

## Marcus A. Marino, AIA, NCARB

**Expert Witness** – Architecture & Construction Consulting

Licensed Architect | **45+ Years Professional Practice** | **Forensic & Litigation Support**

### Areas of Expertise

- Architectural Standard of Care, and Duty to Warn.
- Building Codes & Compliance
- Construction Defects & Failures
- Forensic Analysis
- Professional Practice & Ethics
- Coaching attorneys for cross examination of architectural experts
- Negligent Design, Errors and Omissions, and Delayed Delivery Causes.
- Construction Administration Failures, (Scheduling, Oversight, and Communication.
- Residential, Commercial & Institutional Projects
- All types of structures

### Expert Witness & Consulting Experience

- Served as the **expert witness and consultant** in multiple litigation cases involving architectural design, zoning and property disputes, construction defects, and professional liability.
- Provided **deposition and trial testimony** for both plaintiff and defense, including analysis of building code compliance, standard of care, and construction practices.
- Experienced in preparing **written reports, opinions, and exhibits** for legal proceedings and negotiations in pretrial proceedings.
- Engaged by law firms, insurance companies, and contractors for **forensic analysis** of construction disputes.

### Professional Experience

**President and Principal Architect:** Design M Group, Inc.,

*Previously over 45 years at 7 firms total in architectural practice across residential, commercial, and institutional projects.*

- Led design and construction administration for multi-million-dollar developments.
- Provided **quality control, peer review, and forensic evaluations** of architectural work.
- Extensive knowledge of **permitting, codes, zoning, and professional practice standards.**

Marcus A. Marino Expert Witness CV  
*page one of two*

## Academic Qualification

- Master in Science of Architecture and Urban Design – Columbia University, New York City, NY
- Bachelors of Architecture – Pratt Institute, Brooklyn, NY

## Licensure & Professional Affiliations

- Licensed Architect in the State of California, and in New York State since 1981
- Certificate Holder – National Council of Architectural Accreditation Boards
- State of California Safety Assessment Program – CA DSW Volunteer – California Governor’s Office
- Commissioner – Historic Resource Management Commission – Davis, California 2023-2027
- Member, American Institute of Architects (AIA) – past Vice President of Public Advocacy – NY State
- NYC DCP Key Terms Clarification Text Amendments Committee
- NYC DOB Sub Committee for the Creation of the 2008 Building Code
- New York State Architects’ Council – past Board member
- National Lighthouse Museum – Founding Board Member

## Publications & Awards

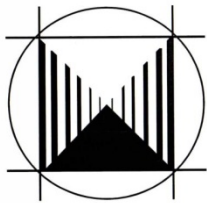
- Published articles on **architecture, construction law, and design practice** in professional journals.
- Invited speaker at various at industry meetings regarding **architecture and construction standards**.
- **National ADA Design Award** (Town of Tuckahoe-City Hall)

## Contact Information

**Marcus A. Marino, AIA, NCARB**  
**Design M Group, INC.**  
**417 Mace Blvd., Ste 417 J-209**  
**Davis, California 95618**  
**530-650-6470**

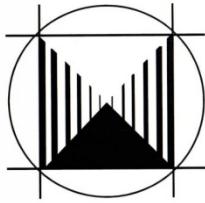
All expert witness work is performed by Marcus A. Marino, AIA, NCARB

Published date August 30, 2025



## Law Firms Served

Lewis Brissois Bisgaard & Smith, LLP	(for the defense)	multiple cases
Wilk Auslander LLP,	(for the plaintiff)	
Michael Swaaley Esq.,	(for the plaintiff)	multiple cases
Rothkrug Rothkrug & Spector, LLP	(for the plaintiff)	multiple cases
Westerman Ball Ederer Miller Zucker & Shartstein, LLP	(for the defense)	
Fidelity National Law Group, LLP	(for the defense)	
Decker & Decker, LLP	(for the plaintiff)	multiple cases
Coritsides & Lambros, PLLC	(for the defense)	
Wasserman Grubin & Rogers, LLP	(for the defense)	
Kopelwitz Ostrow Perguson Weiselburg Gilbert	(for the plaintiff)	
Quinn McCabe, LLP	(for the defense)	
Zetlin & DiChiara	(for the plaintiff)	multiple cases
The Cermeie Law Firm, LLP	(for the plaintiff)	
Freed & Lerner Attorneys at Law	(for the defense)	
Furguson Weiselberg Gilbert, LLP	(for the plaintiff)	
Madison Law, LLP	(for the plaintiff)	
Sive Taget & Riesel Land Attorneys	(for the plaintiff)	multiple cases
Walker Wilcox Matousek, LLC	(for the defense)	
Weinberg Wheeler Hudgins Gunn & Dial	(for the defense)	



## Recent Cases Summarized

### **McDonald's v Hiscox**

**US District Court Northern District Illinois**

**Case No. 1:22-cv-02682**

**For the defendant**

Issue: Delayed Delivery

Analyzed the timeline of the design schedule from inception of project to submission to the Authorities

Having Jurisdiction for permit

### **Brenda Maccioli v State of Arizona et al**

**In The Superior Court of the State of Arizona in and for the County of Maricopa**

**Case NO. CV2023-0052023**

**For the defense**

Issue: Improper design and construction created a dangerous tripping hazard.

Analyzed the site conditions and particulars of the accident, the design per appropriate building codes, and the expectations of a reasonable pedestrian route of circulation.

### **nKlosures, a California Corporation v Avalon Lodging, LLC et al**

**US District Court, Central District of California**

**Case No. 22-00259 RSWL JDEx**

**For the plaintiff**

Issue: Breach of Contract, Copyright infringement of architects work product.

Analyzed the architect's design drawings and renderings and compared them to the drawings prepared by the second architect and the original renderings to the photographs of the finished building

### **Maxwell Place Condominium Association v Toll Brothers**

**Superior Court of the State of New Jersey**

**For the defendant**

Issue: Negligent Design, Errors and Omissions

Analyzed the construction documents for accuracy and the actual construction.

### **The New York City & The Landmarks Preservation Comm. v Seguire Bay Estates, LLC et al**

**Supreme Court of the State of New York, County of Richmond, Part DCM**

**Index No. 100740/13**

**For the defense**

Issue: Landmark building permitted to degrade, City of New York sought \$9,300,00.00 in

Analyzed the legal restrictions on development for an appraisal of the property's development worth.



## Samples of Exhibits Created for Reports

1

**McDonald's v Hiscox**  
**US District Court Northern District Illinois**  
**Case No. 1:22-cv-02682**

**For the defendant**

Issue: Delayed Delivery

Analyzed the timeline of the design schedule from inception of project to submission to the Authorities  
Having Jurisdiction for permit

2

**Brenda Maccioli v State of Arizona et al**  
**In The Superior Court of the State of Arizona in and for the County of Maricopa**  
**Case NO. CV2023-0052023**

**For the defense**

Issue: Improper design and construction created a dangerous tripping hazard.

Analyzed the site conditions and particulars of the accident, the design per appropriate building codes, and the expectations of a reasonable pedestrian route of circulation.

3

**nKlosures, a California Corporation v Avalon Lodging, LLC et al**  
**US District Court, Central District of California**  
**Case No. 22-00259 RSWL JDEx**

**For the plaintiff**

Issue: Breach of Contract, Copyright infringement of architects work product.

Analyzed the architect's design drawings and renderings and compared them to the drawings prepared by the second architect and the original renderings to the photographs of the finished building

4

**The New York City & The Landmarks Preservation Comm. v Segune Bay Estates, LLC et al**  
**Supreme Court of the State of New York, County of Richmond, Part DCM**  
**Index No. 100740/13**

**For the defense**

Issue: Landmark building permitted to degrade, City of New York sought \$9,300,00.00 in

Analyzed the legal restrictions on development for an appraisal of the property's development worth.

## Samples of Exhibits Created for Reports

# 1

### McDonald's v Hiscox

US District Court Northern District Illinois  
Case No. 1:22-cv-02682  
For the defendant

Delayed Delivery - Graphics created for the report indicated a normal schedule for a similar project and plans notated where areas were enlarged to accommodate current building codes, and areas of the site that were increased based on the owners program requirements.

Building was destroyed when a car drove into the building and exploded. McDonald's claimed the the insurance company had to pay for all improvements and the loss of business payments even though there was a delayed design schedule.

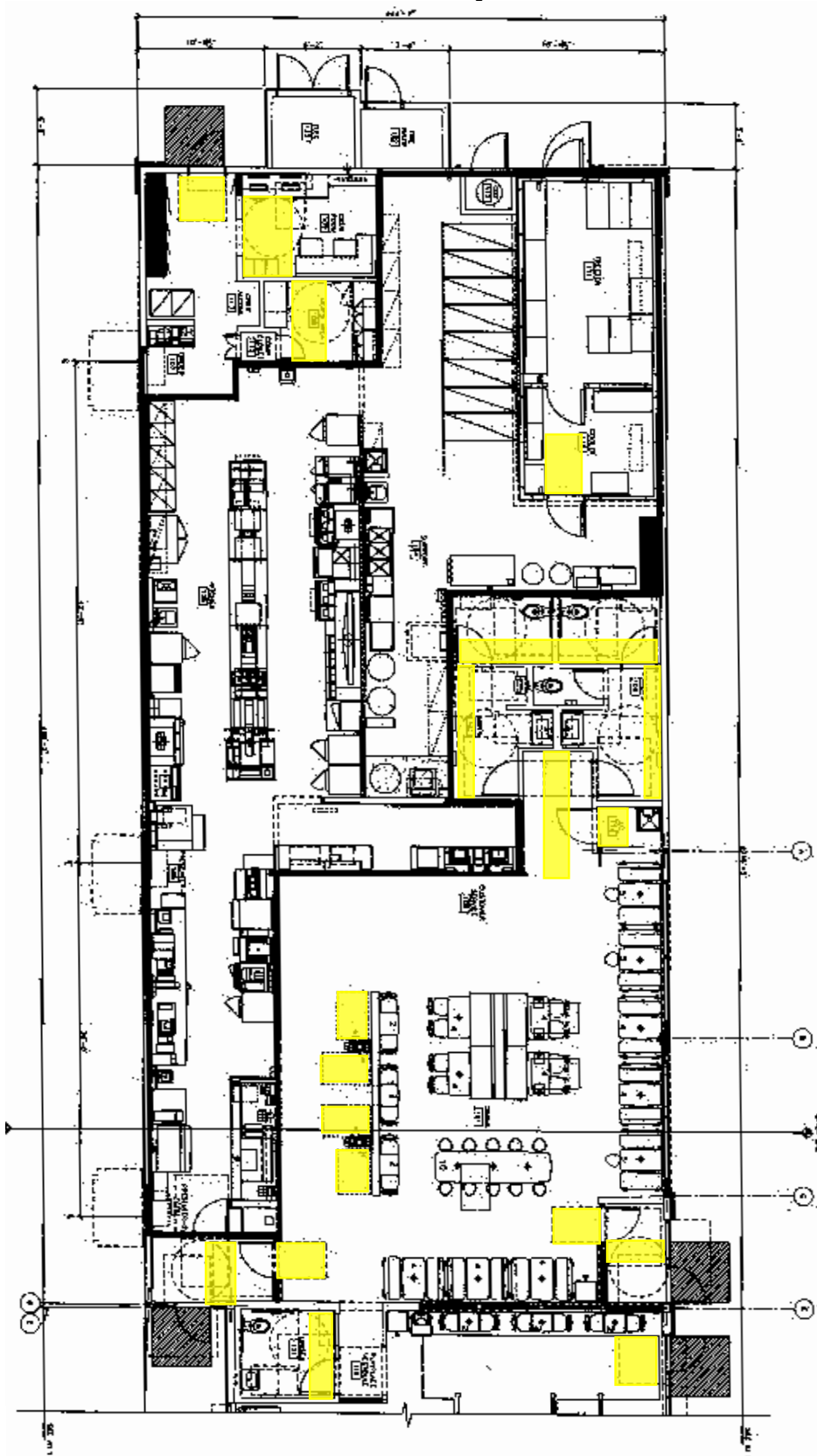
## McDonald's v Hiscox

<b>TYPICAL DESIGN TEAM PROJECT SCHEDULE - NEW BUILDING: Adjusted for this Project- Annotated with Fire Incident in Time Sequence by Standard of Praticce</b>																																								
TASK	WEEKS																																							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Determine Program with Client - (Physical needs and proximaties)																																								
Determine the Authorities Having Jurisdiction (AHJ)																																								
Survey the property																																								
Determine Utility Requirements and deadlines																																								
Review AHJ Requirements (Zoning)																																								
Determine and add Required Consultants(MEP, Fire Safety, Landscape Architect, Arborist, Sound Consultant, etc )																																								
Map out important Site Features (as specified by AHJ - Zoning Resolution)																																								
Preliminary Conversation with AHD (City Planning, Property Association)																																								
Prrreliminary Buildig Design																																								
Locate building on Site																																								
Time of Fire																																								
Secondary Conversation with AHJ (City Planning, and Propoerty Association)																																								
Preliminary Budgeting																																								
Design Development Drawings (Building and Site)																																								
Construction Documents and Legal papers (Easements, Applications signed)																																								
Create list of long lead construction material items and equipment for early ordering																																								
Filing with AHJ ( City Planning for Entitlement)																																								
Filing with AHJ ( Building, Fire, CalTrans, Property Association)																																								
Pay for and Receive perrmit																																								
<b>TASK</b>	<b>WEEKS</b>																																							



# McDonald's v Hiscox

## Floor Plan Annotated with Approximate Areas of Additional Code Requirements



## **Samples of Exhibits Created for Reports**

# 2

### **Brenda Maccioli v State of Arizona et al**

In The Superior Court of the State of Arizona  
in and for the County of Maricopa  
Case No. CV2023-0052023  
For the defense

An accidental fall by a patron who claimed that a curb at the bottom of a structural trust was improperly placed in the design of the center. - Graphics were created to indicate the normal flow of pedestrian traffic which was not the route taken by the victim, and the acceptance by code of the curb in question.

Brenda Maccioli v State of Arizona et al

**Arizona Cardinals Football Stadium  
1 Cardinals Drive  
Glendale, AZ 85305**

**ARERA OF STUDY - OVER ALL VIEW**

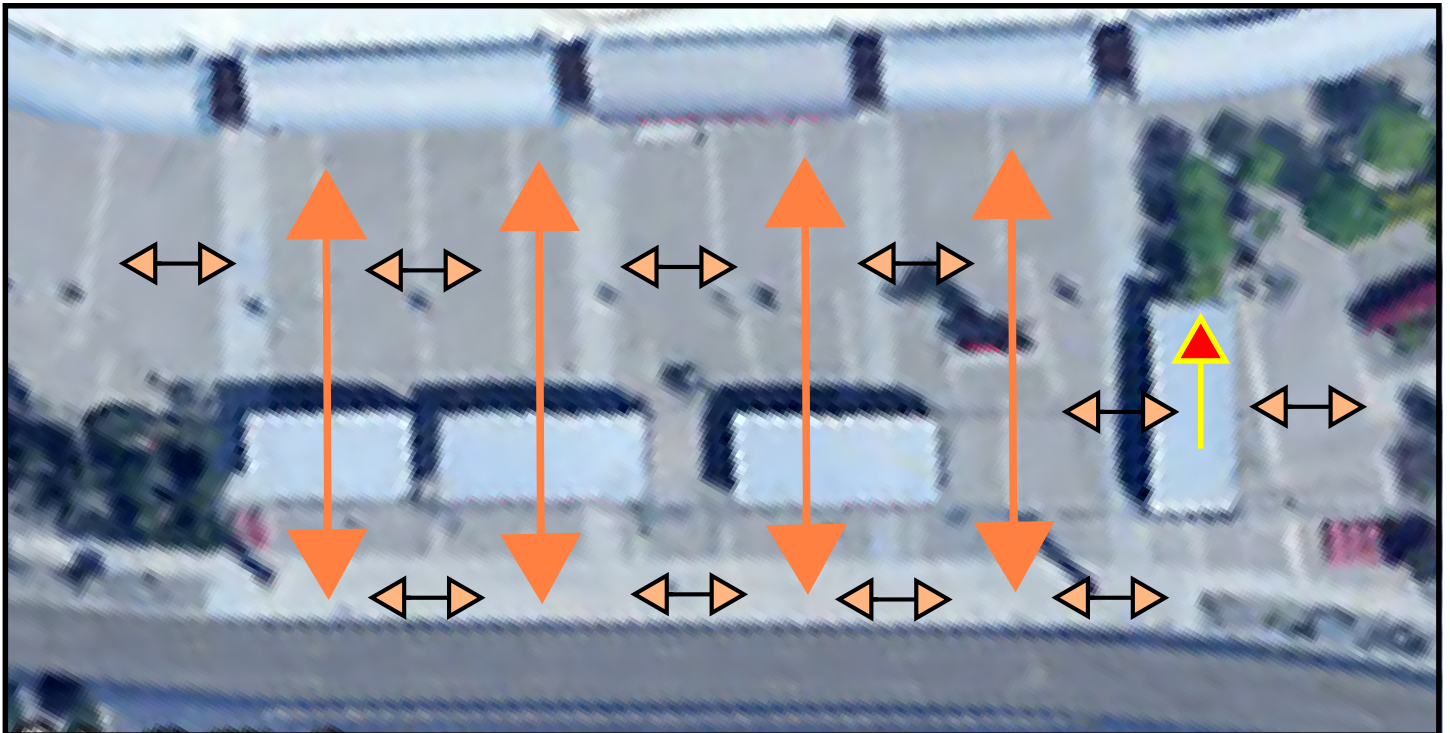


Annotated Aerial Photograph - Google Earth




**Location of Incident**

Brenda Maccioli v State of Arizona et al

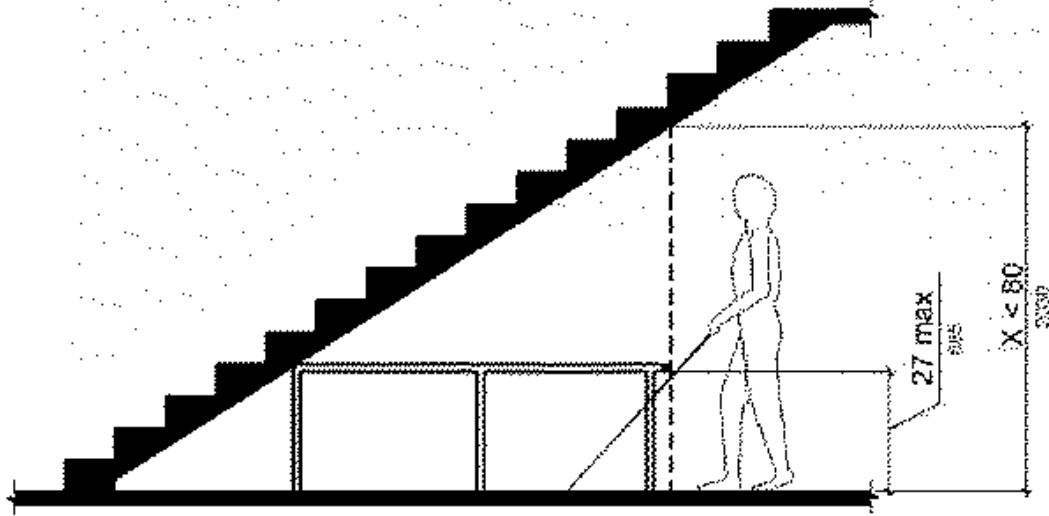
## CIRCULATION PATH STUDY



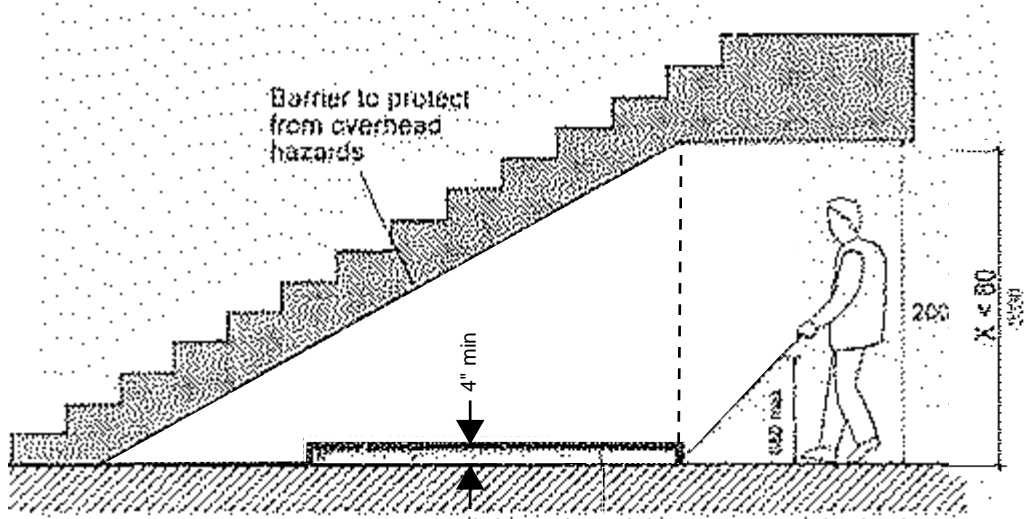
### FIGURE KEY

-  PRIMARY CIRCULATION PATH
-  SECONDARY CIRCULATION PATH
-  NOT A CIRCULATION ROUTE

# BUILDING CODE DIAGRAMS



DETECTABLE WARNING FOR HEAD PROTECTION



ALTERNATE DETECTABLE WARNING FOR HEAD PROTECTION

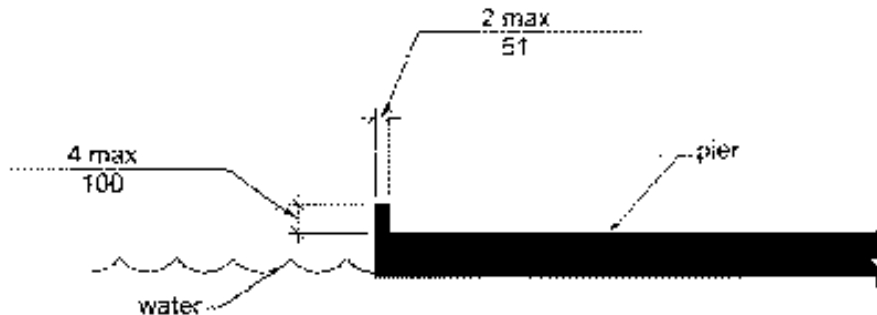
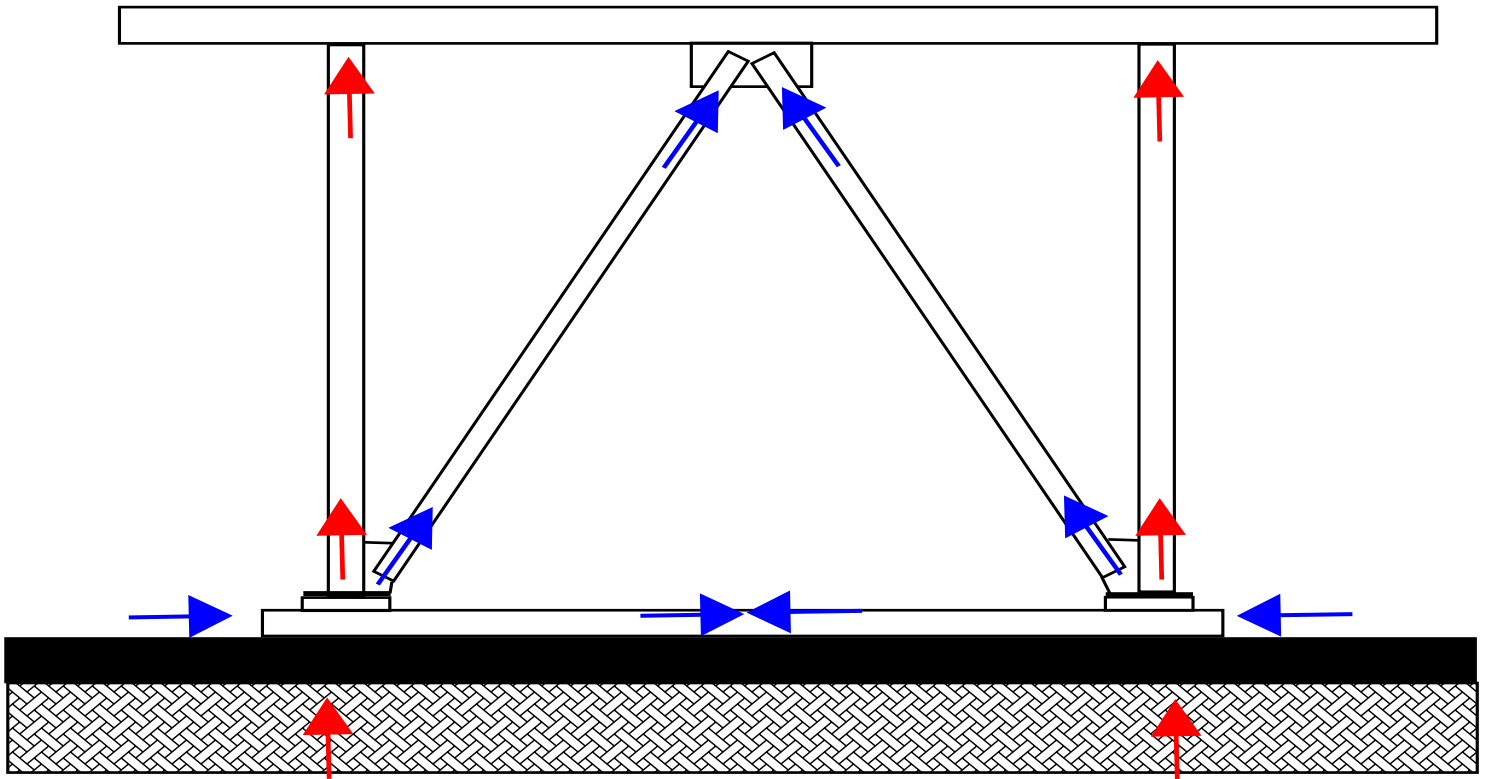
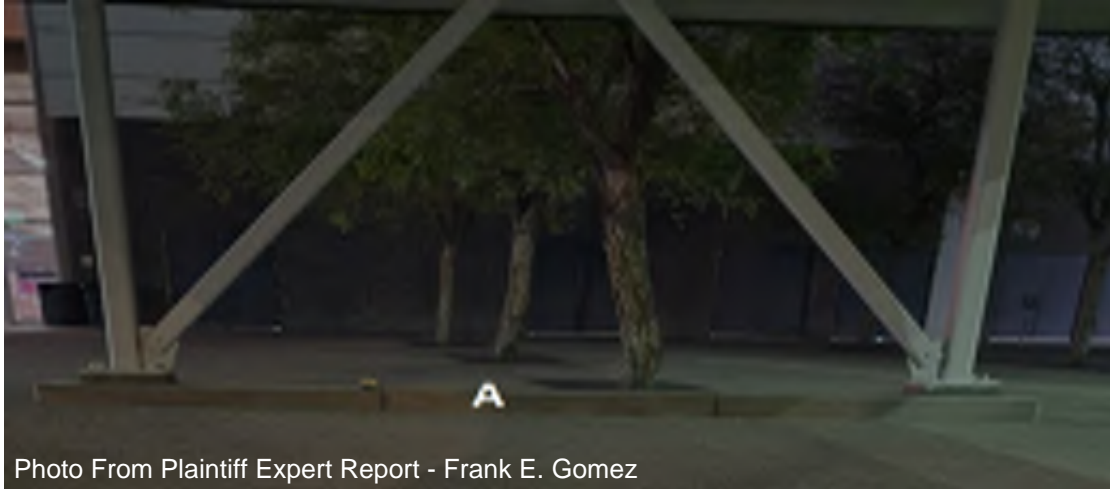


FIGURE 1103.3.1(C)  
(EXCEPTION 2) EDGE PROTECTION AT BOAT SLIPS


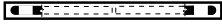
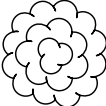

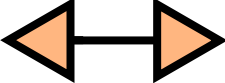
# ROOF SUPPORT TRUSS STRUCTURAL FORCES

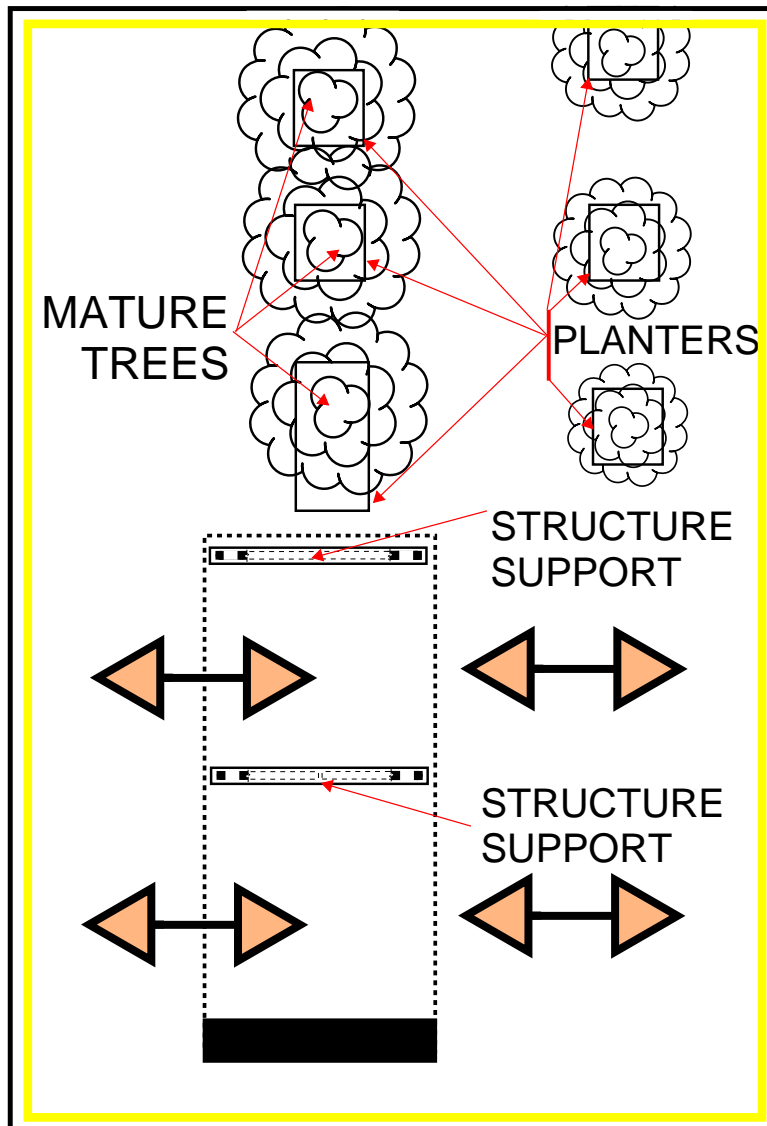


- ↑ FORCES EXERTED ON STRUCTURE TO COMPENSATE FOR GRAVITY
- FORCES EXERTED ON STRUCTURE TO COMPENSATE FOR WIND LOAD AND SEISMIC FORCES

# AREA OF STUDY DETAIL

## FIGURE KEY

-  SHADE STRUCTURE ABOVE
-  STRUCTURE SUPPORT
-  TREES
-  FLUSH PLANTERS
-  CIRCULATION PATH



## **Samples of Exhibits Created for Reports**

# 3

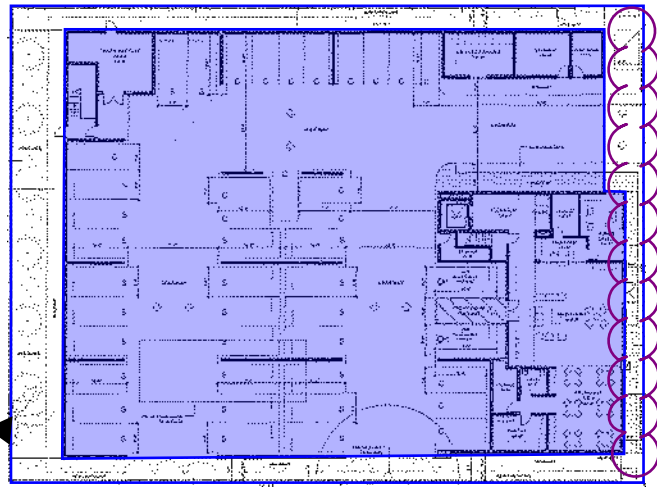
**nKlosures, a California Corporation v Avalon Lodging, LLC et al**

US District Court, Central District of California  
Case No. 22-00259 RSWL JDEx  
For the plaintiff

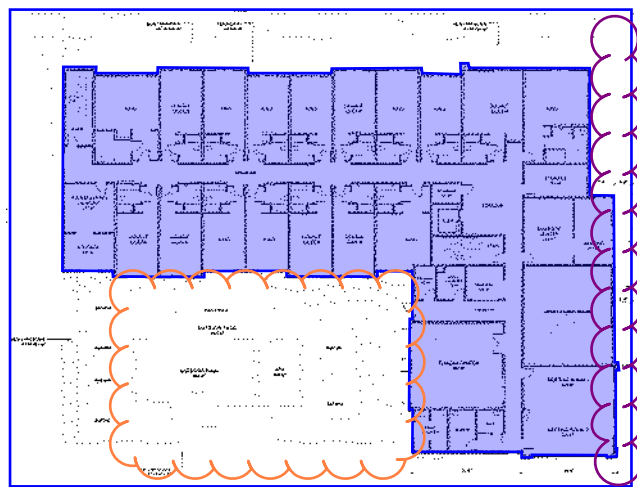
Breach of Contract , Copyright Infringement. The architect was released from the contract after presenting all design drawings without cause. The new replacement architect used the drawings of the initial architect to create the construction drawings and file with the Authority Having Jurisdiction using the same design that was originally presented.

Exhibits created indicated the areas of the two designs that were the same.

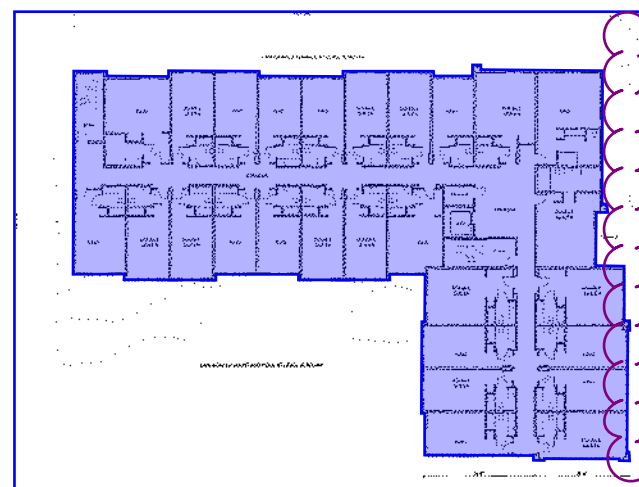
**nKlosures, a California Corporation v Avalon Lodging, LLC et al**



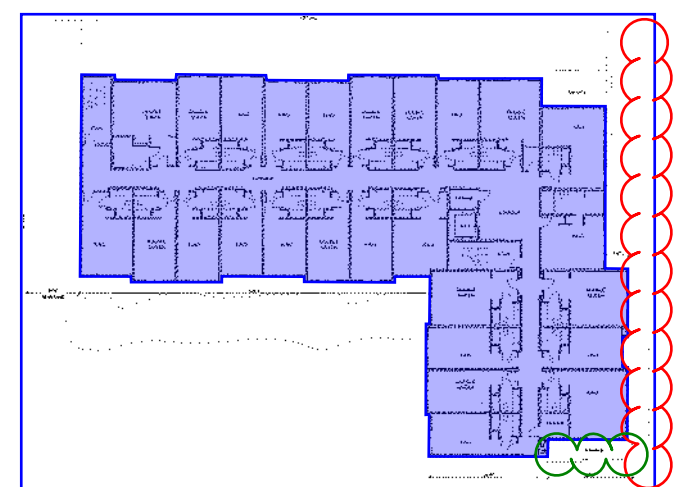
FIRST (GROUND) FLOOR



SECOND FLOOR



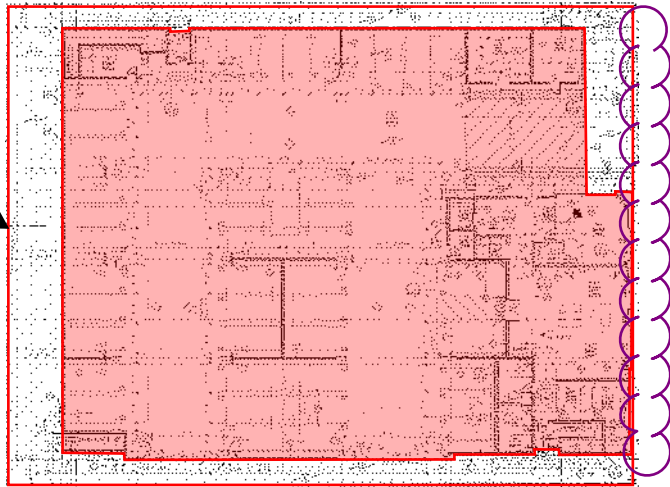
THIRD FLOOR



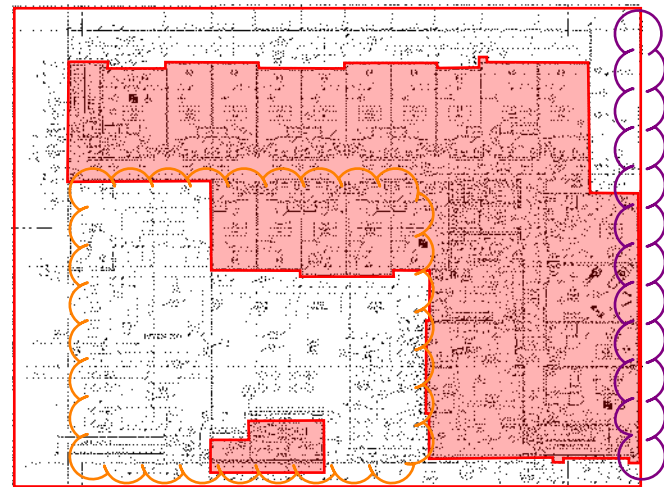
FOURTH FLOOR

**MASSING STUDY OF ORIGINAL nKLOSURES DESIGN DRAWINGS FOR APPROVED CUP**

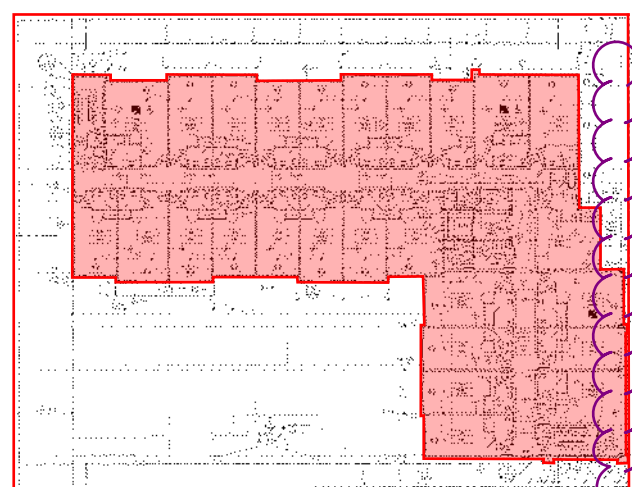
PROPERTY LINE



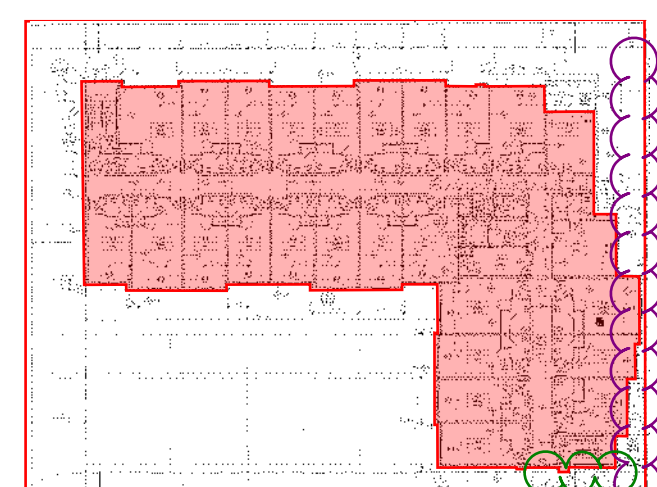
FIRST (GROUND) FLOOR



SECOND FLOOR



THIRD FLOOR



FOURTH FLOOR

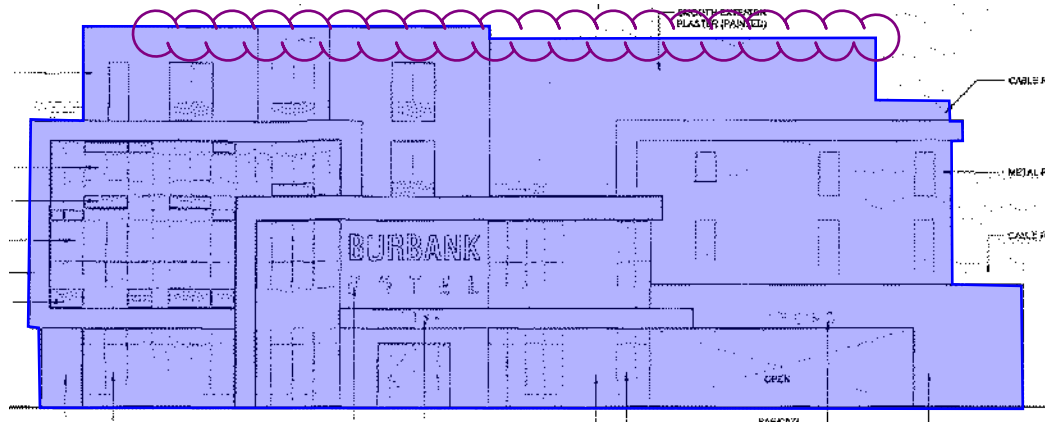
**MASSING STUDY OF W&W LAND CONSULTANTS APPROVED DRAWINGS - NOT TO SCALE - PDFs FROM APPROVED DRAWINGS**

MINOR VARIATIONS IN THE FRONT YARD DIMENSION

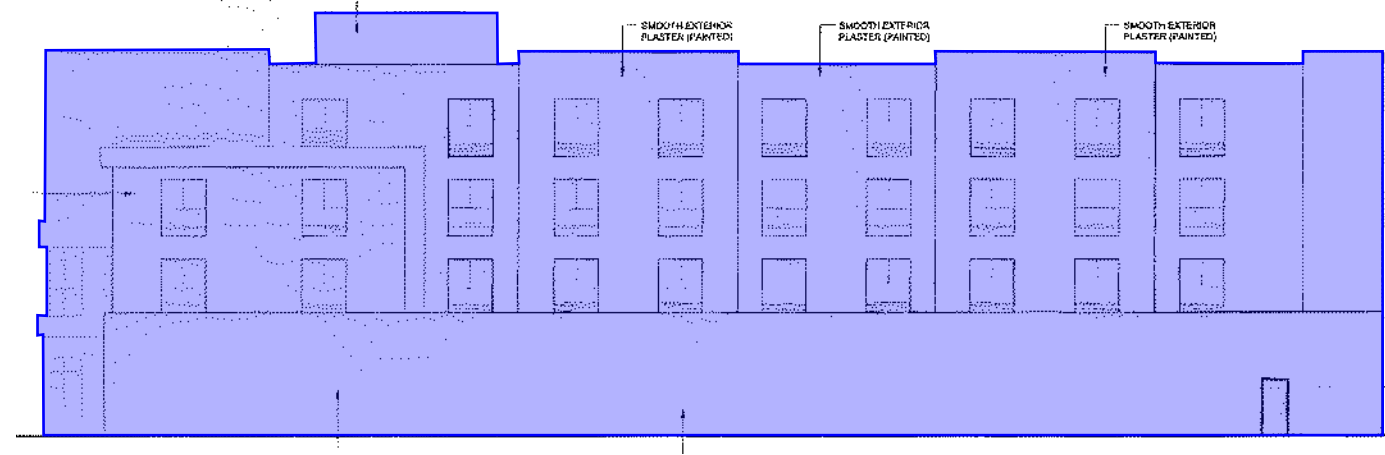
VARIATIONS ON THE INSIDE OF SITE SECOND FLOOR - NOT VISABLE FORM THE STREET

MINOR VARIATIONS IN THE FRONT CORNER OF THE BUILDING

nKlosures, a California Corporation v Avalon Lodging, LLC et al

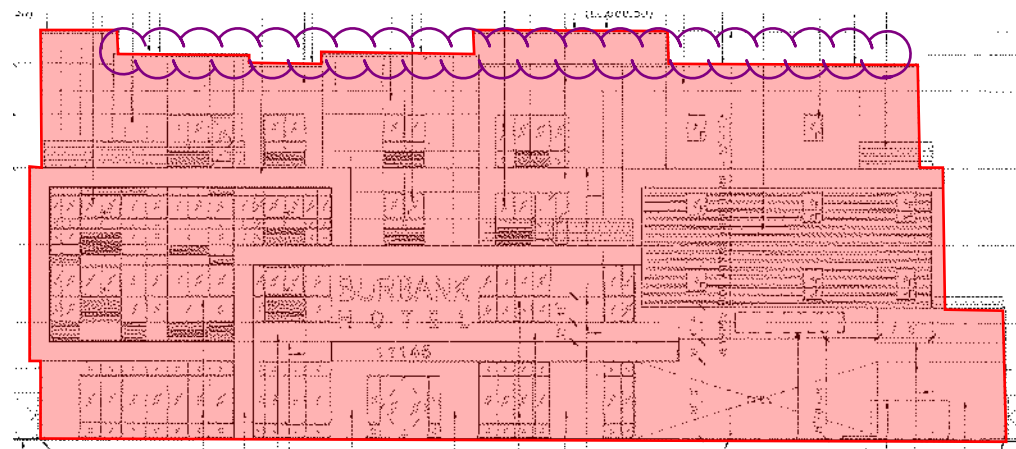


FRONT ELEVATION

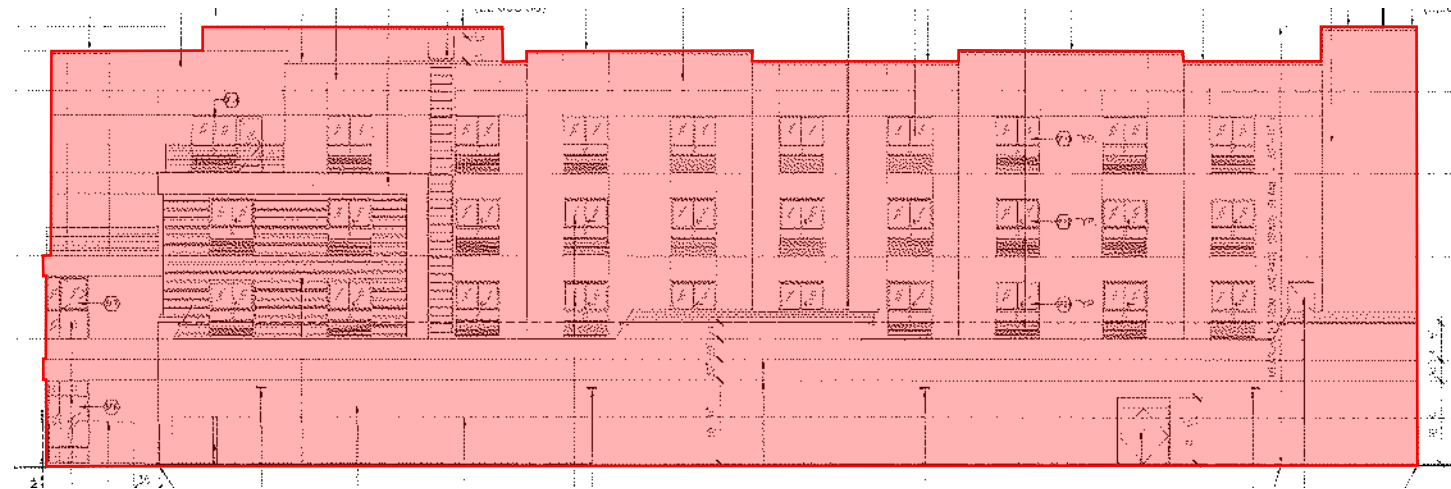


EAST ELEVATION

MASSING STUDY OF ORIGINAL nKLOSURES DESIGN DRAWINGS FOR APPROVED CUP



FRONT ELEVATION



EAST ELEVATION

MASSING STUDY OF W&W LAND CONSULTANTS APPROVED DRAWINGS - NOT TO SCALE - PDFs FROM APPROVED DRAWINGS

  
MINOR VARIATIONS IN THE TOP PROFILE  
OF THE BUILDING ON THE FRONT STREET

Appendix "A" - Overall Massing Comparison  
of nKlosures Design Rendering and W&W  
Land Consultants Approved Construction  
Drawings - ELEVATIONS

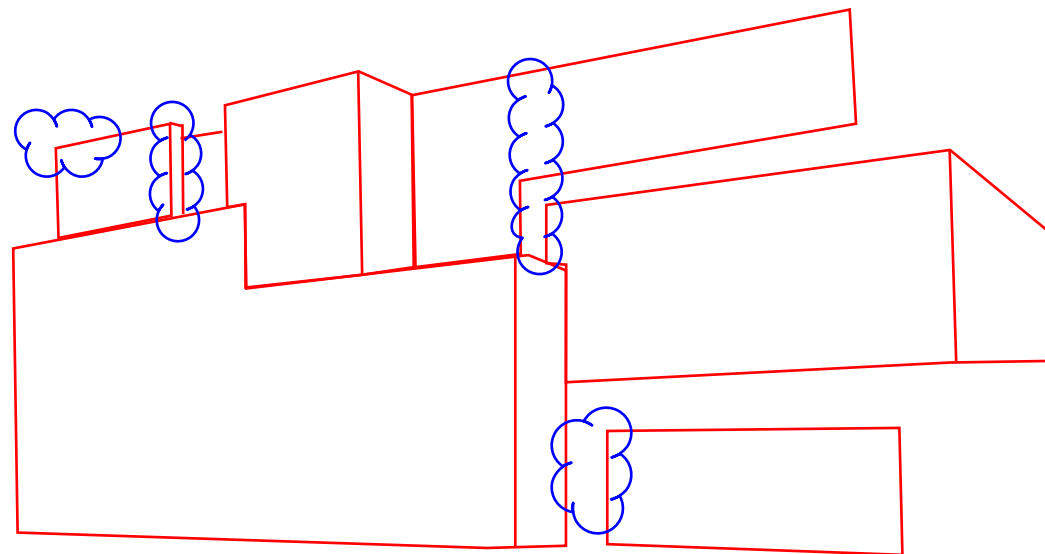
nKlosures, a California Corporation v Avalon Lodging, LLC et al



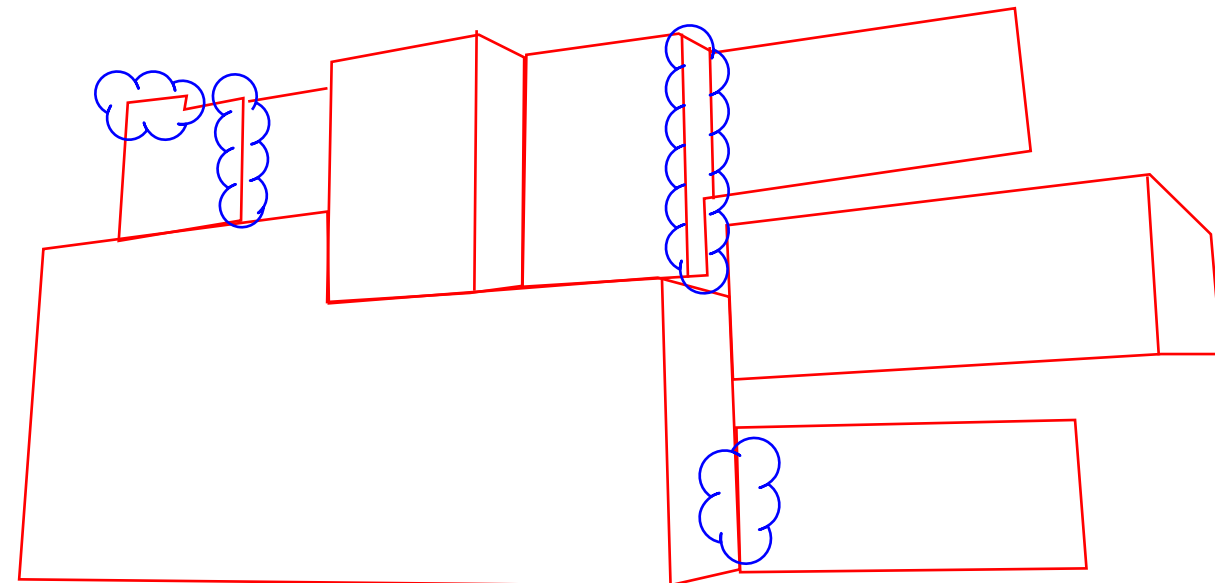
ORIGINAL DESIGN- RENDERING (BY NKLOSURES)



BUILT PROJECT- PHOTO (IMG 1808)



MASSING STUDY OF ORIGINAL RENDERING



MASSING STUDY OF COMPLETED BUILDING

EXCEPT FOR THE MINOR SETBACK DIFFERENCES BETWEEN THE ORIGINAL DESIGN AND THE COMPLETED BUILDING, THE SECTIONAL MASSING IS VIRTUALLY THE SAME ON THE FRONT OF THE BUILDING

nKlosures, a California Corporation v Avalon Lodging, LLC et al



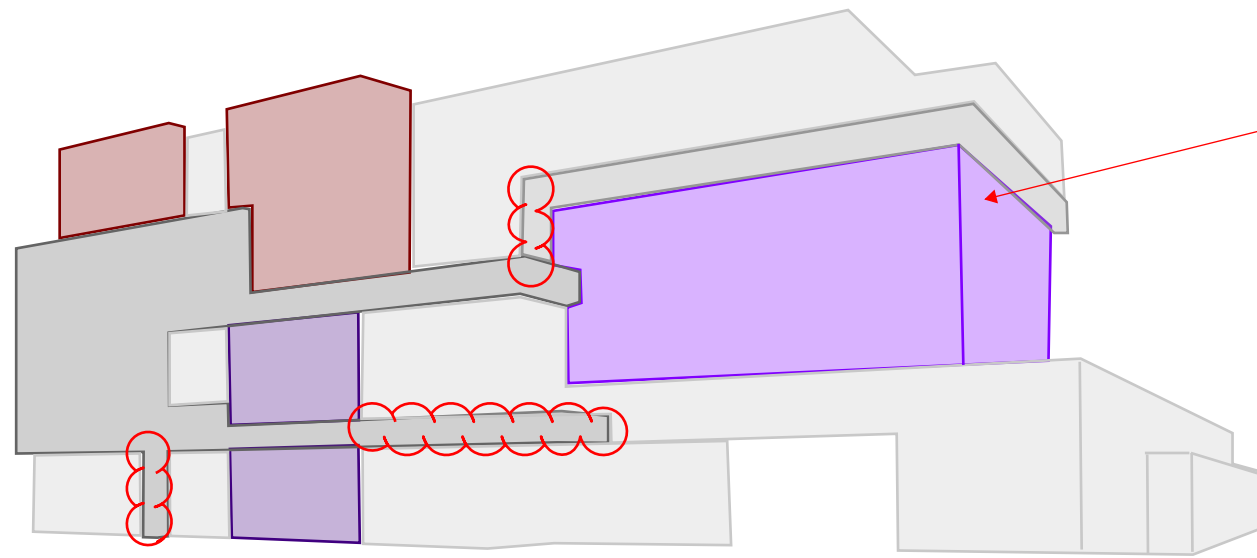
ORIGINAL DESIGN- RENDERING (BY nKLOSURES)



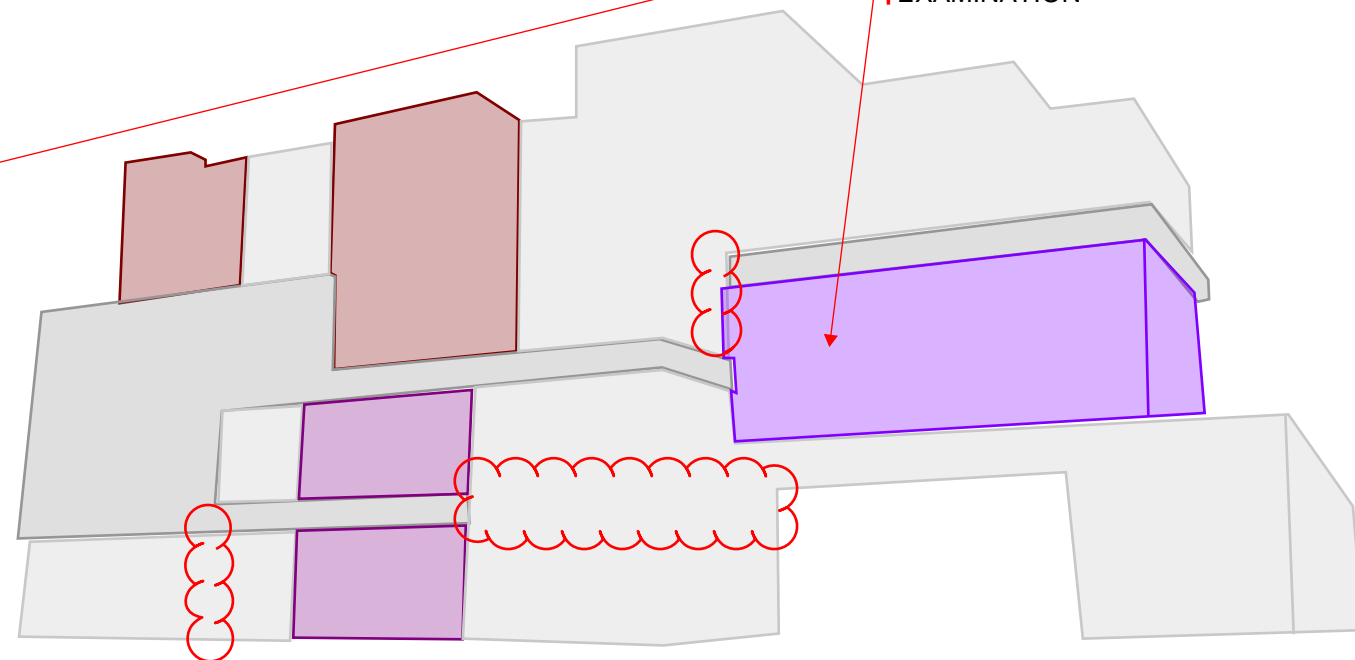
BUILT PROJECT- PHOTO (IMG 1808)

 EXTREMELY MINOR DIFFERENCE BETWEEN THE TWO DESIGNS

METAL PANELS MAY HAVE BEEN DETERMINED TO BE TOO REFLECTIVE DURING BUILDING DEPARTMENT EXAMINATION

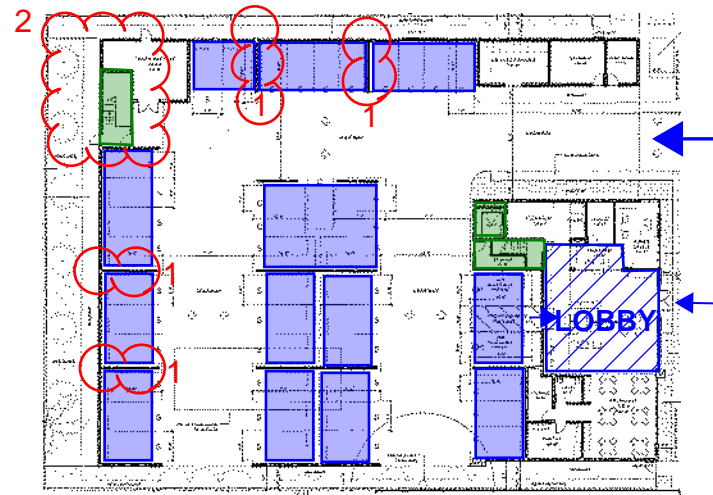


nKLOSURES DESIGN AESTHETIC MATERIALS COMPARISON

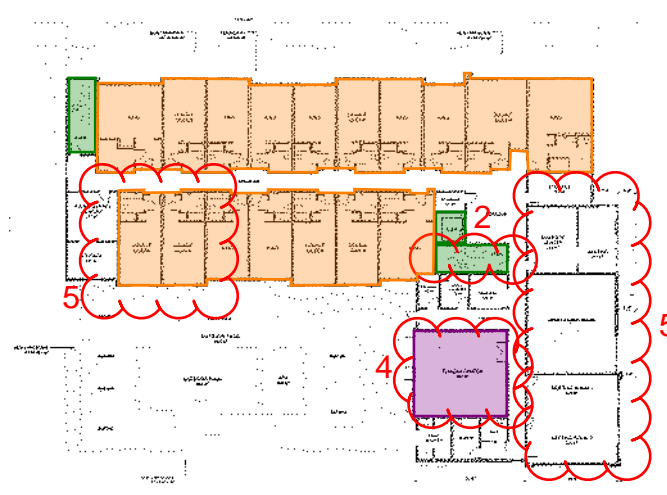


W&W LAND CONSULTANTS COMPLETED BUILDING AESTHETIC MATERIALS COMPARISON

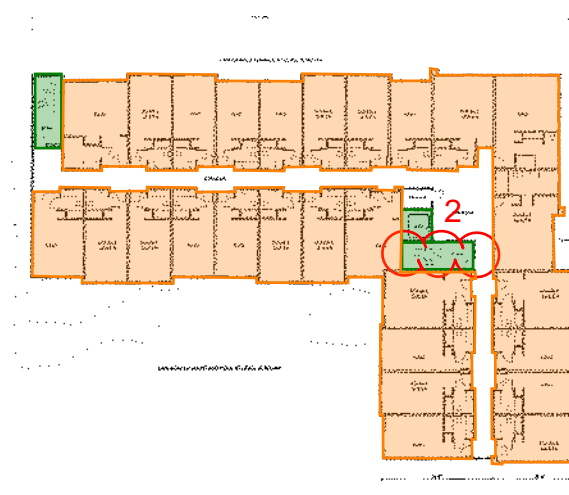
nKlosures, a California Corporation v Avalon Lodging, LLC et al



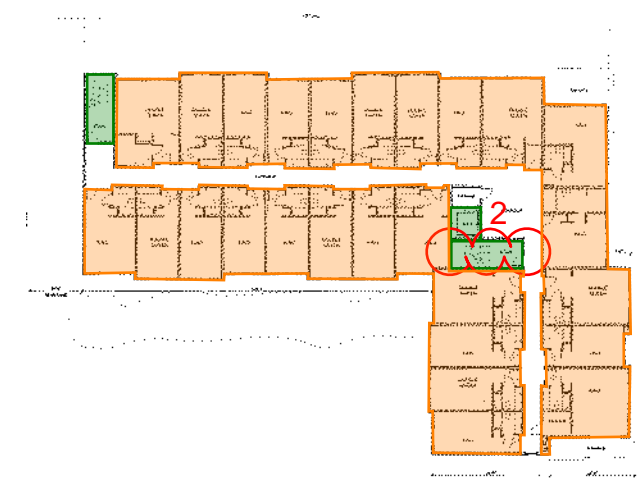
FIRST (GROUND) FLOOR



SECOND FLOOR



THIRD FLOOR



FOURTH FLOOR

FLOOR PLAN STUDY OF ORIGINAL nKLOSURES DESIGN DRAWINGS FOR APPROVED CUP

1 SLIGHT DIFFERENCES IN PARKING PROBABLY DUE TO STRUCTURAL SHEER WALL REQUIREMENTS

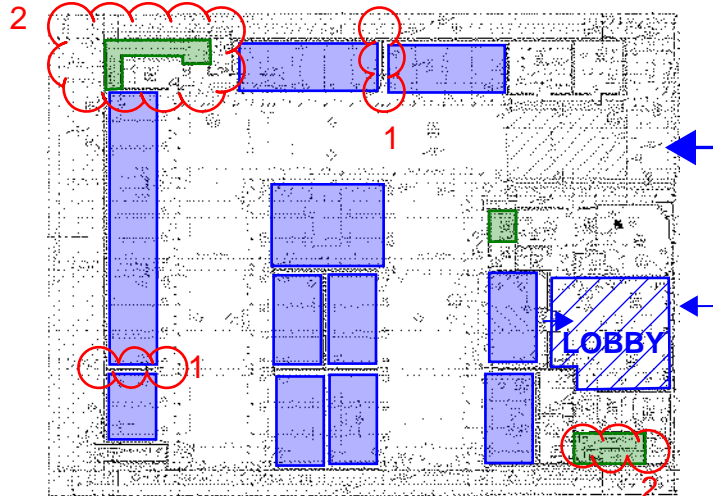
2 SLIGHT DIFFERENCES IN STAIR ORIENTATION

3 STAIR LOCATION DIFFERNT

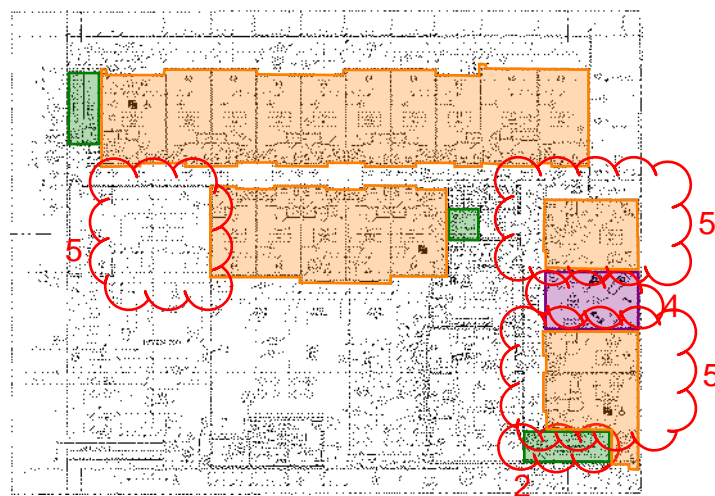
4 FITNESS ROOM LOCATION & SIZE DIFFERNT

5 FIVE GUEST ROOM IN DIFFERNT LOCATIONS

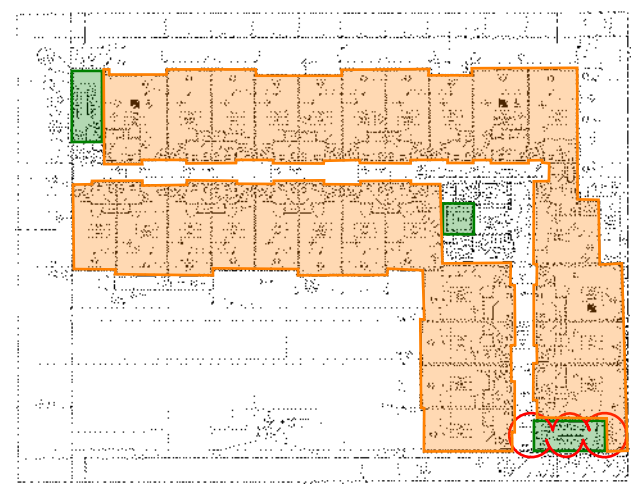
MINOR DIFFERENCES IN LAYOUT ON THE SECOND FLOOR. MAY HAVE BEEN DUE TO CLIENT REQUESTED CHANGES DURING THE CONSTRUICTION DRAWINGS PHASE



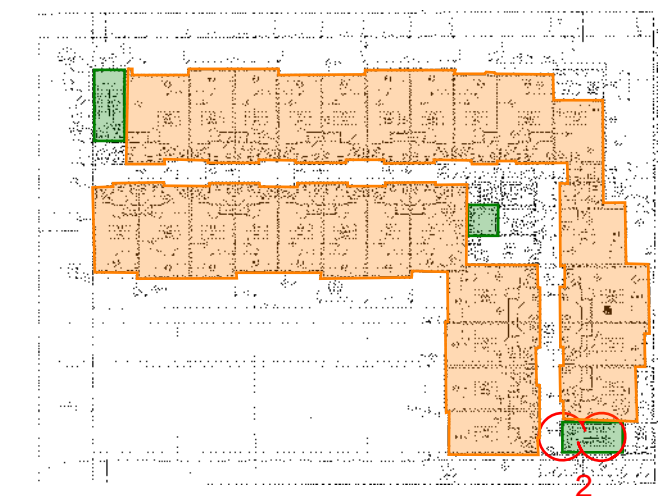
FIRST (GROUND) FLOOR



SECOND FLOOR

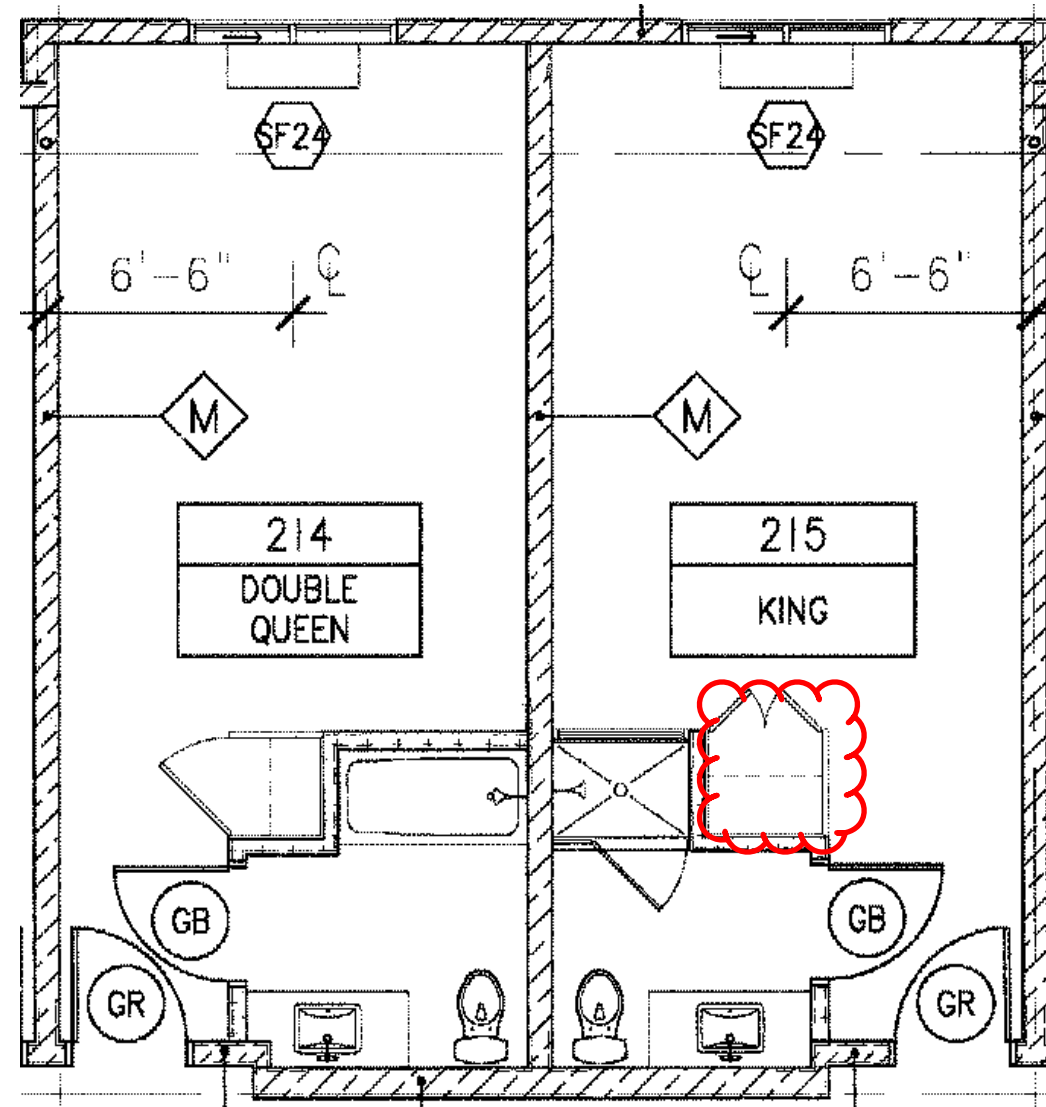
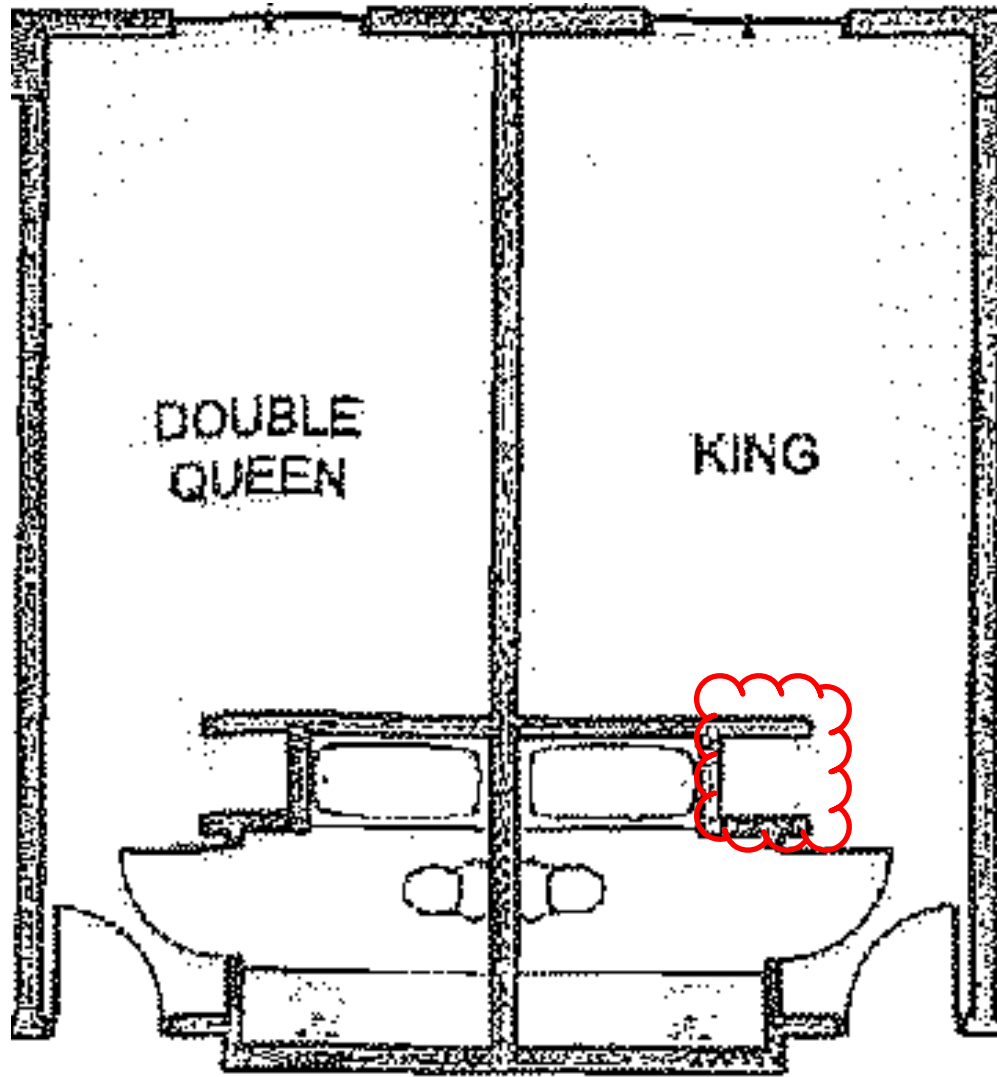


THIRD FLOOR



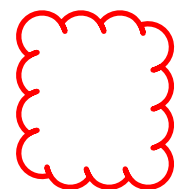
FOURTH FLOOR

FLOOR PLAN STUDY OF W&W LAND CONSULTANTS APPROVED DRAWINGS - NOT TO SCALE - PDFs FROM APPROVED DRAWINGS



UNIT DESIGN STUDY OF ORIGINAL nKLOSURES DESIGN DRAWINGS FOR APPROVED CUP

UNIT DESIGN STUDY OF W&W LAND CONSULTANTS APPROVED DRAWINGS - NOT TO SCALE - PDFs FROM APPROVED DRAWINGS



VIRTUALLY THE SAME ONLY DIFERENCE IS THE DIRECTION OF THE CLOSET DOORS

TYPICAL DOUBLE QUEEN NEXT TO A KING - GROUPED THE SAME WAY IN BOTH PLANS

## **Samples of Exhibits Created for Reports**

# 4

**The City of New York and The Landmarks Preservation Commission**  
**v**  
**Seguine Bay Estates, LLC et al**

Supreme Court of the State of New York,  
County of Richmond, Part DCM  
Index No. 100740/13  
For the defense

Landmarked building was permitted to degrade. The City imposed a fine with interest and penalties of \$9,300,000.00. The law provided that the fine could be reduced if the value of the property was less than the fine. The exhibits created indicated the extremely low value of the property due to the restrictions of the Flood Zone and the Special Zoning District. The court imposed a fine of merely the deed to the property which was worth less than \$300,000.00

**The City of New York and The Landmarks Preservation Commission**

**v**

**Seguine Bay Estates, LLC et al**

# **ANALYSIS OF FLOOD ZONES AND WETLANDS**

**ON 509 SEGUINE AVENUS, STATEN ISLAND, NY**

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**Findings**

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**Map Number 3604970314G; Panel 0314G**

**Preliminary – December 5, 2013**

**Federal Emergency Management Agency, National Flood Insurance Program NFIP**

**Map Number 3604970314G; Panel 0314G**

**September 5, 2007**

## **ENLARGED PORTION OF**

**Federal Emergency Management Agency, National Flood Insurance Program NFIP**

**Map Number 3604970314G; Panel 0314G**

**Preliminary – December 5, 2013**

## **MARKED UP ENLARGED PORTION OF**

**Federal Emergency Management Agency, National Flood Insurance Program NFIP**

**Map Number 3604970314G; Panel 0314G**

**Preliminary – December 5, 2013**

**(TO INDICATE APPROXIMATE LOCATION OF BUILDING)**

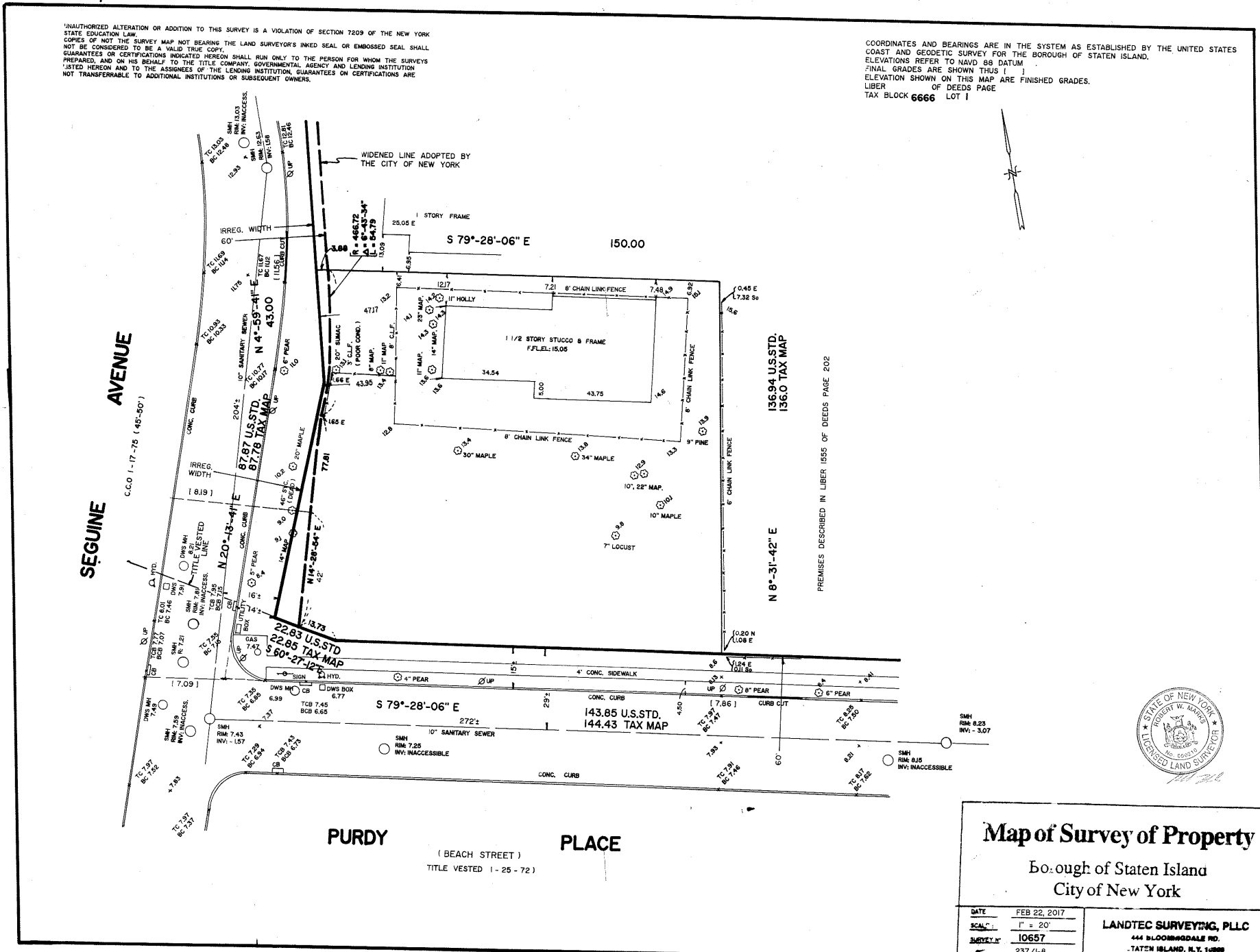
## **MARKED UP PORTION OF SURVEY**

**(TO INDICATE APPROXIMATE LOCATION OF WETLANDS BUFFER)**

Survey

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.  
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COORDINATES AND BEARINGS ARE IN THE SYSTEM AS ESTABLISHED BY THE UNITED STATES COAST AND GEODETIC SURVEY FOR THE BOROUGH OF STATEN ISLAND.  
 ELEVATIONS REFER TO NAVD 88 DATUM  
 FINAL GRADES ARE SHOWN THUS [ ]  
 ELEVATION SHOWN ON THIS MAP ARE FINISHED GRADES.  
 LIBER OF DEEDS PAGE  
 TAX BLOCK 6666 LOT 1



Map of Survey of Property

Borough of Staten Island  
 City of New York

DATE	FEB 22, 2017
SCALE	1" = 20'
SURVEY NO.	10657
	237/1-8.

LANDTEC SURVEYING, PLLC  
 444 BLOOMINGDALE RD.  
 STATEN ISLAND, N.Y. 10980

# The City of New York and The Landmarks Preservation Commission

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## Seguine Bay Estates, LLC et al



### Legend

- Transit, Roads, Reference Features**
  - Roads, ferries, commuter rail, neighborhood names
  - Roads**
    - Major Roads
    - Interstate Highways
    - Tunnels
  - NYC subway routes and stations
  - Neighborhood/Town Labels**
    - County Boundaries
    - Ferry
    - Commuter Rail
- Parks, Playgrounds, & Open Space**
  - Parks & Public Lands
  - Forested Areas (NJ)
  - Community Gardens
  - School property with garden
  - Playgrounds
  - Green Spaces Along Streets
  - Golf Courses
  - Baseball/Soccer/Football Fields
  - Tennis/Basketball/Handball Courts & Tracks
  - Cemeteries
- Land Use**
  - Block/Lot Boundaries
    - (Building footprints in gray)



(Not all items in the legend may be visible on the map.)

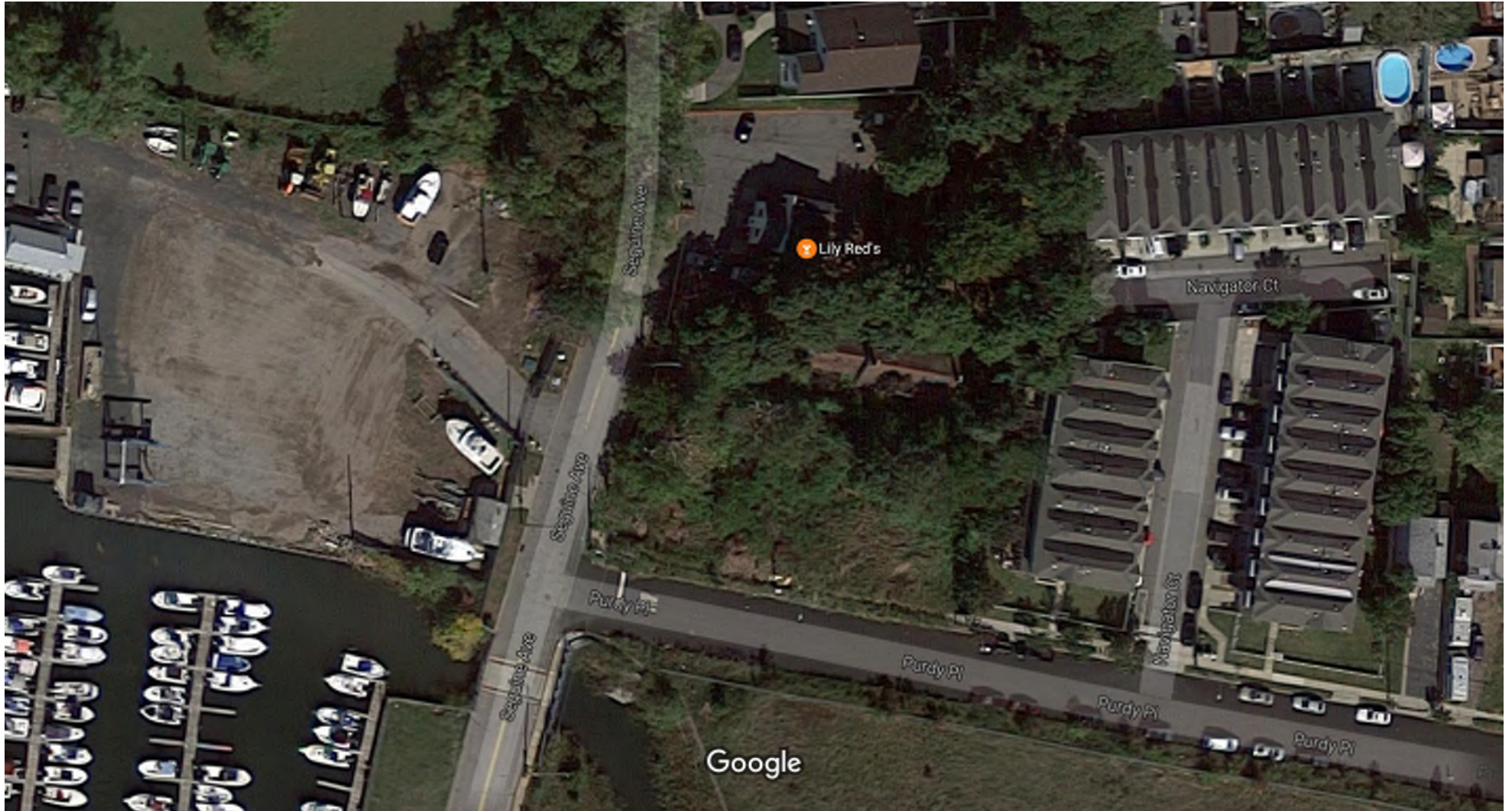
This map was created using the Open Accessible Space Information System (OASIS) website, licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 3.0 United States License](https://creativecommons.org/licenses/by-nc-sa/3.0/). Visit [www.oasisnyc.net](http://www.oasisnyc.net) for the latest information about data sources and notes about how the maps were developed. Contact [oasisnyc@gc.cuny.edu](mailto:oasisnyc@gc.cuny.edu) with questions or comments. OASIS is developed and maintained by the [Center for Urban Research](http://www.cunycur.org/), CUNY Graduate Center.

The City of New York and The Landmarks Preservation Commission

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Seguine Bay Estates, LLC et al

Google Maps 509 Seguine Ave



Imagery ©2017 Google, Map data ©2017 Google 50 ft

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM, Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only inlandward of the North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was New York Long Island State Plane FIPSZONE 3104. The horizontal datum was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NIMS12  
National Geodetic Survey  
SSMCI-3 #022  
1315 East West Highway  
Silver Spring, Maryland 20910-3182  
(301) 713-3242

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was provided in digital format by the Department of Information Technology and Telecommunication, City of New York (DITTT). This information was derived from digital orthophotos produced at a scale of 1:1,200 with 2-foot pixel resolution from photography dated April 2008.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contain authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

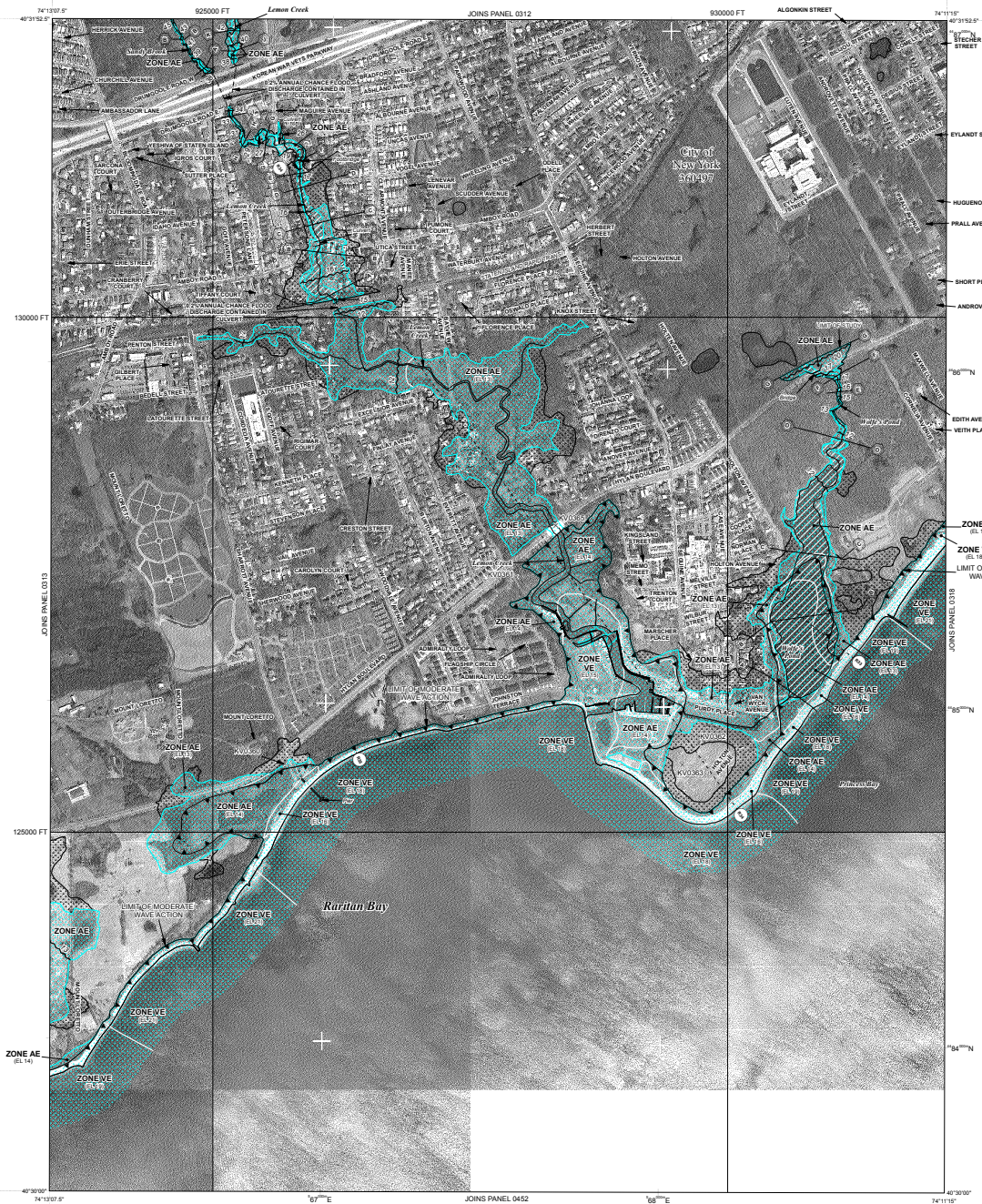
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

The AE Zone category has been divided by a Limit of Moderate Wave Action (LMWA). The LMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between the VE Zone and the LMWA or between the shoreline and the LMWA for areas where VE Zones are not identified will be similar to, but less severe than those in the VE Zone.

For information on available products associated with this FIRM visit the Map Service Center (MSC) website at <http://www.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products of the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMX) at 1-877-FEMAMAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/businessinfo>.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AV, VE, and VE-1 through VE-30. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

**ZONE A**  
No Base Flood Elevations determined.  
Base Flood Elevations determined.

**ZONE AH**  
Flood depths of 1 to 3 feet (swaley areas of ponding); Base Flood Elevations determined.

**ZONE AO**  
Flood depths of 1 to 3 feet (swaley areas of ponding); average depths determined; for areas of unusual fire flooding, velocities also determined.

**ZONE AR**  
Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR indicates the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

**ZONE AV**  
Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

**ZONE VE**  
Coastal flood zone with velocity hazard (wave action); no Base Flood Elevation determined.

**ZONE VE-1 through VE-30**  
Coastal flood zone with velocity hazard (wave action); Base Flood Elevation determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

**ZONE D**  
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot in drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE K**  
Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE O**  
Areas in which flood hazards are unassessable, but possible.

**COASTAL BARRIERS RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary  
0.2% annual chance floodplain boundary  
Floodway boundary  
Zone D boundary  
CBRS and OPA boundary  
Boundary dividing Special Flood Hazard Area Zone and boundary dividing Special Flood Hazard Area of different Base Flood Elevations, flood depths or flood velocities.  
Line of Moderate Wave Action  
Base Flood Elevation line and value; elevation in feet\*  
Base Flood Elevation value where uniform within zone; elevation in feet

\* Referenced to the North American Vertical Datum of 1988  
Cross section line  
Tide gauge line  
Canal, Flume, Weir/Dam or Aqueduct  
Road or Railroad Bridge  
Floodgate  
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere  
77°04'N, 32°22'30"W  
2008 meter Universal Transverse Mercator grid values; zone 18  
5000-foot grid values; New York State Plane coordinates  
System: Long Island zone (PROJCS=3104), Lambert Conformal Conic projection  
Spheroid: Clarke 1866  
Datum: North American Datum of 1983  
Units: Meter  
Datum shift: 0.000000  
Scale factor: 0.999999  
False easting: 1000000.000000  
False northing: 0.000000  
Projection: Lambert Conformal Conic  
Datum: North American Datum of 1983  
Units: Meter  
Datum shift: 0.000000  
Scale factor: 0.999999  
False easting: 1000000.000000  
False northing: 0.000000  
Projection: Lambert Conformal Conic  
Datum: North American Datum of 1983  
Units: Meter  
Datum shift: 0.000000  
Scale factor: 0.999999  
False easting: 1000000.000000  
False northing: 0.000000  
Projection: Lambert Conformal Conic

**MAP REPOSITORY**  
Refer to listing of Map Repositories on Map Index

**INITIAL NFIP MAP DATE**  
June 28, 1974

**FLOOD HAZARD INSURANCE MAP REVISIONS**  
June 11, 1976

**FLOOD INSURANCE RATE MAP EFFECTIVE**  
November 16, 1983

**FLOOD INSURANCE RATE MAP REVISIONS**

For descriptions of revisions see Notice to Users page in the Flood Insurance Study report.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6633.

**MAP SCALE 1" = 500'**  
1:160,000  
0 500 1000 FEET  
0 150 300 METERS

**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0314G**

**FIRM**  
FLOOD INSURANCE RATE MAP

**CITY OF NEW YORK**  
BROOKLYN, RICHMOND, NEW YORK, QUEENS, AND KINGS COUNTIES

**PANEL 314 OF 457**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**  
COMMUNITY: NEW YORK, CITY OF  
MAP NUMBER: 3604970314G

**PRELIMINARY**  
**DECEMBER 5, 2013**

Notice to User: The Map Number above should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

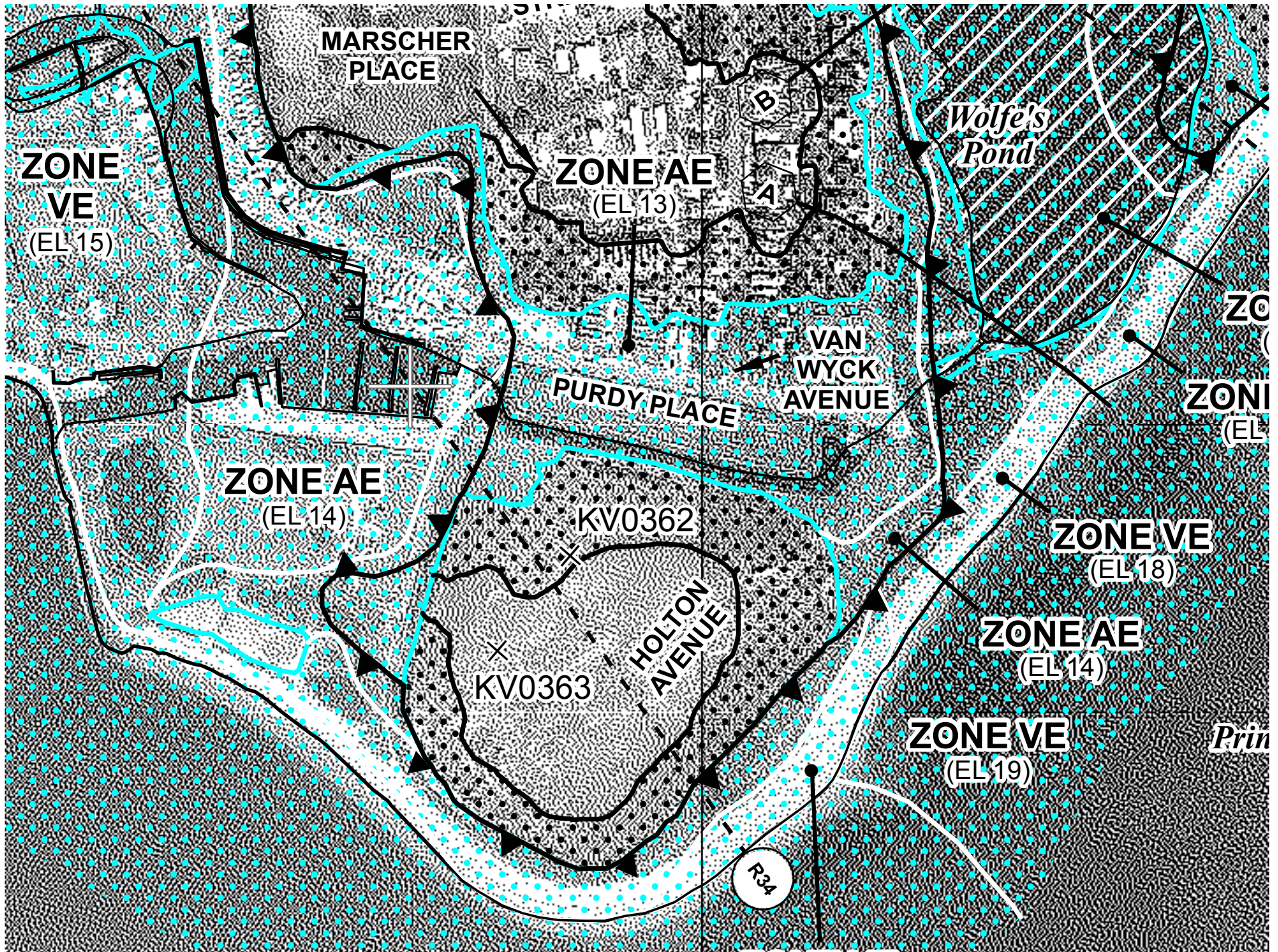
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3604970314G

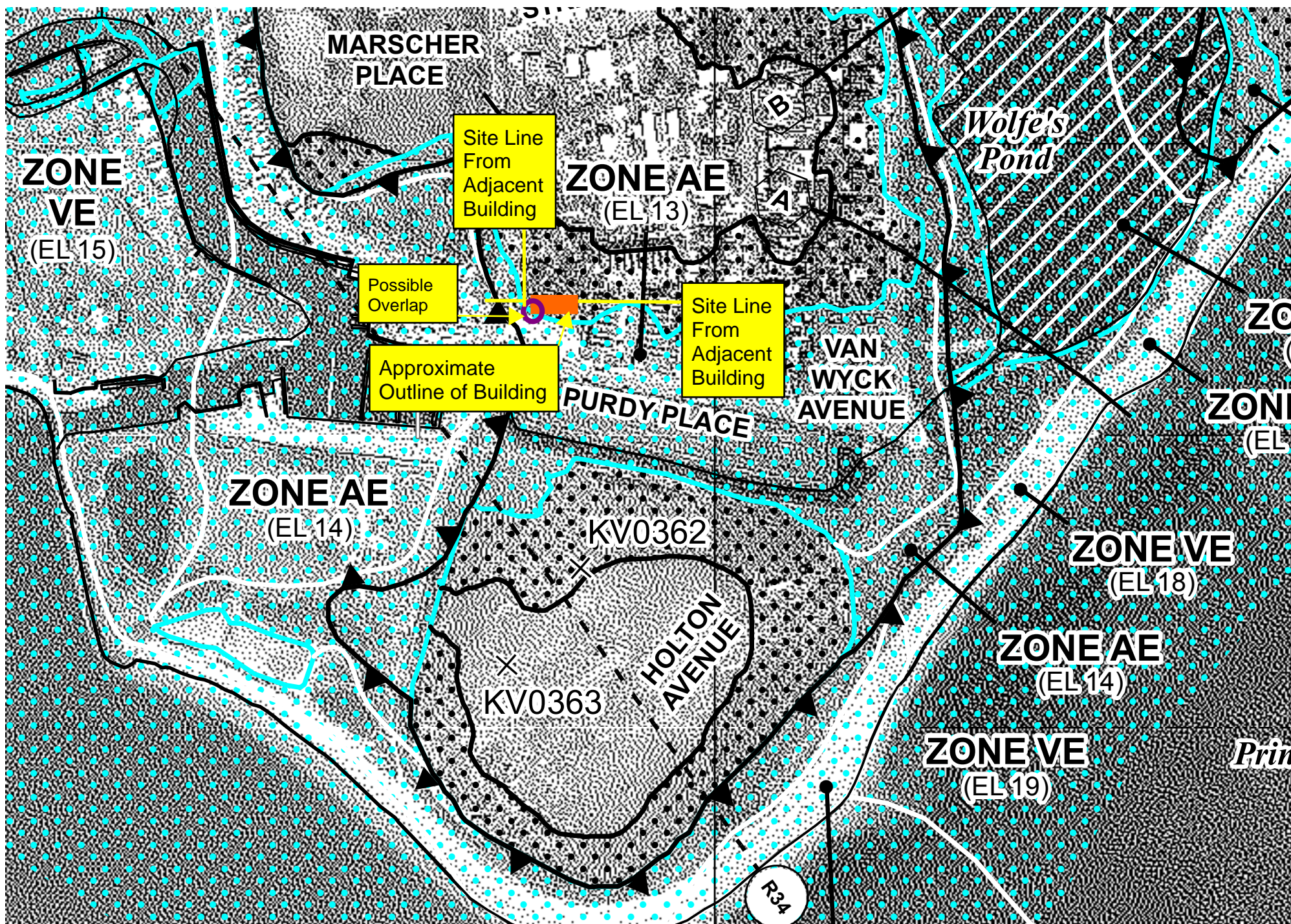
**MAP REVISED**

Federal Emergency Management Agency

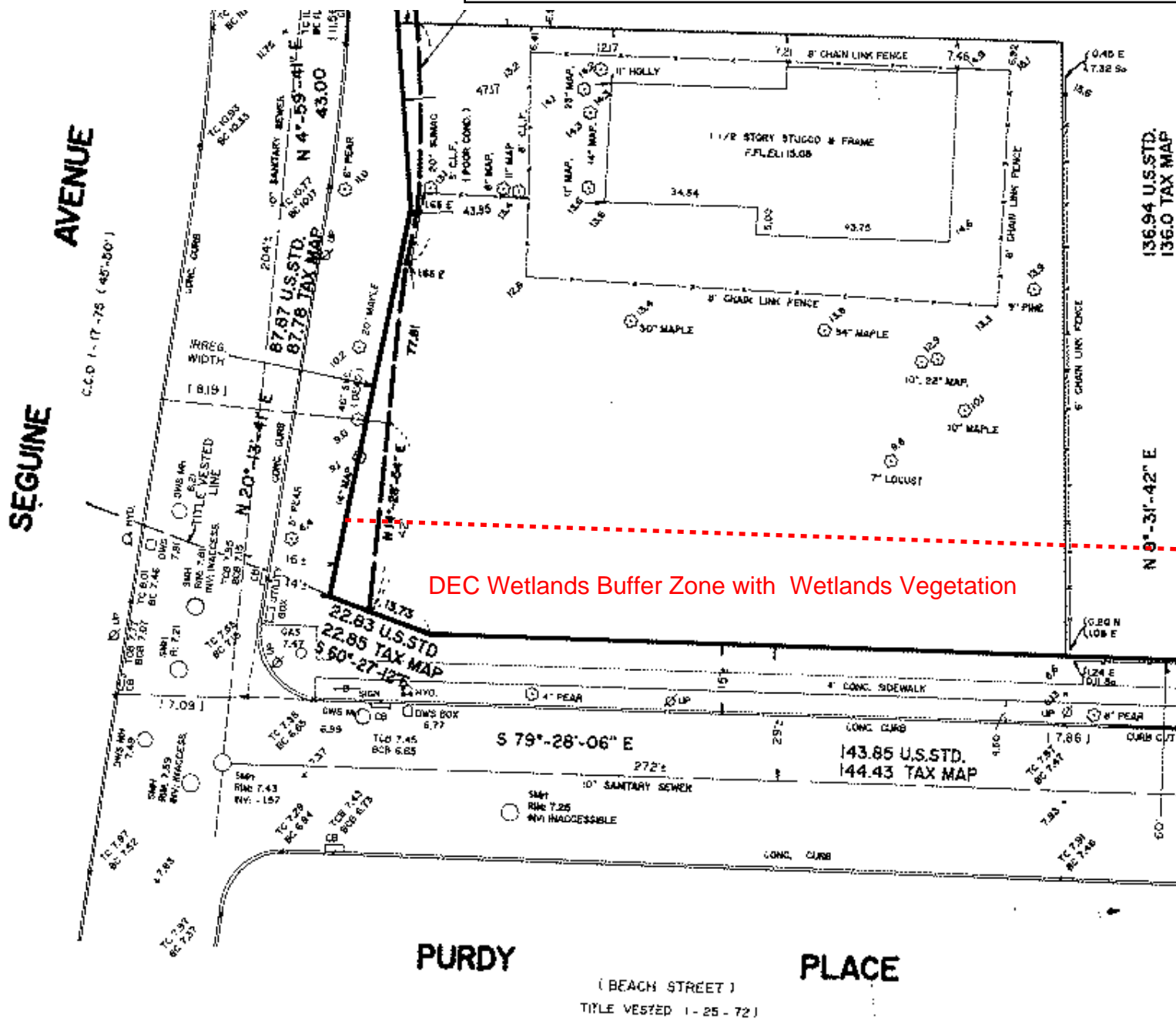


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Approximate Location of DEC Wetlands Buffer Zone



DEC Wetlands Buffer Zone with Wetlands Vegetation

PURDY PLACE  
(BEACH STREET)  
TITLE VESTED 1-25-72

SEGUINE AVENUE

136.94 U.S. STD.  
136.0 TAX MAP  
N 9°-31'-42" E