

FACILITY PROGRAM FOR:

# POINT LOOKOUT LIBRARY

Point Lookout  
Long Beach, NY

Prepared by  
Steven Chiochio, Tim Massa,  
and Thomas Guarino

Arc 366  
Architectural Design 3  
Architectural Engineering Technology  
Farmingdale State College



# PROJECT VISION

Point Lookout community on Long Beach wants to build a library located on the corner of Lido Boulevard and Parkside Road Drive.



# GOALS

- Make a library in Point Lookout that serves the community with knowledge and entertainment.
- Create a meeting place for the community.





# SITE LOCATION

- Point lookout is a fairly small community located at the end of Long beach in the Town of Hempstead.
- There already is a small library located a few blocks away from our site.



# PROGRAMMING ISSUES

- Collection Size
- Occupancy
- Community Groups
- Circulation



# COLLECTION SIZE

- Our library will house 11,720 books.
- This collection will take up about 600 square feet.
- We will offer an online collection which will have 3,090 items such as books, DVDs, and CDs.
- Our collection will be housed on moving loaded library shelving units.



# OCCUPANCY

## Point Lookout CDP, New York

Median Household Income

**108,409**

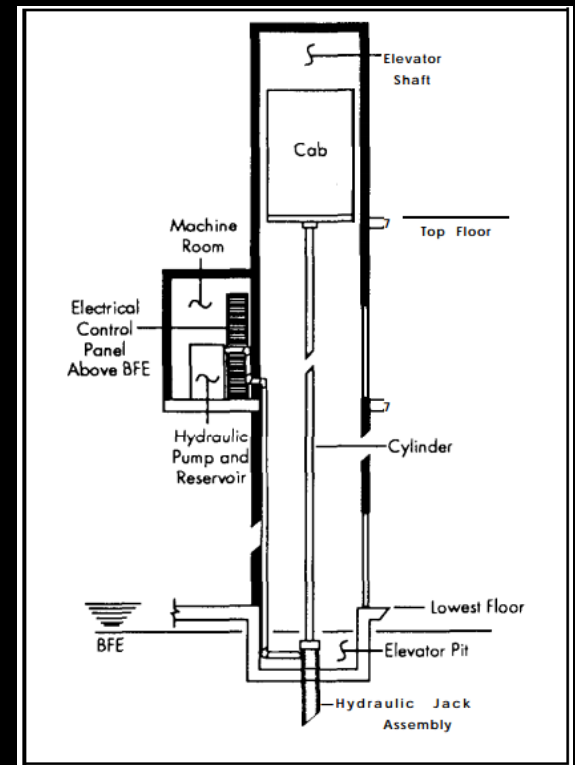
Source: 2008-2012 American Community Survey 5-Year Estimates

Subject	Number	Percent
<b>SEX AND AGE</b>		
Total population	1,219	100.0
Under 5 years	56	4.6
5 to 9 years	65	5.3
10 to 14 years	65	5.3
15 to 19 years	69	5.7
20 to 24 years	55	4.5
25 to 29 years	40	3.3
30 to 34 years	32	2.6
35 to 39 years	51	4.2
40 to 44 years	66	5.4
45 to 49 years	87	7.1
50 to 54 years	122	10.0
55 to 59 years	131	10.7
60 to 64 years	97	8.0
65 to 69 years	77	6.3
70 to 74 years	55	4.5
75 to 79 years	61	5.0
80 to 84 years	51	4.2
85 years and over	39	3.2
Median age (years)	50.7	( X )
16 years and over	1,021	83.8
18 years and over	989	81.1
21 years and over	952	78.1
62 years and over	338	27.7
65 years and over	283	23.2

- Based on our design, this building will fall under occupancy group A.
- This library should be able to fit 100 people inside.
- Events will take place at the library. These events will be attended by approximately 80-100 people.

# CIRCULATION

- Elevator design
- Our elevator must be flood resistant.
- Stairways, 2 are needed
- 30-40% of space planning





# ZONING ISSUES

- The building will be located in business district x.
- The height of the building can not be more than two stories and exceed a maximum height of 30 feet.
- Flood Zone AE

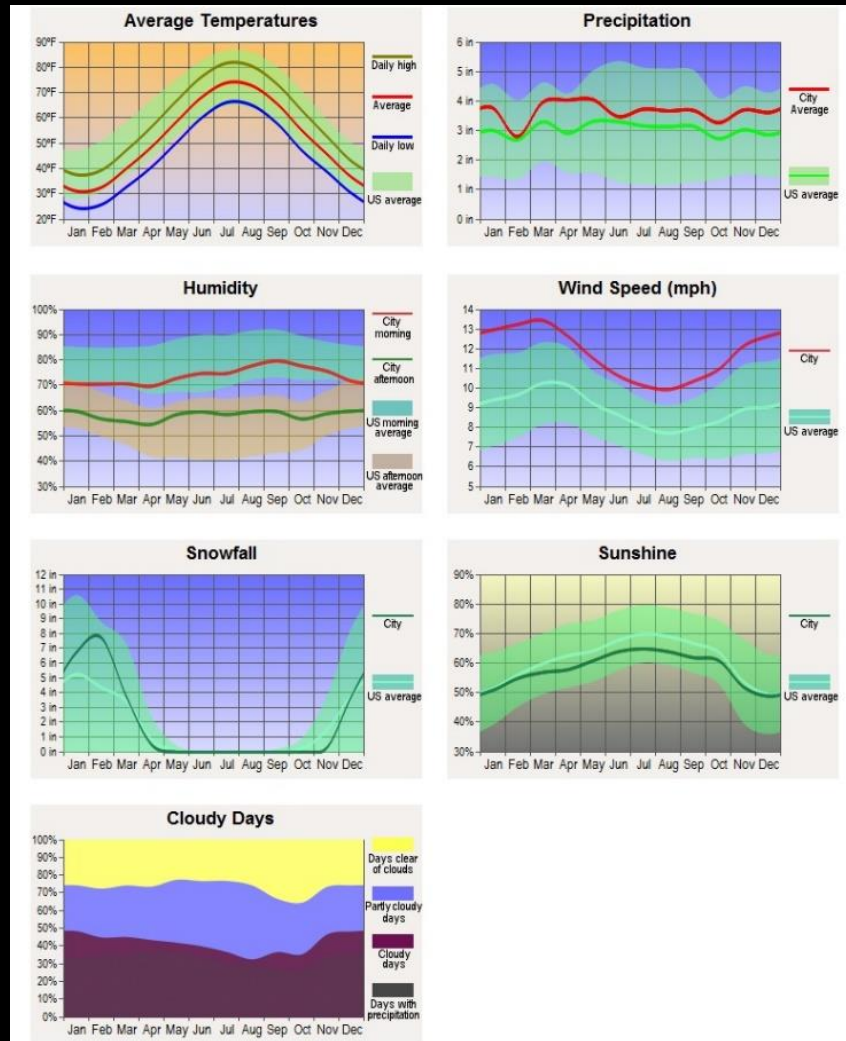


# TRAFFIC

- Estimated there are about 1,000 eligible drivers, and about 70% are actual drivers.
- If 700 people are drivers and pass by at least twice a day going to and from their homes, it is estimated that roughly 2000 cars pass by the site on an average work day.



# ENVIRONMENTAL ISSUES





# TECHNICAL ISSUES

- Flood Zone AE (FEMA codes)
- Foundation
- Building Materials
- Protecting Utilities
- Parking Requirements
- Fire Codes



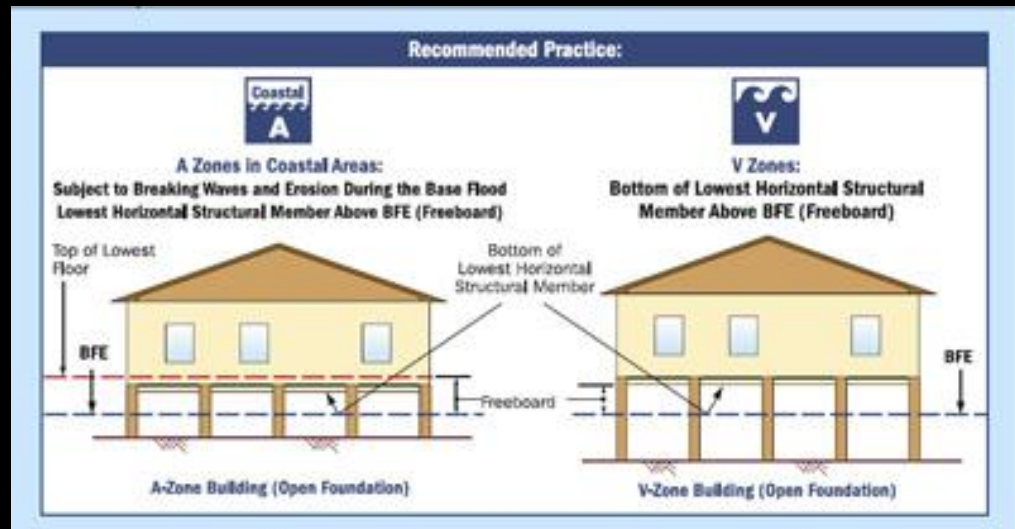


# FLOOD ZONE (AE)



# DFE

- BFE= 9ft
- Free board= 2ft
- Elevation= 4ft
- $9\text{ft} + 2\text{ft} - 4\text{ft} = 7\text{ft}$



# FOUNDATION IN FLOOD CONDITIONS

Foundation Type	Base Flood Condition Present		
	Wave Heights Between 1.5 and 3.0 Feet*	Velocity Flow, Erodible Soils	Large Debris
Fill	no	no	no
Slab on grade	no	no	no
Crawlspace, shallow footing	no	no	no
Foundation walls, shallow footing	no	no	no
Stemwall, shallow footing	yes	no	yes
Stemwall, deep footing**	yes	yes	yes
Pier, shallow footing	yes	no	no
Pier, deep footing**	yes	yes	no
Post, shallow embedment	no	no	no
Pile/Column, deep embedment**	yes	yes	yes

\*Wave heights greater than 3.0 feet mapped as V Zone: fill, slab, crawlspace, wall foundations not permitted.

\*\*Deep means sufficiently deep to withstand erosion and scour, including that induced by the presence of the foundation itself.

Table 10-3. Advantages and Special Considerations of Three Types of Pile Materials

Material	Advantages	Special Considerations
Wood	<ul style="list-style-type: none"> <li>• Comparatively low initial cost</li> <li>• Readily available in most areas</li> <li>• Easy to cut, saw and drill</li> <li>• Permanently submerged piles resistant to decay</li> <li>• Relatively easy to drive in soft soil</li> <li>• Suitable for friction and end bearing pile</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to splice</li> <li>• Subject to eventual decay when in soil or intermittently submerged in water</li> <li>• Vulnerable to damage from driving (splitting)</li> <li>• Comparatively low compressive load</li> <li>• Relatively low allowable bending stress</li> </ul>
Concrete	<ul style="list-style-type: none"> <li>• Available in longer lengths than wood piles</li> <li>• Corrosion resistant</li> <li>• Can be driven through some types of hard material</li> <li>• Suitable for friction and end-bearing piles</li> <li>• Reinforced piles have high bending strength</li> <li>• High bending strength allows taller or more heavily loaded pile foundations to be constructed without grade beams</li> </ul>	<ul style="list-style-type: none"> <li>• High initial cost</li> <li>• Not available in all areas</li> <li>• Difficult to make field adjustments for connections</li> <li>• Because of higher weight, require special consideration in high seismic areas</li> </ul>
Steel	<ul style="list-style-type: none"> <li>• High resistance to bending</li> <li>• Easy to splice</li> <li>• Available in many lengths, sections, and sizes</li> <li>• Can be driven through hard subsurface material</li> <li>• Suitable for friction and end-bearing piles</li> <li>• High bending strength, which allows taller or more heavily loaded pile foundations to be constructed without grade beams</li> </ul>	<ul style="list-style-type: none"> <li>• Vulnerable to corrosion</li> <li>• May be permanently deformed if struck by heavy object</li> <li>• High initial cost</li> <li>• Some difficulty with attaching wood framing</li> </ul>



# PARKING REQUIREMENTS

- The minimum number of required parking spaces
- Handicapped-accessible parking
- Staff Parking (5)

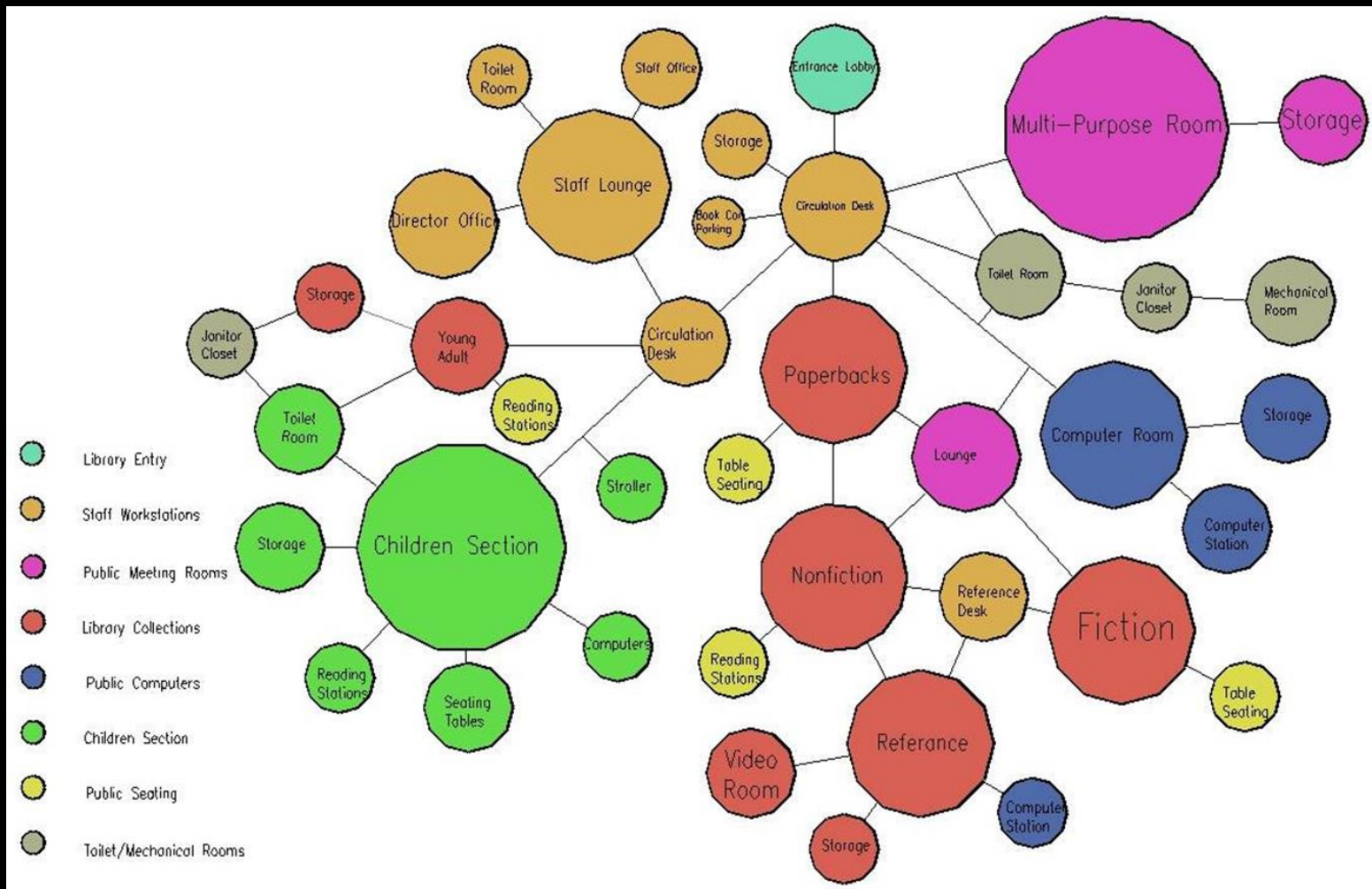




# SPACE PLANNING

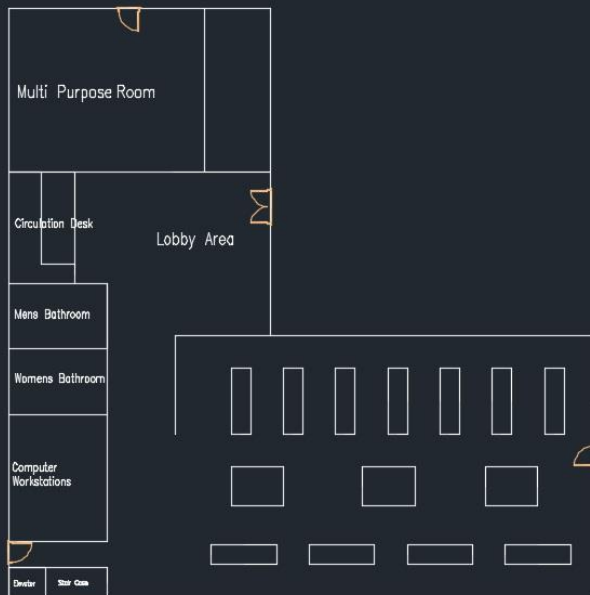
Staff Rooms	SQ FT	Multi-Purpose Room	SQ FT	Lobby	SQ FT	Computer Area	SQ FT	Misc.	
Director Office	300	Occupance x80	1200	Circulation Desk	120	Computer Station x8	280	Mechanical Room	200
Staff Cubicle (4)	160	Storage Closet	100	Entrance Lobby	200	Photocopy Machine	50	Electrical Room	100
Staff Lounge	500			Toilet Room x2	200	Print Station	30	Janitor Closet x2	40
Photocopy Machine	30	<b>Total SQ FT</b>	1300	File Cabinet x4	80	Storage Closet	50	Building Storage	120
Print Station	30							Book Truck Parking	32
				<b>Total SQ FT</b>	600	<b>Total SQ FT</b>	410		
<b>Total SQ FT</b>	1020							<b>Total SQ FT</b>	492
Childrens Section	SQ FT	Young Adult	SQ FT	Adult Section		Lounge Area			
Collection size	35	Collection Size	43	Fiction	135	Recliner Chair x4	140		
Computer Station (4)	140	Reading Station (2)	60	Non Fiction	128	Coffe Table x2	50		
Bean Bag Chair (2)	40	Table, Rectangle (4)	100	Reference	57				
Table, Rectangle (8)	250	Magazine collection	36	Paperbacks	114	<b>Total SQ FT</b>	190		
Reading Carrel (4)	120	Computer Station (2)	60	Reading Station (10)	300				
Youth Floor (10)	80			Table Round (4)	100				
Storage Closet	100	<b>Total SQ FT</b>	299	Lounge Chair	60	<b>Video Room</b>			
Service Desk	120			Storage Closet	120				
Stroller Parking	100			Table Rectangle (10)	250	Collection Size	43		
Toilet Room x2	200								
Lounge Chairs (2)	140			<b>Total SQ FT</b>	1264	<b>Total SQ FT</b>	43		
<b>Total SQ FT</b>	1425			<b>Total Net Area</b>	7043				
				Circulation 35%	2465				
<b>Total Gross Area</b>									
					<b>9508</b>				

# SPACE PLANNING

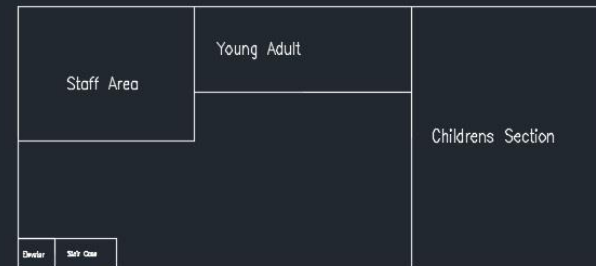


# SPACE PLANNING

## First Floor



## Second Floor



# Project Cost Planning

Design Group #4

Project 2 - Live/Work Architectural Studios

15-Oct-14

ARC 366-Fall 2013

Farmingdale State College

Allocations				Comments
Project Total			\$ 5,716,893	
		%		
	% Project	Construction		
Construction	75%		\$ 4,287,670	
Design Contingency	4%	5%	\$ 214,383	
Project Contingency	7.5%	10%	\$ 428,767	
Architects Fees	5.3%	7%	\$ 300,137	
Permits	2.3%	3%	\$ 128,630	
Reimbursable Expenses	1.5%	2%	\$ 85,753	
Equipment	4.5%	6%	\$ 257,260	
	100%		\$ 5,702,601	
		GSF	cost per GSF	
Project construction cost per GSF		9,123	\$ 470	
Project costs per GSF		9,123	\$ 627	