PUBLIC UTILITIES COMMISSION

Bethel Municipal Center, 1 School Street
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TOWN OF BETHEL
TOWN CLERK

SPECIAL MEETING

Monday, August 18, 2014
4:00 p.m.
C.J. Hurgin Municipal Center – Meeting Room "A"

Present: First Selectman Matt Knickerbocker, Selectmen Richard Straiton, Selectmen Paul Szatkowski, Commissioner Peter Valenti and Commissioner Gribbin. Also in attendance were Town Attorney Martin Lawlor, Public Works Director Andrew Morosky, Utility Supervisor Kelly Curtis and Wright-Pierce Senior Project Manager Mariusz Jedrychowski, PE.

Also in Attendance: Robin Kahn, Attorney and Dan Kroeber of Milone and MacBroom.

Absent: Comptroller Robert Kozlowski

Call to Order: First Selectman Knickerbocker called the Special Meeting to order at 4:03 p.m. and led the Pledge of Allegiance.

Public Input: None

Correspondence: None

Meeting Minutes from Regular Meeting August 4, 2014 Selectman Szatkowski made a motion, which was seconded by Selectman Straiton to approve the minutes as presented. Vote, All in Favor, Motion Approved. Commissioner Gribbin and First Selectman Knickerbocker abstained.

New Business:

- **Bethel Crossings:** Courtesy presentation by Dan Kroeber, Professional Engineer with Milone and MacBroom, the designers for Bethel Crossing. Project will consist of 71 single family 3-4 bedroom units located North and South of Maple Avenue Extension near Plumtrees Road. Mr. Kroeber reviewed the proposal for sewer and water. Also, fire hydrant locations were discussed. Mr. Morosky distributed a Sanitary Sewer and Potable Water Design Summary prepared by Milone and MacBroom. See attached. Planning & Zoning and the Wetlands Commission have received formal plans for review. Robin Kahn reported Public Hearings are planned to take place the end of September. This development is proposed within a DCD zone, which has yet to be adopted.

  First Selectman Knickerbocker made a motion to refer the Bethel Crossings plans to the Engineering Department for formal review with Mariusz Jedrychowski, Wright-Pierce, which was seconded by Selectman Straiton. Vote, All in Favor, Motion Approved.

Old Business:

- **Stipulated Agreement – Eureka Water Storage Tank:**

  First Selectman Knickerbocker reported that the City of Danbury has unanimously accepted the Town's Proposed Stipulated Agreement – Eureka Water Storage Tank.

  Selectman Straiton made a motion to approve the Stipulated Agreement - Eureka Water Storage Tank, which was seconded by Selectman Szatkowski, with discussion. Vote, All in Favor, Motion Approved.

  Discussion ensued.

- **PUC Capital Project Status Summary:**

  First Selectman Knickerbocker reported the final draft has been reviewed and needs a formal approval.

  First Selectman Knickerbocker made a motion to approve the PUC Capital Improvement Plan, dated July 2014 as prepared by Wright-Pierce, which was seconded by Selectman Straiton. Vote, All in Favor, Motion Approved.

  Mr. Jedrychowski reported on possible funding for the project through the Connecticut Health Departments grant/loan program for water projects and grant money for the tank.

  Selectman Straiton made a motion to authorize Mr. Jedrychowski of Wright-Pierce, to act as our agent to apply for any and all grants for the Capital Improvement plan, which was seconded by Selectman Szatkowski. Vote, All in Favor, Motion Approved.

  Selectman Knickerbocker requested Mr. Jedrychowski inform the Public Works Department, Attorney Lawlor, and Phyllis Kansky on grant progress.

- **Consideration of Water Main Replacements:**

  Selectman Straiton made a motion to authorize Mr. Jedrychowski of Wright Pierce, to start the engineering work and bid documents for water main replacements on Cindy Lane, Andrews Street, Highland Avenue, which was seconded by First Selectman Knickerbocker. Vote, All in Favor, Motion Approved.

  Selectman Straiton made a motion to authorize Mr. Jedrychowski, Wright Pierce, to design a replacement of the Hoyts Hill Pump Station, which was seconded by First Selectman Knickerbocker. Vote, All in Favor, Motion Approved.

  Andrew Morosky gave update on wells behind the police station. Discussion ensued.

Financial Report:

- **Water and Sewer Financials:** None.

- **Invoices:** None.

Engineering / Utility Consultant Report:

- **Stony Hill Sewer Project:** First Selectman Knickerbocker stated need to schedule Public Information session.

- **Stony Hill Sewer Project Easements:** Attorney Lawlor updated the Commission on the progress of obtaining outstanding easements.

- **Supervisor's Report:** Mr. Curtis informed the Commission of the following items:

  - As Attorney Lawlor had requested, the 48-50 Stony Hill - Copper Square culvert completion date was 7/11/14. Mr. Curtis will forward this information on so that proper paper work can be filed.
  - Cioffoletti is ongoing..
  - The flushing of Chestnut Ridge is complete.

Rich Straiton reported the Chief Inspector for the Route 302 paving project, Chris Griffin, gave the Town of Bethel a compliment of being the best crew he's worked with in years and thanked the Town.

Adjourn: ***As there was no further business on the agenda First Selectman Knickerbocker made a motion, which was seconded by Commission Valenti to adjourn the meeting at 5:02 p.m. Vote: All in Favor, Motion Unanimously Approved.***

Respectfully submitted,

Kathy Galbis, Recording Secretary

SANITARY SEWER AND POTABLE WATER DESIGN SUMMARY

Bethel Crossing

MMI #1873-46

August 18, 2014

Sanitary Sewer

The proposed buildings will be connected to an 8-inch-diameter gravity sewer collection system, which will connect at three points in the existing gravity sewer system along Maple Avenue Extension. One connection point will be at an existing manhole and the other two connection points will be made by installing new manholes on the existing sewer main. The sewer collection system will consist of buried 8-inch SDR-35 polyvinyl chloride (PVC) pipe and precast concrete manholes at distances not to exceed 300 feet between manholes. Building connections will consist of individual 4-inch building laterals with cleanouts to connect to the new sewer mains.

Wastewater Generation

The single-family residential development consists of 71 four-bedroom units. Based on this bedroom count, 284 bedrooms will be provided in this residential development.

Listed below are the estimated sewer flows for the development. The flow generation is based upon 110 gallons per day per bedroom. The peaking factor is taken from the chart in Figure 2-1 of "Guides for the Design of Wastewater Treatment Works, 2011 Edition" (aka TR-16).

Average Daily Flow (ADF)

Residential = 284 bedrooms *110 gpd/bedroom = 31,240 gallons per day (gpd)

Total ADF = 31,240 gpd = 21.7 gallons per minute (gpm)

Peak Flow

Assume a peak hourly flow factor of 5.6

Total Peak Hourly Flow = 31,240 gpd * 5.6 = 174,944 gpd = 122 gpm

The sewer collection system shall be sized to accommodate this peak hourly flow.

Sewer Capacity

The sewer system capacity will vary depending on pipe material, pipe diameter, and pipe slope. Since all of the sewer main will consist of 8-inch PVC pipe, the only variable is slope. The minimum required slope of any individual 8-inch pipe segment of sewer main between manholes is 0.4 percent (TR-16). An 8-inch PVC pipe with slope of 0.4 percent has an estimated flow capacity of 445 gpm, which exceeds the peak-hour flow rate for the development of 122 gpm. Sewer pipe segments with steeper than minimum slopes will have greater flow capacities.

Potable Water

The proposed buildings will be connected to a 8-inch-diameter potable water distribution system, which will connect at two locations to the existing water supply main along Maple Avenue Extension. The water supply main will consist of buried special thickness class 52 ductile iron (DI) pipe with cement mortar lining, gate valves, and fire hydrants. The fire hydrants will be spaced as required by the Town of Bethel Fire Marshal's Office; each will have 6-inch DI pipe between the main and the hydrant along with a 6-inch isolation gate valve. Each building will have a domestic water service connection with a meter inside each building, individual curb stops and a minimum 1-inch red brass or type K copper service pipe.

Water Demand

The potable water demand is currently assumed to be equal to the estimated sewer flow, although landscape irrigation may be considered in the future.

Average Daily Flow (ADF)

Residential = 31,240 gpd

Total ADF = 31,240 gpd

Water supply systems are designed to provide peak-day demand plus fire demand. The peak-day demand is calculated as the ADF multiplied by a peaking factor. The peaking factor is taken from the chart in Figure 2-1 of TR-16.

Peak Flow

Assume a peak-day demand peaking factor of 3.0.

Peak day demand = 31,240 gpd * 3.0 = 93,720 gpd = 65 gpm

Fire Demand

The required minimum fire hydrant demand will be as directed by the Town of Bethel Fire Marshal's Office; a meeting will be scheduled at a later date to discuss this matter. The fire demand must be delivered by the water distribution system with a minimum pressure of 20 pounds per square inch (psi) at all points in the system.

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