

# Estuarine/ Alluvial Archaeology in Ireland. Towards Best Practice.

Department of Archaeology,  
University College Dublin,  
26<sup>th</sup> May 2005.

University College Dublin

*An Coláiste Ollscoile, Baile Átha Cliath*

Department of Archaeology



Excavations of a mill at  
**Killoteran, Co. Waterford**  
as part of the  
**N-25 Waterford By-Pass Project**



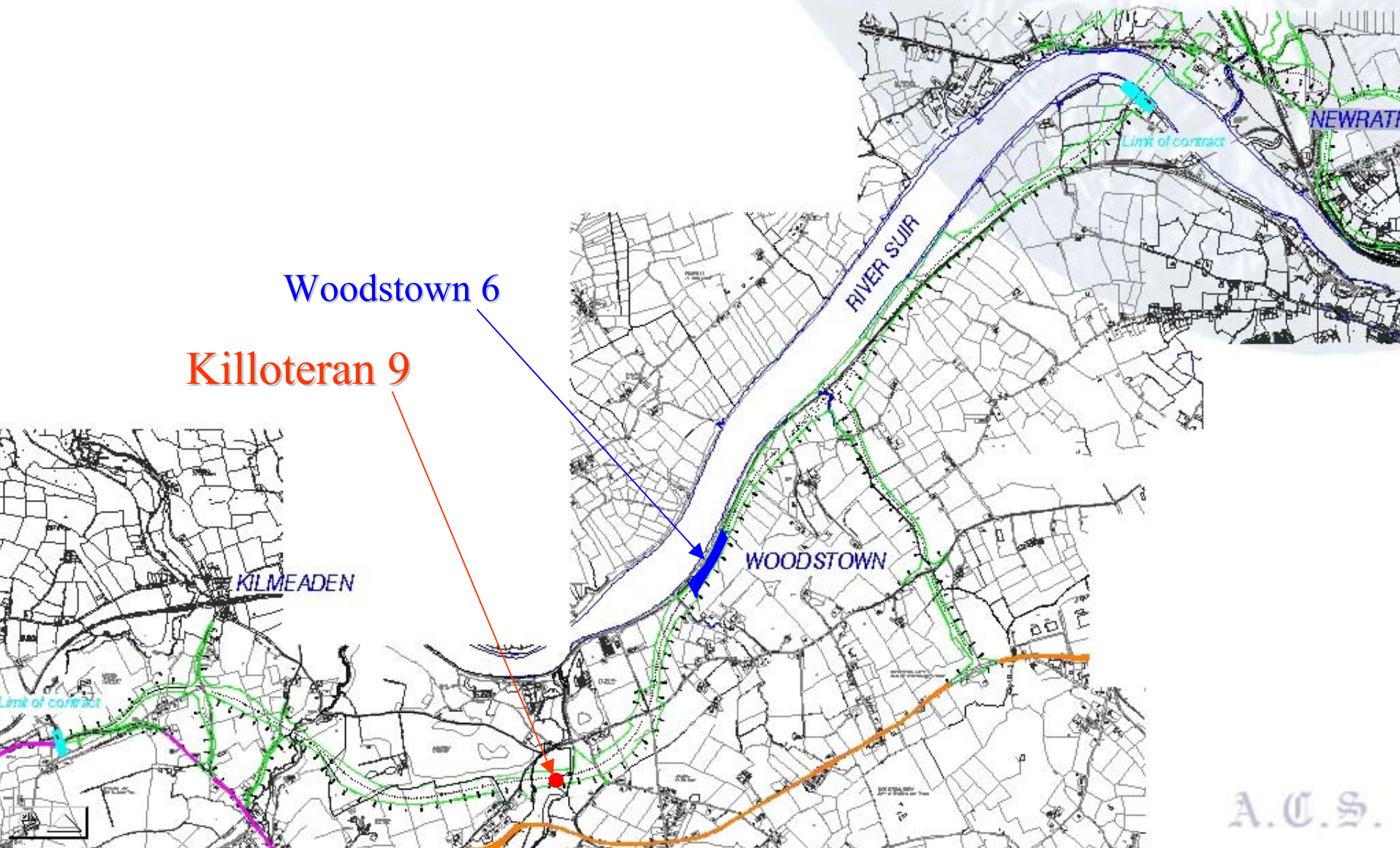
**Donald Murphy**

**Archaeological Consultancy Services Limited**

**NRA**  
National Roads Authority  
*An tÚdarás um Bóithre Náisiúnta*

A.C.S.

# Waterford By-Pass Project: Contract 1.



**Site Location:**



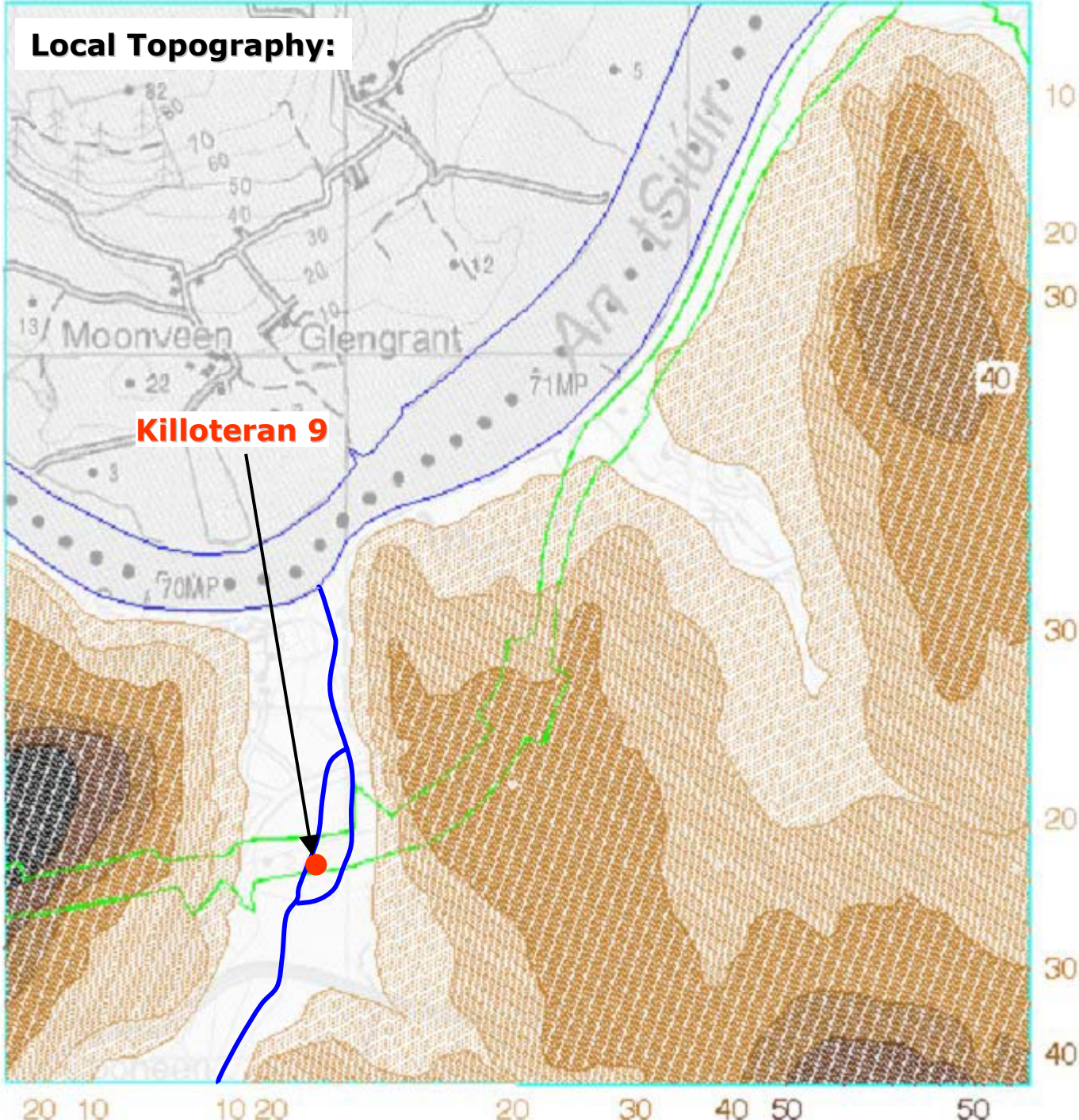
# Site Location:



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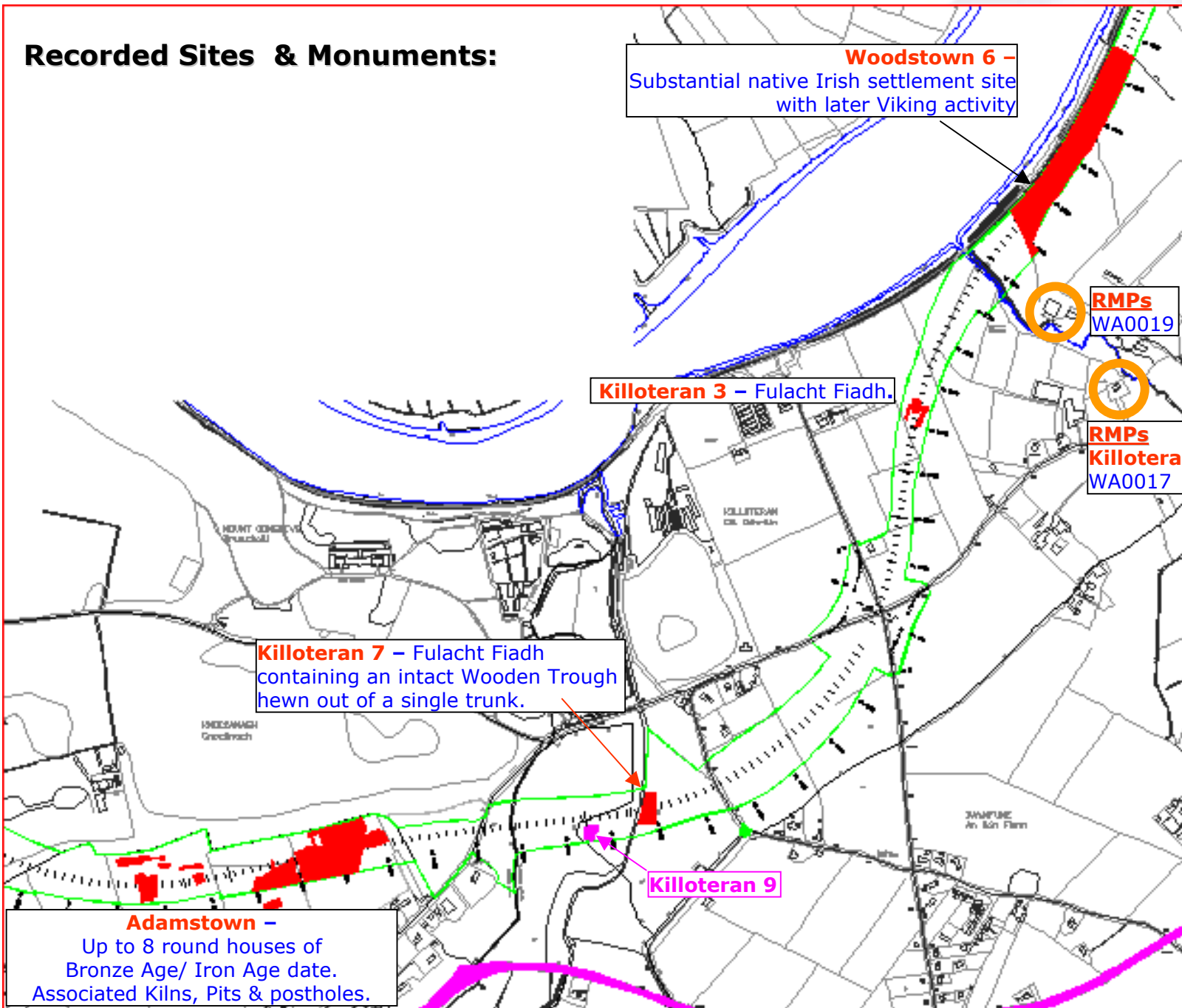
**Local Topography:**



**Killoteran 9**

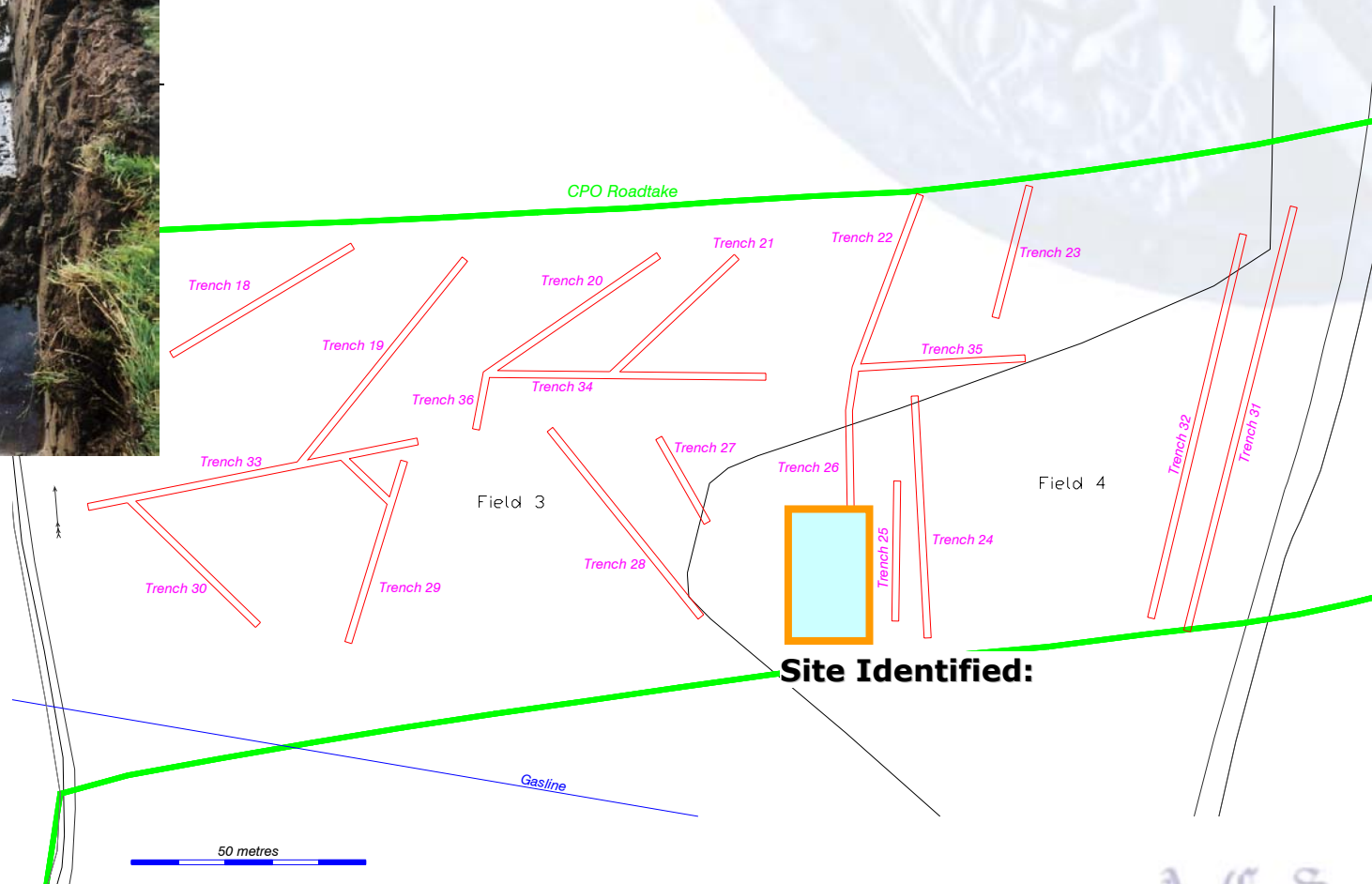


# Recorded Sites & Monuments:



# Methodology:

Initial Testing – December 2003  
Test Trenches Excavated Where Possible



## Methodology:

Small Area Opened Up  
Around Exposed Timbers



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**Killoteran 9:  
Testing December 2003**

- Worked Timbers exposed consisting of Posts, Stakes & Upright Planks set in a Wooden Base Plate.
- Interpreted as a Revetment.

- Two samples of wood sent for dating –

Sample 1: Yew Post; Cal AD 410 to 650  
Oak Plank; Cal AD 340 to 600

Turned out to be  
Worked Trunks

Revetment

Further Planks



## **Aims Of The Excavation:**

- To identify the nature & significance of the structural remains exposed.
- To preserve by record, all archaeological features uncovered.
- To collect appropriate samples to assist in dating the site & placing it within its wider environmental context.

## Excavation Results:

Excavation commenced in July 2004 & continued until October 2004 at which point it was abandoned due to bad weather.

Area opened measuring 20m x30m. Over **600 recovered Worked Timbers** to date. Majority represent collapse into the Mill Race.



## Excavation Results:

Timbers recovered including Posts, Planks & possible wheel paddles.





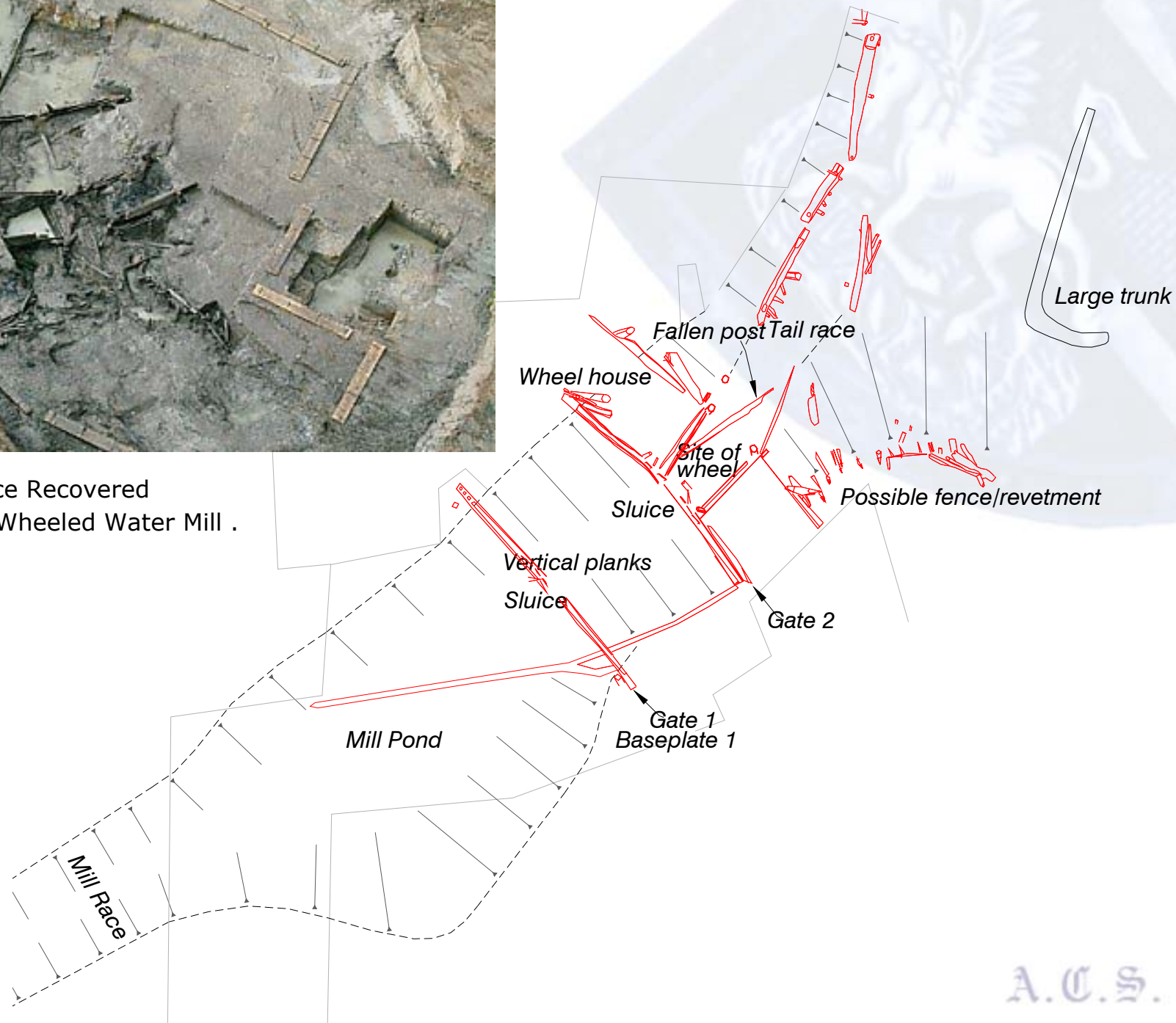
**Recording & Removal:**

## Excavation Conditions:





Structural Evidence Recovered  
For Tidal Vertical Wheeled Water Mill .



# Main Structural Evidence:





## Main Structural Evidence:



**Water Channel & Flow**

# Main Structural Evidence:



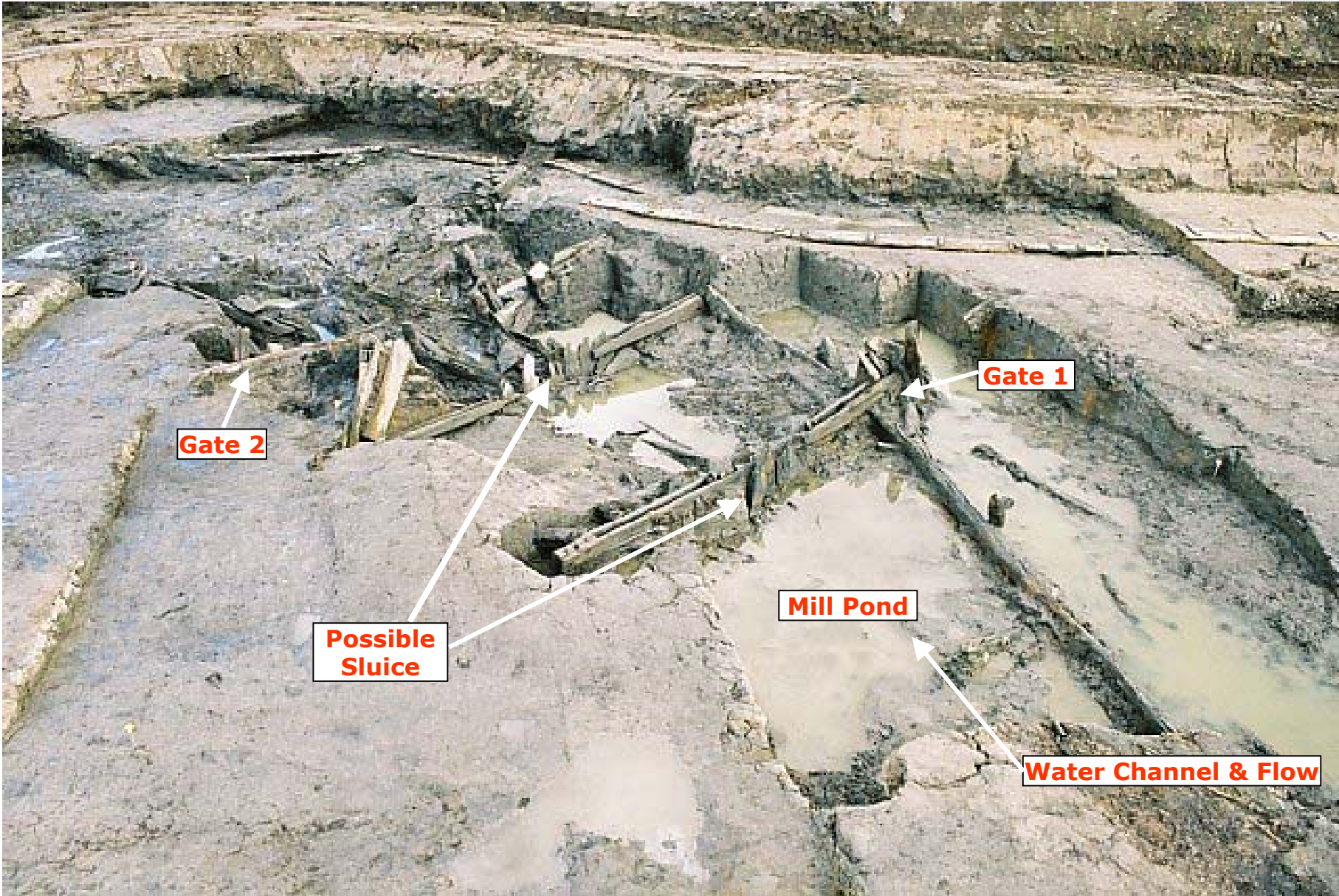
# Main Structural Evidence:



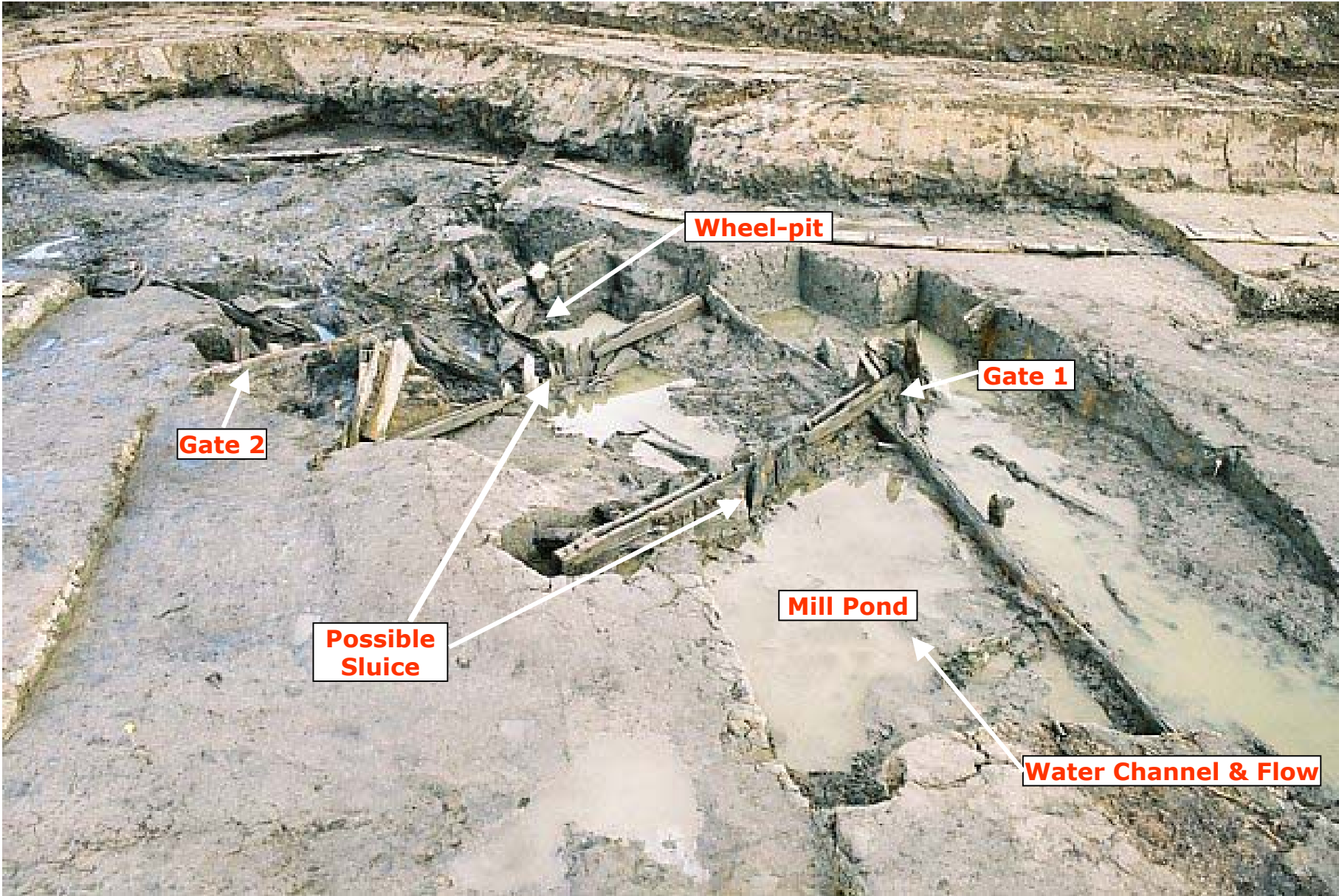
**Main Structural Evidence:**



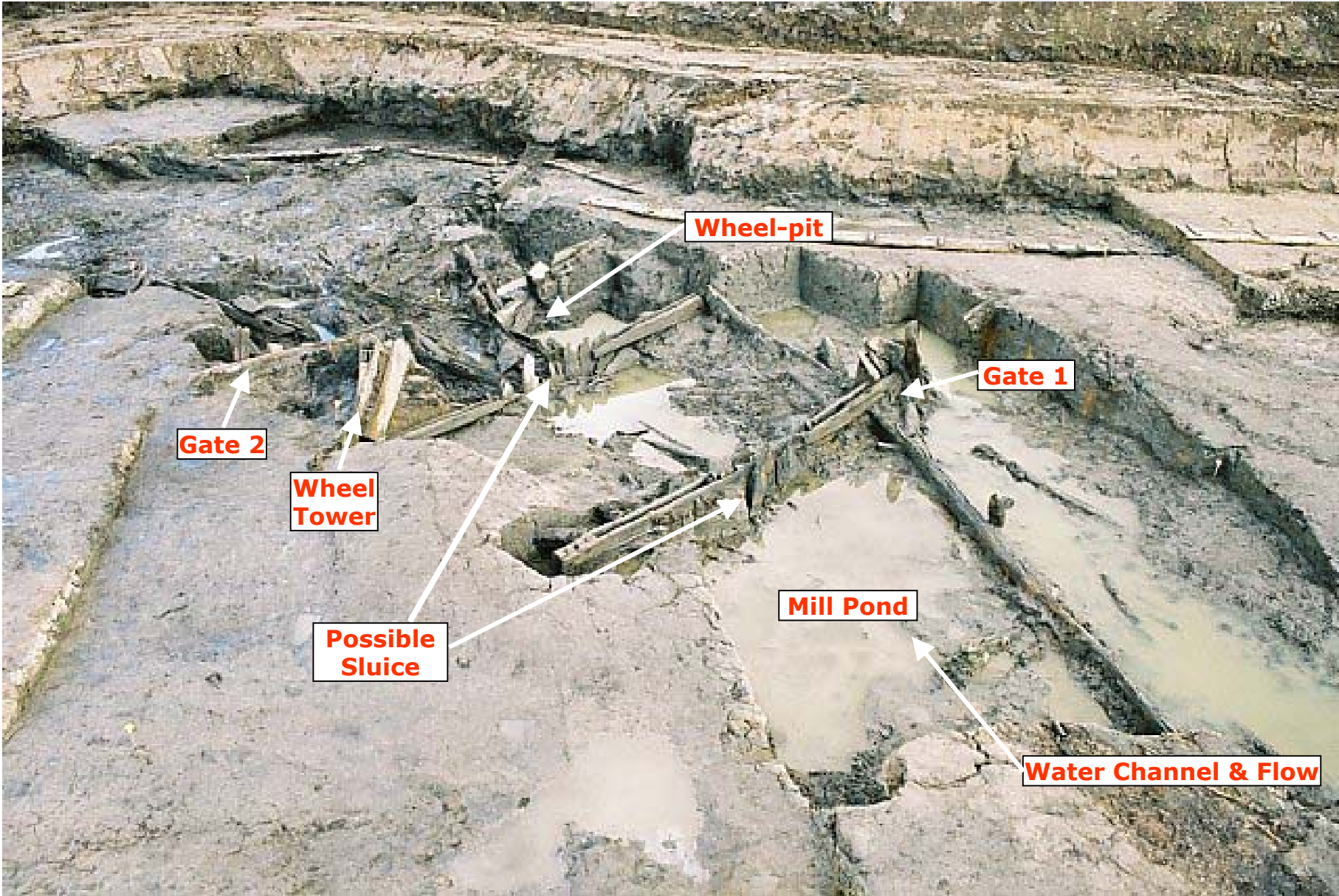
**Main Structural Evidence:**



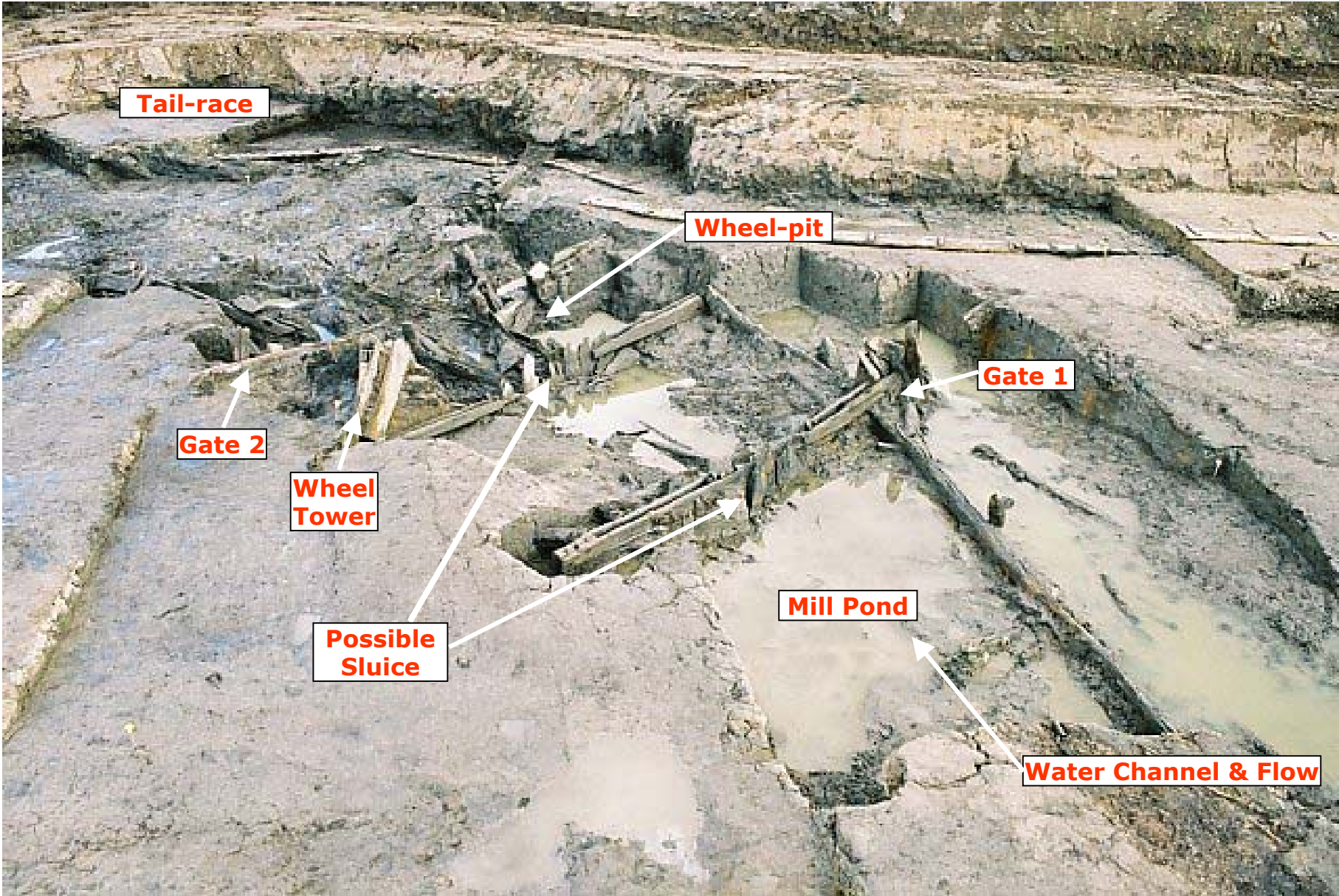
# Main Structural Evidence:



**Main Structural Evidence:**



# Main Structural Evidence:



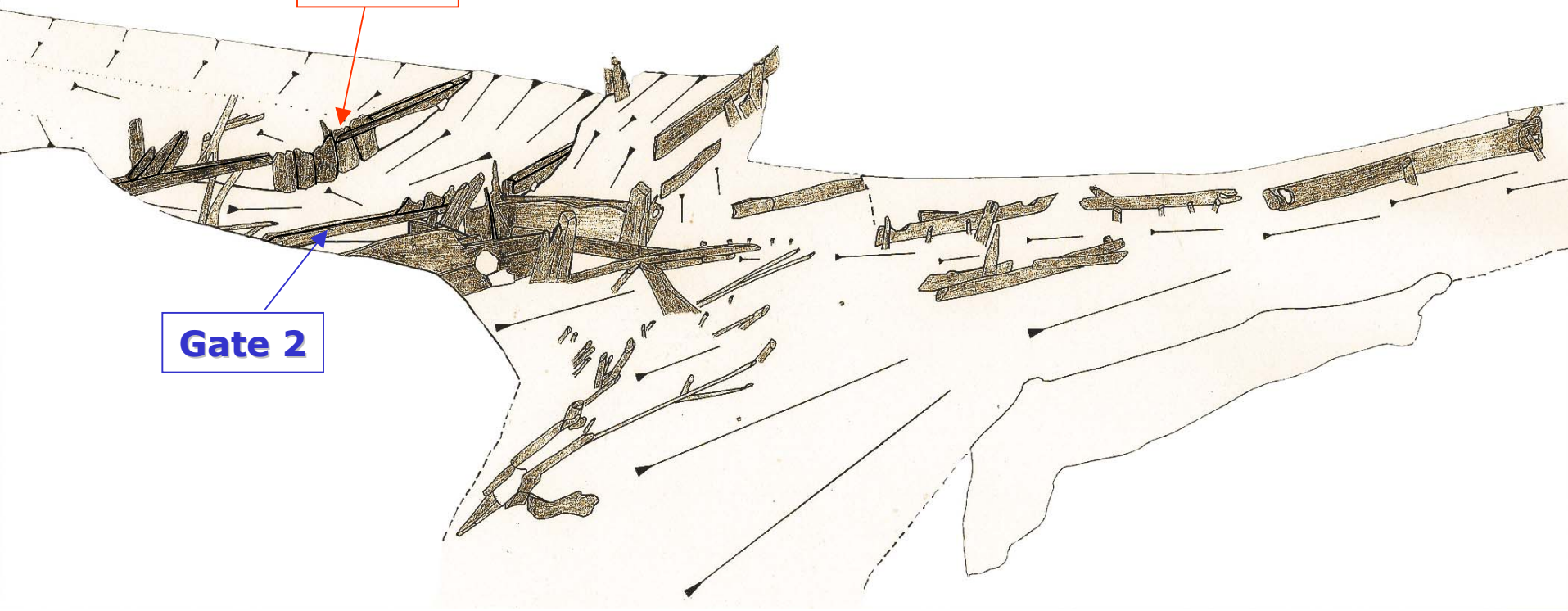


**Gates 1 & 2:**

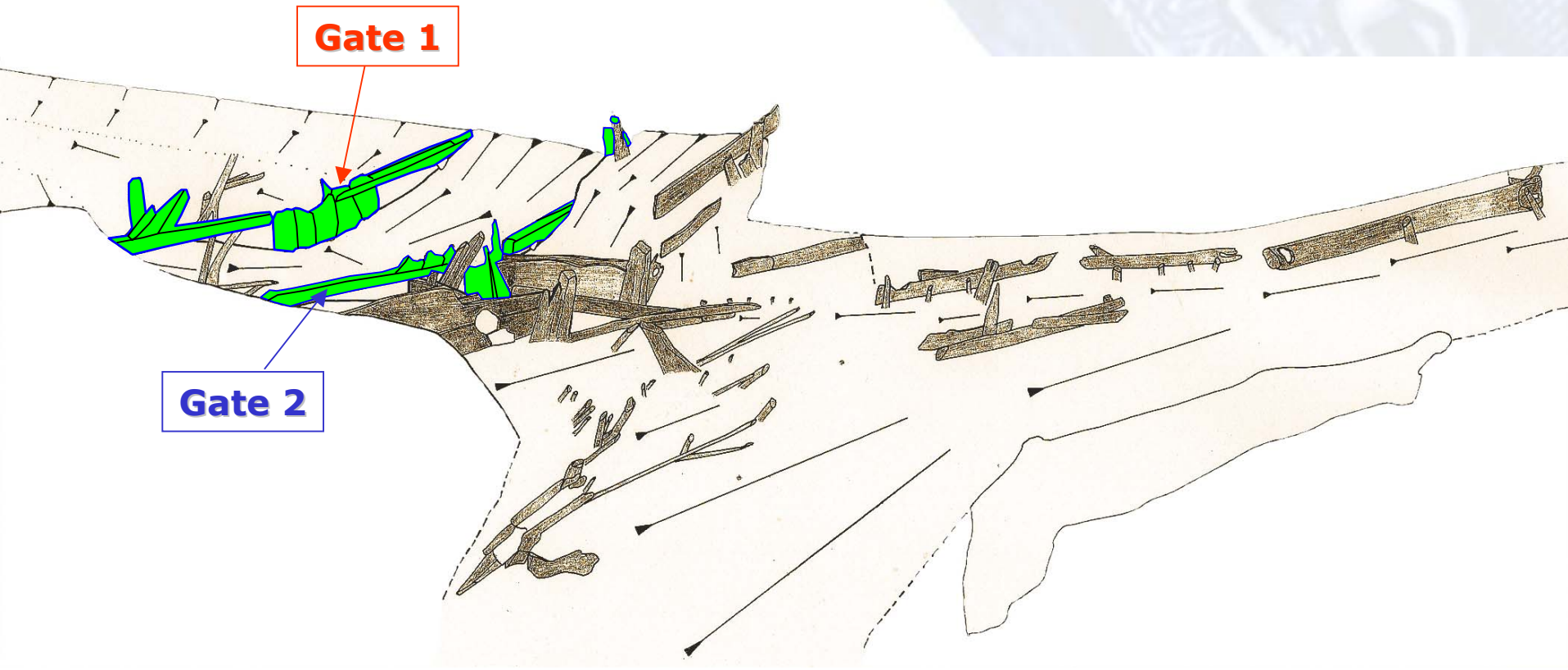


**Gate 1**

**Gate 2**



**Gates 1 & 2:**



# Gates 1 & 2:



# Water Management:





Gate 1:  
Base-plate.

## Gate 1:

Base-plate & collapsed in-situ  
Planking and Upright Post.



# Gate 1: Possible Sluice Gate.



## Gate 2: Base-plate & in-situ Planking.





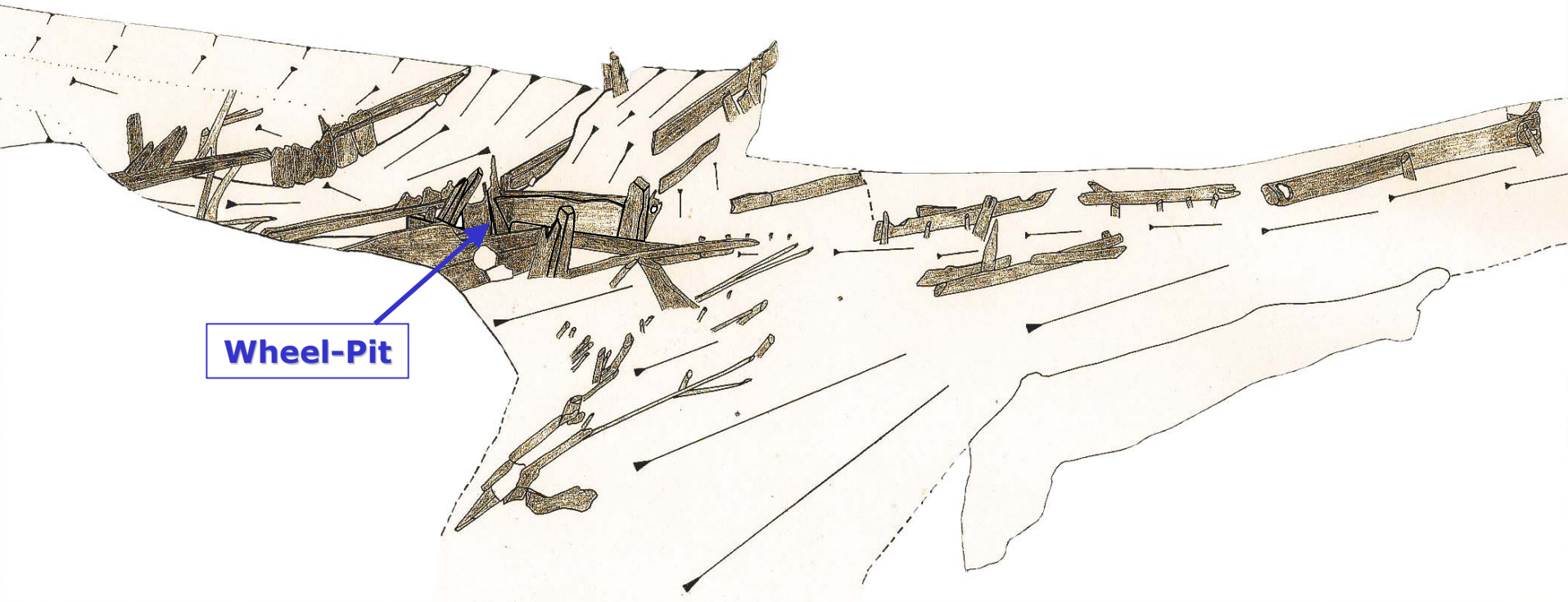
## Gate 2: Fallen Vertical Planks.



**Gate 2:** Base-plate & Planking with possible opening towards Wheel-Pit.

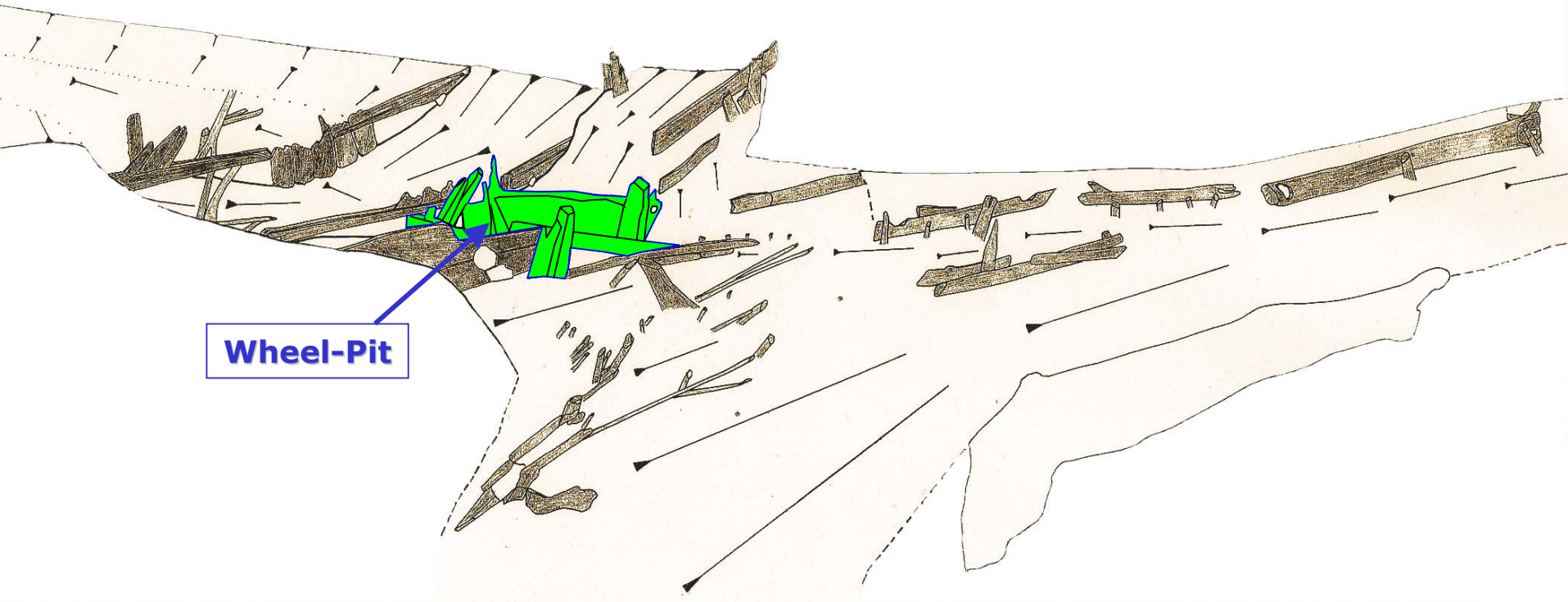


# Wheel-Pit:



Wheel-Pit

# Wheel-Pit:



Wheel-Pit



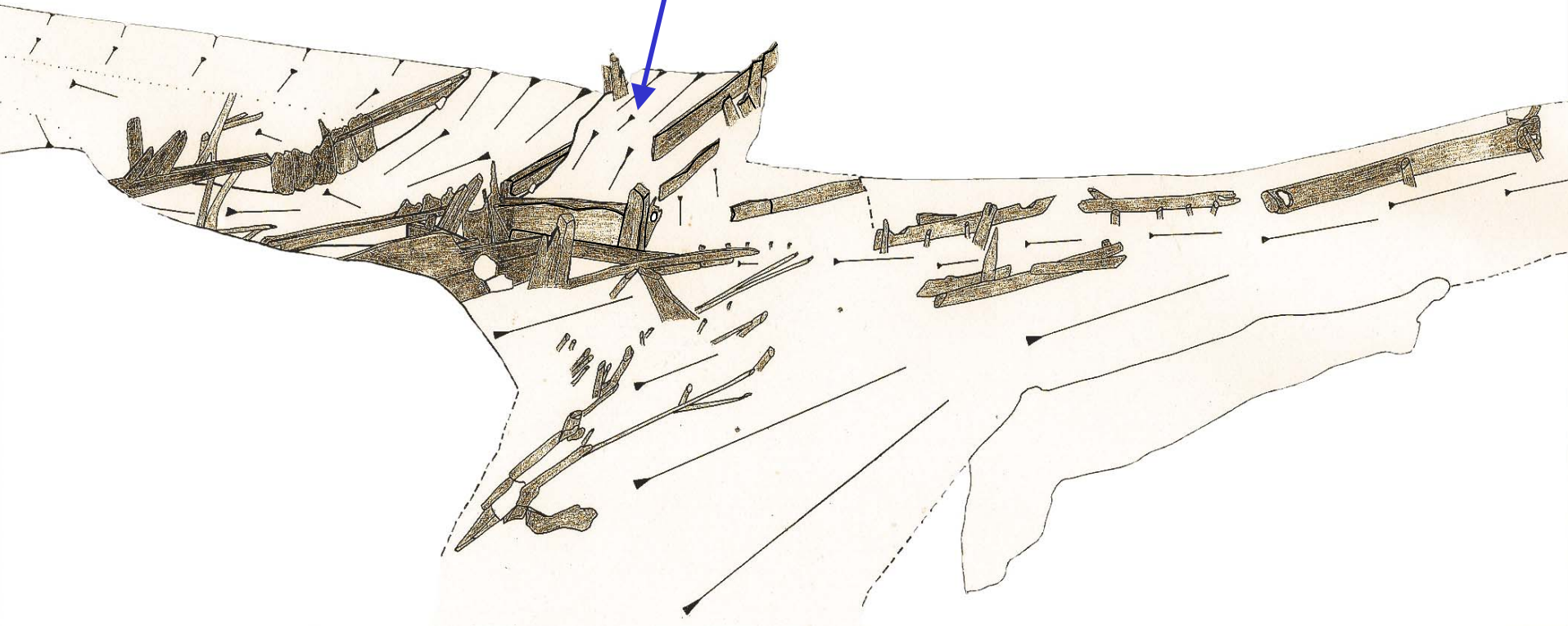
## **Wheel-Pit & Supports:**

# Wheel-Pit Floor:



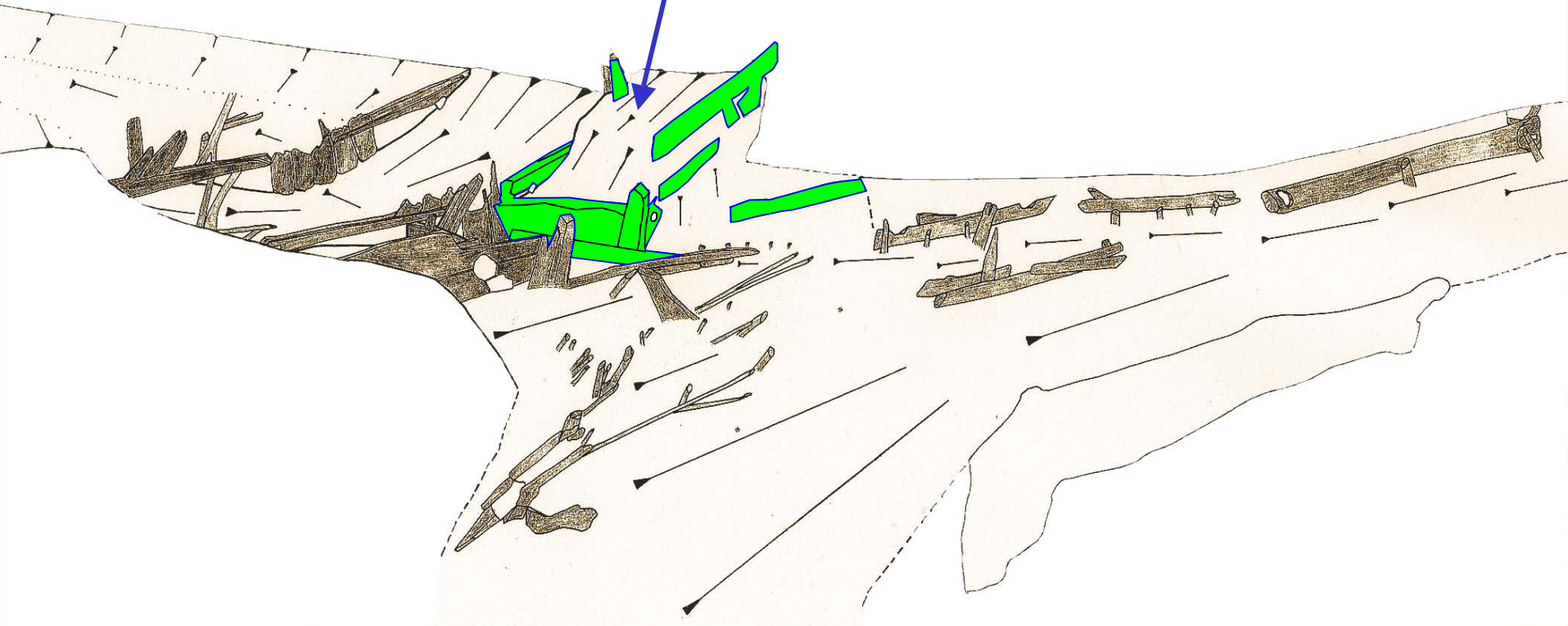
# Wheel Tower:

Wheel Tower



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Wheel Tower

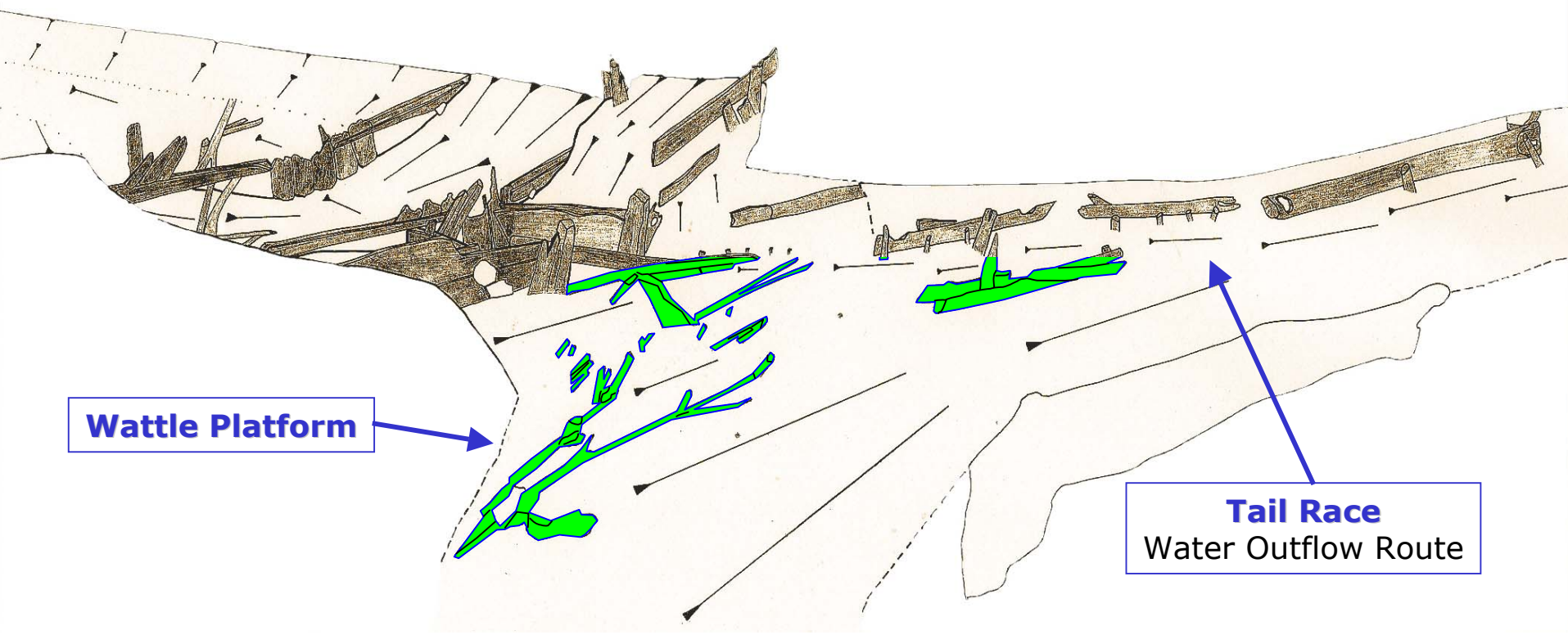




# Collapsed Wheel-House Structure:



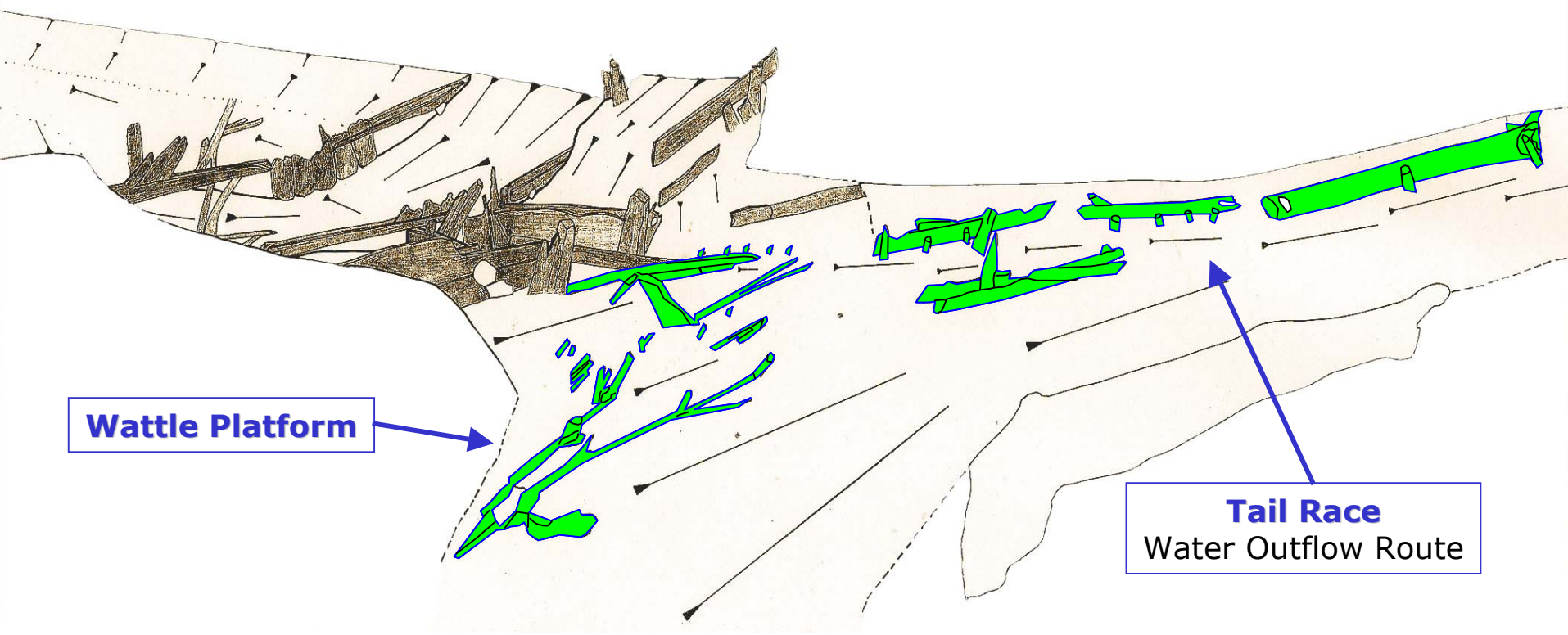
# Tail Race:



**Wattle Platform**

**Tail Race**  
Water Outflow Route

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**Wattle Platform**

**Tail Race**  
Water Outflow Route

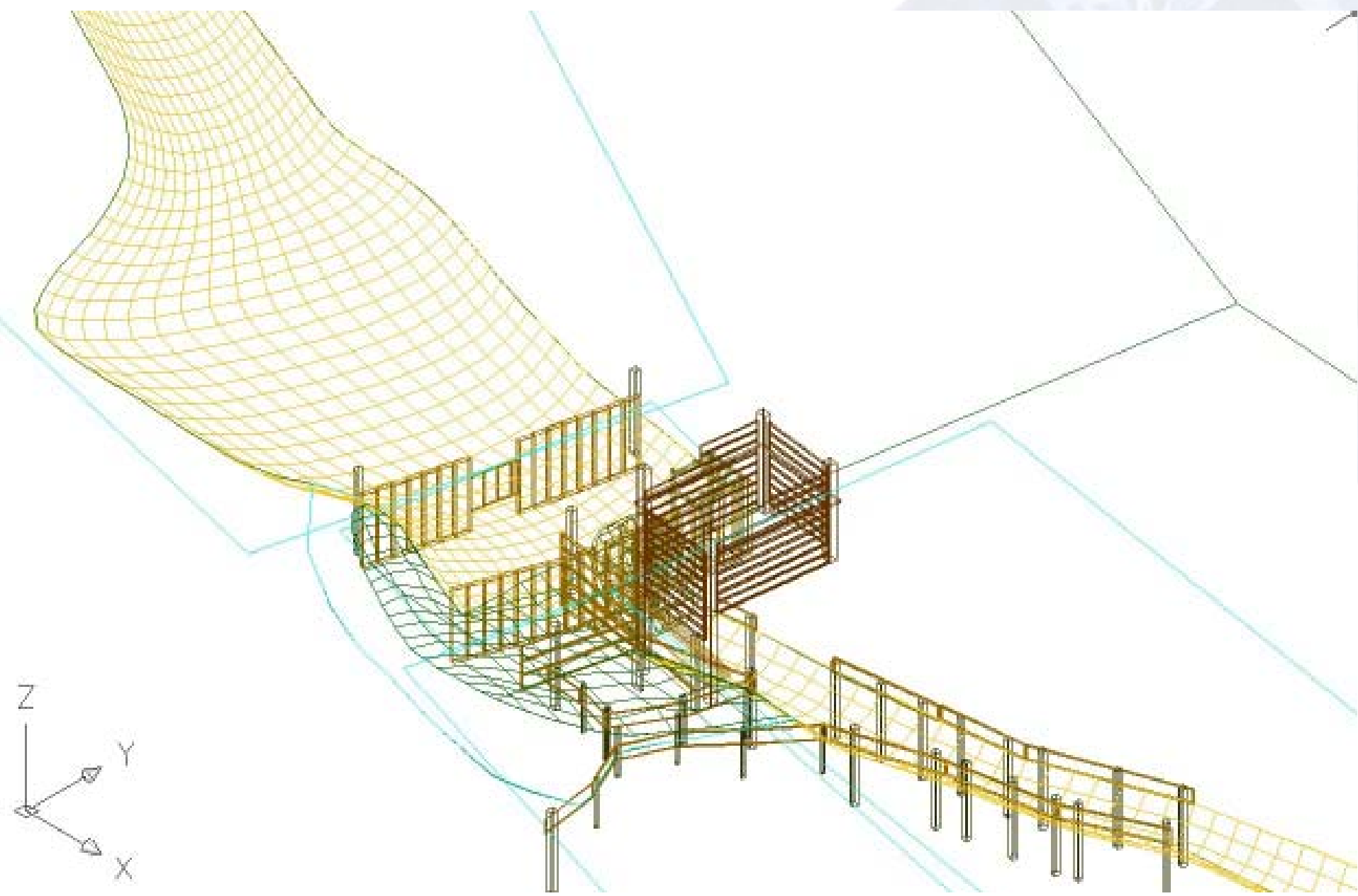
# Tail Race & Fence/ Revetment:



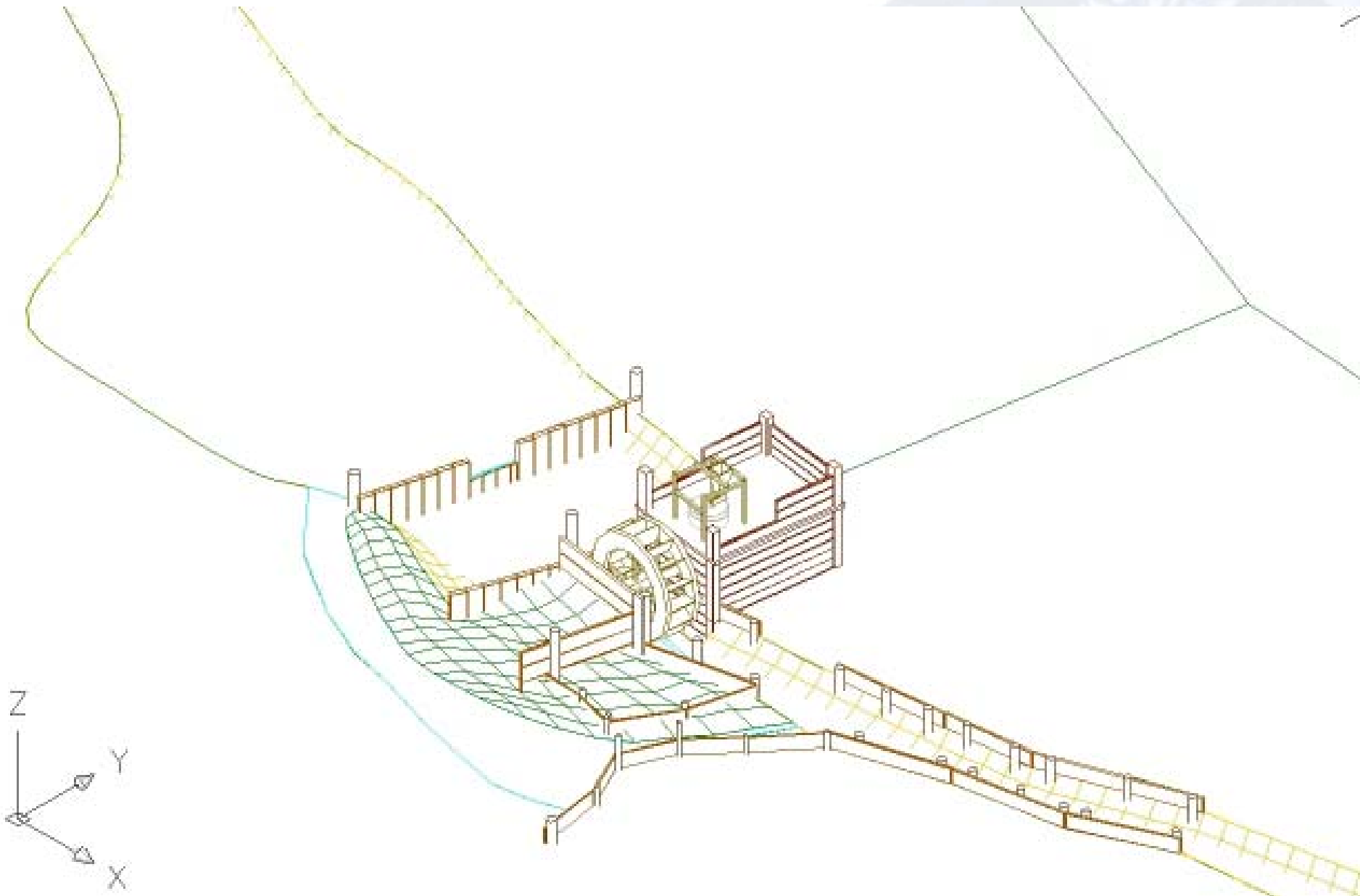


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**Reconstruction:**



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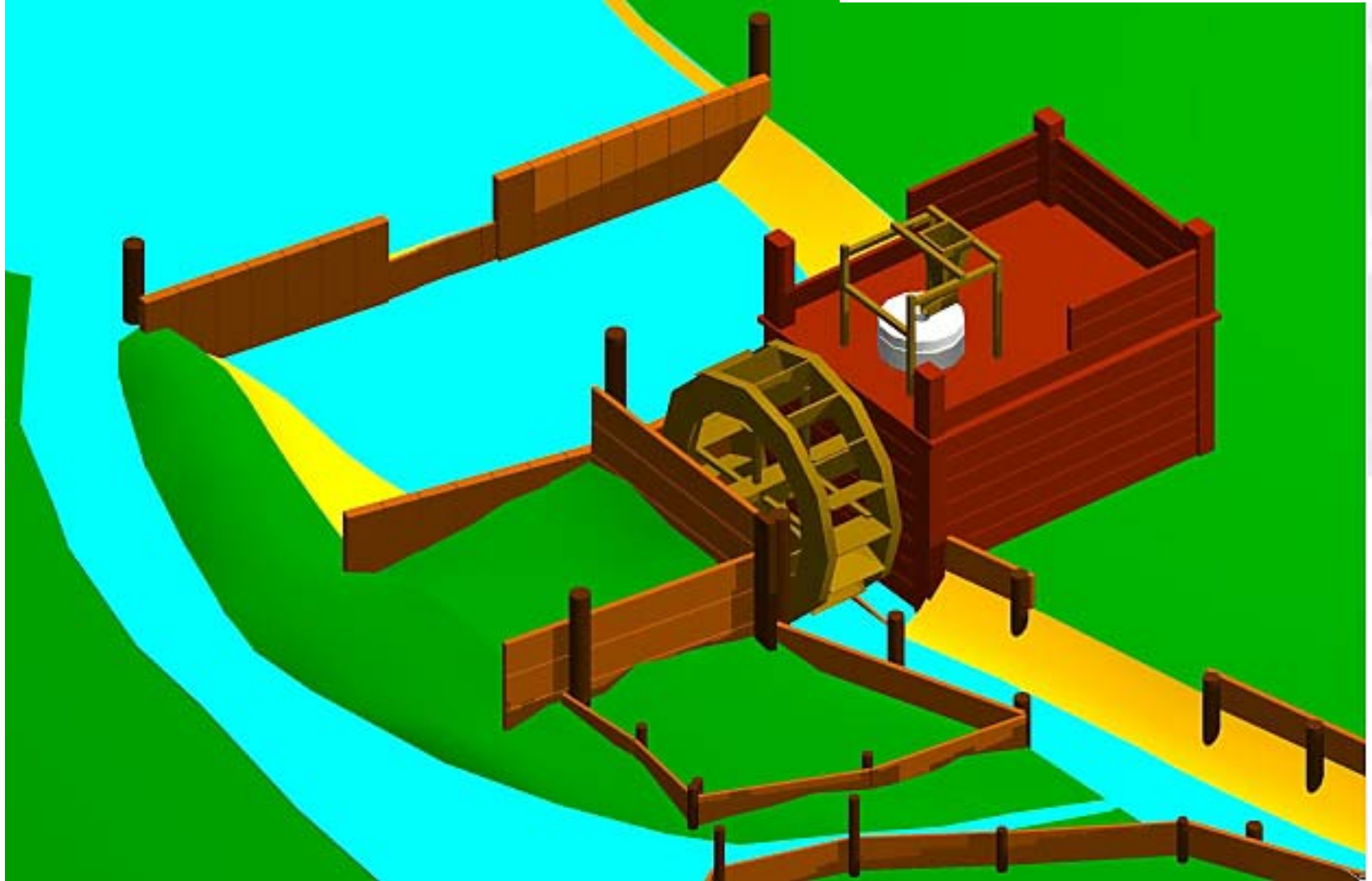
**Reconstruction:**





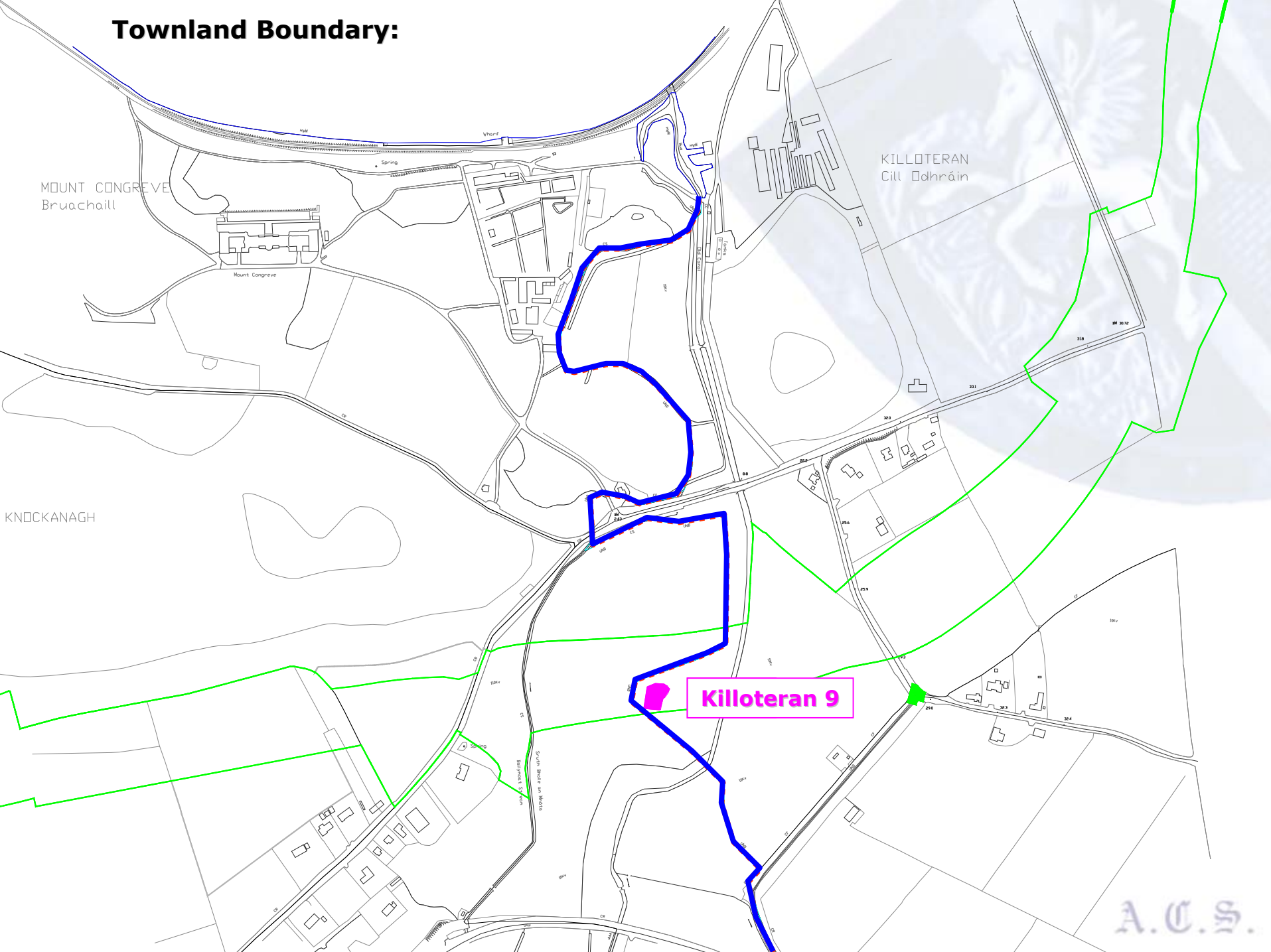
**Finds:**

Included – Mill Stone Fragments.  
Knife Handles.  
Clench Nails.



**Dates make it the earliest Irish Mill known to date.  
Dendro dates will confirm.**

# Townland Boundary:



MOUNT CONGREVE  
Bruachailt

KILLOTERAN  
Cill Odhráin

**Killoteran 9**

# The End...

