

# GIS Project Sketches

Dirt Gravel and Low  
Volume Road Program

WEBINAR  
12/22/22  
Starts 9am

Location	Feature Type	Length	Width	Description
1+00	French Mattress	150	40	
4+00	French Mattress	50	40	
3+00	Crosspipe - New	40	15	

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**CDGRS**

Steve Bloser

[smb201@psu.edu](mailto:smb201@psu.edu)

Ken Corradini

[kjc139@psu.edu](mailto:kjc139@psu.edu)

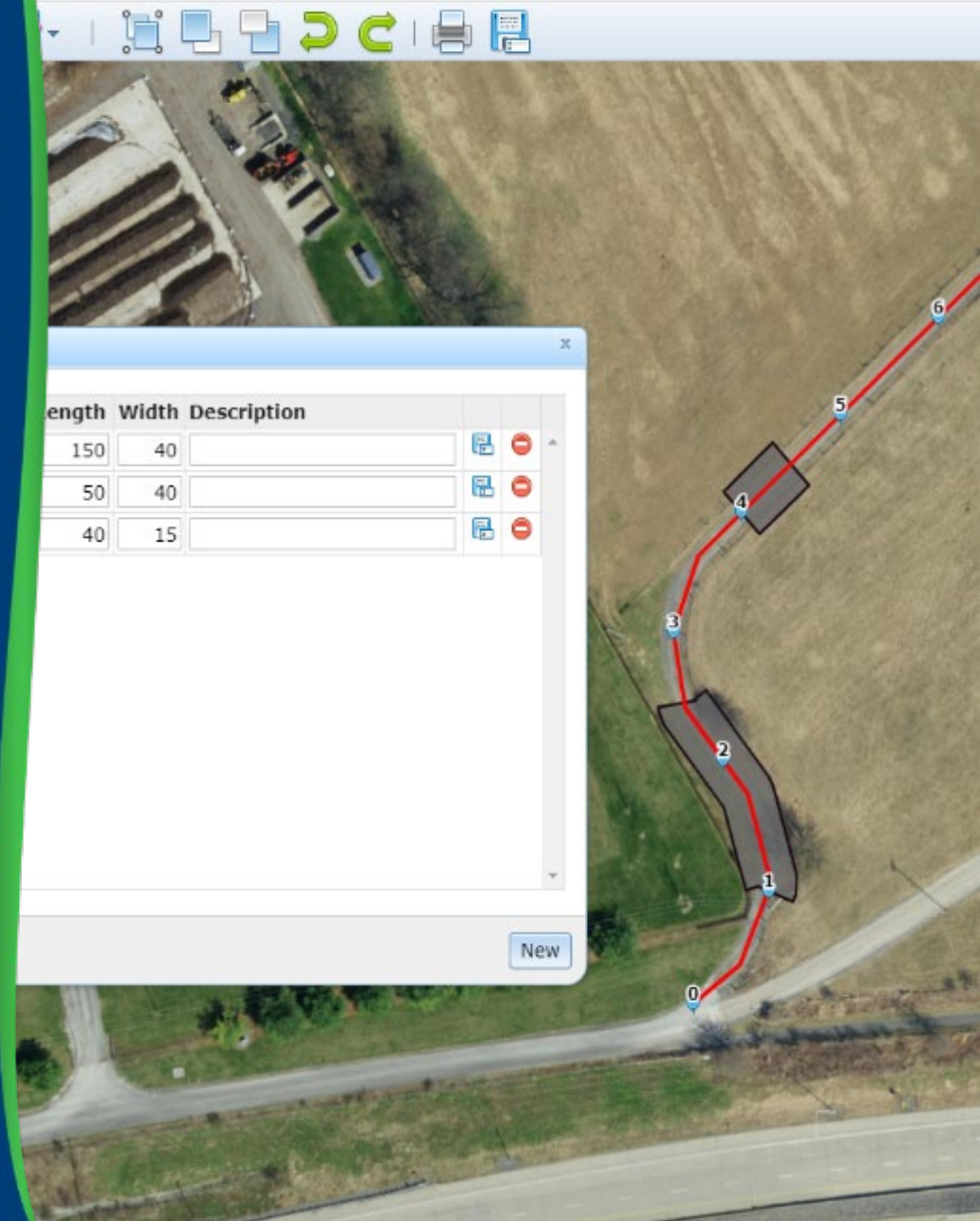


# GIS Project Sketches

## Purpose

Provide an overview and update on incorporating project sketch capability into DGLVR GIS

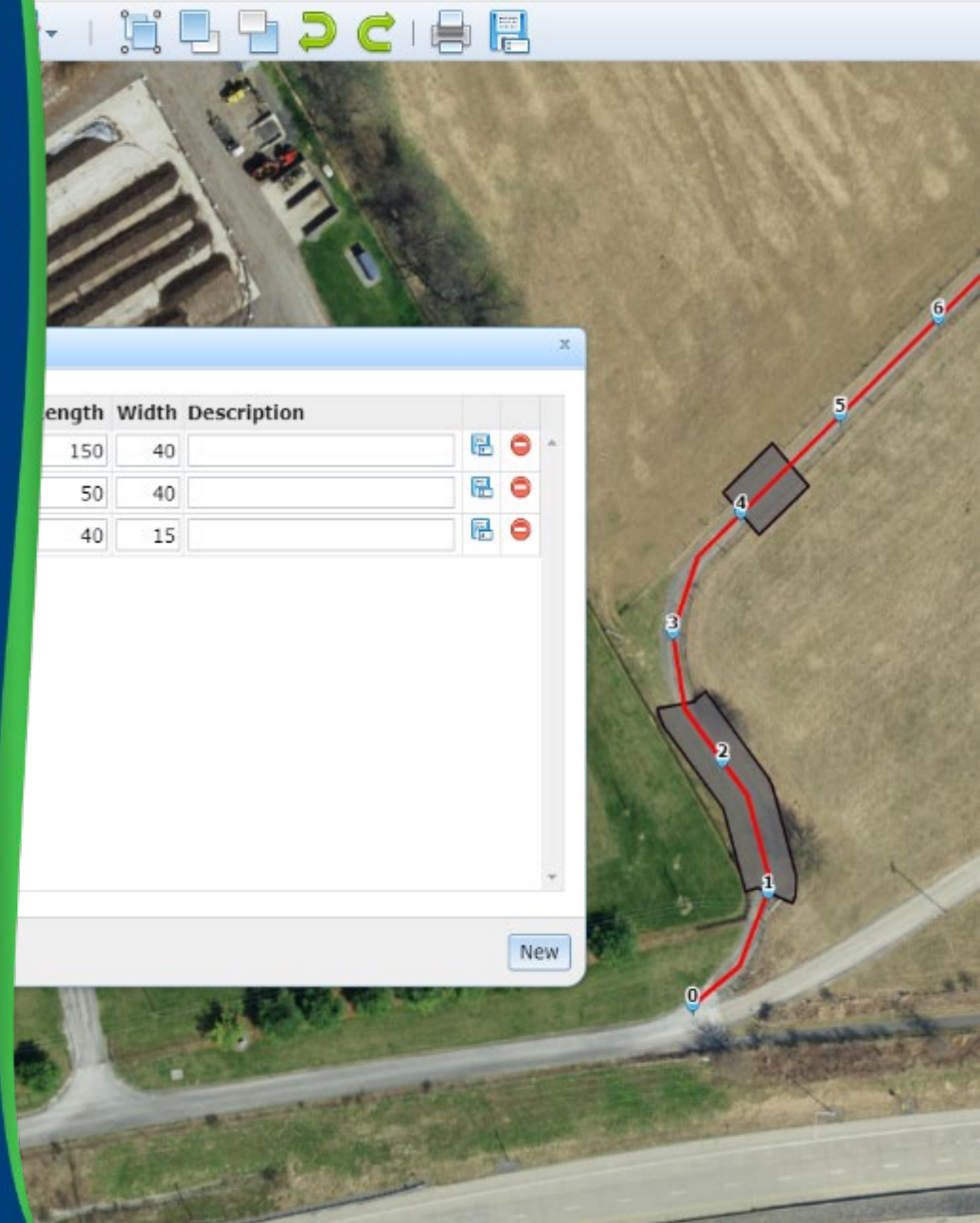
Allow input and feedback from CDs





# GIS Project Sketches

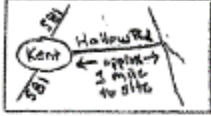
- **Background and Status**
- Demonstration
- Moving Forward



## 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

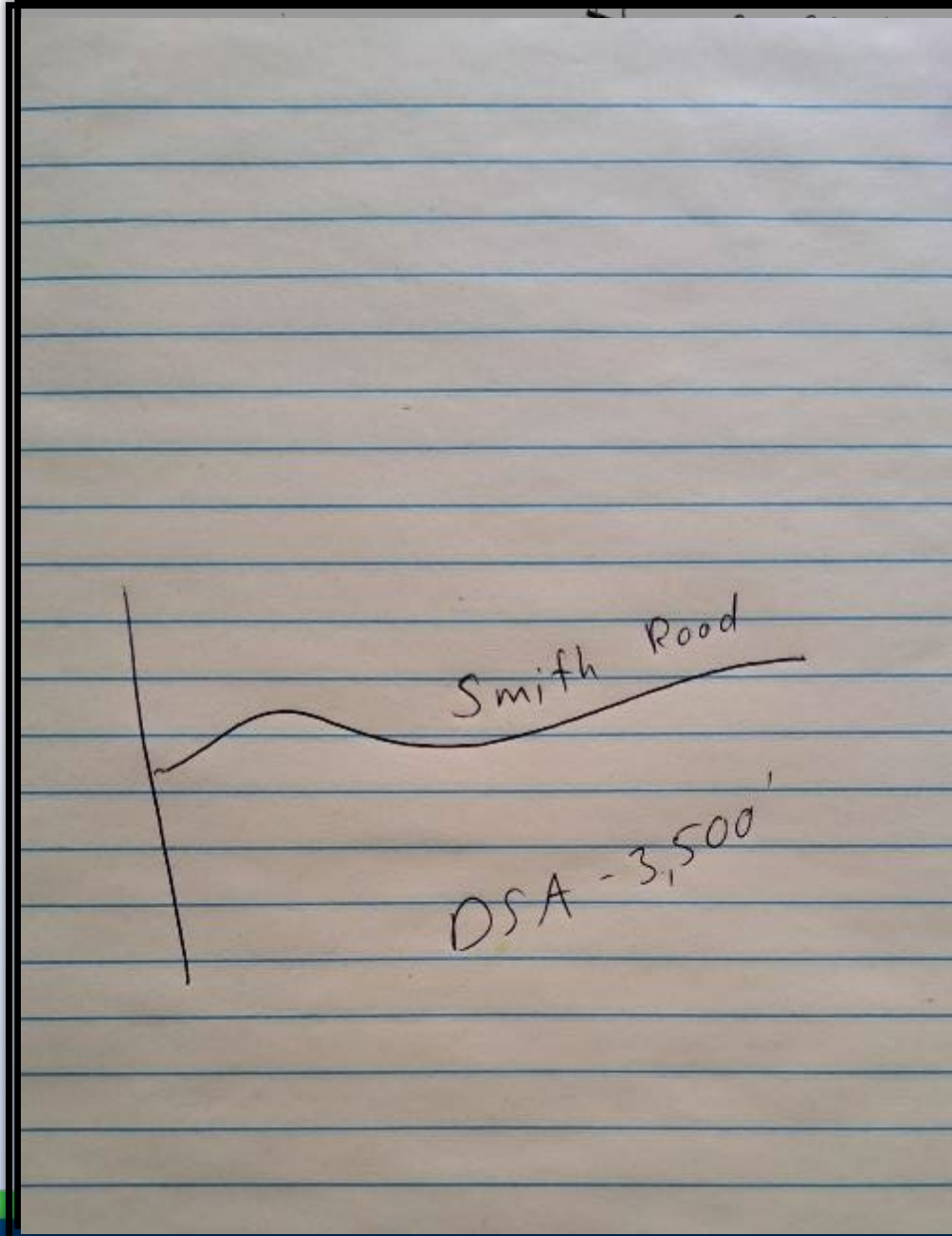
Materials Estimate:

- 18" Dia. Smooth Bore Pipe - 60' @ \$8.50/ft = \$510.00
- 15" Dia. Smooth Bore Pipe - 100' @ \$7.00/ft = \$700.00
- Driving 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...





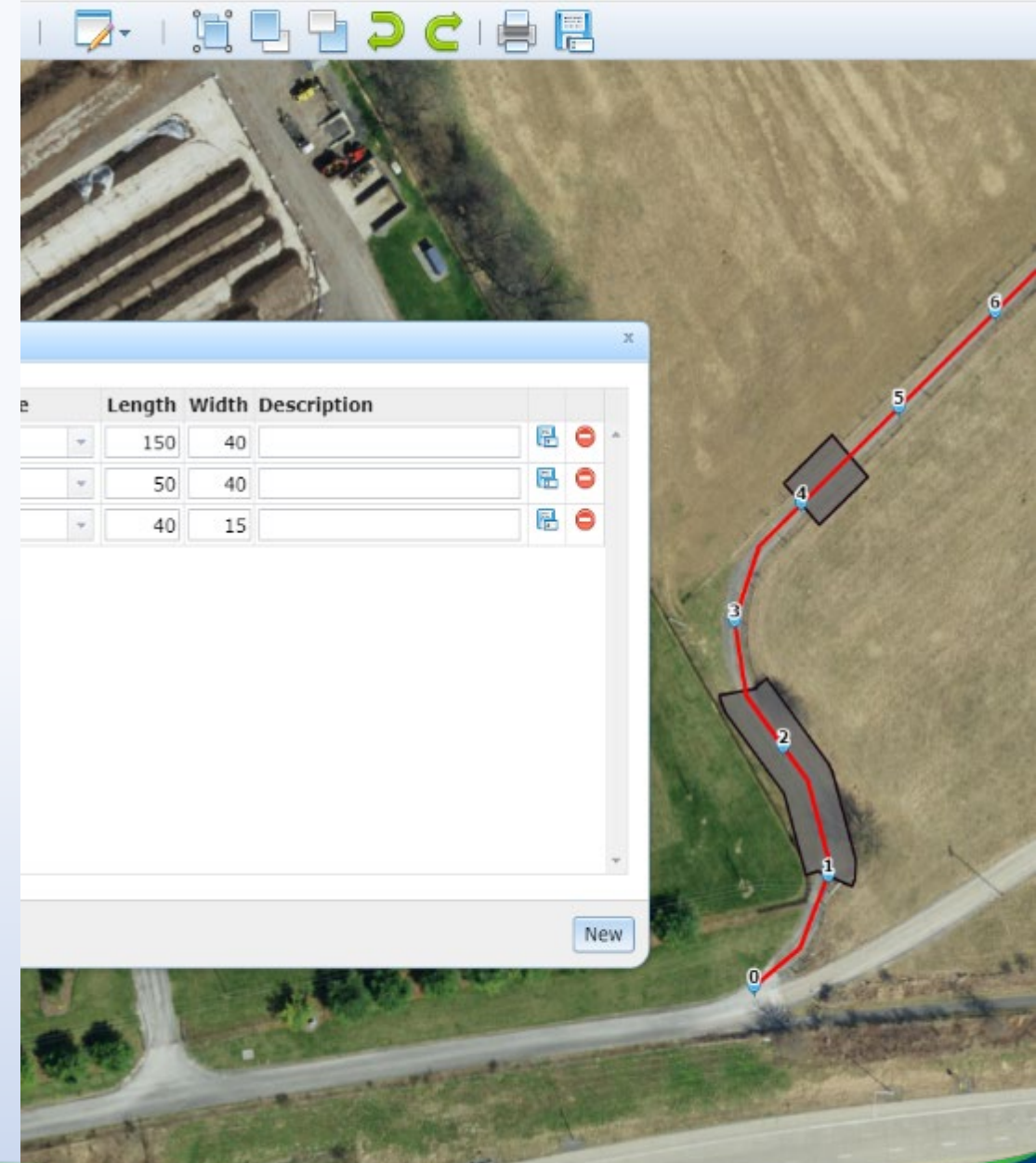
## 2022 Workshop Session

- 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



## Since Workshop

- CDGRS has been working with programmer to develop project sketch capability
  - Draw on map to scale
  - Include stationing
  - Standardized practices (pipe, mattress, etc)
  - Can print and attach to grant app



## Demonstration Today

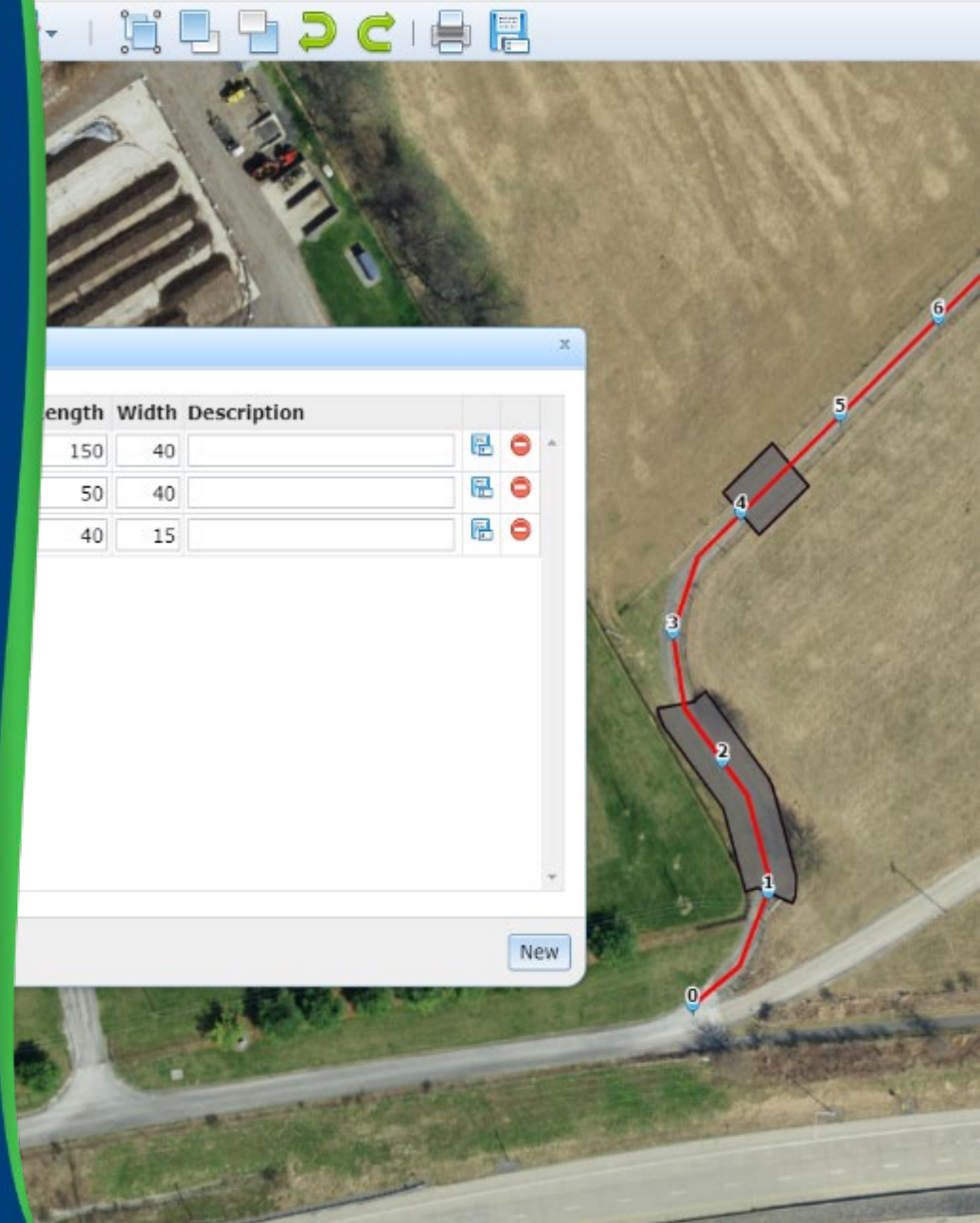
- Basics are working.
- Still rough and in test mode:
  - Not available to CDs yet
  - There will likely be glitches during demo.
- Will be looking for feedback, ideas, and eventually a few “testers”.

DEMO



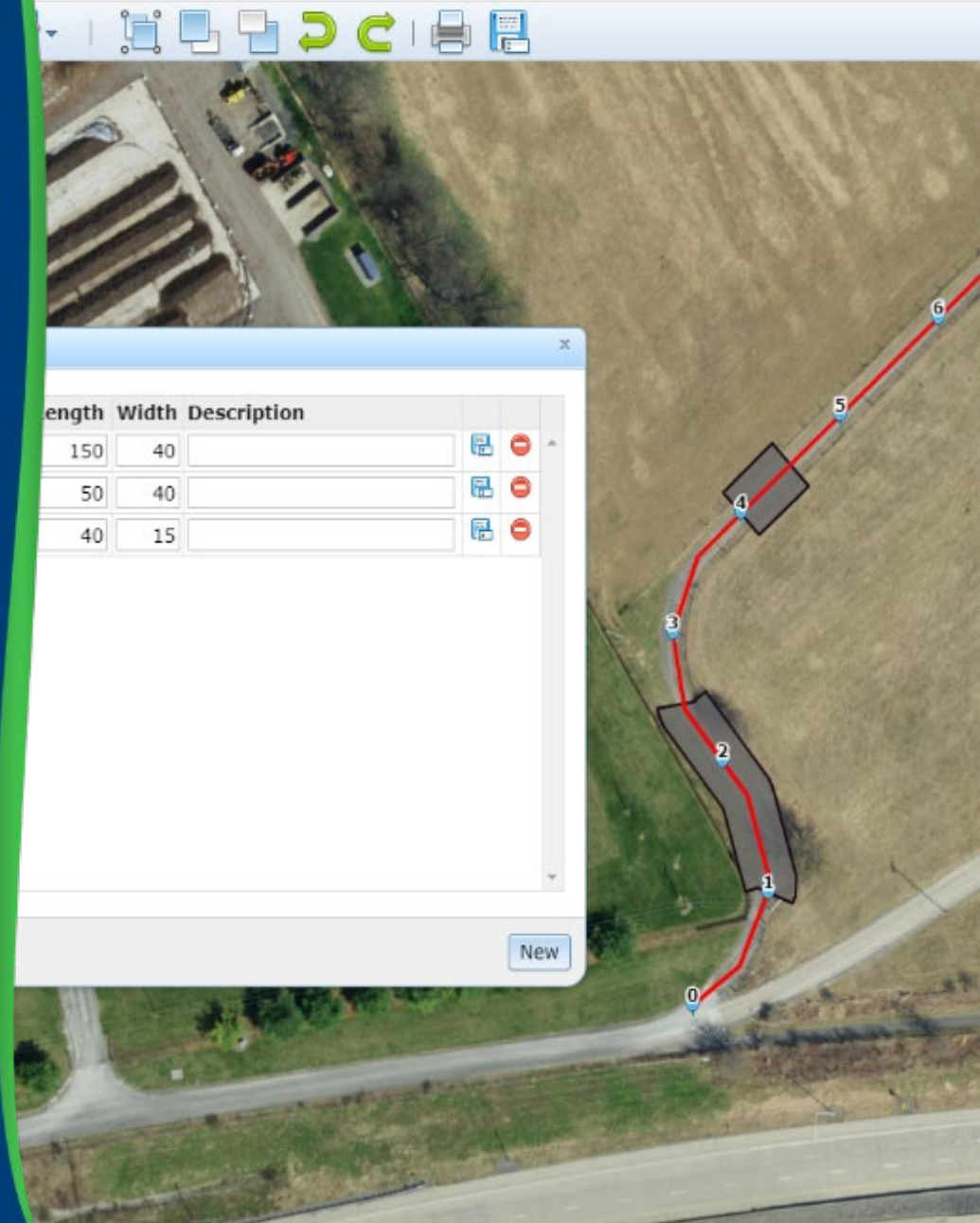
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- Background and Status
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## Moving Forward

- 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

- Still in development mode. Potential Timeline:
  - **January:** complete initial programming, look for CD “testers”
  - **February:** continue testing and programming
  - **March:** Potentially “go live” for all CDs to use

## Poll Question

Polls are limited to multiple choice, so  
Please put in the Chat:

- Any recommendations or comments based on the demo you saw
- Your name and e-mail if you would like to help with testing in January. -Only volunteer if you will actually have the time to put into it.