

# Inner Harbor Navigational Canal

## Industrial Canal Lock - Interpretive Design Plan

New Orleans, Louisiana



U S Army Corps of Engineers  
New Orleans

*April 13, 2018*

*submittal - V*

### Interpretive Design Plan

#### Project Participants

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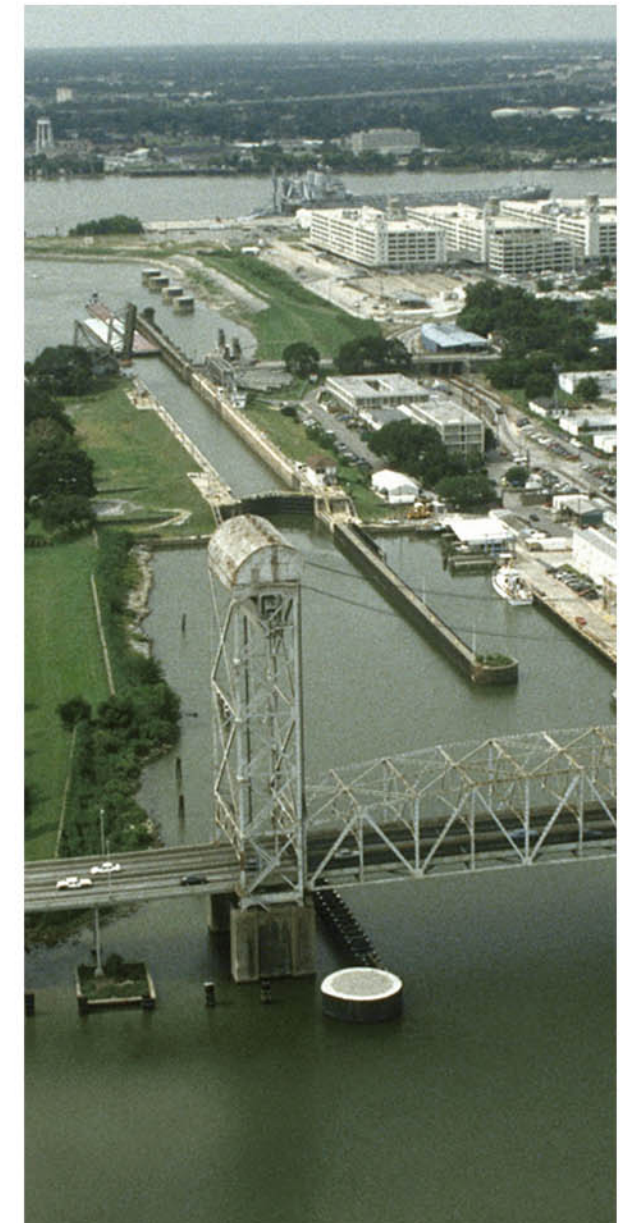
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*Prepared by:*

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**Final Design Plan**





## SHEET SCHEDULE

- 00 - SHEET SCHEDULE
- 01 - CONTENT PROJECT OUTLINE
- 02 - OVERALL SITE PLAN
- 03 - CONTENT BUBBLE DIAGRAM
- 04 - INTERPRETIVE STORY FLOW
- 05 - STORYBOARD
- 06 - SKETCH - 3 INTERPRETIVE PANELS - NORTH END OUTSIDE AREA
- 07 - SKETCH - KIOSK - NORTH END OUTSIDE AREA
- 08 - LOCKMASTER BUILDING
- 09 - SKETCH - INTRO/WAYFINDING PANEL
- 10 - SKETCH - LOCKMASTER BUILDING FRONT ROOM - WEST WALL
- 11 - SKETCH - LOCKMASTER BUILDING FRONT ROOM - EAST WALL
- 12 - SKETCH - LOCKMASTER BUILDING HALLWAY
- 13 - SKETCH - LOCKMASTER BUILDING BACK ROOM
- 14 - SKETCH - LOCKMASTER BUILDING BACK ROOM
- 15 - SKETCH - SAFETY - NORTH END OUTSIDE AREA
- 16 - SKETCH - UNDERNEATH - NORTHWEST END GATE CHAMBER
- 17 - SKETCH - UNDERNEATH - NORTHWEST END VALVE CHAMBER
- 18 - SKETCH - UNDERNEATH - NORTHWEST CHAMBER - NEW EQUIPMENT
- 19 - SKETCH - UNDERNEATH - NORTHWEST CHAMBER - SYSTEM OVERVIEW
- 20 - SKETCH - UNDERNEATH - SOUTHWEST END GATE CHAMBER
- 21 - SKETCH - 2 PANEL - SOUTH END OUTSIDE AREA
- 22 - SKETCH - FUTURE REPLACEMENT - SOUTH END OUTSIDE AREA

\*. Entry

- Marquee ID potentially place retired Bullgear prominently near entry gate

1. 3-Interpretive Panels - north end - Outside deck/Top of lock wall, Railing panels

- Introduction/theme
  - History
  - Navigation
  - River height differential
  - Importance
  - Only lock east of Mississippi
- How it Works
  - Sequence of boat traffic
  - Lock operator
- Commerce/Economics
  - National importance
  - GIWW 3<sup>rd</sup> busiest waterway
  - GIWW and Mississippi
  - Products
    - Petrochemical
    - Military fuel

2. USACE Kiosk - north end - Outside deck/Top of lock wall

1. USACE Mission statement
2. USACE Safety
3. Lock maintenance/periodic dewatering

3. Lockmaster building – Front room

1. Way finding introduction panel
2. Hallway
  - Display case
    - Lock history
      1. State authorization for deep-water canal (1914) (Panel 1, 1785-1914)
      2. Completion of Lock (1921)/Canal (1923) (Panel 2, 1914-1923)
      3. Routing of GIWW through Lock (1944) (Panel 3, 1923-1963)
      4. Completion of MRGO (1963) (Panel 4, 1963-2005)
      5. Katrina (2005) and closure of MRGO (Panel 5, 2005 to present)
      6. Replacement
3. Timeline
4. Touch screen(s)
  - Construction
  - Engineering
  - Dewatering
5. Panels on Window wall
  - a. How the lock works
  - b. GIWW and Mississippi network
  - c. Waterborne transportation
6. Mural - Hallway

4. Lockmaster building - Back room gallery

- Engineering, construction, and technology
  - Panama Canal
- Dewatering process/maintenance
- Machinery exchange
- Lock operator interactive exhibit

5. Lockmaster building - New North room gallery

- a. Events
  - i. Notable boats
  - ii. Opening day 1923
  - iii. Accidents
- b. Hurricanes
  - i. Katrina
  - ii. Gustav

5. Safety

6 - 9. Underneath – North gate chamber, north valve chamber, tunnel, and capstan chamber

1. Lock overview – system design and major component identification
2. How the lock works mechanically
3. Improvements to equipment since original construction
4. Gates
5. Valves
6. Chamber
7. Capstan
8. Size of the ships
9. Where are you? Are you really underneath?

10-11. South end - Outside deck/Top of lock wall –

1. Two panel station
  - Stop logs and crane
  - Coordination
    - Port of New Orleans
    - GIWW

12. Interpretive Panel Set - Operator building

13. Future/Replacement – new lock for next century

1. The need
2. Deep water vs shallow water
3. Possible design solutions



Industrial Canal  
Lock Interpretive  
Design Plan

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SHEET TITLE / GRAPHIC PANEL

CONTENT  
OUTLINE

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MK

SCALE:

SHEET NUMBER:

01 OF 22



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SHEET TITLE / GRAPHIC PANEL

## OVERALL PROJECT SITE PLAN

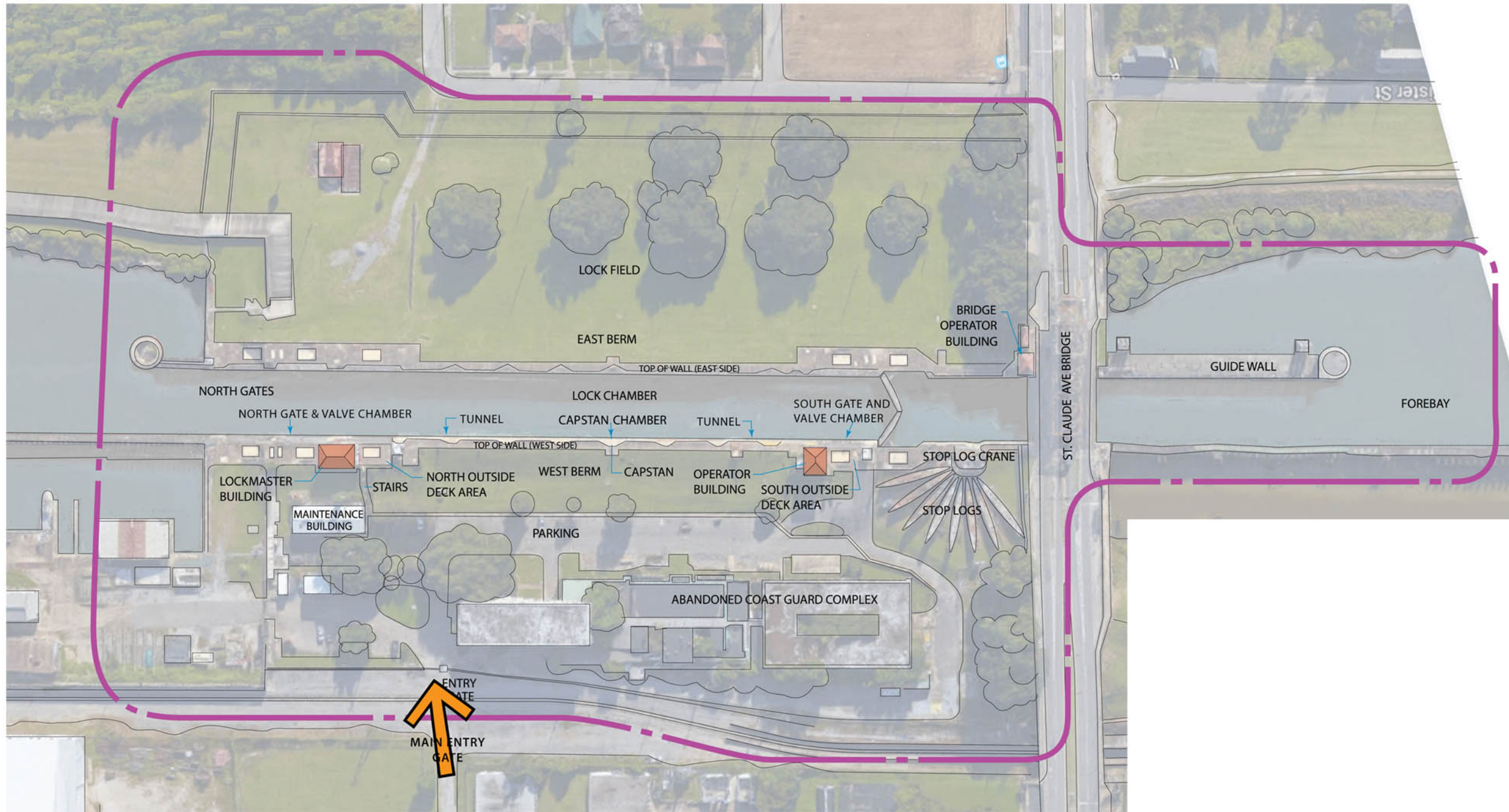
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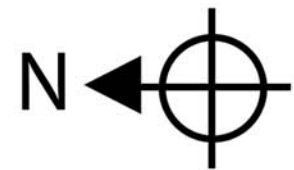
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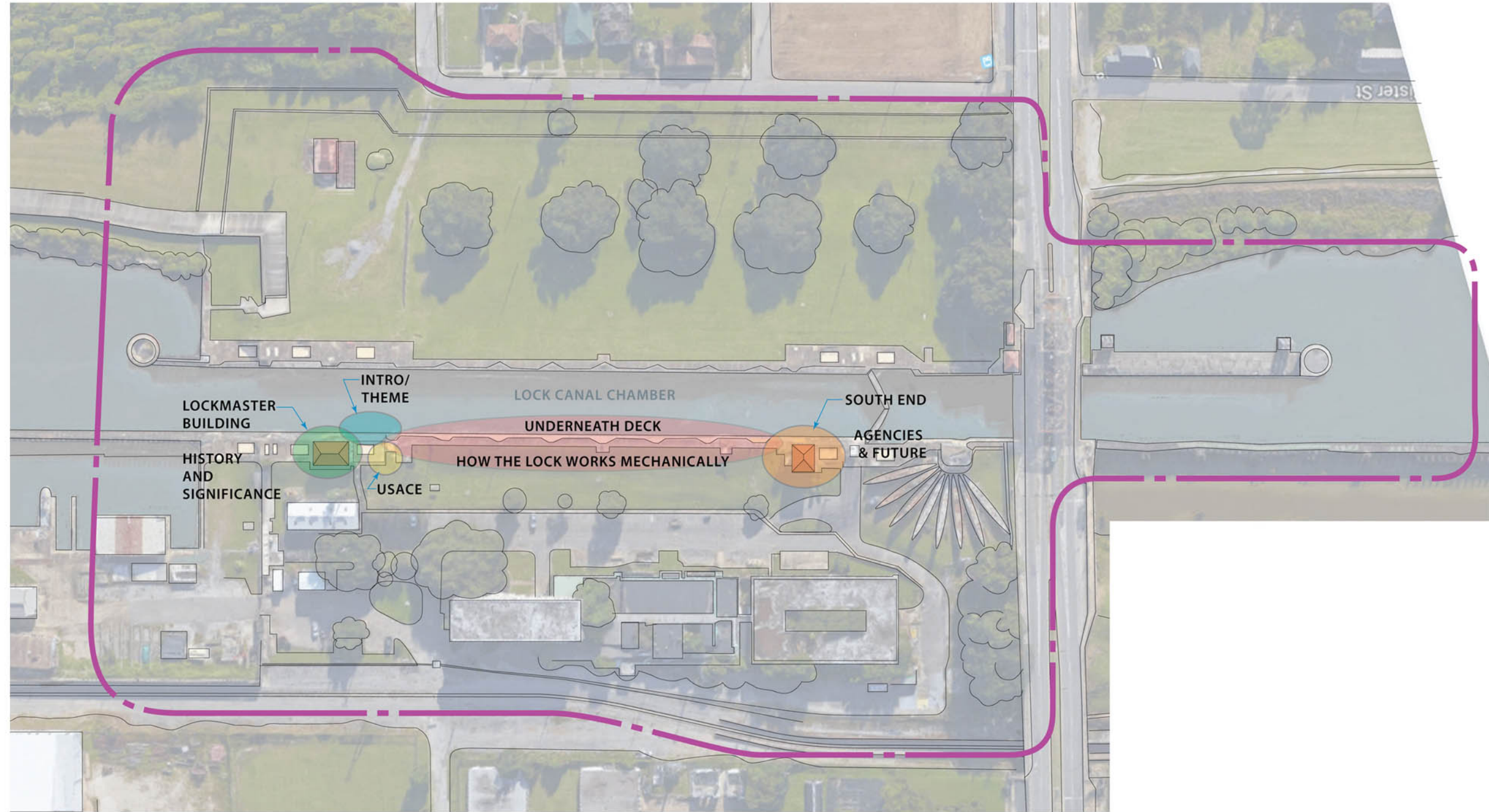
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### SITE PLAN





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SHEET TITLE / GRAPHIC PANEL

CONTENT  
BUBBLE  
DIAGRAM

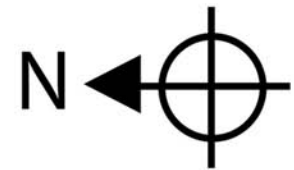
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**SITE PLAN**





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SHEET TITLE / GRAPHIC PANEL

## INTERPRETIVE STORY FLOW

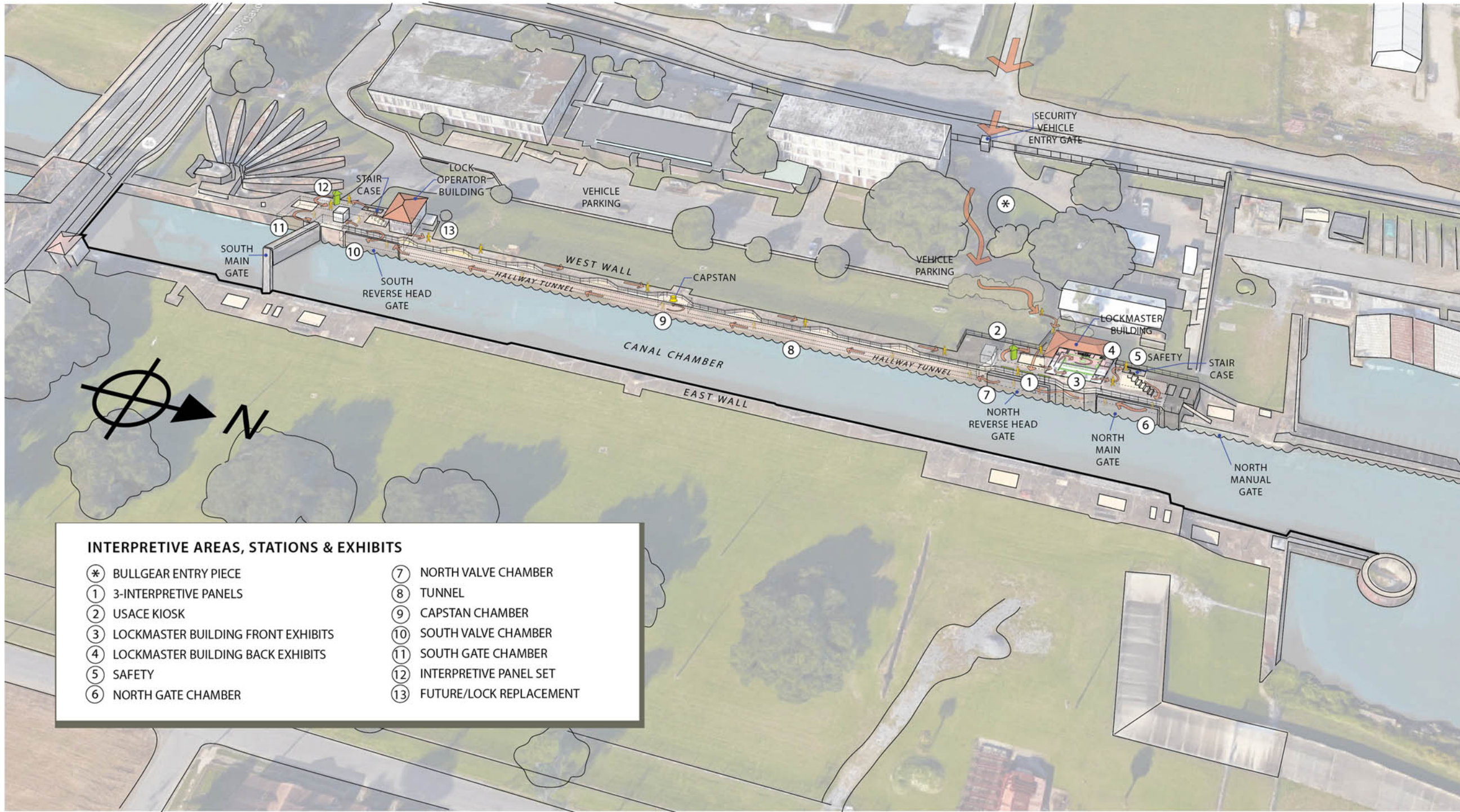
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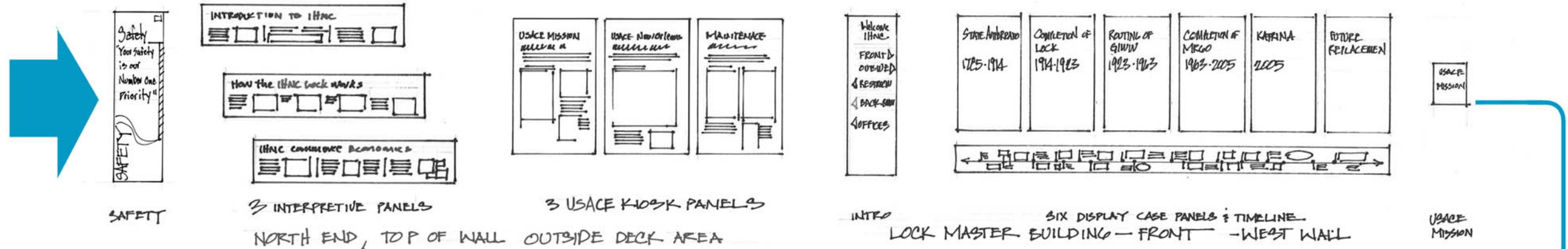
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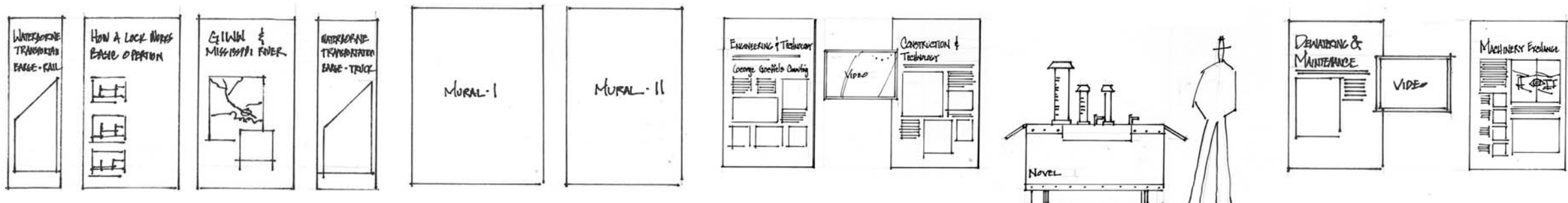
04 OF 22



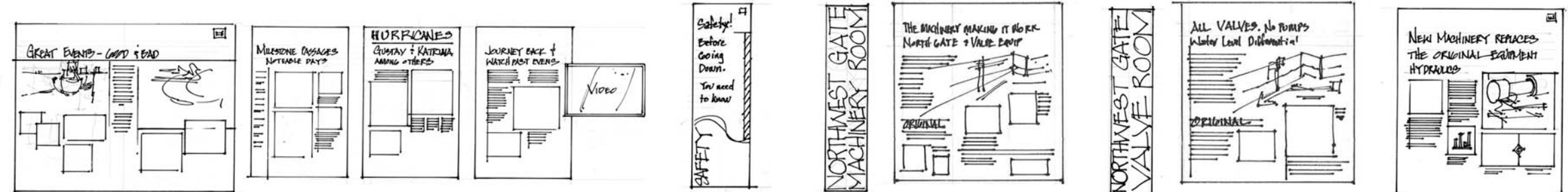
- INTERPRETIVE AREAS, STATIONS & EXHIBITS**
- |                                      |                           |
|--------------------------------------|---------------------------|
| ⊛ BULLGEAR ENTRY PIECE               | ⑦ NORTH VALVE CHAMBER     |
| ① 3-INTERPRETIVE PANELS              | ⑧ TUNNEL                  |
| ② USACE KIOSK                        | ⑨ CAPSTAN CHAMBER         |
| ③ LOCKMASTER BUILDING FRONT EXHIBITS | ⑩ SOUTH VALVE CHAMBER     |
| ④ LOCKMASTER BUILDING BACK EXHIBITS  | ⑪ SOUTH GATE CHAMBER      |
| ⑤ SAFETY                             | ⑫ INTERPRETIVE PANEL SET  |
| ⑥ NORTH GATE CHAMBER                 | ⑬ FUTURE/LOCK REPLACEMENT |



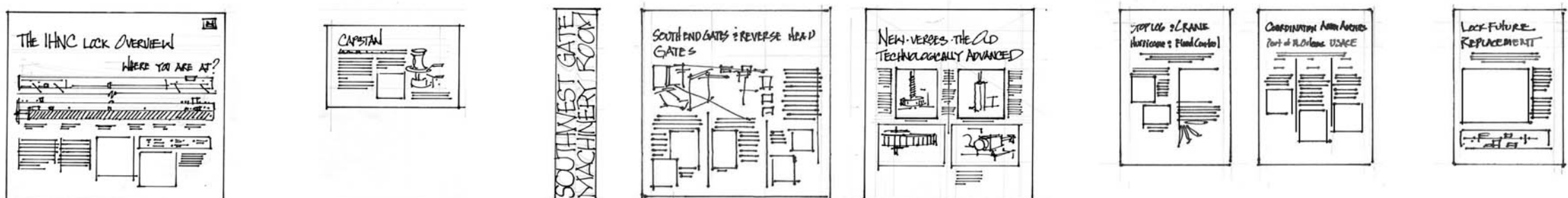
SAFETY INTERPRETIVE PANELS USACE KIOSK PANELS INFO SIX DISPLAY CASE PANELS: TIMELINE USACE MISSION  
 NORTH END, TOP OF WALL OUTSIDE DECK AREA LOCK MASTER BUILDING - FRONT - WEST WALL USACE MISSION



TRANSPORTATION HOW IT WORKS LOCK MASTER BUILDING - FRONT - EAST WALL LOCK MASTER BUILDING HALLWAY LOCK MASTER BUILDING - BACK ROOM



LOCK MASTER BUILDING - NORTH ROOM SAFETY NORTHEND GATE CHAMBER NORTHEND VALVE CHAMBER UNDERNEATH THE LOCK WALL



NORTHEND VALVE CHAMBER CAPSTAN SOUTH END GATE CHAMBER SOUTH END, TOP OF WALL OUTSIDE DECK AREA



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SHEET TITLE / GRAPHIC PANEL

GRAPHIC STORY-BOARD

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SCALE:

SHEET NUMBER:



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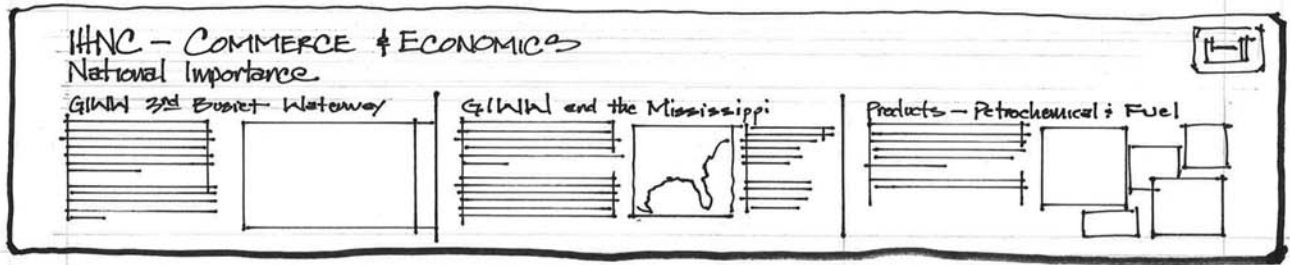
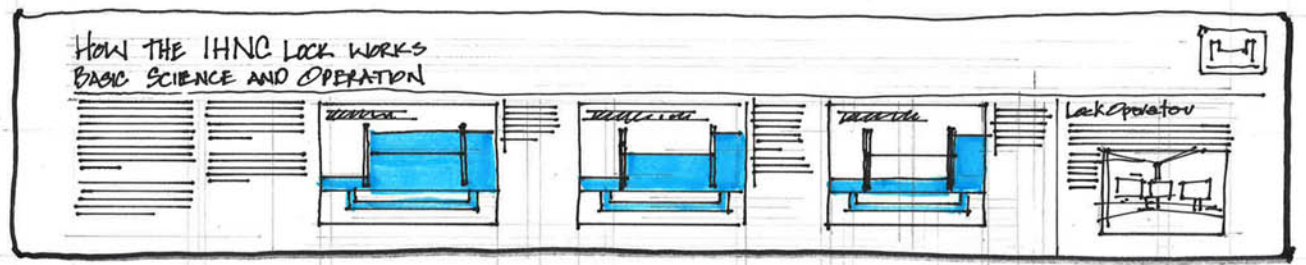
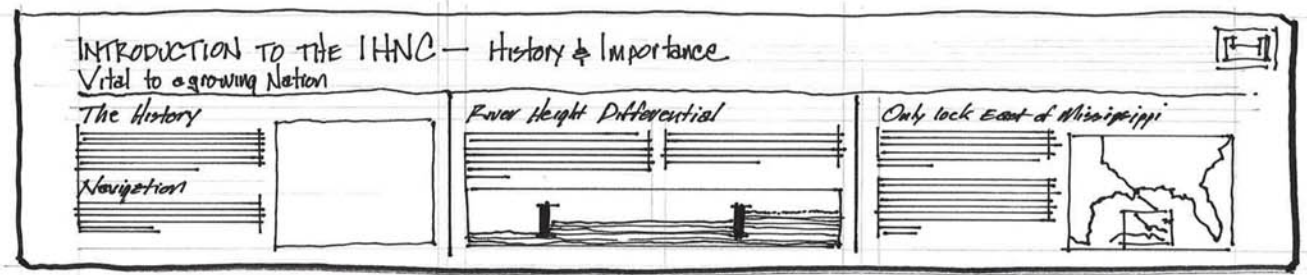
SKETCH  
3  
INTERPRETIVE  
PANELS  
NORTH END  
OUTSIDE  
AREA

DRAWN BY:  
MK

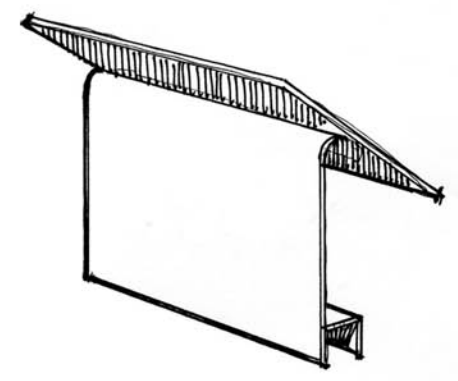
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06 OF 22

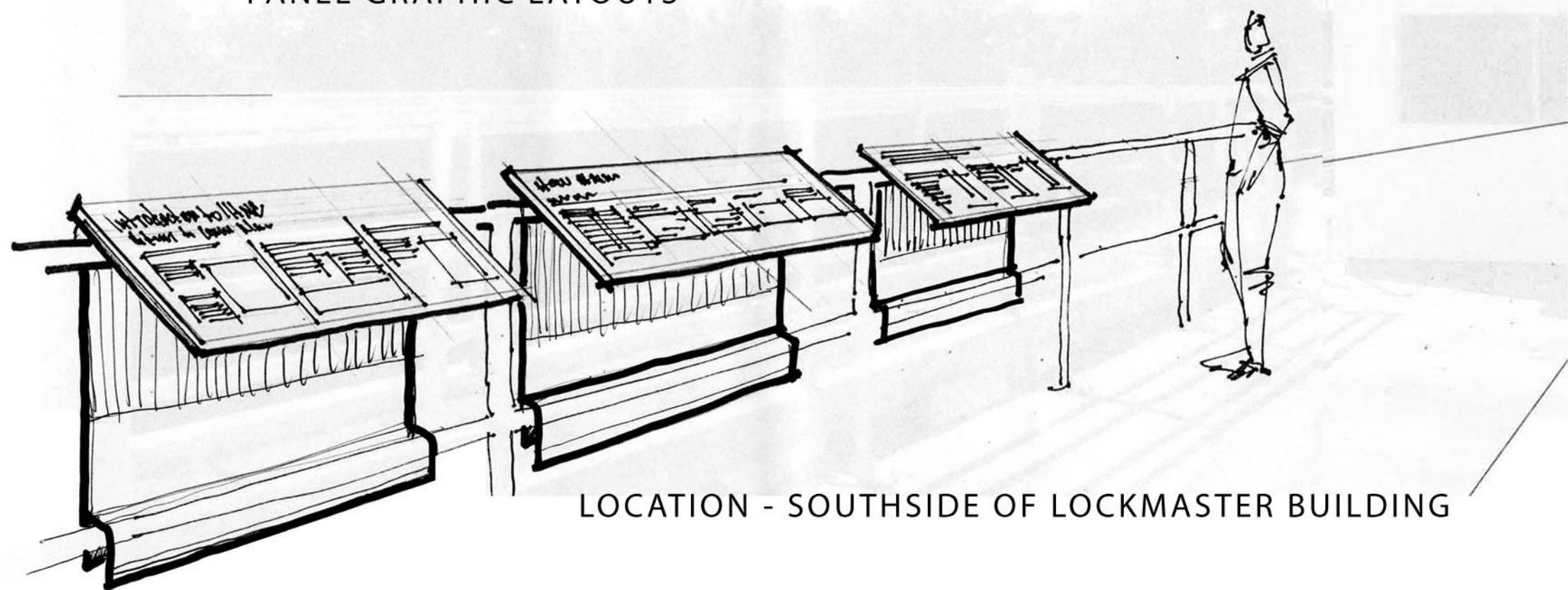


PANEL GRAPHIC LAYOUTS



PANELS TO HANG ON RAILING WITHOUT FASTENERS

REMOVABLE LOCK INTERPRETIVE PANELS



LOCATION - SOUTHSIDE OF LOCKMASTER BUILDING





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SKETCH  
USACE KIOSK  
NORTH END  
OUTSIDE  
AREA

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PANEL GRAPHIC LAYOUTS





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SHEET TITLE / GRAPHIC PANEL

## LOCKMASTER BUILDING

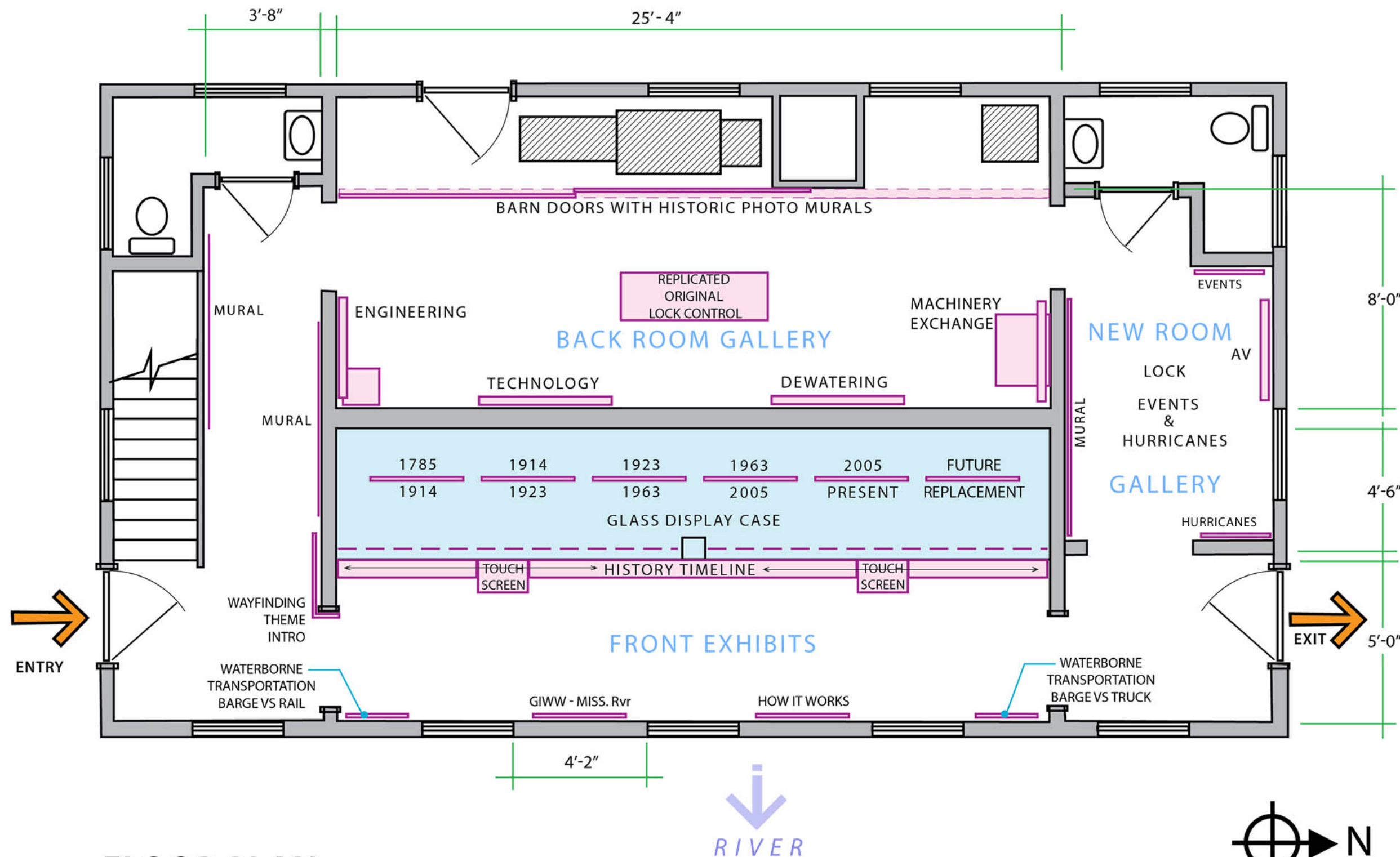
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### FLOOR PLAN

SCALE





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**SHEET TITLE / GRAPHIC PANEL**

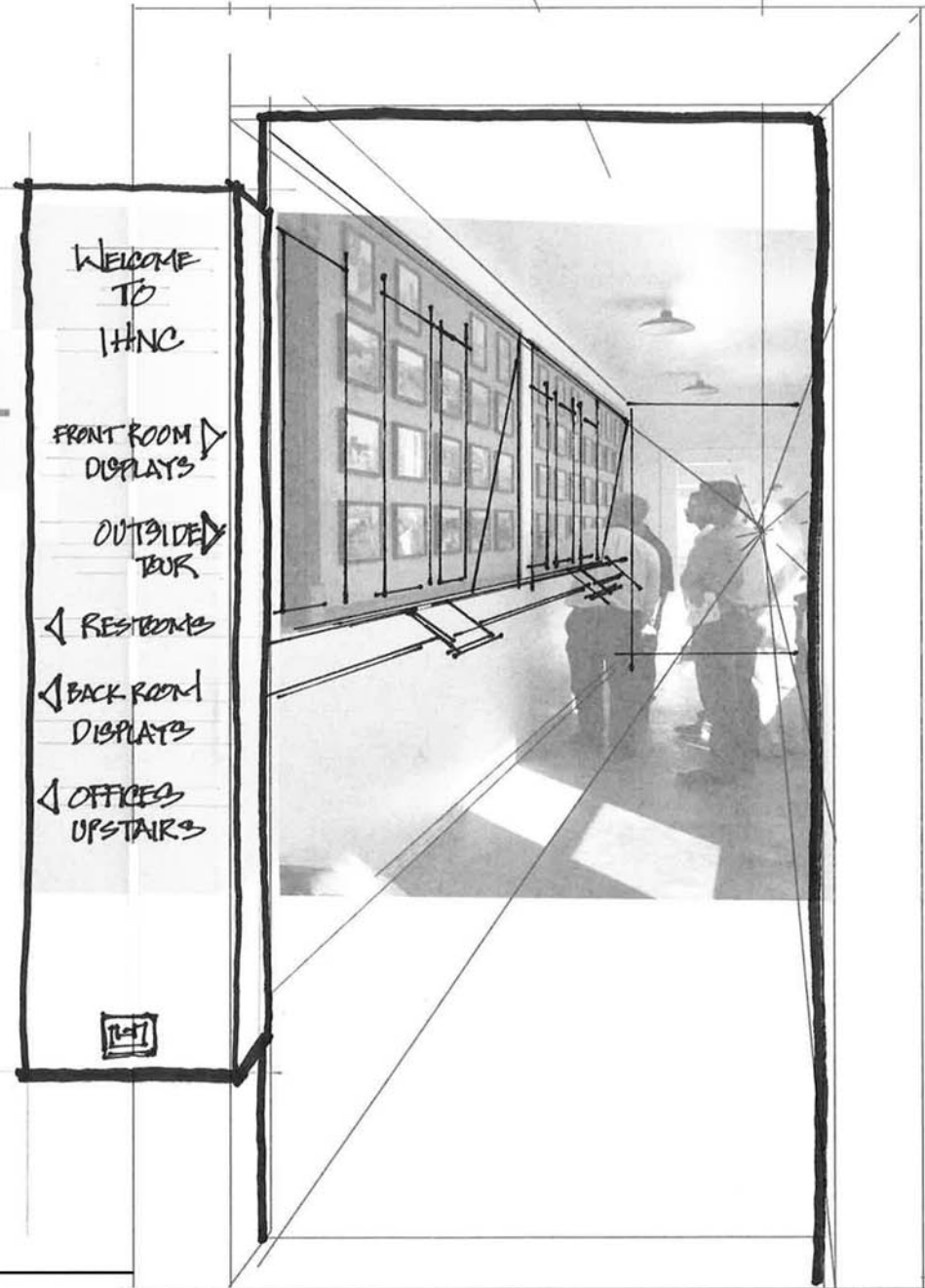
**SKETCH  
INTRO  
WAYFINDING  
PANEL**

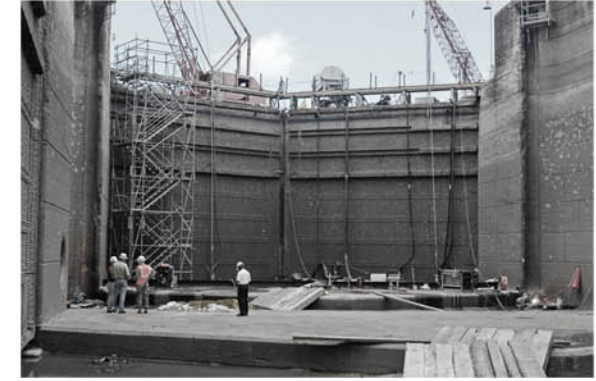
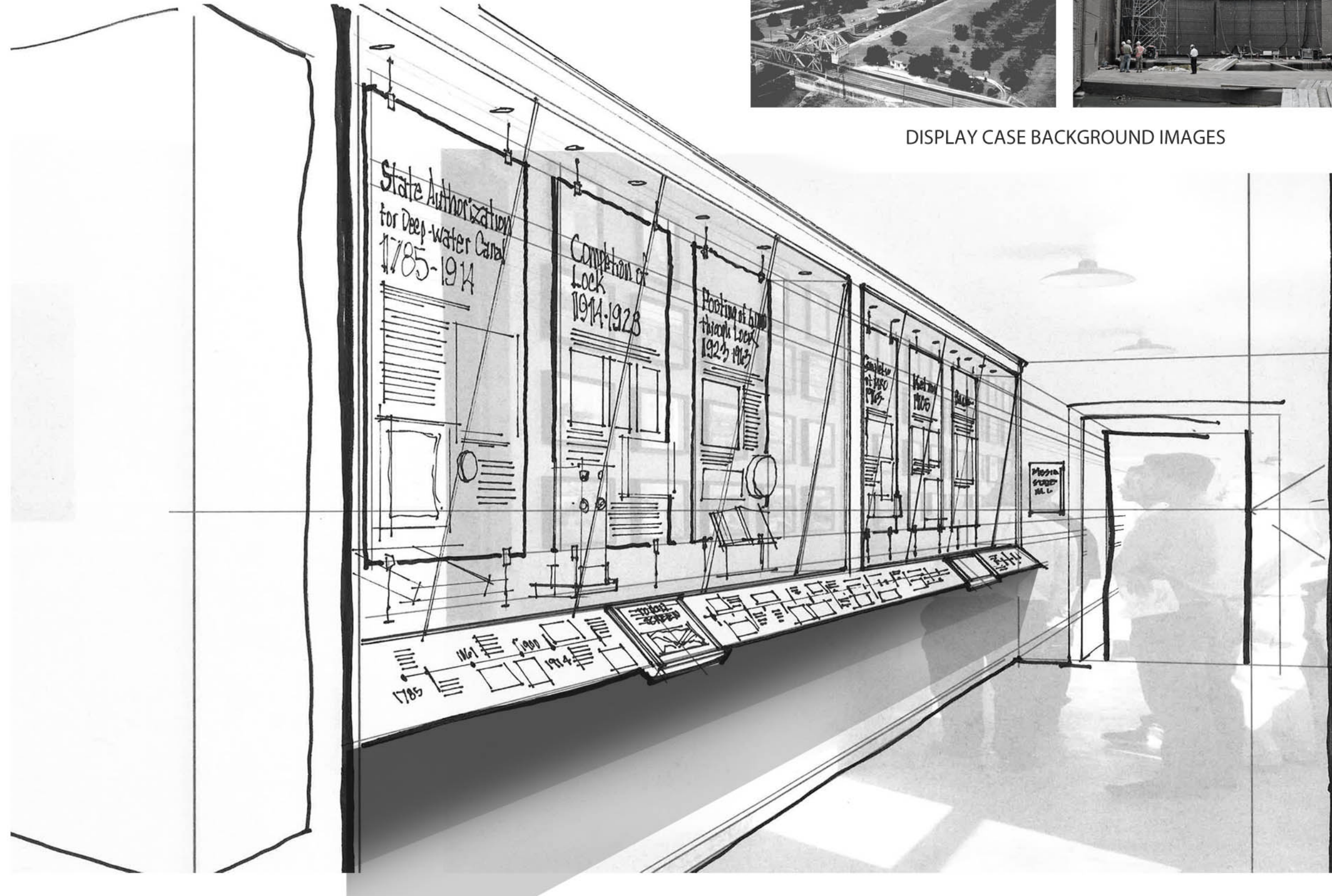
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DISPLAY CASE BACKGROUND IMAGES



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SKETCH  
LOCKMASTER  
BUILDING  
FRONT  
ROOM  
WEST WALL

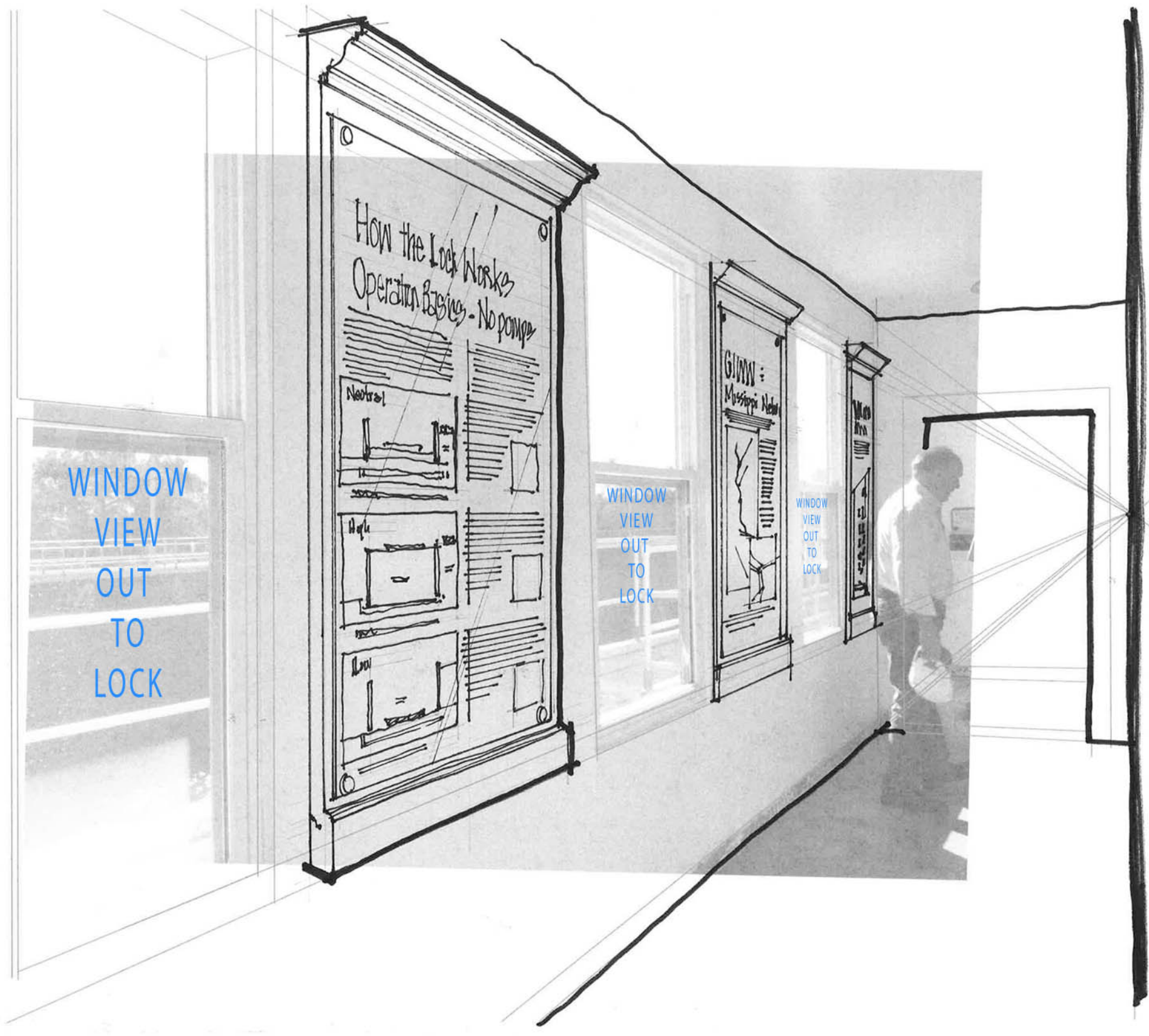
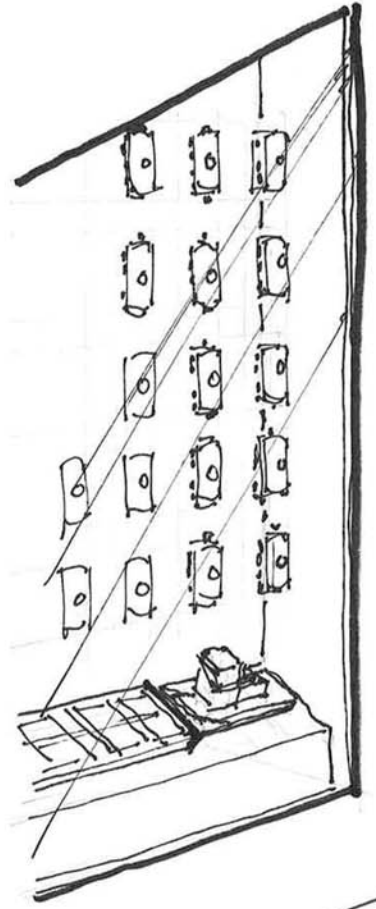
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Vvalverborne  
Transportation  
Barge vs Railcar



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SKETCH  
LOCKMASTER  
BUILDING  
FRONT  
ROOM  
EAST WALL

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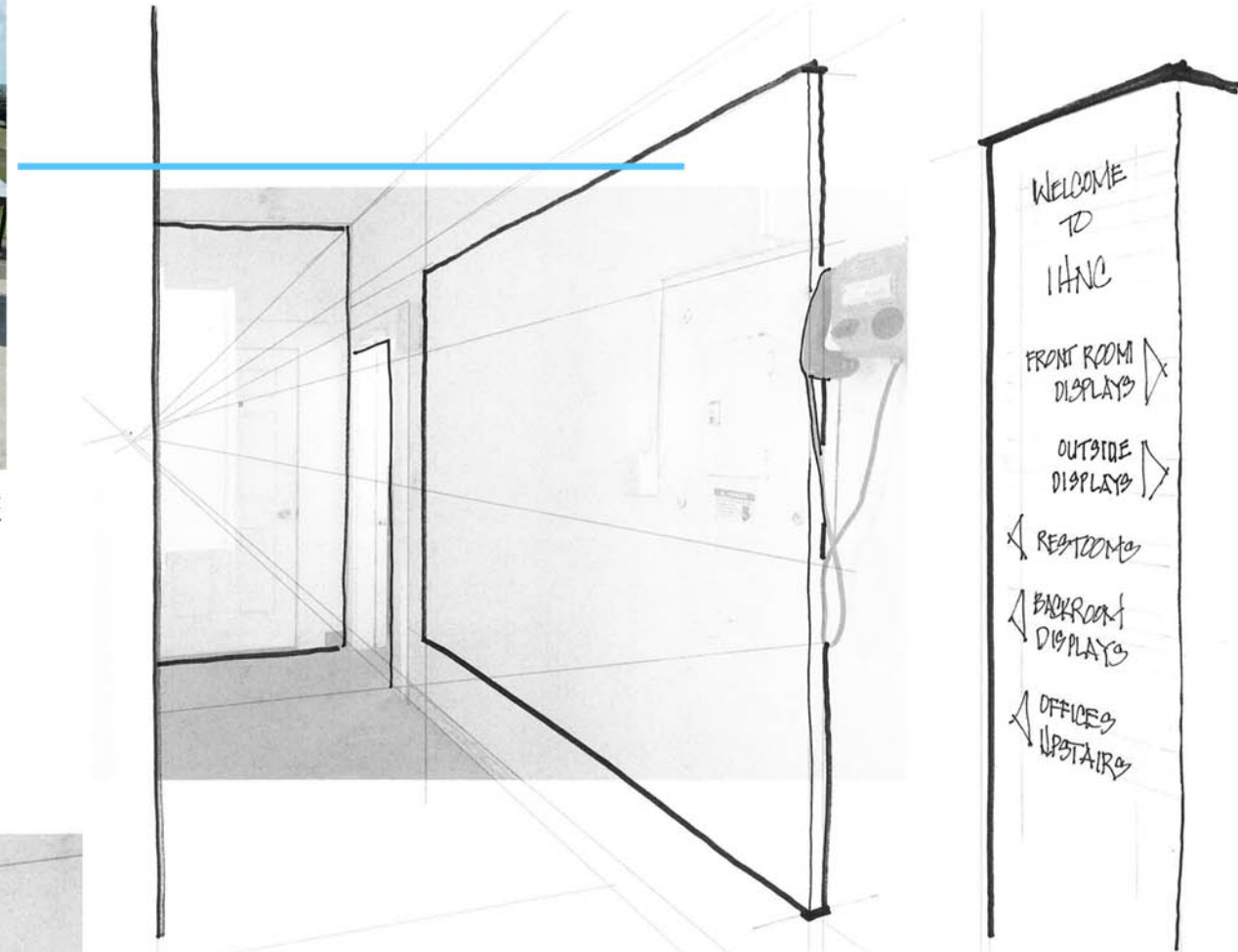
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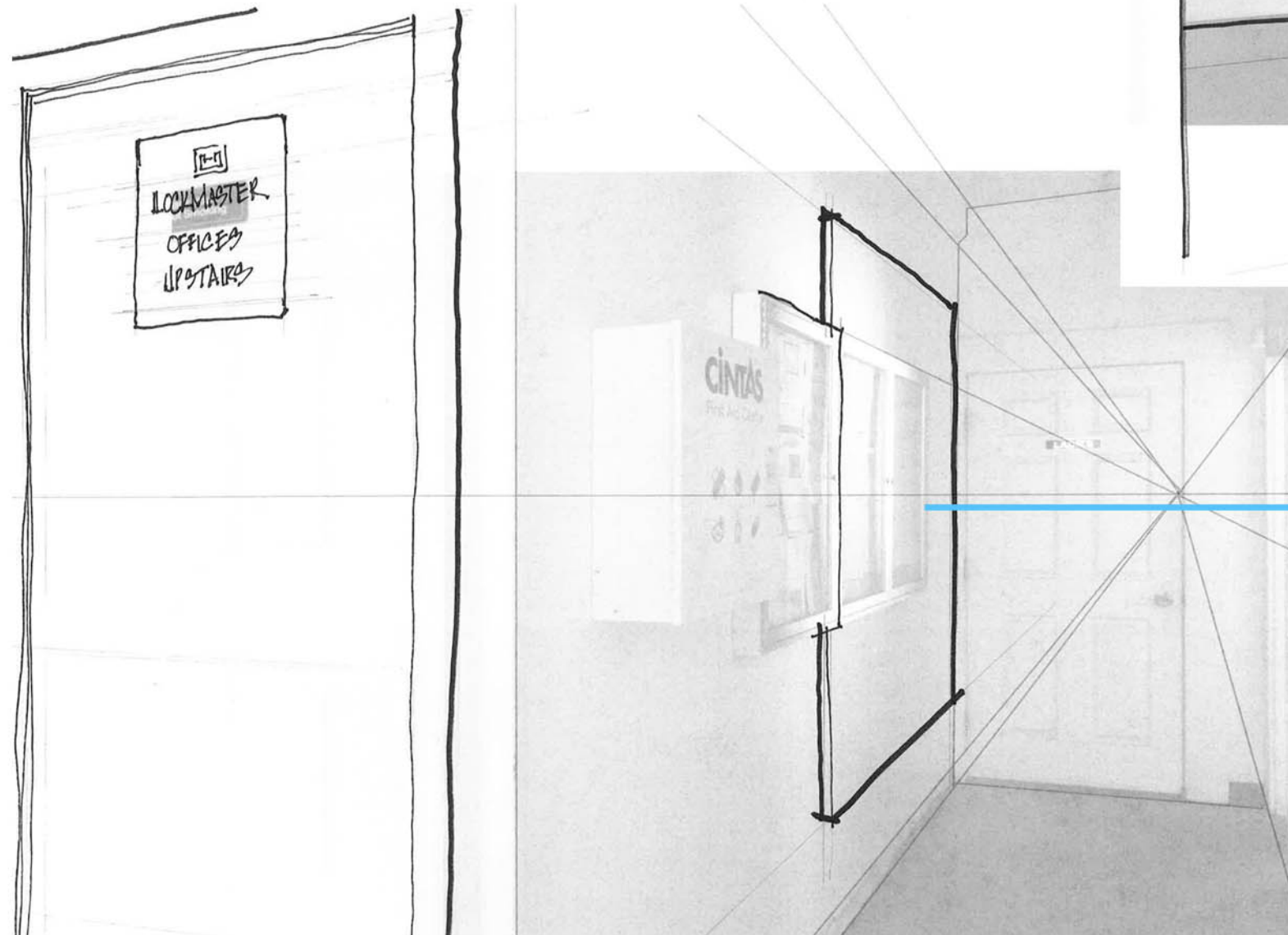


LARGE WALL IMAGE



NORTH WALL

WELCOME TO IHC  
 FRONT ROOM DISPLAYS  
 OUTSIDE DISPLAYS  
 RESTROOMS  
 BACKROOM DISPLAYS  
 OFFICES UPSTAIRS



SOUTH WALL



LARGE WALL IMAGE



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**SKETCH LOCKMASTER BUILDING HALLWAY**

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**SKETCH  
LOCKMASTER  
BUILDING  
BACK  
ROOM**

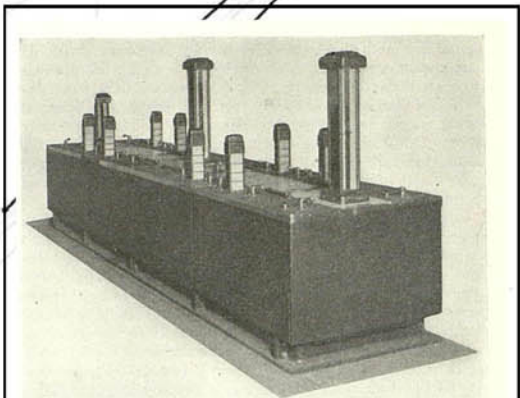
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REFERENCE

Locks of New Orleans Industrial Canal  
Controlled by Novel Electrical  
Switchboard



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SHEET TITLE / GRAPHIC PANEL

## SKETCH LOCKMASTER BUILDING BACK ROOM

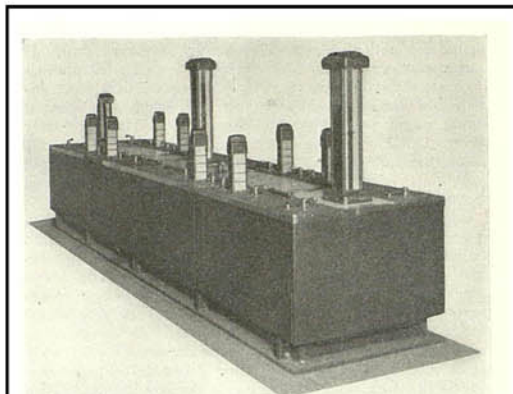
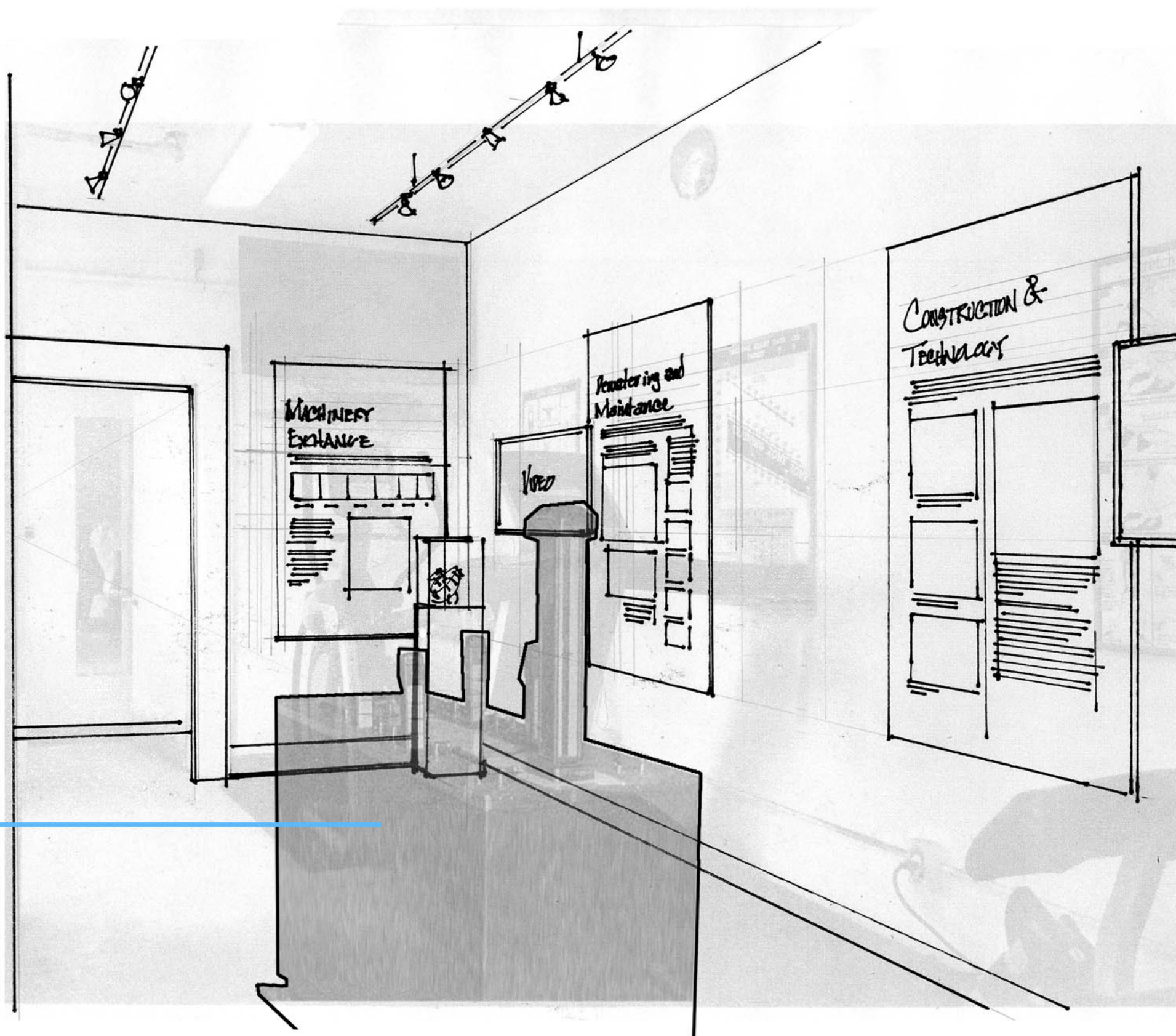
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Switchboard

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SHEET TITLE / GRAPHIC PANEL

SKETCH  
SAFETY  
MESSAGE  
AT  
STAIRS

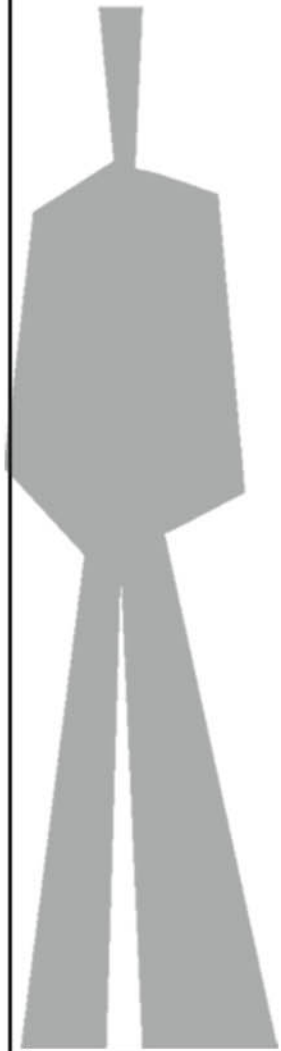
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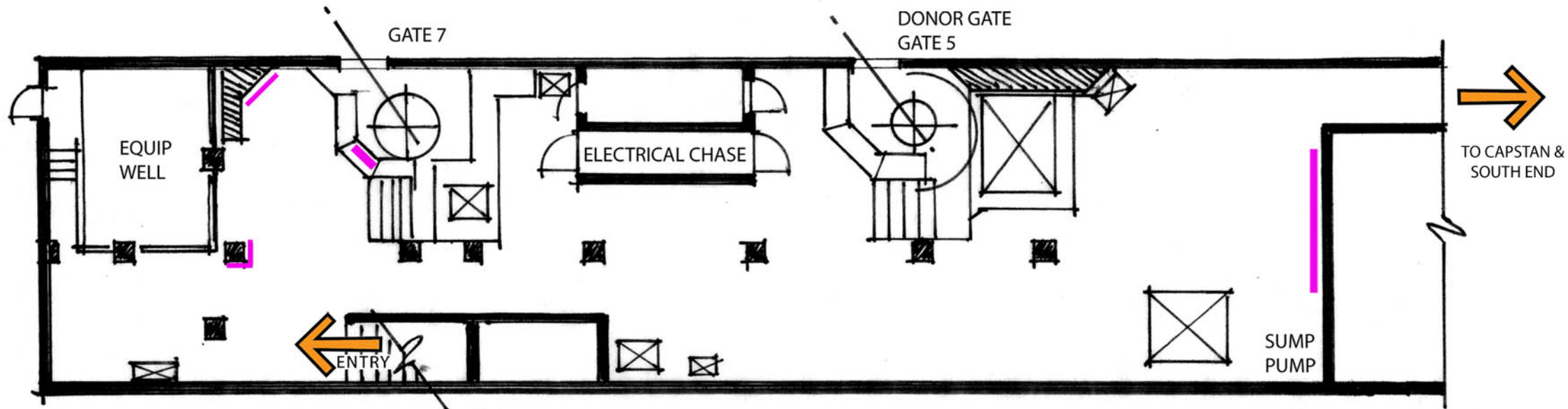
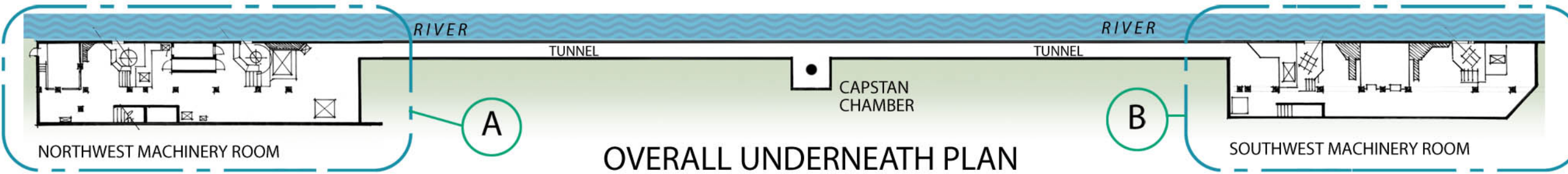
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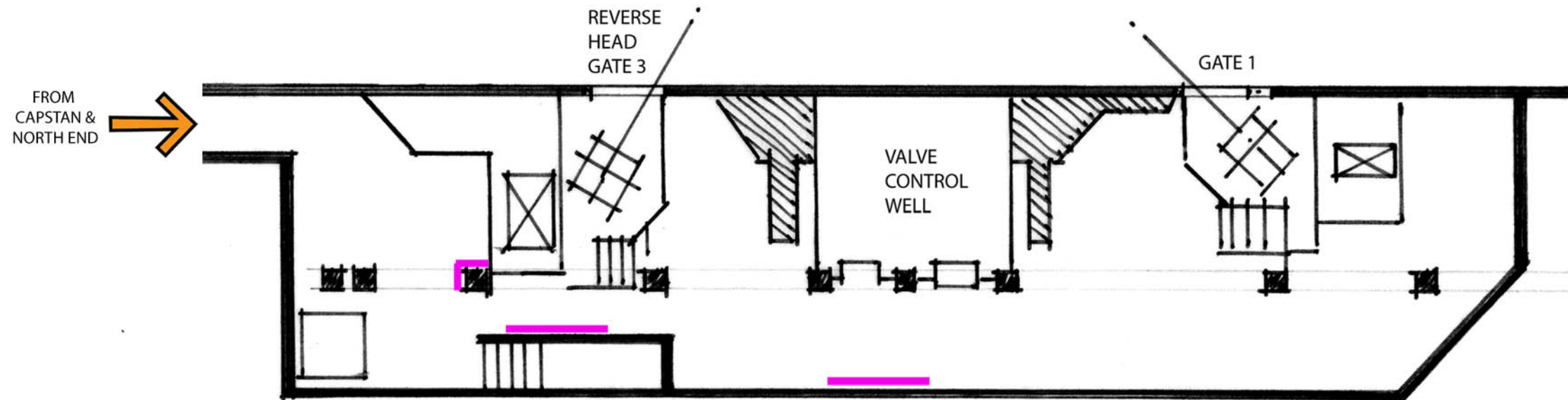
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A NORTHWEST MACHINERY ROOM DETAIL



B SOUTHWEST MACHINERY ROOM DETAIL



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SHEET TITLE / GRAPHIC PANEL

UNDERNEATH  
 -  
 FLOOR  
 PLANS

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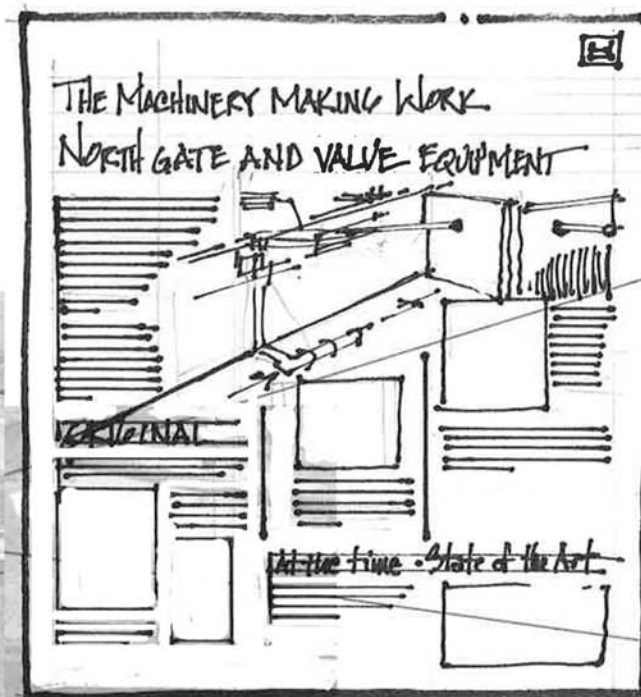
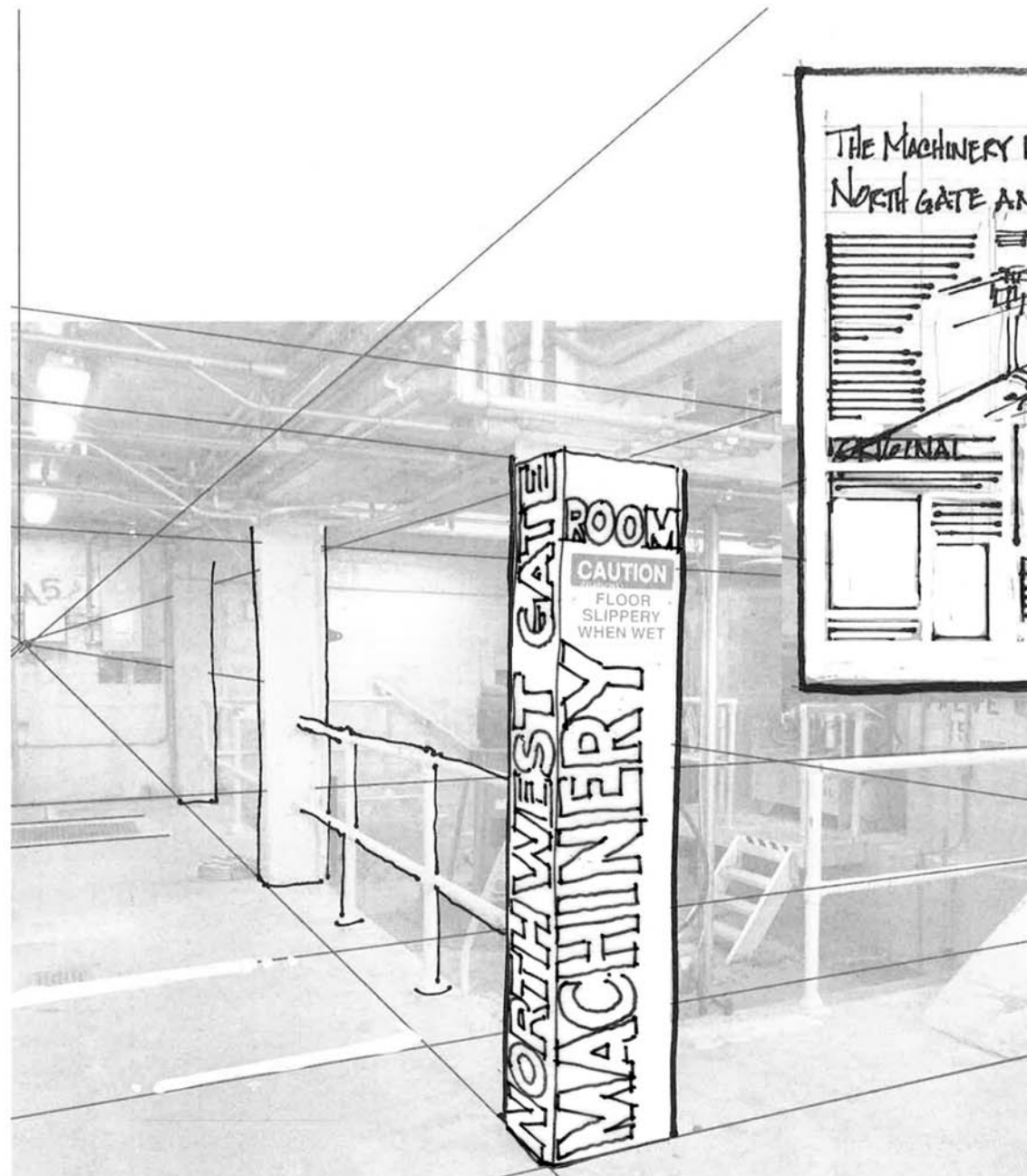
## SKETCH UNDERNEATH NORTH END GATE CHAMBER

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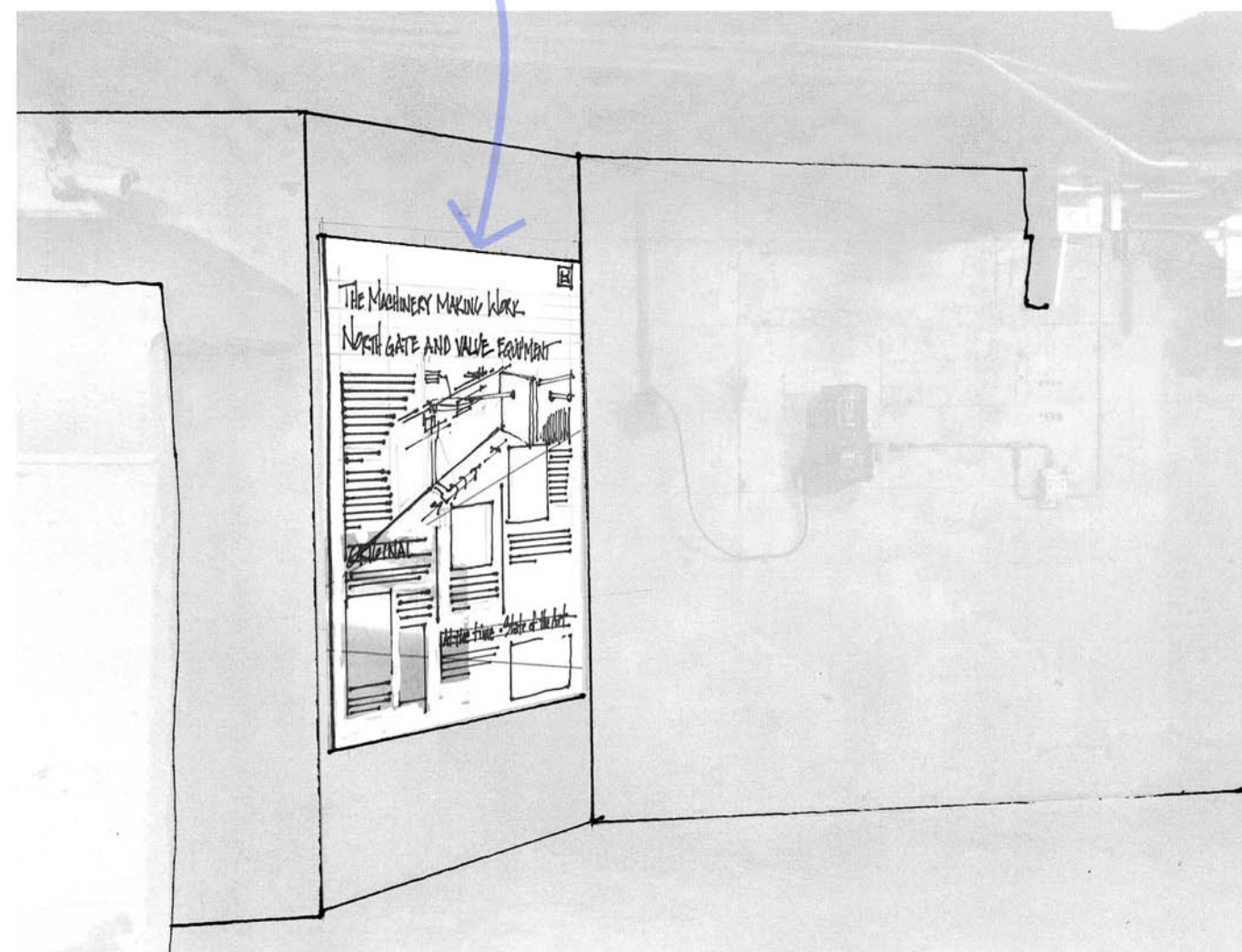
SCALE:

SHEET NUMBER:



NORTH GATE = VALVE

- HOW IT FITS INTO OVERALL SYSTEM
- IDENTIFY EQUIPMENT
- HOW IT WORKS
- ORIGINAL EQUIPMENT
- REPLACEMENT EQUIPMENT
- HISTORICALLY SIGNIFICANCE
- FACTS





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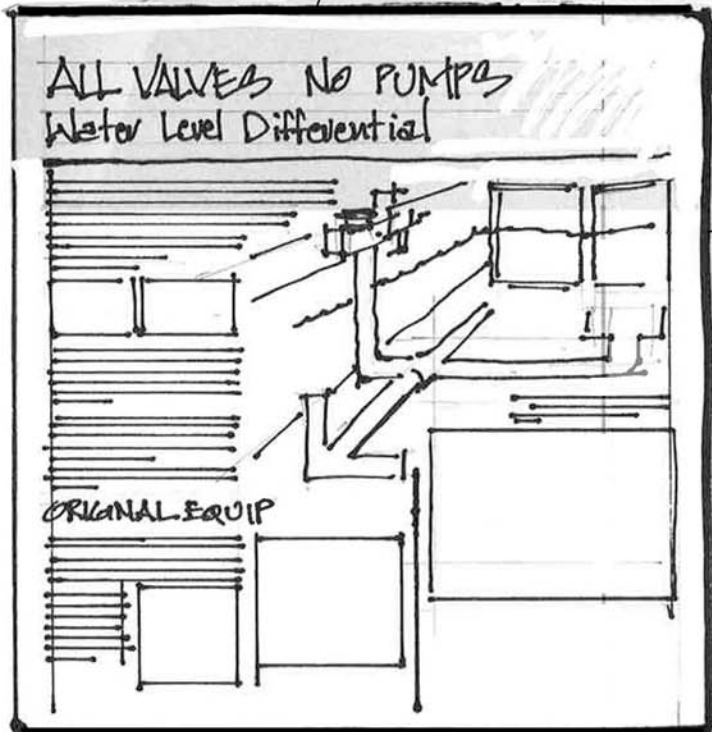
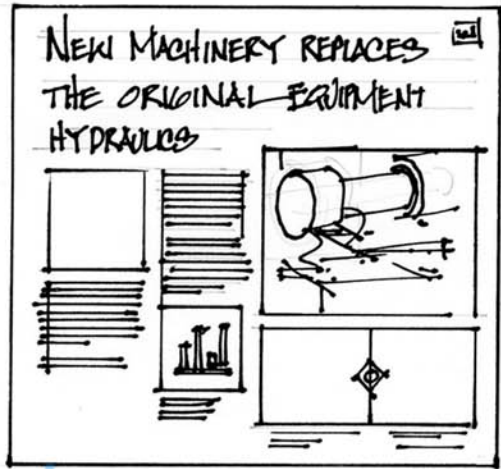
SKETCH  
UNDERNEATH  
NORTH END  
VALVE  
CHAMBER

DRAWN BY:

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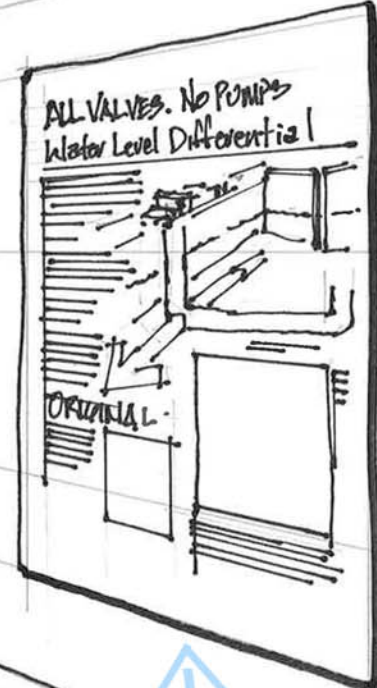
SCALE:

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NORTH VALVE

- HOW IT FITS INTO OVERALL SYSTEM
- IDENTIFY EQUIPMENT
- HOW IT WORKS
- ORIGINAL EQUIPMENT
- REPLACEMENT EQUIPMENT
- HISTORICAL SIGNIFICANCE
- FACTS



NORTHWEST GATE VALVE ROOM



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**SHEET TITLE / GRAPHIC PANEL**

**SKETCH  
UNDERNEATH  
SYSTEM  
OVERVIEW**

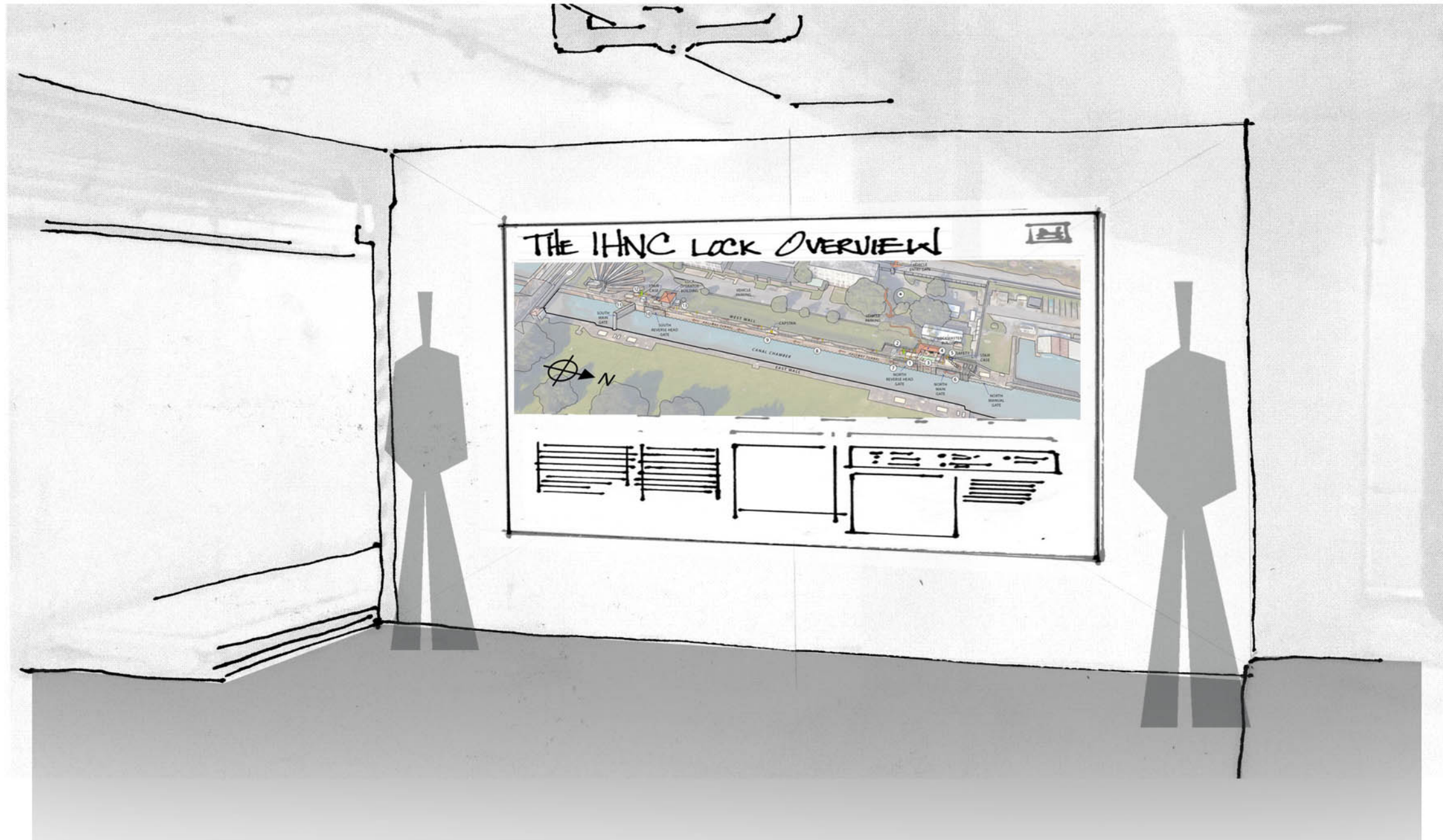
DRAWN BY:

MK

SCALE:

SHEET NUMBER:

**19 OF 22**





Industrial Canal  
Lock Interpretive  
Design Plan

Prepared by:



**Kaser design**

M. Kaser & Associates, Inc.  
217 S. MacArthur Blvd.  
Coppell, Texas 75019  
ph: (469) 549-1832



Project participants



April 13, 2018

SHEET TITLE / GRAPHIC PANEL

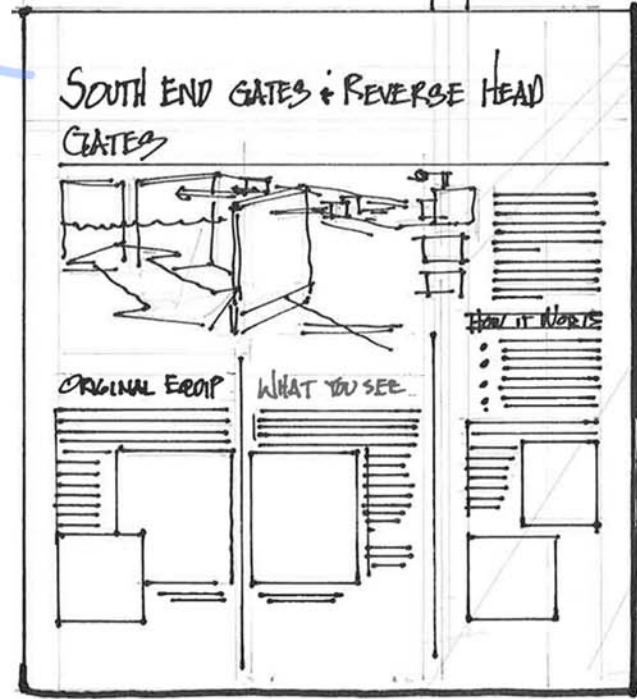
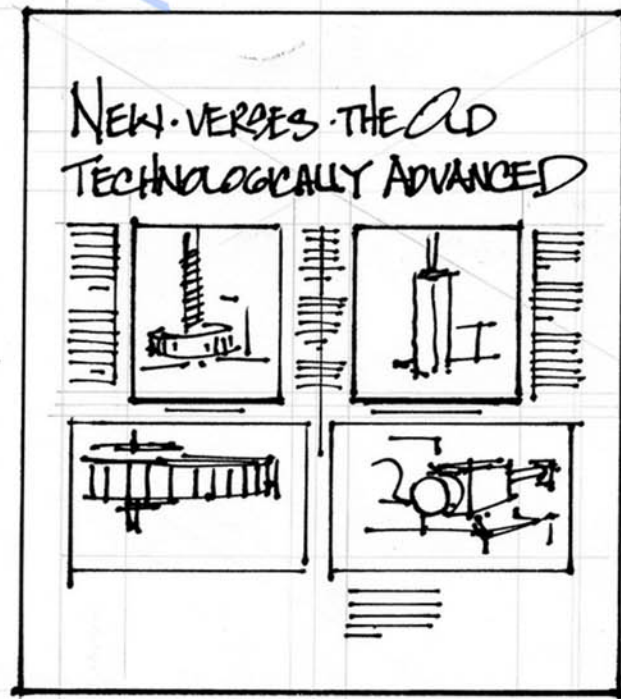
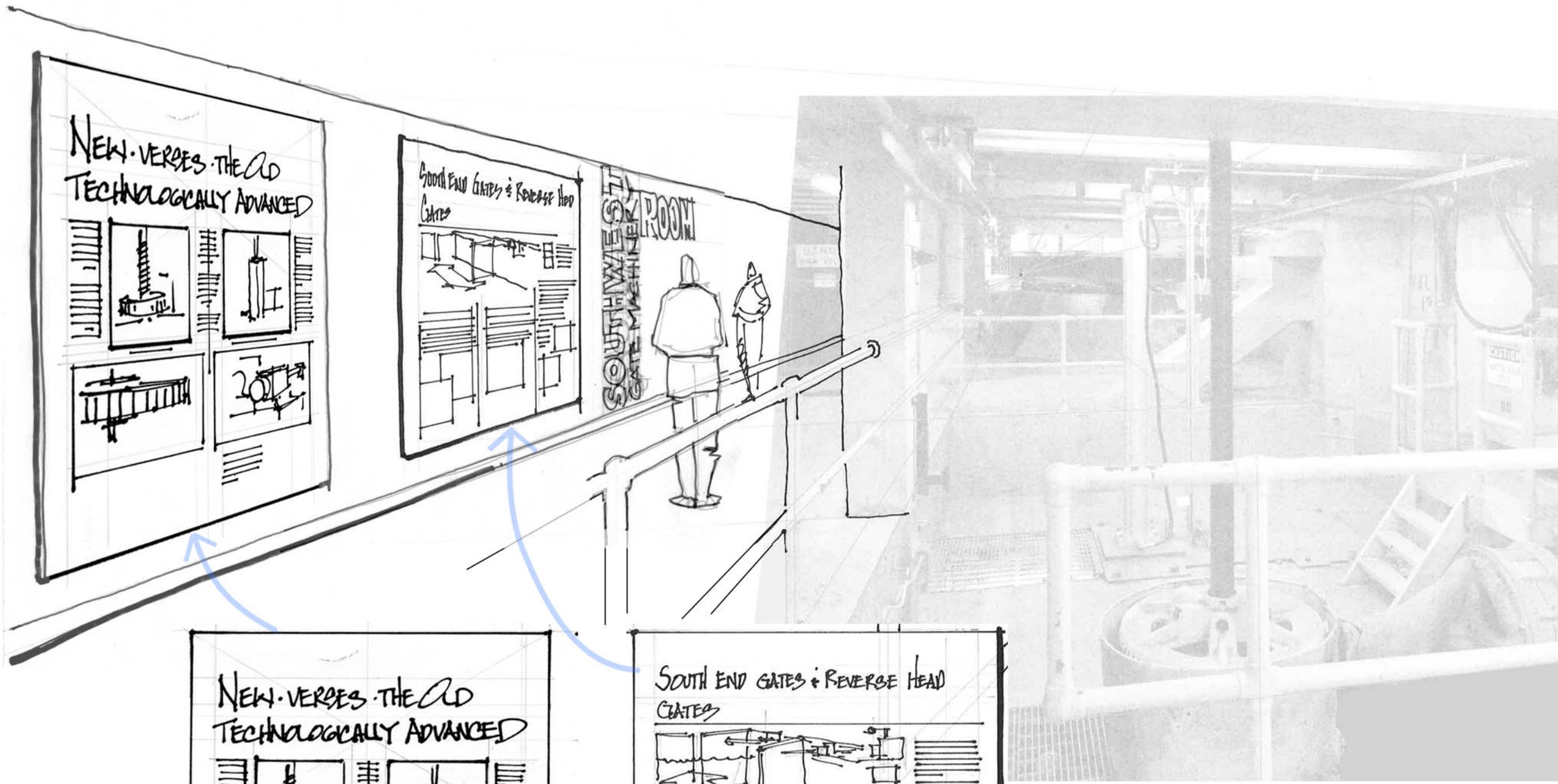
SKETCH  
UNDERNEATH  
SOUTH END  
GATE  
CHAMBER

DRAWN BY:

MK

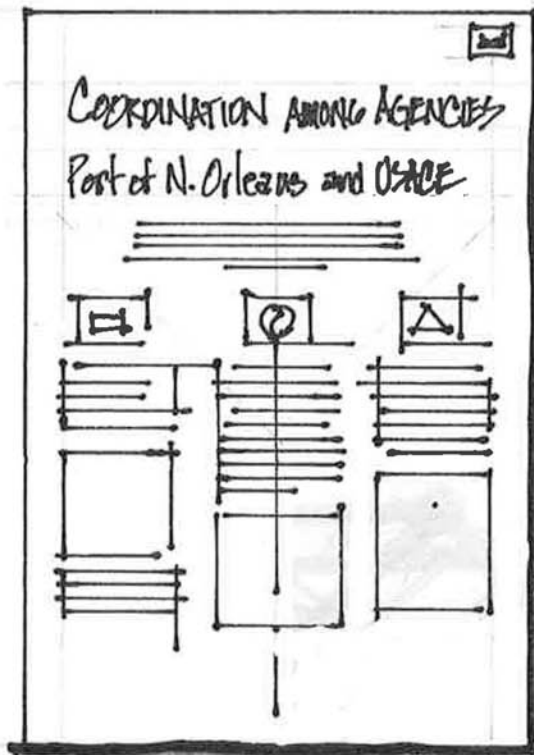
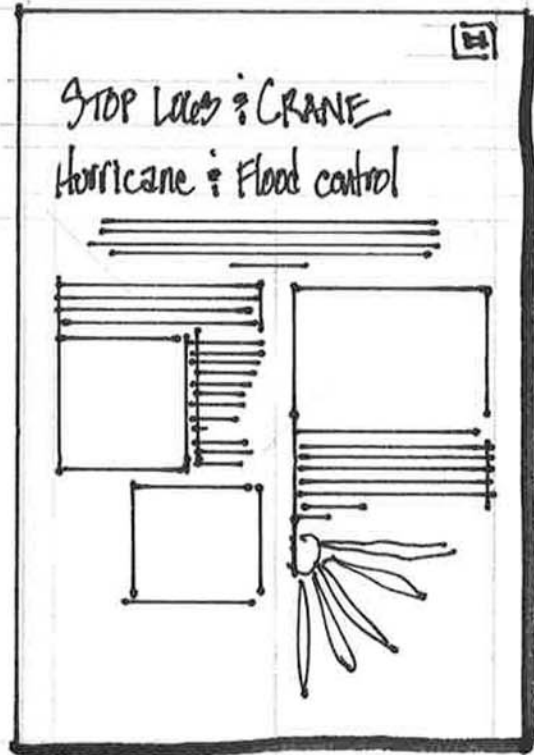
SCALE:

SHEET NUMBER:



SOUTH END GATE & REVERSE HEAD

- HOW IT FITS INTO OVERALL SYSTEM
- IDENTIFY EQUIPMENT
- HOW IT WORKS
- ORIGINAL EQUIPMENT
- REPLACEMENT EQUIPMENT
- HISTORICAL SIGNIFICANCE
- FACTS



Industrial Canal  
Lock Interpretive  
Design Plan

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SHEET TITLE / GRAPHIC PANEL

SKETCH  
2-PANEL  
STATION  
SOUTH END  
OUTSIDE  
AREA

DRAWN BY:

MK

SCALE:

SHEET NUMBER:

21 OF 22



Industrial Canal  
Lock Interpretive  
Design Plan

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April 13, 2018

SHEET TITLE / GRAPHIC PANEL

SKETCH  
FUTURE  
LOCK  
REPLACEMENT  
SOUTH END  
OUTSIDE  
AREA

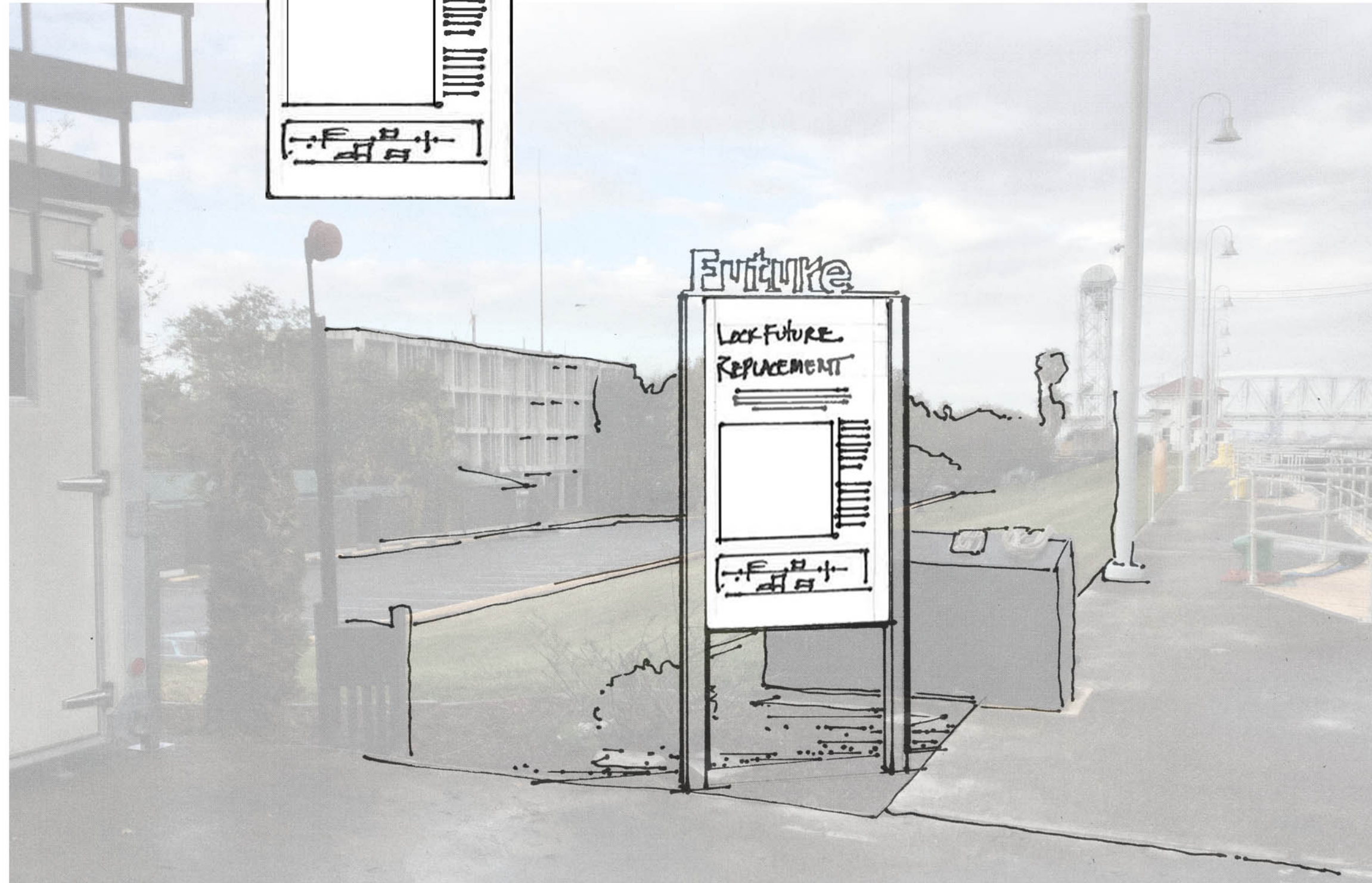
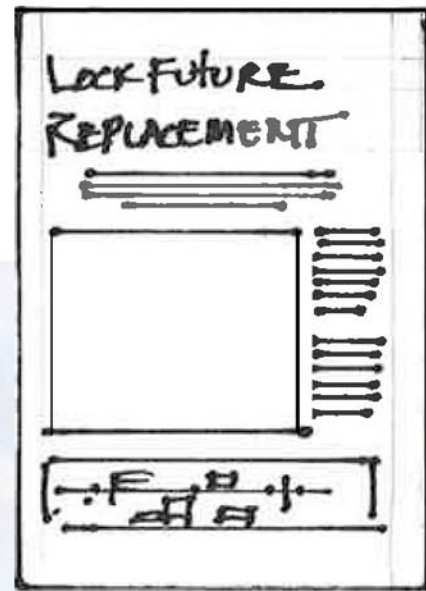
DRAWN BY:

MK

SCALE:

SHEET NUMBER:

22 OF 22





Interpretive Station Number	Interpretive Station and Description	Total	Proposed Schedule			
			2019	2020	2021	2022
*	<b>Entry Bull Gear Piece</b> Clean-up, relocation, footer foundation, support signage and installation	\$ 115,000.00				\$ 115,000.00
1	<b>Interpretive panel set of 3</b> Design, fabrication and provision of 3 hand rail panels. (see sheet 06)	Included with plan				
2	<b>USACE Interpretive Kiosk</b> Design, fabrication and provision of 3-sided USACE kiosk at top of wall. (see sheet 07)	\$ 34,000.00	\$ 34,000.00			
3	<b>Lockmaster bldg front</b> Full display program for front hallway. Shadow box displays, handrail, AV touch screens, AV content, artifact handling, graphic design and installation. Plus 4 wall panels: How it Works, Waterborne Transport, GIWW & Miss River (see sheet 08-12) Note: Building renovation and prep not included.	\$ 310,000.00		\$ 310,000.00		
4	<b>Lockmaster bldg back room</b> Full display program for backroom. Panels, display cases, AV displays, AV content, graphic design and installation for the displays: Engineering, Machinery Exchange, Technology, Dewatering, and replicated Lock Control. (see sheets 13-14) Note: Building renovation and prep not included.	\$ 240,000.00			\$ 240,000.00	
4	<b>Lockmaster bldg new room</b> Full display program for new north room. Panels, display cases, AV displays, AV content, graphic design and installation for the displays: Events and Hurricanes. (see sheet 08) Note: Building renovation and prep not included.	\$ 270,000.00			\$ 270,000.00	
5, 6, 7, 8, 9, 10, and 11	<b>Underneath Chamber Panels</b> Full array of services - design, fabrication, delivery, and installation for the listed stations. (see sheets 15 thru 20)  Northwest Gate Chamber Northwest Valve Chamber Tunnel Capstan Southwest Gate Southwest Mechanical	\$ 130,000.00	\$ 130,000.00			
12 and 13	<b>Southend top-of-wall stations</b> Full array of services - design, fabrication, delivery, and installation for the listed stations. (see sheets 21-22)  Interpretive panel set Future Lock Replacement	\$ 42,000.00		\$ 42,000.00		
<b>TOTAL</b>		\$ 1,141,000.00	\$ 164,000.00	\$ 352,000.00	\$ 510,000.00	\$ 115,000.00



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