

MEMORANDUM

TO: Jarrod J. Cabral
FROM: Michael Richard
DATE: May 4, 2023
SUBJECT: Truro DPW New Facility and Updated Energy Code

We are currently anticipating an increased project cost of 3%-6% between construction and design costs as a result of the new stretch energy code. The new code is expected to increase energy efficiency and require additional electrification. Some examples of the cost drivers include:

- Increased design & construction administration fees due to enhanced design standards and design/modeling iterations to meet the new code. In addition, there will be increased commissioning and documentation of the new systems. Of note is the requirement for commissioning (i.e. testing) for air leakage from the building/thermal envelope (windows, doors, storefronts, etc.). This will be a difficult performance standard to meet and may require re-assembly of constructed pieces, and contractors are not expected to bear the risk. This will be reflected in their bid pricing.
- The new code has enhanced building envelope performance standards. These enhanced standards will require more efficient building envelope systems such triple pane glass, additional insulation, and tighter construction standards such as detailing around outlets and junction boxes; thereby increasing the construction costs.
- More costly equipment and systems to reduce or eliminate the need for fossil fuels. This will include items such more efficient appliances, heating electrification, water heating electrification, heat pumps, energy recovery systems, etc.
- The increase in building electrification systems will have a ripple effect on the facilities infrastructure, increasing costs for:
 - Larger utility service
 - Larger generator
 - Larger wire and conduit
 - More and/or bigger electric panels

Note: The service upgrades may pose an issue with current Cape utilities.

In addition, there is a lot of uncertainty now given materials supply shortages that can impact pricing and schedule. For instance, the specialty occupancy electric outlets that will be required are in short supply and are difficult to find now.