TO: HONORABLE CITY COUNCIL
FROM: CITY MANAGER DEPARTMENT: PUBLIC WORKS
DATE: JULY 9, 2007 CMR: 283:07
SUBJECT: CITY OF PALO ALTO STANDARD DRAWINGS AND SPECIFICATIONS, 2007

This is an informational report and no Council action is required.

BACKGROUND
The Department of Public Works promulgates standard drawings and specifications to regulate construction in the public right-of-way, ensuring improvements are safe, uniform and maintainable. These standards contain technical drawings and specifications for implementing public capital improvement projects and private development projects within the City of Palo Alto. The technical drawings and specifications provide standards for improvements to public streets, sidewalks, curb and gutter, medians, planting strips and storm drains.

In December 10, 1992 (CMR548:92), the City Council approved the 1992 standard drawings and specifications and authorized the City Engineer to make any additional revisions, changes or modifications to the City of Palo Alto standard drawings and specifications as deemed reasonable, necessary or expedient, in accordance with sound engineering principles and applicable law.

In response to the 2006 street maintenance program audit, staff recommended a complete update of the standard drawings and specifications. Staff provided a status report of the audit recommendations to the Finance Committee on February 21, 2007 (CMR:150:07) which noted the City would complete the update to the standard drawings and specifications this Spring.

DISCUSSION
Since 1992, there have been new laws and regulations resulting in implementation of new construction materials and engineering standards. The City periodically updated or added new specifications and drawings into individual project conditions of approval, project specifications and/or permit conditions to be consistent with the improved engineering standards. Sufficient changes have been made to warrant the issuance of the 2007 edition, which formally incorporates these revisions. The changes have been reviewed and approved by the City Attorney’s Office and all affected City departments.
Attachment A provides the complete detail on changes. The most significant revisions that have been made to the 1992 Standard Drawings and Specifications are summarized below:

1. Eliminate the general provisions. These provisions contain legal and contractual requirements not typically used for permitted work within the City’s right-of-way. The general provisions typically include contract conditions such as award and execution of contracts to measurement and payment items and are included in the City’s construction bid and contract documents provided by the City’s Purchasing Division.

2. Add a new specification to address storm water pollution prevention during construction and materials used for storm water pipelines.

3. Add requirement to increase the concrete strength in concrete streets from 2,500 pounds per square inch (psi) to 3,500 psi at 28 days. To meet this requirement, cement is added with the use of flyash (a by-product of coal plants) and has proved to increase concrete strength and provides longer lasting concrete street repairs.

4. Require that truncated domes be installed at all new curb ramps and other locations as specified by the Engineer to meet Americans with Disability Act (ADA) requirements.

5. Add new detail for trench plates. This was a recommendation from the Auditor intended to limit the duration of the plates installed in the public right-of-way. The trench detail limits the distance and number of plates installed, shows the temporary transition of the plate and roadway surface to enhance pedestrian, bicyclists and motorist’s safety and requires that Public Works Inspector be notified when the plate is installed and/or removed.

6. Add a new detail to demonstrate the limits of street cut and street restoration requirements. The new street cuts are shown in various ways to minimize new street cuts in relation to existing trenches.

7. Revise the trench specifications to include stringent requirements for surface and subsurface excavation and restoration standards.

8. Add a new irrigation specification and drawings section.

9. Revise the Inert Solids and Building Materials Recycling section to require the contractor to divert construction and demolition debris from the landfill. Deconstruction is encouraged and salvageable materials must be made available for re-use prior to recycling. Reuse of materials on current project is encouraged.

10. Added new detail for stringent tree protection during construction.

11. Added new section and detail for Engineered Soil Mix to provide a planting material recommended for use in paved and/or hardscape areas to allow tree roots to grow under sidewalks or paved surfaces.

Copies of the City of Palo Alto Standard Drawings and Specifications, 2007 are available at the Development Center, Revenue Collections located on first floor of the Civic Center and on the City’s website.

ATTACHMENTS
Attachment A: Detailed Summary of Changes to the City’s 1992 Standard Drawings and Specifications