

**ENGINEER'S REPORT**  
For the  
Higgins Woodridge  
Permanent Road Division (PRD)  
**Nevada County, California**  
Revised August 8, 2018



**Prepared by:**

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**Nevada County Department of Public Works**  
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## **I. PRD ASSESSMENT INTRODUCTION**

The Higgins Marketplace Subdivision is an approved project with an approved Tentative Parcel Map (Parcel Map 04-020). The project is located south of Combie Road and east of State Route 49. The Parcel Map consists of six developable parcels and one open space parcel. As part of the project, the developer plans to improve and extend both Higgins Road and Woodridge Drive. The project is conditioned to create a Permanent Road Division (PRD) and levy an annual parcel charge to each developable lot for road maintenance within the development prior to recordation of the Parcel Map.

If approved, the PRD will charge the existing parcel an annual assessment to fund road maintenance services. Upon Parcel map recordation, each developable lot identified in the Parcel Map will pay its pro rata share of annual assessments. Details of these payments are included in this Engineer's Report. The services to be provided in the PRD will be as follows:

### **A. Road Surface Maintenance:**

The proposed road surface maintenance consists of approximately 99,000 square feet and includes Higgins Road (Combie Road to Woodridge Drive) and Woodridge Drive (Higgins Road to State Route 49).

The following items are typically included in a typical 25-year pavement maintenance cycle:

- Road resurfacing, including seal coat, patch and crack seal preparation work twice per each cycle.
- Pavement overlay and additional preparation and preservation work at the end of each cycle.
- Traffic signal maintenance costs for equipment relating to the south leg (Higgins Road) of the future traffic signal at Combie Road / Higgins Road.
- Miscellaneous road maintenance work as-needed, including sidewalk maintenance, brush and vegetation maintenance, pothole repair, drainage and culvert maintenance, signing and striping, sidewalk maintenance snow removal, etc.
- Commercial driveways encroaching upon Higgins Road and Woodridge Drive are not included in PRD maintenance costs. These costs are borne upon the property owner. This includes private commercial driveway culvert maintenance, striping, and pavement repairs or improvements.

## **II. LEGAL REQUIREMENTS**

Pursuant to Section 4 of Article XIII D of the California Constitution, the lots receiving a special benefit from the street improvements must be identified and the special benefit determined. Initially upon PRD formation, the existing parcel will be entirely responsible for the annual assessments. Upon Parcel Map recordation, all developable parcels within the parcel map shall share liability for the road. Since the size of each developable parcel will have a proportional impact on these roads, the proposed charges are assessed based on developable parcel size. For the purposes of discussion, Parcels 1-4 and 6-7 are considered developable. Parcel 5 is considered open space and has no impact on future road maintenance. As a result, no assessment is being charged.

### **III. BASIS OF ANNUAL ASSESSMENT**

The annual assessments for each maintenance program as defined in this Report have been based upon current rates and maintenance costs. Further discussion on each maintenance activity is as follows:

#### **A. Road Surface Maintenance:**

The road pavement resurfacing program is based upon the cost to patch repair and reseal the pavement with twice in each 25-year cycle and to patch repair and resurface the pavement with a layer of asphaltic concrete overlay including grinding transitions at the end of each cycle. The annualized cost for these pavement surface treatments were obtained from Nevada County maintenance costs. These costs were amortized over a 25-year maintenance cycle, which is typically used for newly constructed roads below 3,500-foot elevation.

#### **B. Additional Costs:**

Additional future routine maintenance costs include PRD management and contingency (10% of maintenance costs) and off season work and other miscellaneous repairs (20% of maintenance costs). These costs are in line with established engineering principals and reflect actual costs in other similar road maintenance districts.

### **IV. CALCULATION OF SPECIAL BENEFIT**

The existing lot and subsequent developable lots identified within the proposed parcel map are receiving a special benefit from the maintenance and the proportionate special benefit must be determined in relationship to the total maintenance expenses estimated to be necessary to maintain the road improvements. The benefits are wholly special benefits and each of the lot and lots within this PRD and receive special benefit from the identified maintenance in that the roads of this PRD.

Under the PRD program, the parcels receiving benefit from road maintenance activities will be responsible for annual costs of items included above. The County of Nevada will provide the actual maintenance functions with an annual parcel charge appearing on the annual Tax Bill. Prior to Parcel map recordation, the existing lot will be responsible for the entire cost of road maintenance. Upon Parcel Map recordation, each proposed parcel in this PRD would receive a special benefit from the proposed maintenance programs.

The Annual Maintenance Budget is intended to identify the maintenance items for the long-term maintenance of project road facilities. Table 1 includes annual assessments necessary to fund ongoing road maintenance activity. Prior to Parcel Map recordation, the existing lot would be responsible for the entire annual assessment. Once the Parcel Map is recorded, annual assessments would become the responsibility of the created parcels based on parcel size. Table 1 includes budget information for both scenarios:

**Table 1: Higgins Woodridge PRD  
Maintenance Budget Worksheet**

<b>PRD Maintenance</b>					
<b>LONG TERM PREVENTATIVE MAINTENANCE**</b>					
		Width	Length	Cost Per Square Foot	Cost
Year 10	Microsurface	30	3300	0.2	\$ 19,800.00
	Patch and Crack Seal (prep work)	30	3300	0.55	\$ 54,450.00
Year 18	Microsurface	30	3300	0.2	\$ 19,800.00
	Patch and Crack Seal (prep work)	30	3300	0.55	\$ 54,450.00
Year 25	Overlay	30	3300	1.65	\$ 163,350.00
	Patch and Crack Seal (prep work)	30	3300	0.6	\$ 59,400.00
	Management/Admin/Contingency				\$ 37,125.00
	Other Miscellaneous Repairs & Maintenance				\$ 74,250.00
	<b>Total</b>				<b>\$ 482,625.00</b>
	<b>Annual Assessment</b>				<b>\$ 19,305.00</b>
	<b>Annual Assessments Per Parcel</b>		Size (acres)	Percentage	
	<b>Parcel 1</b>		5.52	40.9%	<b>\$ 7,887.76</b>
	<b>Parcel 2</b>		1.95	14.4%	<b>\$ 2,786.44</b>
	<b>Parcel 3</b>		0.96	7.1%	<b>\$ 1,371.78</b>
	<b>Parcel 4</b>		1.23	9.1%	<b>\$ 1,757.60</b>
	<b>Parcel 6</b>		3.06	22.6%	<b>\$ 4,372.56</b>
	<b>Parcel 7</b>		0.79	5.8%	<b>\$ 1,128.86</b>
	<b>TOTAL</b>		<b>13.51</b>	<b>100.0%</b>	<b>\$ 19,305.00</b>
	<b>Parcel 5</b>		Open Space - not included in PRD Maintenance Costs		
<b>**Assumptions:</b>					
	Six Parcels paying proportionally based on their lot acreage. Parcel 5 (open space) pays no fee.				
	This assume revenue cost for 25-year maintenance cycle for Year 1. Future years shall be adjusted for inflation.				
	Parcel sizes per draft Parcel Map 04-020 dated 5/31/2018.				

**V. ASSESSMENT RATE AND METHOD OF ASSESSMENT**

**A. Assessment Rate:**

The rate of assessment is calculated for the 2019/20 Tax Year and is proposed to be as follows:

1. Annual Maintenance Budget – Existing Parcel (prior to Parcel Map recordation)
  - Parcel 1 - \$19,305.00
  
2. Annual Maintenance Budget – Proposed Parcels (after Parcel Map recordation):
  - Parcel 1 - \$7,887.76
  - Parcel 2 - \$2,786.44
  - Parcel 3 - \$1,371.78
  - Parcel 4 - \$1,757.60
  - Parcel 5 - \$0 (open space)
  - Parcel 6 - \$4,372.56
  - Parcel 7 - \$1,128.86

**B. Method of Assessment:**

Assessments will be collected in the same way real property taxes are collected by the Nevada County Tax Collector on behalf of the zone of benefit and will be deposited by the County in a separate fund in the name of "Higgins Woodridge Permanent Road Division (PRD)". Assessments will be collected in two (2) installments and will be available within sixty (60) days after the installments are due. The amount of assessment specified for this year shall be adjusted annually for the ensuing fiscal year to reflect the San Francisco/Oakland/San Jose Metropolitan Area Consumer Price Index for all Urban Consumers for the previous calendar year (January – December). The amount of increase shall not exceed five percent (5%) in any one year. Nevada County Department of Public Works shall be responsible for making the necessary computations each year and advising the Nevada County Auditor-Controller what the amount of charge for public roads maintenance services is to be for the next year as a result of the foregoing computation.

**C. Timing of Assessment:**

Assessments will be first collected for each lot in the first year after the creation of the Higgins Woodridge PRD and collection of a parcel charge is adopted by the Board of Supervisors.

# **ATTACHMENT A**

## **PROPOSED LEGAL DESCRIPTION AND BOUNDARY MAP FOR THE HIGGINS WOODRIDGE PRD**

**ATTACHMENT A**

**Higgins Woodridge Permanent Road Division**

That portion of land within portions of the Southeast Quarter of the Southwest Quarter of Section 21 and the North Half of Section 28, Township 14 North, Range 8 East, M.D.B.&M, in the unincorporated area of County of Nevada, State of California, and being more particularly described as follows:

Beginning at the northeast corner of Parcel 1 as shown on that certain Parcel Map No. 79-89 recorded April 8, 1980 in Book 14 of Parcel Maps at Page 158, Nevada County Official Records; thence from said Point of Beginning around the perimeter of said Parcel 1 the following thirteen (13) consecutive courses: 1) South 14° 39' 23" West, 233.39 feet, 2) South 06° 07' 08" West, 192.35 feet, 3) South 05° 20' 53" West, 180.11 feet, 4) South 06° 33' 02" West, 123.04 feet, 5) South 20° 17' 56" West, 160.45 feet, 6) South 22° 07' 13" West, 115.87 feet, 7) South 88° 21' 19" West, 800.41 feet, 8) North 47° 36' 50" West, 20.99 feet, 9) North 30° 51' 32" West, 52.30 feet, 10) North 04° 44' 10" West, 50.00 feet, 11) North 04° 44' 10" West, 148.72 feet, 12) North 04° 22' 18" East, 614.44 feet, and 13) North 82° 46' 00" East, 778.12 feet to the southeast corner of Parcel 6 of that certain Parcel Map No. 99-002 recorded April 1, 2002 in Book 19 of Parcel Map at Page 88, Nevada County Official Records and also being a point on the westerly right-of-way line of Higgins Road as dedicated to the County of Nevada in Deed Document No. 2002-0012743; thence northerly along said westerly right-of-way of Higgins Road the following seven (7) consecutive courses: 1) North 07° 44' 00" West, 161.00 feet, 2) South 81° 55' 04" West, 20.00 feet, 3) North 07° 44' 00" West, 53.90 feet to the beginning of a curve to the left and having a radius of 684.73 feet, 4) along said curve through a central angle of 09° 48' 15" and an arc length of 117.17 feet to the beginning of a curve to the right and having a radius of 684.73 feet, 5) along said curve through a central angle of 09° 48' 16" and an arc length of 117.17 feet, 6) North 07° 44' 00" West, 169.00 feet to the beginning of a curve to the left and having a radius of 25.00 feet, 7) along said curve through a central angle of 110° 28' 56" and an arc length of 48.21 feet to a point on the southerly right-of-way line of Combie Road; thence easterly along the said southerly right-of-way line of Combie Road, North 61° 47' 04" East, 10.07 feet to the beginning of a curve to the right and having a radius of 400.00 feet; thence along said curve through a central angle of 15° 47' 39" and an arc length of 110.26 feet to the beginning of a non-tangent curve concave southeasterly and having a radius of 25.00 feet whose chord bears South 34° 55' 21" West, 33.88 feet; thence along said curve through a central angle of 85° 18' 43" and an arc length of 37.22 feet; thence South 07° 44' 00" West, 181.99 feet to the beginning of a curve to the left and having a radius of 659.11 feet; thence along said curve through a central angle of 9° 33' 57" and an arc length of 110.04 feet to the beginning of a curve to the right and having a radius of 779.11 feet; thence along said curve through a central angle of 9° 33' 57" and an arc length of 130.08 feet; thence South 07° 44' 00" East, 222.30 feet to the north line of said Parcel 1; thence easterly along said north line of said Parcel 1, North 82° 46' 00" East, 211.73 feet to said Point of Beginning.

The herein described property contains an area of 20.92 acres, more or less.

This description has been prepared by me, or under my direct supervision, in conformance with the Professional Land Surveyors Act, on August 8, 2018.



Kevin J. Nelson, P.L.S. 8423  
Expires 12-31-18





**COUNTY SURVEYOR'S STATEMENT**

I, AS FRESH BY THE FIELD WORKMAN AT THE REQUEST OF THE HIGGINS WOODRIDGE PERMANENT ROAD DIVISION ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_ 2018.



KIMBERLY J. NELSON, P.L.S. #4623  
 REGISTRATION EXPIRES 12/31/18  
 COUNTY SURVEYOR

**COUNTY RECORDER'S STATEMENT:**

FILED THE \_\_\_\_\_ DAY OF \_\_\_\_\_ 2018 AT \_\_\_\_\_  
 IN BOOK \_\_\_\_\_ OF SURVEYS, AT PAGE \_\_\_\_\_, AT THE REQUEST  
 OF COUNTY OF NEVADA.

FEE: \_\_\_\_\_ COUNTY RECORDER  
 GREGORY J. DANZ  
 DOC. No. \_\_\_\_\_ BY \_\_\_\_\_ DEPUTY

**LEGEND**

PROPOSED PERMANENT ROAD DIVISION BOUNDARY  
 TOTAL AREA TO BE AMENDED = 20.022 Acres

**Boundary Map for**  
*the formation of the:*  
**HIGGINS WOODRIDGE**  
**PERMANENT ROAD DIVISION**

BEING A PORTION OF SECTIONS 28, TOWNSHIP 14 NORTH,  
 RANGE 8 EAST, M.D.M., IN THE UNINCORPORATED  
 TERRITORY OF NEVADA COUNTY, CALIFORNIA

August 2018 Scale 1"=100'



**NEVADA COUNTY**  
 DEPARTMENT OF PUBLIC WORKS

Sheet 1 of 1 Sheets

