

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

IMOBILIZATION AND CONTRACT PROCESSING COST

1. MATERIALS AND EXECUTION

- A. Mobilization shall consist of preparatory work and operations, including, but not limited to those necessary for the movement of personnel, equipment, bond cost, insurances, preparing and submitting submittals, traffic control, supplies and incidentals to the project site; for the establishment of all other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

2. MEASUREMENT AND PAYMENT

- A. The contract lump sum price paid for Mobilization and Contract Processing Cost as shown in the bid schedule shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in this bid item. Payment shall be no more than 50% of the line item for up to 50% of work completed. The remaining 50% to be paid when final payment is to be made for the remaining work of the contract.

BASE FAILURE REPAIR

1. PROCEDURE

- A. The Contractor shall repair base failures as specified in these Technical Provisions and as directed by the Project Engineer. Base repair areas are shown on the plan. The exact location will be marked in the field by the Project Engineer. The minimum width of base repair shall be 4 feet wide. Prior to beginning any work on the pavement and pothole repairs (pavement repairs), the Contractor shall arrange for and conduct a field review of each pavement and pothole repair location with the Project Engineer. The Project Engineer and Contractor shall record the agreed upon dimensions for each asphalt concrete repair and asphalt concrete base repair. The size and type of repair shall not vary from this agreement unless specified in writing by the Project Engineer. Additional compensation shall not be allowed for pavement and pothole repairs more than the agreed upon size.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- B. All areas to receive pavement base failure repair will be located within the limit of work boundaries and outlines in fluorescent paint on the pavement surface. The outlined painting shall be completed one week prior to the Contractor's start of the 2" overlay. The repair locations are not shown on the Project Plans and will be determined in the field by the Project Engineer.
- C. Base Failure repair work shall consist of removing the existing cracked or damaged Asphalt Concrete by excavation or pavement grinding to a depth of 3 inches or as directed by the Project Engineer. The surface exposed by the excavation and/or grinding shall be evaluated by the Project Engineer prior to backfilling the area with 3" of asphalt concrete

2. MEASUREMENT AND PAYMENT

- A. The Contract unit price per square foot as field measured from the existing pavement surface to the base of excavation, including removal of aggregate base, if necessary, for **Base Failure Repair (3" Depth)** shall include, but not be limited to, furnishing all labor, materials, tools, equipment, saw cutting, grinding and incidentals, supplying HMA and for doing all the work involved in the excavation of the existing pavement section, disposal of the excavated material, replacing unsuitable subgrade material, and shall include only that excavation from the areas that are field determined to require base failure repair, as specified in the Contract Documents and as directed by the Project Engineer.
- B. The actual size of area repairs on the plans may vary from the quantities marked in the field.

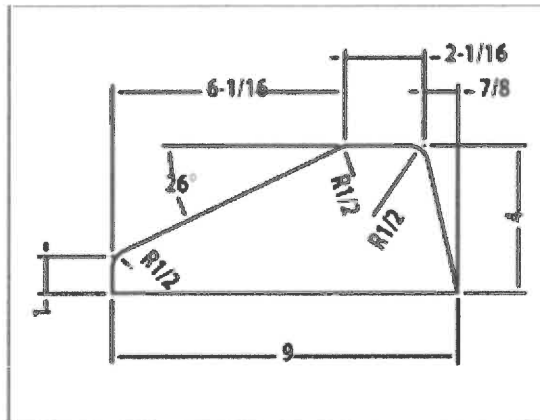
WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

ROLL ASPHALT CURB

1. PROCEDURE

- A. After the completion of the 2" overlay the Contractor shall install an asphalt roll curb as specified in these Technical Provisions and as directed by the Project Engineer. The location of the roll curb is shown on the plan and the exact location will be marked in the field by the Project Engineer.
- B. The back edge of the curb shall fall on the edge of the roadway. The grade of the curb shall follow the grade of the roadway surface. As directed by the Project Engineer a 6" gap shall be installed as a drainage release point.
- C. Asphalt roll curb shall be installed by a "curbing machine" to allow the curb to be extruded in place.
- D. A curbing machine shall incorporate the use of a minimum 5" auger. Capable of extruding 15 feet per minute.
- E. Construction of the asphalt curb shall comply to the detail below:



WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

2. MATERIALS TO BE USED

A. Asphalt Curb Mix:

- a. Liquid Asphalt
- b. Asphalt Content should be 6.0 to 9.0% by weight of total mix and should be AC-20 or AR-8000 (60-70 penetration). The liquid asphalt content will also have to be raised if the mix has slag, or other absorptive materials in it.

B. Aggregates:

- a. All aggregates must be heated and dried. Crushed aggregates are highly recommended versus round river stone.
- b. Aggregate graduation:

SIEVE SIZE PASSING % BY WEIGHT

1/2"- 100

3/8"- 75-100

No. 4- 60-80

No. 8- 45-60

No. 50- 18-30

No. 200- 2-15

C. Temperature:

- a. Optimum working temperature needs to be 250 to 290 degrees Fahrenheit. Under no circumstances should mix temperatures exceed 300 Degrees F.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

D. Emulsified Asphalt Tack Coat:

- a. When placing Asphalt Curb over an existing or five-day old asphalt, the contractor shall spray a coating of SS-1 Emulsified Asphalt Tack Coat to the area where a rolled asphalt curb will be located. Apply from .05 to .15 gallons per square yard.

3. MEASUREMENT AND PAYMENT

- A. The Contract unit price per linear foot as field measured. The asphalt roll curb shall include, but not be limited to, furnishing all labor, materials, tools, equipment, and incidentals, supplying HMA, SS-1 and for doing all the work involved in the installation of the roll curb, as specified in the Contract Documents and as directed by the Project Engineer.

EDGE AND TRANSITION GRIND (COLD PLANE)

1. PROCEDURE

- A. Existing asphalt concrete pavement shall be cold planed at the locations shown or specified in the Project Plans section of this document to a depth of 2" measured from the lip of gutter tapered to 0" in three feet along the curb or mow band and in accordance with these Technical Provisions, unless directed otherwise by the Project Engineer. Both north and south gate shall be cold plane 6' wide for the width of the roadway at those two locations. Taper grind shall be 2" at the gates tapered to 0" at 6 feet away.
- B. Any monuments, utility boxes, valve boxes, drain grates, manhole rims or similar structures shall be protected in place. The contract shall take measure to grind around of chip away all utilities as needed.
- C. The cold planing machine shall be equipped and capable of performing as follows:

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- D. The cold planing machine shall be capable of planing the pavement without requiring the use of a heating device to soften the pavement prior to or during the planing operation. The machine shall be operated efficiently so dust, fumes and smoke are maintained at minimum levels.
- E. The cold planing machine shall be equipped with a cutter head not less than 12 inches in width. The cutting chamber shall be enclosed and shrouded.
- F. The cutter assembly shall rotate in such a manner as to deposit planed material neatly behind the cutting chamber while clearing the wheel tracks.
- G. Results of the cold planing operations shall be as follows:
 - a. Roads being planned shall be swept with a mechanical type pickup machine throughout the course of planing operations and shall be left clean of all planing debris at the end of each working day.
 - b. Planing debris shall not be spilled into drain inlets and the Contractor shall clean up any spillage immediately.
 - c. The planed material shall remain the property of the Contractor. The Contractor shall be responsible for disposal of the planed material.
 - d. All vegetation shall be removed from the gutter lip and other street areas to be resurfaced. The Contractor shall remove existing asphalt concrete from the top of the gutter pan and from the face of gutter lip as directed by the Project Engineer.
 - e. The outside lines of the planed area shall be neat and uniform. The depth, width and shape of the cut shall be as shown or specified in the Contract Documents or as directed by the City Engineer. The final cut shall result in a uniform surface conforming to the details shown or specified. The outside lines of the planed area shall be neat and uniform.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- f. The planing operations shall not damage the surfacing to remain in place or the gutter lips during the planing operation.
 - g. The Contractor shall replace damaged or spalled curb or mow band at the Contractor's expense.
 - h. The Project Engineer or the District representative shall evaluate the surface exposed by the grinding prior to backfilling the area with asphalt concrete.
- H. At the end of each working day, there shall not be any elevation difference between planed and unplanned pavement in the traveled vehicle lanes. Any differences perpendicular to the centerline of the street shall be sloped by either ground bevels or temporary asphalt concrete tapers. The slope of either the bevel or the temporary asphalt concrete taper shall not be greater than one (1) inch vertical in twelve (12) inches horizontal. When temporary asphalt concrete tapers are used, the asphalt concrete shall be commercial quality and may be spread and compacted by any method that will produce a smooth riding surface. Temporary asphalt concrete tapers and all loose material from the underlying surface shall be completely removed before placing the permanent surfacing. Elevation differences between planed pavement and are not required to be sloped.

2. MEASUREMENT AND PAYMENT

- A. Cold planing asphalt concrete shall be measured by the linear foot based on a three-foot width per foot. The quantity to be paid for will be the actual linear foot of pavement cold planed, irrespective of the number of passes required to obtain the specified depth.
- B. The Contract unit price paid per linear foot of the **EDGE AND TRANSITION GRIND (COLD PLANE)** Bid Item shall include, but not be limited to, furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in cold planing, including the protection of interferences (e.g., monuments and pavement marking) and disposal or transport of planed material as shown on the Project plan, as specified in the Contract Documents, and as directed by the Project Engineer.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- C. Full compensation for furnishing asphalt concrete for temporary tapers and for constructing, maintaining, removing and disposing of the tapers is included in the Contract unit price paid per linear foot for the **EDGE AND TRANSITION GRIND (COLD PLANE)** Bid Item as shown on the Bid Schedule and no additional compensation will be paid.

ASPHALT LEVELING COURSE

1. PROCEDURE

- A. The Contractor shall provide an HMA leveling course as specified in these Technical Provisions and as directed by the Project Engineer. Leveling course locations are shown on the plans. The exact location will be marked in the field by the Project Engineer. Prior to beginning any work on the pavement, the Contractor shall arrange for and conduct a field review of each HMA leveling course location with the Project Engineer. The Project Engineer and Contractor shall record the agreed upon dimensions for each asphalt leveling course location. The size and type of repair shall not vary from this agreement unless specified in writing by the Project Engineer. Additional compensation shall not be allowed more than the agreed upon size.
- B. All areas to receive HMA leveling course will be located within the limit of work boundaries and outlines in fluorescent paint on the pavement surface. The outlined painting shall be completed one week prior to the Contractor's start of the 2" overlay. The repair locations are shown on the Project Plans and will be determined in the field by the Project Engineer.
- C. The leveling course shall consist of removing the existing debris, grasses and any surface contaminants such as dirt and dust or as directed by the Project Engineer. The surface exposed by the cleaning shall be evaluated by the Project Engineer prior to the HMA leveling course.
- D. HMA leveling course material shall be Type A 3/8" PG 64-10. Existing surface shall be sprayed with SS-1 at a rate 0.02 to 0.10 gal/sq yard.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- E. Material shall be placed in one lift. The use of string lines, grade boards or laser shall be applied to assure all low areas are raised sufficiently to meet existing surrounding pavement grades. HMA material shall be compacted to 95% and applied at 250-290 degrees.

2. MEASUREMENT AND PAYMENT

- A. The Contract unit price per square foot as field measured from the existing pavement surface, for **ASPHALT LEVELING COURSE**, shall include, but not be limited to, furnishing all labor, materials, tools, equipment, and incidentals, supplying HMA and for doing all the work involved in the preparation of the existing pavement section, as specified in the Contract Documents and as directed by the Project Engineer.
- B. The actual size of area repairs on the plans may vary from the quantities marked in the field.

CRACK SEALING

1. PROCEDURE

- A. The Contractor shall repair existing roadway cracks as specified in these Technical Provisions and as directed by the Project Engineer. Existing crack areas are not shown on the plans. The exact location will be marked in the field by the Project Engineer. The minimum width of crack repair shall be ½" wide. Prior to beginning any work on any cracks, the Contractor shall arrange for and conduct a field review for repair location with the Project Engineer. The Project Engineer and Contractor shall record the agreed upon dimensions for each crack repair. The size and type of repair shall not vary from this agreement unless specified in writing by the Project Engineer. Additional compensation shall not be allowed for crack repairs more than the agreed upon size.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- B. All areas to receive crack sealing will be located within the limit of work boundaries and outlines in fluorescent paint on the pavement surface. The outlined painting shall be completed one week prior to the Contractor's start of the 2" overlay. The crack repair locations are not shown on the Project Plans and will be determined in the field by the Project Engineer.
- C. Crack sealing repair work shall consist of removing debris, foreign material, and grasses from the crack to a depth equal to the thickness of the existing asphalt. The crack sealing compound shall be applied directly into the crack and squeegee at the surface to prevent any mounding. All crack that settles more than a 1/4" shall be topped off.

2. MEASUREMENT AND PAYMENT

- A. The Contract unit price per linear foot as field measured from the existing pavement surface, for **CRACK SEALING** shall include, but not be limited to, furnishing all labor, materials, tools, equipment, and incidentals, supplying crack sealing compound and for doing all the work involved in the excavation of the crack debris, disposal of the excavated material, as specified in the Contract Documents and as directed by the Project Engineer.

ASPHALT CONCRETE OVERLAY

1. PROCEDURE

- A. Following completion of base repair crack sealing, edge and transition grinding, and leveling course, a 2-inch-thick asphalt concrete (HMA) overlay shall be installed on cemetery roadways and corporation yard as shown on the Project Plans. The AC overlay materials and installation shall conform stated below. The existing roadway surface shall be cold planed at the conforms, curbs, gutters and mow bands, as needed, before starting installation and any base failures shall be repaired and cracks wider than one half (1/2) inch shall be cleaned and filled with crack sealing compound. The AC overlay shall be placed in one lift up to a maximum thickness of two (2.0) inches as shown on the Project Plans. After the AC overlay is installed and rolled/compacted, shoulder backing shall be completed.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- B. Shoulder backing shall be of topsoil or AB as applicable of the area.
- C. Asphalt Concrete for overlay shall be Type A, ½ inch maximum, medium grading. All asphalt concrete shall conform to Section 39, "Asphalt Concrete", of the State Standard Specifications and these Special Provisions. Asphalt binder shall be Performance Grade (PG) 64-10.
- D. The Contractor shall submit the proposed asphalt concrete mix design to the Project Engineer at least ten (10) days prior to intended use. Proposed Mix Designs are to be based on Contractor's intended grading as detailed in Section 39, "Asphalt Concrete", of the State Standard Specifications and based on recent (within one year) grading and specific gravity tests (California Test Methods 202 and 105). Asphalt content shall be the optimum amount as determined by California Test 367. No asphalt concrete shall be incorporated into the work until the Mix Design is approved by the Project Engineer.
- E. Asphalt concrete shall be spread with a self-propelled spreader ready for compaction without further shaping, except asphalt concrete for conform tapers and driveways may be spread and compacted by any method that will produce a layer with uniform smoothness, texture and density.
- F. Contractor shall employ two vibratory rollers suffice to obtain 95% compaction. The first roller shall be used as the breakdown roller 250-275 degrees. While the finish roller will be used at 160-200 degrees.
- G. The entire road surfaces shall be cleaned of any foreign materials, grasses, dust, dirt, vegetation and any other materials that would prevent adhesiveness between the new and old pavements.
- H. All existing roadway surface shall receive a tack coat of SS-1 at a rate of 0.05-0.10 gal/yard.

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

TECHNICAL SPECIFICATIONS

- I. In addition to the requirements in Section 39-2.01C (2), "Spreading and Compacting Equipment," of the current State Standard Specifications, asphalt paving equipment shall be equipped with automatic screed controls and a sensing device or devices to control overlay thickness. Should the automatic screed controls fail to operate properly during any day's work, the Contractor may use manual control of the spreading equipment for the remainder of that day. However, the equipment shall be corrected or replaced with alternative automatically controlled equipment conforming to the requirements in this Section before starting another day's work. A 30 foot "leveling ski" with laser sensors shall be used to remove the high and lows of the existing pavement grade.
- J. End and shoulder conform tapers, permanent and temporary, shall be placed concurrently with the paving of the adjacent lane at various locations as directed by the City Engineer. Kraft paper or other approved bond breaker shall be placed under temporary tapers to facilitate the removal of the taper when paving operations resume.
- K. Half-width surfacing operations shall be conducted in such a manner that, at the end of each day's work, there will be no exposed centerline construction joint.

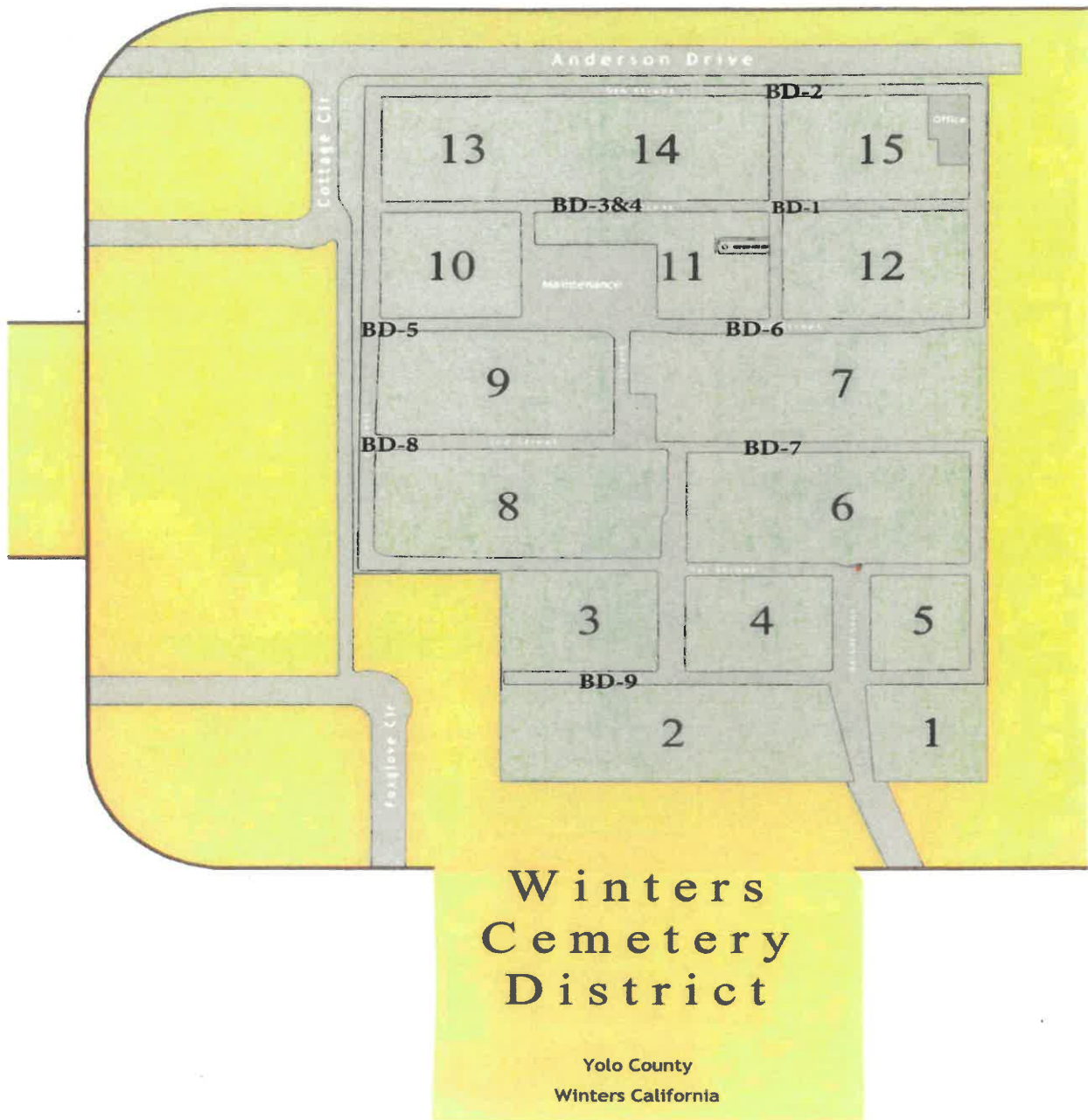
2. MEASUREMENT AND PAYMENT

- A. Asphaltic concrete overlay will be paid for at the Contract Unit Price per ton of the combined aggregate and asphalt for the **Asphalt Concrete Overlay** Bid Item and no additional compensation will be paid. Full compensation for furnishing and placing asphalt concrete in all roadway areas including end edge tapers, for furnishing and placing bond breaker material, for removing and disposing of temporary conform tapers, shoulder backing, and all surface preparation will be considered as being included in the Contract Unit Price paid per ton for the Asphalt Concrete Overlay Bid Item as shown on the Bid Schedule and no additional compensation will be made
- B. Full compensation for asphaltic emulsion used as a tack coat will be considered as being included in the Contract Unit Price per ton for the Asphalt Concrete Overlay Bid Item and no additional payment will be made.

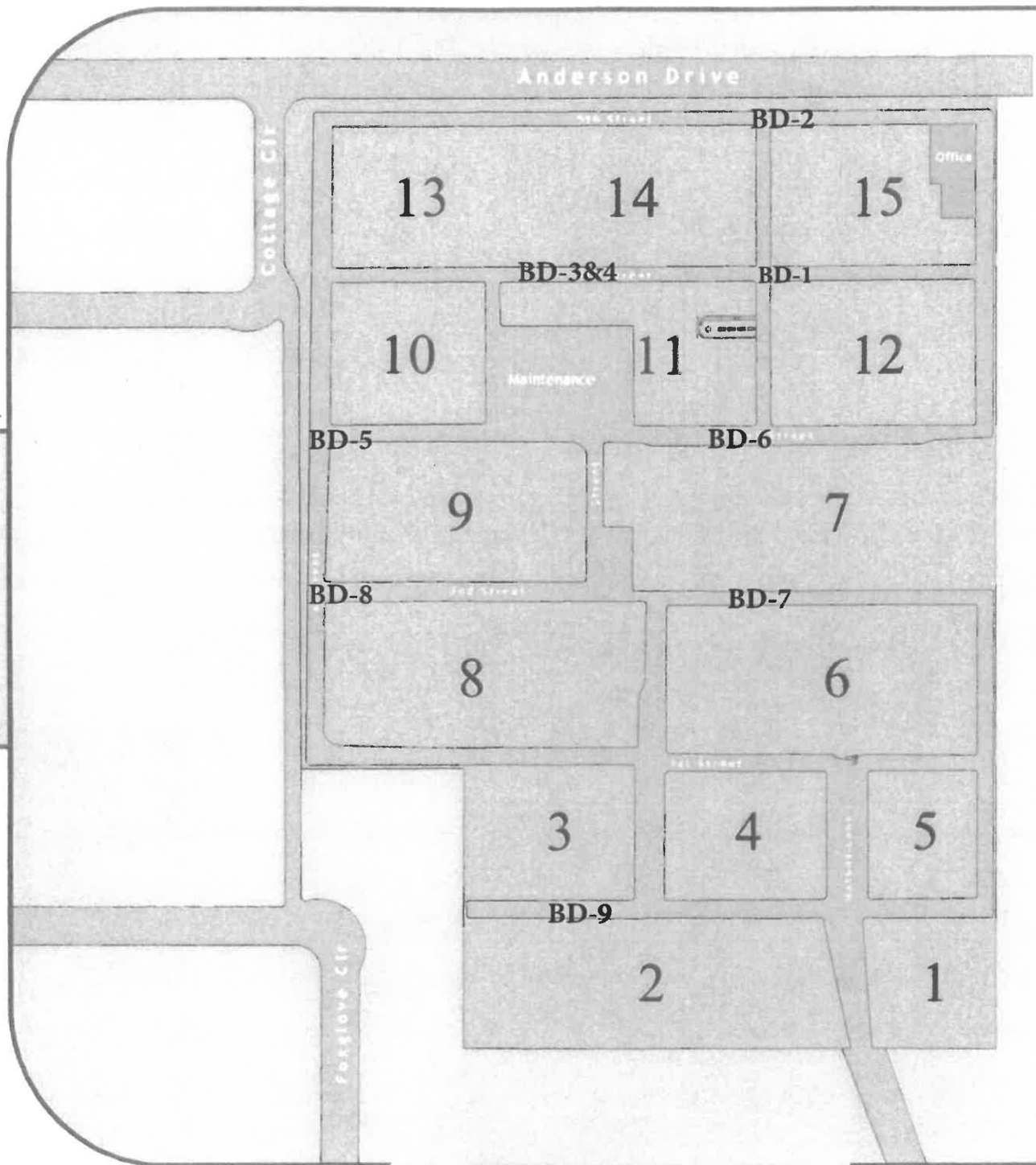
WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

PLAN SECTION

Plan A-AC Repairs-Dugout Locations



Plan A-AC Repairs-Dugout Locations



Winters Cemetery District

Yolo County
Winters California

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

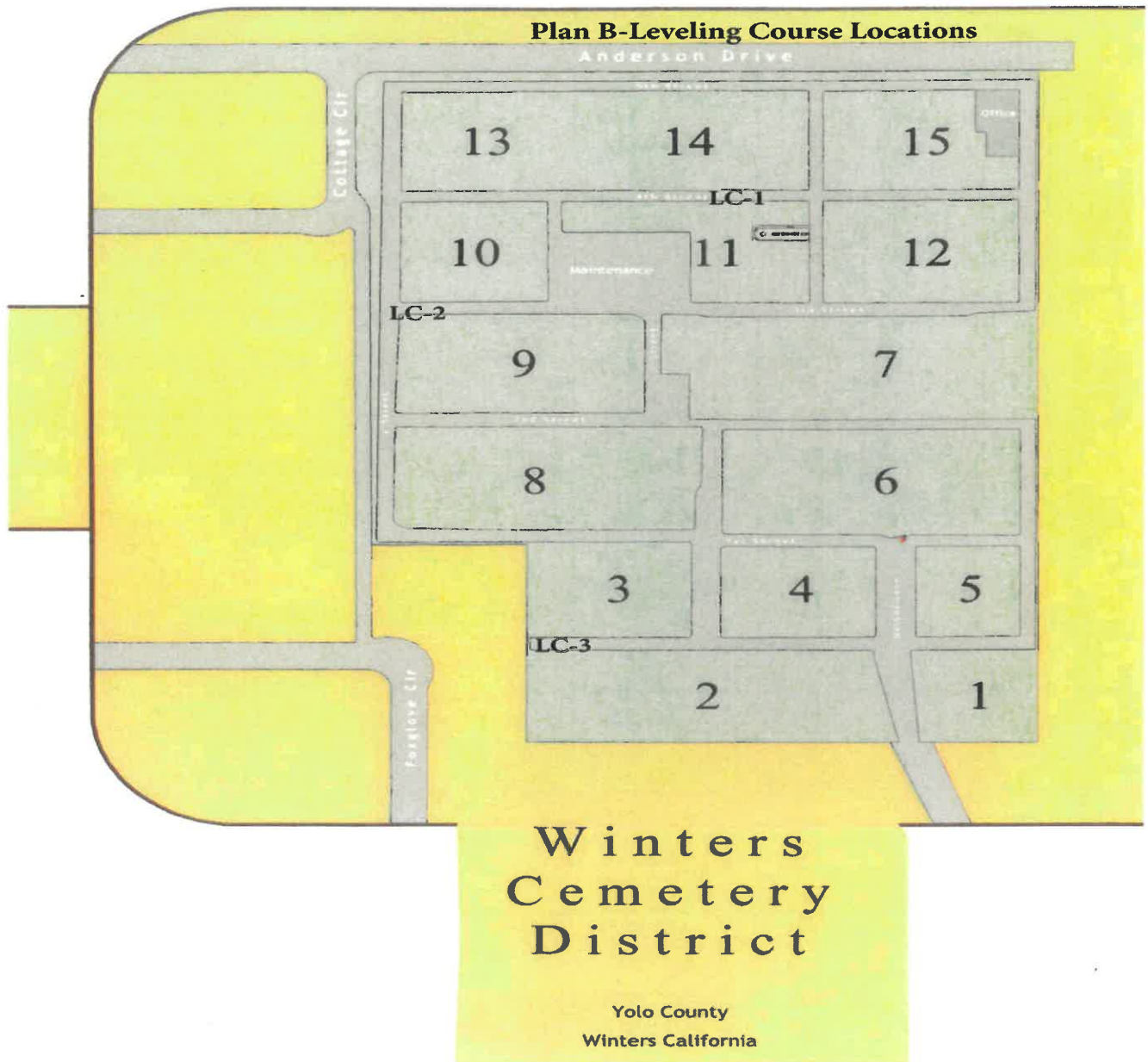
PLAN SECTION

Asphalt Repairs-Digouts

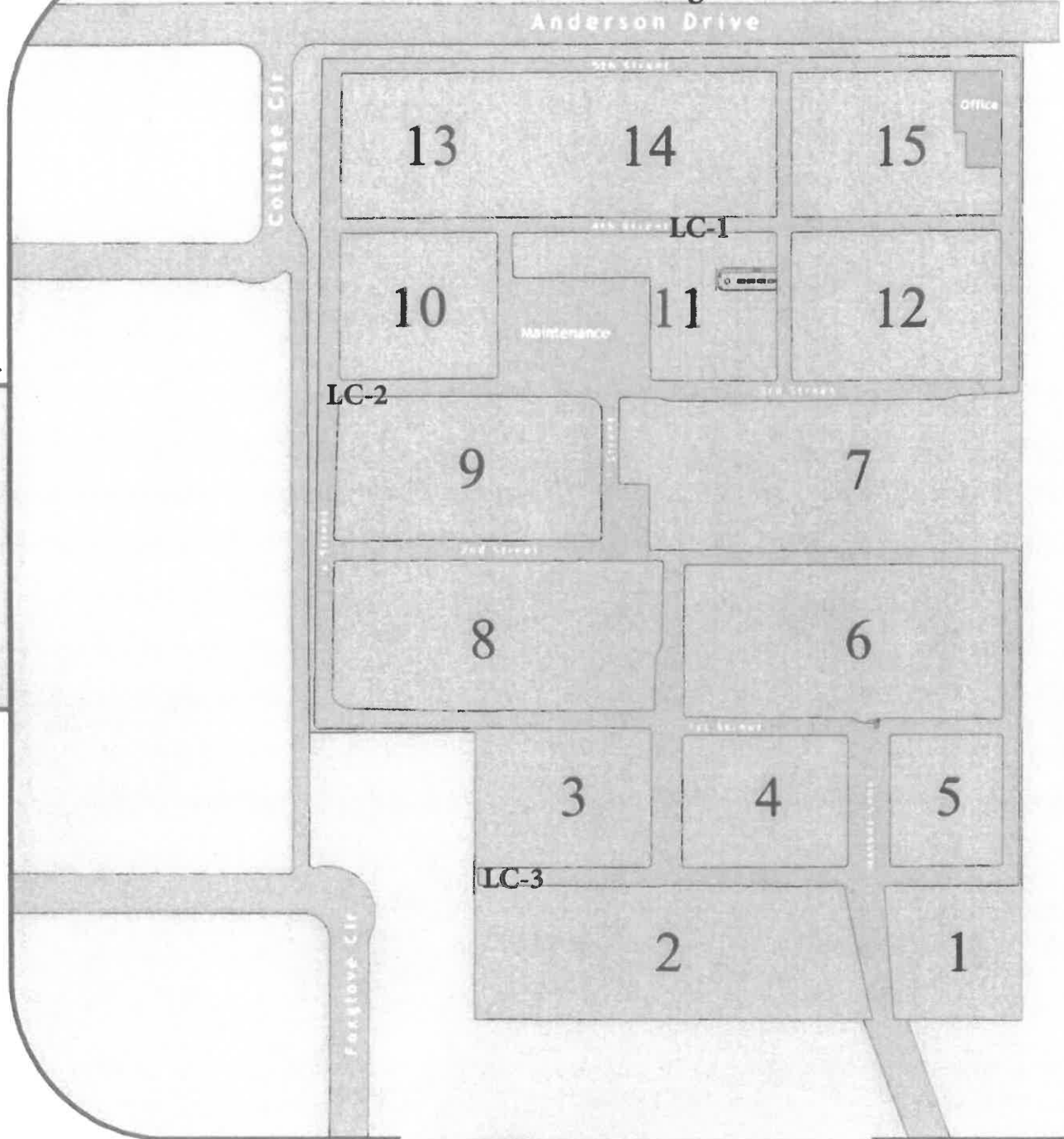
<u>Location</u>	<u>Size</u>
BD-1	8'x12'
BD-2	2'x18'
BD-3	6'x12'
BD-4	6'x14'
BD-5	6'x10'
BD-6	6'x10'
BD-7	4'x4'
BD-8	6'x14'
BD-9	8'x10'

WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

PLAN SECTION



Plan B-Leveling Course Locations



Winters Cemetery District

Yolo County
Winters California

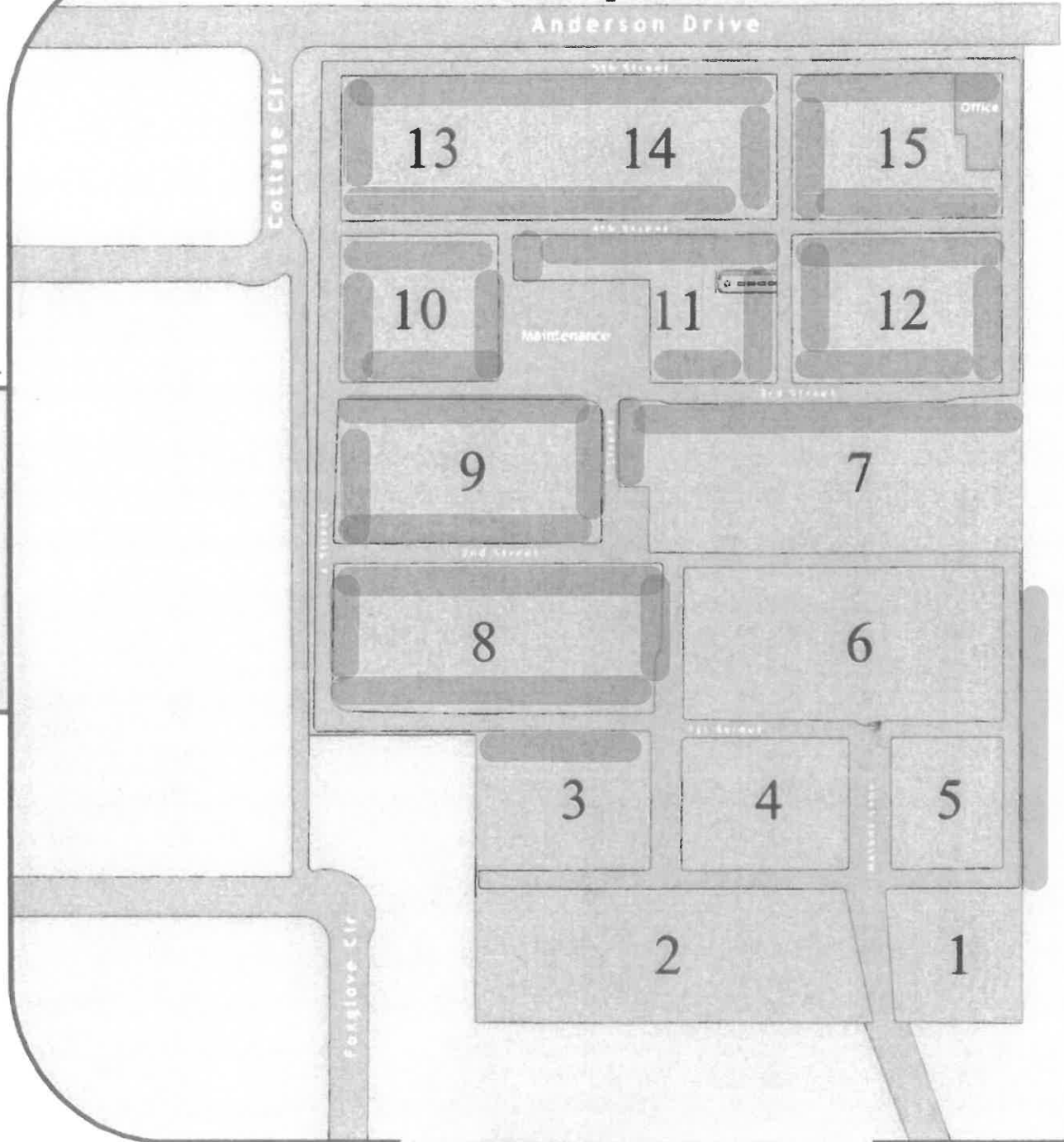
WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

PLAN SECTION

Asphalt Leveling Course

<u>Location</u>	<u>Size</u>
LC-1	14'x20'
LC-2	14'x20'
LC-3	14'x25'

Plan C-Roll Asphalt Curb Locations



Winters Cemetery District

Yolo County
Winters California

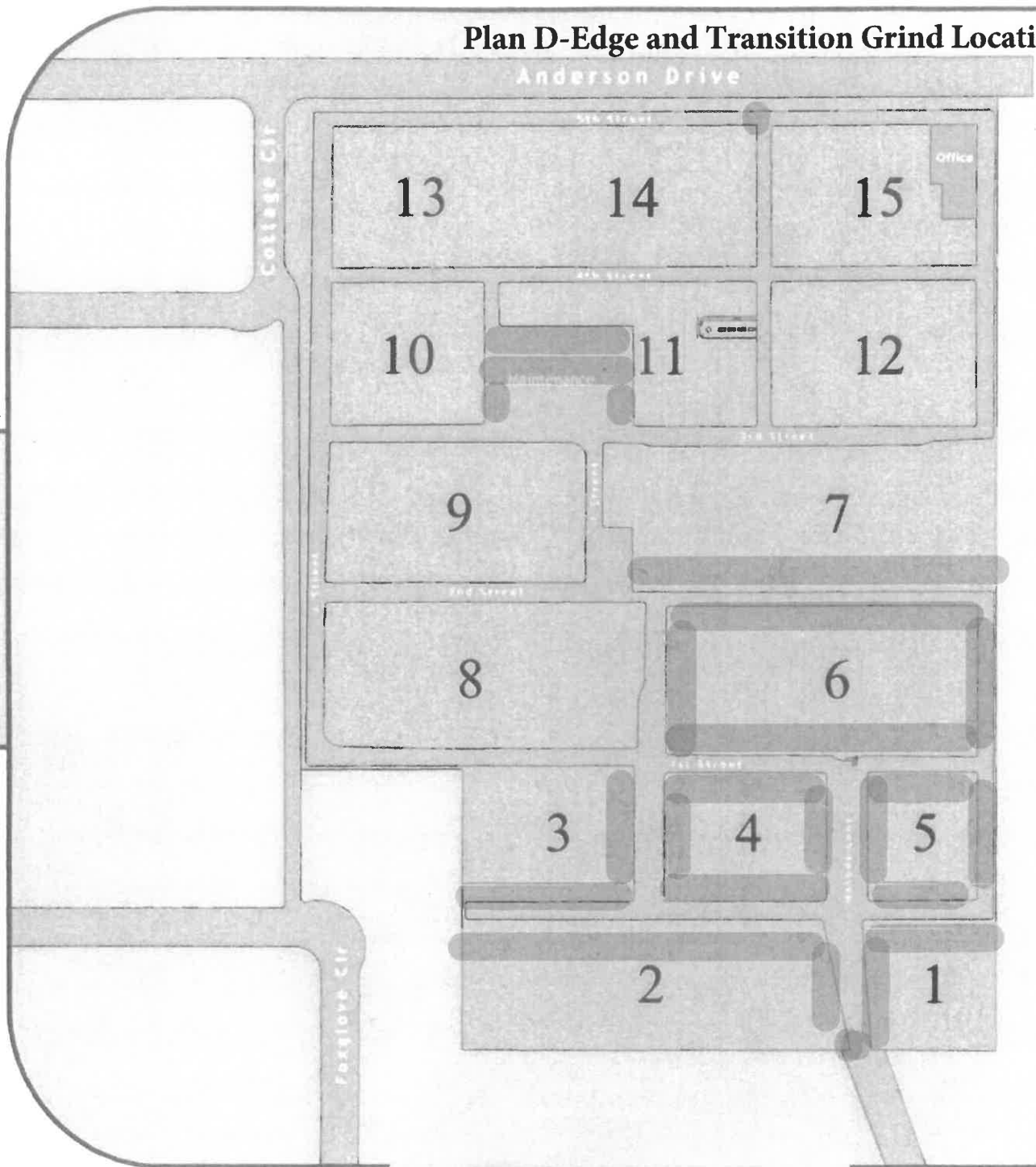
WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

PLAN SECTION

Roll Asphalt Curb Quantities

<u>Location</u>	<u>Linear Feet</u>
Section 3	161LF
Section 5/6	145LF
Section 7	460LF
Section 8	881LF
Section 9	775LF
Section 10	562LF
Section 11	547LF
Section 12	680LF
Section 13/14	1092LF
Section 15	585LF

Plan D-Edge and Transition Grind Locations



Winters Cemetery District

Yolo County
Winters California

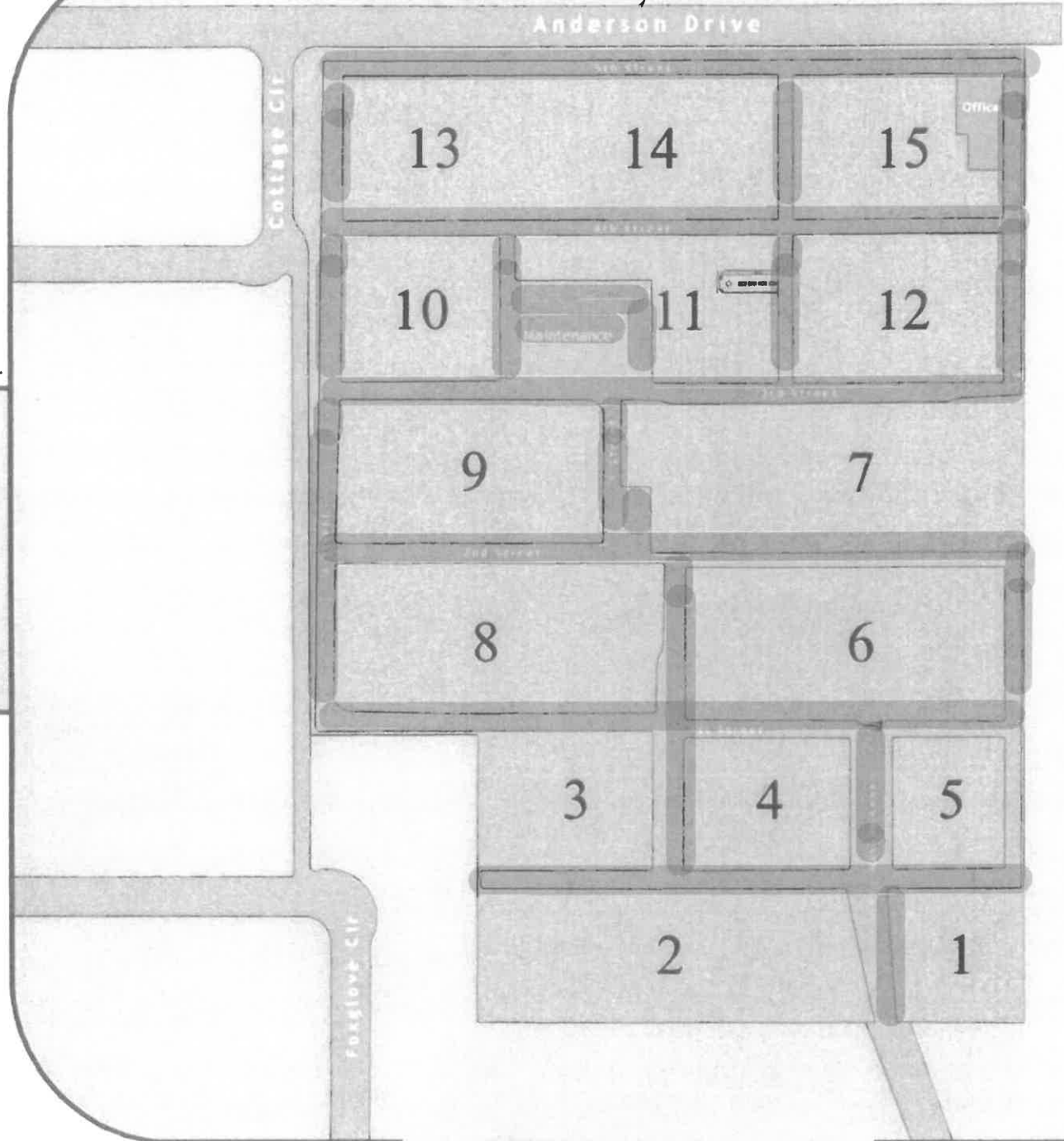
WINTERS CEMETERY DISTRICT
STATE OF CALIFORNIA
ROAD MAINTENANCE 2024

PLAN SECTION

Edge and Transition Grind Quantities

<u>Location</u>	<u>Linear Feet</u>
Section 1	257LF
Section 2	470LF
Section 3	278LF
Section 4	561LF
Section 5	460LF
Section 6	894LF
Section 7	321LF
North Gate	20LF (transition grind)
South Gate	20LF (transition grind)
Corporation Yard-Full 2" grind over entire parking /storage lot	
	120lf x 63lf
	129lf x 15lf
	32lf x 22lf

Plan E-2" Overlay Locations



Winters
Cemetery
District

Yolo County
Winters California