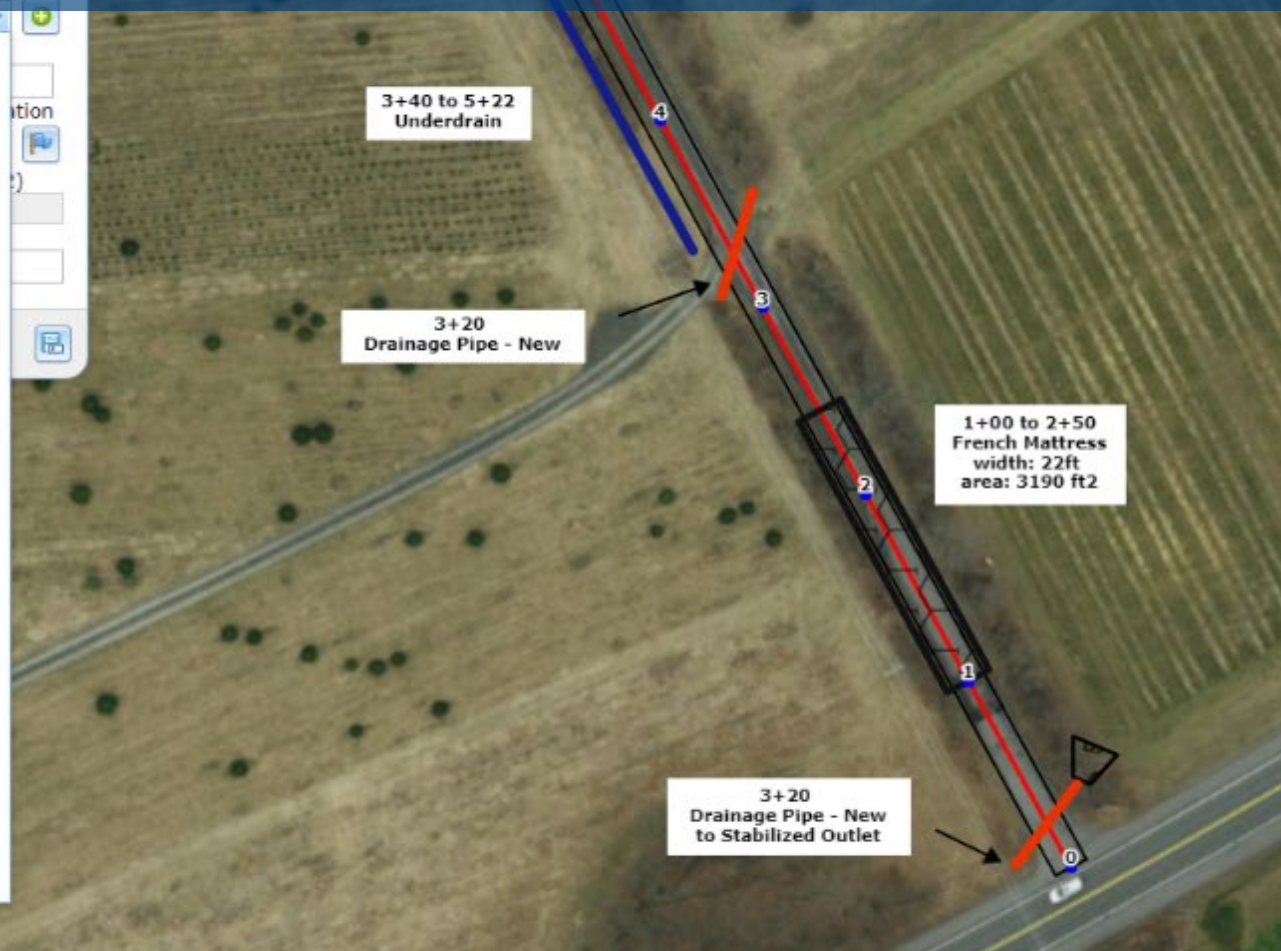


# GIS Project Sketcher Application

Dirt Gravel and Low  
Volume Road Program

**WEBINAR**  
6/13/23  
Starts 9am

- Select a type
- Bank Stabilization
- Ditch - Armored
- Ditch - Reshape
- Ditch - Rock Lined
- Diversion Swale
- Drainage Pipe - Existing
- Drainage Pipe - New
- Drainage Pipe - Replace
- Drop Inlet
- French Mattress
- Geotextile - Fabric
- Geotextile - Grid - Cell
- Grade Break - BBDip
- Headwall\_Endwall
- Infiltration Feature
- Misc - Line
- Misc - Point
- Misc - Polygon
- Outlet Protection
- Pavement - Sealed Surface
- Road Fill
- Storm Water Basin
- Stream Crossing - Existing
- Stream Crossing - Replace
- Turnout
- Underdrain



**CDGRS**

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Mike Anderson: Spatial IT

If you are reading this, then you are successfully seeing the webinar video. Webinar audio should be automatic through your computer (or click “join audio”), and options can be accessed in the “audio options” button on the bottom left. If your computer audio is not working, you can listen on your phone by dialing 312-626-6799.



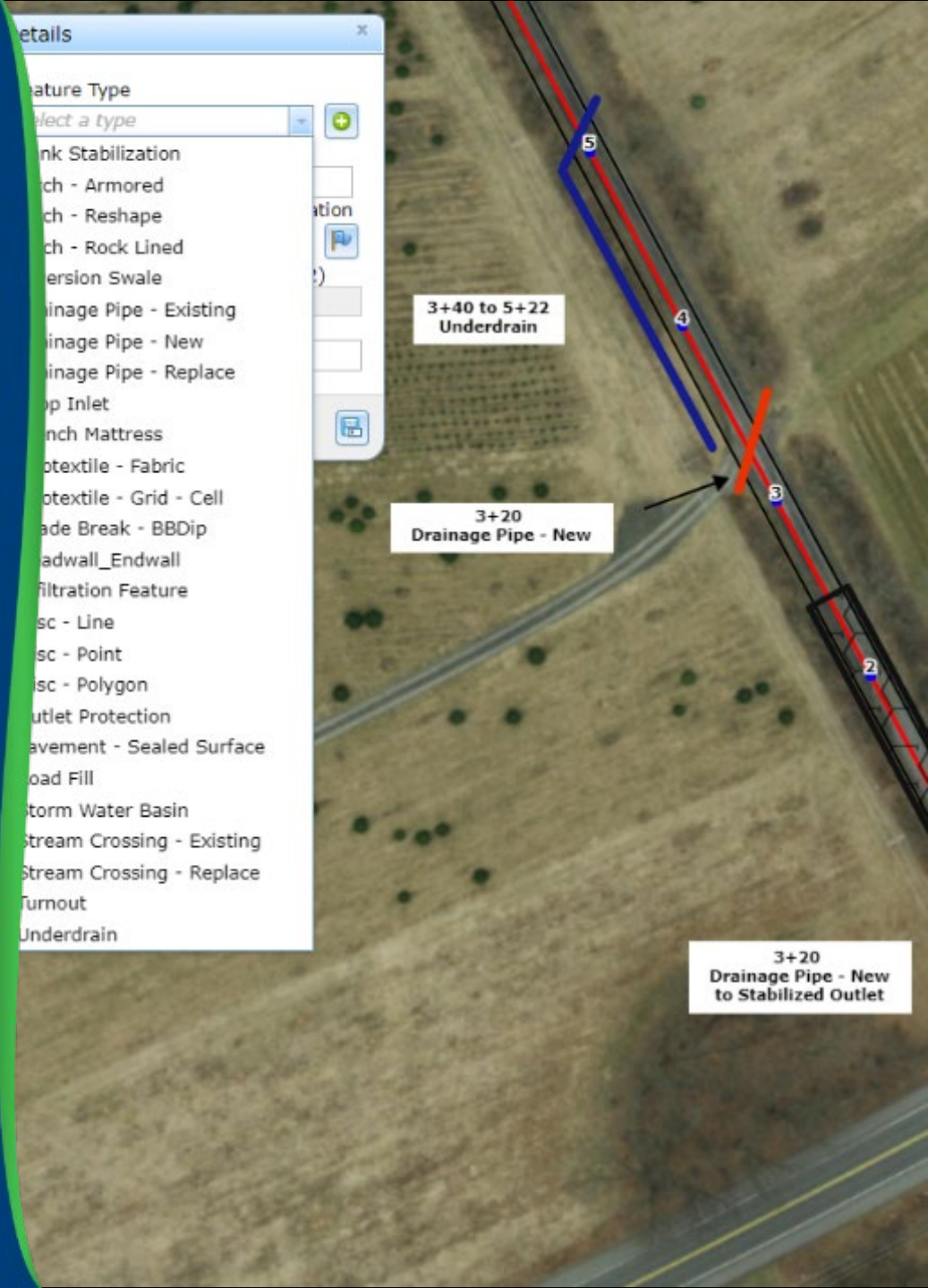
# GIS Project Sketches

## Purpose

Mini-training and walkthrough of Project Sketcher App

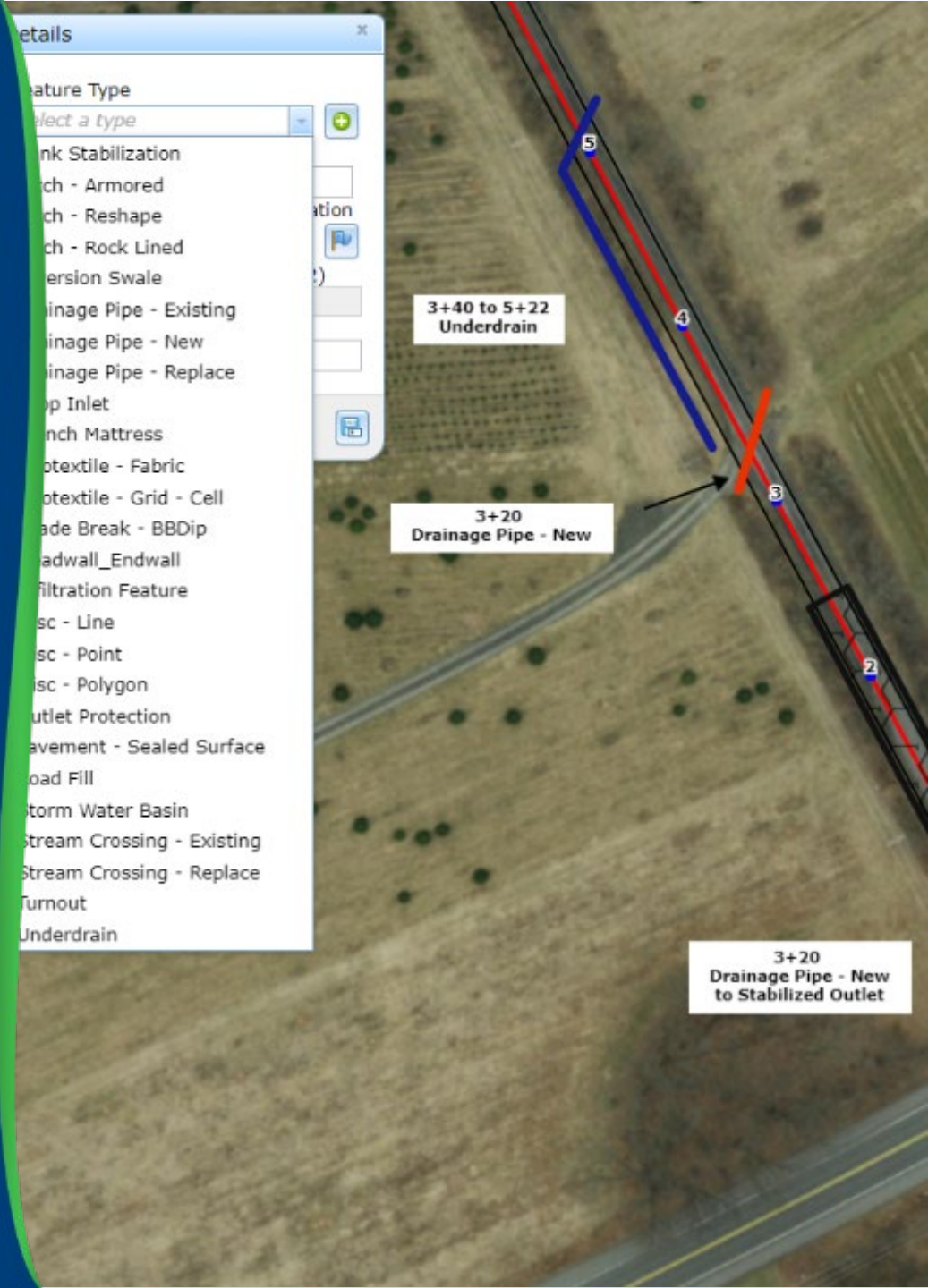
Sketcher is now available to CDs

Still want feedback



# GIS Project Sketches

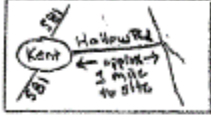
- **Background and Status**
- **Demonstration**
- **Moving Forward**



## Project Sketches

- Show location of project deliverables such as pipes, turnouts, DSA, etc.
- Required as part of workplan, become part of contract.
- Most still done by hand:
  - Some fancy...

Any Mountain Road  
Dirt and Gravel Road Project 2014  
Every Township, Your County  
Sketch AMR. I  
Not to Scale



Hollow Road

00+00 Remove + Replace pipe  
40' x 18" BPSB pipe

Poor Boy Road  
Base Improvement  
with PennDOT 2A

03+52 New 30' x 15"  
BPSB pipe

06+22 New 30' x 15"  
BPSB pipe

Any Mountain Road

10+93 Remove + Replace pipe  
20' x 18" BPSB pipe

13+16 New 30' x 15"  
BPSB pipe

14+09 Existing Stream pipe

15+42 Existing pipe

- Install three new pipes (15" Black Plastic Smooth Bore) and replace two pipes (18" Black Plastic Smooth Bore)
- Install Headwalls + Endwalls on all pipes
- Grade existing road to a 4% center-crown (1/2" of fall per 1' road width)
- Paver place DSA to a uniform loose depth of 6" to 6' wide. Reflect center-crown built into base. Compact with vibratory roller (minimum 10 ton).
- Keep pipes as shallow as practical and ensure a minimum of 2% fall from inlet to outlet.
- Grade wide - shallow ditches with continuous fall
- Stabilize areas of roadside disturbance with contractor mix grass seed + mulch

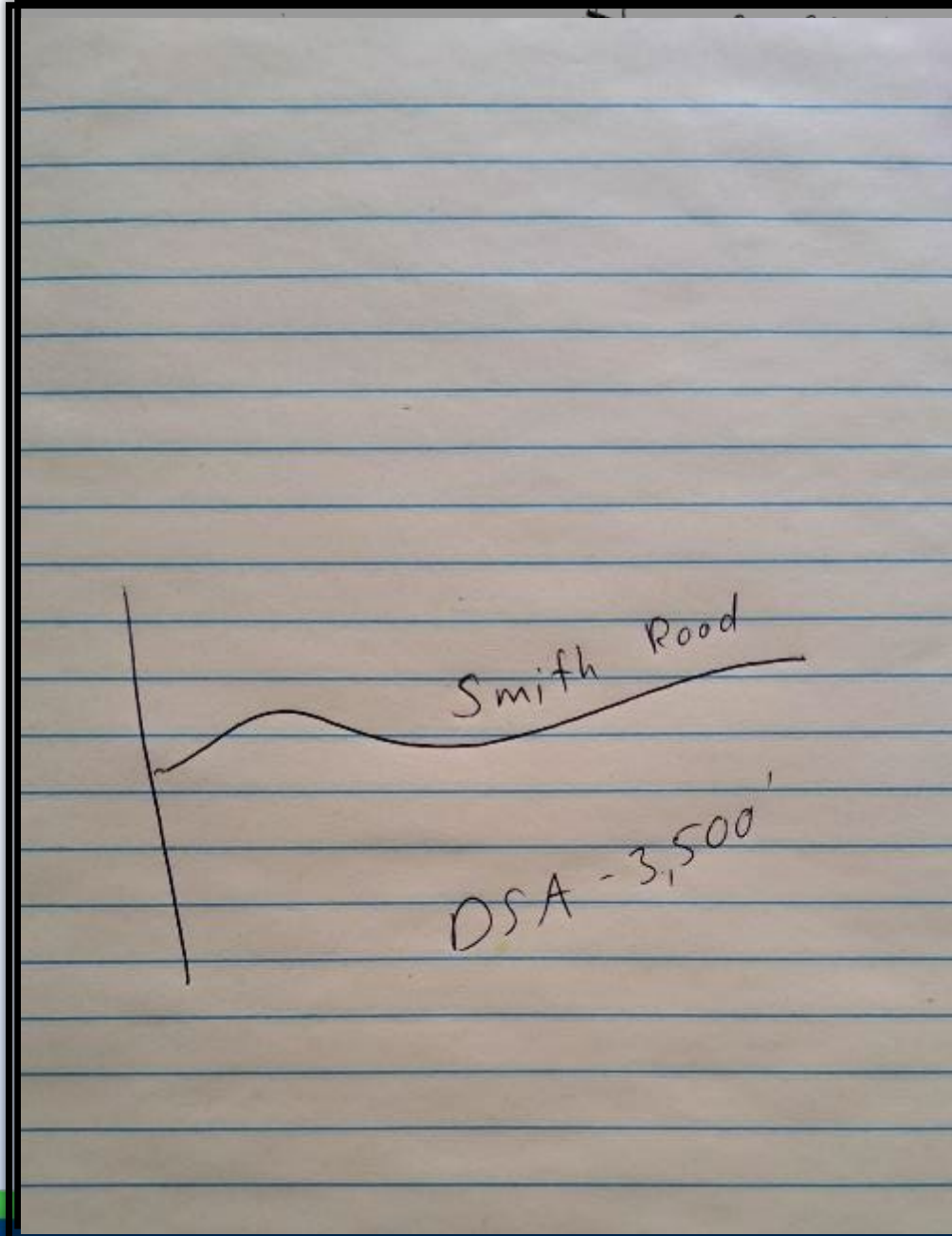
Materials Estimate:

- 18" Dia. Smooth Bore Pipe - 60' @ \$8.50/ft = \$510.00
- 15" Dia. Smooth Bore Pipe - 100' @ \$7.00/ft = \$700.00
- Driveway Surface Aggregate - 740 tons (paver placed + compacted)
- 2A Aggregate for Poor Boy Road (approx 5 tri-axle loads)
- 2RC Aggregate - 45 tons (approx 2 tri-axle loads)
- Grass Seed + Straw Mulch = \$61.00
- Dimensional Well Stone - 2 pallets = \$300.00
- 2A @ 12.00/ton = \$1,320.00
- DSA @ 22.00/ton = \$16,280.00
- 2RC @ 11.00/ton = \$495.00

Total Materials Estimate = \$19,666.00

## Project Sketches

- Show location of project deliverables such as pipes, turnouts, DSA, etc.
- Required as part of workplan, become part of contract.
- Most still done by hand:
  - Some fancy...
  - Some not...



## 2022 Workshop Session

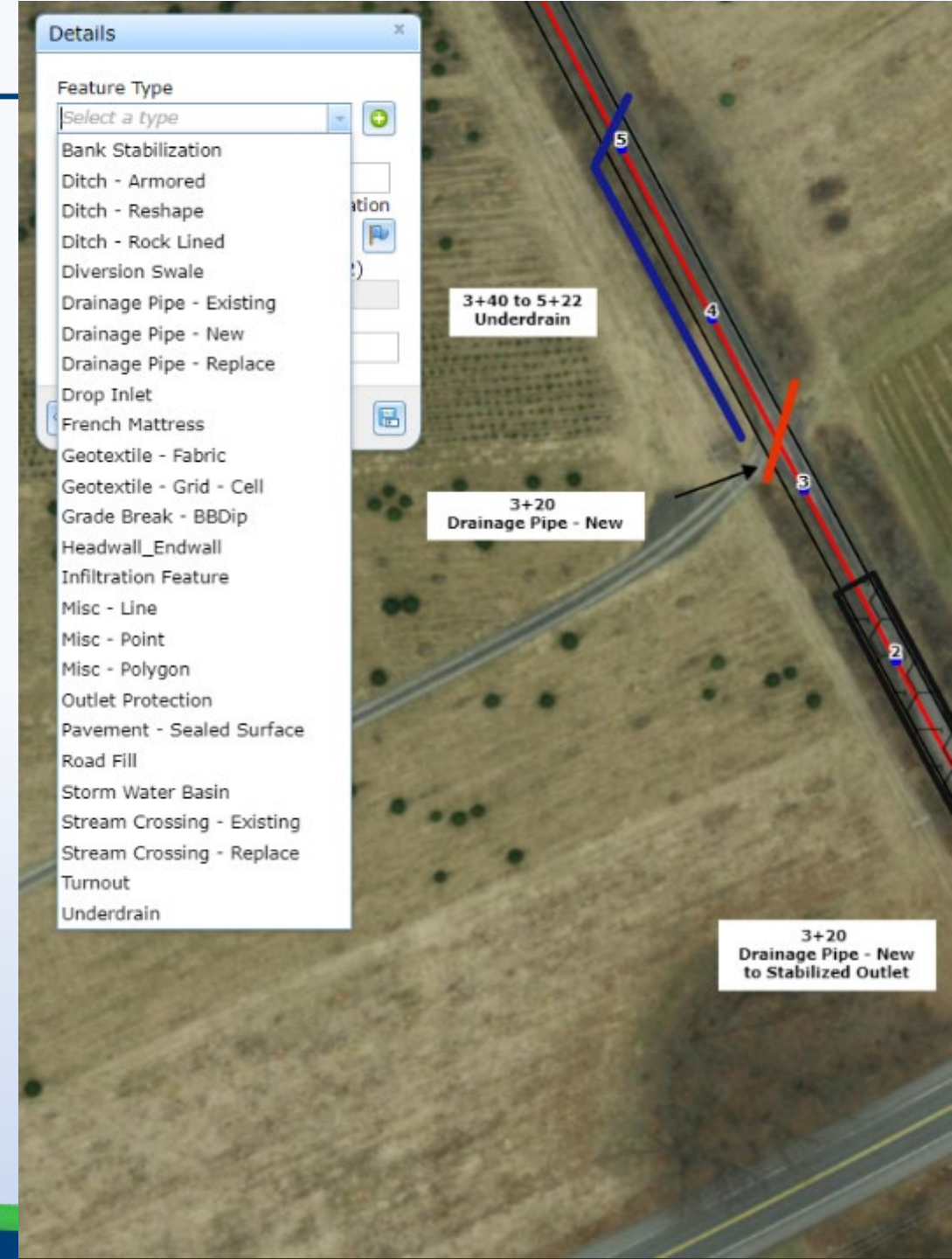
- Several Counties and CDGRS staff shared tools they use to create workplans
  - Aerial images, text and graphics in word/ppt
  - Other software
- Good discussion and feedback on possibilities to incorporate into DGLVR GIS system



# GIS Project Sketches

## Since Workshop

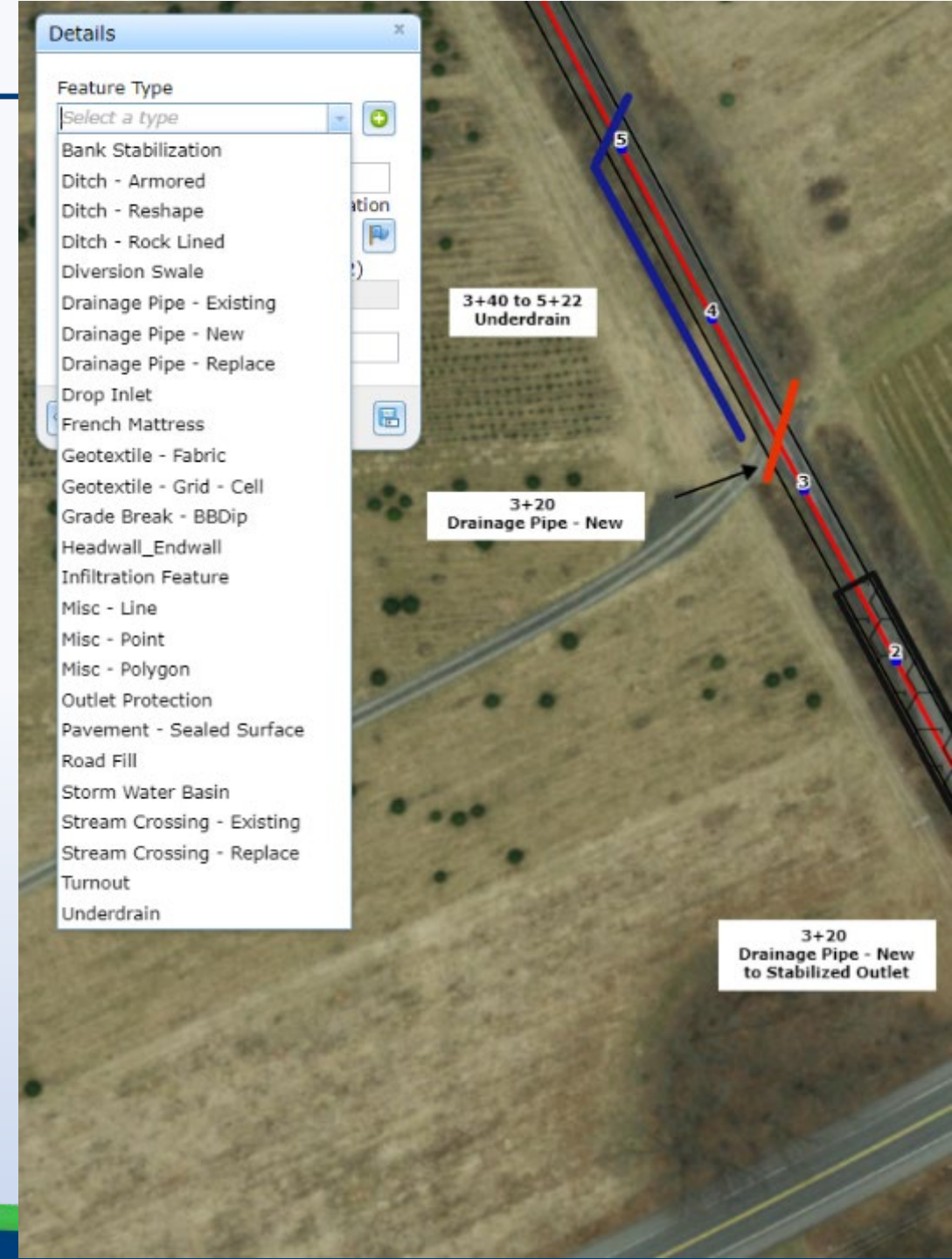
- CDGRS has been working with programmer to develop application
- Small “testing group” established, met several times, given access to program
- Today: available for all CDs



# GIS Project Sketches

## Since Workshop

- CDGRS has been working with programmer to develop application
- Small “testing group” established, met several times, given access to program
- Today: available for all CDs
- **Note: Sketcher is at about 90% complete, we still want feedback**

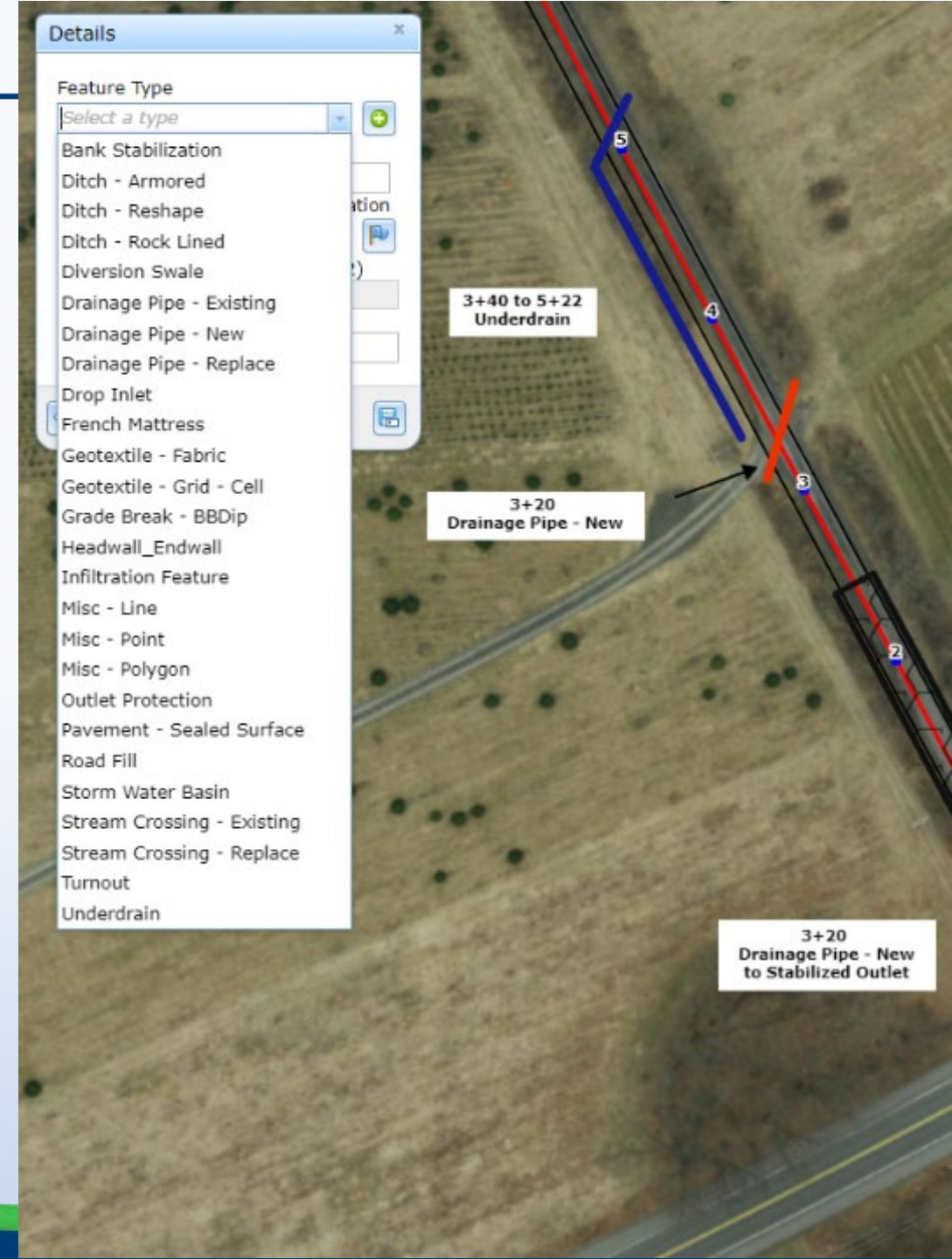




# GIS Project Sketches

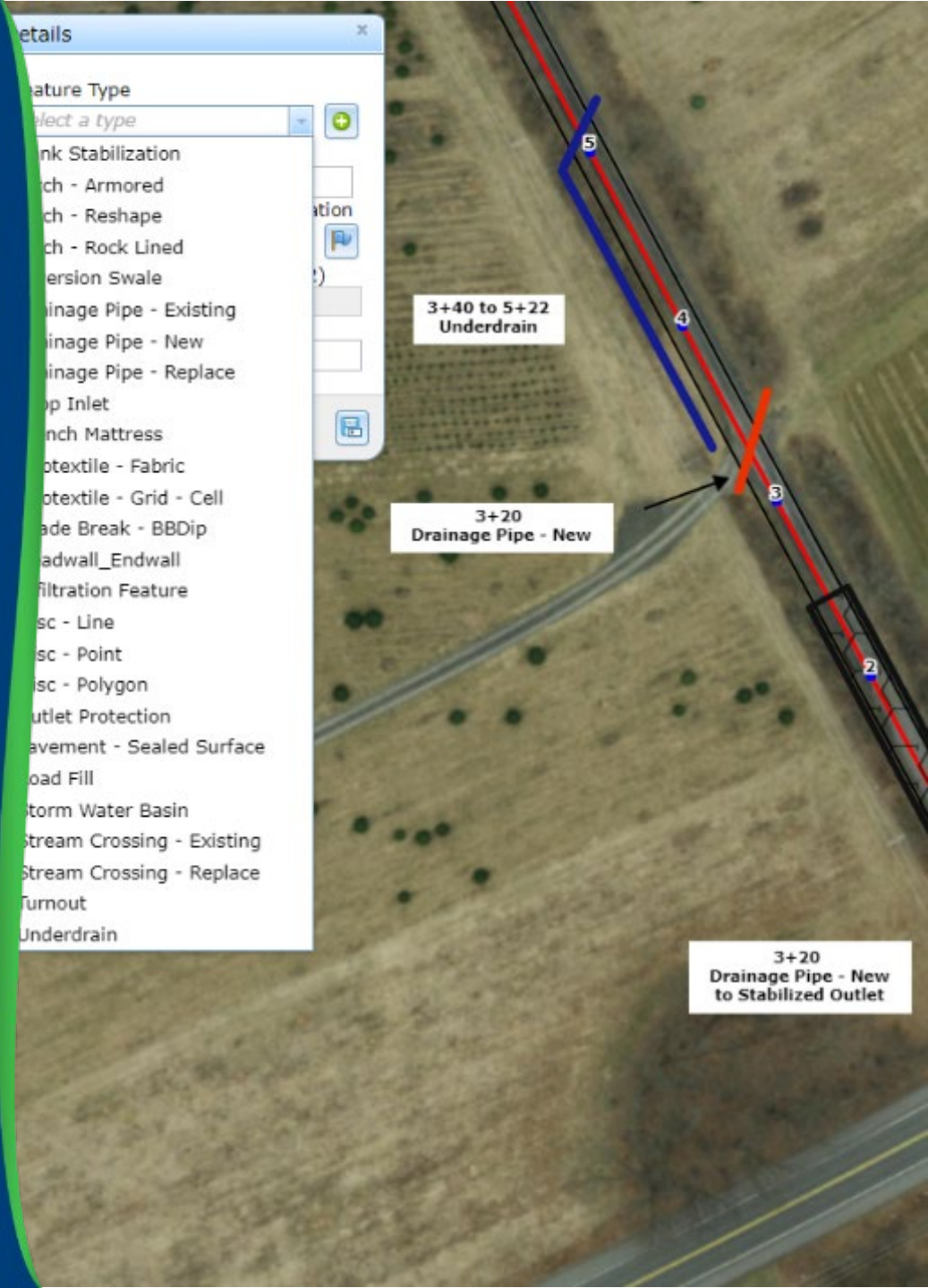
## Since Workshop

- Separate App from “GIS Mapper”
  - Login through CDGRS website
  - Separate App reduces clutter in mapper
  - Separate App did not risk adding glitches to financial tracking system



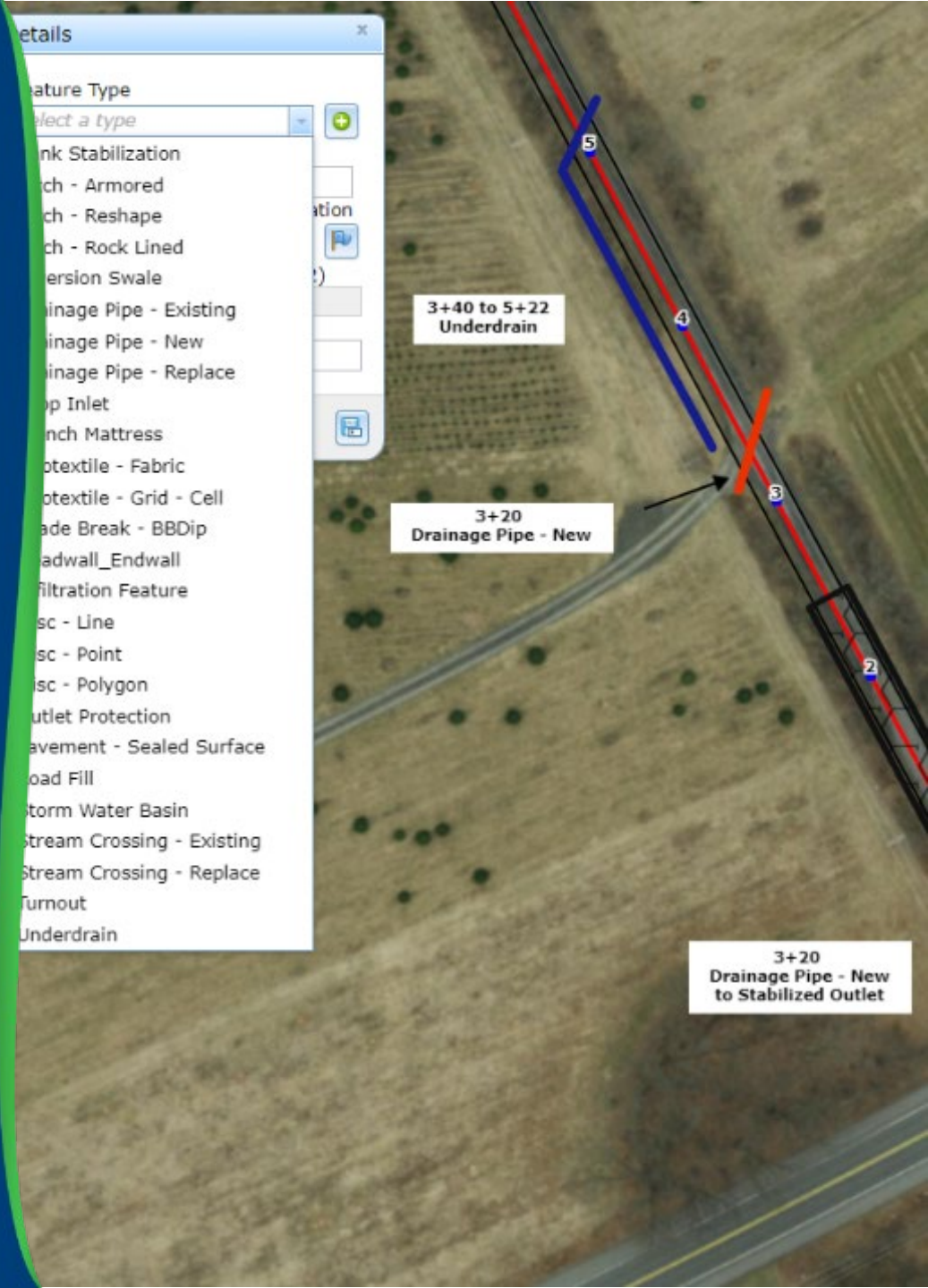
# GIS Project Sketches

- Background and Status
- **Demonstration**
- Moving Forward



# GIS Project Sketches

- Background and Status
- Demonstration
- **Moving Forward**



## Moving Forward

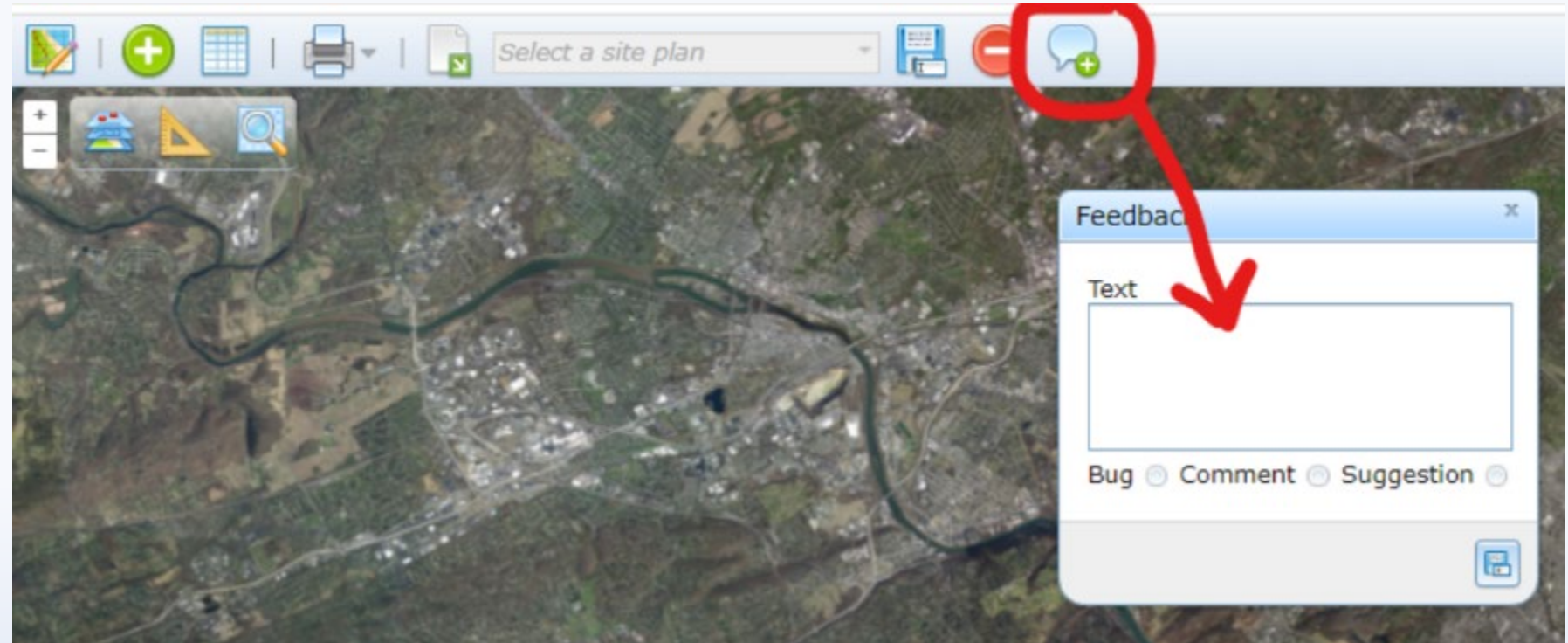
- Use of GIS project sketch will not be required, but available as a tool.
- Can print out plans, attach to grant application.
- Plans can be saved and “tweaked” to create “as-builts” or reflect project changes.
- Will eventually be available to applicants (via public viewer).

## Moving Forward

- **Please start using, but understand we are still refining.**
- **Give us feedback on glitches or suggestions**
- **Thing we are still working on or planning:**
  - Printing: working but we are still refining
  - Additional “bells and whistles”
  - Tie sketches back to projects in GIS?
  - Potentially adding ability to add Tech Bulletins and other info
- **Public version available once we iron out more kinks.**

Happy Mapping!

Don't forget the feedback button



**Don't just say "I broke it"**

- Try to repeat the error
- Give as much detail as possible