 319 B 66	338	В	66	57	58	57
340 B 66 54 55 54 341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 61 61 61 61 61 62 63 64 63 63 64 63 66 63 64 63 66 63 64 63 66 63 64 63 66 63 64 63 66 63 64 63 66 63 64 63 66 63 66 63 66 63 64 63 84 63 84 66 63 66 63 66 63 66 63 66 63 66 63 66 61 61 61 31 88 8 66 52						
341 B 66 56 57 57 342 B 66 56 57 57 317 B 66 63 64 63 NSA 2 298 B 66 61 61 61 299 B 66 63 64 63 NSA 3 313 B 66 63 64 63 NSA 3 313 B 66 59 59 61 314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 59 59 61 318 B 66 52 53 53 319 B 66 52 53 53 320 B 66 52 53 53 321 B 66						+
NSA 2 298 B 66 61 61 61 299 B 66 63 64 63 NSA 3 313 B 66 59 59 61 314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 60 61 61 318 B 66 59 59 61 318 B 66 59 59 61 318 B 66 52 53 53 319 B 66 52 53 53 320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 65 66 65	341	В	66	56	57	57
NSA 2 298						
298 B 66 61 61 61 NSA 3 Sign of the property of the prop	317	В	66	63	64	63
NSA 3 Section Section		<u> </u>	NSA	2	•	
NSA 3 313	298	В	66	61	61	61
NSA 3 313	299	В	66	63	64	63
313 B 66 59 59 61 314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 59 59 61 318 B 66 60 61 61 318 B 66 52 53 53 319 B 66 51 52 52 320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 57 <			NSA			
314 B 66 59 59 61 315 B 66 59 59 61 316 B 66 59 59 61 318 B 66 60 61 61 318 B 66 52 53 53 319 B 66 51 52 52 320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 <	313	В			59	61
315 B 66 59 59 61 316 B 66 60 61 61 318 B 66 52 53 53 319 B 66 51 52 52 320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 349 B 66 56 <						
316 B 66 60 61 61 318 B 66 52 53 53 319 B 66 51 52 52 320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 57 58 60 348 B 66 56 56 58 349 B 66 52 <					1	
318 B 66 52 53 53 319 B 66 51 52 52 320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 57 58 60 346 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 <						
319 B 66 51 52 52 320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 <						
320 B 66 52 53 53 321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 <						
321 B 66 53 53 53 322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43						
322 B 66 54 54 54 323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 <						
323 B 66 60 60 60 324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 43 <						
324 B 66 65 66 65 325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 43 44 44						
325 B 66 63 64 64 327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 43 44 44					1	
327 B 66 64 65 65 328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
328 B 66 62 63 63 344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
344 B 66 57 58 60 346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
346 B 66 49 49 49 348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
348 B 66 56 56 58 349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
349 B 66 52 52 53 350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
350 B 66 48 49 50 351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
351 B 66 47 48 48 352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
352 B 66 46 47 47 353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
353 B 66 43 44 44 354 B 66 43 44 44 355 B 66 44 44 45						
354 B 66 43 44 44 355 B 66 44 44 45						
355 B 66 44 44 45					1	

Receiver	Land Use	Criteria	Existing	Design	Design
	Activity	Level	Year (2019)	Year (2042)	Year
	Category		PM	No-Build	(2042)
				PM	Build PM
357	В	66	47	48	47
358	В	66	48	48	48
359	В	66	48	50	48
361	В	66	47	48	48
360	В	66	49	50	50
362	В	66	48	49	50
368	В	66	51	52	52
		NSA	4		
303	C	66	66	66	66
304	В	66	47	48	47
305	В	66	48	49	48
306	В	66	51	52	52
307	В	66	54	55	55
308	В	66	54	55	56
309	В	66	50	50	51
310	В	66	46	46	46
311	В	66	45	45	45
312	В	66	60	61	62
364	В	66	48	49	49
369	С	66	64	65	64
370	В	66	49	49	50
		NSA	5		
300	В	66	62	63	62
301	В	66	65	65	65

Two (2) receivers will be impacted in the design year (2042) no-build and design year (2042) build conditions. Receiver 335 (single family home) is located in NSA 1. This receiver exceeds the NAC in the existing, design year (2042) no-build, and the design year (2042) build condition. Receiver 303 (cemetery) is located in NSA 4. This receiver approaches the NAC in the existing, design year (2042) no-build, and the design year (2042) build condition. One (1) receiver in NSA 3 will be impacted in the design year (2042) no-build condition (approaches) but levels at this receiver decrease in the future condition due to traffic redistribution. These receivers are all located within 40 feet of the edge of the existing road.

TABLE 3B
BRISTOL ROAD EXTENSION
MODELED RESULTS COMPARISON

Receiver	Land Use Activity Category	Criteria Level	Existing Year (2019) PM	Design Year (2042) No- Build PM	Design Year (2042) Build PM
	, <u> </u>	NS	SA 6		
225	В	66	50	50	55
226	В	66	57	57	62
227	В	66	59	60	61
		NS	SA 7		
244	В	66	59	59	59
245	В	66	55	55	55
246	В	66	52	53	52

Receiver	Land Use	Criteria	Existing	Design Year	Design Year
Receiver	Activity	Level	Year (2019)	(2042) No-	(2042) Build
	Category		PM	Build PM	PM
247	В	66	49	50	50
248	В	66	50	51	51
249	В	66	52	52	53
250	В	66	52	52	53
251	В	66	54	55	56
252	В	66	55	55	56
253	В	66	55	56	57
254	В	66	56	57	57
255	В	66	55	56	57
256	В	66	55	55	56
257	В	66	55	56	57
258	В	66	55	56	57
259	В	66	54	55	56
260	В	66	53	54	56
261	В	66	50	51	55
262	В	66	49	50	56
263	В	66	44	45	55
264	В	66	44	45	52
265	В	66	44	45	51
266	В	66	43	43	47
267	В	66	44	44	47
268	В	66	45	45	48
269	В	66	47	47	50
270	В	66	48	48	51
271	В	66	48	48	50
272	В	66	48	48	50
273	В	66	47	48	49
274	В	66	47	47	49
275	В	66	46	47	48
276	В	66	45	46	47
277	В	66	43	45	46
211	Ь		<u> 44</u> А 7А	45	40
210	D			61	FO
319	В	66	61 62	61	59 62
300	В	66 NG	6A 8	63	62
69	В	66	48	48	49
70	В	66	48	49	50
70	В	66	48	49	50
71	В	66	49	49	50
		66	49	50	51
73	В		<u>49</u> 51	51	52
74	В	66 66	51	52	53
75 76	B B	66 66	52	53	53
76		66			
77	В	66	53	54	54 55
78 79	B B	66 66	55 57	56 57	55 56
		66			56
80	В	66	58	58	57 59
81	В	66	60	61	59 50
82	В	66	48	49	
83	В	66	48	49	50

Receiver	Land Use	Criteria	Existing	Design Year	Design Year
	Activity Category	Level	Year (2019) PM	(2042) No- Build PM	(2042) Build PM
84	В	66	48	49	50
85	В	66	49	49	50
86	В	66	49	49	50
87	В	66	49	49	50
88	В	66	49	49	50
89	В	66	49	49	50
90	В	66	49	50	50
91	В	66	49	50	50
92	В	66		59	58
93	В		59 57	57	56
		66			
94	В	66	55	56	55
95	В	66	54	55	55
96	В	66	53	54	54
97	В	66	52	53	54
98	В	66	51	52	53
99	В	66	51	52	53
100	В	66	51	51	53
101	В	66	51	51	53
102	В	66	51	51	53
103	В	66	51	51	52
104	В	66	51	51	52
105	В	66	51	52	53
106	В	66	52	52	53
107	В	66	50	51	51
108	В	66	51	51	51
109	В	66	52	52	51
110	В	66	52	53	52
111	В	66	53	53	52
112	В	66	53	53	53
113	В	66	53	54	54
114	В	66	53	54	55
115	В	66	54	54	55
116	В	66	54	55	56
117	В	66	56	56	57
118	В	66	61	62	60
119	В	66	61	61	59
120	В	66	61	61	59
121	В	66	61	62	60
122	В	66	61	61	60
123	В	66	61	62	60
123	В	66	61	62	62
124	В	66	60	61	61
125	В	66	60	61	60
					60
127	В	66	60	60	
128	В	66	60	60	59
129	В	66	59	60	59
137	В	66	60	60	58
138	В	66	60	61	57
139	В	66	61	62	59
140	В	66	51	52	52

Receiver	Land Use	Criteria	Existing	Design Year	Design Year
Receiver	Activity	Level	Year (2019)	(2042) No-	(2042) Build
	Category		PM	Build PM	PM
141	В	66	55	56	55
142	В	66	62	62	62
143	В	66	61	61	61
144	В	66	60	61	61
145	В	66	62	63	63
146	В	66	64	64	64
301	В	66	48	49	49
302	В	66	48	49	49
303	В	66	49	49	49
304	В	66	50	51	50
305	В	66	52	53	52
306	В	66	49	50	50
307	В	66	48	49	49
308	В	66	49	49	49
309	В	66	47	47	47
310	В	66	57	58	57
311	В	66	50	51	51
312	В	66	50	51	51
313	В	66	51	51	51
314	В	66	49	50	50
315	В	66	50	50	51
316	В	66	51	52	52
318	В	66	50	50	51
320	В	66	53	54	53
321	В	66	52	53	53
321			SA 9	33	33
164	В	66	66	66	65
			A 10		
171	В	66	49	50	50
172	В	66	48	48	48
173	В	66	47	47	48
174	В	66	45	46	46
175	В	66	44	45	46
188	В	66	43	44	47
189	В	66	43	44	47
190	В	66	44	44	48
191	В	66	45	46	49
192	В	66	45	46	49
193	В	66	46	47	50
194	В	66	48	48	51
195	В	66	49	49	52
196	В	66	50	51	54
196	В	66	48	48	50
197	В	66	47	47	49
198	В	66	47	47	49
200	В	66	45	45 45	48
		66	43		46
201 202	B B	66	43	43	46
202	В	66	43	44	46
204	В	66	43	44	46

Receiver	Land Use Activity Category	Criteria Level	Existing Year (2019) PM	Design Year (2042) No- Build PM	Design Year (2042) Build PM	
205	В	66	44	44	46	
206	В	66	45	45	46	
207	В	66	45	46	47	
208	В	66	46	47	47	
209	В	66	55	56	57	
210	В	66	53	53	56	
211	В	66	51	52	55	
212	В	66	47	48	52	
213	В	66 46		47	51	
214	В	66 44		44	48	
215	В	66	44	44	48	
216	В	66	66 44		49	
217	В	66	45	46	51	
218	В	66	46	47	52	
219	В	66	47	48	53	
220	В	66	48	49	54	
221	В	66	50	50	56	
222	В	66	50	50	55	
223	В	66	57	58	61	
224	В	66	58	58	61	
		NS	SA 11			
165	С	66	62	62	60	

One receiver is impacted under the existing (2019) and design year (2042) no-build condition. This receiver is located in NSA 9 and approaches the NAC. The existing receiver is located within 25 feet of the edge of road and 80 feet from an existing rail line. Noise levels at this receiver decrease in the future condition due to traffic redistribution. More traffic will divert to the new roadway and Butler Avenue will experience less traffic in the build scenario.

One receiver is impacted under the design year (2042) build condition. This receiver is located in NSA 7 and experiences a 10 plus DBA change in noise volume. This receiver is considered to have a substantial increase in noise levels. The existing receiver is located within 50 feet of the existing section of the Bristol Road Extension. Once the new section of Bristol Road is constructed the roadway will be moved a little further away from the receptor and a new sidewalk will be constructed between the road and the house.

TABLE 3C
PARK/FERRY/CALLOWHILL
MODELED RESULTS COMPARISON

Receiver	Land Use	Criteria Level	Existing	Design Year	Design Year						
Receiver	Activity	Citteria Levei	Year (2022)	(2042) No-	(2042) Build						
	Category		PM	Build PM	PM						
NSA 12											
3	В	66	54	55	56						
4	В	66	55	556	57						
5	В	66	58	59	60						
6	В	66	62	63	63						
18	В	66	61	61	61						
19	В	66	58	59	59						

Receiver	Land Use Activity	Criteria Level	Existing Year (2022)	Design Year (2042) No-	Design Year (2042) Build
	Category		PM	Build PM	PM
20	В	66	62	63	62
30	В	66	54	54	54
31	В	66	52	52	53
32	В	66	51	52	52
33	В	66	52	53	53
		NS	A 13		
1	В	66	50	51	51
16	В	66	66	66	66
		NS	A 14		
7	В	66	48	48	49
11	В	66	56	57	57
		NS	A 15		
8	В	66	68	69	68
9	C	66	59	60	60
10	В	66	58	59	60
21	В	66	61	61	61
22	В	66	61	61	61
23	В	66	62	63	63
25	В	66	46	46	46
27	В	66	47	47	47
28	В	66	58	59	59

Two receivers are impacted in the existing year (2022), design year (2042) no-build, and design year (2042) build scenarios. Receiver 16 is located in NSA 13 and Receiver 8 is located in NSA 15. The receiver in NSA 13 approaches the NAC in the existing, design year (2042) no-build, and the design year (2042) build condition. The receiver in NSA 15 exceeds the NAC in the existing, design year (2042) no-build, and the design year (2042) build condition. These two receivers are located within 20 feet of the existing edge of road.

A summary by NSA from the three design year models are found in Table 4 below:

TABLE 4
FUTURE NOISE SUMMARY BY NSA

NSA NUMBER	RECEPTOR NUMBERS	RANGE OF DESIGN YEAR (2042) BUILD NOISE LEVELS	BARRIER WARRANTED		
1	317, 329-342	53-68 dBA	Yes		
2	298, 299	61-63	No		
3	313-316, 318-328, 344, 346, 348-362, 368	43-65 dBA	No		
4	303-312, 364, 369 370	45-66 dBA	Yes		
5	300, 301	62-65 dBA	No		

NSA NUMBER	RECEPTOR NUMBERS	RANGE OF DESIGN YEAR (2042) BUILD NOISE LEVELS	BARRIER WARRANTED
6	225-227	55-62 dBA	No
7	244-277	46-59 dBA	Yes
7A	300, 319	59-62 dBA	No
8	69-129, 136-146, 301-309, 311-316, 318	47-64 dBA	No
9	164	65 dBA	No
10	171-175, 188-224	46-61 dBA	No
11	165	60 dBA	No
12	3-6, 18-20, 30-33	52-63 dBA	No
13	1, 16	51-66 dBA	Yes
14	7, 11	49-57 dBA	No
15	8-10, 21-23, 25, 27- 28	46-68 dBA	Yes

Barriers are warranted for the future design year (2042) build condition at the MP intersection at two locations: one residence to the west of the MP intersection (Receiver 335 (single family)) and Receiver 303 (St. James Lutheran Church cemetery). Berms would require too much right-of-way and relocation of grave sites within a National Register Historic District. Barriers are warranted in the design year (2042) build condition for one residence within BRE portion of the project, at the Forest Park Drive and Bristol Road intersection. Two receivers (8 and 16) warrant barriers at the PFC intersection.

Coordination with the organization in charge of the cemetery indicated that there was no information available on visitors per day and would be very low so it was assumed that it was equivalent to one residential unit to be conservative. During multiple field views over a number of years very few visitors were observed. The church building is currently vacant and has been advertised for rent for commercial use for a number of years. A barrier or berm at this location would not be feasible as impacts would be required to grave sites in order to maintain pedestrian access and not impact safety/capacity along the roadways and intersections while still meeting project needs. Additionally, the church property is a contributing element to the Chalfont Historic District. Section 106 clearance has been received for the project and a Section 4(f) evaluation was required. A Section 4(f) Deminimis Use form was submitted and approved for the historic district.

A barrier to mitigate impacts at Receiver 335 would not be feasible as there are driveways and sidewalks for this residence and others along Main Street. The barrier length required would exceed 4X the distance from the receiver and eliminate access to the building itself.

A barrier would not be feasible at the BRE intersection of Bristol Road and Forest Park Drive for Receiver 263. The receiver is located close to the adjacent intersection. A barrier to mitigate impacts to receptor 263 would not be feasible as there are driveways and sidewalks on Forest Park Drive and proposed sidewalks on the new section of Bristol Road, and the barrier could not be constructed without affecting sight distance at the intersection. Additionally, the barrier length required would exceed 4X the distance from the receiver and eliminate access to this property and adjacent properties.

A barrier would not be feasible at the PFC intersection for Receiver 8 and 16, both receivers are located very close to the adjacent intersections. The barrier length required would exceed 4X the distance from the receiver and eliminate access to the properties. The Morgan James Homestead which is listed on the National Register of Historic Places, is located to the east of the intersection. Shifting the roadway improvements away from Receiver 8 (single family residence) in order to construct a barrier while meeting design criteria would result in additional Section 4(f) impacts to this property. Receiver 16 (single family residence) is located at the intersection of East Peace Valley Road and Callowhill Road. A barrier could not be constructed at this location without introducing safety concerns consisting mainly of site distance issues while maintaining the existing roadway alignment. The proposed roadway is being shifted to avoid the need for acquisition of the property.

5.0 HIGHWAY TRAFFIC NOISE CONSIDERATION AND ABATEMENT ALTERNATIVES

Noise abatement is warranted within NSA's 1, 4, 7, 13, and 15 within the project area. Barriers in the area of these receptors are not feasible due to safety concerns, pedestrian access, driveway access, grave relocations, and additional Section 106 impacts. Earthen berms were considered but due to narrow right of way, existing Section 106 considerations, the existing Chalfont Historic District, the existing railroad, driveways, and pedestrian access; they were considered not feasible. The intersection improvements included in this project will provide alternative routes for traffic to reduce congestion in the overall traffic network in this area. Several Traffic Management techniques will be provided with the implementation of the intersection improvements. Several new signals will be constructed with the intersection improvements proposed for this project. Timing of the signals will be coordinated where possible to achieve smooth traffic flow and reduce the need for frequent acceleration and deceleration. The speed limit on Butler Avenue in the east bound direction past the railroad tracks will be reduced by 5 mph. The speed limit on Bristol Road approaching the Butler/Bristol intersection will be reduced by 10 mph. Separating noisier vehicles from other vehicles and placing them in a lane further away from receiver, is not possible for this intersection improvement due to downtown like setting and lack of additional space for additional lanes.

6.0 CONSTRUCTION NOISE CONSIDERATION AND ABATEMENT OPPORTUNITIES

Highway construction is inherently noisy due to the use of heavy equipment. In order to mitigate highway construction noise several techniques can be employed:

- Use of less noisy equipment with mufflers
- Limit construction to day-time hours only
- Limit particularly noisy operations to specific time periods or durations through contract specifications and special provisions
- Locate storage areas and haul roads away from sensitive receptors
- Use alternative pile driving methods
- Use of electric compressors vs. diesel or gasoline compressors
- Use of shields and dampeners

A reasonable combination of these techniques to limit noise during construction will be incorporated in this project.

7.0 PUBLIC INVOLVEMENT PROCESS

Stake holder meetings were held in 2017 and early 2018 for local groups and governments within the project limits. An initial public meeting was held on June 5, 2018, at Unami Middle School to discuss the project alternatives. A second meeting was held with the Forest Park Neighbors Coalition on August 23, 2018 to further discuss the Bristol Road Extension Study Alternative Analysis. Residents asked PennDOT and the design team questions about the project, noise issues were not discussed at this meeting. A second meeting was held with the Forest Park Neighbors Coalition on January 30, 2020 to discuss the final preferred Bristol Road Extension Alternative and safety concerns for this neighborhood. Noise was not a discussion at this meeting. A second meeting was held on February 26, 2020 with the Carousel Point HOA Board to discuss the selected Bristol Road Extension Alternative and impacts to the housing community. Noise impacts were briefly discussed at this meeting but the proximity to the rail line was noted as being an existing noise factor for the community. An additional local stakeholder meeting was held in June of 2023 to update the local officials on the project status. A second public meeting will be held virtually as the project moves from preliminary engineering to final design.

8.0 LIST OF QUALIFICATIONS

Name: Tracy Stroschein

Title: Environmental Services Manager

Education: B.S. - Environmental Resource Management, Minor – Environmental

Engineering

Years of Professional Experience: 26 years

Responsibility: TNM modeling, Report preparation

Name: Jaimie E. Ruane

Title: Senior Environmental Scientist

Education: B.S. – Biology, 2001, Minor – Geography

Years of Professional Experience: 23 years

Responsibility: TNM modeling, Report review/preparation/edits

Name: Benjamin Guthrie, PE Title: Project Manager

Education: B.S. – Civil and Environmental Engineering

M.S. - Transportation Engineering

Years of Professional Experience: 16 years

Responsibility: Traffic data projections

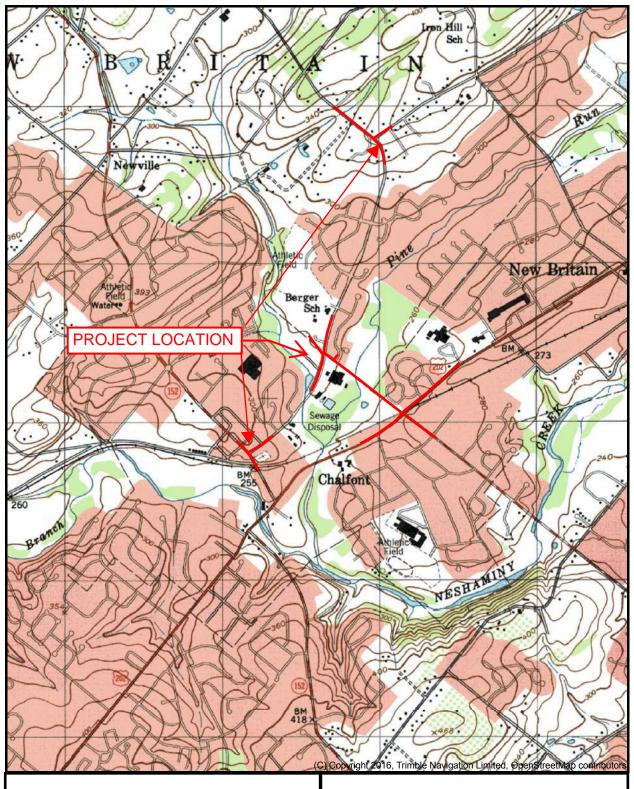
Name: Brett Grove, PE

Title: Senior Project Manager Education: Senior Project Manager B.S. – Civil Engineering

Years of Professional Experience: 29 years

Responsibility: Project Management, Report QA/QC

APPENDIX A: FIGURES

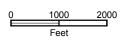


Source: Doylestown USGS 7.5 Minute

Quadrangle

MPMS#: 12923

Prepared: Dec. 9, 2019

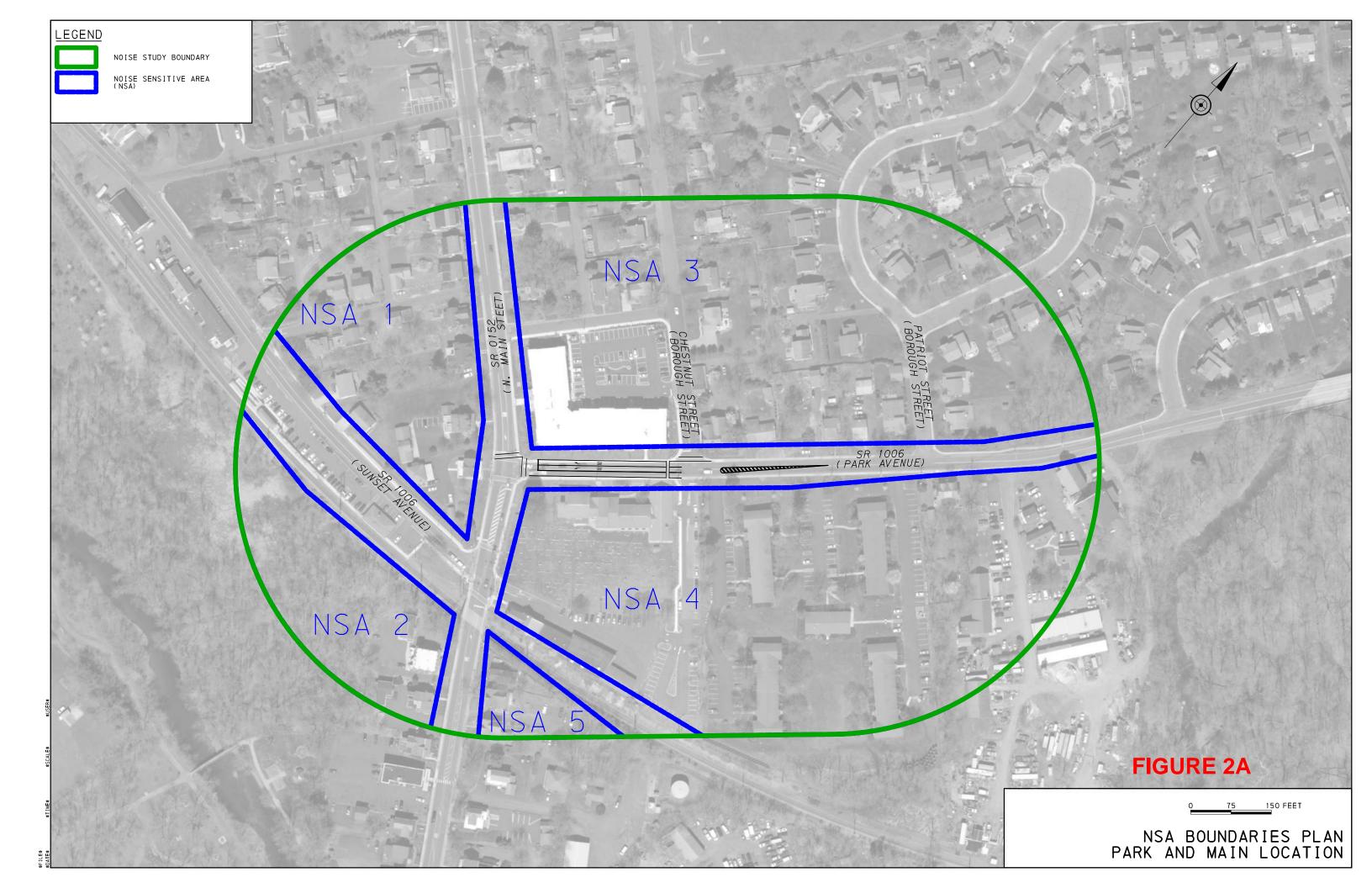


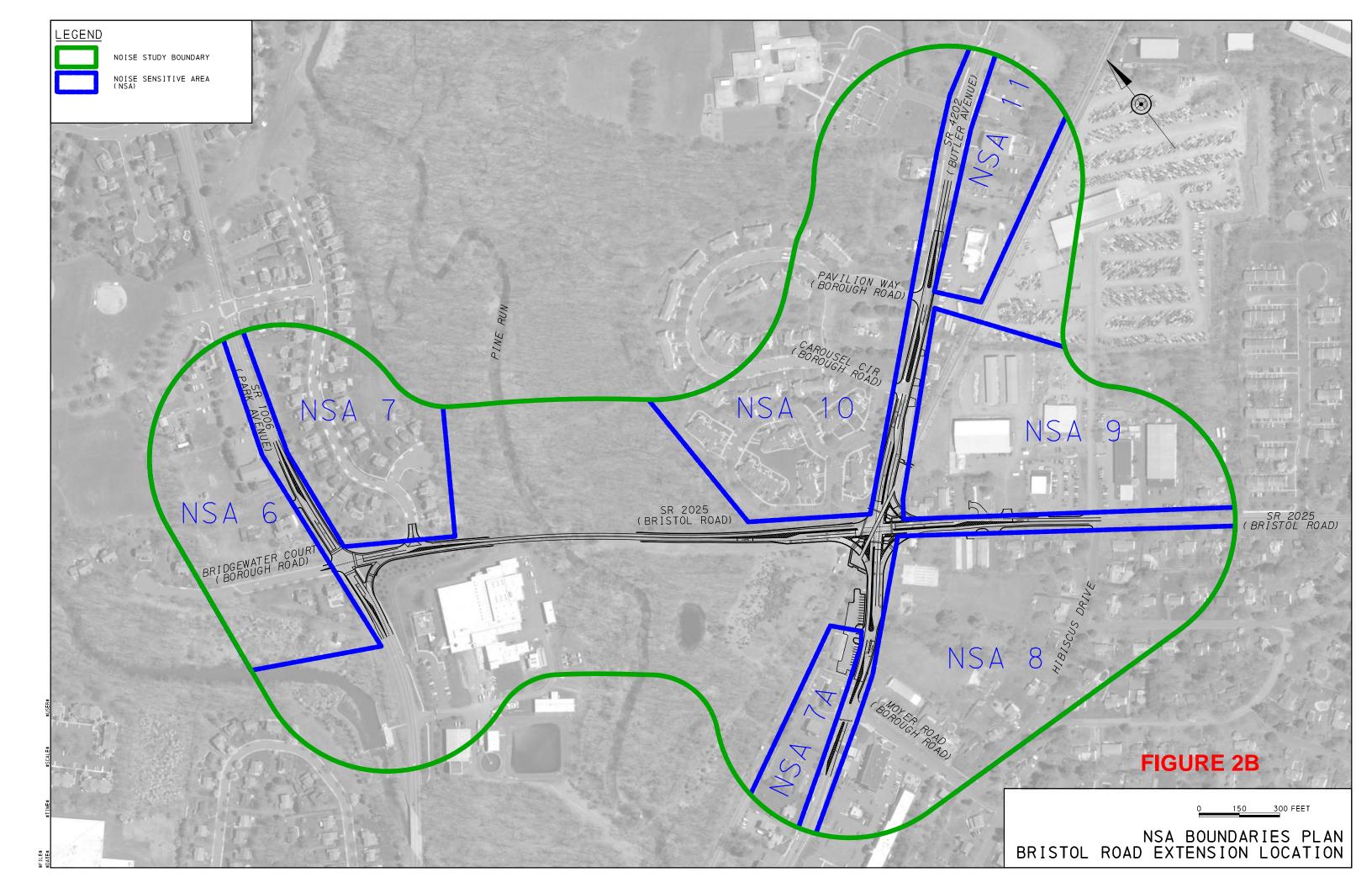


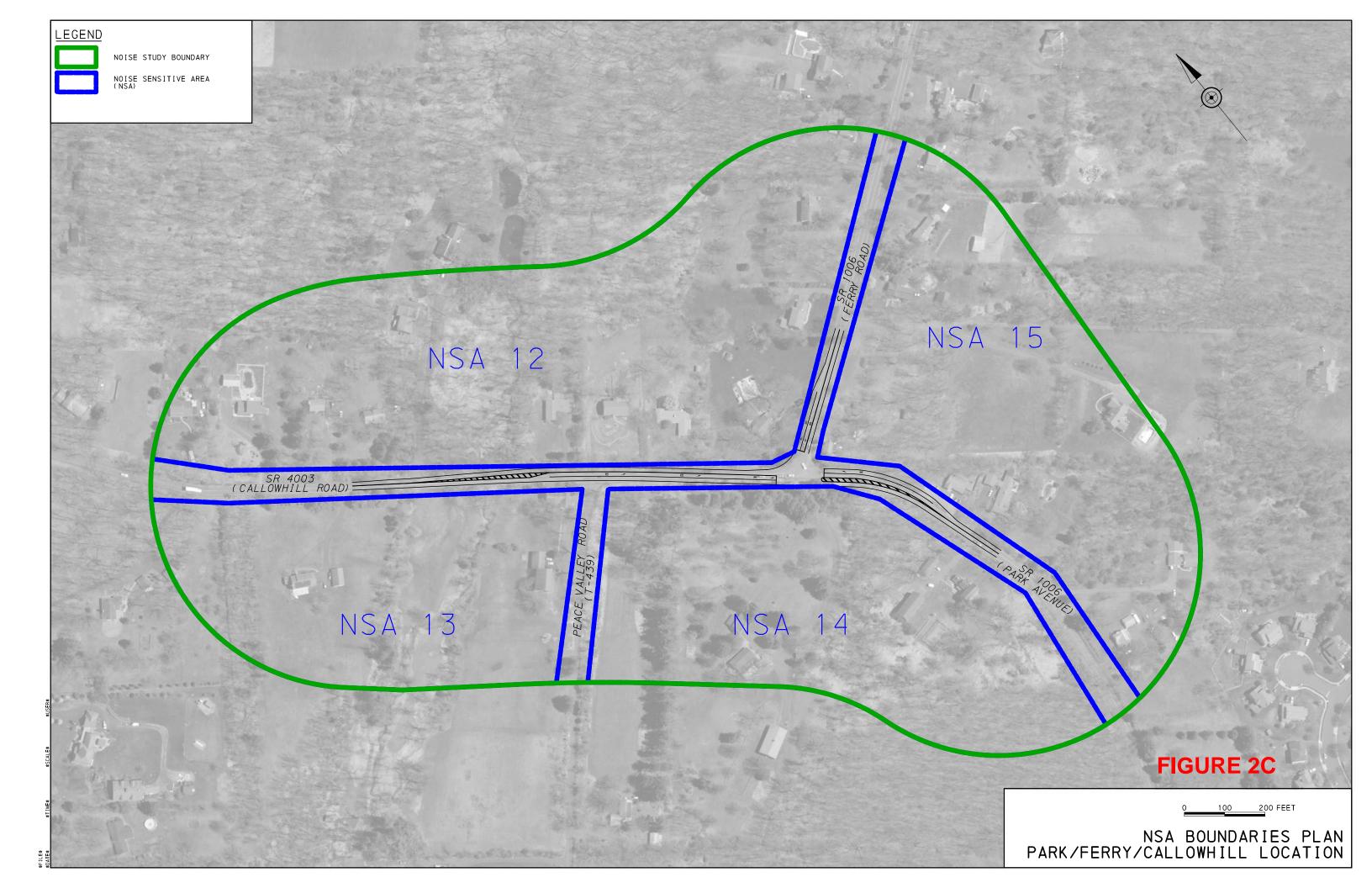
PROJECT LOCATION MAP

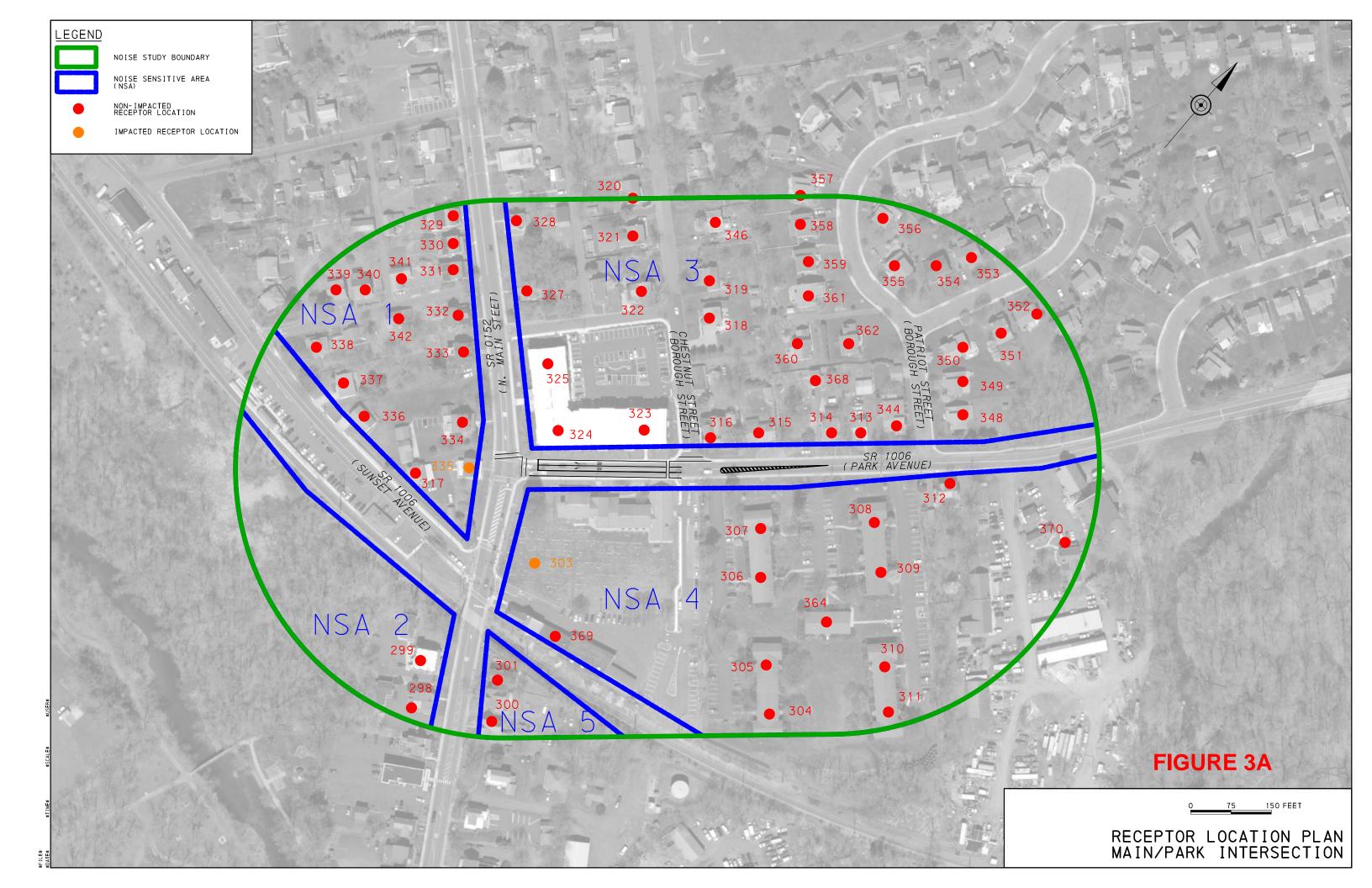
BRISTOL ROAD EXTENSION NEW BRITAIN TOWNSHIP, CHALFONT BOROUGH, AND NEW BRITAIN BOROUGH, BUCKS COUNTY, PA

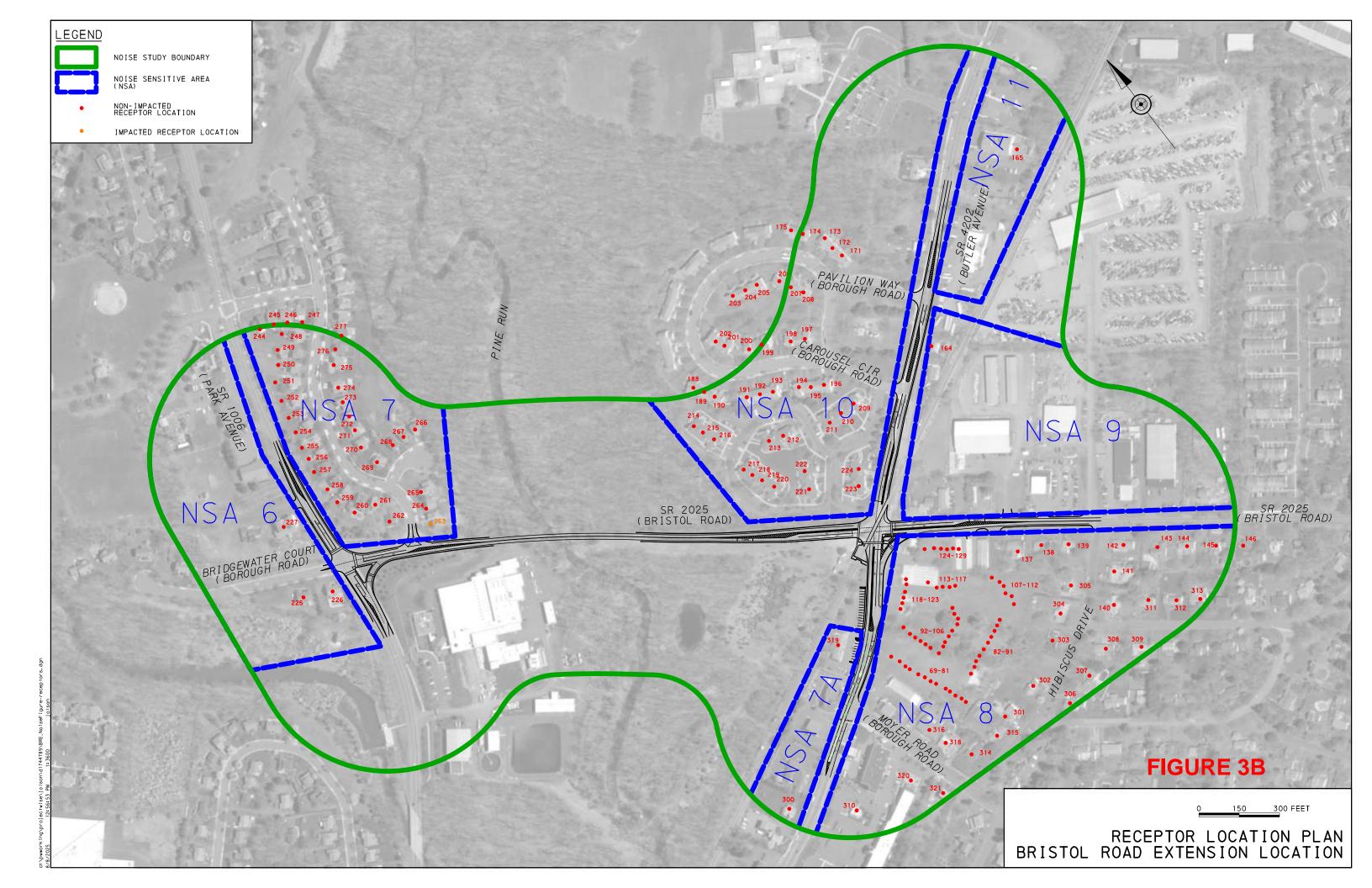
FIGURE 1

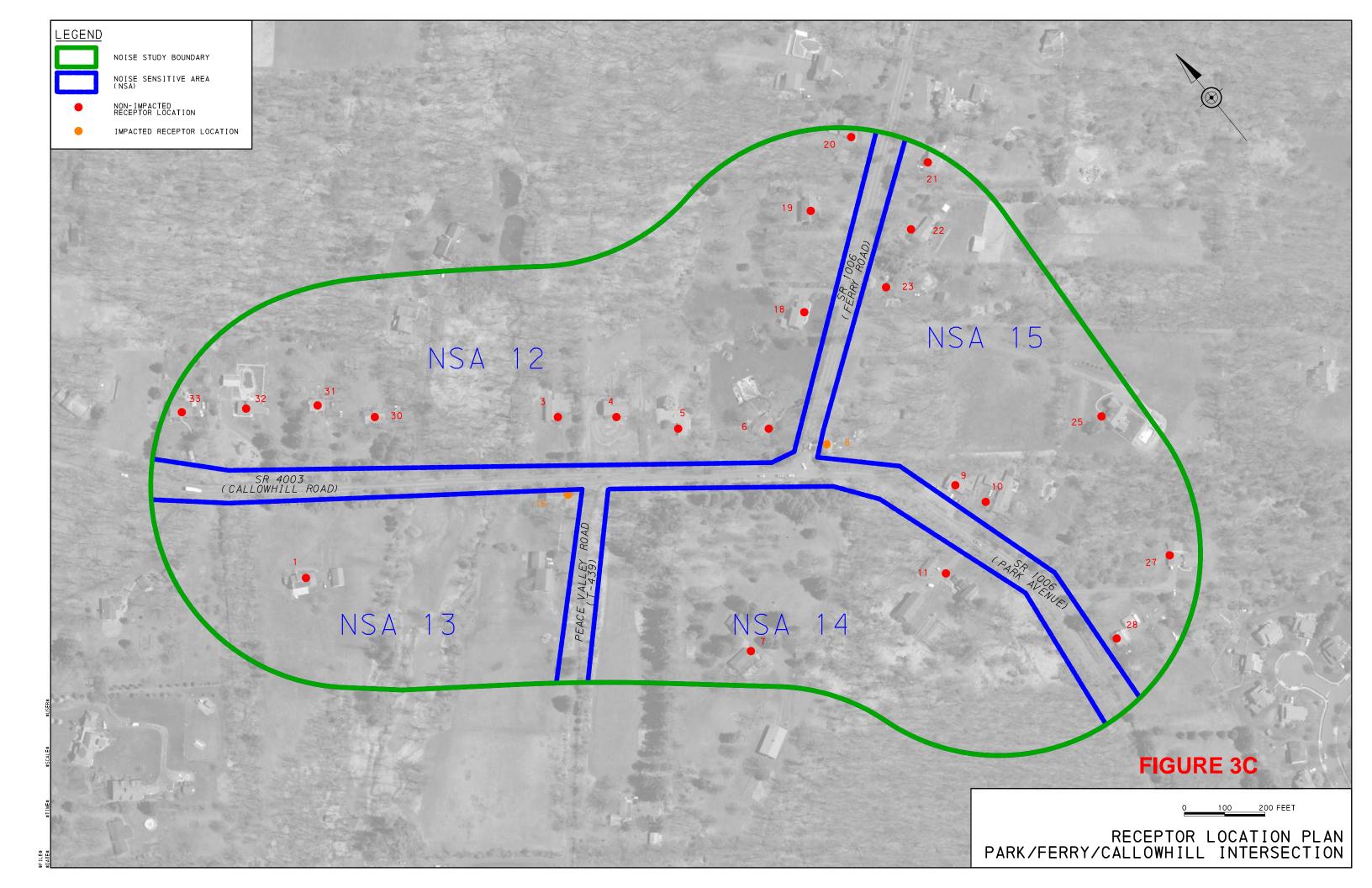












APPENDIX B: TNM RUNS

Three models were created in TNM for this project

Bristol Road Extension - BRE

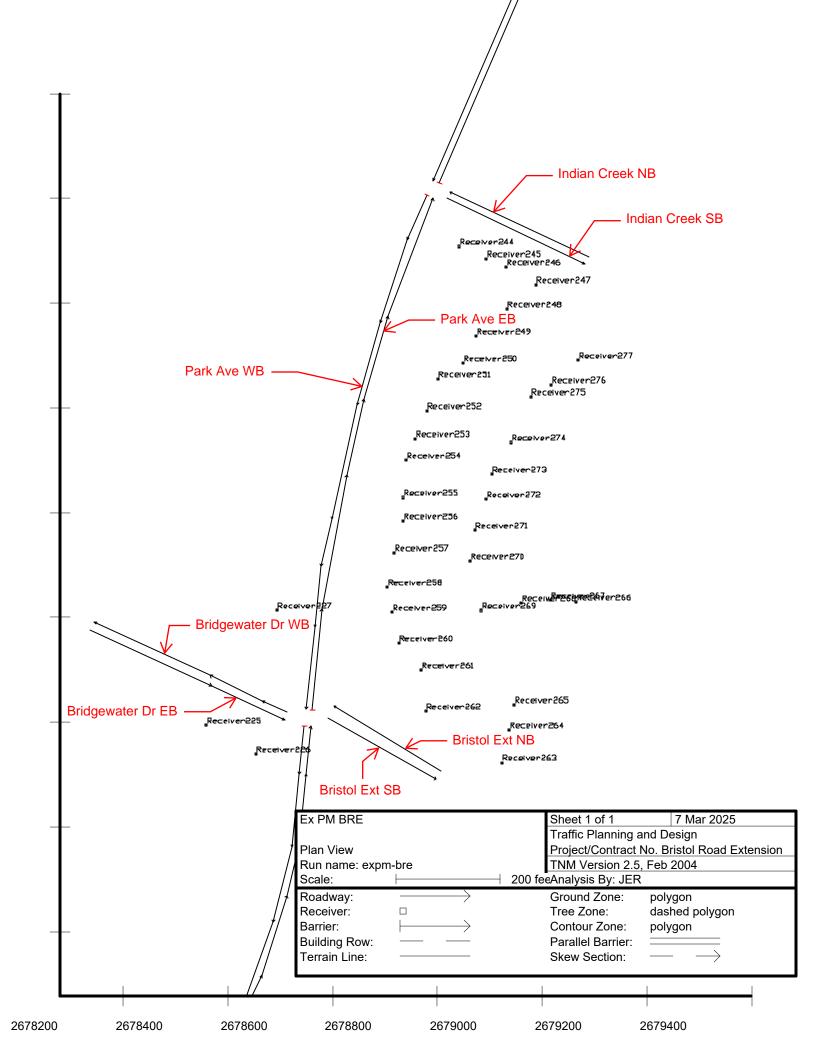
This includes the intersection of Butler Avenue and Bristol Road with the side roads Moyer Avenue (intersects with Butler Ave) and Hibiscus Drive (intersects with Bristol Rd). This model also includes the roads on the other end of the proposed extension of Bristol Road. The Intersection of Park Avenue with Bristol Road Extension and Bridgwater Court with the sideroad Indian Creek Way (intersects with Park Ave). The receivers in this model are residences, daycares, or restaurants (with outdoor seating).

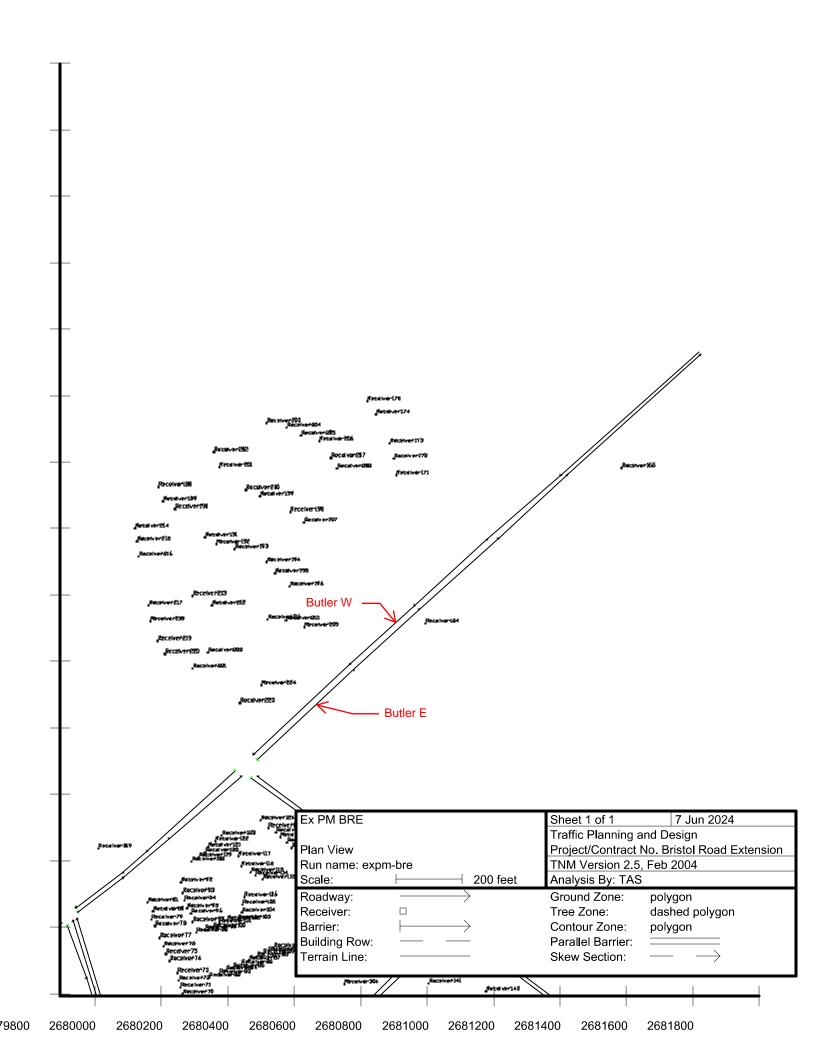
Main Street

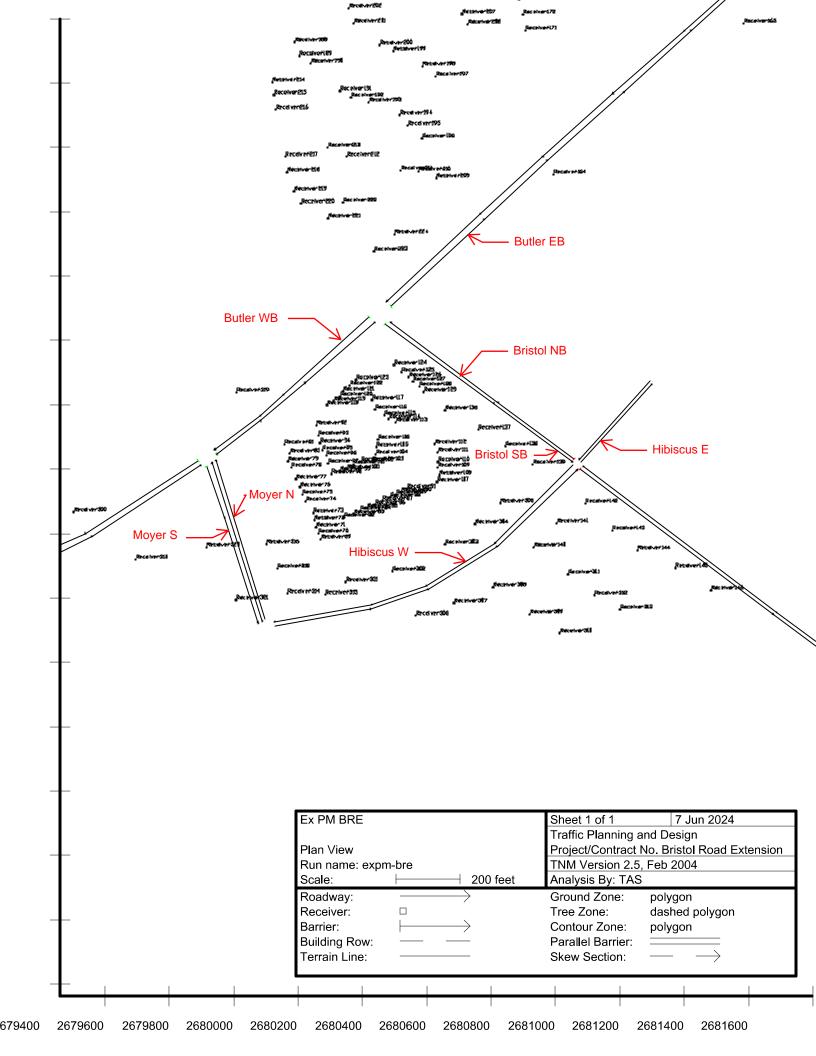
This includes the intersection of Main Street and Park Avenue with the side roads Chestnut Street (intersection with Park Ave) and Sunset Avenue (intersects with Main ST). The receivers in the model are residences, a graveyard, and a creamery (with outdoor seating).

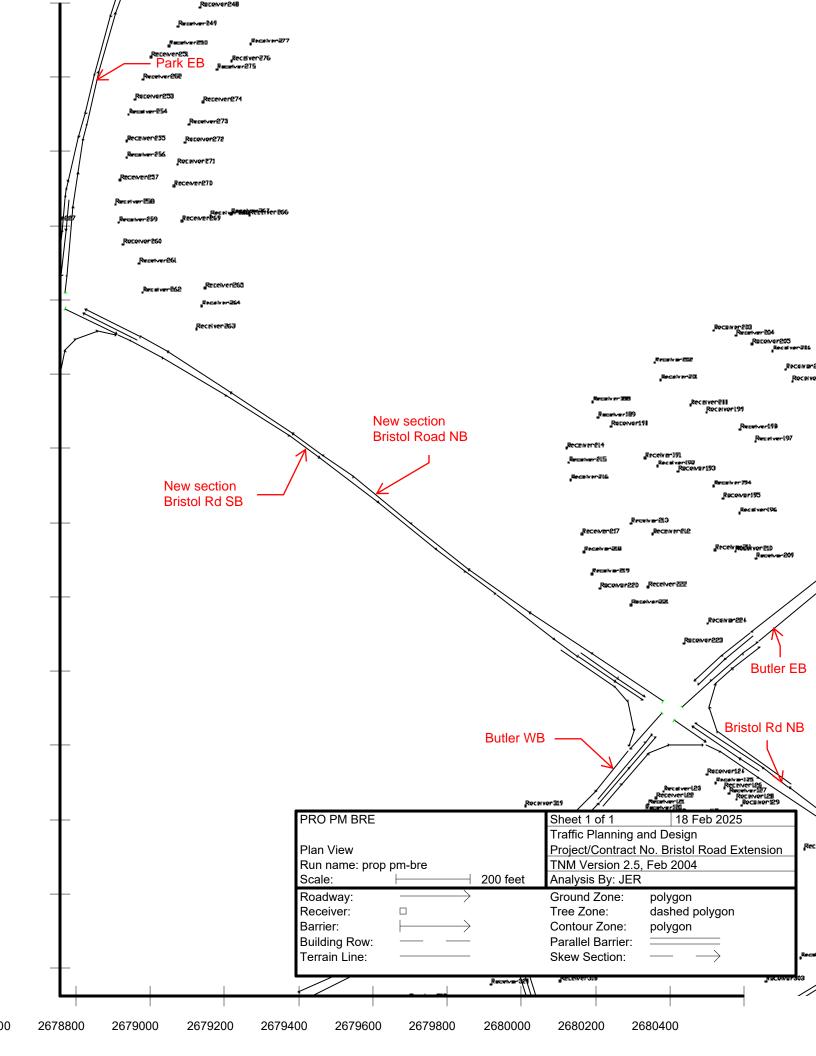
Park, Ferry, Callowhill - PFC

This includes the intersection of Park Avenue, Ferry Road, and Callowhill Road with the sideroad Peace Valley Road (intersects with Callowhill). The receivers in this model are residences and a music studio.









DECIII	TC.	SOUND) I E	/EI C
KESUI	∟ப க:	SOUNI	JLE	VELO

Bristol Road Extension

TEGGETO: GGGTTD EETEEG						_	nistoi itoat	u Exterisio	••		1	T
Traffic Planning and Design							7 Februar	v 2025				
JER							TNM 2.5	,				
							Calculated	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Bristol	Road Exter	nsion								
RUN:		Ex PM										
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement type	e shall be use	d unless	
										y substantiate		
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver										1		
Name	No.	#DUs	Existing	No Barrier					With Barrier			
				LAeq1h		Increase over	existina	Туре	Calculated	Noise Reduc	tion	
			•	Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc	•	•			minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver69	68	1	0.0	47.7	66	47.7	10		47.7	0.0	5	-5.0
Receiver70	69	1	0.0	48.2	66	48.2	10		48.2	0.0	5	-5.0
Receiver71	70	1	0.0	48.6	66	48.6	10		48.6	0.0	5	-5.0
Receiver72	71	1	0.0	48.9	66	48.9	10		48.9	0.0	5	-5.0
Receiver73	72	1	0.0	49.4	66	49.4	10		49.4	0.0	5	-5.0
Receiver74	73	1	0.0	50.5	66	50.5	10		50.5	0.0	5	-5.0
Receiver75	74		0.0	51.2	66	51.2	10		51.2	0.0	5	-5.0
Receiver76	75	1	0.0	52.0	66	52.0	10		52.0	0.0	5	-5.0
Receiver77	76	1	0.0	53.2	66				53.2	0.0	5	-5.0
Receiver78	77		0.0	55.2			10		55.2	0.0	5	-5.0
Receiver79	78		0.0				10		56.5	0.0		
Receiver80	79	1	0.0	57.6	66	57.6	10		57.6	0.0	5	
Receiver81	80		0.0						60.4			
Receiver82	81		0.0						48.4			
Receiver83	82		0.0						48.2			
Receiver84	83		0.0						48.4			
Receiver85	84		0.0						48.6			
Receiver86	85		0.0						48.6			
Receiver87	86								48.5			
Receiver88	87								48.6			
Receiver89	88								48.7			
Receiver90	89								48.9			
Receiver91	90								49.2			
Receiver92	91	1	0.0	58.7	66	58.7	10		58.7	0.0	5	-5.0

RESULTS: SOUND LEVELS						В	ristol Road	Extensi	on			
Receiver93	92	1	0.0	56.6	66	56.6	10		56.6	0.0	5	-5.0
Receiver94	93	1	0.0	55.3	66	55.3	10		55.3	0.0	5	- 5.0
Receiver95	94	1	0.0	54.1	66	54.1	10		54.1	0.0	5	-5.0
Receiver96	95	1	0.0	53.3	66	53.3	10		53.3	0.0	5	-5.0
Receiver97	96	1	0.0	52.3	66	52.3	10		52.3	0.0	5	-5.0
Receiver98	97	1	0.0	51.3	66	51.3	10		51.3	0.0	5	-5.0
Receiver99	98	1	0.0	51.0	66	51.0	10		51.0	0.0	5	-5.0
Receiver100	99	1	0.0	50.7	66	50.7	10		50.7	0.0	5	-5.0
Receiver101	100	1	0.0	50.9	66	50.9	10		50.9	0.0	5	-5.0
Receiver102	101	1	0.0	50.8	66	50.8	10		50.8	0.0	5	-5.0
Receiver103	102	1	0.0	50.5	66	50.5	10		50.5	0.0	5	-5.0
Receiver104	103	1	0.0	50.8	66	50.8	10		50.8	0.0	5	-5.0
Receiver105	104	1	0.0	51.2	66	51.2	10		51.2	0.0	5	-5.0
Receiver106	105	1	0.0	51.9	66	51.9	10		51.9	0.0	5	-5.0
Receiver107	106	1	0.0	50.3	66	50.3	10		50.3	0.0	5	-5.0
Receiver108	107	1	0.0	50.8	66	50.8	10		50.8	0.0	5	-5.0
Receiver109	108	1	0.0	51.5	66	51.5	10		51.5	0.0	5	-5.0
Receiver110	109	1	0.0	51.9	66	51.9	10		51.9	0.0	5	-5.0
Receiver111	110	1	0.0	52.5	66	52.5	10		52.5	0.0	5	-5.0
Receiver112	111	1	0.0	52.6	66	52.6	10		52.6	0.0	5	-5.0
Receiver113	112	1	0.0	53.0	66	53.0	10		53.0	0.0	5	-5.0
Receiver114	113	1	0.0	53.2	66	53.2	10		53.2	0.0	5	-5.0
Receiver115	114	1	0.0	53.6	66	53.6	10		53.6	0.0	5	-5.0
Receiver116	115	1	0.0	54.4	66	54.4	10		54.4	0.0	5	-5.0
Receiver117	116	1	0.0	55.7	66	55.7	10		55.7	0.0	5	-5.0
Receiver118	117	1	0.0	61.0	66	61.0	10		61.0	0.0	5	-5.0
Receiver119	118	1	0.0	60.7	66	60.7	10		60.7	0.0	5	-5.0
Receiver120	119	1	0.0	60.5	66	60.5	10		60.5	0.0	5	-5.0
Receiver121	120	1	0.0	61.0	66	61.0	10		61.0	0.0	5	-5.0
Receiver122	121	1	0.0	60.9	66	60.9	10		60.9	0.0	5	-5.0
Receiver123	122	1	0.0	61.0	66	61.0	10		61.0	0.0	5	-5.0
Receiver124	123	1	0.0	61.1	66	61.1	10		61.1	0.0	5	-5.0
Receiver125	124	1	0.0	60.2	66	60.2	10		60.2	0.0	5	-5.0
Receiver126	125	1	0.0	60.3	66	60.3	10		60.3	0.0	5	-5.0
Receiver127	126	1	0.0	59.8	66	59.8	10		59.8	0.0	5	-5.0
Receiver128	127	1	0.0	59.6	66	59.6	10		59.6	0.0	5	-5.0
Receiver129	128	1	0.0	59.2	66	59.2	10		59.2	0.0	5	-5.0
Receiver137	136	1	0.0	59.5	66	59.5	10		59.5	0.0	5	-5.0
Receiver138	137	1	0.0	60.2	66	60.2	10		60.2	0.0	5	-5.0
Receiver139	138	1	0.0	61.0	66	61.0	10		61.0	0.0	5	-5.0
Receiver140	139	1	0.0	51.4	66	51.4	10		51.4	0.0	5	-5.0

RESULTS: SOUND LEVELS					E	Bristol Road	Extensi	on			
Receiver141	140	1 (.0 55.	2 66	55.2	2 10		55.2	0.0	5	-5.0
Receiver142	141	1 (.0 61.	9 66	61.9	9 10		61.9	0.0	5	-5.0
Receiver143	142	1 (.0 60.	6 66	60.6	3 10		60.6	0.0	5	-5.0
Receiver144	143	1 (.0 60.	0 66	60.0	10		60.0	0.0	5	-5.0
Receiver145	144	1 (.0 62.	0 66	62.0	10		62.0	0.0	5	-5.0
Receiver146	145	1 (.0 63.	5 66	63.5	5 10		63.5	0.0	5	-5.0
Receiver164	146	1 (.0 65.	8 66	65.8	3 10		65.8	0.0	5	-5.0
Receiver165	147	1 (.0 61.	8 66	61.8	3 10		61.8	0.0	5	-5.0
Receiver171	150	2 (.0 49.	0 66	49.0	10		49.0	0.0	5	-5.0
Receiver172	151	2 (.0 47.	9 66	47.9	10		47.9	0.0	5	-5.0
Receiver173	152	2 (.0 46.	9 66	46.9	9 10		46.9	0.0	5	-5.0
Receiver174	153	2 (.0 45.	1 66	45.1	10		45.1	0.0	5	-5.0
Receiver175	154	2 (.0 44.	3 66	44.3	3 10		44.3	0.0	5	-5.0
Receiver188	155	2 (.0 42.	9 66	42.9	10		42.9	0.0	5	-5.0
Receiver189	156	2 (.0 43.	3 66	43.3	3 10		43.3	0.0	5	-5.0
Receiver190	157	2 (.0 43.	5 66	43.5	5 10		43.5	0.0	5	-5.0
Receiver191	158	2 (.0 44.	9 66	44.9	9 10		44.9	0.0	5	-5.0
Receiver192	159	2 (.0 45.	4 66	45.4	10		45.4	0.0	5	-5.0
Receiver193	160	2 (.0 46.	1 66	46.1	10		46.1	0.0	5	-5.0
Receiver194	161	2 (.0 47.	9 66	47.9	10		47.9	0.0	5	-5.0
Receiver195	162	2 (.0 48.	8 66	48.8	3 10		48.8	0.0	5	-5.0
Receiver196	163	2 (.0 50.	4 66	50.4	10		50.4	0.0	5	-5.0
Receiver197	164	2 (.0 47.	5 66	47.5	10		47.5	0.0	5	-5.0
Receiver198	165	2 (.0 46.	6 66	46.6	3 10		46.6	0.0	5	-5.0
Receiver199	166	2 (.0 44.	8 66	44.8	3 10		44.8	0.0	5	-5.0
Receiver200	169	2 (.0 44.	1 66	44.1	10		44.1	0.0	5	-5.0
Receiver201	170	2 (.0 42.	9 66	42.9	10		42.9	0.0	5	-5.0
Receiver202	171	2 (.0 42.	6 66	42.6	3 10		42.6	0.0	5	-5.0
Receiver203	172	2 (.0 43.	1 66	43.1	10		43.1	0.0	5	-5.0
Receiver204	173	2 (.0 43.	4 66	43.4	10		43.4	0.0	5	-5.0
Receiver205	174	2 (.0 43.	9 66	43.9	10		43.9	0.0	5	-5.0
Receiver206	175	2 (.0 44.	5 66	44.5	5 10		44.5	0.0	5	-5.0
Receiver207	176	2 (.0 45.	4 66	45.4	10		45.4	0.0	5	-5.0
Receiver208	177	2 (.0 46.					46.1	0.0	5	-5.0
Receiver209	178	3 (.0 55.	3 66	55.3	3 10		55.3	0.0	5	-5.0
Receiver210	179	3 (.0 52.					52.7		5	-5.0
Receiver211	180	3 (.0 51.	2 66	51.2	2 10		51.2	0.0	5	-5.0
Receiver212	181	6 (.0 47.	3 66	47.3	3 10		47.3	0.0	5	-5.0
Receiver213	182	6 (.0 46.	0 66	46.0	10		46.0	0.0	5	-5.0
Receiver214	183	4 (.0 43.			10		43.5	0.0	5	-5.0
Receiver215	184	4 (.0 43.	6 66	43.6	10		43.6	0.0	5	-5.0

RESULTS: SOUND LEVELS					В	ristol Road	Extension	n			
Receiver216	185	4 0.0	43.5	66	43.5	10		43.5	0.0	5	-5.0
Receiver217	186	4 0.0	45.3	66	45.3	10		45.3	0.0	5	-5.0
Receiver218	187	4 0.0	46.2	66	46.2	10		46.2	0.0	5	-5.0
Receiver219	188	4 0.0	47.2	66	47.2	10		47.2	0.0	5	-5.0
Receiver220	189	4 0.0	48.0	66	48.0	10		48.0	0.0	5	-5.0
Receiver221	190	4 0.0	49.8	66	49.8	10		49.8	0.0	5	-5.0
Receiver222	191	4 0.0	49.6	66	49.6	10		49.6	0.0	5	-5.0
Receiver223	192	4 0.0	57.2	66	57.2	10		57.2	0.0	5	-5.0
Receiver224	192	4 0.0	57.7	66	57.7	10		57.7	0.0	5	-5.0
Receiver225	193	4 0.0	49.9	66	49.9	10		49.9	0.0	5	-5.0
Receiver226	194	1 0.0	56.9	66	56.9	10		56.9	0.0	5	-5.0
Receiver244	195	1 0.0	58.7	66	58.7	10		58.7	0.0	5	-5.0
Receiver245	196	1 0.0	54.6	66	54.6	10		54.6	0.0	5	-5.0
Receiver246	197	1 0.0	52.2	66	52.2	10		52.2	0.0	5	-5.0
Receiver247	198	1 0.0	48.9	66	48.9	10		48.9	0.0	5	-5.0
Receiver248	199	1 0.0	50.1	66	50.1	10		50.1	0.0	5	-5.0
Receiver249	200	1 0.0	51.8	66	51.8	10		51.8	0.0	5	-5.0
Receiver250	201	1 0.0	51.9	66	51.9	10		51.9	0.0	5	-5.0
Receiver251	202	1 0.0	54.2	66	54.2	10		54.2	0.0	5	-5.0
Receiver252	203	1 0.0	54.7	66	54.7	10		54.7	0.0	5	-5.0
Receiver253	204	1 0.0	55.4	66	55.4	10		55.4	0.0	5	-5.0
Receiver254	205	1 0.0	56.1	66	56.1	10		56.1	0.0	5	-5.0
Receiver255	206	1 0.0	55.4	66	55.4	10		55.4	0.0	5	-5.0
Receiver256	207	1 0.0	54.7	66	54.7	10		54.7	0.0	5	-5.0
Receiver257	208	1 0.0	55.2	66	55.2	10		55.2	0.0	5	-5.0
Receiver258	209	1 0.0	55.4	66	55.4	10		55.4	0.0	5	-5.0
Receiver259	210	1 0.0	54.1	66	54.1	10		54.1	0.0	5	-5.0
Receiver260	211	1 0.0	53.0	66	53.0	10		53.0	0.0	5	-5.0
Receiver261	212	1 0.0	50.4	66	50.4	10		50.4	0.0	5	-5.0
Receiver262	213	1 0.0	49.4	66	49.4	10		49.4	0.0	5	-5.0
Receiver263	214	1 0.0	44.2	66	44.2	10		44.2	0.0	5	-5.0
Receiver264	215	1 0.0	44.2	66	44.2	10		44.2	0.0	5	-5.0
Receiver265	216	1 0.0	44.1	66	44.1	10		44.1	0.0	5	-5.0
Receiver266	217	1 0.0	42.7	66	42.7	10		42.7	0.0	5	-5.0
Receiver267	218	1 0.0	43.6	66	43.6	10		43.6	0.0	5	-5.0
Receiver268	219	1 0.0	44.7	66	44.7	10		44.7	0.0	5	-5.0
Receiver269	220	1 0.0	46.6	66	46.6	10		46.6	0.0	5	-5.0
Receiver270	221	1 0.0	47.7	66	47.7	10		47.7	0.0	5	-5.0
Receiver271	222	1 0.0	47.7	66	47.7	10		47.7	0.0	5	-5.0
Receiver272	223	1 0.0	47.6	66	47.6	10		47.6	0.0	5	-5.0
Receiver273	224	1 0.0	47.4	66	47.4	10		47.4	0.0	5	-5.0

RESULTS: SOUND LEVELS						В	ristol Road	d Extension	n			
Receiver274	225	1	0.0	46.6	66	46.6	10		46.6	0.0	5	-5.0
Receiver275	226	1	0.0	46.2	66	46.2	10		46.2	0.0	5	-5.0
Receiver276	227	1	0.0	45.2	66	45.2	10		45.2	0.0	5	-5.0
Receiver277	228	1	0.0	44.4	66	44.4	10		44.4	0.0	5	-5.0
Receiver300	237	1	0.0	62.4	66	62.4	10		62.4	0.0	5	-5.0
Receiver301	238	1	0.0	48.1	66	48.1	10		48.1	0.0	5	-5.0
Receiver302	239	1	0.0	48.3	66	48.3	10		48.3	0.0	5	-5.0
Receiver303	240	1	0.0	48.9	66	48.9	10		48.9	0.0	5	-5.0
Receiver304	241	1	0.0	50.0	66	50.0	10		50.0	0.0	5	-5.0
Receiver305	242	1	0.0	52.4	66	52.4	10		52.4	0.0	5	-5.0
Receiver306	243	1	0.0	48.9	66	48.9	10		48.9	0.0	5	-5.0
Receiver307	244	1	0.0	48.2			10		48.2	0.0	5	-5.0
Receiver308	245	1	0.0	48.5	66	48.5	10		48.5	0.0	5	-5.0
Receiver309	246	1	0.0	46.8	66	46.8	10		46.8	0.0	5	-5.0
Receiver311	248	1	0.0	50.2	66	50.2	10		50.2	0.0	5	-5.0
Receiver312	249	1	0.0	50.2	66	50.2	10		50.2	0.0	5	-5.0
Receiver313	250	1	0.0	50.8			10		50.8	0.0	5	-5.0
Receiver314	251	1	0.0	49.4	66	49.4	10		49.4	0.0	5	-5.0
Receiver315	299	1	0.0	49.8			_		49.8	0.0	5	-5.0
Receiver319	301	1	0.0	60.7			10		60.7	0.0	5	-5.0
Receiver310	303	1	0.0	57.0					57.0	0.0	5	-5.0
Receiver320	304	1	0.0	52.9			10		52.9	0.0	5	-5.0
Receiver321	305	1	0.0	52.2	66	52.2	10		52.2	0.0	5	-5.0
Receiver318	307	1	0.0	49.8			10		49.8	0.0	5	-5.0
Receiver316	308	1	0.0	51.4	66	51.4	10		51.4	0.0	5	-5.0
Receiver227	310	2	0.0	59.3	66	59.3	10		59.3	0.0	5	-5.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		252	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESII	I TS:	SOUND) I F\	/FIS
KLOU	LIO.	SOUND	,\	

			1		1					1	1	1
Traffic Planning and Design							7 Februar	v 2025				
JER							TNM 2.5	,				
							Calculate	d with TNI	VI 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Bristol	Road Exter	nsion								
RUN:		No Bui	ld PM-BRE									
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement typ	e shall be use	d unless	
									ighway agenc			
ATMOSPHERICS:		68 deg	F, 50% RH						rent type with	-		
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier	,		
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver69	68	1	47.7	48.2	. 66	0.5	10		48.2	0.0	5	-5.0
Receiver70	69	1	48.2	48.7	66	0.5	10		48.7	0.0	5	-5.0
Receiver71	70	1	48.6	49.1	66	0.5	10		49.1	0.0	5	-5.0
Receiver72	71	1	48.9	49.4	- 66	0.5	10		49.4	0.0	5	-5.0
Receiver73	72		49.4	49.8	66	0.4	10		49.8	0.0	5	-5.0
Receiver74	73	1					10		51.0	0.0		
Receiver75	74		51.2	51.7			_		51.7	0.0		
Receiver76	75		52.0	52.5	66	0.5	10		52.5	0.0		
Receiver77	76	1	53.2	53.7	66	0.5	10		53.7	0.0		
Receiver78	77		55.2	55.6			10		55.6	0.0		
Receiver79	78						_		57.0			
Receiver80	79								58.1			
Receiver81	80			60.9					60.9			
Receiver82	81			48.9					48.9			
Receiver83	82								48.7			
Receiver84	83								48.9			
Receiver85	84								49.1			
Receiver86	85				66				49.1			
Receiver87	86								49.0			
Receiver88	87								49.1			
Receiver89	88			49.2					49.2			
Receiver90	89						_		49.5			5 -5.0
Receiver91	90								49.7			5 -5.0
Receiver92	91	1	58.7	59.1	66	0.4	10		59.1	0.0	5	-5.0

RESULTS: SOUND LEVELS					В	ristol Road	Extensio	า			
Receiver93	92	1 56.6	57.0	66	0.4	10		57.0	0.0	5	-5.0
Receiver94	93	1 55.3	55.7	66	0.4	10		55.7	0.0	5	-5.0
Receiver95	94	1 54.1	54.5	66	0.4	10		54.5	0.0	5	-5.0
Receiver96	95	1 53.3	53.7	66	0.4	10		53.7	0.0	5	-5.0
Receiver97	96	1 52.3	52.8	66	0.5	10		52.8	0.0	5	-5.0
Receiver98	97	1 51.3	51.7	66	0.4	10		51.7	0.0	5	-5.0
Receiver99	98	1 51.0	51.5	66	0.5	10		51.5	0.0	5	-5.0
Receiver100	99	1 50.7	51.2	66	0.5	10		51.2	0.0	5	-5.0
Receiver101	100	1 50.9	51.3	66	0.4	10		51.3	0.0	5	-5.0
Receiver102	101	1 50.8	51.3	66	0.5	10		51.3	0.0	5	- 5.0
Receiver103	102	1 50.5	51.0	66	0.5	10		51.0	0.0	5	-5.0
Receiver104	103	1 50.8	51.3	66	0.5	10		51.3	0.0	5	-5.0
Receiver105	104	1 51.2	51.7	66	0.5	10		51.7	0.0	5	-5.0
Receiver106	105	1 51.9	52.4	66	0.5	10		52.4	0.0	5	-5.0
Receiver107	106	1 50.3	50.9	66	0.6	10		50.9	0.0	5	-5.0
Receiver108	107	1 50.8	51.3	66	0.5	10		51.3	0.0	5	-5.0
Receiver109	108	1 51.5	52.0	66	0.5	10		52.0	0.0	5	-5.0
Receiver110	109	1 51.9	52.5	66	0.6	10		52.5	0.0	5	-5.0
Receiver111	110	1 52.5	53.1	66	0.6	10		53.1	0.0	5	-5.0
Receiver112	111	1 52.6	53.1	66	0.5	10		53.1	0.0	5	-5.0
Receiver113	112	1 53.0	53.6	66	0.6	10		53.6	0.0	5	-5.0
Receiver114	113	1 53.2	53.7	66	0.5	10		53.7	0.0	5	-5.0
Receiver115	114	1 53.6	54.1	66	0.5	10		54.1	0.0	5	-5.0
Receiver116	115	1 54.4	54.9	66	0.5	10		54.9	0.0	5	-5.0
Receiver117	116	1 55.7	56.1	66	0.4	10		56.1	0.0	5	-5.0
Receiver118	117	1 61.0	61.5	66	0.5	10		61.5	0.0	5	-5.0
Receiver119	118	1 60.7	61.1	66	0.4	10		61.1	0.0	5	-5.0
Receiver120	119	1 60.5	60.9	66	0.4	10		60.9	0.0	5	-5.0
Receiver121	120	1 61.0	61.5	66	0.5	10		61.5	0.0	5	-5.0
Receiver122	121	1 60.9	61.4	66	0.5	10		61.4	0.0	5	-5.0
Receiver123	122	1 61.0	61.5	66	0.5	10		61.5	0.0	5	-5.0
Receiver124	123	1 61.1	61.6	66	0.5	10		61.6	0.0	5	-5.0
Receiver125	124	1 60.2	60.8	66	0.6	10		60.8	0.0	5	-5.0
Receiver126	125	1 60.3	60.8	66	0.5	10		60.8	0.0	5	-5.0
Receiver127	126	1 59.8	60.4	66	0.6	10		60.4	0.0	5	-5.0
Receiver128	127	1 59.6	60.2	66	0.6			60.2	0.0	5	-5.0
Receiver129	128	1 59.2	59.7	66	0.5			59.7	0.0	5	-5.0
Receiver137	136	1 59.5	60.1	66	0.6			60.1	0.0	5	-5.0
Receiver138	137	1 60.2	60.8	66	0.6	10		60.8	0.0	5	-5.0
Receiver139	138	1 61.0	61.5	66	0.5			61.5	0.0	5	-5.0
Receiver140	139	1 51.4	52.0	66	0.6	10		52.0	0.0	5	- 5.0

RESULTS: SOUND LEVELS						В	ristol Road	Extension				
Receiver141	140	1	55.2	55.7	66	0.5	10		55.7	0.0	5	-5.0
Receiver142	141	1	61.9	62.4	66	0.5	10		62.4	0.0	5	-5.0
Receiver143	142	1	60.6	61.2	66	0.6	10		61.2	0.0	5	-5.0
Receiver144	143	1	60.0	60.6	66	0.6	10		60.6	0.0	5	-5.0
Receiver145	144	1	62.0	62.6	66	0.6	10		62.6	0.0	5	-5.0
Receiver146	145	1	63.5	64.1	66	0.6	10		64.1	0.0	5	-5.0
Receiver164	146	1	65.8	66.4	66	0.6	10	Snd Lvl	66.4	0.0	5	-5.0
Receiver165	147	1	61.8	62.3	66	0.5	10		62.3	0.0	5	-5.0
Receiver171	150	2	49.0	49.5	66	0.5	10		49.5	0.0	5	-5.0
Receiver172	151	2	47.9	48.4	66	0.5	10		48.4	0.0	5	-5.0
Receiver173	152	2	46.9	47.4	66	0.5	10		47.4	0.0	5	-5.0
Receiver174	153	2	45.1	45.6	66	0.5	10		45.6	0.0	5	-5.0
Receiver175	154	2	44.3	44.8	66	0.5	10		44.8	0.0	5	-5.0
Receiver188	155	2	42.9	43.5	66	0.6	10		43.5	0.0	5	-5.0
Receiver189	156	2	43.3	43.9	66	0.6	10		43.9	0.0	5	-5.0
Receiver190	157	2	43.5	44.0	66	0.5	10		44.0	0.0	5	-5.0
Receiver191	158	2	44.9	45.5	66	0.6	10		45.5	0.0	5	-5.0
Receiver192	159	2	45.4	45.9	66	0.5	10		45.9	0.0	5	-5.0
Receiver193	160	2	46.1	46.7	66	0.6	10		46.7	0.0	5	-5.0
Receiver194	161	2	47.9	48.4	66	0.5	10		48.4	0.0	5	-5.0
Receiver195	162	2	48.8	49.3	66	0.5	10		49.3	0.0	5	-5.0
Receiver196	163	2	50.4	50.9	66	0.5	10		50.9	0.0	5	-5.0
Receiver197	164	2	47.5	48.0	66	0.5	10		48.0	0.0	5	-5.0
Receiver198	165	2	46.6	47.1	66	0.5	10		47.1	0.0	5	-5.0
Receiver199	166	2	44.8	45.3	66	0.5	10		45.3	0.0	5	-5.0
Receiver200	169	2	44.1	44.7	66	0.6	10		44.7	0.0	5	-5.0
Receiver201	170	2	42.9	43.4	66	0.5	10		43.4	0.0	5	-5.0
Receiver202	171	2	42.6	43.2	66	0.6	10		43.2	0.0	5	-5.0
Receiver203	172	2	43.1	43.6	66	0.5	10		43.6	0.0	5	-5.0
Receiver204	173	2	43.4	44.0	66	0.6	10		44.0	0.0	5	-5.0
Receiver205	174	2	43.9	44.4	66	0.5	10		44.4	0.0	5	-5.0
Receiver206	175	2	44.5	45.0	66	0.5	10		45.0	0.0	5	-5.0
Receiver207	176	2	45.4	46.0	66	0.6	10		46.0	0.0	5	-5.0
Receiver208	177	2	46.1	46.6	66	0.5	10		46.6	0.0	5	-5.0
Receiver209	178	3	55.3	55.8	66	0.5	10		55.8	0.0	5	-5.0
Receiver210	179	3	52.7	53.3	66	0.6	10		53.3	0.0	5	-5.0
Receiver211	180	3	51.2	51.7	66	0.5	10		51.7	0.0	5	-5.0
Receiver212	181	6	47.3	47.8	66	0.5	10		47.8	0.0	5	-5.0
Receiver213	182	6	46.0	46.5	66	0.5	10		46.5	0.0	5	-5.0
Receiver214	183	4	43.5	44.0	66	0.5	10		44.0	0.0	5	-5.0
Receiver215	184	4	43.6	44.1	66	0.5	10		44.1	0.0	5	-5.0

RESULTS: SOUND LEVELS						Ві	ristol Road I	Extensio	า			
Receiver216	185	4	43.5	44.0	66	0.5	10		44.0	0.0	5	-5.0
Receiver217	186	4	45.3	45.8	66	0.5	10		45.8	0.0	5	-5.0
Receiver218	187	4	46.2	46.7	66	0.5	10		46.7	0.0	5	-5.0
Receiver219	188	4	47.2	47.7	66	0.5	10		47.7	0.0	5	-5.0
Receiver220	189	4	48.0	48.5	66	0.5	10		48.5	0.0	5	-5.0
Receiver221	190	4	49.8	50.3	66	0.5	10		50.3	0.0	5	-5.0
Receiver222	191	4	49.6	50.1	66	0.5	10		50.1	0.0	5	-5.0
Receiver223	192	4	57.2	57.7	66	0.5	10		57.7	0.0	5	-5.0
Receiver224	193	4	57.7	58.2	66	0.5	10		58.2	0.0	5	-5.0
Receiver225	194	1	49.9	50.4	66	0.5	10		50.4	0.0	5	-5.0
Receiver226	195	1	56.9	57.4	66	0.5	10		57.4	0.0	5	-5.0
Receiver244	196	1	58.7	59.2	66	0.5	10		59.2	0.0	5	-5.0
Receiver245	197	1	54.6	55.2	66	0.6	10		55.2	0.0	5	- 5.0
Receiver246	198	1	52.2	52.8	66	0.6	10		52.8	0.0	5	- 5.0
Receiver247	199	1	48.9	49.5	66	0.6	10		49.5	0.0	5	- 5.0
Receiver248	200	1	50.1	50.7	66	0.6	10		50.7	0.0	5	-5.0
Receiver249	201	1	51.8	52.3	66	0.5	10		52.3	0.0	5	-5.0
Receiver250	202	1	51.9	52.4	66	0.5	10		52.4	0.0	5	- 5.0
Receiver251	203	1	54.2	54.8	66	0.6	10		54.8	0.0	5	-5.0
Receiver252	204	1	54.7	55.2	66	0.5	10		55.2	0.0	5	- 5.0
Receiver253	205	1	55.4	56.0	66	0.6	10		56.0	0.0	5	- 5.0
Receiver254	206	1	56.1	56.7	66	0.6	10		56.7	0.0	5	-5.0
Receiver255	207	1	55.4	55.9	66	0.5	10		55.9	0.0	5	-5.0
Receiver256	208	1	54.7	55.2	66	0.5	10		55.2	0.0	5	-5.0
Receiver257	209	1	55.2	55.8	66	0.6	10		55.8	0.0	5	-5.0
Receiver258	210	1	55.4	55.9	66	0.5	10		55.9	0.0	5	-5.0
Receiver259	211	1	54.1	54.6	66	0.5	10		54.6	0.0	5	-5.0
Receiver260	212	1	53.0	53.5	66	0.5	10		53.5	0.0	5	-5.0
Receiver261	213	1	50.4	50.9	66	0.5	10		50.9	0.0	5	-5.0
Receiver262	214	1	49.4	49.8	66	0.4	10		49.8	0.0	5	-5.0
Receiver263	215	1	44.2	44.5	66	0.3	10		44.5	0.0	5	-5.0
Receiver264	216	1	44.2	44.6	66	0.4	10		44.6	0.0	5	-5.0
Receiver265	217	1	44.1	44.6	66	0.5	10		44.6	0.0	5	-5.0
Receiver266	218	1	42.7	43.2	66	0.5	10		43.2	0.0	5	-5.0
Receiver267	219	1	43.6	44.1	66	0.5	10		44.1	0.0	5	-5.0
Receiver268	220	1	44.7	45.2	66	0.5	10		45.2	0.0	5	-5.0
Receiver269	221	1	46.6	47.1	66	0.5	10		47.1	0.0	5	-5.0
Receiver270	222	1	47.7	48.2	66	0.5	10		48.2	0.0	5	-5.0
Receiver271	223	1	47.7	48.3	66	0.6	10		48.3	0.0	5	-5.0
Receiver272	224	1	47.6	48.1	66	0.5	10		48.1	0.0	5	-5.0
Receiver273	225	1	47.4	47.9	66	0.5	10		47.9	0.0	5	-5.0

RESULTS: SOUND LEVELS						В	ristol Road	Extensio	n			
Receiver274	226	1	46.6	47.1	66	0.5	10		47.1	0.0	5	-5.0
Receiver275	227	1	46.2	46.8	66	0.6	10		46.8	0.0	5	-5.0
Receiver276	228	1	45.2	45.8	66	0.6	10		45.8	0.0	5	-5.0
Receiver277	229	1	44.4	45.0	66	0.6	10		45.0	0.0	5	-5.0
Receiver300	238	1	62.4	62.9	66	0.5	10		62.9	0.0	5	-5.0
Receiver301	239	1	48.1	48.7	66	0.6	10		48.7	0.0	5	-5.0
Receiver302	240	1	48.3	48.8	66	0.5	10		48.8	0.0	5	-5.0
Receiver303	241	1	48.9	49.4	66	0.5	10		49.4	0.0	5	-5.0
Receiver304	242	1	50.0	50.6	66	0.6	10		50.6	0.0	5	-5.0
Receiver305	243	1	52.4	52.9	66	0.5	10		52.9	0.0	5	-5.0
Receiver306	244	1	48.9	49.5	66	0.6	10		49.5	0.0	5	-5.0
Receiver307	245	1	48.2	48.7	66	0.5	10		48.7	0.0	5	-5.0
Receiver308	246	1	48.5	49.0	66	0.5	10		49.0	0.0	5	-5.0
Receiver309	247	1	46.8	47.4	66	0.6	10		47.4	0.0	5	-5.0
Receiver311	249	1	50.2	50.8	66	0.6	10		50.8	0.0	5	-5.0
Receiver312	250	1	50.2	50.7	66	0.5	10		50.7	0.0	5	-5.0
Receiver313	251	1	50.8	51.4	66	0.6	10		51.4	0.0	5	-5.0
Receiver314	298	1	49.4	49.9	66	0.5	10		49.9	0.0	5	-5.0
Receiver315	299	1	49.8	50.3	66	0.5	10		50.3	0.0	5	-5.0
Receiver319	301	1	0.0	61.2	66	61.2	10		61.2	0.0	5	-5.0
Receiver310	302	1	0.0	57.6	66	57.6	10		57.6	0.0	5	-5.0
Receiver320	303	1	0.0	53.5	66	53.5	10		53.5	0.0	5	-5.0
Receiver321	304	1	0.0	52.7	66	52.7	10		52.7	0.0	5	-5.0
Receiver318	305	1	0.0	50.3	66	50.3	10		50.3	0.0	5	-5.0
Receiver316	306	1	0.0	51.9	66	51.9	10		51.9	0.0	5	-5.0
Receiver227	308	2	0.0	59.9	66	59.9	10		59.9	0.0	5	-5.0
Dwelling Units		# DUs N	loise Red	duction								
		N	/lin	Avg	Max							
		d	IB	dB	dB							
All Selected		249	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

DEGII	I TC.	SOUND	1 =1	/EI Q

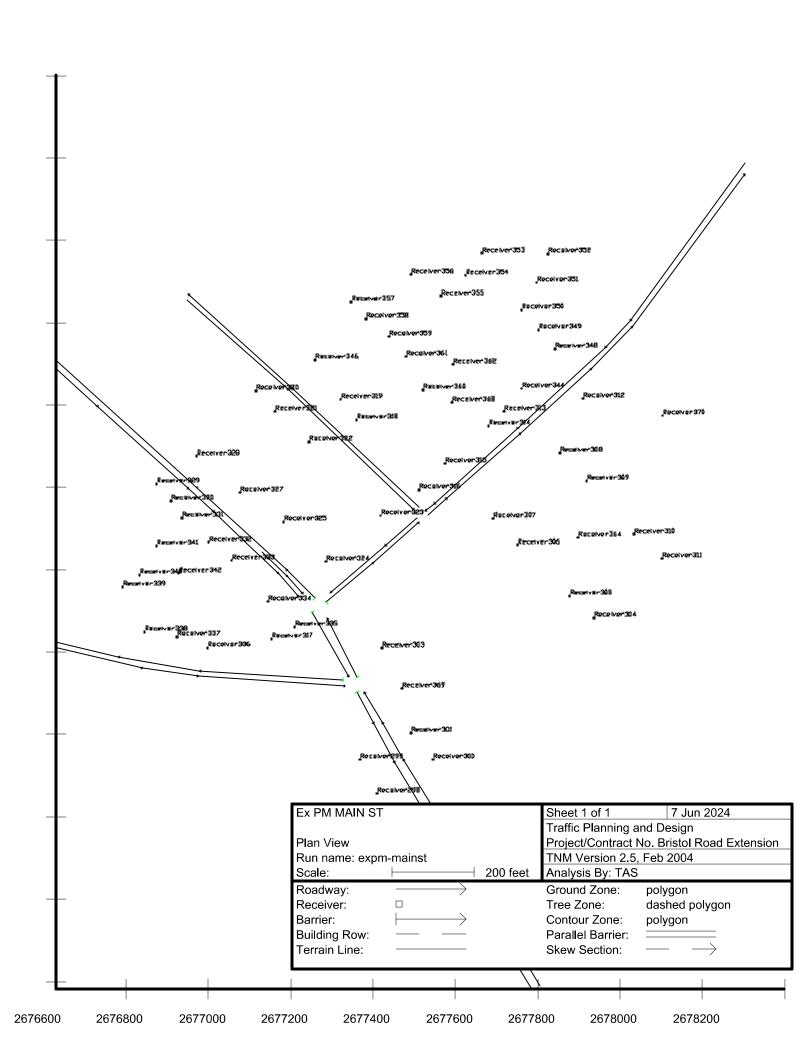
										+		_
Treffic Planning and Decim							7 Fabruar	. 2025				
Traffic Planning and Design JER							7 Februar TNM 2.5	y 2025				
JEK							_	J:414 TAIR	405			
DECLUTO COLIND LEVELO							Calculated	a with I Ni	/1 2.5			
RESULTS: SOUND LEVELS		.										
PROJECT/CONTRACT:			Road Exter	nsion								
RUN:		PRO PI									<u> </u>	
BARRIER DESIGN:		INPUI	HEIGHTS							e shall be use		
471400DUFDIGO			/ DI							y substantiat		
ATMOSPHERICS:		68 deg	F, 50% RH	1	-			of a differ	rent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs		No Barrier					With Barrier	_		
			LAeq1h	LAeq1h		Increase over		Type	Calculated	Noise Reduc		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver69	68	1	47.7	49.2	66	1.5	10		49.2	0.0) ;	-5.0
Receiver70	69	1	48.2	49.6	66	1.4	10		49.6	0.0) :	-5.0
Receiver71	70	1	48.6	50.1	66	1.5	10		50.1	0.0) ;	-5.0
Receiver72	71	1	48.9	50.4	66	1.5	10		50.4	0.0) ;	-5.0
Receiver73	72		49.4	50.9	66	1.5	10		50.9	0.0) ;	-5.0
Receiver74	73		50.5	51.8	66	1.3	10		51.8	0.0) :	-5.0
Receiver75	74		51.2	52.5	66	1.3	10		52.5	0.0) :	-5.0
Receiver76	75	1	52.0	53.1	66	1.1	10		53.1	0.0) ;	-5.0
Receiver77	76		53.2	53.8			10		53.8	0.0		-5.0
Receiver78	77		55.2	55.1			10		55.1	0.0	;	-5.0
Receiver79	78		56.5	56.0	66	-0.5	10		56.0	0.0) ;	-5.0
Receiver80	79		57.6	56.9			10		56.9	0.0		-5.0
Receiver81	80		60.4	59.1					59.1	0.0	;	-5.0
Receiver82	81								49.8			5 -5.0
Receiver83	82		48.2						49.7			-5.0
Receiver84	83		48.4						49.7			-5.0
Receiver85	84		48.6						49.8			5 -5.0
Receiver86	85		48.6						49.8			5 -5.0
Receiver87	86		48.5						49.6			5 -5.0
Receiver88	87								49.7			-5.0
Receiver89	88						-		49.8			5 -5.0
Receiver90	89								50.0			5 -5.0
Receiver91	90		49.2						50.1			5 -5.
Receiver92	91	1	58.7	57.8	66	-0.9	10		57.8	0.0) :	-5.0

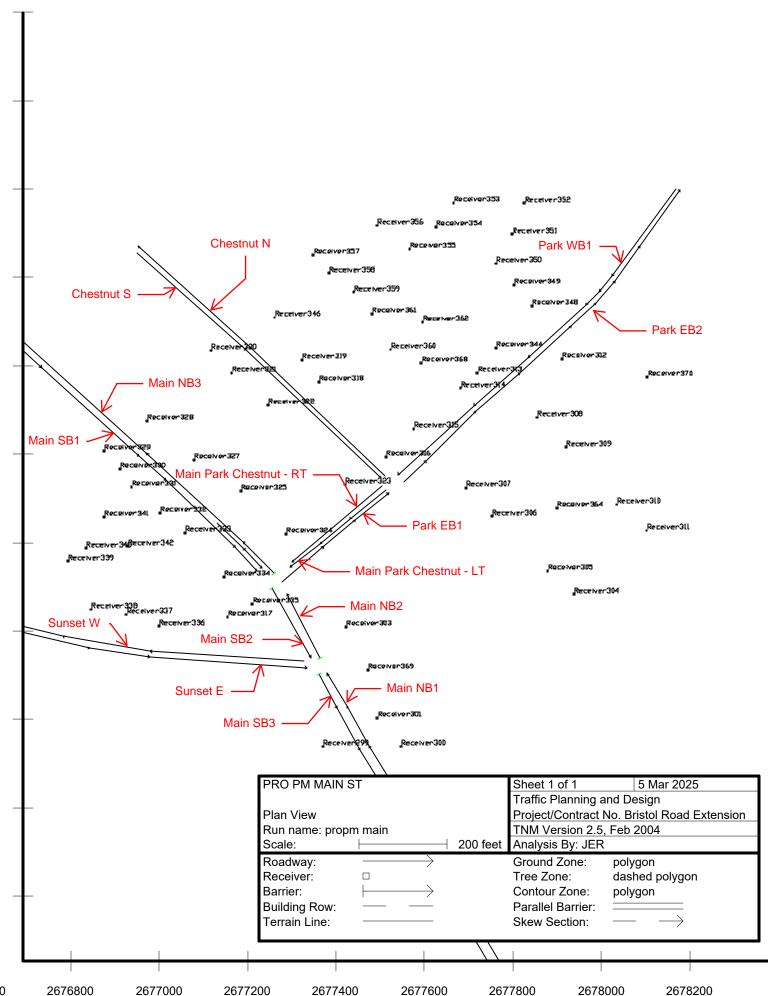
RESULTS: SOUND LEVELS						Br	ristol Road I	Extensior	1			
Receiver93	92	1	56.6	56.3	66	-0.3	10		56.3	0.0	5	-5.0
Receiver94	93	1	55.3	55.4	66	0.1	10		55.4	0.0	5	-5.0
Receiver95	94	1	54.1	54.7	66	0.6	10		54.7	0.0	5	-5.0
Receiver96	95	1	53.3	54.2	66	0.9	10		54.2	0.0	5	-5.0
Receiver97	96	1	52.3	53.6	66	1.3	10		53.6	0.0	5	-5.0
Receiver98	97	1	51.3	52.8	66	1.5	10		52.8	0.0	5	-5.0
Receiver99	98	1	51.0	52.6	66	1.6	10		52.6	0.0	5	-5.0
Receiver100	99	1	50.7	52.5	66	1.8	10		52.5	0.0	5	-5.0
Receiver101	100	1	50.9	52.6	66	1.7	10		52.6	0.0	5	-5.0
Receiver102	101	1	50.8	52.5	66	1.7	10		52.5	0.0	5	-5.0
Receiver103	102	1	50.5	52.0	66	1.5	10		52.0	0.0	5	-5.0
Receiver104	103	1	50.8	52.3	66	1.5	10		52.3	0.0	5	-5.0
Receiver105	104	1	51.2	52.9	66	1.7	10		52.9	0.0	5	-5.0
Receiver106	105	1	51.9	53.3	66	1.4	10		53.3	0.0	5	-5.0
Receiver107	106	1	50.3	50.6	66	0.3	10		50.6	0.0	5	-5.0
Receiver108	107	1	50.8	50.9	66	0.1	10		50.9	0.0	5	-5.0
Receiver109	108	1	51.5	51.3	66	-0.2	10		51.3	0.0	5	-5.0
Receiver110	109	1	51.9	51.8	66	-0.1	10		51.8	0.0	5	-5.0
Receiver111	110	1	52.5	52.4	66	-0.1	10		52.4	0.0	5	-5.0
Receiver112	111	1	52.6	53.0	66	0.4	10		53.0	0.0	5	-5.0
Receiver113	112	1	53.0	54.3	66	1.3	10		54.3	0.0	5	-5.0
Receiver114	113	1	53.2	54.9	66	1.7	10		54.9	0.0	5	- 5.0
Receiver115	114	1	53.6	55.2	66	1.6	10		55.2	0.0	5	- 5.0
Receiver116	115	1	54.4	55.8	66	1.4	10		55.8	0.0	5	-5.0
Receiver117	116	1	55.7	56.6	66	0.9	10		56.6	0.0	5	-5.0
Receiver118	117	1	61.0	59.7	66	-1.3	10		59.7	0.0	5	- 5.0
Receiver119	118	1	60.7	59.4	66	-1.3	10		59.4	0.0	5	-5.0
Receiver120	119	1	60.5	59.3	66	-1.2	10		59.3	0.0	5	-5.0
Receiver121	120	1	61.0	59.7	66	-1.3	10		59.7	0.0	5	-5.0
Receiver122	121	1	60.9	59.8	66	-1.1	10		59.8	0.0	5	-5.0
Receiver123	122	1	61.0	59.9	66	-1.1	10		59.9	0.0	5	-5.0
Receiver124	123	1	61.1	61.5	66	0.4	10		61.5	0.0	5	- 5.0
Receiver125	124	1	60.2	60.5	66	0.3	10		60.5	0.0	5	-5.0
Receiver126	125	1	60.3	60.2	66	-0.1	10		60.2	0.0	5	- 5.0
Receiver127	126	1	59.8	59.7	66	-0.1	10		59.7	0.0	5	-5.0
Receiver128	127	1	59.6	59.2	66	-0.4	10		59.2	0.0	5	-5.0
Receiver129	128	1	59.2	58.6	66	-0.6	10		58.6	0.0	5	-5.0
Receiver137	132	1	59.5	57.5	66	-2.0	10		57.5	0.0	5	-5.0
Receiver138	133	1	60.2	57.4	66	-2.8	10		57.4	0.0	5	-5.0
Receiver139	134	1	61.0	58.5	66	-2.5	10		58.5	0.0	5	-5.0
Receiver140	135	1	51.4	51.6	66	0.2	10		51.6	0.0	5	-5.0

RESULTS: SOUND LEVELS					В	ristol Road	Extensio	n			
Receiver141	136	1 55.2	55.4	66	0.2	10		55.4	0.0	5	-5.0
Receiver142	137	1 61.9	62.0	66	0.1	10		62.0	0.0	5	-5.0
Receiver143	138	1 60.6	61.1	66	0.5	10		61.1	0.0	5	-5.0
Receiver144	139	1 60.0	60.5	66	0.5	10		60.5	0.0	5	-5.0
Receiver145	140	1 62.0	62.6	66	0.6	10		62.6	0.0	5	-5.0
Receiver146	141	1 63.5	64.1	66	0.6	10		64.1	0.0	5	-5.0
Receiver164	142	1 65.8	64.5	66	-1.3	10		64.5	0.0	5	-5.0
Receiver165	143	1 61.8	60.1	66	-1.7	10		60.1	0.0	5	-5.0
Receiver171	144	2 49.0	49.6	66	0.6	10		49.6	0.0	5	-5.0
Receiver172	145	2 47.9	48.4	66	0.5	10		48.4	0.0	5	-5.0
Receiver173	146	2 46.9	47.5	66	0.6	10		47.5	0.0	5	-5.0
Receiver174	147	2 45.1	46.0	66	0.9	10		46.0	0.0	5	-5.0
Receiver175	150	2 44.3	45.5	66	1.2	10		45.5	0.0	5	-5.0
Receiver188	151	2 42.9	46.8	66	3.9	10		46.8	0.0	5	-5.0
Receiver189	152	2 43.3	47.3	66	4.0	10		47.3	0.0	5	- 5.0
Receiver190	153	2 43.5	47.6	66	4.1	10		47.6	0.0	5	-5.0
Receiver191	154	2 44.9	48.9	66	4.0	10		48.9	0.0	5	-5.0
Receiver192	155	2 45.4	49.4	66	4.0	10		49.4	0.0	5	-5.0
Receiver193	156	2 46.1	49.8	66	3.7	10		49.8	0.0	5	-5.0
Receiver194	157	2 47.9	51.1	66	3.2	10		51.1	0.0	5	-5.0
Receiver195	158	2 48.8	52.0	66	3.2	10		52.0	0.0	5	-5.0
Receiver196	159	2 50.4	53.5	66	3.1	10		53.5	0.0	5	-5.0
Receiver197	160	2 47.5	49.5	66	2.0	10		49.5	0.0	5	-5.0
Receiver198	161	2 46.6	48.7	66	2.1	10		48.7	0.0	5	-5.0
Receiver199	162	2 44.8	47.7	66	2.9	10		47.7	0.0	5	-5.0
Receiver200	163	2 44.1	47.3	66	3.2	10		47.3	0.0	5	-5.0
Receiver201	164	2 42.9	46.3	66	3.4	10		46.3	0.0	5	-5.0
Receiver202	165	2 42.6	45.8	66	3.2	10		45.8	0.0	5	-5.0
Receiver203	166	2 43.1	45.5	66	2.4	10		45.5	0.0	5	-5.0
Receiver204	169	2 43.4	45.5	66	2.1	10		45.5	0.0	5	-5.0
Receiver205	170	2 43.9	45.9	66	2.0	10		45.9	0.0	5	-5.0
Receiver206	171	2 44.5	46.3	66	1.8	10		46.3	0.0	5	- 5.0
Receiver207	172	2 45.4	46.9	66	1.5	10		46.9	0.0	5	-5.0
Receiver208	173	2 46.1	47.4	66	1.3	10		47.4	0.0	5	-5.0
Receiver209	174	3 55.3	57.2	66	1.9	10		57.2	0.0	5	-5.0
Receiver210	175	3 52.7	55.6	66	2.9	10		55.6	0.0	5	-5.0
Receiver211	176	3 51.2	55.0	66	3.8	10		55.0	0.0	5	-5.0
Receiver212	177	6 47.3	51.8	66	4.5	10		51.8	0.0	5	-5.0
Receiver213	178	6 46.0	50.9	66	4.9	10		50.9	0.0	5	-5.0
Receiver214	179	4 43.5	47.7	66	4.2	10		47.7	0.0	5	-5.0
Receiver215	180	4 43.6	48.1	66	4.5	10		48.1	0.0	5	-5.0

RESULTS: SOUND LEVELS						В	ristol Road	Extension				
Receiver216	181	4	43.5	48.7	66	5.2	10		48.7	0.0	5	-5.0
Receiver217	182	4	45.3	50.7	66	5.4	10		50.7	0.0	5	-5.0
Receiver218	183	4	46.2	51.9	66	5.7	10		51.9	0.0	5	-5.0
Receiver219	184	4	47.2	53.3	66	6.1	10		53.3	0.0	5	-5.0
Receiver220	185	4	48.0	54.2	66	6.2	10		54.2	0.0	5	-5.0
Receiver221	186	4	49.8	55.8	66	6.0	10		55.8	0.0	5	- 5.0
Receiver222	187	4	49.6	55.0	66	5.4	10		55.0	0.0	5	-5.0
Receiver223	188	4	57.2	60.8	66	3.6	10		60.8	0.0	5	-5.0
Receiver224	189	4	57.7	60.5	66	2.8	10		60.5	0.0	5	-5.0
Receiver225	190	1	49.9	54.7	66	4.8	10		54.7	0.0	5	-5.0
Receiver226	191	1	56.9	61.5	66	4.6	10		61.5	0.0	5	-5.0
Receiver244	192	1	58.7	59.1	66	0.4	10		59.1	0.0	5	-5.0
Receiver245	193	1	54.6	54.7	66	0.1	10		54.7	0.0	5	-5.0
Receiver246	194	1	52.2	52.3	66	0.1	10		52.3	0.0	5	-5.0
Receiver247	195	1	48.9	49.5	66	0.6	10		49.5	0.0	5	-5.0
Receiver248	196	1	50.1	50.6	66	0.5	10		50.6	0.0	5	-5.0
Receiver249	197	1	51.8	52.5	66	0.7	10		52.5	0.0	5	-5.0
Receiver250	198	1	51.9	53.1	66	1.2	10		53.1	0.0	5	-5.0
Receiver251	199	1	54.2	55.6	66	1.4	10		55.6	0.0	5	-5.0
Receiver252	200	1	54.7	56.0	66	1.3	10		56.0	0.0	5	-5.0
Receiver253	201	1	55.4	56.8	66	1.4	10		56.8	0.0	5	-5.0
Receiver254	202	1	56.1	57.4	66	1.3	10		57.4	0.0	5	-5.0
Receiver255	203	1	55.4	56.6	66	1.2	10		56.6	0.0	5	-5.0
Receiver256	204	1	54.7	56.1	66	1.4	10		56.1	0.0	5	-5.0
Receiver257	205	1	55.2	56.7	66	1.5	10		56.7	0.0	5	-5.0
Receiver258	206	1	55.4	57.1	66	1.7	10		57.1	0.0	5	-5.0
Receiver259	207	1	54.1	56.4	66	2.3	10		56.4	0.0	5	-5.0
Receiver260	208	1	53.0	55.8	66	2.8	10		55.8	0.0	5	-5.0
Receiver261	209	1	50.4	54.5	66	4.1	10		54.5	0.0	5	-5.0
Receiver262	210	1	49.4	55.8	66	6.4	10		55.8	0.0	5	-5.0
Receiver263	211	1	44.2	55.0	66	10.8	10	Sub'l Inc	55.0	0.0	5	-5.0
Receiver264	212	1	44.2	52.1	66	7.9	10		52.1	0.0	5	-5.0
Receiver265	213	1	44.1	50.7	66	6.6	10		50.7	0.0	5	-5.0
Receiver266	214	1	42.7	46.5	66	3.8	10		46.5	0.0	5	-5.0
Receiver267	215	1	43.6	47.4	66	3.8	10		47.4	0.0	5	-5.0
Receiver268	216	1	44.7	48.4	66	3.7	10		48.4	0.0	5	-5.0
Receiver269	217	1	46.6	50.0	66	3.4	10		50.0	0.0	5	-5.0
Receiver270	218	1	47.7	50.5	66	2.8	10		50.5	0.0	5	-5.0
Receiver271	219	1	47.7	50.2	66	2.5	10		50.2	0.0	5	-5.0
Receiver272	220	1	47.6	49.7	66	2.1	10		49.7	0.0	5	-5.0
Receiver273	221	1	47.4	49.4	66	2.0	10		49.4	0.0	5	-5.0

RESULTS: SOUND LEVELS						В	ristol Road	l Extensio	n			
Receiver274	222	1	46.6	48.5	66	1.9	10		48.5	0.0	5	-5.0
Receiver275	223	1	46.2	47.9	66	1.7	10		47.9	0.0	5	-5.0
Receiver276	224	1	45.2	47.0	66	1.8	10		47.0	0.0	5	-5.0
Receiver277	225	1	44.4	46.1	66	1.7	10		46.1	0.0	5	-5.0
Receiver300	234	1	62.4	61.8	66	-0.6	10		61.8	0.0	5	-5.0
Receiver301	235	1	48.1	49.0	66	0.9	10		49.0	0.0	5	-5.0
Receiver302	236	1	48.3	49.1	66	0.8	10		49.1	0.0	5	-5.0
Receiver303	237	1	48.9	49.4	66	0.5	10		49.4	0.0	5	-5.0
Receiver304	238	1	50.0	50.4	66	0.4	10		50.4	0.0	5	-5.0
Receiver305	239	1	52.4	52.4	66	0.0	10		52.4	0.0	5	-5.0
Receiver306	240	1	48.9	49.6	66	0.7	10		49.6	0.0	5	-5.0
Receiver307	241	1	48.2	48.8	66	0.6	10		48.8	0.0	5	-5.0
Receiver308	242	1	48.5	48.5	66	0.0	10		48.5	0.0	5	-5.0
Receiver309	243	1	46.8	46.8	66	0.0	10		46.8	0.0	5	-5.0
Receiver311	245	1	50.2	50.7	66	0.5	10		50.7	0.0	5	-5.0
Receiver312	246	1	50.2	50.5	66	0.3	10		50.5	0.0	5	-5.0
Receiver313	247	1	50.8	50.8	66	0.0	10		50.8	0.0	5	-5.0
Receiver314	298	1	49.4	50.2	66	0.8	10		50.2	0.0	5	-5.0
Receiver315	299	1	49.8	50.6	66	0.8	10		50.6	0.0	5	-5.0
Receiver319	301	1	0.0	59.4	66	59.4	10		59.4	0.0	5	-5.0
Receiver310	302	1	0.0	56.5	66	56.5	10		56.5	0.0	5	-5.0
Receiver320	303	1	0.0	53.0	66	53.0	10		53.0	0.0	5	-5.0
Receiver321	304	1	0.0	52.8	66	52.8	10		52.8	0.0	5	-5.0
Receiver318	305	1	0.0	50.8	66	50.8	10		50.8	0.0	5	-5.0
Receiver316	306	1	0.0	52.0	66	52.0	10		52.0	0.0	-	-5.0
Receiver227	308	2	0.0	60.7	66	60.7	10		60.7	0.0	5	-5.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		249	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							





DECIII	TC.	SOUND) I E	/EI C
KESUI	∟ப க:	SOUNI	JLE	VELO

						-	Jilotoi itou	u =xtoo.	···			
Troffic Planning and Design							20 Januar	n, 2025				
Traffic Planning and Design							29 Januar TNM 2.5	y 2025				
TAS								al!4la TN	M 0 5			
DECLUTO COUNT LEVELO							Calculate	a with IN	IVI 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			Road Exte	nsion								
RUN:			MAIN ST									
BARRIER DESIGN:		INPUT	HEIGHTS					_	pavement typ			
									nighway agenc	-		
ATMOSPHERICS:		68 deg	F, 50% RH					of a diffe	erent type with	approval of I	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Type	Calculated	Noise Redu	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver298	298	1	0.0	61.0	66	61.0	10		61.0	0.0) !	5 -5.
Receiver299	300	1	0.0	63.2	. 66	63.2	10		63.2	0.0) !	5 -5.
Receiver300	301	1	0.0	62.4	- 66	62.4	10		62.4	0.0) !	5 -5.
Receiver301	302	1	0.0	65.2	. 66	65.2	2 10		65.2	0.0) !	5 -5.
Receiver369	303	1	0.0	64.3	72	64.3	10		64.3	0.0) !	5 -5.
Receiver303	304	1	0.0	65.5	66	65.5	10		65.5	0.0) ;	5 -5.
Receiver304	305	8	0.0	47.2	66	47.2	10		47.2	0.0) ;	5 -5.
Receiver305	306	8	0.0	48.0	66	48.0	10		48.0	0.0) ;	5 -5.
Receiver306	307	8	0.0	51.0	66	51.0	10		51.0	0.0) ;	5 -5.
Receiver307	308	8	0.0	54.1	66	54.1	10		54.1	0.0) ;	5 -5.
Receiver308	309	8	0.0	54.3	66	54.3	3 10		54.3	0.0) !	5 -5.
Receiver309	311	8	0.0	49.6	66	49.6	10		49.6	0.0) ;	5 -5.
Receiver310	312		0.0	45.7			10		45.7	0.0) :	5 - 5.
Receiver311	313	8	0.0			44.6	3 10		44.6	0.0) (5 -5.
Receiver312	314	2	0.0	60.2	66	60.2	2 10		60.2	0.0) (5 -5.
Receiver313	315	1	0.0	58.6	66	58.6	3 10		58.6	0.0) (5 -5.
Receiver314	316	1	0.0	58.7	66	58.7	10		58.7	0.0) (5 - 5.
Receiver315	317	1	0.0	58.5	66	58.5	10		58.5	0.0) !	5 -5.
Receiver316	318		0.0	60.3	66				60.3	0.0) (5 -5.
Receiver318	320	1	0.0	52.4	66	52.4	10		52.4	0.0) !	5 -5.
Receiver319	321	1	0.0	51.4	66	51.4	10		51.4	0.0) :	5 - 5.
Receiver320	322		0.0						52.3	0.0) (5 -5.
Receiver321	323		0.0	52.8	66	52.8	3 10		52.8	0.0) !	5 -5.
Receiver322	324	1	0.0	53.5	66	53.5	10		53.5	0.0) (5 -5.

RESULTS: SOUND LEVELS						В	Bristol Road	Extension	1			
Receiver323	325	23	0.0	59.5	66	59.5	10		59.5	0.0	5	-5.0
Receiver324	326	23	0.0	65.4	66	65.4	10		65.4	0.0	5	-5.0
Receiver325	327	23	0.0	63.2	66	63.2	10		63.2	0.0	5	-5.0
Receiver317	328	1	0.0	63.1	66	63.1	10		63.1	0.0	5	-5.0
Receiver327	329	1	0.0	64.3	66	64.3	10		64.3	0.0	5	-5.0
Receiver328	330	1	0.0	62.0	66	62.0	10		62.0	0.0	5	-5.0
Receiver329	331	1	0.0	62.0	66	62.0	10		62.0	0.0	5	-5.0
Receiver330	332	2	0.0	62.4	66	62.4	10		62.4	0.0	5	-5.0
Receiver331	333	1	0.0	61.9	66	61.9	10		61.9	0.0	5	-5.0
Receiver332	334	1	0.0	62.8	66	62.8	10		62.8	0.0	5	-5.0
Receiver333	335	1	0.0	63.7	66	63.7	10		63.7	0.0	5	-5.0
Receiver334	336	6	0.0	64.6	66	64.6	10		64.6	0.0	5	-5.0
Receiver335	337	1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	5	-5.0
Receiver336	338	1	0.0	60.1	66	60.1	10		60.1	0.0	5	- 5.0
Receiver337	339	1	0.0	57.3	66	57.3	10		57.3	0.0	5	-5.0
Receiver338	340	1	0.0	57.0	66	57.0	10		57.0	0.0	5	-5.0
Receiver339	341	1	0.0	53.0	66	53.0	10		53.0	0.0	5	-5.0
Receiver340	342	1	0.0	53.9	66	53.9	10		53.9	0.0	5	- 5.0
Receiver341	343	1	0.0	56.2	66	56.2	10		56.2	0.0	5	-5.0
Receiver342	344	1	0.0	56.3	66	56.3	10		56.3	0.0	5	-5.0
Receiver344	345	1	0.0	57.1	66	57.1	10		57.1	0.0	5	-5.0
Receiver346	346	1	0.0	48.8	66	48.8	10		48.8	0.0	5	-5.0
Receiver348	347	1	0.0	55.6	66	55.6	10		55.6	0.0	5	-5.0
Receiver349	348	1	0.0	51.9	66	51.9	10		51.9	0.0	5	-5.0
Receiver350	349	1	0.0	48.3	66	48.3	10		48.3	0.0	5	-5.0
Receiver351	350	1	0.0	47.3	66	47.3	10		47.3	0.0	5	-5.0
Receiver352	351	1	0.0	46.4	66	46.4	10		46.4	0.0	5	-5.0
Receiver353	352	1	0.0	43.0	66	43.0	10		43.0	0.0	5	-5.0
Receiver354	353	1	0.0	43.2	66	43.2	10		43.2	0.0	5	-5.0
Receiver355	354	1	0.0	43.6	66	43.6	10		43.6	0.0	5	-5.0
Receiver356	355	1	0.0	41.8	66	41.8	10		41.8	0.0	5	-5.0
Receiver357	356	1	0.0	47.0	66	47.0	10		47.0	0.0	5	-5.0
Receiver358	357	1	0.0	47.5	66	47.5	10		47.5	0.0	5	- 5.0
Receiver359	358	1	0.0	48.0	66	48.0			48.0	0.0	5	-5.0
Receiver361	359	1	0.0	47.2	66	47.2	10		47.2	0.0	5	-5.0
Receiver360	360	1	0.0	49.2					49.2	0.0	5	-5.0
Receiver362	361	1	0.0	48.0					48.0	0.0	5	- 5.0
Receiver364	362			47.9			10		47.9	0.0	5	-5.0
Receiver368	364		0.0	51.1	66		10		51.1	0.0	5	-5.0
Receiver370	366	1	0.0	48.5	66	48.5	10		48.5	0.0	5	-5.0
Dwelling Units		# DUs	Noise Reduction	on								

		Min	Avg	Max
		dB	dB	dB
All Selected	200	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

R	FSIII	ITS.	SOU	ND I	_EVEL	S

							riotoi rtou	u =x	••			
Traffic Planning and Design							4 Februar	v 2025				
JER							TNM 2.5	y 2023				
OLIX							_	d with TNN	125			
RESULTS: SOUND LEVELS							Calculate	u with him	1 2.3			
PROJECT/CONTRACT:		Brietal	Road Exte	neion								
RUN:			LD PM MA									
BARRIER DESIGN:			HEIGHTS	IN 31				Avorago	navoment typ	e shall be use	d unloss	
BARRIER BESIGN.		1141 01	IILIOIIIO							y substantiate		
ATMOSPHERICS:		68 dog	F, 50% RH							approval of F		
		oo aeg	1 , 30 /6 1		_	+		or a uniter	ent type with	approvar or r		
Receiver												
Name	No.	#DUs	Existing	No Barrier		<u> </u>			With Barrier	_		
			LAeq1h	LAeq1h		Increase over		Туре	Calculated	Noise Reduc		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver298	1		0.0	61.4			10		61.4	0.0		-5.0
Receiver299	2		0.0				10		63.6	0.0		-5.0
Receiver300	3	1	0.0	62.7	66	62.7	10		62.7	0.0		-5.0
Receiver301	4	1	0.0	65.4	66	65.4	10		65.4	0.0	!	-5.0
Receiver369	6		0.0	64.9	72	64.9	10		64.9	0.0		-5.0
Receiver303	7	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	!	-5.0
Receiver304	8			47.8			10		47.8	0.0		-5.0
Receiver305	9	8	0.0	48.6	66	48.6	10		48.6	0.0		-5.0
Receiver306	10			51.6			10		51.6	0.0		-5.0
Receiver307	11			54.6	66	54.6	10		54.6	0.0		-5.0
Receiver308	12			54.8	66	54.8	10		54.8	0.0		-5.0
Receiver309	13			50.1	66	50.1	10		50.1	0.0		-5.0
Receiver310	14			46.3	66	46.3	10		46.3	0.0		-5.0
Receiver311	15			45.2	66	45.2	10		45.2	0.0	!	-5.0
Receiver312	16	2	0.0	60.8			10		60.8	0.0	!	-5.0
Receiver313	17	1	0.0		66		10		59.1	0.0		-5.0
Receiver314	18	1	0.0	59.2	66	59.2	10		59.2	0.0		-5.0
Receiver315	19		0.0	59.0			10		59.0	0.0		-5.0
Receiver316	20		0.0		66				60.7			-5.0
Receiver318	21	1	0.0	52.8	66	52.8	10		52.8	0.0		-5.0
Receiver319	22		0.0	51.8	66	51.8	10		51.8	0.0		-5.0
Receiver320	23		0.0						52.8			-5.0
Receiver321	24		0.0	53.3	66	53.3	10		53.3	0.0		-5.0
Receiver322	25	1	0.0	54.1	66	54.1	10		54.1	0.0		-5.0

RESULTS: SOUND LEVELS						Е	Bristol Road	Extension	1			
Receiver323	26	23	0.0	59.7	66	59.7	10		59.7	0.0	5	-5.0
Receiver324	27	23	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	5	-5.0
Receiver325	28	23	0.0	63.8	66	63.8	10		63.8	0.0	5	-5.0
Receiver317	30	1	0.0	63.7	66	63.7	10		63.7	0.0	5	-5.0
Receiver327	31	1	0.0	64.9	66	64.9	10		64.9	0.0	5	-5.0
Receiver328	32	1	0.0	62.6	66	62.6	10		62.6	0.0	5	-5.0
Receiver329	33	1	0.0	62.5	66	62.5	10		62.5	0.0	5	-5.0
Receiver330	34	2	0.0	62.9	66	62.9	10		62.9	0.0	5	-5.0
Receiver331	35	1	0.0	62.5	66	62.5	10		62.5	0.0	5	-5.0
Receiver332	36	1	0.0	63.4	66	63.4	10		63.4	0.0	5	-5.0
Receiver333	37	1	0.0	64.3	66	64.3	10		64.3	0.0	5	-5.0
Receiver334	38	6	0.0	65.2	66	65.2	10		65.2	0.0	5	-5.0
Receiver335	39	1	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	5	-5.0
Receiver336	40	1	0.0	60.7	66	60.7	10		60.7	0.0	5	-5.0
Receiver337	41	1	0.0	57.9	66	57.9	10		57.9	0.0	5	-5.0
Receiver338	42	1	0.0	57.6	66	57.6	10		57.6	0.0	5	-5.0
Receiver339	43	1	0.0	53.6	66	53.6	10		53.6	0.0	5	-5.0
Receiver340	44	1	0.0	54.5	66	54.5	10		54.5	0.0	5	-5.0
Receiver341	45	1	0.0	56.8	66	56.8	10		56.8	0.0	5	-5.0
Receiver342	46	1	0.0	56.9	66	56.9	10		56.9	0.0	5	-5.0
Receiver344	47	1	0.0	57.7	66	57.7	10		57.7	0.0	5	-5.0
Receiver346	48	1	0.0	49.3	66	49.3	10		49.3	0.0	5	-5.0
Receiver348	49	1	0.0	56.1	66	56.1	10		56.1	0.0	5	-5.0
Receiver349	50	1	0.0	52.4	66	52.4	10		52.4	0.0	5	-5.0
Receiver351	51	1	0.0	47.8	66	47.8	10		47.8	0.0	5	-5.0
Receiver352	52	1	0.0	47.0	66	47.0	10		47.0	0.0	5	-5.0
Receiver353	53	1	0.0	43.6	66	43.6	10		43.6	0.0	5	-5.0
Receiver354	54	1	0.0	43.7	66	43.7	10		43.7	0.0	5	-5.0
Receiver355	55	1	0.0	44.1	66	44.1	10		44.1	0.0	5	-5.0
Receiver356	56	1	0.0	42.3	66	42.3	10		42.3	0.0	5	-5.0
Receiver357	57	1	0.0	47.6	66	47.6	10		47.6	0.0	5	-5.0
Receiver358	58	1	0.0	48.0	66	48.0	10		48.0	0.0	5	-5.0
Receiver359	59	1	0.0	48.5	66	48.5	10		48.5	0.0	5	-5.0
Receiver361	60	1	0.0	47.7	66	47.7	10		47.7	0.0	5	-5.0
Receiver360	61		0.0	49.7	66				49.7	0.0	5	-5.0
Receiver362	62			48.5					48.5	0.0	5	-5.0
Receiver364	63			48.5					48.5	0.0	5	-5.0
Receiver368	299		0.0	51.6					51.6	0.0	5	-5.0
Receiver370	301		0.0	49.1	66				49.1	0.0	5	-5.0
Receiver350	303	1	0.0	48.8	66	48.8	10		48.8	0.0	5	-5.0
Dwelling Units		# DUs	Noise Reduction	on								

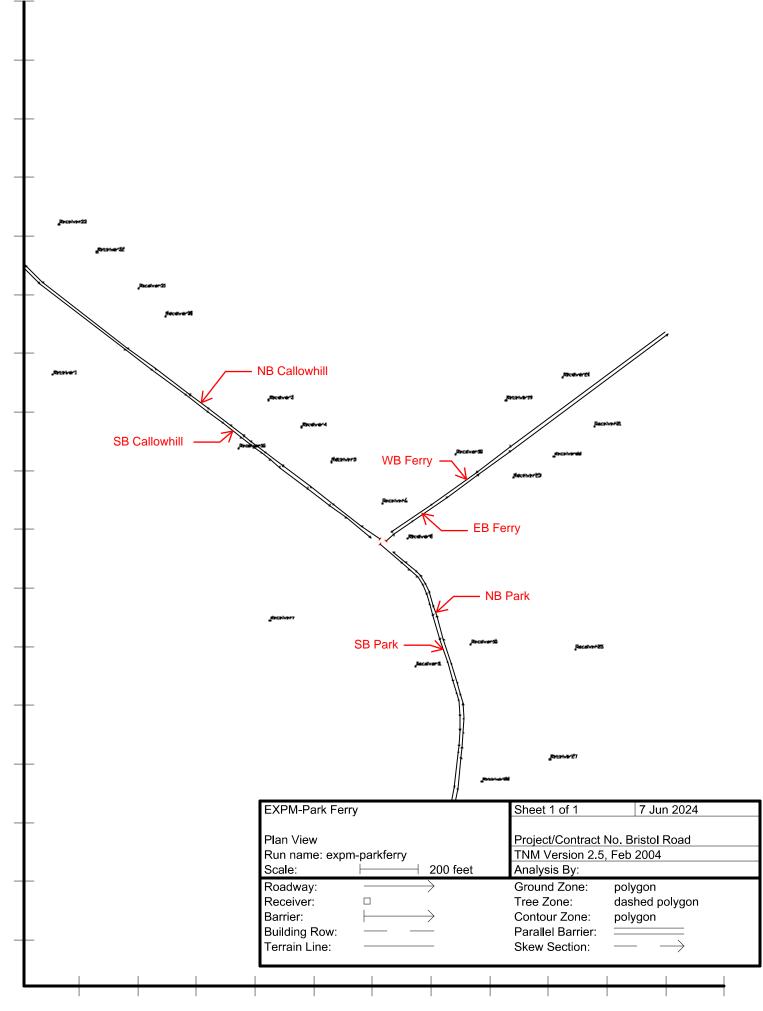
		Min	Avg	Max
		dB	dB	dB
All Selected	200	0.0	0.0	0.0
All Impacted	25	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

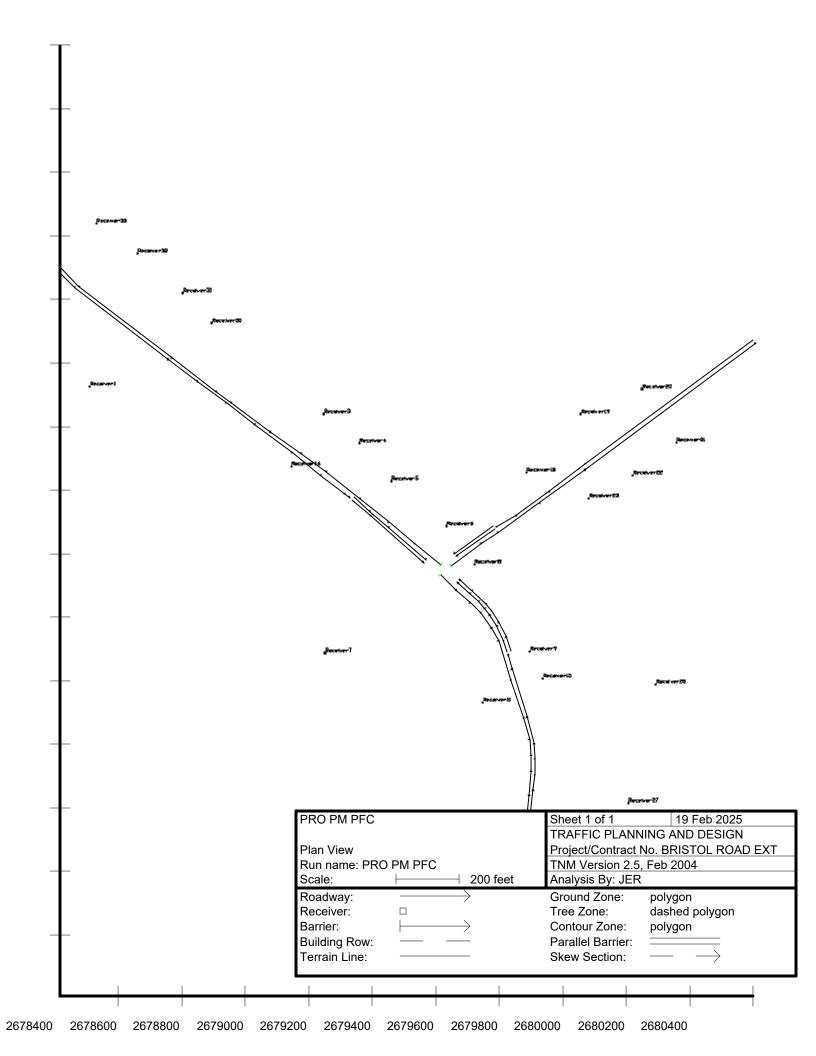
RESUI	LTS:	SOUND	LEVELS
-------	------	-------	--------

TRESSERG. SOCIAL ELVELS						_	Tiotoi itou	a Exteriore	··			
Traffic Planning and Design							14 Februa	ry 2025				
JER							TNM 2.5	,				
							-	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Bristol	Road Exter	nsion								
RUN:			M MAIN ST									
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement typ	e shall be use	d unless	
										y substantiate		
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver								_		1		
Name	No.	#DUs	Existing	No Barrier					With Barrier			
		1		LAeq1h		Increase over	existina	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h		Goal	Calculated
							Sub'l Inc	•	•			minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver298	1	1	61.0	60.5	66	-0.5	10		60.5	0.0	5	-5.0
Receiver299	2	1	63.2	62.8	66	-0.4	10		62.8	0.0	5	-5.0
Receiver300	3	1	62.4	62.0	66	-0.4	10		62.0	0.0	5	-5.0
Receiver301	4	1	65.2	64.9	66	-0.3	10		64.9	0.0	5	-5.0
Receiver303	6	1	65.5	65.6	66	0.1	10		65.6	0.0	5	-5.0
Receiver304	7	8	47.2	47.4	66	0.2	10		47.4	0.0	5	-5.0
Receiver305	8	8	48.0	48.2	66	0.2	10		48.2	0.0	5	-5.0
Receiver306	9	8	51.0	51.9	66	0.9	10		51.9	0.0	5	-5.0
Receiver307	10	8	54.1	55.3	66	1.2	10		55.3	0.0	5	-5.0
Receiver308	11	8	54.3	56.1	66	1.8	10		56.1	0.0	5	-5.0
Receiver309	12	. 8	49.6	50.9	66	1.3	10		50.9	0.0	5	-5.0
Receiver310	13	8	45.7	46.1	66	0.4	10		46.1	0.0	5	-5.0
Receiver311	14		44.6	44.7			10		44.7	0.0	5	
Receiver312	15		60.2	62.1	66				62.1	0.0	5	
Receiver313	16		58.6		71				61.1	0.0	5	
Receiver314	17		58.7						61.2	0.0	5	
Receiver315	18	1	58.5	60.7	66	2.2	10		60.7	0.0	5	
Receiver316	19		60.3	60.8	66	0.5	10		60.8	0.0	5	-5.0
Receiver317	20								62.8			
Receiver318	21		V=						52.7			
Receiver319	22								51.5			
Receiver320	23	1							52.5			
Receiver321	24								52.9			
Receiver322	25	1	53.5	53.7	66	0.2	10		53.7	0.0	5	-5.0

RESULTS: SOUND LEVELS						В	ristol Road	Extension	1			
Receiver323	26	23	59.5	59.8	66	0.3	10		59.8	0.0	5	-5.0
Receiver324	27	23	65.4	65.4	66	0.0	10		65.4	0.0	5	-5.0
Receiver325	28	23	63.2	63.5	66	0.3	10		63.5	0.0	5	-5.0
Receiver327	30	1	64.3	64.8	66	0.5	10		64.8	0.0	5	-5.0
Receiver328	31	1	62.0	62.5	66	0.5	10		62.5	0.0	5	-5.0
Receiver329	32	1	62.0	62.5	66	0.5	10		62.5	0.0	5	-5.0
Receiver330	33	1	62.4	62.9	66	0.5	10		62.9	0.0	5	-5.0
Receiver331	34	1	61.9	62.4	66	0.5	10		62.4	0.0	5	-5.0
Receiver332	35	1	62.8	63.2	66	0.4	10		63.2	0.0	5	-5.0
Receiver333	36	1	63.7	64.1	66	0.4	10		64.1	0.0	5	-5.0
Receiver334	37	1	64.6	64.8	66	0.2	10		64.8	0.0	5	-5.0
Receiver335	38	1	68.0	67.8	66	-0.2	10	Snd Lvl	67.8	0.0	5	-5.0
Receiver336	39	1	60.1	59.4	66	-0.7	10		59.4	0.0	5	-5.0
Receiver337	40	1	57.3	57.2	66	-0.1	10		57.2	0.0	5	-5.0
Receiver338	41	1	57.0	57.2	66	0.2	10		57.2	0.0	5	-5.0
Receiver339	42	1	53.0	53.1	66	0.1	10		53.1	0.0	5	-5.0
Receiver340	43	1	53.9	54.1	66	0.2	10		54.1	0.0	5	-5.0
Receiver341	44	1	56.2	56.6	66	0.4	10		56.6	0.0	5	-5.0
Receiver342	45	1	56.3	56.5	66	0.2	10		56.5	0.0	5	-5.0
Receiver344	46	1	57.1	59.4	66	2.3	10		59.4	0.0	5	-5.0
Receiver346	47	1	48.8	49.3	66	0.5	10		49.3	0.0	5	-5.0
Receiver348	48	1	55.6	57.7	66	2.1	10		57.7	0.0	5	-5.0
Receiver349	49	1	51.9	53.4	66	1.5	10		53.4	0.0	5	-5.0
Receiver350	50	1	48.3	49.5	66	1.2	10		49.5	0.0	5	-5.0
Receiver351	51	1	47.3	48.2	66	0.9	10		48.2	0.0	5	-5.0
Receiver352	52	1	46.4	47.0	66	0.6	10		47.0	0.0	5	-5.0
Receiver353	53	1	43.0	44.0	66	1.0	10		44.0	0.0	5	-5.0
Receiver354	54	1	43.2	44.4	66	1.2	10		44.4	0.0	5	-5.0
Receiver355	55	1	43.6	44.6	66	1.0	10		44.6	0.0	5	-5.0
Receiver356	56	1	41.8	42.5	66	0.7	10		42.5	0.0	5	-5.0
Receiver357	57	1	47.0	47.1	66	0.1	10		47.1	0.0	5	-5.0
Receiver358	58	1	47.5	47.6	66	0.1	10		47.6	0.0	5	-5.0
Receiver359	59	1	48.0	48.0	66	0.0	10		48.0	0.0	5	-5.0
Receiver361	60	1	47.2	47.5	66	0.3	10		47.5	0.0	5	-5.0
Receiver360	61	1	49.2	50.1	66	0.9	10		50.1	0.0	5	-5.0
Receiver362	62	1		49.4					49.4	0.0	5	-5.0
Receiver364	63	8	47.9	48.6	66	0.7	10		48.6	0.0	5	-5.0
Receiver368	298	1	51.1	52.3					52.3	0.0	5	-5.0
Receiver369	301	1	64.3	64.1	66				64.1	0.0	5	-5.0
Receiver370	303	1	48.5	49.8	66	1.3	10		49.8	0.0	5	-5.0
Dwelling Units		# DUs	Noise Reducti	on								

		Min	Avg	Max
		dB	dB	dB
All Selected	193	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0





RESULTS: SOUND LEVELS						E	Bristol Roa	d					
TPD							7 Februar	v 2025					
JER							TNM 2.5	,					
							_	d with TNN	1 2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		Bristol	Road										
RUN:			Park Ferry										
BARRIER DESIGN:			HEIGHTS					Average	pavement type	shall be use	d unles	s	
									ghway agenc				
ATMOSPHERICS:		68 deg	F, 50% RH						ent type with				
Receiver					_								
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			+	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion		
			•	Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calc	ulated
							Sub'l Inc	-	-			minu	ıs
												Goa	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	15	1	0.0	50.2	66	50.2	2 10)	50.2	0.0		8	-8.0
Receiver3	16	1	0.0	54.3			3 10		54.3	0.0		8	-8.0
Receiver4	17	1	0.0	55.1	66	55.1	10)	55.1	0.0		8	-8.0
Receiver5	18	1	0.0	58.2	66	58.2	2 10)	58.2	0.0		8	-8.0
Receiver6	19	1	0.0	62.1	66	62.1	10		62.1	0.0		8	-8.0
Receiver7	20	1	0.0	47.5	66	6 47.5	10		47.5	0.0		8	-8.0
Receiver8	21	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0		8	-8.0
Receiver10	22	1	0.0	58.0	66	58.0	10		58.0	0.0		8	-8.0
Receiver11	23	1	0.0	56.0	66	56.0	10		56.0	0.0		8	-8.0
Receiver16	26	1	0.0	65.6	66	65.6	10		65.6	0.0		8	-8.0
Receiver18	27	1	0.0	60.5	66	60.5	10		60.5	0.0		8	-8.0
Receiver19	28	1	0.0	58.4	66	58.4	10		58.4	0.0		8	-8.0
Receiver20	29	1	0.0	62.2	66	62.2	10		62.2	0.0		8	-8.0
Receiver21	30	1	0.0	60.8	66	60.8	10		60.8	0.0		8	-8.0
Receiver22	31	1	0.0	60.6	66	60.6	10		60.6	0.0		8	-8.0
Receiver23	32	1	0.0	62.0	66	62.0	10		62.0			8	-8.0
Receiver25	33		0.0						45.5			8	-8.0
Receiver27	34								46.8			8	-8.0
Receiver28	35		0.0	58.2					58.2			8	-8.0
Receiver30	36		0.0						53.0			8	-8.0
Receiver31	37		0.0						51.9			8	-8.0
Receiver32	38		0.0						51.3			8	-8.0
Receiver33	39		0.0	52.3					52.3			8	-8.0
Receiver9	41	1	0.0	59.4	66	59.4	10		59.4	0.0		8	-8.0

Bristol Road

Dwelling Units	#	DUs	Noise Red	duction					
			Min	Avg	Max				
			dB	dB	dB				
All Selected		24	0.0	0.0	0.0	0			
All Impacted		1	0.0	0.0	0.0	0			
All that meet NR Goal		0	0.0	0.0	0.0	0			

RESULTS: SOUND LEVELS	BRISTOL ROAD EXT
NEGOTION GOODING TENTED	

						_		U, 12 2/11		_		
TRAFFIC PLANNING AND DESIGN							7 Februar	v 2025				
JER							TNM 2.5	y 2025				
JLK							_	d with TNN	125			
RESULTS: SOUND LEVELS							Calculate	u with Hill	1 2.3			
PROJECT/CONTRACT:		DDIST	DL ROAD E	·VT								
RUN:			LD PM PF									
BARRIER DESIGN:			HEIGHTS	•				Avorago r	avoment typ	e shall be use	nd unloce	
BARRIER BESIGN.		INFOI	IILIGIII3							y substantiat		
ATMOSPHERICS:		68 dea	F, 50% RH							approval of F		
Receiver		oo aog	7,0070141		-	_			one type with	прріотагої і	111174.	
	Na	#DI16	Culation	No Downier					With Barrier			
Name	No.	#DUs	Existing LAeq1h	No Barrier	_	Increase area	. avlatina	Turna	Calculated	Noise Reduc	4!	
			LACTII	LAeq1h Calculated	Crit'n	Increase over Calculated	Crit'n	Type	LAeq1h	Calculated	Goal	Calculated
				Calculated	CIICII	Calculated	Sub'l Inc	Impact	LAeqIII	Calculated	Goai	minus
							Sub i iiic					Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	15	1							50.7			
Receiver3	15 16		0.0						54.9			8 -8.0 8 -8.0
	17											
Receiver4 Receiver5	17		0.0						55.6 58.8			8 -8.0 8 -8.0
Receiver6	19		0.0						62.7			8 -8.0
Receiver7	20	I	0.0						48.1			8 -8.0
Receiver8	21		0.0						68.7			8 -8.0
Receiver10	22		0.0						58.6			8 -8.0
Receiver11	23		0.0					+	56.5			8 -8.0
Receiver16	26		0.0		66				66.1			8 -8.0
Receiver18	27	1	0.0		66				61.1			8 -8.0
Receiver19	28		0.0						59.0			8 -8.0
Receiver20	29		0.0						62.7			8 -8.0
Receiver21	30		0.0						61.4			8 -8.0
Receiver22	31	1	0.0	61.2	66	61.2	10		61.2	0.0		8 -8.0
Receiver23	32	1	0.0	62.6	66	62.6	10		62.6	0.0		8 -8.0
Receiver25	33	1	0.0	46.1	66	46.1	10		46.1	0.0		8 -8.0
Receiver27	34	1	0.0	47.4	66	47.4	10		47.4	0.0		8 -8.0
Receiver28	35	1	0.0	58.8	66	58.8	3 10		58.8	0.0		8 -8.0
Receiver30	36	1	0.0	53.5	66	53.5	5 10		53.5	0.0)	8 -8.0
Receiver31	37	1	0.0	52.4	66	52.4	10		52.4	1 0.0)	8 -8.0
Receiver32	38	1	0.0	51.8	66	51.8	3 10		51.8	0.0		8 -8.0
Receiver33	39	1	0.0	52.9	66	52.9	10		52.9	0.0		8 -8.0
Receiver9	41	1	0.0	60.0	66	60.0	10		60.0	0.0)	-8.0

BRISTOL ROAD EXT

Dwelling Units	# DU	Noise Re	Noise Reduction				
		Min	Avg	Max			
		dB	dB	dB			
All Selected		24 0.0	0.0	0.0)		
All Impacted		2 0.0	0.0	0.0)		
All that meet NR Goal		0.0	0.0	0.0)		

RESULTS: SOUND LEVELS	BRISTOL ROAD EXT
NEGOTION GOODING TENTED	

		1								1		1
TRAFFIC PLANNING AND DESIGN							14 Februa	ry 2025				
JER							TNM 2.5	,				
-							_	d with TNN	/ 1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		BRISTO	L ROAD E	XT								
RUN:		PRO PI										
BARRIER DESIGN:			HEIGHTS					Average	pavement typ	e shall be use	ed unless	
									ghway agenc			
ATMOSPHERICS:		68 deg	F, 50% RH						rent type with			
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	15	1	50.2	51.0	66	0.8	3 10		51.0	0.0	3	-8.
Receiver3	16	1	54.3	55.8	66	1.5	10		55.8	0.0) (-8.
Receiver4	18	1	55.1	57.0	66	1.9	10		57.0	0.0	3	-8.
Receiver5	19	1	58.2	59.6	66	1.4	10		59.6	0.0) (-8.
Receiver6	20	1	62.1	63.3	66	1.2	2 10		63.3	0.0) (-8.
Receiver7	21	1	47.5	48.7	66	1.2	2 10		48.7	0.0) (-8.
Receiver8	22	! 1	68.1	68.1	66	0.0	10	Snd Lvl	68.1	0.0	3	-8.
Receiver10	23	1	58.0	59.5	66	1.5	10		59.5	0.0) (-8.
Receiver11	24	. 1	56.0	57.4	66	1.4	10		57.4	0.0) (-8.
Receiver16	27	1	65.6	65.9	66	0.3	10		65.9	0.0	3	-8.
Receiver18	28	1	60.5	61.1	66	0.6	10		61.1	0.0	3	-8.
Receiver19	29	1	58.4	58.9	66	0.5	10		58.9	0.0	3	-8.
Receiver20	30	1	62.2	62.4	66	0.2	2 10		62.4	0.0	3	
Receiver21	31		60.8	61.1	66	0.3	3 10		61.1	0.0	3	1
Receiver22	32		60.6	60.9					60.9	0.0		
Receiver23	33	1	62.0	62.5	66	0.5	10		62.5	0.0	3	
Receiver25	34	. 1	45.5	46.1	66	0.6	3 10		46.1	0.0	3	-8.
Receiver27	35	1	46.8	47.0	66	0.2	2 10		47.0	0.0)	1
Receiver28	36		58.2				10		58.9	0.0		
Receiver30	37	1		53.7			10		53.7			
Receiver31	38						-		52.5			
Receiver32	39	1	51.3	51.8	66	0.5	10		51.8	0.0) (
Receiver33	40								52.7			
Receiver9	42	.∣ 1	59.4	60.4	66	1.0	10		60.4	0.0)	-8.

BRISTOL ROAD EXT

Dwelling Units	# DUs	Noise Red	Noise Reduction				
		Min	Avg	Max			
		dB	dB	dB			
All Selected	24	0.0	0.0	0.0)		
All Impacted	1	0.0	0.0	0.0)		
All that meet NR Goal	0	0.0	0.0	0.0)		

APPENDIX C: TRAFFIC DATA

Existing Volumes - PM BRE

A = Passenger Cars, MT = Medium Trucks, HT = Heavy Trucks, MC = Motorcycles.

Bristol and Hibiscus

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1.	Bristol NB, thru	369	363	6	0	0	0
2.	Bristol NB, right turn	7	3	0	4	0	0
3.	Bristol NB, left turn	39	39	0	0	0	0
4.	Bristol SB, thru	279	275	3	1	0	0
5.	Bristol SB, right turn	7	7	0	0	0	0
6.	Bristol SB, left turn	3	2	0	1	0	0
7.	Hibiscus WB, right turn	5	3	0	1	1	0
8.	Hibiscus WB, left turn	7	7	0	0	0	0
9.	Hibiscus EB, right turn	43	42	1	0	0	0
10.	Hibiscus EB, left turn	4	4	0	0	0	0
11.	Hibiscus WB/EB thru	0	0	0	0	0	0
12	Hibiscus W	46	46	0	0	0	0
13	Hibiscus E	10	5	0	5	0	0
14	Bristol N	378	370	6	1	1	0
15	Bristol S	329	324	4	1	0	0

Bristol and Butler

MANUA	L COUNTS	Total	Α	MT	HT	Buses	MC
1	Bristol NB, right turn	124	124	0	0	0	0
2	Bristol NB, left turn	249	245	4	0	0	0
3	Butler EB, thru	456	450	6	0	0	0
4	Butler EB, right turn	148	144	3	1	0	0
5	Butler WB, thru	453	446	4	3	0	0
6	Butler WB, left turn	127	127	0	0	0	0
7	Bristol S	275	271	3	1	0	0
8	Butler E	581	574	4	3	0	0
9	Butler W	702	691	8	3	0	0

Butler and Moyer

MANUAL	COUNTS	Total	Α	MT	HT	Buses	MC
1	Moyer NB, right turn	36	35	0	0	1	0
2	Moyer NB, left turn	36	36	0	0	0	0
3	Butler EB, thru	552	539	11	2	0	0
4	Butler EB, right turn	57	57	0	0	0	0
5	Butler WB, thru	672	651	12	4	5	0
6	Butler WB, left turn	22	21	1	0	0	0
7	Moyer S	79	78	1	0	0	0
8	Butler E	592	578	11	2	1	0
9	Butler W	716	694	12	4	6	0

Park and Bridgewater/Bristol Ext

MANUA	L COUNTS	Total	Α	MT	HT	Buses	MC
1	Park WB, right turn	1	1	0	0	0	0
2	Park WB, left turn	2	2	0	0	0	0
3	Park WB, thru	214	212	1	1	0	0
4	Park EB, right turn	11	11	0	0	0	0
5	Park EB, left turn	1	1	0	0	0	0
6	Park EB, thru	201	197	3	0	1	0
7	Bridgewater, left turn	0	0	0	0	0	0
8	Bridgewater, right turn	1	1	0	0	0	0
9	Bristol Ext, thru	0	0	0	0	0	0
10	Bristol Ext, right turn	2	2	0	0	0	0
11	Bristol Ext, left turn	10	10	0	0	0	0
12	Park E	203	199	3	0	1	0
13	Park W	225	223	1	1	0	0
14	Bridgewater N	2	2	0	0	0	0
15	Bristol S	13	13	0	0	0	0

Park and Indian Creek

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1	Park WB, right turn	0	0	0	0	0	0
2	Park WB, left turn	5	5	0	0	0	0
3	Park WB, thru	207	207	0	0	0	0
4	Park EB, right turn	9	9	0	0	0	0
5	Park EB, left turn	1	1	0	0	0	0
6	Park EB, thru	183	181	2	0	0	0
7	Indian Creek, right turn	1	1	0	0	0	0
8	Indian Creek, left turn	6	6	0	0	0	0
9	Park E	185	183	2	0	0	0
10	Park W	215	215	0	0	0	0
11	Indian Creek	15	15	0	0	0	0

No Build Volumes - PM BRE

A = Passenger Cars, MT = Medium Trucks, HT = Heavy Trucks, MC = Motorcycles.

Bristol and Hibiscus

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1.	Bristol NB, thru	423	416	7	0	0	0
2.	Bristol NB, right turn	8	3	0	5	0	0
3.	Bristol NB, left turn	45	45	0	0	0	0
4.	Bristol SB, thru	320	316	3	1	0	0
5.	Bristol SB, right turn	8	8	0	0	0	0
6.	Bristol SB, left turn	3	2	0	1	0	0
7.	Hibiscus WB, right turn	6	4	0	1	1	0
8.	Hibiscus WB, left turn	8	8	0	0	0	0
9.	Hibiscus EB, right turn	49	48	1	0	0	0
10.	Hibiscus EB, left turn	5	5	0	0	0	0
11.	Hibiscus WB/EB thru	0	0	0	0	0	0
12	Hibiscus W	53	53	0	0	0	0
13	Hibiscus E	11	5	0	6	0	0
14	Bristol N	434	425	7	1	1	0
15	Bristol S	377	372	4	1	0	0

Bristol and Butler

MANUA	L COUNTS	Total	Α	MT	HT	Buses	MC
1	Bristol NB, right turn	142	142	0	0	0	0
2	Bristol NB, left turn	286	281	5	0	0	0
3	Butler EB, thru	523	516	7	0	0	0
4	Butler EB, right turn	170	166	3	1	0	0
5	Butler WB, thru	520	512	5	3	0	0
6	Butler WB, left turn	146	146	0	0	0	0
7	Bristol S	316	312	3	1	0	0
8	Butler E	666	658	5	3	0	0
9	Butler W	806	793	10	3	0	0

Butler and Moyer

MANUAL	COUNTS	Total	Α	MT	HT	Buses	MC
1	Moyer NB, right turn	41	40	0	0	1	0
2	Moyer NB, left turn	41	41	0	0	0	0
3	Butler EB, thru	633	618	13	2	0	0
4	Butler EB, right turn	65	65	0	0	0	0
5	Butler WB, thru	771	746	14	5	6	0
6	Butler WB, left turn	25	24	1	0	0	0
7	Moyer S	90	89	1	0	0	0
8	Butler E	674	658	13	2	1	0
9	Butler W	812	787	14	5	6	0

Park and Bridgewater/Bristol Ext

MANUA	COUNTS	Total	Α	MT	HT	Buses	MC
1	Park WB, right turn	1	1	0	0	0	0
2	Park WB, left turn	2	2	0	0	0	0
3	Park WB, thru	246	244	1	1	0	0
4	Park EB, right turn	13	13	0	0	0	0
5	Park EB, left turn	1	1	0	0	0	0
6	Park EB, thru	231	227	3	0	1	0
7	Bridgewater, left turn	0	0	0	0	0	0
8	Bridgewater, right turn	0	0	0	0	0	0
9	Bristol Ext, thru	1	1	0	0	0	0
10	Bristol Ext, right turn	0	0	0	0	0	0
11	Bristol Ext, left turn	2	2	0	0	0	0
12	Park E	231	227	3	0	1	0
13	Park W	248	246	1	1	0	0
14	Bridgewater N	3	3	0	0	0	0
15	Bristol S	15	15	0	0	0	0

Park and Indian Creek

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1	Park WB, right turn	0	0	0	0	0	0
2	Park WB, left turn	6	6	0	0	0	0
3	Park WB, thru	238	238	0	0	0	0
4	Park EB, right turn	10	10	0	0	0	0
5	Park EB, left turn	1	1	0	0	0	0
6	Park EB, thru	210	208	2	0	0	0
7	Indian Creek, right turn	1	1	0	0	0	0
8	Indian Creek, left turn	7	7	0	0	0	0
9	Park E	212	210	2	0	0	0
10	Park W	247	247	0	0	0	0
11	Indian Creek	16	16	0	0	0	0

Build Volumes - PM BRE

A = Passenger Cars, MT = Medium Trucks, HT = Heavy Trucks, MC = Motorcycles.

Bristol and Hibiscus

MANUAI	COUNTS	Total	Α	MT	HT	Buses	MC
1.	Bristol NB, thru	423	416	7	0	0	0
2.	Bristol NB, right turn	8	3	0	5	0	0
3.	Bristol NB, left turn	45	45	0	0	0	0
4.	Bristol SB, thru	320	316	3	1	0	0
5.	Bristol SB, right turn	8	8	0	0	0	0
6.	Bristol SB, left turn	3	2	0	1	0	0
7.	Hibiscus WB, right turn	6	4	0	1	1	0
8.	Hibiscus WB, left turn	8	8	0	0	0	0
9.	Hibiscus EB, right turn	49	48	1	0	0	0
10.	Hibiscus EB, left turn	5	5	0	0	0	0
11.	Hibiscus WB/EB thru	0	0	0	0	0	0
12	Hibiscus W	53	53	0	0	0	0
13	Hibiscus E	11	5	0	6	0	0
14	Bristol N	434	425	7	1	1	0
15	Bristol S	377	372	4	1	0	0

Bristol and Butler

MANUA	L COUNTS	Total	Α	MT	HT	Buses	MC
1	Bristol NB, right turn	142	142	0	0	0	0
2	Bristol NB, left turn	170	167	3	0	0	0
	Bristol NB, thru	116	114	2	0	0	0
	Bristol SB, right turn	17	17	0	0	0	0
	Bristol SB, left turn	58	58	0	0	0	0
	Bristol SB, thru	70	70	0	0	0	0
3	Butler EB, thru	465	459	6	0	0	0
4	Butler EB, right turn	101	98	2	1	0	0
	Butler EB, left turn	12	12	0	0	0	0
5	Butler WB, thru	403	397	4	2	0	0
	Butler WB, right turn	116	114	1	1	0	0
6	Butler WB, left turn	146	146	0	0	0	0
7	Bristol S	317	314	2	1	0	0
	Bristol N	244	240	3	1	0	0
8	Butler E	665	659	6	0	0	0
9	Butler W	590	581	7	2	0	0

Butler and Moyer

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1	Moyer NB, right turn	41	40	0	0	1	0
2	Moyer NB, left turn	41	41	0	0	0	0
3	Butler EB, thru	518	505	11	2	0	0
4	Butler EB, right turn	65	65	0	0	0	0
5	Butler WB, thru	555	537	10	4	4	0
6	Butler WB, left turn	25	24	1	0	0	0
7	Moyer S	90	89	1	0	0	0
8	Butler E	559	545	11	2	1	0
9	Butler W	596	578	10	4	4	0

Park and Bridgewater/Bristol Ext

MANUA	L COUNTS	Total	Α	MT	HT	Buses	MC
1	Park WB, right turn	1	1	0	0	0	0
2	Park WB, left turn	66	66	0	0	0	0
3	Park WB, thru	182	180	1	1	0	0
4	Park EB, right turn	94	94	0	0	0	0
5	Park EB, left turn	1	1	0	0	0	0
6	Park EB, thru	190	187	2	0	1	0
7	Bridgewater, left turn	0	0	0	0	0	0
8	Bridgewater, right turn	0	0	0	0	0	0
9	Bristol Ext, thru	1	1	0	0	0	0
10	Bristol Ext, right turn	41	40	1	0	0	0
11	Bristol Ext, left turn	205	202	2	1	0	0
12	Park E	231	227	3	0	1	0
13	Park W	387	382	3	2	0	0
14	Bridgewater N	3	3	0	0	0	0
15	Bristol S	160	160	0	0	0	0

Park and Indian Creek

MANUAL COUNTS		Total	Α	MT	HT	Buses	MC
1	Park WB, right turn	0	0	0	0	0	0
2	Park WB, left turn	6	6	0	0	0	0
3	Park WB, thru	238	238	0	0	0	0
4	Park EB, right turn	10	10	0	0	0	0
5	Park EB, left turn	1	1	0	0	0	0
6	Park EB, thru	210	208	2	0	0	0
7	Indian Creek, right turn	1	1	0	0	0	0
8	Indian Creek, left turn	7	7	0	0	0	0
9	Park E	212	210	2	0	0	0
10	Park W	247	247	0	0	0	0
11	Indian Creek	16	16	0	0	0	0

PFC - PM

A = Passenger Cars, MT = Medium Trucks, HT = Heavy Trucks, MC = Motorcycles.

EXISTING

MANUAL COUNTS		Total	Α	MT	HT	Buses	MC
1	Park NB, right turn	137	137	0	0	0	0
2	Park NB, thru	51	51	0	0	0	0
3	Callowhill SB, thru	39	39	0	0	0	0
4	Callowhill SB, left-turn	226	224	1	0	1	0
5	Ferry WB, right turn	552	547	3	1	1	0
6	Ferry WB, left turn	208	206	1	0	1	0
7	Park S	247	245	1	0	1	0
8	Callowhill N	603	598	3	1	1	0
9	Fery E	363	361	1	0	1	0

NO BUILD/BUILD

MANUAL COUNTS		Total	Α	MT	HT	Buses	MC
1	Park NB, right turn	157	157	0	0	0	0
2	Park NB, thru	59	59	0	0	0	0
3	Callowhill SB, thru	45	45	0	0	0	0
4	Callowhill SB, left-turn	259	257	1	0	1	0
5	Ferry WB, right turn	633	628	3	1	1	0
6	Ferry WB, left turn	239	237	1	0	1	0
7	Park S	284	282	1	0	1	0
8	Callowhill N	692	687	3	1	1	0
9	Ferry E	416	414	1	0	1	0

Existing Volumes PM - MP

A = Passenger Cars, MT = Medium Trucks, HT = Heavy Trucks, MC = Motorcycles.

Main Street & Park Avenue

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1	Main NB, right turn	178	177	1	0	0	0
2	Main NB, thru	626	621	3	0	2	0
3	Main SB, thru	492	483	8	1	0	0
4	Main SB, left-turn	65	64	1	0	0	0
5	Park WB, right turn	17	17	0	0	0	0
6	Park WB, left turn	172	171	1	0	0	0
7	Main S	664	654	9	1	0	0
8	Main N	643	638	3	0	2	0
9	Park E	243	241	2	0	0	0

MANUAL	. COUNTS	Total	Α	MT HT		Buses	MC
1.	Main NB, thru	826	818	6	1	1	0
2.	Main NB, right turn	8	8	0	0	0	0
3.	Main NB, left turn	118	117	1	0	0	0
4.	Main SB, thru	557	543	11	2	1	0
5.	Main SB, right turn	39	38	1	0	0	0
6.	Main SB, left turn	1	1	0	0	0	0
7.	Sunset WB, right turn	4	4	0	0	0	0
8.	Sunset WB, left turn	7	7	0	0	0	0
9.	Sunset EB, right turn	118	116	1	0	1	0
10.	Sunset EB, left turn	51	51	0	0	0	0
11.	Sunset WB/EB thru	2	2	0	0	0	0
12	Sunset W	157	155	2	0	0	0
13	Sunset E	9	9	0	0	0	0
14	Main N	881	873	6	1	1	0
15	Main S	682	666	12	2	2	0

No Build Volumes PM - MP

A = Passenger Cars, MT = Medium Trucks, HT = Heavy Trucks, MC = Motorcycles.

Main Street & Park Avenue

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1	Main NB, right turn	204	203	1	0	0	0
2	Main NB, thru	718	713	3	0	2	0
3	Main SB, thru	565	555	9	1	0	0
4	Main SB, left-turn	75	74	1	0	0	0
5	Park WB, right turn	20	20	0	0	0	0
6	Park WB, left turn	197	196	1	0	0	0
7	Main S	762	751	10	1	0	0
8	Main N	738	733	3	0	2	0
9	Park E	279	277	2	0	0	0

Main Street & Sunset Avenue

MANUAL	COUNTS	Total	Α	MT	HT	Buses	MC
1.	Main NB, thru	948	939	7	1	1	0
2.	Main NB, right turn	9	9	0	0	0	0
3.	Main NB, left turn	135	134	1	0	0	0
4.	Main SB, thru	639	623	13	2	1	0
5.	Main SB, right turn	45	44	1	0	0	0
6.	Main SB, left turn	1	1	0	0	0	0
7.	Sunset WB, right turn	5	5	0	0	0	0
8.	Sunset WB, left turn	8	8	0	0	0	0
9.	Sunset EB, right turn	135	133	1	0	1	0
10.	Sunset EB, left turn	59	59	0	0	0	0
11.	Sunset WB/EB thru	2	2	0	0	0	0
12	Sunset W	180	178	2	0	0	0
13	Sunset E	10	10	0	0	0	0
14	Main N	1012	1003	7	1	1	0
15	Main S	782	764	14	2	2	0

Build Volumes PM - MP

A = Passenger Cars, MT = Medium Trucks, HT = Heavy Trucks, MC = Motorcycles.

Main Street & Park Avenue

MANUAL	. COUNTS	Total	Α	MT	HT	Buses	MC
1	Main NB, right turn	163	162	1	0	0	0
2	Main NB, thru	515	511	2	0	2	0
3	Main SB, thru	484	475	8	1	0	0
4	Main SB, left-turn	156	154	2	0	0	0
5	Park WB, right turn	223	223	0	0	0	0
6	Park WB, left turn	133	132	1	0	0	0
7	Main S	617	607	9	1	0	0
8	Main N	738	734	2	0	2	0
9	Park E	319	316	3	0	0	0

Main Street & Sunset Avenue

MANUAL	COUNTS	Total	Α	MT	HT	Buses	MC
1.	Main NB, thru	705	698	5	1	1	0
2.	Main NB, right turn	9	9	0	0	0	0
3.	Main NB, left turn	135	134	1	0	0	0
4.	Main SB, thru	494	482	10	1	1	0
5.	Main SB, right turn	45	44	1	0	0	0
6.	Main SB, left turn	1	1	0	0	0	0
7.	Sunset WB, right turn	5	5	0	0	0	0
8.	Sunset WB, left turn	8	8	0	0	0	0
9.	Sunset EB, right turn	135	133	1	0	1	0
10.	Sunset EB, left turn	59	59	0	0	0	0
11.	Sunset WB/EB thru	2	2	0	0	0	0
12	Sunset W	180	178	2	0	0	0
13	Sunset E	10	10	0	0	0	0
14	Main N	769	762	5	1	1	0
15	Main S	637	623	11	1	2	0

APPENDIX D: PRELIMINARY ENGINEERING PLANS

DISTRICT	COUNTY	TOWNSHIP	BOROUGH	ROUTE	SECTION	TOTAL SHEETS
6-0	BUCKS	NEW BRITAIN	CHALFONT NEW BRITAIN	2025 4202 1006 4003	002	54

ECMS NO. 12923

COMMONWEALTH OF PENNSYLVANIA



DEPARTMENT OF TRANSPORTATION

DESIGN DESIGNATION - SR 2025

HIGHWAY
CLASSIFICATION - URBAN MINOR
DESIGN SPEED - 35 M.P.H.
PAVEMENT WIDTH - VARIES 32' TO 55'
SHOULDER WIDTH - 5' (LT)
VARIES O' TO 5' (RT)

DIRAFFIC DATA

CURRENT - 6,311 (2025)
A.D.T.

DESIGN YEAR - 6,537 (2047)
A.D.T.

D.H.V. - 654

D.H.V. - 654

DESIGN DESIGNATION - SR 4202

TRAFFIC DATA

HIGHWAY
CLASSIFICATION - URBAN PRINCIPAL
DESIGN SPEED - 35 M.P.H.

PAVEMENT WIDTH - VARIES 34' TO 42'
SHOULDER WIDTH - VARIES 4' TO 6' (LT)
O - 61%

TRAFFIC DATA

CURRENT - 14,298 (2025)
A.D.T.

DESIGN YEAR - 14,810 (2047)
A.D.T.

D.H.V. - 1,185
D - 61%

- 6%

DESIGN DESIGNATION - SR 1006 SEG 0070 & 0080

HIGHWAY
CLASSIFICATION — URBAN MINOR
ARTERIAL

DESIGN SPEED — 35 & 45 M.P.H.

PAVEMENT WIDTH — VARIES 32' TO 44'
SHOULDER WIDTH — VARIES 0' TO 10'

D — 53%

TRAFFIC DATA

CURRENT — 4,670 (2025)
A.D.T.

DESIGN YEAR — 4,837 (2047)
A.D.T.

D.H.V. — 484

D — 53%

DESIGN DESIGNATION - SR 1006 SEG 0090

HIGHWAY
CLASSIFICATION - URBAN MINOR
DESIGN SPEED - 40 M.P.H.

PAVEMENT WIDTH - 25'
SHOULDER WIDTH - VARIES 2' TO 3' (LT)
VARIES 1' TO 2' (RT)

DIRAFFIC DATA

CURRENT A.D.T.

DESIGN YEAR - 7,622 (2047)
A.D.T.

D.H.V. - 762
D.H.V. - 762
D.H.V. - 762
T. - 3%

DESIGN DESIGNATION - SR 4003

TRAFFIC DATA

HIGHWAY
CLASSIFICATION - URBAN MAJOR
DESIGN SPEED - 40 M.P.H.

PAVEMENT WIDTH - VARIES 20' TO 22'
SHOULDER WIDTH - VARIES 0' TO 1'

D.H.V. - 624
D - 55%
T - 4%

DRAWINGS FOR CONSTRUCTION

 \mathbb{OF}

STATE ROUTE 2025 SECTION 002

IN _____BUCKS ____COUNTY FROM STA. ___101+80.36 ___ TO STA. ___130+50.00 __LENGTH 2819.64 FT. 0.534 MI. FROM SEG. __N/A __ OFFSET ___N/A __ TO SEG. __0012 __OFFSET __0835 ___

AND

STATE ROUTE <u>4202</u> SECTION <u>002</u>

FROM STA. <u>198+50.00</u> TO STA. <u>222+50.00</u> LENGTH <u>2266.75</u> FT. <u>0.429</u> MI.

FROM SEG. <u>0050</u> OFFSET <u>1150</u> TO SEG. <u>0060</u> OFFSET <u>1224</u>

AND

STATE ROUTE 1006 SECTION 002

FROM STA. 0+00.00 TO STA. 810+00.00 LENGTH 2376.00 FT. 0.450 MI.

FROM SEG. 0070 OFFSET 0000 TO SEG. 0090 OFFSET 0500

AND

STATE ROUTE 4003 SECTION 002

FROM STA. 604+00.00 TO STA. 612+00.00 LENGTH 750.00 FT. 0.142 MI.

FROM SEG. 0010 OFFSET 0000 TO SEG. 0010 OFFSET 0800

ALSO INCLUDED:

TRAFFIC CONTROL PLAN SHEETS SIGNING AND PAVEMENT MARKING PLAN SHEETS EROSION AND SEDIMENT POLLUTION CONTROL PLAN SHEETS POST CONSTRUCTION STORMWATER MANAGEMENT PLAN SHEETS WETLAND MITIGATION PLAN SHEETS RATIROAD PLAN SHEETS TRAFFIC SIGNAL PLAN SHEETS STRUCTURE PLANS S - 41980 SHEETS CROSS SECTIONS SHEETS



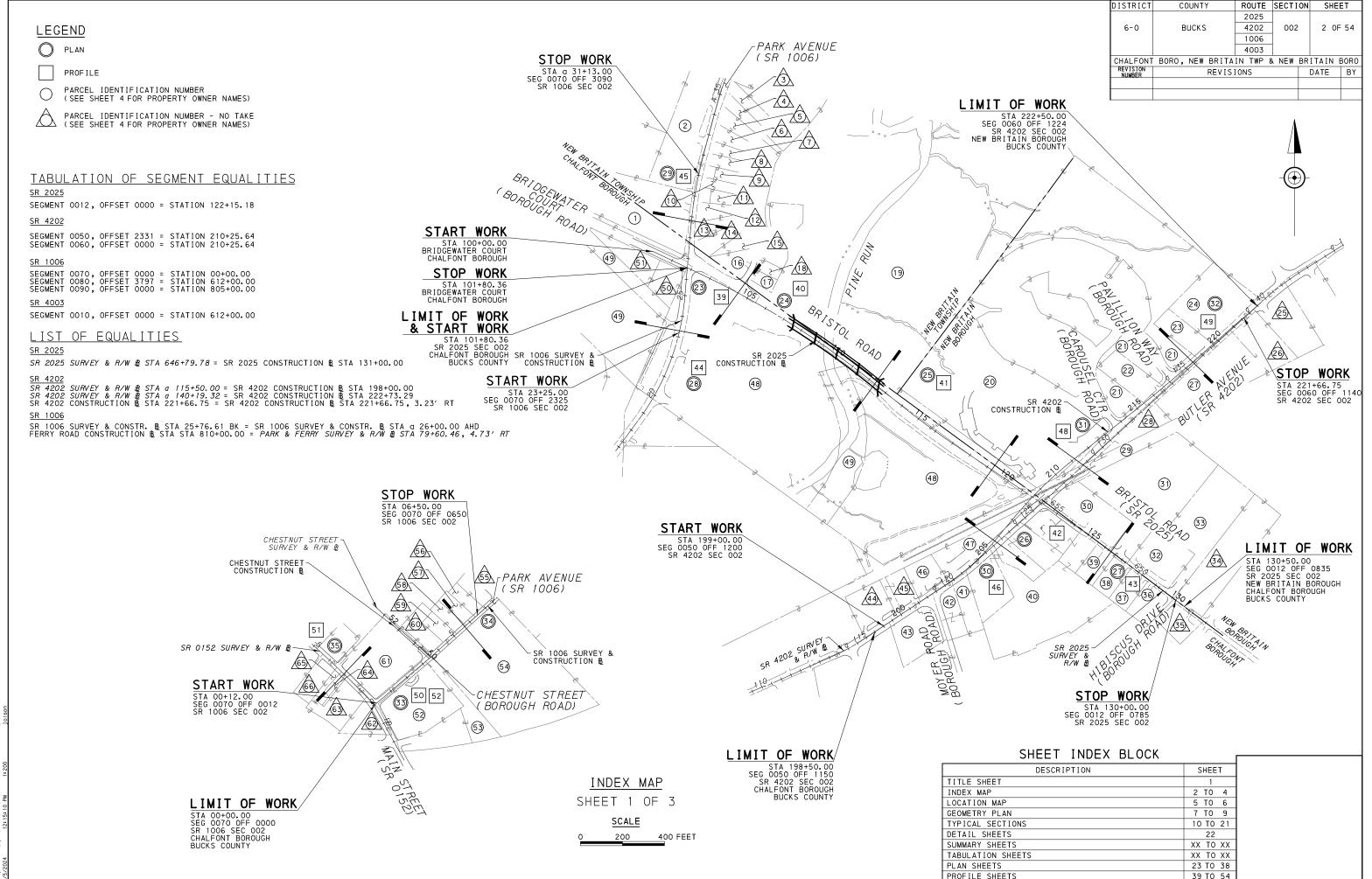


REG. PROF. ENGINEER

SAFETY REVIEW SUBMISSION

RECOMMENDED	DATE:							
-		DISTRICT	EXECUTIVE					
RECOMMENDED	DATE:							
		DEPUTY	SECRETARY					
APPROVED	DATE:							
SECRETARY OF TRANSPORTATION								
(ON BEHALF OF THE GOVERNOR AS WELL AS THE SECRETARY)								

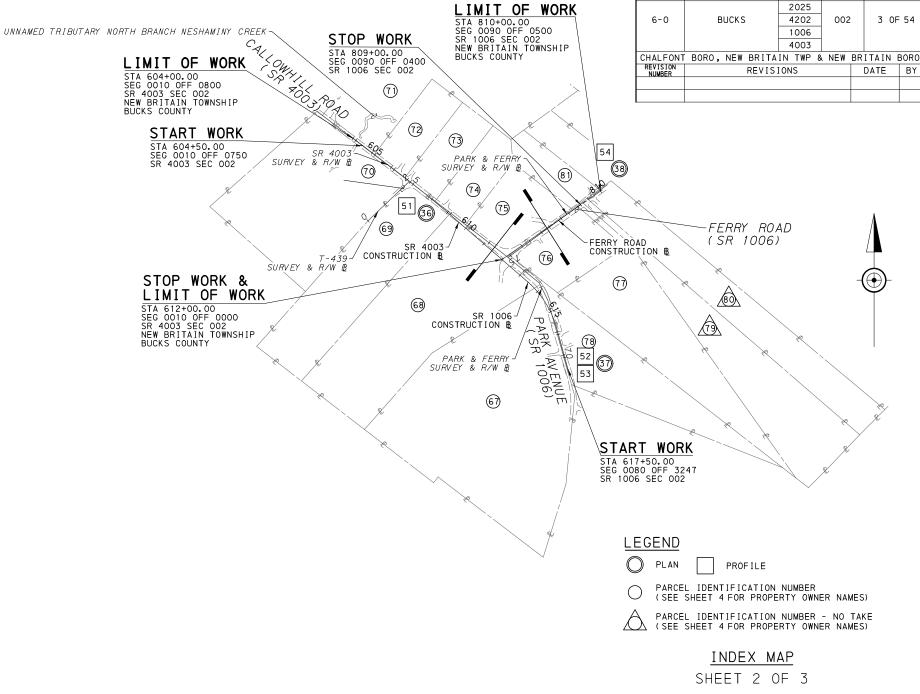
6/5/2024 12:14:44 PM 1:25 jolson



RECORD OF EXISTING TYPES OF ROADWAY PAVEMENT

NOTE: THE DEPTHS OF MATERIAL SHOWN ARE FOR DESIGN PURPOSES ONLY. ANY RISK OF UNANTICIPATED COSTS ASSOCIATED WITH DIFFERENCES BETWEEN THE LISTED DEPTHS AND THE ACTUAL DEPTHS SHALL BE ACCEPTED BY THE CONTRACTOR.

SEG 0012 0FF 0000 TO SEG 0012 0FF 0835 1.50" SPAV, HMA WRG, 64-22, 9.5MM, H 2.50" BITUMINOUS WEARING COURSE FB-1 2" BITUMINOUS WEARING COURSE AT-1 LINKNOWN BASE COURSE 1.50" SPAV, HMA WEARING COURSE 62-22, 12.5MM, H 1.50" RECYCLED BIT WEARING COURSE 10" BITUM CONCRETE BASE COURSE SEG 0050 OFF 1300 TO SEG 0050 OFF 2232 6" BITUM CONCRETE BASE COURSE 9" PLAIN CEMENT CONCRETE PVMT SEG 0050 OFF 2232 TO SEG 0050 OFF 2331 1.5" SPAV, HMA WEARING COURSE 64-22, 9.5MM, H 1.5" RECYCLED BIT WEARING COURSE 5" BITUM CONCRETE BASE COURSE 9" PLAIN CEMENT CONCRETE PYMT SEG 0060 OFF 0000 TO SEG 0060 OFF 1224 24 FT OF 1.5" SWWH3 SPAV, WMA WRG, 64-22, 9.5MM, H 20 FT OF 1.5" FBIMO BITUMINOUS WEARING CRSE FB-1 14 FT OF 2" CP200 BITUM WEARING COURSE CP-2 14 FT OF 10" NSB00 NATIVE STONE (GRANULAR) SUBB SEG 0070 OFF 0000 TO SEG 0070 OFF 0700 1.50" SPAV, WMA WRG, 64-22, 9.5MM, H 3" BITUM WEARING COURSE 6" NATIVE STONE (GRANULAR) SUBBASE SEG 0070 OFF 2315 TO SEG 0070 OFF 3103 22 FT OF 1.5'' SWWH3 SPAV, WMA WRG, 64-22, 9.5MM, H 20 FT OF 1.5'' FBIMO BITUMINOUS WEARING CRSE FB-1 20 FT OF 2.5'' ID2UO BITUMINOUS WEARING CRSE ID-2 14 FT OF 2'' UBWCO UNKNOWN BITUM WEARING COURSE 14 FT OF 6'' NSBOO NATIVE STONE (GRANULAR) SUBB SEG 0080 OFF 3247 TO SEG 0080 OFF 3797 22 FT OF 1.5" SWWH3 SPAV, WMA WRG, 64-22, 9.5MM, H 20 FT OF 2.25" FB1MO BITUMINOUS WEARING CRSE FB-1 20 FT OF 2.5" ID2UO BITUMINOUS WEARING CRSE ID-2 14 FT OF 2" UBWCO UNKNOWN BITUM WEARING COURSE 14 FT OF 6" NSBOO NATIVE STONE (GRANULAR) SUBB SEG 0090 OFF 0000 TO SEG 0090 OFF 0490 SR 4003 20 FT OF 1.5'' SPWH3 SPAV, HMA WRG, 64-22, 9.5MM, H 20 FT OF 3'' FB1U0 BITUMINOUS WEARING CRSE FB-1 20 FT OF 3'' SUB20 2A SUBBASE SEG 0090 OFF 0000 TO SEG 0090 OFF 0490



DISTRICT

COUNTY

ROUTE SECTION SHEET

200 400 FEET

LIS	T OF PROPERTY OWNERS		
	JOHN MEENAN	(38)	BARRY G. WARREN AND SARA M. WARREN, HUSBAND AND WIFE
2	THE BOARD OF SUPERVISORS OF THE TOWNSHIP	(39)	32 BRISTOL ROAD, LP, A PENNSYLVANIA LP
	OF NEW BRITAIN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA	<u>(40)</u>	RAP CHALFONT, LP
(3)	MICHAEL KLAWITER AND KATHLEEN M. KLAWITER	<u>(41)</u>	ND2198, LLC
4	EDWARD M. HAUSLE AND SUSAN M. HAUSLE	(42)	JVW PROPERTIES
5	MARIA L. BURKHOLDER	43	THOMAS B. CARR AND DEBRA K. CARR, AS TRUSTEES UNDER THE THOMAS B. CARR TRUST
6	DENNIS J. SHORTALL AND VICKI L. SHORTALL, H/W	44	PARAMOUNT L.P.
	EDWARD QUINLAN AND DOREEN P. QUINLAN	45	SHAYA NEW BRITAIN, LP
(8)	CECILIA M. PARENT	46	SUBURBAN COMMUNITY BANK (A PA CORP.)
A	MADY T. MODIFIES	47)	ANNA MARIA TOLOMELLO
(9)	MARY T. MCCLURE	48	NORTH PENN WATER AUTHORITY
	CHRISTINA J. GIRARD AND KEVIN D. JAKEMAN	49	NORTH WALES WATER AUTHORITY, A MUNICIPAL AUTHORITY
	JAMES L. LAUGHLIN AND KIMBERLY S. LAUGHLIN, H/W	50	PAUL BRAZIL AND KELLY BRAZIL
12	KEITH SIMONSEN & ANDREA SIMONSEN	<u>(5)</u>	PAUL DARREFF AND CRISTINA DEMATTEO
<u>(13)</u>	CHRISTOPHER P. SWIGGARD AND MARGARET SWIGGARD, H/W	(52)	JERC PARTNERS XXV, LP
A		(53)	JERC PARTNERS XXV, LP
(14)	WILLIAM S. BATTY AND JENNIFER P. BATTY	54)	PINE CREEK ASSOCIATES
13	GREGORY H. LEE	55	DAWN MACO
(16)	RONALD H. STEINHAUER III AND JENNIFER M. STEINHAUER	(56)	WILLIAM W. WRIGHT AND ALYSSA C. WRIGHT
(17)	LAURA BALTRA	A	
18	STEVEN J. STEIN AND NADINE H. STEIN	<u>√5 /\</u>	JEFFREY J. REEDER AND DALISSA M. REEDER
19	NEW BRITAIN TOWNSHIP	(58)	JEFFREY J. REEDER AND DALISSA M. REEDER
20	YEW SERVICE CORPORATION (A PENNSYLVANIA CORP.), GRANOR BRITAIN CORP. (A PENNSYLVANIA CORP.) AND PRICE HOMES CORP. (A PENNSYLVANIA CORP.)	<u>6</u>	LADD S. MCCOY AND MARIA G. MCCOY TRUSTEES OF MCCOY LIVING TRUST
21)	FOREST PARK OWNER'S ASSOCIATION		GAIL M. SANTINI AND STEVEN H. SANTINI
22	PHILADELPHIA SUBURBAN WATER COMPANY	<u>(61)</u>	JERC PARTNERS XXV, LLC
23	ALFRED S. HALAS AND EDWARD R. DIPAUL	<u>(2)</u>	JOSEPH D. WITT
24	FOUR (401) BUTLER LLC	<u>(3)</u>	PENNS PROPERTY GROUP
	AFN ABSPROPOO1 LLC	63	136 MAIN ST., LLC
	PHILADELPHIA ELECTRIC COMPANY	<u>65</u>	SETH M. CORNELL AND HANNAH CORNELL
27	JABEMAC, LP		CHRISTIAN W. MATTHESON AND MARGARET CORNILLON MATTHESON
	NSG REALTY	<u>67</u>	SARAH A. GERDING & ANN GERDING HURLEY
29	SEPTA	68)	ERIC D. SOROKER
30	GEORGEIA RUTH LEVY AND JENNIFER B. LEVY	69	RAYMOND P. KIRSCH & CATHERINE J. BIRKENSTOCK KIRSCH H/W
3)	84SLB1, LLC	70	ANN C. DURANTE & JUDITH A. ROGERS
32	BILL MITCHELL'S AUTO SERVICE, INC.	71)	ANTHONY E. LEPORE
33	MARGARET T. SCHWIND	72	LISA A. STREETSMITH
34	DAVID KEMMERER	73)	JEFFREY R. RAYSBROOK & LAURA E. RAYSBROOK
l .	DATE NEMMENEN	74	MARK BARR & MARGE NOCTON-BARR
35	SUSAN L. SUPPER	75)	BARBARA B. KEENA
36	STANLEY F. CLEMENS AND MARY JANE CLEMENS	76	KATHARINE ELIZABETH BROWN & RICHARD C. KARASZKIEWICZ, III
37	TIMOTHY J. SHANAHAN AND MARY C. SHANAHAN, HIS WIFE	77	MICHAEL F. CARTER

							- '
		6-0	BUCKS	2025 4202	002	4 OF	1
		6-0	BUCKS		- 002	4 06	- 54
<u>78</u>	HENRY R. SCHMIDT & MARIE SCHMIDT			1006	+		
(7a)	BERNARD J. PICKETT, JR.	CHALFONT	BORO, NEW BRITA	IN TWP	& NEW BF	RITAIN	BORO
7(3)	BEHARIE O. TIONETT, On.	REVISION NUMBER	REVIS	ONS		DATE	BY
(8)	JOHN J. CAHILL & PATRICIA A. CAHILL				\longrightarrow		
81)	JEFFREY A. HARRIS & GAIL L. HARRIS						

ROUTE SECTION SHEET

COUNTY

INDEX MAP SHEET 3 OF 3

:\pwworking\projectwise\jolson\d0279191\index03.dgn /5/2024 12:15:32 PM 1:25 jolson

		PUBLIC UTILITIES			
SYMBOL	OWNER	ADDRESS	REPRESENTATIVE	TELEPHONE	EMAIL
W1	AQUA PENNSYLVANIA, INC.	762 W LANCASTER AVENUE, BRYN MAWR, PA 19010	BRENNAN KELLY	(610) 645-4297	BTKELLY@AQUAAMERICA.COM
—G2—	TEXAS EASTERN TRANSMISSION, LP (ENBRIDGE)	560 POTTSTOWN PIKE, CHESTER SPRINGS, PA 19425	DAVE LEIB	(610) 458-1712	DAVE. LEIB@ENBRIDGE. COM
—SEP—	SOUTHEASTERN PA TRANSPORTATION AUTHORITY (SEPTA)	1234 MARKET STREET, 12TH FLOOR, PHILADELPHIA, PA 19107	TYLER LADD	(215) 580-7800	TLADD@SEPTA.ORG
—s2—	CHALFONT-NEW BRITAIN TWP. JOINT SEWAGE AUTHORITY	1645 UPPER STATE ROAD, DOYLESTOWN, PA 18901	JOHN SCHMIDT	(215) 345-1225	JSCHMIDT@CNBSA.ORG
— c —	COMCAST CABLE COMMUNICATIONS	190 SHOEMAKER ROAD, POTTSTOWN, PA 19464	MIKE KIMBERLY	(610) 327-6395	MIKE_KIMBERLY@CABLE.COMCAST.COM
- w $-$	NORTH PENN WATER AUTHORITY	300 FORTY FOOT ROAD, LANSDALE, PA 19446	DAN PRESTON	(215) 855-3617	DPRESTON@NORTHPENNWATER.ORG
W2 $$	NORTH WALES WATER AUTHORITY	200 WEST WALNUT STREET, NORTH WALES, PA 19454	CHASE HOWES	(215) 699-4836	CHOWES@NWWATER.COM
—G1—	PECO ENERGY COMPANY (GAS)	1050 WEST SWEDESFORD ROAD, BERWYN, PA 19312	MICHAEL GABRIEL	(215) 485-0047	MIKE. GABRIEL@PECO-ENERGY. COM
=Eu=	PECO ENERGY COMPANY (ELECTRIC)	1050 WEST SWEDESFORD ROAD, BERWYN, PA 19312	CHARLES DETTLING	(610) 725-7129	CHARLES. DETTL ING@EXELONCORP. COM
$=$ T_U $=$	VERIZON PENNSYLVANIA, LLC	1050 VIRGINIA DRIVE, FORT WASHINGTON, PA 19034	CHRIS ATKINSON	(215) 478-5218	CHRIS. J. ATKINSON@VERIZON. COM
—F0U—	CROWN CASTLE	3200 HORIZON DR, STE 150, KING OF PRUSSIA, PA 19406	LAUREN LEVITT	(610) 635-3234	LAUREN. LEVITT@CROWNCASTLE. COM
— s —	CHALFONT BOROUGH	40 NORTH MAIN STREET, CHALFONT, PA 18914	SHAWN CURRAN	(215) 822-7295	SCURRAN@CHALFONTBOROUGH.COM
<u>s1</u>	BUCKS COUNTY WATER & SEWER AUTHORITY	1275 ALMSHOUSE ROAD, WARRINGTON, PA 18976	JAMES NAPOLEON	(215) 343-2538	N. JIM@BCWSA. NET

EARTHWORK SUMMARY ENTIRE PROJECT

	THE INFORMATION ON ESTIMATED AMOUNTS OF EARTHWORK HAS BEEN USED IN THE PRELIMINARY ESTIMATE. DO NOT USE AS A WAIVER OF ANY PROVISIONS OF THE SPECIFICATIONS AND CONTRACTS.									
	CUBIC YARDS OF EXCAVATION CLASS 1 CLASS 1A CLASS 1B CLASS 2 CLASS 3** CLASS 4					CLASS 4	CUBIC YDS OF COMPLETED EMBANKMENT*	CUBIC YDS OF BORROW EXCAVATION	CUBIC YDS OF SELECT BORROW	CUBIC YDS OF WASTE

TABULATION OF OVERALL LENGTH

STATE ROUTE	STATION	FT	ΜI				
SR 2025	101+80.36 TO 130+50.00	2869.64	0.543				
SR 4202	198+50.00 TO 222+50.00	2400.00	0.455				
SR 1006	0+00.00 TO 810+00.00	8014.00	1.518				
SR 4003	604+00.00 TO 612+00.00	800.00	0.152				
TOTAL LENGTH14083.64FT2.667MI							

DISTRICT

REVISION NUMBER

COUNTY

BUCKS

ROUTE SECTION SHEET

002

5 OF 54

DATE BY

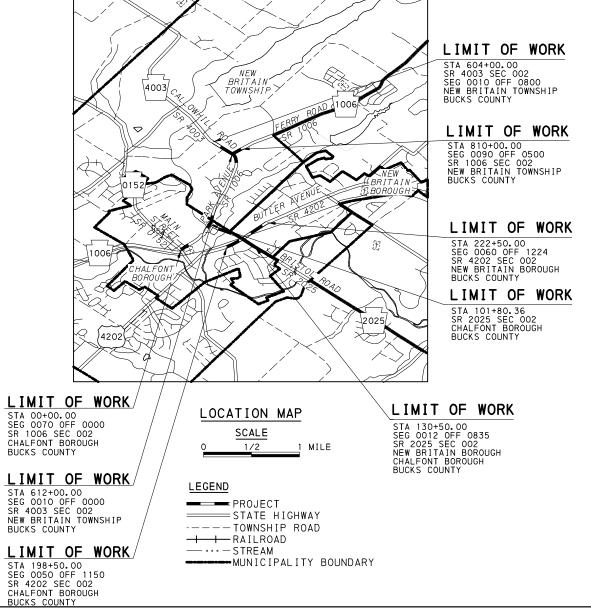
2025

4202

1006 4003 CHALFONT BORO, NEW BRITAIN TWP & NEW BRITAIN BORO

REVISIONS

TABULATION OF CONSTRUCTION LENGTH							
STATE ROUTE	STATION	FT	ΜI				
BRIDGEWATER CT.	100+00.00 TO 101+80.36	180.36	0.034				
SR 2025	101+80.36 TO 130+00.00	2819.64	0.534				
SR 4202	199+00.00 TO 221+66.75	2266.75	0.429				
SR 1006	23+25.00 TO 31+13.00	788.00	0.149				
SR 1006	00+12.00 TO 6+50.00	638.00	0.121				
SR 1006	617+50.00 TO 612+00.00	550.00	0.104				
SR 1006	805+00.00 TO 809+00.00	400.00	0.076				
SR 4003	604+50.00 TO 612+00.00	750.00	0.142				
TOTAL LENGTH 8392.75 FT 1.590 MI							



GENERAL NOTES AND LOCATION MAP

GENERAL NOTES

THE LEGAL RIGHT-OF-WAY FOR SR 4202 FROM STATION 97+30 TO 110+00 IS VARIABLE WIDTH FROM FORTY-EIGHT FEET TO FIFTY-THREE FEET AS ACQUIRED BY SECTION 511 OF ACT 428 OF JUNE 1, 1945.

THE LEGAL RIGHT-OF-WAY FOR SR 4202 FROM STATION 110+00 TO 154+11 IS FIFTY FEET, TWENTY-FIVE FEET EACH SIDE OF CENTERLINE BASED ON A PLAN FOR CONSTRUCTION OF ROUTE NO 178, SECTION 3, APPROVED AND SIGNED BY THE GOVERNOR ON JUNE 6, 1924, RECORDED IN HIGHWAY BOOK 2, PAGE 3 OF THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 4202 FROM STATION 127+37 TO 136+17, LEFT, IS VARIABLE WIDTH FOR TWENTY-FIVE FEET TO FORTY-FOUR FEET LEFT OF CENTERLINE AS SHOWN AND OFFERED FOR DEDICATION TO NEW BRITAIN BOROUGH ON A PLAN FOR FOREST PARK RECORDED ON JANUARY 1, 1988 IN PLAN BOOK 243, PAGE 70 AT THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL ROW FOR MONROE ROAD, BOROUGH ROAD FROM STATION 0+00 TO 0+50 IS VARIABLE WIDTH FROM THIRTY-THREE FEET TO EIGHTY-FOUR FEET BASED ON A PLAN FOR CONSTRUCTION AND CONDEMNATION OF RIGHT-OF-WAY FOR ROUTE NO 178, SECTION 11, APPROVED AND SIGNED BY THE GOVERNOR ON FEBRUARY 9, 1950, RECORDED IN HIGHWAY BOOK 2, PAGE 19 OF THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 2025 FROM STATION 645+00 TO 654+65 IS THRITY-THREE FEET, SIXTEEN AND ONE HALF FEET EACH SIDE OF THE CENTERLINE BASE ON ROAD DOCKET A-15, DATED MARCH 1736, RECORDED IN ROAD BOOK 6, PAGE 27 ON REEL 1 AT THE CLERK OF THE CIRCUIT COURT FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 2025 FROM STATION 654+65 TO 655+65 IS VARIABLE WIDTH FROM FORTY FEET TO NINETY FEET BASED ON A PLAN FOR CONSTRUCTION AND CONDEMNATION OF RIGHT-OF-WAY FOR ROUTE NO 178, SECTION 11, APPROVED AND SIGNED BY THE GOVERNOR ON FEBRUARY 9, 1950, RECORDED IN HIGHWAY BOOK 2, PAGE 19 OF THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 0152 IS FORTY-THREE FEET AS ESTABLISHED BY CHALFONT BOROUGH ORDINANCE NO 5, OF SEPTEMBER 30, 1903.

THE LEGAL RIGHT-OF-WAY FOR SR 1006 FROM STATION 0-06.22 TO 12+60 IS THIRTY-SIX FEET, EIGHTEEN FEET EACH SIDE OF CENTERLINE AS ESTABLISHED BY CHALFONT BOROUGH ORDINANCE NO 9, SECTION 3, DATED JUNE 13, 1909.

THE LEGAL RIGHT-OF-WAY FOR SR 1006 FROM STATION 7+53 TO 15+00, LEFT, IS VARIABLE WIDTH FROM THIRTY-THREE FEET TO THIRTY-FIVE FEET FROM CENTERLINE AS SHOWN ON A PLAN FOR MAINS -ABARBANEL PARTNERSHIP RECORDED ON MARCH 3, 1993 IN PLAN BOOK 269, PAGE 90 AND DEDICATED TO CHALFONT BOROUGH BY DEED DATED DECEMBER 8, 1995 AND RECORDED IN DEED BOOK 1176, PAGE 1061 AT THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 1006 FROM STATION 12+60 TO 28+00 IS VARIABLE WIDTH FROM THIRTY-THREE FEET TO ONE HUNDRED SIXTY-FIVE FEET AS SHOWN ON DRAWINGS AUTHORIZING CONDEMNATION OF RIGHT-OF-WAY OF LEG. ROUTE 9076, SECTION 2R/W, APPROVED AND SIGNED BY THE GOVERNOR ON AUGUST 13, 1969, RECORDED IN HIGHWAY BOOK 45, PAGE 6 OF THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 1006 FROM STATION 28+00 TO 35+89, LEFT IS SIXTEEN AND ONE HALF FEET LEFT OF CENTERLINE BASE ON ROAD DOCKET A-19, DATED MARCH 1738, RECORDED IN ROAD BOOK 6, PAGE 30 ON REEL 1 AT THE CLERK OF THE CIRCUIT COURT FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 1006 FROM STATION 26+55 TO 40+57, RIGHT, IS FORTY FEET RIGHT OF CENTERLINE AS SHOWN ON A PLAN FOR FOREST PARK WEST RECORDED ON JUNE 1, 1994 IN PLAN BOOK 275, PAGE 6 AND DEDICATED TO NEW BRITAIN TOWNSHIP BY DEED DATED NOVEMBER 28, 1995 AND RECORDED IN DEED BOOK 1175, PAGE 223 AT THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 1006 FROM STATION 35+89 TO 43+88, LEFT, IS VARIABLE WIDTH FROM THIRTY-FIVE TO FORTY FEET LEFT OF CENTERLINE AS SHOWN ON A PLANOF FAIRWOOD RECORDED ON SEPTEMBER 28, 1977 IN PLAN BOOK 160, PAGE 35 AT THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR 1006 FROM STATION 40+57 TO 43+88, RIGHT, IS VARIABLE WIDTH FROM FORTY TO FORTY-THREE FEET LEFT OF CENTERLINE AS SHOWN ON A PLANOF FAIRWOOD RECORDED ON SEPTEMBER 28, 1977 IN PLAN BOOK 160, PAGE 35 AT THE RECORDER OF DEEDS FOR BUCKS COUNTY.

THE LEGAL RIGHT-OF-WAY FOR SR-1006, (PARK AVE. & FERRY RD.), FROM STATION 69+24.84 TO STATION 80+00, IS 33 FEET, PER RIGHT-OF-WAY RECORD, (FORM 989), FOR LR-09076.

THE LEGAL RIGHT-OF-WAY FOR SR-4003, (CALLOWHILL RD.) FROM STATION 0+00 TO STATION 8+60, IS 33 FEET, PER FINAL PLAN OF LOTS OF WILLOW BROOK, RECORDED 06-08-1967 IN BOOK 45 PAGE 18.

THE LEGAL RIGHT-OF-WAY FOR T-403, (PEACE VALLEY RD.) FROM STATION 0+00 TO STATION 2+37.69, IS 33 FEET, PER FINAL PLAN OF LOTS OF WILLOW BROOK, RECORDED 06-08-1967 IN BOOK 45 PAGE 18.

THE DEPARTMENT RESERVES THE RIGHT TO ELIMINATE ANY OR ALL OF THIS WORK. DO NOT PERFORM WORK EXCEPT THAT WHICH IS WITHIN THE HIGHWAY RIGHT-OF-WAY UNTIL SO ORDERED IN WRITING BY THE ENGINEER.

BUILDINGS AND STRUCTURES MARKED [C] HAVE BEEN OR ARE TO BE REMOVED OR ALTERED BY THE DEPARTMENT OR OTHER AUTHORITY RESPONSIBLE FOR THE PAYMENT OF PROPERTY DAMAGES AND SUCH WORK IS NOT PART OF THIS CONTRACT.

BUILDINGS AND STRUCTURES MARKED ① ARE ENCROACHMENTS WHICH ARE THE RESPONSIBILITY OF THE PROPERTY OWNER TO REMOVE. IN CASE ANY ENCROACHMENTS SO MARKED ARE NOT REMOVED BY THE PROPERTY OWNER, DO NOT INTERFERE WITH OR REMOVE SAME UNTIL AUTHORIZED IN WRITING BY THE ENGINEER.

DEMOLISH AND REMOVE BUILDINGS AND STRUCTURES MARKED $\ \square$ AS LUMP SUM ITEMS AT THE LOCATIONS INDICATED.

REMOVE BUILDINGS AND STRUCTURES MARKED [R] UNDER THE ITEM FOR CLEARING AND GRIBBING.

GENERAL NOTES CONTINUED

RC-53M NOVEMBER 30, 2021

DETAILS OTHER THAN THOSE INDICATED ARE ON THE FOLLOWING STANDARD DRAWINGS:

RC-20M	NOVEMBER 1. 2022	BC-753M JANUARY 31, 2019
RC-21M	JUNE 1, 2010	BC-755M JANUARY 31, 2019
RC-22M	FEBRUARY 8, 2019	BC-766M NOVEMBER 23, 202
RC-23M	FEBRUARY 8, 2019	BC-767M NOVEMBER 23, 202
RC-24M	FEBRUARY 19, 2021	BC-783M JANUARY 31, 2019
RC-26M	NOVEMBER 30, 2021	TC-8600 JUNE 13, 2Ó13
RC-27M	NOVEMBER 30, 2021	TC-8602 JUNE 13, 2013
RC-28M	SEPTEMBER 1, 2023	TC-8604 AUGUST 17, 2021
RC-45M	FEBRUARY 19, 2021	TC-8702B JUNE 13. 2013
RC-50M	FEBRUARY 19, 2021	TC-8716 JUNE 13, 2013
RC-51M	SEPTEMBER 1, 2023	•

HORIZONTAL CONTROL IS TIED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM 1983 (NAD 83).

VERTICAL CONTROL IS BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD 1988).

AVERAGE COMBINED FACTOR IS 0.XXXXXXXXXX. NEED FOR BRE AREA AND PFC

THE CONTRACTOR IS REQUIRED TO NOTIFY THE DEPARTMENT AND SUBMIT AN ALLEGED VIOLATION REPORT (AVR) TO THE PA PUBLIC UTILITY COMMISSION THROUGH THE PA ONE CALL SYSTEM, WWW.PAICALL.ORG, WITHIN TEN (10) BUSINES DAYS AFTER A UTILITY LINE IS STRUCK, DAMAGED, OR PREVIOUS DAMAGE IS DISCOVERED AS REQUIRED BY PENNSYLVANIA'S UNDERGROUND UTILITY LINE PROTECTION LAW ACT 50 (P.L.852, NO. 287 AMENDED OCT. 30, 2017). SEE SPECIAL PROVISION UTILITIES-FOR USE ON PROJECTS WITH MINIMUM OR NO EXCAVATION FOR UTILITY CONTACT INFORMATION.

DO NOT INTERFERE WITH THE OPERATION OF ANY FIRE HYDRANT, FIRE CALL BOX, OR POLICE CALL BOX.

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

DRAINAGE EASEMENT. AN EASEMENT FOR THE CONSTRUCTION, INSPECTION, MAINTENANCE, REPAIR, RECONSTRUCTION AND ALTERATION OF HIGHWAY DRAINAGE FACILITIES. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY FLOW OF WATER. HOWEVER, NO STRUCTURE OF ANY KIND MAY BE ERECTED IN THE AREA, NOR MAY ANY PIPE OR DITCH BE CONNECTED TO THE DEPARTMENT'S PIPE OR DITCH WITHOUT ADVANCED WRITTEN APPROVAL BY THE DEPARTMENT OF TRANSPORTATION.

SIDEWALK EASEMENT. AN EASEMENT FOR THE CONSTRUCTION, INSPECTION, MAINTENANCE, REPAIR, RECONSTRUCTION AND ALTERATION OF A SIDEWALK. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO ITS USE FOR

TRAFFIC SIGNAL EASEMENT. AN EASEMENT FOR THE CONSTRUCTION, INSPECTION, OPERATION, MAINTENANCE, REPAIR, RECONSTRUCTION AND ALTERATION OF A TRAFFIC SIGNAL AND APPURTENANCE THERETO. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO ITS USE FOR TRAFFIC SIGNAL PURPOSES.

REQUIRED PRIVATE ACCESS. LAND ACQUIRED IN THE INTEREST DESIGNATED (EITHER FEE SIMPLE OR EASEMENT FOR DRIVEWAY PURPOSES) FOR THE BENEFIT AND USE OF THE PROPERTY OR PROPERTIES DESIGNATED, ALONG WITH A TEMPORARY CONSTRUCTION EASEMENT FOR THE BENEFIT AND USE OF THE COMMONWEALTH, IF NECESSARY. TITLE SHALL VEST IN THE OWNERS OF THE DESIGNATED PROPERTIES UPON ACQUISITION AND MAINTENANCE RESPONSIBILITY SHALL TRANSFER UPON THE COMPLETION OF CONSTRUCTION, IF ANY

STATE ROUTE 4202, PREVIOUSLY KNOWN SR 0202 AND LR 00178.

STATE ROUTE 1006, PREVIOUSLY KNOWN 09076 & 09074

STATE ROUTE 4003, PREVIOUSLY KNOWN 09078

STATE ROUTE 0152, PREVIOUSLY KNOWN 658

STATE ROUTE 2025, PREVIOUSLY KNOWN 09034

10111101	0001111	110012	DE0 1 10.1	J 31121	- '
		2025			
6-0	BUCKS	4202	002	6 0F	54
		1006			
		4003			
	BORO, NEW BRITA	IN TWP 8	NEW BR	ITAIN E	30R0
REVISION NUMBER	REVIS		DATE	BY	

DISTRICT

COLINTY

ROUTE SECTION SHEET

c: \pwwork ing\projectwise\jolson\d0279191\location02. dgn 6/5/2024 12:15:39 PM 1:2640 lolson

SUMMARY OF CURVE DATA

	2025-1	2025-2	2025-3	4202-1	4202-2	4202-3	EX-4202-1	EX-4202-2	EX-4202-3	EX-4202-4
PI STA	107+54.88	115+44.27	124+72.50	204+12.89	209+13.08	216+57.70	101+84.22	a 114+55.23	a 120+92.08	a 141+46.98
DELTA	13° 45′ 54 " RT	5°23′04" LT	3°03′06" RT	16° 35′ 40" LT	11°35′17" RT	2°41′28" LT	30°11′00" RT	9°27′30" LT	7°57′01" LT	10°11′00" RT
Т	494.88	192.80	109.21	145.84	202.94	187.90	257.63	79.04	79.66	127.65
L	985.00	385.31	218.36	289.63	404.50	375.73	503. 29	157.71	159.06	254.64
R	4100.00	4100.00	4100.00	1000.00	2000.00	8000.00	955. 37	955. 37	1146.28	1432.69
E	29.76	4.53	1.45	10.58	10.27	2.21	34.13	3. 26	2.76	5.68
SE	NC	NC	NC	NC	NC	NC	EX SLOPE	EX SLOPE	EX SLOPE	EX SLOPE
PCC STA										
PC STA	102+59.99	113+51.47	123+63.29	202+67.05	207+10.14	214+69.80	99+26.59	a 113+76.19	a 120+12.42	a 140+19.32
PT STA	112+44.99	117+36.78	125+81.65	205+56.68	211+14.64	218+45.53	104+29.88	a 115+33.90	a 121+71.48	a 142+73.96
PCC STA										

DISTRICT	COUNTY	ROUTE	SECTION	SHE	ΞT
		2025			
6-0	BUCKS	4202	002	7 OF	54
		1006			
		4003			
	BORO, NEW BRITA	IN TWP 8	NEW BR	ITAIN E	30R0
REVISION NUMBER	REVIS		DATE	BY	

SUMMARY OF PROJECT COORDINATES

	COORDIN	ATE SYSTEM (SOUTH ZONE) , N		I	
RTE	STATION	POINT		INATES	BEARINGS	
			NORTH	EAST		
	100+00.00	POT	360271.8122	2678386.6220	664971/01	
	102+59.99	PC	360159.9521	2678621.3215	S64°31′01"	
<u></u>	107+54.88	PI	359947.0327	2679068.0586		
## 7	112+44.99	PT	359633.9320	2679451.3036	S50° 45′ 08 "	
125	113+51.47	PC	359566.5638	2679533.7643	330 43 00	
SR 2025 CONSTRUCTION	115+44.27	PI	359444.5866	2679683.0681		
28	117+36.78	PT	359337.1582	2679843.1593	S58°08′12"	
SI	123+63.29	PC	358988.0586	2680363.3920	330 00 12	
6	124+72.50	PΙ	358927.2067	2680454.0744		
ا	125+81.65	PT	358861.6136	2680541.3887	S53°05′06"	
	130+00.00	POT	358610.3528	2680875.8552		
2025 /EY @	645+00.00	POT	358442. 3111	2681099.5445	NE ZO OF LOCAL	
202	655+65.00	POT	359081.9804	2680248.0469	N53°05′06″	
SR 2 SURVI						
SUS						
	198+00.00	POT	358431.8994	2679401.1556		
	202+67.05	PC	358690.2724	2679790.2312		
	204+12.89	ΡI	358770.9489	2679911.7193		
₩	205+56.68	PT	358882.9619	2680005.1064		
28	207+10.14	PC	359000.8305	2680103.3755		
SR 4202 CONSTRUCTION	209+13.08	PI	359156.7049	2680233.3306		
² ∑	211+14.64	PT	359283.2977	2680391.9479	<u>.</u>	
SE	214+69.80	PC	359504.8449	2680669.5404	N51°24′24" N48°42′56"	
Š	216+57.70	PI	359622.0552	2680816.4016		
ပ	218+45.53	PT	359746.0312	2680957.5979		
Ì	221+66.75	PI	359957.9690	2681198.9740		
	222+73, 29	POT	360027.5318	2681279.6403	N47°29′31"	
	97+42.51	POT	357507.0662	2677886, 4881	== =:	
	99+26.59	PC	357655.7069	2677995.0762	N36°08′59″	
	101+84, 22	PI	357863.7373	2678147.0510		
	104+29.88	PT	357967.1551	2678383.0123	N66°19′59"	
69	110+12.74	PI	358201.1269	2678916.8502		
- 1	110+15.74	PI	358198.3890	2678918.0766	S24°07′43″	
R/W	110+12.74	EQNBK	358198.3901	2678918.0789		
∞	a 110+15.74	EQNAHD	358198, 3901	2678918.0789		
	a 113+76.19	PC	358346.9628	2679249.7743	N65°52′17"	
NEY	a 114+55.23	PI	358379. 2714	2679321.9048		
SURV	a 115+33.90	PT	358422. 9941	2679387.7454		
	a 120+12.42	PC	358687.7115	2679786. 3748	N56°24′47"	
4202	a 120+92.08	PI	358731.7775	2679852.7324		
	a 121+71.48	PT	358784, 5982	2679912. 3572	N48°27′46"	
SR	a 126+19.95	PI	359081.9804	2680248. 0469	7, 10 21 40	
·	a 140+19.32	PC	360027.5318	2681279.6403	-	
	a 141+46.98	PI	360027.3378	2681373.7446	1171 23 31"	
- 1						
	a 142+73.96	PT	260182.0461	2681481.6162	N57°40′31"	

MPUTATIONAL PURPOSES WO (2) PLACES.

		., , , , , , , , , , , , , , , , , , ,	NORTH EA
	100+00.	00 POT	360271.8122 267838
	102+59.	99 PC	360159.9521 267862
	107+54.	88 PI	359947.0327 267906
	112+44.	99 PT	359633.9320 267945
	மு <mark>த்</mark> 113+51.	47 PC	359566.5638 267953
∠S64°31′01"E	8E 115+44.		359444.5866 267968
SR 2025 CONSTRUCTION &	NS 117.70		359337.1582 267984
/ STA 101+80.36 OFF 0' RT=	123+63.		358988.0586 268036
/ SR 1006 SURVEY & CONSTRUCTION & STA a 26+56.39, OFF 0' RT	124+72.		358927.2067 268045
STA d 26+56.39, OFF O' RT	125+81.		358861.6136 268054
POT®//	130+00.		
SR 1006 SURVEY & \ \ \ / \	 		358610.3528 268087
CONSTRUCTION &	55 645+00.		358442. 3111 268109
	855+65.	00 P0T	359081.9804 268024
FOR SR 1006 SURVEY & CONSTRUCTION B GEOMETRY DATA, SEE SHEET 8	SV.RI		
GEOMETRY DATA, SEE SHEET O			
†	198+00.		358431.8994 267940
\leftarrow \downarrow δ	202+67.		358690.2724 267979
2025-1	204+12.		358770.9489 267991
$\overline{}$	205+56.	68 PT	358882.9619 268000
	207+10.	14 PC	359000.8305 268010
	209+13.	08 PI	359156.7049 268023
$\downarrow\uparrow$	211+14.	64 PT	359283.2977 268039
	SS 214+69.	80 PC	359504.8449 268066
	8 216+57.	70 PI	359622.0552 268081
SR 4202 CONSTRUCTION B F SD 2005	218+45.		359746.0312 268095
STA 208+45. 73 = STA 208+45. 73 = STA 208-45. 73 = STA 2025 CONSTRUCTION & CONSTR	221+66.		359957.9690 268119
SR 2025 CONSTRUCTION & CONSTRUCTION &	222+73.		360027.5318 268127
31A 121730.03	97+42.5		357507.0662 267788
STA a 115+50.00, OFF 0.00' RT SR 4202 SURVEY & R/W B	99+26.		357655.7069 267799
SR 4202 SURVEY & R/W B SR 4202 CONSTRUCTION B	101+84.		357863.7373 267814
N36°08'59"E \ SR 4202 SURVEY - STA 198+00.00, OFF 0.00' RT= PC	104+29.		357967.1551 267838
$A = A \cdot $	440.40		358201.1269 267891
	1 1		358198. 3890 267891
2025-2			358198. 3901 267891
4202-1	770 720		
	1 . 0 , 7 0 , 7 0		358198. 3901 267891
EX-4202-3 EX-4202-3 EX-4202-3 EX-4202-3 EX-4202-3 EX-4202-1 STA 221+66.75, 0.00' RT=	à a 113+76		358346.9628 267924
SR 4202 CONSTRUCTION &	à a 114+55		358379. 2714 267932
SR 4202 CONSTRUCTION & STA 221+66.75, 0.00' RT= SR 4202 CONSTRUCTION & STA 221+66.75, 0.00' RT= SR 4202 CONSTRUCTION & STA 221+60.75, 0.00' RT= SR 4202 CONSTRUCTION & STA	ि <i>a 115+33</i>		358422. 9941 267938
SP 4909 SUPVEY & PAW R / 156 \	7 0 120+12 0 120+92		358687.7115 267978
	₩ a 120+92		358731.7775 267985
SR 4202 SURVEY & R/W R SR 4202 CONSTRUCTION B	a 121+71		358784 . 5982 267991
STA a 110+15.74, OFF 3' RT, AHD N56°24'47" FT STA 222+73.29, 0.00' RT= SR 4202 SURVEY & R/W B SR 4202 SURVEY & R/W B	vi a 126+19	. 95 PI	359081.9804 268024
SIA a 140+19.32, OFF 0.00' RI	a 140+19	. 32 PC	360027.5318 268127
N56° 24′ 47 "E	a 141+46	.98 PI	360113.7871 268137
N48°27′46"E	a 142+73	7. 96 PT	260182.0461 268148
	a 165+66	.63 POT	361407.9801 268341
PC 4202-2 N47°29'31"E 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NOTE: FOUR (4)	PLACE COORDINA	TES ARE USED FOR COMP
SR 2025 CONSTRUCTION B STA 122+11.60= SR 4202 SURVEY & R/W B STA 0 126+19.95 = SR 2025 SURVEY & R/W B SR 2025 SURVEY & R/W B	ONLY AN	D DO NOT IMPLY A	PRECISION BEYOND TWO
SR 2025 CUNSTRUCTION 65 STA 126+19.95 = STA 2 126+19.95 = STA 2 025 SURVEY & R/W B STA 4202 SURVEY & R/W B STA 655+65.00			
SR 4202 SURVEY & R/W E	155 1"E		
107 40/3	3/1/55		
2025-3	2 +	+ 0	<i>L</i> ,
% 553° 05′ 06 "E		+ + 0 160	<i>log</i>
		+	
\uparrow .			+- 164
Ξ			ĕ
SR 2025 SURVEY & R/W &			
SR 2025 CONSTRUCTION B \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
SCALE STA 131+00.00.00.0FF 0' RT= SR 2025 SURVEY & R/W & POT			
SR 2025 SURVEY & R/W B 0 250 500 FEET STA 646+79.78, OFF 0' RT=			
31A 040713.10, UFF U RI=			
		GEOM	ETRY PLAN

SUMMARY OF CURVE DATA

		00	1117 (1 (1) 0)			
	1006-1	1006-2	1006-3	1006-4	0152-1	0152-2
PI STA	9+79.98	21+84.88	a 30+29.55	a 35+74.00	11+25.16	14+14.24
DELTA	11°32′47" LT	31°34′00" LT	9°57′04" RT	8° 44′ 51" RT	17°08′10" LT	1°41′43" LT
Т	36.28	323.90	182.82	151.82	50.91	64.11
L	72.31	631.34	364.73	303.06	101.06	128, 21
R	358.82	1145.92	2100.00	1985.00	337.89	4333.00
E	1.83	44.90	7.94	5.80	3, 81	0.47
SE	NC	5.20%	3.80%	EX SLOPE	EX SLOPE	EX SLOPE
PCC STA						
PC STA	9+43.70	18+60.98	a 28+46.73	a 34+22.18	10+74.25	13+50.13
PT STA	10+16.01	24+92.31	a 32+11.46	a 37+25.24	11+75.31	14+78.34
PCC STA						

SUMMARY OF PROJECT COORDINATES BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE), NAD DATUM 1983

RTE	STATION	POINT	COORD	INATES	BEARINGS
KIE	STATION	FOINI	NORTH	EAST	DEANTINGS
≪	8+00.00	POT	<i>357848.1950</i>	2677200.5863	
ΕY	10+74.25	PC	358088.4094	2677068. 2549	N28°51′00"W
£ €	11+25.16	PΙ	<i>358132.9992</i>	2677043.6909	
SU N	11+75.31	PT	358168.3719	2677007.0794	N45°59′09"W
52 SURVI	13+50.13	PC	358289.8417	2676881.3557	N43 33 03 W
015	14+14.24	PΙ	358334. 3887	2676835. 2487	
	14+78.34	PT	358377.5521	2676787.8438	N47°40′53"W
SR	19+37.82	POT	358686.8994	2676448.0986	11 10 33 W
ΕT	50+00.00	POT	358332.7290	2677319.9657	N47°24′43"W
AR ON	52+50.00	POT	358501.9099	2677135.9064	N41 24 45 W
S.					
TC ON					
IZE					
ES.					
CHESTNUT CONSTRUCT					
T-69	0+00.00	POT	358338.0479	2677326.2076	N47°24′43"W
STRE! R/W	7+05.67	POT	<i>358815.5896</i>	2676806.6692	N4/ 24:45"W
7 %					
TN!					
ES					
CHESTNUT SURVEY 8					

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.

SUMMARY OF PROJECT COORDINATES BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE), NAD DATUM 1983

RTE	CTATION	STATION POINT		COORDINATES		
KIE	STATION	PUINI	NORTH	EAST	BEARINGS	
	-0+06.22	POT	358108.1911	2677056.4613	N49°33′54"E	
	<i>3+60.29</i>	PΙ	358345.9070	2677335. 4306		
49	9+43.70	PC	358736.7851	2677768.5322	N47°56′00"E	
0 /	9+79.98	PΙ	358761.0913	2677795. 4639		
7.1	10+61.01	PT	358790.2963	2677816.9855	N36°23′13"E	
SAC	18+60.98	PC	359470.5167	2678318. 2493	N36 23 13 E	
175	21+84.88	PΙ	359731.2673	2678510.4000		
CONSTRUCTION	24+92.31	PT	360054.0240	2678537.6178		
_	25+76.61	EQNBK	360138.0250	2678544.7016	N4°49′13"E	
∞	a 26+00.00	EQNAH	360138.0250	2678544.7016	N4-49-13"E	
Ēζ	a 27+09.32	PΙ	360246.9542	2678553.8876		
SURVEY	a 27+99.99	PΙ	360337.3085	2678561.5072		
วร	a 28+46.73	PC	360383.8606	2678565.6690	N5°06′32″E	
90	a 30+29.55	PΙ	360565.9577	2678581.9488		
1006	a 32+11.46	PT	360742.5021	2678629.4515	N15°03′36"E	
SR	a 34+22.18	PC	360945.9849	2678684.2025	N15-U3-36"E	
ν	a 35+74.00	PΙ	361092.5954	2678723.6509		
	a 37+25.24	PT	361231.5012	2678784.9373	N23°48′27"E	
	a 44+47.81	POT	<i>361892</i> . <i>5907</i>	2679076.6158		

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.

N23°48'27"E ✓ SR 0152 SURVEY & R/W ₽ N15°03′36″E-N47°40′53"W -1006-4 -CHESTNUT STREET SURVEY & R/W & N5°06′32"E¬ N4°49′13″E ~N47°24′43"W 1006-3 N4°49′13″E 0152-2 SR 2025 CONSTRUCTION & STA 101+80.36 OFF 0' RT=
SR 1006 SURVEY & CONSTRUCTION & STA a 26+56.39, OFF 0' RT 1006-2 N45°59′09"W ~ N47°24′43"W-SR 1006 SURVEY & CONSTRUCTION & STA 25+76.61 BK = SR 1006 SURVEY & CONSTRUCTION & STA d 26+00.00, AHD CHESTNUT STREET CONSTRUCTION B 1006-1 SR 2025
© CONSTRUCTION B SR 1006 SURVEY &-CONSTRUCTION B 0152-1 N36°23′13"E N49°33′54"E FOR SR 2025 CONSTRUCTION & GEOMETRY DATA, SEE SHEET 7 POT -N47°56′00″E N28°51′00"W¬ SR 1006 SURVEY & CONSTRUCTION & STA 3+48.18 = CHESTNUT SURVEY & R/W B STA 00+0.00 SR 1006 SURVEY & CONSTRUCTION & STA 3+39.38 = CHESTNUT STREET CONSTRUCTION & STA 50+00.00 <u>SCALE</u> SR 1006 SURVEY & CONSTRUCTION & STA -0+6.22 = 150 SR 0152 SURVEY & R/W ₺ STA 10+97.29 GEOMETRY PLAN

ROUTE SECTION SHEET

002

8 OF 54

2025

4202

1006 4003 CHALFONT BORO, NEW BRITAIN TWP & NEW BRITAIN BORO
REVISION REVISIONS DATE BY

DISTRICT

6-0

COUNTY

BUCKS

SUMMARY OF PROJECT COORDINATES BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE), NAD DATUM 1983

	COORDIN	ATE SYSTEM (S	OUTH ZONE), N	AD DATUM 1983		
RTE	STATION	POINT	COORD	BEARINGS		
KIE	STATION	POINT	NORTH	EAST	DEANTNOS	
B	0+00.00	POT	364756.6827	2679426.2916	N50°48′20"W	
≥	0+06.17	PΙ	364760.5847	2679421.5063		
4003 & R/W	8+60.00	POT	365281.2167	2678744.7780	N52°25′39"W	
4%						
SR SURVEY						
18						
-						
, 49a	69+24.84	POT	364277.3325	2679676.7763	N15°44′42"W	
ERRY R/W	72+36.90	PΙ	364577.6823	2679592.0980	N25°56′42"W	
FE	73+17.64	PΙ	364650.2850	2679556.7737	N50°48′20"W	
8,8	74+86.00	PΙ	364756.6827	2679426, 2916	N53° 48 ′ 59 "E	
PARK SURVEY	80+00.00	POT	<i>365060.1353</i>	2679841.1560	N53 48 759 "E	
J.P.A.						
1003 B	600+00.00	POT	365492.7605	2678460.3218	S53° 05′ 15 "E	
4 d	605+77.82	PC	365145.7261	2678922.3183	333 03 13 L	
1006 / SR 4 ONSTRUCTION	607+60.10	ΡI	365036.2500	2679068.0607		
ST	609+42.23	PT	364917.0195	2679205.9372	S49° 08′ 53 "E	
L'SI	613+37.69	PC	364658.3507	2679505.0585	0.000000	
ST	614+58.78	PI	364579.1400	2679596.6568		
2 8	615+72.86	PT	364462.4250	2679628.9398	S15° 27′ 41 "E	
SR	617+77.97	POT	364264.7439	2679683.6179		
₩	805+00.00	POT	364748.4126	2679400.9122	N55° 18′ 40 "E	
JAC I	810+08.68	POT	365037.9132	2679819.1765		
FERRY ROAD						
~∑						
ST						
^L 8						
0						
ÉY,	0+00.00	POT	364909.5328	2678842.7321	N46°25′18"E	
7-439 SURV & R/W B	2+37.69	POT	<i>365073.3837</i>	2679014.9237		
188						
39						
1,20						
			•			

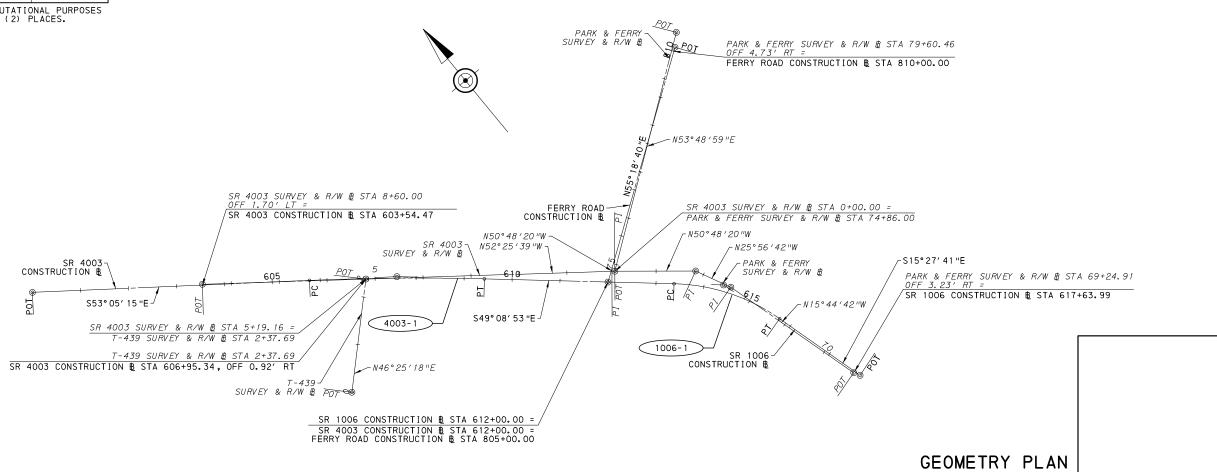
NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.

SUMMARY OF CURVE DATA

	4003-1	1006-1		
PI STA	607+60.10	614+58.78		
DELTA	3°56′22" RT	33°41′12" RT		
T	182.28	121.10		
L	364.42	235.18		
R	5300.00	400.00		
E	3.13	17.93		
SE	NC	6.00%		
PCC STA				
PC STA	605+77.82	613+37.69		
PT STA	609+42.23	615+72.86		
PCC STA				
	•	•		

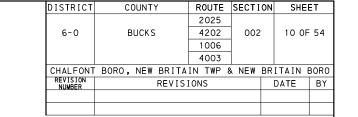
STRICT	COUNTY	ROUTE	SECTION	SHEET
		2025		
6-0	BUCKS	4202	002	9 OF 54
		1006		
		4003		

CHALFONT	BORO,	NEW	BRITA	ΙN	TWP	&	NEW	BR	ITAIN	BORO
REVISION NUMBER			REVIS:	ION	S				DATE	BY

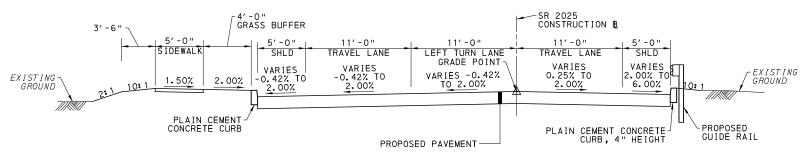


200 FEET

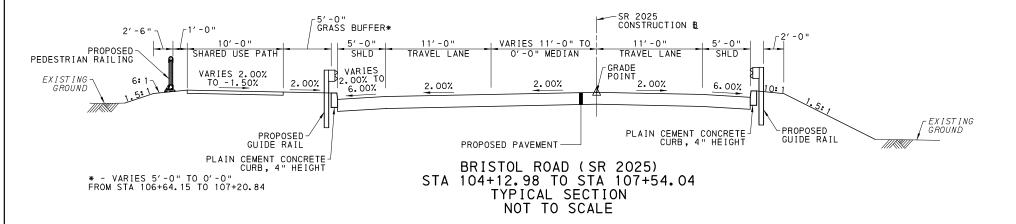
100

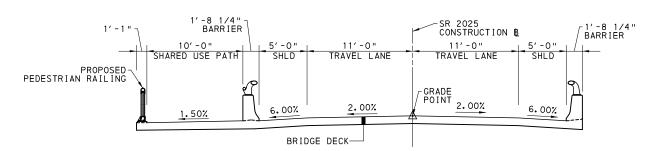


NOTE: PROPOSED PAVEMENT SECTION TO BE DETERMINED

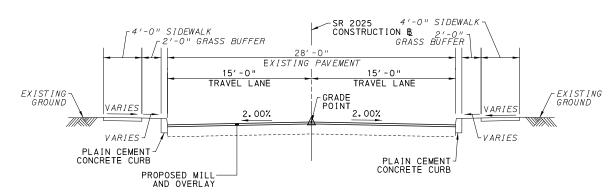


BRISTOL ROAD (SR 2025)
STA 101+99.60 TO STA 104+12.98
TYPICAL SECTION
NOT TO SCALE

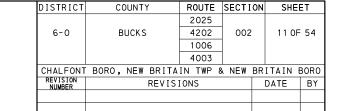




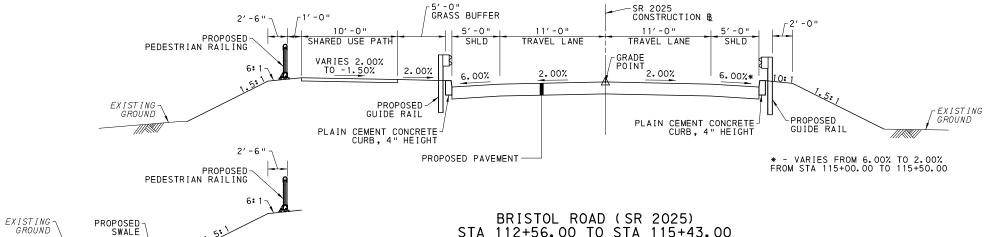
BRISTOL ROAD (SR 2025)
STA 107+54.04 TO STA 112+56.00
TYPICAL BRIDGE SECTION
NOT TO SCALE



BRIDGEWATER COURT
STA 100+00.00 TO STA 101+57.65
TYPICAL SECTION
NOT TO SCALE



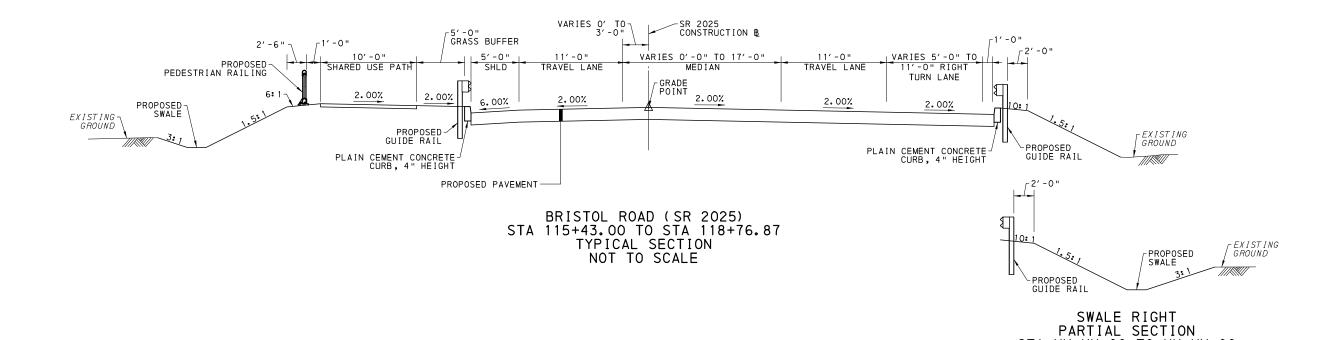
NOTE: PROPOSED PAVEMENT SECTION TO BE DETERMINED



BRISTOL ROAD (SR 2025) STA 112+56.00 TO STA 115+43.00 TYPICAL SECTION NOT TO SCALE

SWALE LEFT
PARTIAL SECTION
STA XX+XX.00 TO XX+XX.00 NOT TO SCALE

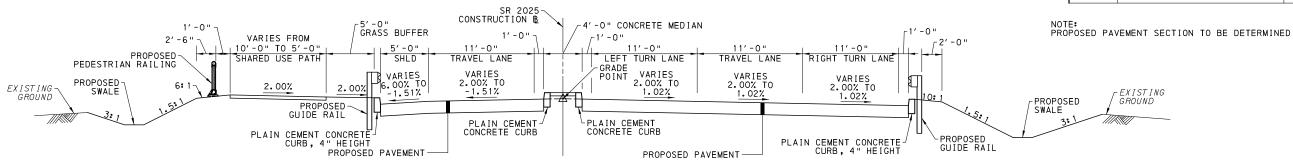
PROPOSED SWALE



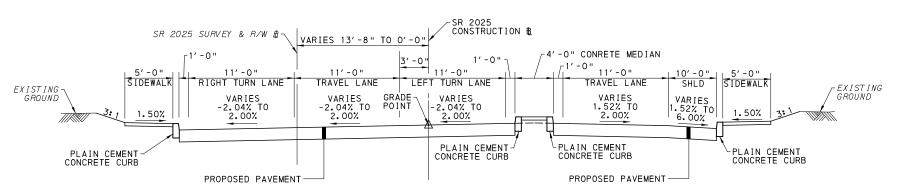
TYPICAL SECTIONS

STA XX+XX.00 TO XX+XX.00 NOT TO SCALE

DISTRICT	COUNTY	ROUTE	SECTION	SHE	ET
		2025			
6-0	BUCKS	4202	002	12 OF	54
1		1006			
1		4003			
	BORO, NEW BRITA	IN TWP 8	& NEW BR	ITAIN I	30R0
REVISION NUMBER	REVIS	IONS		DATE	BY



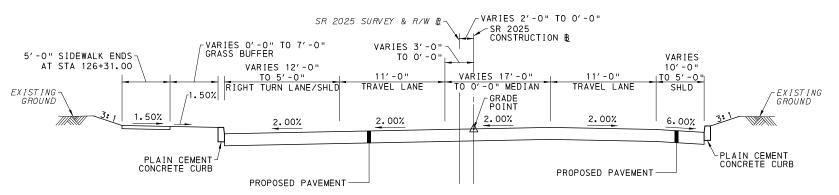
BRISTOL ROAD (SR 2025) STA 118+76.87 TO STA 121+58.98 TYPICAL SECTION NOT TO SCALE



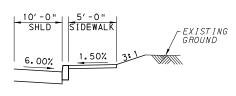
BRISTOL ROAD (SR 2025)
STA 121+58.98 TO STA 124+53.07
TYPICAL SECTION
NOT TO SCALE

DISTRICT ROUTE SECTION SHEET COUNTY 2025 BUCKS 13 OF 54 6-0 4202 002 1006 4003 CHALFONT BORO, NEW BRITAIN TWP & NEW BRITAIN BORO
REVISION REVISIONS DATE BY

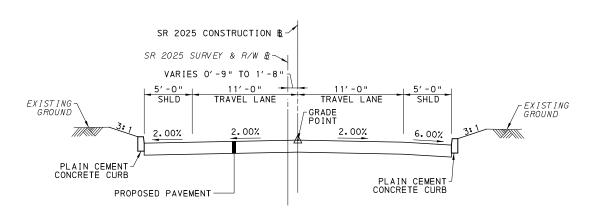
NOTE: PROPOSED PAVEMENT SECTION TO BE DETERMINED



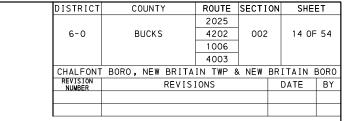
BRISTOL ROAD (SR 2025)
STA 124+53.07 TO STA 127+38.02
TYPICAL SECTION
NOT TO SCALE



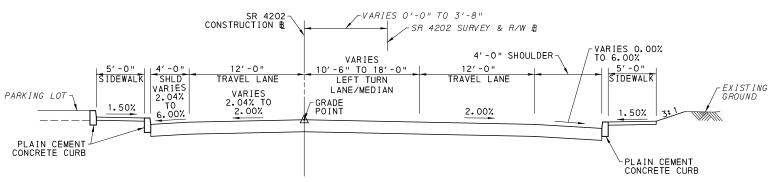
SIDEWALK RIGHT PARTIAL SECTION STA 124+53.07 TO 124+90.32 NOT TO SCALE



BRISTOL ROAD (SR 2025) STA 127+38.02 TO STA 129+50.00 TYPICAL SECTION NOT TO SCALE



NOTE: PROPOSED PAVEMENT SECTION TO BE DETERMINED

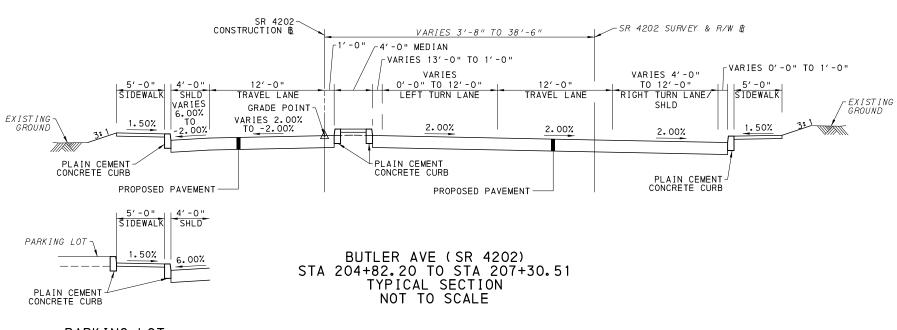


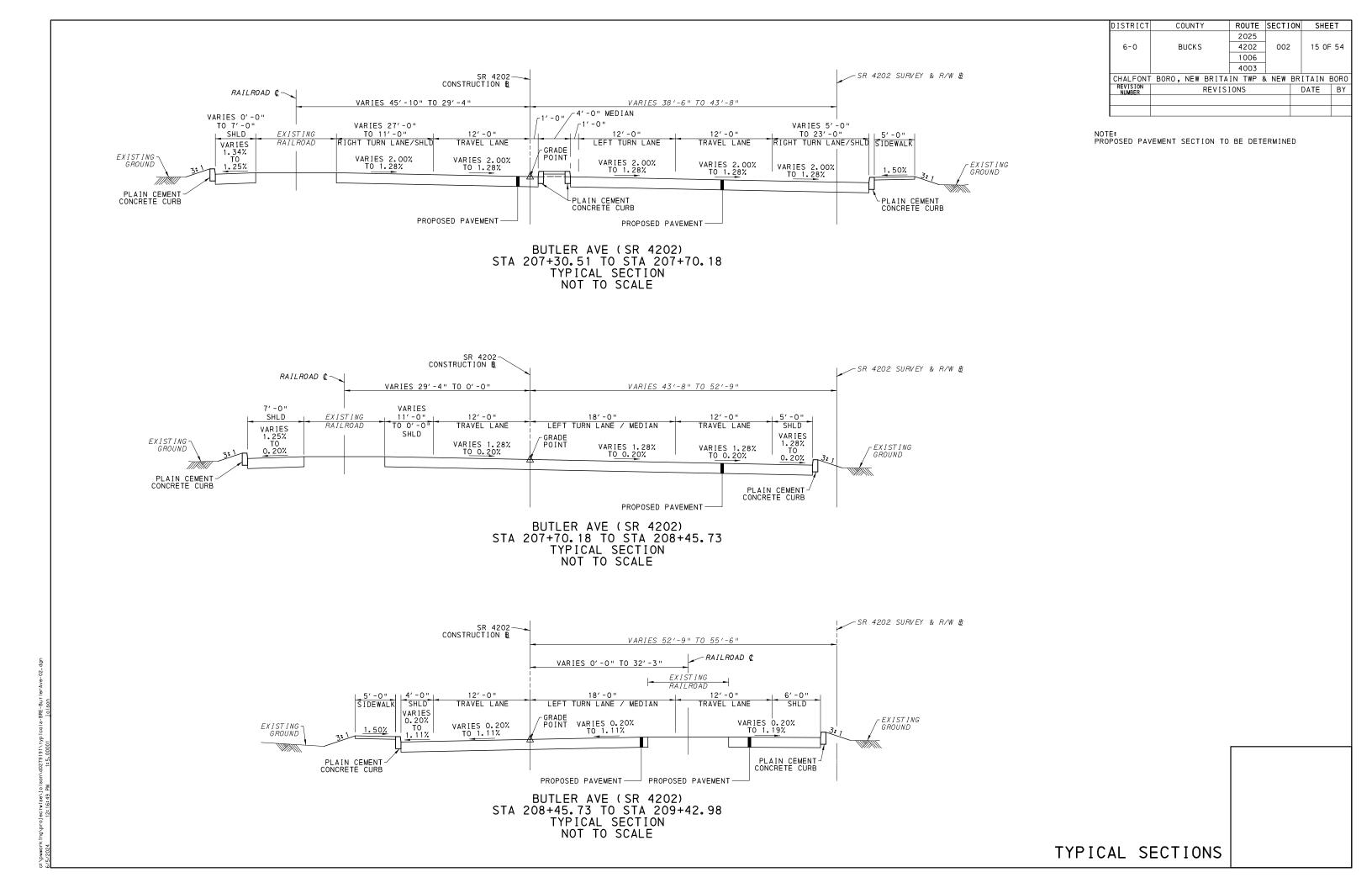
BUTLER AVE (SR 4202)
STA 202+75.00 TO STA 204+82.20
TYPICAL SECTION
NOT TO SCALE

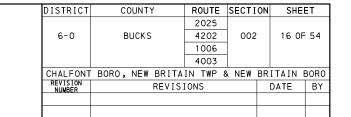
PROPOSED PAVEMENT

PROPOSED PAVEMENT

END CONDITION
PARTIAL SECTION
STA 202+75.00 TO 203+47.94

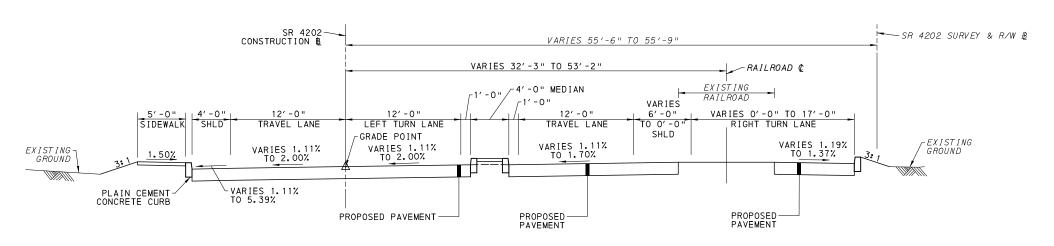




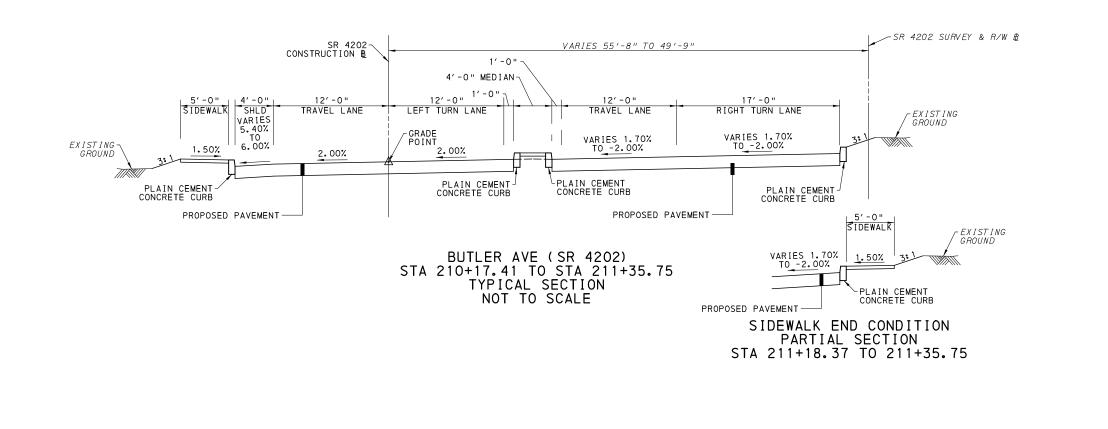


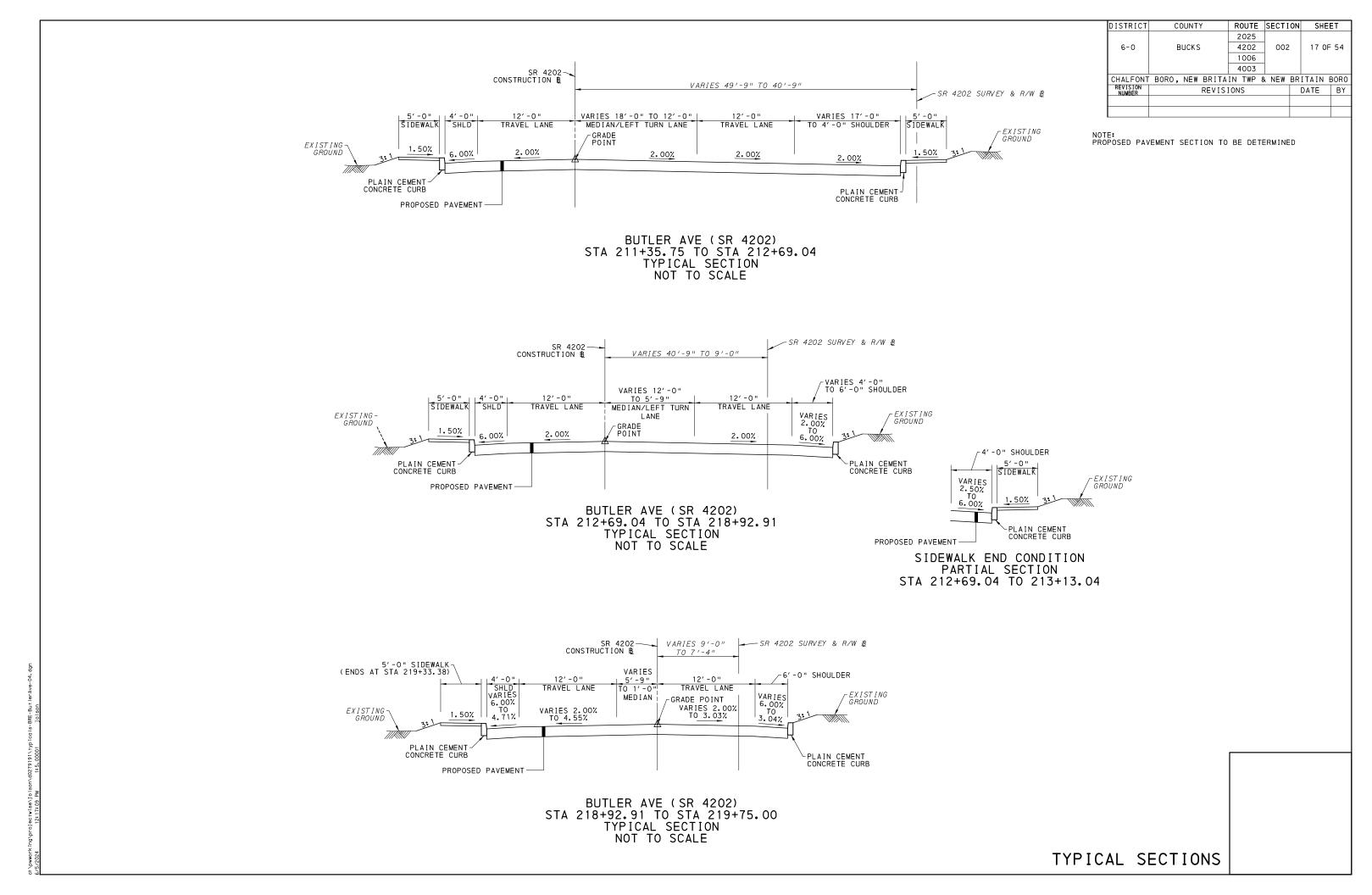
NOTE: PROPOSED PAVEMENT SECTION TO BE DETERMINED

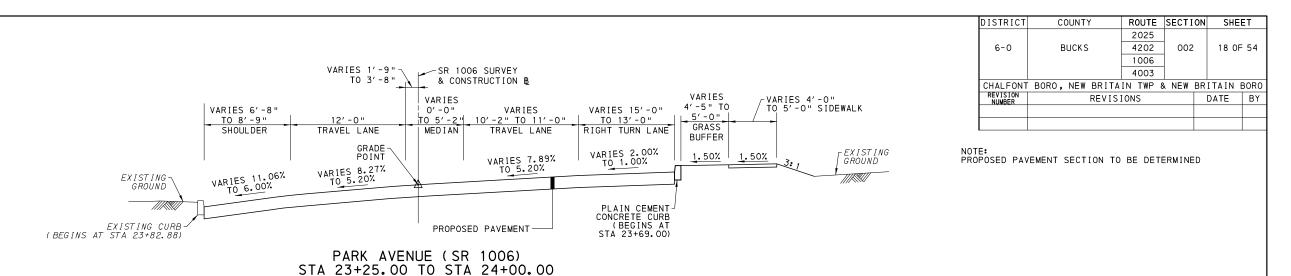
TYPICAL SECTIONS

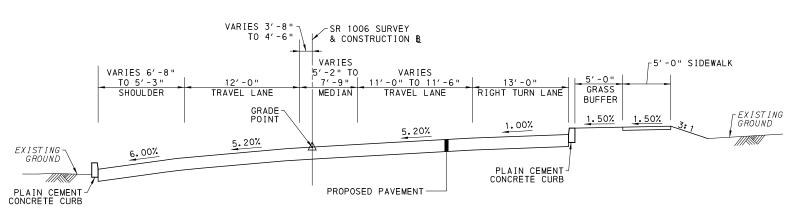


BUTLER AVE (SR 4202)
STA 209+42.98 TO STA 210+17.41
TYPICAL SECTION
NOT TO SCALE



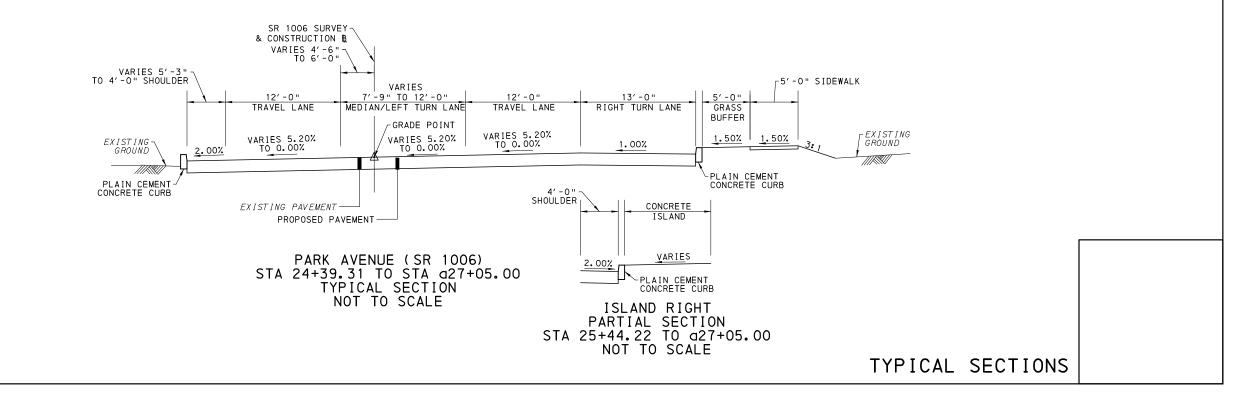


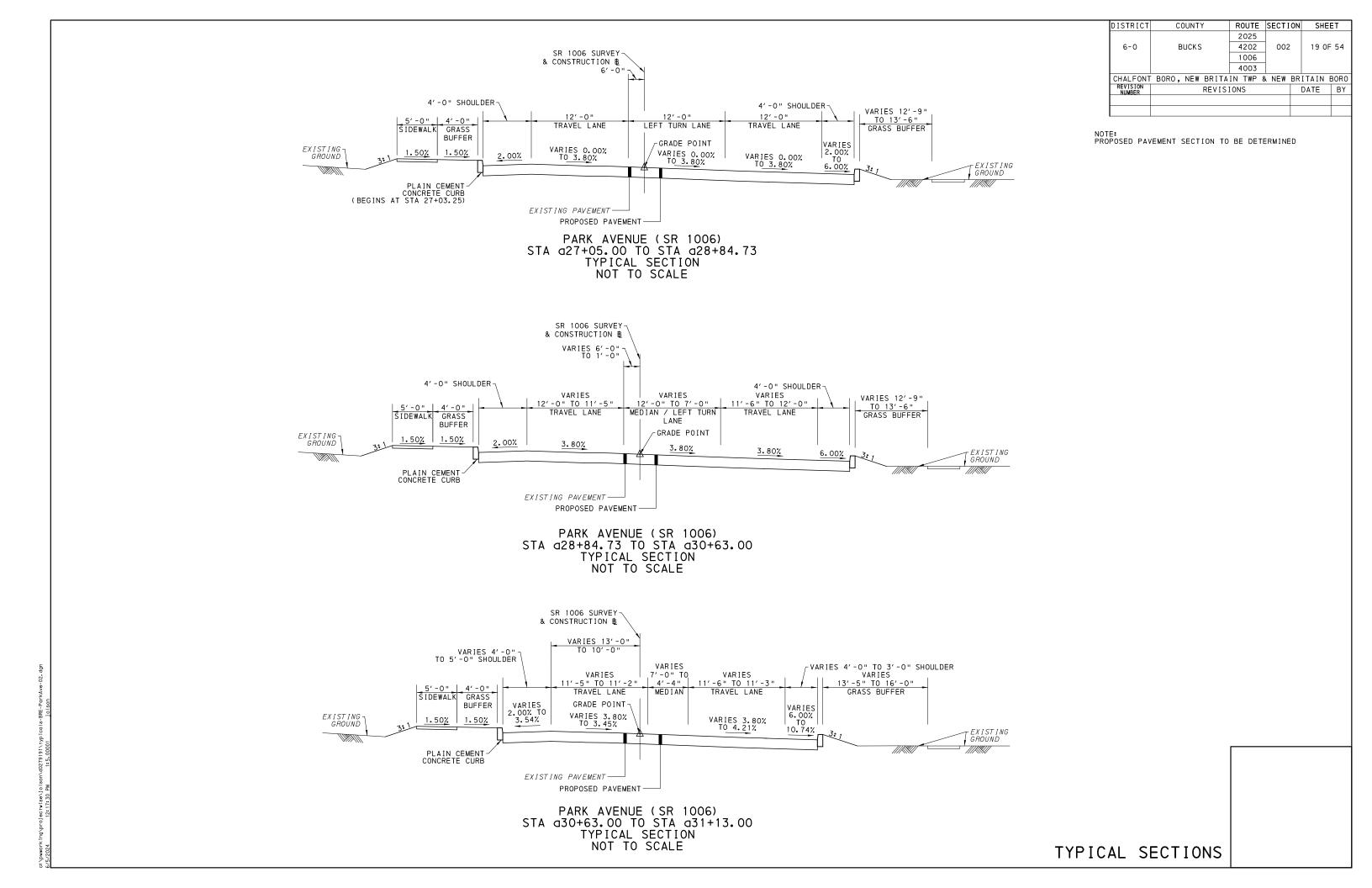


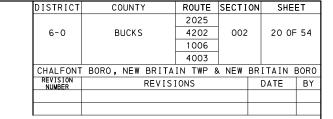


PARK AVENUE (SR 1006) STA 24+00.00 TO STA 24+39.31 TYPICAL SECTION NOT TO SCALE

TYPICAL SECTION NOT TO SCALE



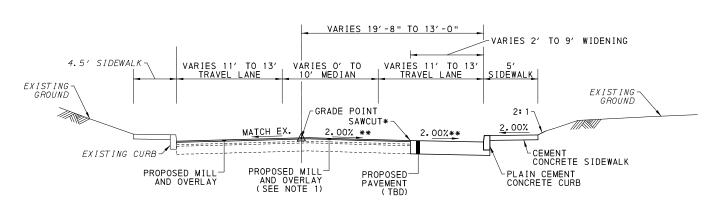




NOTES:

- * SAWCUT EXISTING PAVEMENT 2'-0" FROM THE FACE OF EXISTING CURB.
- 1. CORRECT CROSS SLOPE USING MILLING OF ASPHALT PAVEMENT SURFACE, VARIABLE DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR BETWEEN STATION 3+50.74 RT TO STA 5+50.00 RT.

PROPOSED PAVEMENT SECTION TO BE DETERMINED



PARK AVENUE (SR 1006)

STA 3+50.74 TO STA 6+00.00

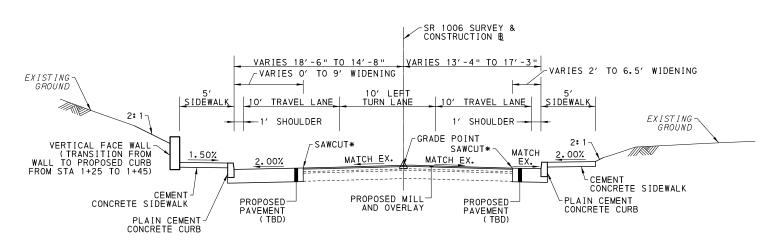
TYPICAL SECTION

NOT TO SCALE

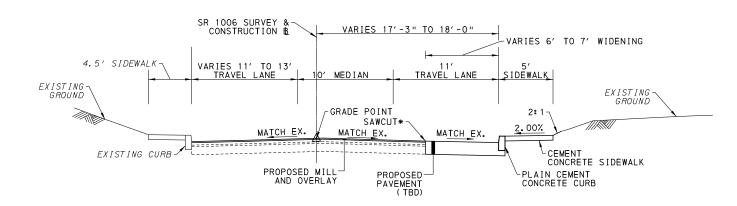
** - VARIES 0.20% TO 2.00% FROM STA 3+50.74 TO STA 4+00.74.

** - 2.00% FROM STA 4+00.74 TO STA 5+25.00 ** - VARIES 2.00% TO 2.98% FROM STA 5+25.00 TO STA 5+50.00.

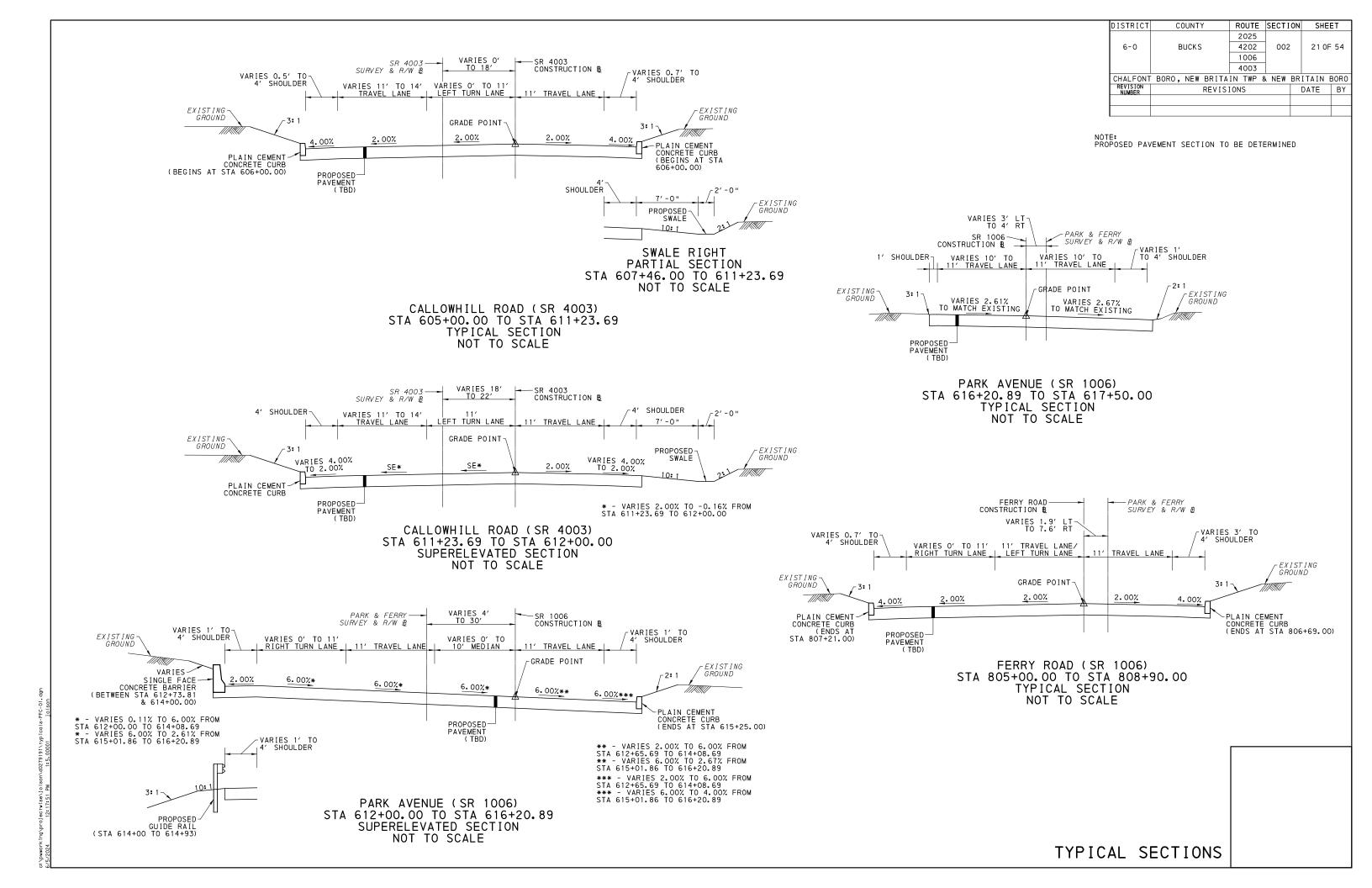
** MATCH EXISTING FROM STA 5+50.00 TO STA 6+00.00

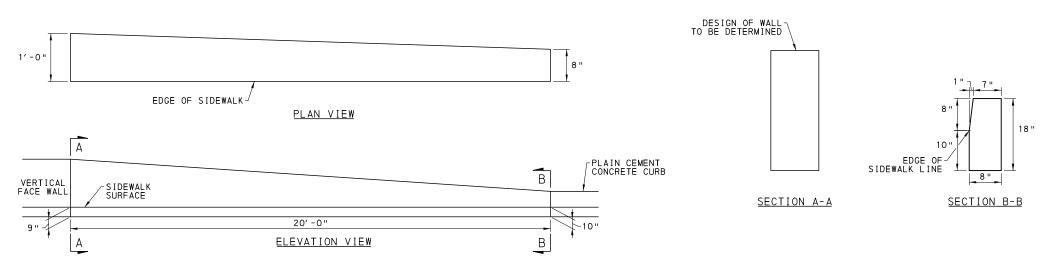


PARK AVENUE (SR 1006) STA 00+12.00 TO STA 3+26.26 TYPICAL SECTION NOT TO SCALE



PARK AVENUE (SR 1006) STA 3+26.26 TO STA 3+50.74 TYPICAL SECTION NOT TO SCALE





DISTRICT COUNTY ROUTE SECTION SHEET

| COUNTY |

NOTES:

- 1. FOR SLOTTED PLATE CONNECTION DETAILS, SEE STANDARD DRAWING RC-58M.
- 2. FOR DRAINAGE TREATMENT, SEE RC-58M.

VERTICAL WALL TRANSITION
TO PLAIN CEMENT CONCRETE CURB
(ITEM 9000-XXXX)
(NOT TO SCALE)

POST CAP

POST CAP

(TYP.)

3" TERMINAL
POST (TYP.)

STRETCH
BAR (TYP.)

PENNDOT CLASS A
CONCRETE

FILL WITH NO. 57
STONE FOR DRAINAGE

12" @ POST HOLE
TOP RAIL

TOP RAIL

TOP RAIL

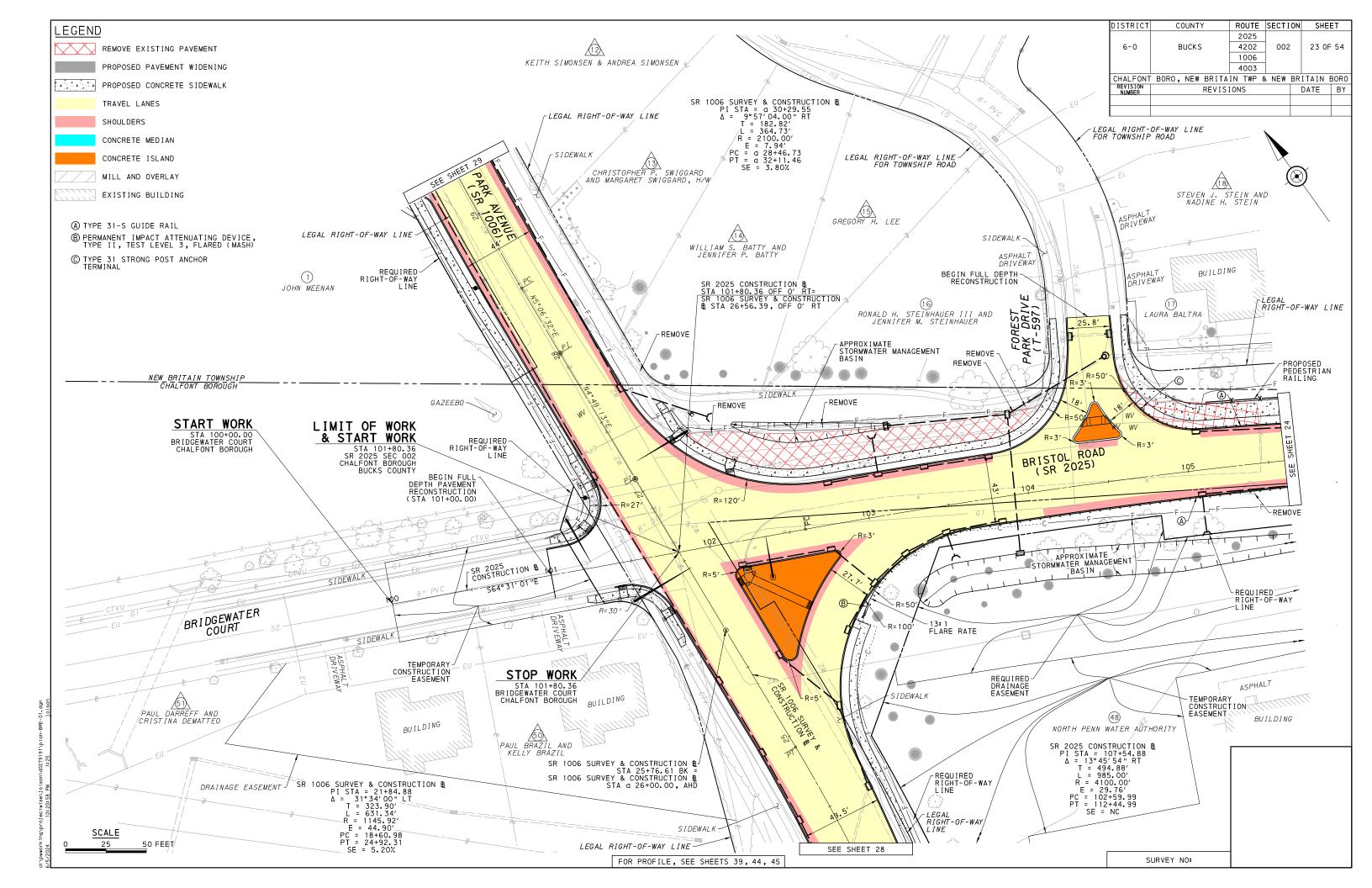
TOP RAIL

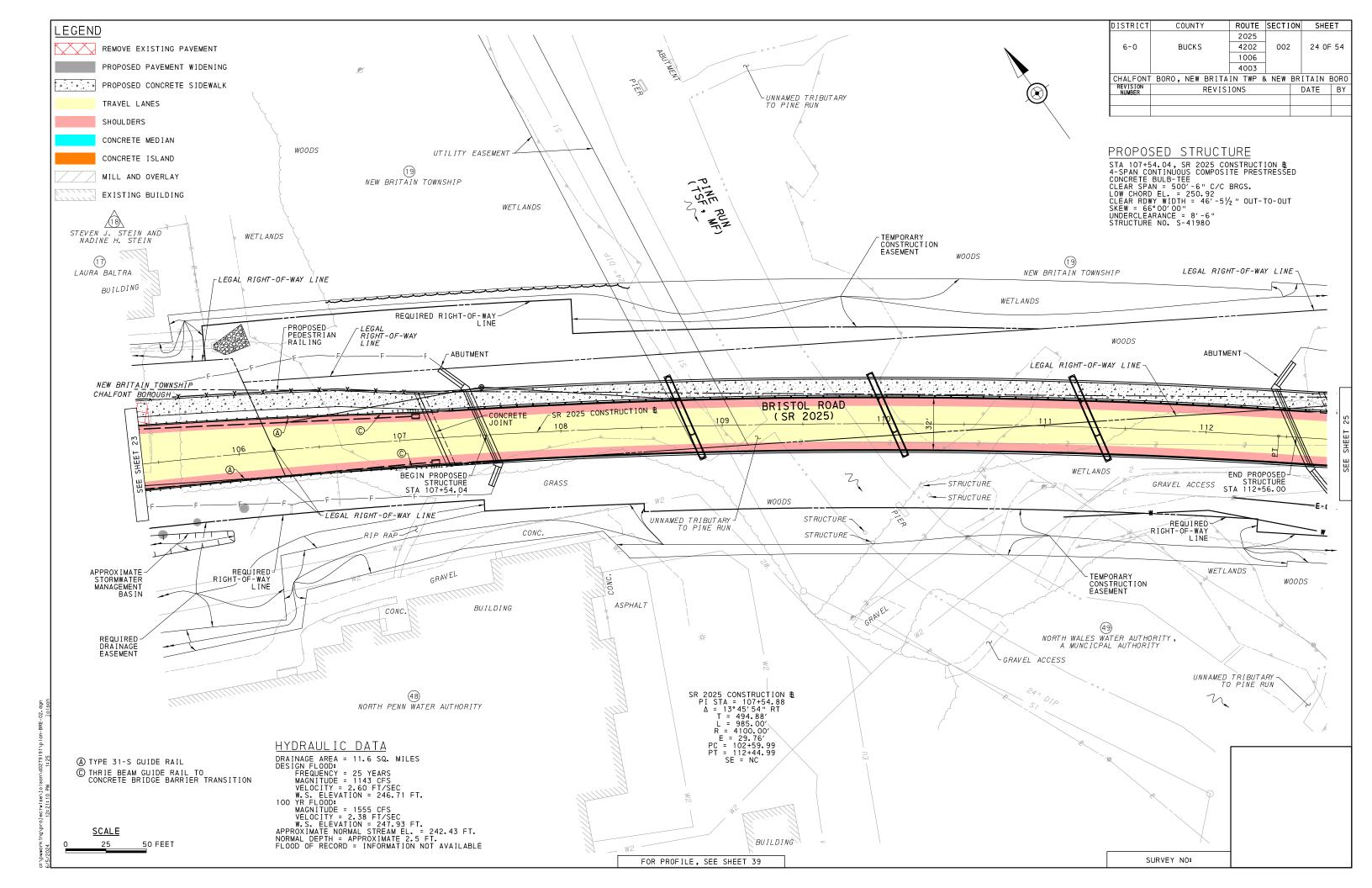
TENSION WIRE

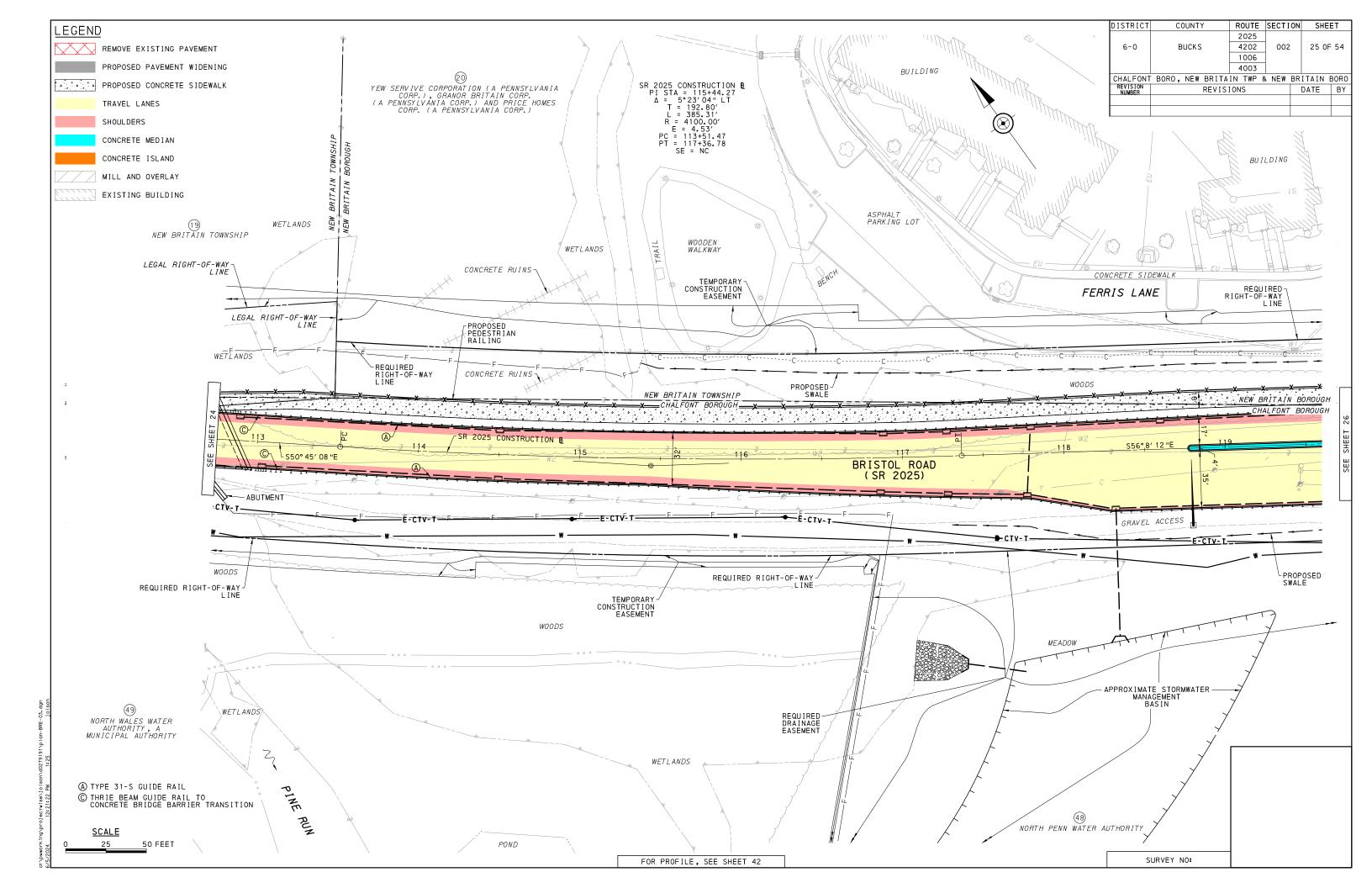
PEDESTRIAN RAILING (ITEM 9000-XXXX)

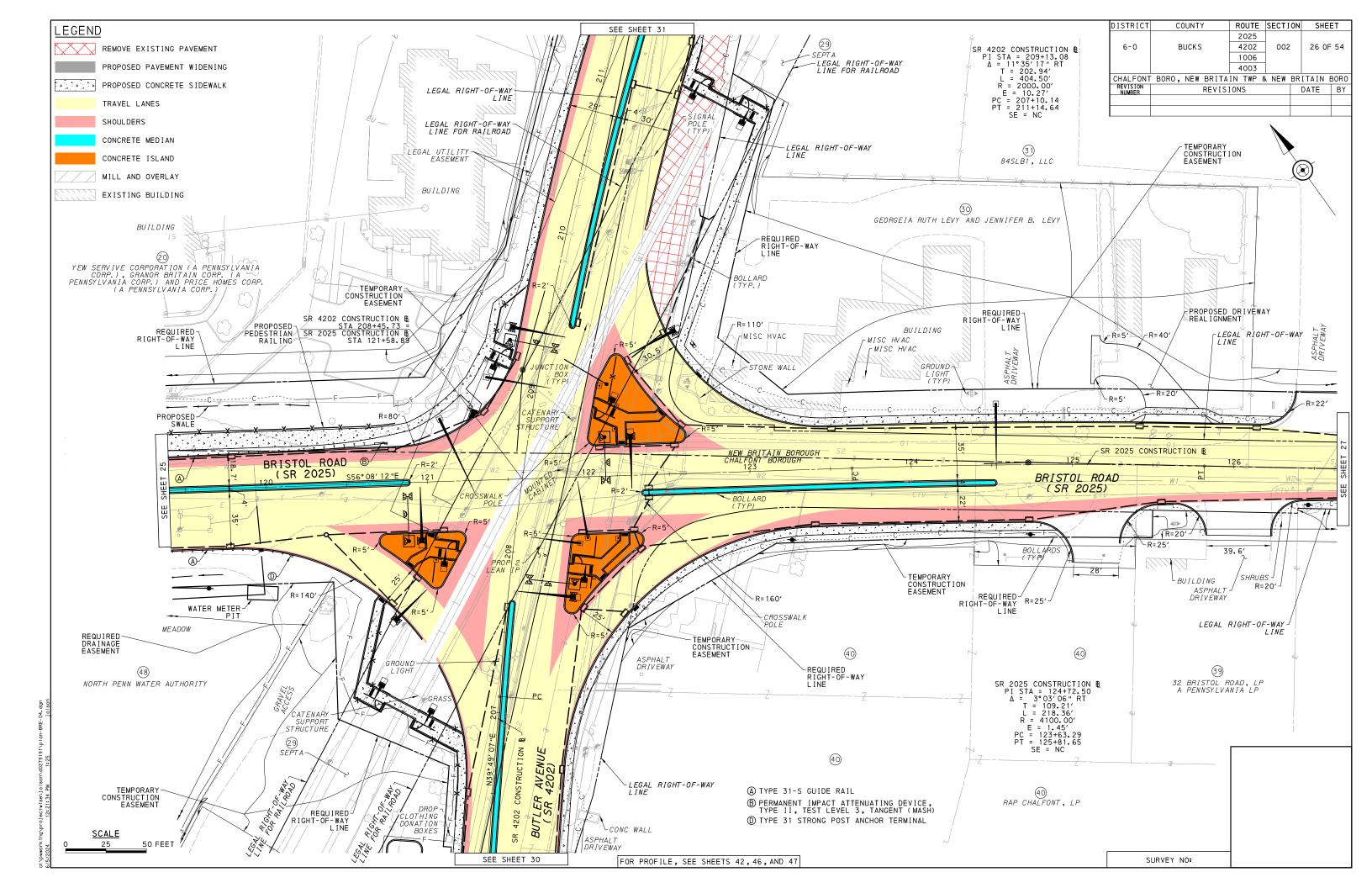
DETAILS

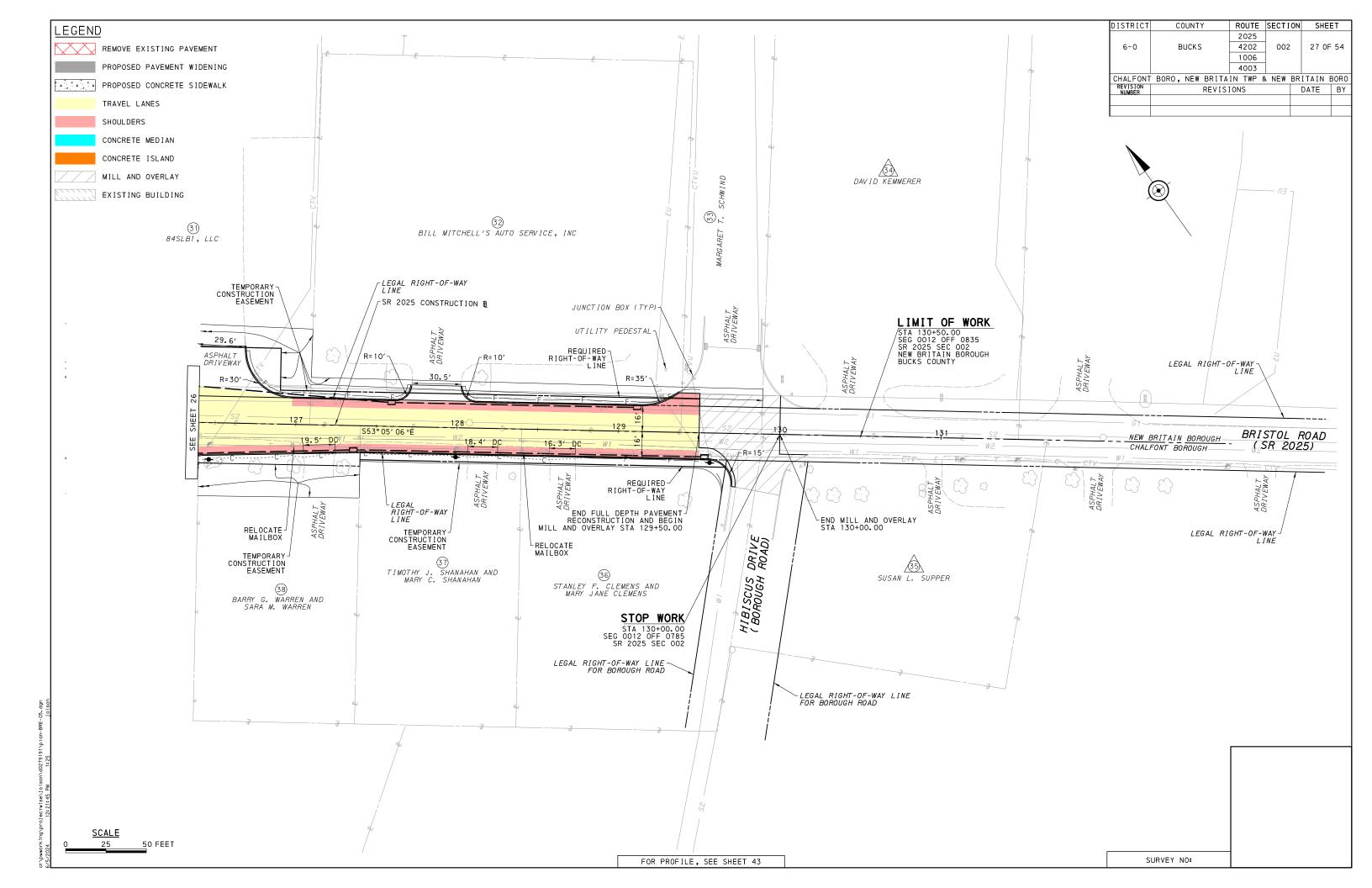
pwworking\projectwise\jolson\d0279191\details01.dgn



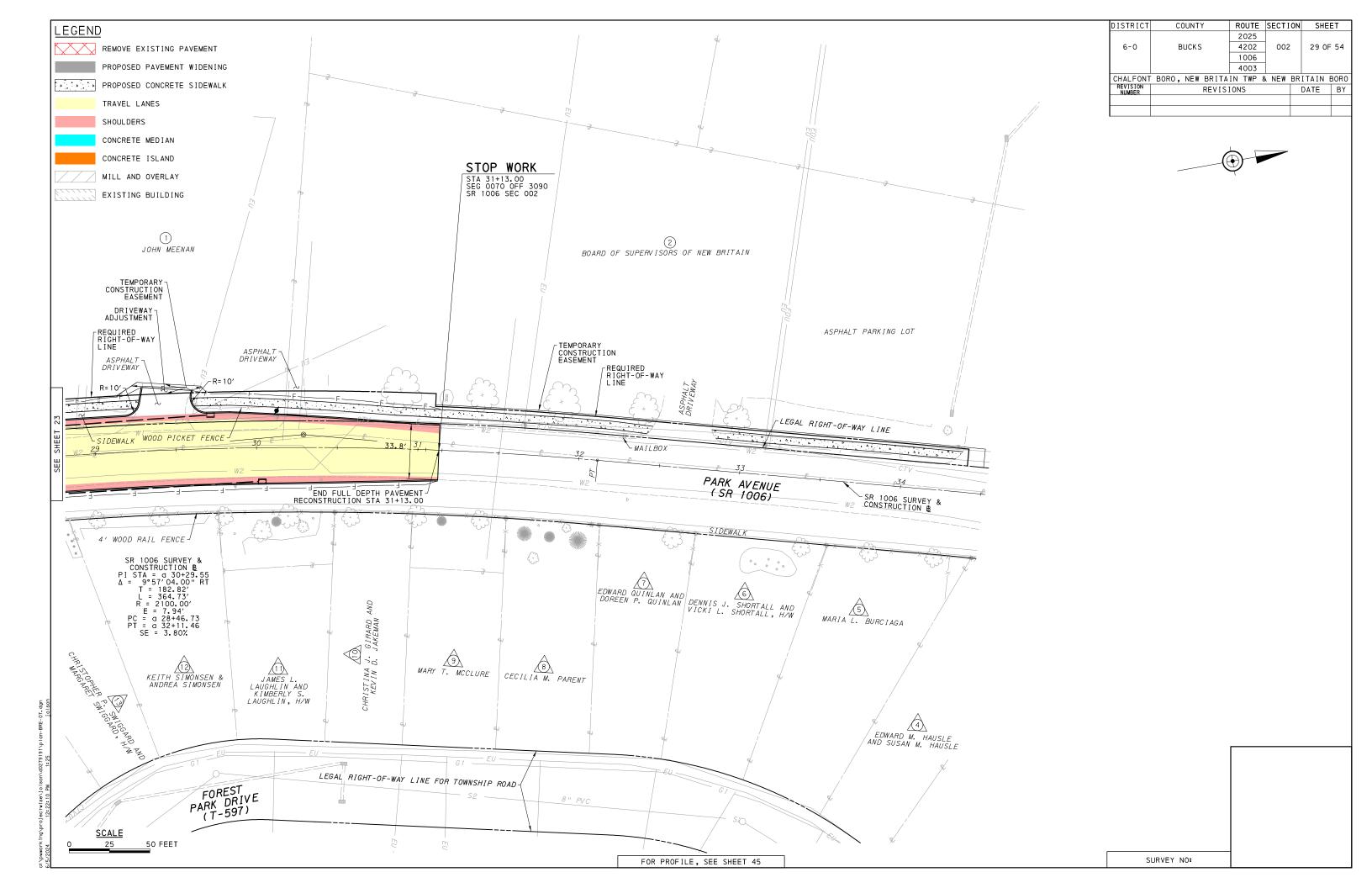


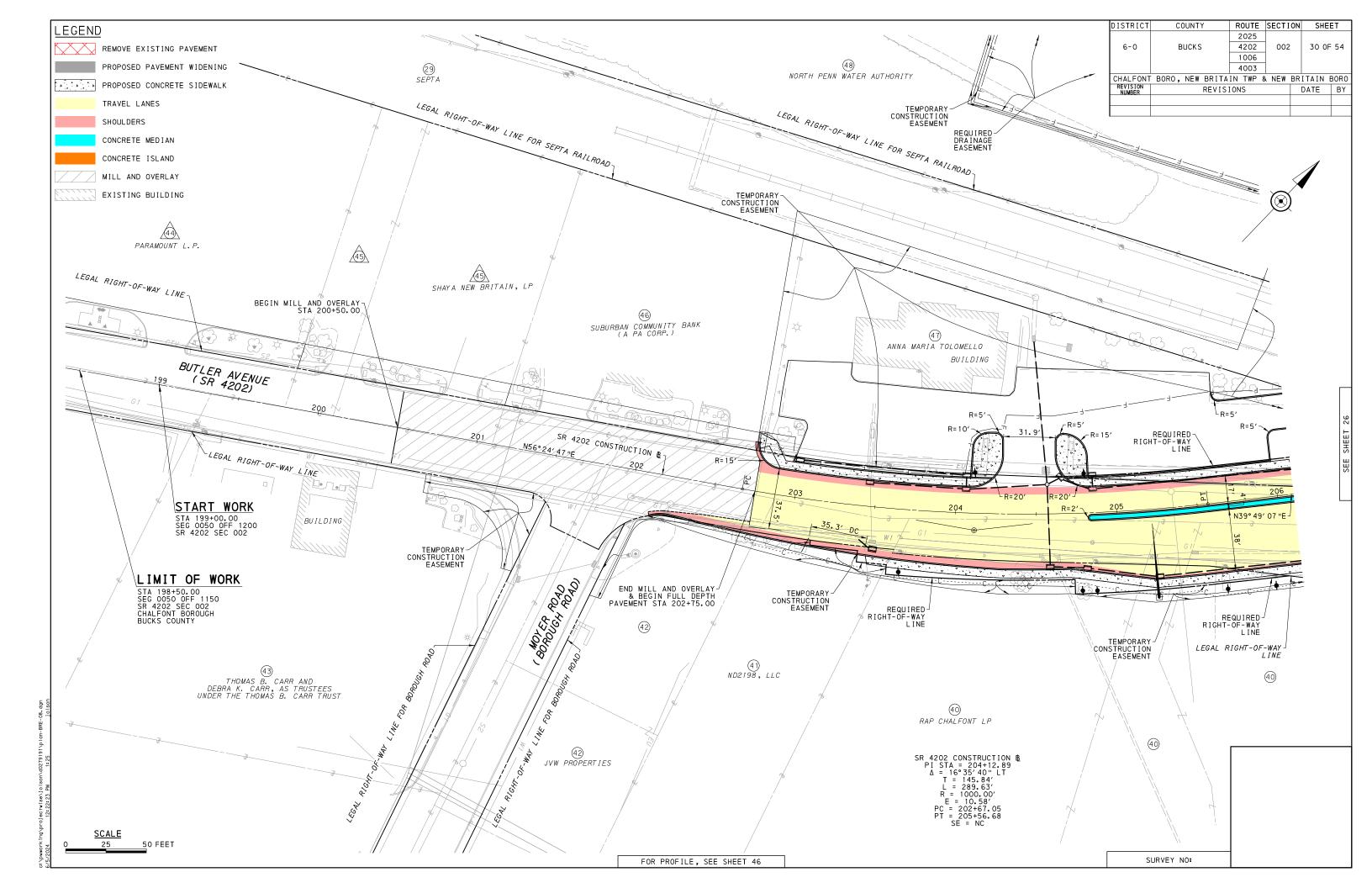


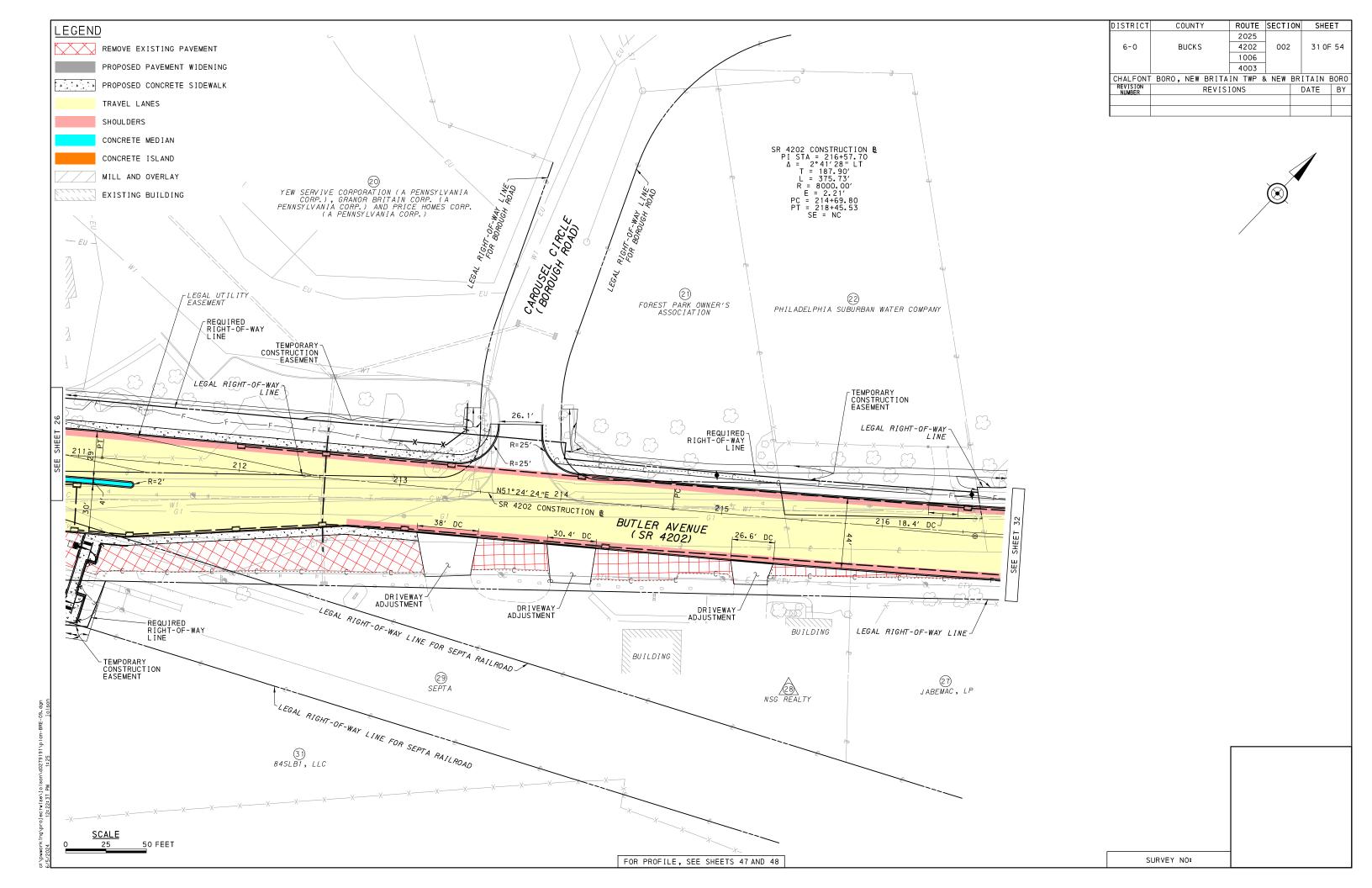


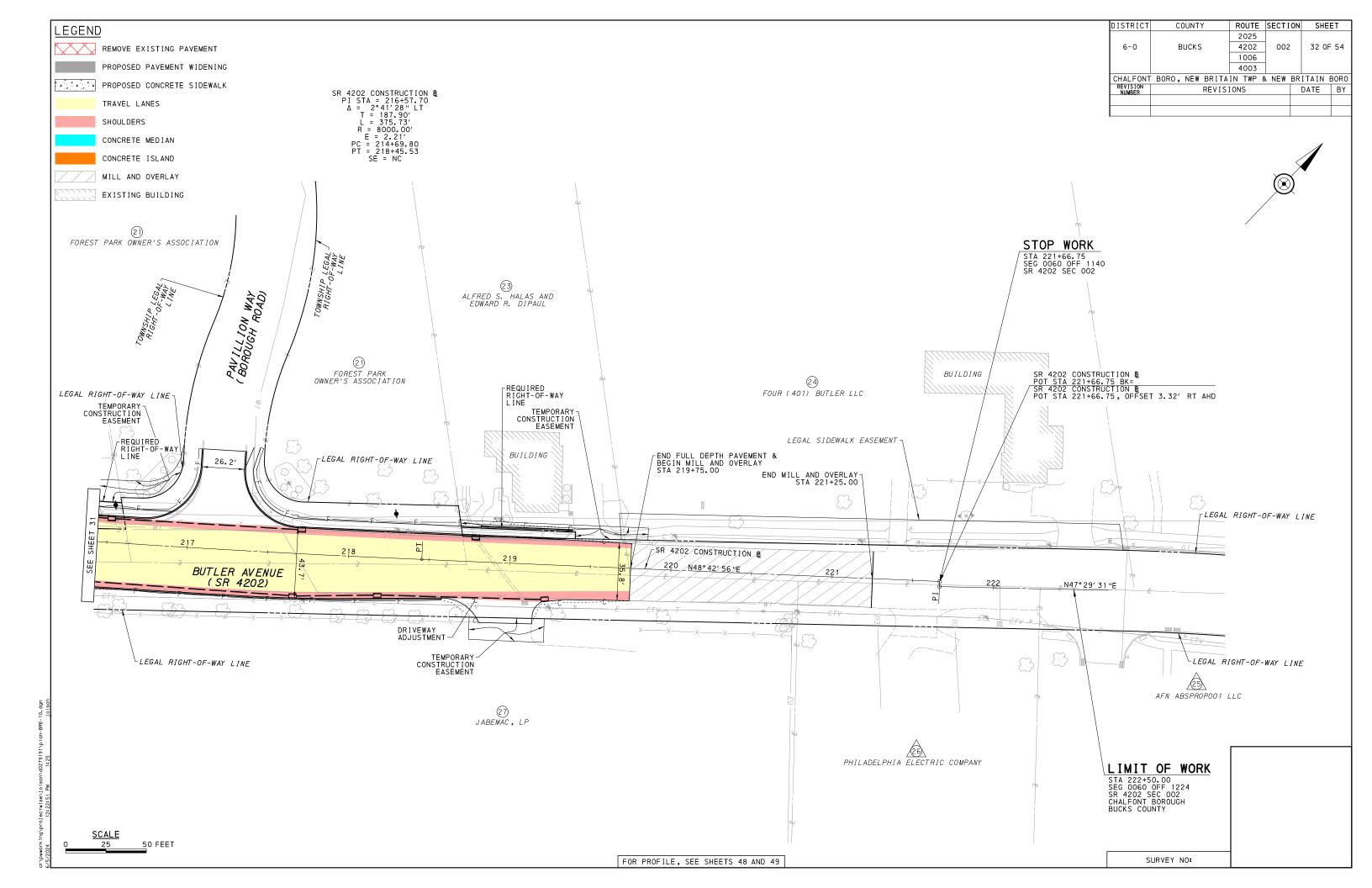


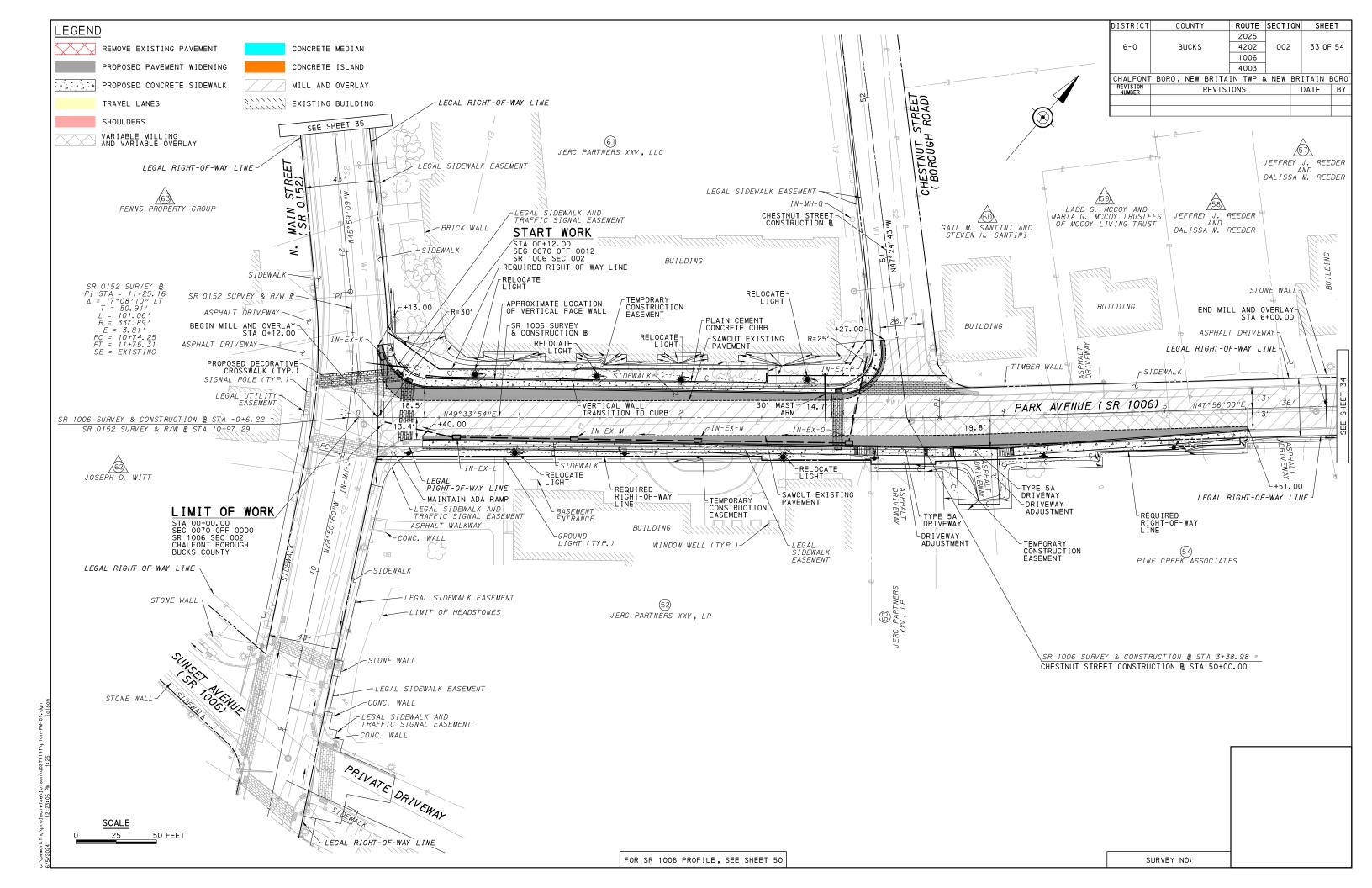


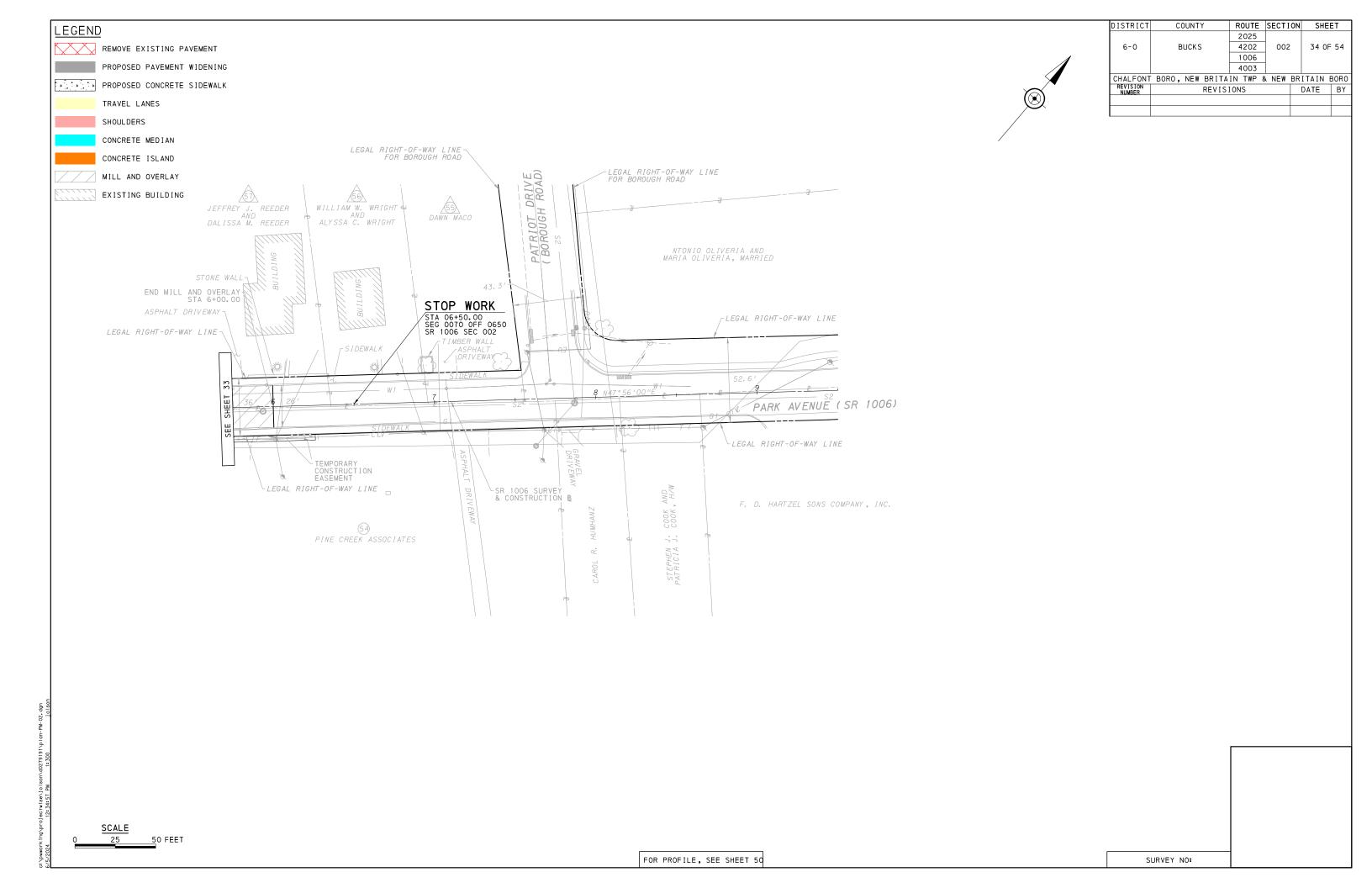


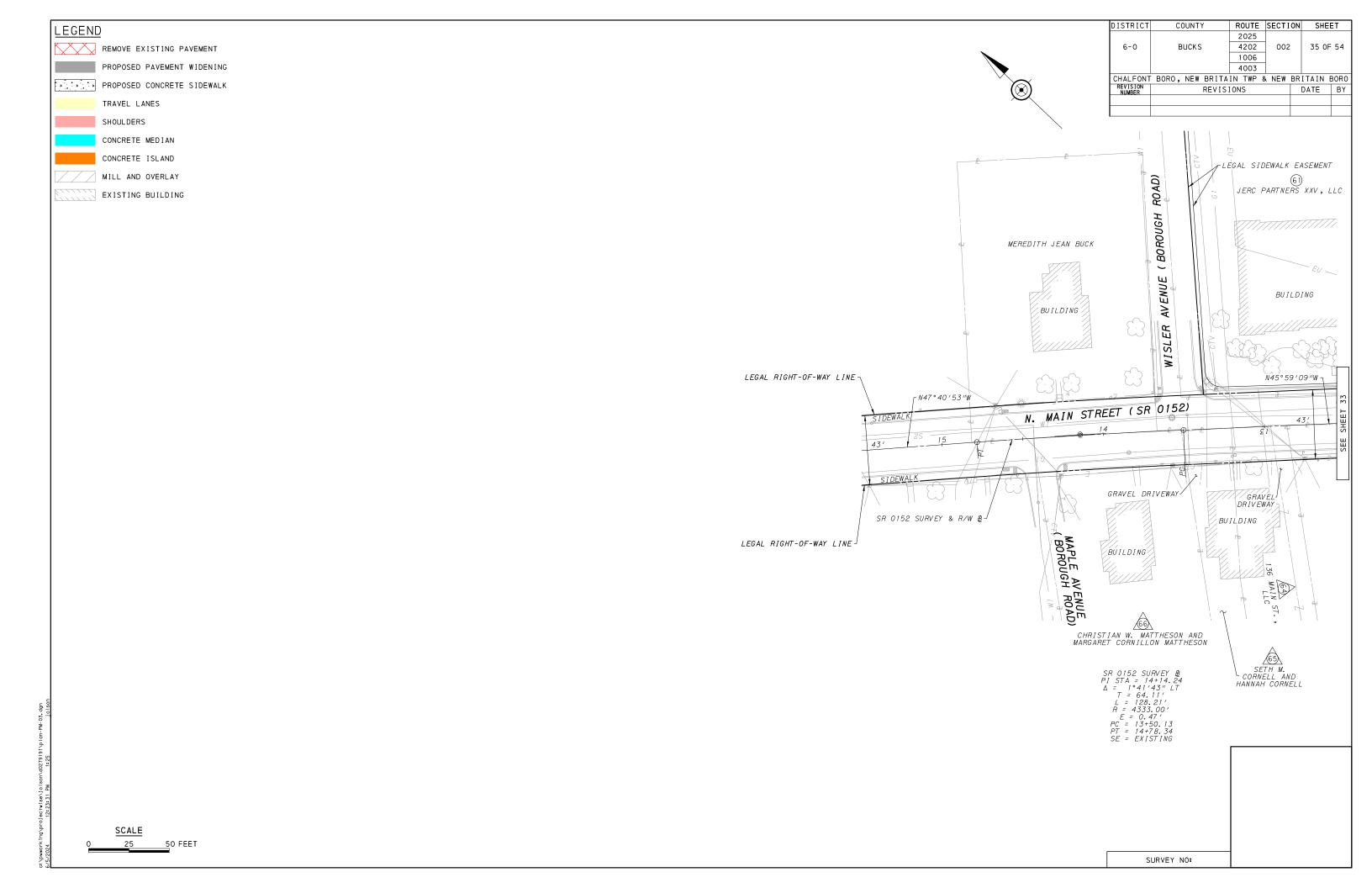


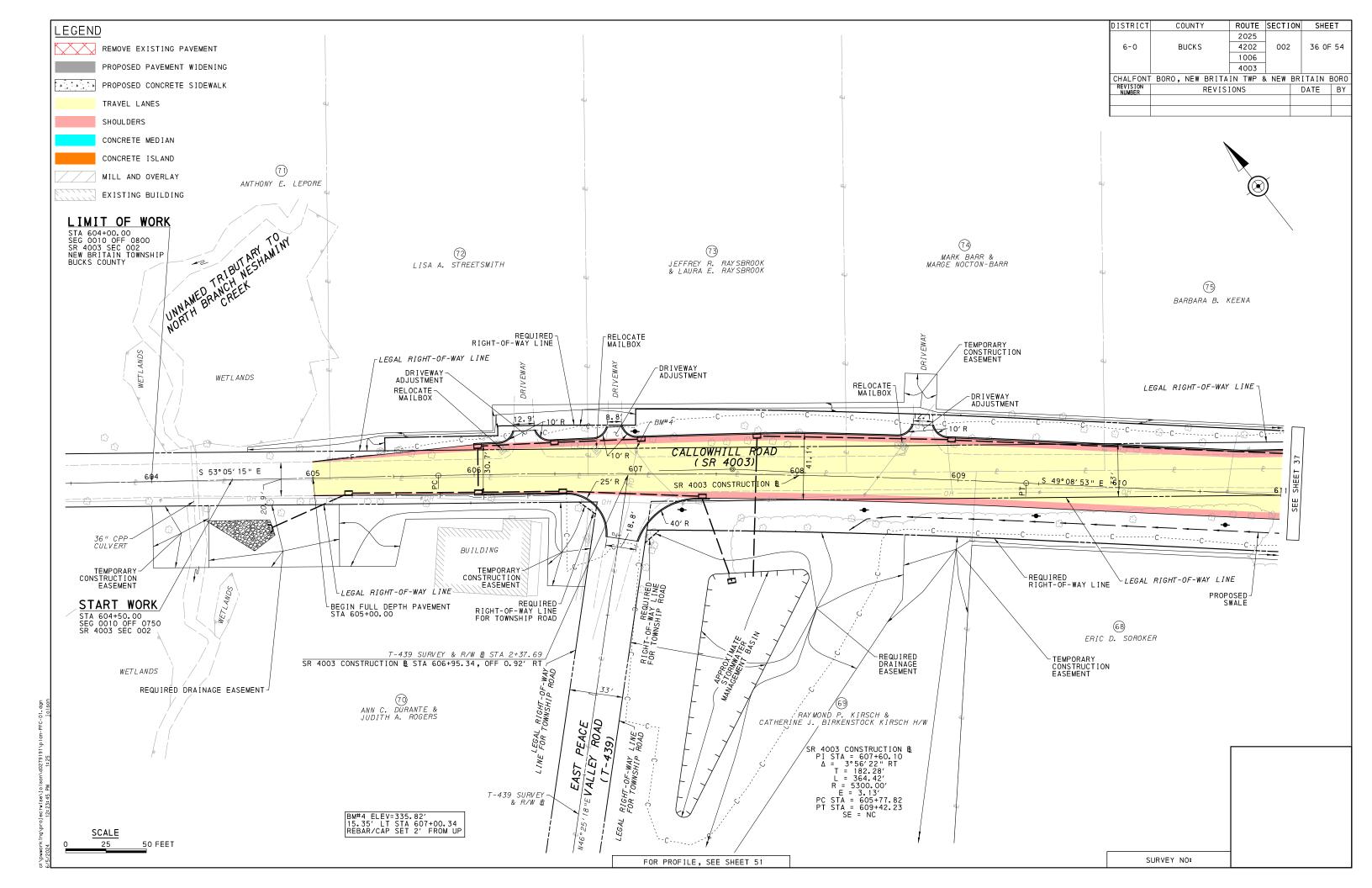


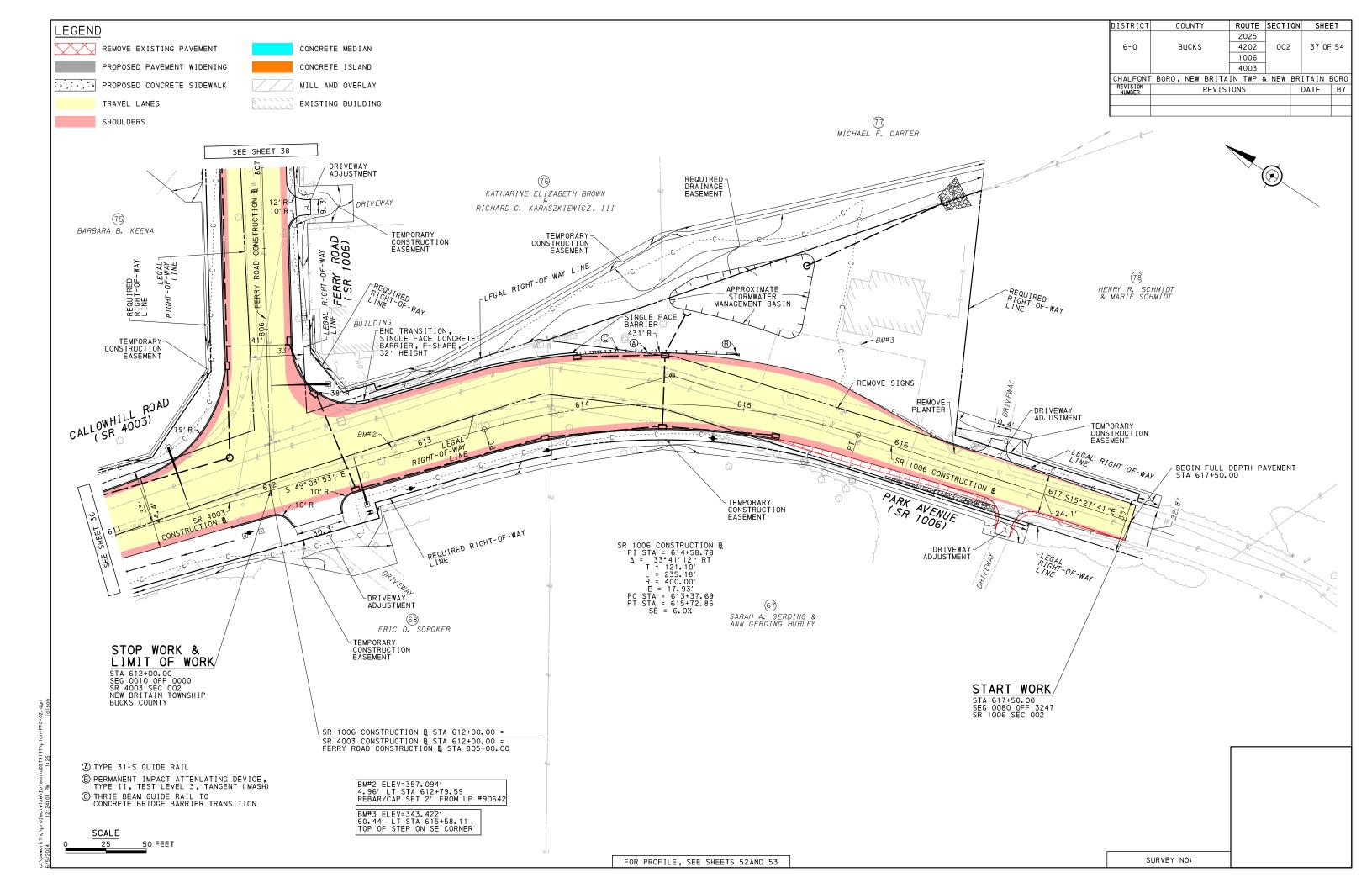


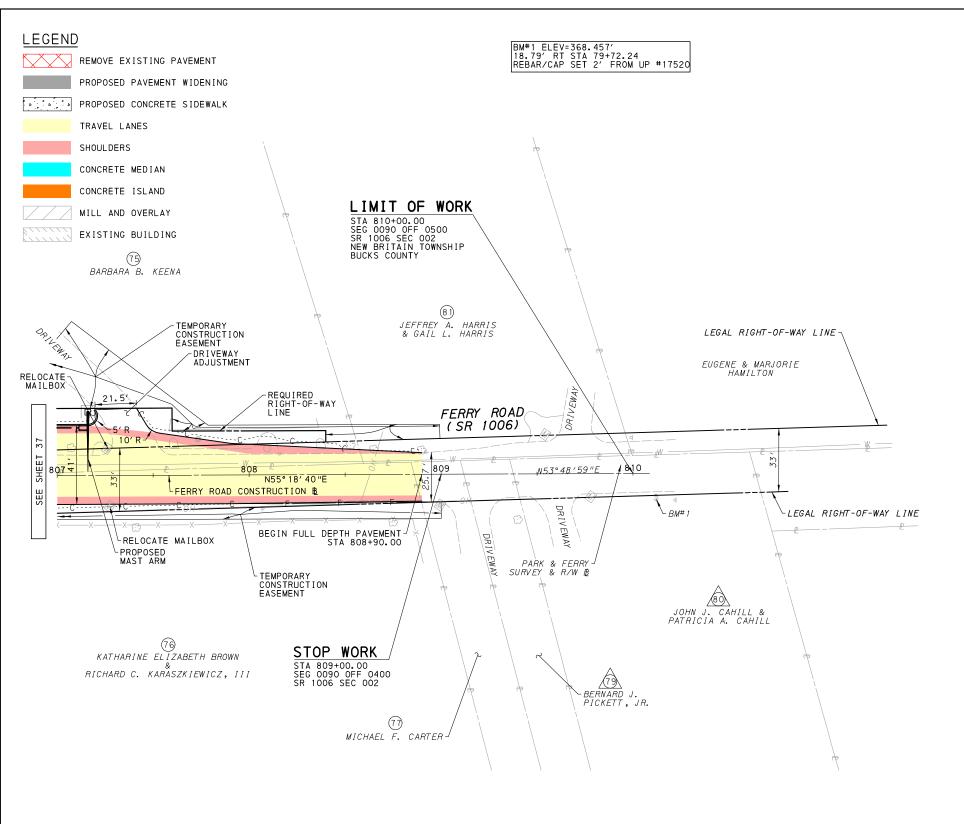












DIZIKICI	COUNTY	ROUTE	SECTION	SHEET		
		2025				
6-0	BUCKS	4202	002	38 OF 54		
		1006				
		4003				
	BORO, NEW BRITA	IN TWP 8	NEW BR	ITAIN I	BORO	
REVISION NUMBER	REVISIONS			DATE	BY	

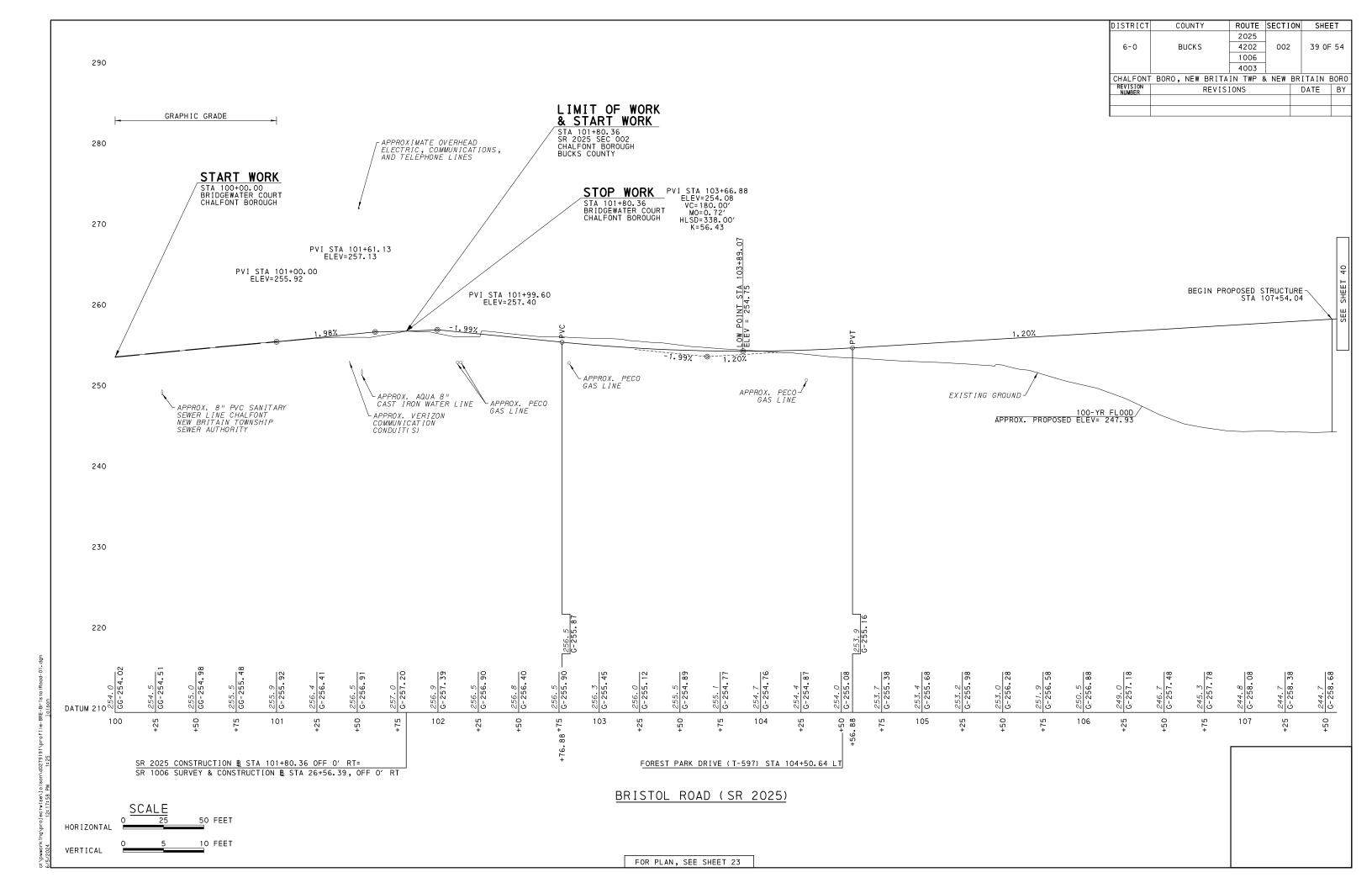


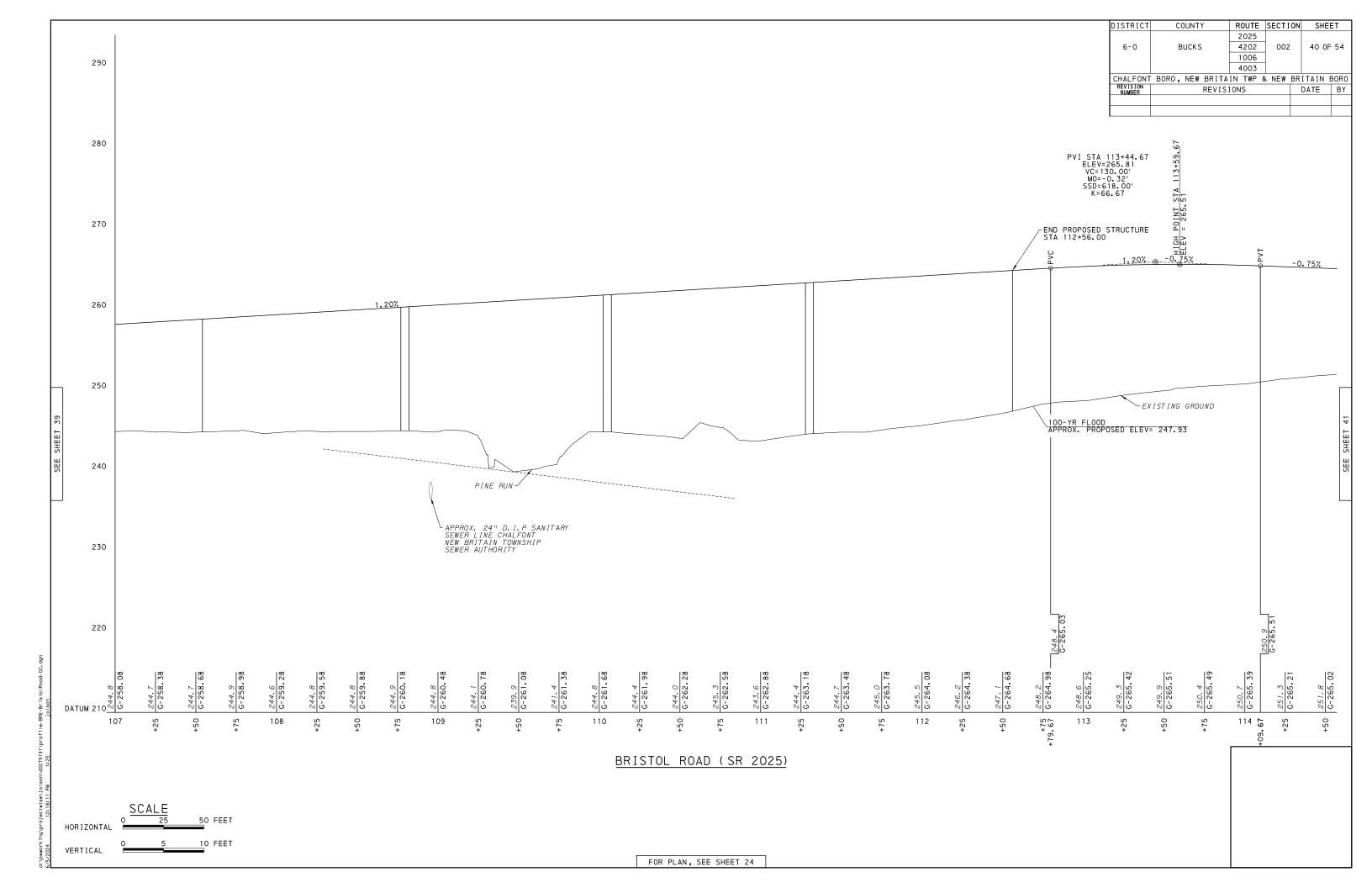
c: /pwworking/projectwise/jolson/d0279191/plan-PFC-03. dgn 5/5/2024 12: 24: 17 PM 1: 25

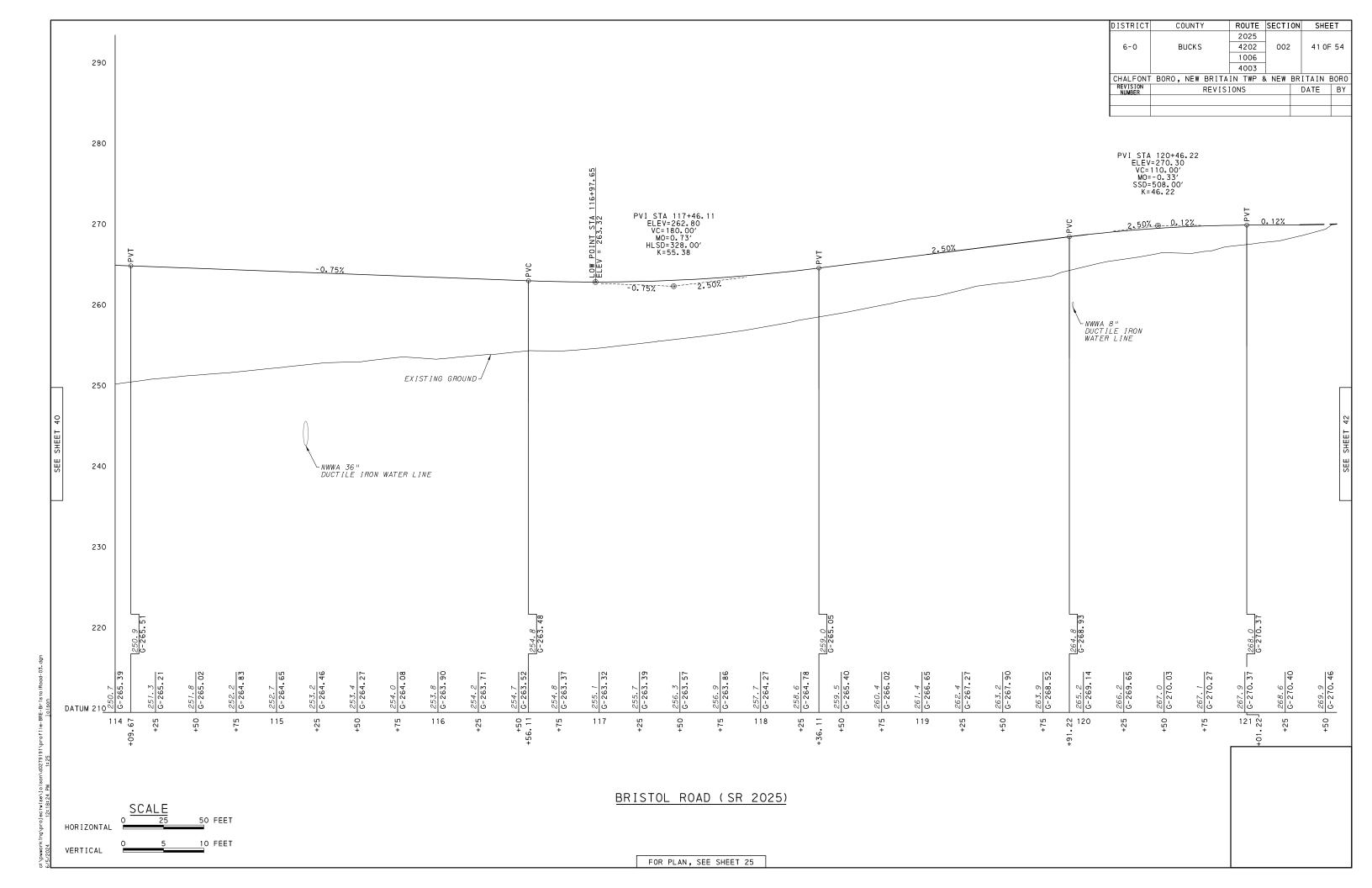
50 FEET

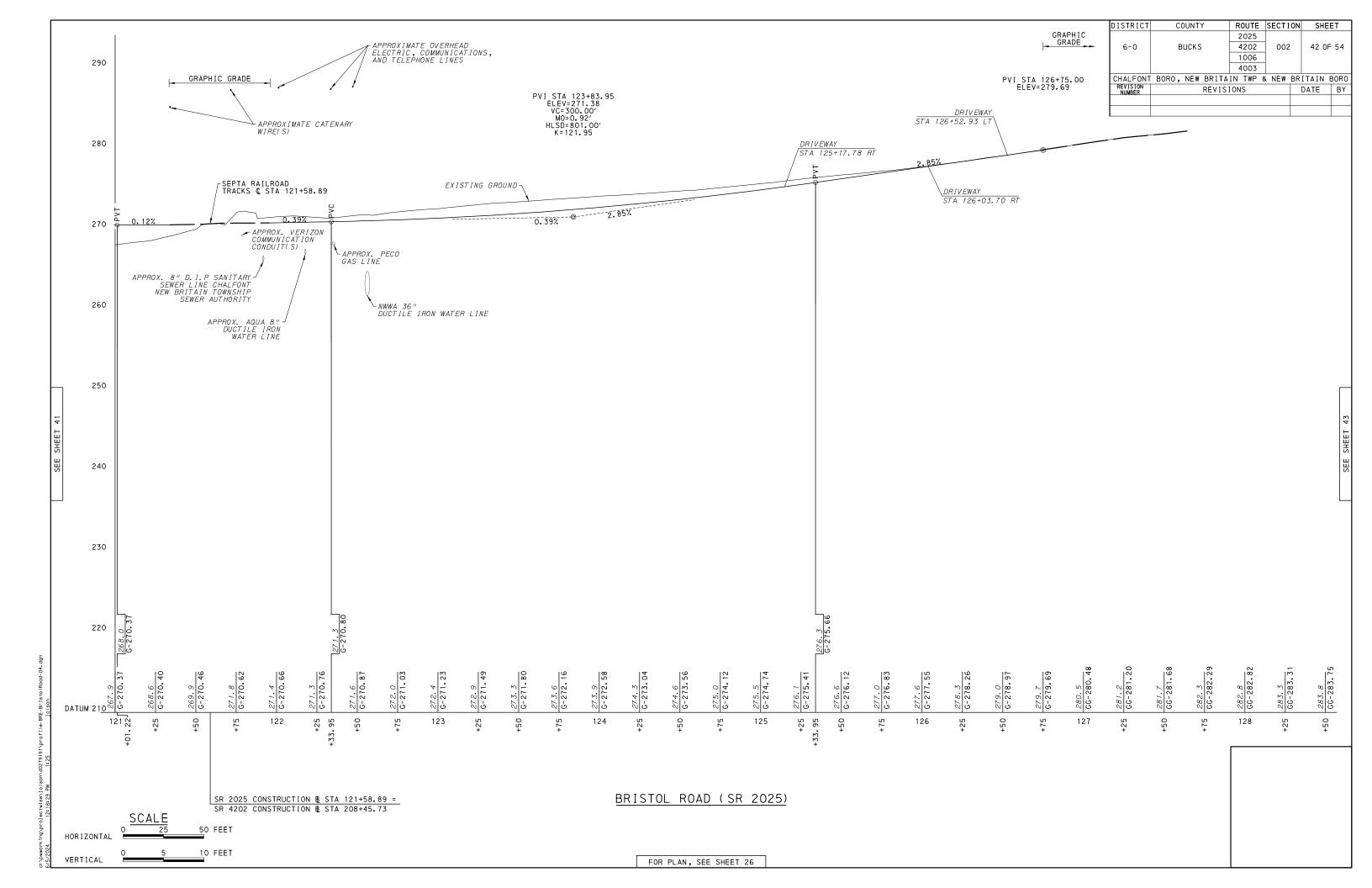
FOR PROFILE, SEE SHEET 54

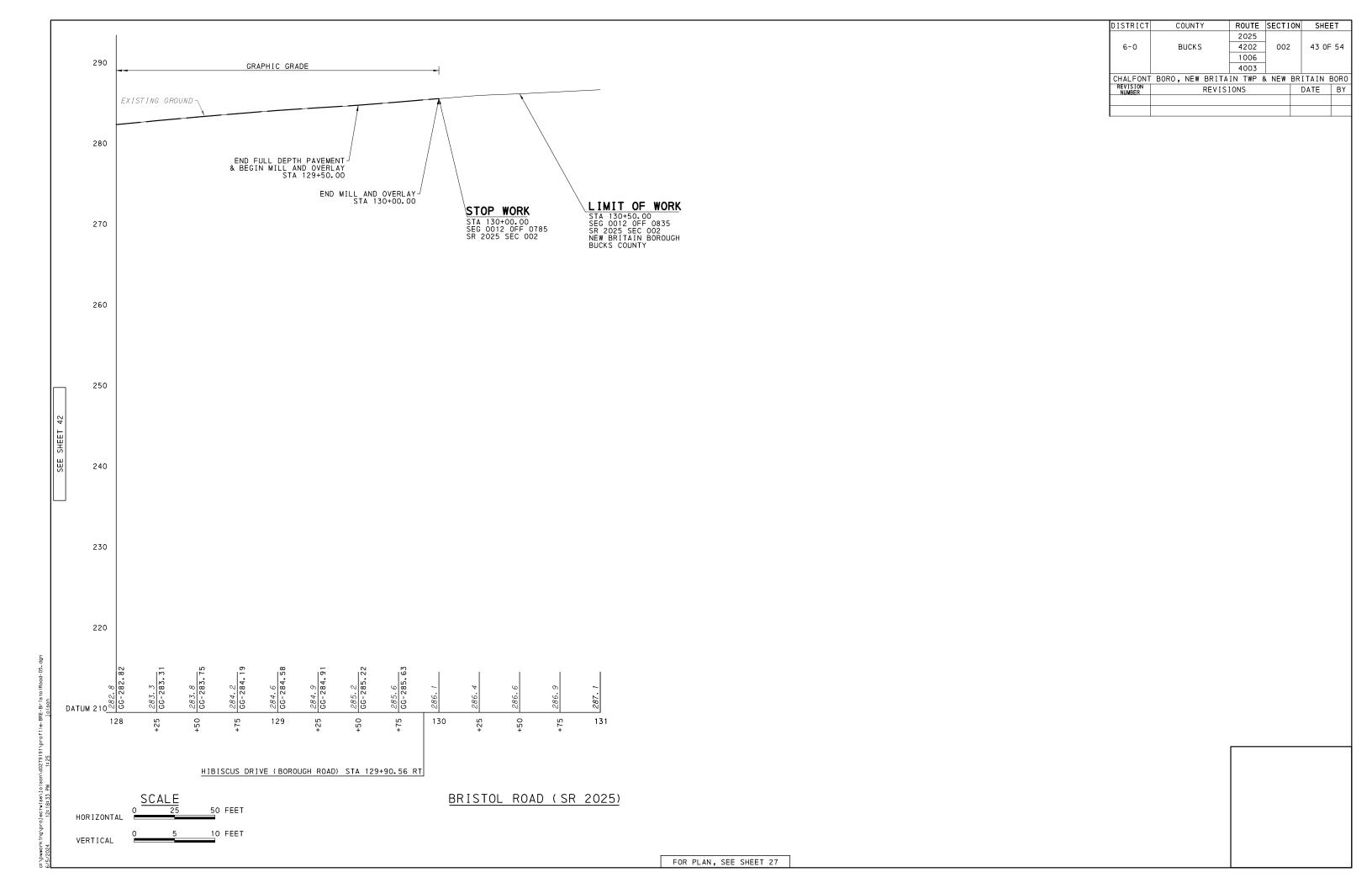
SURVEY NO:

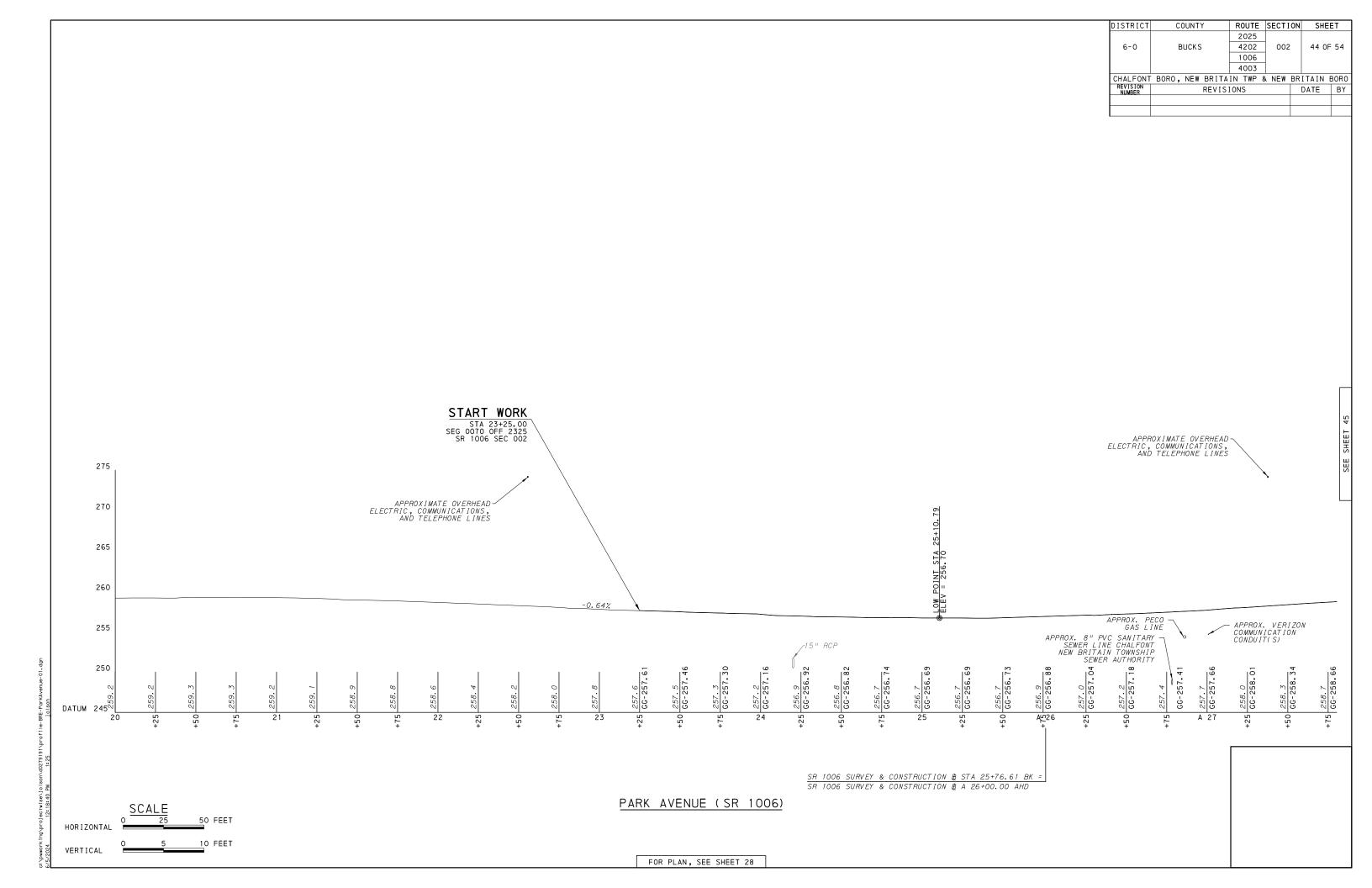




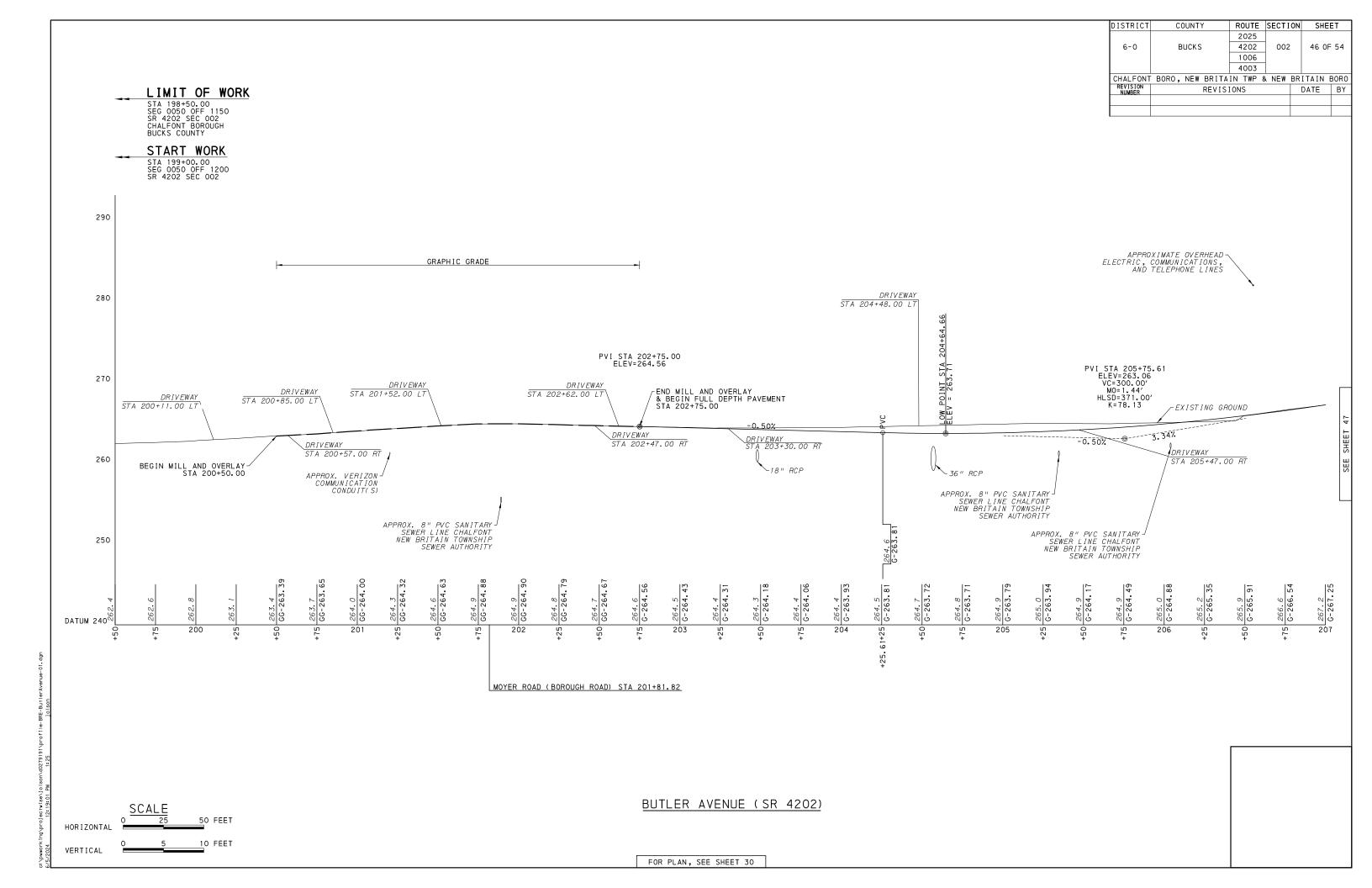


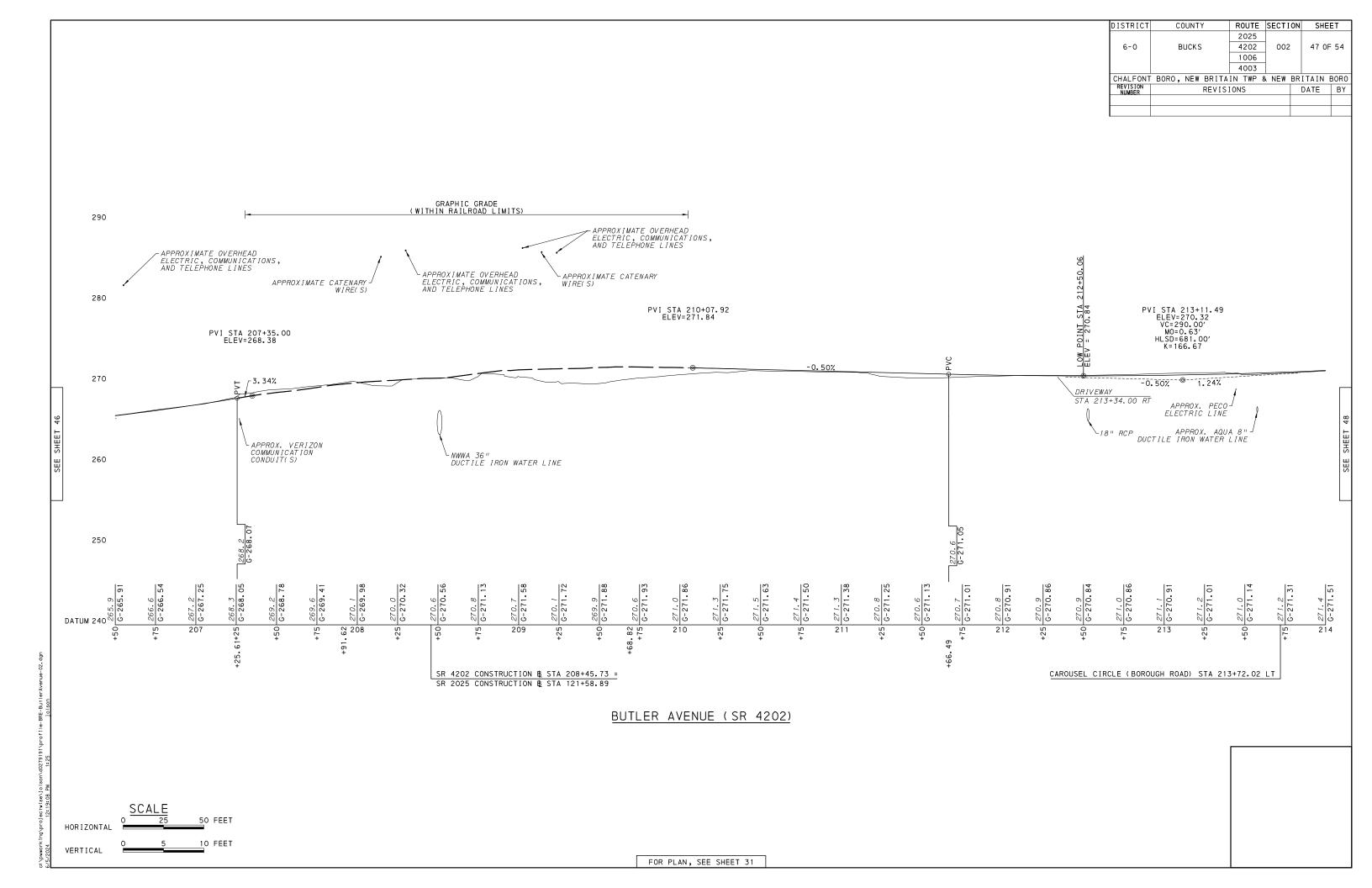


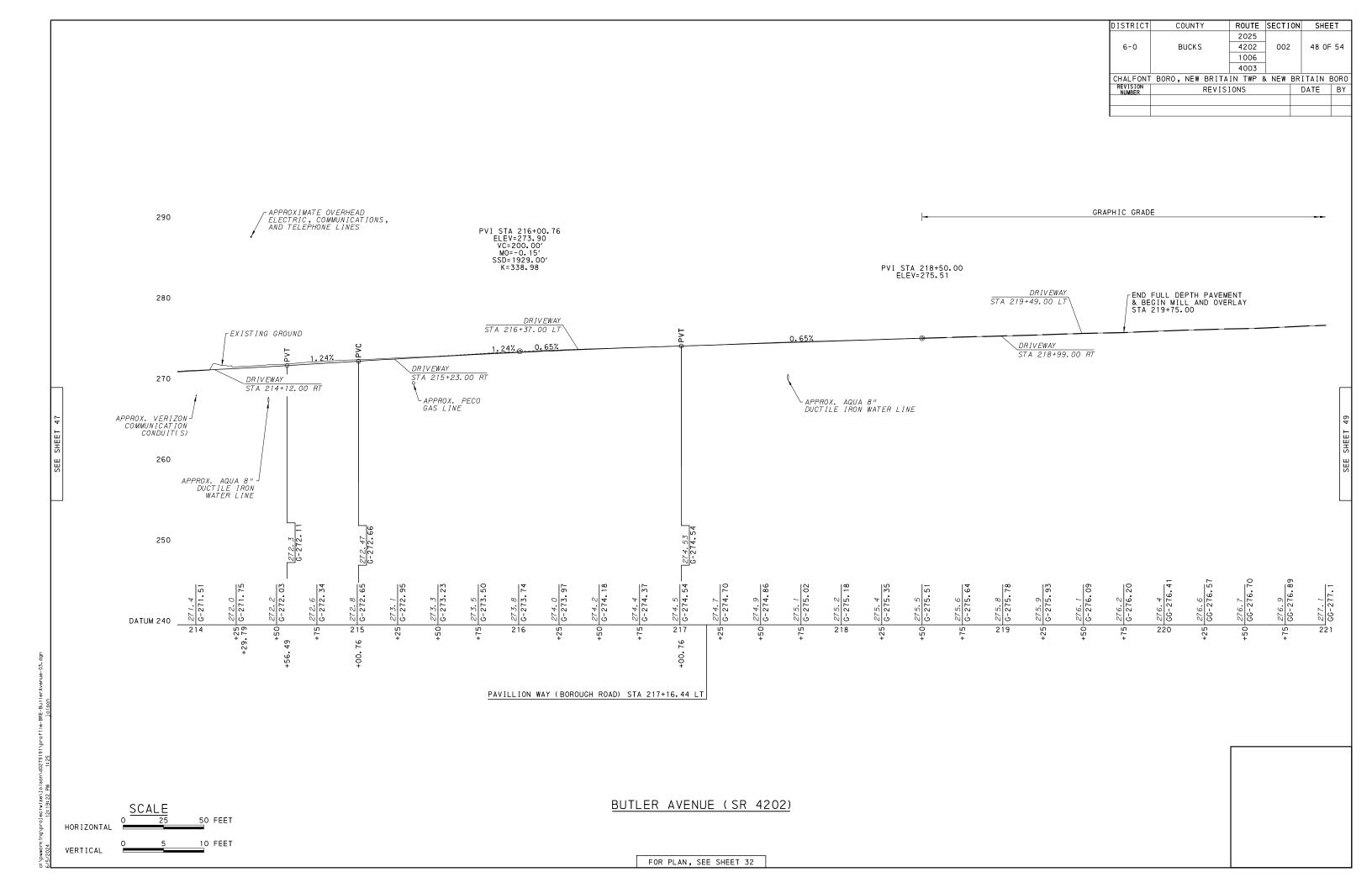


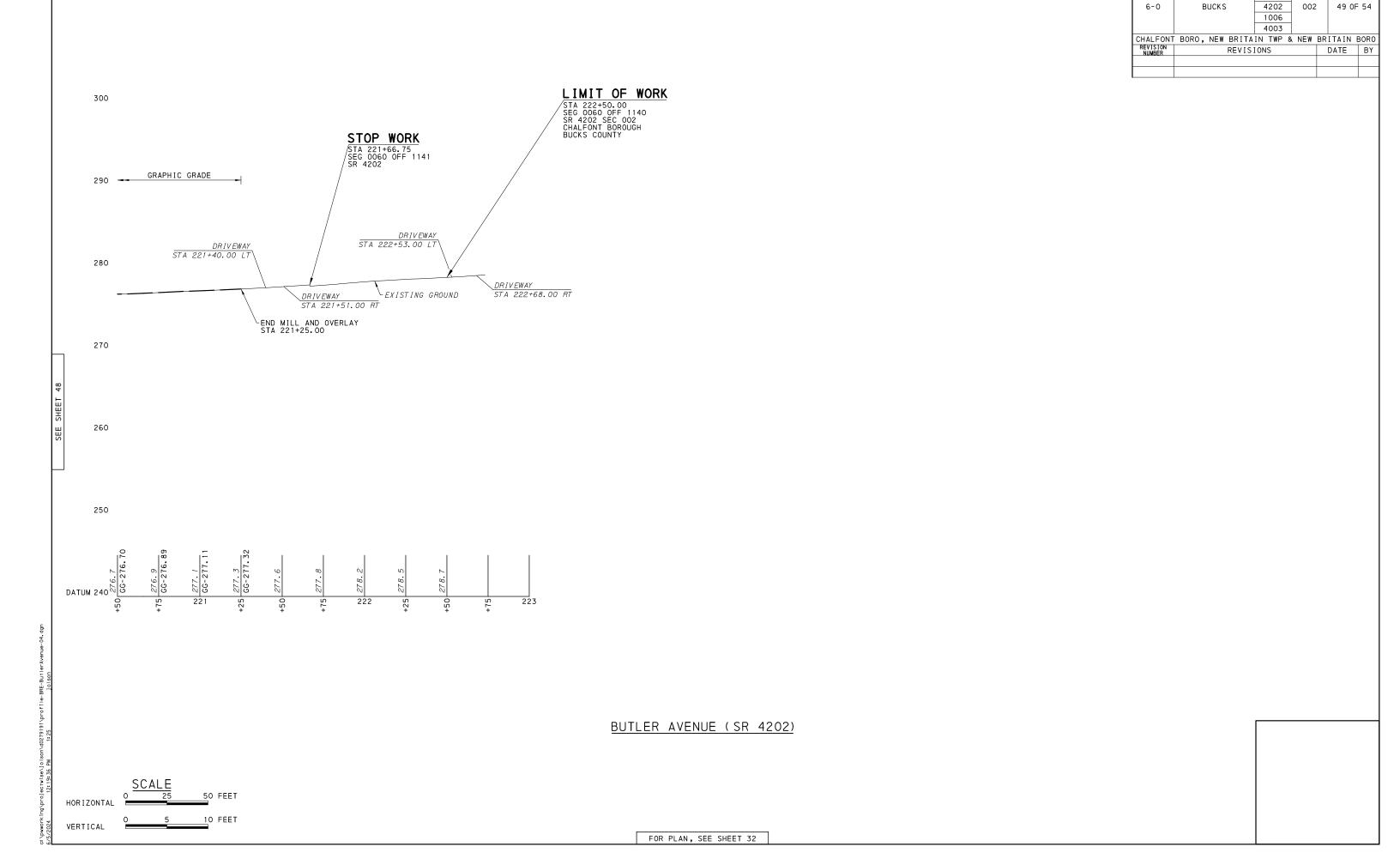










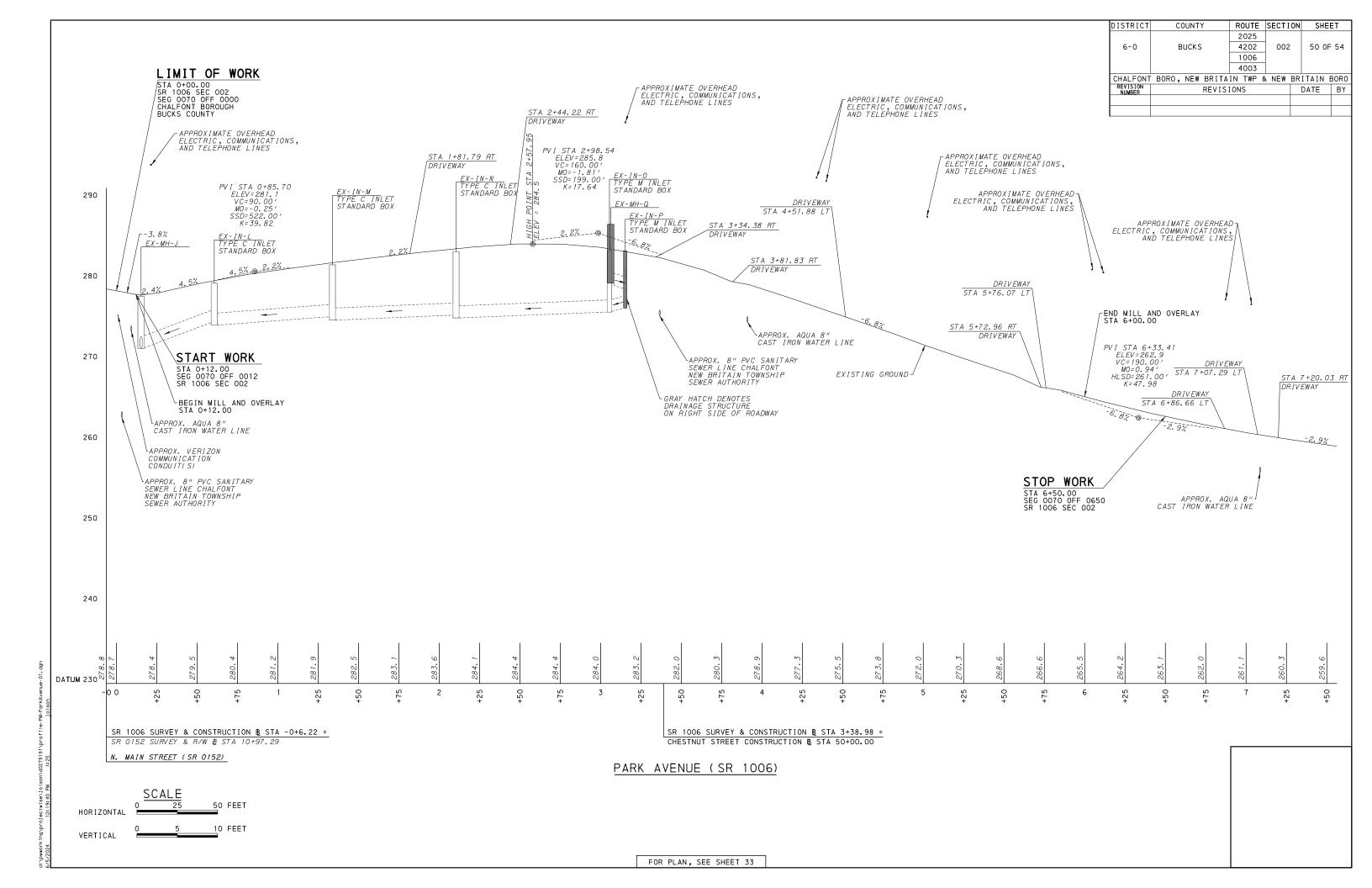


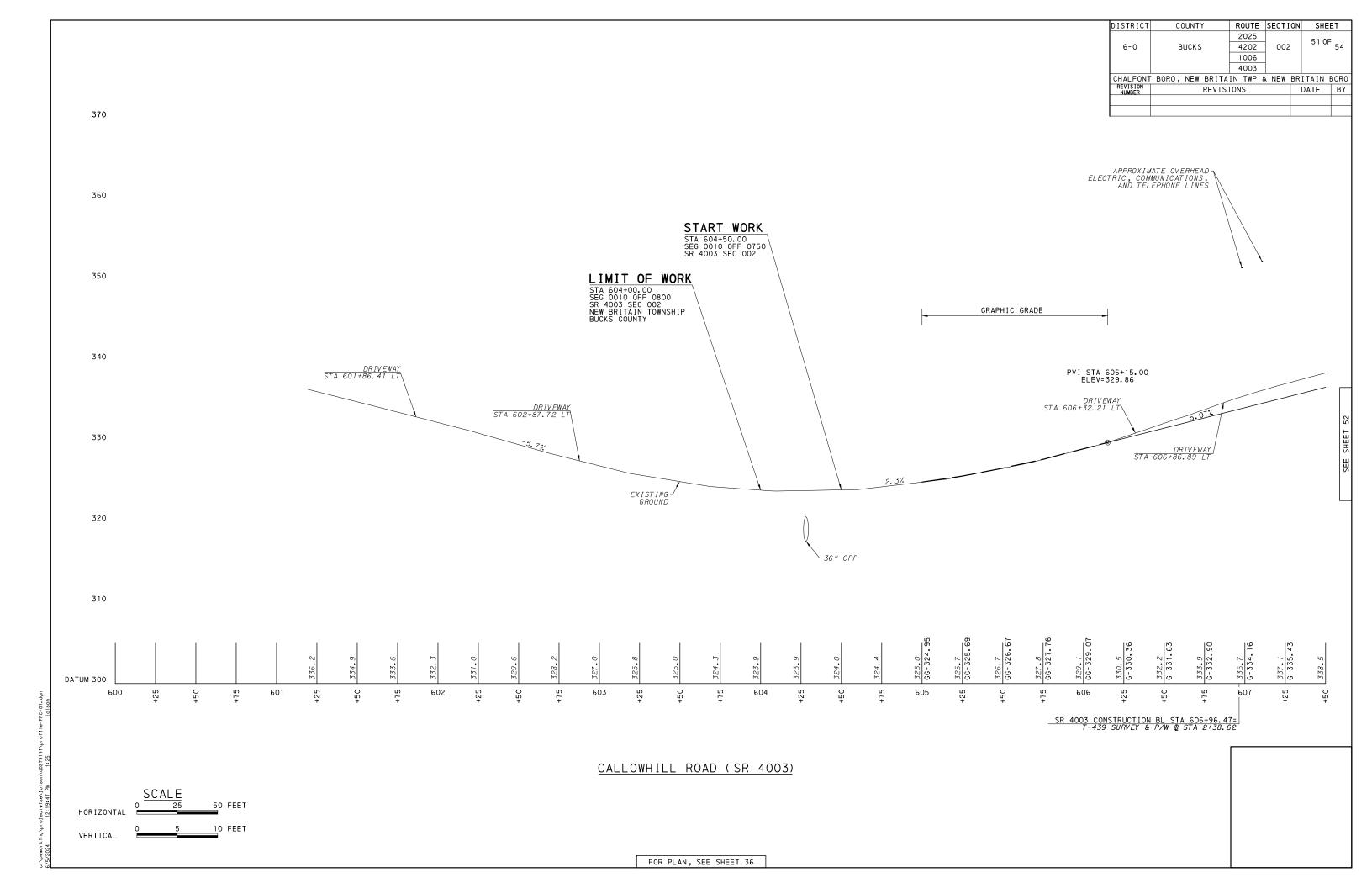
DISTRICT

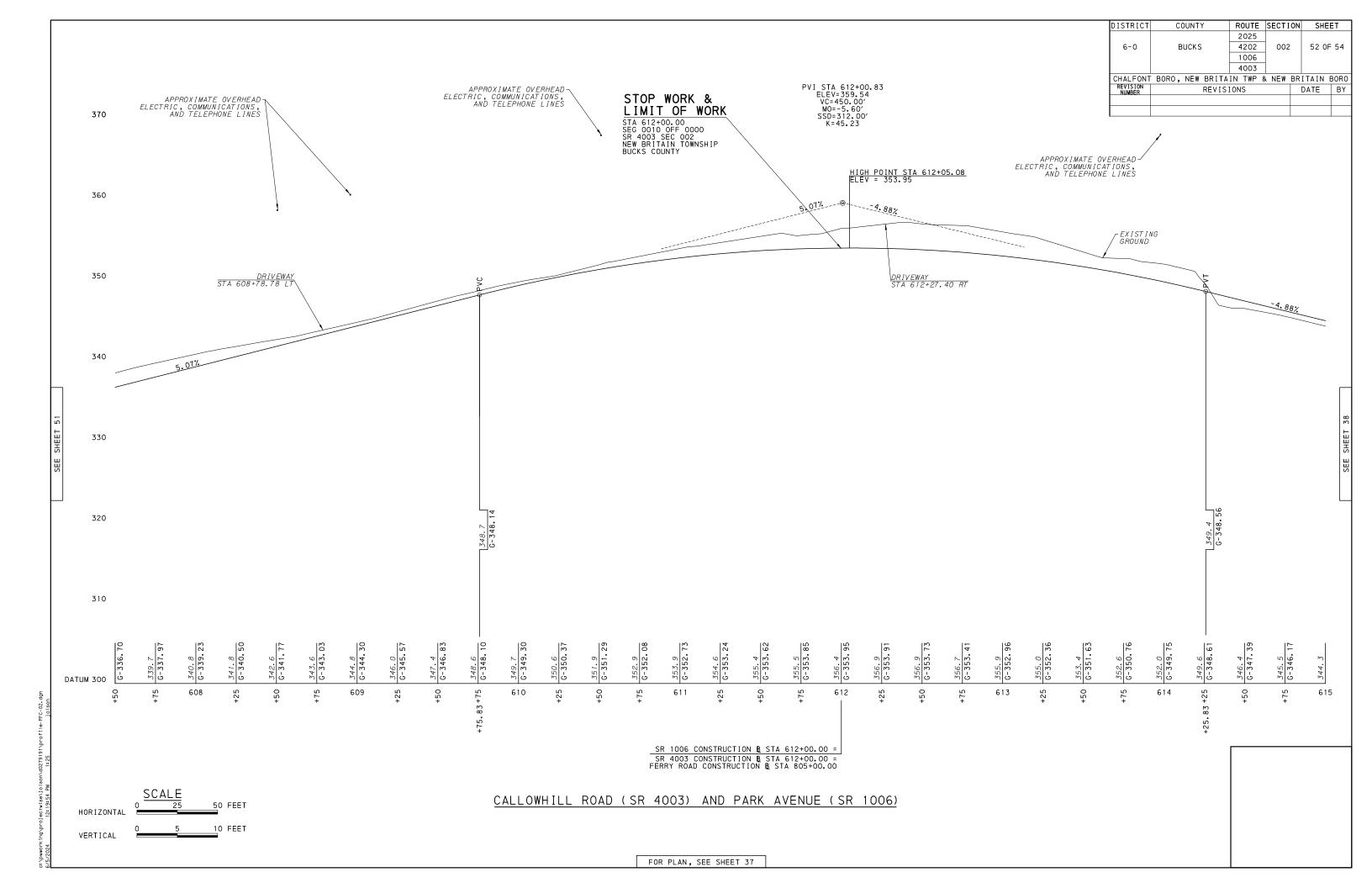
COUNTY

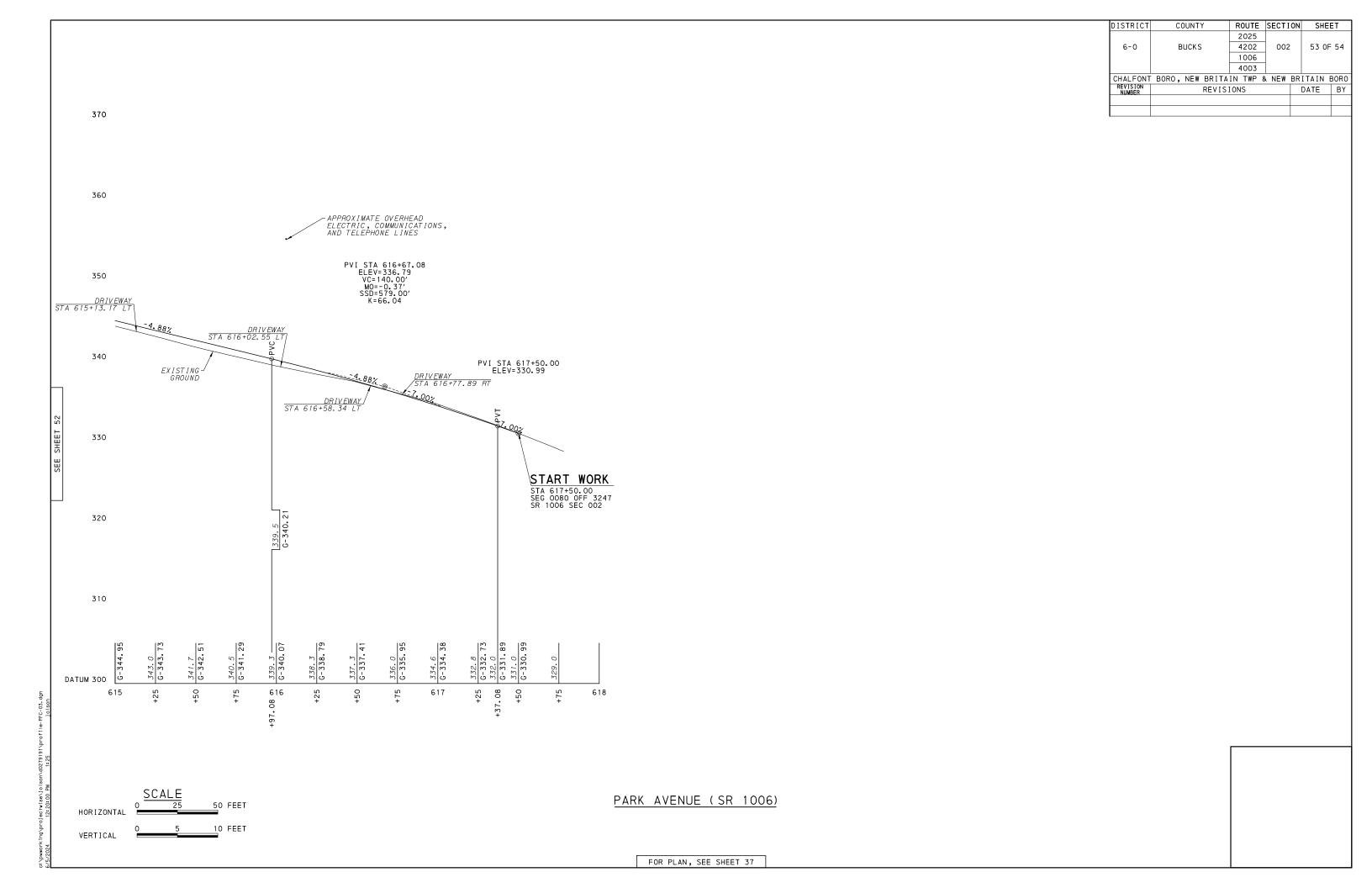
ROUTE SECTION SHEET

2025





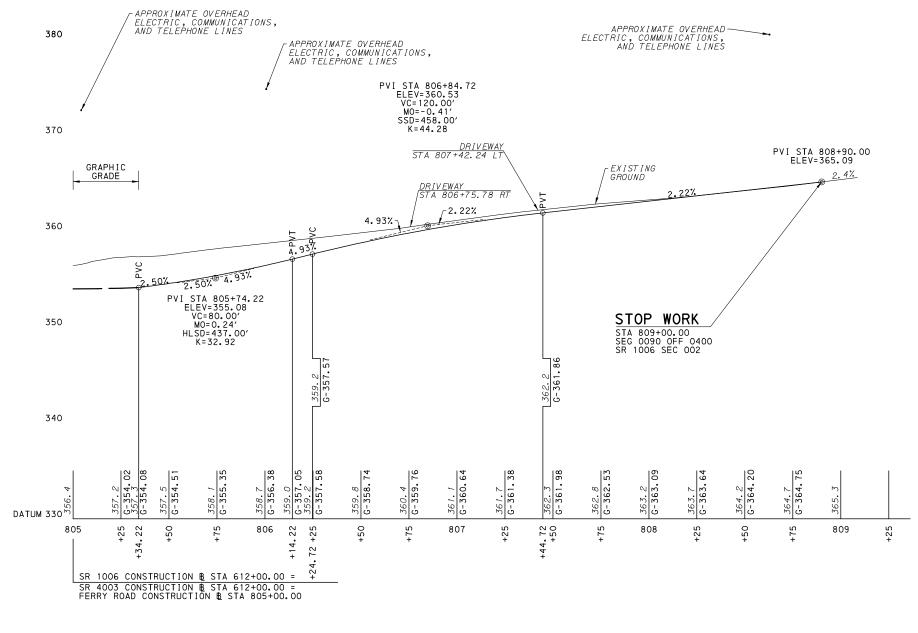




DISTRICT	COUNTY	ROUTE	SECTION	N SHEET				
		2025						
6-0	BUCKS	4202	002	54 OF 54		002 54 OF)F 54	
		1006						
		4003						
	BORO, NEW BRITA	IN TWP 8	NEW BR	ITAIN E	BOR0			
REVISION NUMBER	REVISIONS			DATE	BY			

LIMIT OF WORK

STA 810+00.00 SEG 0090 OFF 0500 SR 1006 SEC 002 NEW BRITAIN TOWNSHIP BUCKS COUNTY



FERRY ROAD (SR 1006)

VERTICAL 0 5 10 FEET

50 FEET

SCALE

FOR PLAN, SEE SHEET 38