

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Public Works *[Signature]*

BOARD AGENDA # *C-2

Urgent Routine

AGENDA DATE May 13, 2014

CEO Concurs with Recommendation YES NO
(Information Attached)

4/5 Vote Required YES NO

SUBJECT:

Approval of the 2014 Stanislaus County Department of Public Works Standards and Specifications Update

STAFF RECOMMENDATIONS:

Approve and adopt the Stanislaus County Department of Public Works Standards and Specifications 2014 Edition Update.

FISCAL IMPACT:

There is no fiscal impact associated with this item.

BOARD ACTION AS FOLLOWS:

No. 2014-233

On motion of Supervisor Withrow, Seconded by Supervisor O'Brien

and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, Monteith, and Chairman De Martini

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) X Approved as recommended

2) _____ Denied

3) _____ Approved as amended

4) _____ Other:

MOTION:

[Signature: Christine Ferraro]

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

DISCUSSION:

The purpose of the County Improvement Standards and Specifications is to establish minimum design requirements for the construction of improvements in the public rights-of-way, residential subdivisions, commercial developments, industrial developments, and other types of development projects that are subject to the approval of the Department of Public Works or are to be dedicated to the County for maintenance and/or operations.

The current Standards and Specifications were originally adopted in February 2007. In January 2014, County Public Works staff completed an update to the County Standards and Specifications. This update was in response to suggestions from the development community and County staff.

The recent update to the current standards were undertaken to meet current conditions, incorporate new requirements mandated by State and Federal law, consolidate formatting, and reflect up-to-date reference information with the following process goals in mind:

1. To update the Standards and Specifications with the intent to make them a valuable tool for the development and construction industries;
2. To improve overall user-friendliness;
3. To provide greater efficiency and consistency in the design and construction of public improvements;
4. To bring the Standards and Specifications into compliance with the Circulation Element of the County General Plan that is currently being updated;
5. To bring the Standards and Specifications into compliance with the new National Pollutant Discharge Elimination System (NPDES) General Construction Permit 2009-0009-DWQ requirements; and
6. To bring the Standards and Specifications into compliance with the new NPDES General Permit and Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4) Order No. 2013-0001-DWQ requirements.

The Standards and Specifications were reviewed internally by various County departments, including: Consolidated Fire, Environmental Resources, Planning and Community Development, and Public Works (Engineering, Road and Bridge Maintenance, Traffic, Development Services, and Surveying). Department comments, suggestions, and recommendations were incorporated into the document to form an Administrative Draft. After the changes were incorporated, the Administrative Draft was submitted to members of the public, including but not limited to: engineering consulting firms, contractors, developers, and various city & county agencies to review the proposed changes. County staff received valuable feedback through the public review process.

In March 2014, the Administrative Draft Standards and Specifications document was distributed to the Building Industry Association (BIA) for final review and comment. Comments that were received from the BIA were incorporated into the final Standards and Specifications.

Approval of the 2014 Stanislaus County Department of Public Works Standards and Specifications Update

If the County 2014 Standard and Specifications Update is approved and adopted by the Board of Supervisors, the Department of Public Works will notify Standards and Specifications holders of the change and post the update on the Internet and Intranet for external and internal viewing.

POLICY ISSUES:

The recommended action supports the Board's priorities of promoting A Safe Community, A Well Planned Infrastructure and Efficient Delivery of Public Services. Processing maps and preparing plans for public improvements in conformance with the County Standard and Specifications provides for orderly development of the community.

STAFFING IMPACT:

There is no staffing impact associated with this item.

CONTACT PERSON:

Matt Machado, Public Works Director. Telephone (209)525-4130.

PS:djd

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ATTACHMENT A SUMMARY OF UPDATES

The following items are a summary of significant updates that have been made in the 2014 Standards & Specifications.

CHAPTER 1: GENERAL PROVISIONS

1. Section 1.2: Definitions for Groundwater, Groundwater Basin, Groundwater Elevation, and Groundwater Surface have been defined.

CHAPTER 2: TEMPORARY TRAFFIC CONTROL AND SAFETY

1. Section 2.10: Road closure and traffic control requirements describing traffic control plan and traffic delay notification & coordination have been incorporated into the Standards to help enhance public safety.
2. Section 2.12: The section on asphalt concrete has been updated to be in general conformance to the Caltrans Section 39 PG 64-10 asphalt concrete design requirements (Caltrans Standard Plans and Specifications 2010 edition).

CHAPTER 3: ROADS

1. Section 3.2: County road classification have been revised and updated to conform to the County General Plan Chapter 3 Circulation Element, latest edition of the Highway Design Manual (HDM), and the American Association of State Highway and Transportation Officials (AASHTO) standards.
2. Section 3.11: The section on Prime Coat for roadways has been removed.
3. Section 3.16: The County adopts the State Std. A2-6 curb & gutter (A87A) that requires 1 inch slope for 24 inches of width of gutter to help eliminate pavement warps that may result in ponding in front of handicap ramps.
4. Section 3.17: Driveway approach requirements have been expanded and new/revised construction details have been provided to help enhance public safety.
5. Section 3.20: Disabled access curb ramps have been updated for ramp slopes, truncated dome requirements, installation, and testing to meet current ADA regulations.
6. Section 3.20 Truncated Domes has been updated in conformance of ADA regulations: The truncated dome tiles shall comply with the new ADA requirements related to Dome Alignment, Dome Size, Dome Spacing, Dome Color, Tile Size and Location.
7. Section 3.35: Recommended intersection lane configurations are specified to help enhance public safety.
8. Section 3.38: Bicycle lane requirements have been added to accommodate and encourage bicycle use along the County roadways.

9. Section 3.39: Driveway access and design have been added and enhance to ensure driveway standards from public roads are met to protect the public health, safety, and welfare.

CHAPTER 4: STORM DRAINAGE

1. Section 4.2: County storm drain requirements for new development and re-development projects have been updated. All storm drainage retention facilities within Stanislaus County shall be designed using a 100-year, 6-day storm (5.60"). All storm drainage detention facilities within Stanislaus County shall be designed using a 100-year, 24-hour storm (2.88"). All conveyance drainage facilities shall be designed for a 10-year, 24-hour storm (1.88") or greater. These design changes are summarized in the table below:

Design Area	Design Method	Design Return	Comments
< 400 acres	Rational Formula	$V = CAR/12$ (depending on retention or detention design facility – see below)	Refer to section 4.3
> 400 acres	Unit Hydrograph TR-55 HEC-1	$V = CAR/12$ (depending on retention or detention design facility – see below)	Rainfall depths shall be taken from NOAA Atlas 2, Volume XI, or Rainfall Intensity Curves (Detail No. 400)
Retention Basin	$V_{ret} = CAR/12$	100-Year, 6-days $R = 5.33"$ (urban areas)	Volume of storm water must perc within
Detention Basin	$V_{det} = CAR/12$	100-Year, 24-hour $R = 2.88"$	Peak discharge from a detention basin shall not exceed 90% of the undeveloped peak flow from the 100-year, 24-hour event
Conveyance/Pipelines	Rational Formula $Q = CIA$	10-Year, 24-hour $R = 1.88"$	Refer to section 4.3

2. Section 4.4 and 4.6: Minimum separation from drainage retention facilities to ground water table has been increased to 10 feet from 5 feet to help protect stormwater and groundwater quality.
3. Section 4.7 Pump Station Force Mains specifies Galvanized Steel/Welded Steel Pipe or Class 235 DR-18 (originally classified as Class 150) or Class 305 DR-14

(originally Class 200) has the preferred pipe type for use in designing pump station force mains.

4. Section 4.10: Minor correction was made to help differentiate retention and detention basin.
5. Section 4.18: Section on Stormwater Quality requirements have been added per State/Federal mandates related to the new NPDES General Construction and MS4 Phase II Permit requirements.

CHAPTER 5: LIGHTING

1. Section 5.9: The section on electroliers/street lights has been updated to include LED luminaires/LED lamps to help enhance energy efficiency.
2. Section 5.17: The requirements for energizing street lights and formation of lighting districts have been updated.

CHAPTER 6: MISCELLANEOUS

1. Section 6.2: Emergency access road design requirements have been updated.

CHAPTER 7: GRADING

1. This chapter has been updated to help reduce erosion and sediment problems resulting from the development process and the increase of urban runoff from developed land within the County jurisdiction. This section has been updated to assist developers in processing permits in Stanislaus County. The general purpose of this Chapter is to safeguard the health, safety, property, and public welfare by regulating grading, excavation and earthwork construction activities in the unincorporated areas of Stanislaus County.

This chapter is based on the California Building Standards Commissions and is designed in conformance to Appendix J (Grading) of the California Building Code (Title 24 Part 2, Volume 1 & 2) and Sections 4.106 & 5.106 (Mandatory Measures for Residential and Non-residential Site Development) of the California Green Building Standards Code (California Code of Regulations Title 24, Part 11).

CHAPTER 8: PORTLAND CEMENT PERVIOUS CONCRETE PAVEMENT

1. This is a new Chapter that is introduced into the 2014 Standards and Specifications and provides general guidelines to developers, contractors, and design professional on Portland Cement Pervious Concrete Pavement. This type of concrete is gaining popularity with Low Impact Development and Post-Development Storm Water design standards to help protect storm water quality and recharge the County's groundwater.

CHAPTER 9: NPDES GENERAL CONSTRUCTION PERMIT & STORMWATER QUALITY

1. This is a new Chapter on Storm Water Quality. Stanislaus County is required by State and Federal regulations to develop programs to control the discharge of pollutants to the municipal storm drain system or to surface water bodies of the State, including the discharge of pollutants from construction sites. As a result, all construction projects are subject to the State mandated requirements designed to improve stormwater quality under the Clean Water Act. The new State requirements include such things as: expanded plan check and review; site control measures; source control measures; increased site construction inspection, post-development standards; stormwater treatment control measures.

The primary purpose of this new chapter is to help protect the quality of storm water.