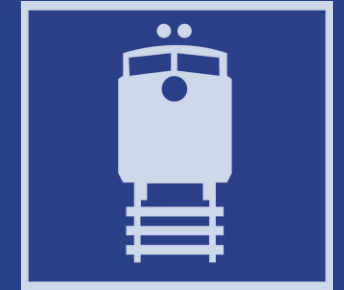




INDOT
**DIGITAL
DELIVERY**



10-Year Strategic Timeline for State DOT



Introduction

Phase 1: Planning & Foundation (2025–2026)

Phase 2: Pilot Development (2026–2027)

Phase 3: Evaluation & Scaling (2028–2029)

Phase 4: Statewide Rollout (2030–2032)

Phase 5: Optimization & Sustainability (2033–2035)



INDOT DIGITAL DELIVERY

10 YEAR STRATEGIC ROADMAP

PHASE 1 (2025 - 2026) Foundation & Planning

- Bentley Infrastructure Cloud for Active Construction
- Infrastructure Cloud Deliverables Management ERMS Replacement

1

3

- ### PHASE 3 (2028 - 2029) Strategic Expansion
- Refine modeling standards and data exchange formats
 - Expand pilots to additional regions and asset types

PHASE 4 (2030 - 2032) Statewide Rollout

- Implement digital delivery across all new projects
- Integrate digital as-builts into asset management systems

4

5

PHASE 5 (2033 - 2035) Optimization & Sustainability

- Align with national open data standards
- Institutionalize Digital Delivery and retire legacy systems

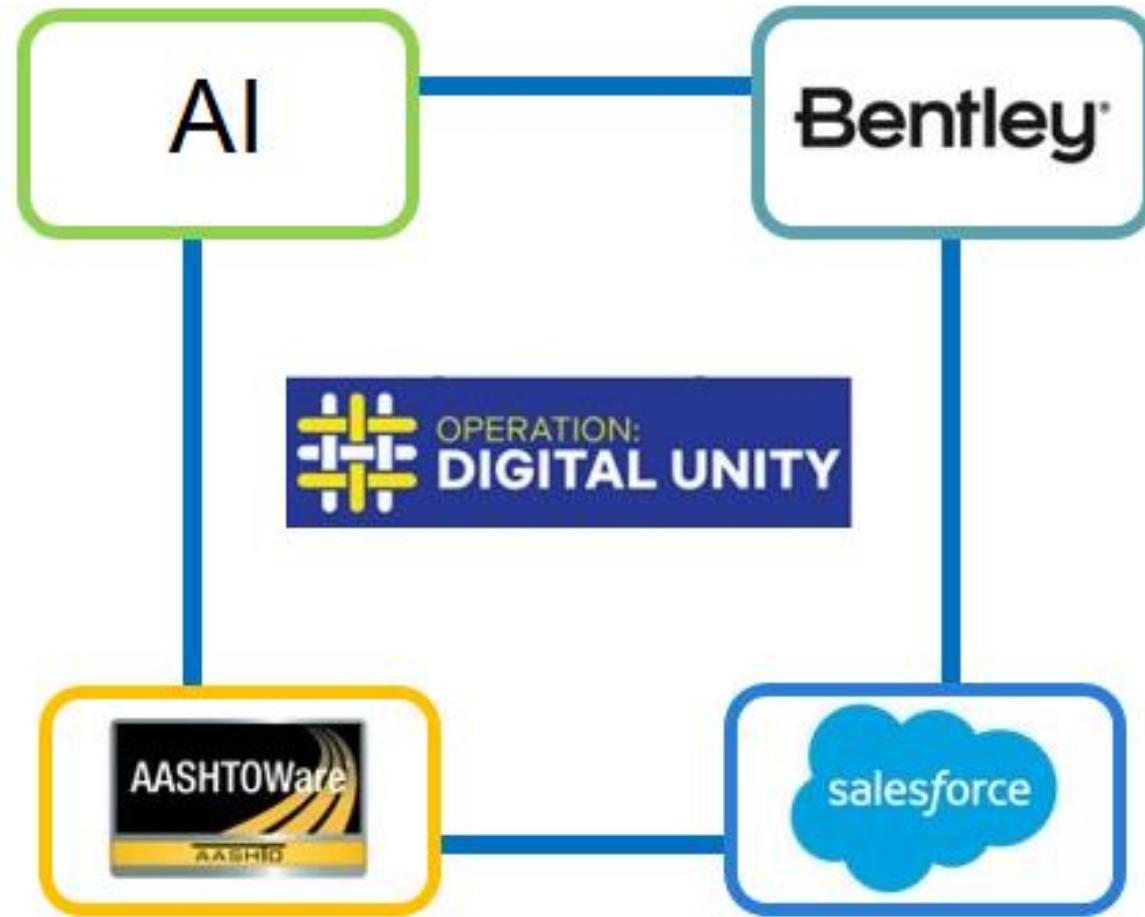
PHASE 2 (2026 - 2027) Pilot & Implementation

- Digital Delivery Program Commencement
- Initial Digital Delivery Pilot Selection
- Develop Information Delivery Manual with Exchange

2



Digital Unity



Major Projects



Improve
64



I-70 Revive
Contract 3



Renew I-
70 West



Mid States



CAD Model Request



Blanket Waiver Form

Export PDF with Geolocation
or Coordinate System

INDOT ProjectWise work area

RFP Digital Delivery

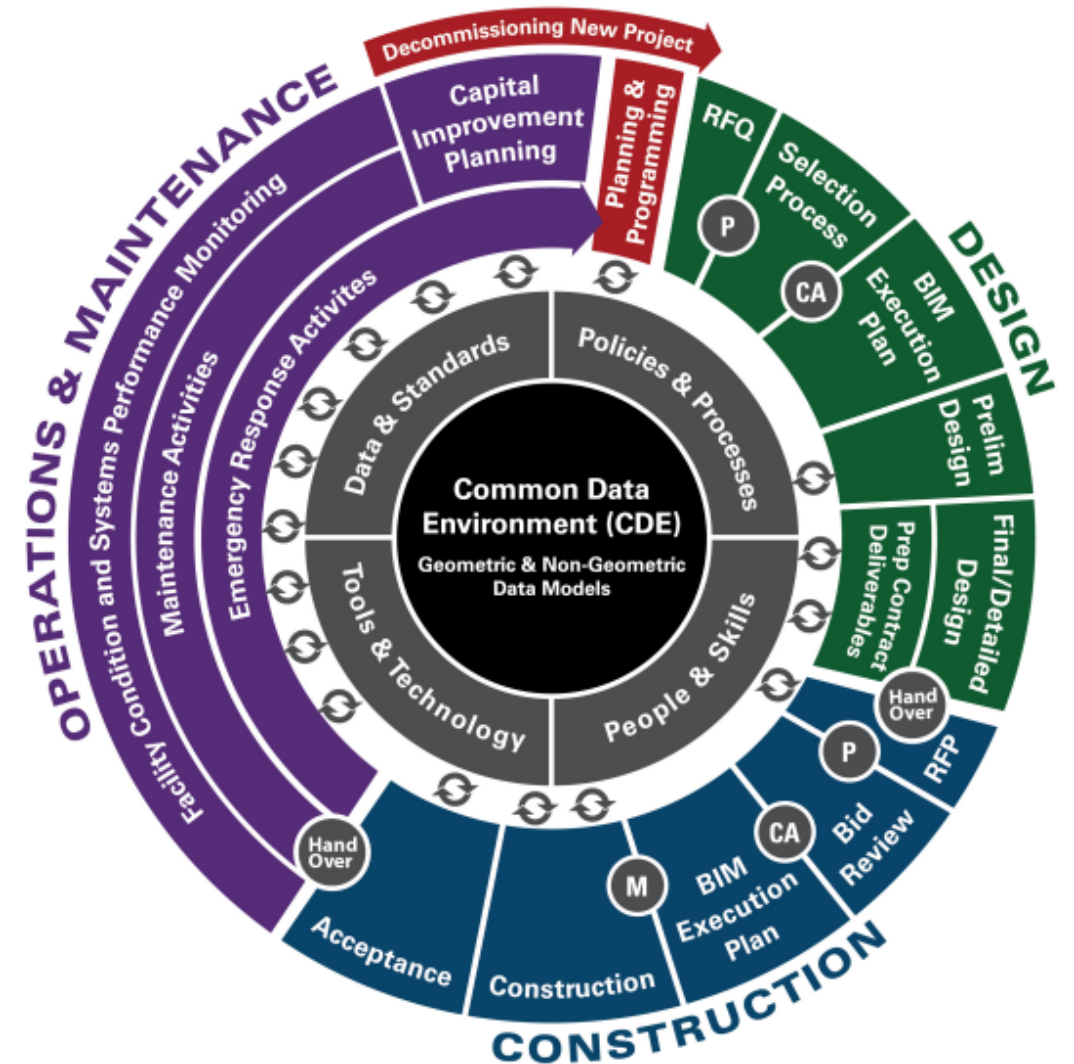
ID: 21239

Digital Delivery
Implementation
Plan and Data
Requirements
Development
Plan

Target RFP: 03/10/26
Modernize Bentley
Workspace

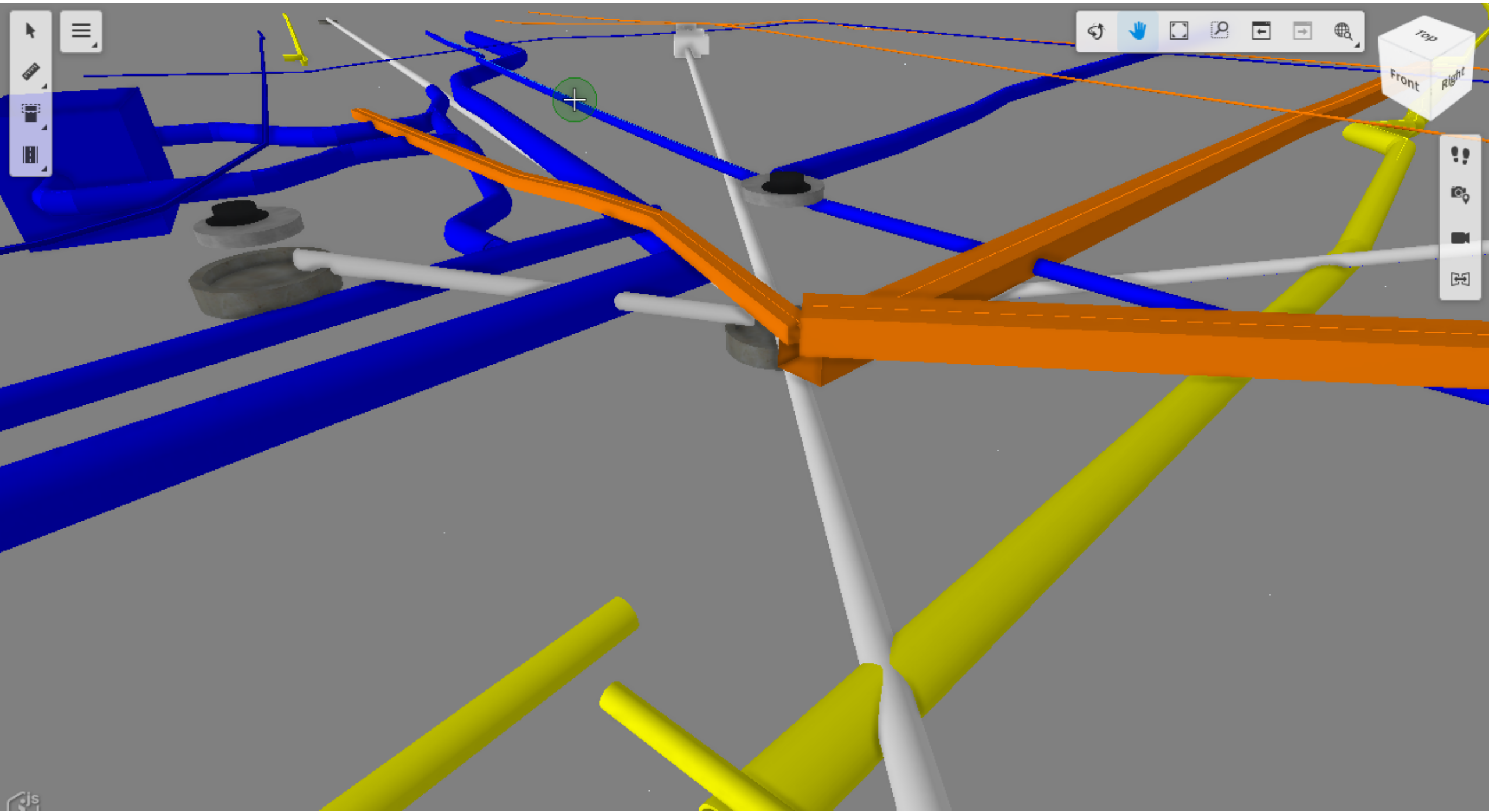
- Bridge Workspace
- Drainage
Workspace

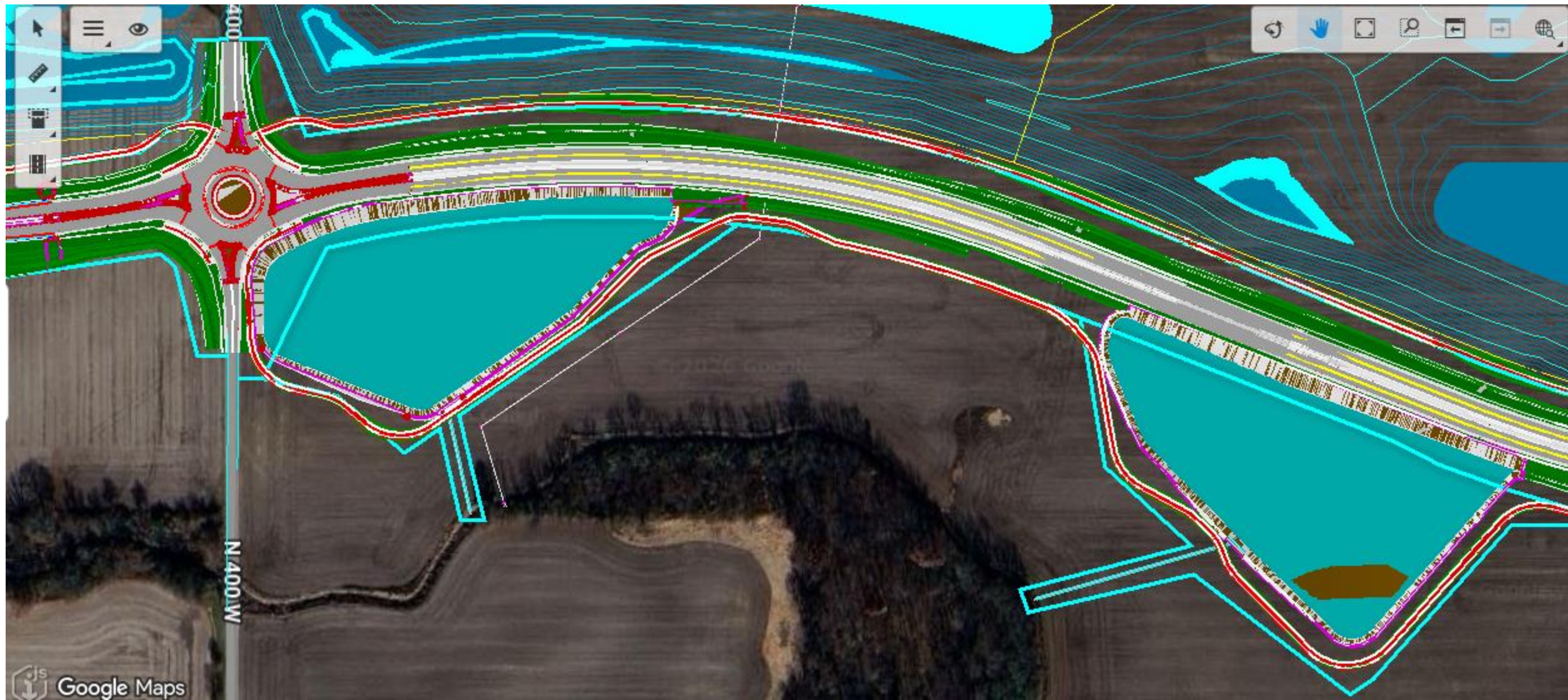
Future-State Data
Dictionary

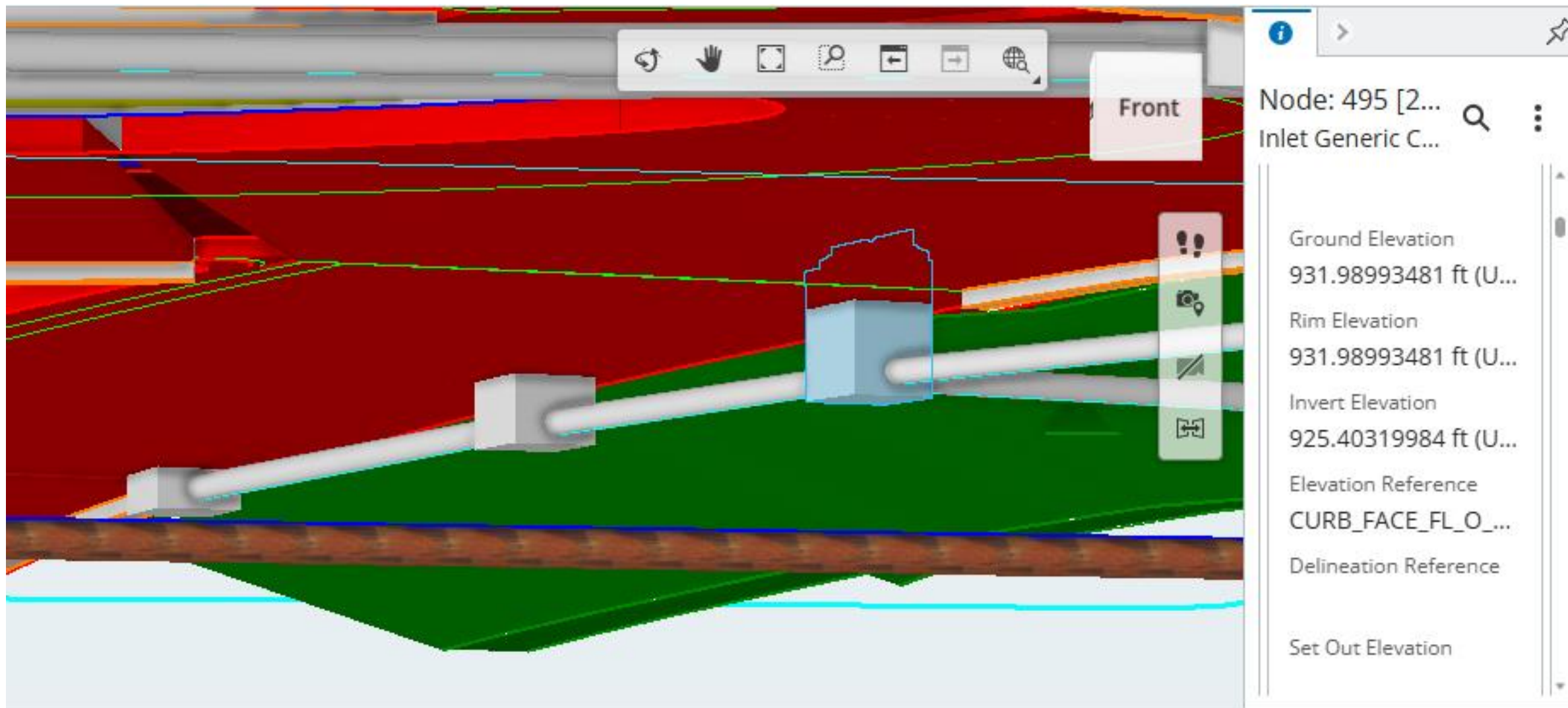


SR 32 PDB Pilot Demonstration







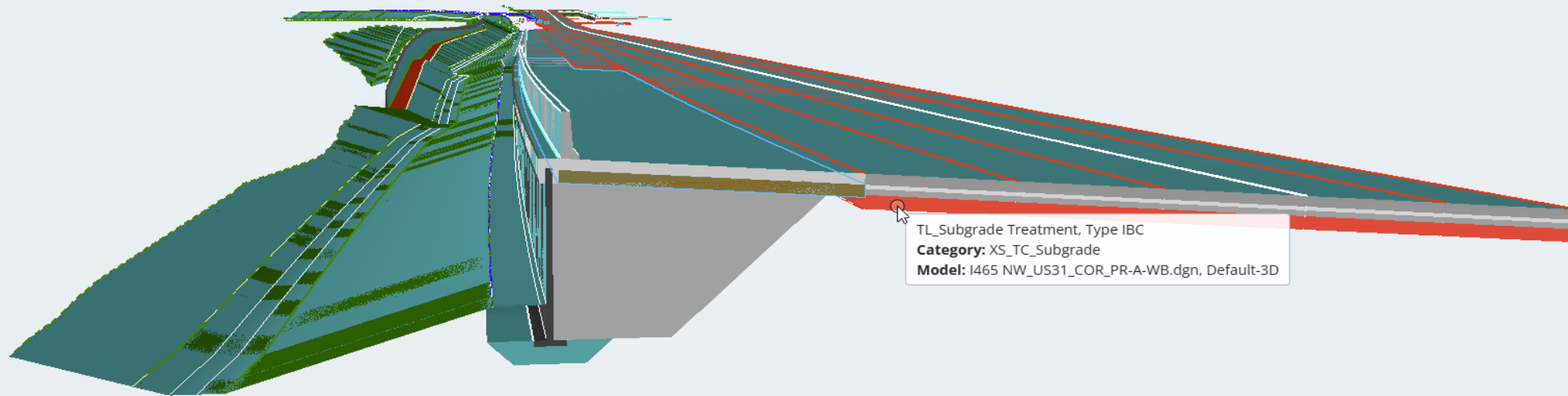


Display Optimizations

Presentation



Unified Model Viewing



- View and work with models directly in a web browser
- No OpenRoads or OpenBridge required
- Roads, Bridges, drainage, terrain, all together

Map Layers

Base

Google Maps: Aerial Im...

Background

No Background layers specified

Add Layer

Overlay

No Overlay layers specified

Add Layer

Properties

SW2_Aggregate for Under...

XS_TC_Aggregate

Selected Item(s)

Category

XS_TC_Aggregate

Code

Model

I465 NW_US31_COR_PR-A-WB.dgn, ...

User Label

SW2_Aggregate for Underdrains

Mesh

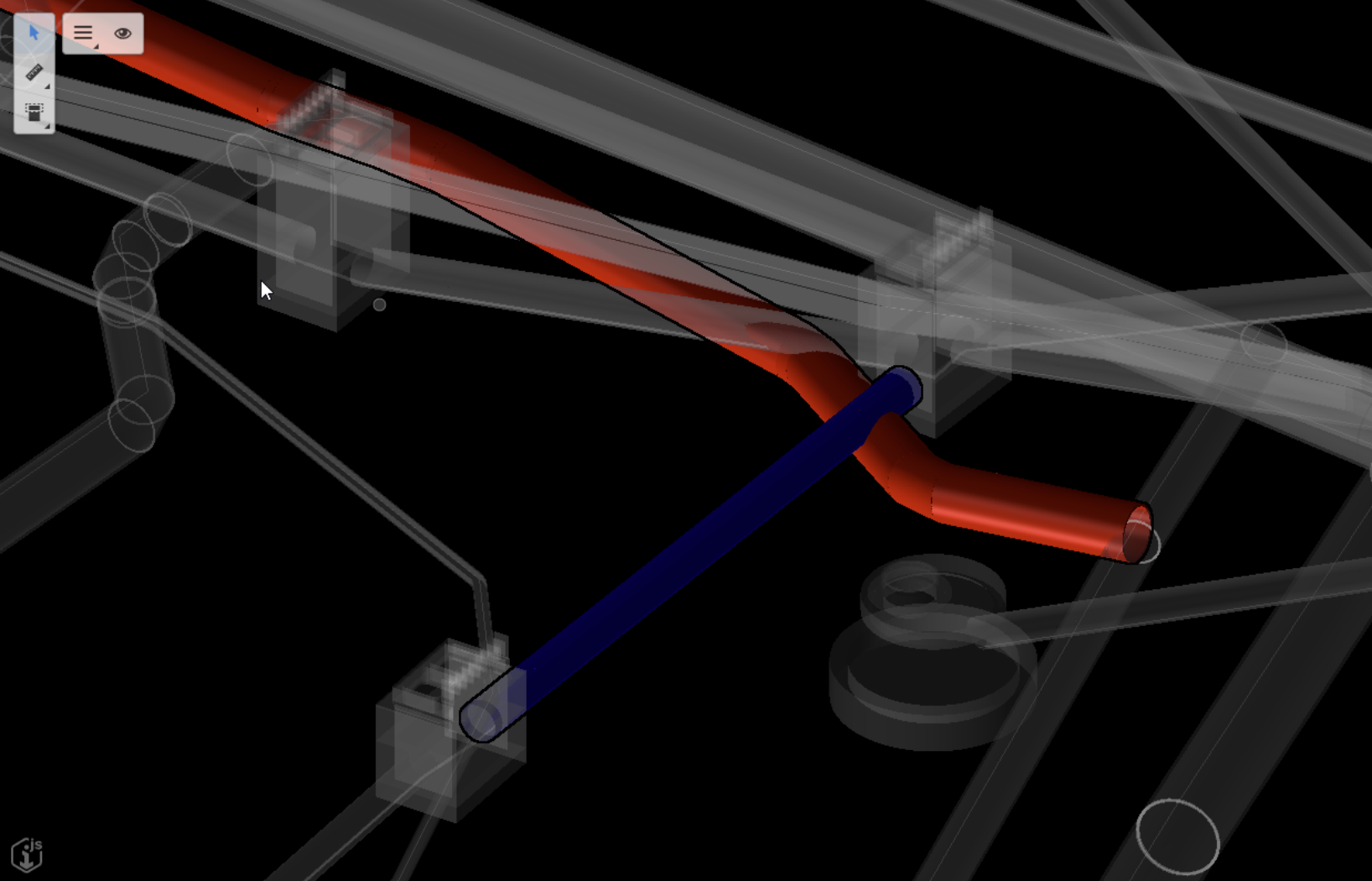
Surface Feature Symbology

XS_TC_Aggregate

Volume Option

Design

Cut Factor

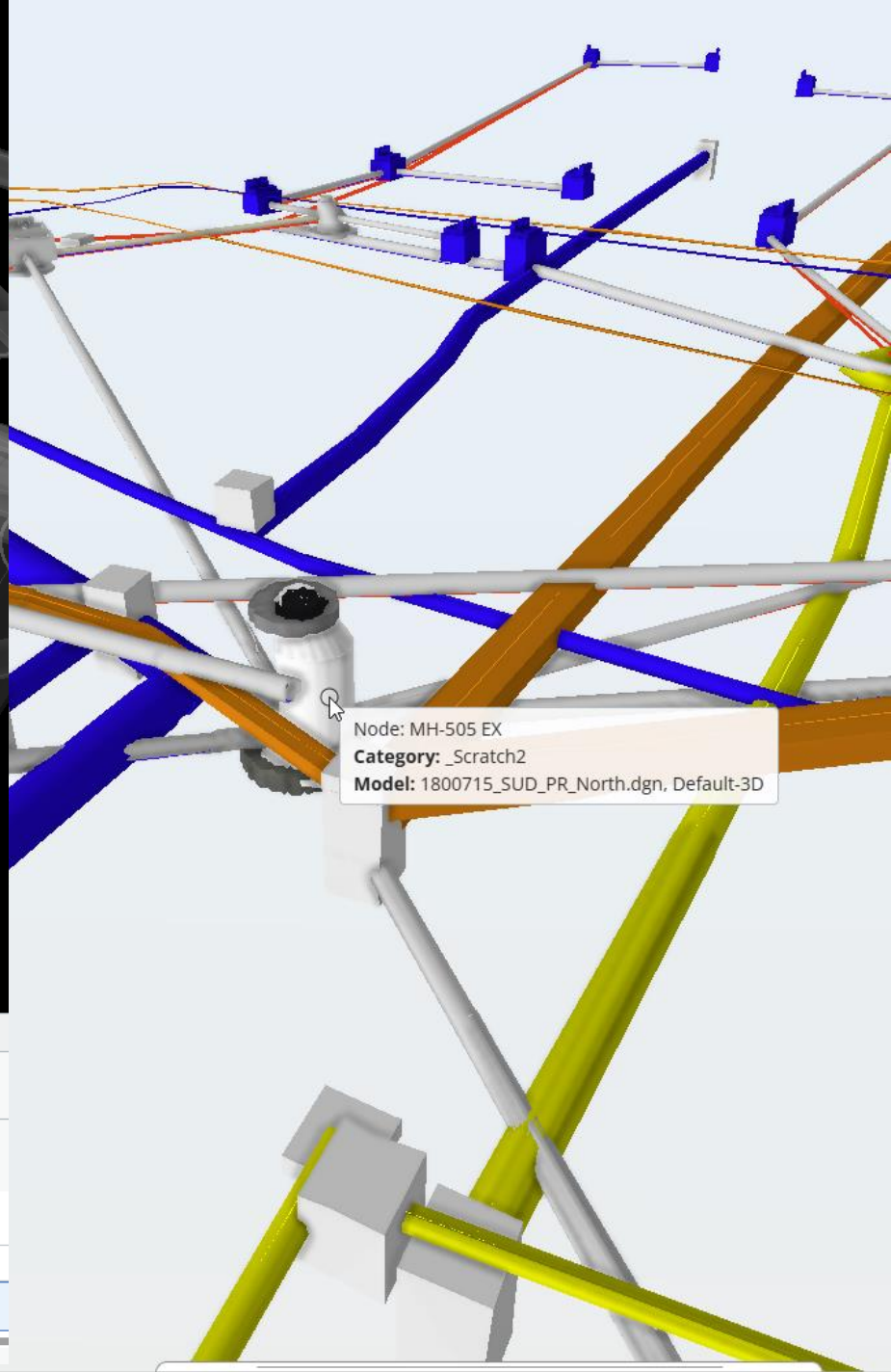


Forms Clash Detection

Clash Jobs > Clash PR Drainage

Clash View ^ Clash

	#	Set A Element	Set B Element	Status	Suppression
☐	31	Link: WATER VAULT [3-3MM]	Link: P-314 [4-37U]	Active	Unsuppressed
☒	30	Link: WATERS [3-3MI]	Link: P-312 [4-364]	Active	Unsuppressed



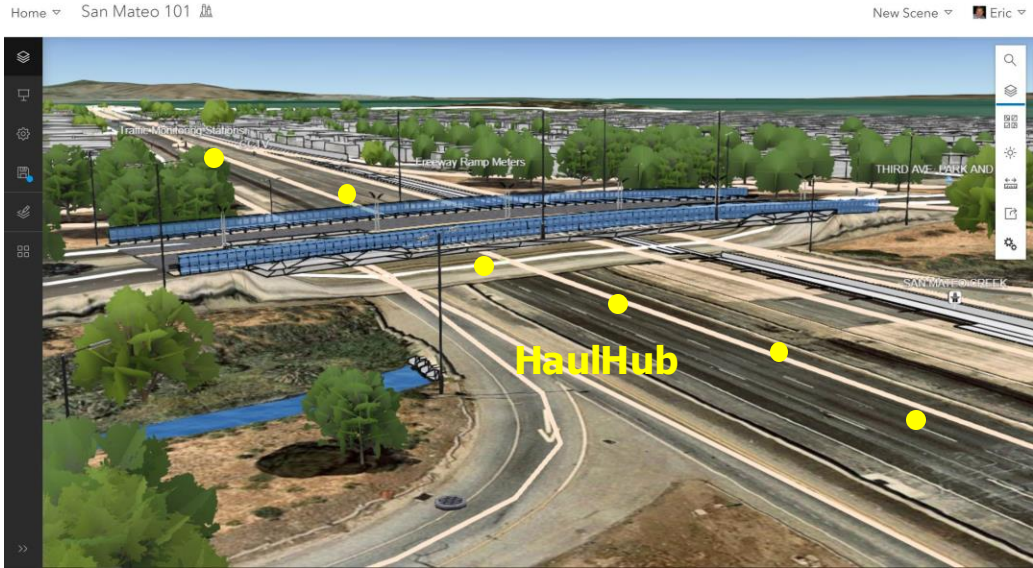
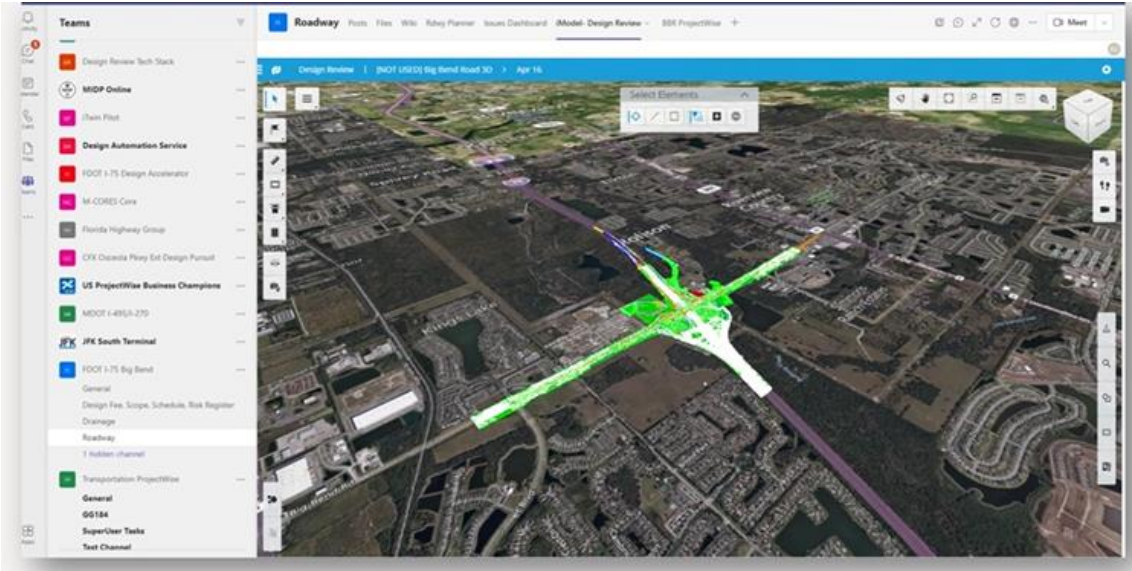
Data Integration

Design Software

Autodesk, Bentley

Esri

GIS



Safe
Software
(FME)

AWP

Survey & Other Tools
Trimble Leica TopoDOT

Construction

- Change Order
- Contract Administration
- Contract Claims
- Contract Permits
- Contract Progress
- Contract Specific Authorities
- Contract Time
- Contract Vendor Assets
- Contractor Evaluation
- Daily Diary
- Daily Work Reports
- Daily Work Reports by Contract
- Meetings
- Payment Estimate Accounting
- Payment Estimate Approval Decisions
- Payment Estimates

Estimation

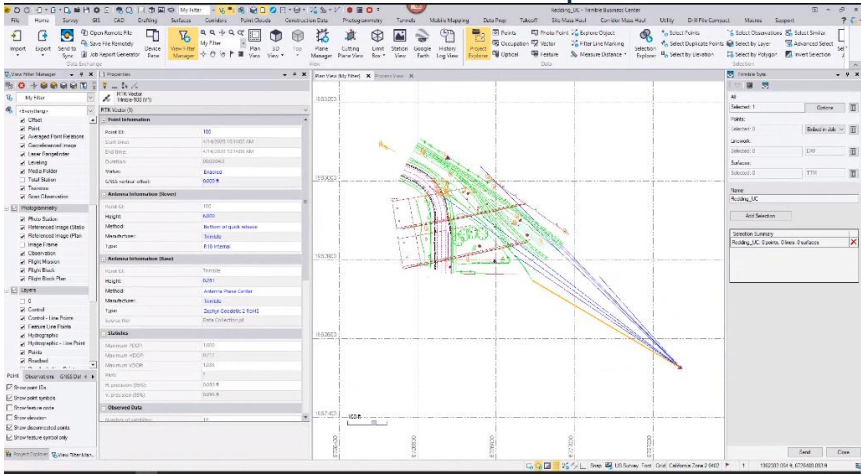
- Bid History Profiles
- Concepts
- Contingency Assignment Profiles
- Cost Estimates
- Item Bid History
- Life Cycle Maintenance Schedule Profiles
- Planning Groups
- Review Reference Profile Recommendations
- Roadway Cost Sets
- Snapshots
- Typical Section Profiles

Preconstruction

- Projects
- Prime Projects
- Proposals
- Lettings

Materials

- Acceptance Actions
- Action Relationships
- Daily Source Reports
- Find Sample
- Mix Design
- Product Group Sample Reviewer Assignment
- Sample Records



Infrastructure Cloud

[Register a project](#) [Upgrade projects](#) Recent My projects  



EXTERNAL

PROJECT

205815
SR 32 PDB

Created on: Feb 10, 2025



PROJECT

Lead Des 1900162
x-Testing Contract R-42570 - M...

Created on: Sep 25, 2025



PROJECT

INDOT_Phase 1 BIC
INDOT_Phase 1 BIC

Created on: Feb 19, 2026



PROJECT

Sandbox
BIC Demo Sandbox
Indianapolis

Created on: Jan 20, 2026



PROJECT

Improve 64
Contract R-42570, Lead Des 19...

Created on: Mar 12, 2026



INDOT

DIGITAL DELIVERY
PROJECT TEMPLATE

INDOT Strengthening Indiana's core

PROJECT

BIC Training Template
BIC Training Template

Created on: Nov 24, 2025



PROJECT

Major Projects Template
Major Projects Template

Created on: Jul 28, 2025



PROJECT

2100256
R-43741 - Seymour I-74
Greensburg

Created on: Dec 16, 2025



PROJECT

2100202, R-43798
Contract R-43798 Coliseum BL...

Created on: Jan 5, 2026



EXTERNAL

PROJECT

684082
I70 Pavement Replacement
Indianapolis, IN

Created on: Feb 3, 2026

[All projects >](#)

Infrastructure Cloud

+

Home

Work

Documents

Deliverables

Map

iModels

Dashboard

Carbon Analysis

Project View



Lead Des 1900162

[Contract R-42570 - Major Projects Improve 64 \(ATL and Interchange Reconstruction on I-64 and I-265 in New Alba...](#)

Contract R-42570 - Major Projects Improve 64 (ATL and Interchange Reconstruction on I-64 and I-265 in New Albany)

Wednesday Feb 11

35°F

68° 31°

Sunny

Wind: 5 mph, NNW

Humidity: 89%

THU

46° 25°

FRI

52° 27°

SAT

54° 39°

SUN

56° 31°

My recent activity

- Comment Tracking Form - Copy #CTF-00033

Title sheet

21 hours ago

Viewed
- Comment Tracking Form - Copy #CTF-00036

New location

21 hours ago

Viewed
- Comment Tracking Form - Copy #CTF-00034

Bad plans

21 hours ago

Viewed
- Transmittal Issue #TRA-00005

-

22 hours ago

Modified
- Comment Tracking Form - Copy #CTF-00018

Test PMP - Highlighting

4 days ago

Viewed

iModels

My work

- My work

My role

All

ID: SUB-00003

-

Assigned to: Andrew Pangallo

Status: Unresolved

ID: SUB-00004

-

Assigned to: Andrew Pangallo

Status: Unresolved - draft

ID: SUB-00006

-

Assigned to: Andrew Pangallo

Status: Unresolved

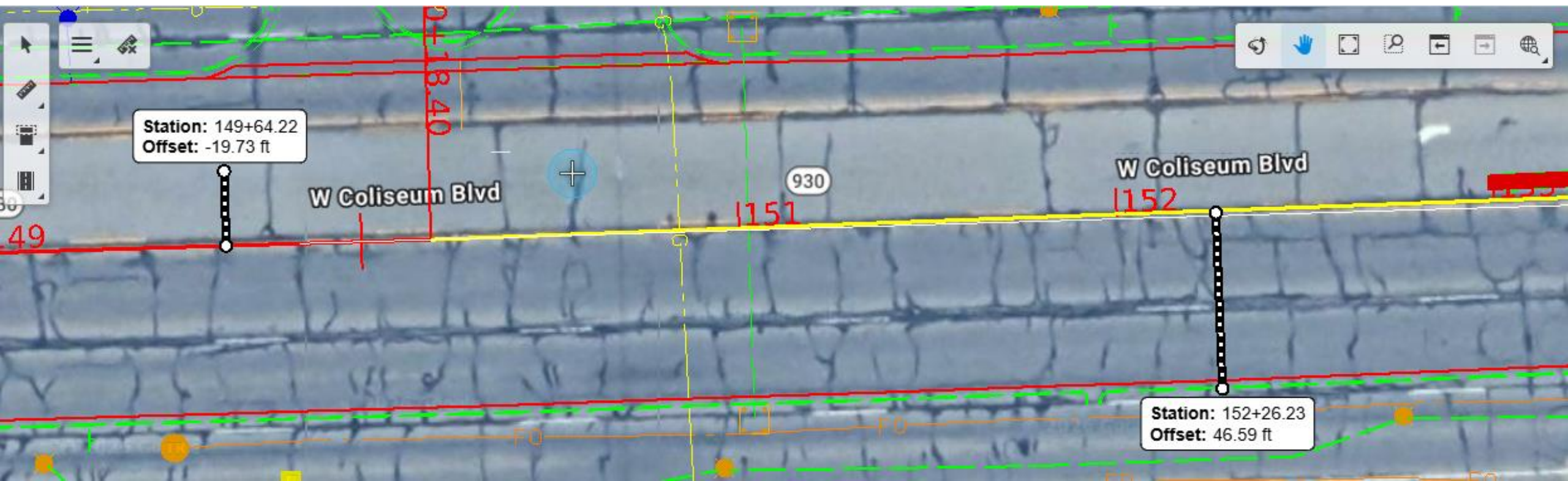
View all

Summary

- My work

All work

Infrastructure Cloud



Status:

Subject:

Brief Description of Changed Condition

Time of Discovery

MM/DD/YYYY h:mm A

Assigned To:

Type of Changed Condition

Description:

Description of Condition - Provide a detailed description of the changed condition, including: Location on the project, Nature of the condition, Circumstances leading to discovery

Estimated Cost Impact

ROM Estimated Cost

Impact Assessment

02/12/2026

Impacted Operations

Impacted Operations (Successors)

Save

Cancel

Construction Conference Test

Edit

Reassign

Escalate

More...

Details

Comments

Audit trail

ID:

NOCC-00001

Status:

Open

Time of Discovery:

Feb 11, 2026, 9:35 AM

Assigned To:

Andrew Pangallo

Type of Changed Condition:

Differing Site Conditions

Description:

Parking Lot curb is icy

Estimated Cost Impact:

50

Impact Assessment:

Feb 12, 2026

Impacted Operations:

Conference Presentation

Controlling Operation Affected?:

Yes

Access:

Users with authorized roles

Related forms

Search and add related forms by ID or subject

Close



<https://www.in.gov/dot/div/contracts/conmemo/22-08.pdf>

Title *

Construction Conference Test

Summary Description and Solution

Parking Lot curb is icy

Onset Date of Change

02/11/2026

Change Order Type

104.02 Changed Condition

Andrew Pangallo

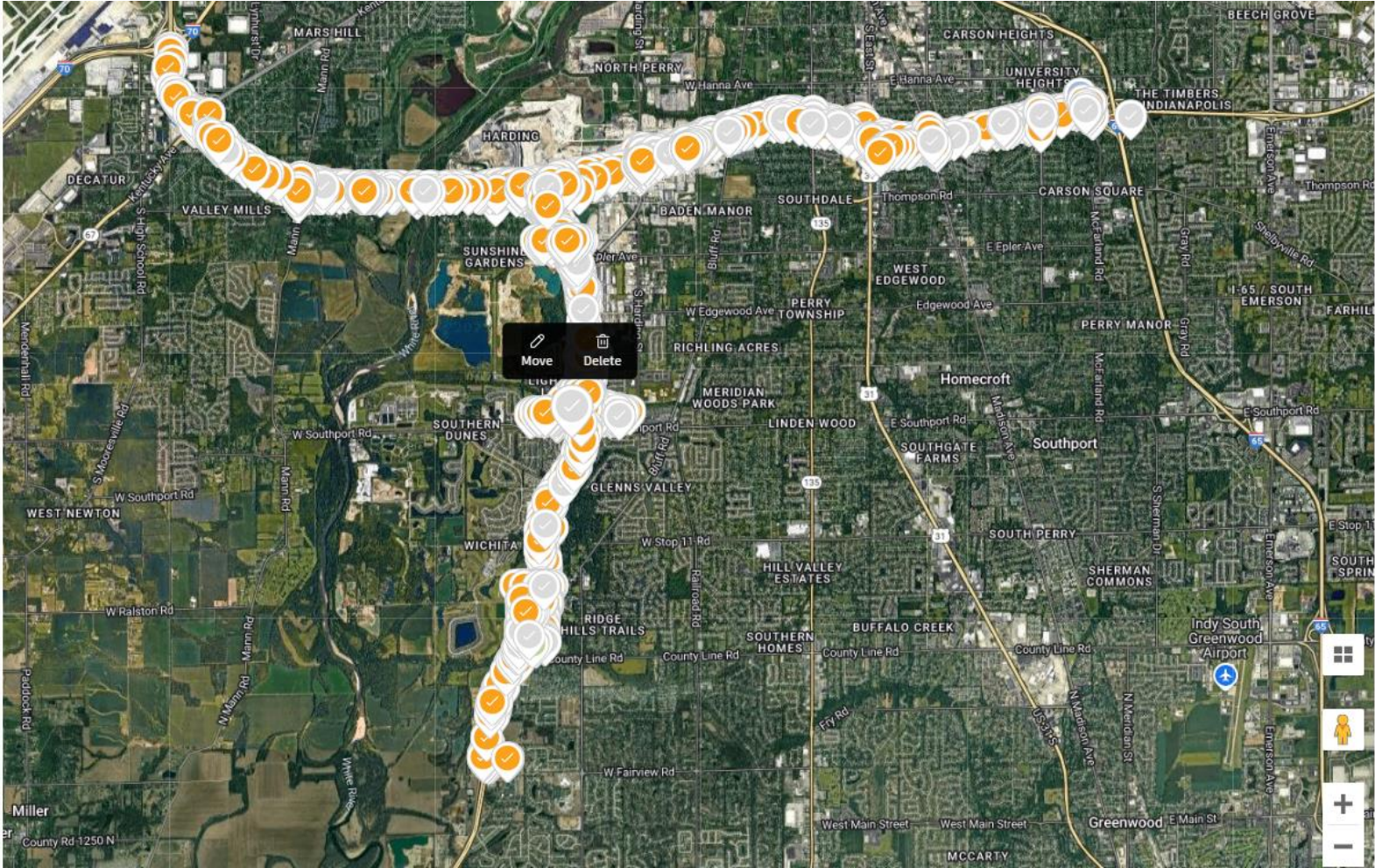
Role: Contractor Project Manager 

Cancel



Workflows/Process/Communication

#156 - Deficiency List	
Open • Deficiency List	
Deficiency List - Milestone	No due date
#155 - Deficiency List	
Open • Deficiency List	
Deficiency List - Milestone	No due date
#154 - Deficiency List	
Open • Deficiency List	
Deficiency List - Milestone	No due date
#153 - Deficiency List	
Closed • Deficiency List	
Deficiency List - Milestone	No due date
#152 - Deficiency List	
Open • Deficiency List	
Deficiency List - Milestone	No due date
#151 - Deficiency List	
Open • Deficiency List	
Deficiency List - Milestone	No due date
#150 - Deficiency List	
Open • Deficiency List	
Deficiency List - Milestone	No due date
#149 - Deficiency List	



39.66366350620304,
-86.19813775263934

Description *

Clean sediment from curb and road.
Repair inlet protection as needed.

Priority

Unspecified

Placement

Unspecified

References (2)

Add references

Photos (2)

IMG_5431
May 28, 2024 10:17 AM

image000000
May 30, 2024 12:49 PM

Attachments



HaulHub



Refresher Training starting mid to late March



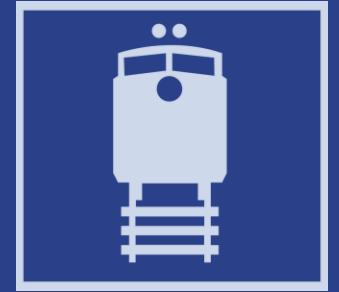
Synced to all AWP and SiteManager Projects



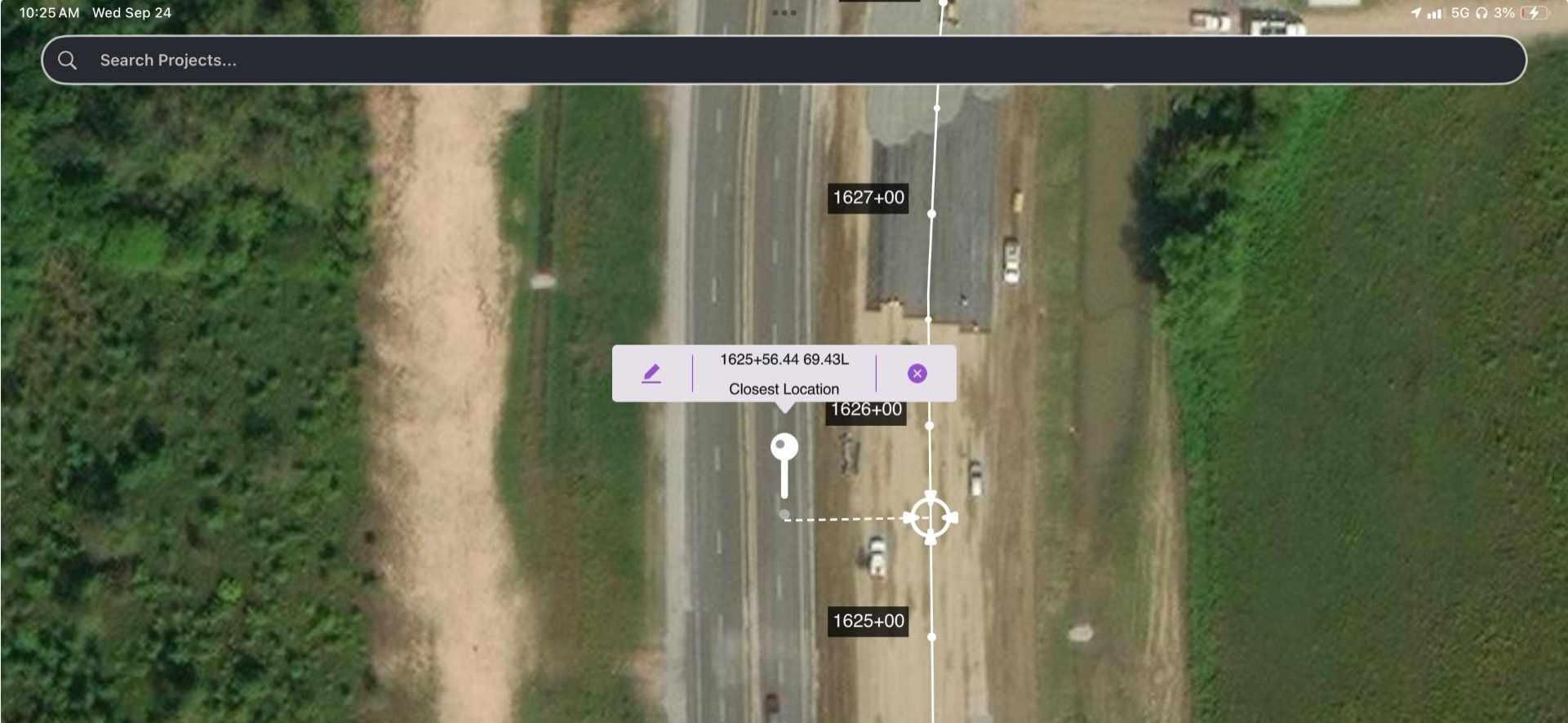
Alignment CAD files export to XML



Manual Stationing via map starting coordinates



Search Projects...



ON I-69 FROM 0.5 MILE S OF FAIRVIEW RD VIA SR 37 TO I-465 AND ON I-465 FROM I-70 TO I-65S

R -41536

Available Stationing

secs ago

I-69

Roadway - Highway, street, intersection

1625+56.44

69.43L

Closest Station to your location

Offset



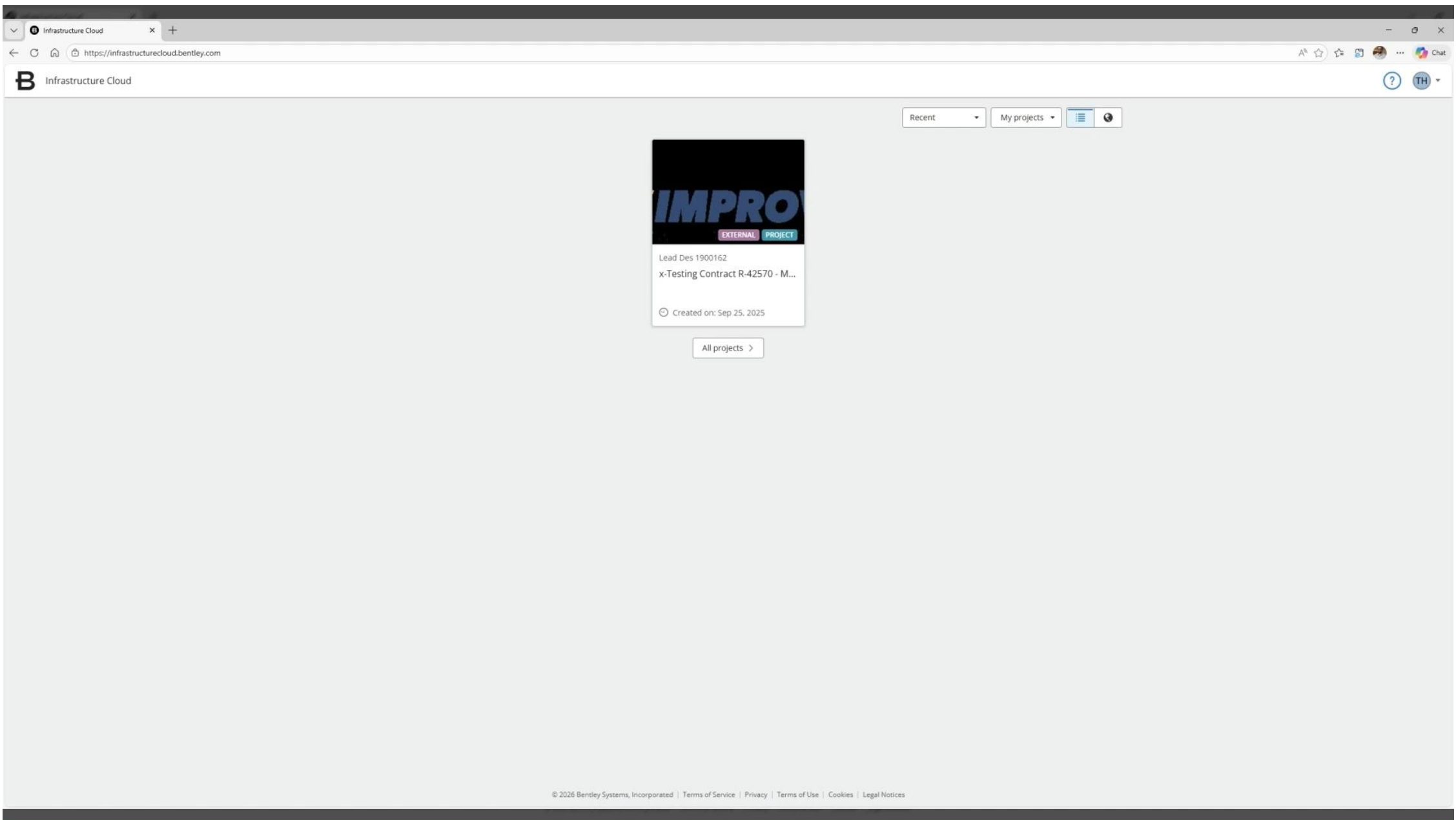
Today



Online



Explore



Infrastructure Cloud

Lead Des 1900162
x-Testing Contract R-42570 - Major Projects Improve 64 (ATL a...

EXTERNALPROJECT

Search any datatype in this project or asset

New

Deliverables Management

ProjectWise Deliverables Management

IncomingOutgoingDrafts

Download responsesShow all types

SearchShow all completed

Subject	Package ID	Classification	Issued	Purpose	Status	Progress	Latest response	Actions
2026 Road School Transmittal Example ID: Lead Des 1900162-TR-0000045 To: Timothy Haney, HNTB Corporation	Lead Des 1900162-TR-0000045	Stage 1	03/09/2026 2:31 PM	Submittal	Acknowledged Due date: 03/11/2026 2:31 PM Responded Due date: 04/08/2026 2:31 PM	Acknowledgements 1 / 1 Responses 1 / 1	03/09/2026 2:38 PM	
Version Compare Transmittal ID: Lead Des 1900162-TR-0000048 To: Timothy Haney, HNTB Corporation	Lead Des 1900162-TR-0000048	Stage 1	03/06/2026 10:09 AM	Design Submittal	Acknowledged Due date: 03/08/2026 11:09 AM Responded Due date: 03/20/2026 11:09 AM	Acknowledgements 1 / 1 Responses 1 / 1	03/06/2026 10:17 AM	
Additional Reviewer Guide Transmittal ID: Lead Des 1900162-TR-0000046 To: Nathan Goins, HNTB Corporation	Lead Des 1900162-TR-0000046	Stage 1	03/04/2026 4:04 PM	Submittal	Acknowledged Due date: 03/06/2026 4:04 PM Responded Due date: 03/18/2026 5:04 PM	Acknowledgements 1 / 1 Responses 1 / 1	03/06/2026 9:06 AM	
BIC_Workflow_0001 ID: Lead Des 1900162-TR-0000034 - C To: Nathan Goins, HNTB Corporation + 1 more	Lead Des 1900162-TR-0000034 - C	DSUB Release for Constr...	02/10/2026 11:12 AM	Design Submittal	Acknowledged Due date: 02/12/2026 11:12 AM Responded Due date: 02/24/2026 11:12 AM	Acknowledgements 2 / 2 Responses 1 / 1	02/10/2026 11:36 AM	
BIC_Workflow_0001 ID: Lead Des 1900162-TR-0000034 - B To: Nathan Goins, HNTB Corporation + 1 more	Lead Des 1900162-TR-0000034 - B	DSUB Stage 3 (STG3)	02/10/2026 10:35 AM	Design Submittal	Acknowledged Due date: 02/12/2026 10:35 AM Responded Due date: 02/24/2026 10:35 AM	Acknowledgements 2 / 2 Responses 1 / 1	02/10/2026 10:53 AM	
BIC_Workflow_0001 ID: Lead Des 1900162-TR-0000034 To: Nathan Goins, HNTB Corporation + 1 more	Lead Des 1900162-TR-0000034	DSUB Stage 1 (STG1)	02/10/2026 9:51 AM	Design Submittal	Acknowledged Due date: 02/12/2026 9:51 AM Responded Due date: 02/24/2026 9:51 AM	Acknowledgements 2 / 2 Responses 1 / 1	02/20/2026 2:08 PM	
Consolidator Test ID: Lead Des 1900162-TR-0000033 To: Nathan Goins, HNTB Corporation	Lead Des 1900162-TR-0000033	DSUB	02/09/2026 2:16 PM	For Review	Acknowledged Due date: 02/11/2026 2:16 PM Responded Due date: 02/23/2026 2:16 PM	Acknowledgements 1 / 1 Responses 1 / 1	02/09/2026 2:34 PM	
Submittal_Transmittal_Issues_00000001 ID: Lead Des 1900162-TR-0000032 - C To: Nathan Goins, HNTB Corporation	Lead Des 1900162-TR-0000032 - C	DSUB	02/09/2026 2:07 PM	Design Submittal	Acknowledged Due date: 02/11/2026 2:07 PM Responded Due date: 02/23/2026 2:07 PM	Acknowledgements 1 / 1 Responses 1 / 1	02/09/2026 2:10 PM	
Submittal_Transmittal_Issues_00000001					Acknowledged Due date: 02/11/2026 1:00 PM	Acknowledgements 1 / 1		

HomeWorkDocumentsDeliverablesMapiModelsDashboardCarbon AnalysisAdministration



AI



AI Geotechnical Report Analysis

📌 Key Variables

Factor	Typical Range	Impact
Soil Type	A-6 (silty clay), A-7-6 (fat clay)	Very slow drying
Initial Moisture Excess	6% above optimum	Moderate to high
Air Temperature	45–70°F	Slows evaporation
Relative Humidity	60–90%	Reduces drying rate
Wind Speed	5–15 mph	Helps drying
Cloud Cover	Frequent in spring	Slows drying
Sunlight Hours	4–6 hrs/day avg.	Limited drying window

🕒 Estimated Aeration Time

Assuming:

- 6% above optimum
- 12-inch lift
- Disked 2–3 times per day
- No rainfall during drying

Weather Conditions	Estimated Time to Reach Optimum
Ideal (sunny, breezy)	2–3 days
Typical spring (cloudy, humid)	4–6 days
Wet spring (rain every 2–3 days)	7–10+ days or infeasible

⚠️ Practical Considerations

- **A-7-6 soils** are highly plastic and retain water—**aeration is often ineffective** beyond 4–5% over optimum.
- **Rain resets progress**—even 0.1" can halt drying.
- **Contractors often switch to lime drying** if drying takes more than 3 days or if rain is forecast.

☀️ Summer Aeration Conditions

Factor	Summer Advantage
Air Temperature	75–90°F → faster evaporation
Sunlight	8–10 hrs/day → sustained drying
Humidity	Lower than spring (esp. July)
Wind	More consistent → helps surface drying
Rainfall	Less frequent than spring

🕒 Estimated Aeration Time (12" Lift, 6% Over Optimum)

Weather Conditions	Estimated Time to Reach Optimum
Hot, dry, breezy	1–2 days
Typical summer	2–3 days
Humid or cloudy	3–4 days
Rainfall during drying	5+ days or reset entirely

⚠️ Important Considerations

- **A-7-6 soils** (fat clays) are still slow to dry even in summer due to high plasticity.
- **Disking 2–3 times per day** is essential to expose moisture.
- **Rain resets progress**—even a light shower can halt drying.
- **Field judgment** is critical—if drying takes more than 3 days, lime drying may be more cost-effective.

AI Recommendations

Area	Expected	What's Likely Missing or Underspecified
Drying Agent Coverage	10–30% of 1.2M CY = 120k–360k CY	Only 500 tons of drying agent (covers ~7,400 CY)
Pay Items	Separate line items for lime (215-01000) or lime kiln dust (215-01100)	Only 217-11917 (Drying Soils for Embankment) is included
Alignment with Geotech Report	Anticipates widespread wet A-6/A-7 soils needing chemical stabilization	CIB does not reflect this in quantity or scope
Contingency Language	Should allow for field-directed stabilization beyond plan quantities	No clear language found (based on prior summaries)
Clarification of Material Type	Should specify if 217-11917 includes lime, cement, or other agents	Ambiguous—needs clarification via RFI

Claim Analysis

Access Date for Parcel 23

- The binding document **Rev 3.pdf** specifies Parcel 23 as an **occupied parcel** with an access date of **January 12, 2022**.

Schedule Validity

- The contractor's initial schedule aimed for demolition of Parcel 23 between **November 10–15, 2021**, which did not align with contractual provisions.

Known Historic Removal Scope

- The contractor's claim regarding unforeseen historic removal tasks is also false. The contract details these requirements, including 3D scanning and specialized procedures, which were priced into the contract.

Lack of Compensable Delay Basis

- The contractor's claim for compensable delay is unfounded, as delays were foreseeable and documented. The contractor did not adjust its schedule to meet known restrictions.

Conclusion

- No time extension or compensation is warranted.

Coming Spring 2026

Goodbye ERMS

Multiple File Upload Tool (MFUT)

Indiana Department of Transportation

Current User : JonathanPauwe

Enter DES number:

Fill from SPMS

Required Properties

DES Number :

Contract Number :

Structure Number :

Current Status :

Document Type :

Road Bridge Indicator :

Designed By :

Design Type :

District :

Managed By :

Optional Properties

Project Number :

Letting Date :

NBI Number :

Ending Reference Post :

Keywords :

Route Number :

Project Stage :

Stimulus Project Indicator :

Review Due Date :

Provision Type :

Location :

Primary DES Number :

Beginning Reference Post :

Comments :

Revision Date :

County :

Final Tracing Type :

Reviewer :

Review Completed Date :

Culvert Asset ID :

Next

Hello Infrastructure Cloud

ProjectWise

DES 1234567

Future Project Structure Testing

Home

Work

Documents

Deliverables

Map

Models

Dashboard

DES 1234567

Future Project Structure Testing

SR 70, 1.15 miles West of SR 66

Sunny

75°F

Wind: 11 mph, SSW

Humidity: 54%

SAT 75° 46°

SUN 57° 30°

MON 58° 43°

TUE 59° 53°

My recent activity

Design Issue #ISS-00002

BCM Test Issue

October 2, 2025

Viewed

Design Issue #ISS-00001

Design Issue test

October 2, 2025

Viewed

More Submittal Testing #SUB-00005

Contracts Detail

October 2, 2025

Viewed

More Submittal Testing #TRA-00004

Management

October 2, 2025

Viewed

More Submittal Testing #TRA-00005

Specification Ambiguity

October 2, 2025

Viewed

My work

My work

My role

All

ID: SUB-00008

Pay Item

Assigned to: Engineer

Status: Unresolved - draft

ID: TRA-00002

Test

Assigned to: Jonathan Pauwe

Status: Unresolved

ID: TRA-00001

Fix-date, not current

Assigned to: Jonathan Pauwe

Due Jul 16, 2024 - 486 days Over - Status: Issue rejected - ...

ID: TAS-00009

Utility Coordination

Assigned to: Jonathan Pauwe

Due Mar 28, 2025 - 121 days Overdue - Status: Draft

View all

Create

Bridge Replacement Stage 2 Checklist

Design Document Review

Design Issue

Design Task

Development Milestone

Level 1 Checklist

iModels

I-69

No content

Summary

My work

Project

17

All open items

0

Open Clash

0

Open Design Issue

1

Open Design Task

0

Open Reviews

3

Open Submittals

13

Open Deliverable Issues

0

Open Deliverable RFI



Digital Delivery Website

- <https://on.in.gov/INDOTDigitalDelivery>

Digital Delivery

[Home](#) [INDOT](#) > [INDOT](#) > Digital Delivery

Digital delivery in transportation refers to a **model-based project delivery method** that replaces traditional 2D paper plans with **3D-engineered models and structured data** as the primary source of truth throughout the project lifecycle. Instead of static PDFs, contractors, designers, and inspectors work from integrated digital models that include geometry, attributes, and linked documentation. This approach enables:

- **Improved design quality and visualization** (e.g., seeing road and bridge designs together in 3D).
- **Better collaboration and communication** across design, construction, and asset management.
- **Reduced change orders and RFIs**, lowering project costs and delays.
- **Enhanced asset management** through digital as-builts and lifecycle data integration.
- **Data-driven decision-making** and automation for quantity takeoffs, cost estimation, and GIS integration



Getting Started

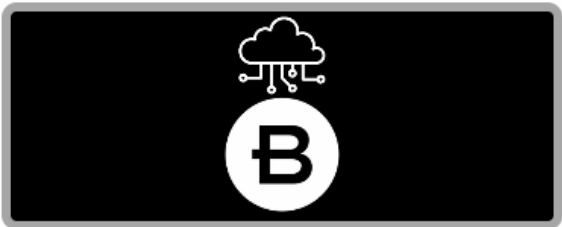
Bentley®
REGISTRATION

[Click Here to Register](#)



Digital Delivery Website

Trainings



Infrastructure Cloud Overview

[Click Here](#)



Infrastructure Cloud Project
Collaboration

[Click Here](#)



YouTube Bentley Training

[Click Here](#)



ProjectWise Deliverables Management
Portal Help

[Click Here](#)

[CLICK HERE TO SUBMIT FEEDBACK ABOUT DIGITAL DELIVERY](#)

Frequently Asked Questions

What is Digital Delivery?

+

Why are DOTs adopting Digital Delivery?

+

What are the benefits?

+

Who is impacted?

+



Bentley Access

- INDOT user access
- Use ITAP application

Home » Enroll New Application

Application Enrollment – Select Application

☐ PSCS Portal

☐ Project Close Out

☐ Project Commitments

☐ Project Scoping Application

☐ Projector

☒ ProjectWise

☒ DOTWise

☐ Public Works Application

☐ Railroad Application

☐ Research and Development Testing Website

Requesting ProjectWise Access and the DOTWise Project Creator

To request access to ProjectWise and the DOTWise Project Creator, you must do so via the ITAP system (<https://itap.indot.in.gov>). The process varies slightly if you already have access to the application(s), and just need to request additional roles for them. These processes are explained in the next section.

2.1 Requesting Access to New Applications

This section explains how to request access to a new application.

1. A User may request access to a new INDOT application from either the ITAP home page or from the ITAP menu. From the ITAP home page, click on the Enroll New Application link. From the ITAP menu, click on the Menu button and then select the Enroll New Application link under Application.

