

PROSPECT HILL VILLAGE - BELLINGHAM, MA
PROPOSED CONSTRUCTION SEQUENCE
CONSTRUCTION OF CROSS-COUNTRY SEWER FORCE MAIN
VIA RAILWAY TO BLACKMAR STREET WITH STREAM CROSSING
AND GRAVITY SEWER TO DUPRE ROAD PUMP STATION
DEP FILE NO. 108-968

PREPARED BY WALL STREET DEVELOPMENT
REVISED APRIL 21, 2025

The Project calls for the installation of a sewer force main from the development site cross-country in the former Attleboro and Woonsocket Railway existing rail bed (the "Railway") out to Town Way (unpaved road) and Blackmar Street. The sewer force main to be installed is shown on Sheets S-1 to S-4 of the site development plan. The proposed sewer force main will be installed from the sewer pump station down the Railway to the south out through Blackmar Street to the high point near Lakeview Avenue. The sewer will then transition to a gravity sewer to the Dupre Sewer Pump Station on Cross Street.

The work to install the sewer force main will include work within the buffer zone, degraded Riverfront Area, and a crossing of Hoag Brook (within the portion of the brook found to be an intermittent stream). The proposed gravity sewer is located entirely within existing paved roadways. The installation will follow the construction sequencing outlined below:

1. Stake the Limits of Work: The limits of work off the paved roadway are to be staked out just prior to the time of commencing construction. The stake out is to ensure that there will be no unauthorized wetland intrusion.
2. Tree and Brush Removal: Limited tree and brush in the work area, including the railway and side slopes, as required, are to be cut at the base and removed to the limit of the approved erosion control barriers in jurisdictional areas.
3. Install Erosion Controls: Place and stake siltation control barriers at staked limit of work for erosion control, in areas designated on the plans.
4. Sewer Line Stake-out: The centerline of the proposed sewer line will be staked with offset stakes in unpaved areas, and painted on the paved roadway sections.
5. Work order: Work will begin at the project development site at the north end of the proposed sewer, and will progress to the south. A trench box will be employed in compliance with OSHA standards, which will minimize the width of the required excavation. Pipe bedding, pipe, and manholes will be transported to the work area along the sewer main route. Pipe bedding will be placed directly into the trench and the limited excess soils (the volume of the pipe, bedding, and manholes) will be removed from the work area and reused at an appropriate location. Not more than one pipe length of trench will be left open during non-work hours. All surfaces will be restored to existing condition; however the railroad bed surface may be modified (at the same elevation) for use as a walking path (not currently proposed).
6. Force Main Installation: The proposed sewer force main will be a 4' diameter SDR21 pipe with pipe lengths varying from 10-feet to 20-feet in length. As each pipe segment is installed, it will be placed in appropriate bedding materials as indicated on the plans in accordance with standard construction practice, and joints sealed as required. Backfill soil will be from the excavation for the next pipe segment, to minimize the need for soil removal.
7. Hoag Brook Stream Crossing: The sewer force main installation will necessitate temporary impacts to Hoag Brook as the force main crosses below the bottom of the brook. The work is proposed to cross a segment of the brook with no associated BVW at the location of old bridge abutments/retaining walls. The work will be temporary in nature and conducted during a no-flow or low-flow period. Any flow that is present will be halted with a sandbag dike upstream of the proposed stream crossing location, as indicated on the plans, where a large storage volume exists above the channel constriction just upstream. The materials and equipment necessary to complete the stream crossing will be staged and ready nearby, prior to installing the temporary dam. The goal is to conduct the work quickly, and utilize the available storage immediately upstream. If required, any channel flow will be pumped around the work area in accordance with best management practices. This will include:
 - a. Pump(s) staged in the upland, on a secure flat location;
 - b. Pump intake(s) to be positioned to not remove or destabilize and sediment;
 - c. Pump discharge(s) to be within a temporary flow dissipating structure (e.g. a perforated, stone-filled barrel) placed within the channel downstream of the work area;The affected bank and channel bottom will be stabilized with stone at the completion of the work, to match existing channel contours.
8. Surface Finish: The final surface treatment of the sewer easement along the railway will be at the discretion of the Conservation Commission (i.e. gravel path, wood chips, etc.).
9. Gravity Sewer Work: The gravity sewer main will be an 8-inch SDR35 sewer pipe. As the work progresses to the gravity portion of the sewer installation within the paved public way of Blackmar Street, the work will include pipe installation with sewer manholes, backfill, compaction of the sewer trench and road restoration in compliance with Town of Bellingham specifications. The gravity sewer includes pipe installation under the existing Peters River box culvert under Cross Street. The sewer has been designed to avoid the box culvert, and no alteration to the culvert or Peters River will occur.
10. Completion: Upon completion of the sewer installation, the Railway may be stabilized as a future walking path, at the discretion of the Commission and/or Planning Board.

Dewatering: If trench dewatering is required at any point along the proposed sewer, water will be pumped from the trench and discharged outside of wetlands and buffer zones to ensure a safe work area. Soils at the site are highly permeable and have high infiltration rates. Measures for dewatering will be established in accordance with the site-specific dewatering plan.

sand and gravel, and infiltration can readily occur. Management of pumped water can be accomplished by either:

1. Direct pumping to a secure upland area for infiltration; or
2. Pumping to a tanker truck or settling tank (e.g. frac tank) to allow settling of suspended solids. Water will be removed from the frac tank and discharged outside of wetlands jurisdiction, where it can infiltrate in a non-erosive manner. This may involve the use of a tanker truck, which will remove water from the frac tank and discharge the water for infiltration outside of wetlands jurisdiction (e.g., to an excavated infiltration pit inside the former gravel pit).

Any water discharge will be monitored to ensure that infiltration and any deposition of suspended soils occurs outside of wetlands jurisdiction.

TOWN CLERK OF THE TOWN OF BELLINGHAM
RECEIVED AND RECORDED FROM THE PLANNING
BOARD APPROVAL OF THIS PLAN AND NO APPEAL
HAS BEEN TAKEN FOR TWENTY DAYS NEXT AFTER
RECEIPT AND RECORDING OF SAME.

TOWN CLERK _____ DATE _____

100

**SITE DEVELOPMENT PLAN
"PROSPECT HILL VILLAGE"
A MULTI-UNIT RESIDENTIAL DEVELOPMENT
BEING HAMPSHIRE MASSACHUSETTS**

WALL STREET DEVELOPMENT CORP.
P.O. BOX 272
WESTWOOD, MASSACHUSETTS
PREPARED FOR:

The logo for GLM Engineering Consultants, Inc. It features a stylized 'G' and 'L' intertwined, with a circle containing a cross-like pattern inside the 'G'. To the right of the logo, the text 'Engineering' is stacked above 'Consultants, Inc.'.

JOB No.	16,590
DATE:	November 30, 2023
SCALE:	1"= 20'
SHEET:	SUP-B
PLAN #:	27,871

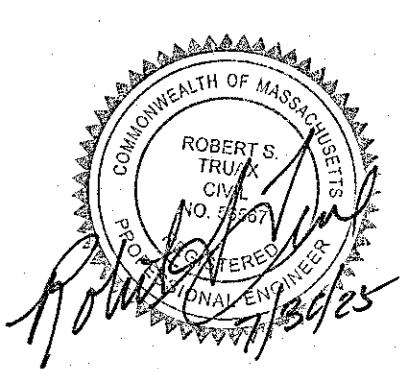
CONSTRUCTION SPECIFICATIONS

DATE APPROVED: _____

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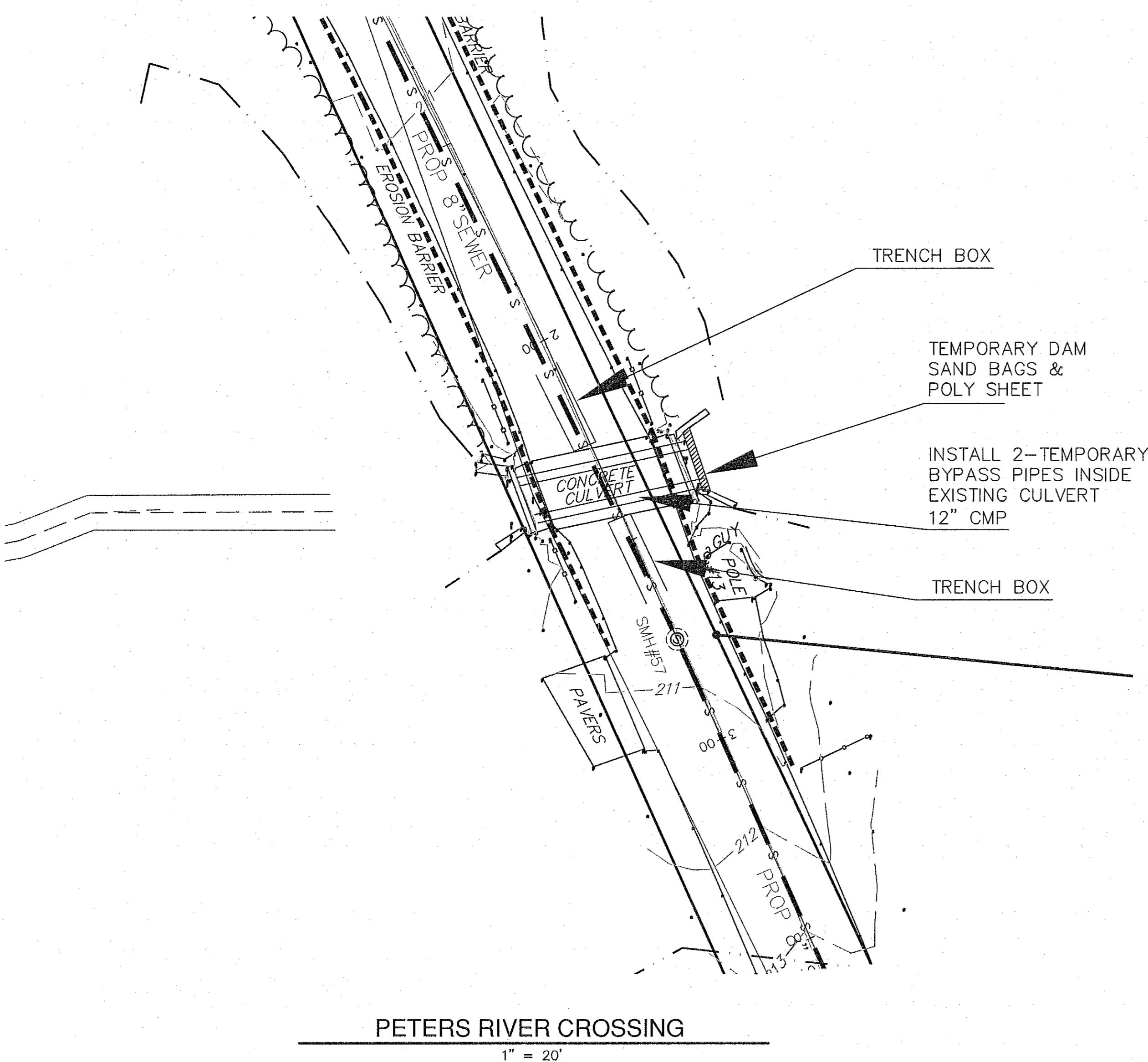
TOWN CLERK _____ DATE _____

REVISIONS	DESCRIPTION
No.	DATE
1	04/02/2024 WETLAND DELINEATION
2	07/15/2024 PLG BLD COMMENTS
3	09/26/2024 NEW ROAD LAYOUT (LAKE ST)
4	01/30/2025 PLG BLD COMMENTS (29 UNITS)
5	01/30/2025 PLG BLD COMMENTS - BSC 3/19/25
6	04/28/2025 PLG BLD COMMENTS
7	06/09/2025 REVIEW COMMENTS
8	07/30/2025 CONSERVATION COMMISSION COMMENTS



**SITE DEVELOPMENT PLAN
"PROSPECT HILL VILLAGE"
A MULTI-UNIT RESIDENTIAL DEVELOPMENT
BELLINGHAM, MASSACHUSETTS**

PREPARED FOR:
WALL STREET DEVELOPMENT CORP.
P.O. BOX 272
WESTWOOD, MASSACHUSETTS



PROSPECT HILL VILLAGE - BELLINGHAM, MA
PROPOSED CONSTRUCTION SEQUENCE
CONSTRUCTION OF SEWER FORCE MAIN
AT PETERS RIVER
DEP FILE NO. 108-968

PREPARED BY WALL STREET DEVELOPMENT
REVISED APRIL 25, 2025

The Project calls for the installation of a sewer force main from the development site cross-country in the former Attleboro and Woonsocket Railway existing rail bed (the "Railway") out to Town Way (unpaved road) and Blackmar Street. The sewer force main to be installed is shown on Sheets S-1 to S-4 of the site development plan. The proposed sewer force main will be installed from the sewer pump station down the Railway to the south, out through Blackmar Street to the high point near Lakeview Avenue. The sewer will then transition to a gravity sewer to the Dupre Sewer Pump Station on Cross Street.

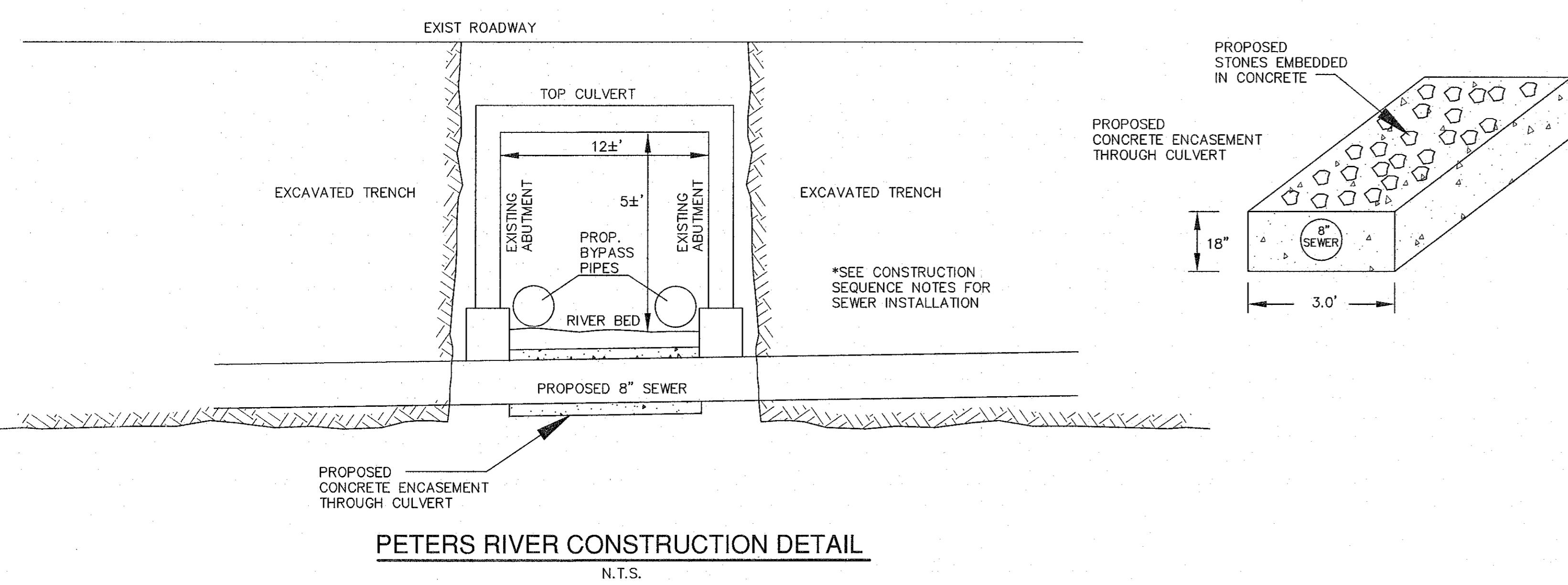
The work to install the sewer gravity main will include work within the buffer zone, degraded Riverfront Area, and a crossing under Peters River, within the paved Cross Street, where Peters River passes under Cross Street in a large rectangular box culvert.

The proposed work in the roadway will be coordinated with appropriate Town officials, including Public Works and Bellingham Police Department, to ensure that the work is conducted with safety to the public and in conformance with all local requirements.

The proposed gravity sewer route is located entirely within existing paved roadway. The installation will follow the construction sequencing outlined below:

1. Stake and/or paint the **Limits of Work**: The limits of work will be staked (offsets) or painted onto the roadway just prior to the commencing of construction.
2. **Preconstruction meeting**: Prior to this work, a preconstruction meeting with the local permitting, engineering, and public safety officials will be coordinated.
3. **Install Erosion Controls**: Place and stake siltation control barriers at staked limit of work for erosion control, in areas designated on the plans.
4. **Gravity Sewer Work**: The gravity sewer main will be an 8-inch SDR35 sewer pipe. The work will include pipe installation with sewer manholes, backfill, compaction of the sewer trench and road restoration in compliance with Town of Bellingham specifications. All construction materials will be transported to the work area on trucks using the public roads. All excess soils from the trench excavation will be placed into trucks and brought to the development site for use as common fill. The work area will be regularly swept and kept clean of soil and other debris.
5. **Peters River Crossing**: The gravity sewer includes pipe installation under the existing Peters River box culvert below Cross Street. The sewer has been designed to avoid the box culvert. Details of the proposed construction at the Peters River culvert follow.
 - a. **Timing**: This work will be conducted during a summer-to-autumn low flow period, when substantial rainfall is not predicted for the anticipated length of time required to complete the pipe installation under Peters River. The work will only commence when all required equipment, personnel, and materials are available to complete the work in an efficient manner, and weather conditions are favorable.
 - b. **Access trench**: The pipe trench will be established on both sides of the existing box culvert, to allow access to both sides of the culvert;
 - c. **Flow diversion**: Stream flow through the box culvert will be temporarily diverted by the placement of a sandbag and poly sheet dam at the upstream end of the culvert. Stream flow will be directed into one or more temporary, movable plastic pipes situated to capture flow at the upstream end of the culvert (at the temporary dam). The temporary pipe(s) will pass through the culvert and discharge within the existing stream channel to the stone channel substrate near the downstream end of the culvert. Pumping from the channel upstream of the culvert may also be employed. Pump intake and discharge hoses will be positioned as needed to prevent scour at both the intake and discharge. If pumping is utilized, a discharge flow dissipator will be employed to prevent scour. As an alternative to fully damming the channel, an internal temporary dike may be installed within the channel, parallel to stream flow, to contain stream flow to approximately one-third of the channel width, to allow a portion of the pipe installation outside the flowed portion, followed by the same process on the opposite side of the channel.
 - d. **Dewatering**: If dewatering is required, water will be pumped from the sewer trench into a frac tank temporarily staged nearby, and/or directly into a tanker truck. As needed, water will be pumped from the frac tank into the tanker truck. The tanker truck will transport the collected water to the development site, where it will be discharged to a pit in high permeability soils, located outside of all wetlands and wetland buffer zones, to infiltrate.
 - e. **Sewer trench excavation**: Outside the box culvert, the sewer trench will be excavated to appropriate depth using heavy equipment operated on the road surface. Inside the 3-sided box culvert, the trench will be hand dug.
 - f. **Pipe installation and encasement**: To ensure long term stability of the sewer pipe under the stream, it is proposed to install the pipe, and then immediately encase it in concrete, with approximately 4-inches of concrete cover over and under the pipe, and an 18-inch wide bed of concrete. To provide a rough surface to minimize scour, and maintain channel consistency, stones from the existing channel substrate will be imbedded in the surface layer of the concrete (see plan detail);

Channel restoration: The stream channel within the work area will be restored with hand tools, to reestablish the channel topography and surface substrate to pre-work conditions. Flow will then be reestablished by slowly removing the temporary dam and gradually restoring flow to the channel.



CONSTRUCTION SPECIFICATIONS

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JOB No. 16,590
DATE: November 30, 2025
SCALE: 1" = 20'
SHEET: SUP-C
PLAN #: 27,871

