NORTH CAROLINA
Department of Transportation

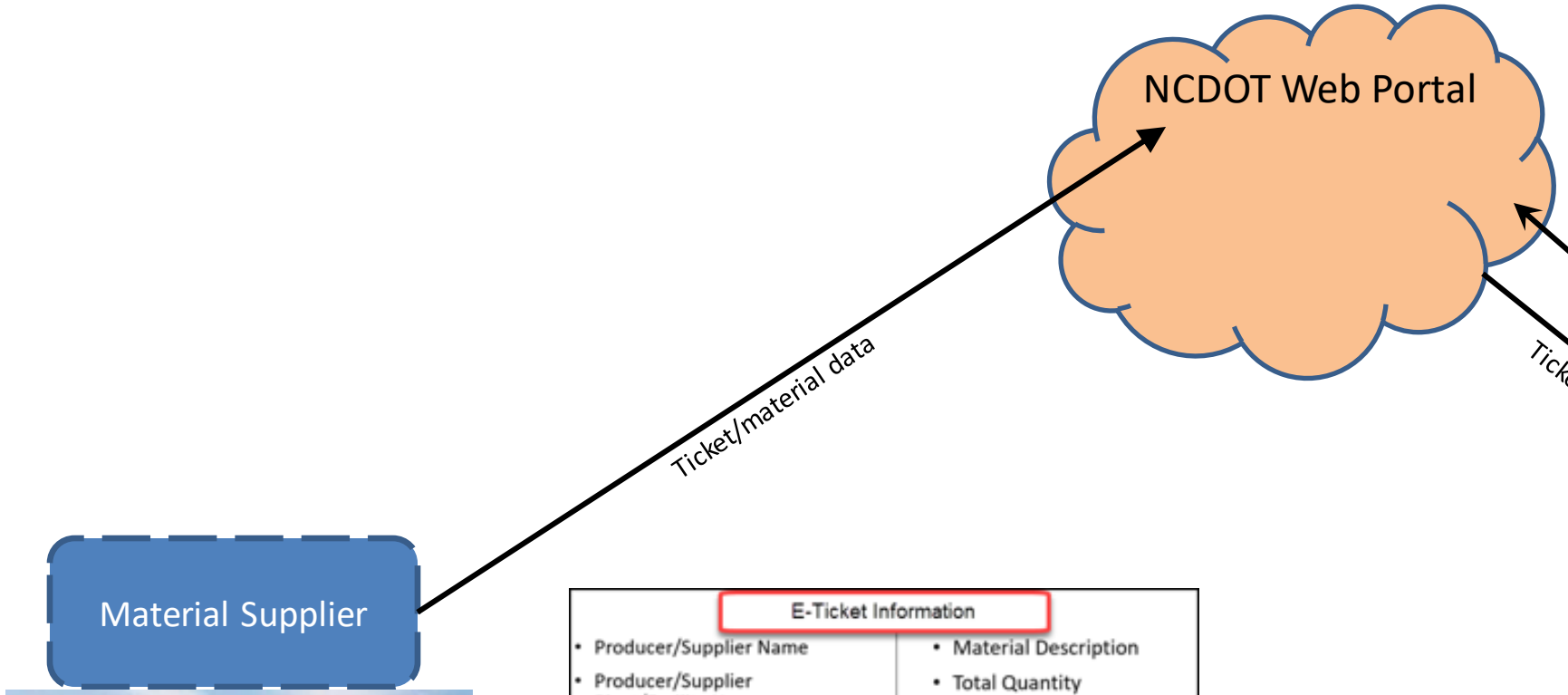
E-Ticketing / Technology Update

Bryan Edwards, PE

E-Ticketing Update

E-Ticketing Strategy Updates

Option 1: E-tickets sent to NCDOT system in real time via API



Currently piloting this Option in Division 5

E-Ticket Information

- Producer/Supplier Name
- Producer/Supplier Plant/Facility Name
- Plant Type
- Plant Number
- Producer/Supplier Ticket Number
- Producer/Supplier Project Number
- NCDOT Contract Number
- Ticket Date
- Ticket Time
- Material Description
- Total Quantity
- Truck Number
- Load Number
- Job Mix Formula (for asphalt only)
- Weighmaster Certification #
- Weighmaster Name
- Weighmaster Expiration Date

NCDOT Inspector

E-Ticketing Strategy Updates

Option 2: QR Code used to facilitate e-ticketing

(where coverage is limited)

HARRISON
A CRH COMPANY

Murphy Asphalt Plant

Murphy, NC

WARNING: SEE BACK OF TICKET FOR SPECIFIC PRODUCT WARNINGS.

TICKET # 38275

Date: 6/16/21 Time: 10:30 am Plant: AS221

Customer: 201818
WNC Paving Inc
PO Box 896
Waynesville, NC 28786-0896

Job: 1902
NCDOT DN00667

Phase: 1

Carrier: 999 None- Pickups
Truck ID: 55 **Axles:**
License:

PO #: NCDOT DN00667

Zone: 0

Product: 49886 NC S9.5C With Rap
JMF: 18-0797-151

Temp:

*** Simulated Delivery ***

1 /LDS Today	15 /LDS To Date
9.55 Tn	138.43 Tn
8.66 Mg	125.58 Mg

Max Legal Gross	Gross	Tare	Net
56,500 Lb	40000*lb	20900 lb	19100 lb
	20.00*Tn	10.45 Tn	9.55 Tn
* = Manual Weight	18.14*Mg	9.48 Mg	8.66 Mg

CA1 06/30/2021
CTF8 06/30/2021

Weighmaster: Derrick Stiles 45013
Lab: 06/30/2021

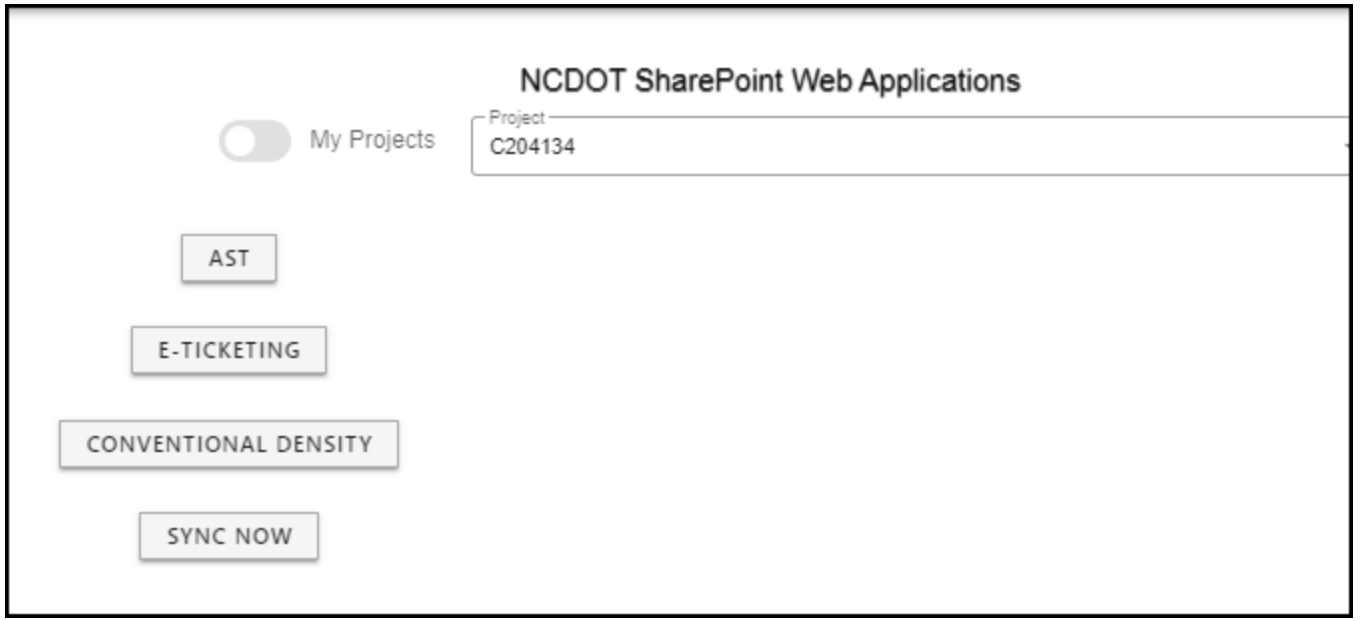
Weighmaster:

Received By:

Currently piloting this Option in Division 14

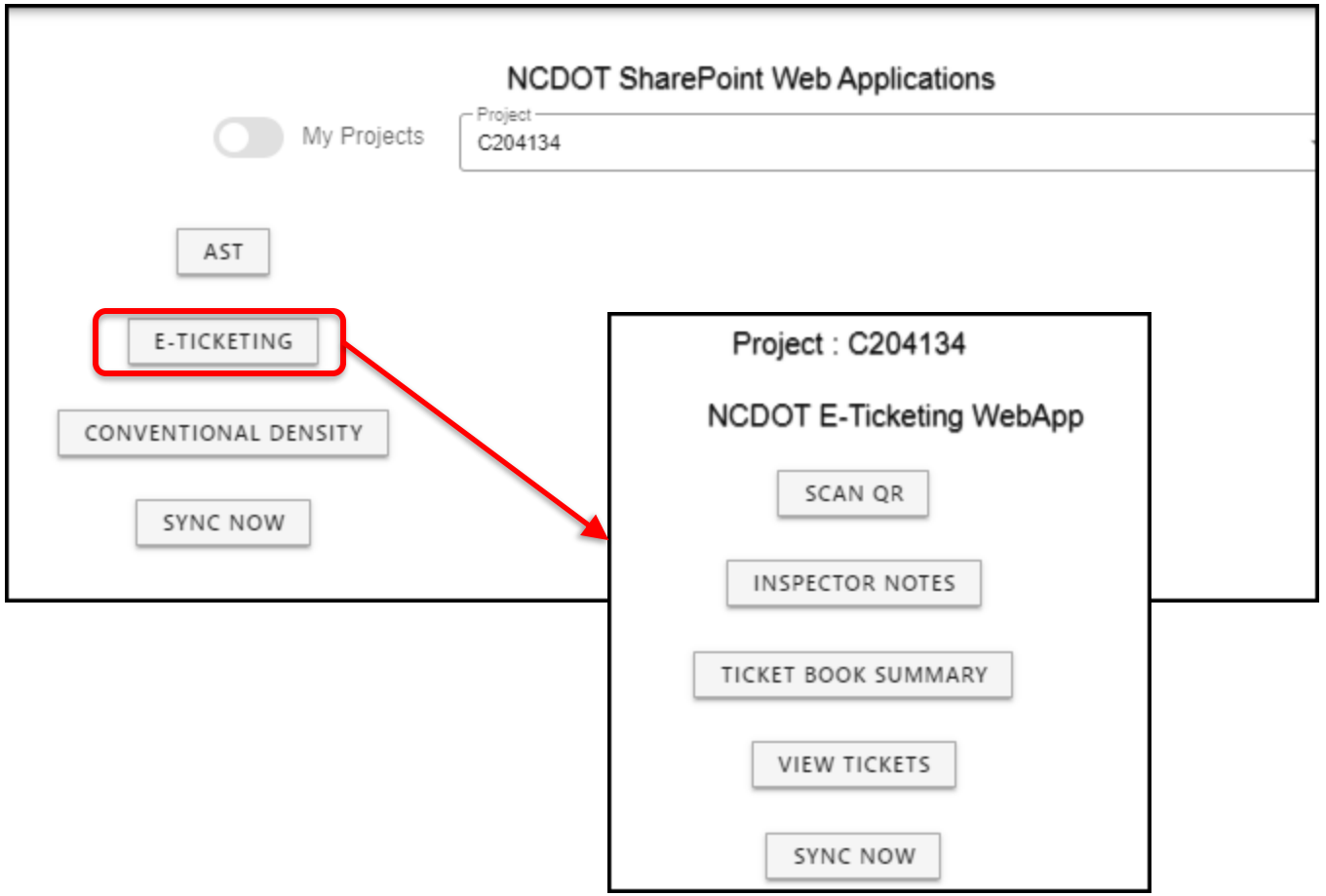
E-Ticketing Web Application

Inspector Application (iPad)



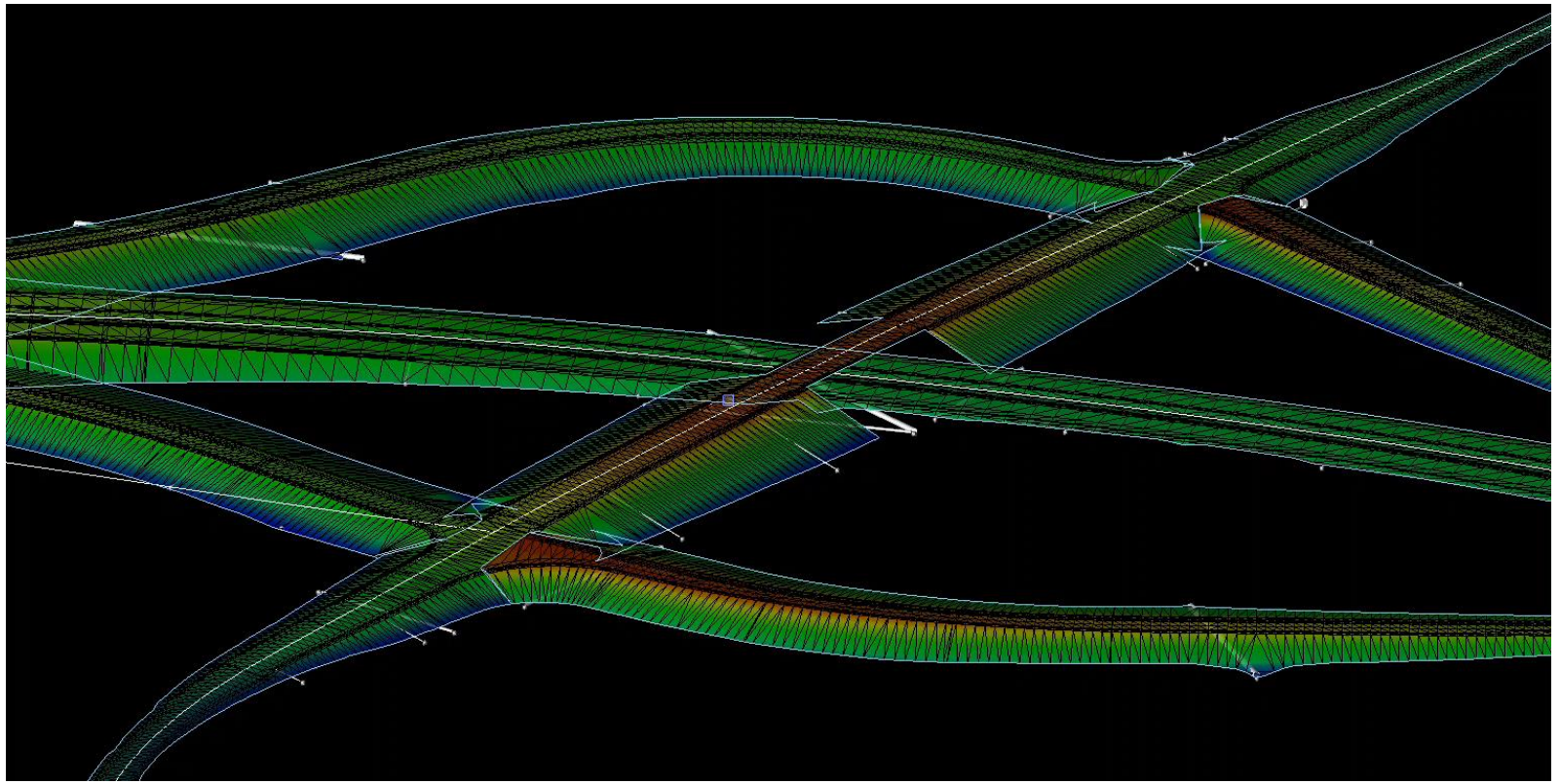
E-Ticketing Web Application

Inspector Application (iPad)



NCDOT OpenRoads Designer (Construction)

OpenRoads Designer Update (ORD)

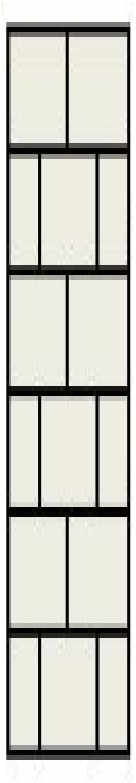


What do we do today ?

PreConstruction

2d Plan Set
(Plans, Profile, XSC)

3d Grading Model ?
(only surface)



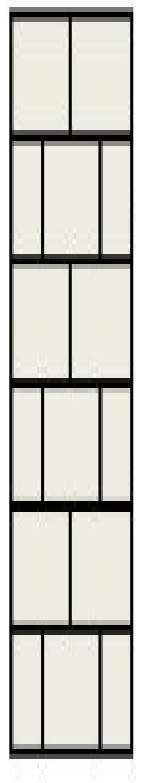
Construction

PDF Files

SharePoint Project Site

Redline Markups of PDF Files

SharePlus/
Bluebeam/
Adobe



Asset Mgt

Redline Markups of PDF Files

New Asbuilts: SharePoint
Gwynn: Shared Drive

How will ORD change this?

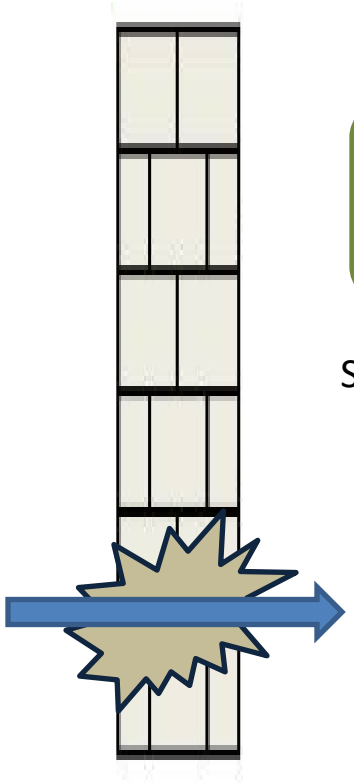
PreConstruction

2d Plan Set
(Plans, Profile, XSC)

3d Grading Model ?
(only surface)

3d Model
(features, pipes, data)

Tools: ORD
Applications: PW



Construction

PDF Files

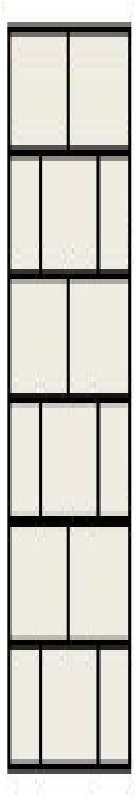
SharePoint Project Site

Redline Markups of PDF Files

SharePlus/
Bluebeam/
Adobe

3d Model
(features, pipes, data)

Tools?
Applications?



Asset Mgt

Redline Markups of PDF Files

New Asbuilts: SharePoint
Gwynn: Shared Drive

How are Field Changes Documented ?

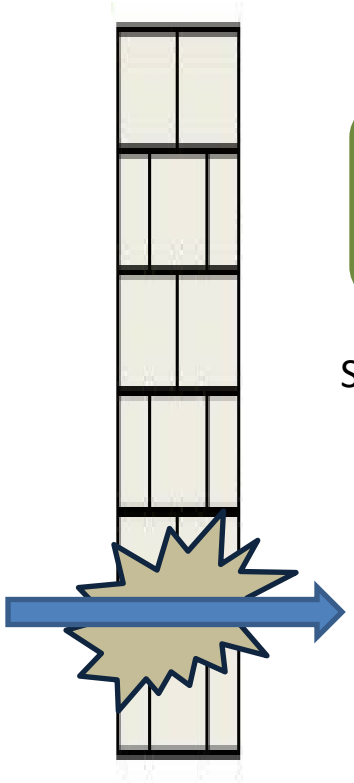
PreConstruction

2d Plan Set
(Plans, Profile, XSC)

3d Grading Model ?
(only surface)

3d Model
(features, pipes, data)

Tools: ORD
Applications: PW



Construction

PDF Files

SharePoint Project Site

Redline Markups of PDF Files

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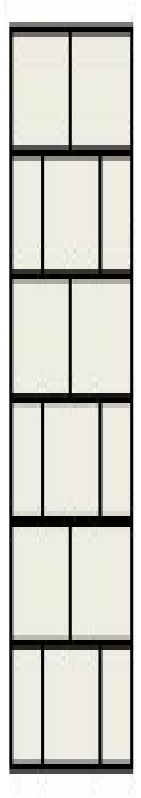
Bluebeam/
Adobe

3d Model
(features, pipes, data)
With Corrections

Field changes documented in the model ?



Asset Mgt

Redline Markups of PDF Files

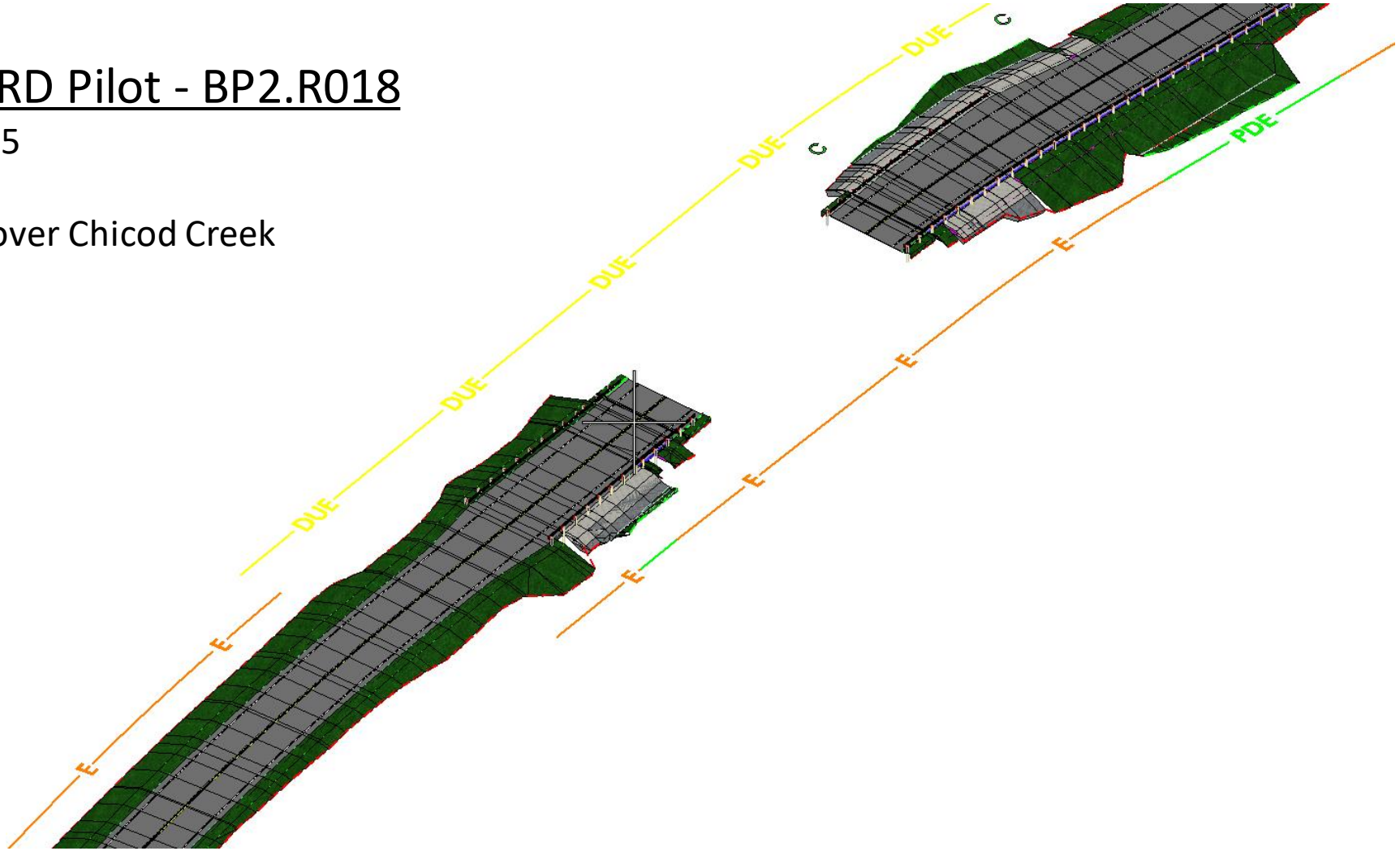
New Asbuilts: SharePoint
Gwynn: Shared Drive

The Future is Here !

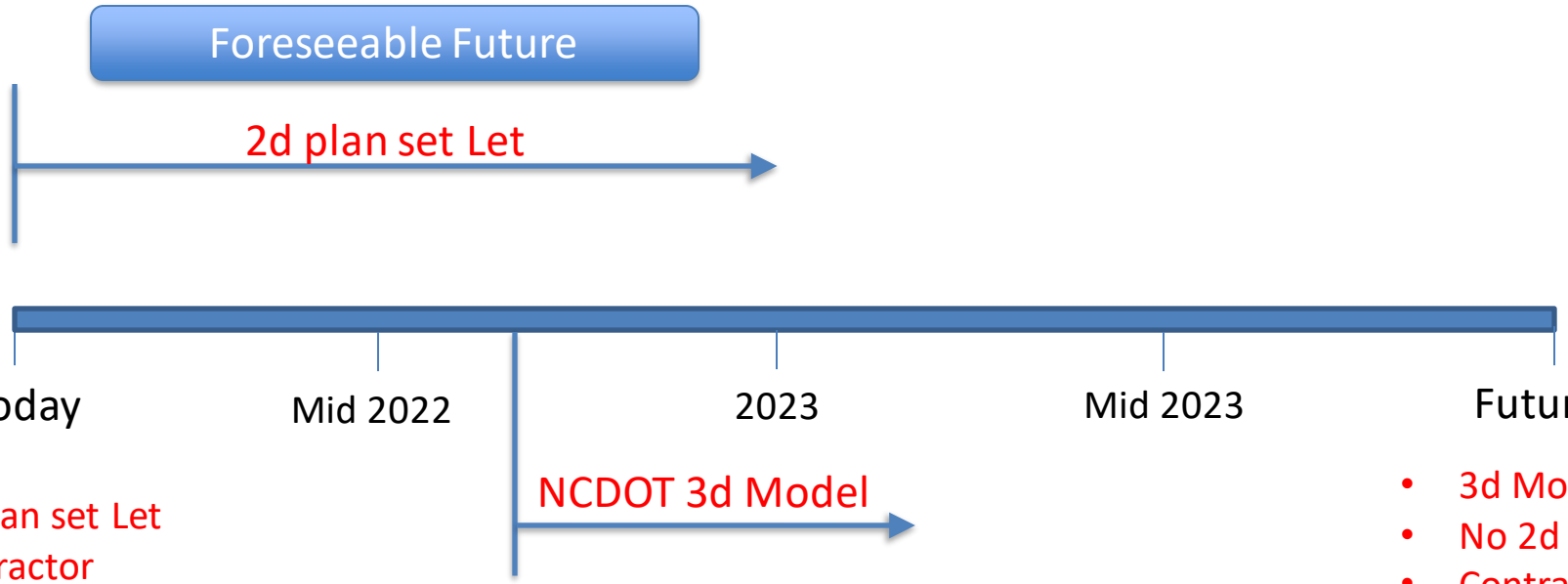
First NCDOT ORD Pilot - BP2.R018

LET Date: March 15

Replace Bridge 15 over Chicod Creek
Pitt County



When will ORD changes take place ?



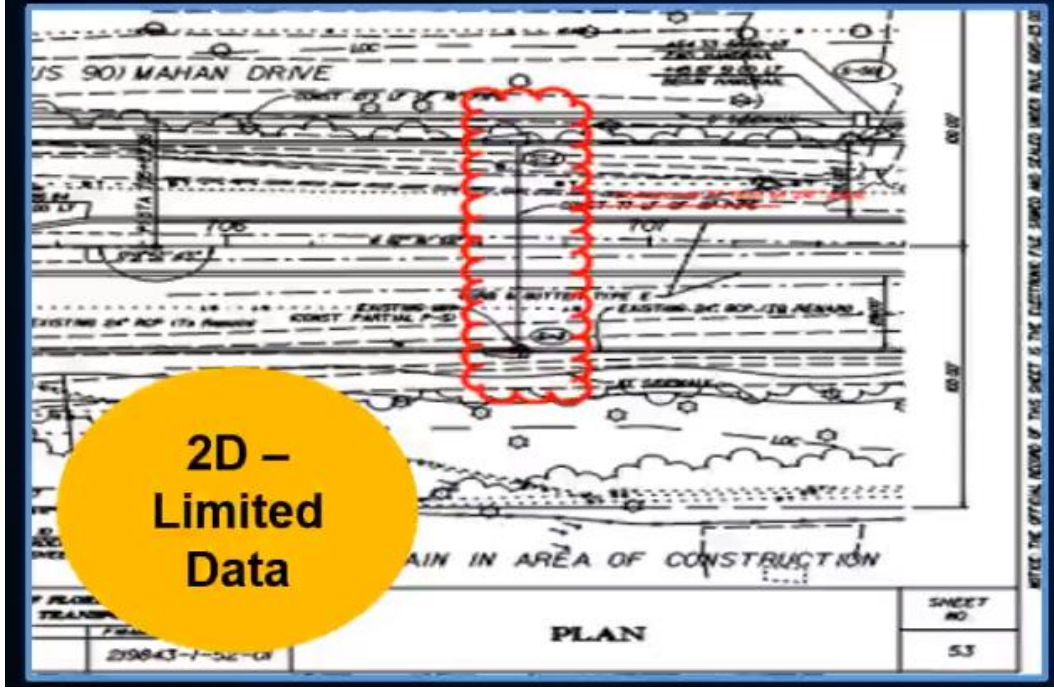
- 2d plan set Let
- Contractor Builds own model

- 3d Model Let
- No 2d plans
- Contractor used 3d model by NCDOT

Pathway to 3D Model

Replace this:

DESIGN → CONSTRUCTION → O & M



With this:

DESIGN → CONSTRUCTION → O & M