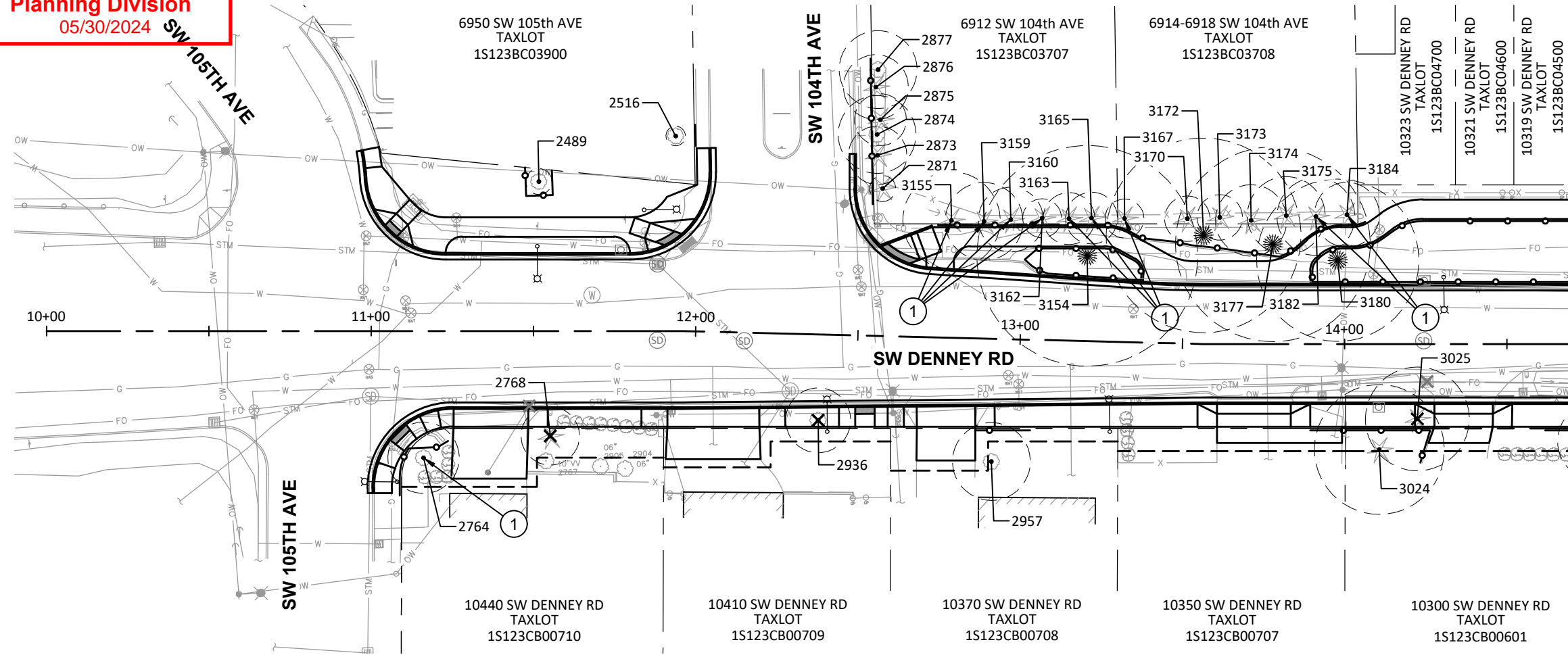


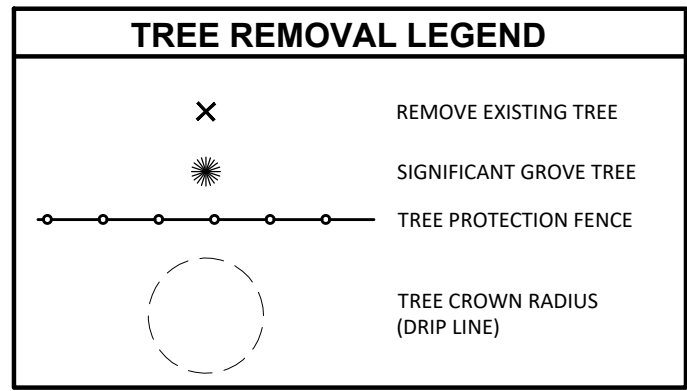
Received
Planning Division
05/30/2024



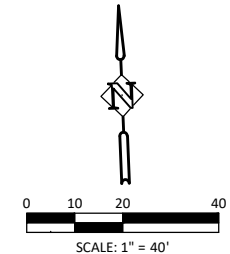
SW DENNEY RD - PLAN VIEW
SCALE: 1" = 40' (HORZ.)

CONSTRUCTION NOTE:

① CROWN PRUNING REQUIRED. SEE NOTE 7 ON SHEET TR-8.



SEE SHEETS TR-6, TR-7 & TR-8 FOR TREE DATA AND PROTECTION SPECIFICATIONS



EXPIRES: 12/31/25

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Department of Land Use & Transportation Engineering
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SW DENNEY ROAD
SW 105TH AVE TO SW SCHOLLS FERRY ROAD
WASHINGTON COUNTY

SW DENNEY RD STA POB TO 14+70
TREE REMOVAL- PROTECTION PLAN

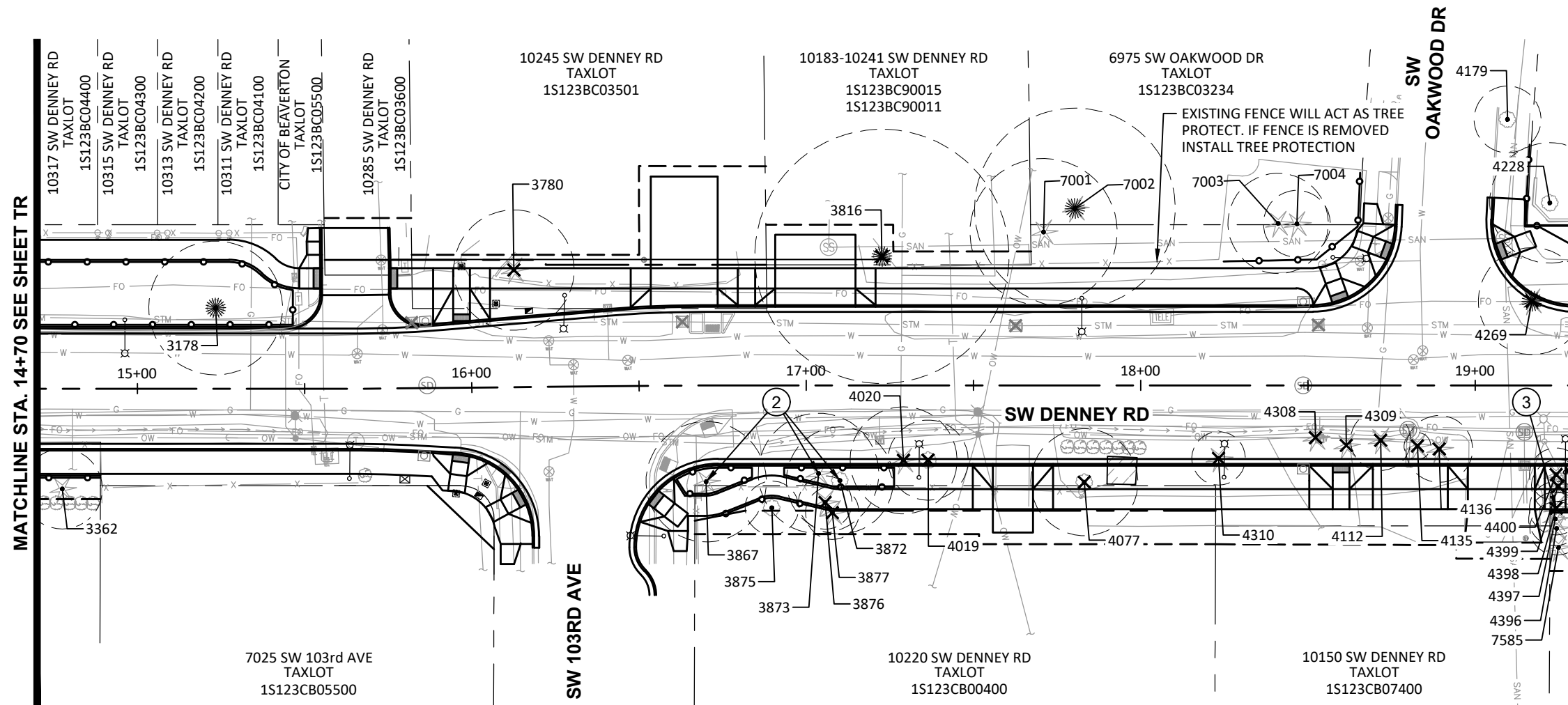
PROJECT NUMBER
100666

SHEET NO.
71 OF 84

SHEET TITLE
TR

MATCHLINE STA. 14+70 SEE SHEET TR

MATCHLINE STA. 19+30 SEE SHEET TR-3

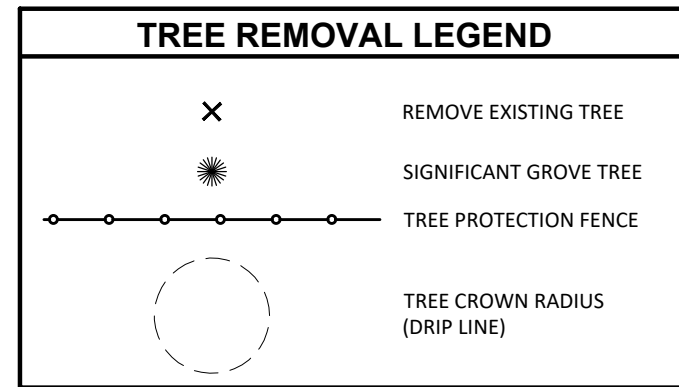


SW DENNEY RD - PLAN VIEW

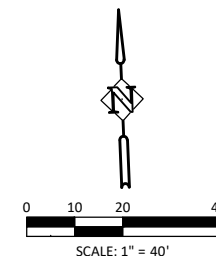
SCALE: 1" = 40' (HORZ.)

CONSTRUCTION NOTES:

- ② WORK REQUIRES AIR-SPADE, HYDRO-VAC, OR HAND EXCAVATION. CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE ARBORIST. SEE NOTE 10 ON SHEET TR-8.
- ③ STUMP REMOVAL USING STUMP GRINDING ONLY. SEE NOTE 7 ON SHEET TR-8.



SEE SHEETS TR-6, TR-7 & TR-8 FOR TREE DATA AND PROTECTION SPECIFICATIONS



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SW DENNEY ROAD
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WASHINGTON COUNTY

SW DENNEY RD STA 14+70 TO 19+30
TREE REMOVAL- PROTECTION PLAN

PROJECT NUMBER
100666

SHEET NO.
72 OF 84

SHEET TITLE
TR-2



EXPIRES: 12/31/25

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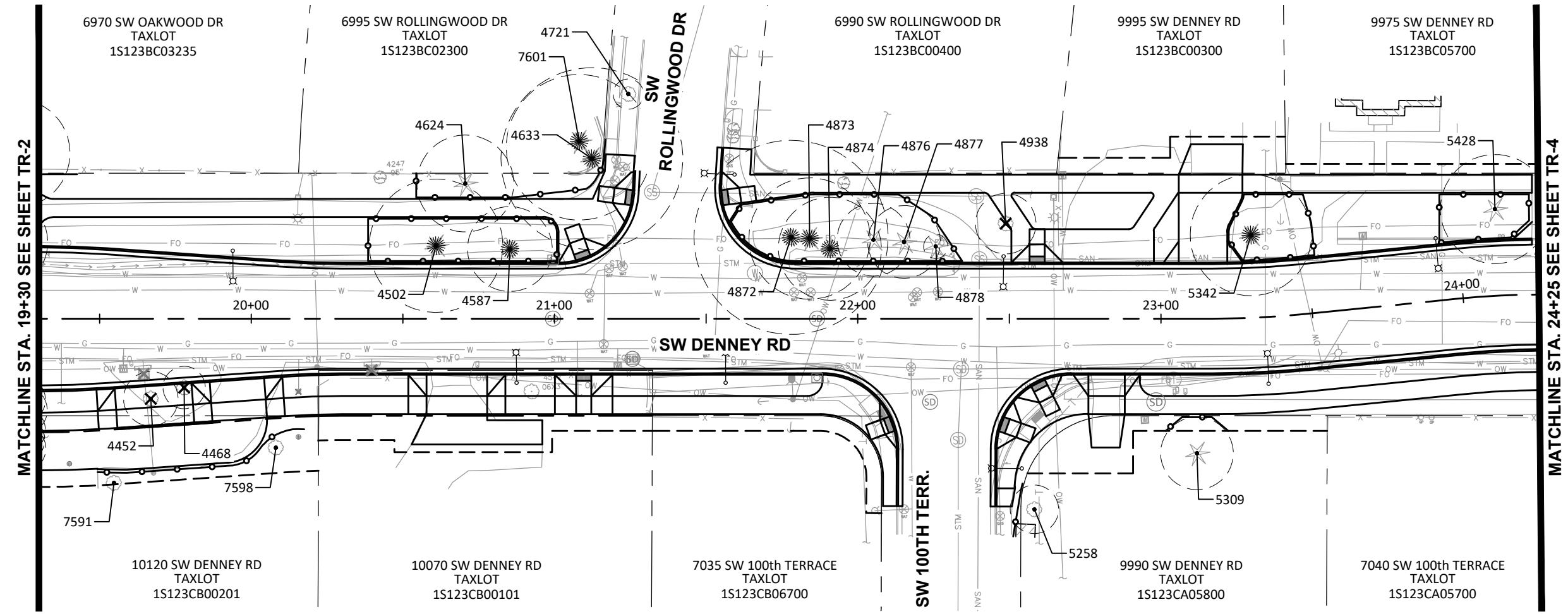
SW DENNEY ROAD
 SW 105TH AVE TO SW SCHOLLS FERRY ROAD
 WASHINGTON COUNTY

SW DENNEY RD STA 19+30 TO 24+25
TREE REMOVAL- PROTECTION PLAN

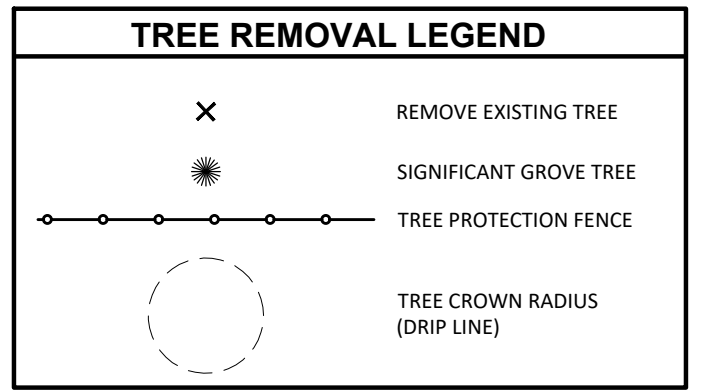
PROJECT NUMBER
100666

SHEET NO.
73 OF 84

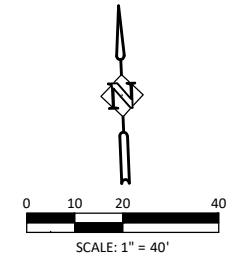
SHEET TITLE
TR-3



SW DENNEY RD - PLAN VIEW
 SCALE: 1" = 40' (HORZ.)

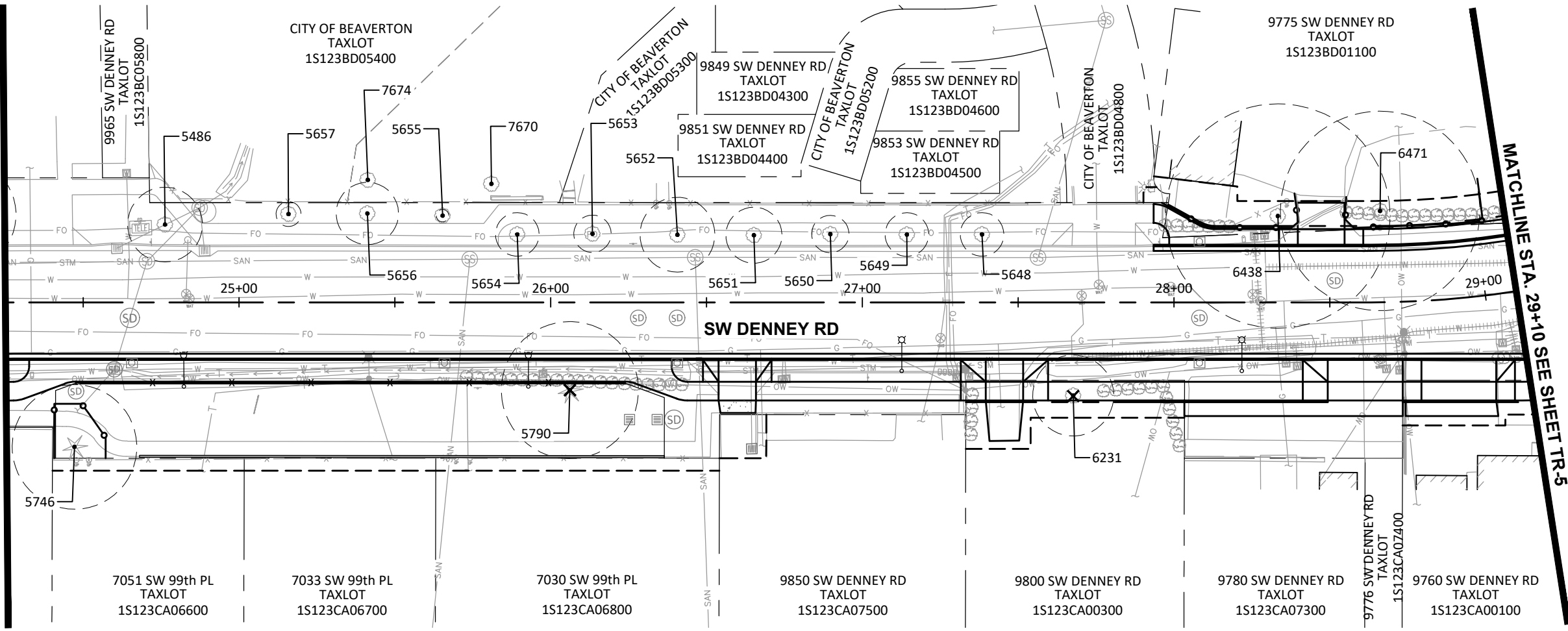


SEE SHEETS TR-6, TR-7 & TR-8 FOR TREE DATA AND PROTECTION SPECIFICATIONS

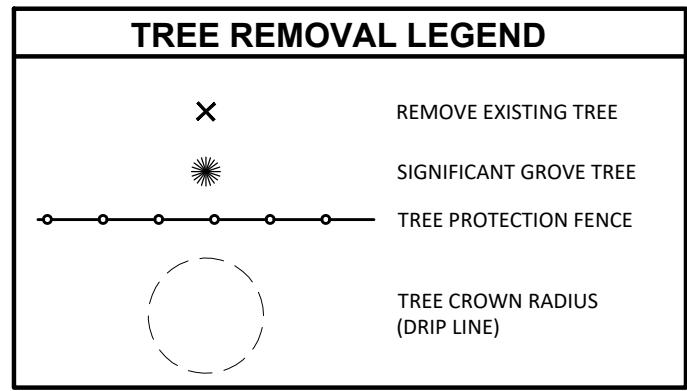


MATCHLINE STA. 24+25 SEE SHEET TR-3

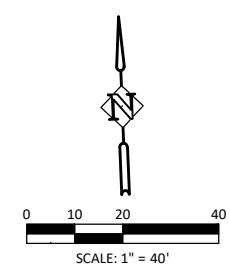
MATCHLINE STA. 29+10 SEE SHEET TR-5



SW DENNEY RD - PLAN VIEW
 SCALE: 1" = 40' (HORZ.)



SEE SHEETS TR-6, TR-7 & TR-8 FOR TREE DATA AND PROTECTION SPECIFICATIONS



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SW DENNEY ROAD
 SW 105TH AVE TO SW SCHOLLS FERRY ROAD
 WASHINGTON COUNTY

SW DENNEY RD STA 24+25 TO 29+10
TREE REMOVAL- PROTECTION PLAN

PROJECT NUMBER
100666

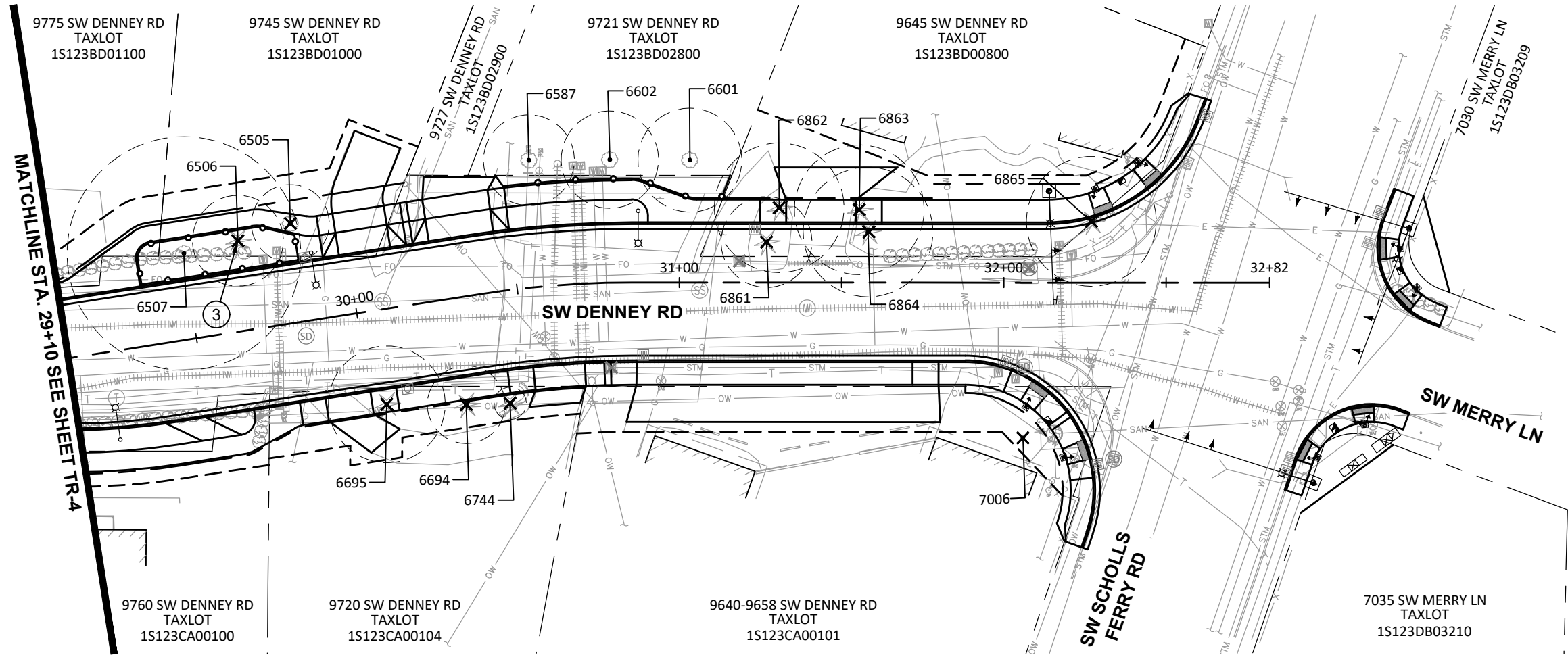
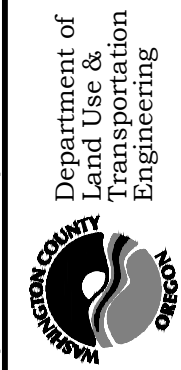
SHEET NO.
74 OF 84

SHEET TITLE
TR-4



EXPIRES: 12/31/25

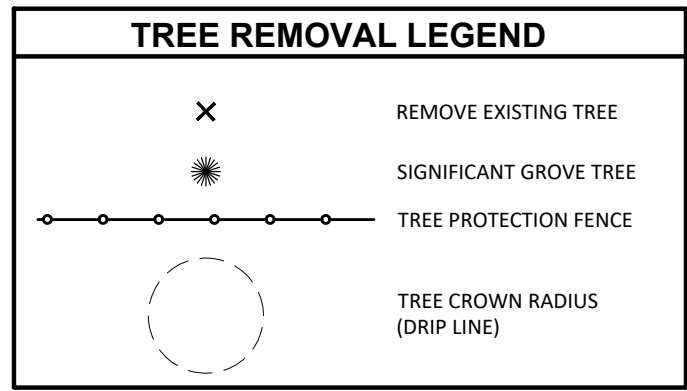
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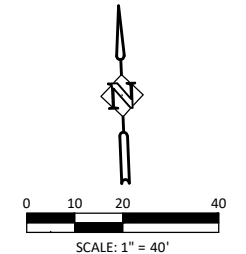
SW DENNEY RD - PLAN VIEW
 SCALE: 1" = 40' (HORZ.)

CONSTRUCTION NOTE:

③ STUMP REMOVAL USING STUMP GRINDING ONLY. SEE NOTE 7 ON SHEET TR-8.



SEE SHEETS TR-6, TR-7 & TR-8 FOR TREE DATA AND PROTECTION SPECIFICATIONS



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SW DENNEY ROAD
 SW 105TH AVE TO SW SCHOLLS FERRY ROAD
 WASHINGTON COUNTY

SW DENNEY RD STA 29+10 TO EOP

TREE REMOVAL- PROTECTION PLAN

PROJECT NUMBER
100666

SHEET NO.
75 OF 84

SHEET TITLE
TR-5

No.	Common Name	DBH	Treatments
2489	Japanese Maple	3	Retain
2516	Dogwood	2	Retain
2764	Katsura	9	Retain, prune for clearance
2768	Juniper	7,9	Remove
2871	Juniper	4	Retain
2873	Juniper	7,8	Retain
2874	European White Birch	14	Retain
2875	Juniper	10	Retain
2876	Juniper	10	Retain
2877	European White Birch	15	Retain
2936	Japanese Maple	2x6	Remove
2957	Plum	6,7,10	Retain
3024	Douglas-Fir	24	Retain
3025	Douglas-Fir	30	Remove
3154	Oregon White Oak	34	Retain
3155	Juniper	2x8, 12	Likely to Retain, prune for clearance
3159	Juniper	8	Likely to Retain, prune for clearance
3160	Juniper	6	Likely to Retain, prune for clearance
3162	Juniper	6	Likely to Retain, prune for clearance
3163	Juniper	6	Likely to Retain, prune for clearance
3165	Juniper	6	Likely to Retain, prune for clearance
3167	Juniper	6	Likely to Retain, prune for clearance
3170	Juniper	5	Likely to Retain
3172	Scarlet Oak	24	Retain
3173	Juniper	5	Likely to Retain
3174	Juniper	8	Likely to Retain
3175	Juniper	8	Likely to Retain
3177	Scarlet Oak	24	Retain
3178	Oregon White Oak	31	Retain
3180	Scarlet Oak	22	Retain
3182	Juniper	8	Likely to Retain, prune for clearance
3184	Juniper	8	Likely to Retain, prune for clearance
3362	Douglas-Fir	12	Retain
3780	Austrian Pine	20	Remove
3816	Silver Maple	40	Remove
3867	Douglas-Fir	30	Likely to Retain
3872	Oregon White Oak	18	Likely to Retain
3873	Douglas-Fir	22	Likely to Retain

No.	Common Name	DBH	Treatments
3875	Oregon White Oak	8	Retain
3876	Douglas-Fir	12	Remove
3877	Douglas-Fir	12	Remove
4019	Oregon White Oak	15	Remove
4020	Douglas-Fir	20	Remove
4077	English Walnut	16	Remove
4112	Ponderosa Pine	6	Remove
4135	Ponderosa Pine	6	Remove
4136	Ponderosa Pine	14	Remove
4179	Hornbeam	10	Unaffected
4228	Silk Tree	11	Retain
4269	Ponderosa Pine	30	Remove
4308	Ponderosa Pine	8	Remove
4309	Ponderosa Pine	8	Remove
4310	Ponderosa Pine	12	Remove
4396	Incense Cedar	2x6,8	Retain
4397	Incense Cedar	8	Retain
4398	Incense Cedar	6	Remove, grind stump
4399	Incense Cedar	16	Remove
4400	Incense Cedar	13	Remove
4452	Silk Tree	4	Remove
4468	Smoketree	2x6	Remove
4502	Ponderosa Pine	37	Retain
4587	Oregon White Oak	12	Retain
4624	White Pine	23	Retain
4633	Deodar Cedar	24	Retain
4721	Plum	7	Unaffected
4872	Oregon White Oak	16	Retain
4873	Douglas-Fir	34	Retain
4874	Oregon White Oak	13	Retain
4876	Douglas-Fir	13	Retain
4877	Douglas-Fir	16	Retain
4878	Douglas-Fir	4	Retain
4938	Pear	15	Remove
5258	Apple	4,5,7	Retain
5309	Douglas-Fir	2x8	Retain
5342	Douglas-Fir	36	Retain
5428	Douglas-Fir	22	Retain
5486	Zelkova	6	Retain

TREE DATA



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SW DENNEY ROAD
 SW 105TH AVE TO SW SCHOLLS FERRY ROAD
 WASHINGTON COUNTY

TREE DATA

PROJECT NUMBER
100666

SHEET NO.
76 OF **84**

SHEET TITLE
TR-6

No.	Common Name	DBH	Treatments
5648	Zelkova	4	Retain
5649	Zelkova	6	Retain
5650	Zelkova	5	Retain
5651	Zelkova	6	Retain
5652	Zelkova	7	Retain
5653	Zelkova	4	Retain
5654	Zelkova	4	Retain
5655	Zelkova	2	Retain
5656	Zelkova	6	Retain
5657	Zelkova	2	Retain
5746	Ponderosa Pine	34	Retain
5790	Douglas-Fir	36	Remove
6231	Red Oak	10	Remove
6438	Oregon White Oak	38	Retain
6471	Oregon White Oak	36	Retain
6505	European White Birch	14	Remove
6506	Scots Pine	16	Remove, grind stump
6507	Oregon White Oak	40	Retain
6587	Red Maple	12	Retain
6601	Red Maple	12	Retain
6602	Red Maple	12	Retain
6694	Atlas Cedar	10,2x24	Remove
6695	Scots Pine	10,12,15	Remove
6744	Blue Spruce	5	Remove
6861	Spruce	14	Remove
6862	Deodar Cedar	27	Remove
6863	Deodar Cedar	27	Remove
6864	Austrian Pine	20	Remove
6865	Scots Pine	18	Remove
7001	Douglas-Fir	22	Retain
7002	Redwood	65	Retain
7003	Douglas-Fir	18	Retain
7004	Douglas-Fir	10	Retain
7601	Douglas-Fir	30	Retain
7006	Japanese Maple		Remove
7585	Incense Cedar		Retain

TREE DATA CONTINUED



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SW DENNEY ROAD
 SW 105TH AVE TO SW SCHOLLS FERRY ROAD
 WASHINGTON COUNTY

TREE DATA

PROJECT NUMBER
100666

SHEET NO.
77 OF 84
 SHEET TITLE
TR-7

Tree Protection Specifications

1. **Pre-Construction Meeting.** Prior to any site activity, a pre-construction meeting with the Owner, Contractors, and Project Arborist shall take place to review tree protection measures and address questions or concerns on site.
2. **Tree Root Protection Zone.** The Root Protection Zone (RPZ) is defined as 5-feet beyond the dripline of protected trees regardless of the location of tree protection fencing. Protected tree driplines are shown to scale on tree plan drawings. Where the dripline of protected trees exceeds the location of protection fencing, the Contractor shall be mindful of working within the RPZ and coordinate with the Project Arborist in a timely manner to monitor excavation, document root pruning, and provide on-the-ground recommendations as needed.
3. **Temporary Tree Protection Fencing.** Trees to be retained shall be protected by installation of tree protection fencing as depicted on site plan drawings. Fencing shall be installed prior to development activity, including demolition of existing infrastructure. The fence shall be a four foot (4') tall orange plastic or snow fence, secured to six foot (6') tall metal posts, driven two feet (2') into the ground. Heavy 12-gauge wire shall be strung between each post and attached to the top and midpoint of each post. Colored tree flagging indicating that this area is a tree protection zone is to be placed every five (5) linear feet on the fence to alert construction crews of the sensitive nature of the area. Fencing shall be maintained and remain in place until physical development is complete. Fencing shall not be opened, adjusted or removed without prior coordination with the Project Arborist.
4. **Tree Protection Zone.** Without authorization from the Project Arborist, none of the following shall occur beneath the dripline of any protected tree:
 - a. Construction or placement of new buildings;
 - b. Grade change or cut and fill, during or after construction, unless depicted on site plans;
 - c. New impervious surfaces, unless depicted on site plans;
 - d. Trenching for utilities, irrigation or drainage;
 - e. Staging or storage of materials and equipment of any kind; or
 - f. Vehicle maneuvering or parking.

The Contractor shall be responsible for contacting the Project Arborist in a timely manner prior to working beneath protected tree driplines. Root protection zones may be entered for tasks like surveying, measuring, and sampling. Fences must be closed upon completion of these tasks.
5. **Erosion Control.** Where erosion control measures are required beneath the dripline of protected trees, compost socks shall be installed in lieu of silt fencing to avoid the need to trench within critical root zones.
6. **Tree Removal.** Trees to be removed shall be clearly identified with tree-marking paint or other methods approved in advanced by the Project Arborist. Tree removal shall be performed by a Qualified Tree Service. Directionally fell trees or surgically remove them where needed to avoid damage to protected trees. Where trees are approved for removal within a tree protection zone, protection fencing may be temporarily opened for trees to be felled. No heavy machinery is allowed inside of tree protection zones, but a machine may operate outside of the protection zone to reach in and drag felled trees away. Close the protection fencing once tree removal is complete.
7. **Stump Removal.** The stumps of trees #4398 and #6506 shall be removed by stump grinding up to six inches below the ground surface. Elsewhere, stumps of trees planned for removal that are located within the RPZ of retained trees should remain in the ground where feasible, or else removed by stump grinding or extracted from the ground under the on-site supervision of the Project Arborist.
8. **Crown Pruning.** Pruning may be needed to provide overhead clearance to avoid crown damage during construction and to remove dead and defective branches for safety. The Project Arborist can help identify where pruning is necessary once trees recommended for removal have been removed and the site is prepared for construction. Crown pruning shall be performed by a Qualified Tree Service using ISA Best Management Practices for Pruning and ANSI A300 Standards. Prune the minimum needed to provide sufficient clearance and to remove dead or defective branches for safety.
9. **Demolition of Existing Surfacing.** Where existing infrastructure is removed adjacent to a protected tree, slowly and carefully remove surfacing by saw cutting and using hand tools to peel back the material. Coordinate with the Project Arborist if tree roots are revealed. The arborist shall assess the roots and provide on-the-ground recommendations which may include root pruning, covering the exposed roots with top soil and mulch, or other recommendations.
10. **Excavation.** Excavation for the curb cut adjacent to trees #3867, #3872 ad #3873 shall be conducted by air-spading, hydro-vacuum excavation, or hand-digging to carefully expose roots for the Project Arborist to assess in terms of quantity, size and location. The Project Arborist may direct and document root pruning, or, document a recommendation for tree removal if the Arborist determines that that the extent of necessary root impacts will be detrimental to the health or stability of these trees; such documentation shall be submitted to the City for the Record. Elsewhere, excavation immediately adjacent to roots 2-inches and larger in diameter beneath the dripline of retained trees shall be by hand or other non-invasive techniques to ensure that roots are not damaged. Where feasible, major roots shall be protected by tunneling or other means to avoid destruction or damage. Exceptions can be made if, in the opinion of the Project Arborist, unacceptable damage will not occur to the tree. The Contractor is responsible for coordinating with the Project Arborist in a timely manner prior to damaging or pruning roots 2-inches and larger in diameter regardless of the approved location of tree protection fencing.
11. **Root Pruning.** The Contractor may prune roots smaller than 2-inches in diameter as digging progresses. Root pruning shall be performed with pruning shears or a sharp saw. Prune roots perpendicular to the natural growth direction with bark firmly attached (clean cuts with no jagged edges). Roots measuring 2-inches and larger in diameter should be exposed for the Project Arborist to assess prior to root pruning. The arborist should direct and document pruning of roots 2-inches and larger.

12. **New Surfacing and Backfill.** Where feasible, avoid excavation and build up from existing grade by carefully removing only the uppermost organic matter from the ground surface with a small, flat-blade bucket, placing rock to the required depth on the ground surface, and finish with surfacing. Taper edges to native grade with top soil (not spoils or sub-soils).
13. **Utilities.** Avoid open-trenching for underground utilities and street lighting beneath the dripline of protected trees. If open-trenching is unavoidable, coordinate with the Project Arborist to discuss methods to minimize tree root impacts which may include hand-digging or hydro-vacuum excavation, tunneling around roots and leaving roots intact within trenches, or other techniques. Also refer to tree protection notes 10 and 11 for excavation and root pruning.
14. **Landscaping.** Following construction and where landscaping is desired, apply approximately 3-inches of mulch beneath the dripline of protected trees in a minimum 5-foot radius around tree trunks; do not pile mulch directly against tree trunks. Shrubs and ground cover plants or grasses may be planted beneath protected tree driplines, but no closer than 5-feet to tree trunks. If irrigation is used, use drip irrigation or low flow emitters installed at native grade only (no trenching) beneath the driplines of protected trees. Landscaping shall be performed by hand and with hand tools only beneath protected tree driplines; adjust the location of plants to avoid tree root impacts.
15. **Quality Assurance.** The Project Arborist should supervise proper execution of this plan on-call during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports should be provided to the Client and City following each site visit performed during construction.



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SW DENNEY ROAD
SW 105TH AVE TO SW SCHOLLS FERRY ROAD
WASHINGTON COUNTY

TREE PROTECTION SPECIFICATIONS

PROJECT NUMBER
100666
SHEET NO.
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SHEET TITLE
TR-8