

IN HOUSE BUILD-OUT ANALYSIS LOWER ALLOWAYS CREEK TOWNSHIP

LOWER ALLOWAYS CREEK TOWNSHIP, SALEM COUNTY, NEW JERSEY

Committee Makeup:

Green Team Members and others as follows:

Ellen B. Pompper, Mayor	Planning / Zoning Board	Emergency Response Team member	Resident
Jack Lynch	Public Works Manager	Environmental Engineer	Stormwater Coordinator
Lewis Fog	Public Works Foreman	Emergency Response Team member	Resident
Lance Kaufmann	Planning Board Member	Recycling Coordinator - CRP	Resident
Kevin Clour	Chief Financial Officer	Purchasing Agent	Resident
Thomas Massey	Planning / Zoning Board	LAC Historical Committee	Resident
Torrey Reade	Planning / Zoning Board	Farm and business owner	Resident
John Palumbo	Construction Code Official	Sandy re-Construction inspector	Home Building Business owner
Ronald Campbell Sr	Municipal Clerk		

Consultants:

Fralinger Engineering, PA - Stephan Nardelli

Other References;

Build-Out Analysis in GIS as a Planning Tool, With a Demonstration for Roanoke County, Virginia; by Mary A. Zirkle

Build-Out Analysis for Lower Alloways Creek Township

It must be noted that without GIS data and shape files available from the State of New Jersey and other repositories this build-out analysis would be quite cumbersome and never have been attempted in house. In addition, QGIS which is a free GIS Software program was paramount to completing this project and found to be very user friendly and workable, again making this in house project possible.

This is just a brief summary of all the work done to produce the Build-Out Analysis, a great deal of thanks goes to the members of all committees and other who were consulted, who helped with this project.

It was determined that we would be looking for two things what now exists and where and where new construction of single family housing could occur. From this data future infrastructure needs could be accessed.

Several methods were suggested by various people to arrive at what additional housing/building units the Township's current Zoning Ordinances would allow, one aspect we did not consider is multiple unit structures. The reason being is that no multi-dwelling housing units or commercial units exist in LAC currently. It was felt that seeing no pressure on neighboring communities for such units, LAC Twp which is off the beaten path would not likely see this type of new construction either. The Committees came up with three main ways to determine the analysis, which we will call:

Carve the stone into a statue, Down for the Count and Smart end of the tape.

We applied a number of assumptions in analysis for Lower Alloways Creek Township. The assumptions are described in the following paragraphs, as well as in subsequent discussions.

Chip the stone into a statue

The assumption used here is that you start with all the parcels and whittle them down till you have only what can be developed, be it housing or other type.

So using the GIS Lower Alloways Creek parcel shapefile, we joined the shapefiles attribute table which lists each parcel with the Tax Assessor's and Tax Collector's parcel listings, giving us a robust database to run queries on. The shape file attribute list uses a county

– municipal – block – lot – qualifier identifier system for each parcel, which we duplicated and matched with the tax Collector and Tax Assessor listings. Using this joined data we then could then identify, highlight or classify each municipal parcel we could eliminate.

CHIPPING

We first identified for elimination those parcels that had improvements on them currently, then those that were government owed (US, State, County, LAC, School), Cemeteries, Farm & other Restricted Preservations and then Churches. This gave us a good list of those parcels that probably would not see new housing/other being constructed on them. To this point the join table worked well, then the hand work began, using the zoning map and the requirements found there each remaining parcels potential was examined. These were broken down by using the zoning requirements to determine: Could these parcels be developed using the road frontage, setbacks and acre requirements necessary. Then by number of housing units they could support if they meet the requirements of their Zoning District.

Map #3 shows all categories of all the parcels in the Township, pre chisel. By chipping off the Government, preserved, church, cemetery (Map #4) and then two additional categories of No Road frontage/access (NR) and not enough acreage (NA) we arrive at our buildable map (Map # 5).

This is where we then took each buildable parcel and determined how many housing units it could support using its Zoning regulations. Sheet # 6 shows the number of supported housing units the lot was identified as supporting. Then using how many of that type were found, to give the totals to the right most column and grand total of **686** individual housing units that could be supported with the current Zoning regulations.

Down for the Count

With this method we counted every current vacant parcel on eevveerry roadway, minus government owed parcels only, thus we arrive at **209**. By the end of this method you get to really know the parcel map, really, really well.

Smart end of the tape

Another way we worked this out was to take each road with its mileage and straight out determine a raw number of housing units if every unit required two hundred feet of road frontage, the AR district requirements that gave us **1438** total units in the Township. Interesting with this method the State's road mileage for LAC and what we calculated was 8 miles more, some of which we realize is private road/lanes, which we determined to leave in our calculation.

Conclusions

Everyone on all of the committees that worked on this project were also made aware that in the past ten years fourteen new homes have been built in the Township. The rate at which homes have been built in the past certainly must factor into this analysis.

It was discussed and determined that LAC Twp is about half way to its maximum potential of fourteen thousand thirty-eight, which everyone agreed will not literally happen. At the current person per dwelling rate of 2.36 that gives us a population increase from 1770 to three thousand three hundred ninety-four (3394). This translates to 77 persons per square mile, but the reality is that area is really much smaller, but no figure could be agreed on.

The committees felt the real number was closer to the 209 of the parcel count (Down for the Count), then the 686 of the parcel potential (Chipping the Stone). Short term, no pressure is being felt for new home building on a large scale, new private sewer requirements are also increasing the cost associated with housing and could slow construction. The consensus was that the Township could absorb this amount of housing over time and they did not have any suggestions or feel there were any infrastructure needs based on these findings.

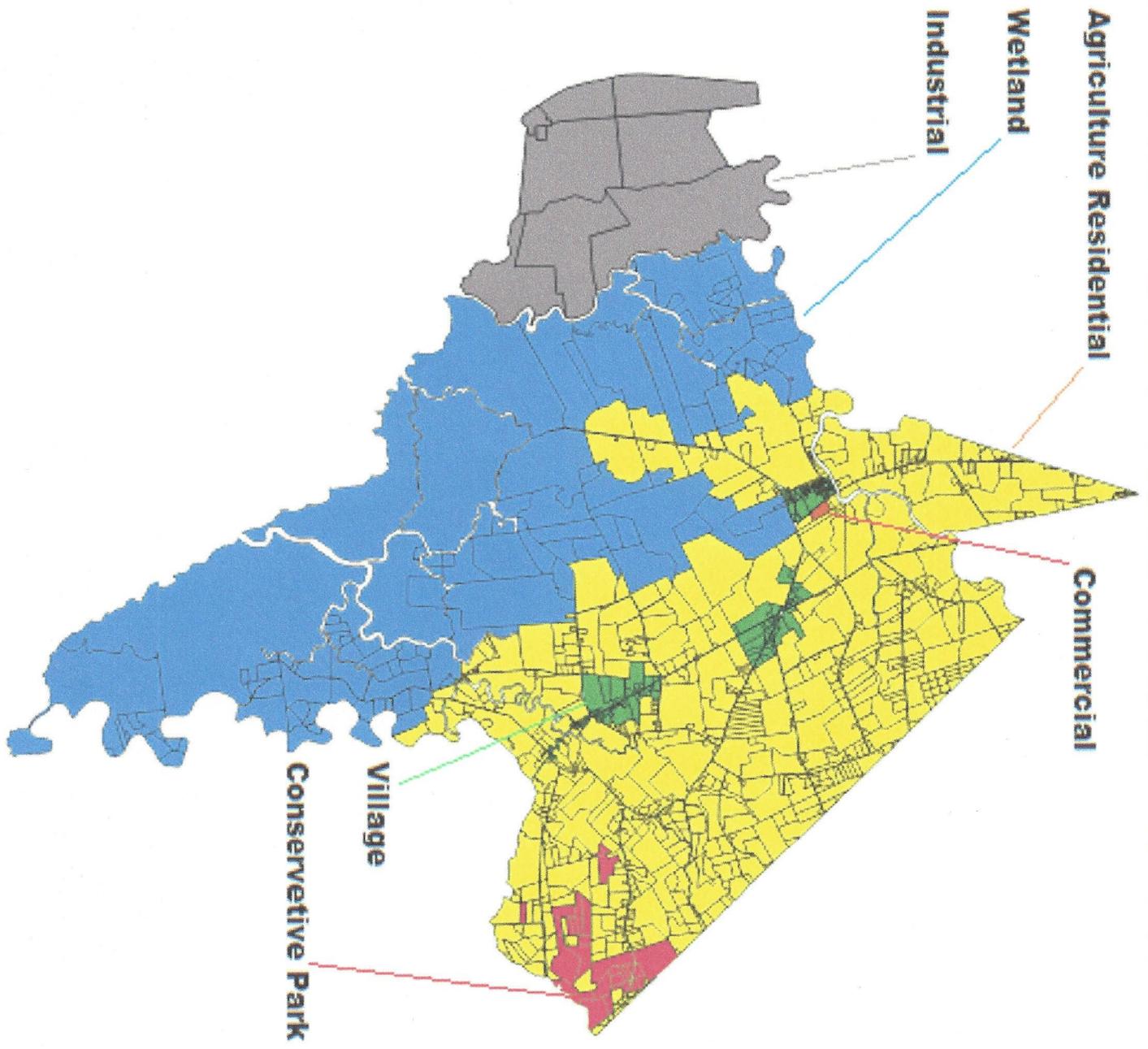
Infrastructure

There were two concerns which got the most discussion and are only somewhat related to future build out. One is that the Salem Hancock's Bridge Road currently has a lot of traffic during shift changes at the nuclear Plant which during "outages" (a time for refueling and repairs). This road is a County Roadway and only has one lane each way with no shoulder, for the traffic it receives it should have shoulders and some felt two lanes each way.

The other concern, again only somewhat related to future build out, is New Bridge Road which has a bridge closed because it was deemed unsafe about ten years ago. This was another route used by Plant traffic and for evacuation purposes which has a mixed public option on whether it should be replaced.

The Build-Out analysis and the related information has been given to the full Planning Board for their review, as of this writing they have not had a meeting for several months for this to take place. A presentation of this material and the GIS software used is planned for when they hold their next meeting.

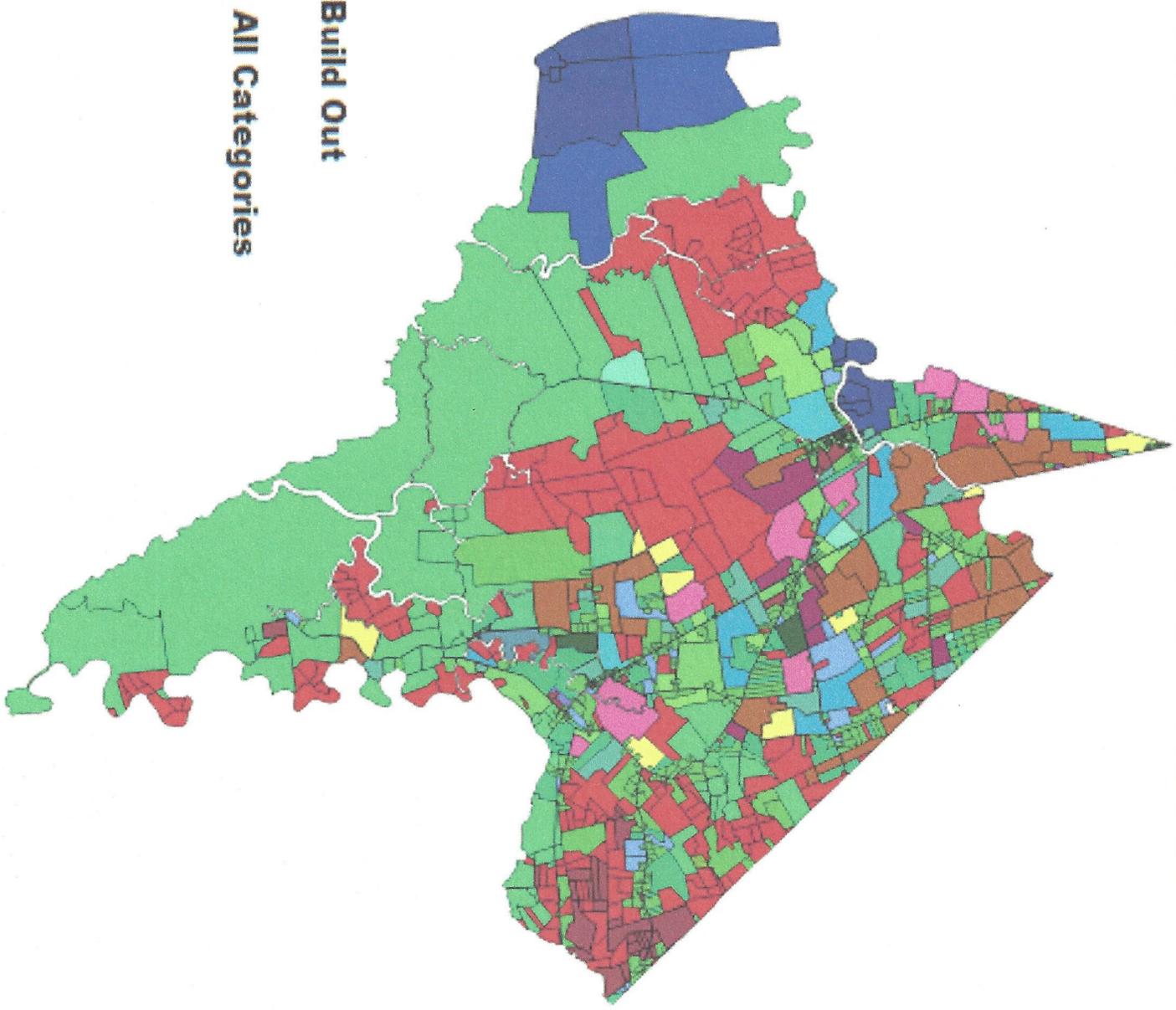
1705_LAC_2112016
Lampessy
LAC_ZONING
CPL
AGD
CPO
IND
VGL
WTL
Beng Aerial
Sales/County/arcgls



	Minimum Lot Area	Depth to seasonal High Water Table	minimum Lot Width	Minimum Lot Depth
Agricultural Residential	1.5 8500	three feet 3	two hundred feet 200	two hundred feet 200
Village	Eight thousand five hundred square feet		sixty feet 60	one hundred twenty-five feet 125
Industrial	three acres 3		two hundred feet 200	two hundred feet 200
Wetlands	ten acres 10		one hundred fifty feet 150	two hundred feet 200
Conservation Park	twenty-five acres 25		two hundred and fifty feet 200	two hundred feet 200
Commercial	10000 <= one story - 50000 > one story		100 <= one story - 350 > one story	

- Fairplay
- LAC_Zoning
- Bing Aerial
- SalemCountyParcels

BT	USA
CEM	Y1
CHK	Y10
FPF	Y11
LAC	Y12
MEL	Y15
RA	Y2
RI	Y3
NR	Y4
PSEG	Y5
SC	Y6
USA	Y7
Y1	Y8
Y10	Y9
Y11	Y14
Y12	Y14
Y15	Y14
Y2	Y14
Y3	Y14
Y4	Y14
Y5	Y14
Y6	Y14
Y7	Y14
Y8	Y14
Y9	Y14
CHURCH	Y14
LACS	Y14



Build Out
All Categories

1705_LAC_2112016

Farmserv

LAC_Zoning

Bing Aerial

SalemCountyParcels

BUT

RA

NR

V1

V10

V11

V12

V15

V2

V3

V4

V5

V6

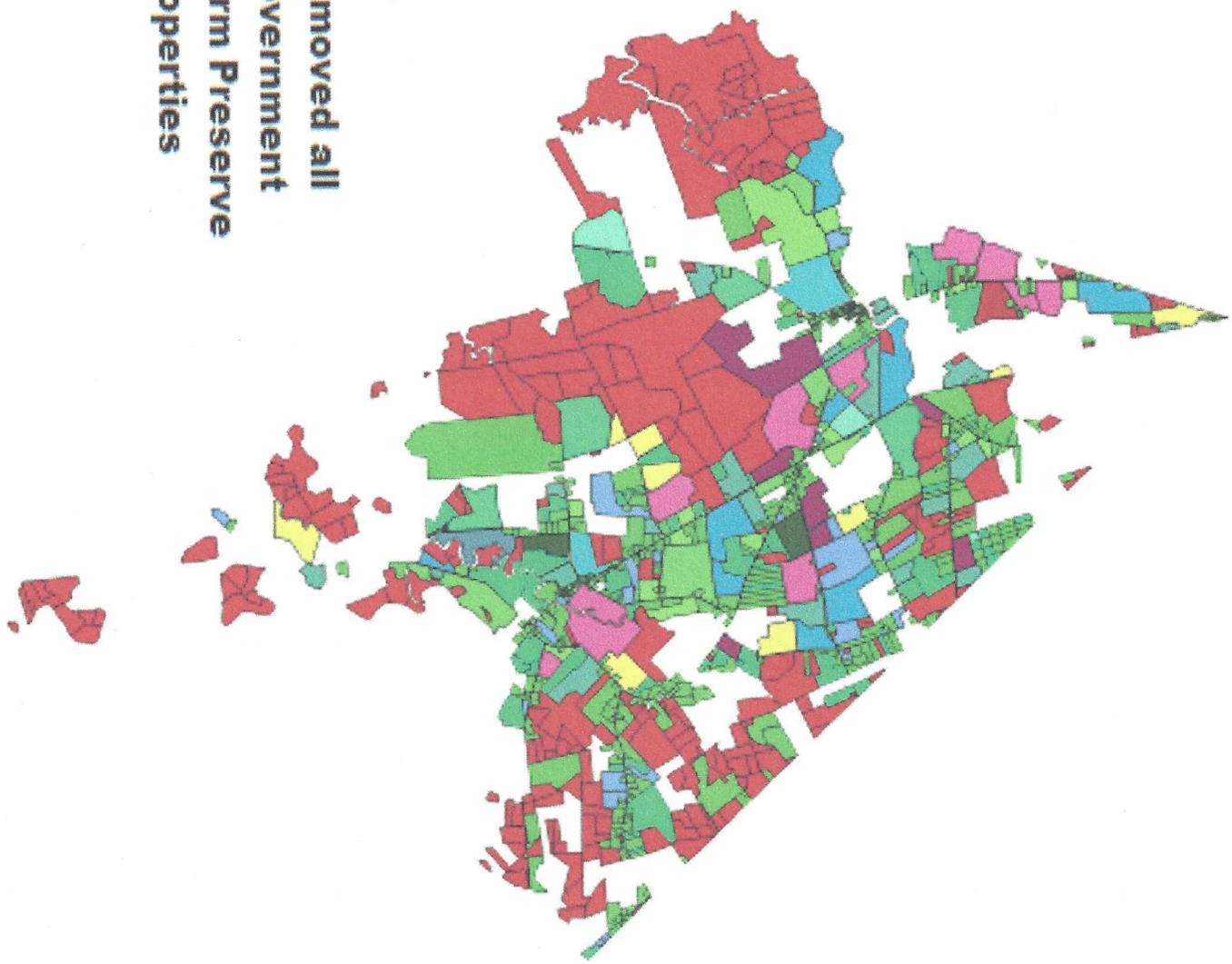
V7

V8

V9

V14

**Removed all
Government
Farm Preserve
Properties**



- 1705_LAC_2112016
 - FarmPersv
 - LAC_ZONING
 - Bing Aerial
 - SalinasCountyParcels
- | | |
|-----|--------------|
| Y1 | Dark Green |
| Y10 | Green |
| Y11 | Light Green |
| Y12 | Teal |
| Y15 | Blue-Teal |
| Y2 | Blue |
| Y3 | Light Blue |
| Y4 | Yellow-Green |
| Y5 | Yellow |
| Y6 | Orange |
| Y7 | Red-Orange |
| Y8 | Red |
| Y9 | Dark Red |
| Y14 | Dark Purple |

**Build Out
all none Buildable
Categories
removed**
Each color is # of
potential homes per
lot, if subdivided
fully



Buildout by deduction of parcels w/ parcel potential

NO Government, Church, Farm Preserve, No Road Access, Land Locked properties

Lot Potential if divided	# of lots of this type	TOTAL
1	78	78
2	23	46
3	9	27
4	22	88
5	10	50
6	11	66
7	7	49
8	9	72
9	5	45
10	2	20
11	4	44
12	2	24
13	0	0
14	1	14
15	3	45
	186	668

Ys MAP

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75 % of LAC TWP is subject to the Coastal Area Facilities Act

ROAD NAME	Miles	Zoning	Current	Potential / NO Subdivisions	Available by 200 Feet	
Allways Creek Neck Road	3	V / W / AR	12	14	79.2	
Batter Cake	0.05	AR	2	0	1.32	wetlands
Beasley Neck	2.14	AR	22	5	56.496	unpaved / not buildable
Buckhorn	2.9	AR	21	15	76.56	Mostly unpaved / not buildable
Buttonwood	0.55	AR	12	0	14.52	parcels border with other roadways where included
Church	0.66	V / AR	7	2	17.424	parcels border with other roadways where included
Cross	2.8	AR	25	7	73.92	
Cuff	0.6	AR	3	1	15.84	parcels border with other roadways where included
Frank Smith	0.2	AR	1	0	5.28	parcels border with other roadways where included
Friendship	1.8	AR	20	6	47.52	
Frog Ocean	2.2	AR / W	17	7	58.08	
Front	0.2	V	12	0	5.28	wetlands
Ft. Elsborg	0.45	AR	3	0	11.88	
HARASTA	1	AR	3	2	26.4	unpaved / not buildable
Harnersville Hancock Bridge	0.8	AR / V	14	4	21.12	
Harnersville Pecks Corner	2.8	AR / V	29	5	73.92	
Hell Neck	2.6	AR / CP	42	18	68.64	some Parcels are CP
Hemple	0.06	AR	1	0	1.584	
Hogate	2.1	AR	28	12	55.44	
JERICO	1.32	AR / CP	21	5	34.848	some Parcels are CP
Leisure Armus Senior Complex	0.25	AR	29	6	6.6	Space is available, No additional units Planned
Locust Island	0.76	V / C	10	4	20.064	
long bridge	2	AR / W	11	5	52.8	Wetlands
Main - Canton	4	AR / V	58	12	105.6	
Main - HB	0.5	V	87	3	13.2	
Maple	0.1	V	5	0	2.64	
Maskells Mill	3.2	AR / V	55	12	84.48	
Mays Lane	0.04	V	2	0	1.056	
Mill	0.4	AR	2	3	10.56	
New	0.2	V	4	0	5.28	
New Bridge	2.6	AR	22	6	68.64	
Poplar	1.5	W / AR	22	3	39.6	
Powell	0.28	AR / V	2	3	7.392	Wetlands
Quinton Hancock Bridge	0.9	AR	9	2	23.76	Wetlands
Robinson	2.4	AR	23	6	63.36	
Salem Hancocks Bridge	2.8	AR	34	13	73.92	Wetlands
Second	0.2	V	7	0	5.28	
Short	0.2	AR	2	0	5.28	
Silver Lake	1.2	AR / V / W	17	3	31.68	Wetlands
SMICK	1.9	V / AR	21	5	50.16	
Stow Neck	4	W / AR	16	15	105.6	Wetlands
SYMES	0.15	AR	1	1	3.96	
WILD OAKS	0.75	AR	10	4	19.8	Private Development

Distance measured Mileage 57.81 744 209 1459.984

Actual Mileage as reported by NJ DOT 49.78