Dirt, Gravel, and Low Volume Road (DGLVR) Program 2/28/2023

How to Fill out the Grant Application

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 646-876-9923.

SCC

Sherri Law

shlaw@pa.gov

Pennsylvania SCC State Conservation Commission

PennState Center for Dirt and Gravel Road Studies

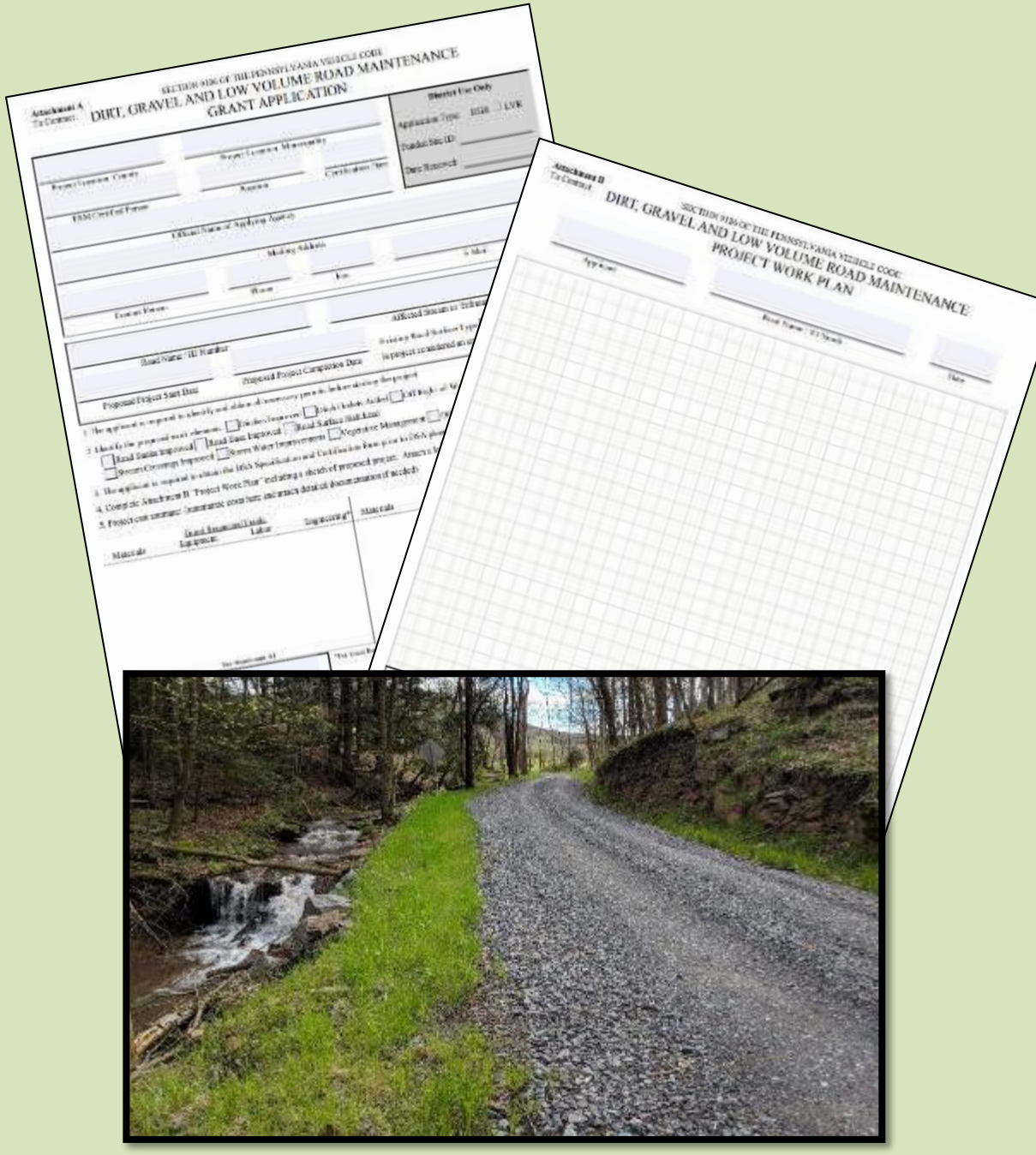
This webinar is being recorded

Please enter questions in the “Q&A” Feature

We will answer all questions at the end

Outline

- DGLVR Program Introduction
- Eligibility for DGLVR Grant funds
- Filling out the Grant Application
  - Page 1
  - Location map
  - Project sketch
  - Cost estimate
  - Attachments
- What to do if you need help



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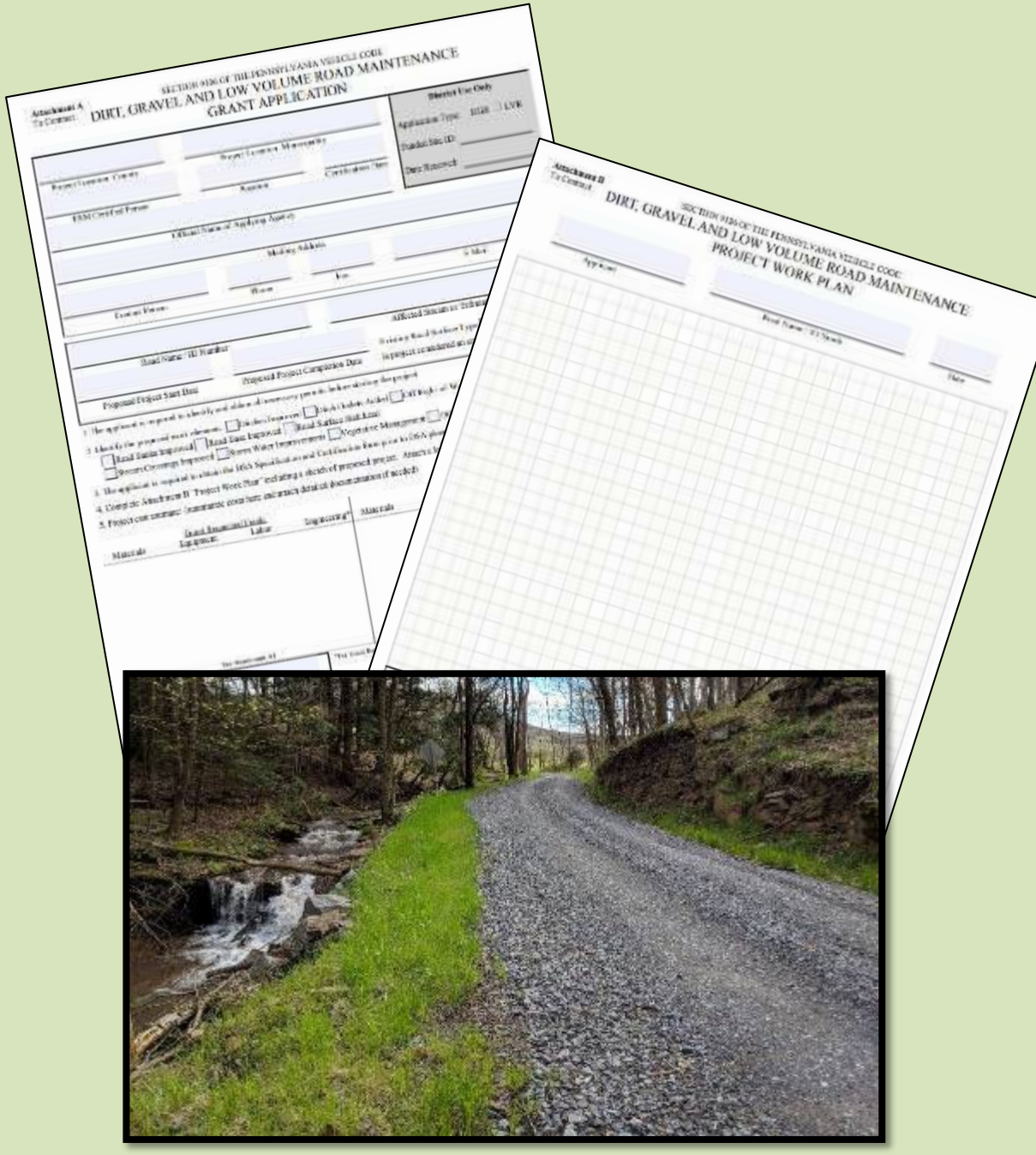


Project Primer: Road Base and Fill

Before

DGR Project in Jefferson County:
$65K Spent, $5K in kind

After

Before

Project Primer: Fill, pipes, surface

After

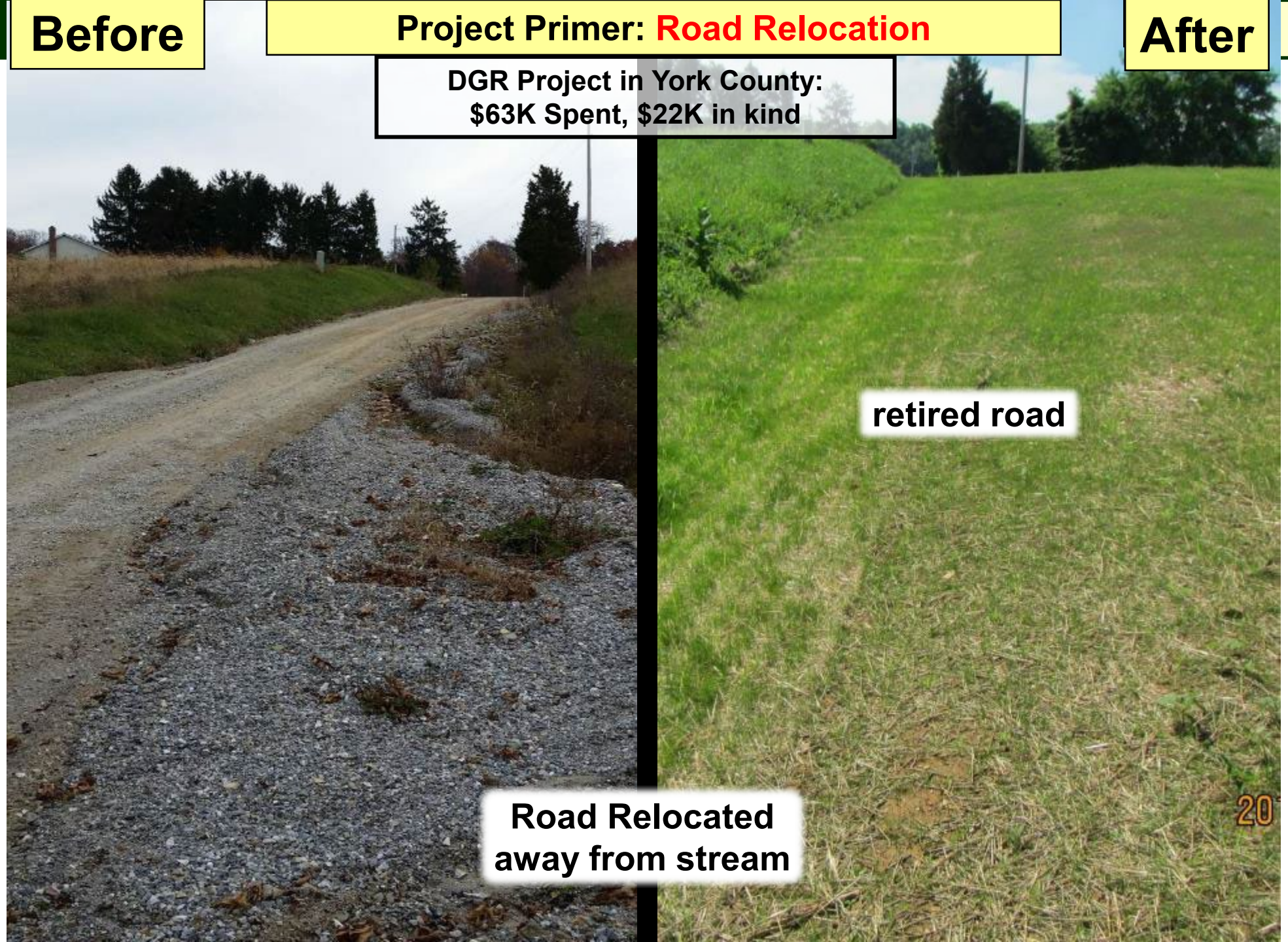
DGR Project in Mercer County:
$100K Spent, $6K in kind

Project Primer: Road Relocation

Before

After

DGR Project in York County:
$63K Spent, $22K in kind



Project Primer: Stream Crossings

Inlet

Project Primer: Stream Crossings

Outlet

Project Primer: LVR Issues

Before

After

LVR Project in Montgomery County:
$24K Spent, $2K in kind

Before

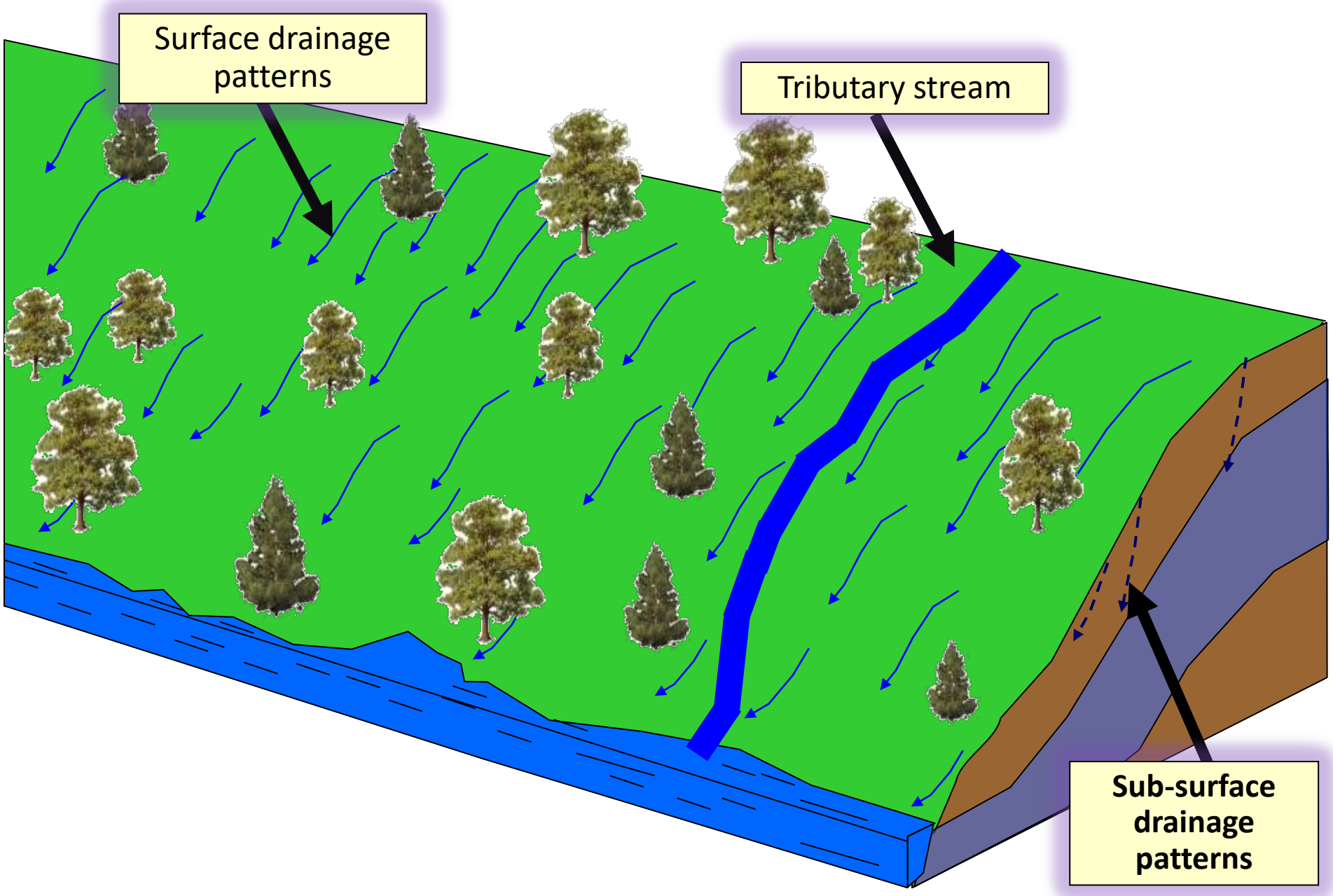
Project Primer: Fill, pipes, surface

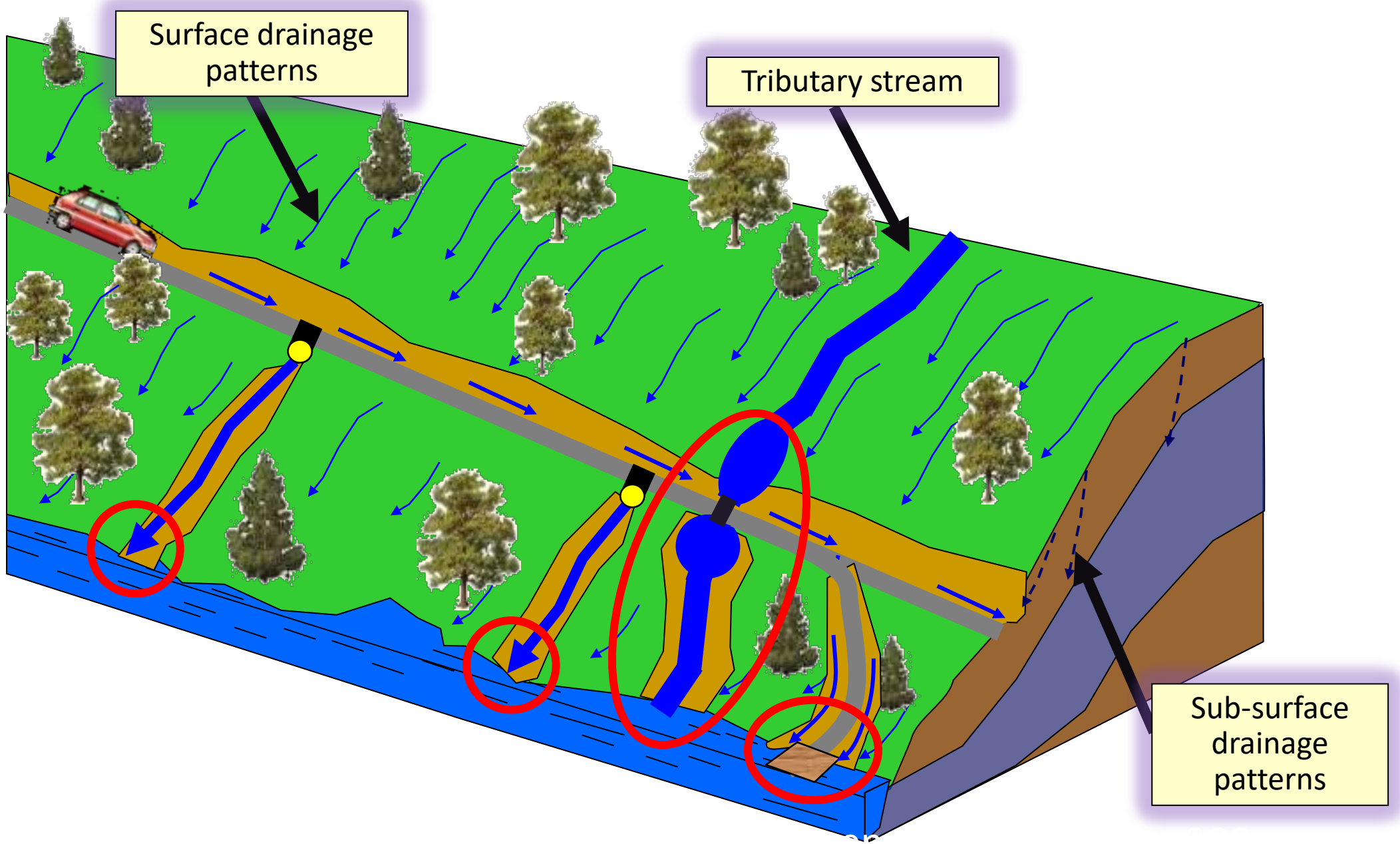
After

DGR Project in Bradford County:
$107K Spent, $14K in kind

Road / Stream Connection

Program focus is where the road and/or the stream negatively impacts the other


Surface drainage patterns
Tributary stream
Sub-surface drainage patterns


Surface drainage patterns
Tributary stream
Sub-surface drainage patterns

Effects of Roads

- **Generate Sediment**
- **Deliver Sediment to Stream**

Erosion

Introduction

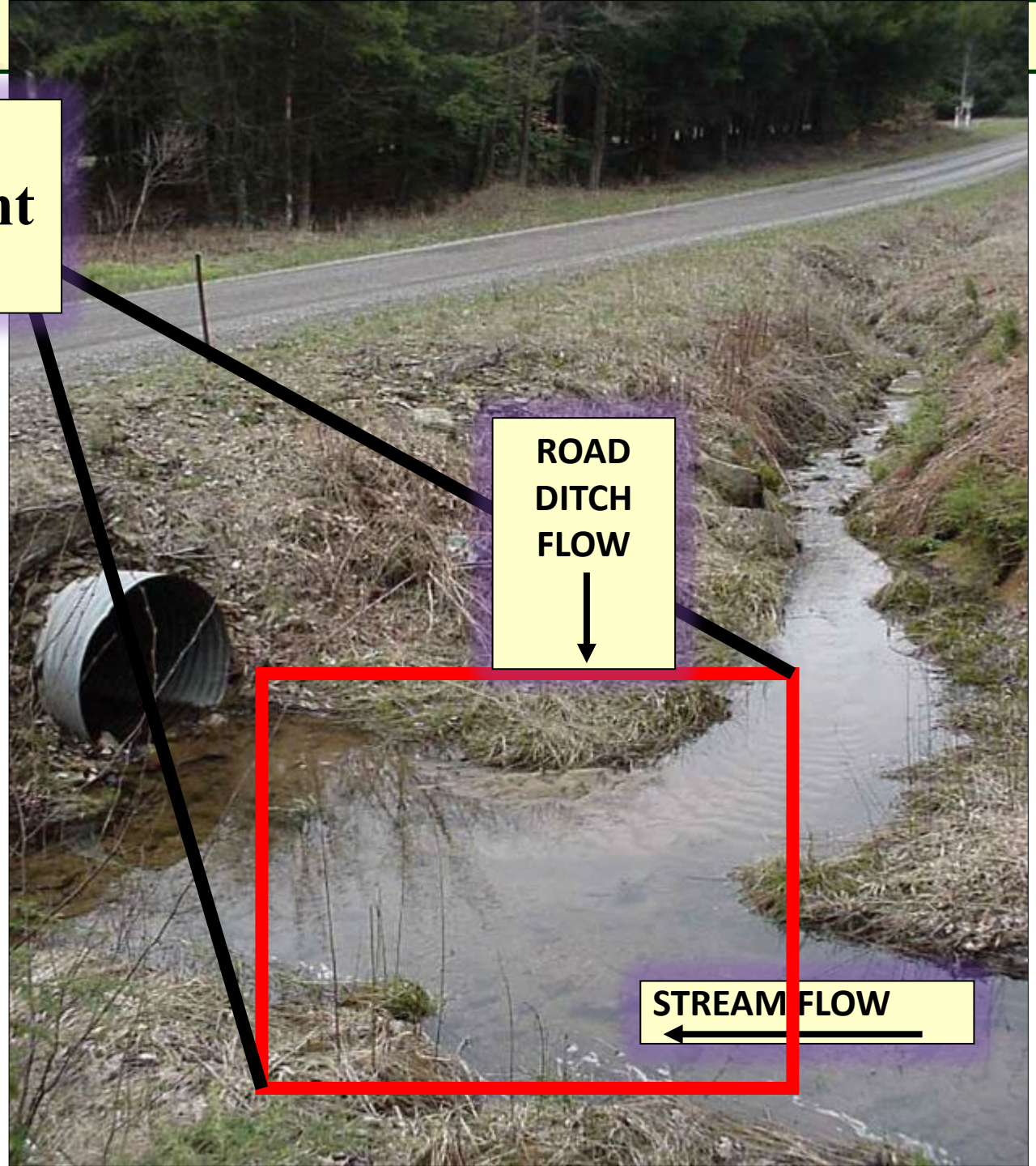
Erosion


Road ditch with insufficient outlets

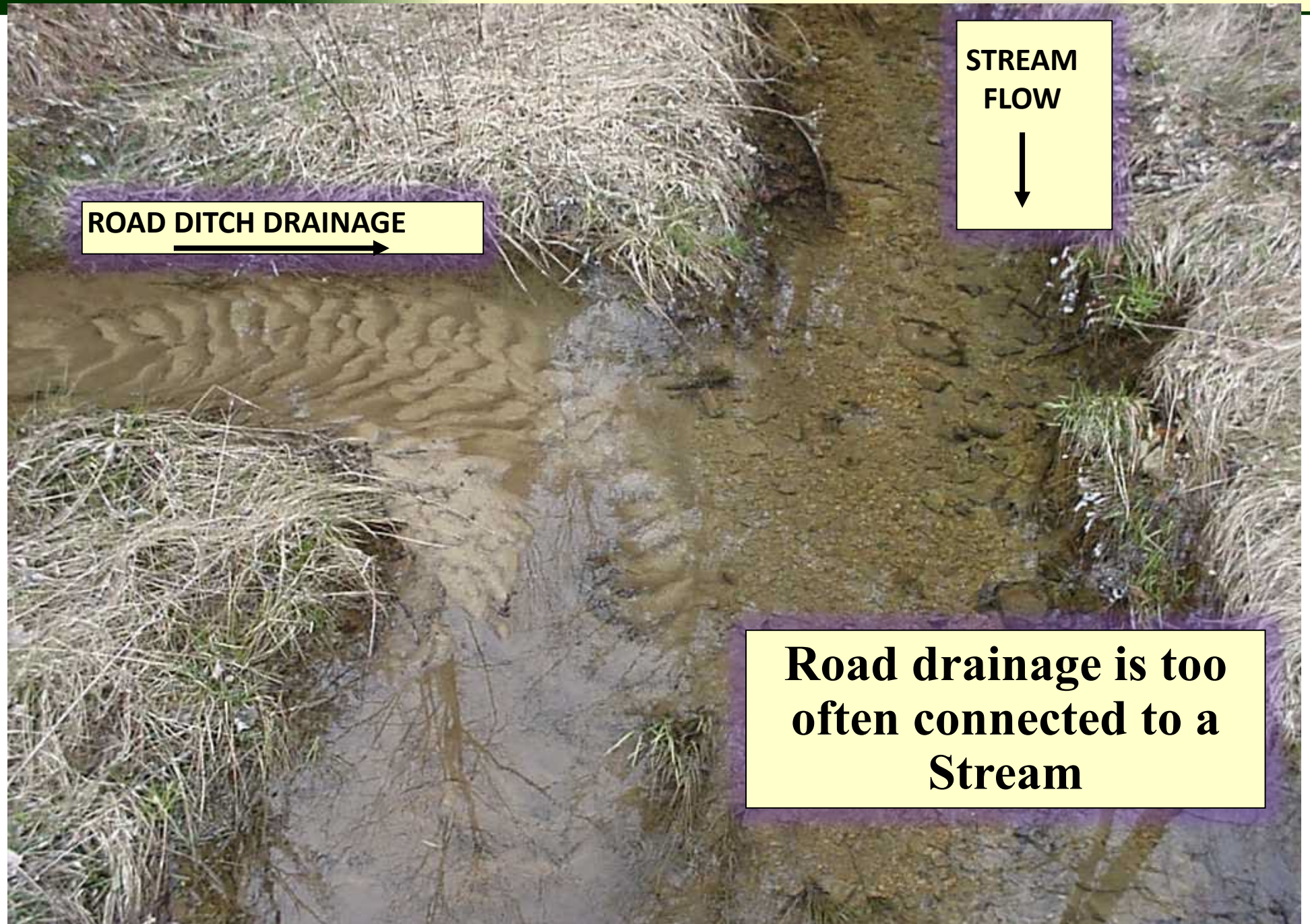

Effects of Roads
• Deliver Sediment to Stream

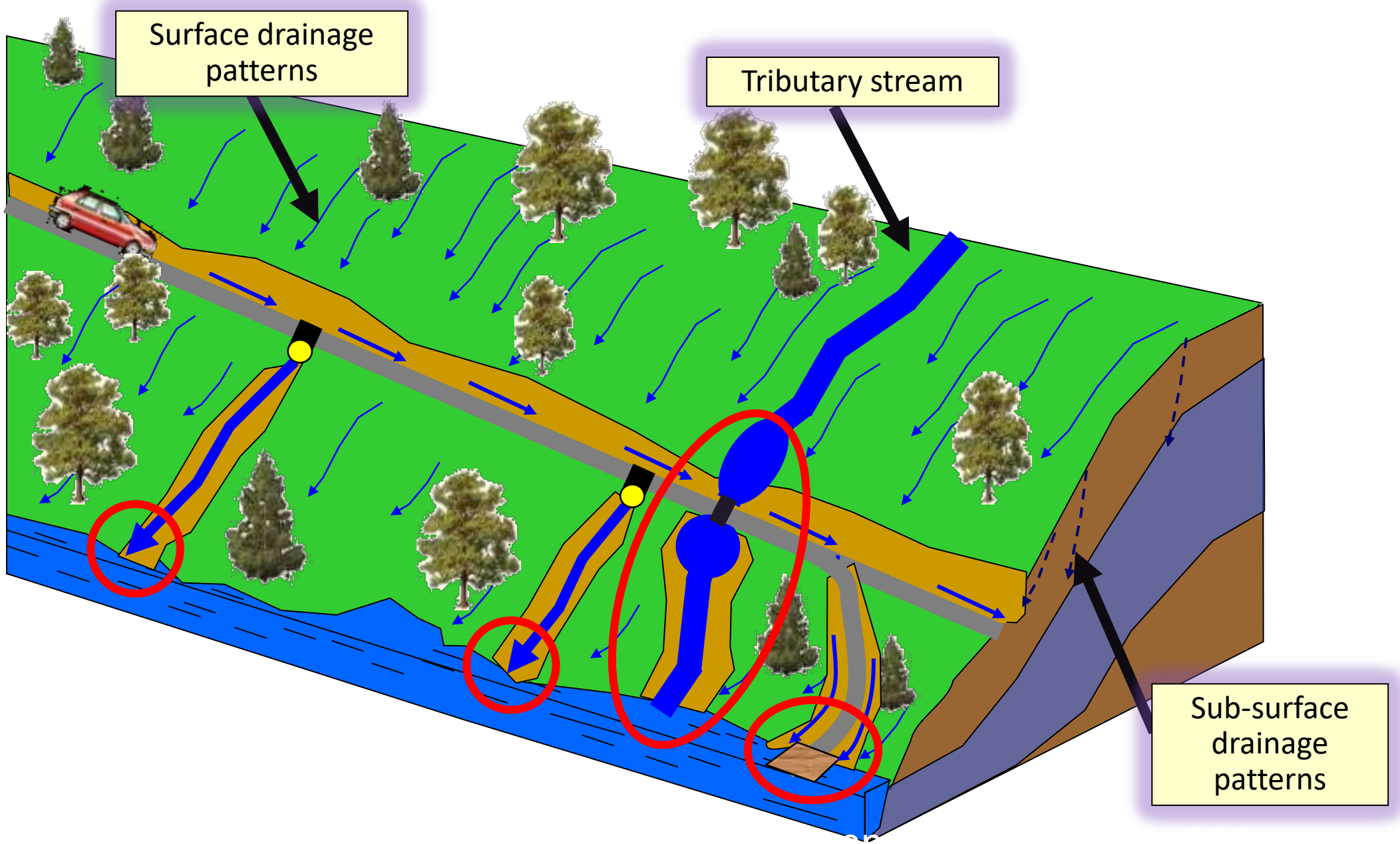
Effects of Roads

- Deliver Sediment to Stream



Erosion


STREAM FLOW
ROAD DITCH DRAINAGE
Road drainage is too often connected to a Stream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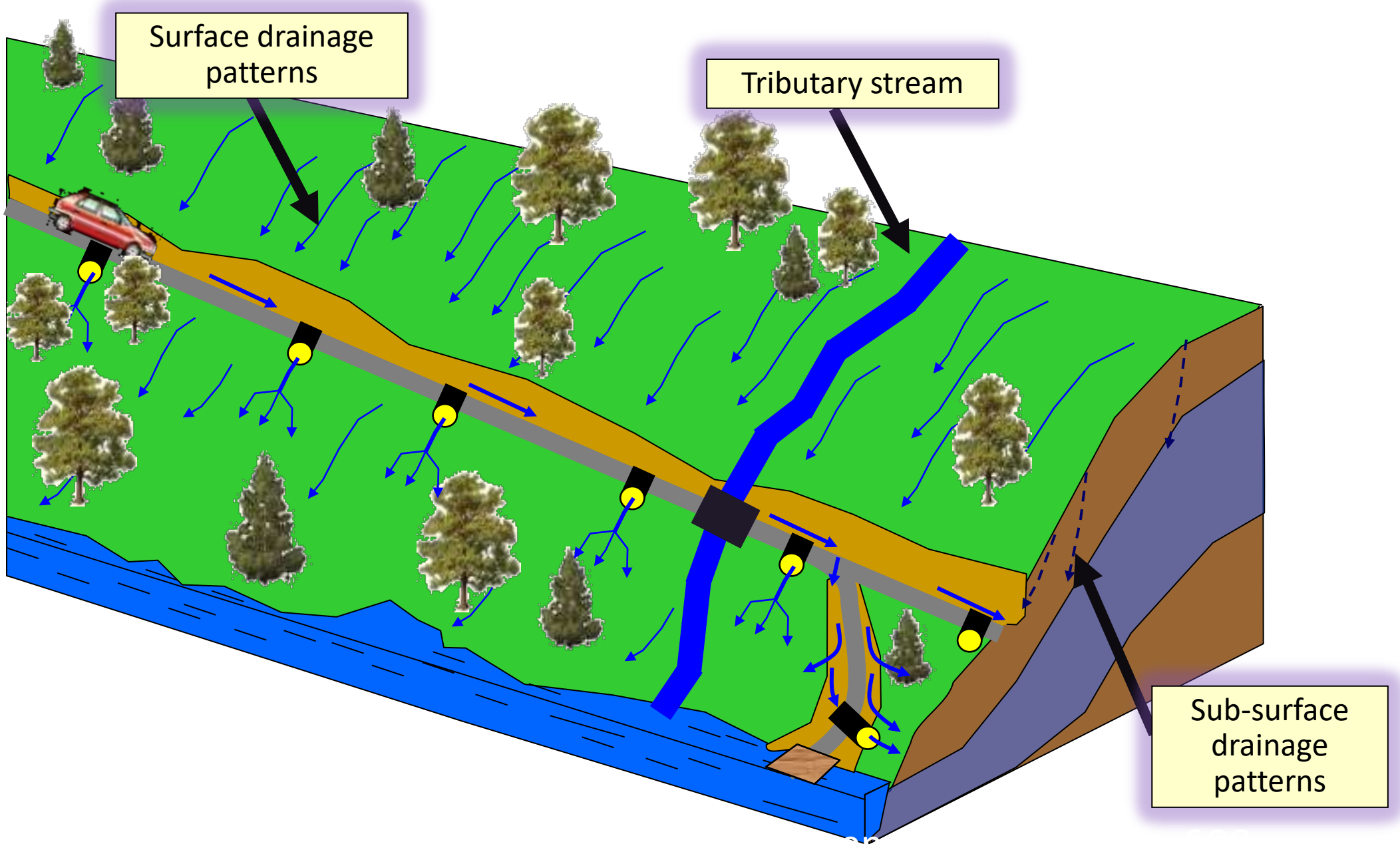
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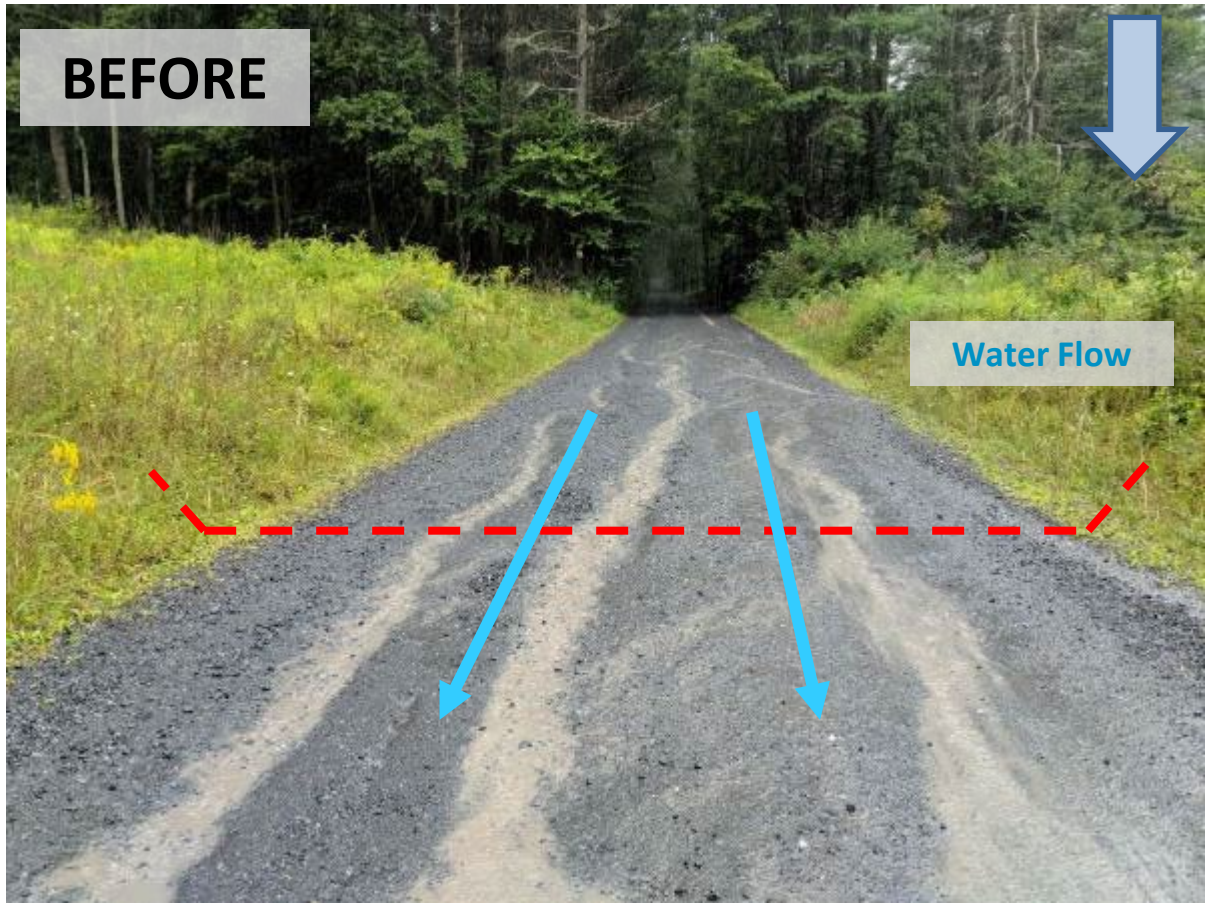
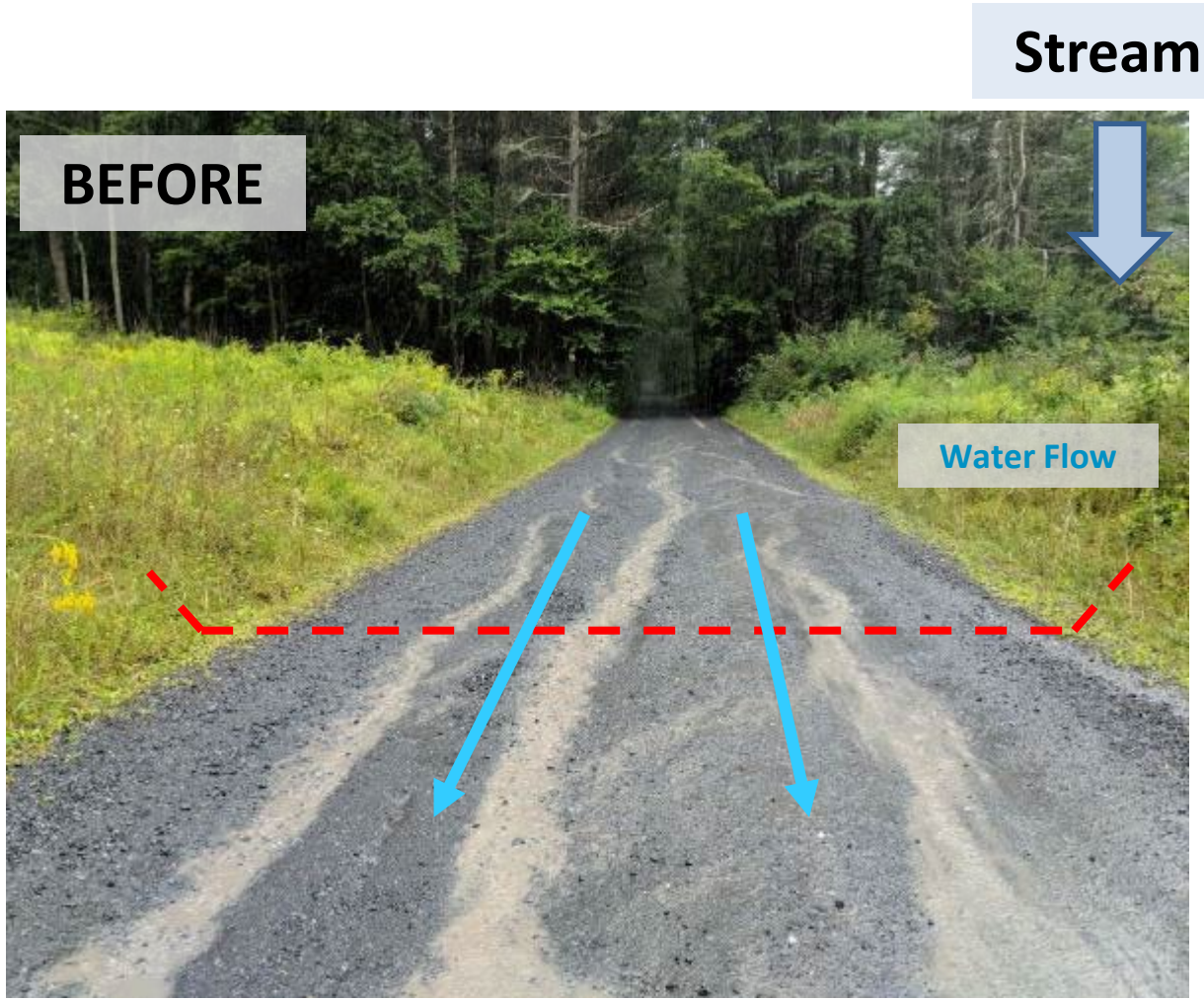
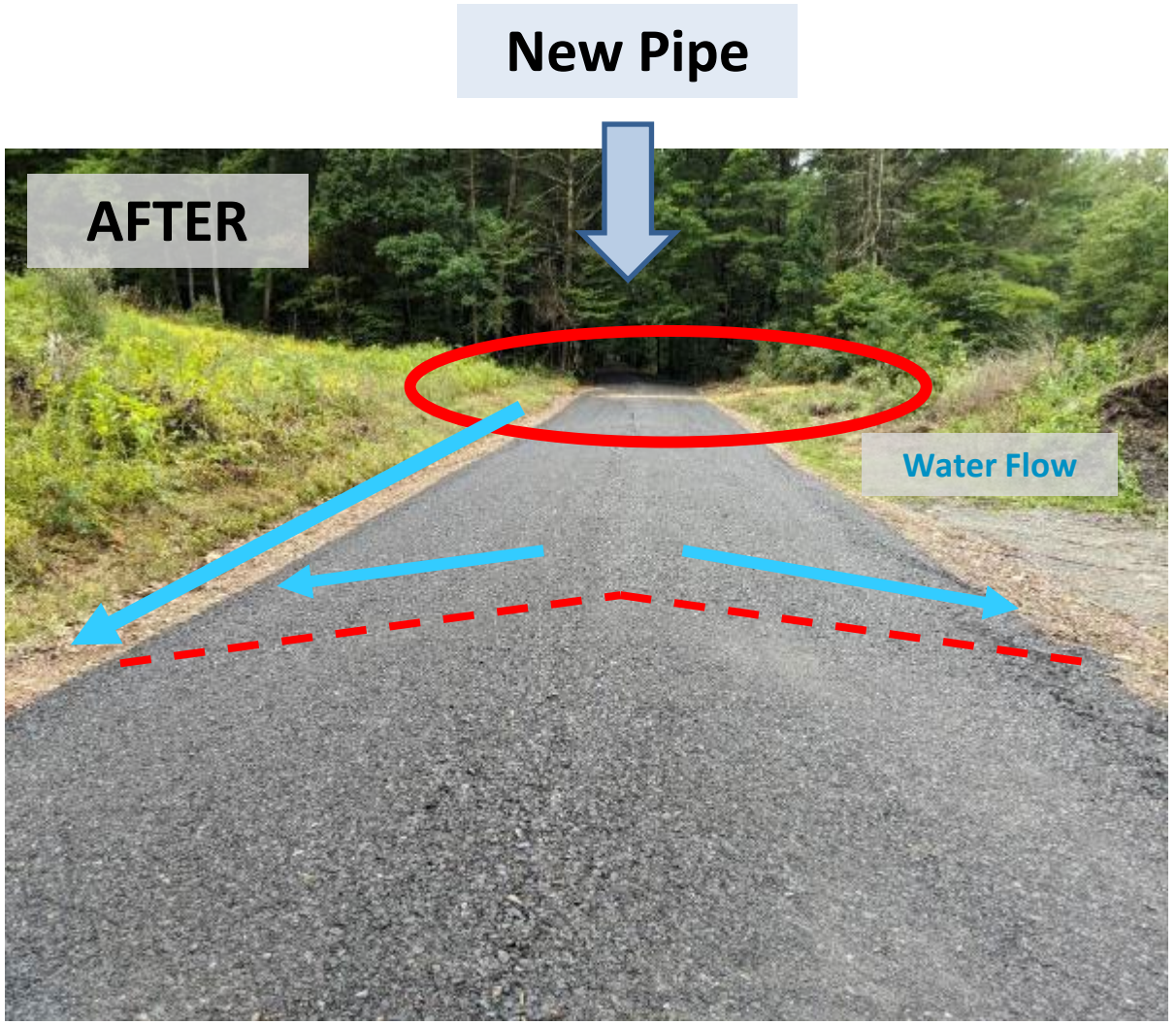
Tributary stream
Sub-surface drainage patterns

Example Dirt and Gravel Road Project



Example Dirt and Gravel Road Project





During construction – placing road fill


AFTER

DGR

- Two Types of Funding
  - Based on road surface
- Dirt and Gravel Roads (DGR)
  - Unbound road surface
  - Can be shaped with a grader

- Low Volume Roads (LVR)
  - Paved or sealed (including tar and chip)
  - Low traffic volume (500 vehicles/day or less)

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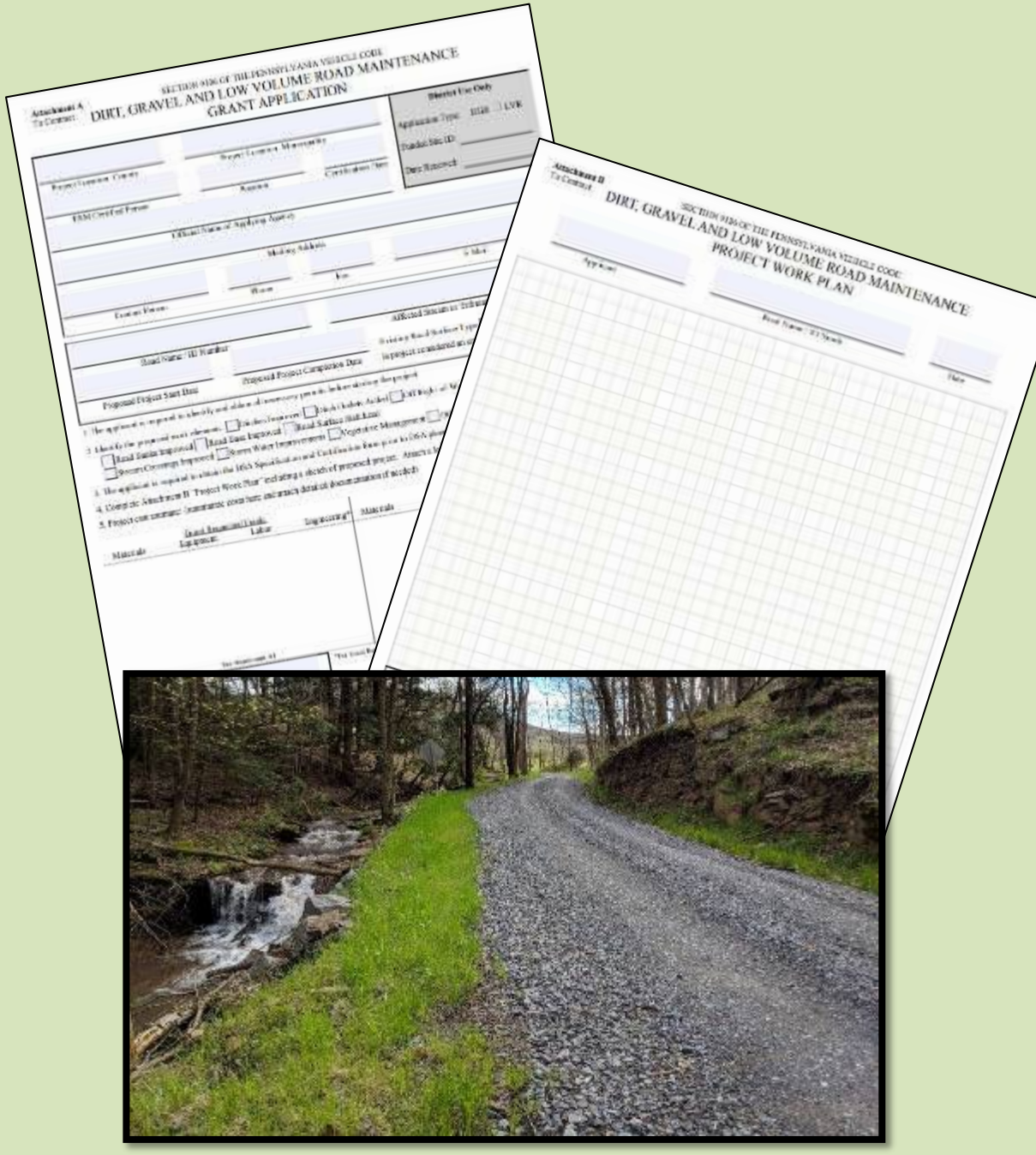


Eligible Applicants

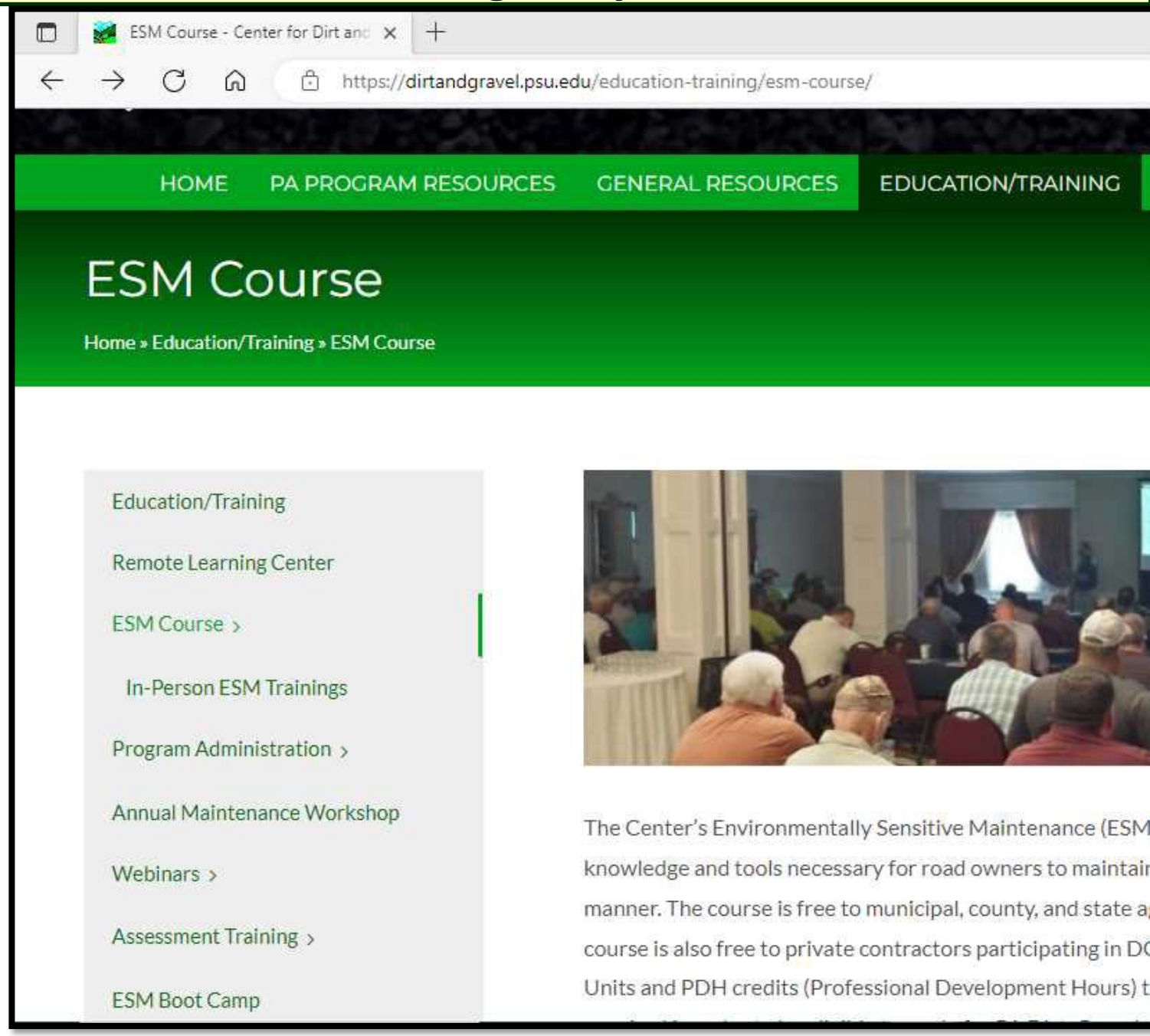
- Public entities (local, county, and state) that own public roads in PA that are open to public vehicle travel

- The person in charge of work plan development and project implementation from the entity must have attended Environmentally Sensitive Road Maintenance (ESM) Training within the past 5 calendar years

Eligibility

ESM Training

- https://dirtandgravel.psu.edu/education-training/esm-course/
- 2 days, 8 AM – 4 PM
- Breakfast, snacks, drinks, and lunch provided
- No cost to attend
- Must register online
- 12 sessions held in different locations around PA each year



Eligible Roads

- Public Roads owned by an eligible applicant
- Road must be open to public motor vehicle travel for a minimum of 2 consecutive weeks annually
- The road must have a stream/water quality impact
- Must be an unpaved or low volume road
  - LVR means sealed surface with ADT of 500 or less

Project Eligibility

- DGR and LVR projects **must** focus on **both** environmental and road improvements
- Routine maintenance is not eligible for DGLVR funding
- Focus on long-term benefit through use of Environmentally Sensitive Maintenance (ESM) practices
- Project work must meet DGLVR policy, standards, and specifications

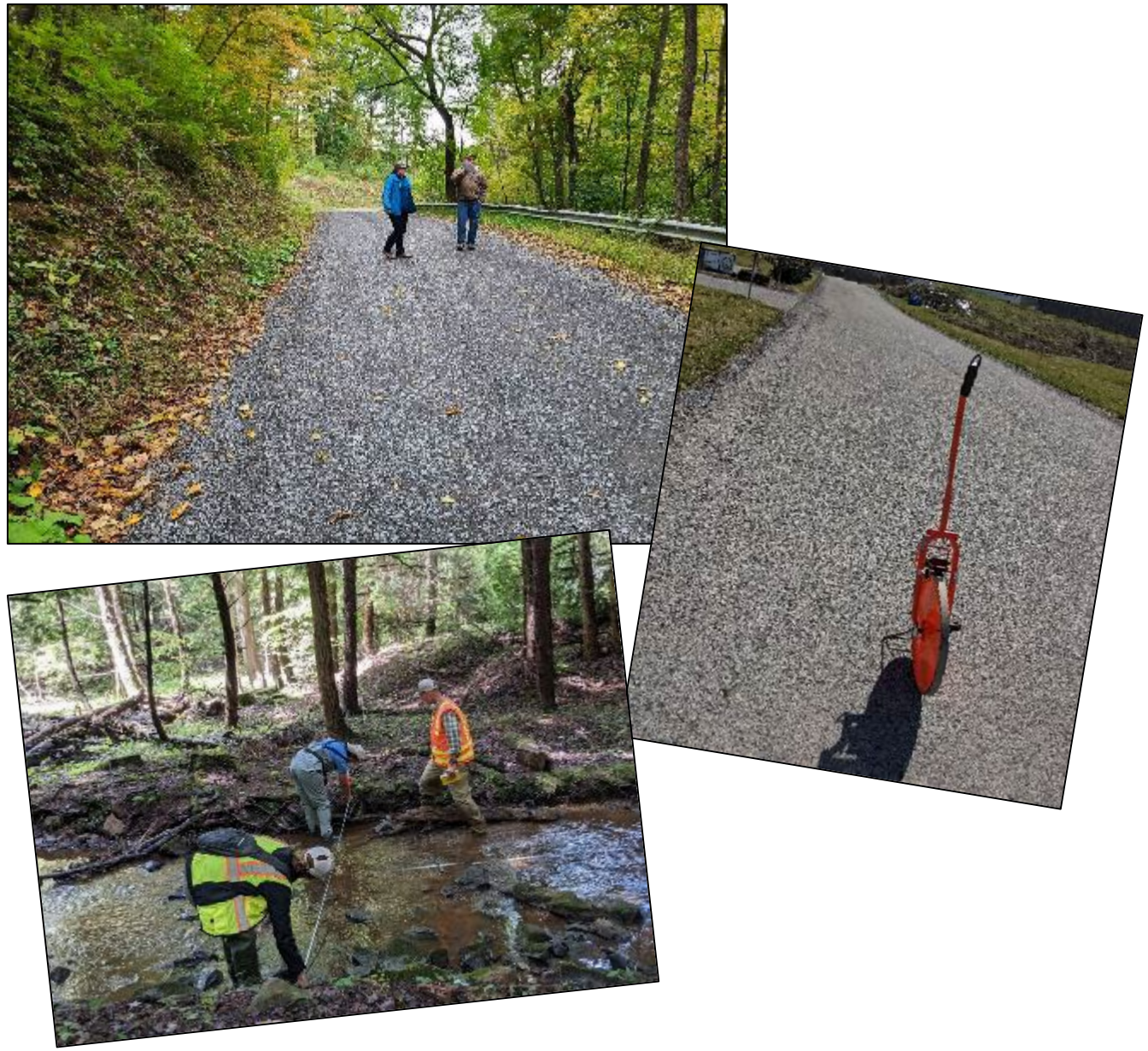
Questions about Eligibility?

- Work with your local County Conservation District to make sure you, your roads, and your projects are eligible for DGLVR funding

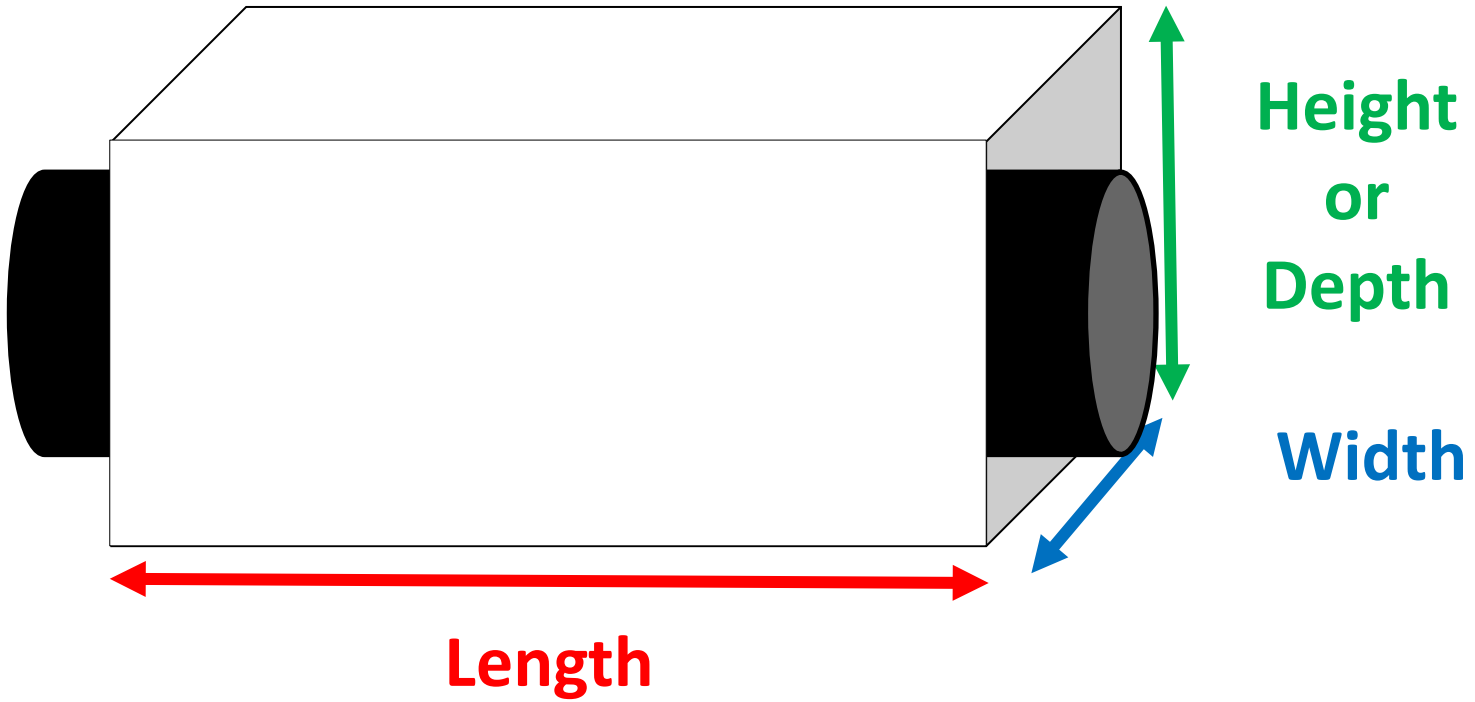
- Additional information at ESM training

Eligibility

- **Pre-application meeting**
  - review roads with conservation district
  - Make sure all eligibility requirements are met
  - Identify road problems
  - Come up with solutions
  - Take measurements
  - Make sure the project is a good fit for the grant program

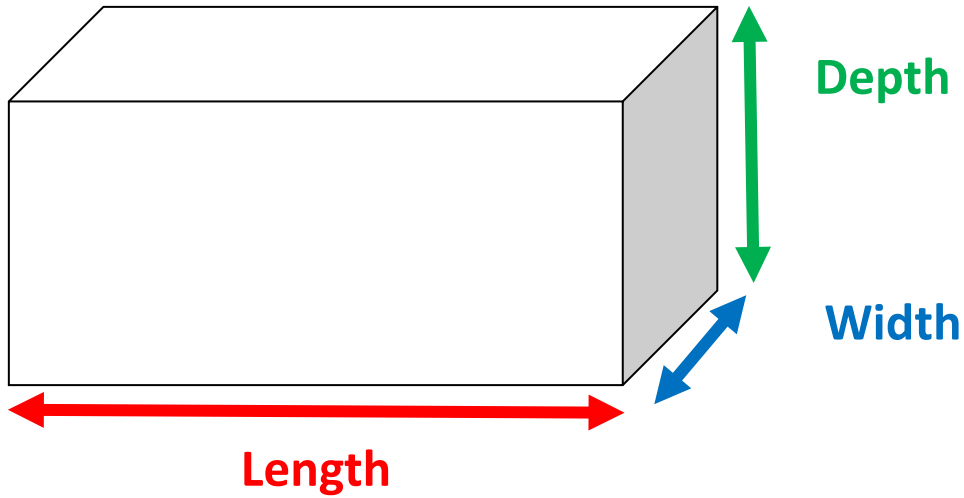


Materials Estimation



Volume (ft^3) = Length (ft) x Width (ft) x Height (ft)

Materials Estimation



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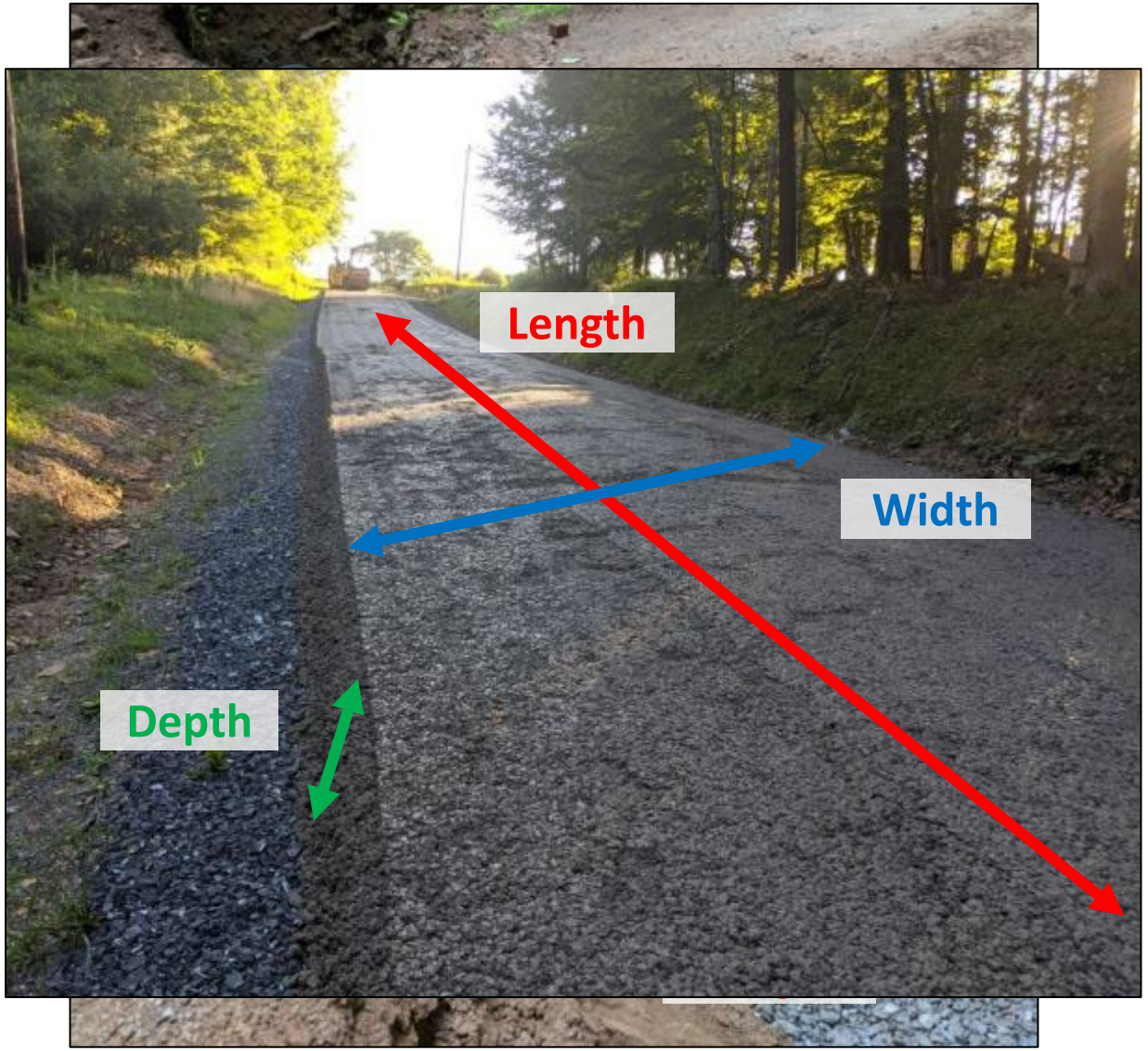

Materials Estimation Webinar

- **February 16, 2023**
- **Recording available online**
- **https://dirtandgravel.psu.edu/education-training/webinars/past-webinars/**

- February 16: Estimating Project Materials and Costs
  - This session was a primer and overview for CD technicians in estimating quantities and costs for projects (both stream crossing and standard projects).
  - Webinar Download (92.1 MB): MP4 format *(~55 minutes)*
  - Presentation Downloads:
    - Adobe PDF (4.00 MB)
    - MS Powerpoint (5.62 MB)

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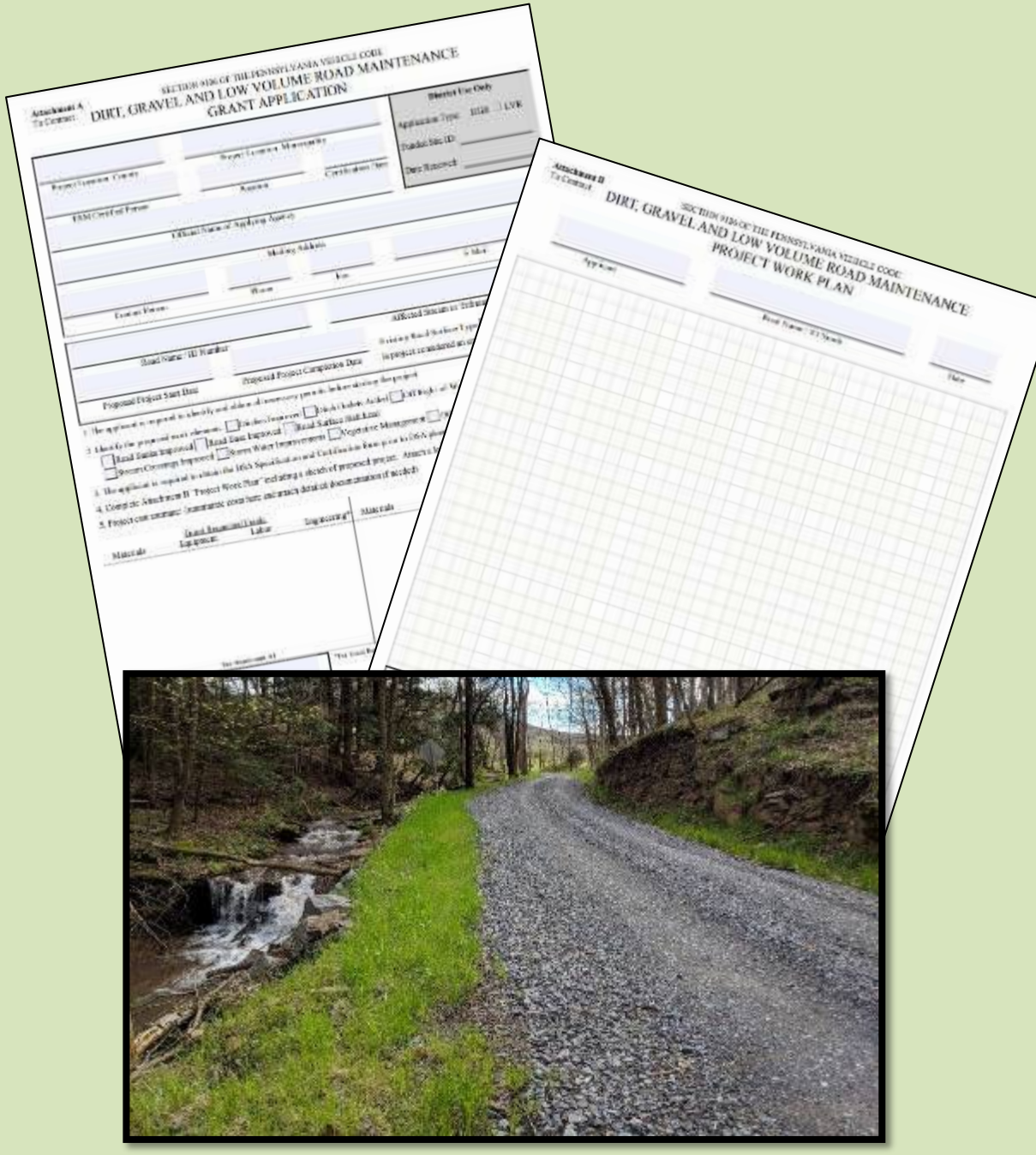


Why talk about grant applications?

It's important that DGLVR grant applications are thorough, detailed, and filled out correctly.

To prevent misunderstandings

Why talk about grant applications?

- **The application becomes a DGLVR contract attachment**
  - **Defines the scope of work that the grant will pay for**

List of Attachments:

Attachment A – Grant Application and Workplan *(project specific)*
Attachment B – General Contract Provisions *(PA standard)*
Attachment C – Statement of Policy, incorporated by reference, available at www.dirtandgravelroads.org
Attachment D – Quality Assurance Board Standards *(county specific)*
Attachment E – Schedule of Payments *(project specific)*
Attachment F – Prevailing Wage Notification Letter *(project specific)*
Attachment G - Prevailing Wage Certified Statement of Compliance *(project specific)*

Filling out the Grant Application

https://dirtandgravel.psu.edu/pa-program-resources/program-specific-resources/blank-forms/

PennState
Center for Dirt and Gravel Road Studies

C D G R S

HOME PA PROGRAM RESOURCES GENERAL RESOURCES EDUCATION/TRAINING NEWS & EVENTS BOF CENTER

Blank Forms

Home » PA Program Resources » Program Resources » Blank Forms

- PA Program Resources
- SCC Program Overview ›
- Conservation Districts
- Program Resources ›
  - Blank Forms
  - Reference Material
  - Administrative Manual ›
  - Conservation District Allocations
- QA/QC
- Low Volume Roads

Blank Forms

Unless noted otherwise for specific items such as traffic counts, all policies and forms apply to both the "Dirt and

Attachment A
To Contract

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE GRANT APPLICATION

Project Location: County _____ Project Location: Municipality _____

ESM Certified Person _____ Position _____ Certification Date _____

Official Name of Applying Agency _____

Mailing Address _____

Contact Person _____ Phone _____ Fax _____ E-Mail _____

District Use Only

Application Type: DGR ☐ LVR

Funded Site ID: _____

Date Received: _____

Road Name / ID Number _____ Affected Stream or Tributary _____

Proposed Project Start Date _____ Proposed Project Completion Date _____

Existing Road Surface Type: ☐ Unpaved ☐ Paved

Is project considered an emergency? ☐ Yes ☐ No

1. The applicant is required to identify and obtain all necessary permits before starting the project.

2. Identify the proposed work elements: ☐ Ditches Improved ☐ Ditch Outlets Added ☐ Off Right-of-Way Improvements
☐ Road Banks Improved ☐ Road Base Improved ☐ Road Surface Stabilized
☐ Stream Crossings Improved ☐ Storm Water Improvements ☐ Vegetative Management ☐ Other _____

3. The applicant is required to obtain the DSA Specification and Certification form prior to DSA placement.

4. Complete Attachment B "Project Work Plan" including a sketch of proposed project. Attach a locational map with the project highlighted.

5. Project cost estimate: (summarize costs here and attach detailed documentation if needed)

Grant Requested Funds				In-Kind Contributions			
Materials	Equipment	Labor	Engineering*	Materials	Equipment	Labor	Engineering

See Attachment A1 — See Attachment A2

*For Grant Requested Funds, Engineering costs cannot exceed 10% of the total grant amount requested.

Grant Requested..... $_____

In-Kind Contributions..... $_____

Total Project Value..... $_____

Applicant Signature _____ Date _____

Attachment B
To Contract

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE PROJECT WORK PLAN

Applicant _____ Road Name / ID Numb _____ Date _____

Instructions:
- Draw a sketch of the proposed project that includes:
  - All Proposed Work (i.e., Cross Pipes, Stream Crossings, Other ESM Practices)
  - Project Road Length in Feet or Miles
  - Nearest Intersection and/or Reference Landmarks
  - Known Utilities
  - North Arrow
- Attach a copy of a locational map with the project highlighted
- Attach additional project details as necessary

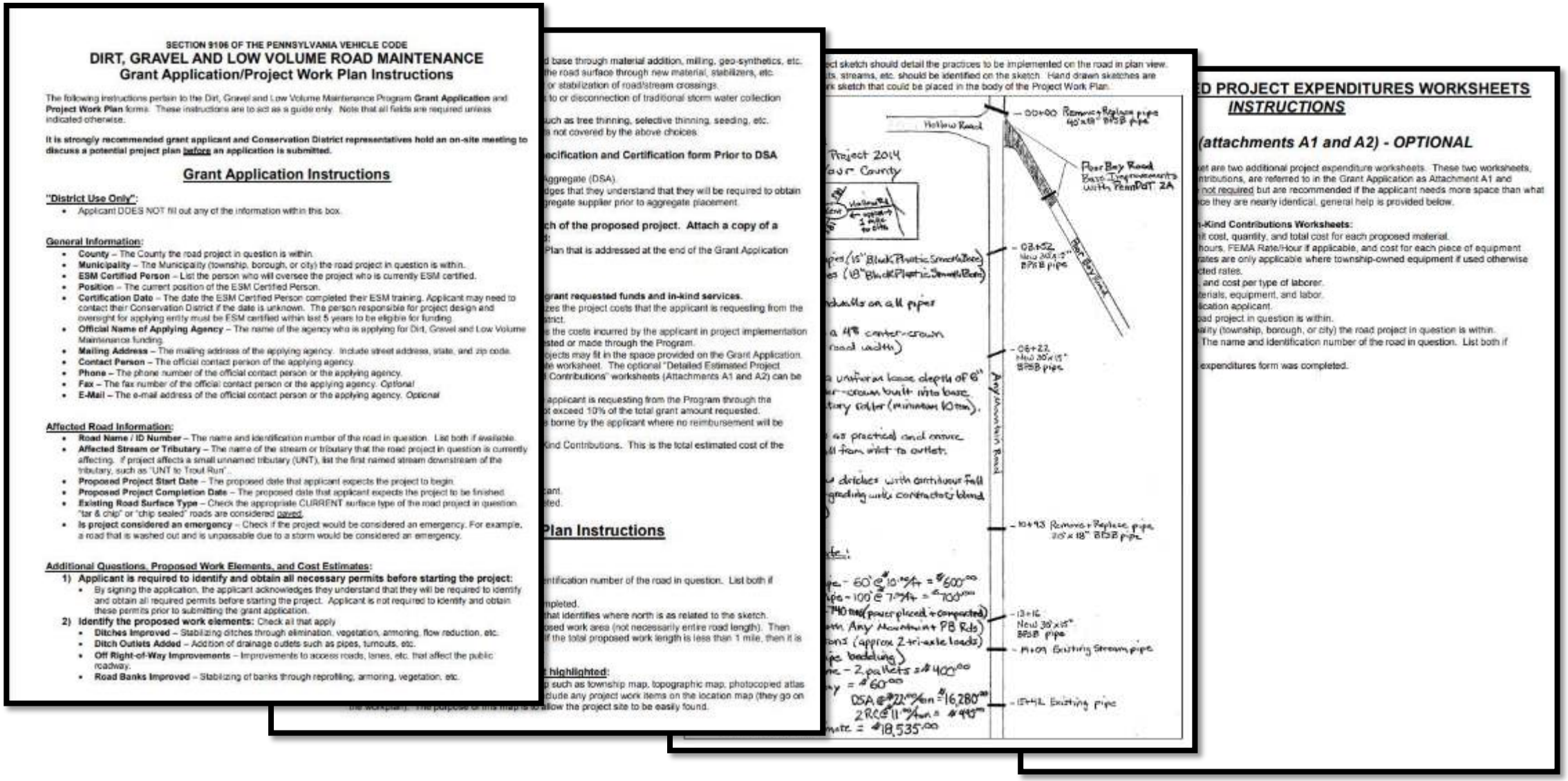
811 Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Project Length = _____ feet / miles (circle one)

North Arrow

Filling out the Application

Instructions available on Blank Forms page of Center's Website



SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE
Grant Application/Project Work Plan Instructions

The following instructions pertain to the Dirt, Gravel and Low Volume Maintenance Program **Grant Application** and **Project Work Plan** forms. These instructions are to act as a guide only. Note that all fields are required unless indicated otherwise.

It is strongly recommended grant applicant and Conservation District representatives hold an on-site meeting to discuss a potential project plan before an application is submitted.

Grant Application Instructions

"District Use Only":
- Applicant DOES NOT fill out any of the information within this box.

General Information:
- **County** – The County the road project in question is within.
- **Municipality** – The Municipality (township, borough, or city) the road project in question is within.
- **ESM Certified Person** – List the person who will oversee the project who is currently ESM certified.
- **Position** – The current position of the ESM Certified Person.
- **Certification Date** – The date the ESM Certified Person completed their ESM training. Applicant may need to contact their Conservation District if the date is unknown. The person responsible for project design and oversight for applying entity must be ESM certified within last 5 years to be eligible for funding.
- **Official Name of Applying Agency** – The name of the agency who is applying for Dirt, Gravel and Low Volume Maintenance funding.
- **Mailing Address** – The mailing address of the applying agency. Include street address, state, and zip code.
- **Contact Person** – The official contact person of the applying agency.
- **Phone** – The phone number of the official contact person or the applying agency.
- **Fax** – The fax number of the official contact person or the applying agency. Optional
- **E-Mail** – The e-mail address of the official contact person or the applying agency. Optional

Affected Road Information:
- **Road Name / ID Number** – The name and identification number of the road in question. List both if available.
- **Affected Stream or Tributary** – The name of the stream or tributary that the road project in question is currently affecting. If project affects a small unnamed tributary (UNT), list the first named stream downstream of the tributary, such as "UNT to Trout Run".
- **Proposed Project Start Date** – The proposed date that applicant expects the project to begin.
- **Proposed Project Completion Date** – The proposed date that applicant expects the project to be finished.
- **Existing Road Surface Type** – Check the appropriate CURRENT surface type of the road project in question. "tar & chip" or "chip sealed" roads are considered paved.
- **Is project considered an emergency** – Check if the project would be considered an emergency. For example, a road that is washed out and is unpassable due to a storm would be considered an emergency.

Additional Questions, Proposed Work Elements, and Cost Estimates:

1) **Applicant is required to identify and obtain all necessary permits before starting the project:**
   - By signing the application, the applicant acknowledges they understand that they will be required to identify and obtain all required permits before starting the project. Applicant is not required to identify and obtain these permits prior to submitting the grant application.
2) **Identify the proposed work elements:** Check all that apply
   - **Ditches Improved** – Stabilizing ditches through elimination, vegetation, armoring, flow reduction, etc.
   - **Ditch Outlets Added** – Addition of drainage outlets such as pipes, turnouts, etc.
   - **Off Right-of-Way Improvements** – Improvements to access roads, lanes, etc. that affect the public roadway.
   - **Road Banks Improved** – Stabilizing of banks through reprofiling, armoring, vegetation, etc.

d base through material addition, milling, geo-synthetics, etc.
he road surface through new material, stabilizers, etc.
or stabilization of road/stream crossings.
to or disconnection of traditional storm water collection

uch as tree thinning, selective thinning, seeding, etc.
s not covered by the above choices.

ecification and Certification form Prior to DSA

ggregate (DSA).
dges that they understand that they will be required to obtain
regate supplier prior to aggregate placement.

ch of the proposed project. Attach a copy of a
Plan that is addressed at the end of the Grant Application

grant requested funds and in-kind services.
zes the project costs that the applicant is requesting from the
strict.
s the costs incurred by the applicant in project implementation
sted or made through the Program.
ojects may fit in the space provided on the Grant Application
e worksheet. The optional "Detailed Estimated Project
Contributions" worksheets (Attachments A1 and A2) can be

applicant is requesting from the Program through the
ot exceed 10% of the total grant amount requested.
borne by the applicant where no reimbursement will be

Kind Contributions. This is the total estimated cost of the

ant.
ted.

Plan Instructions

ntification number of the road in question. List both if

mpleted.
that identifies where north is as related to the sketch.
osed work area (not necessarily entire road length). Then
if the total proposed work length is less than 1 mile, then it is

highlighted:
p such as township map, topographic map, photocopied atlas
clude any project work items on the location map (they go on
allow the project site to be easily found.

ct sketch should detail the practices to be implemented on the road in plan view.
ts, streams, etc. should be identified on the sketch. Hand drawn sketches are
k sketch that could be placed in the body of the Project Work Plan.

Hollow Road
Project 2014
Bear Bay Road Base Improvements with PennDOT 2A
Bear Bay Road
Any Mountain Road

D PROJECT EXPENDITURES WORKSHEETS
INSTRUCTIONS

(attachments A1 and A2) - OPTIONAL

et are two additional project expenditure worksheets. These two worksheets,
ntributions, are referred to in the Grant Application as Attachment A1 and
not required but are recommended if the applicant needs more space than what
e they are nearly identical, general help is provided below.

n-Kind Contributions Worksheets:
it cost, quantity, and total cost for each proposed material.
hours, FEMA Rate/Hour if applicable, and cost for each piece of equipment
ates are only applicable where township-owned equipment if used otherwise
cted rates.
and cost per type of laborer.
terials, equipment, and labor.
ication applicant.
ad project in question is within.
ality (township, borough, or city) the road project in question is within.
The name and identification number of the road in question. List both if

expenditures form was completed.

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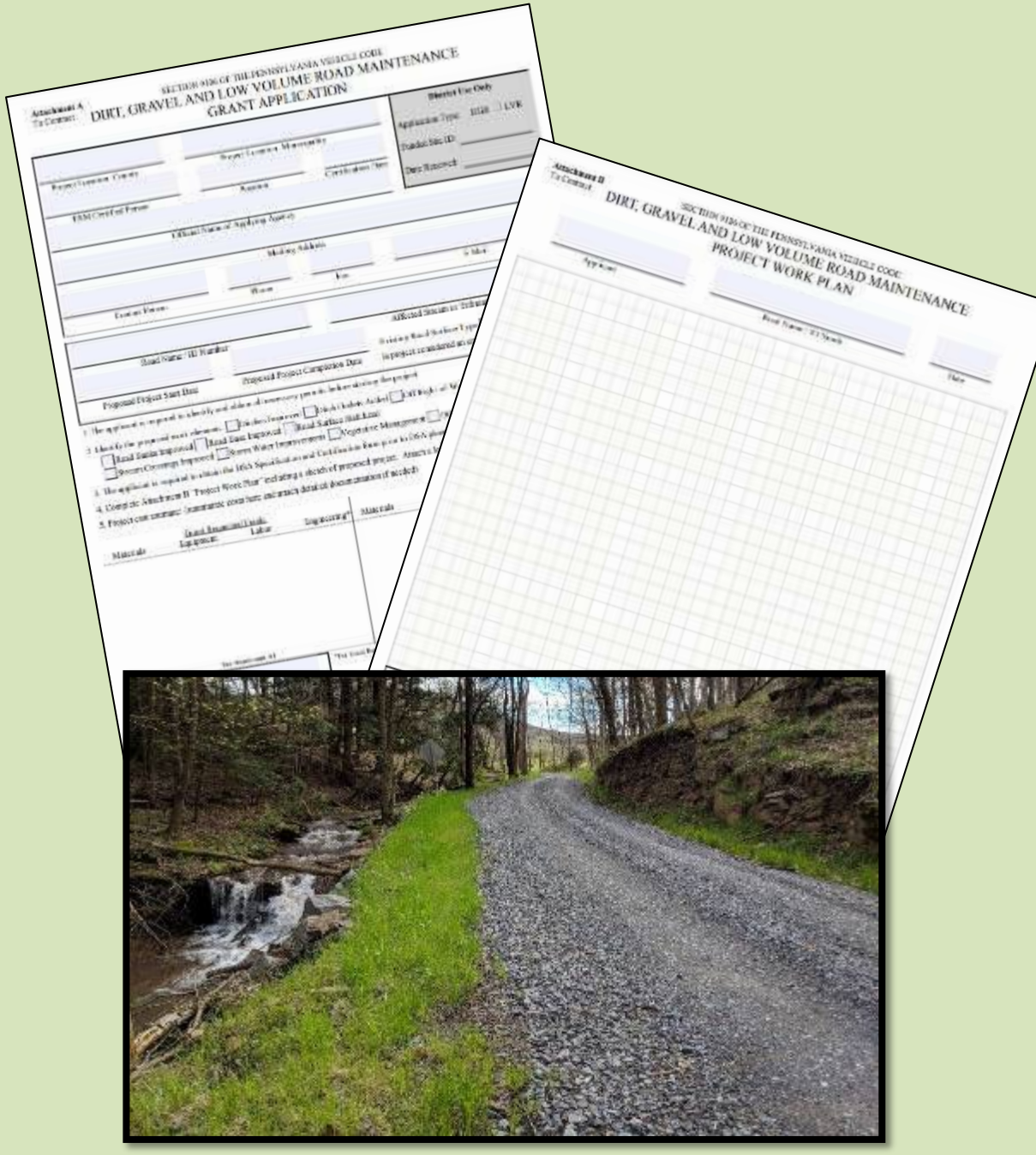

Attachment A
To Contract

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE GRANT APPLICATION

Any County	Example Township
Project Location: County	Project Location: Municipality

District Use Only

Application Type: ☐ DGR ☐ LVR

Work Site ID: _____

Date Received: _____

John Doe	Roadmaster	8/25/2022
ESM Certified Person	Position	Certification Date

Example Township
Official Name of Applying Agency

123 Main Street, Example Town, PA 12345
Mailing Address

John Doe	123-456-7890	123-789-4560	Johndoe@example.com
Contact Person	Phone	Fax	E-Mail

Any Mountain Road/ TR 123	Unnamed Tributary (UNT) to River
Road Name / ID Number	Affected Stream or Tributary

April 30, 2024	Sept 30, 2024
Proposed Project Start Date	Proposed Project Completion Date

Existing Road Surface Type: [X] Unpaved [ ] Paved

Is project considered an emergency? [ ] Yes [X] No

1.The applicant is required to identify and obtain all necessary permits before starting the project.

2. Identify the proposed work elements: [X] Ditches Improved [X] Ditch Outlets Added [X] Off Right-of-Way Improvements
[ ] Road Banks Improved [X] Road Base Improved [ ] Road Surface Stabilized
[ ] Stream Crossings Improved [X] Storm Water Improvements [X] Vegetative Management [ ] Other _____

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5. Project cost estimate: (summarize costs here and attach detailed documentation if needed)

Grant Requested Funds			In-Kind Contributions		
Materials	Equipment	Labor	Materials	Equipment	Labor
See attached sheets					
See Attachment A1			See Attachment A2		

Grant Requested.....	$ $24,775.00
In-Kind Contributions.....	$ $3,590.00
Total Project Value.....	$ $28,365.00

John Doe
Applicant Signature

2/1/2023
Date

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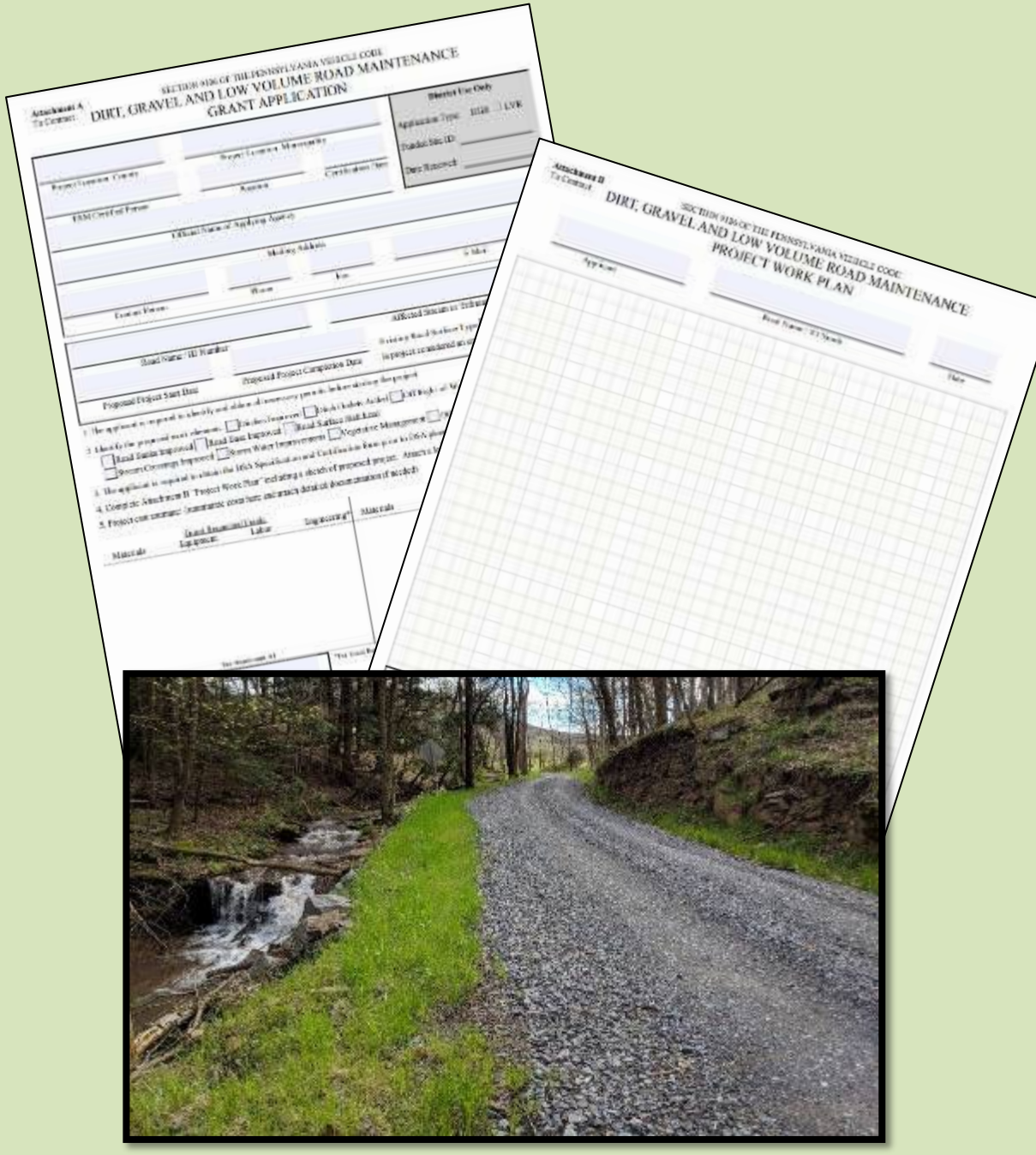
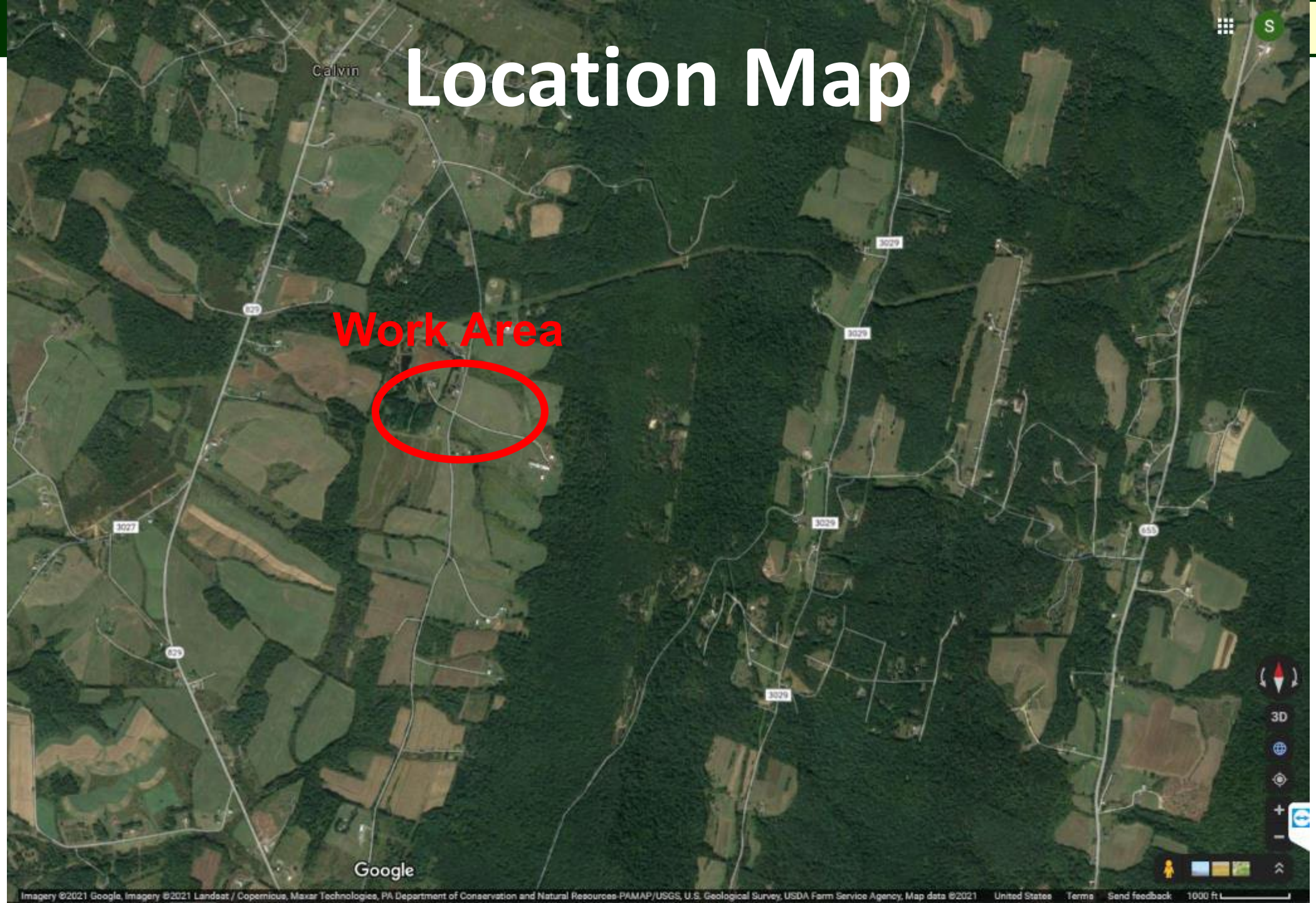
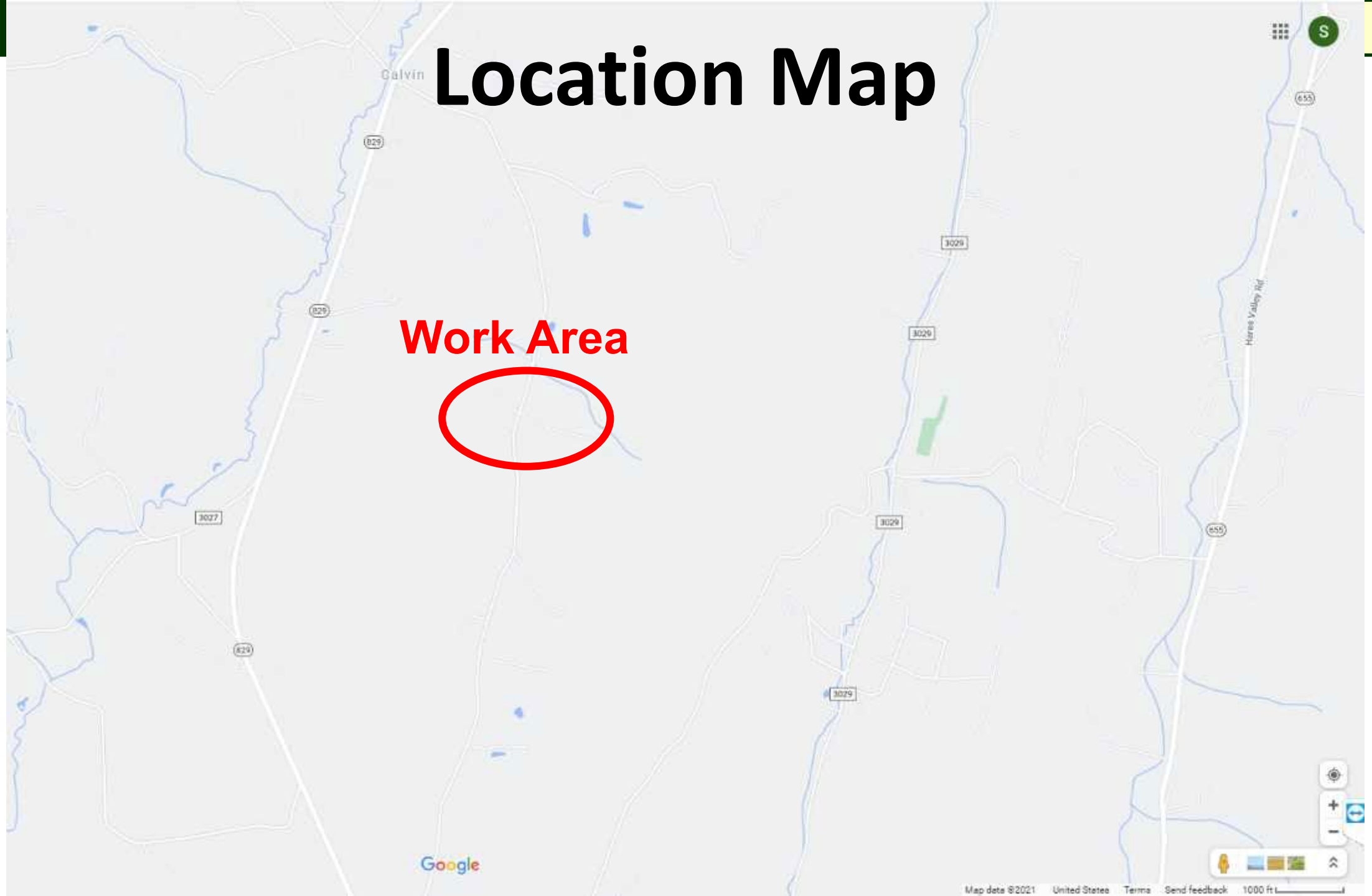


Location Map

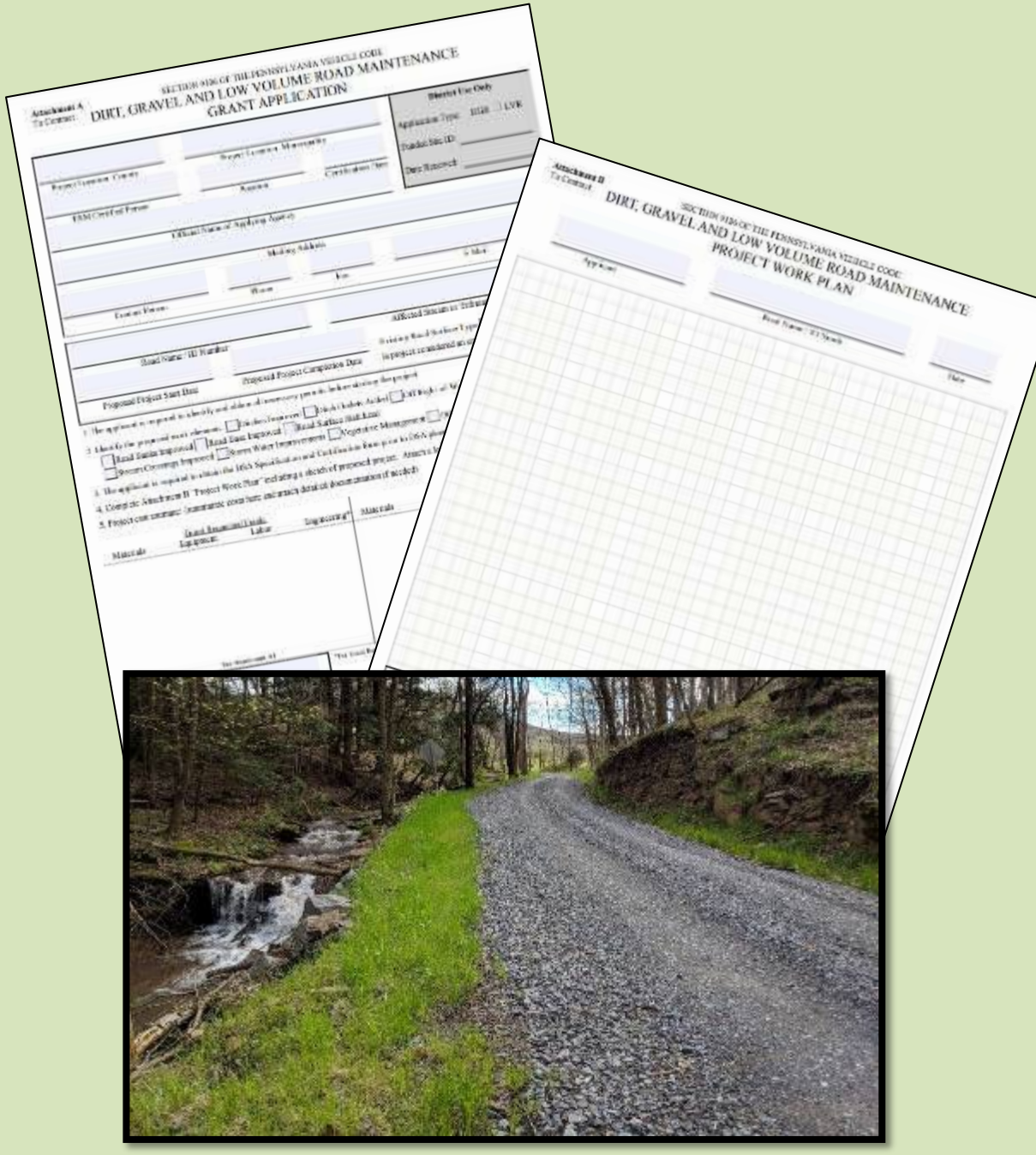


Location Map



Outline

- DGLVR Program Introduction
- Eligibility for DGLVR Grant funds
- **Filling out the Grant Application**
  - Page 1
  - Location map
  - **Project sketch**
  - Cost estimate
  - Attachments
- What to do if you need help



DGLVR Grant Applications

Application

Attachment B
To Contract

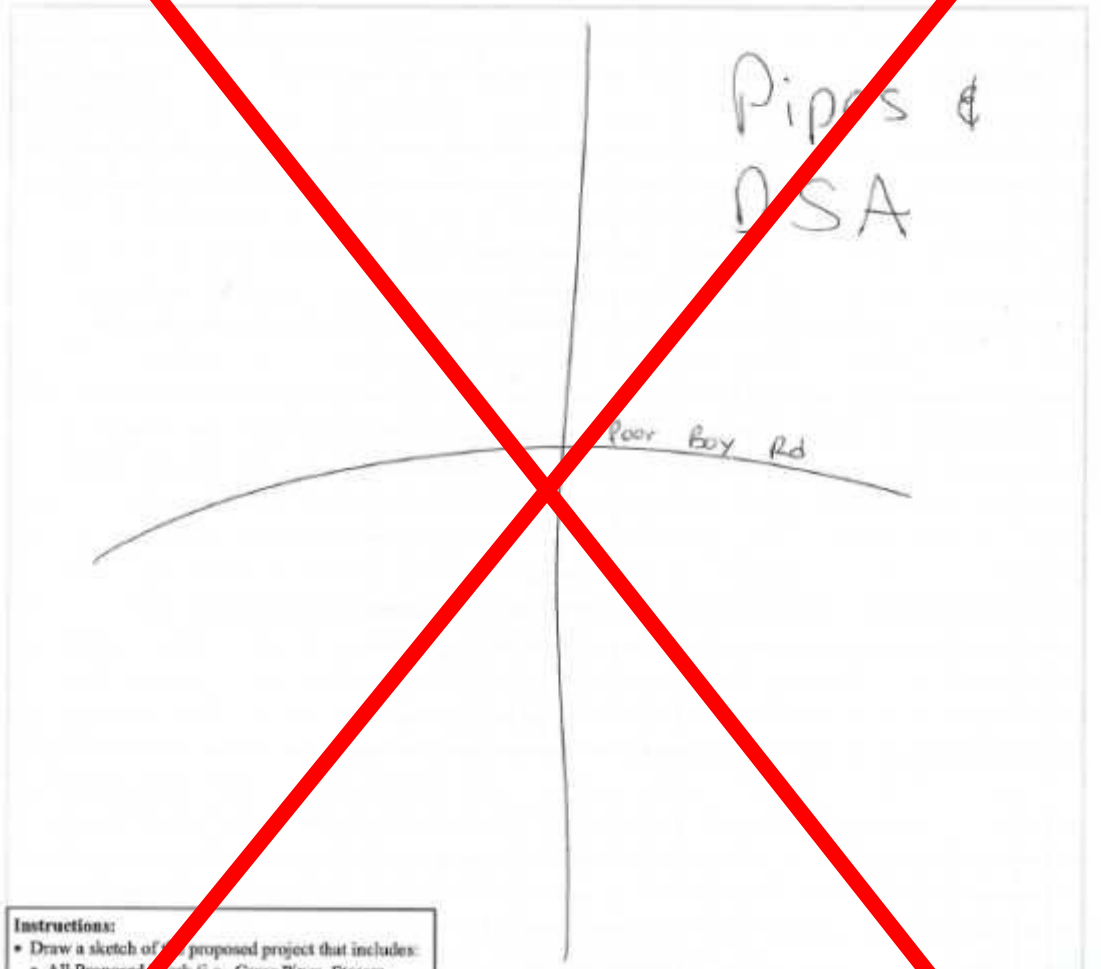
SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE PROJECT WORK PLAN

Emery Township — Applicant

Amy Mountain Rd — Road Name / ID Numb

Date



Instructions:

- Draw a sketch of the proposed project that includes:
  - All Proposed Work (i.e., Cross Pipes, Stream Crossings, Other ESM Practices)
  - Project Total Length in Feet or Miles
  - Nearest Intersection and/or Reference Landmarks
  - Known Utilities
  - North Arrow
- Attach a copy of a locational map with the project highlighted
- Attach additional project details as necessary

811 — Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

North Arrow

Project Length = _____ feet / miles (circle one)

Attachment B
Contract

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE PROJECT WORK PLAN

Every Township — Applicant

Any Mountain Rd — Road Name / ID Numb

Date

Pipes & DSA

Poor Boy Rd

Instructions:

- Draw a sketch of the proposed project that includes:
  - All Proposed Work (i.e., Cross Pipes, Stream Crossings, Other ESM Practices)
  - Project Road Length in Feet or Miles
  - Nearest Intersection and/or Reference Landmarks
  - Known Utilities
  - North Arrow
- Attach a copy of a locational map with the project highlighted

Attach additional project details as necessary

811 Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

North Arrow

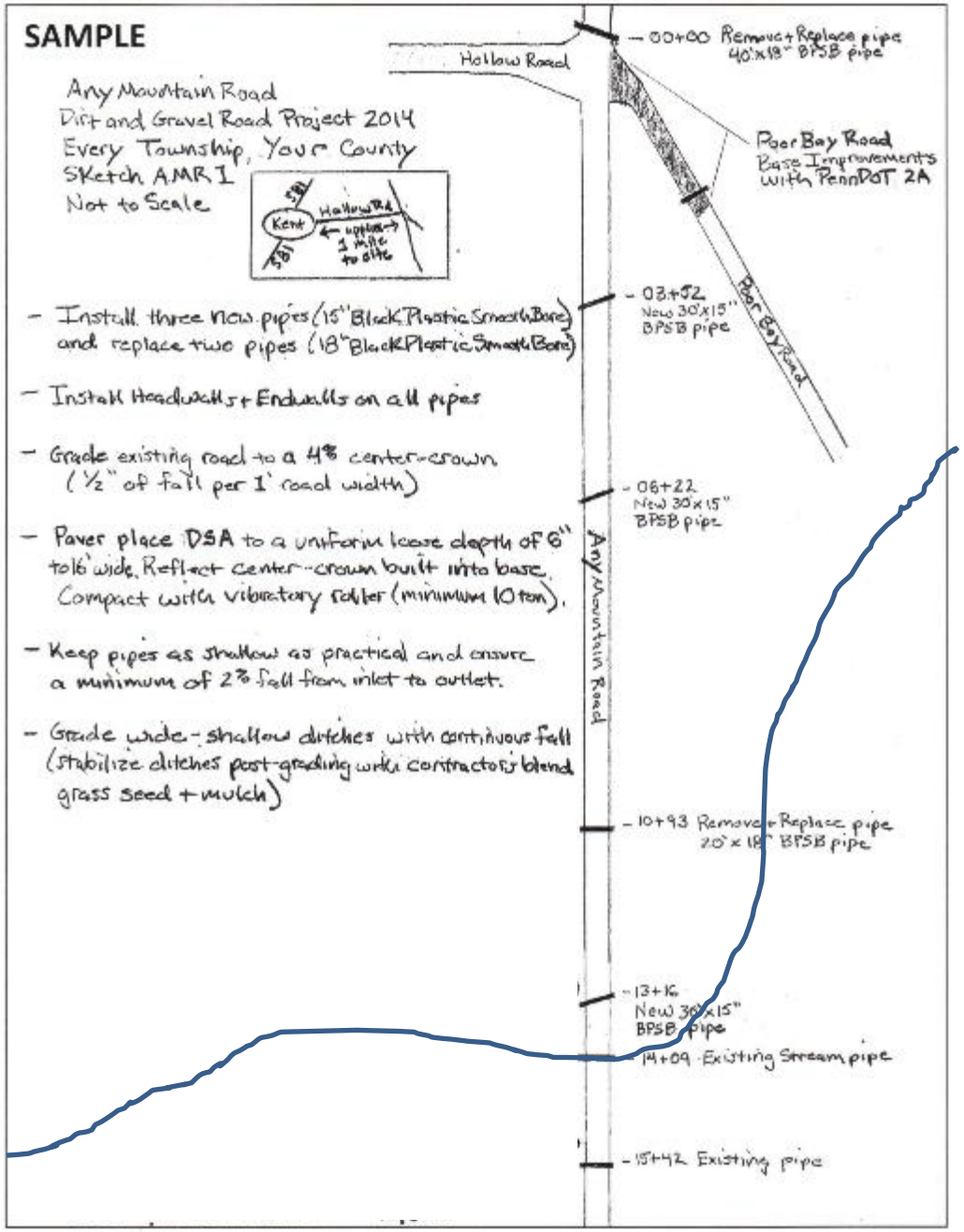
Project Length = _____ feet / miles (circle one)

Project Work Sketch: The project sketch should detail the practices to be implemented on the road in plan view. Items such as new culverts, turnouts, streams, etc. should be identified on the sketch. Hand drawn sketches are acceptable. Below is a sample work sketch that could be placed in the body of the Project Work Plan.

SAMPLE

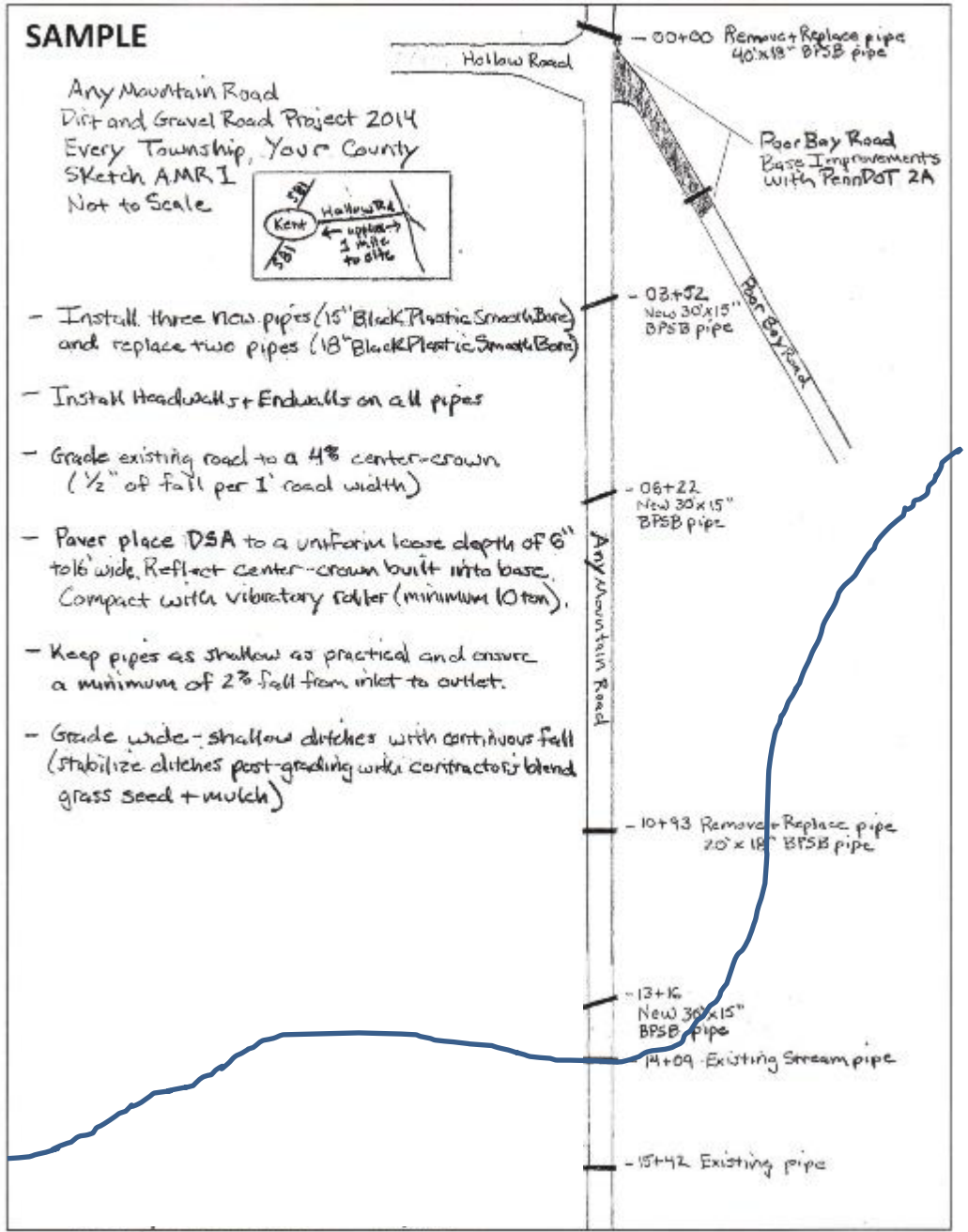
Any Mountain Road
Dirt and Gravel Road Project 2014
Every Township, Your County
Sketch AMR 1
Not to Scale

- 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 (½" of fall per 1' road width)
- Paver place DSA to a uniform loose depth of 6" to 16' 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 ditches post-grading work; contractor to blend grass seed + mulch)



Filling out the Application

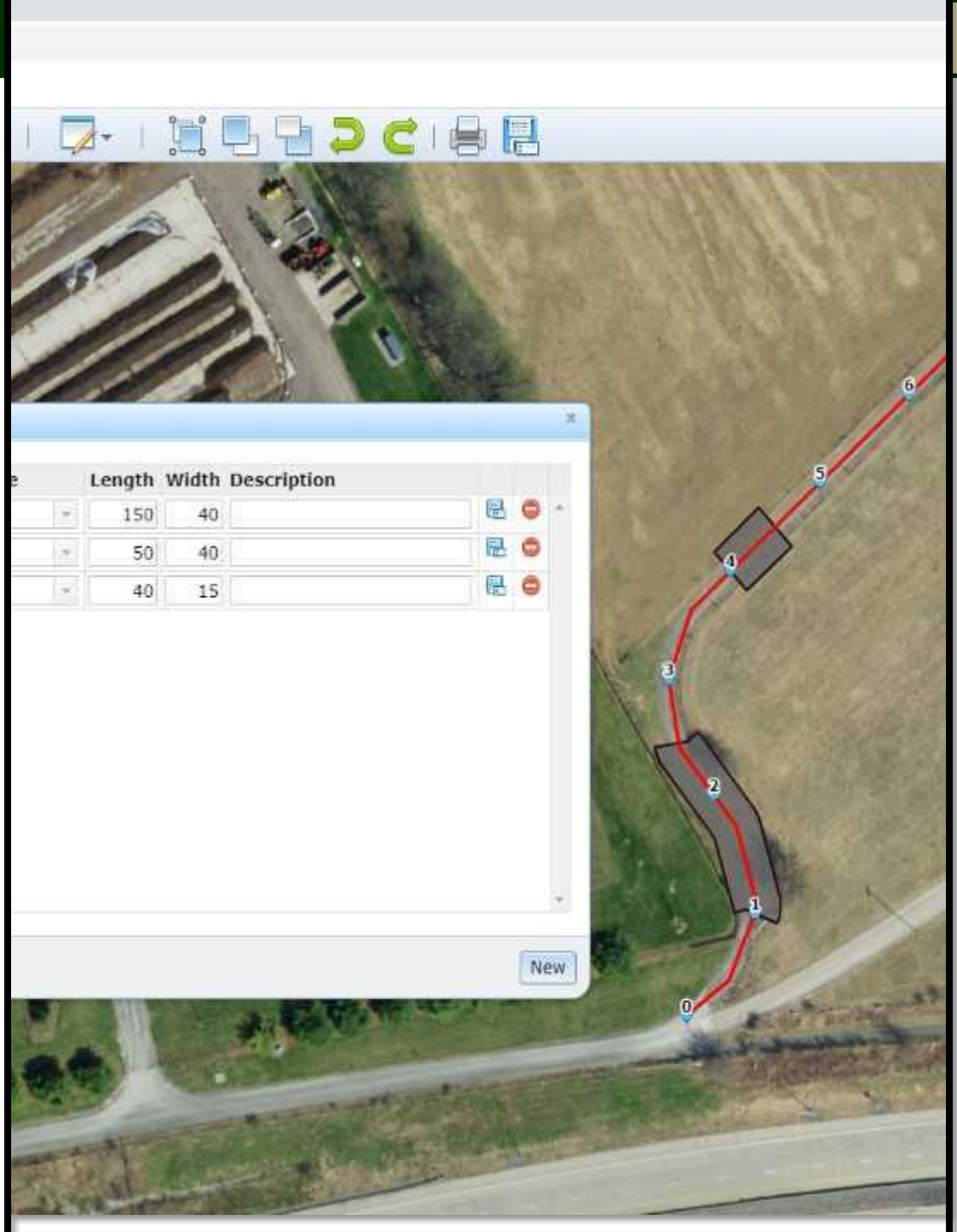
Project Work Sketch: The project sketch should detail the practices to be implemented on the road in plan view. Items such as new culverts, turnouts, streams, etc. should be identified on the sketch. Hand drawn sketches are acceptable. Below is a sample work sketch that could be placed in the body of the Project Work Plan.



Project Sketch Tips

Show approximate location, shape, and size of:

- Road
- Project features
  - cross pipes, French mattress, ditch reshaping, road fill, etc.
  - 3 dimensions
  - Materials notes
- Streams
- Landmarks (big tree, fence, utility, mailbox, house, etc.)
- Property lines

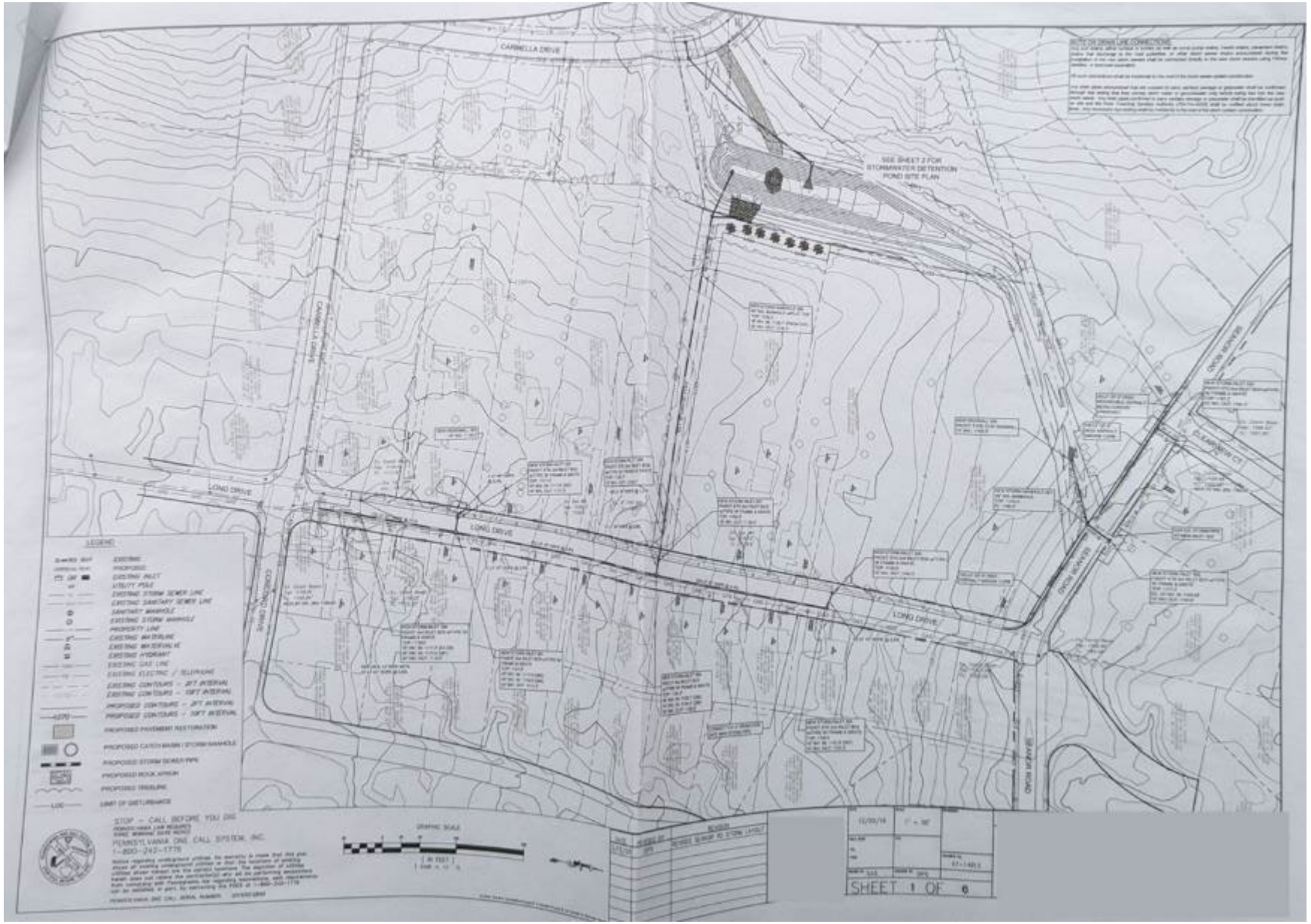


Filling out the Application

GIS Project Sketch Tool

- CDGRS has been working to develop updated project sketch capability in the GIS
- Currently being tested and will be available to districts soon
- Includes:
  - Draw on map to scale
  - Stationing
  - Standardized practices (pipe, underdrain, etc.)
  - Can print and attach to grant app

Filling out the Application



Engineered drawings are not required for the DGLVR grant application, but can be included

Outline

- DGLVR Program Introduction
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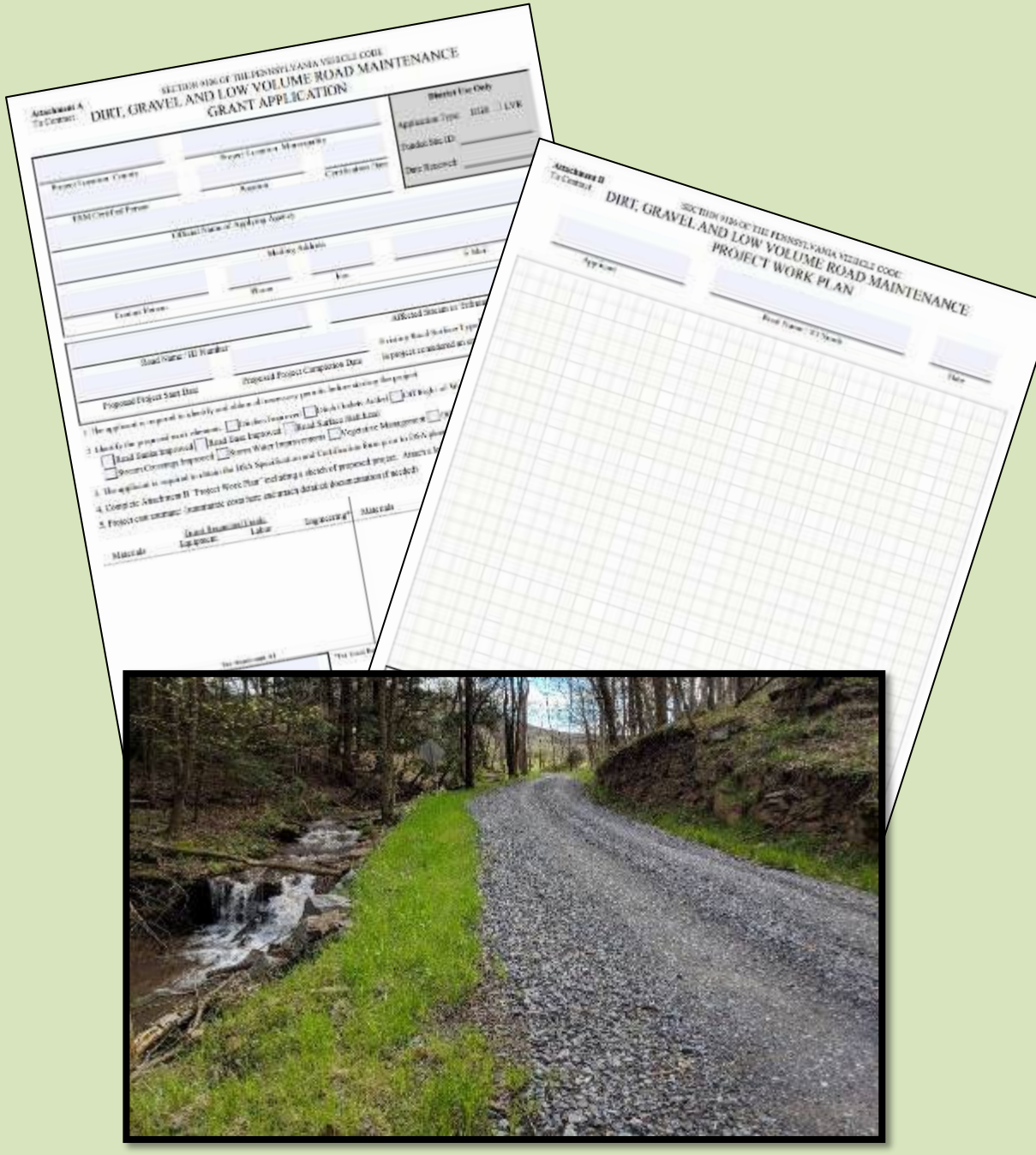


1. The applicant is required to identify and obtain all necessary permits before starting the project.

2. Identify the proposed work elements: [X] Ditches Improved [X] Ditch Outlets Added [X] Off Right-of-Way Improvements
[ ] Road Banks Improved [X] Road Base Improved [ ] Road Surface Stabilized
[ ] Stream Crossings Improved [X] Storm Water Improvements [X] Vegetative Management [ ] Other _____

3. The applicant is required to obtain the DSA Specification and Certification form prior to DSA placement.

4. Complete Attachment B "Project Work Plan" including a sketch of proposed project. Attach a locational map with the project highlighted.

5. Project cost estimate: (summarize costs here and attach detailed documentation if needed)

Grant Requested Funds			In-Kind Contributions		
Materials	Equipment	Labor	Materials	Equipment	Labor
DSA: $10,000 Pipes: $10,000 Etc....			Township labor to install project: $3,590		
See Attachment A1			See Attachment A2		

Grant Requested..... $	$24,775.00
In-Kind Contributions..... $	$3,590.00
Total Project Value..... $	$28,365.00

John Doe
Applicant Signature

2/1/2023
Date

Developing a Cost Estimate

- Start with a project plan
  - Sketch/draw your plan
- Create materials list
- Find out how much the materials costs
- Find out how much installing the project will cost
- Consider:
  - Do you have the labor and equipment to install the project yourself?
  - Will you hire a contractor?

Filling out the Application

Attachment A1
to Contract
(optional)

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE
DETAILED ESTIMATED PROJECT EXPENDITURES
GRANT REQUESTED FUNDS

Use best estimates and complete as much info as possible.

Materials*			
Type	Unit Cost	Qty	Cost $
Total Materials $			

Equipment			
Type	Hours	FEMA* Rate/Hr	Cost $
Total Equipment $			

Labor*			
Type	Rate/Hr	Hours	Cost $
Total Labor $			

*Prevailing wage may apply to projects over $25,000 when a contractor is involved.

Engineering†	
Total Engineering $	

†For Grant Requested Funds, Engineering costs cannot exceed $25,000 or 20% of the total grant amount requested.

* FEMA rates are only applicable where municipality-owned equipment is used otherwise use contracted rates.

Total Grant Requested: $_____ (materials + equipment + labor + engineering)

Applicant _____ County _____ Road Name / ID Number _____ Date _____

Attachment A2
to Contract
(optional)

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE
DETAILED ESTIMATED PROJECT EXPENDITURES
IN-KIND FUNDS

Use best estimates and complete as much info as possible.

Materials*			
Type	Unit Cost	Qty	Cost $
Total Materials $			

Equipment			
Type	Hours	FEMA* Rate/Hr	Cost $
Total Equipment $			

Labor*			
Type	Rate/Hr	Hours	Cost $
Total Labor $			

*Prevailing wage may apply to projects over $25,000 when a contractor is involved.

Engineering	
Total Engineering $	

* FEMA rates are only applicable where municipality-owned equipment is used otherwise use contracted rates.

Total In-Kind Contributions: $_____ (materials + equipment + labor + engineering)

Applicant _____ County _____ Road Name / ID Number _____ Date _____

Attachment A1
to Contract
(optional)

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE
DETAILED ESTIMATED PROJECT EXPENDITURES
GRANT REQUESTED FUNDS

Use best estimates and complete as much info as possible.

Materials*			
Type	Unit Cost	Qty	Cost $
Total Materials $			

Equipment			
Type	Hours	FEMA* Rate/Hr	Cost $
Total Equipment $			

Labor°			
Type	Rate/Hr	Hours	Cost $
Total Labor $			

°Prevailing wage may apply to projects over $25,000 when a contractor is involved.

Engineering+	
Total Engineering $	

+For Grant Requested Funds, Engineering costs cannot excee $25,000 or 20% of the total grant amount requested.

* FEMA rates are only applicable where municipality-owned equipment is used otherwise use contracted rates.

Total Grant Requested: $_____ (materials + equipment + labor + engineering)

_____ Applicant

_____ County

_____ Road Name / ID Number

_____ Date

Filling out the Application

Materials*			
Type	Unit Cost	Qty	Cost $
DSA	$30/ ton	800 tons	$24,000
Total Materials $			

X =

Attachment A1
to Contract
(optional)

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE
DETAILED ESTIMATED PROJECT EXPENDITURES
GRANT REQUESTED FUNDS

Use best estimates and complete as much info as possible.

Materials*

Type	Unit Cost	Qty	Cost $
Total Materials $			

Equipment

Type	Hours	FEMA* Rate/Hr	Cost $
Total Equipment $			

Labor°

Type	Rate/Hr	Hours	Cost $
Total Labor $			

°Prevailing wage may apply to projects over $25,000 when a contractor is involved.

Engineering+

Total Engineering $	

+For Grant Requested Funds, Engineering costs cannot exceed $25,000 or 20% of the total grant amount requested.

* FEMA rates are only applicable where municipality owned equipment is used other[illegible]

Total Grant Requested: $ _____ (materials + equipment + labor + engineering)

Applicant _____ County _____ Road Name / ID Number _____ Date _____

Up to 20% of the grant (max $25k) can be used for engineering costs incurred AFTER a contract is signed

1.The applicant is required to identify and obtain all necessary permits before starting the project.

2. Identify the proposed work elements: [X] Ditches Improved [X] Ditch Outlets Added [X] Off Right-of-Way Improvements
[ ] Road Banks Improved [X] Road Base Improved [ ] Road Surface Stabilized
[ ] Stream Crossings Improved [X] Storm Water Improvements [X] Vegetative Management [ ] Other _____

3. The applicant is required to obtain the DSA Specification and Certification form prior to DSA placement.

4. Complete Attachment B "Project Work Plan" including a sketch of proposed project. Attach a locational map with the project highlighted.

5. Project cost estimate: (summarize costs here and attach detailed documentation if needed)

Grant Requested Funds			In-Kind Contributions		
Materials	Equipment	Labor	Materials	Equipment	Labor
See attached sheets					
See Attachment A1			See Attachment A2		

Grant Requested..... $	$24,775.00
In-Kind Contributions..... $	$3,590.00
Total Project Value..... $	$28,365.00

John Doe
Applicant Signature

5/1/2021
Date

Filling out the Application

Attachment A1
to Contract
(optional)

SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE

DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE
DETAILED ESTIMATED PROJECT EXPENDITURES
GRANT REQUESTED FUNDS

Use best estimates and complete as much info as possible.

Materials*

Type	Unit Cost	Qty	Cost $
DSA	30.00	800	24000
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
Total Materials $			24,000.00

Equipment

Type	Hours	FEMA* Rate/Hr	Cost $
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
Total Equipment $			0.00

Labor°

Type	Rate/Hr	Hours	Cost $
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
Total Labor $			0.00

°Prevailing wage may apply to projects over $25,000 when a contractor is involved.

Engineering+

Total Engineering $	0.00

+For Grant Requested Funds, Engineering costs cannot exceed 20% of the total grant amount requested.

* FEMA rates are only applicable where municipality-owned equipment is used otherwise use contracted rates.

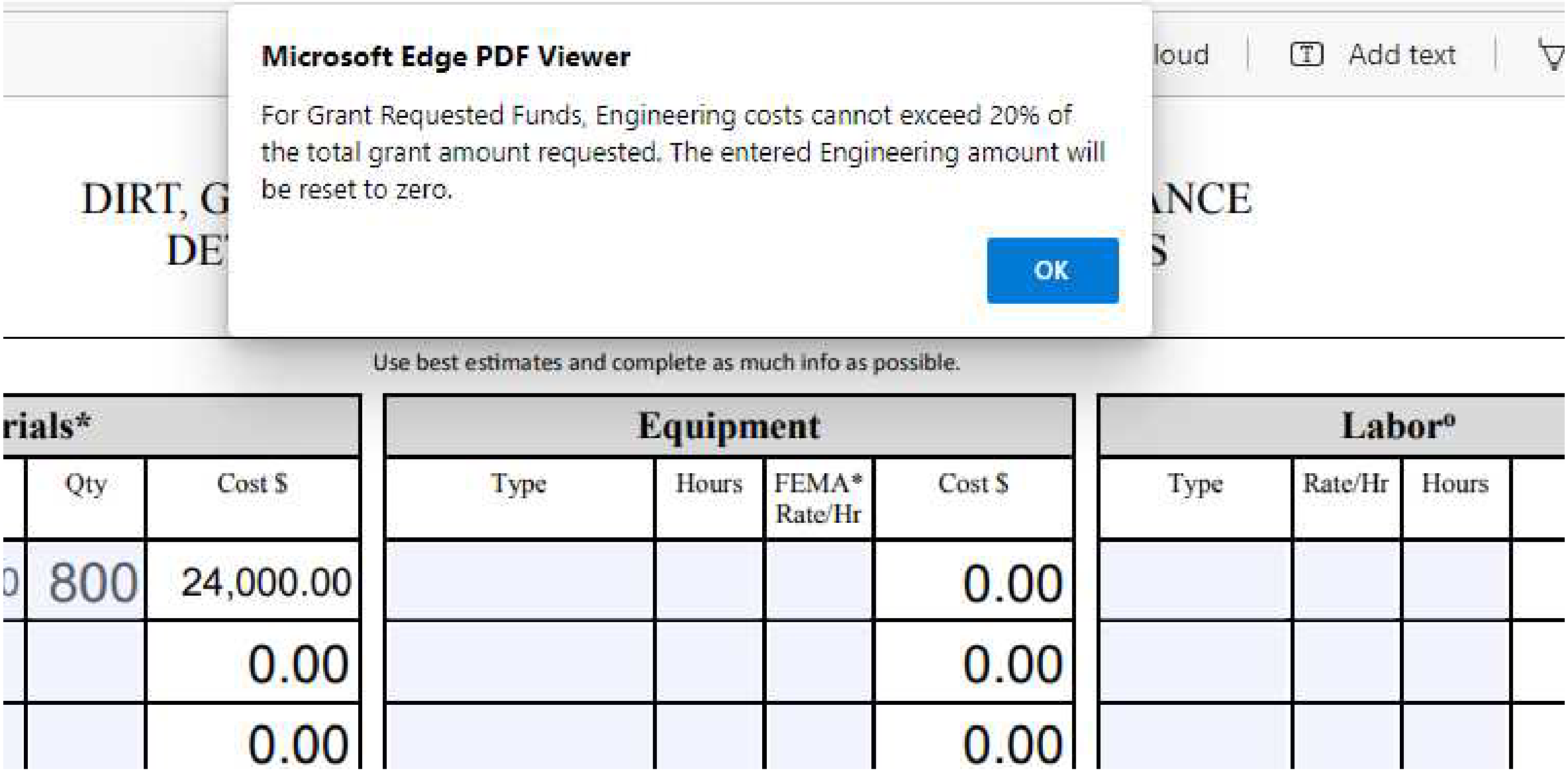
Total Grant Requested: $ 24,000.00 (materials + equipment + labor + engineering)

Applicant | County | Road Name / ID Number | Date

The PDF grant application on the Center's website does the math for you!

https://dirtandgravel.psu.edu/pa-program-resources/program-specific-resources/blank-forms/

Filling out the Application



rials*		Equipment				Labor[0]			
Qty	Cost $	Type	Hours	FEMA* Rate/Hr	Cost $	Type	Rate/Hr	Hours	
800	24,000.00				0.00				
	0.00				0.00				
	0.00				0.00				

Filling out the Application

January 4, 2023

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Avenue Drainage Improvements

Item	Description	Quantity	Unit	Unit Price	Escrow
1	**MOBILIZATION**	1	LS	$ 15,000.00	$ 15,000.00
	Subtotal				**$ 15,000.00**
2	**EROSION CONTROL**				
	Inlet Protection	7	EA	$ 200.00	$ 1,400.00
	Erosion Control Blanket	100	SF	$ 1.00	$ 100.00
	Subtotal				**$ 1,500.00**
3	**STORMWATER MANAGEMENT**				
	18" HDPE Pipe	255	LF	$ 150.00	$ 38,250.00
	Type C Inlet	5	EA	$ 5,000.00	$ 25,000.00
	Manhole	2	EA	$ 7,000.00	$ 14,000.00
	Water Quality Structure - TerreKleen TK18	1	EA	$ 40,000.00	$ 40,000.00
	Connection to Existing Inlet	2	EA	$ 2,000.00	$ 4,000.00
	Subtotal				**$ 121,250.00**
4	**CONCRETE**				
	Concrete Curb	25	LF	$ 75.00	$ 1,875.00
	ADA Ramps	2	EA	$ 3,500.00	$ 7,000.00
	Subtotal				**$ 8,875.00**
5	**ASPHALT PAVING**				
	Full Depth Trench Restoration	125	SY	$ 100.00	$ 12,500.00
	Subtotal				**$ 12,500.00**
	SUBTOTAL:				**$ 159,125.00**
	DESIGN, CONSTRUCTION DOCS, AND INSPECTIONS				**$ 38,031.25**
	TOTAL:				**$ 197,156.25**

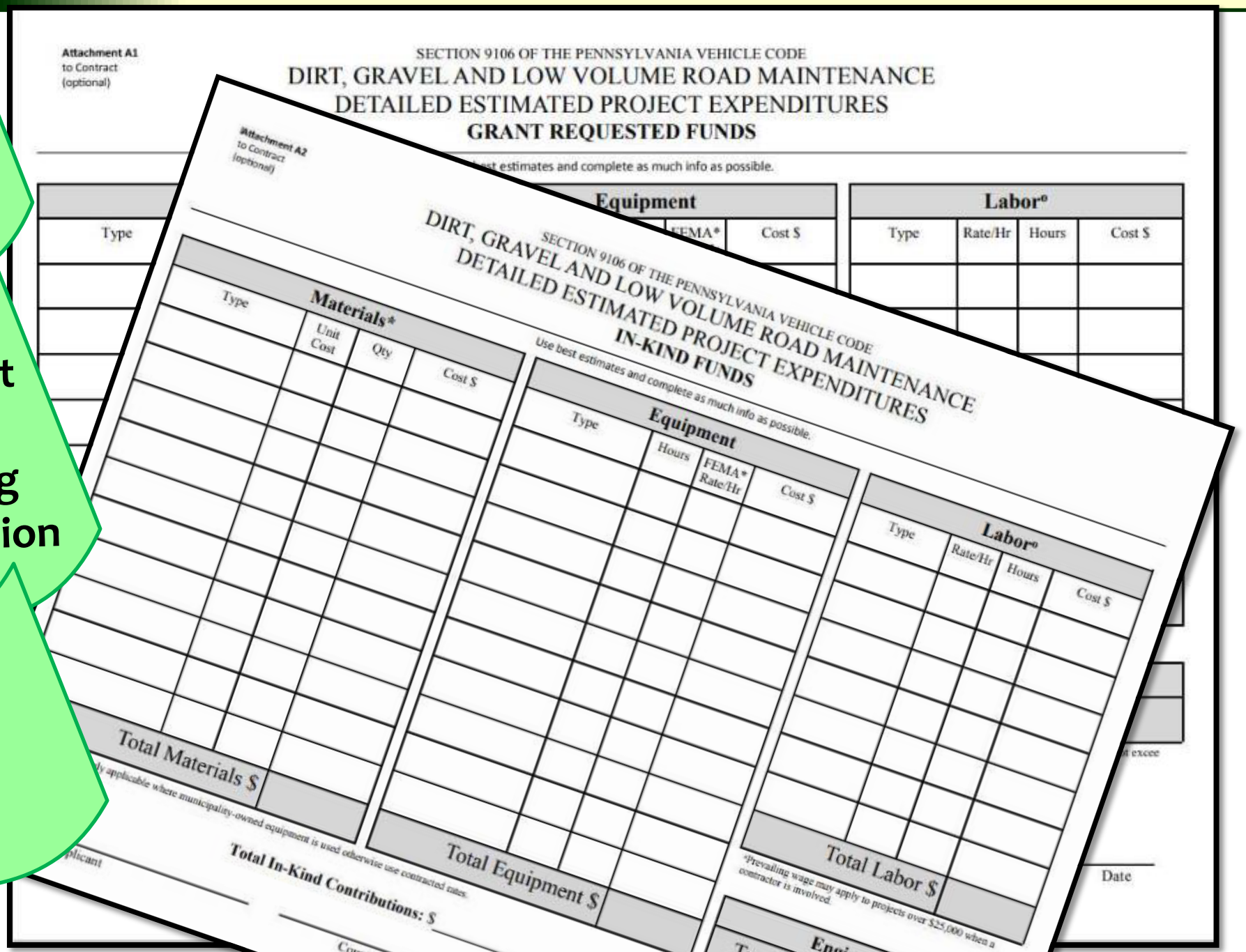
A cost estimate prepared by an engineer or contractor can be attached to the grant application

Make sure to specify which costs the grant will pay for and which will be in-kind

Anticipate cost increases by the time you go to construction

Don't forget to budget for all project components, including Erosion & Sedimentation (E&S) Controls

Don't forget to budget for Prevailing Wage



Make sure to budget for all project components

Example: What do you need to install a cross pipe?

- Pipe
- Connector/grease
- Headwalls and endwalls
- Back fill
- Equipment and labor
- Compaction equipment
- Backhoe/excavator
- Skid loader?
- Truck to haul waste material?

Erosion and Sediment (E&S) Controls

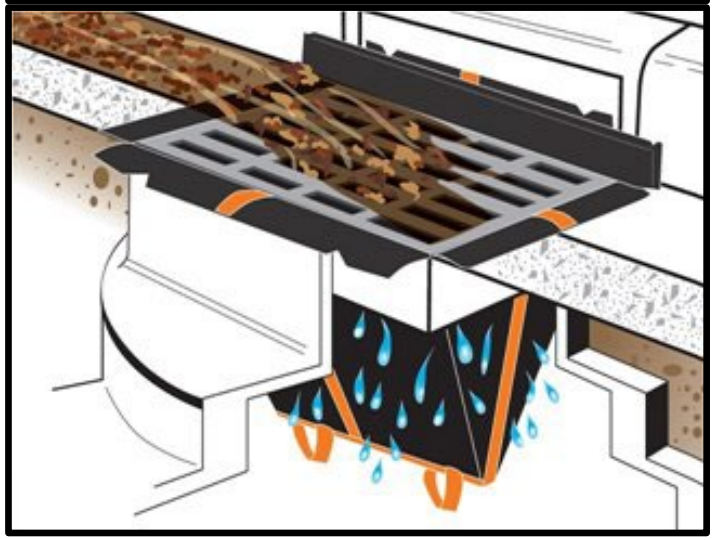
- Prevent loose earth disturbed during construction from washing away
- Best management practices to reduce erosion can include free practices:
  - Don’t work in the rain
  - Don’t leave disturbed earth if it’s going to rain over night/the next day
  - Fill/cover any trenches the same day you dig them
  - Complete stream work when the water flow is low

E&S Controls to budget for

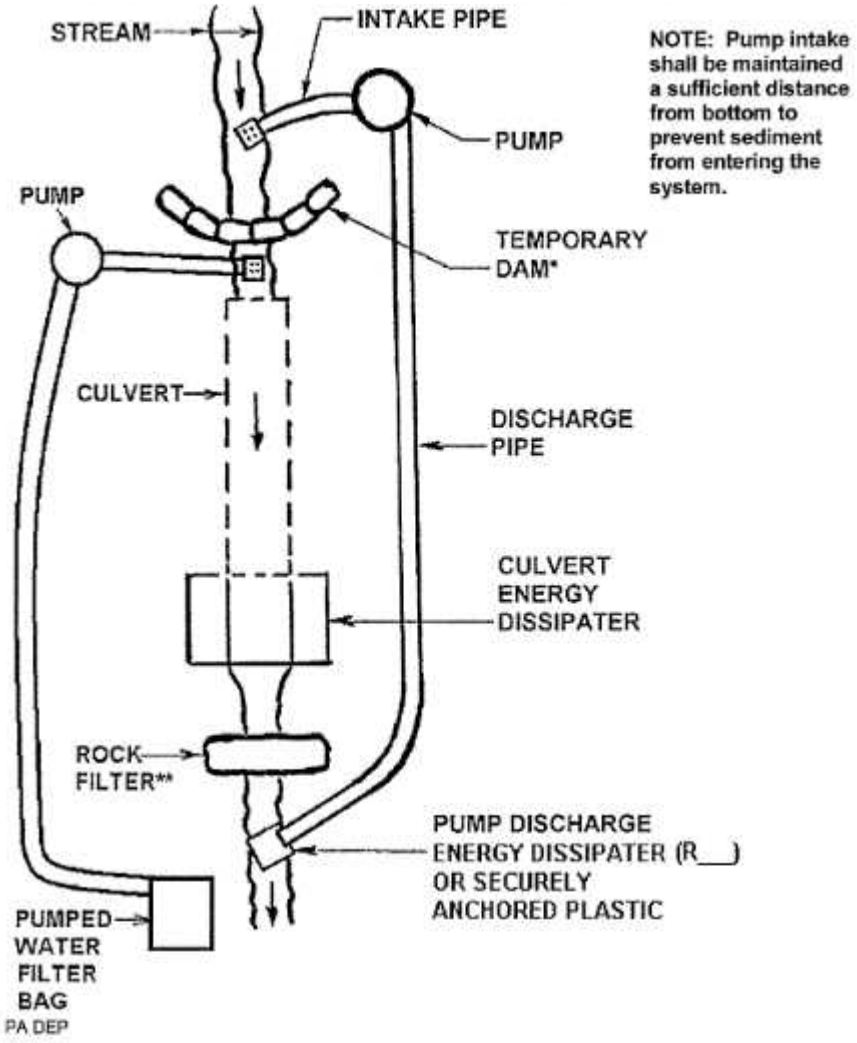
Erosion blanket

Grass seed and mulch

Inlet Filter Bag



Water pump around system



ALWAYS seed and mulch

Prevailing Wage

- DGLVR projects **totaling $25,000** or more must pay prevailing wage to **contracted** labor
  - See "Frequently Asked Questions about Prevailing Wage Document"
  - You can look up PW rate determinations in your area to estimate PW costs
  - Ask contractors for cost estimates at PW rates

Prevailing Wage

–See recorded webinars from 2022

https://dirtandgravel.psu.edu/education-training/webinars/past-webinars/

- January 27: Prevailing Wage
  - This webinar provided an overview of Prevailing Wage requirements for DGLVR Program with some updated examples.
  - Webinar Download (72.2 MB): MP4 format *(~34 minutes)*
- April 7: Prevailing Wage II
  - This webinar was the second part of an earlier PW webinar this spring, with this webinar involving invited speakers. Speakers from the U.S. Department of Labor and PA Department of Labor and Industry joined this webinar to discuss Prevailing Wage and answer questions related to the DGLVR Program.
  - Webinar Download (344 MB): MP4 format *(~1 hour, 37 minutes)*

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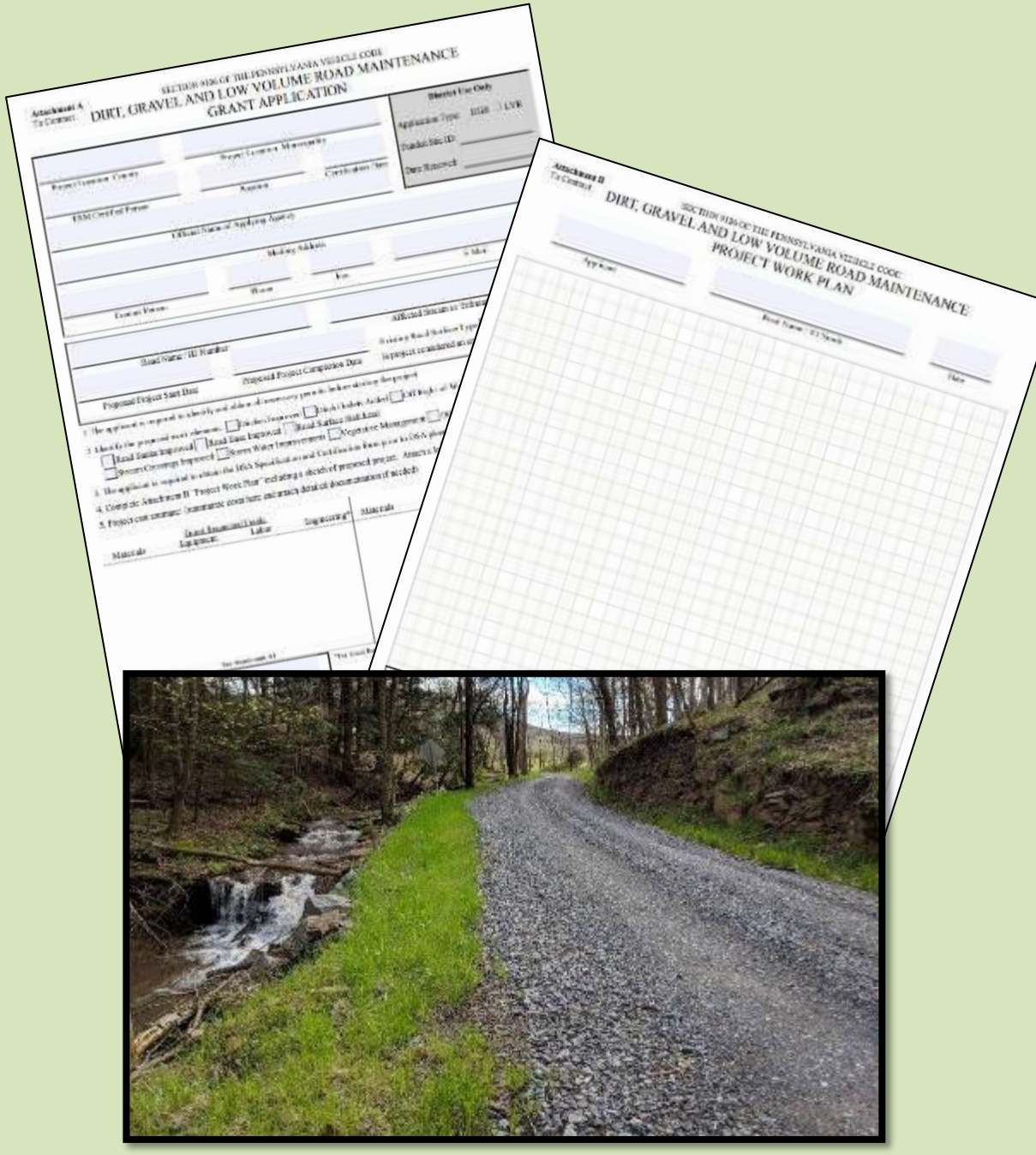
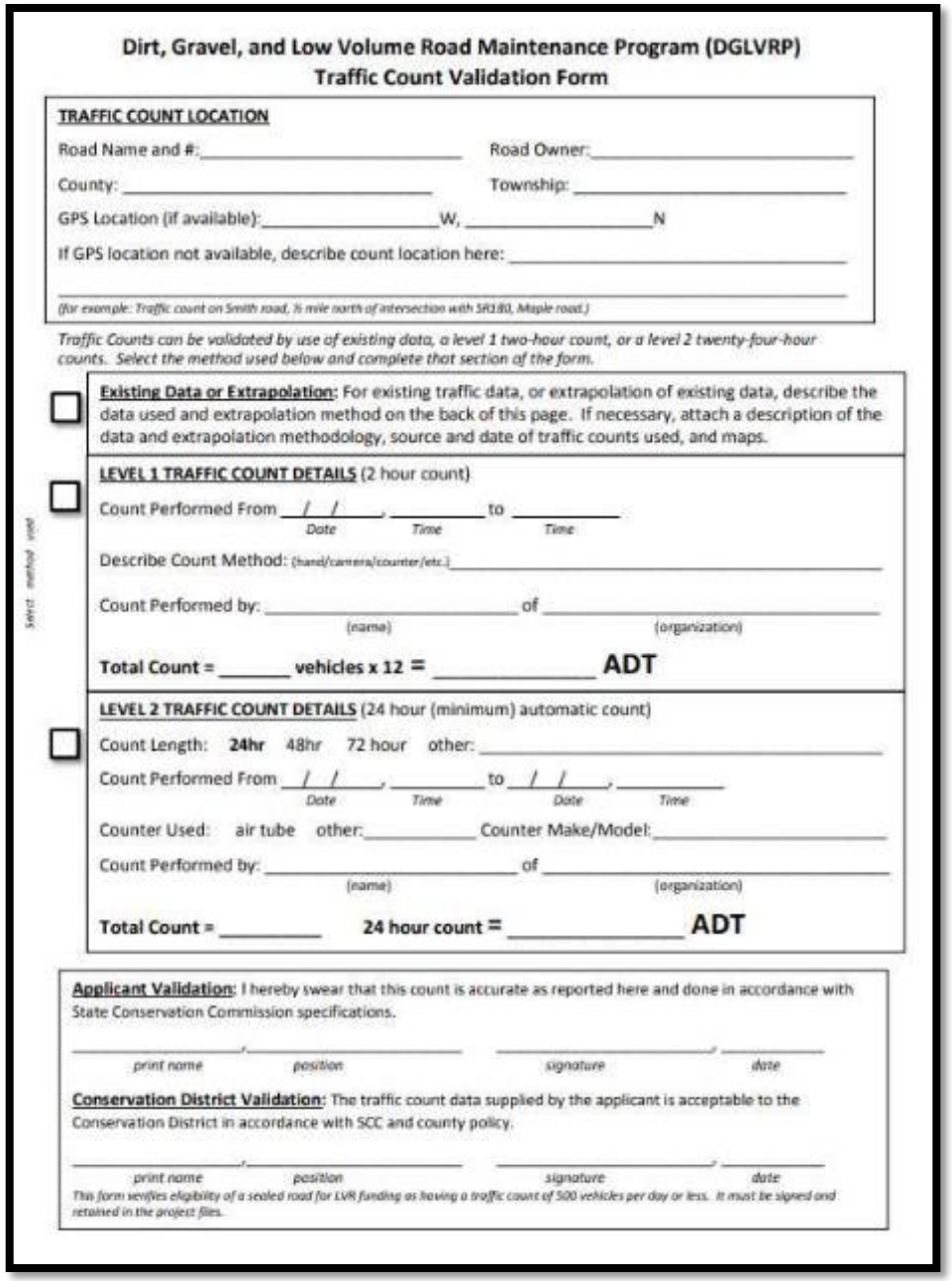
  - Cost estimate
  - **Attachments**
- What to do if you need help



Potential Attachments to the Grant Application

- Traffic count for LVR Projects



Dirt, Gravel, and Low Volume Road Maintenance Program (DGLVRP)
Traffic Count Validation Form

TRAFFIC COUNT LOCATION

Road Name and #:_____ Road Owner:_____

County: _____ Township: _____

GPS Location (if available):_____W, _____N

If GPS location not available, describe count location here: _____

_____

(for example: Traffic count on Smith road, ½ mile north of intersection with SR180, Maple road.)

Traffic Counts can be validated by use of existing data, a level 1 two-hour count, or a level 2 twenty-four-hour counts. Select the method used below and complete that section of the form.

☐ **Existing Data or Extrapolation:** For existing traffic data, or extrapolation of existing data, describe the data used and extrapolation method on the back of this page. If necessary, attach a description of the data and extrapolation methodology, source and date of traffic counts used, and maps.

☐ **LEVEL 1 TRAFFIC COUNT DETAILS** (2 hour count)

Count Performed From __/__/____, _____ to _____
Date *Time* *Time*

Describe Count Method: (hand/camera/counter/etc.)_____

Count Performed by: _____ of _____
(name) (organization)

Total Count = _____ vehicles x 12 = _____ ADT

☐ **LEVEL 2 TRAFFIC COUNT DETAILS** (24 hour (minimum) automatic count)

Count Length: **24hr** 48hr 72 hour other: _____

Count Performed From __/__/____, _____ to __/__/____, _____
Date *Time* *Date* *Time*

Counter Used: air tube other:_____ Counter Make/Model:_____

Count Performed by: _____ of _____
(name) (organization)

Total Count = _____ 24 hour count = _____ ADT

Applicant Validation: I hereby swear that this count is accurate as reported here and done in accordance with State Conservation Commission specifications.

_____, _____ _____, _____
print name *position* *signature* *date*

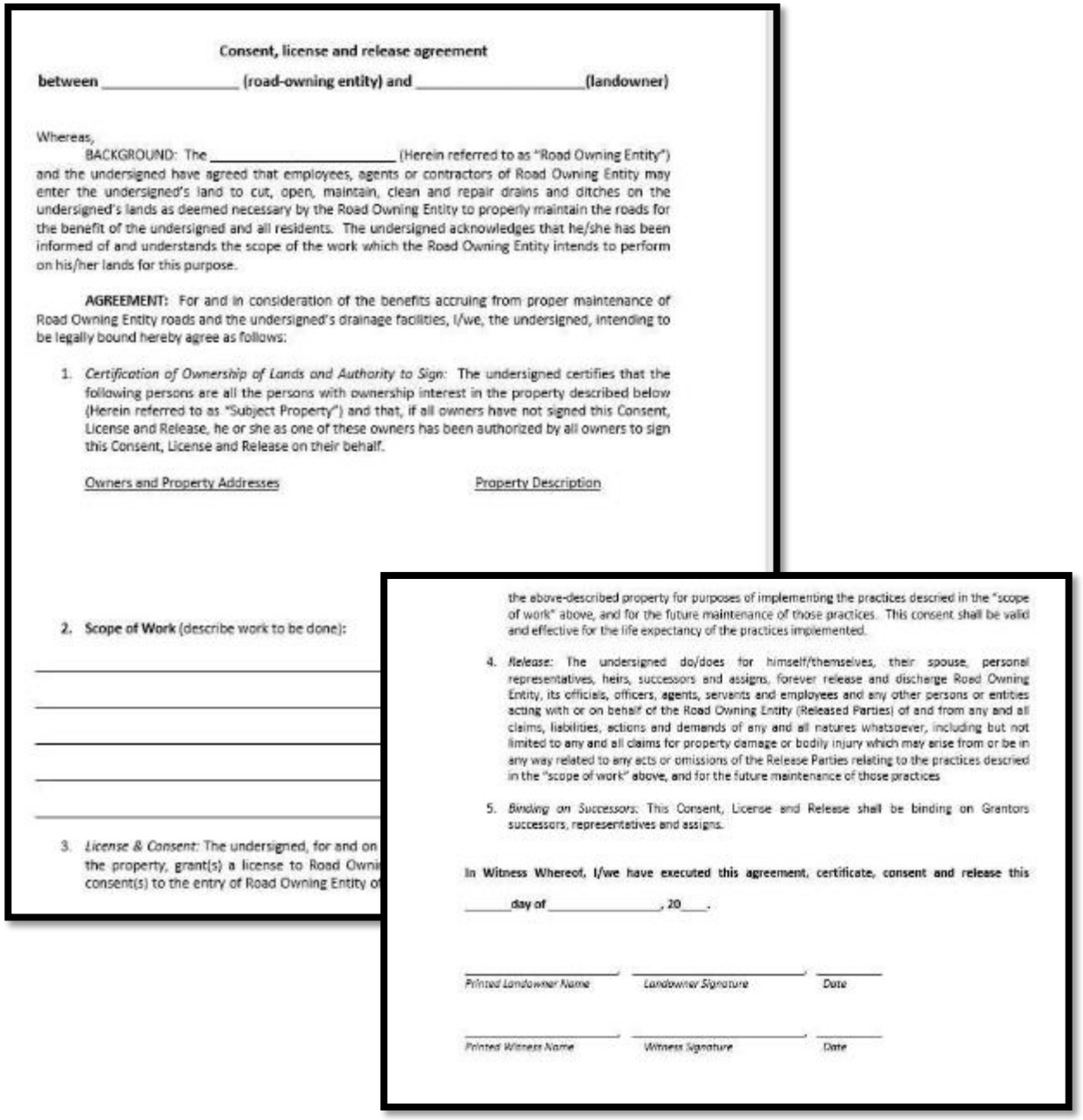
Conservation District Validation: The traffic count data supplied by the applicant is acceptable to the Conservation District in accordance with SCC and county policy.

_____, _____ _____, _____
print name *position* *signature* *date*

This form verifies eligibility of a sealed road for LVR funding as having a traffic count of 500 vehicles per day or less. It must be signed and retained in the project files.

Potential Attachments to the Grant Application

- Traffic count for LVR Projects
- Landowner consent for off right-of-way work



Consent, license and release agreement

between _____ **(road-owning entity) and** _____**(landowner)**

Whereas,

BACKGROUND: The _____ (Herein referred to as "Road Owning Entity") and the undersigned have agreed that employees, agents or contractors of Road Owning Entity may enter the undersigned's land to cut, open, maintain, clean and repair drains and ditches on the undersigned's lands as deemed necessary by the Road Owning Entity to properly maintain the roads for the benefit of the undersigned and all residents. The undersigned acknowledges that he/she has been informed of and understands the scope of the work which the Road Owning Entity intends to perform on his/her lands for this purpose.

AGREEMENT: For and in consideration of the benefits accruing from proper maintenance of Road Owning Entity roads and the undersigned's drainage facilities, I/we, the undersigned, intending to be legally bound hereby agree as follows:

1. *Certification of Ownership of Lands and Authority to Sign:* The undersigned certifies that the following persons are all the persons with ownership interest in the property described below (Herein referred to as "Subject Property") and that, if all owners have not signed this Consent, License and Release, he or she as one of these owners has been authorized by all owners to sign this Consent, License and Release on their behalf.

Owners and Property Addresses | Property Description

2. **Scope of Work** (describe work to be done):

3. *License & Consent:* The undersigned, for and on
the property, grant(s) a license to Road Owni
consent(s) to the entry of Road Owning Entity o

the above-described property for purposes of implementing the practices descried in the "scope of work" above, and for the future maintenance of those practices. This consent shall be valid and effective for the life expectancy of the practices implemented.

4. *Release:* The undersigned do/does for himself/themselves, their spouse, personal representatives, heirs, successors and assigns, forever release and discharge Road Owning Entity, its officials, officers, agents, servants and employees and any other persons or entities acting with or on behalf of the Road Owning Entity (Released Parties) of and from any and all claims, liabilities, actions and demands of any and all natures whatsoever, including but not limited to any and all claims for property damage or bodily injury which may arise from or be in any way related to any acts or omissions of the Release Parties relating to the practices descried in the "scope of work" above, and for the future maintenance of those practices

5. *Binding on Successors:* This Consent, License and Release shall be binding on Grantors successors, representatives and assigns.

In Witness Whereof, I/we have executed this agreement, certificate, consent and release this _____**day of** _____**, 20**____**.**

Printed Landowner Name | *Landowner Signature* | *Date*

Printed Witness Name | *Witness Signature* | *Date*

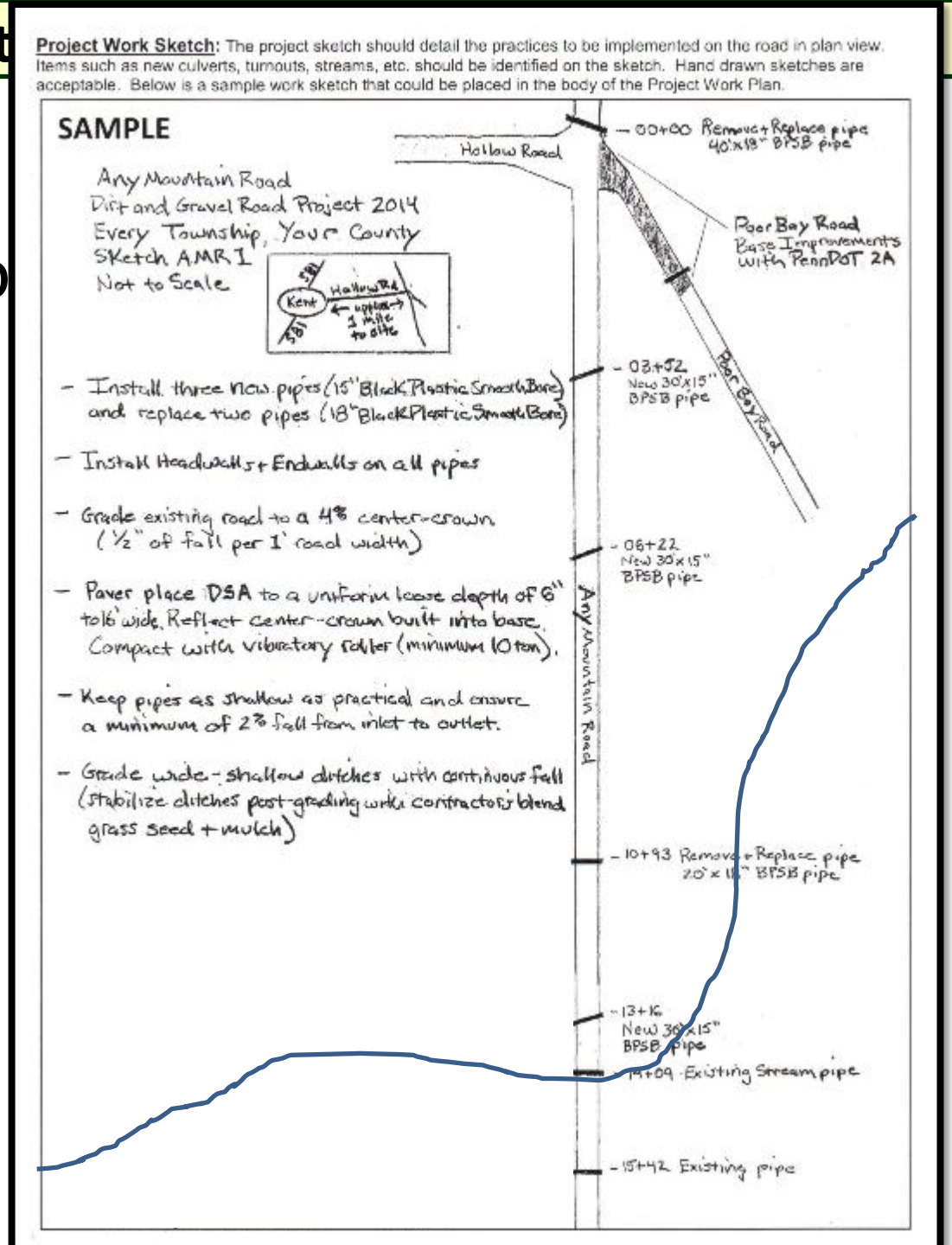
Potential Attachments to the Grant Application

- Traffic count for LVR Projects
- Landowner consent for off right-of-way work
- Permits

Any required project permits must be obtained by the grant recipient before work can begin on the portion of the project related to the permit.

Potential Att

- Traffic count for LVR Projects
- Landowner consent for off right-o
- Permits
- Project Narrative



Project Work Sketch: The project sketch should detail the practices to be implemented on the road in plan view. Items such as new culverts, turnouts, streams, etc. should be identified on the sketch. Hand drawn sketches are acceptable. Below is a sample work sketch that could be placed in the body of the Project Work Plan.

SAMPLE

Any Mountain Road
Dirt and Gravel Road Project 2014
Every Township, Your County
SKetch AMR1
Not to Scale

Kent
Hollow Rd
upstream
1 mile to site
SR
SR

- 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 (½" of fall per 1' road width)
- Paver place DSA to a uniform loose depth of 6" to 16' 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 ditches post-grading with contractor's blend grass seed + mulch)

Hollow Road
00+00 Remove + Replace pipe 40'x18" BPSB pipe
Poor Boy Road Base Improvements with PennDOT 2A
Poor Boy Road
03+52 New 30'x15" BPSB pipe
06+22 New 30'x15" BPSB pipe
Any Mountain Road
10+93 Remove + Replace pipe 20'x 18" BPSB pipe
13+16 New 36'x15" BPSB pipe
14+09 Existing Stream pipe
15+42 Existing pipe

Potential Attachments to the Grant Application

- Traffic count for LVR Projects
- Landowner consent for off right-of-way work
- Permits
- Project Narrative
- Before Photos

Potential Attachments to the Grant Application

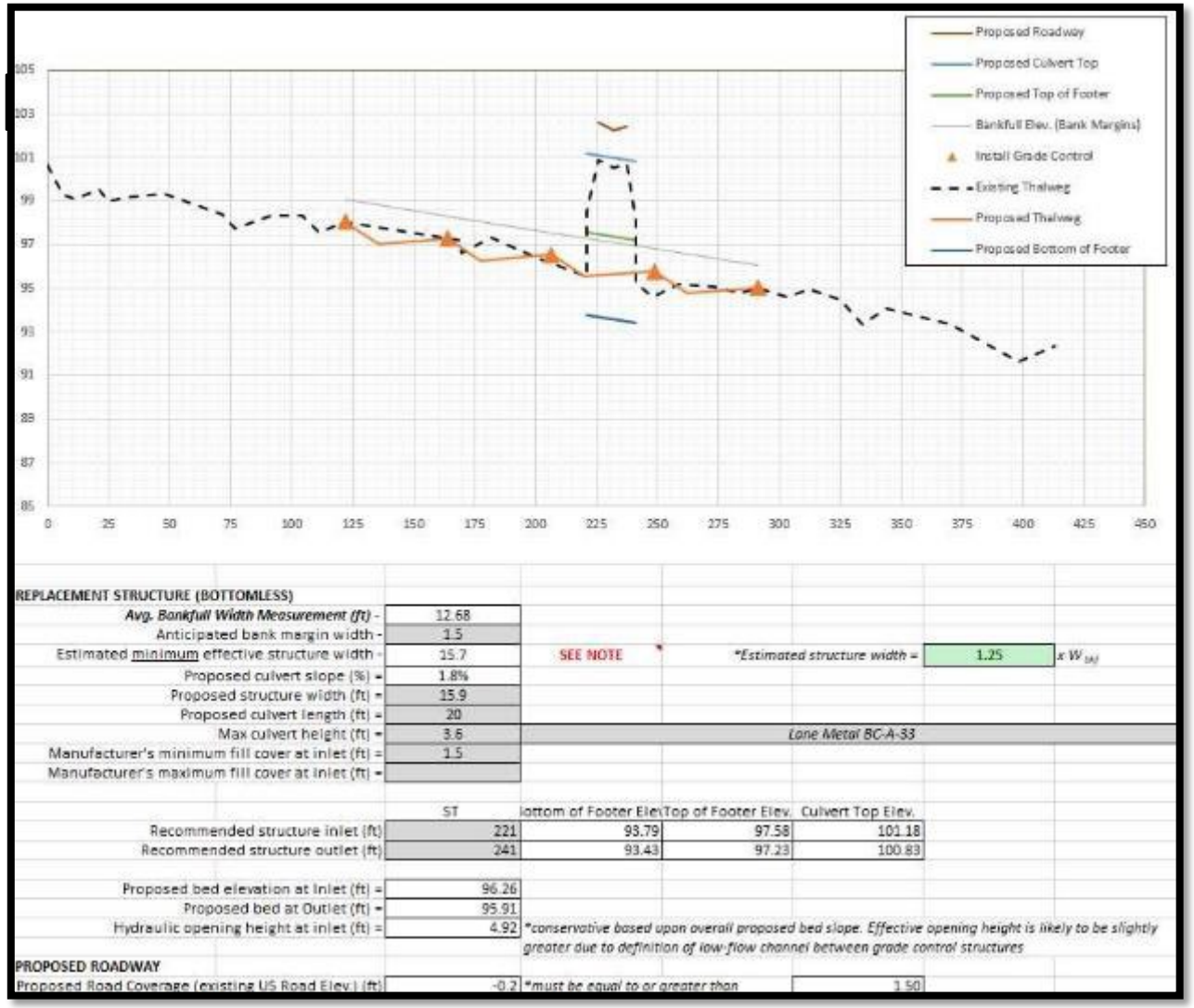
- Traffic count for LVR Projects
- Landowner consent for off righ
- Permits
- Project Narrative
- Before Photos
- Additional Design Details
  - Technical assistance

Example Stationing Document

Station	Description
00+00	project start at top of hill (western end of project).
00+25	remove artificial berm on downhill side of road (continue berm removal along project length as needed).
00+50	driveway (northern side of road) – leave existing plastic driveway pipe. **Build headwall and endwall. Regrade bottom of driveway to keep water from washing onto public road.**
01+00	**Install new cross pipe**. 18" diameter plastic pipe with stone headwall/endwall. 40 ft long.
01+50	existing ditch turn-out. Leave in place.
02+15	Existing cross pipe – corrugated metal, rusted out. **Replace** with new 18" plastic pipe with stone headwall/endwall. 35 ft long.
03+40	install **new cross pipe and through the bank pipe** – outlet the through the bank pipe in tree line. **requires written & signed off-ROW permission from landowner. 70 ft total length.
03+75	begin underdrain on uphill side of road and continue for 100 ft.
04+00	existing ditch turnout – unstable dirt. **Grass seed & mulch.**
04+75	run underdrain across road and outlet in stable grassy area. Adds 40 ft to underdrain length.
04+90	existing concrete pipe – **replace** with new 18" plastic pipe with stone headwall/endwall. 35 ft long.
05+75	end project at stream crossing with UNT to Juniata River. Crossing is in good condition.

Potential Attachments to the Grant Application

- Traffic count for LVR Projects
- Landowner consent for off rig
- Permits
- Project Narrative
- Before Photos
- Additional Design Details
  - Technical assistance
  - Stream crossing design



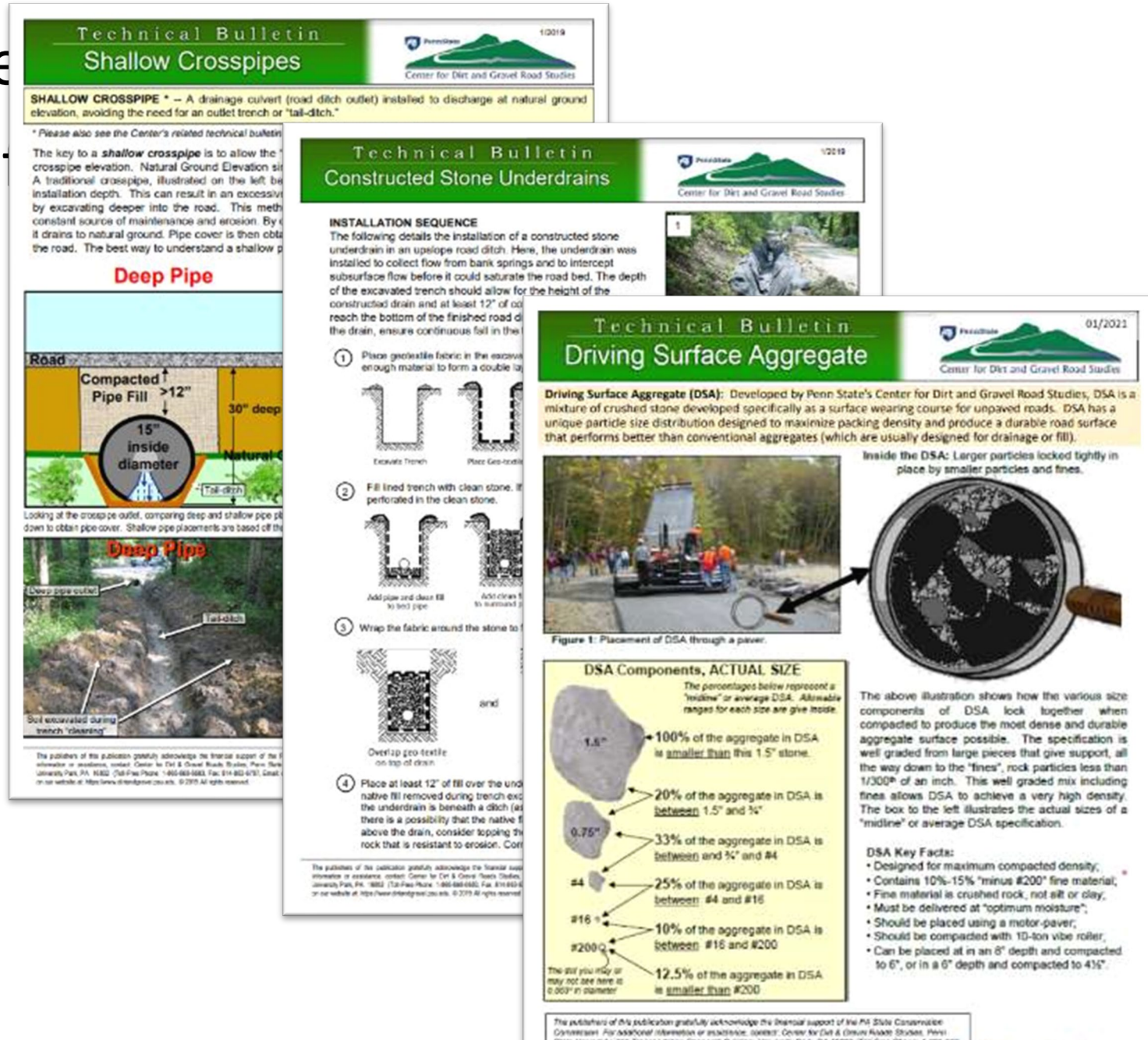
REPLACEMENT STRUCTURE (BOTTOMLESS)					
Avg. Bankfull Width Measurement (ft) -	12.68				
Anticipated bank margin width -	1.5				
Estimated minimum effective structure width -	15.7	SEE NOTE	*Estimated structure width =	1.25	x W_{BF}
Proposed culvert slope (%) =	1.8%				
Proposed structure width (ft) =	15.9				
Proposed culvert length (ft) =	20				
Max culvert height (ft) =	3.6	*Lone Metal BC-A-33*			
Manufacturer's minimum fill cover at inlet (ft) =	1.5				
Manufacturer's maximum fill cover at inlet (ft) =					

	ST	Bottom of Footer Elev.	Top of Footer Elev.	Culvert Top Elev.
Recommended structure inlet (ft)	221	93.79	97.58	101.18
Recommended structure outlet (ft)	241	93.43	97.23	100.83

Proposed bed elevation at Inlet (ft) =	96.26	
Proposed bed at Outlet (ft) =	95.91	
Hydraulic opening height at inlet (ft) =	4.92	*conservative based upon overall proposed bed slope. Effective opening height is likely to be slightly greater due to definition of low flow channel between grade control structures
PROPOSED ROADWAY		
Proposed Road Coverage (existing US Road Elev.) (ft)	-0.2	*must be equal to or greater than 1.50

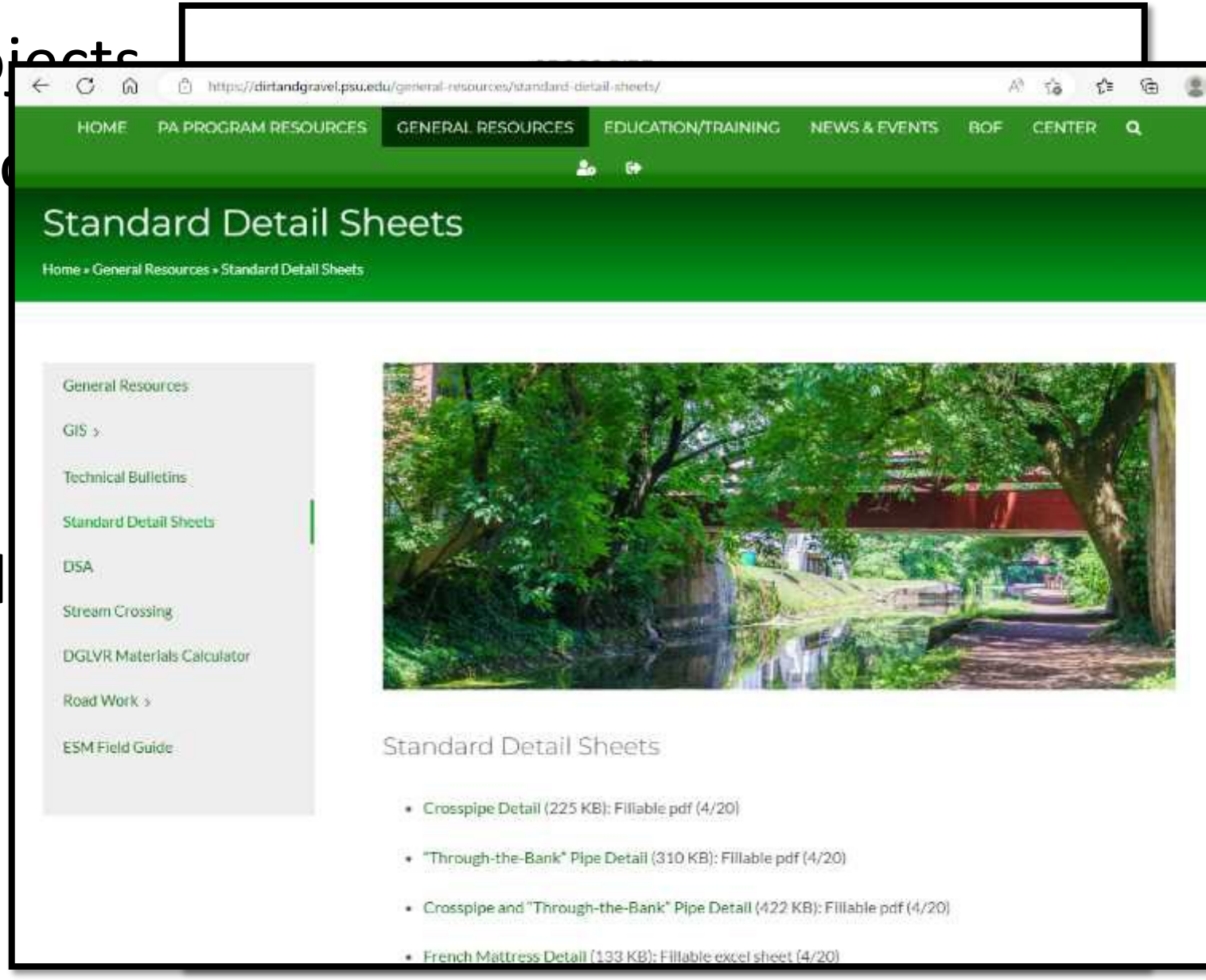
Potential Attachments to the Grant Application

- Traffic count for LVR Proje
- Landowner consent for o
- Permits
- Project Narrative
- Before Photos
- Additional Design Details
  - Technical assistance
  - Stream crossing design
  - Technical Bulletins



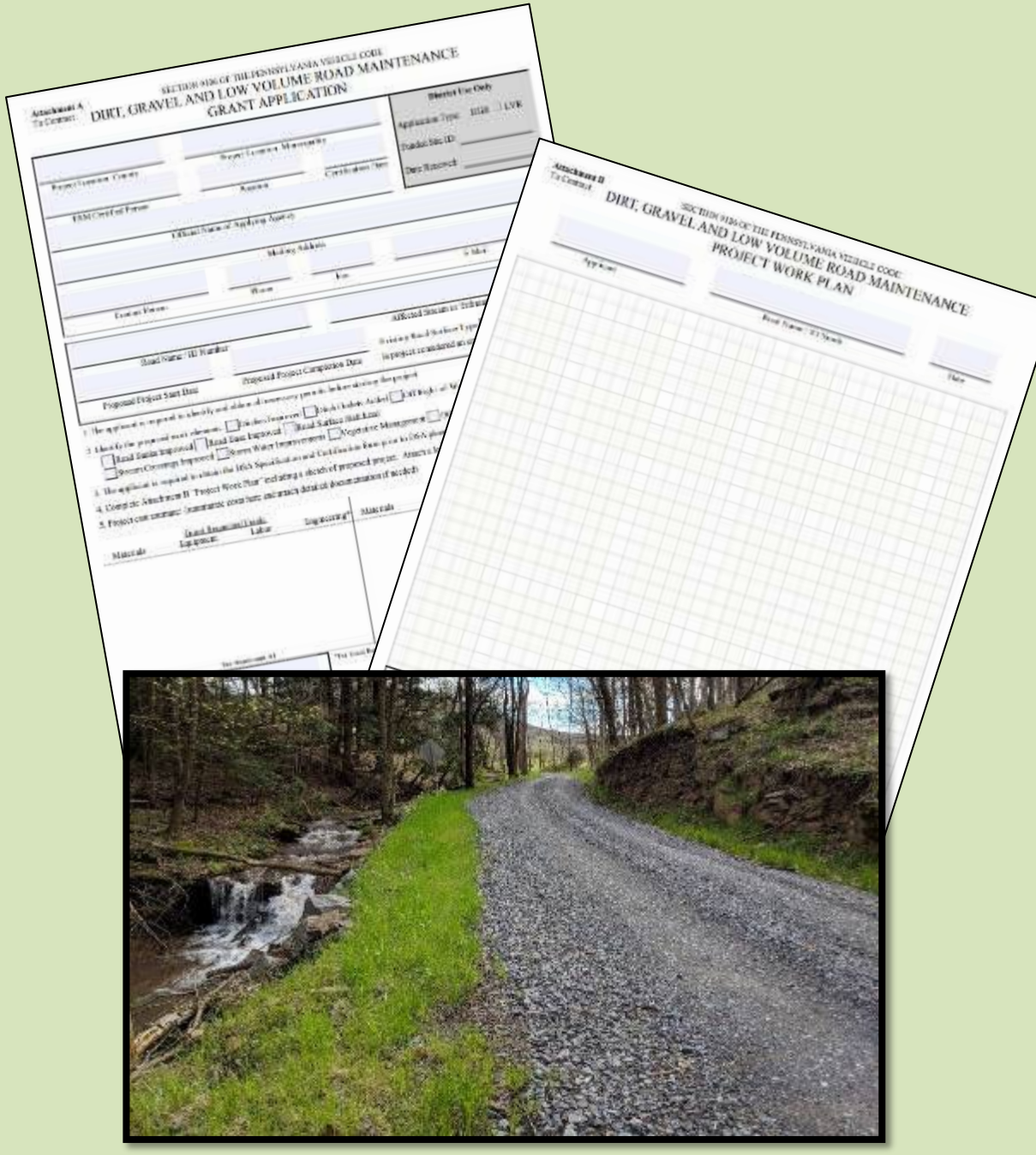
Potential Attachments to the Grant Application

- Traffic count for LVR Projects
- Landowner consent for
- Permits
- Project Narrative
- Before Photos
- Additional Design Detail
  - Technical assistance
  - Stream crossing design
  - Technical Bulletins
  - Standard ESM Details



Outline

- DGLVR Program Introduction
- Eligibility for DGLVR Grant funds
- Filling out the Grant Application
  - Page 1
  - Location map
  - Project sketch
  - Cost estimate
  - Attachments
- **What to do if you need help**



What to do if you need help

- Reach out to your local County Conservation District

- The Center for Dirt and Gravel Road Studies Website also includes information on all PA County Conservation Districts