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CITY OF ELK GROVE
PROUD HERITAGE. BRIGHT FUTURE.

Standards Update Transmittal

Reference Number: 2021-02
Standards: Construction Specifications Manual, Section 25-5, 27-3.01
Standard Drawings, L-23, L-25

Update:

1. Construction Specifications:
   a. Section 25-5, "Expansion Joints in Alley Pavement": revise joint width to ½" from 3/8" to match with the Standard Drawing ST-39.
   b. Section 27-3.01, "Expansion Joints, Weakended Plane Joints, and Score Marks": revise joint width to ½" from 3/8" to match with the Standard Drawing ST-39.
2. Standard Drawings:
   a. L-23 Concrete walk (In Park Areas, not Frontage Areas): change 4" AB to 6" AB; revise Note 1 to read as "Provide 25% of thickness or 1.5" deep score joints at 10'-0" on center,"
   b. L-25 Bike Trail Paving Section: revise to read "3" Hot mix asphalt over 8" Aggregate Base Class 2, compacted to 95%; change 3' graded width to 2' minimum; add Note 5 "For trails parallel and adjacent to city street, the trail edge of traveled way shall be 5' minimum from the roadway edge of shoulder or 5' minimum from the roadway top face of curb whichever is greater."; add note 6 "A geotechnical recommendation is required for R-Value of less than 50 to provide a design life of 20 years and a TI of 5.".

Effect of Update:

1. Modifications provide consistency between the Construction Specifications Standard and Standard Drawing.
2. These modifications clarify the requirements regarding concrete walk and bike trail paving section.
3. Ensure that the trail section is properly designed for a 20 years design life.

Request for Update Initiated By: Kevin Bewsey 6/12/19

Update Reviewed for Conformity and Consistency to Standards:

Jeff Werner 2/18/2021 | 10:06 AM PST

Jeff Werner, P.E., ESD Manager Date

Update to Standards Approved:

Bob Murdoch 2/18/2021 | 10:43 AM PST

Robert Murdoch, P.E., City Engineer Date

25-1 GENERAL

Portland cement concrete pavement shall conform to Section 40, “Concrete Pavement”, of the State Specifications, and these Specifications.

Portland cement concrete pavement shall be constructed to the dimensions, lines and grades shown on the Plans. Unless otherwise provided in the Special Provisions, the pavement shall be constructed of Class “A” or "B" concrete, at the Contractor’s option, conforming to the requirements of Section 50-5, “Portland Cement Concrete”, of these Specifications. Unless otherwise specified in the Special Provisions, the portland cement used in the concrete shall be Type II as described in said Section 50-5, “Portland Cement Concrete”.

25-2 SUBGRADE

Subgrade for concrete pavement shall be prepared as specified in Section 18-2.05, “Subgrade Preparation”, of these Specifications. Subgrade shall be free of all loose or deleterious material when concrete is placed thereon and shall be uniformly moist. Any excess water on subgrade surface shall be removed prior to placing concrete, as directed by the City.

25-3 SIDE FORMS

Side forms shall be furnished and installed in accordance with Section 24, “Side Forms and Headers”, of these Specifications.

25-4 CONCRETE CUTTING

Where new concrete is to join existing concrete, the existing concrete shall be cut to a true line to a minimum depth of one and one-half inches (1-1/2”) with a power driven abrasive type saw.

25-5 EXPANSION JOINTS IN ALLEY PAVEMENT

An expansion joint shall be placed ten feet (10’) from each end of the work and every twenty feet (20’) therefrom, and at other places shown or specified in the Contract. The expansion joint material shall be not less than one half inch (1/2”) in thickness and shall conform to Section 50-4, “Premoulded Expansion Joint Filler”, of these Specifications.

25-6 PLACING CONCRETE PAVEMENT

The Contractor shall make adequate advance arrangements to prevent delay in delivery and placing of the concrete. An interval of more than forty-five (45) minutes between placing of any two (2) consecutive batches or loads shall constitute cause for stopping paving operations, and the Contractor shall make a contact joint, in the concrete already placed, at the location and of the type directed by the City. Such contact joint shall be made at the Contractor’s expense.

Slip-form paving and finishing equipment shall be properly adjusted and in satisfactory operating condition. Prior to placing concrete, the Contractor shall demonstrate proper adjustment of all screeds and floats on slip-form pavers by measurements from grade stakes driven to known elevations. Satisfactory operation and adjustment of all propulsion and control equipment, including pre-erected grade and alignment lines, shall be demonstrated by moving slip-form pavers and finishing machines over a five-hundred-foot (500’) length of prepared subgrade, with all propulsion and control equipment fully operational.

27-3.01 Expansion Joints, Weakened Plane Joints, and Score Marks

In curbs, gutters, and sidewalks, an expansion joint shall be placed at the end of round corners and at major structures such as utility vaults, at portions of sidewalk that include a manhole, and at other places as shown on the Plans or as directed by the City. In addition, an expansion joint shall be placed at sixty-foot (60') intervals of curbs, gutters and sidewalks. Expansion joint material shall be one half inch (1/2") thick and extend for the full depth of the section. Expansion joint material shall conform to Section 50-4, "Premoulded Expansion Joint Filler", of these Specifications. Expansion joints shall be at right angles to the line of the work.

All five-foot (5') wide sidewalk shall be scored at five-foot (5') intervals. Standard control score lines are to be ½" deep with a 1/8" radius. In lieu of every other score mark, at ten foot (10') intervals, weakened plane joints shall be constructed. In lieu of every sixth weakened plane joint, at sixty-foot (60') intervals, expansion joints shall be constructed as detailed above.

All six-foot (6') sidewalk shall be scored at five-foot (5') intervals. In lieu of every other score mark, at ten-foot (10') intervals, weakened plane joints shall be constructed. In lieu of every sixth weakened plane joint, at sixty-foot (60') intervals, expansion joints shall be constructed as detailed above.

Weakened plane joints shall extend through both the sidewalk and the curb and gutter when constructed at the same time and monolithically. Curb and gutter constructed without monolithic sidewalk construction shall be constructed with weakened plane joints at ten-foot (10') intervals and expansion joints at sixty-foot (60') intervals.

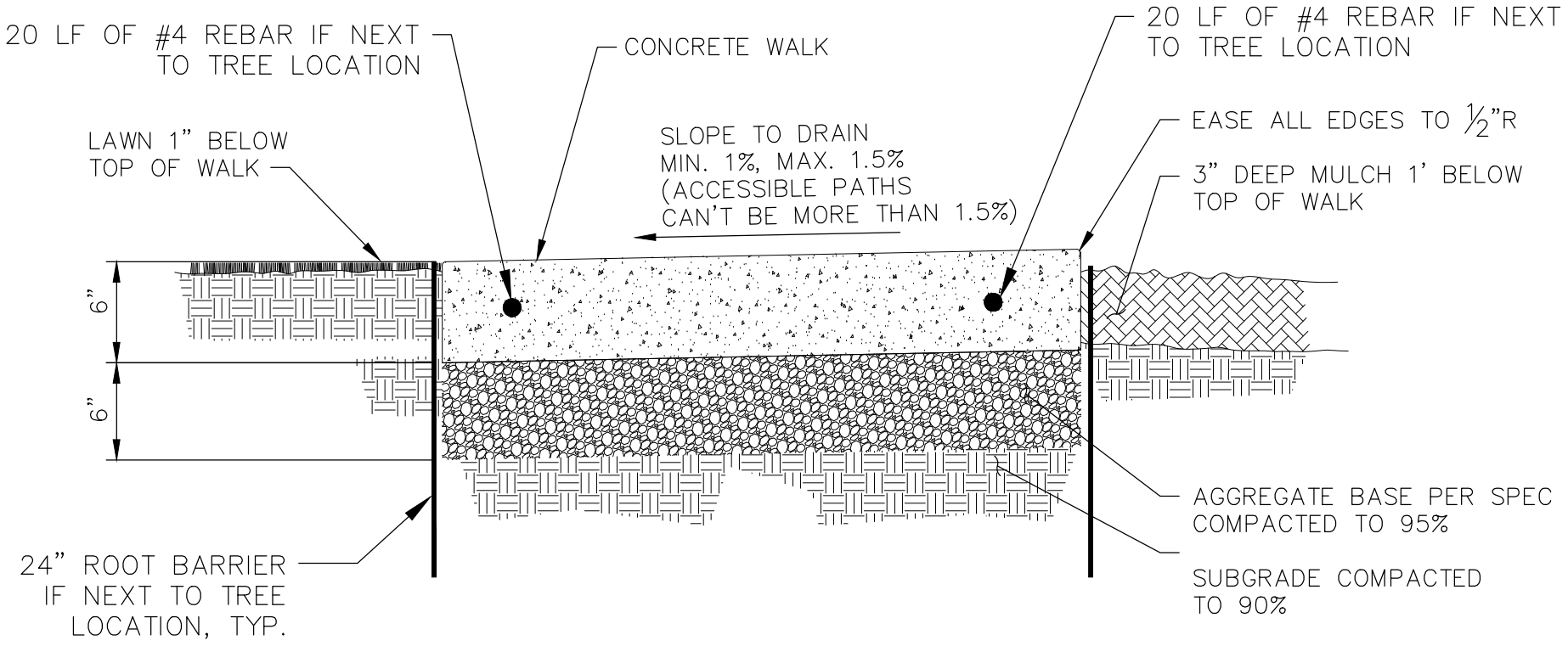
27-3.02 Finishing Concrete Surfaces

The top and exposed surface of the concrete curb shall be finished as follows:

- A direct finishing method, whereby the curb concrete shall be placed to exact form, double screeded, floated, troweled and smoothly finished, after which it shall be broomed with a fine hair push broom drawn over the surface transverse to the line of work. Water may be applied to the surface immediately in advance of brooming.
- Surfaces of sidewalks shall be finished by double screeding, which shall include working the concrete until the coarse aggregate is forced down into the body of the concrete and a layer of mortar is thus forced to the top for floating, and troweling. The surface shall then be marked as directed by the City, and broomed as described above.

27-3.03 Curing of Concrete

Curing of concrete in curbs, gutters, and sidewalks shall be with pigmented compound as specified in Section 50-6, "Curing Compounds for Concrete", of these Specifications. The curing compound shall be applied as recommended by the manufacturer. Curing compound is to be completely and uniformly applied to the exposed surfaces of the concrete such that the compound leaves a neat appearance. Median islands shall have white-pigmented compound. The Contractor shall take care that the pigmented compound is contained within the intended area of work and does not discolor asphalt concrete or other adjoining



NOTES:

1. PROVIDE 25% OF THICKNESS OR 1.5" DEEP SCORE JOINTS AT 10'–0" ON CENTER.
2. PROVIDE EXPANSION JOINTS AT 20'–0" INTERVALS.
3. CLASS "B" CONCRETE.
4. MEDIUM BROOM FINISH PERPENDICULAR TO WALK EDGE UNLESS OTHERWISE SPECIFIED.
5. PROVIDE FULL DEPTH FELT EXPANSION JOINTS WHEN ABUTTING WALKS, WALLS AND BUILDINGS.

DATE 09/22/2007		NOT TO SCALE	
REVISION	BY	APPROVED	DATE
01	KB	JRW	02/16/2021

CITY OF ELK GROVE - PUBLIC WORKS

CONCRETE WALK (IN PARK AREAS, NOT FRONTAGE AREAS)

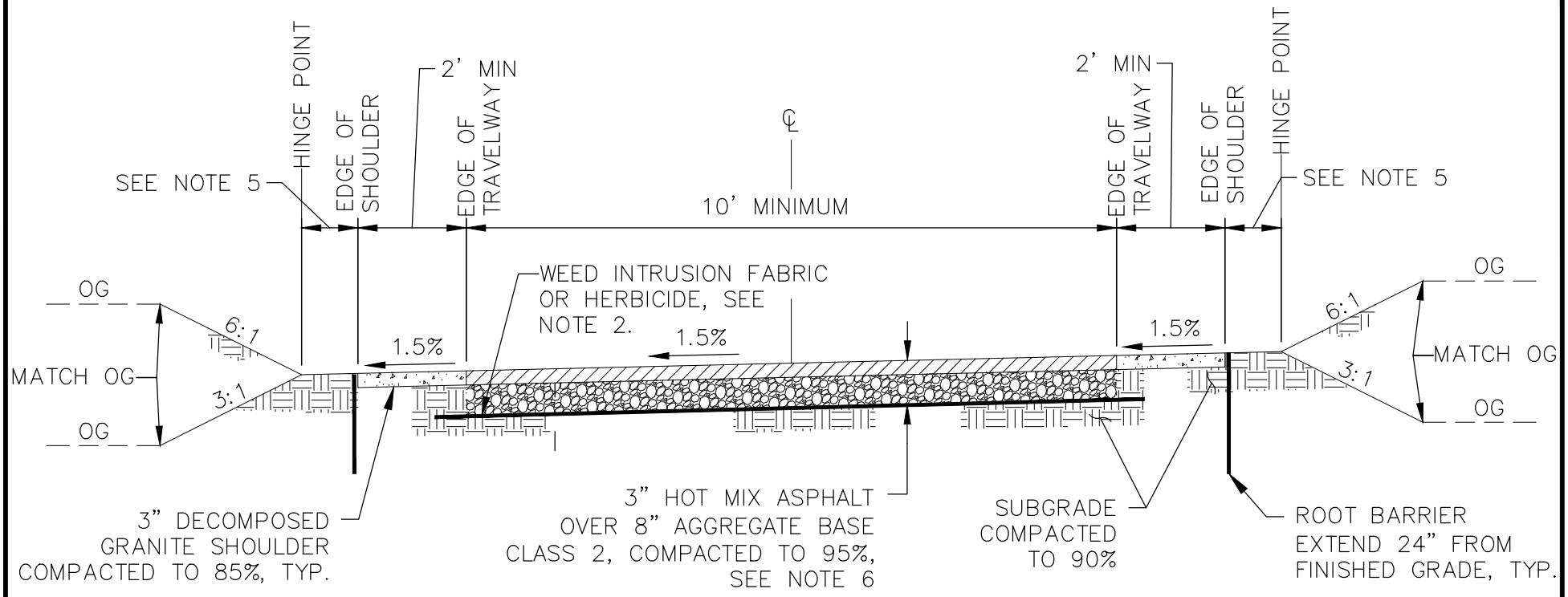
APPROVED BY:

Robert Murdock 02/17/2021

CITY ENGINEER DATE

DRAWING NUMBER

L - 23



NOTES:

1. APPLY PRE-EMERGENT HERBICIDE UNDER DECOMPOSED GRANITE PRIOR TO INSTALLING IT.
2. APPLY PRE-EMERGENT HERBICIDE OR WEED INTRUSION FABRIC TO AGGREGATE BASE PRIOR TO PAVING ASPHALT CONCRETE.
3. APPLY A 4" WIDE SOLID THERMOPLASTIC YELLOW CENTERLINE STRIPE CONTINUOUSLY DOWN THE CENTER OF THE BIKE TRAIL.
4. A MINIMUM 3-FOOT HORIZONTAL CLEARANCE FROM THE PAVED EDGE OF A BIKE PATH TO OBSTRUCTIONS SHALL BE PROVIDED.
5. FOR TRAILS PARALLEL AND ADJACENT TO CITY STREET, THE TRAIL EDGE OF TRAVELED WAY SHALL BE 5' MINIMUM FROM THE ROADWAY EDGE OF SHOULDER OR 5' MINIMUM FROM THE ROADWAY TOP FACE OF CURB WHICHEVER IS GREATER.
6. A GEOTECHNICAL RECOMMENDATION IS REQUIRED FOR AN R-VALUE OF LESS THAN 50 TO PROVIDE A DESIGN LIFE OF 20 YEARS AND A TI OF 5.

DATE 09/22/2007		NOT TO SCALE	
REVISION	BY	APPROVED	DATE
01	KB	JRW	02/16/2021

CITY OF ELK GROVE - PUBLIC WORKS

BIKE TRAIL PAVING SECTION

APPROVED BY:

Robert Murdock 02/17/2021

CITY ENGINEER DATE

DRAWING NUMBER

L - 25