

# NDDOT Stream Diversion Special Provision

# Why?

More consistent  
bidding

Better understanding  
of expectations

Extremely  
environmentally  
sensitive

Large risk



# Why?

**Stream Diversion =  
Stream**

**Minimize impacts**

**Negates other work if  
done wrong**



# Culvert Extensions as of January 20<sup>th</sup>, 2015

May change from this version

Also one similar created for new construction

Traffic Bypasses may be included in the future



# How the SP should be viewed

**General Requirements for things found in all diversion types**

**Specific Requirements for pieces of diversions that may be applicable**

**Contractor develops a plan based upon the situation and diversion type**

# General Requirements

**Construct using a dike and a combination of the items listed**

**Place stockpiles and excavated material  $\geq$  200 feet away**

**Work Area Dewatering requirements**



# Plan

**Submit a Temporary Stream Diversion Plan with SWPPP.**

**Include provisions for:**

**Preventing sediment accumulation**

**Concrete waste control**

**Construction debris control**



# Design

Upstream water quality  
= Downstream water  
quality

Dirty Stream ≠ doesn't  
matter

Maintain normal flow



# Types of Diversions

**Pipe Diversion**

**Suspended Pipe  
Diversion**

**Pipe Diversion**

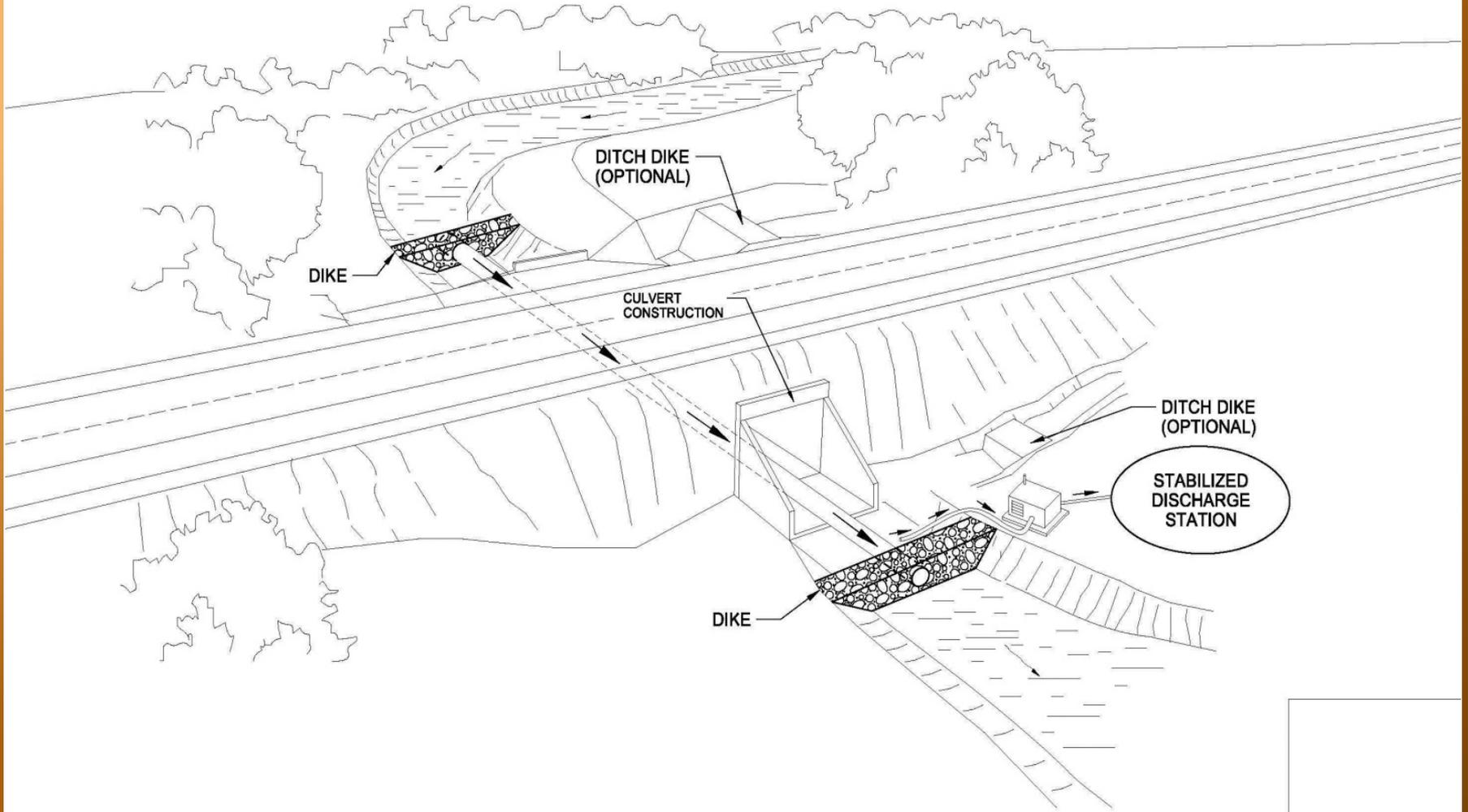
**Channel Diversion**

**Pump Diversion**

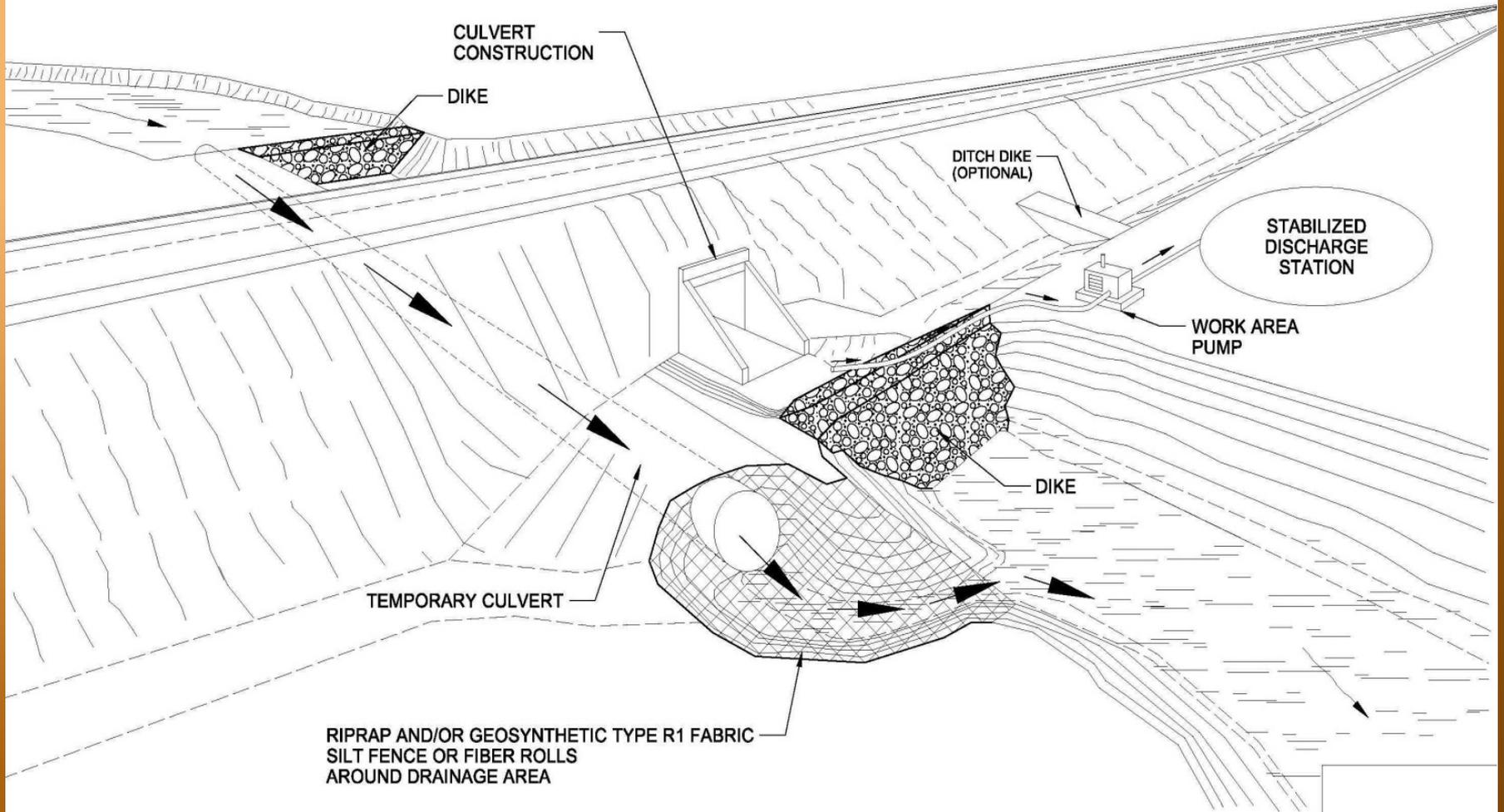
**Existing Cell or Culvert**



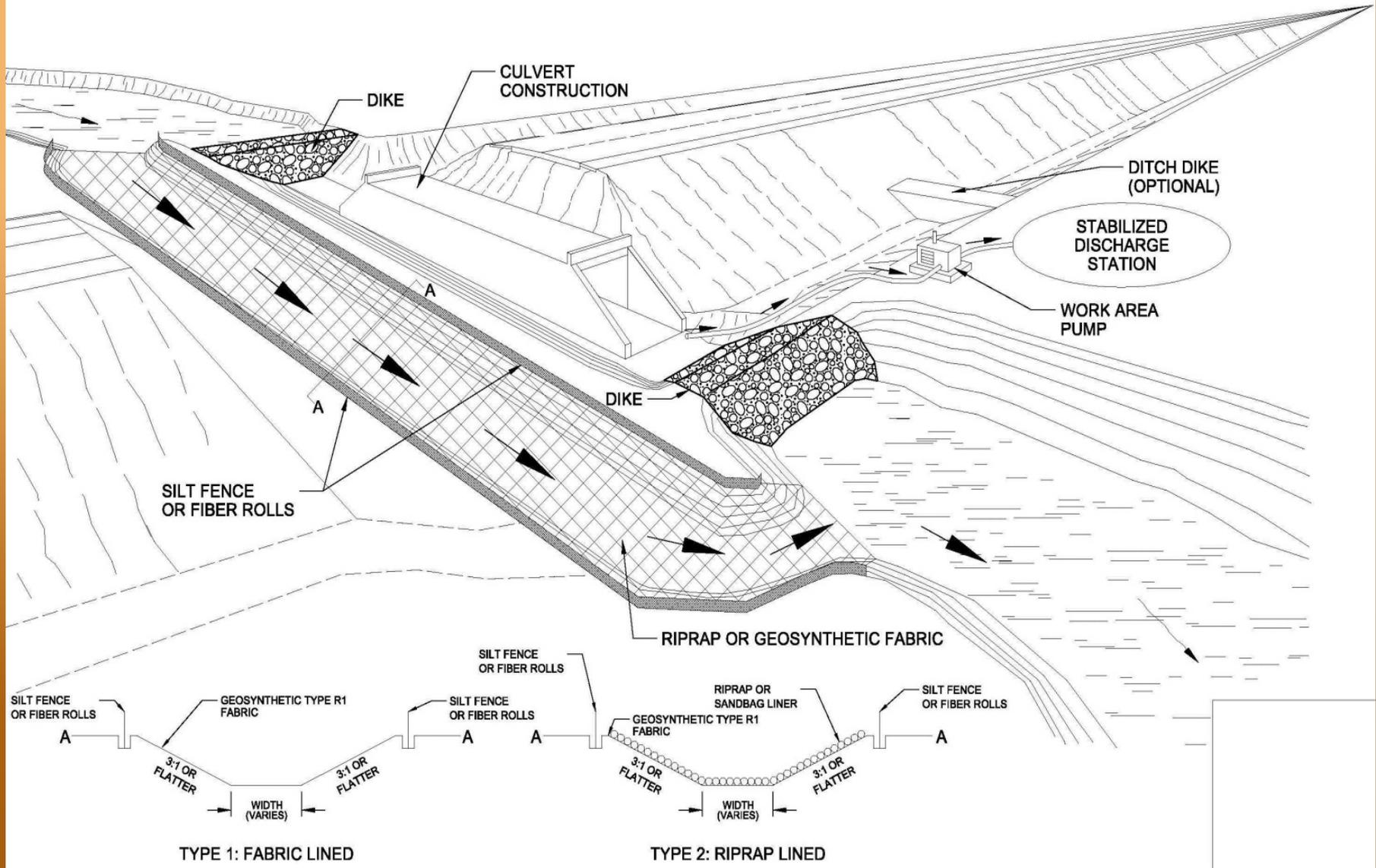
# PIPE-BOX DIVERSION



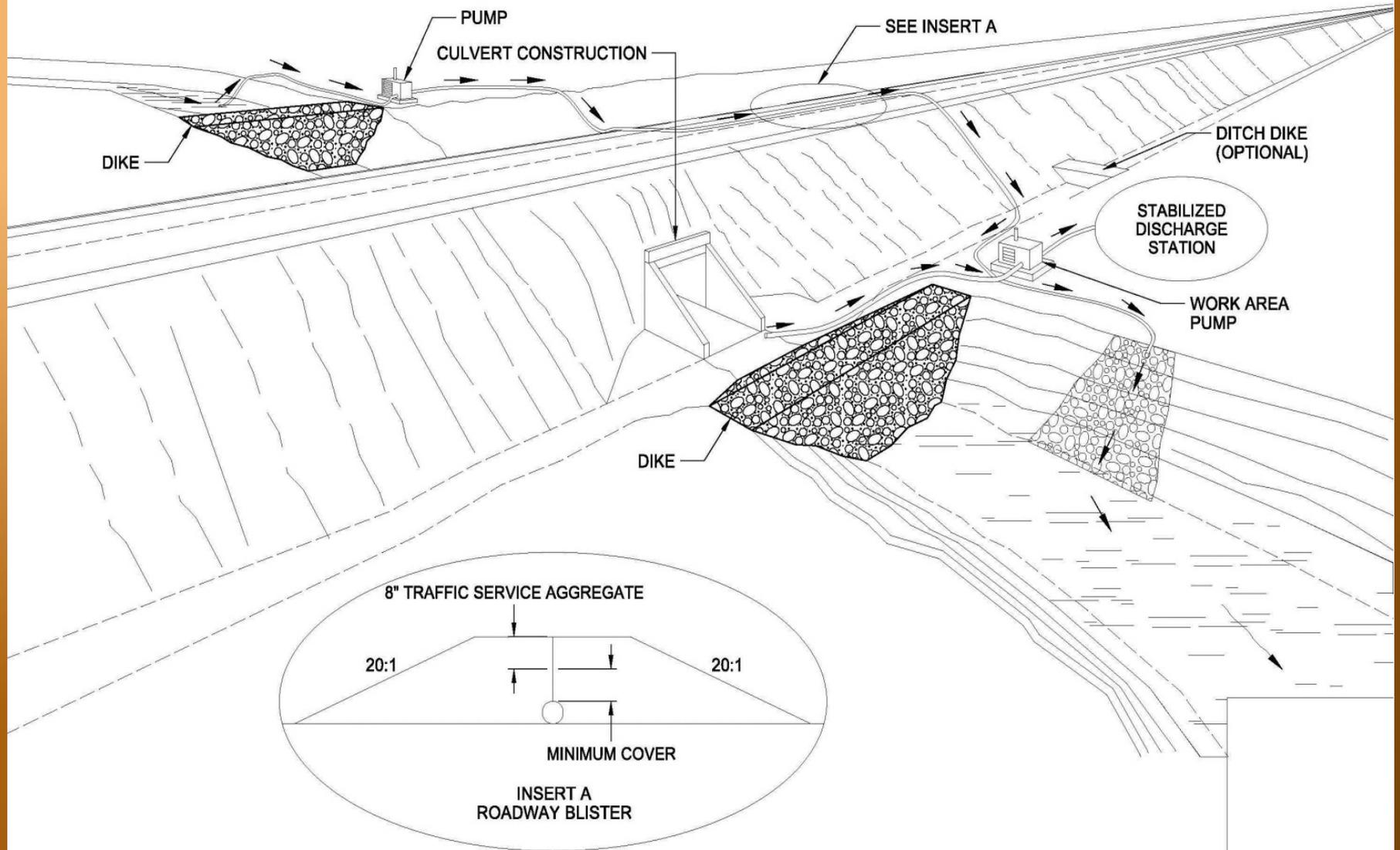
# PIPE DIVERSION



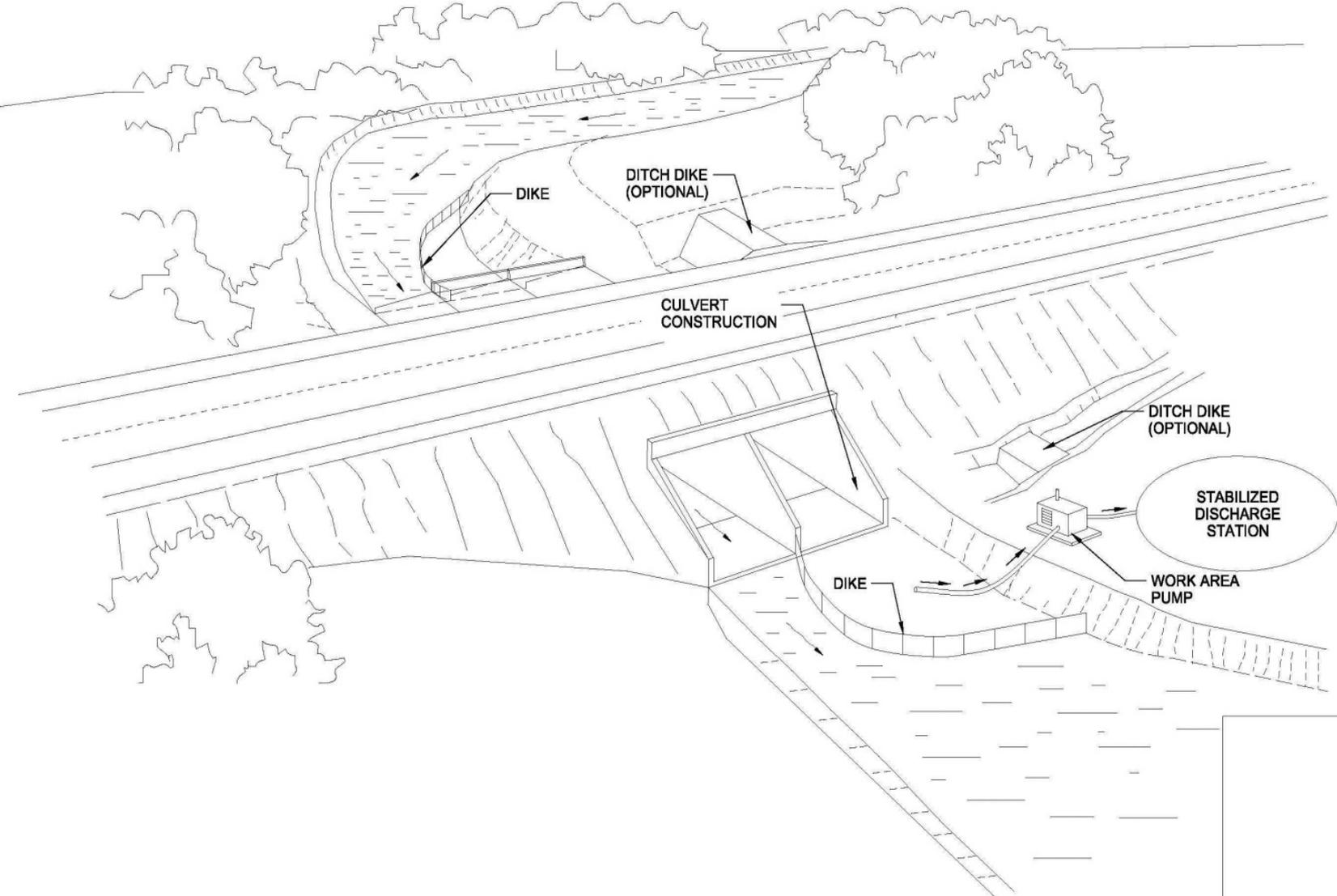
# CHANNEL DIVERSION



# PUMP DIVERSION



# BOX DIVERSION



# Removal

Permanent ESCMs and  
flow dissipation before  
opening to flow

Flow dissipation

Remove individual  
pieces in correct order



# Removal

**Do not start removal until complete**

**Remove all materials used to construct diversion**

**Do not wait to remove diversion once work within the channel is complete**

**Includes placement of riprap and permanent ESCMS**

**Restore diversion area to preexisting condition**

# Basis of Payment

**Pay Item = Temporary  
Stream Diversion**

**Pay Unit = Each**

**75% paid upon  
installation**

**Last 25% upon removal  
and restoration**



# Basis of Payment

Include cost of installation, maintenance and removal

Including traffic control and ESCMs

SP 03(14) does not apply to ESCMs for stream diversions



# Questions?