TANNLER DRIVE PARTITION

CITY OF WEST LINN FILE # MIP-99-02

UG., 1999

DEVELOPED BY

TANNLER DEVELOPMENT, LLC
1607 S.W. STEPHENSON ST.
Portland, Oregon 97219
Telephone 245-1424
Fax 977-2776

VICINITY MAP

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OR 97027

August 19, 1999

Steinar R. Christiansen
Jeffrey J. Russell
Westbridge Construction Company
1607 S. W. Stephenson St.
Portland, OR 97219

RE: Minor Partition on Tannler Drive

Dear Mr. Christiansen and Mr. Russell:

This letter is in response to our meeting on August 18, 1999. The following conditions of approval for File No. MIP-99-02 shall read as follows:

1. The three parcels comprised of tax lot 901 and the lot line adjustment (tax lot 900) shall be tied into the Horton water pressure zone.
2. Where applicable to this development, the installation of storm drains shall meet all City Engineering and Building requirements.
3. All future buildings on this site shall tie their low-point drains into the rain drains with an approved backwater valve that will drain into street.

I declare to have no interest in the outcome of this decision due to some past or present involvement with the applicant, the subject property, or surrounding properties, and therefore, can render an impartial decision. The provisions of the Community Development Code Chapter 99 have been met.

6 August 99
DATE

DAN DRENTLAW, Planning Director

5 Aug 99
DATE

DAVE MONSON, City Engineer

Appeals to this decision must be filed with the West Linn Planning Department within 14 days of the date of mailing. Appeal cost is $250 and must include specific grounds or basis for appeal.

Mailed this 9th day of August, 1999.

p:\planning on planning\development review\staff reports\ MIP99-02

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AS BUILTS

MOST RECENT REVISION TO THIS SET OF PLANS:

3-20-00

TANNLER DRIVE

General Notes:

1. The Design Engineer will be responsible for inspection of the proposed improvements with oversight from the City's Public Works and Engineering staff.
2. A work schedule will be required from the contractor so that the Engineer can have an inspector onsite at the appropriate times. If the work schedule is revised the contractor is to notify the Engineer of the changes. Additionally, the contractor is to give the Engineer at least 24 hours notice of any testing requiring the presence of the Engineer and/or City staff.
3. The contractor is to receive the approval of the Engineer and the City of any proposed changes to the plans or standard requirements.
4. A Building Department Plumbing Permit is required for utilities beyond the first cleanout or meter on private property.
5. A Public Improvement Guarantee Agreement, a pre-construction meeting with the City of West Linn, and installation of erosion control measures are required prior to beginning construction.
6. Prior to site clearing, construction "snow" fencing shall be placed around trees to be preserved 10 feet beyond the dripline of the trees and shall remain in place throughout the infrastructure improvements.

West Linn 7-9-99

Utilities:

1. If not noted on the plans utility information and crossing locations will have to be obtained from the utilities.
2. Utility contacts are as follows: PGE - Cindy Manselle, 650-1411; TCI Cable - Linda Petersen, 605-4987, U.S. West Communications - Lori Dorney 242-4596, Northwest Natural Gas - Scott Palmer 721-2447.

West Linn 8-10-98

Sanitary Sewer:

1. Pipe shall be PVC sewer pipe conforming to ASTM D-3034-SDR 35, except where ductile iron pipe conforming to AWWA C151, Class 52 is specified. Minimum stiffness shall be 46 psi and joint type shall be elastomeric gasket conforming to ASTM D-3212.
2. Manhole base shall be poured in-place concrete base with a minimum compressive strength of 2500 psi or precast. Manhole risers and tops shall be precast sections with minimum compressive strength of 4000 psi. Tops shall be eccentric cones except where insufficient headroom requires flat tops. Inverts shall be constructed so as to provide smooth flow-through characteristics. PVC pipe shall be connected to manhole by means of an elastomeric gasket, an approved waterstop, or flexible sleeve. Cement grout for connecting PVC sewer pipe to manhole will not be permitted.
3. All manholes located in easement areas require tamper proof lids. All manhole rims not in pavement area to be set 12 inches above proposed grade.
4. Cleanout pipe, fittings, and joints shall be the same specifications as for pipe. Castings are as shown on detail and shall conform to ASTM A48 (Grade 30). Cleanout riser shall match downstream pipe diameter.
5. Granular backfill (3/4"-0) is to be compacted to 95% maximum dry density per AASHTO T-99 test method and native material shall be compacted to 85% of in-place dry density of surrounding soil.
6. PVC service laterals shall be 4" pipe conforming to the same specifications as the sewer mains. Service laterals shall be installed to a point beyond the line of the sewer or utility easement as shown on the plan. The service lateral shall be plugged with a 4" rubber ring plug, and the location of the lateral's end marked with a 2" x 4" stake painted green.
7. Sanitary sewer pipe and appurtenances shall be tested for leakage in accordance with APWA Division III requirements. Leakage tests will include required APWA air pressure test for sewer lines and required APWA vacuum test of manholes. All PVC pipe shall be tested for deflection. Deflection shall be tested with a mandrel equal to 95% of the pipe size being tested. In addition, sewer lines shall be video inspected by the contractor per APWA, Division III, Section 303.3.11. All tests shall be witnessed by the Engineer and the City of West Linn.
8. A plumbing permit from the City of West Linn Building Department is required for sanitary sewer laterals beyond the first cleanout.
9. All materials, installation, tests, and inspections to be made in strict accordance with City of West Linn's Street/Utility Construction Standards, with APWA's Standard Specifications for Public Works Construction, and with the Uniform Plumbing Code.

Tannler Drive partition 97-048C 8-31-99

Water Supply

1. Water mains shall be ductile iron pipe conforming to AWWA C151 Class 52. Pipe is to have cement mortar lining and bituminous seal coat conforming to AWWA C104. Joints are to be push-on joint. Pipe fittings are to be of the same material and class as pipe and of domestic origin.
2. Water mains to have a minimum cover of 36".
3. Thrust blocks are to be provided at all changes in direction and branches. Thrust blocking concrete strength is to be 2000 psi. See details for thrust block sizing. Pour thrust blocks against undisturbed earth.
4. Gate valves shall be resilient seat, non-rising stem with "O" ring packing, complying with AWWA C500. Valve boxes shall be "Vancouver" pattern (18" tall casting only).
5. Granular backfill (3/4"-0) is to be compacted to 95% maximum dry density per AASHTO T 99 test method and native material shall be compacted to 85% of in-place dry density of surrounding soil. Backfill under streets shall be in accordance with Class 'B' backfill as indicated on the detail sheet of the plans. Excavation, bedding and backfill shall be in accordance with APWA Division IV, Section 401.
6. Service laterals shall be type K copper. Lateral sizes shall be 1" except where 1 1/4" is specified behind the meters to Parcels 1 & 2. For double services two water services shall be laid side by side. Corporation stops shall be Mueller H 15008 or Ford F1000 4Q. Curb stops shall be Mueller H 14258 or Ford KV43-44W-Q. Meter boxes shall be equal to Brooks #37, shall have traffic lids, and shall be installed 3/4" above finish grade.
7. All waterlines will be pressure tested and purification tested before connection to the city water system. Pressure test shall be conducted at 180 psi and shall meet the requirements of APWA, Division IV, Section 402.3.04.
8. Disinfection shall conform with APWA Division 4, Section 402.3.05.
9. Do not connect new pipe to existing pipe prior to testing. The City of West Linn requires acceptance of new waterline prior to connection to existing water system.
10. A plumbing permit from the City of West Linn Building Department is required for service lateral installations beyond the water meter.
11. All materials, installation, tests, and chlorination to be in strict accordance with APWA's Standard Specifications for Public Works Construction, the supplemental standards and codes of the City of West Linn, and the Oregon State Health Division Administrative Rules, Chapter 333.

Tannler Drive partition 97-048C 8-31-99

Streets:

1. New street sections are to be cleared of all surface vegetation and other miscellaneous structures or materials. Grub improvement areas to remove all buried vegetative matter and debris to a depth of 8" below subgrade. Properly dispose of all waste material.
2. Street subgrade shall conform to APWA Division II, Section 206. Areas to receive fill are to be inspected by City of West Linn personnel prior to placement of the fill. The Contractor shall have fill areas tested for compaction by a certified testing lab in accordance with APWA Division II, Section 206.3.05. Such testing will be at the contractor's expense.
3. Aggregate base rock shall conform to the requirements of APWA Division II, Section 207. Base course shall be 1½"-0 crushed rock and leveling course shall be ¾"-0. City of West Linn requires a proof roll with a loaded 10 yard dump truck of the subgrade prior placement of the rock and again after placement of the base rock and prior to paving. All underground utilities including laterals, services and power or gas conduits will be in place before subgrade proof roll will take place.
4. Asphalt concrete shall conform to the requirements of APWA Division II, Section 211. 1½" base lift shall be Class 'B' A.C. and 1½" final lift shall be Class 'C' A.C. as per APWA Division II, Section 211.2.01. The top lift of asphalt concrete shall not be placed prior to receiving permission from the City of West Linn Engineering Department.
5. Construct curb and gutter using Class 'A' 3300 psi concrete with maximum 1½" aggregate size. Contraction joints at 15' maximum on centers. Three inch weepholes are to be installed on all lots uphill or even with the street. Generally weepholes shall be located at the center and lowest edge of curb for each lot. Curb depressions for handicap ramps shall be centered between curb returns at intersections unless otherwise noted on the plans. Contractor shall stamp location of sewer and water crossings with an (S) or a (W).
6. All materials, installation, tests, and inspections to be in strict accordance with APWA's Standard Specifications for Public Works Construction and the supplemental standards and specifications of the City of West Linn Street/Utility Design and Construction Standards.
7. A street construction encroachment permit or similar permit may be required from the City of West Linn. Construction permit fees or other similar fees or bonding required of the contractor will be the contractor's responsibility to obtain.

West Linn 12-22-97

Storm Drains:

1. Six inch and smaller storm drain pipe shall conform to ASTM D 3034 PVC pipe.
2. Cleanout pipe, fittings, and joints shall be the same specifications as for pipe. Castings are shown on detail and shall conform to ASTM A48 (Grade 30). Cleanout riser shall match downstream pipe diameter.
3. Granular backfill (3/4"-0) is to be compacted to 95% maximum dry density per AASHTO T-99 test method and native material shall be compacted to 85% of in-place dry density of surrounding soil.
4. Storm drain service laterals shall be 4" pipe conforming to the same specifications as the storm drain main lines. Service laterals shall be installed to a point beyond the line or utility easement as shown on the plan. The service lateral shall be plugged with a 4" rubber ring plug, and the location of the laterals end marked with a 2"x4" stake painted white.
5. A plumbing permit from the City of West Linn Building Department is required for all storm drains.
6. All materials, installation, tests, and inspections to be in strict accordance with the Uniform Plumbing Code.

Tannler Drive partition 97-048C 8-31-99

General Grading and Erosion Control

1. Clean waste material excavated from road cut or trenching areas not used in street fill areas may be spread evenly across lot areas in depths of less than one foot, except where noted otherwise on the plans.
2. During construction, straw bales, cutoff trenches or some other method of runoff control shall be used to prevent erosion and/or siltation from crossing outside the work area boundaries.
3. Large organic material, miscellaneous pipe or construction material must be removed from the site and disposed of properly.
4. No filling or cutting shall be done outside of approved grading areas.
5. All erosion control facilities shall meet the requirements of the Clackamas County Department of Utilities, Erosion Prevention and Sediment Control Plans Technical Guidance Handbook, revised August, 1994 and the Oregon Administrative Rules.

West Linn 12-22-97

Erosion Control:

Summary:

1. The intent of the requirement is to prevent siltation from reaching storm drain systems and drainage ways.
2. The minimum measures need to be made on all projects.
   a) A gravel pad, at least 50 feet long, is required where vehicles will leave the construction site.
   b) A sediment barrier is to be constructed of straw bales or a sediment fence where noted in the details or where sediment will cross outside the work area.
   c) Where excavated material is placed on hard surfaces (such as streets) material must be broomed or scraped clean as soon as possible.
   d) Riprap exits from all culverts and storm drain pipes draining into the ditches or swales. Riprap is to be Class 50 riprap or larger or as noted elsewhere in the plans.
   e) Reseed or cover disturbed areas as soon as is possible and practical but no later than the completion of construction on the other phases of work. Erosion control measures such as hay bales and silt fences must remain in place until seeded areas show growth substantial to prevent erosion.

General:

1. Approval of this erosion control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g. size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
2. The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the applicant/contractor until all construction is completed and approved, and vegetation of landscaping is established.
3. The ESC facilities on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to ensure that sediment laden water does not enter the drainage system or violate applicable water standards.
4. The ESC facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded as needed for unexpected storm events and to ensure that sediment laden water does not leave the site.
5. The ESC facilities shall be inspected daily by the applicant/contractor and maintained as necessary to ensure their continued functioning.
6. The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month, or within 24 hours following a storm event.
7. At no time shall more than one foot of sediment be allowed to accumulate within a trapped catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.
8. Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to ensure that all paved areas are kept clean for the duration of the project.

Seeding/Mulching:

1. All areas disturbed during construction to be graded to drain and compacted to a minimum of 90% of AASHTO T-99 immediately after installation of utilities or grading.
2. Recommended Seed Mixture: 80% ELKA Dwarf Perennial Ryegrass and 20% Creeping Red Fescue, by weight. Application Rate shall be 100 pounds minimum per acre.
3. Fertilizer shall be 12-16-8 with 50% of the nitrogen derived from UREA FORMALDEHYDE, and applied at a rate of 400 pounds per acre.
4. Seed and mulch at a rate of 2000 lbs/Ac with heavy bonding agent or netting and anchors. Mulch shall be a wood cellulose fiber or other material suitable for hydromulching.
5. Temporary or Permanent Hydroseeding or acceptable seeding and mulching must be provided whenever perennial cover cannot be established on sites which will be exposed for 60 days or more.

Sediment Fence:

1. 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.
2. The filter fabric fence shall be installed to follow the contours, where feasible. Then fence posts shall be spaced a maximum of six feet apart and driven securely into the ground a minimum of 18 inches.
3. A trench shall be excavated, roughly 6 inches wide by 6 inches deep, upslope and adjacent to the wood post to allow the filter fabric to be buried. Bury the bottom of the fabric 6" vertically below finished grade. All areas of filter fabric trench shall be compacted.
4. The filter fabric shall be installed with stitched loops over fence posts. The fence post shall be constructed of 2" x 2" fir, pine, or steel. The fence post must be a minimum of 48" long. The filter fabric shall not be stapled or attached to existing trees.
5. Sediment fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.
6. Sediment fences shall be inspected by applicant/contractor immediately after each rainfall, and at least daily during prolonged rainfall. Any required repairs shall be made immediately.

Erosion Control 6/29/95

AS BUILTS

REGISTERED PROFESSIONAL ENGINEER
#15851
EXP. 6/30/00
OREGON
MAY 16 1989
PATRICK A. SISUL
3/20/00

REVISIONS	BY

TANNLER DRIVE PARTITION
TANNLER DEVELOPMENT, LLC
Construction Notes

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

97-048CNOT.DWG

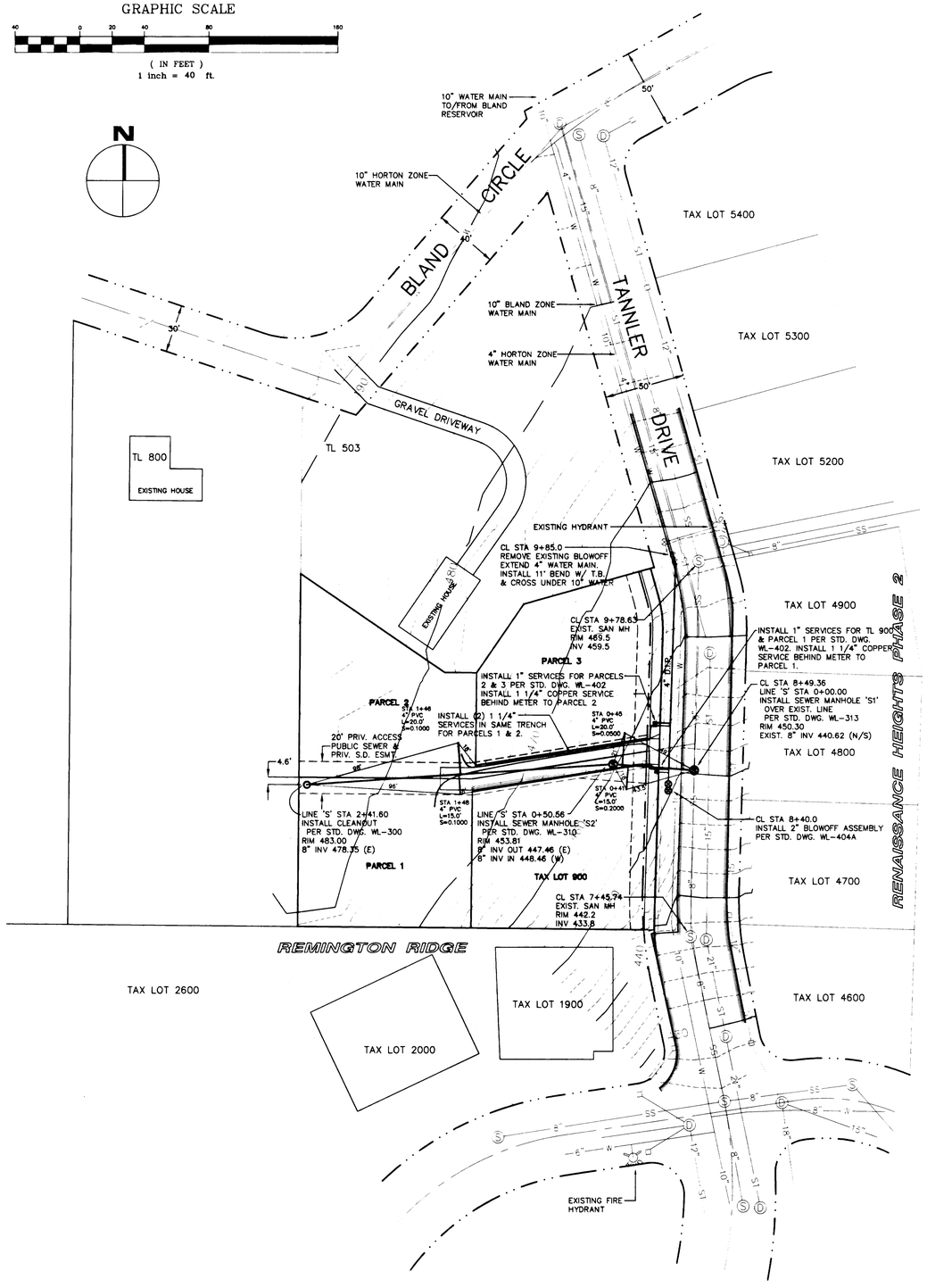
DATE	AUG., 1999
SCALE	NONE
DRAWN	PS
JOB	97-048C
SHEET	1
OF	5 SHEETS

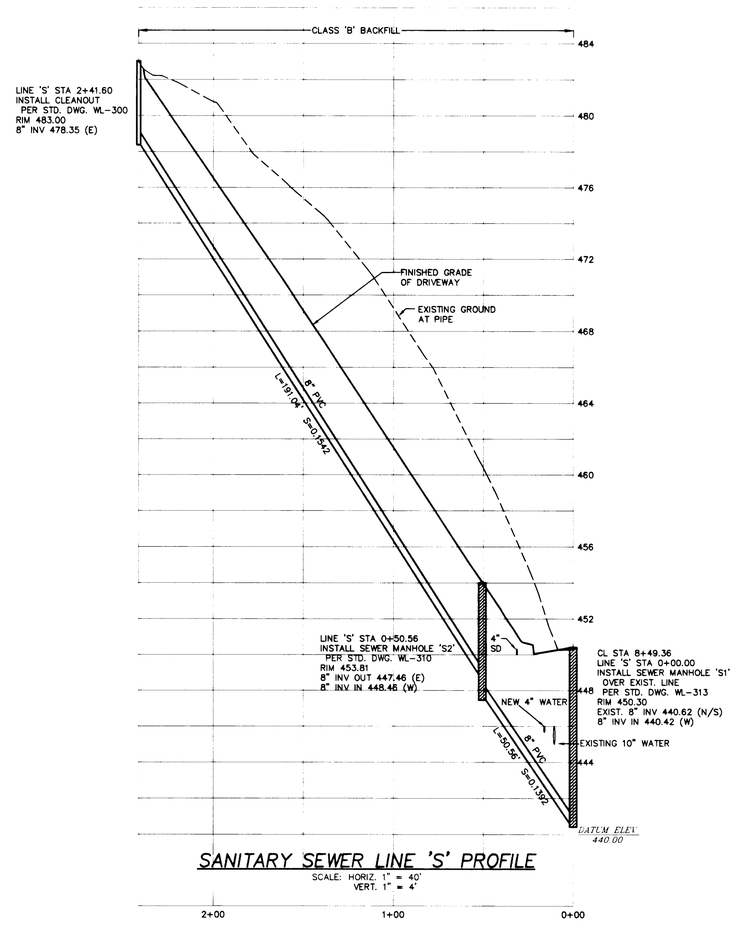
AS BUILTS

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.





SANITARY SEWER LINE 'S' PROFILE

SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

REGISTERED PROFESSIONAL ENGINEER
PATRICK A. SISUL
OREGON
MAY 18, 1982
EXPIRES: 6/30/00

5/20/00

REVISIONS	BY
AS-BUILT 01/25/2000	LD

TANNLER DRIVE PARTITION
TANNLER DEVELOPMENT, LLC

Waterline & Sanitary Sewer Plan

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE AUG. 1999
SCALE H: 1" = 40'
V: 1" = 4'
DRAWN PS
JOB 97-048C
SHEET 2
OF 5 SHEETS

AS BUILTS

GRAPHIC SCALE

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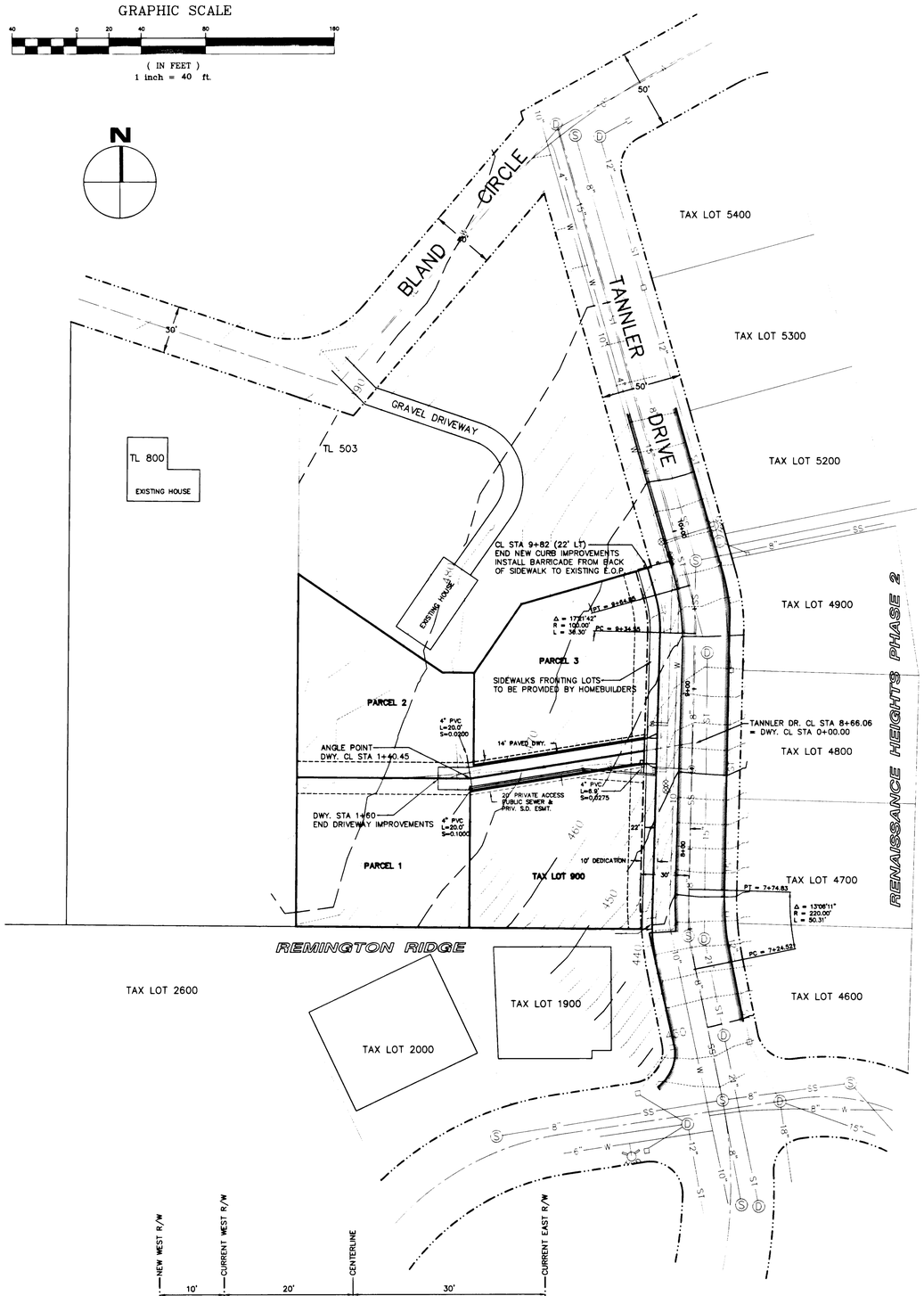
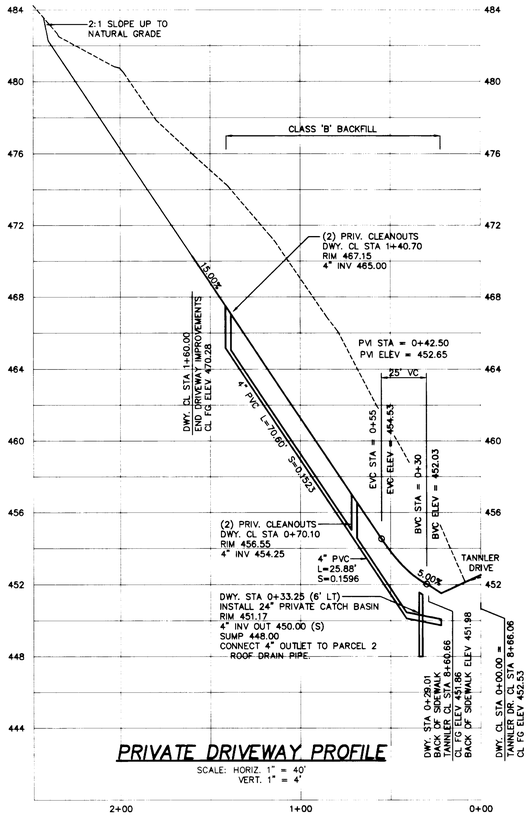
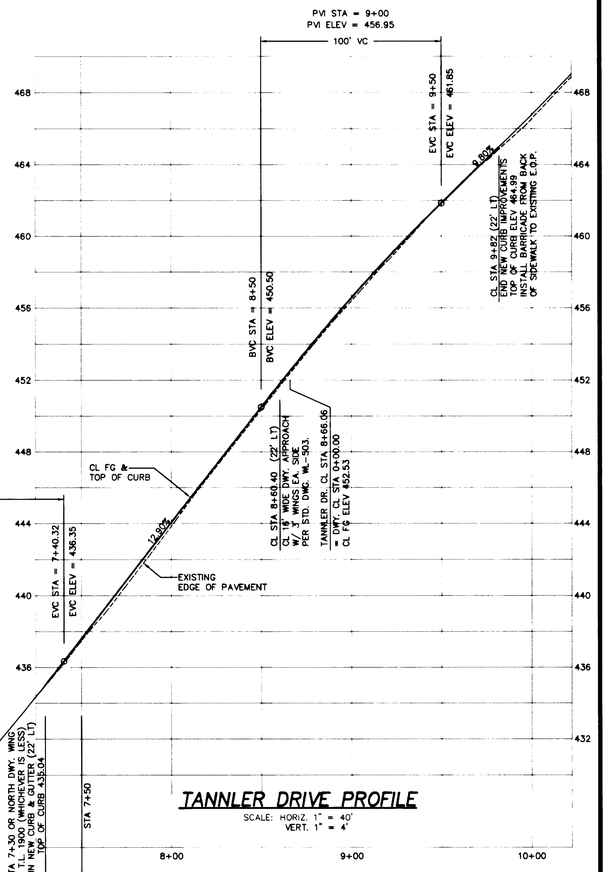
(IN FEET)
1 inch = 40 ft.





PRIVATE DRIVEWAY PROFILE

SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'



TANNLER DRIVE PROFILE

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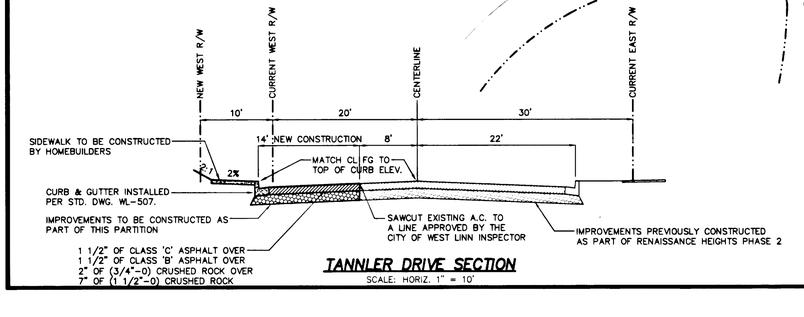

TANNLER DRIVE SECTION

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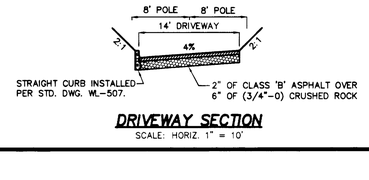

DRIVEWAY SECTION

SCALE: HORIZ. 1" = 10'

REVISIONS	BY
AS-BUILT 01/25/2000	LD

TANNLER DRIVE PARTITION
TANNLER DEVELOPMENT, LLC

Street & Storm Drainage Plan

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

REGISTERED PROFESSIONAL ENGINEER
816.551
OREGON
MAY 18, 1993
PATRICK A. SISUL
3/20/00

DATE	AUG. 1999
SCALE	H: 1" = 40' V: 1" = 4'
DRAWN	PS
JOB	97-048C
SHEET	3
OF	5 SHEETS

GRAPHIC SCALE

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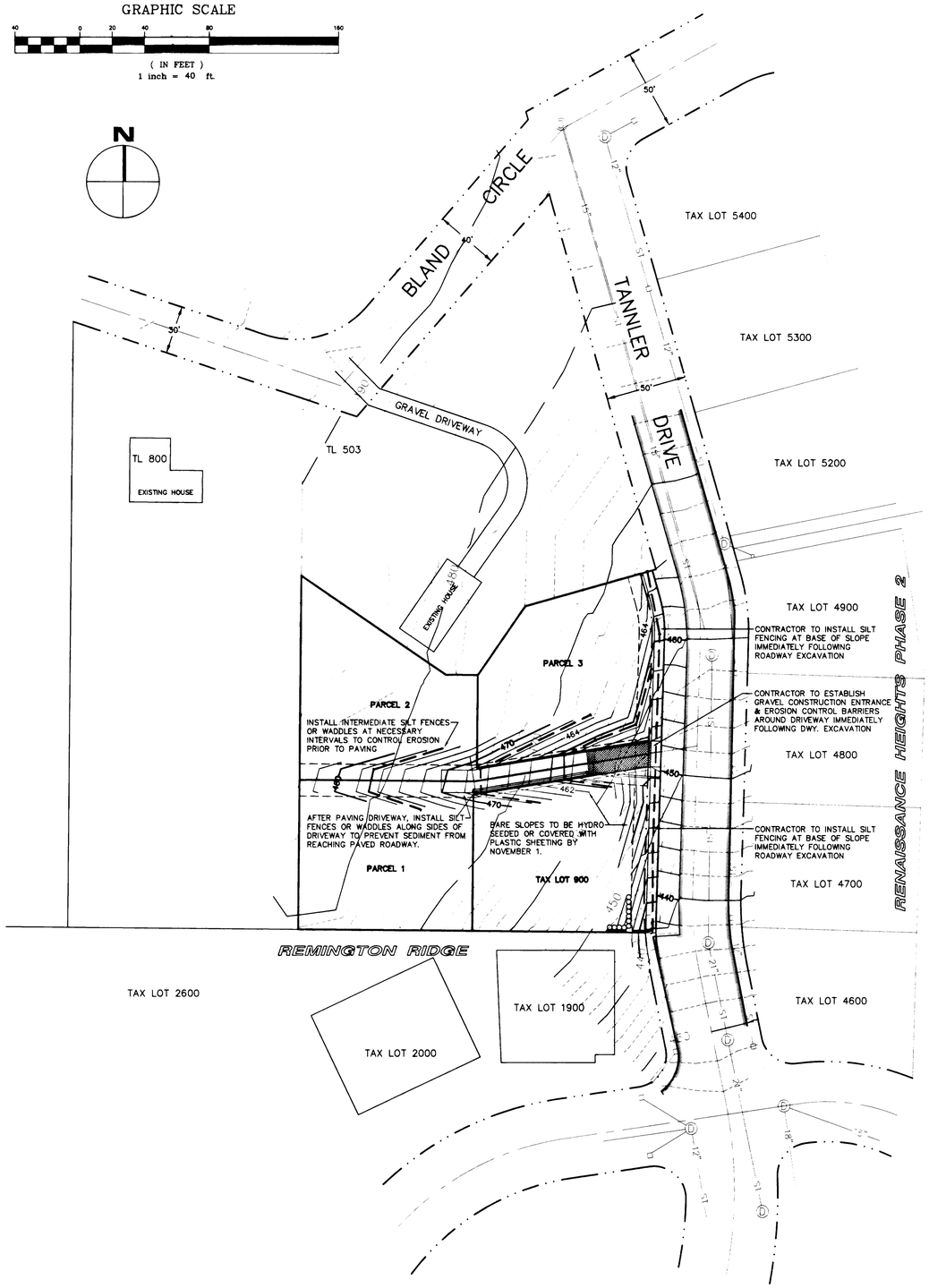
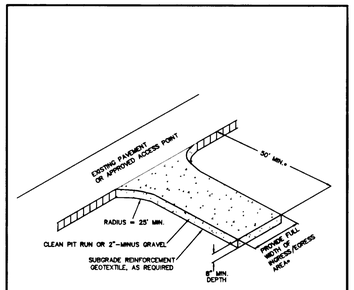
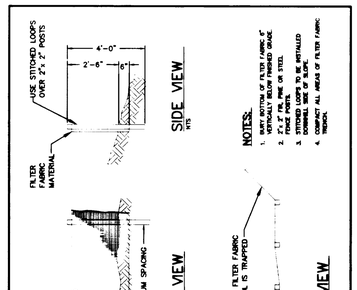
(IN FEET)
1 inch = 40 ft.



ESTIMATED EARTHWORK QUANTITIES (QUANTITIES ARE FROM EG TO SUBGRADE)	
STRIPPINGS	425 CU. YARDS
GENERAL EXCAVATION TRENCH EXCAVATION	1,500 CU. YARDS 410 CU. YARDS
EMBANKMENT WASTE ON LOTS	0 CU. YARDS 0 CU. YARDS
NET HAUL	2335 CU. YARDS

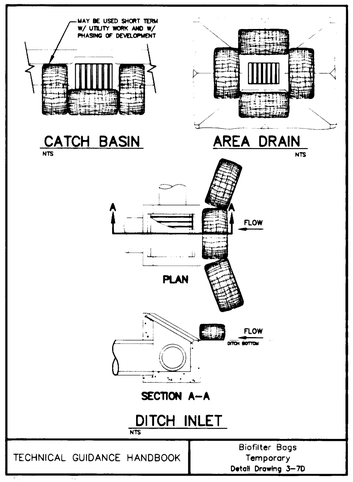


TECHNICAL GUIDANCE HANDBOOK | Gravel Construction Entrance Detail Drawing 3-1A



TECHNICAL GUIDANCE HANDBOOK | Sediment Fence Detail Drawing 3-2

AS BUILTS



TECHNICAL GUIDANCE HANDBOOK | Biofilter Bags Temporary Detail Drawing 3-7D

REGISTERED PROFESSIONAL ENGINEER
16,651
OREGON
MAY 18, 1993
PATRICK A. SISUL
3/20/00

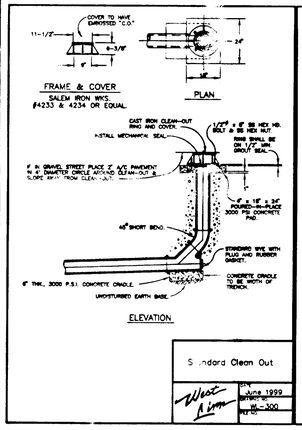
REVISIONS	BY
AS-BUILT 01/25/2000	LD

TANNLER DRIVE PARTITION
TANNLER DEVELOPMENT, LLC

Grading and Erosion Control Plan

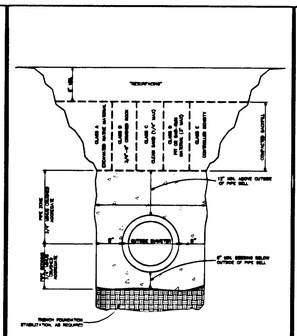
SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

DATE	AUG. 1999
SCALE	H: 1" = 40'
DRAWN	PS
JOB	97-048C
SHEET	4
OF	5 SHEETS



Standard Clean Out

West Linn	DATE June 1999
	STANDARD W.-300
	REF NO.



Trench Backfill, Bedding and Pipe Zone

West Linn	DATE June 1999
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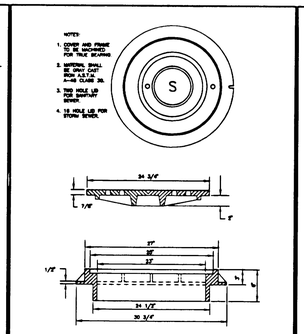

Suburban Manhole Frame & Cover- 3" Depth

West Linn	DATE June 1999
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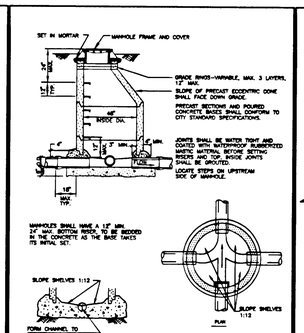
	REF NO.



Standard Manhole for Less than 36" Pipe

West Linn	DATE June 1999
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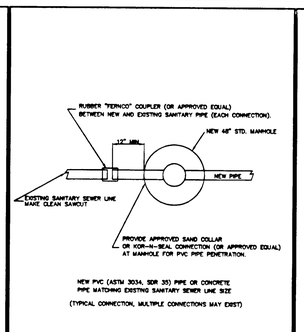

Manhole Detail- Plan View New Manhole to Existing Sanitary Line Connection

West Linn	DATE June 1999
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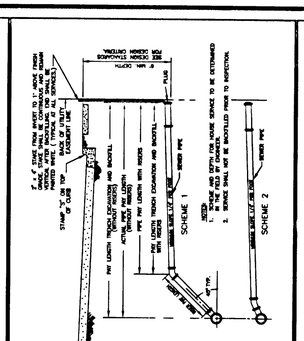

Service Branch

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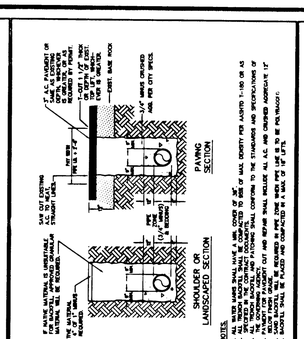

Standard Trench Section

West Linn	DATE June 1999
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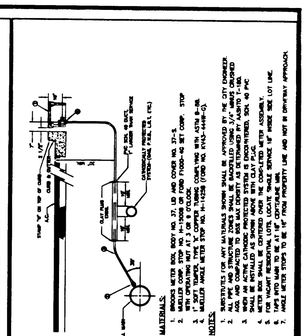
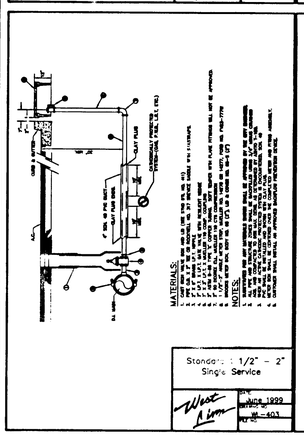


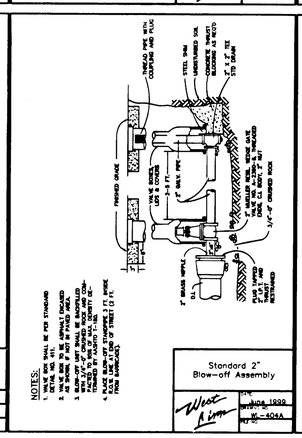
Standard 1" Water Service

West Linn	DATE June 1999
	STANDARD W.-402
	REF NO.



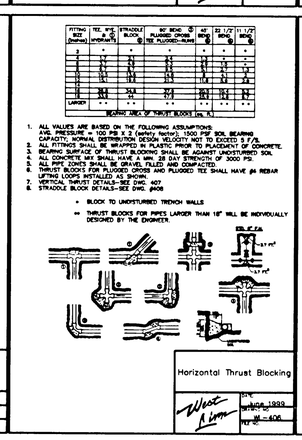
Standard 1 1/2" - 2" Single Service

West Linn	DATE June 1999
	STANDARD W.-403
	REF NO.



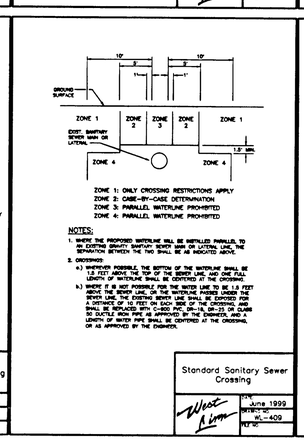
Standard 2" Blow-off Assembly

West Linn	DATE June 1999
	STANDARD W.-404A
	REF NO.



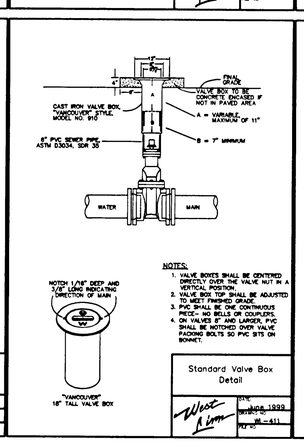
Horizontal Thrust Blocking

West Linn	DATE June 1999
	STANDARD W.-406
	REF NO.



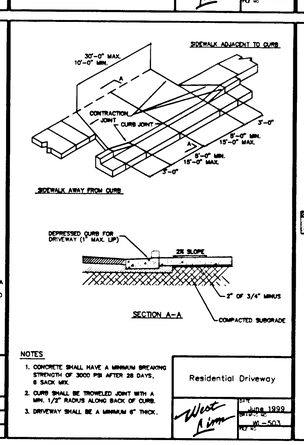
Standard Sanitary Sewer Crossing

West Linn	DATE June 1999
	STANDARD W.-409
	REF NO.



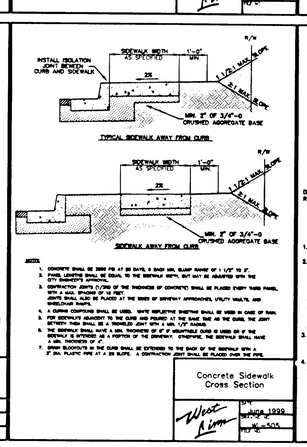
Standard Valve Box Detail

West Linn	DATE June 1999
	STANDARD W.-411
	REF NO.



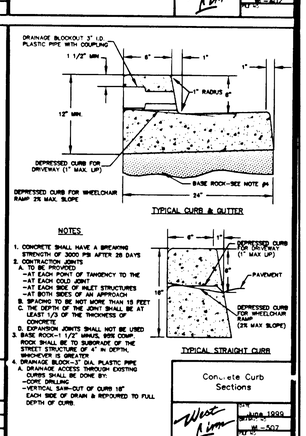
Residential Driveway

West Linn	DATE June 1999
	STANDARD W.-503
	REF NO.



Concrete Sidewalk Cross Section

West Linn	DATE June 1999
	STANDARD W.-505
	REF NO.



Concrete Curb Sections

West Linn	DATE June 1999
	STANDARD W.-507
	REF NO.

STEEL-PLATE CATCHBASINS SHALL NOT BE LESS THAN 10 GAUGE WITH WELDED SEAMS WITH SLEEVES ATTACHED FOR CONNECTING THE STORM DRAIN LINES.

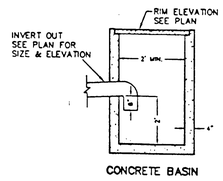
CATCHBASINS MADE OF CAST IRON SHALL HAVE A WALL THICKNESS OF NOT LESS THAN 1/4" WITH SLEEVES ATTACHED FOR CONNECTING THE STORM DRAIN LINES.

STEEL CATCHBASINS SHALL BE ASPHALT COATED INSIDE & OUT.

CONCRETE CATCHBASINS SHALL HAVE A WALL THICKNESS OF 4" & BE REINFORCED WITH #4 BARS @ 6" O.C.

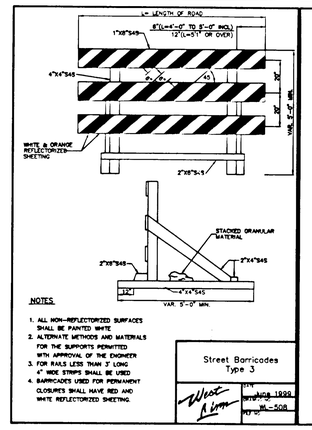
CATCHBASINS ARE TO BE PREFABRICATED OR POURED IN PLACE.

GRATE TO BE WELDED STEEL DROP IN GRATE (ASTM A36). END BARS 1/2"x2"; CROSS BARS 1/2"x2" @ 2" O.C.; BIKE STRAPS 1/8"x1"; 16,000 lb> UNIFORM LOAD CAPACITY.



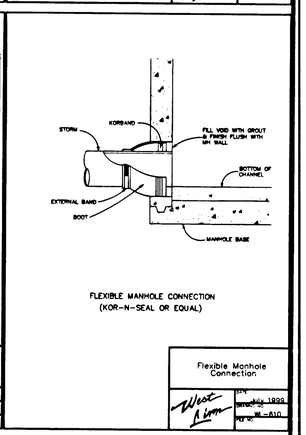
24" x 24" PRIVATE CATCHBASIN DETAIL

N.T.S.



Street Barricades Type 3

West Linn	DATE June 1999
	STANDARD W.-508
	REF NO.



Flexible Manhole Connection

West Linn	DATE July 1999
	STANDARD W.-510
	REF NO.

AS BUILTS

REGISTERED PROFESSIONAL ENGINEER #18551 OREGON MAY 18 1983 PATRICK A. SISUL

3/20/00

REVISIONS	BY

TANNLER DRIVE PARTITION
TANNLER DEVELOPMENT, LLC

Details

SISUL ENGINEERING
375 PORTLAND AVENUE
GLADSTONE, OREGON 97027
(503) 657-0188

97-048C\DETAILS.DWG

DATE	AUG. 1999
SCALE	NONE
DRAWN	PS
JOB	97-048C
SHEET	5
OF	5 SHEETS