



Stoneybrook  
Land Use, Inc.

4846 Sun City Center Blvd., #300  
Sun City Center, FL 33573-6281  
(207) 513-6123

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February 2, 2022

Katherine Cook, Planning Coordinator  
Planning, Permitting and Code Division  
City of Auburn  
60 Court Street  
Auburn, ME 04210

RE: Stable Ridge Apartments - Phase 2  
555 Court Street

Dear Katherine:

On behalf of American Development Group, LLC (ADG), please accept this letter in response to your review comments for the Stable Ridge Apartments - Phase 2 project at 555 Court Street. The parcel is shown on the City GIS system as Parcel ID 229-007.

Water District:

- The owner needs to have their engineer evaluate the demand of Phase 2 of the development and ensure that the Stable Ridge Booster Station (SRBS) now owned by the District is adequate to serve the domestic and fire protection needs of Phase 2.

See attached response from Haley Ward who completed the design for the Booster Station.

- The owner will be responsible for all costs associated with upgrades to the SRBS if needed to serve Phase 2.

Understood.

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- All water gates and service boxes need to be located within the paved surfaces of the development.

**Several project plan sheets (Sheets 3 - 8) have been revised to show all gates to be located within paved areas.**

- If the District is expected to take ownership of the common water mains we will need easements, as-builds of the installed mains and all materials must be purchased through the District.

**An as-built survey and easements for the water mains will be provided upon completion of installation. Materials will be purchased through the District.**

**Sewer District:**

- To take over ownership of the common sewer mains the District reserves the right to review inspection videos that show the lines were installed properly. The District also reserves the right to inspect all sewer manholes.

**Understood.**

- The District will need easements and as-builds for all mains before taking over ownership.

**An as-built survey and easements for the sewer mains will be provided upon completion of installation.**

- Buildings 9-10 show a shared service going between the two buildings. The District will not accept ownership of this line as it is presented.

**The sewer services for Buildings 9 -10 have been revised, as requested. See the revised plans attached.**

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**Staff Review Comments:** I have skipped comments already addressed above.

- 1.) Turn radius for emergency vehicles between garage 3 & 4 largest emergency fire vehicle should be considered.

We have attached a graphic showing the turning radius for the fire, as requested.

- 4.) Blasting survey monitoring out 600'. Please update blasting plan with notices to abutters within 600' with copies to the city.

There are no State regulations to control construction blasting. There are also no specific City requirements. Instead, construction blasting is controlled by industry standards or requirements of their insurance companies. For this type of project, pre-blast surveys would typically be offered to neighbors within 100' and notification of blasting activities would be sent to neighbors within 300'. These setbacks are measured from the blasting limits within the project site.

In this case, we are proposing to require the selected blasting company to offer pre-blast surveys to all property owners within 300' and to notify all property owners within 600' when the blasting is expected to occur for this project. I have attached a Blasting Graphic that we created from the site grading plans and the City GIS mapping system. The graphic shows the expected limits of blasting on site and measures the 300' and 600' setbacks from those limits. Boundary lines for properties located within or adjacent to these setback lines are also shown.

The blasting contractor will not be selected until after approvals are secured and pricing for this Phase 2 construction project has been accepted by ADG. We have previously submitted a Blasting Plan for Phase 2 prepared by the Phase 1 blasting contractor, Drilling & Blasting Rock Specialists. After speaking with them about Staff comments, they asked their blasting consultant to provide sample letters that the abutters within 600' may receive. Two sample letters have been provided, one for those abutters within 300' that will be offered a pre-blast survey, and one for those abutters that lie between 300' and 600' that will receive only a notice of blasting activity.

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Regardless of the selected blasting company, notices similar to these sample letters will be sent by certified mail prior to the start of blasting. Those letters will be mailed within 30 days prior to blasting, but not less than 10 days prior to blasting. As you can see, contact information is provided for ADG, the blasting firm and, in this case, the blasting consultant firm in case any issues arise. As with the Phase 1 construction, these neighbors or any neighbors with any concerns are encouraged to contact Jessica with any questions or concerns.

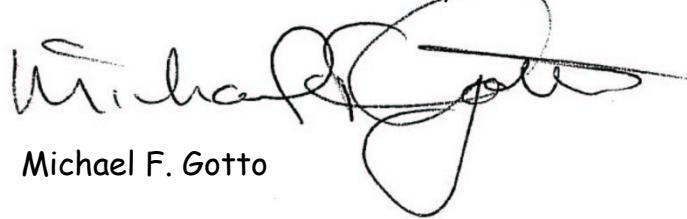
5.) Please see traffic comments below.

After our meeting on January 20<sup>th</sup> the traffic engineer has prepared the attached response to address traffic related issues. We understand that the City is in the process of reviewing the Court Street corridor with a goal of improving vehicle, pedestrian and bicycle movements for the entire corridor. Based upon timing of those City improvements, recommended improvements for our Phase 2 project may need to be adjusted or the funds dedicated for those offsite improvements be given to the City to help fund the larger traffic investment in this corridor. ADG fully supports the City's master plan approach for traffic improvements in this location and will work with Staff to either make improvements approved for this project or commit their offsite improvement funds to the City prior to occupancy of this Phase 2 project.

Please do not hesitate to call if you have any additional questions or need additional information to complete your review of this project. We will also be available at the Planning Board meeting to answer any questions the Planning Board may have.

Respectfully yours,

STONEYBROOK LAND USE, INC.



A handwritten signature in black ink, appearing to read "Michael F. Gotto".

Michael F. Gotto

cc: Jessica Klimek



**HALEY WARD®**  
ENGINEERING | ENVIRONMENTAL | SURVEYING

# MEMO

**To:** Jessica Klimek, American Development Group

**From:** Scott A. Miller, PE

**Re:** 555 Court Street, Water Booster Pump Station  
Domestic Flow Design

**Date:** January 20, 2023

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You have asked for a summary of the design basis for the recently installed water booster pump station installed to serve the multifamily development at 555 Court Street in Auburn, Maine. Specifically, you are asking for confirmation of the domestic flow design basis. This is the normal day to day flow and pressure to be provided to the multifamily units.

I have attached the domestic flow calculation sheet from our 8.16.2022 Preliminary Design report that was used to design the booster pump system.

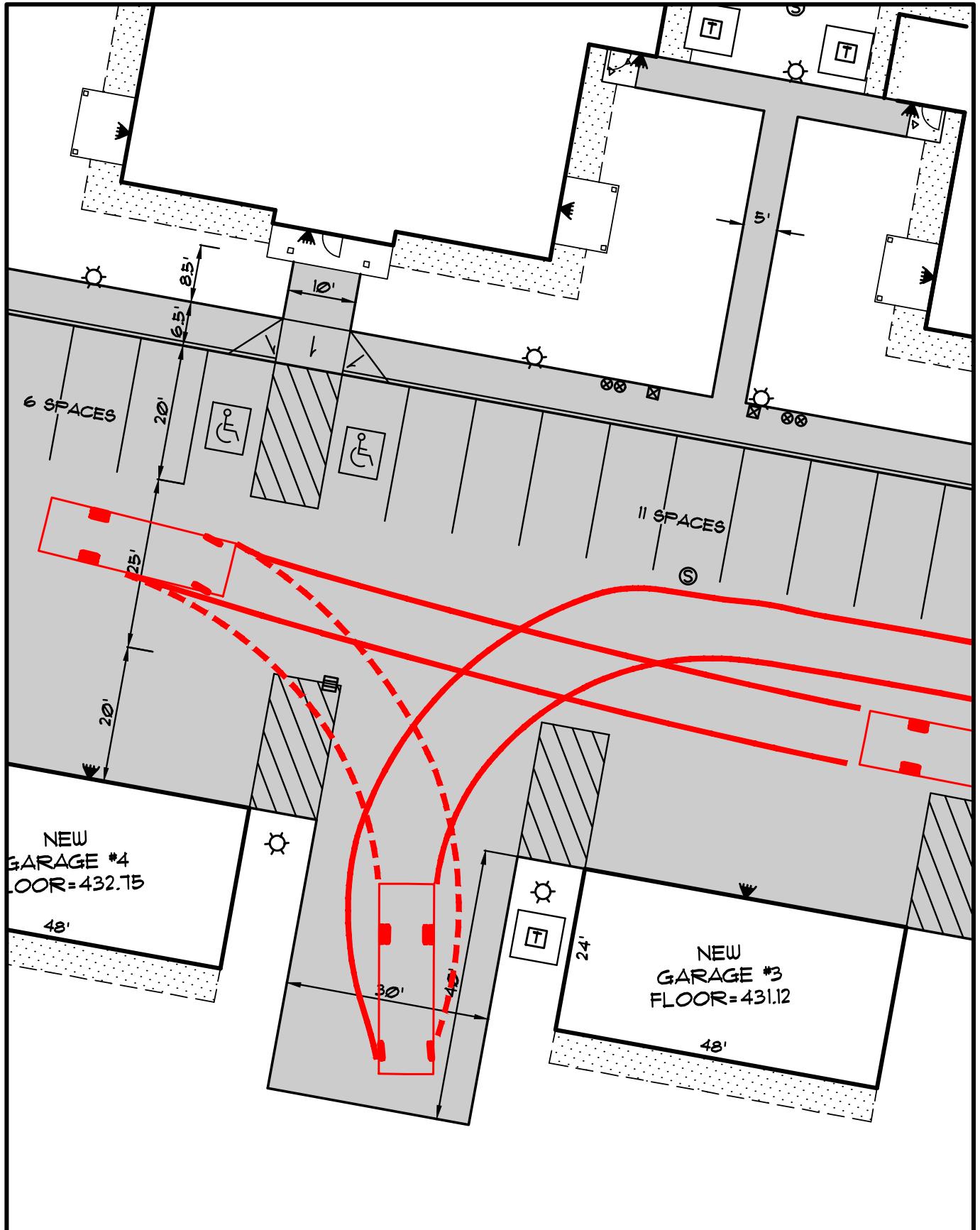
The design allowed for a total of 132 units: 60 in Phase 1 and 72 in Phase 2. Our domestic flow demand design is based upon 1.75 residents per unit for a total residential population of 231.

The design pressure target under normal flow conditions provides for a static pressure of 75 psi at a 430-foot first floor sill elevation. This is the projected sill elevation of the highest structure at the rear of the site.

The design of the booster pump station high flow pump is similarly targeted to provide 800 gallons per minute of fire flow to that sill elevation.



# Domestic Flow Demand Summary



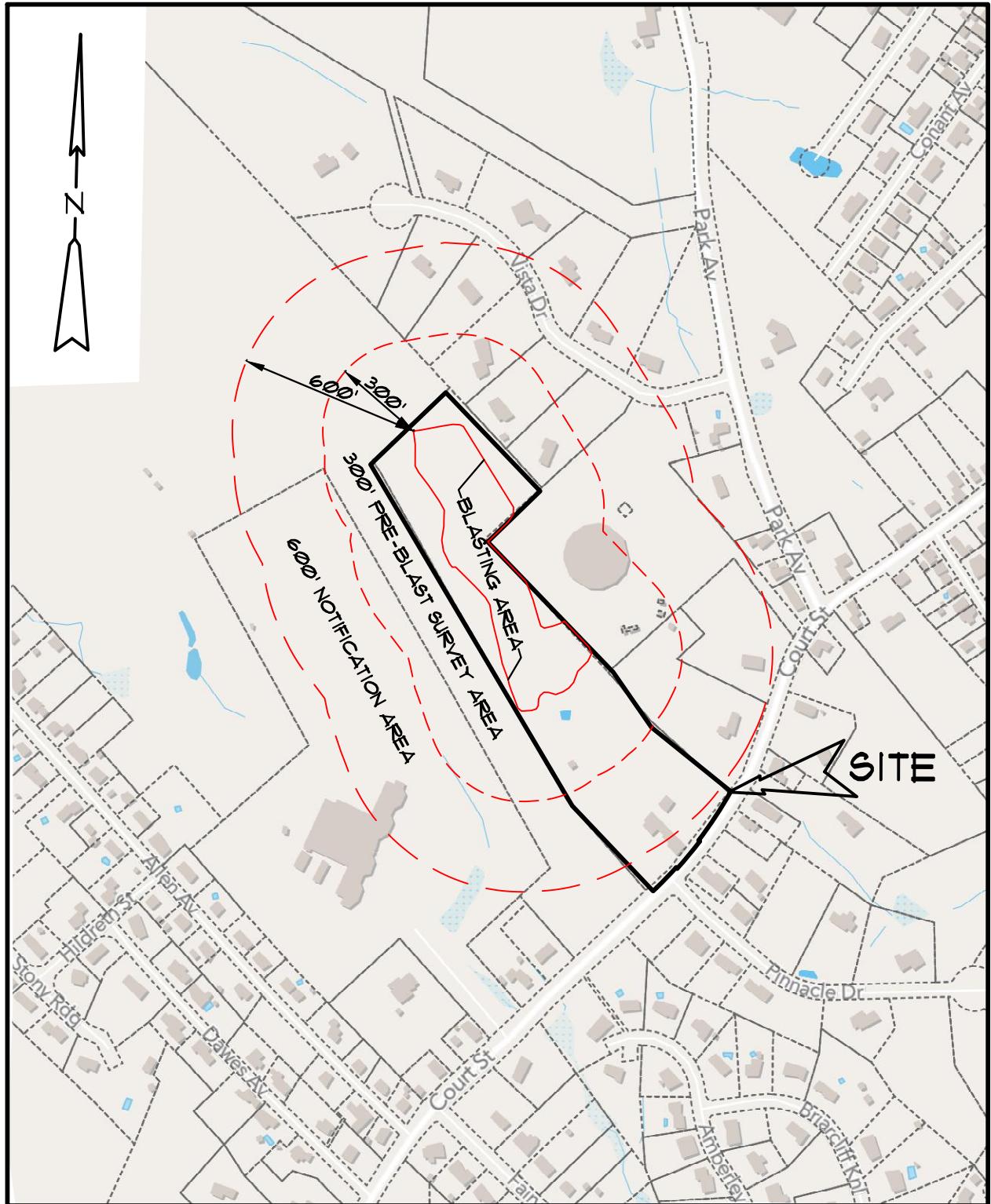
**FIRE TRUCK TURNING GRAPHIC  
STABLE RIDGE APARTMENTS**  
PREPARED FOR  
**AMERICAN DEVELOPMENT GROUP**

**Stoneybrook**  
Land Use, Inc.

4846 Sun City Center Blvd., #300  
Sun City Center, FL 33573-6281

DATE	PROJECT
1/12/23	22-006
DRAWN BY	SCALE
BRJ	1" = 20'
FILE: 22-006 PHASE2	

**SHEET 1**



## BLASTING GRAPHIC

STABLE RIDGE APARTMENTS - PHASE 2 - COURT STREET

OWNER: AMERICAN DEVELOPMENT GROUP, LLC

SCALE: 1" = 500'

DATE OF GRAPHIC: JANUARY 26, 2023

SOURCE: MAPAUBURN

PUBLICATION DATE: 2022

**Stoneybrook**  
Land Use, Inc.



P. O. Box 1394  
Gray, ME 04039  
207-829-2754 - Cell

Date:

## SAMPLE PRE-BLAST LETTER

## Address

During excavation off of 555 Court St. (Stable Ridge Apartments-Phase 2), the engineers found rocks and/or other consolidated natural materials that require removal to complete excavation. Drilling & Blasting Rock Specialists has been contracted to aid in its extraction. This will be achieved through the controlled detonation of explosives. Blasting will begin on or after \_\_\_\_\_ and take place weekdays between 8:00am and 5:00pm.

As a property owner within 300 Ft. of the blast location, this letter is to notify you of the blasting that will be occurring and the offer of a pre-blast survey (PBS). A PBS creates an impartial record of the existing condition of your structure(s). Each survey consists of interior and exterior video documentation of your structure. Structure exteriors shall be conducted during day light hours. Please contact Preconstruction Service **(207) 829-2754** at your earliest convenience to schedule a PBS if desired. There will be no cost to the property owner for the survey.

The blasting contractor will be using the international blasting warning system:

3 signals	5 Minutes Prior to Blast
2 signals	Ready to Blast
1 signal	All Clear (After Blast)

Blasting Firm: Drilling & Blasting Rock Specialists  
P. O. Box 65, Gardiner, ME 04345  
Phone: (207) 582-1391

All technical questions about the permitted work should be directed by phone or in writing to the blasting contractor noted above before the date of blasting. Any concerns noted during the construction period should be directed by phone or in writing to the property Owner and/or blasting contractor.

Property Owner: American Development Group, Jessica Klimek  
P.O. Box 1495, Naples, ME 04055  
Phone: (207) 240-3965



P. O. Box 1394  
Gray, ME 04039  
207-829-2754 - Cell

Date

**SAMPLE LETTER**

Address

**NOTICE OF BLASTING  
IN THE CITY OF AUBURN**

As a 600 Ft. abutter of Stable Ridge Apartments- Phase 2-Court St., this letter serves as a notification of impending blasting at the property listed below.

**Location of proposed blasting: 555 Court St.**

**Name of Property Owner: American Development Group, Jessica Klimek**

**Address of Property Owner: P.O. Box 1495, Naples, ME 04055**

**Phone Number of Property Owner: (207) 240-3965**

**Dates of blasting (approximate): on or after**

**Times of blasting (approximate): 8:00 AM to 5:00 PM**

**Name of blasting contractor: Drilling & Blasting Rock Specialist.**

**Address of blasting contractor: P. O. Box 65 Gardiner, ME 04345**

**Phone number of blasting contractor: (207) 582-1391**

Ten minutes prior to detonation, the blasting contractor shall visually check the area for pedestrians and shall warn them of the impending blast. The blasting contractor will be using the international blasting warning system that states:

**3 horn signals 5 minutes prior to blast**  
**2 horn signals 1 minute to blast**  
**1 horn signal All clear**

All technical questions about the permitted work should be directed by phone or in writing to the blasting contractor noted above before the date of blasting. Any concerns noted during the construction period should be directed by phone or in writing to the property Owner and/or blasting contractor.

# STABLE RIDGE APARTMENTS PHASE II

## TECHNICAL TRAFFIC MEMO

Date: January 31, 2023

From: Jacob Sirois  
Engineer 1  
Barton & Loguidice, LLC.

William J. Bray, P.E.  
Senior Managing Traffic Engineer  
Barton & Loguidice, LLC.

Re: **RESPONSE TO AUBURN CITY STAFF TRAFFIC COMMENTS**

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### Introduction

The City of Auburn met with the Applicant and Engineering Team for the proposed Stable Ridge Apartments – Phase II project on Friday January 20, 2023 to review primarily traffic related issues and provide direction regarding each identified traffic related item. City Staff directed the following items should be fully addressed and submitted to the City for review and comment concurrent with or prior to submission of the full project application.

1. **Sight Distance:** The City of Auburn has requested that the sight distance measurements at the site entrance be re-evaluated in accordance with City of Auburn standards.
2. **Pedestrian Considerations:**
  - a. City Staff requested an updated capacity analysis for the signalized intersection of Park Avenue and Court Street. The updated operational analysis will include existing recorded pedestrian actuations at the intersection.
  - b. An analysis of pedestrian clearance timing was requested to be performed at the signalized intersection of Park Avenue and Court Street to ensure existing pedestrian timings meet both Federal and State standards.
3. **Dual Approach Lane on Park Avenue:** A review of *warrants* for a dedicated right-turn lane on the Park Avenue approach at Court Street was requested.

## Capacity Analysis

As requested by the City of Auburn, capacity analyses of both 2024 Pre- and Post-development traffic conditions were performed for the study intersection at Court Street and Park Avenue, with existing pedestrian activity (actuations) included, utilizing the Synchro and SimTraffic computer traffic models. The post-development condition, was analyzed with an assumed left-turn lane length of 150-feet and a 125-foot bay-taper. The updated intersection capacity analysis also includes re-assessment of the proposed site driveway intersection at Court Street, which also includes a dedicated left-turn lane on the northeast approach of Court Street. The SimTraffic results are based on the average of five (5) out of 7 runs, with the highest and lowest results removed.

Levels of Service rankings are similar to the academic grading system, where an “A” is very good with little delay and “F” represents very poor conditions.

The following table presents the relationship between delay and Level of Service for both a signalized and unsignalized intersection:

Level of Service Criteria Signalized & Unsignalized Intersections			
Signalized Intersections		Unsignalized Intersections	
Level of Service	Total Control Delay (sec/veh)	Level of Service	Total Control Delay (sec/veh)
A	Up to 10.0	A	Up to 10.0
B	10.1 to 20.0	B	10.1 to 15.0
C	20.1 to 35.0	C	15.1 to 25.0
D	35.1 to 55.0	D	25.1 to 35.0
E	55.1 to 80.0	E	35.1 to 50.0
F	Greater than 80.0	F	Greater than 50.0

**Pedestrian Considerations:** The capacity analysis includes existing pedestrian calls on both crosswalks at the intersection of Park Avenue and Court Street. Pedestrian crossing movements were only recorded during the afternoon peak hour of the school discharge time period). Intersection traffic data for the morning and evening peak commuter hours was collected during the month of August and summary reports for these counts do not show any pedestrian activity within the intersection. Barton and Loguidice, to conservatively measure the operational impacts of pedestrian activity within the intersection during the morning and evening computer peak hours have assumed the same level of pedestrian activity as measured during the school discharge time period. For this analysis, we have assumed that pedestrian crossings occur in pairs of two, resulting in 4 total pedestrian actuations at each crosswalk. The pedestrian count sheets are attached in the Appendix for reference.

The City of Auburn has requested that the pedestrian walk time and pedestrian clearance time (PCT) (*flashing don't walk*) be reviewed to determine if the existing timing plan allows for pedestrians to safely cross the crosswalks on Park Avenue and Court Street. (The pedestrian walk and flashing walk timing intervals are determined based upon requirements stated in the latest edition of the Federal Manual on Uniform Traffic Control Devices). Existing intersection pedestrian timing inputs found at the intersection provide a 7 second walk interval for both crosswalks and a consistent flashing don't; walk interval of 11-seconds. The existing walk interval timing of seven (7) seconds meets the requirements of the Federal Manual on Uniform Traffic Control Device standards; whereas, the current pedestrian flashing don't walk timing should be based upon the following equation:

$$PCT = D_c/v_p$$

Where  $D_c$  = pedestrian crossing distance (in feet) and  $v_p$  = pedestrian walking speed (in feet per second).

A pedestrian walking speed of 3.5 ft/s has been used for this analysis.

The existing crosswalks were measured via Google Earth from “warning field to warning field”. The measured distances are as follows:

Across Park Avenue Approach = 58-feet; PCT = 17seconds

Across Court Street NE Approach = 50-feet; PCT = 14 seconds

Barton and Loguidice are recommending increasing the PCT on the Park Avenue pedestrian phase from **11** seconds to **17** seconds. Similarly, on the Court Street pedestrian phase we recommend increasing the PCT from **11** seconds to **14** seconds. These recommendations are included within level of service summary presented on Table 3.2, on the following page, for both the pre-development and post-development traffic conditions.

**Level of Service Analysis:** Table 3.1, below, summarizes the results of the capacity analysis performed for the signalized intersection at Court Street and Park Avenue (without PCT changes), and the unsignalized site intersection with Court Street. The table compares the results determined for all peak hour time periods based upon 2024 pre- and post-development travel conditions.

**Table 3.1**  
**Level of Service Summary**  
**2024 Pre- and Post-Development Conditions**

	2024 Pre-Development				2024 Post-Development							
	AM Peak Hour (Commuter)		Afternoon Peak Hour (School)		PM Peak Hour (Commuter)		AM Peak Hour (Commuter)		Afternoon Peak Hour (School)		PM Peak Hour (Commuter)	
Intersection/Approach	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
<b>Court Street @ Park Avenue</b>												
- Park Street – Left	18.0	B	22.3	C	21.9	C	16.3	B	22.9	C	21.0	C
- Park Street – Right	6.6	A	11.8	B	9.2	A	6.4	A	12.3	B	9.0	A
- Court Street NE – Left	6.7	A	12.8	B	10.2	B	7.0	A	12.4	B	10.6	B
- Court Street NE – Thru	4.8	A	7.2	A	6.2	A	5.0	A	6.9	A	6.1	A
- Court Street SW – Thru	10.0	A	16.6	B	13.7	B	9.3	A	17.2	B	14.7	B
- Court Street SW – Right	7.5	A	12.3	B	9.9	A	5.8	A	12.4	B	12.0	B
- <b>Overall Intersection</b>	<b>7.0</b>	<b>A</b>	<b>12.3</b>	<b>B</b>	<b>9.8</b>	<b>A</b>	<b>6.9</b>	<b>A</b>	<b>12.5</b>	<b>B</b>	<b>10.2</b>	<b>B</b>
<b>Court Street @ Site Entrance</b>												
- Driveway Entrance – Left	11.5	B	16.3	C	14.9	C	12.0	B	21.0	C	15.8	C
- Driveway Entrance – Right	3.8	A	6.5	A	5.4	A	3.8	A	7.7	A	5.9	A
- Court Street NE – Left	2.1	A	6.8	A	4.4	A	2.5	A	5.2	A	4.1	A
- Court Street NE – Thru	0.8	A	1.1	A	1.1	A	0.8	A	0.9	A	0.9	A
- Court Street SW – Thru	1.7	A	2.5	A	2.3	A	1.7	A	2.6	A	2.4	A
- Court Street SW – Right	1.5	A	2.4	A	2.2	A	1.2	A	2.4	A	2.4	A
- <b>Overall Intersection</b>	<b>1.3</b>	<b>A</b>	<b>2.0</b>	<b>A</b>	<b>1.7</b>	<b>A</b>	<b>1.4</b>	<b>A</b>	<b>2.1</b>	<b>A</b>	<b>1.8</b>	<b>A</b>

As shown in the preceding table, the intersection capacity analysis of both 2024 pre- and post-development traffic conditions, with pedestrian movements included, demonstrates that the proposed 60-unit Phase II residential apartment project has minimal impact on traffic operations at the studied

intersections. Overall, both intersections are projected to operate at a Level of Service A during the AM and PM commuter peak hour. During the PM peak hours when the school(s) lets students out and in the commuter peak hour, the signalized intersection operates at a Level of Service B under the post-development conditions.

Table 3.2, below, summarizes the results of the capacity analysis that includes the recommended pedestrian clearance flashing don't walk times presented for the signalized intersection at Court Street and Park Avenue, and the unsignalized site intersection with Court Street. Given that the existing signal should be using the recommended PCT's, with or without the added traffic generated by the development, we will be including the increased PCT within our analysis of the pre-development and post-development traffic conditions.

**Table 3.2**  
**Level of Service Summary**  
**2024 Pre- and Post-Development Conditions (Pedestrian Clearance Time Increase)**

	2024 Pre-Development						2024 Post-Development					
	AM Peak Hour (Commuter)		Afternoon Peak Hour (School)		PM Peak Hour (Commuter)		AM Peak Hour (Commuter)		Afternoon Peak Hour (School)		PM Peak Hour (Commuter)	
Intersection/Approach	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
<b>Court Street @ Park Avenue</b>												
- Park Street – Left	17.2	B	24.3	C	23.0	C	16.8	B	20.8	C	21.3	C
- Park Street – Right	6.6	A	12.7	B	10.4	B	6.3	A	11.1	B	9.1	A
- Court Street NE – Left	6.9	A	15.6	B	12.6	B	6.9	A	12.8	B	10.9	B
- Court Street NE – Thru	4.8	A	8.2	A	7.4	A	4.7	A	7.6	A	6.2	A
- Court Street SW – Thru	10.1	B	20.4	C	17.0	B	9.2	A	17.4	B	14.8	B
- Court Street SW – Right	8.0	A	17.3	B	12.6	B	6.3	A	13.3	B	11.7	B
<b>- Overall Intersection</b>	<b>7.1</b>	<b>A</b>	<b>14.6</b>	<b>B</b>	<b>11.8</b>	<b>B</b>	<b>6.7</b>	<b>A</b>	<b>12.6</b>	<b>B</b>	<b>10.3</b>	<b>B</b>
<b>Court Street @ Site Entrance</b>												
- Driveway Entrance – Left	11.0	B	15.4	C	14.4	B	11.7	B	18.9	C	13.7	B
- Driveway Entrance – Right	.08	A	6.0	A	4.6	A	3.7	A	8.8	A	5.8	A
- Court Street NE – Left	2.0	A	6.6	A	5.2	A	2.7	A	4.7	A	4.3	A
- Court Street NE – Thru	0.8	A	1.1	A	1.2	A	0.8	A	0.9	A	1.0	A
- Court Street SW – Thru	1.7	A	2.6	A	2.5	A	1.7	A	2.6	A	2.4	A
- Court Street SW – Right	1.7	A	2.2	A	2.1	A	1.2	A	2.3	A	2.3	A
<b>- Overall Intersection</b>	<b>1.3</b>	<b>A</b>	<b>2.0</b>	<b>A</b>	<b>1.9</b>	<b>A</b>	<b>1.4</b>	<b>A</b>	<b>2.0</b>	<b>A</b>	<b>1.8</b>	<b>A</b>

As shown in the preceding table, the intersection capacity analysis of both 2024 pre- and post-development traffic conditions, with pedestrian movements and the recommended PCT included, demonstrates that the proposed 60-unit Phase II residential apartment project has minimal impact on traffic operations at the studied intersections. Overall, both intersections are projected to operate at a Level of Service A during the AM peak hour. During the PM peak hours when the school(s) lets students out and the commuter peak hour, the signalized intersection operates at a Level of Service B under both the pre- and post-development conditions. Given the minor pedestrian volume, no significant increase in delay is expected at the signalized intersection of Court Street and Park Avenue, with the results remaining similar to the level of delay experienced under existing programmed signal timing plan.

**Queue Analysis:** Table 3.3 presents the 2024 pre- and post-development vehicle queue summary at the signalized intersection of Court Street and Park Avenue, with pedestrian movements included and no PCT changes, and the unsignalized intersection at Court Street and the Site Entrance.

**Table 3.3**  
**Queue Length Summary**  
**2024 Pre- and Post-Development Conditions**

	2024 Pre-Development			2024 Post-Development		
	AM Peak Hour (Commuter)	Afternoon Peak Hour (School)	PM Peak Hour (Commuter)	AM Peak Hour (Commuter)	Afternoon Peak Hour (School)	PM Peak Hour (Commuter)
Intersection/Approach	Queue (Feet)	Queue (Feet)	Queue (Feet)	Queue (Feet)	Queue (Feet)	Queue (Feet)
<b>Court Street @ Park Avenue</b>						
- Park Street – LR	82	135	111	78	137	108
- Court Street NE – L	82	119	106	85	110	102
- Court Street NE – TR	131	176	167	141	167	161
- Court Street SW – LTR	146	292	215	134	275	241
<b>Court Street @ Site Entrance</b>						
- Driveway Entrance – LR	36	36	33	47	49	44
- Court Street NE – LT	4	63	44	-	-	-
- Court Street NE – L	-	-	-	15	36	33
- Court Street SW – TR	-	-	-	-	-	-

The existing striped left-turn lane on the northeast bound Court Street approach at the signalized intersection with Park Avenue is approximately 80-feet-long in length. The SimTraffic simulation model shows that under both projected 2024 pre-development and post-development travel conditions the 95<sup>th</sup> percentile vehicle queue length exceeds existing vehicle storage in the dedicated left-turn lane.

An additional vehicle queue analysis was performed for the 2024 pre- and post-development traffic conditions including the recommended pedestrian clearance timing to ensure that the proposed left-turn lane extension onto Park Avenue is not exceeded with the proposed PCT recommendation. Table 3.4, on the following page, summarizes the queue analyses performed using the recommended PCT for all conditions.

**Table 3.4**  
**Queue Length Summary**  
**2024 Pre- and Post-Development Conditions**  
**(Pedestrian Clearance Time Increase)**

	2024 Pre-Development			2024 Post-Development		
	AM Peak Hour (Commuter)	Afternoon Peak Hour (School)	PM Peak Hour (Commuter)	AM Peak Hour (Commuter)	Afternoon Peak Hour (School)	PM Peak Hour (Commuter)
Intersection/Approach	Queue (Feet)	Queue (Feet)	Queue (Feet)	Queue (Feet)	Queue (Feet)	Queue (Feet)
<b>Court Street @ Park Avenue</b>						
- Park Street – LR	82	152	123	77	119	116
- Court Street NE – L	76	145	125	75	109	109
- Court Street NE – TR	124	199	183	134	186	159
- Court Street SW – LTR	150	355	250	134	289	257
<b>Court Street @ Site Entrance</b>						
- Driveway Entrance – LR	36	34	32	47	47	42
- Court Street NE – LT	7	75	62	-	-	-
- Court Street NE – L	-	-	-	15	31	33
- Court Street SW – TR	-	-	-	-	-	-

The queue analysis shows that with the increased PCT, the vehicle queue length remains approximately the same, with a post-development maximum queue length in the left-turn lane on Court Street of 109-feet.

Barton and Loguidice, LLC recommends the following roadway striping improvements:

**Court Street @ Park Avenue:** A lane re-striping design which extends the left-turn storage lane to 150-feet and realigns the left-turn lane and through-right-turn lane to have a consistent 11-foot width. The design features a 104-foot merge taper, an 8:1 (88-foot) bay-taper, and a 120-foot deceleration lane.

**Court Street @ Site Entrance:** A left-turn lane which includes a 75-foot storage lane, and a consistent width of 11-feet throughout the storage lane. The design shall restripe the roadway to the following lane dimensions: 11-foot travel lanes, an 11-foot left-turn lane and 3.5-foot shoulders. The design features a 104-foot merge taper, an 8:1 (88-foot) bay-taper, and 120-feet of deceleration length.

### Park Avenue Approach Analysis

The City of Auburn has requested that an analysis be performed for the Park Avenue Approach at Court Street to determine if a dedicated right-turn lane is warranted.

As shown in Figure 5, attached in the Appendix, the post development forecasts indicate that the right-turn movement out of Park Avenue is significantly larger than the left-turn movement, with a maximum of 197 right-turns and 37 left-turns occurring in the Afternoon peak hour which occurs when the school(s) are discharged.

According to the National Cooperative Highway Research Program (NCHRP) Report 279 - Intersection Channelization Design Guide, “*no specific warrants or guidelines are apparent for low speed, urban intersections. Engineers generally rely on capacity analyses and accident experience when considering right-turn lanes.*” The MaineDOT State Traffic Engineer has been consulted in regards to the consideration of a right-turn lane at a signalized intersection, and concurred that the method presented in NCHRP Report 279 is an appropriate approach.

**Capacity Review:** As shown in the prior section, the capacity analysis (PCT increase included) indicates that there are no capacity issues on the Park Avenue approach, with the right-turn movement operating at **LOS A** during the AM and PM commuter peak hours and a **LOS B** during the PM peak hour when the school(s) are discharged. The left-turn movement on the Park Avenue approach operates at **LOS B** during the AM peak hour and **LOS C** during both PM peak hours. During all peak hour time periods, the delay remains acceptable with little change between the pre- and post-development conditions. The Queue Analysis shows the same results, with a queue length of 109-feet (approximately 5 cars) occurring in the post-development PM peak hours.

The Capacity review shows that the forecasted levels of delay and vehicle queues on the Park Avenue approach of the signalized intersection with Court Street are low and acceptable.

**Accident Review:** MaineDOT’s Office of Safety and Mobility has prepared a detailed collision diagram for the intersection of Park Avenue and Court Street. The collision diagram, attached in the Appendix, depicts each crash which occurred during the latest (2019-2021) 3-year period, showing the cause and location of each crash. The collision diagram shows that one (1) crash has occurred on the Park Avenue approach, with the cause attributed to “*Improper Backing*”. The remaining 12 crashes occur on Court Street, with 8 “*Rear-End*” crashes occurring on the northeast approach of Court Street; on the southwest approach of Court Street, the diagram shows that 3 “*Rear-End*” crashes have occurred in the through lane, and one (1) single-vehicle “*Off-Road*” crash occurred in the intersection due to snowy road conditions.

The accident review indicates an existing accident pattern involving conflicts between right-turn and left-turning traffic on the Park Avenue approach does not exist.

In summary, the NCHRP report 279 stipulates that the determination for a dedicated right-turn lane be based upon a capacity analysis and accident patterns. The results of the capacity analysis for the Park Avenue approach shows levels of vehicle delay is very minor for both the right- and left-turn movements during each studied peak hour time period. The vehicle queue assessment shows a maximum queue length of approximately 5 vehicles is projected to occur during the 2024 post-development PM peak hours.

Barton and Loguidice concludes based upon the results of our detailed analyses of intersection capacity, vehicle queuing and roadway safety conditions a dedicated right-turn lane is not warranted on the Park Avenue approach at the signalized intersection at Court Street. Additionally, we would caution that an exclusive right-turn lane on the Park Avenue approach would likely increase the number of motorists

turning “right-on-red” onto Court Street increasing the frequency of conflicts between right-turning vehicles and crossing pedestrians.

## Vehicle Sight Distance

The City of Auburns has requested that sight distance be reviewed in accordance with the Section 60-799 - *Safe Sight Distance* ordinance which requires the following sight distances:

**Auburn Sight Distance Standards**

Speed Limit	Sight Distance
<b>25 mph</b>	<b>250'</b>
30 mph	300'
35 mph	350'
40 mph	400'
45 mph	450'
50 mph	500'

The Auburn Standards require sight distance to be measured in accordance with the following procedures:

- (1) *The sight distance shall be based on the posted speed limit. For those developments requiring planning board review and/or the submission of a traffic impact study, the developer shall provide an analysis of the sight distance for both the posted speed limit and the 85th percentile speed, either one of which the board may require the plan to be designed to.*
- (2) *Measurements shall be from the driver's seat of a vehicle that is ten feet behind the curb (or edge of shoulder) line with the height of the eye 3½ feet above the pavement and the height of the object 4½ feet.*

Based upon discussions at the project City Staff meeting held at the Auburn City Hall on January 20<sup>th</sup>, 2023, only the analysis of the sight distance based upon the posted speed limit is required. Court Street fronting the proposed development is presently posted at 25mph; thus, requiring an unobstructed sight distance of 250-feet.

Our field measurements looking both left and right from the proposed site driveway entrance directionally onto Court Street, in accordance with the City of Auburns standards, indicates existing sight distances are in excess of the requirements based upon a posted speed of 25mph. Looking left from the site entrance we measured a sight distance of **350-feet** and a similar measurement in excess of **350-feet** was recorded to the right.



## APPENDIX

# Traffic Solutions

17 Mount View Dr  
Gorham, ME 04038

Auburn Court St & Park Ave  
October 20, 2022 PM  
Sunny  
Count by David St.Clair

File Name : Auburn Court St & Park Ave 10-20-22 PM  
Site Code : 01020222  
Start Date : 10/20/2022  
Page No : 1

Groups Printed- Pedestrians

Start Time	Park Ave From North		Court St From East		Court St From West		Int. Total
	Peds	App. Total	Peds	App. Total	Peds	App. Total	
01:00 PM	0	0	0	0	1	1	1
<b>*** BREAK ***</b>							
Total	0	0	0	0	1	1	1
02:00 PM	4	4	5	5	12	12	21
02:15 PM	3	3	0	0	2	2	5
<b>*** BREAK ***</b>							
02:45 PM	0	0	2	2	0	0	2
Total	7	7	7	7	14	14	28

# Traffic Solutions

17 Mount View Dr  
Gorham, ME 04038

File Name : Auburn Court St & Park Ave 10-20-22 PM

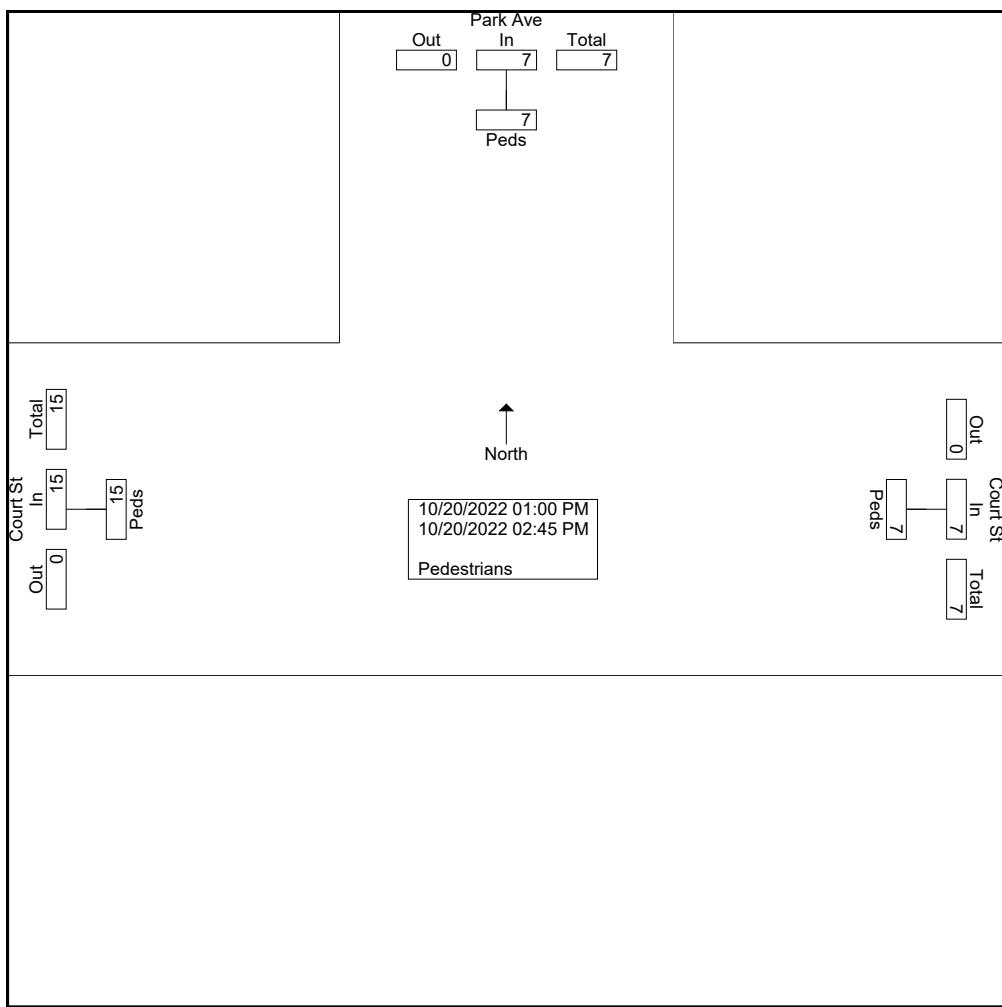
Site Code : 01020222

Start Date : 10/20/2022

Page No : 2

Groups Printed- Pedestrians

	Park Ave From North		Court St From East		Court St From West		Int. Total
	Peds	App. Total	Peds	App. Total	Peds	App. Total	
Grand Total	7	7	7	7	15	15	29
Apprch %	100		100		100		
Total %	24.1	24.1	24.1	24.1	51.7	51.7	



# Traffic Solutions

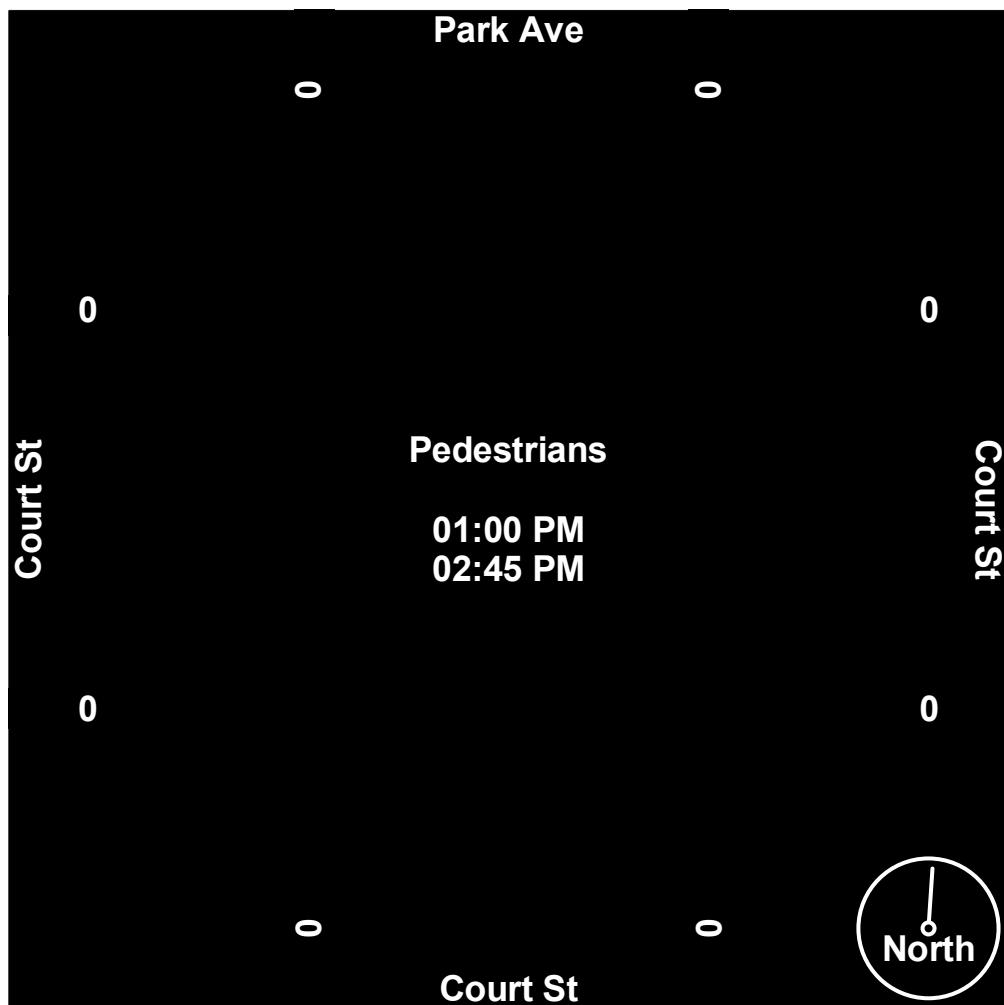
17 Mount View Dr  
Gorham, ME 04038

File Name : Auburn Court St & Park Ave 10-20-22 PM

Site Code : 01020222

Start Date : 10/20/2022

Page No : 3

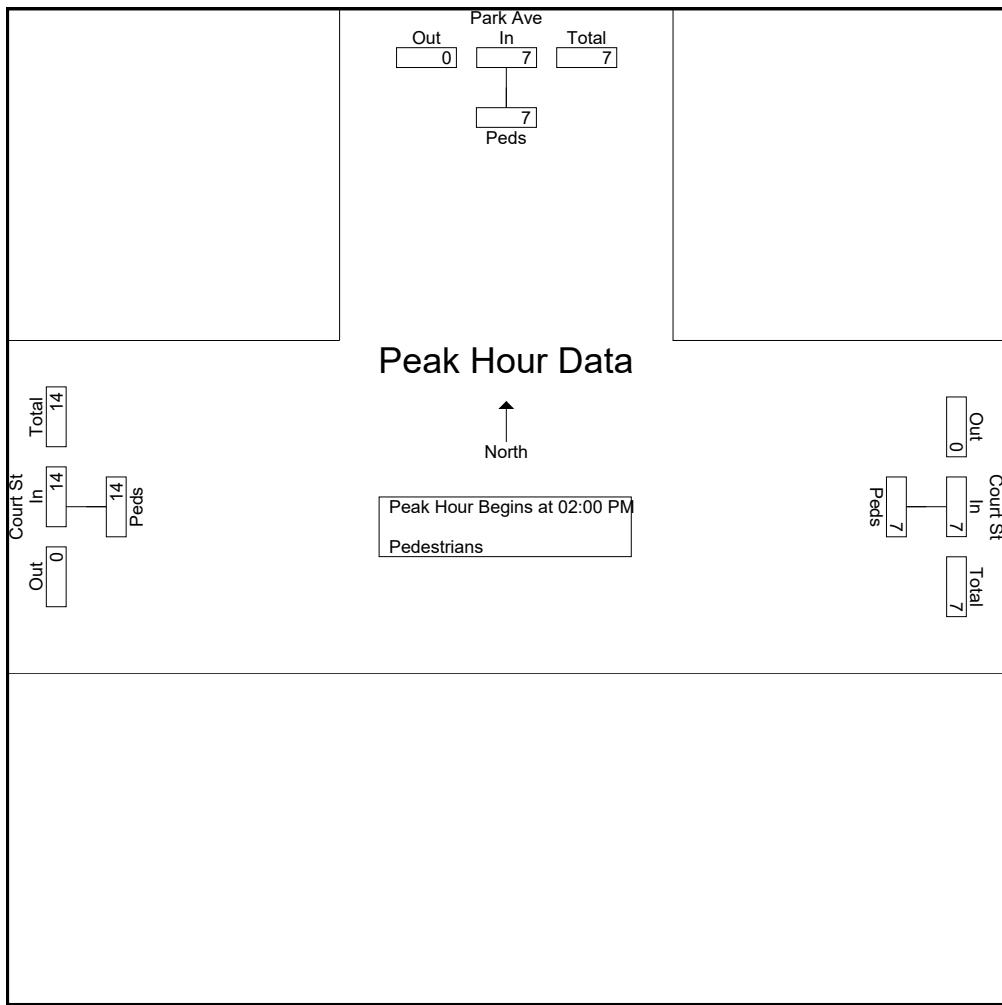


# Traffic Solutions

17 Mount View Dr  
Gorham, ME 04038

File Name : Auburn Court St & Park Ave 10-20-22 PM  
Site Code : 01020222  
Start Date : 10/20/2022  
Page No : 4

	Park Ave From North		Court St From East		Court St From West		
Start Time	Peds	App. Total	Peds	App. Total	Peds	App. Total	Int. Total
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 02:00 PM							
02:00 PM	4	4	5	5	12	12	21
02:15 PM	3	3	0	0	2	2	5
02:30 PM	0	0	0	0	0	0	0
02:45 PM	0	0	2	2	0	0	2
Total Volume	7	7	7	7	14	14	28
% App. Total	100		100		100		
PHF	.438	.438	.350	.350	.292	.292	.333



# Traffic Solutions

17 Mount View Dr  
Gorham, ME 04038

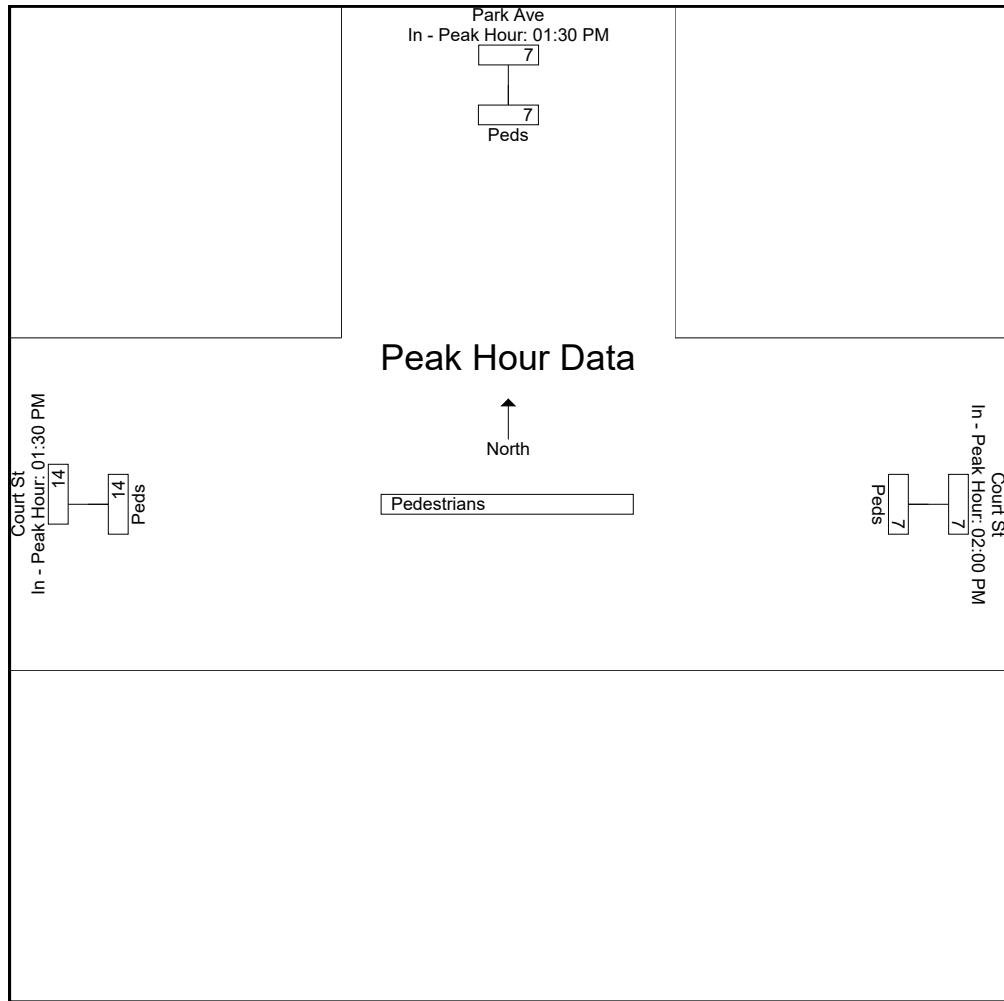
File Name : Auburn Court St & Park Ave 10-20-22 PM  
Site Code : 01020222  
Start Date : 10/20/2022  
Page No : 5

	Park Ave From North		Court St From East		Court St From West		
Start Time	Peds	App. Total	Peds	App. Total	Peds	App. Total	Int. Total

Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	01:30 PM		02:00 PM		01:30 PM	
+0 mins.	0	0	5	5	0	0
+15 mins.	0	0	0	0	0	0
+30 mins.	4	4	0	0	12	12
+45 mins.	3	3	2	2	2	2
Total Volume	7	7	7	7	14	14
% App. Total	100		100		100	
PHF	.438	.438	.350	.350	.292	.292



# Traffic Solutions

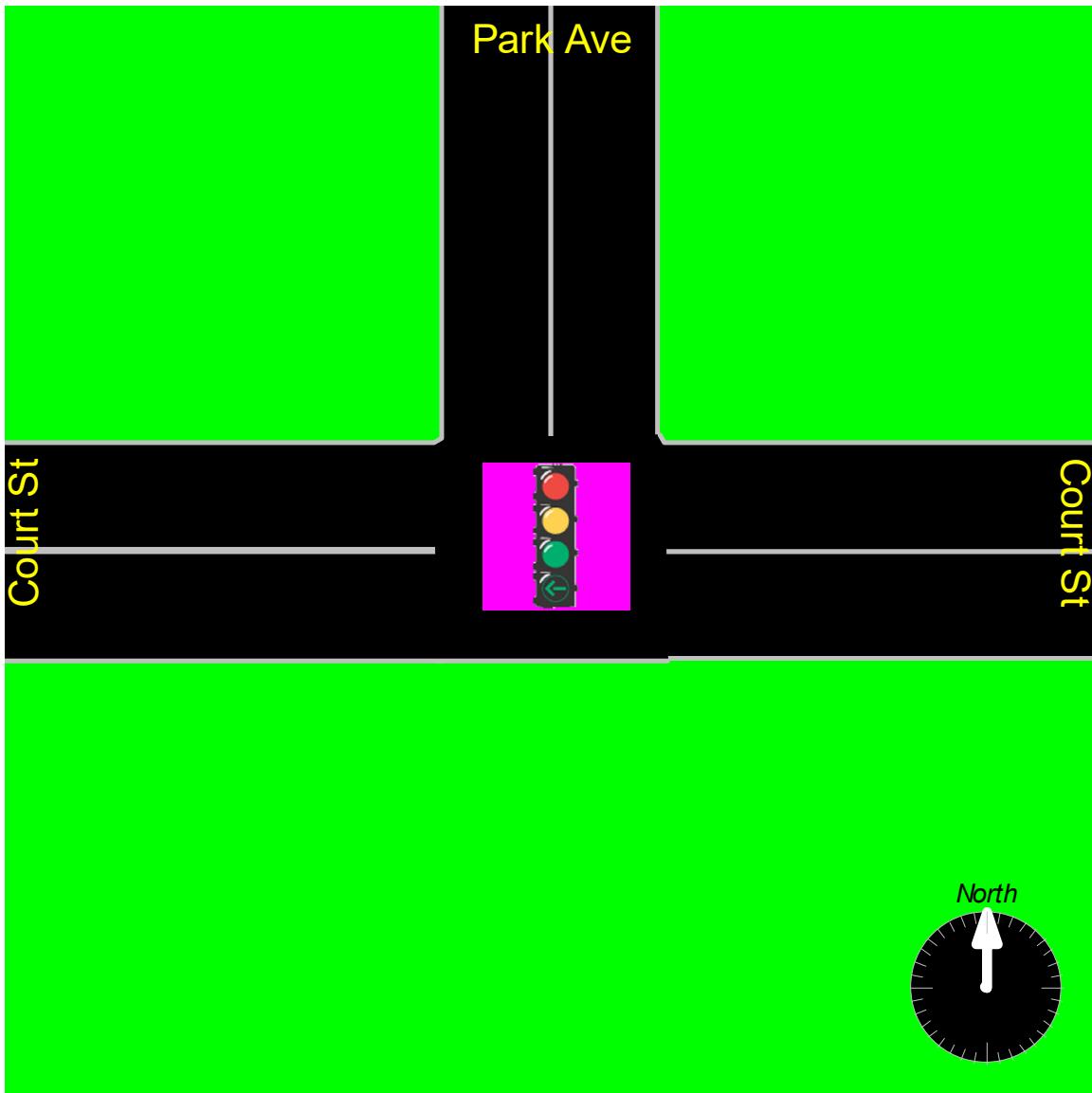
17 Mount View Dr  
Gorham, ME 04038

File Name : Auburn Court St & Park Ave 10-20-22 PM

Site Code : 01020222

Start Date : 10/20/2022

Page No : 6



### Summary of All Intervals

Run Number	1	2	4	5	6	Avg
Start Time	7:25	7:25	7:25	7:25	7:25	7:25
End Time	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1004	1048	1052	1037	1027	1034
Vehs Exited	1008	1042	1049	1042	1037	1036
Starting Vehs	16	21	15	23	28	20
Ending Vehs	12	27	18	18	18	18
Travel Distance (mi)	457	481	479	474	475	473
Travel Time (hr)	20.6	21.6	21.6	21.4	21.4	21.3
Total Delay (hr)	2.7	2.8	2.9	2.9	2.9	2.8
Total Stops	516	486	518	493	459	495
Fuel Used (gal)	15.9	16.8	16.7	16.2	16.4	16.4

### Interval #0 Information Seeding

Start Time	7:25
End Time	7:30
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	7:30
End Time	8:30
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	4	5	6	Avg
Vehs Entered	1004	1048	1052	1037	1027	1034
Vehs Exited	1008	1042	1049	1042	1037	1036
Starting Vehs	16	21	15	23	28	20
Ending Vehs	12	27	18	18	18	18
Travel Distance (mi)	457	481	479	474	475	473
Travel Time (hr)	20.6	21.6	21.6	21.4	21.4	21.3
Total Delay (hr)	2.7	2.8	2.9	2.9	2.9	2.8
Total Stops	516	486	518	493	459	495
Fuel Used (gal)	15.9	16.8	16.7	16.2	16.4	16.4

---

### 3: Court Street & Driveway/Park Avenue Performance by movement

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Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.3	0.2	0.1
Total Del/Veh (s)	17.6	6.8	6.8	4.8	10.0	8.2	7.1

---

### 10: Court Street & 555 Court Street Performance by movement

---

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	2.9	0.5	0.0	0.0	0.3
Total Del/Veh (s)	10.9	3.9	2.4	0.8	1.7	1.6	1.3

---

### Total Network Performance

---

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	9.3

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	100	91	158	184
Average Queue (ft)	49	32	61	81
95th Queue (ft)	86	67	126	147
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		150		
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	40	18
Average Queue (ft)	12	1
95th Queue (ft)	37	10
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	41.0	18.9	7.2	6.7	19.3
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	26	95	28	30	0
Cycles @ Minimum (%)	0	0	37	38	21
Cycles Maxed Out (%)	11	0	0	0	6
Cycles with Peds (%)	0	5	0	0	5

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	2	3	4	5	6	Avg
Start Time	1:55	1:55	1:55	1:55	1:55	1:55
End Time	3:00	3:00	3:00	3:00	3:00	3:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1426	1349	1435	1461	1405	1415
Vehs Exited	1411	1349	1445	1451	1406	1413
Starting Vehs	20	25	41	29	31	28
Ending Vehs	35	25	31	39	30	31
Travel Distance (mi)	645	614	664	666	636	645
Travel Time (hr)	31.4	29.8	32.6	32.8	31.4	31.6
Total Delay (hr)	6.1	5.8	6.7	6.6	6.4	6.3
Total Stops	830	797	850	882	811	833
Fuel Used (gal)	23.1	22.1	24.0	23.8	22.9	23.2

### Interval #0 Information Seeding

Start Time	1:55
End Time	2:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	2:00
End Time	3:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	2	3	4	5	6	Avg
Vehs Entered	1426	1349	1435	1461	1405	1415
Vehs Exited	1411	1349	1445	1451	1406	1413
Starting Vehs	20	25	41	29	31	28
Ending Vehs	35	25	31	39	30	31
Travel Distance (mi)	645	614	664	666	636	645
Travel Time (hr)	31.4	29.8	32.6	32.8	31.4	31.6
Total Delay (hr)	6.1	5.8	6.7	6.6	6.4	6.3
Total Stops	830	797	850	882	811	833
Fuel Used (gal)	23.1	22.1	24.0	23.8	22.9	23.2

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### 3: Court Street & Driveway/Park Avenue Performance by movement

---

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.5	0.5	0.2
Total Del/Veh (s)	22.2	11.3	12.8	7.3	16.8	12.2	12.4

---

### 10: Court Street & 555 Court Street Performance by movement

---

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.1	0.6	0.0	0.0	0.3
Total Del/Veh (s)	18.4	5.7	6.4	0.9	2.6	2.1	1.9

---

### Total Network Performance

---

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	15.2

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	167	185	213	372
Average Queue (ft)	72	60	93	169
95th Queue (ft)	130	126	182	293
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)	0	2		
Queuing Penalty (veh)	2	3		

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	43	40
Average Queue (ft)	11	5
95th Queue (ft)	36	26
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 5

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	42.2	18.0	9.6	8.1	23.8
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	15	92	17	23	0
Cycles @ Minimum (%)	0	0	28	26	5
Cycles Maxed Out (%)	9	0	2	0	15
Cycles with Peds (%)	0	8	0	0	5

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	1	2	3	4	6	Avg
Start Time	3:55	3:55	3:55	3:55	3:55	3:55
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1321	1358	1433	1336	1379	1365
Vehs Exited	1339	1348	1435	1334	1372	1366
Starting Vehs	33	27	26	21	28	25
Ending Vehs	15	37	24	23	35	27
Travel Distance (mi)	605	617	657	605	623	621
Travel Time (hr)	29.2	28.7	30.6	28.3	30.1	29.4
Total Delay (hr)	5.5	4.5	4.9	4.6	5.6	5.0
Total Stops	729	660	717	671	745	704
Fuel Used (gal)	21.7	21.7	23.3	21.2	22.2	22.0

### Interval #0 Information Seeding

Start Time	3:55
End Time	4:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	6	Avg
Vehs Entered	1321	1358	1433	1336	1379	1365
Vehs Exited	1339	1348	1435	1334	1372	1366
Starting Vehs	33	27	26	21	28	25
Ending Vehs	15	37	24	23	35	27
Travel Distance (mi)	605	617	657	605	623	621
Travel Time (hr)	29.2	28.7	30.6	28.3	30.1	29.4
Total Delay (hr)	5.5	4.5	4.9	4.6	5.6	5.0
Total Stops	729	660	717	671	745	704
Fuel Used (gal)	21.7	21.7	23.3	21.2	22.2	22.0

---

### 3: Court Street & Driveway/Park Avenue Performance by movement

---

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.3	0.4	0.1
Total Del/Veh (s)	21.0	9.1	10.3	5.8	14.1	9.4	9.7

---

### 10: Court Street & 555 Court Street Performance by movement

---

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.2	0.7	0.0	0.0	0.4
Total Del/Veh (s)	17.8	4.8	4.0	1.0	2.4	1.9	1.7

---

### Total Network Performance

---

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	12.4

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	137	144	210	230
Average Queue (ft)	60	53	77	126
95th Queue (ft)	107	104	162	214
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)	0	1		
Queuing Penalty (veh)	1	2		

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	30	31
Average Queue (ft)	10	4
95th Queue (ft)	33	21
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 3

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	45.5	18.0	8.5	8.3	21.4
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	23	96	24	16	0
Cycles @ Minimum (%)	0	0	28	33	11
Cycles Maxed Out (%)	14	0	0	1	10
Cycles with Peds (%)	0	4	0	0	6

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	1	2	5	6	7	Avg
Start Time	7:25	7:25	7:25	7:25	7:25	7:25
End Time	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1045	1042	1058	1021	1073	1049
Vehs Exited	1046	1037	1050	1033	1066	1046
Starting Vehs	16	21	11	32	17	19
Ending Vehs	15	26	19	20	24	21
Travel Distance (mi)	474	476	480	465	491	477
Travel Time (hr)	21.5	21.5	21.6	21.1	22.1	21.6
Total Delay (hr)	2.9	2.8	2.7	3.0	2.8	2.9
Total Stops	536	494	521	486	500	508
Fuel Used (gal)	16.6	16.6	16.3	16.1	17.0	16.5

### Interval #0 Information Seeding

Start Time	7:25
End Time	7:30
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	7:30
End Time	8:30
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	5	6	7	Avg
Vehs Entered	1045	1042	1058	1021	1073	1049
Vehs Exited	1046	1037	1050	1033	1066	1046
Starting Vehs	16	21	11	32	17	19
Ending Vehs	15	26	19	20	24	21
Travel Distance (mi)	474	476	480	465	491	477
Travel Time (hr)	21.5	21.5	21.6	21.1	22.1	21.6
Total Delay (hr)	2.9	2.8	2.7	3.0	2.8	2.9
Total Stops	536	494	521	486	500	508
Fuel Used (gal)	16.6	16.6	16.3	16.1	17.0	16.5

3: Court Street & Driveway/Park Avenue Performance by movement

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.3	0.2	0.1
Total Del/Veh (s)	16.3	6.4	7.0	5.0	9.3	5.8	6.9

10: Court Street & 555 Court Street Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.2	0.5	0.0	0.0	0.3
Total Del/Veh (s)	12.0	3.8	2.5	0.8	1.7	1.2	1.4

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	9.2

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	91	136	210	155
Average Queue (ft)	46	34	64	75
95th Queue (ft)	78	85	141	134
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		150		
Storage Blk Time (%)			1	
Queuing Penalty (veh)			1	

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	50	31
Average Queue (ft)	21	2
95th Queue (ft)	47	15
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	44.7	21.6	6.8	6.5	19.8
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	30	96	32	26	0
Cycles @ Minimum (%)	0	0	42	43	19
Cycles Maxed Out (%)	15	0	0	0	6
Cycles with Peds (%)	0	4	0	0	6

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	2	3	4	6	7	Avg
Start Time	1:55	1:55	1:55	1:55	1:55	1:55
End Time	3:00	3:00	3:00	3:00	3:00	3:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1397	1426	1454	1442	1474	1439
Vehs Exited	1394	1430	1455	1460	1482	1443
Starting Vehs	37	25	30	46	40	35
Ending Vehs	40	21	29	28	32	30
Travel Distance (mi)	628	641	664	656	671	652
Travel Time (hr)	30.4	31.4	33.1	32.5	32.9	32.1
Total Delay (hr)	5.8	6.2	7.1	6.9	6.5	6.5
Total Stops	802	823	894	853	860	847
Fuel Used (gal)	22.6	23.1	24.1	23.9	24.1	23.6

### Interval #0 Information Seeding

Start Time	1:55
End Time	2:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	2:00
End Time	3:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	2	3	4	6	7	Avg
Vehs Entered	1397	1426	1454	1442	1474	1439
Vehs Exited	1394	1430	1455	1460	1482	1443
Starting Vehs	37	25	30	46	40	35
Ending Vehs	40	21	29	28	32	30
Travel Distance (mi)	628	641	664	656	671	652
Travel Time (hr)	30.4	31.4	33.1	32.5	32.9	32.1
Total Delay (hr)	5.8	6.2	7.1	6.9	6.5	6.5
Total Stops	802	823	894	853	860	847
Fuel Used (gal)	22.6	23.1	24.1	23.9	24.1	23.6

### 3: Court Street & Driveway/Park Avenue Performance by movement

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.5	0.4	0.2
Total Del/Veh (s)	22.9	12.3	12.4	6.9	17.2	12.4	12.5

### 10: Court Street & 555 Court Street Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.3	0.6	0.0	0.0	0.4
Total Del/Veh (s)	21.0	7.7	5.2	0.9	2.6	2.4	2.1

### Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	15.4

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	187	153	212	318
Average Queue (ft)	75	55	86	172
95th Queue (ft)	137	110	167	275
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)	0	1		
Queuing Penalty (veh)	1	3		

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	60	40
Average Queue (ft)	19	11
95th Queue (ft)	49	36
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 4

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	42.4	20.2	9.8	8.2	23.9
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	14	92	16	19	0
Cycles @ Minimum (%)	0	0	29	30	6
Cycles Maxed Out (%)	9	0	2	0	16
Cycles with Peds (%)	0	8	0	0	5

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	2	3	5	6	7	Avg
Start Time	3:55	3:55	3:55	3:55	3:55	3:55
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1462	1375	1407	1406	1380	1407
Vehs Exited	1455	1379	1407	1389	1393	1405
Starting Vehs	26	27	33	25	41	28
Ending Vehs	33	23	33	42	28	33
Travel Distance (mi)	662	614	637	624	629	633
Travel Time (hr)	31.6	29.0	30.4	30.5	29.6	30.2
Total Delay (hr)	5.7	4.9	5.3	5.9	4.9	5.3
Total Stops	780	736	792	800	719	768
Fuel Used (gal)	23.7	21.8	22.5	22.5	22.2	22.5

### Interval #0 Information Seeding

Start Time	3:55
End Time	4:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	2	3	5	6	7	Avg
Vehs Entered	1462	1375	1407	1406	1380	1407
Vehs Exited	1455	1379	1407	1389	1393	1405
Starting Vehs	26	27	33	25	41	28
Ending Vehs	33	23	33	42	28	33
Travel Distance (mi)	662	614	637	624	629	633
Travel Time (hr)	31.6	29.0	30.4	30.5	29.6	30.2
Total Delay (hr)	5.7	4.9	5.3	5.9	4.9	5.3
Total Stops	780	736	792	800	719	768
Fuel Used (gal)	23.7	21.8	22.5	22.5	22.2	22.5

3: Court Street & Driveway/Park Avenue Performance by movement

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.4	0.4	0.2
Total Del/Veh (s)	21.0	9.0	10.6	6.1	14.7	12.0	10.2

10: Court Street & 555 Court Street Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.0	0.7	0.0	0.0	0.4
Total Del/Veh (s)	15.8	5.9	4.1	0.9	2.4	2.4	1.8

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	12.8

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	135	119	202	292
Average Queue (ft)	60	54	81	132
95th Queue (ft)	108	102	161	241
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)	0	1		
Queuing Penalty (veh)	0	2		

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	44	35
Average Queue (ft)	18	10
95th Queue (ft)	44	33
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	42.1	22.8	8.7	8.4	21.2
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	17	96	21	19	0
Cycles @ Minimum (%)	0	0	30	26	11
Cycles Maxed Out (%)	10	0	0	0	9
Cycles with Peds (%)	0	4	0	0	7

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	1	2	4	5	6	Avg
Start Time	7:25	7:25	7:25	7:25	7:25	7:25
End Time	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1006	1040	1052	1040	1037	1034
Vehs Exited	1010	1034	1049	1043	1040	1035
Starting Vehs	16	21	15	21	28	19
Ending Vehs	12	27	18	18	25	20
Travel Distance (mi)	459	479	479	476	480	474
Travel Time (hr)	20.6	21.4	21.7	21.6	21.7	21.4
Total Delay (hr)	2.6	2.7	3.0	3.0	3.0	2.8
Total Stops	493	474	512	494	461	486
Fuel Used (gal)	16.0	16.6	16.7	16.3	16.5	16.4

### Interval #0 Information Seeding

Start Time	7:25
End Time	7:30
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	7:30
End Time	8:30
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	4	5	6	Avg
Vehs Entered	1006	1040	1052	1040	1037	1034
Vehs Exited	1010	1034	1049	1043	1040	1035
Starting Vehs	16	21	15	21	28	19
Ending Vehs	12	27	18	18	25	20
Travel Distance (mi)	459	479	479	476	480	474
Travel Time (hr)	20.6	21.4	21.7	21.6	21.7	21.4
Total Delay (hr)	2.6	2.7	3.0	3.0	3.0	2.8
Total Stops	493	474	512	494	461	486
Fuel Used (gal)	16.0	16.6	16.7	16.3	16.5	16.4

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### 3: Court Street & Driveway/Park Avenue Performance by movement

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Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.0	0.3	0.2	0.1
Total Del/Veh (s)	17.2	6.6	6.9	4.8	10.1	8.0	7.1

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### 10: Court Street & 555 Court Street Performance by movement

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Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.2	0.5	0.5	0.0	0.0	0.3
Total Del/Veh (s)	11.0	3.8	2.0	0.8	1.7	1.7	1.3

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### Total Network Performance

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Denied Del/Veh (s)	0.4
Total Del/Veh (s)	9.3

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	100	111	151	196
Average Queue (ft)	47	32	60	80
95th Queue (ft)	82	76	124	150
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80		
Storage Blk Time (%)		0	3	
Queuing Penalty (veh)		1	5	

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	39	12
Average Queue (ft)	12	1
95th Queue (ft)	36	7
Link Distance (ft)	120	716
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 6

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	42.2	21.0	7.2	6.6	19.9
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	28	95	30	31	0
Cycles @ Minimum (%)	0	0	36	37	20
Cycles Maxed Out (%)	13	5	0	0	8
Cycles with Peds (%)	0	5	0	0	5

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	2	3	4	5	7	Avg
Start Time	1:55	1:55	1:55	1:55	1:55	1:55
End Time	3:00	3:00	3:00	3:00	3:00	3:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1424	1389	1402	1492	1457	1432
Vehs Exited	1408	1391	1410	1494	1450	1431
Starting Vehs	18	27	43	39	34	32
Ending Vehs	34	25	35	37	41	35
Travel Distance (mi)	643	633	646	681	668	654
Travel Time (hr)	31.9	32.0	33.3	34.1	33.7	33.0
Total Delay (hr)	6.7	7.2	8.1	7.4	7.4	7.3
Total Stops	835	894	903	937	918	898
Fuel Used (gal)	23.4	23.1	23.7	24.6	24.2	23.8

### Interval #0 Information Seeding

Start Time	1:55
End Time	2:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	2:00
End Time	3:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	2	3	4	5	7	Avg
Vehs Entered	1424	1389	1402	1492	1457	1432
Vehs Exited	1408	1391	1410	1494	1450	1431
Starting Vehs	18	27	43	39	34	32
Ending Vehs	34	25	35	37	41	35
Travel Distance (mi)	643	633	646	681	668	654
Travel Time (hr)	31.9	32.0	33.3	34.1	33.7	33.0
Total Delay (hr)	6.7	7.2	8.1	7.4	7.4	7.3
Total Stops	835	894	903	937	918	898
Fuel Used (gal)	23.4	23.1	23.7	24.6	24.2	23.8

### 3: Court Street & Driveway/Park Avenue Performance by movement

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.5	0.5	0.2
Total Del/Veh (s)	24.3	12.7	15.6	8.2	20.4	17.3	14.6

### 10: Court Street & 555 Court Street Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	0.5	0.6	0.0	0.0	0.3
Total Del/Veh (s)	15.4	6.0	6.6	1.1	2.6	2.2	2.0

### Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	17.5

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	208	204	288	488
Average Queue (ft)	79	71	99	192
95th Queue (ft)	152	145	199	355
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80		
Storage Blk Time (%)		6	8	
Queuing Penalty (veh)		26	17	

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	38	148
Average Queue (ft)	10	14
95th Queue (ft)	34	75
Link Distance (ft)	120	716
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 42

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	42.2	19.1	9.6	8.6	24.5
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	11	83	16	19	0
Cycles @ Minimum (%)	0	0	25	24	5
Cycles Maxed Out (%)	8	0	2	2	20
Cycles with Peds (%)	0	17	0	0	20

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	1	2	3	4	6	Avg
Start Time	3:55	3:55	3:55	3:55	3:55	3:55
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1339	1356	1401	1337	1367	1359
Vehs Exited	1369	1356	1408	1337	1355	1365
Starting Vehs	44	30	28	24	29	31
Ending Vehs	14	30	21	24	41	25
Travel Distance (mi)	615	618	643	605	618	620
Travel Time (hr)	29.9	30.5	31.1	28.9	30.6	30.2
Total Delay (hr)	5.7	6.2	6.0	5.2	6.3	5.9
Total Stops	787	764	780	736	794	773
Fuel Used (gal)	22.2	22.3	23.1	21.5	22.2	22.3

### Interval #0 Information Seeding

Start Time	3:55
End Time	4:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	6	Avg
Vehs Entered	1339	1356	1401	1337	1367	1359
Vehs Exited	1369	1356	1408	1337	1355	1365
Starting Vehs	44	30	28	24	29	31
Ending Vehs	14	30	21	24	41	25
Travel Distance (mi)	615	618	643	605	618	620
Travel Time (hr)	29.9	30.5	31.1	28.9	30.6	30.2
Total Delay (hr)	5.7	6.2	6.0	5.2	6.3	5.9
Total Stops	787	764	780	736	794	773
Fuel Used (gal)	22.2	22.3	23.1	21.5	22.2	22.3

3: Court Street & Driveway/Park Avenue Performance by movement

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.3	0.3	0.1
Total Del/Veh (s)	23.0	10.4	12.6	7.4	17.0	12.6	11.8

10: Court Street & 555 Court Street Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	0.7	0.7	0.0	0.0	0.4
Total Del/Veh (s)	14.4	4.6	5.2	1.2	2.5	2.1	1.9

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	14.7

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	157	149	215	330
Average Queue (ft)	66	61	90	136
95th Queue (ft)	123	125	183	250
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80		
Storage Blk Time (%)		4	7	
Queuing Penalty (veh)		18	17	

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	29	141
Average Queue (ft)	10	8
95th Queue (ft)	32	62
Link Distance (ft)	120	716
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 35

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	43.5	19.0	9.0	8.5	21.5
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	20	83	27	21	0
Cycles @ Minimum (%)	0	0	28	30	7
Cycles Maxed Out (%)	12	0	1	1	7
Cycles with Peds (%)	0	17	0	0	18

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	1	2	5	6	7	Avg
Start Time	7:25	7:25	7:25	7:25	7:25	7:25
End Time	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1041	1044	1058	1026	1078	1048
Vehs Exited	1041	1039	1050	1036	1071	1049
Starting Vehs	16	21	11	32	17	19
Ending Vehs	16	26	19	22	24	22
Travel Distance (mi)	474	477	480	468	493	478
Travel Time (hr)	21.5	21.6	21.6	21.1	22.1	21.6
Total Delay (hr)	3.0	2.9	2.7	2.9	2.7	2.8
Total Stops	523	508	518	478	481	501
Fuel Used (gal)	16.5	16.7	16.3	16.1	17.0	16.5

### Interval #0 Information Seeding

Start Time	7:25
End Time	7:30
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	7:30
End Time	8:30
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	5	6	7	Avg
Vehs Entered	1041	1044	1058	1026	1078	1048
Vehs Exited	1041	1039	1050	1036	1071	1049
Starting Vehs	16	21	11	32	17	19
Ending Vehs	16	26	19	22	24	22
Travel Distance (mi)	474	477	480	468	493	478
Travel Time (hr)	21.5	21.6	21.6	21.1	22.1	21.6
Total Delay (hr)	3.0	2.9	2.7	2.9	2.7	2.8
Total Stops	523	508	518	478	481	501
Fuel Used (gal)	16.5	16.7	16.3	16.1	17.0	16.5

3: Court Street & Driveway/Park Avenue Performance by movement

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.3	0.2	0.1
Total Del/Veh (s)	16.8	6.3	6.9	4.7	9.2	6.3	6.7

10: Court Street & 555 Court Street Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.5	0.6	0.0	0.0	0.4
Total Del/Veh (s)	11.7	3.7	2.7	0.8	1.7	1.2	1.4

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	9.1

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	87	105	177	154
Average Queue (ft)	46	34	63	74
95th Queue (ft)	77	75	134	134
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		150		
Storage Blk Time (%)			0	
Queuing Penalty (veh)			1	

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	50	31
Average Queue (ft)	20	2
95th Queue (ft)	47	15
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	46.0	23.8	6.6	6.6	20.3
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	31	96	33	28	0
Cycles @ Minimum (%)	0	0	43	42	20
Cycles Maxed Out (%)	15	4	0	0	6
Cycles with Peds (%)	0	4	0	0	6

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	1	3	4	5	6	Avg
Start Time	1:55	1:55	1:55	1:55	1:55	1:55
End Time	3:00	3:00	3:00	3:00	3:00	3:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1440	1426	1455	1445	1450	1443
Vehs Exited	1440	1430	1459	1445	1465	1448
Starting Vehs	34	25	32	34	46	35
Ending Vehs	34	21	28	34	31	30
Travel Distance (mi)	650	641	664	656	658	654
Travel Time (hr)	31.3	31.6	33.1	32.3	32.8	32.2
Total Delay (hr)	5.8	6.4	7.2	6.5	7.0	6.6
Total Stops	824	837	863	890	886	859
Fuel Used (gal)	23.4	23.1	24.1	23.5	24.0	23.6

### Interval #0 Information Seeding

Start Time	1:55
End Time	2:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	2:00
End Time	3:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	3	4	5	6	Avg
Vehs Entered	1440	1426	1455	1445	1450	1443
Vehs Exited	1440	1430	1459	1445	1465	1448
Starting Vehs	34	25	32	34	46	35
Ending Vehs	34	21	28	34	31	30
Travel Distance (mi)	650	641	664	656	658	654
Travel Time (hr)	31.3	31.6	33.1	32.3	32.8	32.2
Total Delay (hr)	5.8	6.4	7.2	6.5	7.0	6.6
Total Stops	824	837	863	890	886	859
Fuel Used (gal)	23.4	23.1	24.1	23.5	24.0	23.6

### 3: Court Street & Driveway/Park Avenue Performance by movement

Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.5	0.5	0.2
Total Del/Veh (s)	20.8	11.1	12.8	7.6	17.4	13.3	12.6

### 10: Court Street & 555 Court Street Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.3	0.7	0.0	0.0	0.4
Total Del/Veh (s)	18.9	8.8	4.7	0.9	2.6	2.3	2.0

### Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	15.5

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	149	138	240	320
Average Queue (ft)	72	58	97	172
95th Queue (ft)	119	109	186	289
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)	0	2		
Queuing Penalty (veh)	1	4		

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	56	31
Average Queue (ft)	18	9
95th Queue (ft)	47	31
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 6

Intersection: 3: Court Street & Driveway/Park Avenue

Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	42.2	25.2	9.7	8.4	23.5
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	14	94	15	23	0
Cycles @ Minimum (%)	0	0	28	25	8
Cycles Maxed Out (%)	9	6	2	0	15
Cycles with Peds (%)	0	6	0	0	3

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

### Summary of All Intervals

Run Number	2	3	4	5	7	Avg
Start Time	3:55	3:55	3:55	3:55	3:55	3:55
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1456	1373	1378	1401	1384	1397
Vehs Exited	1451	1376	1383	1405	1393	1402
Starting Vehs	27	27	27	33	41	30
Ending Vehs	32	24	22	29	32	27
Travel Distance (mi)	658	613	628	637	632	633
Travel Time (hr)	31.4	29.1	30.5	30.4	29.8	30.2
Total Delay (hr)	5.6	5.1	5.9	5.4	4.9	5.4
Total Stops	768	763	808	780	721	767
Fuel Used (gal)	23.5	21.8	22.7	22.5	22.2	22.6

### Interval #0 Information Seeding

Start Time	3:55
End Time	4:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

### Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	2	3	4	5	7	Avg
Vehs Entered	1456	1373	1378	1401	1384	1397
Vehs Exited	1451	1376	1383	1405	1393	1402
Starting Vehs	27	27	27	33	41	30
Ending Vehs	32	24	22	29	32	27
Travel Distance (mi)	658	613	628	637	632	633
Travel Time (hr)	31.4	29.1	30.5	30.4	29.8	30.2
Total Delay (hr)	5.6	5.1	5.9	5.4	4.9	5.4
Total Stops	768	763	808	780	721	767
Fuel Used (gal)	23.5	21.8	22.7	22.5	22.2	22.6

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### 3: Court Street & Driveway/Park Avenue Performance by movement

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Movement	SBL	SBR	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.3	0.2	0.0	0.0	0.4	0.4	0.2
Total Del/Veh (s)	21.3	9.1	10.9	6.2	14.8	11.7	10.3

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### 10: Court Street & 555 Court Street Performance by movement

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Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	3.2	0.7	0.0	0.0	0.4
Total Del/Veh (s)	13.7	5.8	4.3	1.0	2.4	2.3	1.8

---

### Total Network Performance

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Denied Del/Veh (s)	0.6
Total Del/Veh (s)	13.0

Intersection: 3: Court Street & Driveway/Park Avenue

Movement	SB	NE	NE	SW
Directions Served	LTR	L	TR	LTR
Maximum Queue (ft)	144	132	186	331
Average Queue (ft)	64	57	83	137
95th Queue (ft)	116	109	159	257
Link Distance (ft)	327		844	1026
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)	0	1		
Queuing Penalty (veh)	0	2		

Intersection: 10: Court Street & 555 Court Street

Movement	SE	NE
Directions Served	LR	L
Maximum Queue (ft)	39	36
Average Queue (ft)	17	10
95th Queue (ft)	42	33
Link Distance (ft)	120	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 3

Intersection: 3: Court Street & Driveway/Park Avenue

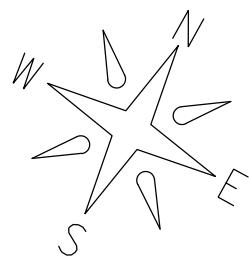
Phase	2	3	4	5	6
Movement(s) Served	NETL	NBTL	SBTL	NEL	SWTL
Maximum Green (s)	61.5	21.0	25.0	20.0	35.0
Minimum Green (s)	12.0	4.0	5.0	5.0	12.0
Recall	Min	None	None	None	Min
Avg. Green (s)	41.7	21.0	8.5	8.5	21.5
g/C Ratio	-0.01	-0.01	-0.01	-0.01	NA
Cycles Skipped (%)	17	94	20	20	0
Cycles @ Minimum (%)	0	0	31	28	10
Cycles Maxed Out (%)	12	6	0	0	9
Cycles with Peds (%)	0	6	0	0	6

Controller Summary

Average Cycle Length (s): NA

Number of Complete Cycles : 0

Park Ave.



9838 4-11-20 2:52P D/C Improper Backing



left turn lane

3680 2-2-20 10:58A D/C Follow Too Close  
31495 12-15-20 12:26P D/C Follow Too Close  
21973 9-15-20 7:34A D/C Follow Too Close

 = Traffic Signal

31749 12-17-20 4:07P S/S  
Road Conditions



Auburn

Node: 3871

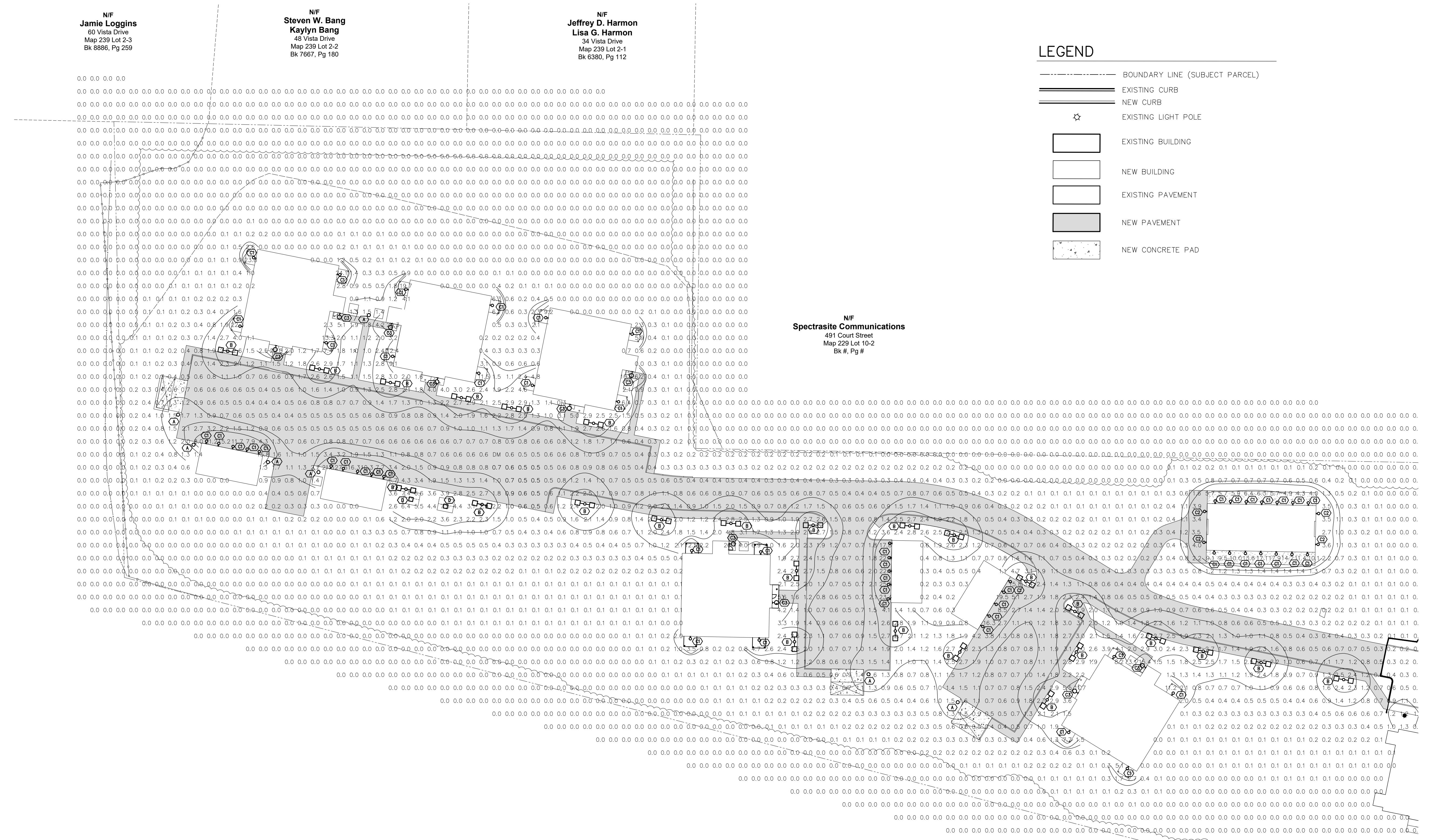
Study Period: 2019-2021

# of Crashes: 13 /CRF: .67

Prepared by Office of Safety & Mobility (MP 1/25/23)

- (C) 23016 8-31-21 9:18A D/C Hit & Run
- (C) 6533 2-27-20 11:52A W/R Follow Too Close
- (C) 3713 1-31-19 4:24P D/C Follow Too Close
- (C) 33911 11-29-21 3:27P D/C Follow Too Close
- (C) 75180 12-9-19 3:13P W/R Follow Too Close
- (C) 66705 10-3-19 4:47P D/CL Follow Too Close
- (C) 16975 7-6-21 7:45P D/CL Follow Too Close
- (C) 68852 10-24-19 3:40P D/C Follow Too Close

Court St.

**LEGEND**

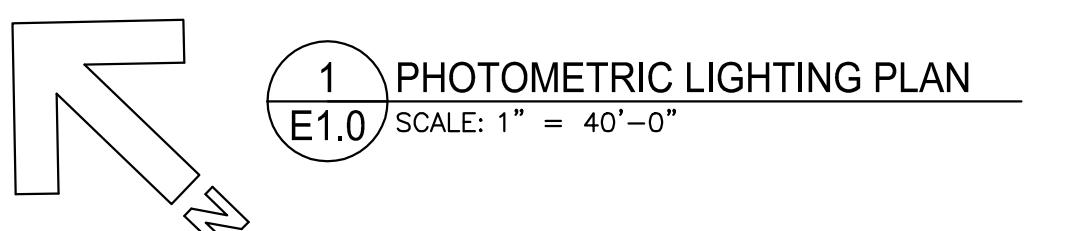
-----	BOUNDARY LINE (SUBJECT PARCEL)
=====	EXISTING CURB
=====	NEW CURB
○	EXISTING LIGHT POLE
[ ]	EXISTING BUILDING
[ ]	NEW BUILDING
[ ]	EXISTING PAVEMENT
[ ]	NEW PAVEMENT
[ ]	NEW CONCRETE PAD

LIGHT FIXTURE TABLE						
LABEL	LIGHT FIXTURE	MANUFACTURER'S ID	Fixture Type	LUMENS	QUANTITY	MOUNTING HEIGHT
OA	LED ACORN LIGHT FIXTURE	ITEM #DP1010	POLE	3,900	7	15'-0"
OB	LED ACORN LIGHT FIXTURE	ITEM #DP1010	POLE	3,900	26	15'-0"
OC1	HUKORO OUTDOOR BARN LIGHT MODEL #I4261	ITEM #5111860	WALL MOUNTED	3,000	54	6'-0"
OC2	HUKORO OUTDOOR BARN LIGHT MODEL #I4261	ITEM #5111860	WALL MOUNTED	3,000	4	6'-0"
OC3	BEACHCREST HOME - KILPATRICK STEEL WALL LIGHT	NONE	WALL MOUNTED	3,000 ASSUMED	10	6'-0"
OD	KATHY IRELAND SIERRA CRAFTSMAN CEILING LIGHT	ITEM #65087	CEILING	1,350	2	CEILING

AUBURN LIGHTING STANDARDS		
STANDARD	REQUIRED VALUE	PROVIDED VALUE
MAX ILLUMINATION AT NEIGHBORING PROPERTIES FROM PROPOSED LIGHTS	N/A	0 FC*

**NOTES:**

1. PROVIDED VALUE EXCEEDS 0 FC AT THE ENTRANCE OF THE DRIVEWAY TO PROVIDE SUFFICIENT ILLUMINATION.
3. DEPRECATION FACTOR FOR LED IS 0.90
4. FIXTURES SHOWN AND NUMBERED ARE AT GROUND OR FIRST FLOOR ONLY.
- LIGHTING FIXTURES ON HIGHER FLOORS ARE NOT INCLUDED.



**N/F**  
**Tim Corp.**  
Court Street  
Map 229 Lot 6  
Bk 2210, Pg 302

**PHOTOMETRIC LIGHTING PLAN**

REV. DATE ISSUED FOR PLANNING BOARD APPROVAL  
1 1/23/23

E1.0

22-024 Stable Ridge Phase 2  
555 COURT STREET - AUBURN, ME  
FOR  
AMERICAN DEVELOPMENT GROUP  
P.O. BOX 1495 - MAPLES, ME

**DIRIGO**  
ARCHITECTURAL

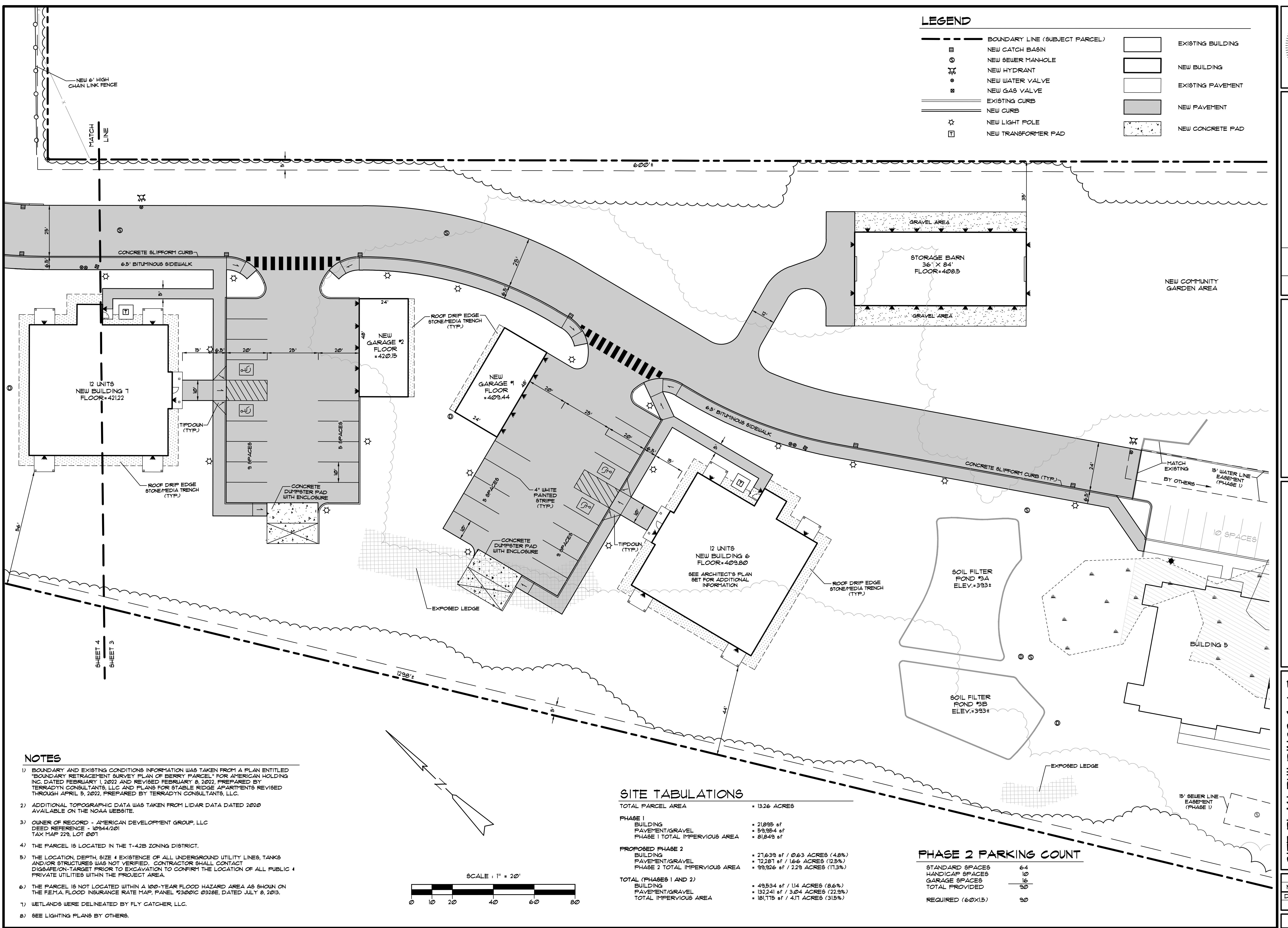
ENGINEERING • CONSTRUCTION MANAGEMENT  
108 MUSSEY ROAD, SCARBOROUGH, ME 04074  
PH: (207) 245-3040  
WS: DIRIGOAE.COM

SIGNED COPY OF DRAWING  
ON FILE AT DIRIGO A/E  
OFFICE

THOMAS W.  
PERKINS  
No. 11710  
LICENSED PROFESSIONAL ENGINEER  
STATE OF MAINE  
1/23/2023

SCALE: AS NOTED  
DATE: 1/23/23  
PROJECT: 22-024

SHEET NO.



**Stoneybrook**  
Land Use, Inc.

4646 Sun City Center Blvd., #500  
Sun City Center, FL 33573-6281

**SUR ENGINEERING, INC.**  
16 THURSTON DRIVE  
MONMOUTH, MAINE 04259  
(207) 422-6218 tef  
steve@surfeng.com

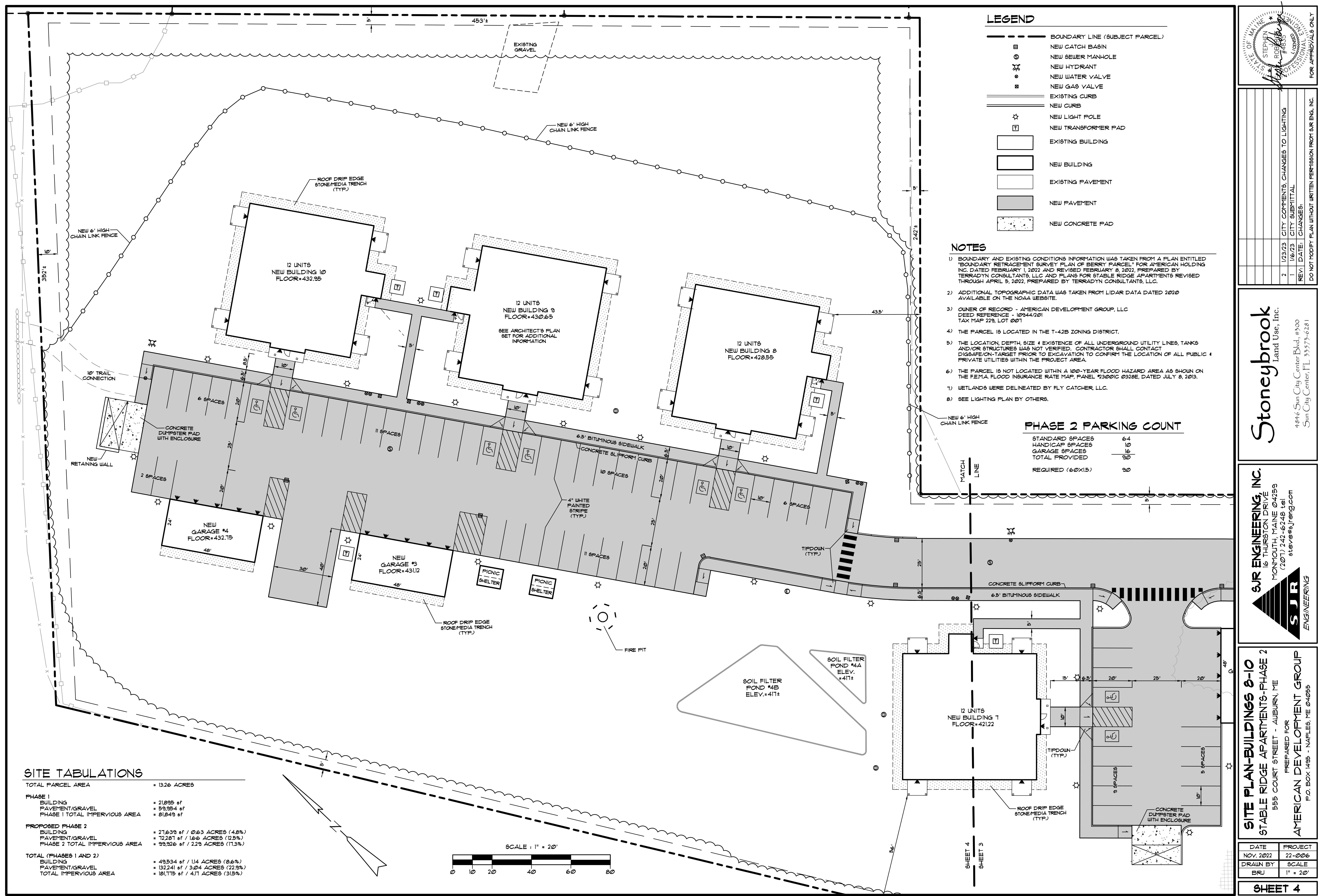


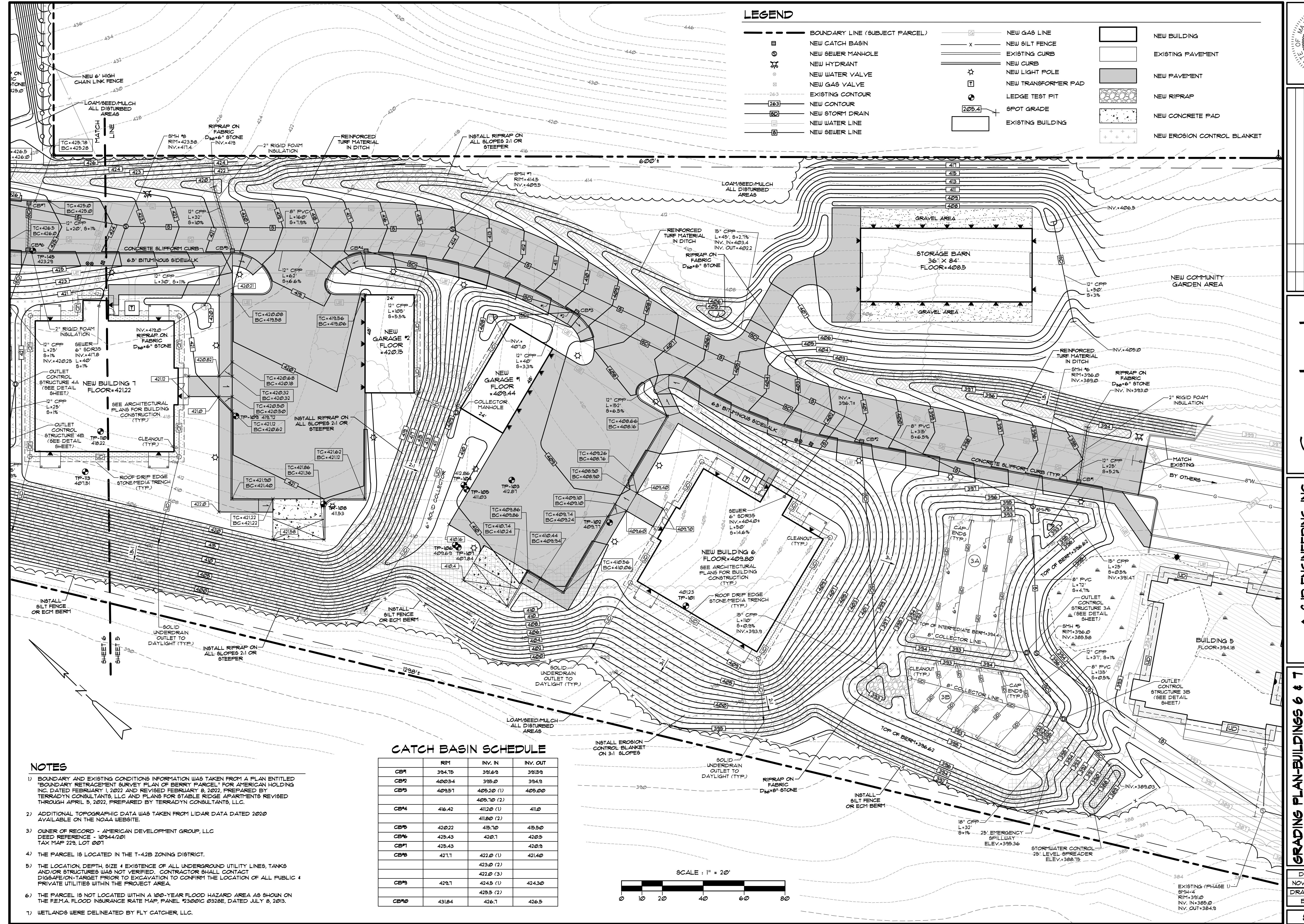
**SITE PLAN-BUILDINGS 6 & 7**  
STABLE RIDGE APARTMENTS-PHASE 2  
555 COURT STREET - AUBURN, ME  
PREPARED FOR  
AMERICAN DEVELOPMENT GROUP  
P.O. BOX 1495 - NAPLES, ME 04055

DATE	PROJECT
NOV. 2022	22-006
DRAWN BY	BRJ
SCALE	1" = 20'

**SHEET 3**

STEPHEN ROBERTSON  
PROFESSIONAL LAND SURVEYOR  
FOR APPROVALS ONLY





		STEPHEN ROBERTSON #4835		LICENCED PROFESSIONAL ENGINEER	
<i>Stephen J. Robertson</i>					
2	1/23/23	CITY COMMENTS, CHANGES TO LIGHTING			
1	1/6/23	CITY SUBMITTAL			
REV:	DATE:	CHANGERS:			

DO NOT MODIFY PLAN WITHOUT WRITTEN PERMISSION FROM SJR ENG., INC.

FOR APPROVALS ONLY

# Stoneybrook

Land Use, Inc.

4846 Sun City Center Blvd., #300  
Sun City Center, FL 33573-6281

**SJR ENGINEERING, INC.**

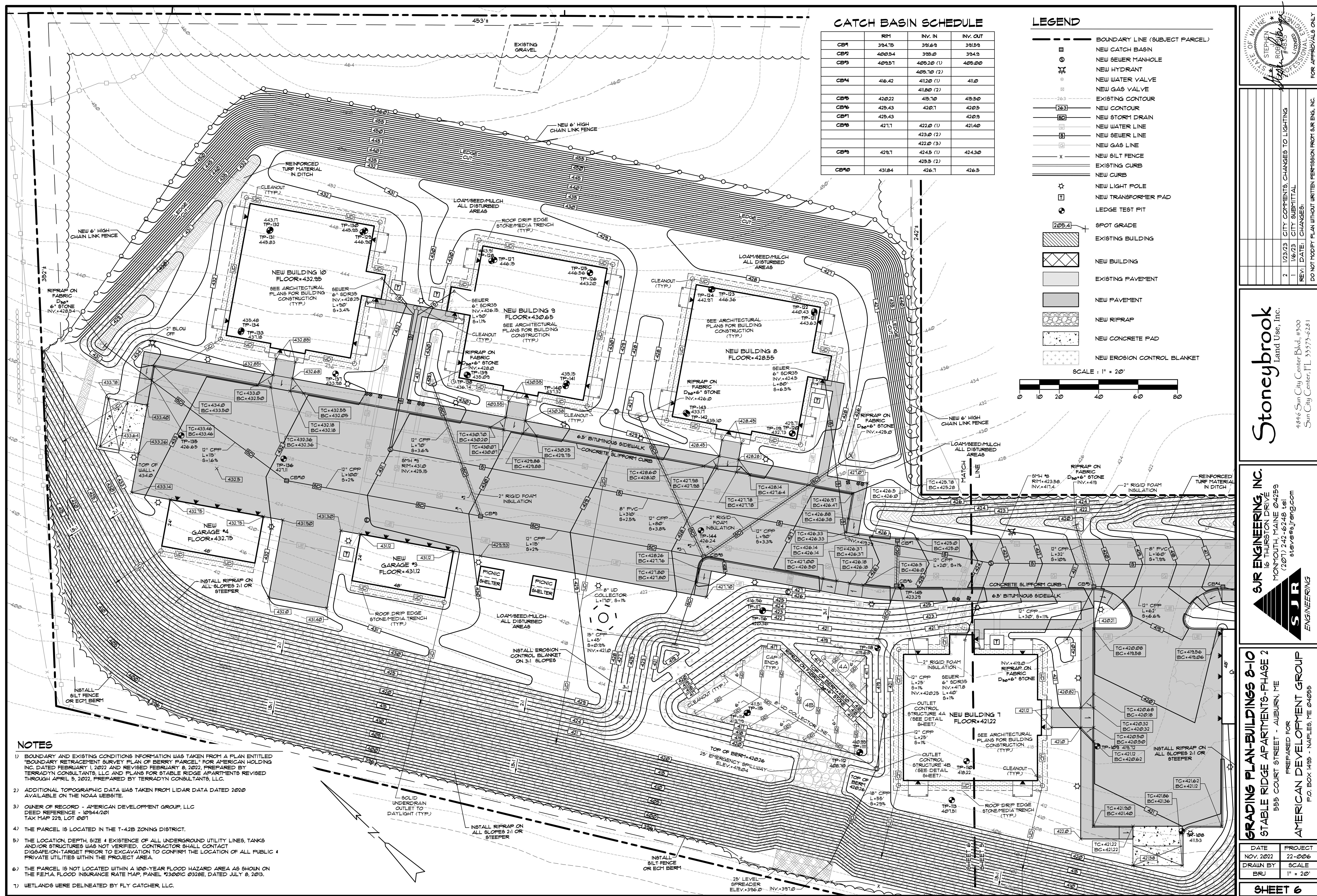
16 THURSTON DRIVE  
MONMOUTH, MAINE 04259  
(207) 242-6248 tel  
[steve@sjreng.com](mailto:steve@sjreng.com)

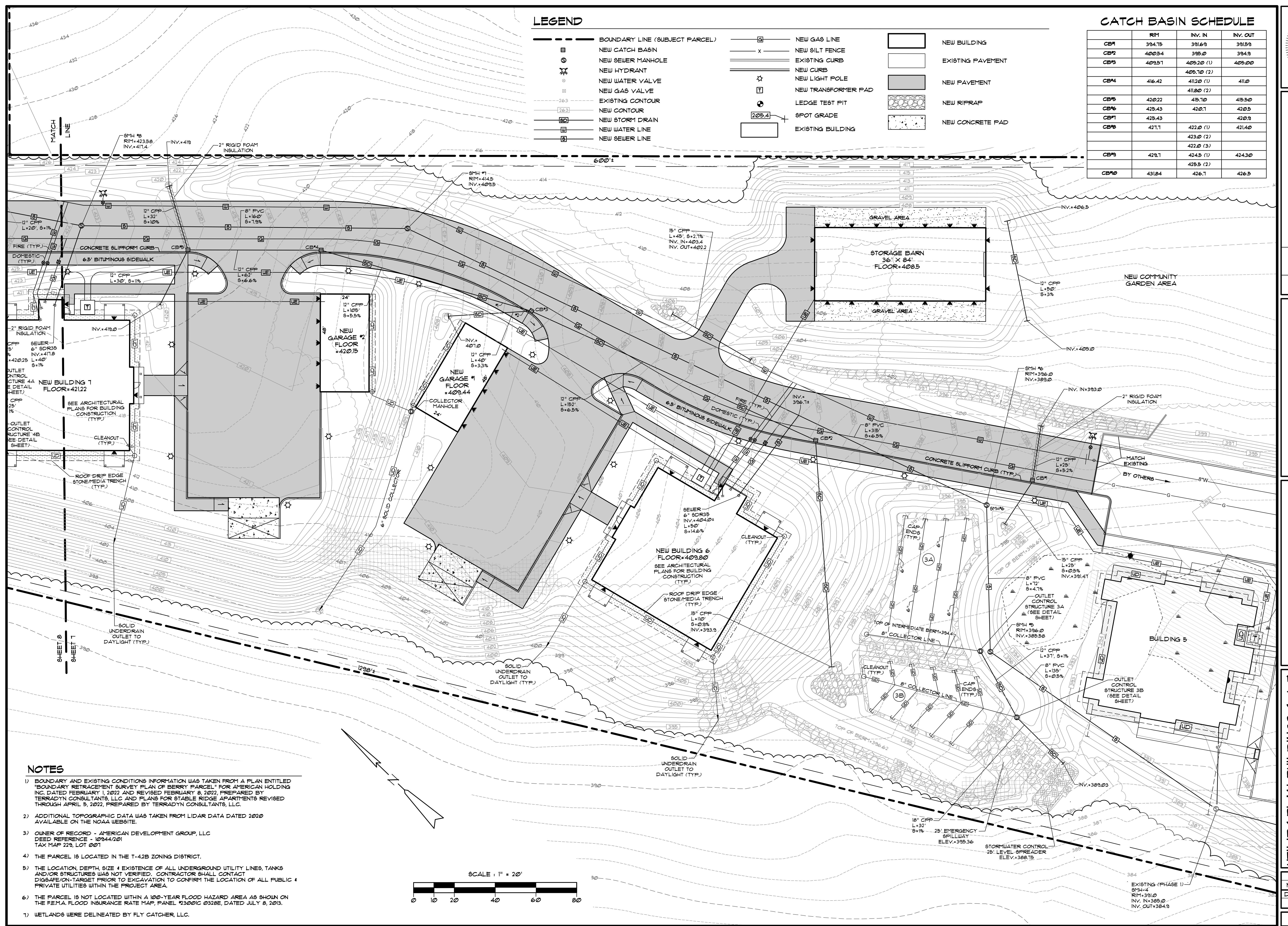
**STABLE RIDGE APARTMENTS-PHASE 2**  
555 COURT STREET - AUBURN, ME  
**AMERICAN DEVELOPMENT GROUP**  
PREPARED FOR  
P.O. BOX 1495 - NAPLES, ME 04055

CATCH BASIN SCHEDULE			
	RIM	INV. IN	INV. OUT
CB#1	394.75	391.69	391.59
CB#2	400.54	395.0	394.9
CB#3	409.51	405.20 (1)	405.00
		405.10 (2)	
CB#4	416.42	411.20 (1)	411.0
		411.80 (2)	
CB#5	420.22	415.70	415.50
CB#6	425.43	420.7	420.5
CB#7	425.43		420.9
CB#8	427.1	422.0 (1)	421.40
		423.0 (2)	
		422.0 (3)	
CB#9	429.7	424.5 (1)	424.30
		425.5 (2)	
CB#10	431.84	426.7	426.5

## NOTES

- 1) BOUNDARY AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A PLAN ENTITLED "BOUNDARY RETRACEMENT SURVEY PLAN OF BERRY PARCEL" FOR AMERICAN HOLDING INC. DATED FEBRUARY 1, 2022 AND REVISED FEBRUARY 8, 2022, PREPARED BY TERRADYN CONSULTANTS, LLC AND PLANS FOR STABLE RIDGE APARTMENTS REVISED THROUGH APRIL 5, 2022, PREPARED BY TERRADYN CONSULTANTS, LLC.
  - 2) ADDITIONAL TOPOGRAPHIC DATA WAS TAKEN FROM LIDAR DATA DATED 2020 AVAILABLE ON THE NOAA WEBSITE.
  - 3) OWNER OF RECORD - AMERICAN DEVELOPMENT GROUP, LLC  
DEED REFERENCE - 10944/201  
TAX MAP 229, LOT 001
  - 4) THE PARCEL IS LOCATED IN THE T-4.2B ZONING DISTRICT.
  - 5) THE LOCATION, DEPTH, SIZE & EXISTENCE OF ALL UNDERGROUND UTILITY LINES, TANKS AND/OR STRUCTURES WAS NOT VERIFIED. CONTRACTOR SHALL CONTACT DIGSAFE/ON-TARGET PRIOR TO EXCAVATION TO CONFIRM THE LOCATION OF ALL PUBLIC & PRIVATE UTILITIES WITHIN THE PROJECT AREA.
  - 6) THE PARCEL IS NOT LOCATED WITHIN A 100-YEAR FLOOD HAZARD AREA AS SHOWN ON THE F.E.M.A. FLOOD INSURANCE RATE MAP, PANEL #23001C 0328E, DATED JULY 8, 2013.
  - 7) WETLANDS WERE DELINEATED BY FLY CATCHER, LLC.





STEPHEN ROBERTSON  
 CONSULTANT  
 PROFESSIONAL ENGINEER  
 FOR APPROVALS ONLY

**Stoneybrook**  
 Land Use, Inc.  
 4046 Sun City Center Blvd., #700  
 Sun City Center, FL 33573-6281

**SJR ENGINEERING, INC.**  
 16 THURSTON DRIVE  
 MONMOUTH, MAINE 04259  
 207-422-6218 tlf  
 steve@sjrlang.com  
**SJR**  
 ENGINEERING

**UTILITY PLAN-BUILDINGS 6 & 7**  
**STABLE RIDGE APARTMENTS-PHASE 2**  
 355 COURT STREET - AUBURN, ME  
 PREPARED FOR  
 AMERICAN DEVELOPMENT GROUP  
 P.O. BOX 1485 - NAPLES, ME 04055

DATE	PROJECT
NOV. 2022	22-006
DRAWN BY	BRJ
SCALE	1" = 20'

SHEET 1

