

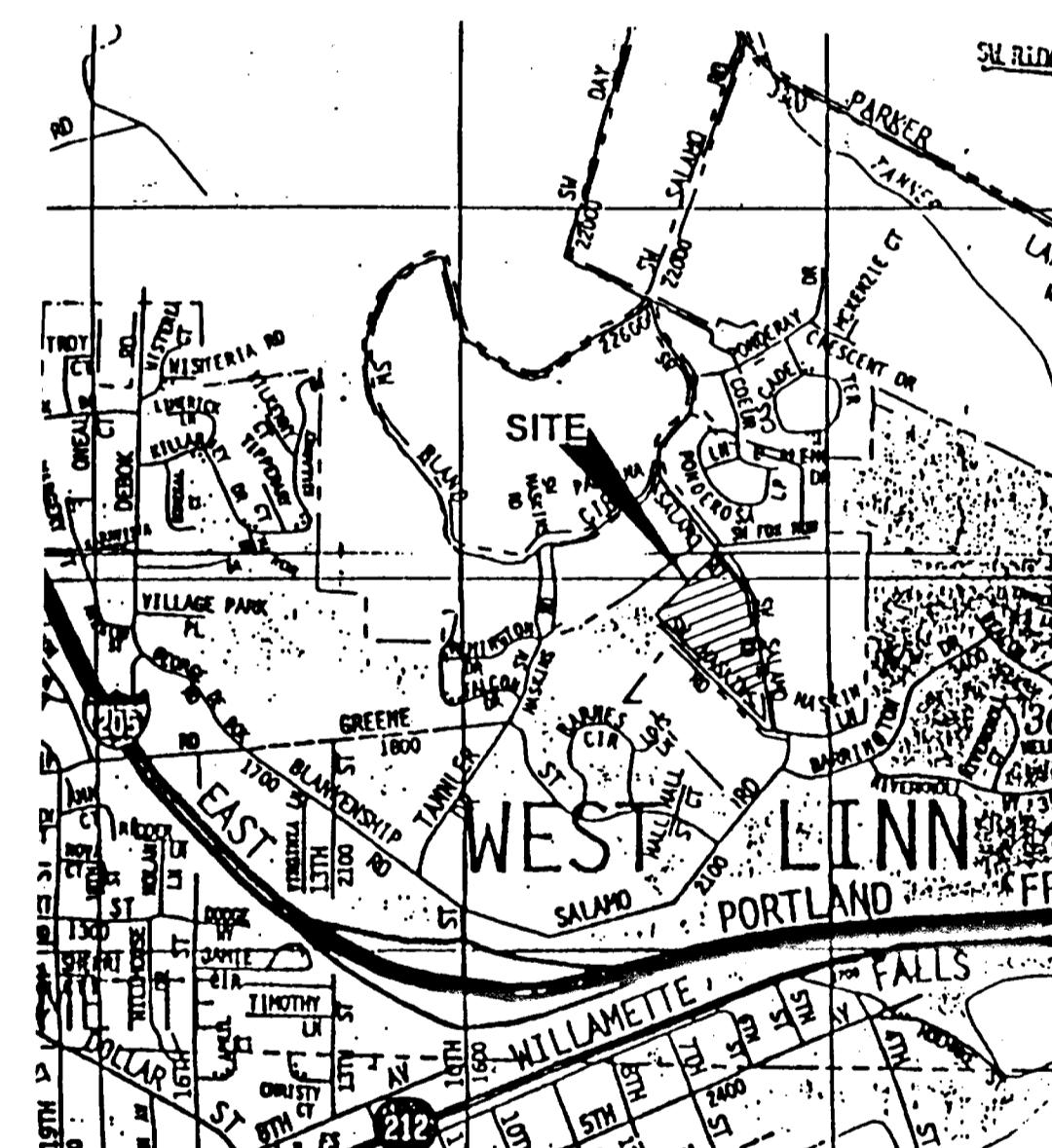
# RENAISSANCE HEIGHTS PHASE 3

DEVELOPED BY

## J.T. SMITH COMPANIES

23600 Salamo Road  
West Linn, Oregon 97068  
PHONE NO. 657-3402  
FAX NO. 657-3625

APRIL, 1998



VICINITY MAP

### SISUL ENGINEERING

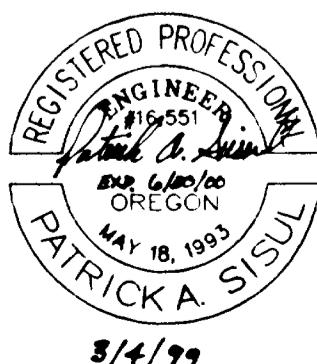
375 PORTLAND AVENUE  
GLADSTONE, OR 97027

### CITY OF WEST LINN

2042 8TH AVENUE  
WEST LINN, OR 97068  
656-4211

AS-BUILT

MOST RECENT REVISION TO  
THIS SET OF PLANS:



5/4/99

REVISIONS BY  
CITY OF WEST LINN  
SHOWN FENCES & GATES  
SHEET NUMBER  
100-100

# RENAISSANCE HEIGHTS 3

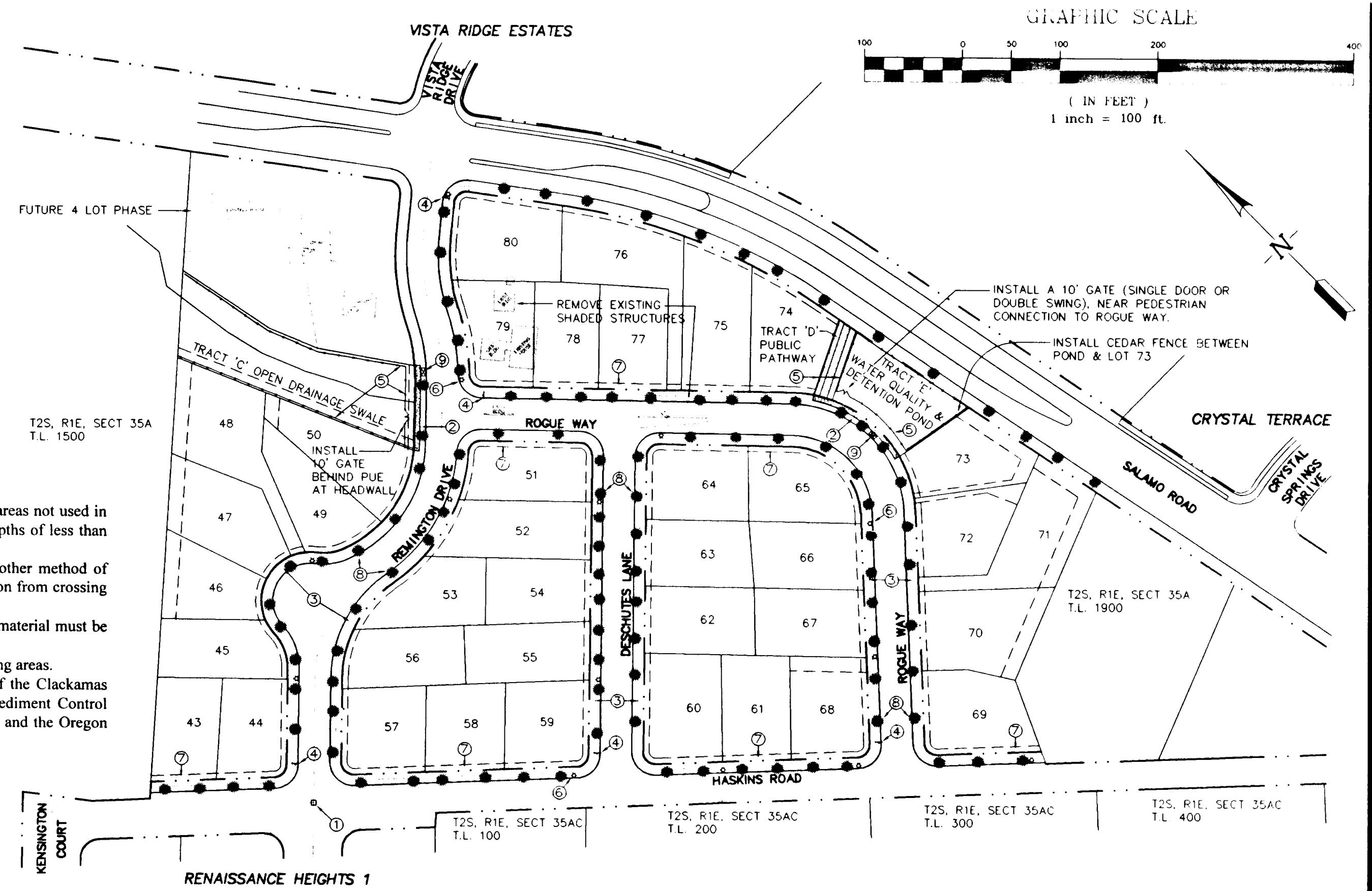
J.T. SMITH COMPANIES

## Specifications

SISUL ENGINEERING

375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 867-0166

DATE APRIL 1998  
SCALE 1" = 100'  
DRAWN PS  
JOB 96-213  
SHEET 1  
OF 13 SHEETS



## CONSTRUCTION AND MANAGEMENT PLAN

1. Prior to any work commencing in, or adjacent to, the wetland/drainage, a temporary construction fence shall be installed to keep equipment, personnel, and materials out of the sensitive area. At this time erosion control measures such as a silt fence or other approved measures shall be put in place at the limits of the transition area along the drainage, the wetland mitigation area, and at the limits of the fill for the road crossing. Fence and erosion control measures may be removed only in the area required for equipment access during the excavation of the wetland mitigation area.

2. Excavation for the wetland mitigation area shall be done prior to, or concurrently with, the placement of fill for the road crossing. The wetland mitigation area shall be excavated to a depth 12 inches below the level of the existing drainageway channel bottom. Equipment and personnel shall be excluded from the resource area except as necessary to complete the work.

3. The upper 12 inches of soil shall be removed from the area of roadway fill and stockpiled onsite. Upon completion of the excavation of the wetland mitigation area, stockpiled wetland topsoil shall be placed in the excavation. Within reasonable limits the removed soil should be stockpiled with the vegetation exposed, and placed in the mitigation site in a normal fashion (i.e. placement of lawn turf).

4. As soon as practical after the commencement of project startup, invasive and exotic plants within the transition zone shall be treated with herbicide by an Oregon licensed pesticide applicator.

5. Mitigation and transition area plantings shall be done in conjunction with other landscaping work on the project. If no other landscaping work is planned on the project, landscaping work will commence as soon as invasive plant control measures have been completed to the point to allow plantings to be competitive and successful. Plantings are to be done using accepted landscaping standards by a professional landscape contractor.

6. Mitigation work shall be monitored twice during the first growing season, and once yearly for three years after. Success shall be considered 80% survival and normal plant and community development at the end of this period. Owner shall be responsible for replacement or corrective action due to failures during this period as deemed necessary by the project manager or the City of West Linn

7. Environmental Technology Consultants shall act as the project manager on all phases of work involving the wetland mitigation and transition areas. The project manager shall be notified by the engineer, the owner, the owners agent, or the contractor prior to commencing any phase of work. This is to insure specifications for excavations, planting materials, plant placement, and other elements of the plan are met and insure success of the project.

8. Any bonds for performance or surety will be as deemed by the City of West Linn.

## Extended Dry Detention Water Quality:

1. Storm drain water quality and detention pond shall be seeded with the following seed mixture:  
40% Agrostis alba (Redtop)  
25% Alopecurus pratensis (Meadow Foxtail)  
20% Lolium perenne (perennial Ryegrass)  
15% Phleum pratense (Timothy)

2. Application rates should be per the supplier's recommendations, or at the following weight per 1000 square foot basis:  
Hydroseeding:  
5 lbs seed mix  
7 lbs 10-20-20 (N-P-K) fertilizer  
50 lbs wood cellulose fiber mulch

### Broadcast Seeding:

5 lbs seed mix  
7 lbs 10-20-20 (N-P-K) fertilizer  
70 lbs wood cellulose fiber mulch  
3. Pond bottom should be mowed and cleaned of debris in the spring of each year, as soon as practical after the start of the growing season (March 1st), but no later than May 1st.  
4. Sediment in the pond should be removed if accumulations exceeding 2" are in evidence, or every two years.  
5. Sediment accumulations in the inlet/outlet structures shall be removed biannually by the City of West Linn Public Works personnel.  
6. A four-foot high matte black chain link fence shall be installed around the water quality and detention facility in accordance with the Conditions of Approval.

West Linn 04-US-98

## Construction Staking Notes:

The Developer has contracted with Engineer to provide construction staking as outlined below. The contractor is to give the Engineer/Surveyor at least a week notice of when the first construction staking will be needed. After the initial staking on the project, requests for staking should be given at least 3 working days (72 hours) in advance of when staking is desired. When called to the site for staking the Engineer's surveyor will stake each phase of the project in a manner that is most efficient for the surveyor. Additional staking requested by the contractor vs restaking required due to the contractor's carelessness will be charged to the contractor. In addition, if survey control monuments (which will be plainly identified) are destroyed by the contractor, the contractor will be charged for the re-establishment of the monuments. Staking to be provided is as follows:

1. Sanitary sewer cut stakes at the following stations, 10', 25', 50', 100', and every 100' thereafter, following each manhole.
2. Storm drain cut stakes at the following stations, 10', 25', 50', 100', and every 100' thereafter, following each manhole or catch basin.
3. Rough grade stakes for street coring set on centerline at 50 foot stations. Extra stakes will be provided in cul-de-sacs and street knuckles.
4. Set temporary front corners at water service locations and stake waterline angle points and fire hydrant locations (after street coring).
5. Set curb stakes at 50 foot stations on the tangent and 25 foot stations in the curves.
6. Mark property line locations on curbs for private utilities.
7. Once the Contractor has installed the water services (and prior to rock and paving the street) he is to notify the Engineer that such has been done so that the Engineer's Surveyor can verify that the water services/meters are in the correct location.

Associated Land Surveyors 2-18-93

## Vertical Control:

Vertical control is based upon City of West Linn centerline monument elevation. Aluminum cap marked "City of West Linn Survey Monument, Do Not Disturb" and stamped LS 1976 set at the intersection of Tanner Drive and Remington Drive. Elevation is 424.57 feet.

Renaissance Heights 4 96-0208 4-5-98

## 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, 243-7497, U.S. West Communications - Jackie Lollar 242-8496.

West Linn 10-21-97

## 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 a double disc type conforming to AWWA C500. Butterfly valves shall be Class 150 B short body type in conformance with AWWA C504. Valve boxes shall be Vancouver style.
5. Fire hydrants shall conform to and shall be installed in accordance with APWA Division IV, Section 404. Pump outlet is to face the direction of access.
6. Granular backfill 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.
7. Service laterals shall be type K. Lateral sizes shall be 1". For double services two 1" water services shall be laid side by side. Corporation stops shall be Ford or approved equal. Curb stop shall be 1" Ford meter stop. Meter boxes shall be equal to Brooks #31. Meter boxes are to be installed 3/4" above finish grade.
8. 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.
9. Disinfection shall conform with APWA Division 4, Section 402.3.05.
10. 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.

West Linn 12-22-97

1. All existing waterline is located approximately 3 feet below ground level in the Remington Drive right-of-way. A new water connection shall be made between Salamo Road and Haskins Road ... on the waterline plan prior to disturbing existing water main. Coordinate new connections and temporary service interruptions with the City of West Linn Public Works Department.
2. A plumbing permit from the City of West Linn Building Department is required for service lateral installations beyond the water meter.
3. 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.

Renaissance Heights 4 96-0208 4-5-98

## Storm Drains:

1. Four inch to 24 inch storm drain pipe shall be Class 3, non-reinforced, concrete pipe conforming to ASTM C14, PVC pipe conforming to ASTM D-3034 or seamless PVC pipe conforming to ASTM F794 (PW Rib or Ultra Rib). Rubber joints are required for all concrete pipe.
2. Thirty inch (30") diameter storm drain pipe shall be Class 3, non-reinforced, concrete pipe conforming to ASTM C14, PVC pipe conforming to ASTM D-3034 or HDPE pipe conforming to AASHTO M294s (ADS N-12 or Hancor Hi-Q). Rubber joints are required for all concrete pipe.
3. Gutter inlet shall be poured in-place concrete with a minimum compressive strength of 3000 psi. Frame shall be fabricated of structural steel, ASTM A-7, A-36, A-273.
4. Manhole base may be poured in-place concrete or precast. Manhole risers and tops shall be precast sections with a 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 watertop, or flexible sleeve. Cement grout for connecting PVC sewer pipe to manhole will not be permitted.
5. 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.
6. 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.
7. Granular backfill 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.
8. 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.
9. 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.
10. A plumbing permit from the City of West Linn Building Department is required for sanitary sewer laterals beyond the first cleanout.
11. 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.

West Linn 2-9-98

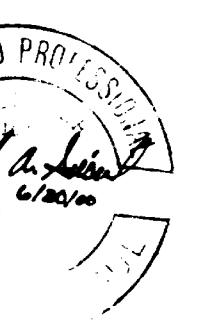
## Structural Fill Notes:

1. Besides the structural fill that will be required for construction of street improvements a structural fill is also to be built on lots where noted on the plans to the specifications noted below.
2. All miscellaneous materials and the organic layer under the fill area shall be stripped or removed. All stumps in the fill area must be removed in their entirety.
3. The contractor shall retain the services of a Geotechnical Engineer and testing lab to inspect and provide testing services and to certify that the structural fill meets the compaction requirements appropriate for home construction and the requirements of the City of West Linn Grading Permit for this project. The contractor must obtain the grading permit prior to beginning work on the project.
4. Fill material should be placed in horizontal lifts approximately 10 inches thick (loose) and compacted at least 95% of the maximum dry density, as determined by ASTM D 698, except as modified by the Geotechnical Engineer. Moisture content of the structural fill shall be controlled to within 2% of the optimum moisture content at the time of compaction, unless modified by the Geotechnical Engineer.
5. Construct curb and gutter using Class 'A' 3300 psi concrete with maximum 1/2" 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. Inspections by City of West Linn personnel will be required after stripping of topsoil and prior to fill placement, after each lift completed under a roadway and after all fill is completed. To request an inspection, call City of West Linn at least 24 hours in advance.
8. At the completion of fill activities a final report to the City of West Linn by the Geotechnical Engineer is required.

West Linn 12-22-97

## Graphic Scale

100 0 50 100 200 400  
(IN FEET)  
1 inch = 100 ft.



AS-BUIL

8/4/99

## 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 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 drip line of the trees and shall remain in place throughout the infrastructure improvements.

West Linn 2-9-98

1 SHEETS

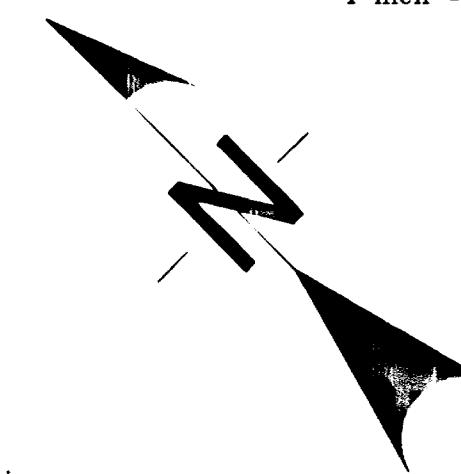
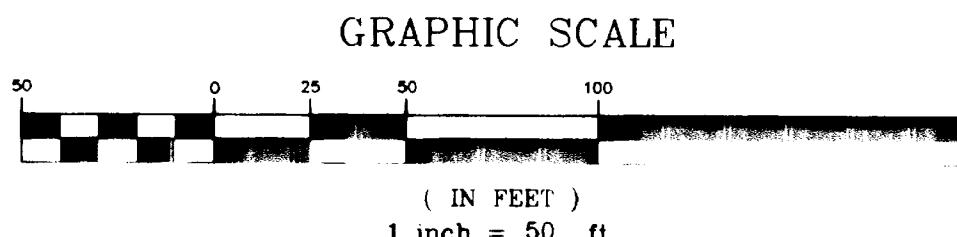
REVISIONS BY  
PROJECT NUMBER: 4/30/98  
PROTECTIVE ARO AND  
DRAFT DATE: 11/17/98  
AS-BUILT

RENAISSANCE HEIGHTS 4  
J.T. SMITH COMPANIES

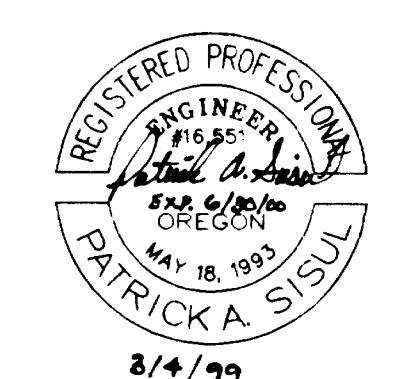
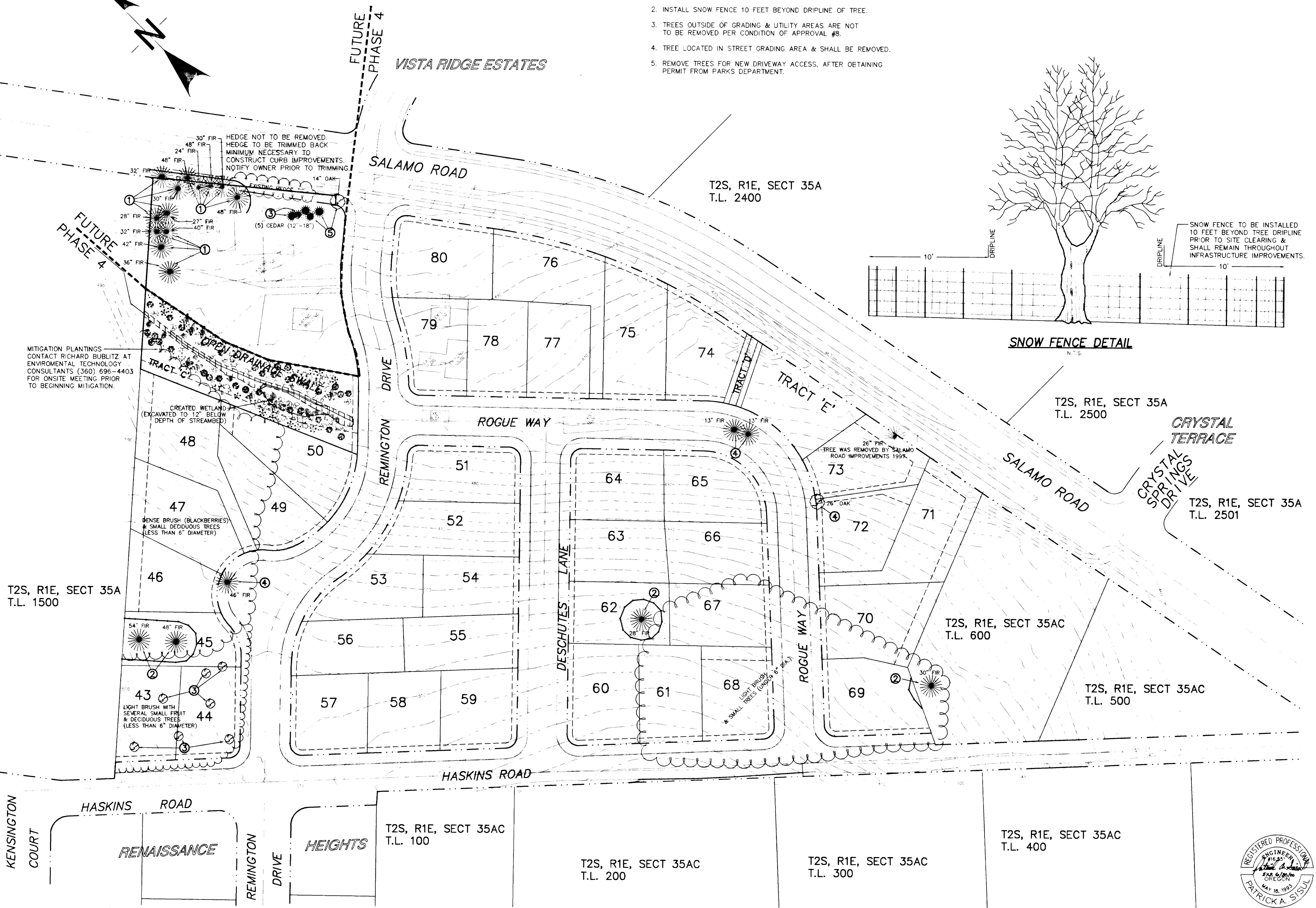
Tree Impact Plan  
& Protection Detail

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

DATE APRIL 1998  
SCALE 1"=50'  
DRAWN JEE  
JOB 96-20B  
SHEET 2  
OF 13 SHEETS



GRAPHIC SCALE



REVISIONS  
BY  
W.E. 11-17-98  
ADD AIR RELEASE &  
REMOVE SERV. 12 HOME  
AS BUILT  
11-17-98

### RENAISSANCE HEIGHTS 3

J.T. SMITH COMPANIES

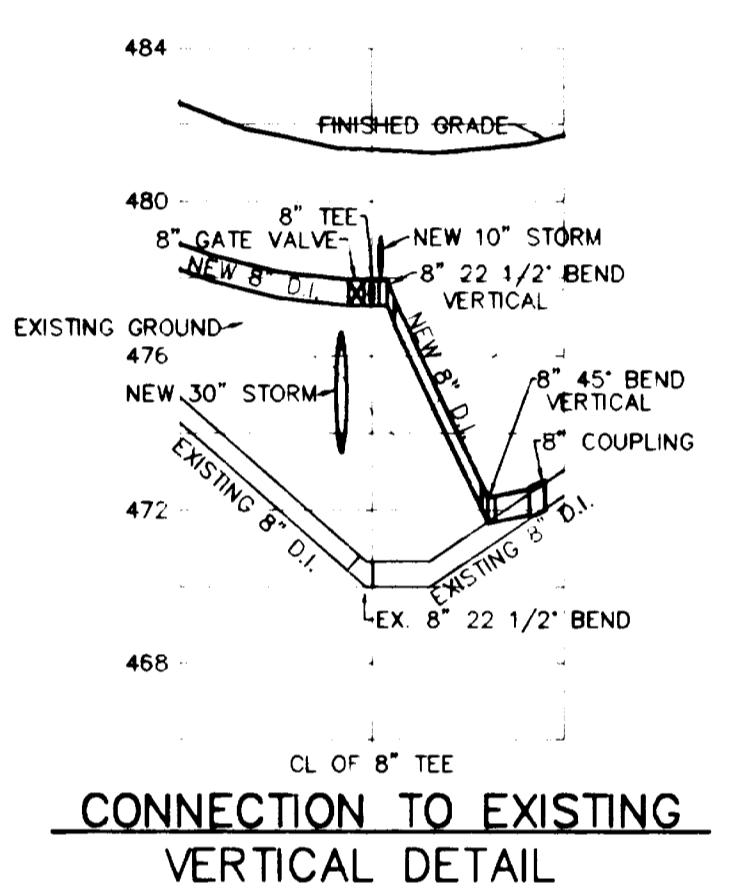
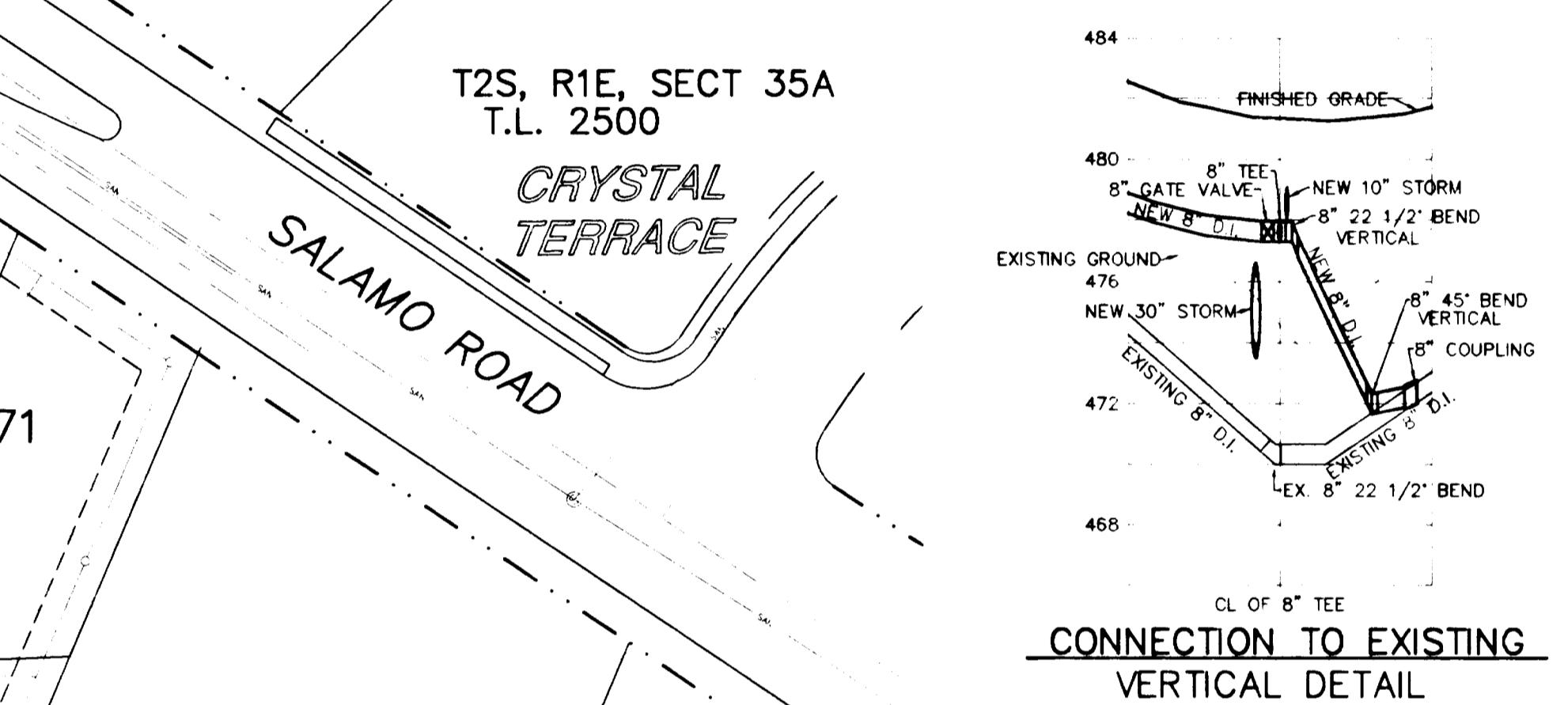
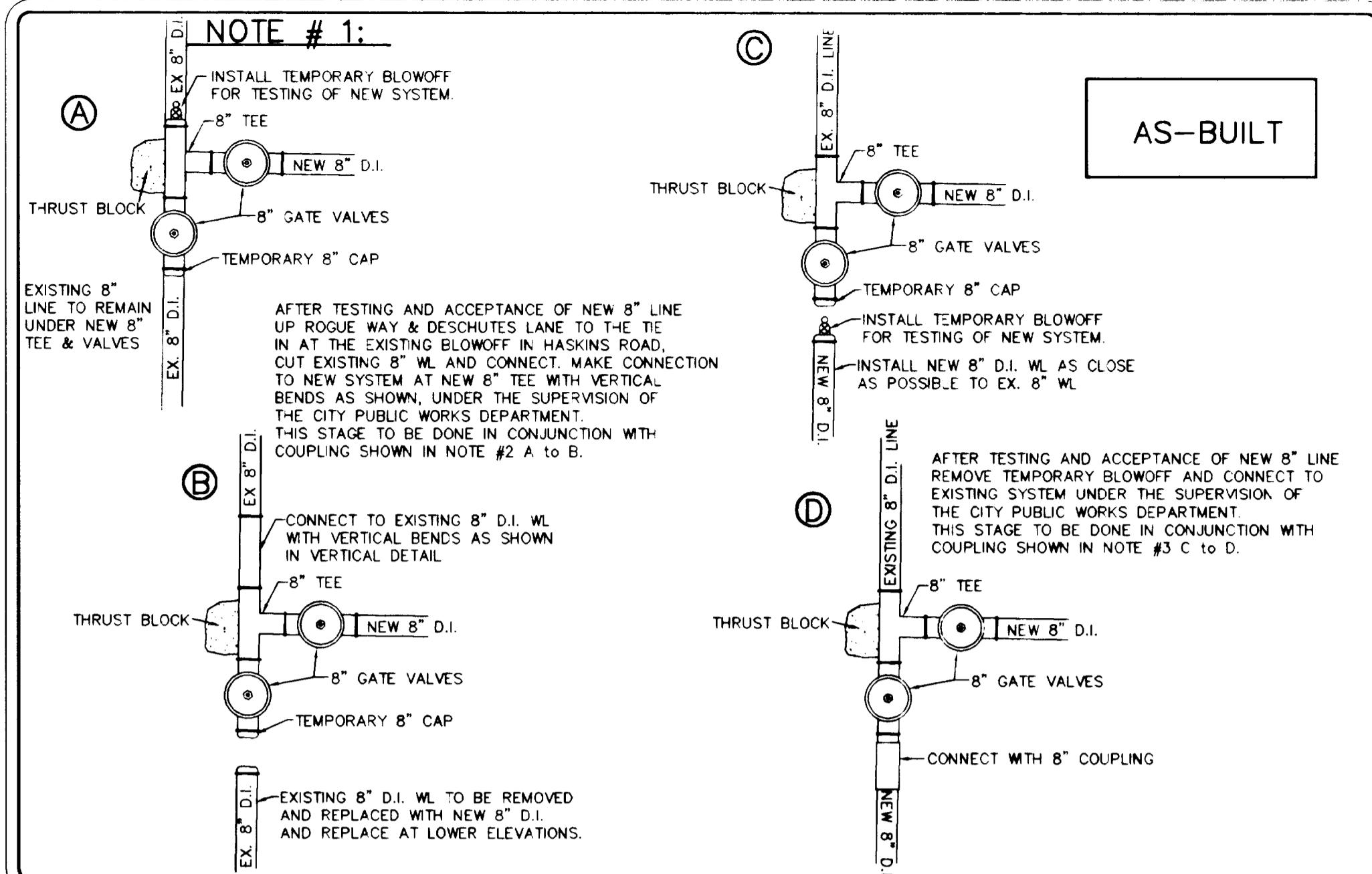
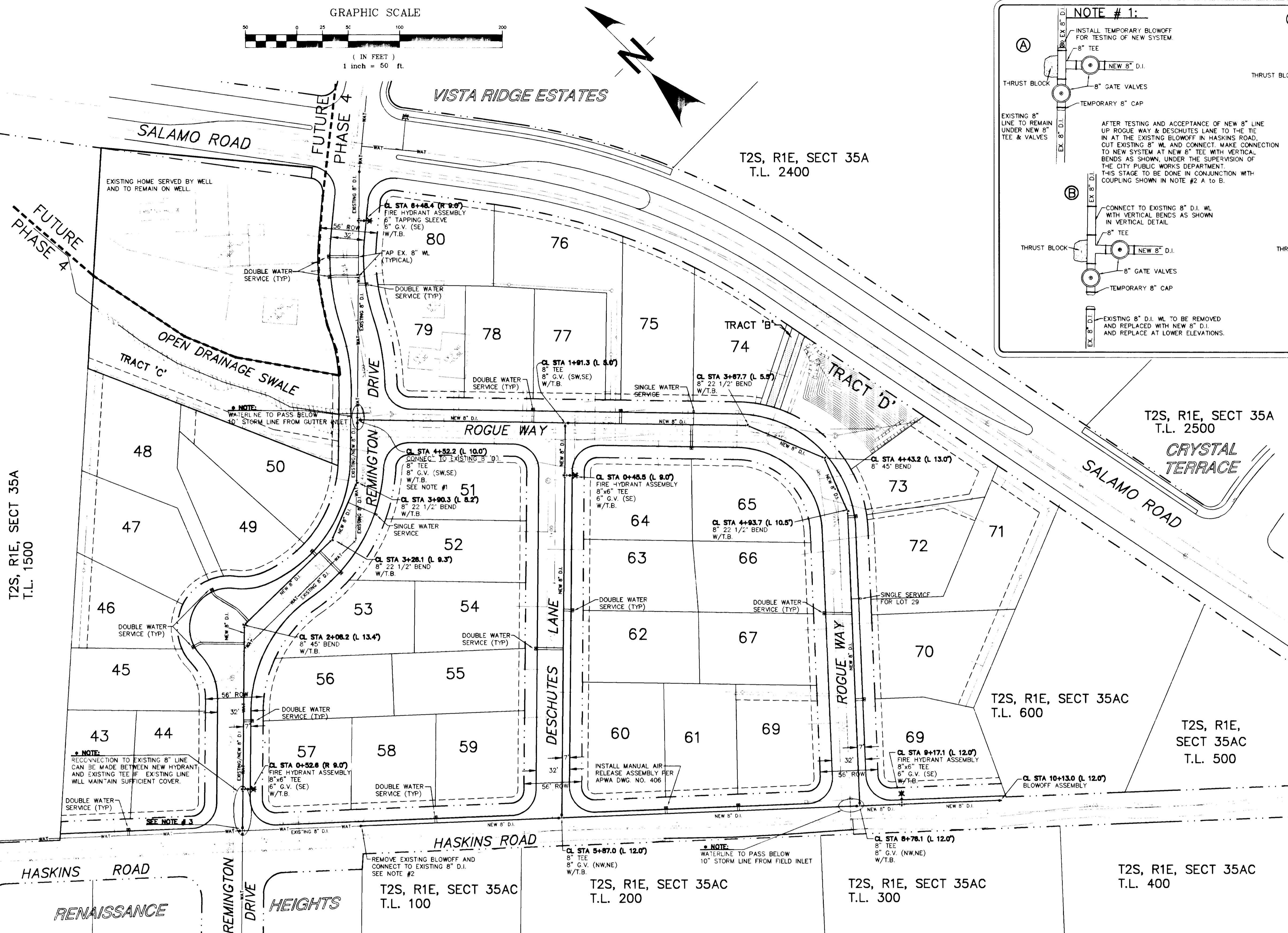
### Waterline Plan

SISUL ENGINEERING

375 PORTLAND AVENUE  
CLADSTONE, OREGON 97027  
(503) 657-0188

REGISTERED PROFESSIONAL  
ENGINEER  
PATRICK A. SISUL  
MAY 18, 1993  
STATE OF OREGON  
JOB #1-2UB  
SHEET 3  
OF 13 SHEETS

T2S, R1E, SECT 35A  
T.L. 1500



**CONNECTION TO EXISTING VERTICAL DETAIL**

REGISTERED PROFESSIONAL  
ENGINEER  
PATRICK A. SISUL  
MAY 18, 1993  
STATE OF OREGON



REVISIONS	
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J. T. SMITH COMPANIES

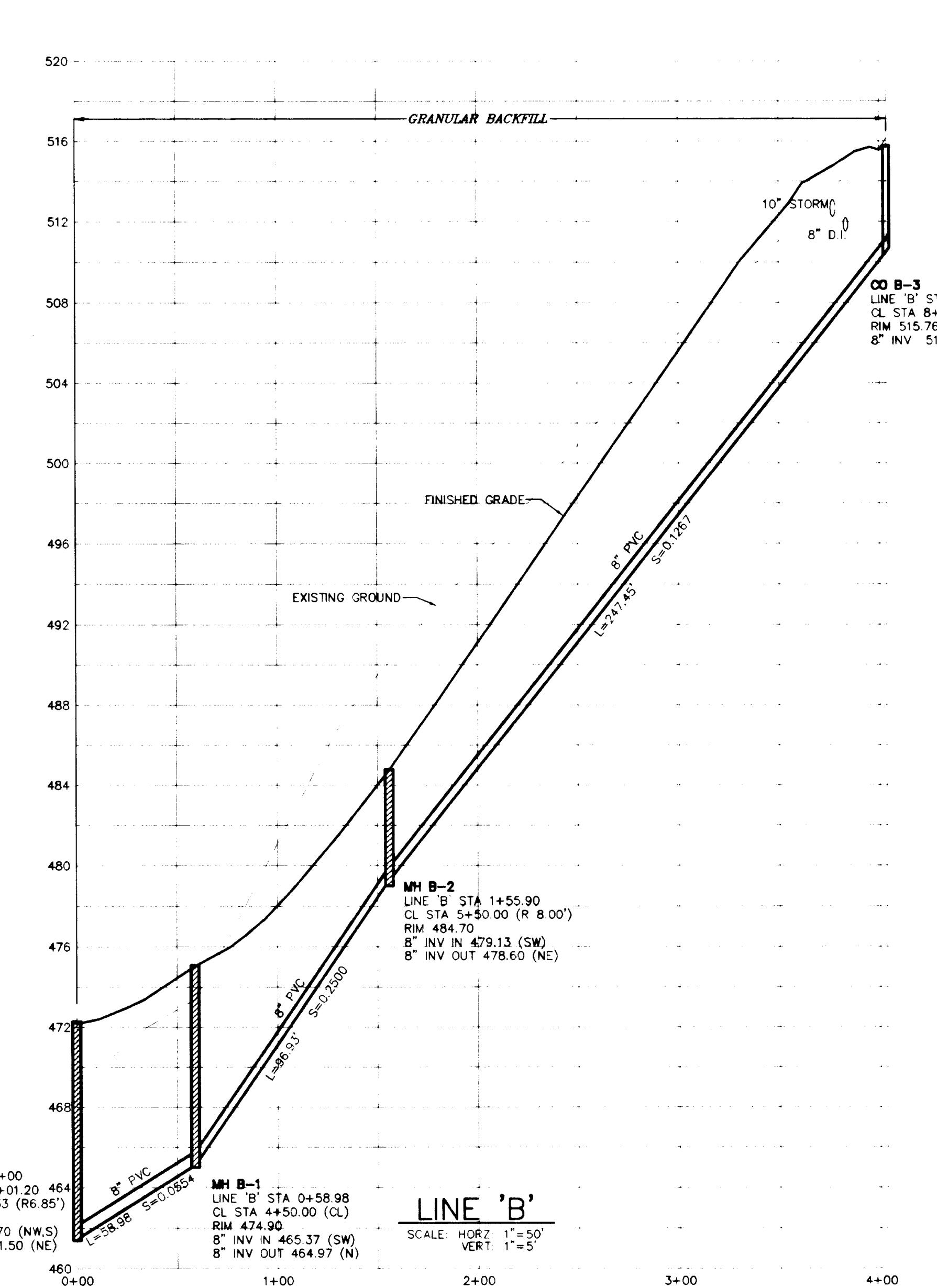
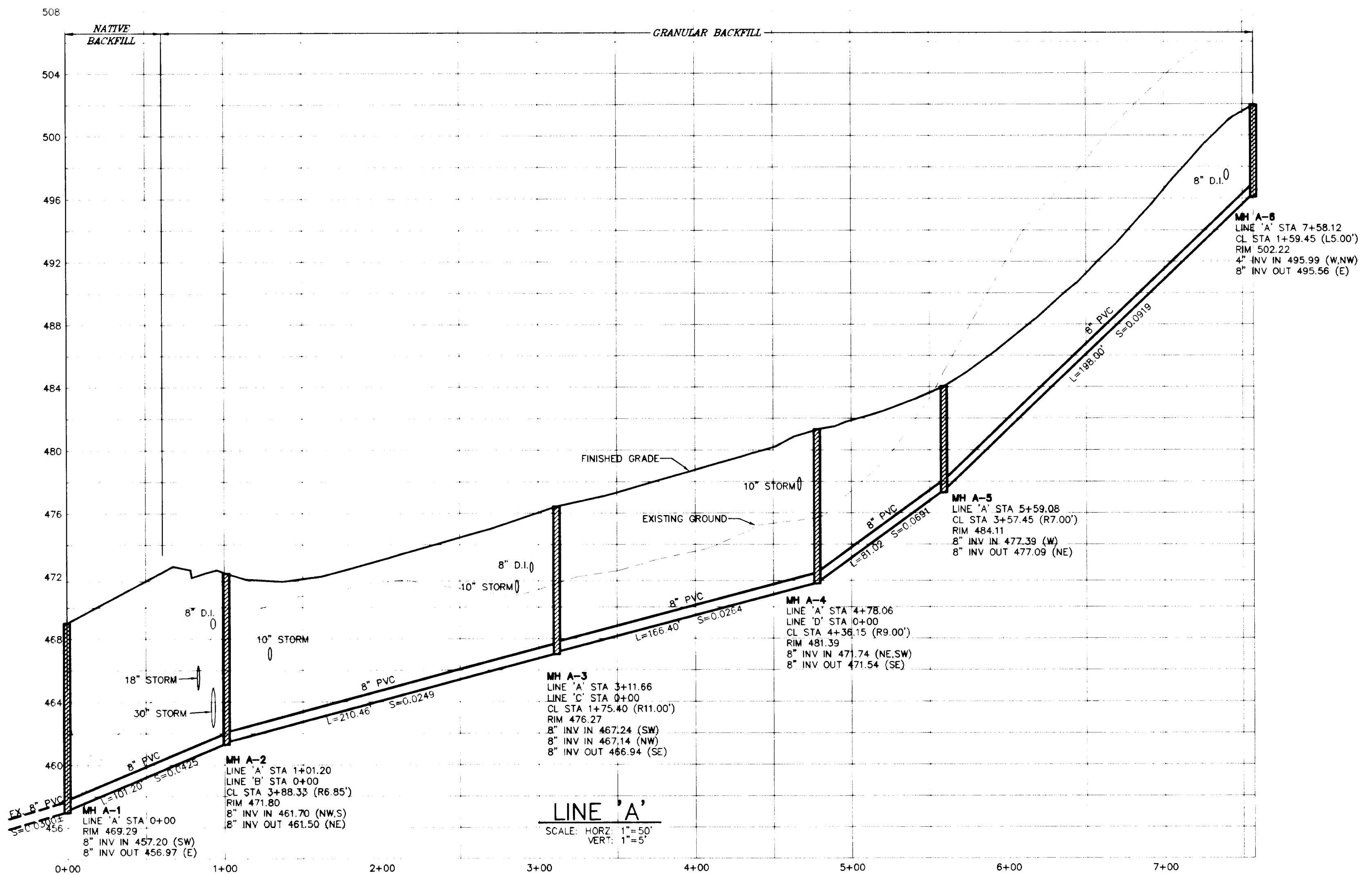
SISSUL ENGINEERING

375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 857-0166

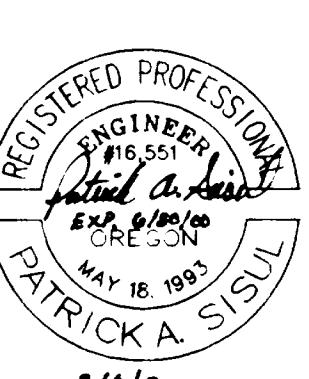
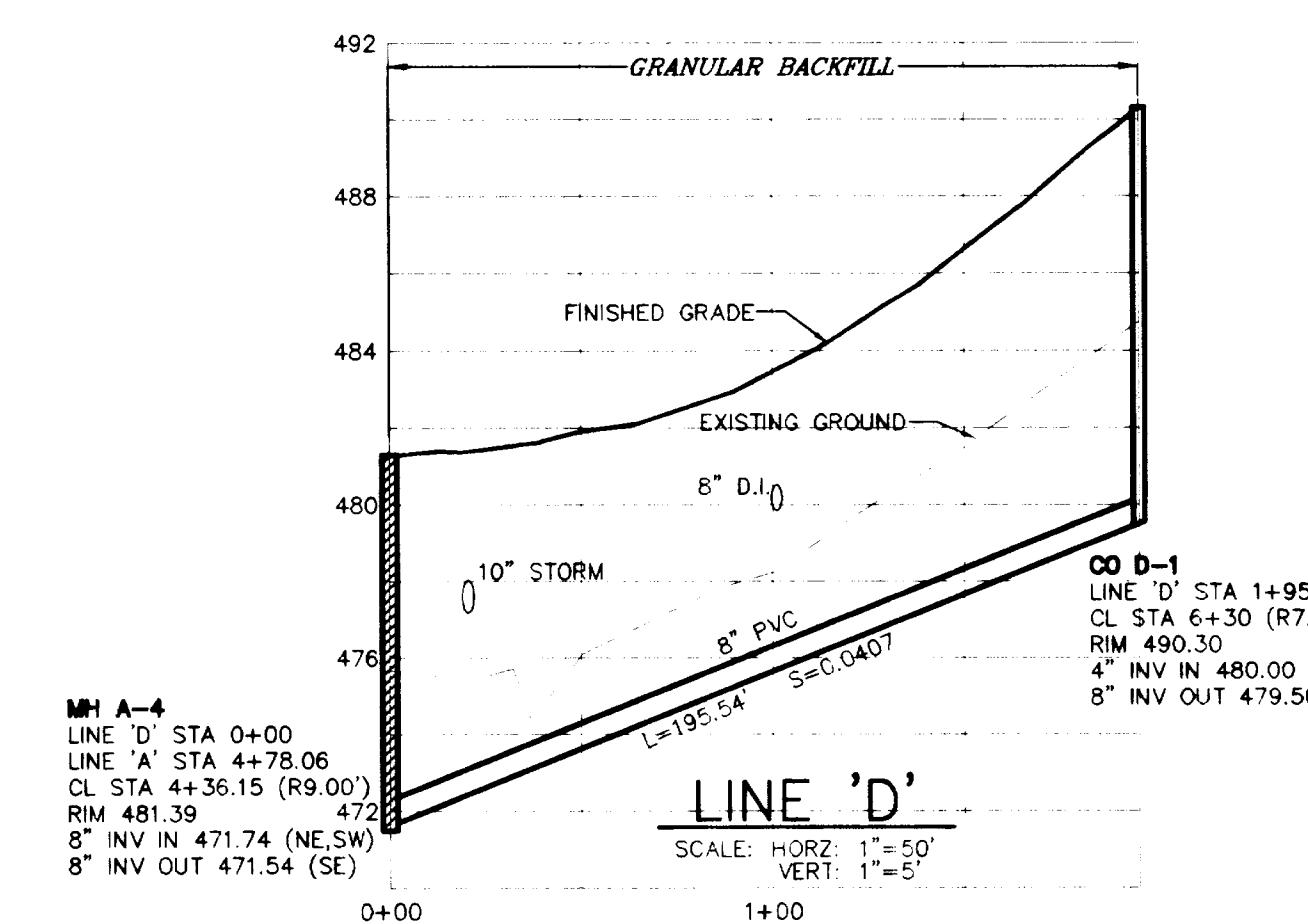
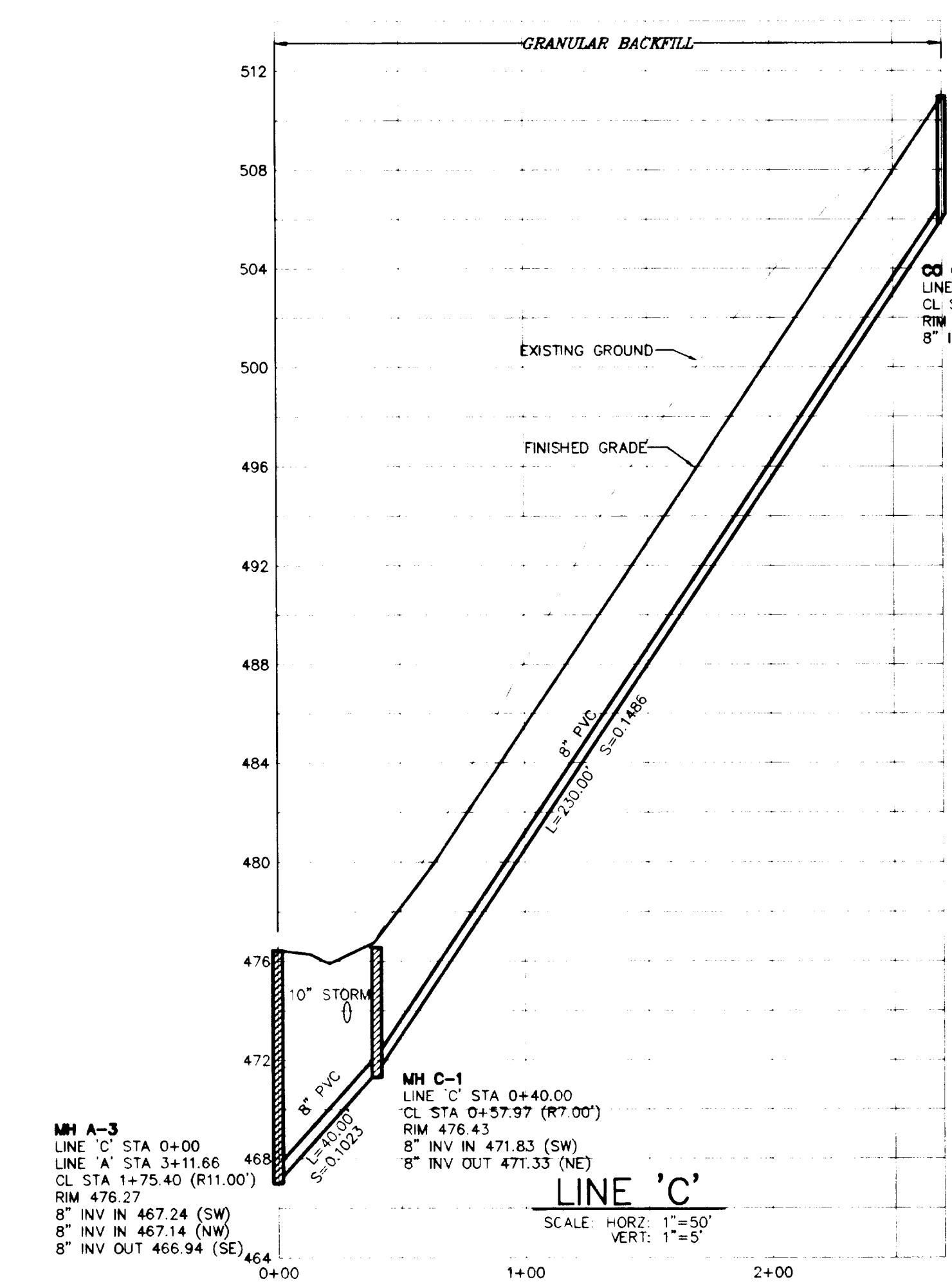
REGISTERED PROFESSIONAL  
ENGINEER  
PATRICK A. SISUL  
EXAMINED AND APPROVED  
MAY 16, 1998  
JOHN J. SISUL  
PATRICK A. SISUL  
SHEETS  
5  
OF 13 SHEETS

### RENAISSANCE HEIGHTS 3

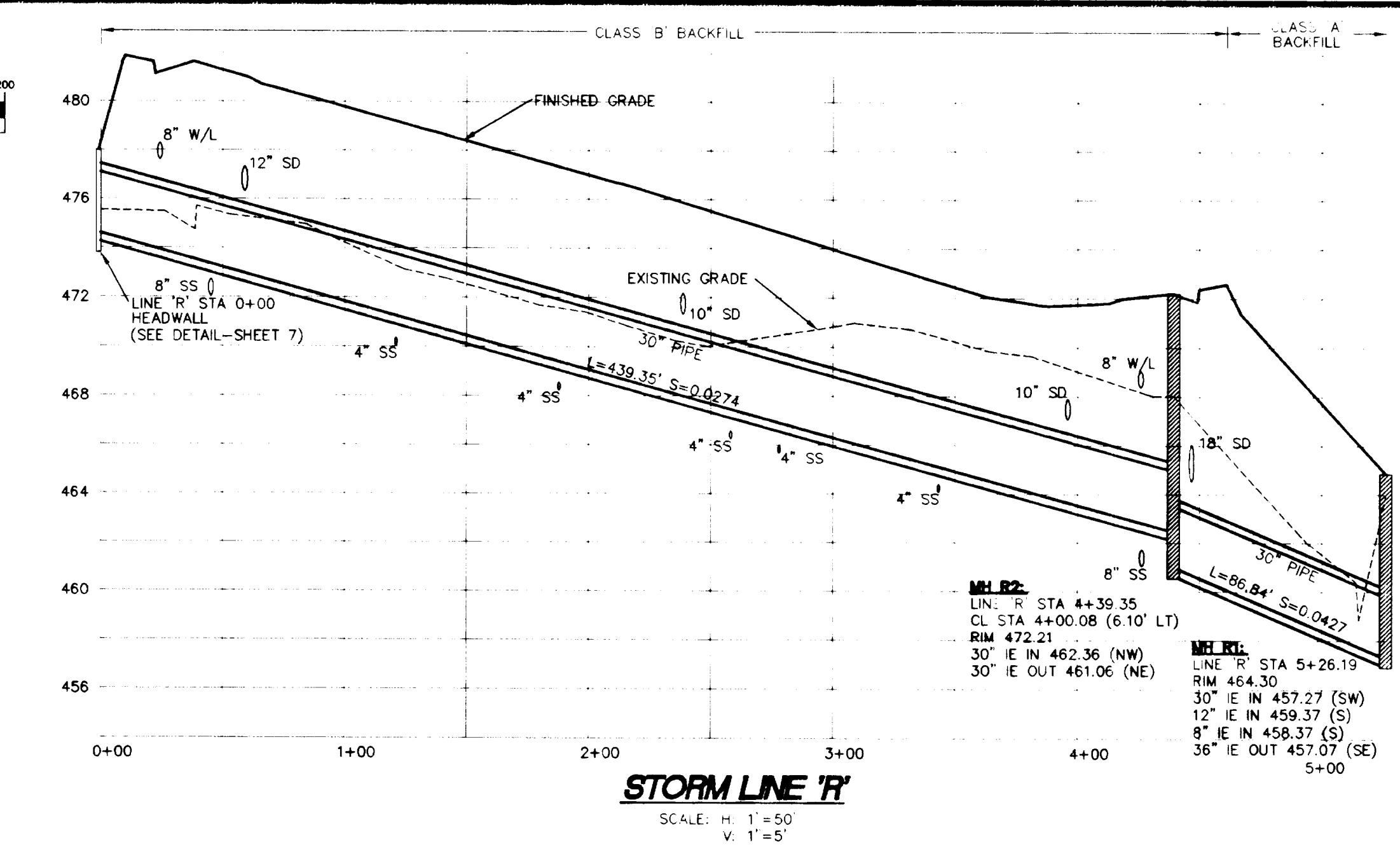
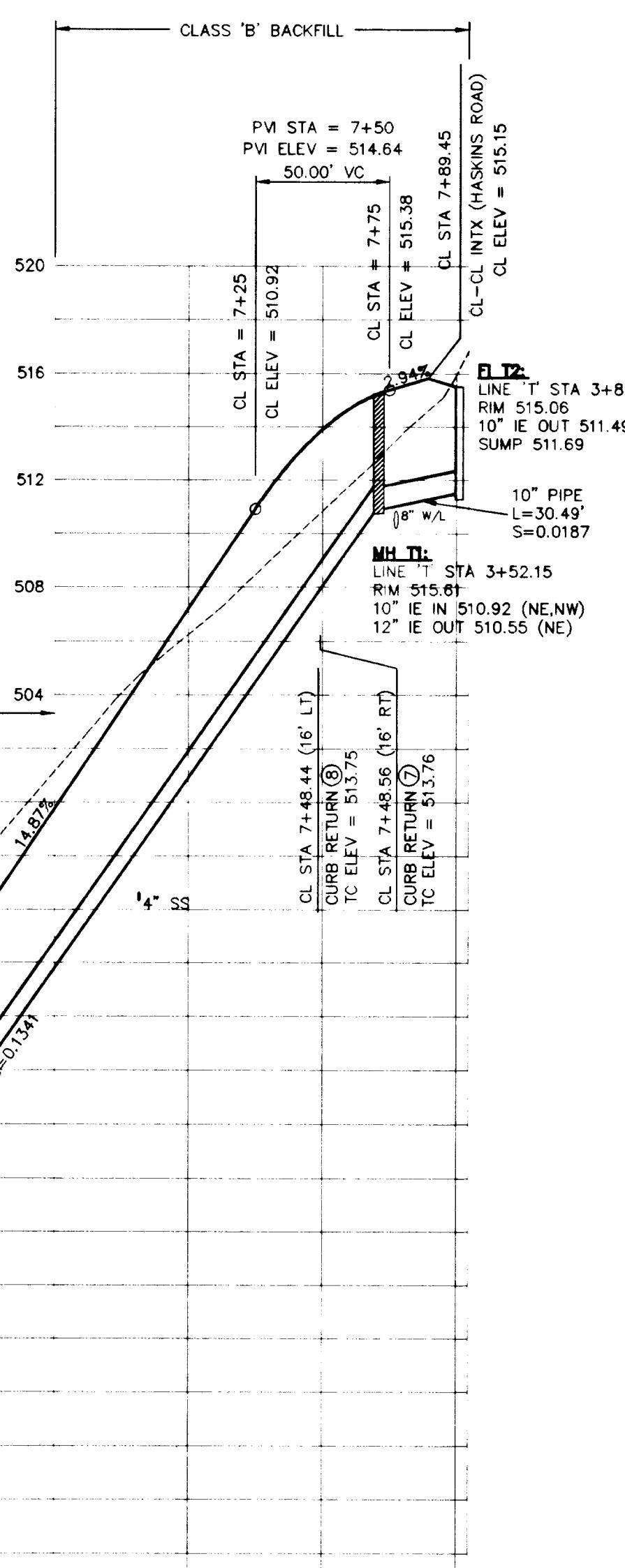
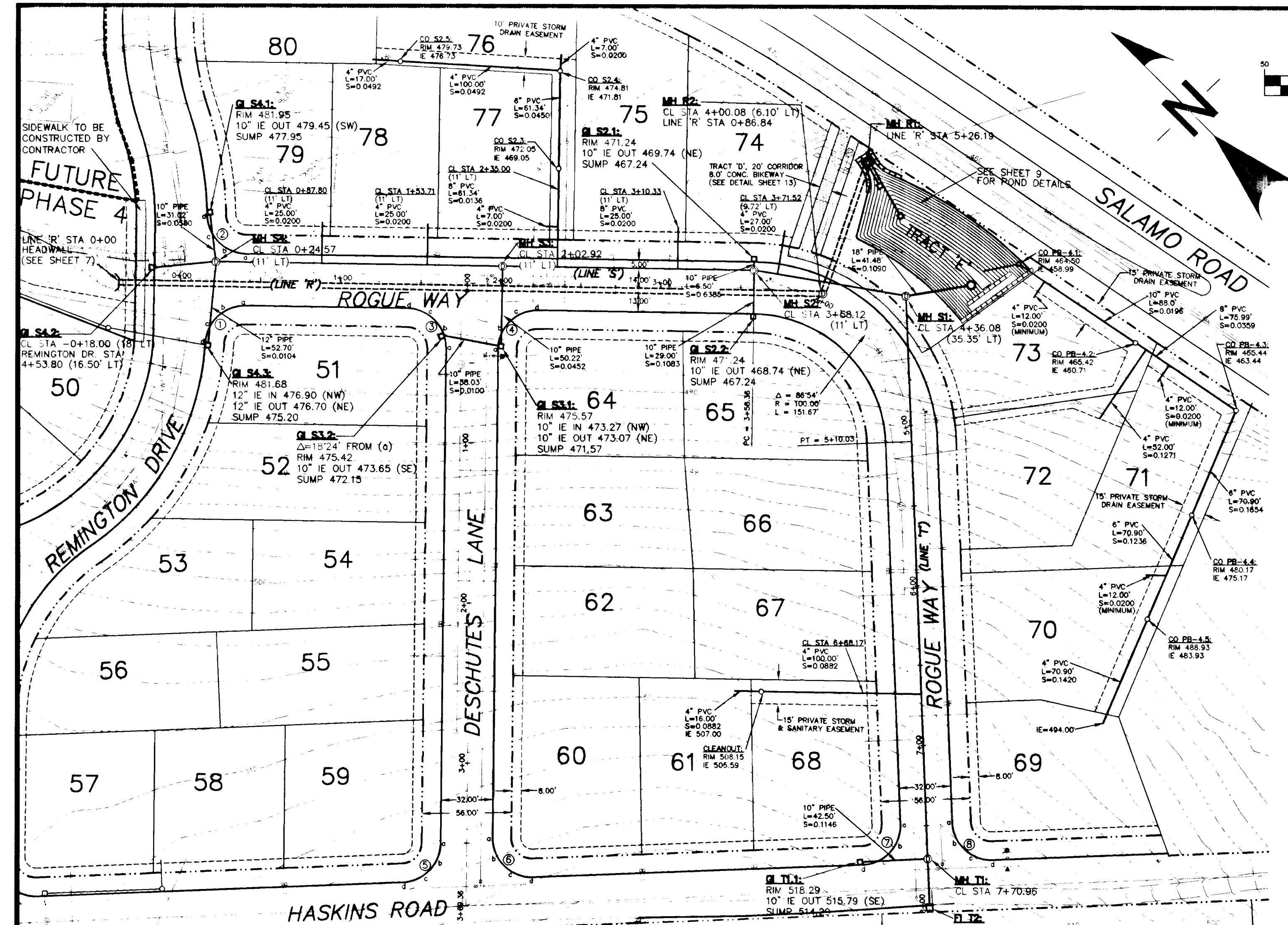
#### Sanitary Sewer Profiles



AS-BUILT



DATE APRIL 1998  
SCALE 1'=50'  
DRAWN JEE  
JOB 96-20B  
SHEET 5  
OF 13 SHEETS



**SISUL ENGINEERING**

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376 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 657-0188

**SISUL ENGINEER**

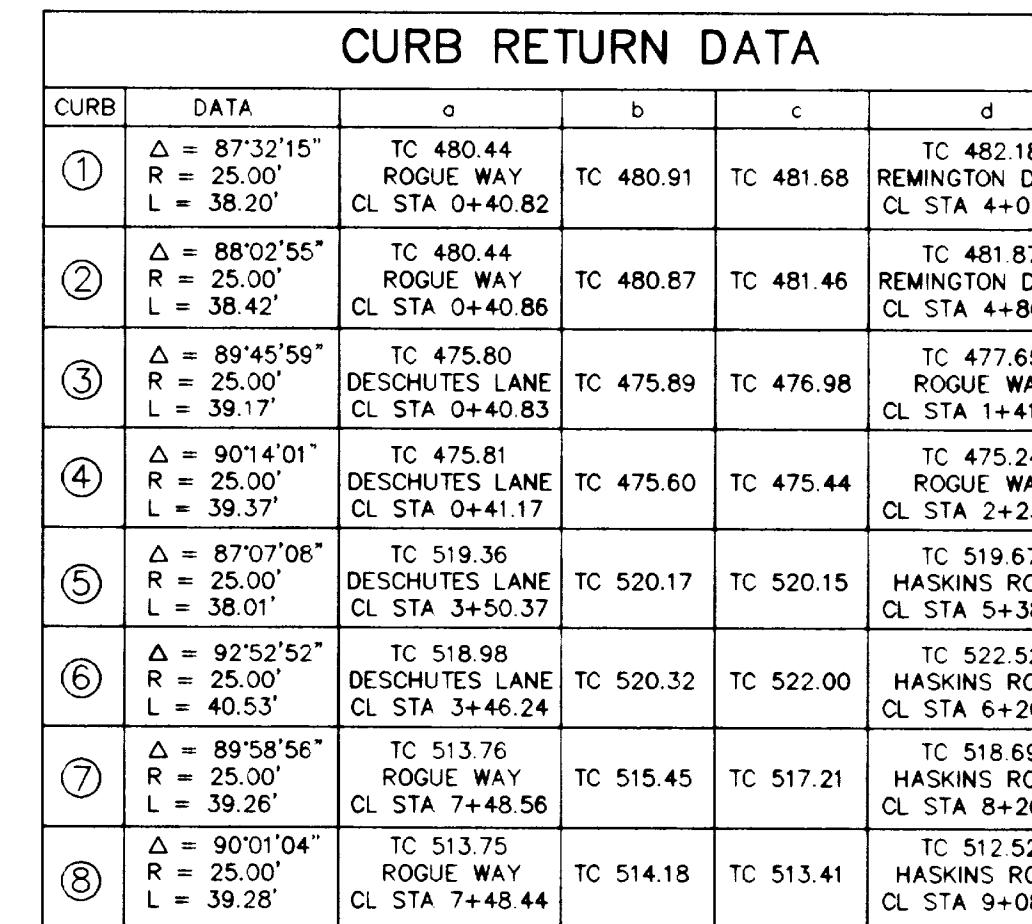
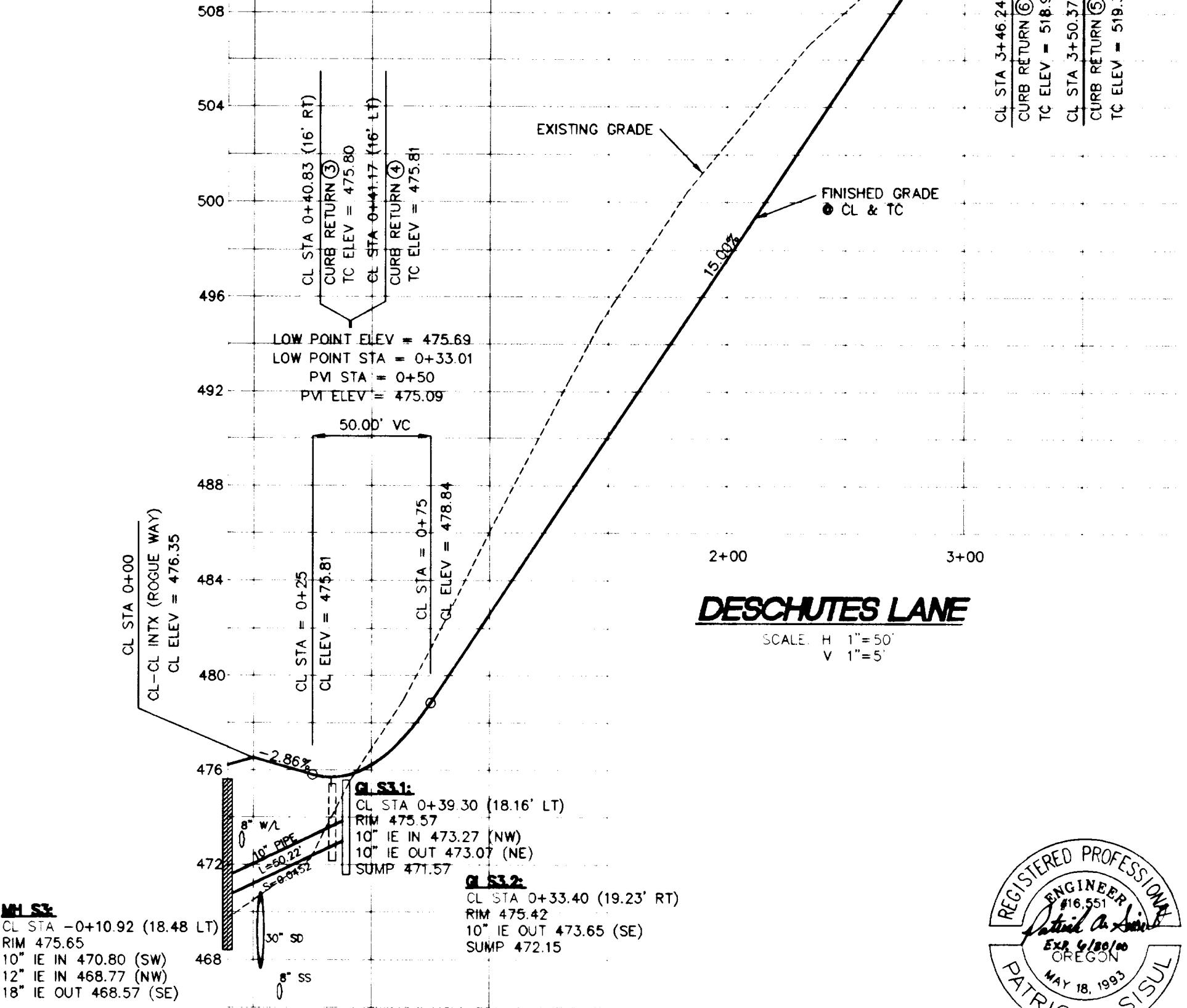
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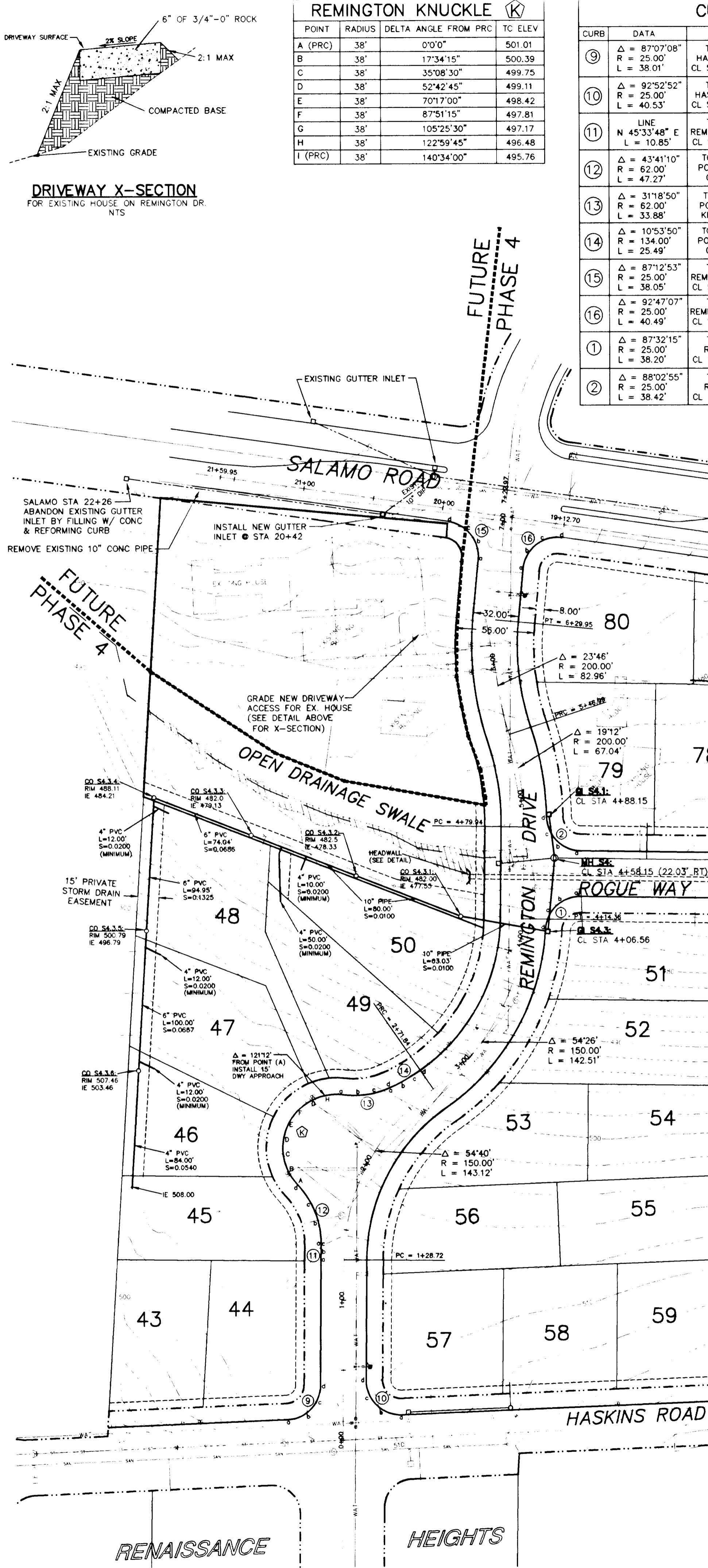
376 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 657-0188

**TE** APRIL 1998  
**ALE** 1" = 50'  
**AWN** SPC  
**B** 96-20B  
**EET**

Street & Storm Drain Plan  
Rogue Way, Deschutes Lane &  
Storm Line 'R'  
*RENAISSANCE HEIGHTS 3*  
*J.T. SMITH COMPANIES*

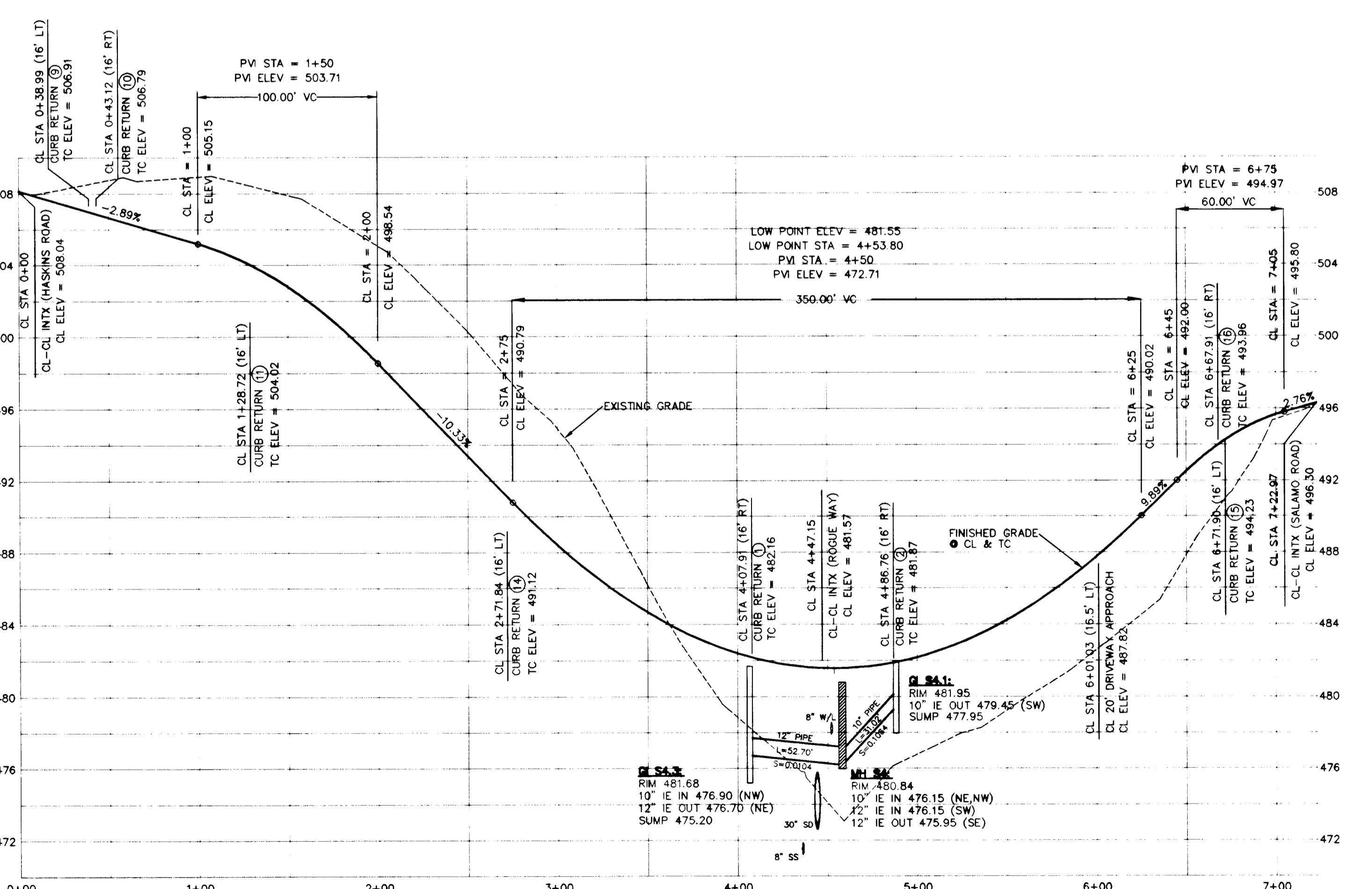
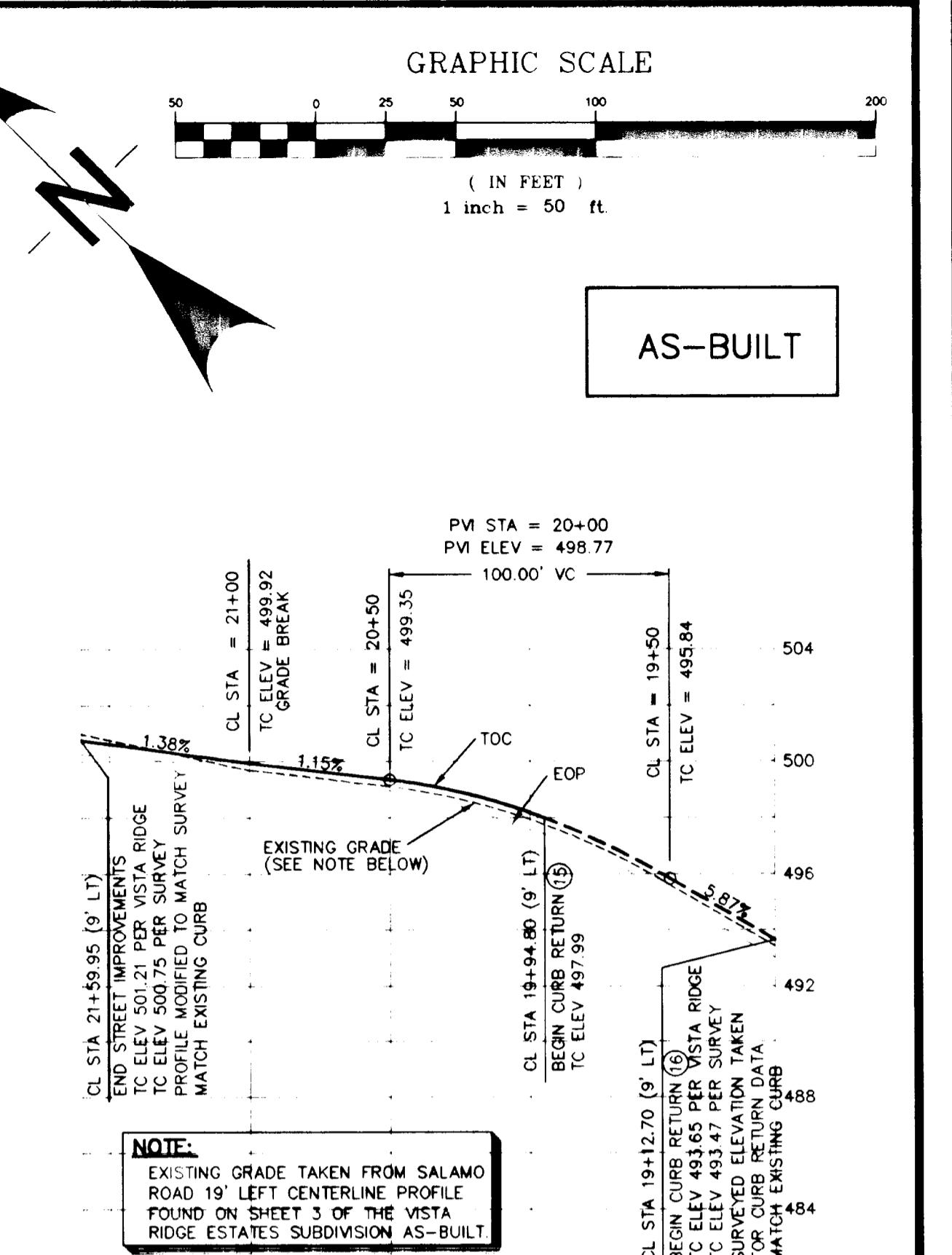
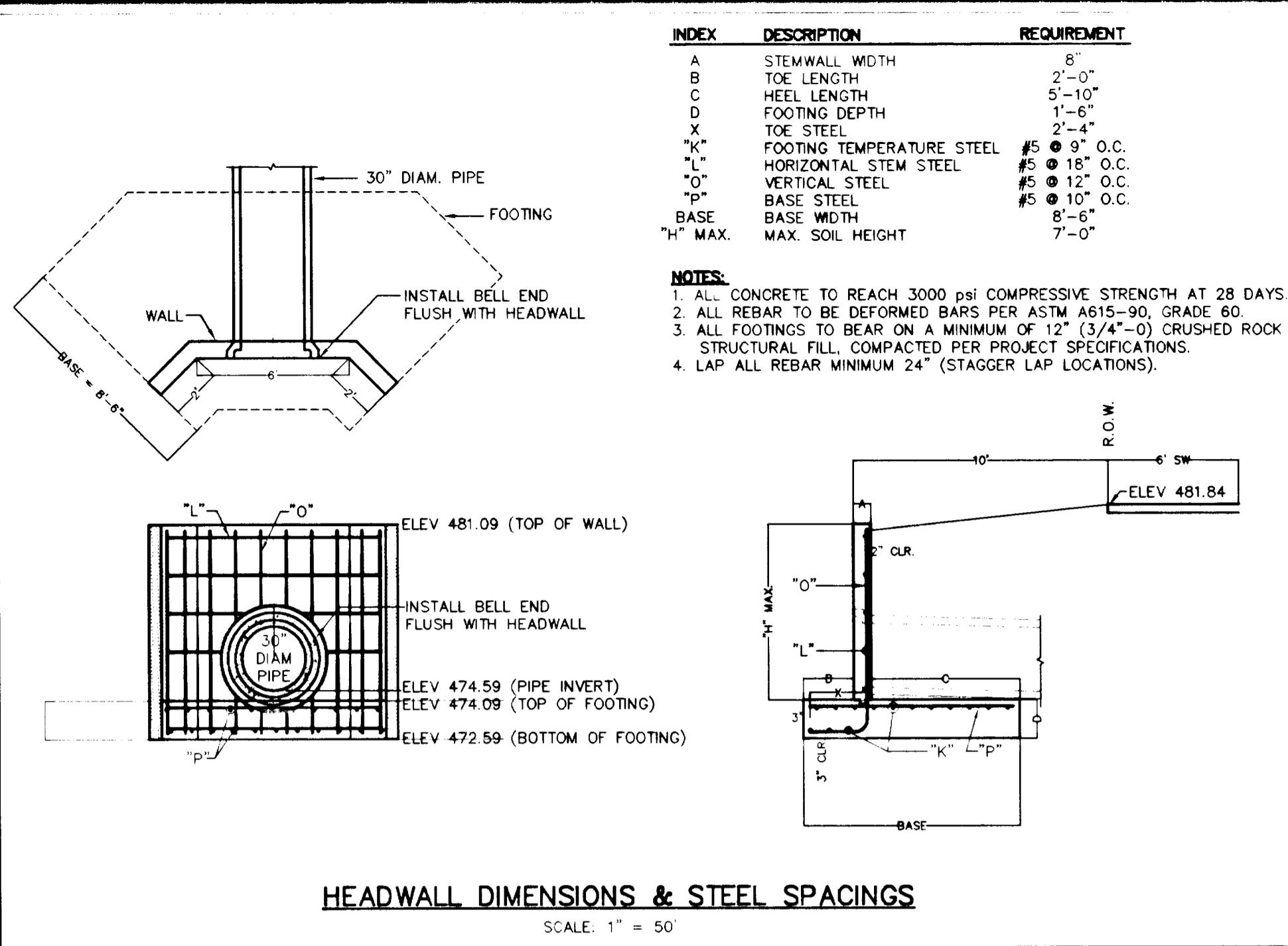
REVISIONS	
USE PEP 1st. CITY REV B RET S. STATIONS. MOVE WALKWAY.	P 4/30
BUILT 17/98	L





REMINGTON KNUCKLE			
POINT	RADIUS	DELTA ANGLE FROM PRC	TC ELEV
A (PRC)	38'	0°0'0"	501.01
B	38'	17°34'15"	500.39
C	38'	35°08'30"	499.75
D	38'	52°42'45"	499.11
E	38'	70°17'00"	498.42
F	38'	87°51'15"	497.81
G	38'	105°25'30"	497.17
H	38'	122°59'45"	496.48
I (PRC)	38'	140°34'00"	495.76

CURB	DATA	a	b	c	d
(9)	$\Delta = 87^{\circ}07'08"$ R = 25.00' L = 38.01'	TC 504.85 HASKINS ROAD CL STA 2+28.95	TC 506.02	TC 506.85	TC 506.91 REMINGTON D CL STA 0+38
(10)	$\Delta = 92^{\circ}52'52"$ R = 25.00' L = 40.53'	TC 510.59 HASKINS ROAD CL STA 3+11.06	TC 509.48	TC 508.08	TC 506.79 REMINGTON D CL STA 0+43
(11)	LINE N 45°33'48" E L = 10.85'	TC 504.02 REMINGTON DRIVE CL STA 1+28.72	TC 503.68	TC 503.40 POINT (a) OF CURVE (12)	<del>TC 501.01 POINT (A) OF KNUCKLE (11)</del>
(12)	$\Delta = 43^{\circ}41'10"$ R = 62.00' L = 47.27'	TC 503.40 POINT (c) OF CURVE (11)	TC 502.65	TC 501.85	TC 501.01 POINT (A) OF KNUCKLE (12)
(13)	$\Delta = 31^{\circ}18'50"$ R = 62.00' L = 33.88'	TC 495.76 POINT (i) OF KNUCKLE (K)	TC 495.03	TC 494.25	TC 493.42 POINT (a) OF CURVE (14)
(14)	$\Delta = 10^{\circ}53'50"$ R = 134.00' L = 25.49'	TC 493.42 POINT (d) OF CURVE (13)	TC 492.72	TC 491.98	TC 491.12 REMINGTON D CL STA 2+71
(15)	$\Delta = 87^{\circ}12'53"$ R = 25.00' L = 38.05'	TC 494.23 REMINGTON DRIVE CL STA 6+71.90	TC 495.42	TC 496.97	TC 497.99 SALAMO RD CL STA 19+9
(16)	$\Delta = 92^{\circ}47'07"$ R = 25.00' L = 40.49'	TC 493.96 REMINGTON DRIVE CL STA 6+67.91	TC 494.58	TC 494.25	TC 493.47 SALAMO RD CL STA 19+1
(1)	$\Delta = 87^{\circ}32'15"$ R = 25.00' L = 38.20'	TC 480.44 ROGUE WAY CL STA 0+40.82	TC 480.91	TC 481.68	TC 482.16 REMINGTON D CL STA 4+0
(2)	$\Delta = 88^{\circ}02'55"$ R = 25.00' L = 38.42'	TC 480.44 ROGUE WAY CL STA 0+40.86	TC 480.87	TC 481.46	TC 481.87 REMINGTON D CL STA 4+8



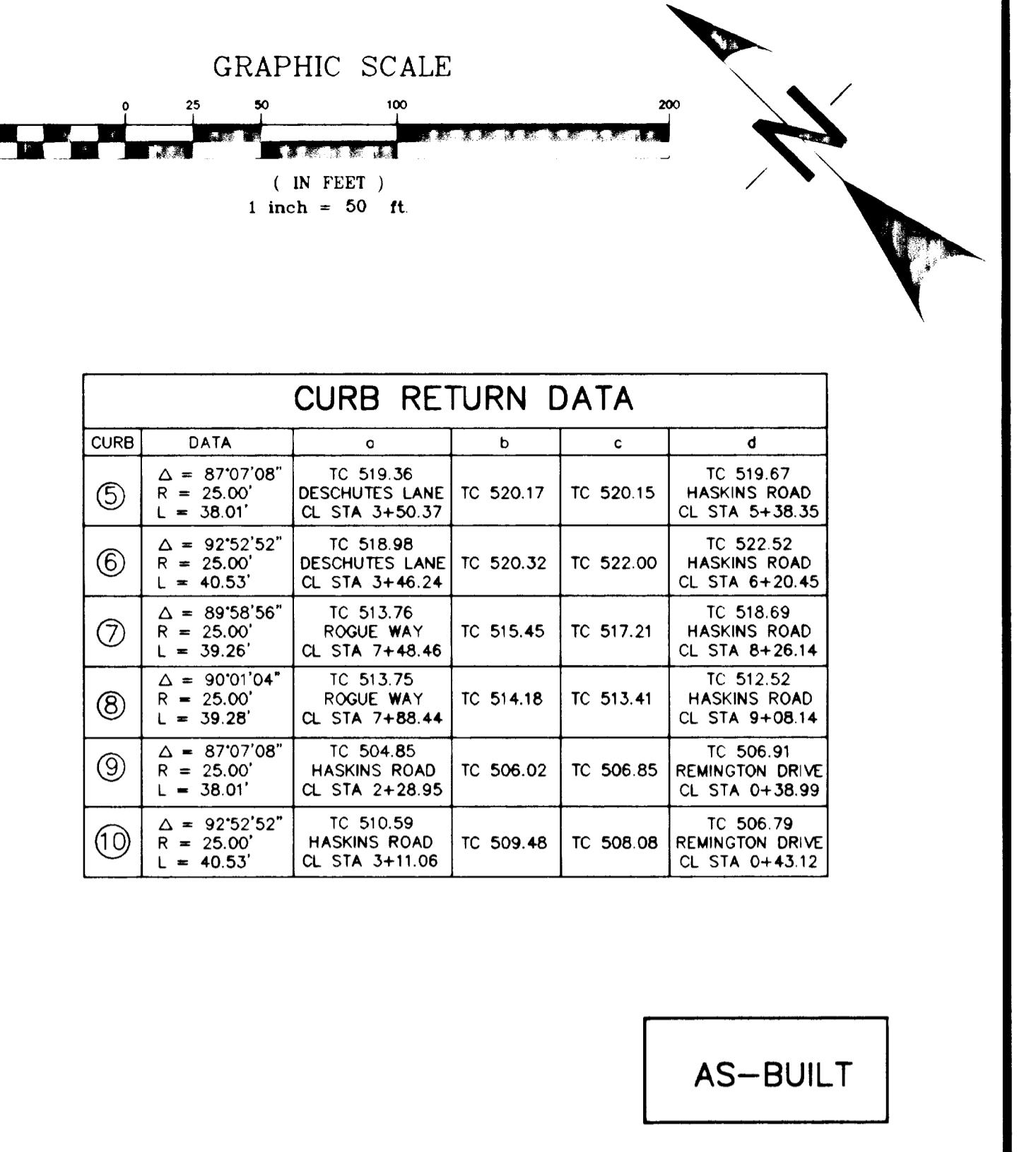
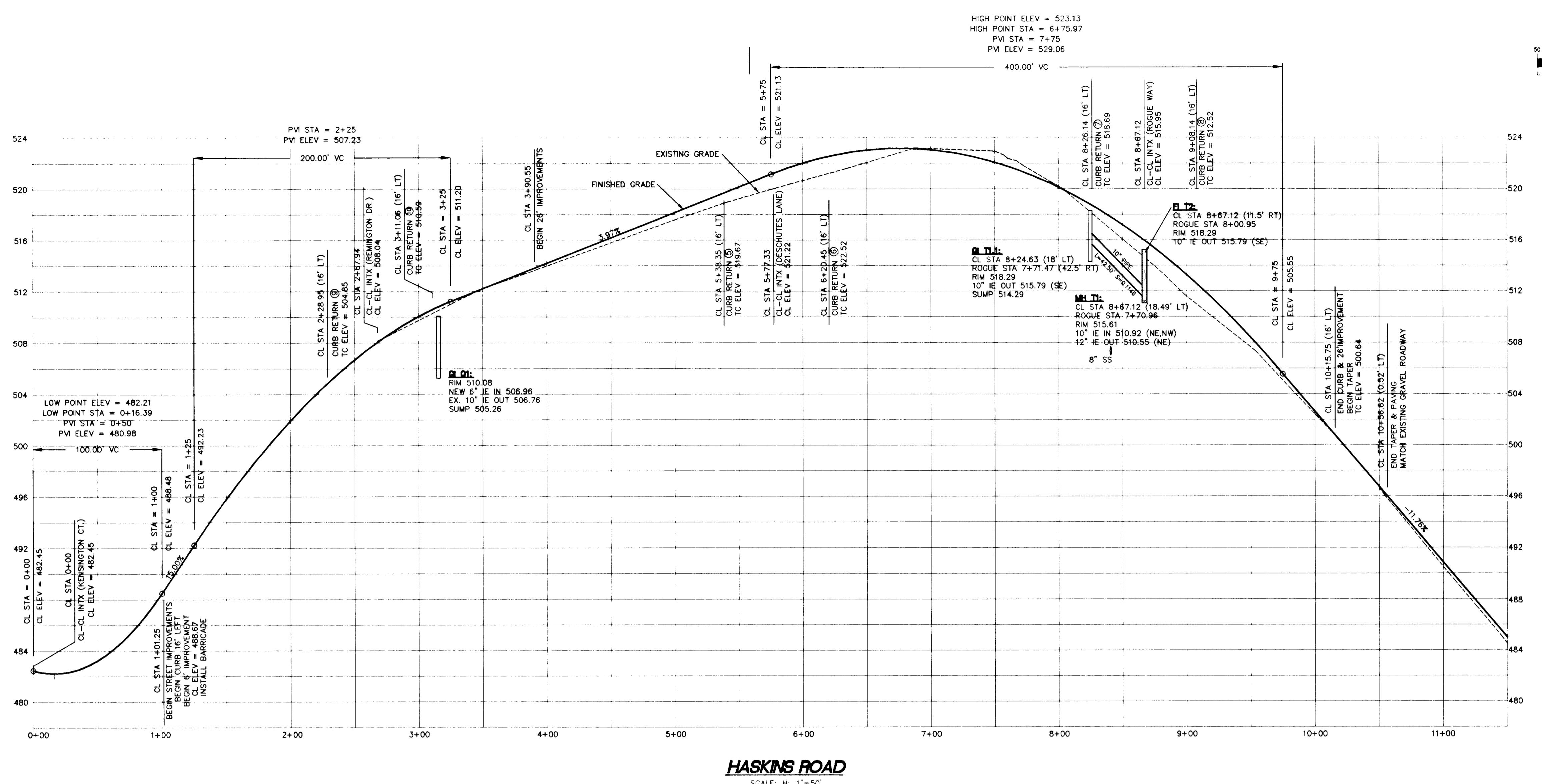
**REMINGTON DRIVE**

**SISUL ENGINEERING**

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3375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 857-0188

**DATE** APRIL 1998  
**SCALE** 1" = 50'  
**DRAWN** SPC  
**JOB** 96-20B  
**SHEET** 7  
OF 13 SHEETS



S-BUILT

# J.T. SMITH COMPANIES

J. T. SMITH COMPANIES

SUCCER & SCOTT LTD  
Haskins Road

**SUL ENGINEERING**

---

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

APRIL 1998

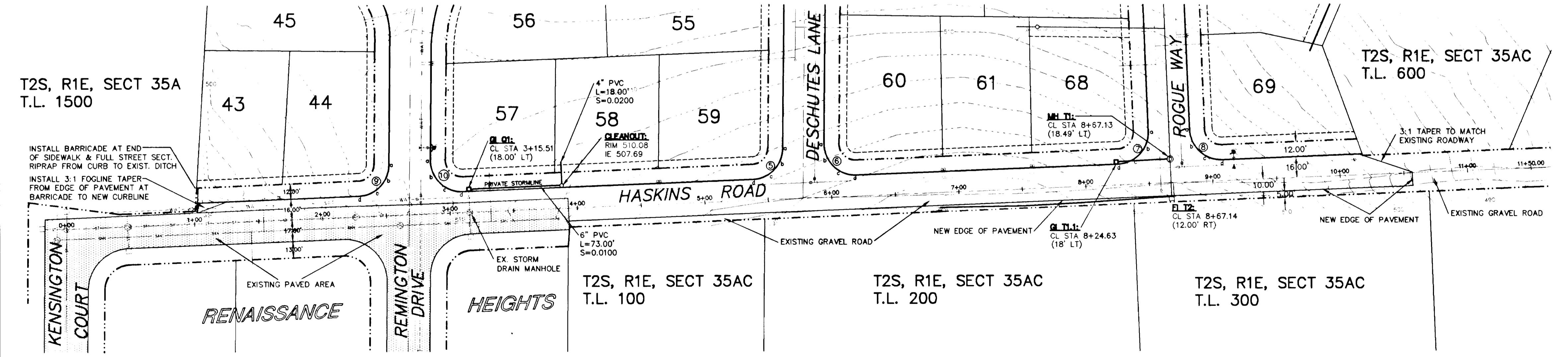
1" = 50'  
SPC  
96-20B

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**8**

**SHEETS**

**NOTE:** THIS DEVELOPMENT TO PARTICIPATE IN AN UPGRADE OF THE REGIONAL DETENTION POND AT THE INTERSECTION OF TANNLER DRIVE AND GREENE STREET AS PART OF THE HASKINS ROAD DETENTION REQUIREMENTS.

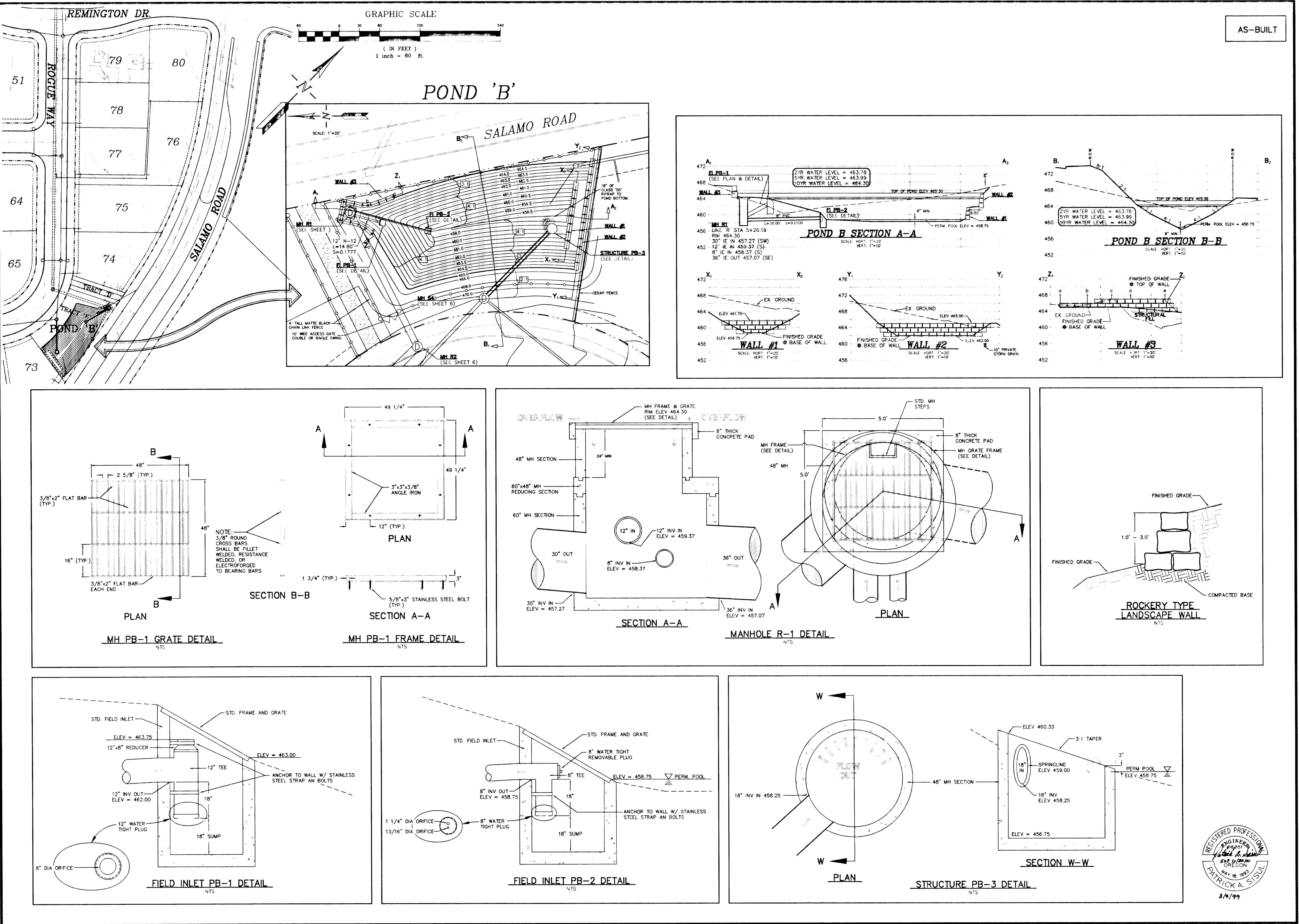


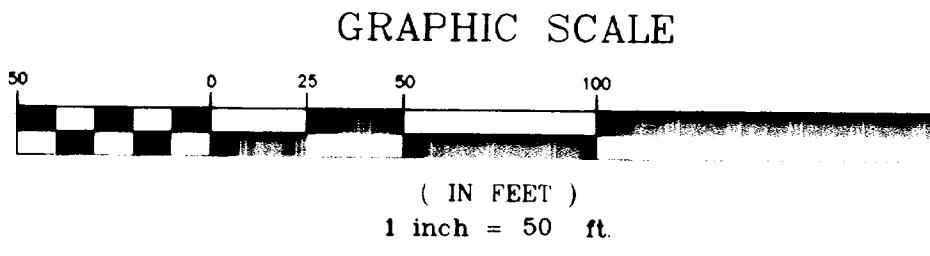
REVISIONS E  
REVISED PER CITY JH  
REVIEW 4/29/98  
AS-BUILT LD  
11/17/98

**SISUL ENGINEERING**  
375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 857-0166  
REGISTERED PROFESSIONAL ENGINEER  
State of Oregon  
Date April 1998  
Scale Noted  
Drawn JH  
Job 96-2CB  
Sheet 84/99  
**9**  
Sheets 13

### RENAISSANCE HEIGHTS 3

J.T. SMITH COMPANIES





## GRAPHIC SCALE

( IN FEET )

1 inch = 50

ESTIMATED EARTHWORK QUANTITIES (QUANTITIES ARE TO <u>SUBGRADE</u> )	
STRIPPINGS (8")	7700 CU. YARD
EXCAVATION	15350 CU. YARD
TRENCHLINES	2830 CU. YARD
EMBANKMENT (ONSITE)	18180 CU. YARD
EMBANKMENT (IMPORT)	1550 CU. YARD

THE ABOVE QUANTITIES ARE BANK YARDS AND  
NOT BEEN ADJUSTED FOR SHRINK/SWELL POTEN

LEGEND

500 EXISTING GROUND CONTOUR

500 FINISHED GRADE CONTOUR

x\* FILL TICK FROM STRIPPED GRADE TO SUBGRADE

CUT TICK FROM STRIPPED GRADE TO SUBGRADE

SEDIMENT FENCE

**NOTE:** AFTER GRADING LOTS, EITHER REPLACE STRIPPINGS OVER GRADED AREA, OR COVER WITH SEED/MULCH MIXTURE. DO NOT LEAVE GRADED AREAS EXPOSED DURING WET SEASON (NOVEMBER 1-APRIL 30)

AS-BUILT

<b>REVISIONS</b>		<b>BY</b>
ON	ENT BENCH	PS
G SWALE & MODIFY		4/30/98
75-77 & QUANTS		
UILT		LD
/98		

# *RENAISSANCE HEIGHTS* 3

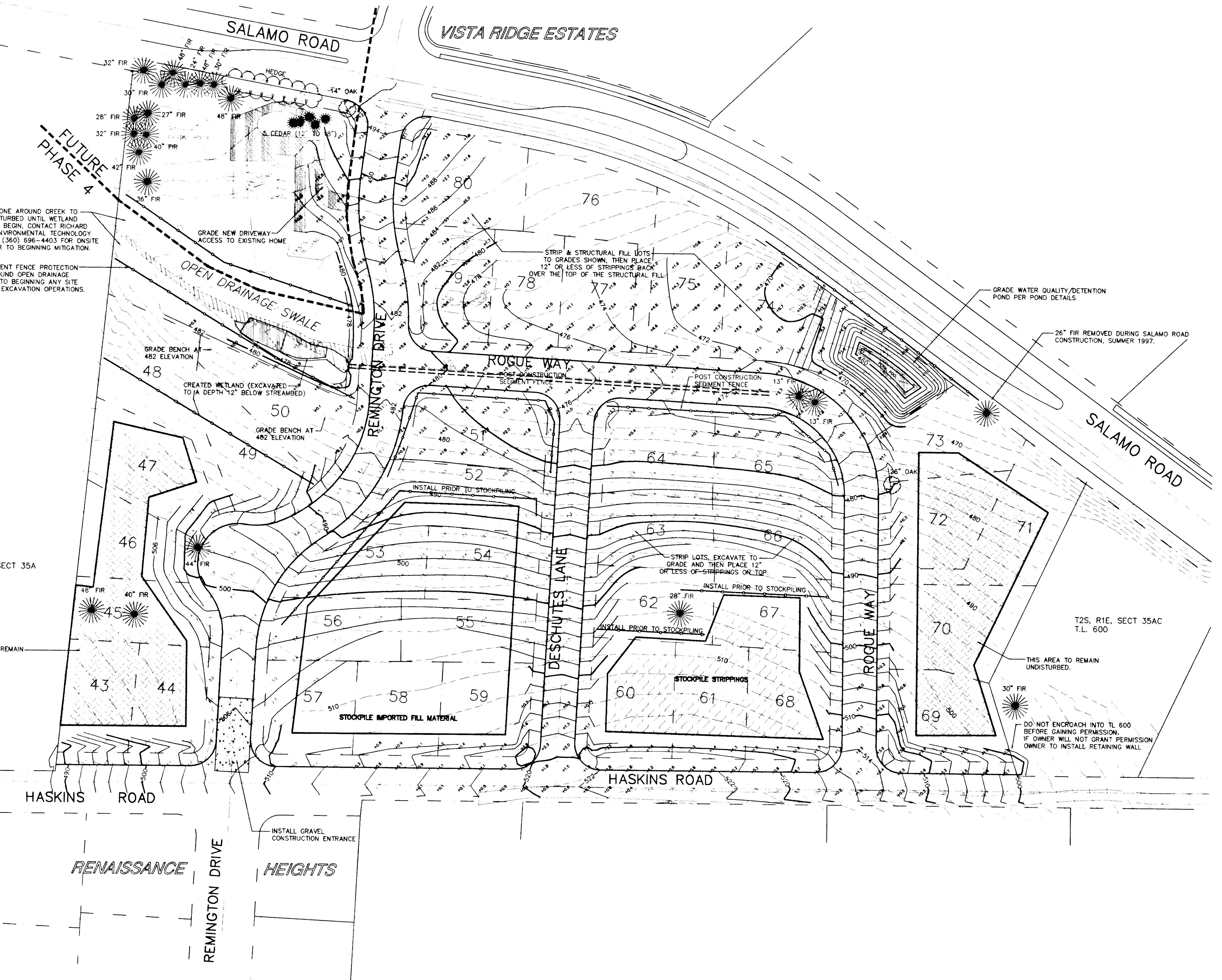
# J. T. SMITH COMPANIES

# Erosion Control Plan Grading and

**ISUL ENGINEERING**  
33125 BOEREN AVE NIT

**GLADISIUNE, OREGON 87027  
(503) 657-0188**

MARCH 1998  
E 1" = 50'  
N SPC/PS  
T 96-20B  
**10**  
13 SHEETS



REVISIONS BY  
AS-BUILT 1/17/98 LD

### RENAISSANCE HEIGHTS 3

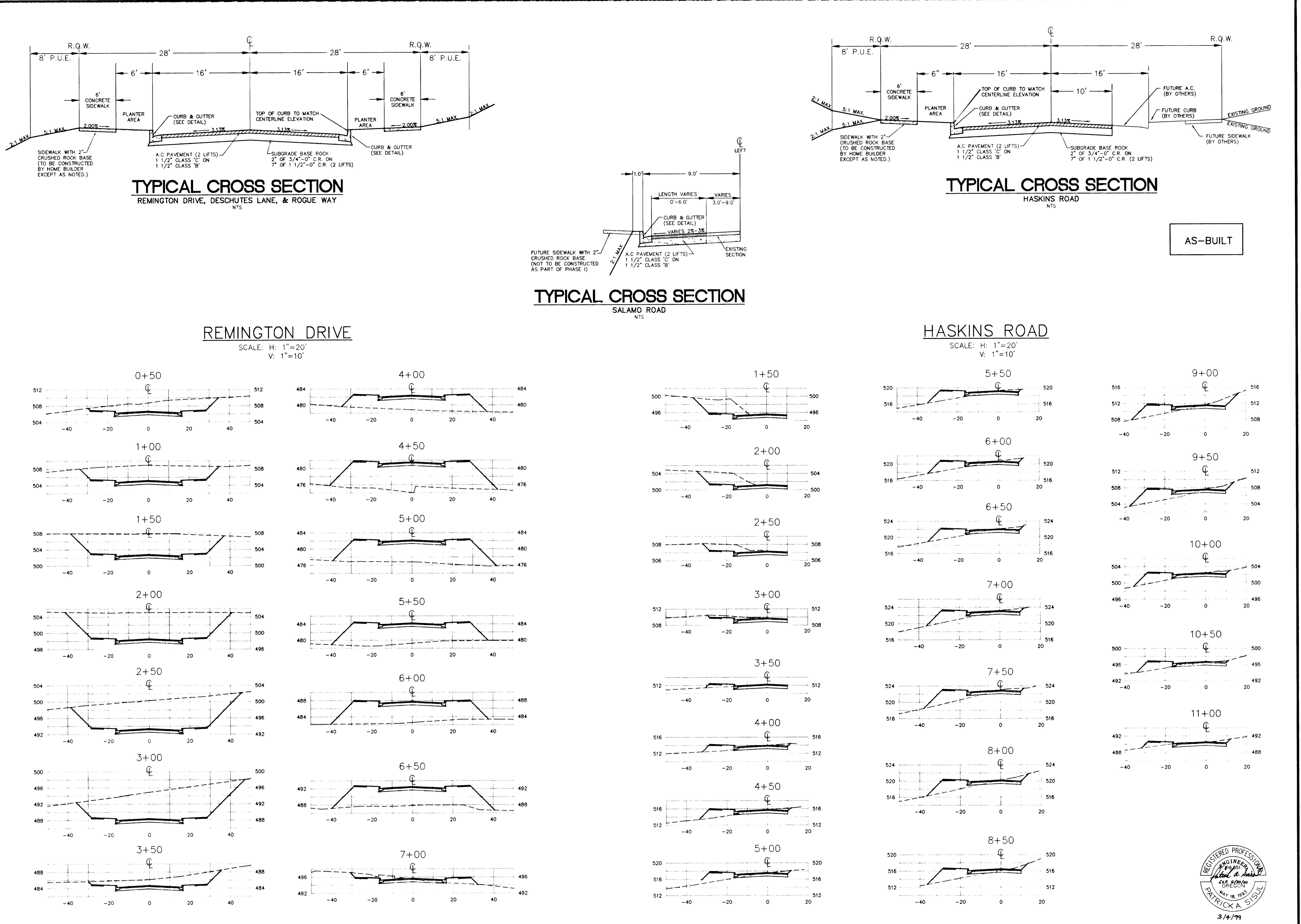
J.T. SMITH COMPANIES

### Typical Sections & Cross Sections

SISUL ENGINEERING

375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 857-0188

DATE MARCH 1998  
SCALE NOTED  
DRAWN SPC  
JOB 96-2CB  
SHEET 11  
DF 13 SHEETS



REVISIONS BY  
DRAFTED 11/17/98 L1

# RENAISSANCE HEIGHTS 3

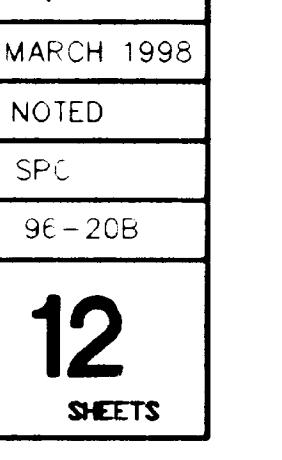
J.T. SMITH COMPANIES

## Cross Sections

**SISUL ENGINEERING**

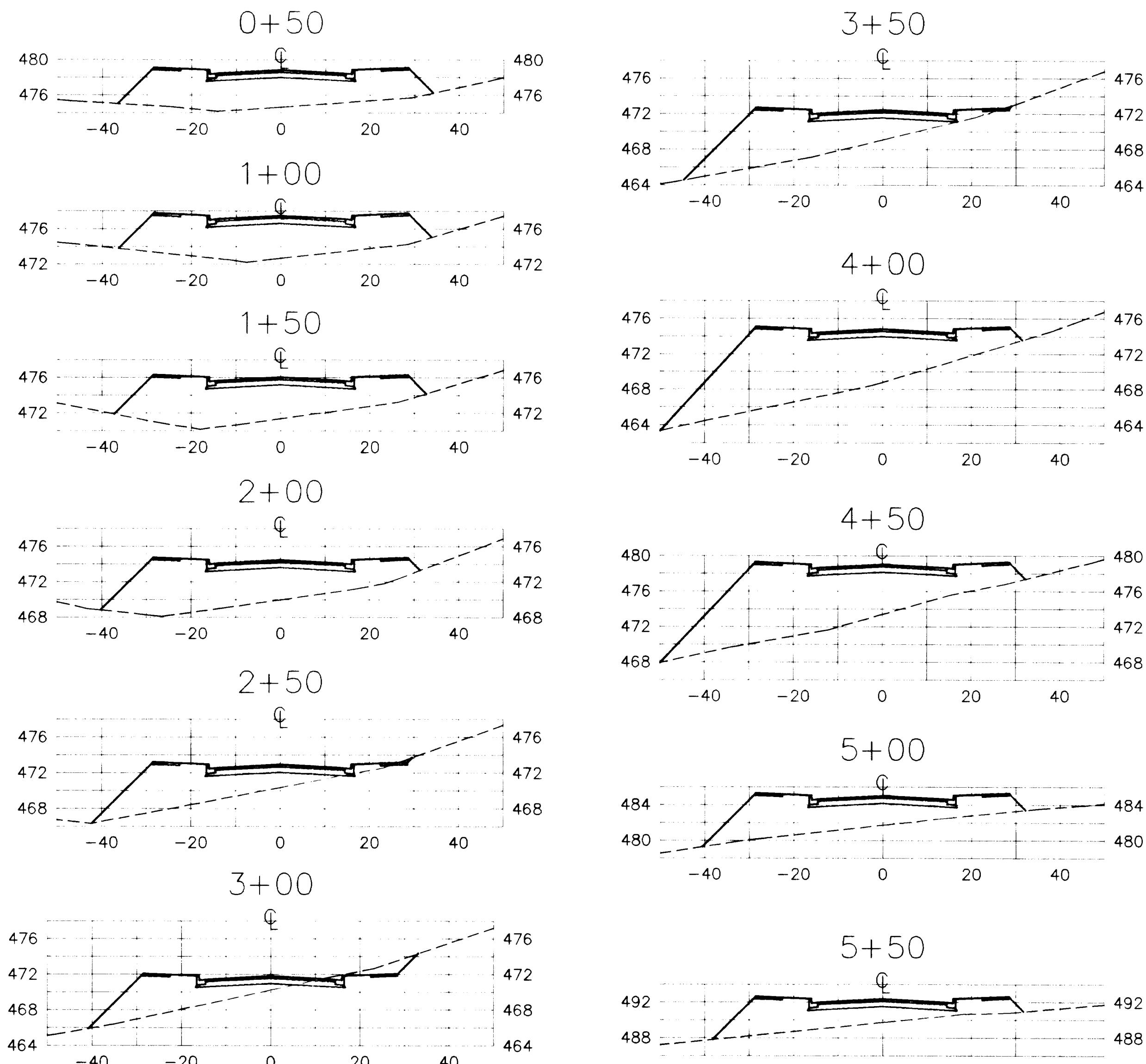
3775 PORTLAND AVENUE  
GLENDALE, OREGON 97027  
(503) 657-0188

DATE MARCH 1998  
SCALE NOTED  
DRAWN SPC  
JOB 96-20B  
SHEET 12  
OF 13 SHEETS



### ROGUE WAY

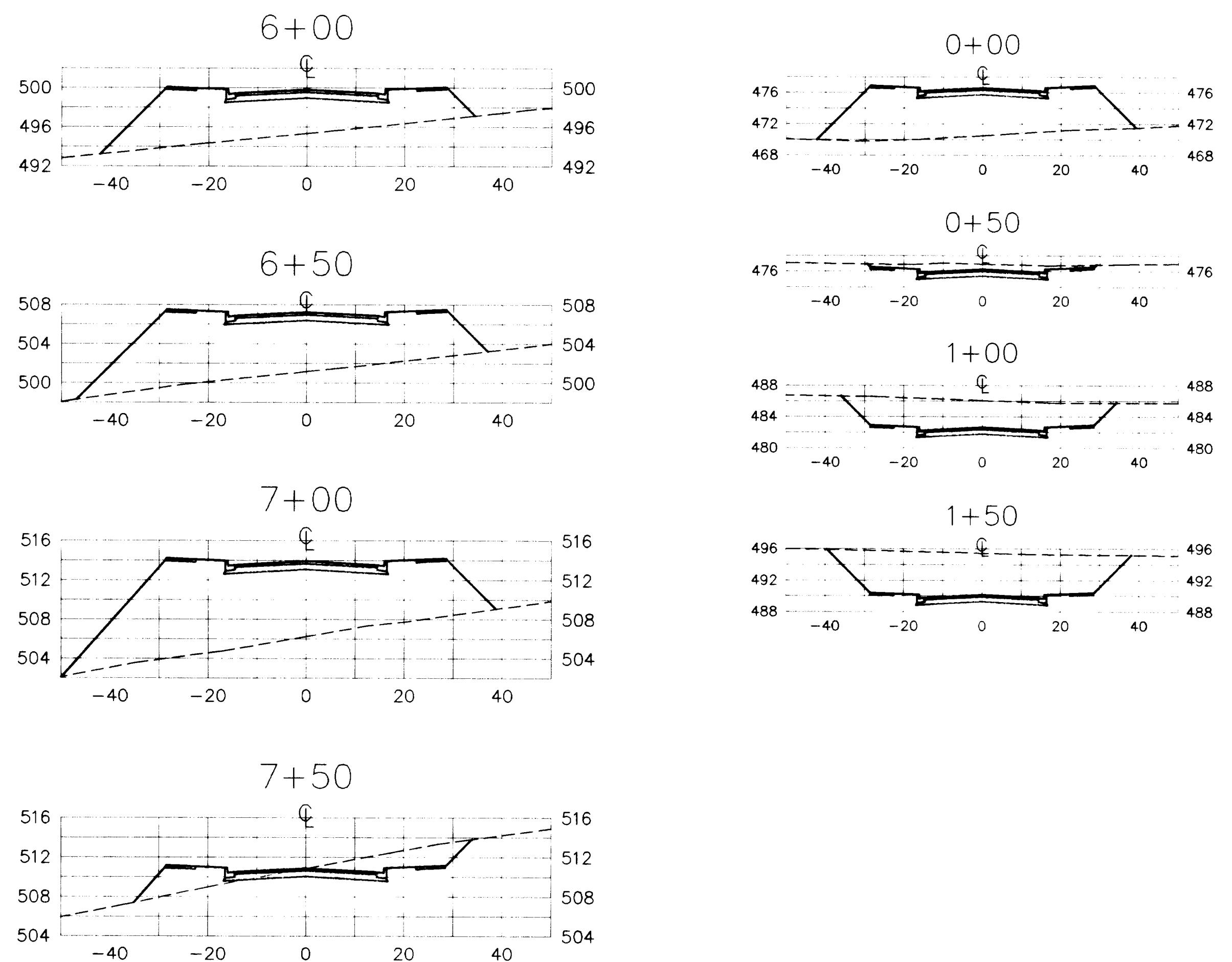
SCALE: H: 1"=20'  
V: 1"=10'

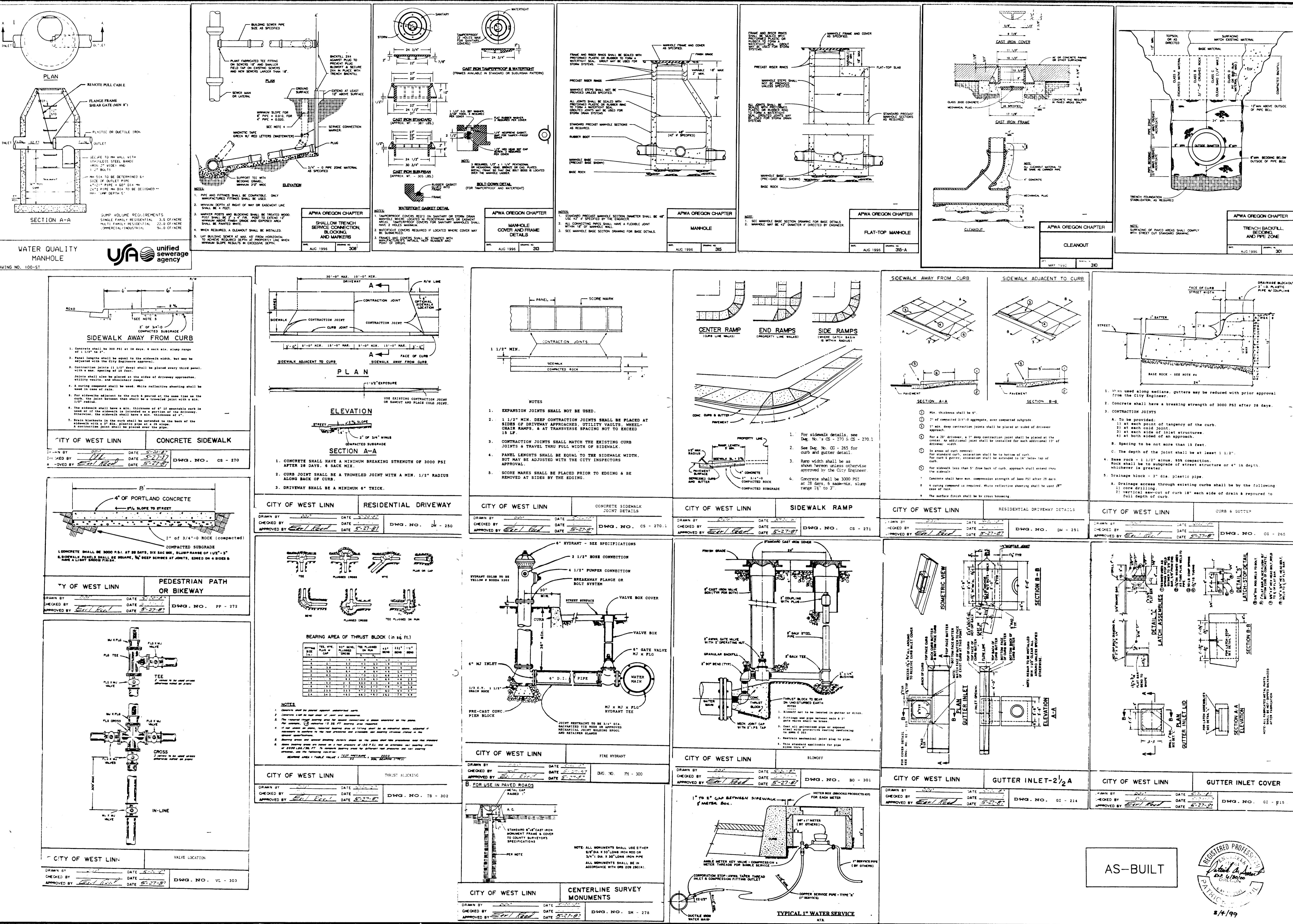


### DESCHUTES LANE

SCALE: H: 1"=20'  
V: 1"=10'

AS-BUILT





REVIEWS 3

ADVANCE NOTICE

## Details

**ISUL ENGINEERING**  
175 PORTLAND AVENUE

**SUL ENGINE**  
715 PORTLAND AVENUE

APRIL  
NTS  
PS  
96-  
**13**

1998  
20B  
3  
MEETS