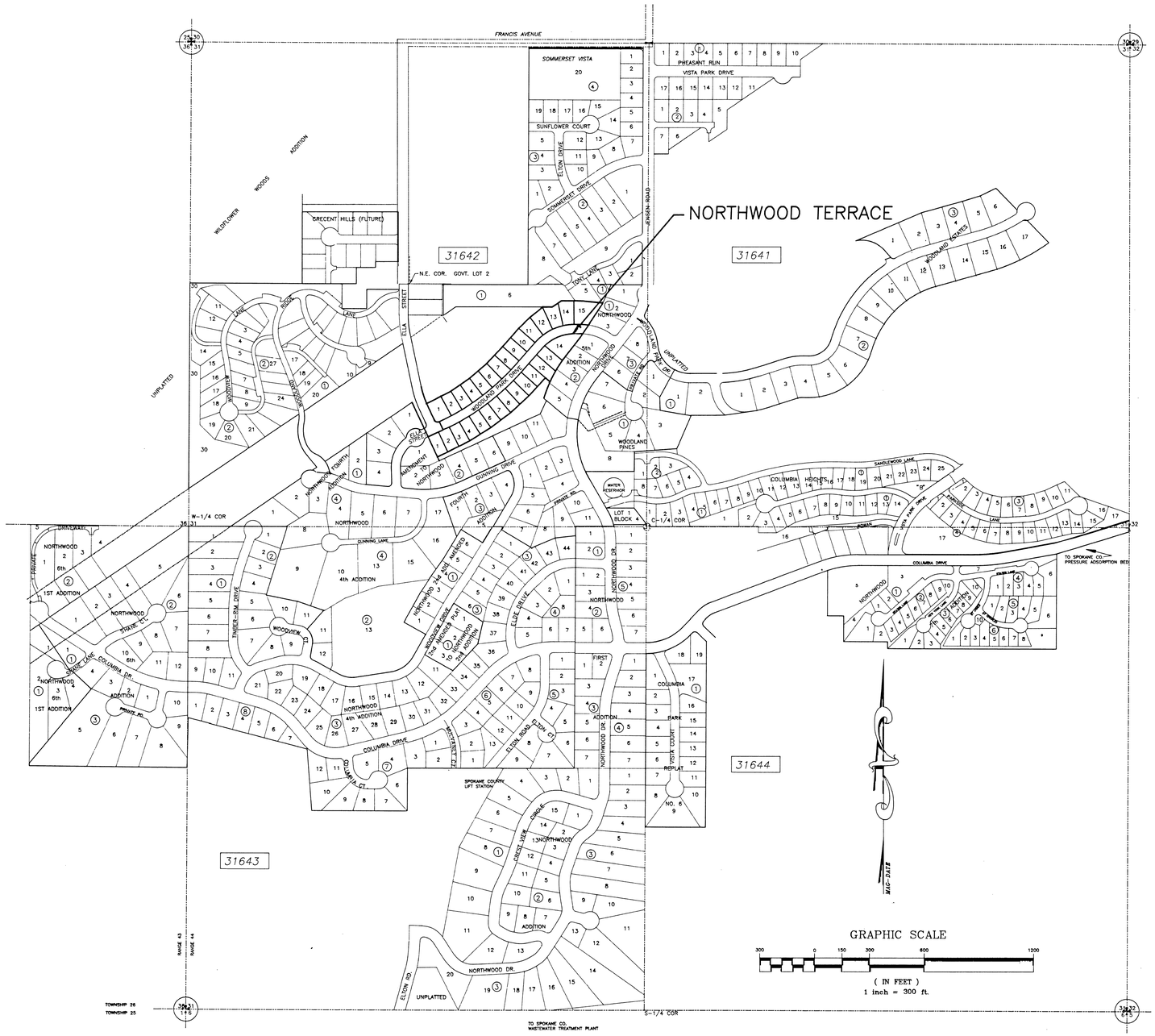
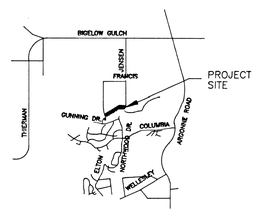


SECTION 31, T. 26 N., R. 44 E. W. M.

SHEET INDEX

1. STREET PLAN AND PROFILE TITLE SHEET / OVERALL
2. STREET DESIGN – WOODLAND PARK DRIVE PLAN AND PROFILE
3. STORM DRAIN – WOODLAND PARK DRIVE PLAN AND PROFILE
4. STORM DRAIN – DRAINAGE DITCH PLAN AND PROFILE
5. GRADING AND EROSION CONTROL PLAN
6. STREET AND POND DETAILS
7. STREET AND POND DETAILS



VICINITY MAP

P1792
9-4-97
9-4-00

CERTIFICATION

"The design improvements shown in this set of plans and calculations conform to the applicable editions of the Spokane County Standards for Road and Sewer Construction and the Spokane County Guidelines for Stormwater Management. All design deviations have been approved by the Spokane County Engineer. I approve these plans for construction."

Jerry Storhaug — 7/31/97
Engineer's Approval — Date

Theodore D. Gunning — 7/31/97
Developer's Approval — Date

CALL BEFORE YOU DIG 456-8000

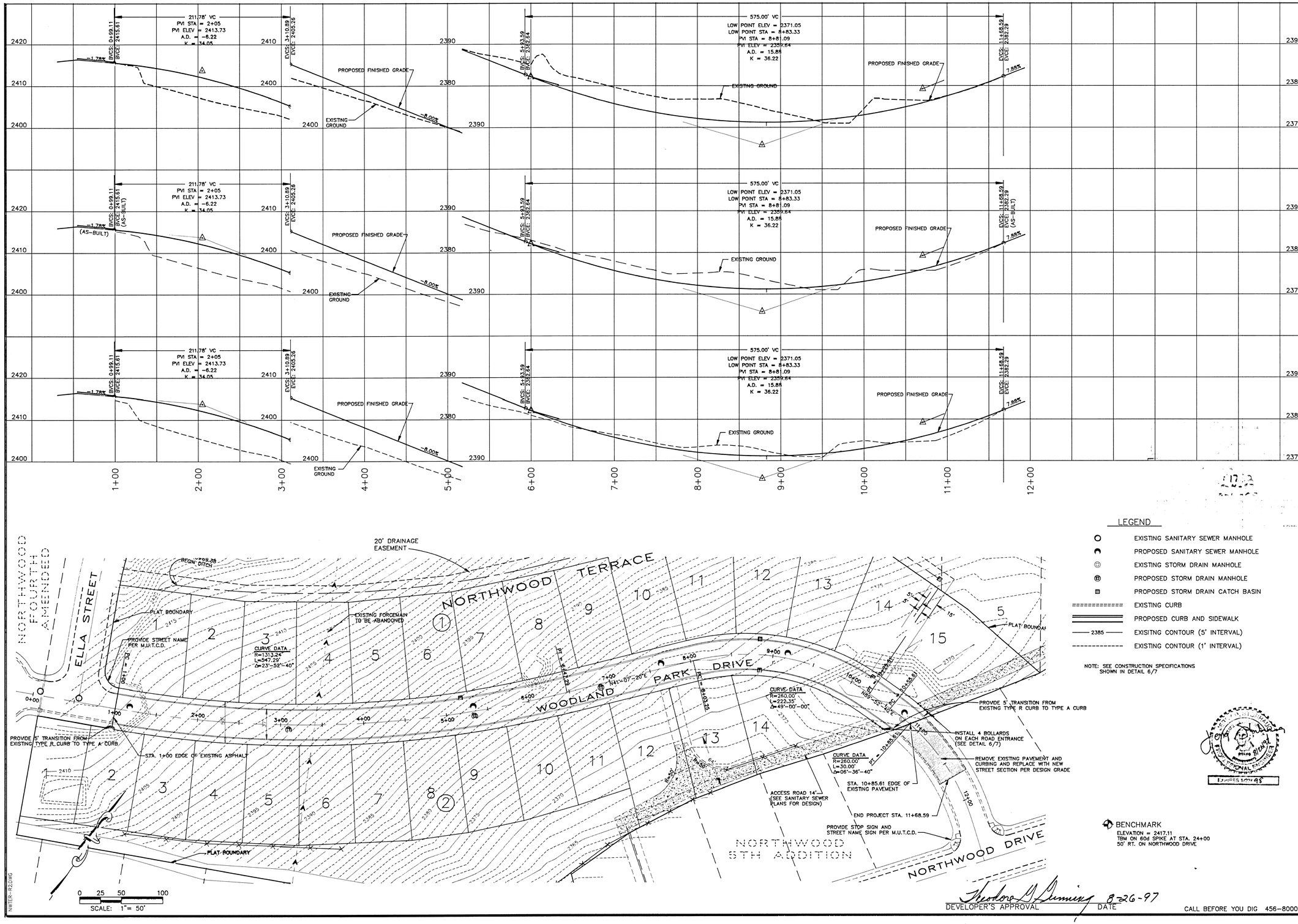
STORHAUG ENGINEERING
E. 9616 MONTGOMERY
SPOKANE, WA 99206
(509) 924-8052

DRAWN BY: MFB
CHECKED BY: JS
DATE: 5/5/97
SCALE: AS SHOWN

NORTHWOOD TERRACE
STREET PLAN AND
PROFILE TITLE SHEET

SHEET 1 OF 7
STREET

NWTER-R1DWG coversht



LEGEND

- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- EXISTING STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN CATCH BASIN
- EXISTING CURB
- PROPOSED CURB AND SIDEWALK
- 2385 EXISITNG CONTOUR (5' INTERVAL)
- EXISTING CONTOUR (1' INTERVAL)

NOTE: SEE CONSTRUCTION SPECIFICATIONS SHOWN IN DETAIL 6/7

BENCHMARK
ELEVATION = 2417.11
TBM ON 60d SPIKE AT STA. 24+00
50' RT. ON NORTHWOOD DRIVE

Theodore G. Gunning 8-26-97
DEVELOPER'S APPROVAL DATE

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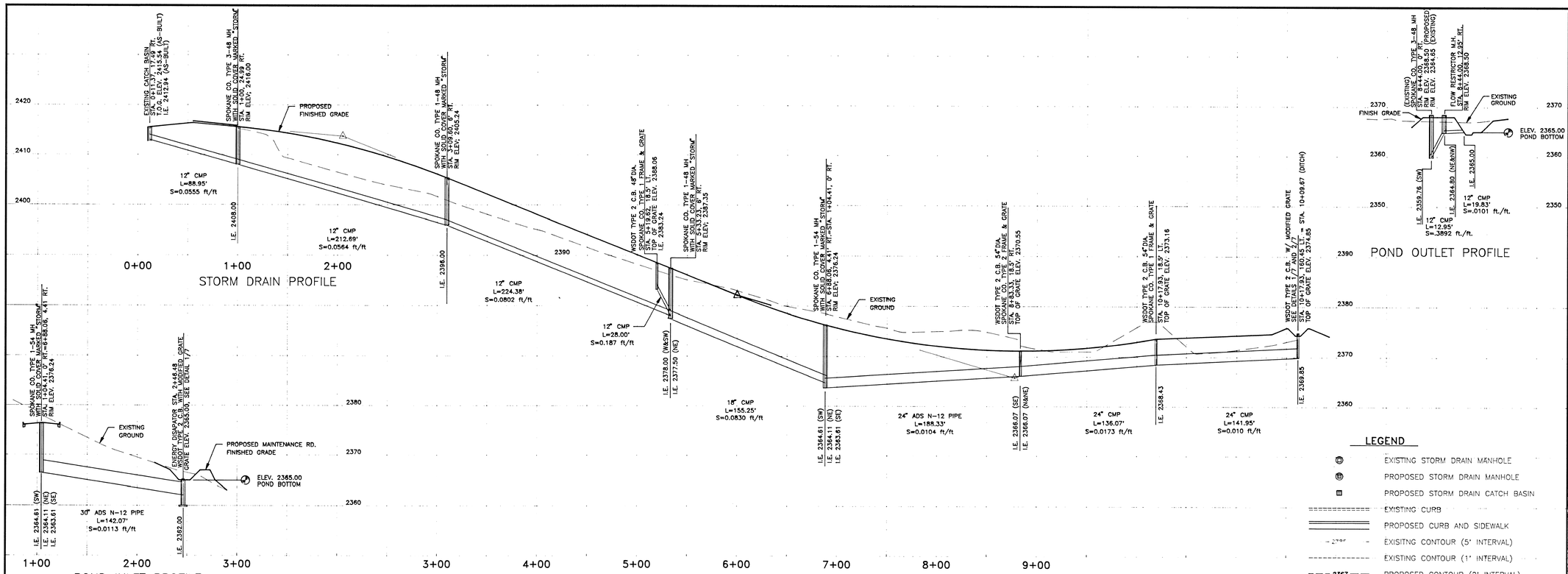
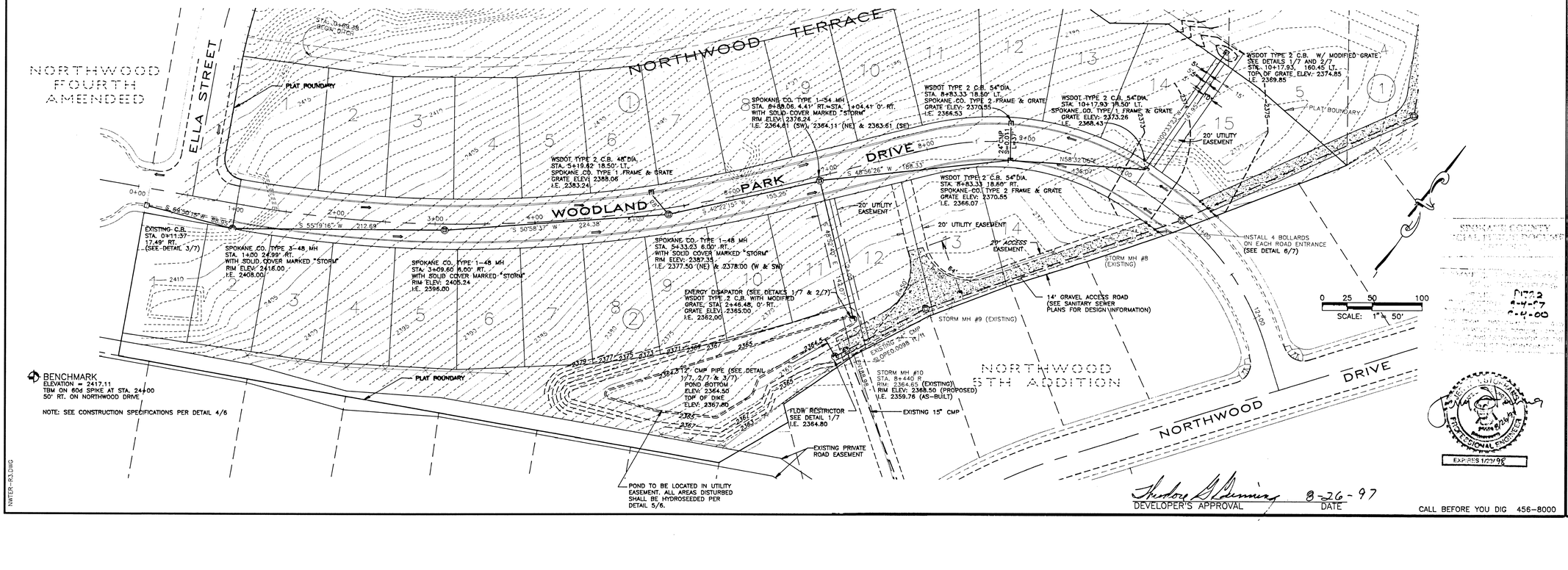
NORTHWOOD TERRACE
STREET DESIGN – WOODLAND
PARK DRIVE PLAN AND PROFILE

SHEET
2 OF 7
STREET





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SPOKANE, WA 99206
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CHECKED BY: JS
DATE: 8/26/97
CALE: AS SHOWN

NORTHWOOD TERRACE
STORM DRAIN - WOODLAND PARK DRIVE PLAN AND PROFILE

SHEET 3 OF 7
STREET

NWTER-R3.DWG

II-5.6.1 BMP E2.10: Stabilized Construction Entrance and Tire Wash

Code: (CE) Symbol:

Definition A temporary stone-stabilized pad located at points of vehicular ingress and egress on a construction site.

Purpose

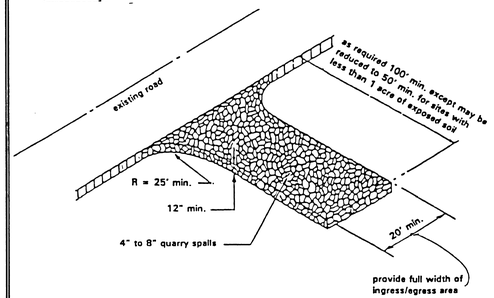
To reduce the amount of mud, dirt, rocks, etc. transported onto public roads by motor vehicles or runoff by constructing a stabilized pad of rock spalls at entrances to construction sites and washing of tires during egress.

Conditions Where Practice Applies

- Whenever traffic will be leaving a construction site and moving directly onto a public road or other paved areas.

Maintenance

- The entrance shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 2-inch stone, as conditions demand, and repair and/or cleanout of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately.



STABILIZED CONSTRUCTION ENTRANCE AND TIRE WASH (CE)

II-5.8.1 BMP E2.10: Filter Fence

Code: (FF) Symbol:

Definition A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched. The filter fence is constructed of stakes and synthetic filter fabric with a rigid wire fence backing where necessary for support.

Purpose

1. To intercept and detain small amounts of sediment under sheet flow conditions from disturbed areas during construction operations in order to prevent sediment from leaving the site.
2. To decrease the velocity of sheet flows.

Conditions Where Practice Applies

- Filter fences must be provided just upstream of the point(s) of discharge of runoff from a site, before the flow becomes concentrated. They may also be required:
  1. Below disturbed areas where runoff may occur in the form of sheet and rill erosion; wherever runoff has the potential to impact downstream resources.
  2. Perpendicular to minor swales or ditch lines for contributing drainage areas up to one acre in size.

The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6 inch overlap, and both ends securely fastened to the post.

Posts shall be spaced a maximum of 6 feet apart and driven securely into the ground a minimum of 30 inches (where physically possible).

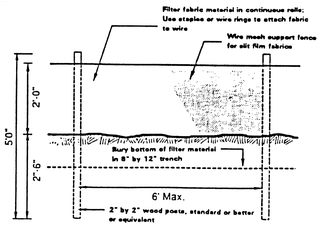
A trench shall be excavated approximately 8 inches wide and 12 inches deep along the line of posts and upslope from the barrier. The trench shall be constructed to follow the contour.

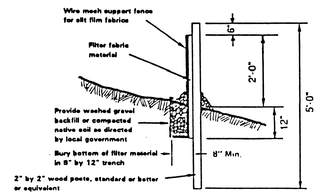
When slit film filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy-duty wire staples at least 1 inch long, tie wires or hog rings. The wire shall extend into the trench a minimum of 4 inches and shall not extend more than 36 inches above the original ground surface.

Slit film filter fabric shall be wired to the fence, and 20 inches of the fabric shall extend into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees. Other types of fabric may be stapled to the fence.

When extra-strength or monofilament fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of Standard Note "e" applying. Extra care should be used when joining or overlapping these stiffer fabrics.

Local governments may specify the use of properly compacted native material. In many instances, this may be the preferred alternative because the soil forms a more continuous contact with the trench below, and use of native materials





FILTER FENCE (FF)

II-5.7.6 BMP E2.35: Surface Roughening

Code: (SR) Symbol:

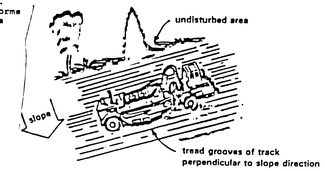
Definition Provision of a rough soil surface with horizontal depressions created by operating a tiller or other suitable equipment on the contour or by leaving slopes in a roughened condition by not fine grading them.

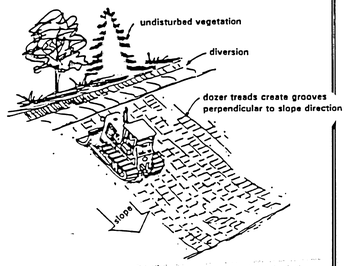
Purpose

To aid in establishment of vegetative cover, reduce runoff velocity, increase infiltration, and provide for sediment trapping.

Conditions Where Practice Applies

- All slopes steeper than 3:1, and greater than 5 vertical feet, require surface roughening; either stair-step grading, grooving, furrowing, or tracking if they are to be stabilized with vegetation.





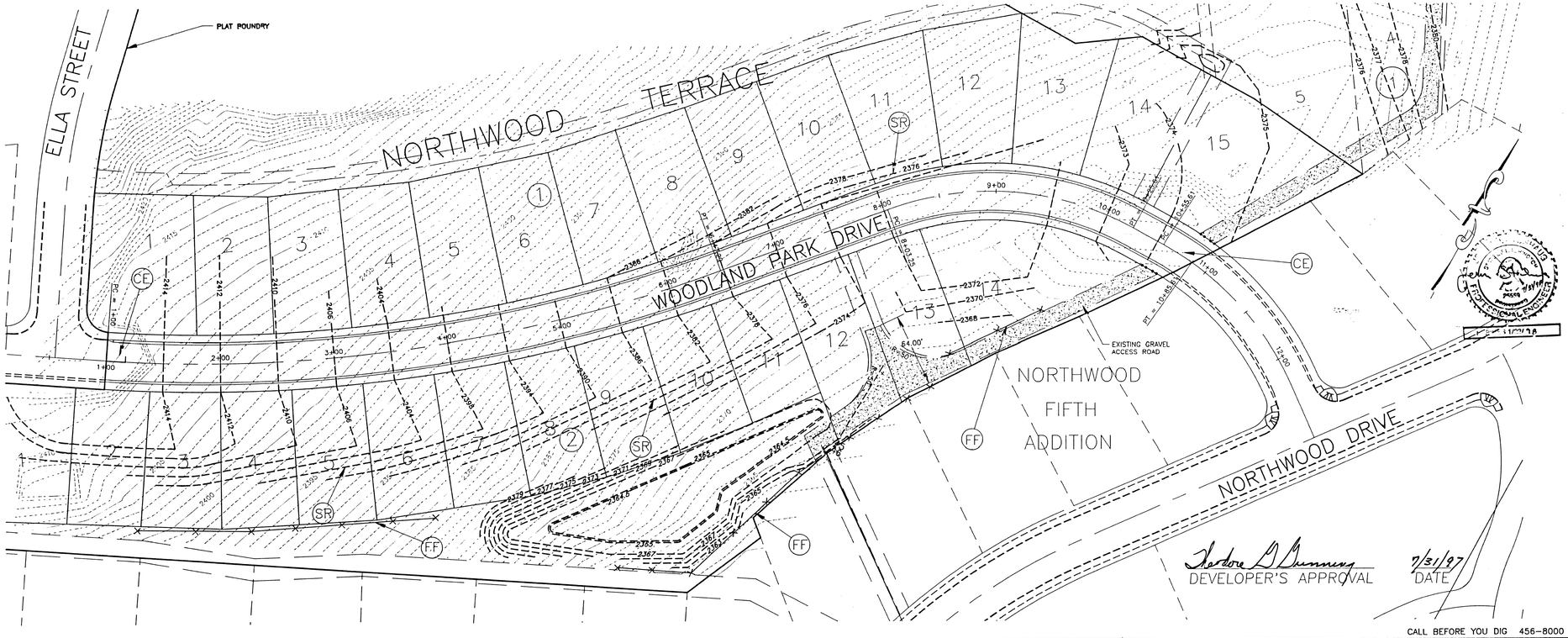
SURFACE ROUGHENING (SR)

LEGEND

- (CE) CONSTRUCTION ENTRY
- (FF) FILTRATION FENCING
- (SR) SURFACE ROUGHENING
- EXISTING CONTOUR 5' INTERVAL
- EXISTING CONTOUR 1' INTERVAL
- PROPOSED CONTOUR

NOTE: CONSTRUCTION SPECIFICATIONS ARE SHOWN ON PAGE 6 OF 7

BENCHMARK
ELEV.=2417.11
TBM ON 60d SPIKE AT STA. 24+00
50' RT. ON NORTHWOOD DRIVE



Theodore D Gunning
DEVELOPER'S APPROVAL

7/31/97
DATE

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NWTER-R4.DWG

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SPOKANE, WA 99206
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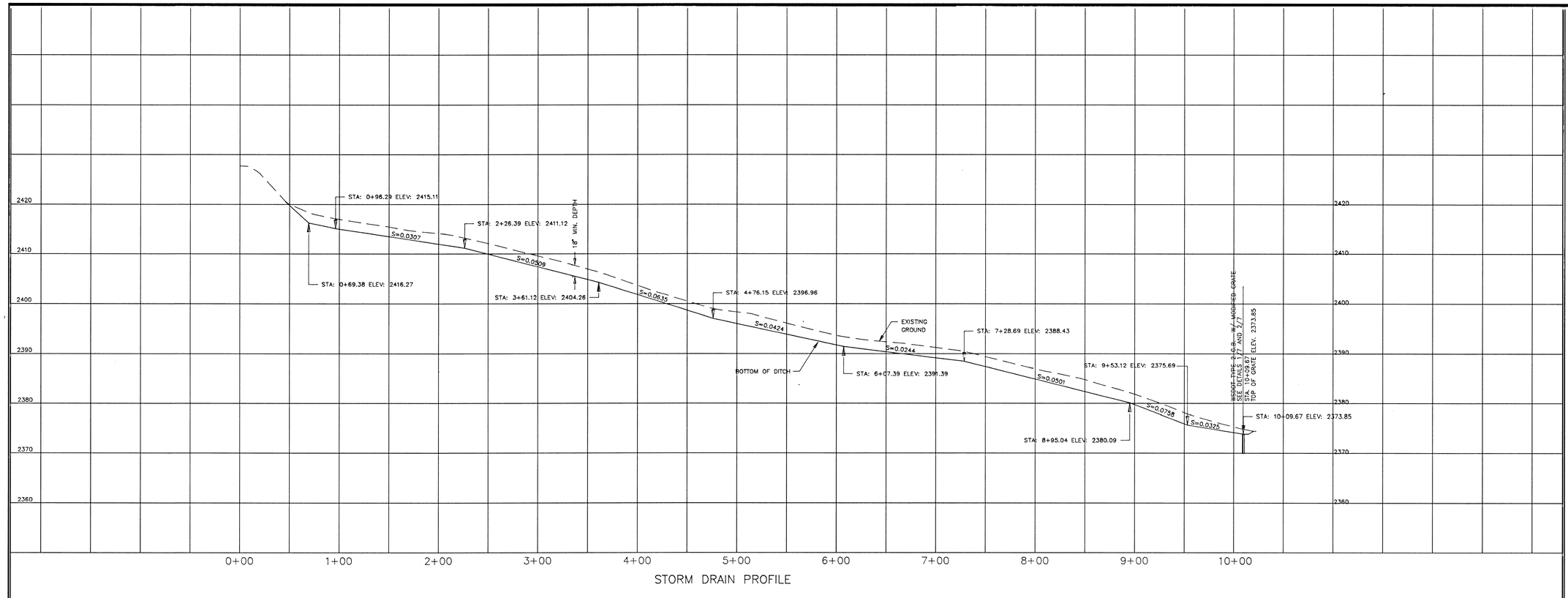
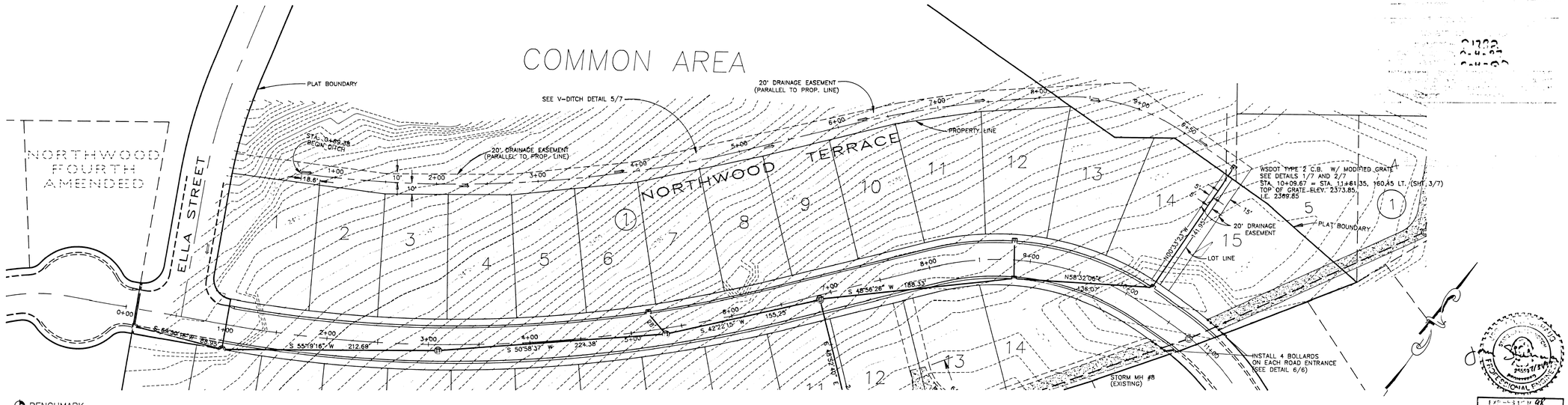
DATE: 5/1/97
SCALE: AS SHOWN

NORTHWOOD TERRACE GRADING AND EROSION CONTROL PLAN

SHEET 4 OF 7
STREET



STORM DRAIN PROFILE



BENCHMARK
ELEVATION = 2417.11
TBM ON 60d SPIKE AT STA. 24+00
50' RT. ON NORTHWOOD DRIVE

NOTE: SEE CONSTRUCTION SPECIFICATIONS PER DETAIL 4/6

Theodore G. Gumming 7/31/97
DEVELOPER'S APPROVAL DATE

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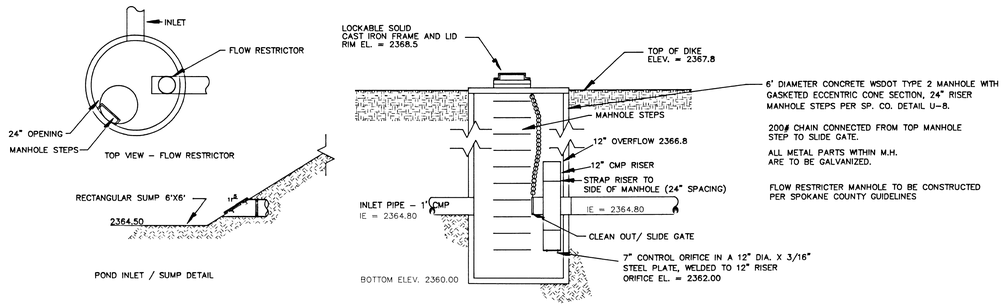
NORTHWOOD TERRACE
STORM DRAIN - DRAINAGE DITCH
PLAN AND PROFILE

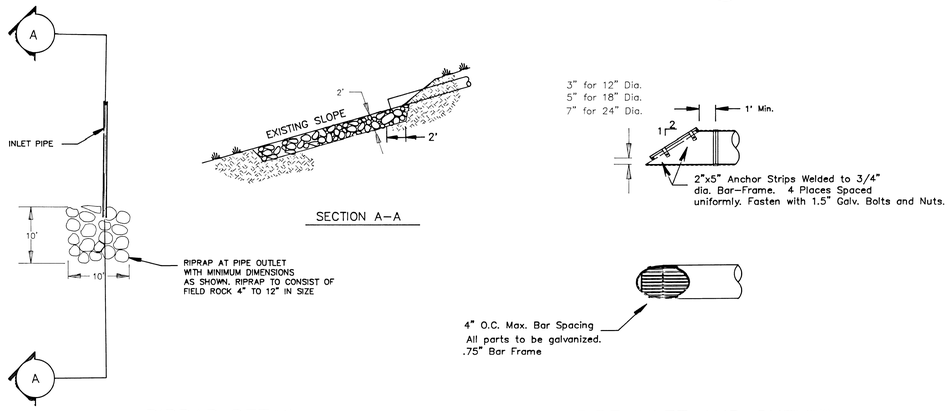
SHEET
5 OF 7
STREET



FLOW RESTRICTOR M.H.

1/6

MANHOLE AT STATION 8+56.95



RIPRAP DETAIL

2/6

PIPE INLET AND OUTLET

3/6

CONSTRUCTION NOTES

1. All items of construction shall be completed within the "1991 Standard Specifications for Road, Bridge, and Municipal Construction as promulgated by the Washington State Department of Transportation" and the "Spokane County Standards for Road and Sewer Construction 1992". and as amended.

2. Locations of existing utilities shown on these plans are approximate. The Contractor shall be responsible for locating all underground utilities. Any conflicting utilities shall be relocated prior to construction of road and drainage facilities.

3. The Contractor is required to have a complete set of the approved road and drainage plans on the job site whenever the construction is in progress.

4. For construction of drywells, install filter fabric (Amoco 4545 or approved equivalent) between the drywell barrel and the washed drainrock, and between the washed drainrock and the native soils.

5. If the contractor discovers any discrepancies between the plans and existing conditions encountered, the Contractor shall immediately notify the Design Engineer and the Spokane County Engineer's Office.

6. Prior to site construction, the Contractor is responsible for locating underground utilities. Call the underground utility location service at 456–8000 before you dig.

7. Curb data is to back of curb dimension.

8. All signage must conform to Manual of Uniform Traffic Control Standards (M.U.T.C.D.).

9. All existing areas damaged by construction equipment including excavations and embankments shall be hydroseeded per seeding specifications. Contractor shall be responsible for any damage caused by soil erosion until final acceptance of improvements by Spokane County.

CONSTRUCTION SPECIFICATIONS

4/6

Provide fresh, clean new crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America. Provide seed mixture composed of grass species and percentages as follows:

20 percent Elka Perennial Rye

20 percent Durar Hard Fescue

45 percent Covar Sheep/Fescue

15 percent reubens Canadian Bluegrass

Provide mixture composed of grass seed and fertilizer in percentages as follows:

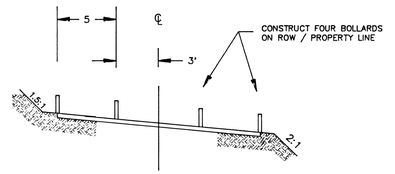
Grass seed mixture: 90 lb.s per acre
Fertilizer: 16:16:16 timed release composition, 300 lbs. per acre

All seeding of slopes shall be done in accordance with WSDOT Standard Specifications

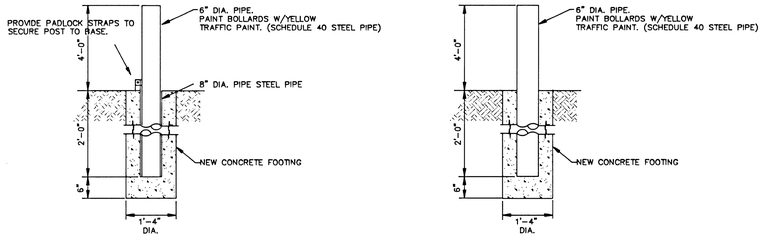
Contractor shall irrigate seeded areas until seed has germinated and has been accepted by Spokane County.

SEEDING SPECIFICATIONS

5/6

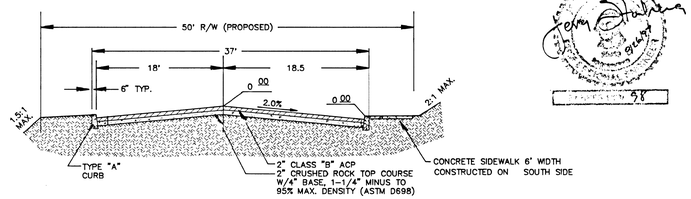


SECTION VIEW



BOLLARD DETAIL

6/6



WOODLAND PARK DRIVE

8/6

Theodore G. Canning 8-26-97

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NWTER-RS.DWG DETAILS

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DATE: 8/26/97
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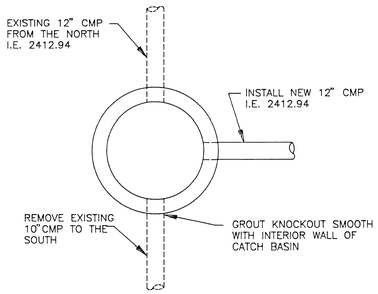
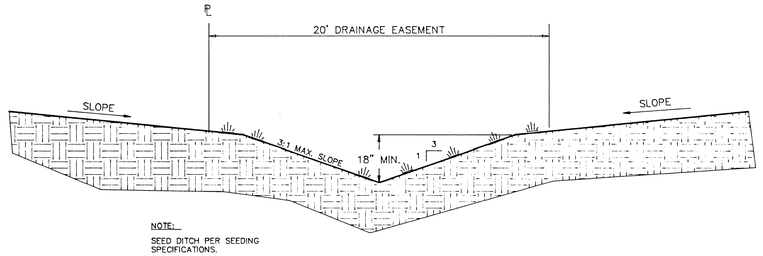
NORTHWOOD TERRACE
STREET AND POND
DETAILS

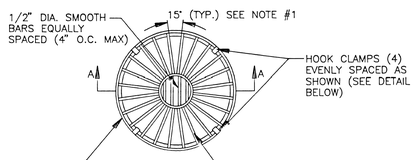
SHEET
6 OF 7
STREET



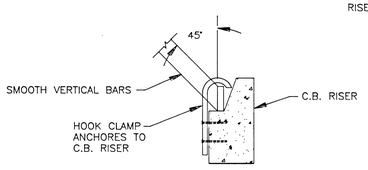
RETROFIT OF CATCH BASIN AT STA. 0+11.37 (3/7)
N.T.S.



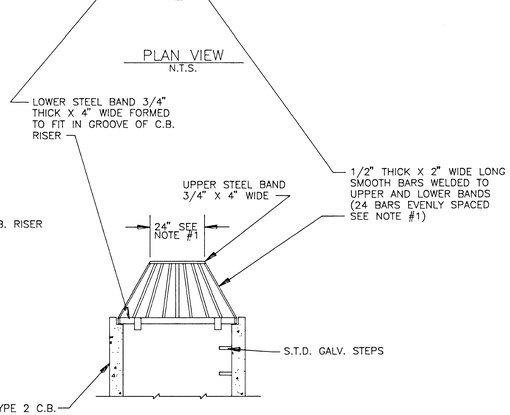
DRAINAGE DITCH SECTION (5/7)
N.T.S.



PLAN VIEW
N.T.S.



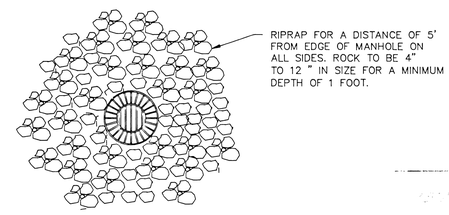
HOOK CLAMP DETAIL
N.T.S.



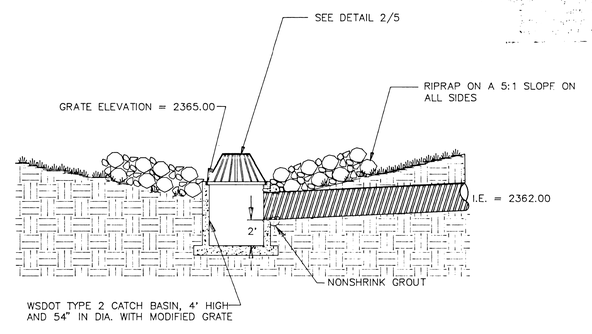
SECTION A–A
N.T.S.

NOTES:
1. DIMENSIONS ARE FOR INSTALLATION IN 54" DIA. C.B. FOR DIFFERENT DIA. C.B.s, ADJUST DEMENSIONS TO MAINTAIN 45 ANGLE ON VERTICAL BARS AND 4" O.C. MAX. SPACING OF BARS AROUND LOWER STEEL BAND. WHEN VERTICAL BAR SPACING EXCEEDS 4" O.C., ADD CONCENTRIC HORIZONTAL RINGS, SPACED 4" O.C. TO THE STRUCTURE.
2. METAL PARTS: CORROSION RESISTANT, STEEL PARTS GALVANIZED.

POND OUTLET ENERGY DISAPATOR GRATE (2/7)



PLAN VIEW
N.T.S.



SECTION
N.T.S.

POND OUTLET ENERGY DISAPATOR (1/7)

Theodore G. Gunning 7/31/97

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NORTHWOOD TERRACE STREET AND POND DETAILS

SHEET 7 OF 7
STREET

NWTER-R6.DWG