



CIVIL LAND USE PLANNING SURVEY
P 503.643.8286 F 844.715.4743 www.pd-grp.com
9020 SW Washington Square Rd Suite 170
Portland, Oregon 97223

PRELIMINARY INTERSECTION SIGHT DISTANCE CERTIFICATION

April 3, 2020

City of Beaverton, Oregon
Site Development
12725 SW Millikan Way, Beaverton OR 97076
<https://www.beavertonoregon.gov>

Attn: Geoff Hunsaker

RE: Vineyard at Cooper Mountain
PRELIMINARY Sight Distance Certification

The intersection of SW Alvord Lane and SW 176th Drive is located 142 feet west of the site's east property line and 816 feet south of the site's northern property line. The sight distance in question is taken from the viewpoint of a driver of a stopped vehicle traveling south along SW 176th Dr. looking west and east along SW Alvord Ln. The speed limit along SW Alvord Ln. is 25 M.P.H. based upon the proposal's conditions of approval, requiring 240 feet of sight distance in both directions, in accord with the City of Beaverton Engineering Design Manual (EDM) Section 210.10.

As required by EDM Section 210.10, sight distance from SW 176th Dr. onto SW Alvord Ln. was measured to be 240 feet to the west of the intersection in one direction. Sight Distance to the east of the intersection was measured to be 151 feet to the intersection of SW Alvord Ln. and SW 175th Ave. The EDM requires that measurements be based on an eye height of 3.5 feet and an object height of 3.5 feet above the road; and be assumed to be 10 feet from the near edge of pavement to the **front** of a stopped vehicle (Actual measurement was taken 15 from pavement edge).

The intersection sight distance from a vehicle traveling south along SW 176th Dr. does not meet the intersection sight distance for a 25 M.P.H. street of 240 feet to the east required by Section 210.10. Sight distance to the east also falls short of the 155 feet to meet stopping sight distance for a 25 M.P.H. street.

However, sight distance from SW 176th Dr. looking east onto SW Alvord Ln. does meet the minimum stopping sight distance for a 20 M.P.H. street at 10% downgrade of 128 feet as set forth by the AASHTO guidelines in Table 3-2, attached herein. The traffic traveling westbound on SW Alvord Ln. is assumed to be traveling at 20 M.P.H. due to the turning movement from SW 175th Ave. The available sight distance to the east of 151 feet meets this stopping sight distance criteria.

In conclusion, I hereby certify that the intersection sight distance for southbound traffic on SW 176th Dr. onto SW Alvord Ln. in the Vineyard at Cooper Mountain subdivision conforms to the requirements for sight distance as set forth in City of Beaverton Engineering Design Manual, subject to approval of stopping sight distance criteria based on the ***Design Exception*** for this intersection.

A handwritten signature in blue ink that reads 'Geoff A. Mihalko'.

Geoff A. Mihalko, P.E.
Project Engineer

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As required by EDM Sections 210.10, sight distance from SW 176th Dr. onto SW Alvord Ln. was measured to be 240 feet to the west of the intersection in one direction. Sight Distance to the east of the intersection was measured to be 151 feet to the intersection of SW Alvord Ln. and SW 175th Ave. The EDM requires that measurements be based on an eye height of 3.5 feet and an object height of 3.5 feet above the road; and be assumed to be 10 feet from the near edge of pavement to the **front** of a stopped vehicle (Actual measurement was taken 15 feet from pavement edge).

The intersection sight distance from a vehicle traveling north along SW 176th Dr. does not meet the intersection sight distance for a 25 M.P.H. street of 240 feet to the east required by Section 210.10. Sight distance to the east also falls short of the 155 feet to meet stopping sight distance for a 25 M.P.H street.

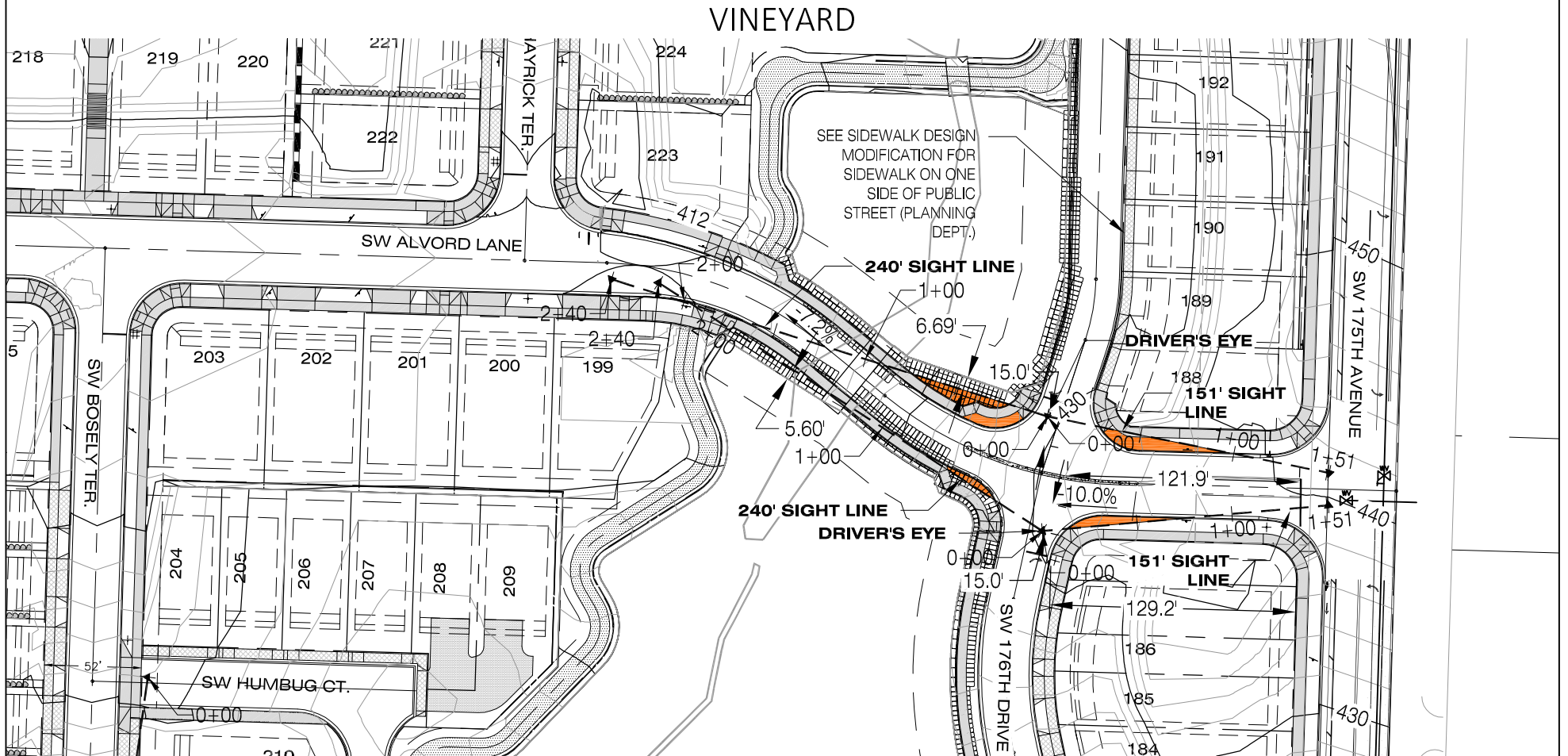
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In conclusion, I hereby certify that the intersection sight distance for northbound traffic on SW 176th Dr. onto SW Alvord Ln. in the Vineyard at Cooper Mountain subdivision conforms to the requirements for sight distance as set forth in City of Beaverton Engineering Design Manual, subject to approval of stopping sight distance criteria based on the *Design Exception* for this intersection.

A handwritten signature in blue ink that reads "Geoff A. Mihalko". The signature is written in a cursive style with a large initial 'G'.

Geoff A. Mihalko, P.E.
Project Engineer

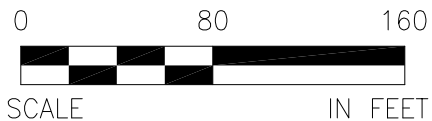
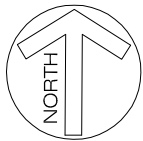
SW 176TH DR. & SW ALVORD LN. HORIZONTAL SIGHT DISTANCE



THIS AREA TO BE CLEAR OF TREES, SHRUBS, UTILITY BOX, CABINETS, ETC THAT MAY BLOCK SIGHT LINES. (TYP)

DESIGN EXCEPTION FOR THIS INTERSECTION

DESIGN SPEED = 25 MPH
 STOPPING SIGHT DISTANCE (SSD) = 128' (20 MPH @ 10.0% DOWNGRADE)
 INTERSECTION SIGHT DISTANCE (ISD) = 240' (25 MPH)



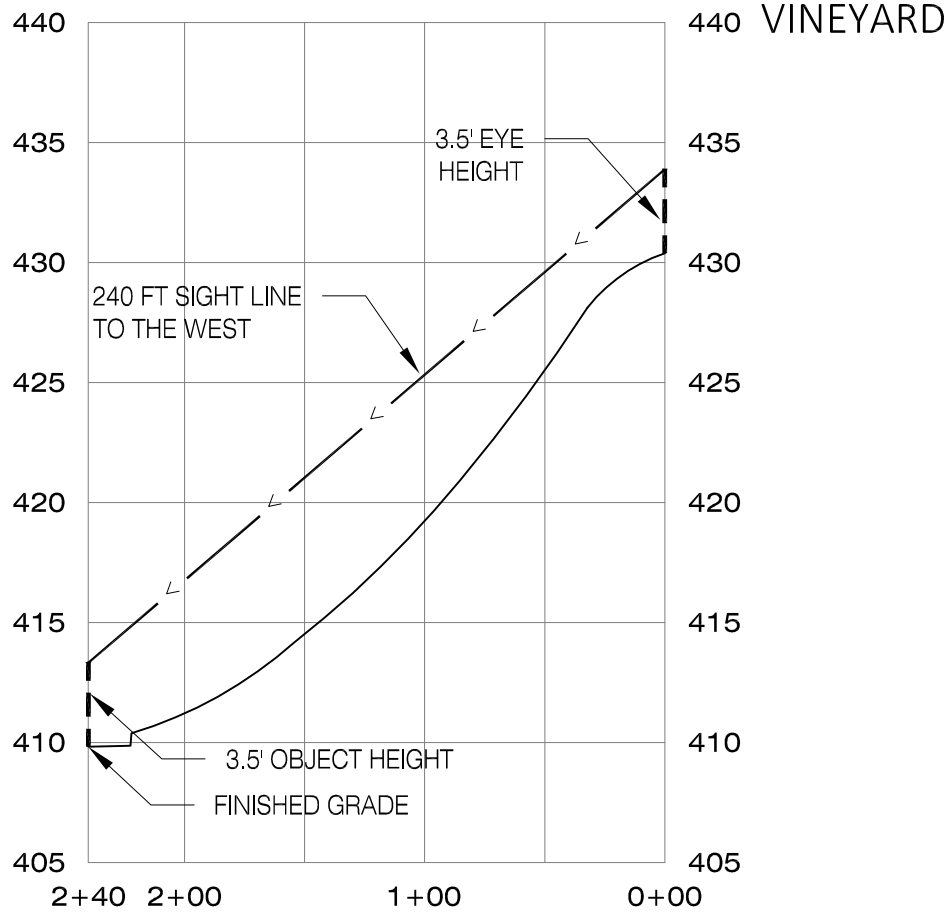
Project
VINEYARD
No.
235-048

Designed by GAM **Date** 04/03/20
Drawn by JPB **Date** 04/03/20
Horiz. Scale: 1" = 80' **Vert. Scale:**
Type ENGINEERING

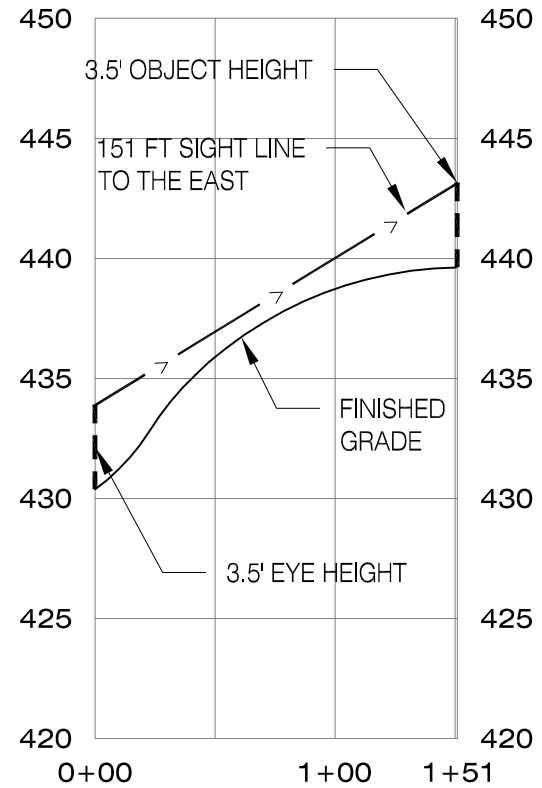
P D G
PIONEER DESIGN GROUP
CIVIL ENGINEERING • LAND USE PLANNING • LAND SURVEYING • LANDSCAPE ARCHITECTURE
 9020 SW WASHINGTON SQUARE RD., SUITE 170 PORTLAND, OREGON 97223
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SW 176TH DR. & SW ALVORD LN. VERTICAL SIGHT DISTANCE



SW 176TH DR. - PROFILE - DRIVING SOUTH LOOKING WEST
SCALE: H: 1" = 80'; V: 1" = 8'



SW 176TH DR. - PROFILE - DRIVING SOUTH LOOKING EAST
SCALE: H: 1" = 80'; V: 1" = 8'

DESIGN SPEED = 25 MPH
STOPPING SIGHT DISTANCE (SSD) = 128' (20 MPH @ 10.0% DOWNGRADE)
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FOR THIS
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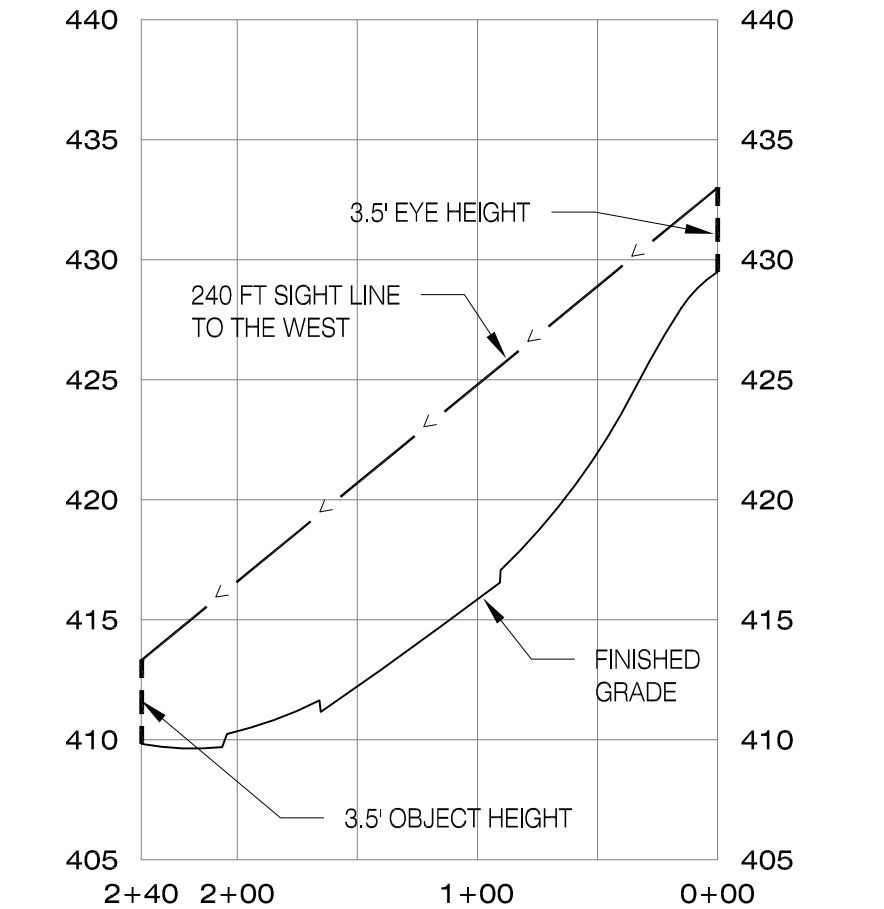
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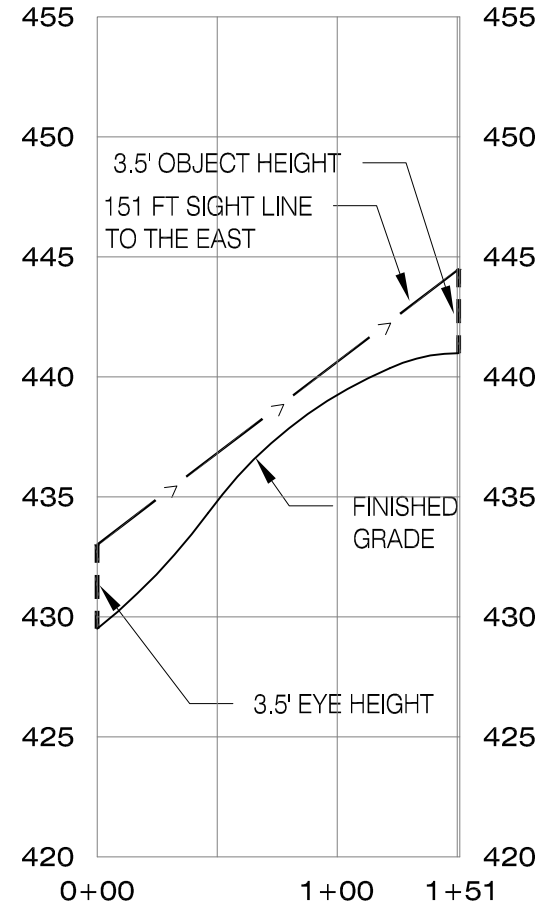
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of
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SW 176TH DR. & SW ALVORD LN. VERTICAL SIGHT DISTANCE

VINEYARD



SW 176TH DR. - PROFILE - DRIVING NORTH LOOKING WEST
SCALE: H: 1" = 80'; V: 1" = 8'



SW 176TH DR. - PROFILE - DRIVING NORTH LOOKING EAST
SCALE: H: 1" = 80'; V: 1" = 8'

DESIGN SPEED = 25 MPH
STOPPING SIGHT DISTANCE (SSD) = 128' (20 MPH @ 10.0% DOWNGRADE)
INTERSECTION SIGHT DISTANCE (ISD) = 240' (25 MPH)

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FOR THIS
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