

TEMPORARY STREAM DIVERSION STAGE-1  
CONSTRUCTION SEQUENCE

A- CHANNEL SECTION-3 , AND CULVERT-3

- 1- CONSTRUCT A TEMPORARY DAM IN THE STREAM 7.7A CULVERT
- 2- CONSTRUCT TEMPORARY DRAIN PIPE AT BOTTOM OF DAM, AND OUTFALL TO EXISTING CHANNEL AS SHOWN
- 3- CONSTRUCT CULVERT-3 ACROSS RIPLEY LANE, AND SECTION-3 CHANNEL

B- CHANNEL SECTION-4

- 1- CONSTRUCT A TEMPORARY DAM IN THE STREAM 7.8 CULVERT UNDER RIPLEY LANE
- 2- CONSTRUCT TEMPORARY DRAIN PIPE AT BOTTOM OF DAM, AND OUTFALL TO EXISTING CHANNEL AS SHOWN
- 3- CONSTRUCT CHANNEL SECTION-3 FOR STREAM 7.8

Groundwater Dewatering for Activity 1

---- Permit Rates Requested: Typical high Flow Quantities / Rates:

- Routine 7200 gpd (5 gpm)
- Flush Flows - at the beginning of dewatering activities, estimated duration up to 5 days. 36,000 gpd (25 gpm)

Assumptions -

Contractor will not dewater the full area at one time. Estimates are based on approximately 50 ft of open excavation in the structure areas.

- Discharge quantities to KC sewer will be limited in WSDOT's contract. - If groundwater flows (and potential discharge to the sewer) are higher than estimated, the Contractor will be required to adjust construction methods to reduce flows. These methods may include: ----building groundwater cutoff systems (such as sheetpiles) ----reducing open excavation areas ----storing excess flow

No known contamination in this area

LEGEND

WB

WETLAND BOUNDARY

EXISTING DITCH

EXISTING CULVERT

CUT

CUT LINE

FILL

FILL LINE

EXISTING EDGE OF PAVEMENT

EXISTING FENCE

BUILDING STRUCTURE

EXISTING WALL

ST

STORM SEWER PIPE

CATCH BASIN

STREAM EDGE

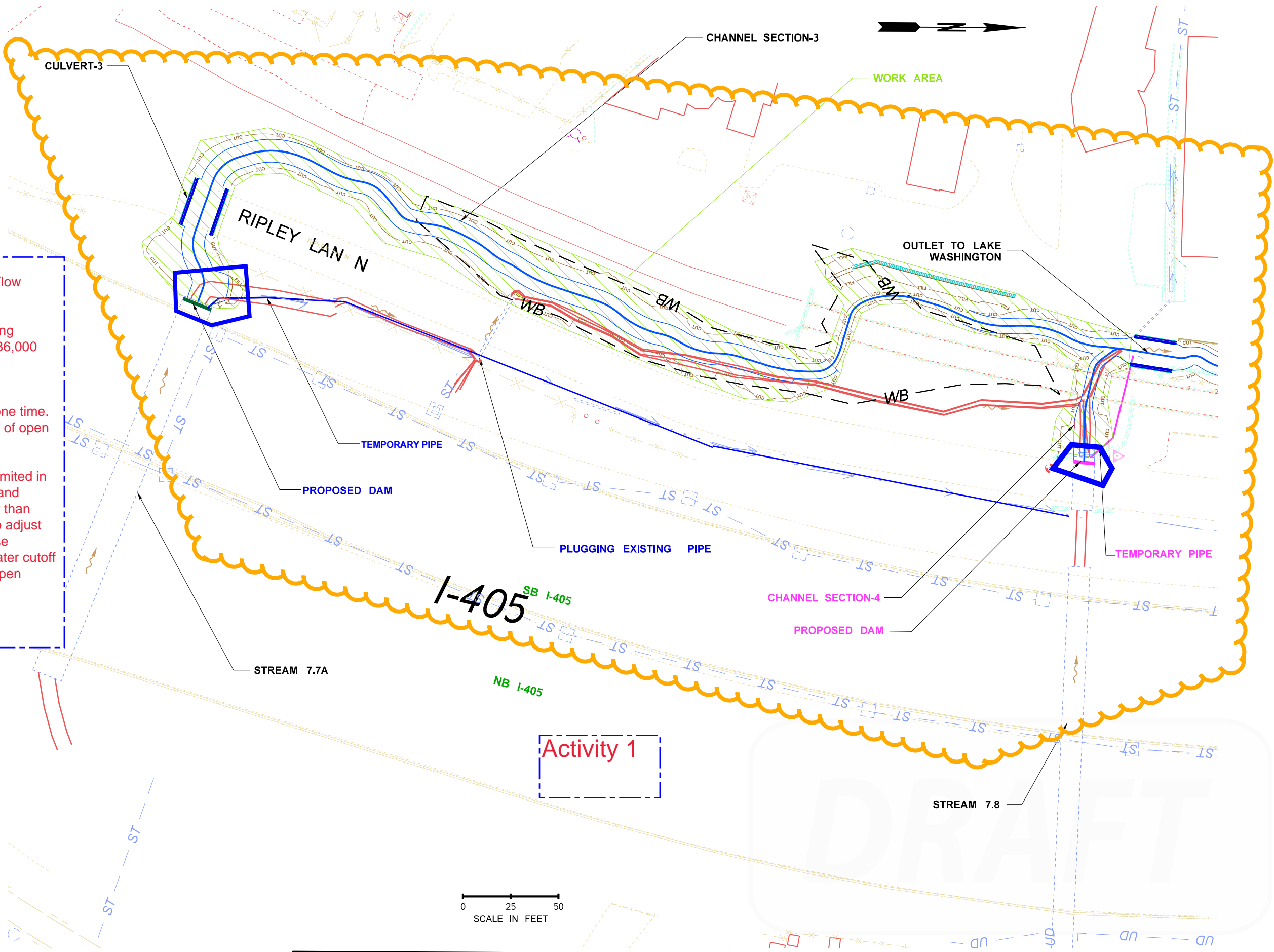
TEMPORARY STREAM DIVERSION STAGE-1



I-405 RIPLEY LANE STREAM CONNECTION

LINE 1:  
LINE 2:

PLOTTED BY: GhadamA  
DATE: 5/26/2021  
TIME: 4:37:23 PM



TEMPORARY STREAM DIVERSION STAGE 2  
CONSTRUCTION SEQUENCE

A- CHANNEL SECTION-1 ( CHANNEL SECTION-1)

TIME OF CONSTRUCTION SHOULD BE DURING THE LAKE WATER SURFACE ELEVATION AT ITS LOWEST

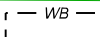











- 1- CONSTRUCT A TEMPORARY DAM IN THE LAKE AROUND THE NEW CHANNEL EXCAVATION.
- 2- CONSTRUCT TEMPORARY DRAIN PIPE AND CONNECT THE EXISTING PIPE OUTFALL TO THE LAKE EDGE.
- 3- PUMP THE WATER SUROUNDED BY THE DAM AND DEWATER TO CREAT WARK ZONE.
- 4- EXCAVATE NEW STREAM CHANNEL, AND PLACE A NEW STREAMBED MATRIEAL.

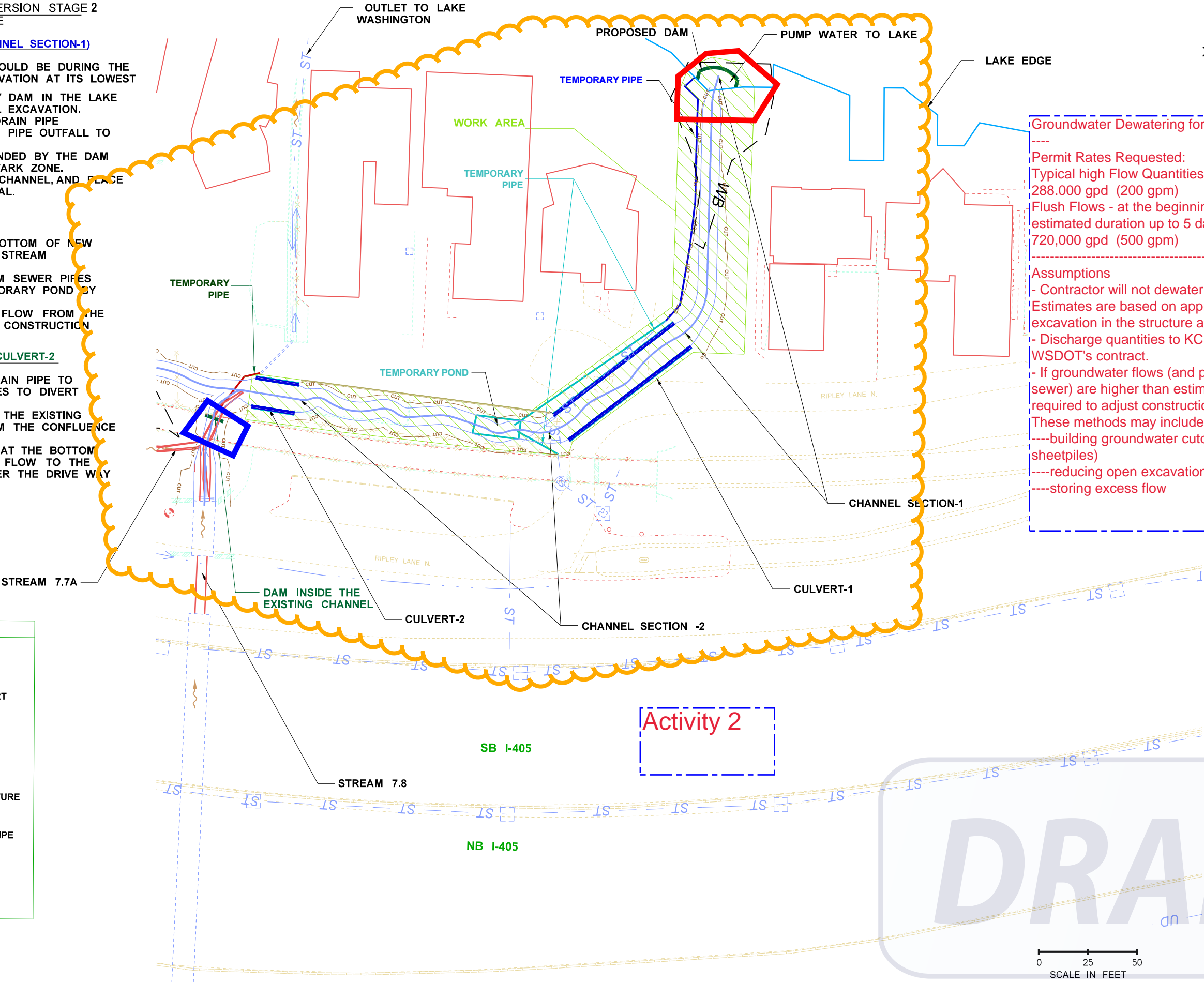
B- CULVERT-1

- 1- EXCAVATE AREA IN THE BOTTOM OF NEW CHANNEL ALIGNMENT TO UP STREAM OF CULVERT-1 AS SHOWN.
- 2- INTERCEPT EXISTING STORM SEWER PIPES AND ROUTE FLOW TO TEMPORARY POND BY TEMPORARY PIPE
- 3- PUMP THE STORM WATER FLOW FROM THE TEMPORARY POND AROUND CONSTRUCTION AREA FOR CULVERT-1.

C- CHANNEL SECTION-2 AND CULVERT-2

- 1-CONNECT A TEMPORARY DRAIN PIPE TO EXISTING STORM SEWER PIPES TO DIVERT FLOW TO CULVERT-1.
- 2- CONSTRUCT A DAM INSIDE THE EXISTING CHANNEL JUST DOWN STREAM THE CONFLUENCE LOCATION.
- 3-PLACE A TEMPORARY PIPE AT THE BOTTOM OF THE DAM TO ROUTE THE FLOW TO THE EXISTING CULVERT PIPE UNDER THE DRIVE WAY

LEGEND	
	WETLAND
	EXISTING DITCH
	EXISTING CULVERT
	CUT LINE
	FILL LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING FENCE
	BUILDING STRUCTURE
	EXISTING WALL
	STORM SEWER PIPE
	CATCH BASIN
	STREAM EDGE



Groundwater Dewatering for Activity 2

Permit Rates Requested:

Typical high Flow Quantities / Rates:

288,000 gpd (200 gpm)

Flush Flows - at the beginning of dewatering activities, estimated duration up to 5 days.

720,000 gpd (500 gpm)

Assumptions

- Contractor will not dewater the full area at one time. Estimates are based on approximately 50 ft of open excavation in the structure areas.
- Discharge quantities to KC sewer will be limited in WSDOT's contract.
- If groundwater flows (and potential discharge to the sewer) are higher than estimated, the Contractor will be required to adjust construction methods to reduce flows. These methods may include:
  - building groundwater cutoff systems (such as sheetpiles)
  - reducing open excavation areas
  - storing excess flow