

MULTNOMAH COUNTY
TRANSPORTATION DIVISION

☐ ACCEPTED

☐ ACCEPTED WITH COMMENTS

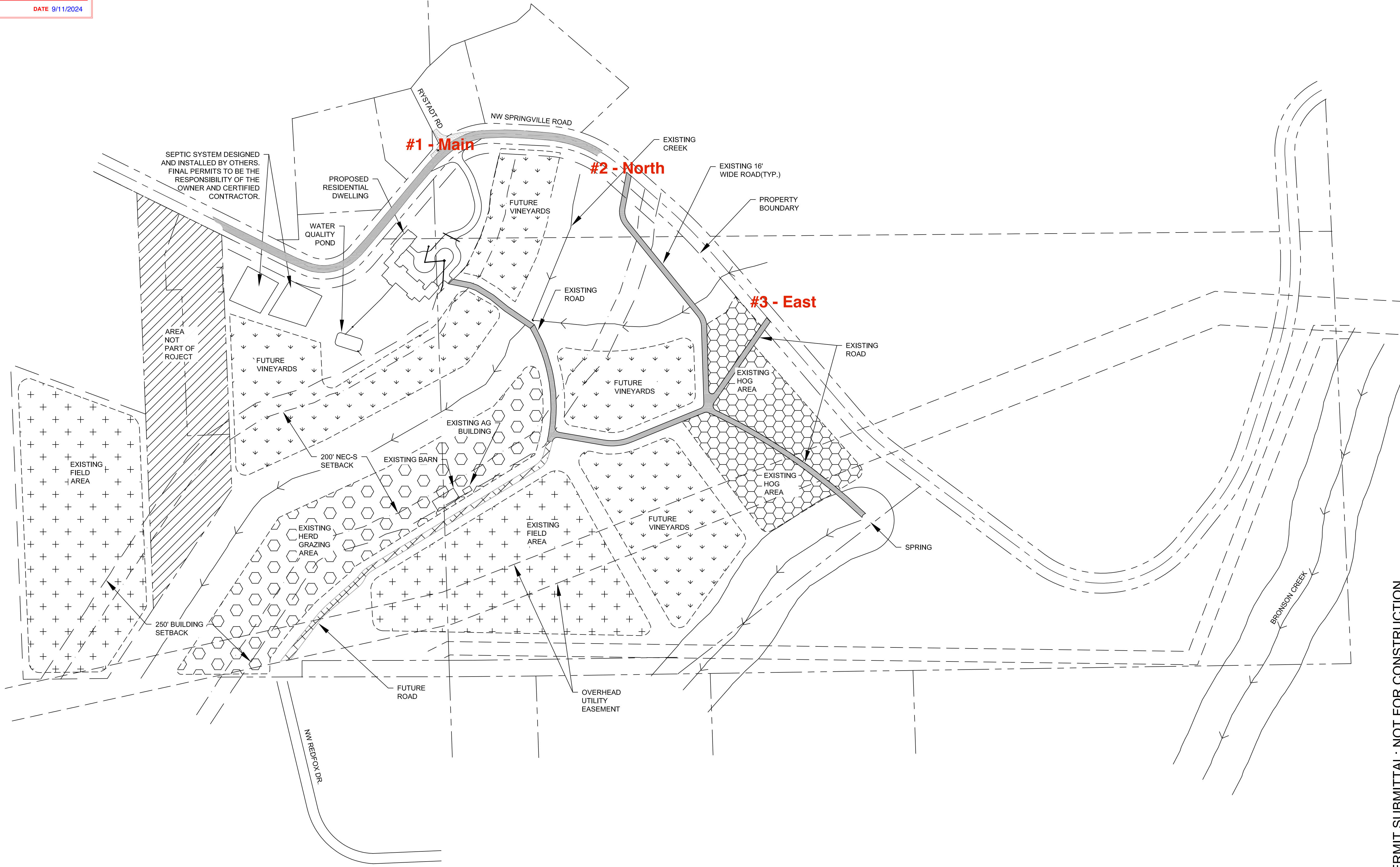
☐ APPROVED

☒ APPROVED AS NOTED

☐ RETURNED FOR CORRECTION

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BY **buenr** DATE **9/11/2024**



FOR PERMIT SUBMITTAL; NOT FOR CONSTRUCTION

DATE

BY

REVISIONS

SCOTT & STACY REED
6460 NW MCGREGOR
TERRACE
PORTLAND, OR 97229
914.391.6995

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SPRINGVILLE RESIDENTIAL

12424 NW SPRINGVILLE ROAD
PORTLAND, OREGON 97229

REGISTERED PROFESSIONAL
ENGINEER
56263
OREGON
January 12, 1989
C.R.K. M. ESPARZA

PROJECT NO.: ----

DATE: 06/05/2024

DESIGNED BY: TNT/SFG

DRAWN BY: TNT/SFG

CHECKED BY: EME

DO NOT SCALE DRAWINGS

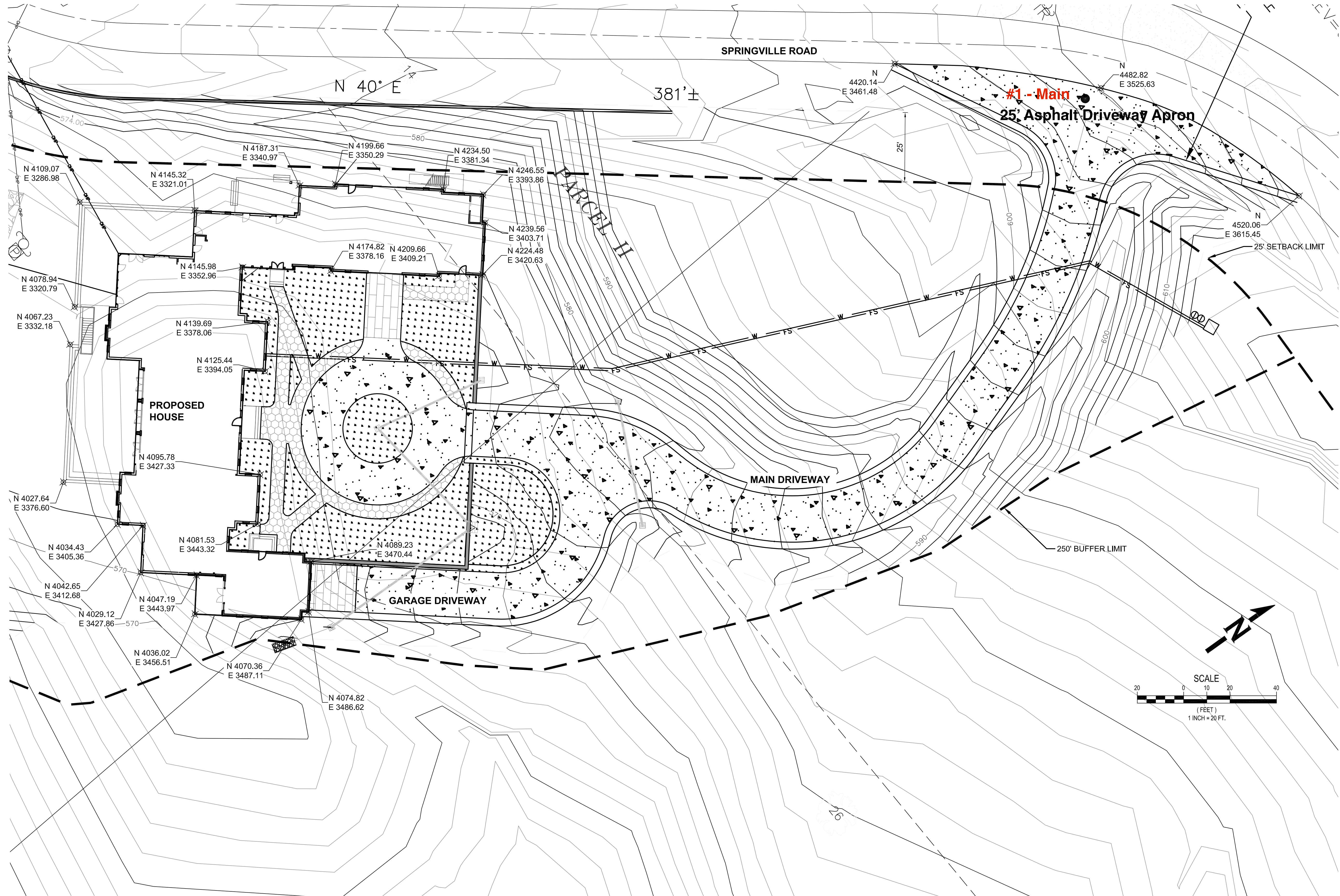
SHEET CONTENTS

EXISTING & FUTURE
FARM USE

14 of 14

C-701

Exhibit AA.7



FOR PERMIT SUBMITTAL; NOT FOR CONSTRUCTION

REVISIONS		DATE		BY	

REED REALTY
ADVISORS, LLC.
1001 SW 5TH AVENUE
SUITE 1100
914.391.6995

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SPRINGVILLE RESIDENTIAL

12460 NW SPRINGVILLE ROAD
PORTLAND, OREGON

PROJECT NO.:
DATE: 06/05/2024
DESIGNED BY: TNT/SFG
DRAWN BY: TNT/SFG
CHECKED BY: EME
DO NOT SCALE DRAWINGS

SHEET CONTENTS
SITE GRADING

11 of 14
C-601

12424 NW SPRINGVILLE ROAD
NORTH GATE
#2

NW SPRINGVILLE ROAD

55'

COMPACT
BASE ROCK

25'

GRAVEL

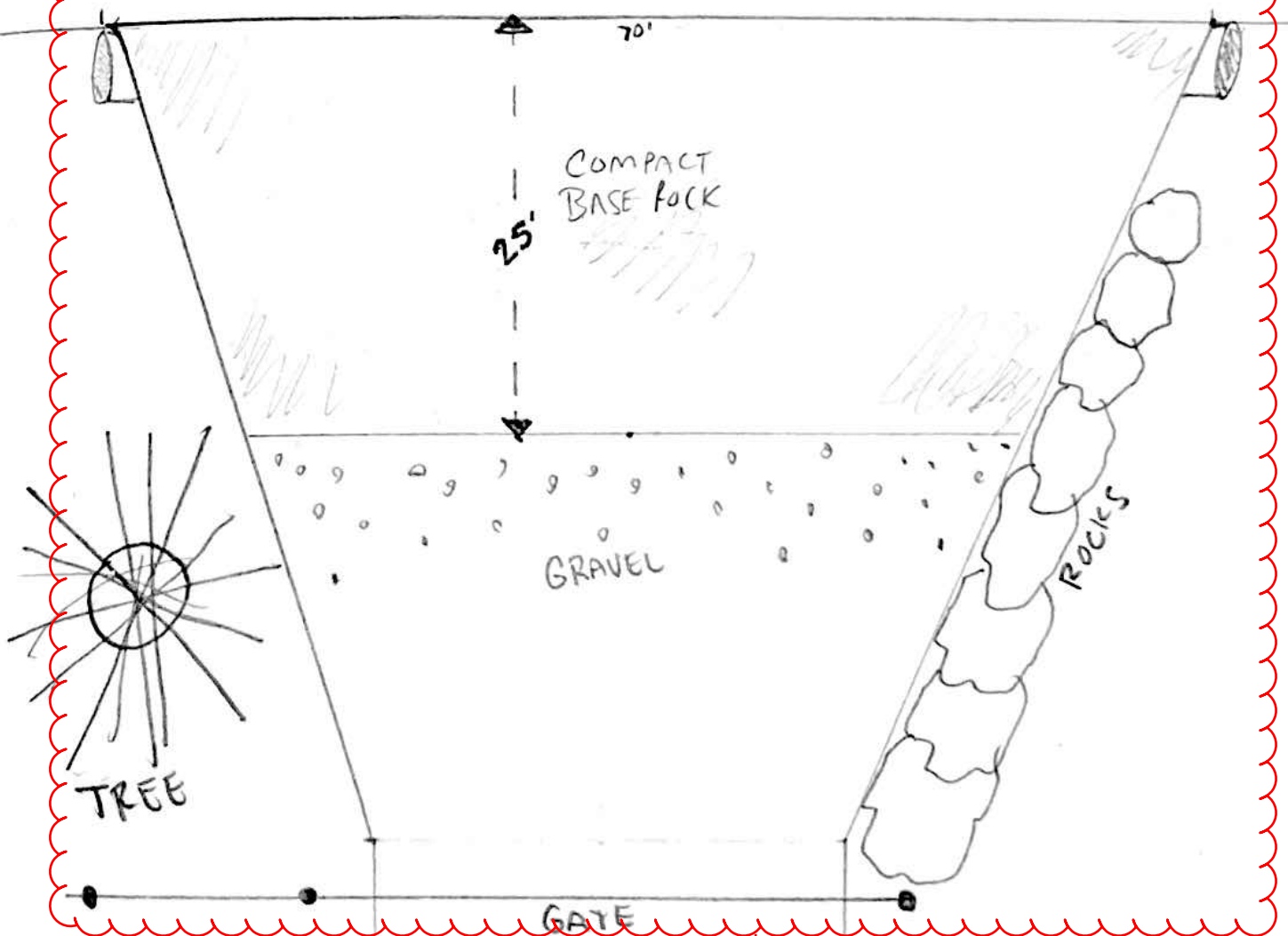
ROCKS

SEE ATTACHED DETAIL FOR
DRIVEWAY APPROACH

0' 20'
SCALE

12424 NW SPRINGVILLE ROAD
EAST GATE
#3

NW SPRINGVILLE ROAD



SEE ATTACHED DETAIL FOR
DRIVEWAY APPROACH

SCALE

20'

RESIDENTIAL DRIVEWAY APPROACH DETAIL SHEET



1620 SE 190th Avenue, Portland Oregon 97233-5910
Phone: (503) 988-5050 Fax: (503) 988-3419

Driveway Approach Dimensions

1. At a minimum, the driveway approach shall meet the dimensions in **Figure 1**
2. Regardless of construction method used, the driveway approach shall be surfaced to the extent of these minimum dimensions.

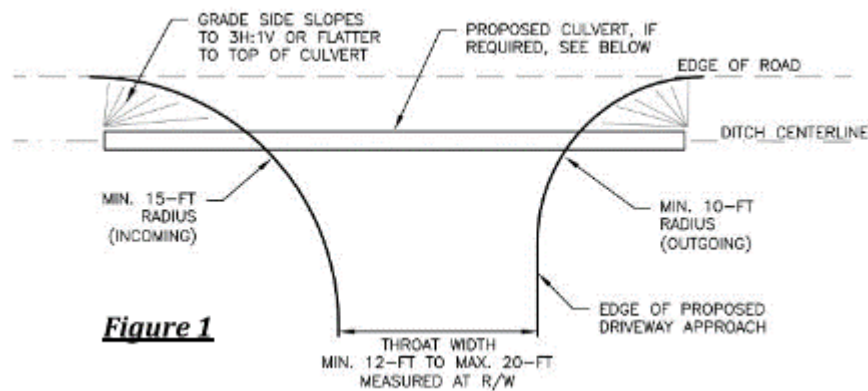


Figure 1

Driveway Approach Material and Depth

1. Gravel shall meet the ODOT gradation requirements.
2. Gravel (Aggregate) shall be a minimum of 8-inches in depth.
3. Materials may be natural aggregate, limestone, crushed concrete or HMA millings. However, absolutely no material may be larger than 1.5 inches in diameter, and shall be free of foreign material, brick, wire, glass, wood, rubber, etc.
4. Paved approach shall be per the Multnomah County standard pavement cross section detail.

Driveway Approach Grade

1. Driveway approaches shall be a 2% minimum slope down / away from the road shoulder so that the water runs away from the road and towards the ditch line as shown in **Figure 2**.
2. In no case shall water from the driveway drain out onto the shoulder or roadway.

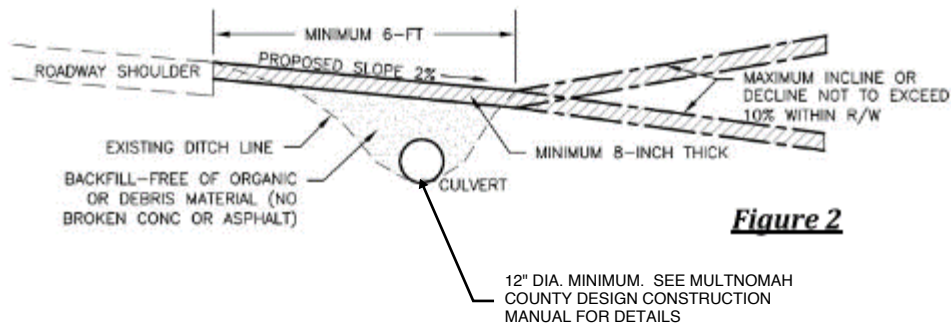


Figure 2

Sight Distance

1. It is necessary to provide a clear line of sight distance to safely enter or exit the roadway. No obstructions within the sight distance area (shown as shaded area in **Figure 3**) shall be taller than 2 feet. This area shall remain free of all structures, trees, and light poles.
2. Minimum sight distance for a Residential Driveway Approach shall be in accordance with **Table 1** below.

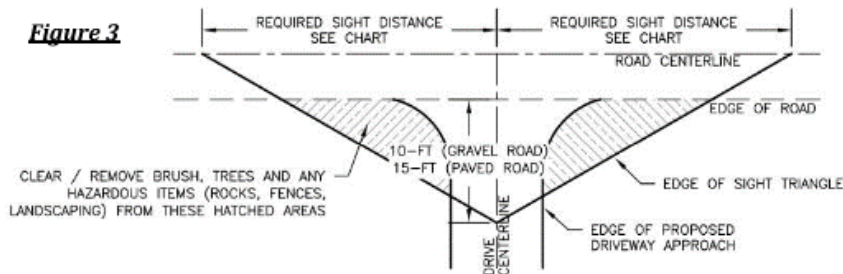


Figure 3

Table 1

Speed Limit (MPH)	Minimum Sight Distance (Feet)
25	280
30	335
35	390
40	445
45	500
50	555
55 / Unposted	610

Culvert Length and Side Slopes

1. Driveway approach culverts shall be installed in line with the road ditch.
2. The contractor shall ensure that the culvert grade allows a positive flow through the ditch (at a minimum of 0.5% slope). Adjust ditch elevation if needed to allow positive flow.
3. Culvert material shall meet the requirements of **Table 2**. All joints shall be sealed and soil tight.
4. The required culvert length is dependent on the ditch depth, location and size of driveway approach.
 - a. The minimum culvert length shall be 30-ft.
 - b. A 3-ft horizontal to 1-ft vertical slope is required from the driveway edge down to the top of culvert as shown in **Figure 4**.
 - c. Under no circumstances shall a vertical headwall be placed.

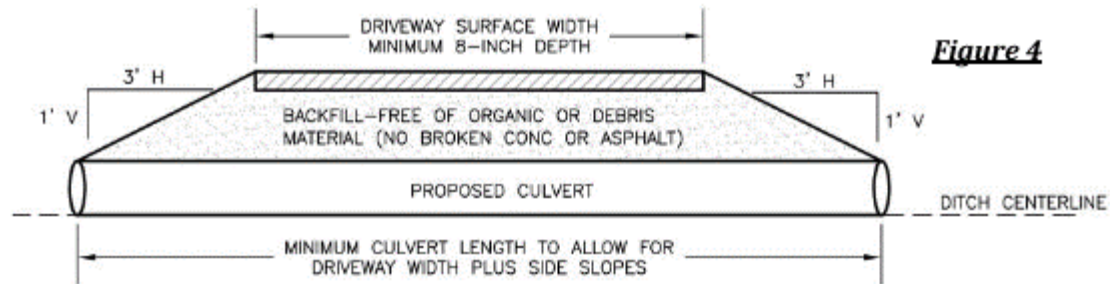


Figure 4

Table 2

Material	Diameter Size (Inches)	Minimum Gauge / Thickness
Corrugated Steel or Metal Pipe (CSP / CMP)	12-inch to 24-inch	16 gauge
	30-inch to 42-inch	14 gauge
	48-inch and greater	12 gauge
Reinforced Concrete Pipe (RCP)	12-inch to 48-inch	Minimum Class II (AASHTO M170)
Smooth Lined Corrugated Plastic Pipe Dual Wall (SLCPP)	12-inch to 24-inch	AASHTO M294, Type S, Prior Approval is Required
	30-inch and greater	Prior Approval is Required