PROGRESS UPDATE TO CITY COUNCIL
FLAMINGO DITCH FEASIBILITY STUDY
CITY OF VENICE

MARCH 11, 2025

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AGENDA

- Feasibility Study Overview
- Model and Data Review
- Public Comment Summary
- Preliminary Findings
- Next Steps

FLAMINGO DITCH FEASIBILITY STUDY

Roadways and private property near the Flamingo Ditch outfall experience flooding due to storm surge, rainfall events, and/or a combination of both.

- **Existing Information:**
  - Open drainage ditch surrounded by low lying areas
  - Private ownership with limited drainage easement
  - Repetitive flooding of private properties and nearby roads
  - Subject to storm surge, rainfall, and/or compound events
- **Study Objectives:**
  - Obtain public input for historical context and local observations
  - Review previous studies and existing data for model refinements
  - Conceptualize and compare options to reduce flooding potential

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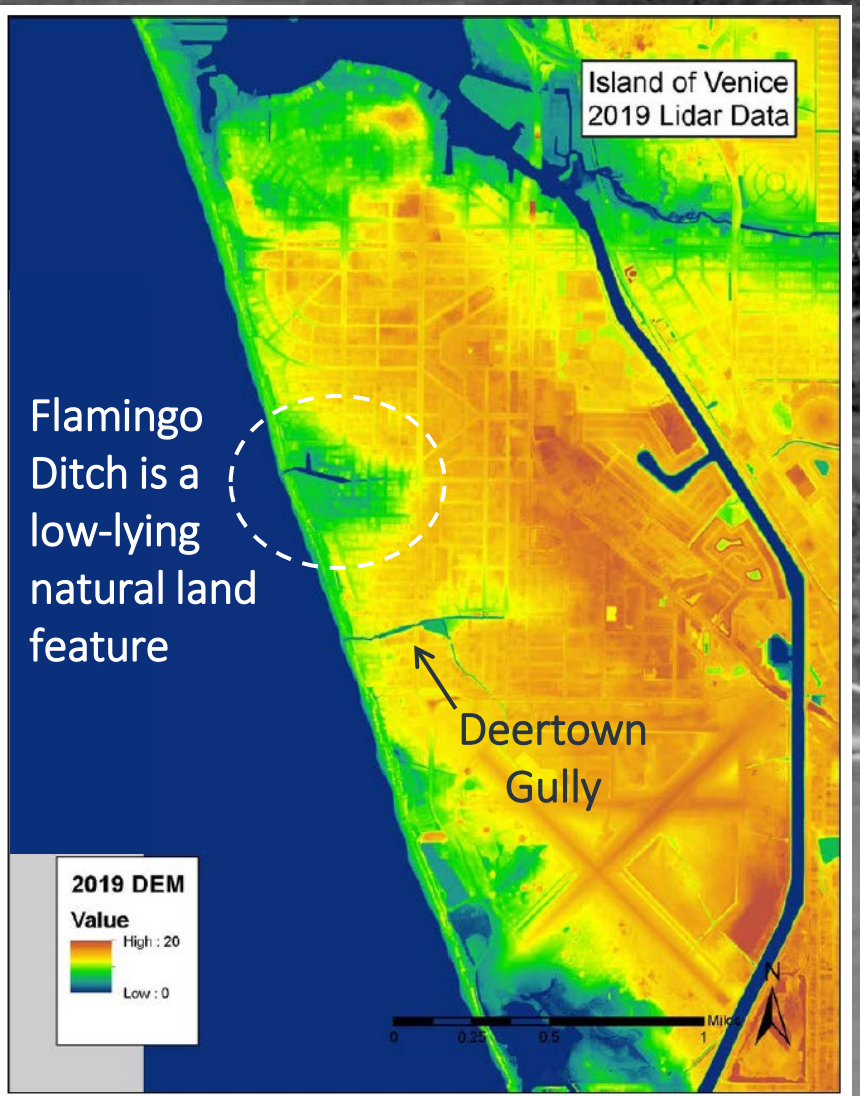
HISTORIC AERIAL IMAGE OF FLAMINGO DITCH (C. 1948)



FLAMINGO DITCH OWNERSHIP

Note: Easement shown for illustration purposes only. Not to scale.

- Flamingo Ditch is owned by the private properties along the ditch.
- Property lines extend to approximate centerline of ditch.
- Existing 20-ft wide easement is for maintenance operations.
- Private property construction easements would be needed for any modifications (e.g., the de-mucking project).

STUDY AREA PRELIMINARY OVERVIEW

Low land elevations and lack of capacity relative to the drainage basin creates conditions of inadequate draining at Flamingo Ditch (FD).

Stormwater flow can exceed ditch capacity in minor rain events. Storm surge increases water and inhibits drainage to the Gulf. When these coincide, compound flooding events can occur.

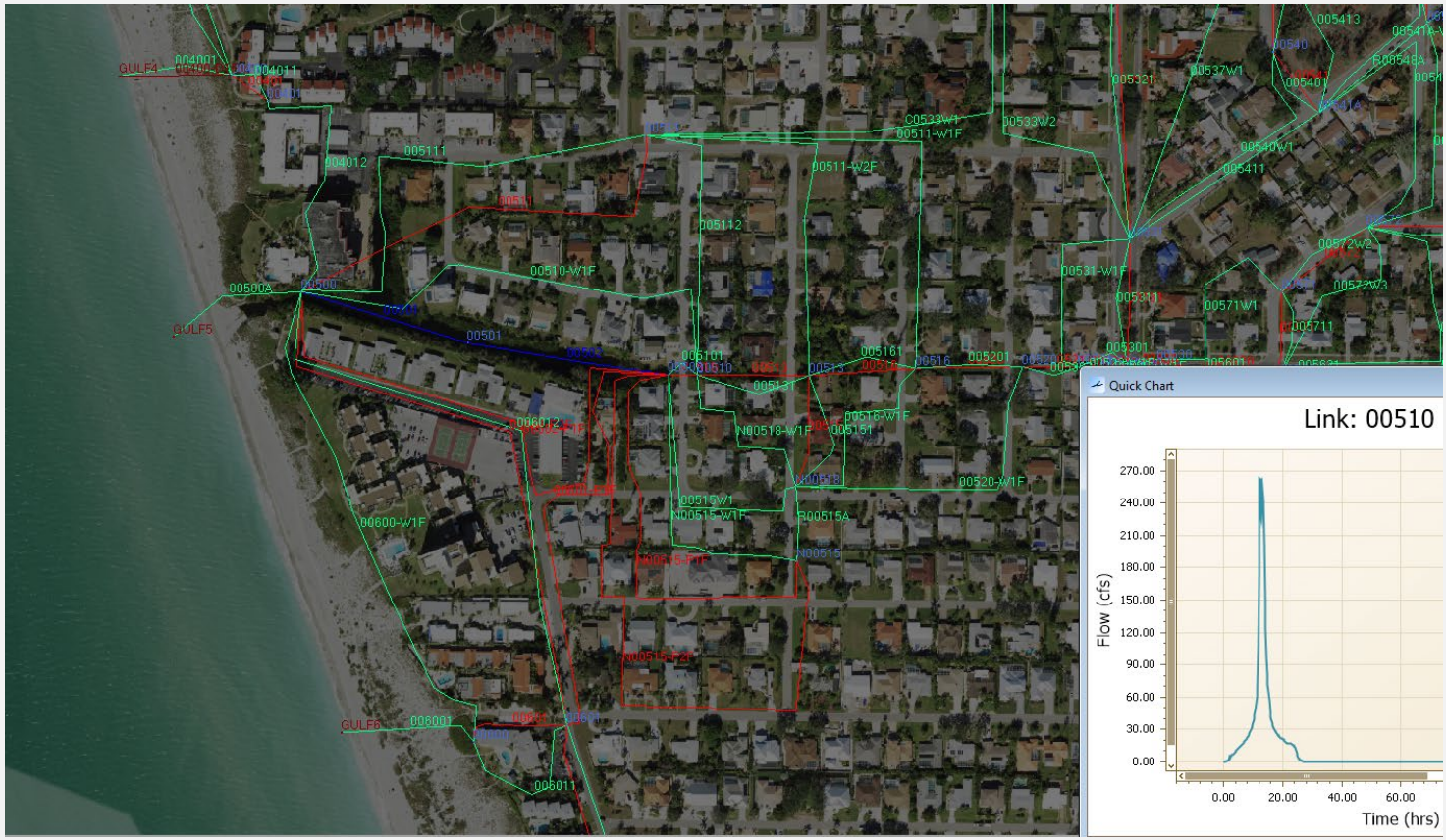
Low elevation of the properties, streets, and homes in the drainage basin limit the critical elevation to +5 ft (NAVD) before overland flow goes back into the neighborhood.

Beach/dune elevation is high compared to FD, inhibiting drainage to the Gulf, which can be further impounded by storms that move sand into the ditch opening.

Flow rates are not always strong enough to open (or keep open) the connection to the Gulf. In comparison, Deertown Gully has higher land elevations, larger cross-sectional area, and stronger flow rate.

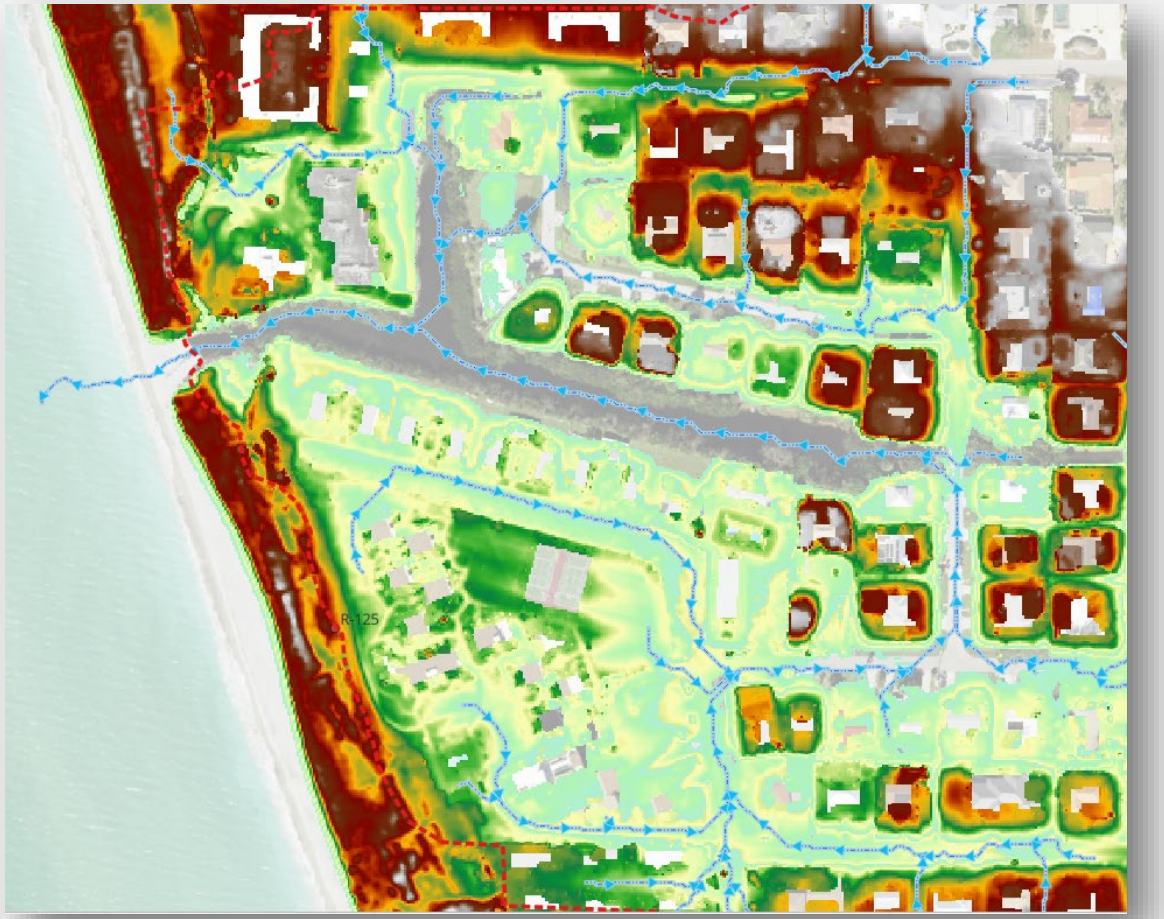
ICPR MODEL DEVELOPMENT

- Interconnected Pond and Channel Routing (ICPR)
- Flooding mechanisms
  - Rain, Surge, Compound
- Model set-up review
- Site visit observations
- Potential updates and data needs



ICPR MODEL - UPDATES AND REFINEMENTS

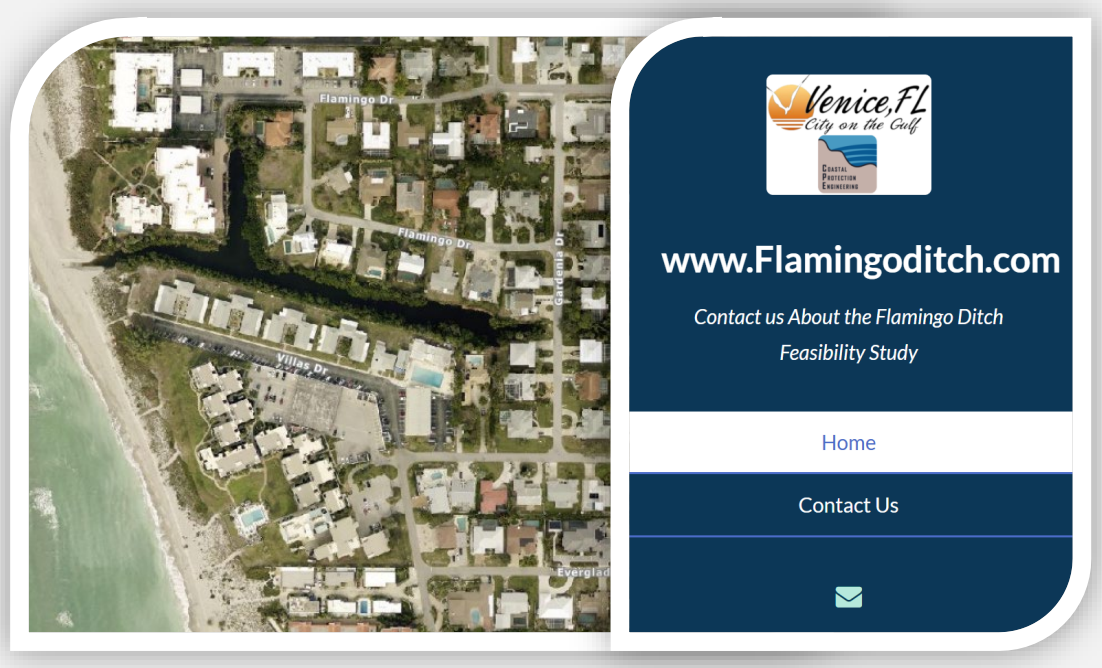
- Previously developed ICPR model
- Correction of routes/features
- Sub-basin refinement
- Data collection
  - Stormwater Invert Survey
  - Topographic Survey
- GIS Analysis



PUBLIC COMMENT

Common Themes from Public Meeting and Public Comment

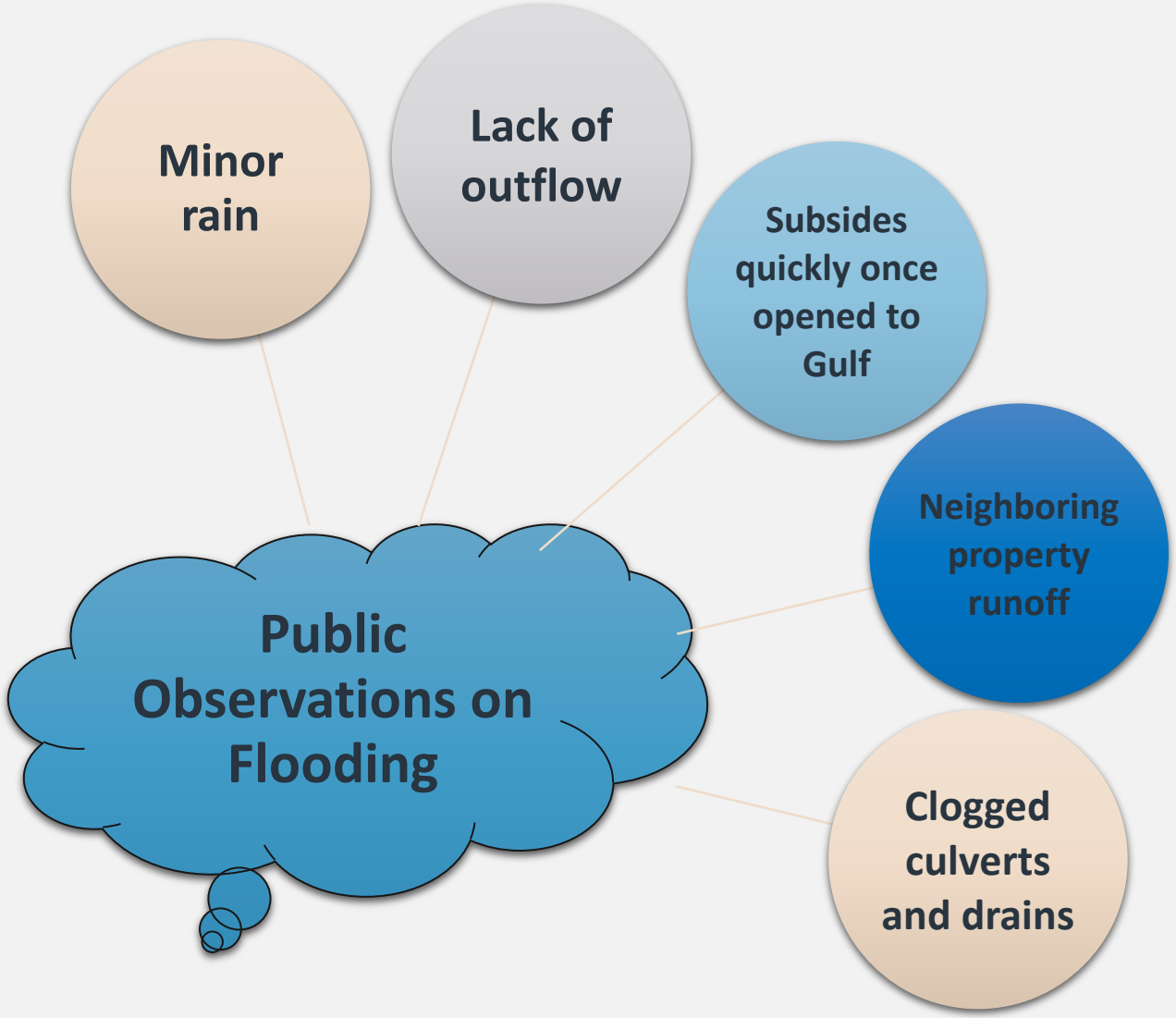
- Property damage and financial impacts
- Health and safety concerns
- Flooding observations
- Maintenance and improvement ideas
- Responsible parties and funding
- Long-term solution
- Upcoming storm season
- Urgency



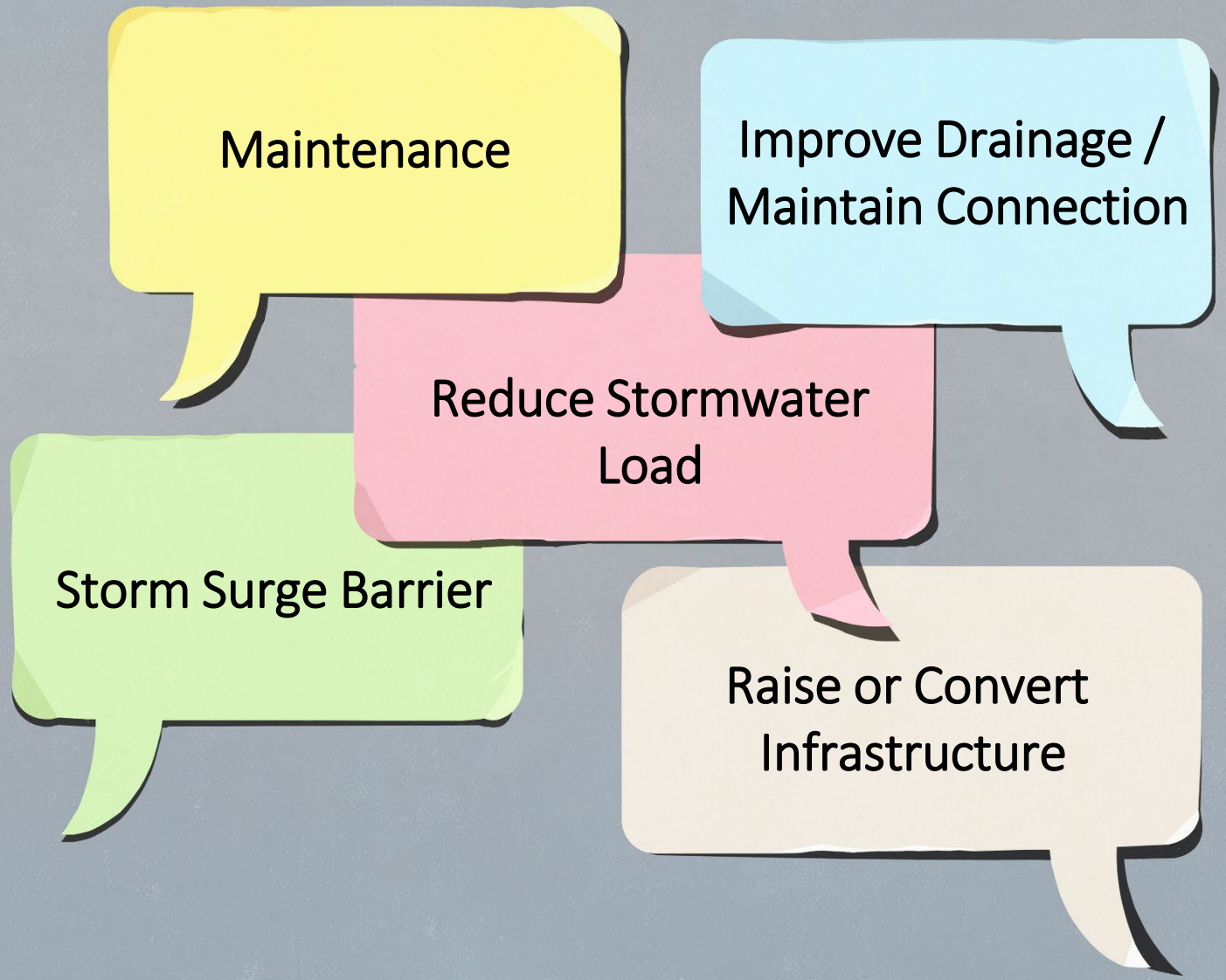
~ 20 public meeting speakers

~ 30 website responses

COMMENTS AND OBSERVATIONS FROM THE PUBLIC



IDEAS FROM PUBLIC COMMENTS



PRELIMINARY FINDINGS

- **Flooding issues exist on a re-occurring basis supported by public comment, literature review, and preliminary model evaluations.**
  - Minor rain events can result in neighborhood flooding.
  - Hurricanes have caused extensive impacts to homes.
- **Challenge is two-fold:**
  - Stormwater drainage
  - Storm surge inundation
- **Potential concepts to improve the system:**
  - Elevate, Block, Pump, Discharge, Maintain

ONGOING CONSIDERATIONS

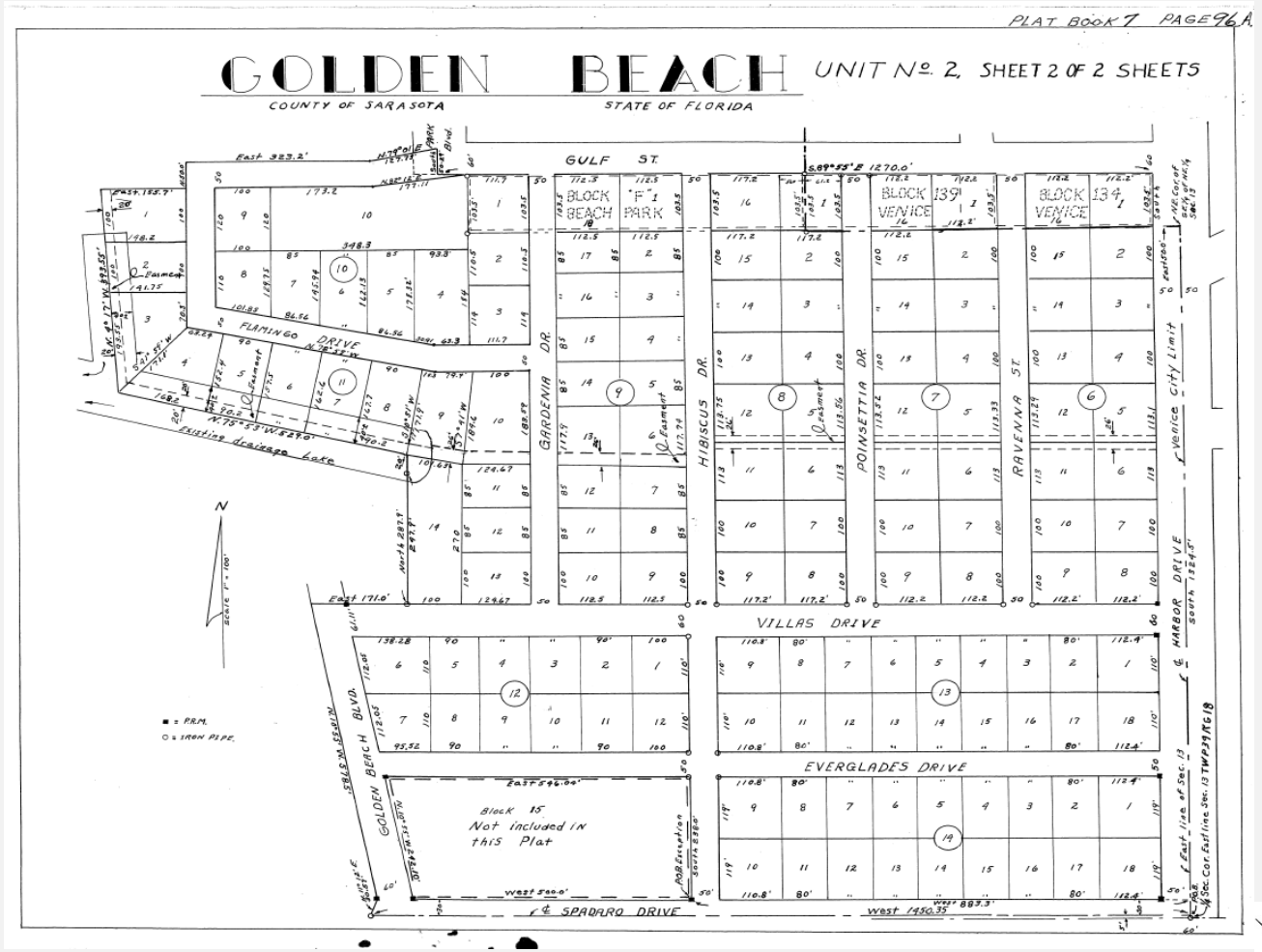
- **Long-term plan to improve drainage:**
  - Alternatives analysis
  - Ownership/easements
  - Cost feasibility
- **Short-term actions with potential strategies such as:**
  - Evaluate/update current SOPs for FD (Outfall #5).
  - Review pre-season emergency contracts for post-storm response activities.
  - City stormwater drainage maintenance (ongoing).
  - Investigate potential for backflow prevention devices (one-way valves).

STATUS AND NEXT STEPS

- Public comment period
- Background information
- Initial model set-up and review
- Additional data gathering/collection
- Finalize model set-up
- Build alternatives in model
- Simulate a range of rain/surge events
- Add/refine alternatives
- Results and reporting

THANK YOU

GOLDEN BEACH PLAT



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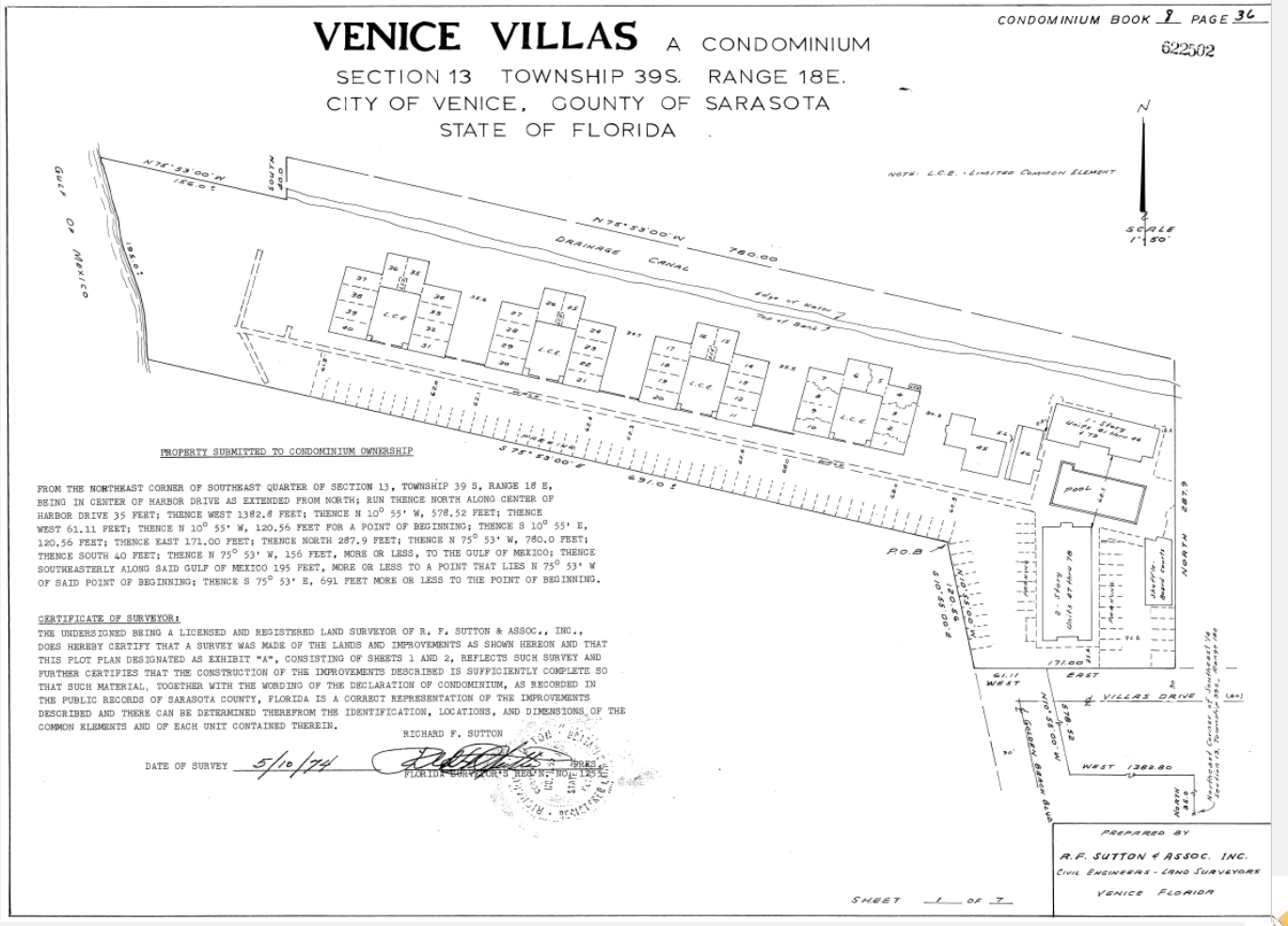
VENICE VILLAS PLAT



CONDOMINIUM BOOK 9 PAGE 36

622502

VENICE VILLAS A CONDOMINIUM

SECTION 13 TOWNSHIP 39S. RANGE 18E.
CITY OF VENICE, COUNTY OF SARASOTA
STATE OF FLORIDA

NOTE: L.C.E. - LIMITED COMMON ELEMENT

SCALE 1" = 50'

DRAINAGE CANAL

PROPERTY SUBMITTED TO CONDOMINIUM OWNERSHIP

FROM THE NORTHEAST CORNER OF SOUTHEAST QUARTER OF SECTION 13, TOWNSHIP 39 S, RANGE 18 E, BEING IN CENTER OF HARBOR DRIVE AS EXTENDED FROM NORTH; RUN THENCE NORTH ALONG CENTER OF HARBOR DRIVE 35 FEET; THENCE WEST 1382.8 FEET; THENCE N 10° 55' W, 578.52 FEET; THENCE WEST 61.11 FEET; THENCE N 10° 55' W, 120.56 FEET FOR A POINT OF BEGINNING; THENCE S 10° 55' E, 120.56 FEET; THENCE EAST 171.00 FEET; THENCE NORTH 287.9 FEET; THENCE N 75° 53' W, 780.0 FEET; THENCE SOUTH 40 FEET; THENCE N 75° 53' W, 156 FEET, MORE OR LESS, TO THE GULF OF MEXICO; THENCE SOUTHEASTERLY ALONG SAID GULF OF MEXICO 195 FEET, MORE OR LESS TO A POINT THAT LIES N 75° 53' W OF SAID POINT OF BEGINNING; THENCE S 75° 53' E, 691 FEET MORE OR LESS TO THE POINT OF BEGINNING.

CERTIFICATE OF SURVEYOR:

THE UNDERSIGNED BEING A LICENSED AND REGISTERED LAND SURVEYOR OF R. F. SUTTON & ASSOC., INC., DOES HEREBY CERTIFY THAT A SURVEY WAS MADE OF THE LANDS AND IMPROVEMENTS AS SHOWN HEREON AND THAT THIS PLOT PLAN DESIGNATED AS EXHIBIT "A", CONSISTING OF SHEETS 1 AND 2, REFLECTS SUCH SURVEY AND FURTHER CERTIFIES THAT THE CONSTRUCTION OF THE IMPROVEMENTS DESCRIBED IS SUFFICIENTLY COMPLETE SO THAT SUCH MATERIAL, TOGETHER WITH THE WORDING OF THE DECLARATION OF CONDOMINIUM, AS RECORDED IN THE PUBLIC RECORDS OF SARASOTA COUNTY, FLORIDA IS A CORRECT REPRESENTATION OF THE IMPROVEMENTS DESCRIBED AND THERE CAN BE DETERMINED THEREFROM THE IDENTIFICATION, LOCATIONS, AND DIMENSIONS OF THE COMMON ELEMENTS AND OF EACH UNIT CONTAINED THEREIN.

RICHARD F. SUTTON

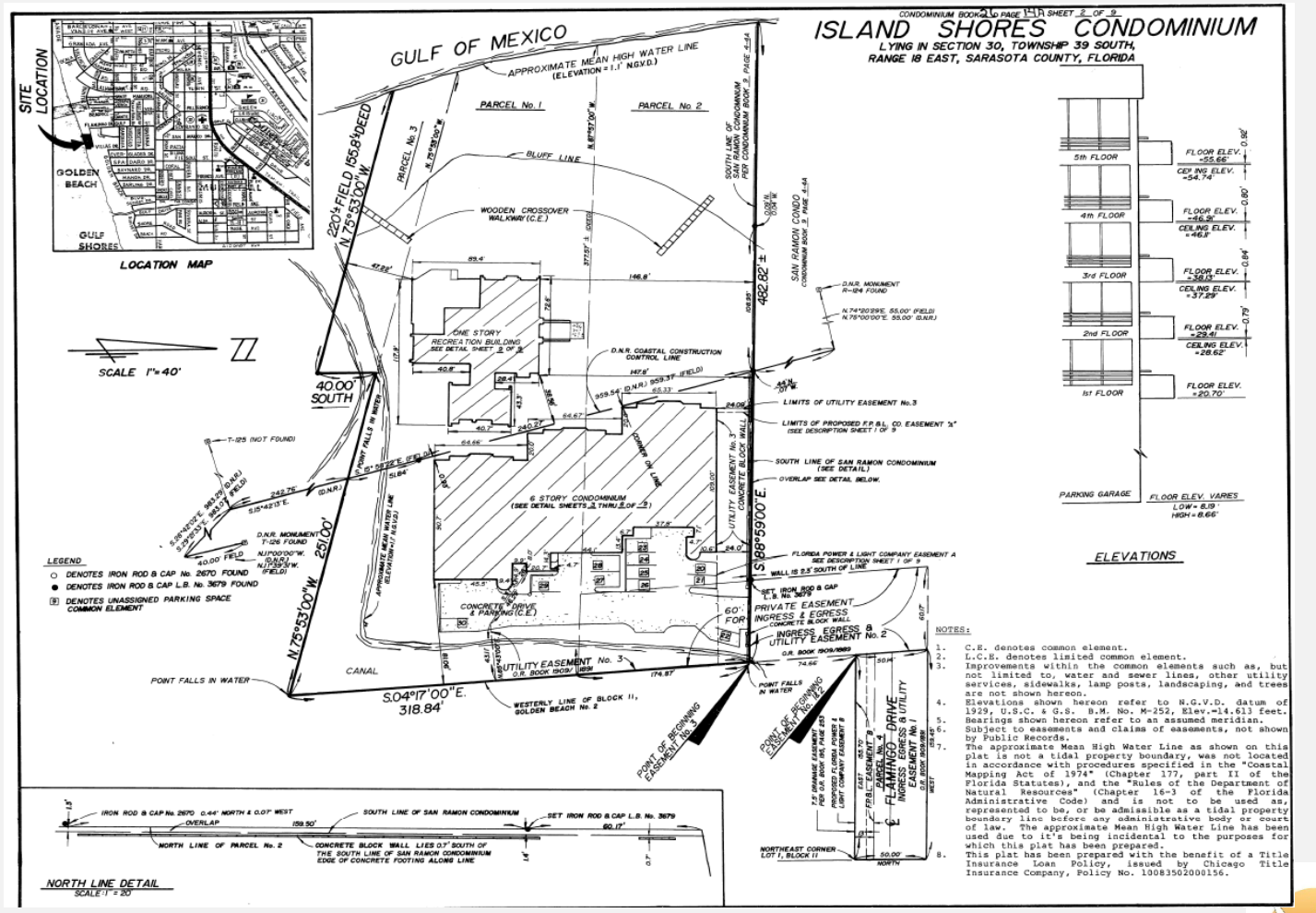
DATE OF SURVEY 5/10/74

FLORIDA SURVEYOR'S REG. NO. 1251

PREPARED BY
R.F. SUTTON & ASSOC. INC.
CIVIL ENGINEERS - LAND SURVEYORS
VENICE FLORIDA

SHEET 1 OF 2

ISLAND SHORES CONDO PLAT



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