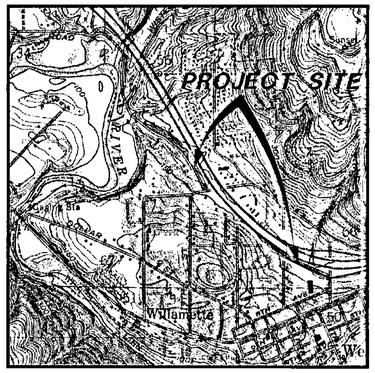
CITY OF WEST LINN

DEPARTMENT OF PUBLIC WORKS

STORM DESIGN PROJECT

10TH STREET
AND
JOHNSON ROAD LOCATIONS



VICINITY MAP
NTS

GENERAL LEGEND

NEW	EXISTING	DESCRIPTION
		R.O.W./PROPERTY LINE
		CENTERLINE OF ROAD
		STREAM CORRIDOR
		CULVERT/OUTFALL
	W	WATER
	SD	STORM DRAIN
		PERF. PIPE
	S	SANITARY SEWER
	E	ELECTRICAL LINE
		FLOWLINE OF DITCH OR STREAM
		TOP OR TOE OF SLOPE
		EDGE OF GRAVEL OR RIP-RAP
		EDGE OF A.C. PAVEMENT
		SAWCUT LINE IN A.C.
		GABION RETAINING WALL
		EXISTING TREE
		STREET LIGHT
		DITCH INLET
		BIOBAGS
		FENCE
		SANITARY SEWER MANHOLE
		STORM DRAIN MANHOLE
		CATCH BASIN
	VE	UTILITY VAULT
		SIGN
		GUY POLE ANCHOR
50	50	CONTOUR ELEVATION
	× 50.0	GRADE ELEVATION

ABBREVIATIONS

A.C.	ASPHALTIC CONCRETE	MIN.	MINIMUM
A.D.	ALGEBRAIC DIFFERENCE	NTS	NOT TO SCALE
BVCS	BEGIN VERTICAL CURVE STATION	O.C.	ON CENTER
BVCE	BEGIN VERTICAL CURVE ELEVATION	PC	POINT OF CURVATURE
CB	CATCH BASIN	PCC	POINT OF COMPOUND CURVE
℄	CENTERLINE	PERF.	PERFORATED
C.O.W.L.	CITY OF WEST LINN	℘	PROPERTY LINE
CONC.	CONCRETE	PP	POWER POLE
DEC	DECIDUOUS	PRC	POINT OF REVERSE CURVE
E	ELECTRICAL	PT	POINT OF TANGENCY
ESC	EROSION AND SEDIMENT CONTROL	PVI	POINT OF VERTICAL INTERSECTION
EL	ELEVATION	R	RADIUS
EOP	EDGE OF PAVEMENT	RP	RESOURCE PROTECTION
EVCS	END VERTICAL CURVE STATION	RT	RIGHT
EVCE	END VERTICAL CURVE ELEVATION	R.O.W.	RIGHT-OF-WAY
EVG	EVERGREEN (ROAD)	TEL	TELEPHONE
EXIST.	EXISTING	TV	TELEVISION
GB	GRADE BREAK	TYP.	TYPICAL
G	GAS	S=	SLOPE EQUALS
HP	HIGH POINT	SD	STORM DRAIN
IE	INVERT ELEVATION	SHT	SHEET
L	LENGTH	ST	STATION
LF	LINEAL FEET	SS	SANITARY SEWER
LP	LOW POINT	S/W	SIDEWALK
L/S	LANDSCAPE	VC	VERTICAL CURVE
LT	LEFT	W	WATER
MAX.	MAXIMUM	WM	WATER METER
MH	MANHOLE		

GENERAL NOTES

1. THE SURVEY WAS PERFORMED BY KPFF CONSULTING ENGINEERS, DATED MARCH 30, APRIL 3, 6, AND 9, 2001. THE 10TH ST. SURVEY ELEVATIONS ARE BASED ON AN EXIST. MH LOCATED NEAR THE EAST END OF THE PROJECT WITH A RIM ELEVATION OF 142.3± PER W.B. WELLS SURVEY DATED 12-01-99. THE JOHNSON RD. SURVEY ELEVATIONS ARE BASED ON AN EXIST. MH LOCATED ON THE WEST SIDE OF JOHNSON RD. WITH A RIM ELEVATION OF 147.9± PER C.O.W.L.
2. THE RIGHT OF WAYS SHOWN HEREON ARE GRAPHICAL REPRESENTATIONS OF COMPILED RECORD BOUNDARIES.
3. THE CONTRACTOR SHALL PERFORM ALL WORK SHOWN ON THE DRAWINGS AND ALL INCIDENTAL WORK CONSIDERED NECESSARY TO COMPLETE THE PROJECT IN AN ACCEPTABLE MANNER.
4. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS AND DRAWINGS, OREGON DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
5. THE CONTRACTOR SHALL EXERCISE CARE WHEN WORKING NEAR TREES TO PREVENT DAMAGE TO TREES, INCLUDING BARK AND ROOT ZONE. THE CONTRACTOR SHALL BE SUBJECT TO FINES, PENALTIES AND MITIGATION FOR TREES THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION, EXCEPT FOR TREES DIRECTED BY THE CITY ARBORIST TO BE REMOVED.
6. TREE PROTECTION FENCING FOR ALL TREES LOCATED WITHIN WORK LIMITS SHALL BE IN PLACE PRIOR TO ANY GRADING, CLEARING, OR CONSTRUCTION IN THE VICINITY OF EACH TREE.
7. ALL CONSTRUCTION ACTIVITY IS PROHIBITED WITHIN WETLAND AREA AS NOTED EXCEPT AS SPECIFIED ON PLANS.
8. EXCAVATORS MUST COMPLY WITH ALL PROVISIONS OF ORS 757.541 TO 757.571 INCLUDING NOTIFICATION OF ALL OWNERS OF UTILITIES AT LEAST 48 BUSINESS DAY HOURS, BUT NOT MORE THAN TEN (10) BUSINESS DAYS BEFORE COMMENCING EXCAVATION.
9. PRIOR TO CONSTRUCTION, CALL ONE CALL UTILITY NOTIFICATION CENTER AT 246-6699 FOR ALL UTILITY IDENTIFICATION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FROM THE CITY OF WEST LINN COPIES OF ALL THE NECESSARY PERMITS AND LICENSES REQUIRED PRIOR TO BEGINNING CONSTRUCTION, INCLUDING TREE REMOVAL PERMITS AND DEMOLITION PERMITS.
11. THE CONTRACTOR AND/OR SUBCONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
12. TRAFFIC DURING CONSTRUCTION SHALL BE CONTROLLED IN ACCORDANCE WITH MUTCD, THE STATE OF OREGON, AND THE CITY OF WEST LINN REQUIREMENTS, AS APPLICABLE. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE CITY PRIOR TO BEGINNING WORK.
13. THE CONTRACTOR IS RESPONSIBLE FOR MANAGING CONSTRUCTION ACTIVITIES TO ENSURE ADJACENT PUBLIC STREETS ARE KEPT CLEAN OF MUD, DUST, AND DEBRIS FROM THE CONSTRUCTION SITE IN COMPLIANCE WITH THE CITY OF WEST LINN EROSION CONTROL STANDARDS. COORDINATE WORK WITH THE EROSION CONTROL PLAN AND THE PLANTING PLAN. ALL STREETS ARE TO BE CLEANED AT THE END OF EACH WORKING DAY. NO TRENCH EXCAVATION SHALL BE LEFT EXPOSED OVER NIGHT.
14. THE CONTRACTOR SHALL HIRE A REGISTERED PROFESSIONAL LAND SURVEYOR TO FULFILL THE REQUIREMENTS OF ORS 209.150 AT THE CONTRACTORS EXPENSE.
15. ALL TOP SOIL REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED ON SITE AND REUSED DURING GRADING.
16. ALL PLANT MATERIAL AND MAN MADE OBJECTS REMOVED DURING CLEARING AND GRUBBING SHALL BE DISPOSED OF BY THE CONTRATOR.

EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
2. THE IMPLEMENTATION OF THESE ESC PLANS AND CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE LOCAL JURISDICTION, AND VEGETATION/LANDSCAPING IS ESTABLISHED. THE C.O.W.L. SHALL BE RESPONSIBLE FOR MAINTENANCE AFTER THE PROJECT IS APPROVED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON SHT C2.0 AND C3.0 SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE MARKINGS SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON SHT C2.0 AND C3.0 MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
5. THE ESC FACILITIES SHOWN ON SHT C2.0 AND C3.0 ARE 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 AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
7. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE MORE THAN 1/3 OF THE BARRIER HEIGHT. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED UPON COMLETION OF CONSTRUCTION. THE CLEANING OPERATIONS SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
8. STORM DRAIN INLETS, BASINS, AND AREA DRAINS SHALL BE PROTECTED UNTIL CONSTRUCTION IS COMPLETED AND/OR VEGETATION IS RE-ESTABLISHED.
9. VEGETATION IS TO BE PLACED AS RAPIDLY AS POSSIBLE.
10. SEEDING SHALL BE PERFORMED NO LATER THAN SEPTEMBER 1 FOR EACH PHASE OF CONSTRUCTION.
11. IF THERE ARE EXPOSED SOILS OR SOILS NOT FULLY ESTABLISHED FROM OCTOBER 1 THROUGH APRIL 30, THE WET WEATHER EROSION PREVENTION MEASURES WILL BE IN EFFECT. SEE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (CHAPTER 4) FOR REQUIREMENTS.
12. THE CONTRACTOR SHALL REMOVE ESC MEASURES WHEN VEGETATION IS FULLY ESTABLISHED.

General Issue of contract for 10th St. site We are restricted to in water work periods July -

DRAWING INDEX

C1.0 COVER
C2.0 10TH STREET PLAN AND PROFILE
C3.0 10TH STREET PLAN AND PROFILE
C4.0 JOHNSON ROAD PLAN AND PROFILE
C5.0 CIVIL DETAILS
L1.0 10TH STREET PLANTING PLAN
L2.0 JOHNSON ROAD PLANTING PLAN

REGISTERED PROFESSIONAL ENGINEER 14991 OREGON JUL. 25, 1978 A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 05-07-01
05-07-01

CITY OF WEST LINN
STORMWATER SWALE PROJECT
COVER

SCALE: AS NOTED
SHEET 1 OF 7
DRAWING NUMBER C1.0

kpff Consulting Engineers
121 SW 7th Avenue, Suite 2500 Portland, OR 97204-3226
(503) 227-3251 Fax (503) 227-9280 Portland Seattle Los Angeles

1031CV.dwg 4-12-01 11:09:00 am EST

Joe Henry

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	80.27	402.78	11°25'04"
C2	78.71	2851.93	01°34'52"
C3	67.82	109.97	35°19'59"
C4	52.59	156.77	19°13'12"
C5	65.69	156.77	24°00'28"
C6	66.60	60.00	63°35'59"
C7	17.53	25.00	40°10'25"
C8	88.79	353.09	14°24'28"
C9	100.16	246.37	23°17'34"

LINE TABLE		
LINE	LENGTH	BEARING
L1	172.05	S67°38'39"E
L2	62.95	S67°34'50"E
L3	25.85	S68°47'08"E

SPECIFY 1310-6H4 PLACEMENT AS ON SHEET C4.

INTERSTATE 205 OFF RAMP

GUARD RAIL

EXIST. SIGN TO REMAIN

EXIST. SIGN TO REMAIN

EXIST. SIGN TO REMAIN

EDGE OF PAVEMENT

DITCH CENTERLINE

MATCHLINE 5+25

EXIST. SSMH
RIM=145.6±
14" IN(W)=138.3±
14" OUT(E)=138.3±

EXIST. 30"ø CMP
IE=142.88

HEAD WALL

PROP. SWALE ALIGNMENT
BOTTOM WIDTH 10'

2+34.99, PC

3+15.26, PCC

EXIST. SSMH
RIM=144.6±
14" IN(W)=137.3±
10" OUT(S)=137.3±
14" OUT(E)=137.3±

3+93.96, PRC

4+61.78, PRC

5+14.37, PCC, PT
END CONSTRUCTION
SECONDARY SWALE

TOP OF DITCH

DITCH

BEGIN FENCE REMOVAL

0+00
N 5448.15
E 4616.50

0+50 BEGIN SWALE CONSTRUCTION
N 5427.13
E 4662.74

FOUND MONUMENT
5/8" IRON ROD
N 5401.78
E 4693.82

EXIST. DITCH INLET
IN=146.85
OUT=144.39

EXIST. 14"ø CMP
IE=143.87

EXIST. 4"ø
PLASTIC PIPE
IE=142.88

RETAINING WALL

REMOVE 655-LF OF FENCE

EXIST. SSMH
RIM=152.7±
4" IN(SW)=147.7±
IN(S)=137.7±
OUT(N)=137.6±

EXIST. CB

LYNCH CB

3+22.02, BEGIN CONSTRUCTION SECONDARY SWALE, PC

EDGE OF PAVEMENT

4+10.65, 22.28RT, PCR

FOUND MONUMENT
5/8" IRON ROD
N 5262.92
E 5031.45

EXIST. CB

RETAINING WALL
2.5' HIGHER HEADING EAST

EXIST. 8"ø CONCRETE PIPE

RETAINING WALL

AC PARKING LOT

PLAN
SCALE: 1"=20'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PVI STA = 1+72.76
PVI ELEV = 142.50

-0.56%

-0.59%

EXIST. SSMH
0+38.08
14"IN(W)=138.38
14"OUT(E)=138.28

EXIST. SSMH
3+11.48
14"IN(W)=137.33
10"OUT(E)=137.33
14"OUT(E)=137.33

MATCHLINE 5+25

0+50 1+00 1+50 2+00 2+50 3+00 3+50 4+00 4+50 5+00 5+50

PROFILE
HOR: 1"=20'
VERT: 1"=2'

REGISTERED PROFESSIONAL ENGINEER 14991
OREGON JUL. 25, 1986 A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 05-07-01
05-07-01

CITY OF WEST LINN STORMWATER SWALE PROJECT
10TH STREET PLAN AND PROFILE

SCALE: AS NOTED SHEET 2 OF 7

DRAWING NUMBER C2.0

kpff Consulting Engineers
121 SW 5th Avenue, Suite 2500 Portland OR 97204-3128
(503) 227-3251 Fax (503) 227-7920 Portland Seattle Los Angeles

301031-02

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	80.27	402.78	11°25'04"
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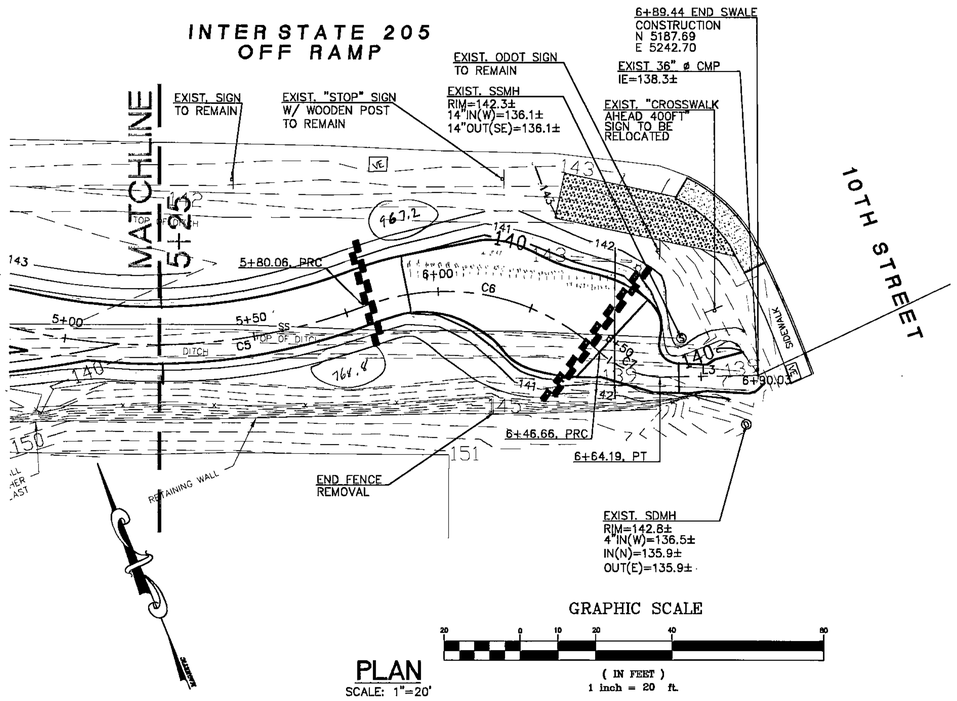
INTER STATE 205 OFF RAMP



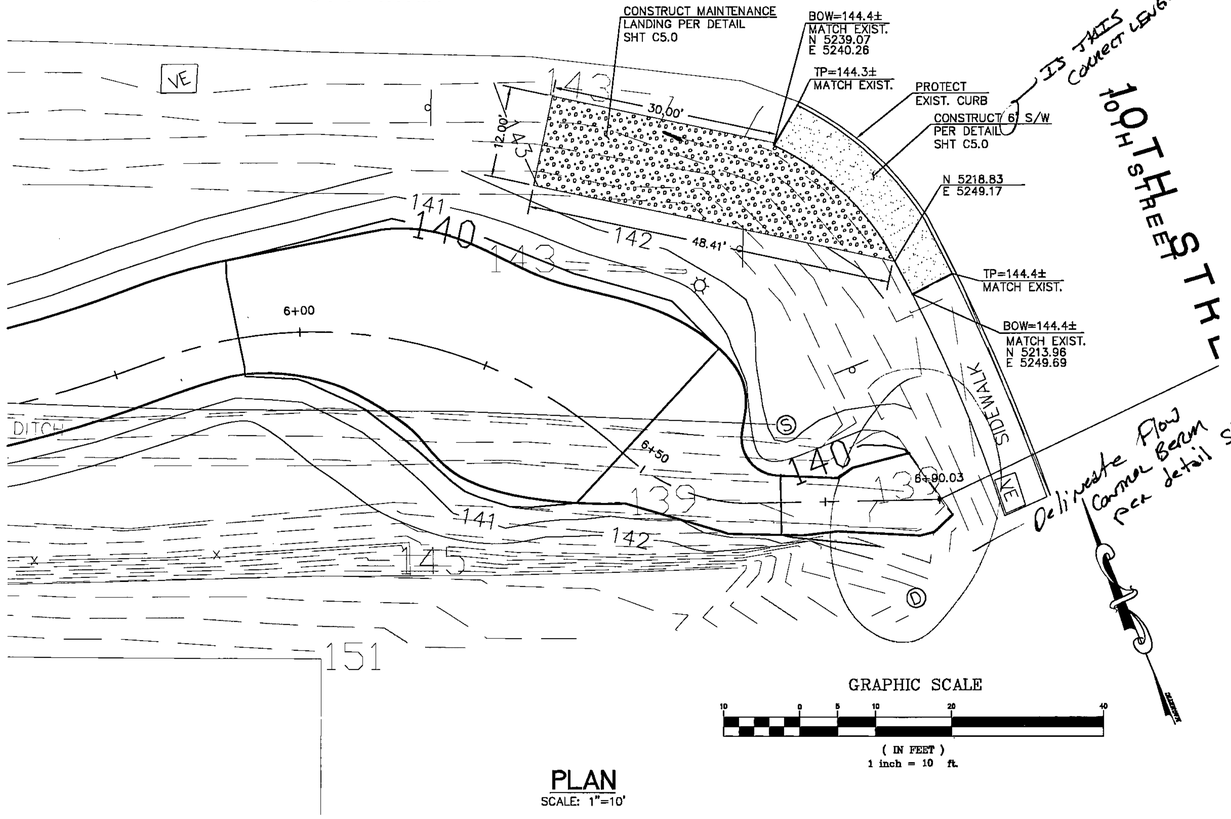
GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PLAN
SCALE: 1"=20'

INTERSTATE 205 OFF RAMP

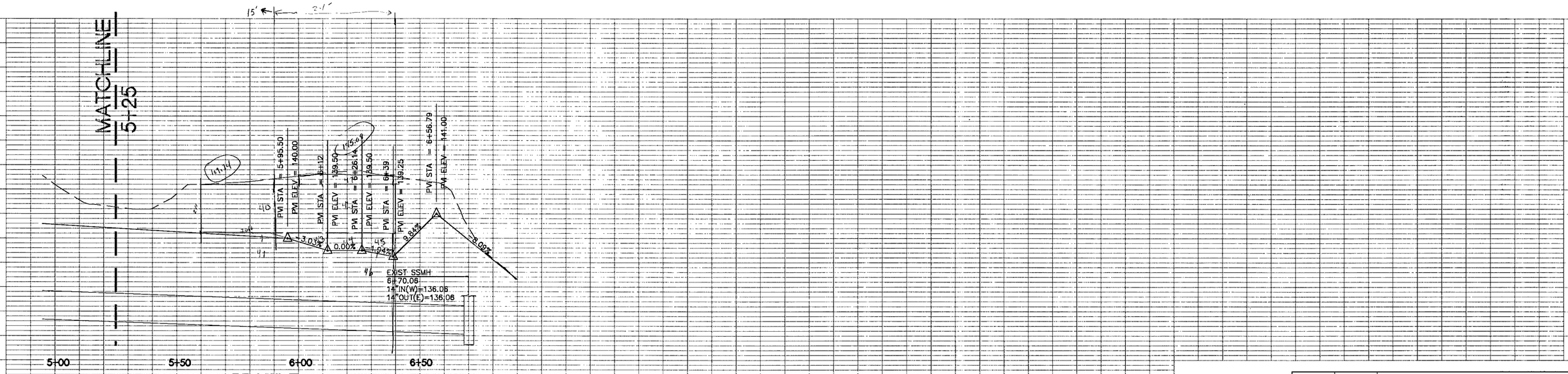


GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

PLAN
SCALE: 1"=10'



PROFILE
HOR: 1"=20'
VERT: 1"=2'

REGISTERED PROFESSIONAL ENGINEER 14991 OREGON JUL. 29, 1998 A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 05-07-01
05-07-01

CITY OF WEST LINN STORMWATER SWALE PROJECT

10TH STREET PLAN AND PROFILE

SCALE: AS NOTED SHEET 3 OF 7

DRAWING NUMBER C3.0

kpff Consulting Engineers
121 SW 5th Avenue, Suite 2500 Portland, OR 97204-3128
(503) 227-3251 Fax (503) 227-7961 Portland Seattle Los Angeles

301031PP1.dwg 4-12-01 9:07:08 am EST

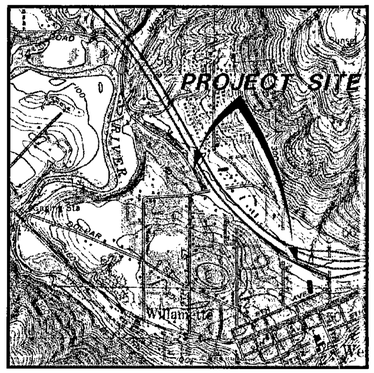
301031-03

CITY OF WEST LINN

DEPARTMENT OF PUBLIC WORKS

STORM DESIGN PROJECT

10TH STREET
AND
JOHNSON ROAD LOCATIONS



VICINITY MAP
NTS

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S=	SLOPE EQUALS
SD	STORM DRAIN
SHT	SHEET
ST	STATION
SS	SANITARY SEWER
S/W	SIDEWALK
VC	VERTICAL CURVE
W	WATER
WM	WATER METER

GENERAL NOTES

1. THE SURVEY WAS PERFORMED BY KPFF CONSULTING ENGINEERS, DATED FEBRUARY 22 & 23, MARCH 1, 2, 6–8, 10, 12–14, 16, 17, 28 & 29, AND APRIL 3–6 & 21, 2000. THE SURVEY IS BASED UPON THE NEW CITY OF LAKE OSWEGO VERTICAL DATUM (NGVD 29). THE BENCHMARK REFERENCED WAS CITY OF LAKE OSWEGO BENCHMARK NO.18J–2, LOCATED IN TOP OF CURB AT S.E. CORNER OF NEW PARKING LOT AT GEORGE ROGERS PARK, APPROX. 200' WEST OF OLD FURNACE CHIMNEY, AND HAS AN ELEVATION OF 66.145 FEET.
2. THE RIGHT OF WAYS SHOWN HEREON ARE GRAPHICAL REPRESENTATIONS OF COMPILED RECORD BOUNDARIES.
3. THE CONTRACTOR SHALL PERFORM ALL WORK SHOWN ON THE DRAWINGS AND ALL INCIDENTAL WORK CONSIDERED NECESSARY TO COMPLETE THE PROJECT IN AN ACCEPTABLE MANNER.
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11. PRIOR TO CONSTRUCTION, CALL ONE CALL UTILITY NOTIFICATION CENTER AT 246–6699 FOR ALL UTILITY IDENTIFICATION.
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17. THE CONTRACTOR SHALL HIRE A REGISTERED PROFESSIONAL LAND SURVEYOR TO FULFILL THE REQUIREMENTS OF ORS 209.150 AT THE CONTRACTORS EXPENSE.

EROSION CONTROL PLAN NOTES

1. AN EROSION/SEDIMENTATION CONTROL (ESC) PLAN IS REQUIRED ON THIS PROJECT. IMPLEMENTATION OF ESC AND THE CONSTUCTION, MAINTENANCE, REPLACEMENT, AND UPDGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED. PROVIDE CATCH BASIN PROTECTION TO DOWNSTREAM INLETS FROM THE SITE PER THE CITY OF PORTLAND EROSION CONTROL MANUAL (MARCH 1, 2000) STORM DRAIN PROTECTION – DETAIL DRAWINGS 4.2 C, D, H OR 4.3 F
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND PERMANENT VEGETATION/LANDSCAPING IS ESTABLISHED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
5. 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 AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
7. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
8. 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.
9. 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.

REVIEW COPY

DRAWING INDEX

C1.0	COVER
C2.0	10TH STREET PLAN AND PROFILE
C3.0	JOHNSON ROAD PLAN AND PROFILE
C4.0	PLANTING PLAN
C5.0	DETAILS

REGISTERED PROFESSIONAL ENGINEER 14991 OREGON JUL. 25, 1986 A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

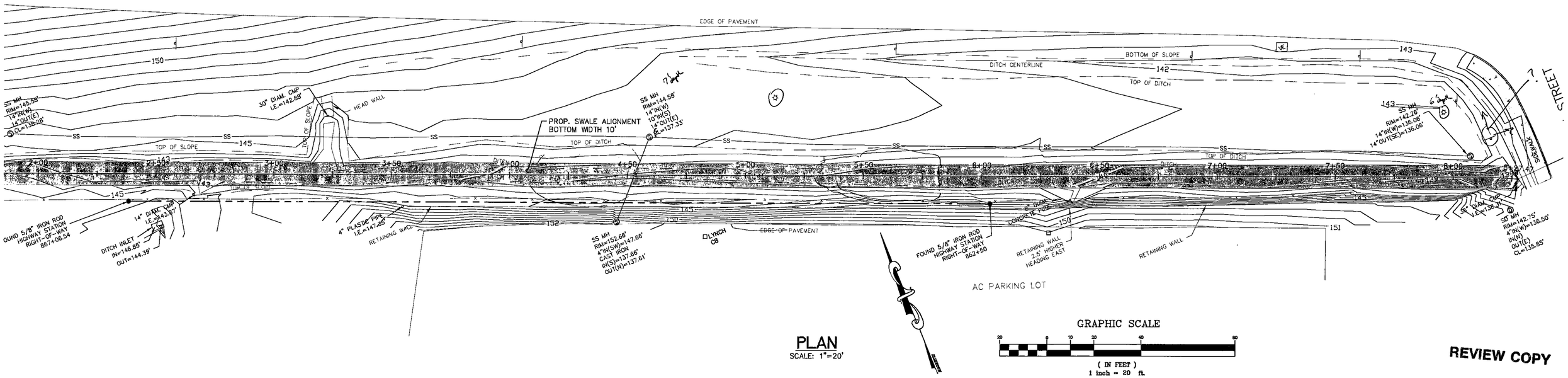
JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 04-12-01
04-24-01

CITY OF WEST LINN STORMWATER SWALE PROJECT
COVER

SCALE: AS NOTED | SHEET 1 OF 5 | DRAWING NUMBER C1.0

kpff Consulting Engineers
111 SW Fifth Avenue, Suite 2500 Portland, OR 97204-3628
(503) 227-3251 Fax (503) 227-7961 Portland Seattle Los Angeles

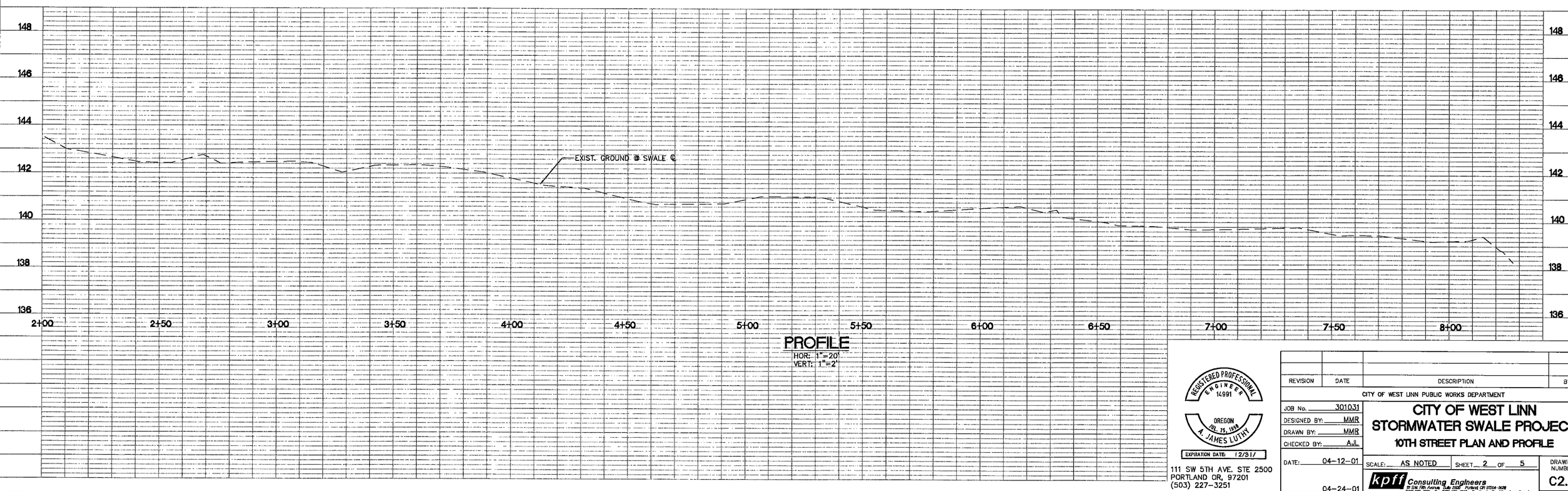
INTERSTATE 205



PLAN
SCALE: 1"=20'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

REVIEW COPY



PROFILE
HOR: 1"=20'
VERT: 1"=2'

REGISTERED PROFESSIONAL ENGINEER 14991 OREGON JULY 25, 1958 A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 04-12-01
04-24-01

CITY OF WEST LINN
STORMWATER SWALE PROJECT
10TH STREET PLAN AND PROFILE

SCALE: AS NOTED SHEET 2 OF 5

DRAWING NUMBER C2.0

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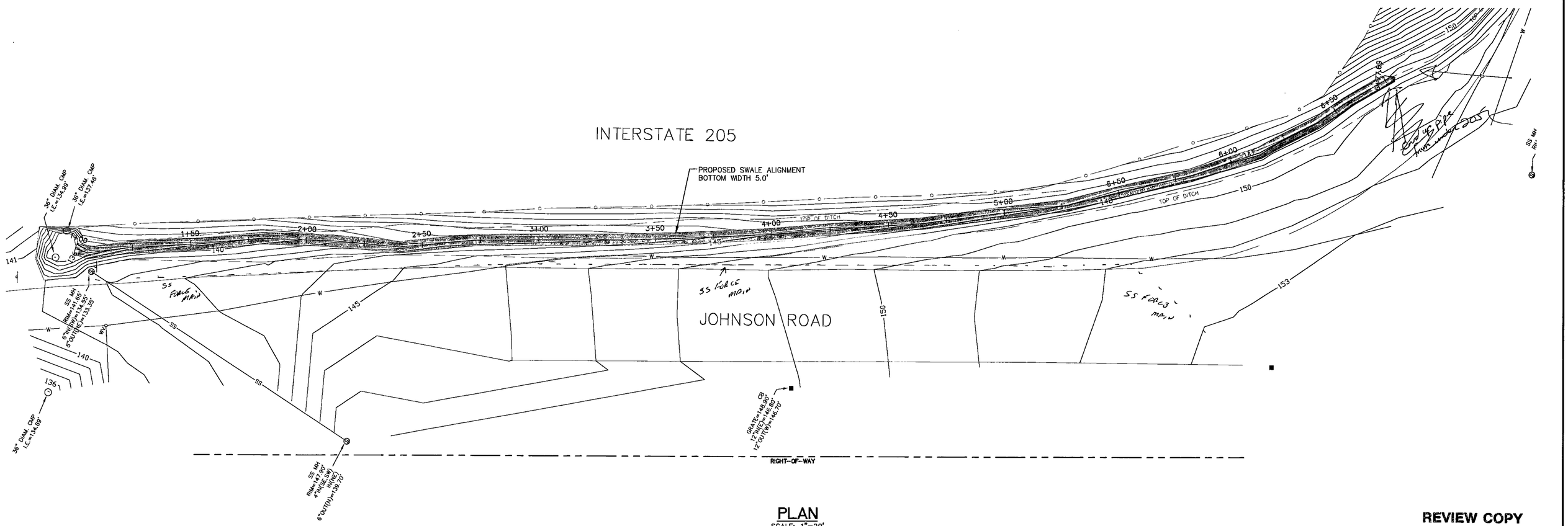
121 SW Fifth Avenue, Suite 2500 Portland OR 97204-3026
(503) 227-3251 Fax (503) 227-3280 Portland Seattle Los Angeles

031PP1.dwg 4-12-01 9:07:08 am EST

301031-02



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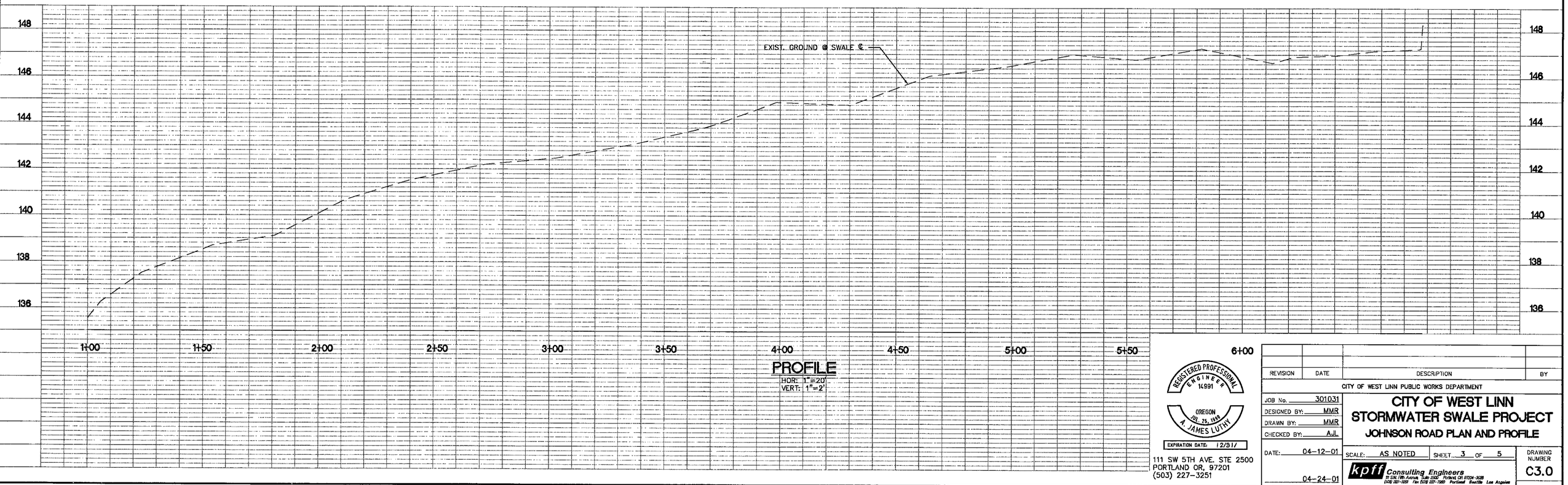


REGISTERED PROFESSIONAL ENGINEER
14991
OREGON
JUL. 25, 1998
A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 04-12-01
04-24-01

CITY OF WEST LINN
STORMWATER SWALE PROJECT
JOHNSON ROAD PLAN AND PROFILE

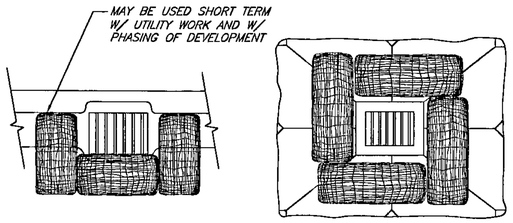
SCALE: AS NOTED
SHEET 3 OF 5

DRAWING NUMBER
C3.0

kpff Consulting Engineers
121 SW Fifth Avenue, Suite 2500 Portland, OR 97204-3128
(503) 227-3251 Fax (503) 227-1981 Portland Seattle Los Angeles

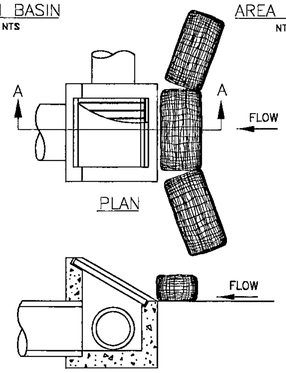
031PP2.dwg 4-12-01 9:44:44 am EST

301031-03



CATCH BASIN
NTS

AREA DRAIN
NTS



PLAN

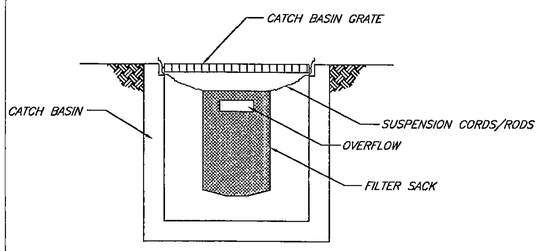
SECTION A–A

DITCH INLET
NTS

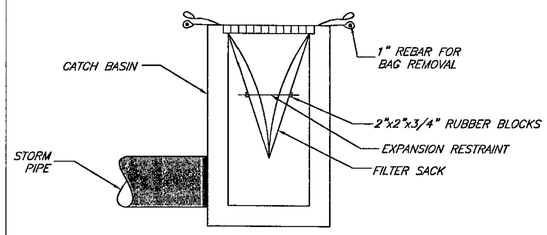
DRAWING NOT TO SCALE

TECHNICAL GUIDANCE HANDBOOK	BIO–FILTER BAGS FOR TEMPORARY INLET PROTECTION Detail Drawing 4.2C

FILE DRAFT\INSPECTORS GRAPHICS DRAWING PLOT 14



INSERT SACK
FRONT VIEW



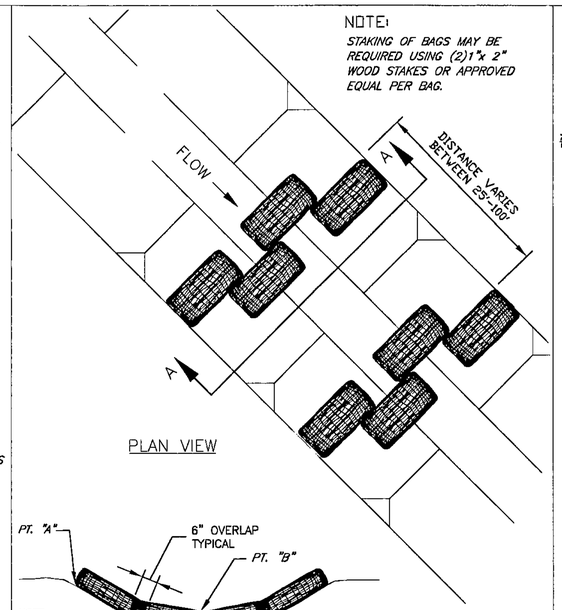
INSERT SACK
SIDE VIEW

NOTE:
RECESSED CURB INLET MUST BE BLOCKED WHEN USING FIILTER FABRIC INLET SACKS. SIZE OF FILTER FABRIC INLET SACK TO BE DETERMINED BY MANUFACTURER.

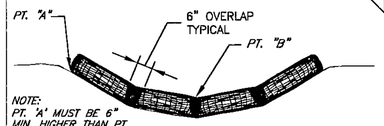
DRAWING NOT TO SCALE

TECHNICAL GUIDANCE HANDBOOK	FILTER FABRIC INLET PROTECTION Detail Drawing 4.2H

FILE DRAFT\INSPECTORS GRAPHICS DRAWING PLOT 10



PLAN VIEW



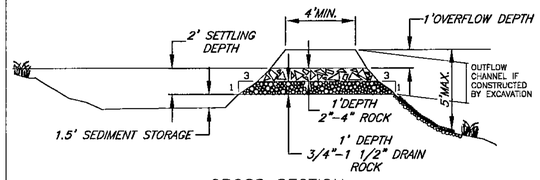
NOTE:
PT. 'A' MUST BE 6" MIN. HIGHER THAN PT. 'B'

SECTION A–A

DRAWING NOT TO SCALE

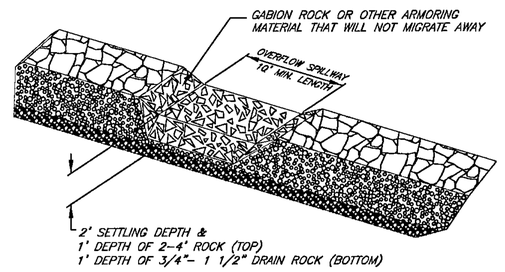
TECHNICAL GUIDANCE HANDBOOK	BIOFILTER BAG DITCHES AND SWALES Detail Drawing 4.2D

FILE DRAFT\INSPECTORS GRAPHICS DRAWING PLOT 14



CROSS SECTION

NOTE: MAY BE CONSTRUCTED BY EXCAVATION OR BY BUILDING A BERM.

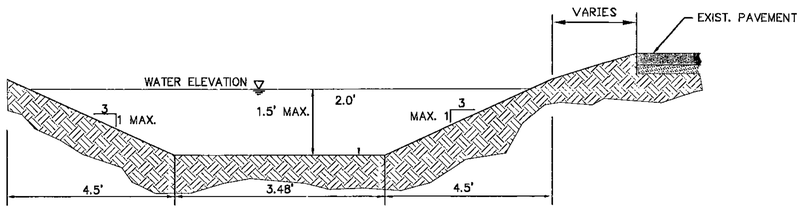


SEDIMENT TRAP OUTLET

DRAWING NOT TO SCALE

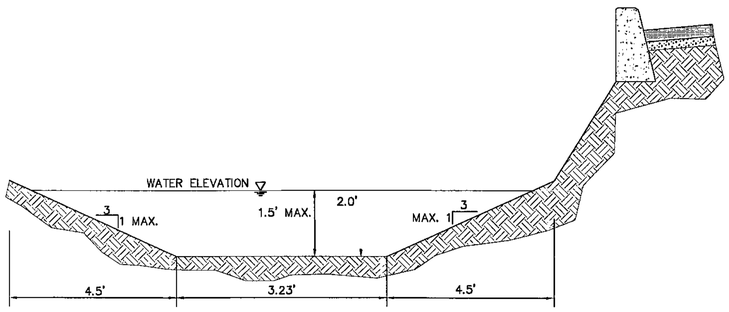
TECHNICAL GUIDANCE HANDBOOK	SEDIMENT TRAP Detail Drawing 4.3F

FILE DRAFT\INSPECTORS GRAPHICS DRAWING PLOT 14



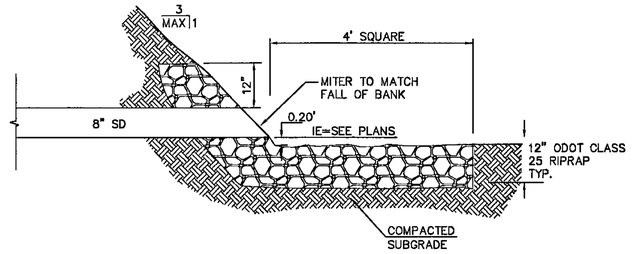
REFER TO PLANS FOR PLANTINGS AND GROUND COVER. SWALE TOPSOIL AND SUBGRADE SHALL BE AS PER NOTE 1 BELOW.

STORMWATER SWALE JOHNSON ROAD
TYPICAL SECTION
NTS



REFER TO PLANS FOR PLANTINGS AND GROUND COVER. SWALE TOPSOIL AND SUBGRADE SHALL BE AS PER NOTE 1 BELOW.

STORMWATER SWALE 10TH STREET
TYPICAL SECTION
NTS



CULVERT OUTFALL
NTS

REVIEW COPY

REGISTERED PROFESSIONAL ENGINEER 14991 — OREGON JAN. 25, 1985 — A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227–3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 04–12–01
04–24–01

CITY OF WEST LINN
STORMWATER SWALE PROJECT
DETAILS

SCALE: AS NOTED
SHEET 5 OF 5

DRAWING NUMBER
C5.0

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111 S.W. 5th Avenue, Suite 2500 Portland, OR 97204–3628
(503) 227–3251 Fax (503) 227–7961 Portland Seattle Los Angeles

1031DT.dwg 4-12-01 9:45:51 am EST

301031–05

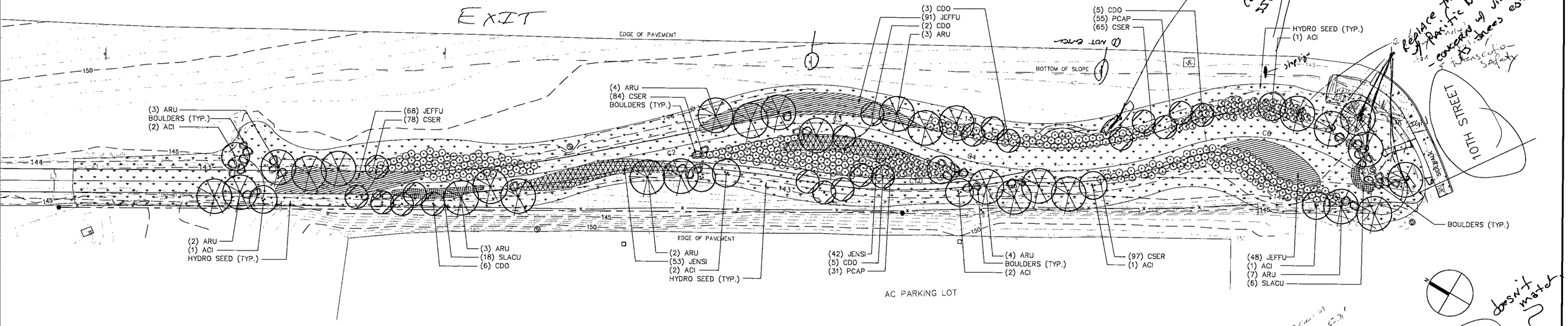
PLANTING MATERIALS LEGEND

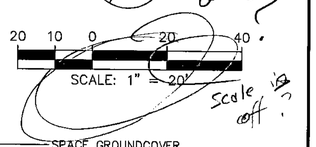
tag	botanical name	common name	size	spacing	comments
TREES:					
ACI	ACER CIRCINATUM	VINE MAPLE	5 GALLON	–	MULTI TRUNK/FOREST GROWN
ARU	ALNUS OREGONA	RED ALDER	1" CALIPER	–	SINGLE LEADER
CDO	CRATAEGUS DOUGLASIR	BLACK HAWTHORN	1" CALIPER		SINGLE LEADER
SHRUBS:					
CSER	CORNUS SERICEA	REDTWIG DOGWOOD	1 GALLON	3 FT. O.C.	–
HDIS	HOLODISCUS DISCOLOR	OCEAN SPRAY	1 GALLON	4 FT. O.C.	–
PCAP	PHYSOCARPUS CAPITATUS	PACIFIC NINEBARK	1 GALLON	3 FT. O.C.	–
GRASSES/SEEDMIXES:					
JEFFU	JUNCUS EFFUSES	COMMON RUSH	PLUGS	3 FT. O.C.	–
JENSI	JUNCUS ENSIFOLIUS	DAGGER-LEAVED RUSH	PLUGS	3 FT. O.C.	–
SLACU	SCIRPUS LACUSTRIS	HARD STEMMED BULRUSH	PLUGS	3 FT. O.C.	–
LANDSCAPE MATERIALS:					

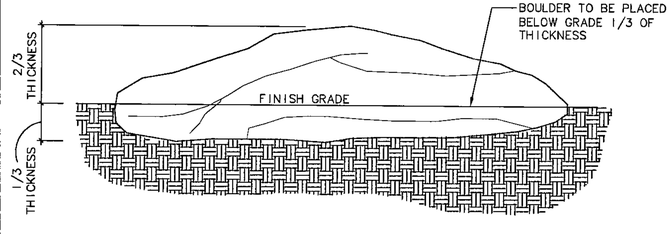
HYDRO SEED MIX: PRO TIME +710 PDX PLUS AVAILABLE FROM HOBBS AND HOPKINS (1-800-345-3295)

BOULDERS PROVIDED BY CLIENT. CONTRACTOR TO INSTALL PER DETAIL (SEE THIS SHEET)

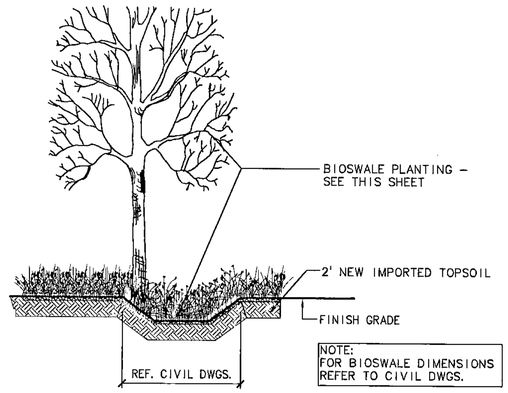
NOTES:
1. PRESERVE AND PROTECT ALL EXISITNG TREES.
2. NO TREES ARE TO BE REMOVED WITHOUT PRIOR WRITTEN DIRECTION BY THE ENGINEER.
3. CONTRACTOR TO PROVIDE A SOILS TEST TO DETERMINE THE FERTILIZER (ORGANIC ONLY) AND SOIL IMPROVEMENTS MATERIALS TO BE USED PRIOR TO PLANTING PER SPECIFICATIONS.



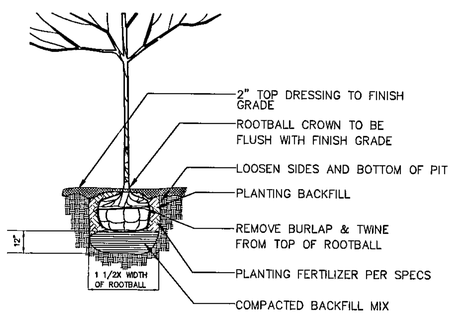




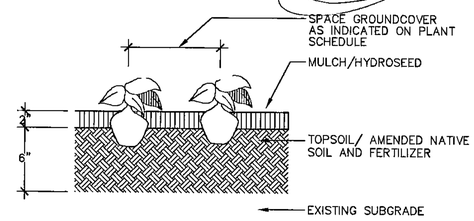
1 / L1.2 TYPICAL BOULDER N.T.S.



2 / L1.2 SWALE PLANTING N.T.S.



3 / L1.2 TREE PLANTING N.T.S.



4 / L1.2 SHRUB PLANTING N.T.S.

REGISTERED PROFESSIONAL ENGINEER 14991 OREGON JULY 25, 1986 A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 04-12-01
04-24-01

CITY OF WEST LINN STORMWATER SWALE PROJECT

10TH STREET PLAN AND PROFILE

SCALE: AS NOTED SHEET 6 OF 9

DRAWING NUMBER L2.0

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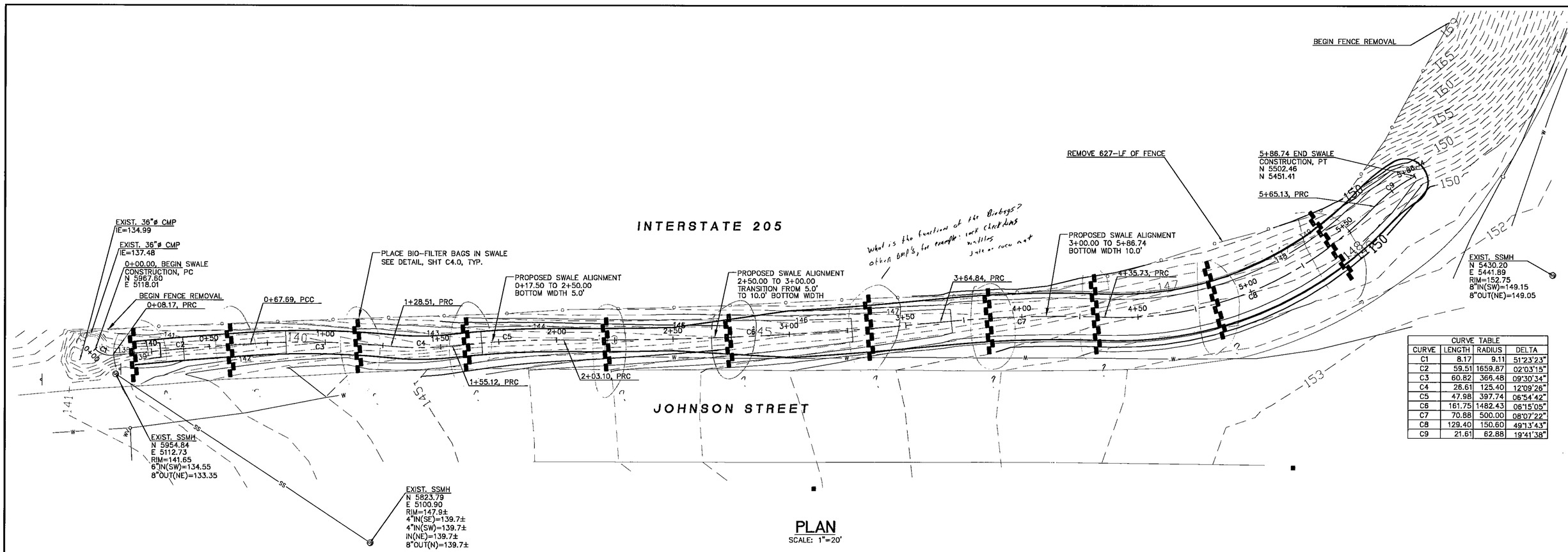
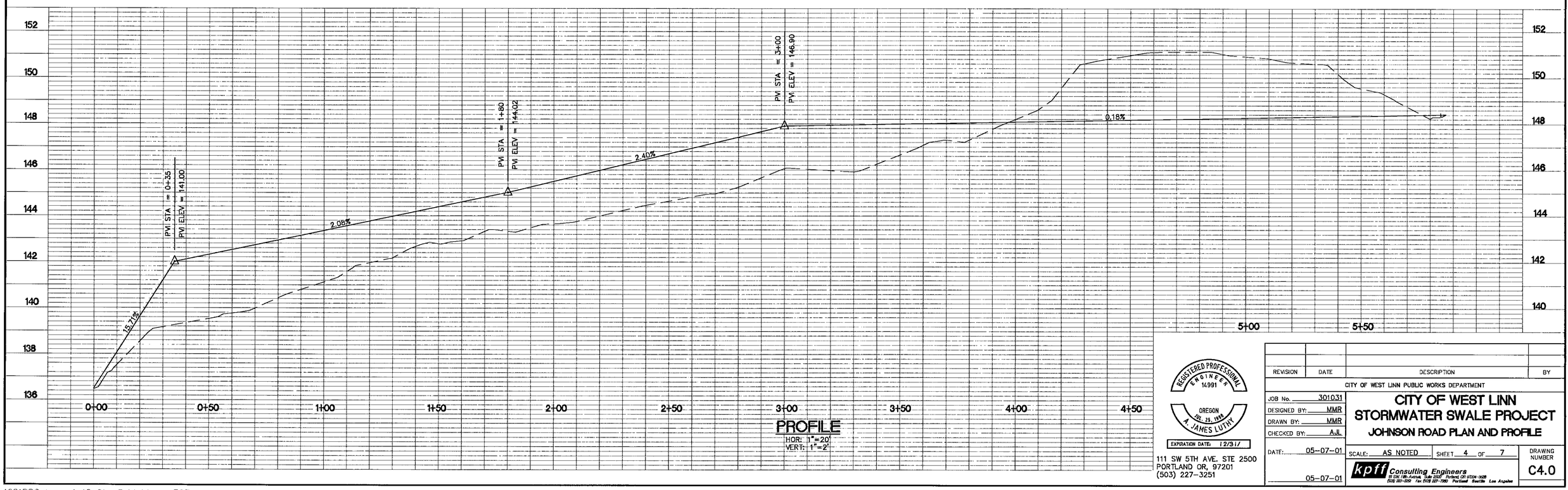
(503) 227-3251 Fax (503) 227-3251 Seattle Los Angeles

031PP1.dwg 4-12-01 9:07:08 am EST



PLAN
SCALE: 1"=20'

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	8.17	9.11	51°23'23"
C2	59.51	1659.87	02°03'15"
C3	60.82	366.48	09°30'34"
C4	26.61	125.40	12°09'26"
C5	47.98	397.74	06°54'42"
C6	161.75	1482.43	06°15'05"
C7	70.88	500.00	08°07'22"
C8	129.40	150.60	49°13'43"
C9	21.61	62.88	19°41'38"



PROFILE
HOR: 1"=20'
VERT: 1"=2'

REGISTERED PROFESSIONAL ENGINEER 14991 OREGON JUL. 25, 1990 A. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 05-07-01
05-07-01

CITY OF WEST LINN STORMWATER SWALE PROJECT
JOHNSON ROAD PLAN AND PROFILE

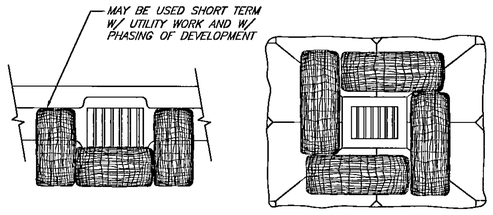
SCALE: AS NOTED SHEET 4 OF 7

DRAWING NUMBER C4.0

kpff Consulting Engineers

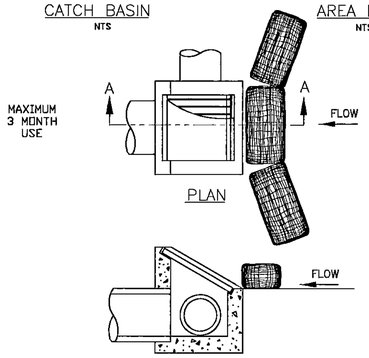
:031PP2.dwg 4-12-01 9:44 44 am EST

301031-04



CATCH BASIN
NTS

AREA DRAIN
NTS



PLAN

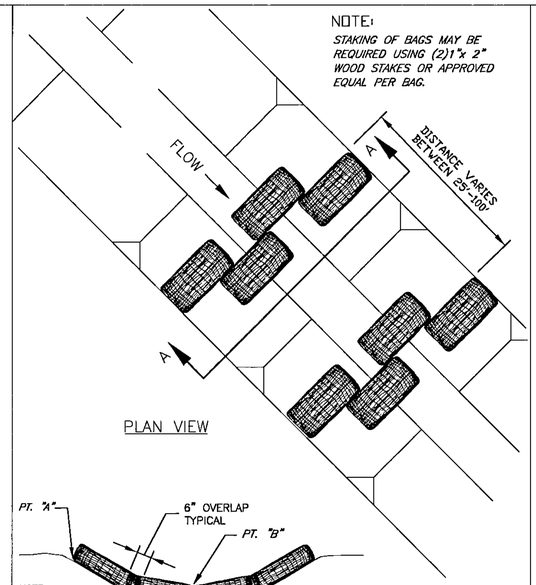
SECTION A–A

DITCH INLET
NTS

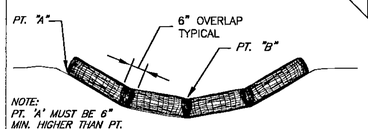
TECHNICAL GUIDANCE HANDBOOK | BIO–FILTER BAGS FOR TEMPORARY INLET PROTECTION | MULTNOMAH CO. DWG # 3–7D

FILE DRAFT\INSPECTORS GRAPHICS DRAWING PLOT 1:1

Clackamas
We county EC/SPL control manual



PLAN VIEW



NOTE:
PT. 'A' MUST BE 6" MIN. HIGHER THAN PT. 'B'

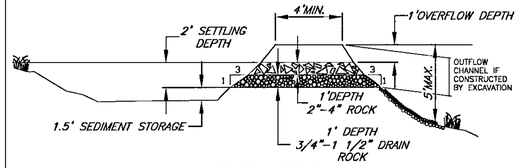
SECTION A–A

DRAWING NOT TO SCALE

TECHNICAL GUIDANCE HANDBOOK | BIO–FILTER BAG DITCHES AND SWALES | MULTNOMAH CO. DWG # 3–3D

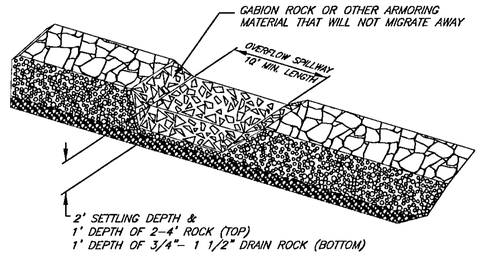
FILE DRAFT\INSPECTORS GRAPHICS DRAWING PLOT 1:1

Clackamas



CROSS SECTION

NOTE: MAY BE CONSTRUCTED BY EXCAVATION OR BY BUILDING A BERM.



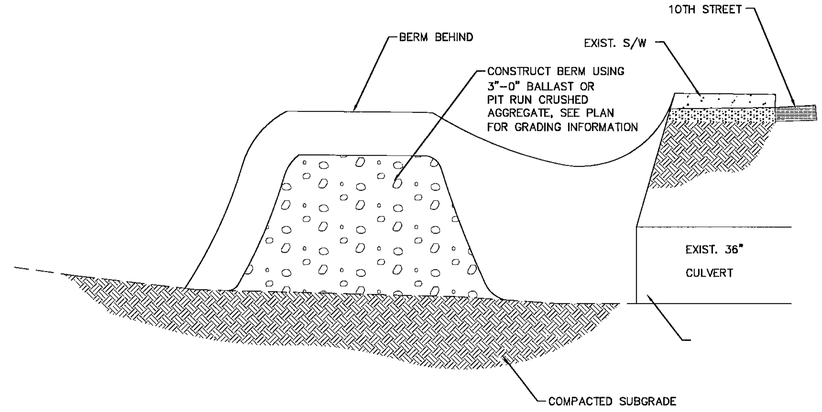
SEDIMENT TRAP OUTLET

DRAWING NOT TO SCALE

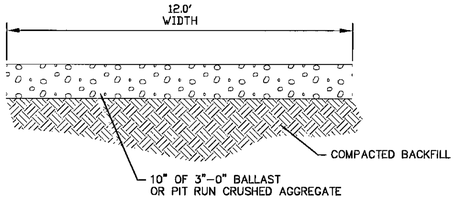
TECHNICAL GUIDANCE HANDBOOK | SEDIMENT TRAP | MULTNOMAH CO. DWG # 3–4

FILE DRAFT\INSPECTORS GRAPHICS DRAWING PLOT 1:1

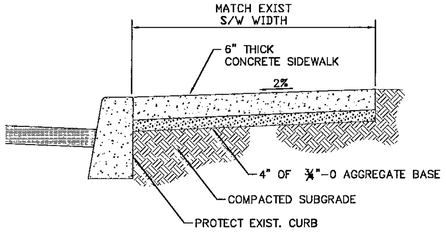
Clackamas County



10TH STREET
FLOW CONTROL BERM
N.T.S.

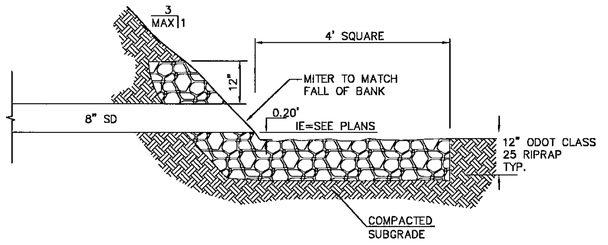


10TH STREET
MAINTENANCE LANDING SECTION
NTS

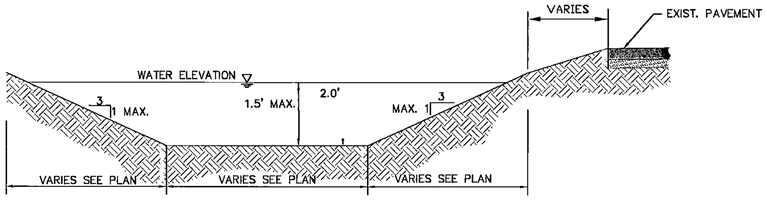


NOTE:
CONCRETE SHALL BE 4000 PSI, SLUMP RANGE 3" TO 5".

10TH STREET
CONCRETE S/W SECTION
N.T.S.

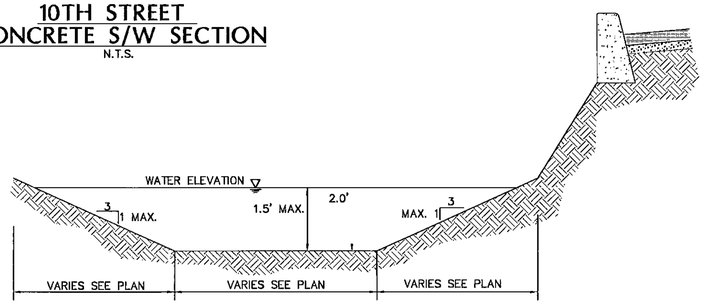


CULVERT OUTFALL
NTS



REFER TO PLANS FOR PLANTINGS AND GROUND COVER. SWALE TOPSOIL AND SUBGRADE SHALL BE AS PER NOTE 1 BELOW.

STORMWATER SWALE JOHNSON ROAD
TYPICAL SECTION
NTS



REFER TO PLANS FOR PLANTINGS AND GROUND COVER. SWALE TOPSOIL AND SUBGRADE SHALL BE AS PER NOTE 1 BELOW.

STORMWATER SWALE 10TH STREET
TYPICAL SECTION
NTS

REGISTERED PROFESSIONAL ENGINEER 14991 OREGON JUL. 25, 1969 R. JAMES LUTHY
EXPIRATION DATE: 12/31/

111 SW 5TH AVE. STE 2500
PORTLAND OR, 97201
(503) 227-3251

REVISION	DATE	DESCRIPTION	BY

CITY OF WEST LINN PUBLIC WORKS DEPARTMENT

JOB No. 301031
DESIGNED BY: MMR
DRAWN BY: MMR
CHECKED BY: AJL
DATE: 05-07-01
05-07-01

CITY OF WEST LINN STORMWATER SWALE PROJECT
DETAILS

SCALE: AS NOTED | SHEET 5 OF 7 | DRAWING NUMBER C5.0

kpff Consulting Engineers
121 SW Fifth Avenue, Suite 2500 Portland, OR 97204-3128
(503) 227-3251 Fax (503) 227-7252 Portland Seattle Los Angeles

1031DT.dwg 4-12-01 9:45:51 am EST

301031-05

PLANTING MATERIALS LEGEND

tag	botanical name	common name	size	spacing	comments
TREES:					
ACI	ACER CIRCINATUM	VINE MAPLE	5 GALLON	–	MULTI TRUNK/FOREST GROWN
ARU	ALNUS OREGONA	RED ALDER	1" CALIPER	–	SINGLE LEADER
SHRUBS:					
CSER	CORNUS SERICEA	REDTWIG DOGWOOD	1 GALLON	3 FT. O.C.	–
HDIS	HOLODISCUS DISCOLOR	OCEAN SPRAY	1 GALLON	4 FT. O.C.	–
GRASSES/SEEDMIXES:					
JEFFU	JUNCUS EFFUSES	COMMON RUSH	PLUGS	3 FT. O.C.	–
SLACU	SCIRPUS LACUSTRIS	HARD STEMMED BULRUSH	PLUGS	3 FT. O.C.	–

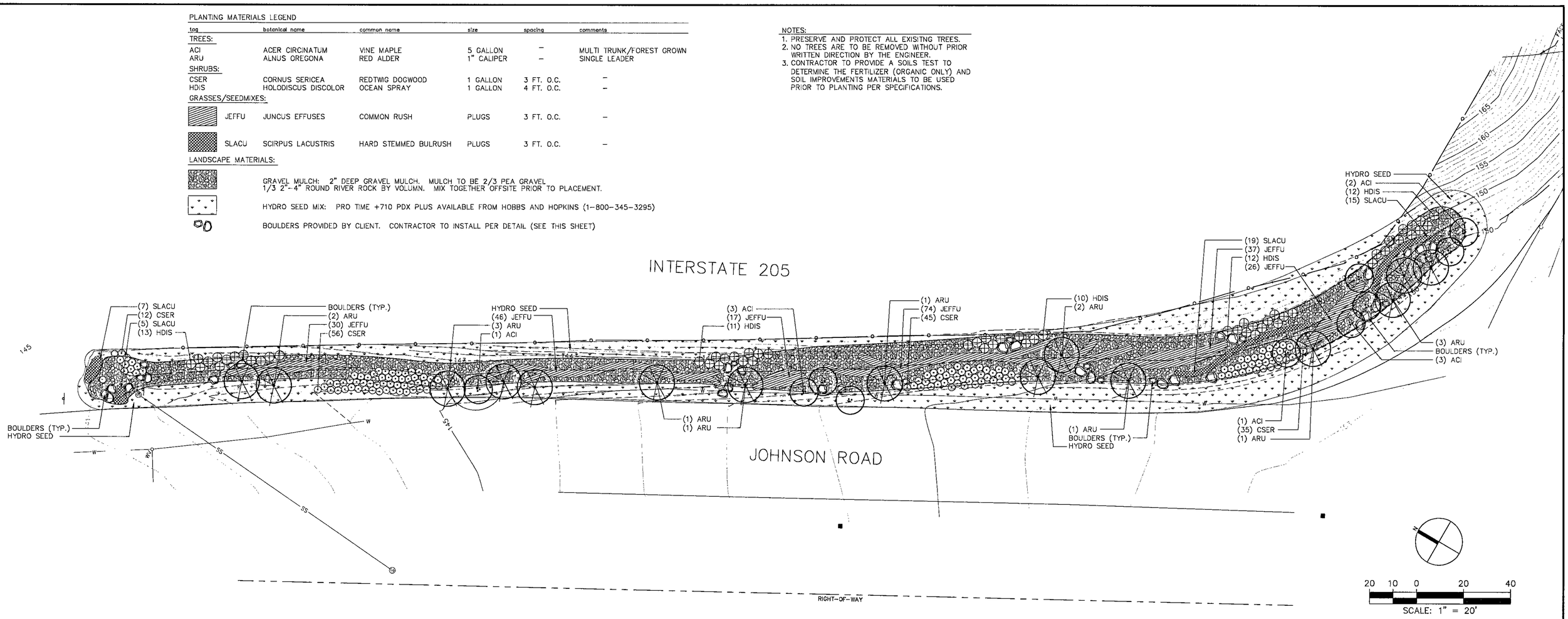
LANDSCAPE MATERIALS:

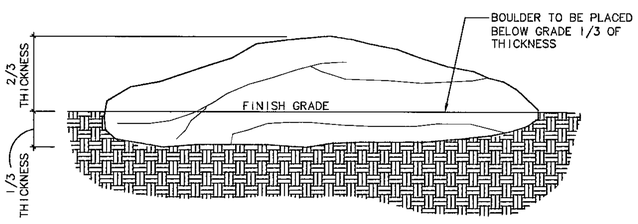
GRAVEL MULCH: 2" DEEP GRAVEL MULCH. MULCH TO BE 2/3 PEA GRAVEL 1/3 2"-4" ROUND RIVER ROCK BY VOLUMN. MIX TOGETHER OFFSITE PRIOR TO PLACEMENT.

HYDRO SEED MIX: PRO TIME +710 PDX PLUS AVAILABLE FROM HOBBS AND HOPKINS (1-800-345-3295)

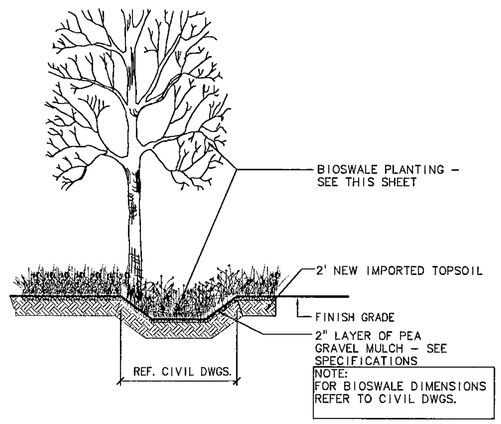
BOULDERS PROVIDED BY CLIENT. CONTRACTOR TO INSTALL PER DETAIL (SEE THIS SHEET)

NOTES:
1. PRESERVE AND PROTECT ALL EXISITNG TREES.
2. NO TREES ARE TO BE REMOVED WITHOUT PRIOR WRITTEN DIRECTION BY THE ENGINEER.
3. CONTRACTOR TO PROVIDE A SOILS TEST TO DETERMINE THE FERTILIZER (ORGANIC ONLY) AND SOIL IMPROVEMENTS MATERIALS TO BE USED PRIOR TO PLANTING PER SPECIFICATIONS.

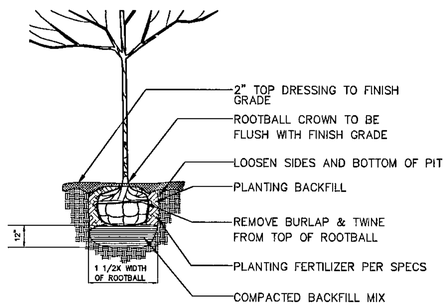




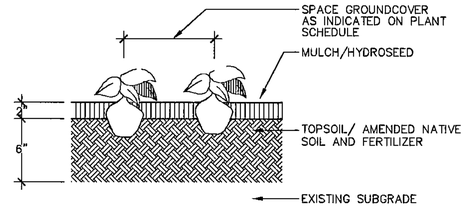
1 / L1.2 TYPICAL BOULDER N.T.S.



2 / L1.2 SWALE PLANTING N.T.S.



3 / L1.2 TREE PLANTING N.T.S.



4 / L1.2 SHRUB PLANTING N.T.S.

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DRAWN BY: MMR
CHECKED BY: AJL
DATE: 04-12-01
04-24-01

CITY OF WEST LINN STORMWATER SWALE PROJECT

PLANTING PLAN

SCALE: AS NOTED | SHEET 1 OF 5 | DRAWING NUMBER L1.2

kpff Consulting Engineers
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