



Payne Pump Station Redirection (CIP 2-1605D)

Location: Central

Number: TBD

GL Number: TBD

Phase: Planning

Project Manager: TBD

GSP Basin: Whipple Creek East

Capital Improvement Project ☒

General Facilities ☒

District Installed Infrastructure ☐

Septic Elimination Program ☐

Developer Reimbursement Program ☐

Fleet & Facilities ☐

Restoration & Replacement Project ☐

Restoration & Replacement – Gravity ☐

Restoration & Replacement – PS & FM ☐

Restoration & Replacement – Fleet & Facilities ☐

Project Definition:

Background. Payne Pump Station was installed in 2015 to eliminate the temporary lift station that served the developments west of Mill Creek and provide capacity for future developments west of Mill Creek. Gravity sewer was evaluated to not be a feasible option due to cost and long-term access constraints. To avoid improvements to gravity sewers, the pump station was installed to pump to mini-basin 2-1605 which feeds the Whipple Creek North Pump Station. To manage capacity at the Whipple Creek North Pump Station, the 2017 General Sewer plan identified a project to redirect Payne Pump Station to flow to the Mill Creek East mini-basin (2-1503) which feeds the Mt. Vista Trunk system. Preliminary alternative work associated with the Payne Pump Station identified gravity sewer upgrade needs between 3-185 to 3-265.

The existing pumps at the Payne Pump Station are rated at 440 gpm. With redirecting these pumps, the discharge point is at a substantially higher elevation which has an operating point at 125 gpm at 110 feet. The forecasted peak hour flow in 2036 is 115 gpm which is reasonably close to the estimated delivery from the existing equipment and hence no changes are anticipated for the mechanical elements of the station. The downstream gravity sewer upgrade needs will be confirmed.

Objective. Redirect Payne Pump Station to provide needed relief to the Whipple Creek North Pump Station.

Scope of Work. Confirm preferred discharge location and any improvements to the pump station. Install new force main to connect to the existing gravity system.

Project Statistics. Force main – TBD feet of 6-inch force main.

Photos: (Map of area on the reverse side)

Budget Information:

Project Cost Estimate:

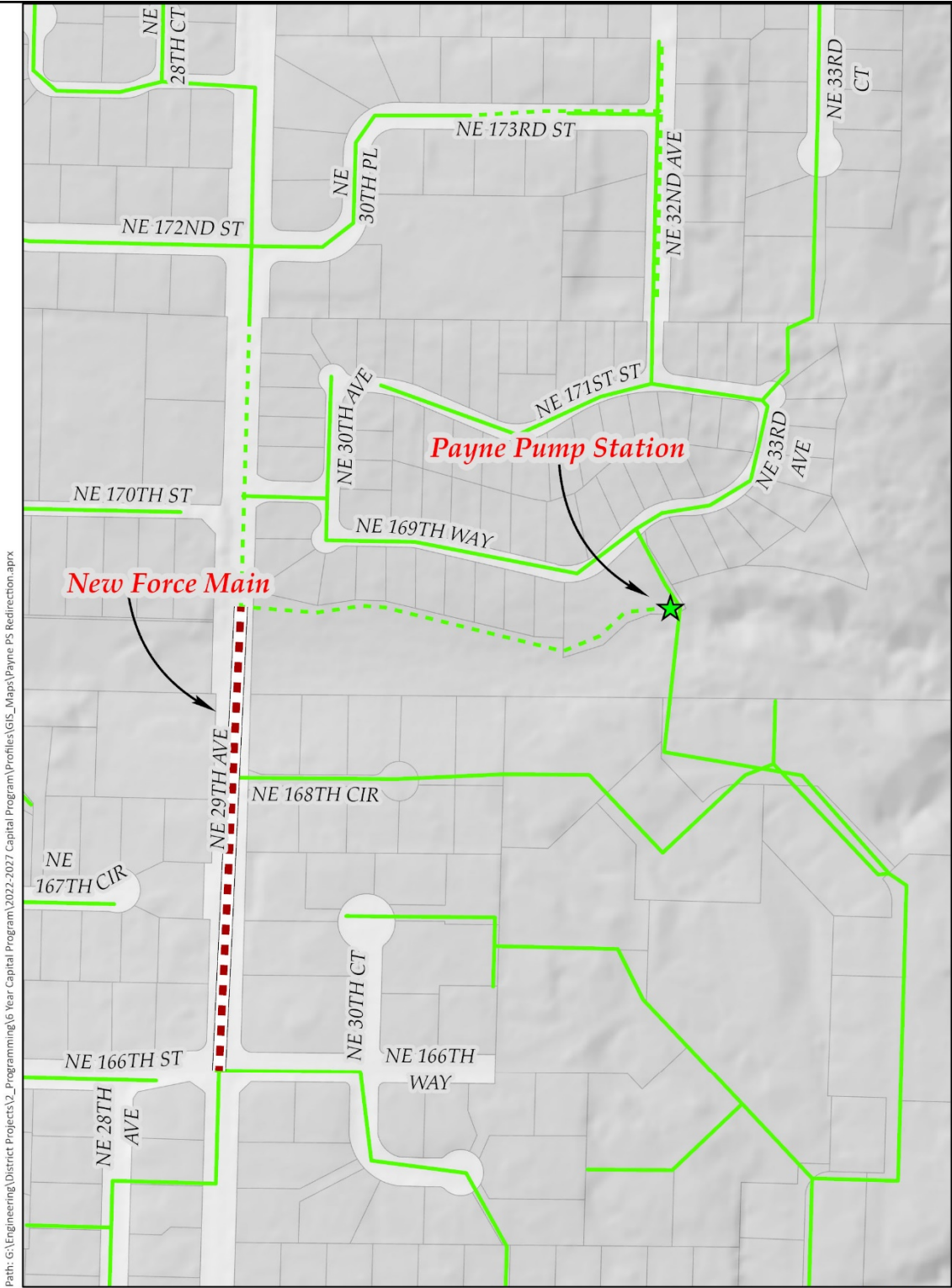
Total Project Cost:	\$840,000
Construction Cost:	\$700,000
Basis of Estimate:	Planning
Date of Estimate:	Sept. 2023

Schedule Information:

Activity

Year

Predesign	2026
Permitting	2026
Real Property/ROW	2026
Design	2026-2027
Bid	2027
Construction	2027



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Payne PS Redirection

