Section 18. Assessment of Consistency with Design Standards

Assessment of Consistency with Design Standards

The following is an assessment of the conformance with the design standards contained in Section 14-526 and in the City of Portland Technical Manual.

1. Transportation Systems and Street Design Standards

1.1. Impact on Surrounding Street Systems

Based upon the anticipated generation of traffic from the proposed project and the peak traffic generated off the time of the roadway peaks, the project is not expected to have a significant impact on the adjacent streets and public ways.

1.2. Street Grades and Vertical Alignment

A new local public street is proposed as part of this project. The proposed street grade at the intersection with Washington Avenue is 2.8% for 26-feet up to a high point then continues down at 1.0% for 45-feet to a low point and up again to 1% for the remainder of the roadway. Vertical alignments for both the crest and sag vertical curves have been designed in accordance with the local street curve values presented in the City of Portland Technical Manual.

2. Sanitary Sewer and Storm Drain Design Standards

2.1. Manholes, Pipes and Catch Basins

Manholes, pipes and catch basins have been designed to meet the City of Portland Design Manual Standards. Manhole and catch basin details shown on Sheet 7 of 8 have been reviewed to meet the requirements shown on the Sanitary Sewer and Storm Drain Design Standards in Section II of the design manual. Pipe material for the sewer main has been specified as 8-inch diameter PVC SDR 35.

2.2. Building Sewer Laterals

The installation of backwater valves have been indicated on the plan as is required when connecting into a combined sewer system.

3. Public Safety Standards

3.1. Fire Hydrant Standards

The existing fire hydrant adjacent to the project site will be within 500-feet of all proposed structures.

3.2. Single and Town Family Residential Development

One-inch diameter water services are proposed to each single family house lot, which will provide adequate flow and pressure for domestic and residential fire protection.

3.3. Site Access Standards

As required, a turnaround has been designed at the end of the roadway. The turnaround design matches the Turnaround on Dead End Street detail in Section I of the Portland Design Manual.

4. Landscaping and Landscape Preservation Standards

4.1. Street Trees

At least two street trees per single family residential lot have been indicated on the Grading and Utility Plan (Sheet 4 of 8).

5. Portland Stormwater Management Standards and Maine DEP Chapter 500 Stormwater Management

5.1. See Section 13. Stormwater Management Plan. The stormwater BMPs have been designed per the Maine BMP manual as well as Maine DEP Chapter 500 standards.