FLORENDO'S HIDEAWAY

OWNER

RENAISSANCE DEVELOPMENT
RANDY SEBASTIAN
1672 WILLAMETTE FALLS DRIVE
WEST LINN, OREGON 97068

LEGEND

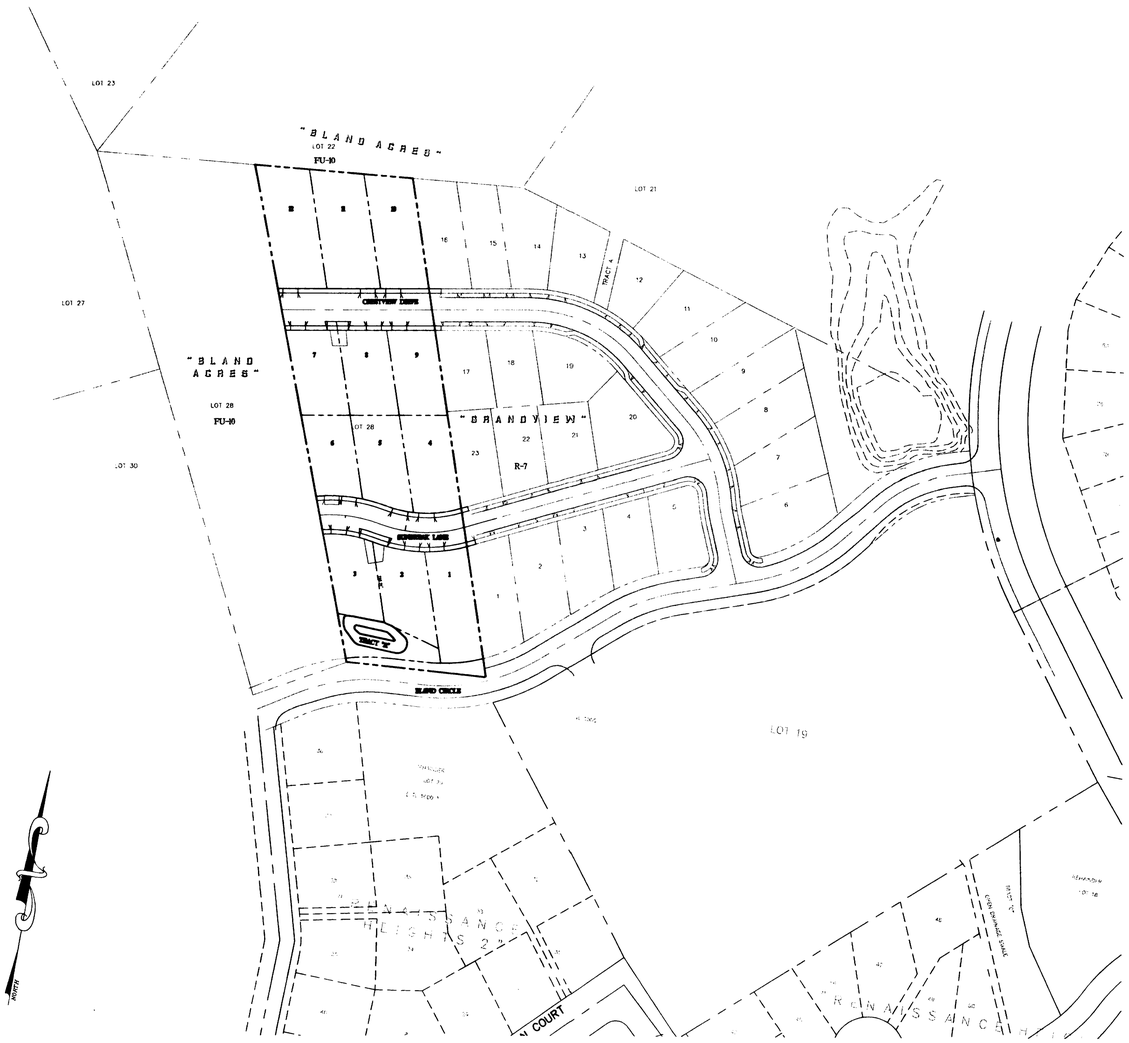
- EXISTING TREE
- EXISTING SANITARY SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING WATER LINE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING CATCH BASIN
- EXISTING STORM DRAIN MANHOLE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- STORM DRAIN LINE
- CATCH BASIN – CB, OSCB
- STORM DRAIN MANHOLE
- CURB INLET
- CLEANOUT
- WATER LINE
- BLOWOFF
- WATER VALVE
- WATER METER
- STREET LIGHT
- THRUST BLOCK
- FIRE HYDRANT
- SIGN
- UTILITY POLE
- EDGE OF EXISTING PAVEMENT – EP
- TEMPORARY CONSTRUCTION DRIVEWAY
- STREET BARRICADE
- UNDERGROUND ELECTRIC
- EXISTING STREET LIGHT
- TELEPHONE RISER
- WELL – AS NOTED
- FENCE – AS NOTED
- SURFACE STORM WATER DRAINAGE
- MONUMENT BOX
- CONCRETE SURFACE
- BRUSH/TREES
- RIM TOP OF MANHOLE RIM
- INV INVERT OF SEWERLINE
- WETLANDS
- ROCK OUTCROPPING
- HANDICAP RAMP & SIDEWALK

ABBREVIATIONS

AC	ASPHALT CONCRETE	PC	POINT OF CURVATURE
ACP	ASBESTOS CEMENT PIPE	PCC	POINT OF COMPOUND CURVATURE
AB	AGGREGATE BASE	PI	POINT OF INTERSECTION
BCR	BEGIN CURB RETURN	P	PROPERTY LINE
BM	BENCH MARK	PRC	POINT OF REVERSE CURVATURE
BVC	BEGIN VERTICAL CURVE	PT	POINT OF TANGENCY
CIP	CAST IRON PIPE	PVC	POLY-VINYL CHLORIDE
CJ	CONTROL JOINT	R	RADIUS
CL	CLASS	RCP	REINFORCED CONCRETE PIPE
℄	CENTERLINE	R/W	RIGHT-OF-WAY
CMP	CORRUGATED METAL PIPE	S	SEWER
CMU	CONCRETE MASONARY UNIT	SD	STORM DRAIN
CO	CLEANOUT	SL	SEWER LATERAL
CTV	CABLE TELEVISION	STA	STATION
DI	DROP INLET	STD. DTL.	STANDARD DETAIL
DIP	DUCTILE IRON PIPE	T	TELEPHONE
E	ELECTRICAL	TB	THRUST BLOCK
ECR	END CURB RETURN	TC	TOP OF CURB
EJ	EXPANSION JOINT	TCN	TOP OF CONCRETE
EL	ELEVATION	TD	TOP OF DIKE
EVC	END VERTICAL CURVE	TF	TOP OF FOOTING
EX	EXISTING	TG	TOP OF GRATE
FF	FINISH FLOOR	TI	TRAFFIC INDEX
FG	FINISH GRADE	TL	TRAFFIC LIGHT
FH	FIRE HYDRANT	TP	TOP OF PAVEMENT
FL	FLOWLINE	TYP.	TYPICAL
FLG	FLANGE	TW	TOP OF WALL
G	GAS	VCP	VITRIFIED CLAY PIPE
GM	GAS METER	VPI	VERTICAL POINT OF INTERSECTION
GB	GRADE BREAK	W	WATER
GSP	GALVANIZED STEEL PIPE	WM	WATER METER
HP	HIGH POINT	WV	WATER VALVE
L	CURVE LENGTH	Δ	DELTA (CURVE CENTRAL ANGLE)
LF	LINEAL FEET	±	APPROXIMATELY
MH	MANHOLE	%	PERCENT
MJ	MECHANICAL JOINT	<	LESS THAN
N.I.C.	NOT INCLUDED IN CONTRACT	>	GREATER THAN
OCEW	ON CENTER EACH WAY		

BENCHMARK

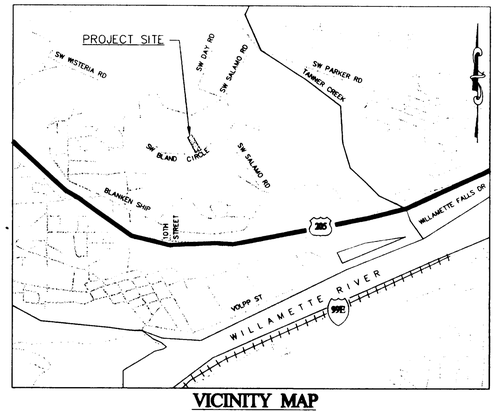
5/8" IRON ROD WITH RED PLASTIC CAP
INSCRIBED "TRILAND INC."
ELEVATION = 524.31
(CITY OF WEST LINN)



GRAPHIC SCALE

-100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.



VICINITY MAP

A PARCEL OF LAND LOCATED IN THE WILLIAM BLAND D.L.C. NO. 55 IN THE NORTHEAST ONE QUARTER OF SECTION 35, TOWNSHIP 2 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CLACKAMAS COUNTY, OREGON, AND BEING A PORTION OF LOT 28 "BLAND ACRES".

UTILITY COMPANIES

CITY OF WEST LINN	656-4211
NORTHWEST NATURAL GAS	226-4211
PORTLAND GENERAL ELECTRIC	650-1481
QWEST TELEPHONE CO.	242-8496
AT&T CABLE	243-7497
PUBLIC TRANSPORT	TRI-MET

LOCATES (48 HOURS NOTICE REQUIRED PRIOR TO EXCAVATION)

ONE CALL SYSTEM (GENERAL TELEPHONE, NORTHWEST NATURAL GAS, QWEST, US SPRINT)	-(503) 246-6699
PORTLAND GENERAL ELECTRIC	-(503) 645-5454
CABLE TELEVISION – AT&T	-(503) 246-6699

REPAIR EMERGENCIES

NORTHWEST NATURAL GAS	- 800-882-3377
QWEST TELEPHONE CO.	-(503) 242-8496
PORTLAND GENERAL ELECTRIC	-(503) 464-7750
AT&T BROADBAND	-(503) 243-7476
CITY OF WEST LINN	-(503) 656-4211

CALL BEFORE YOU DIG 800-332-2344

THE CONTRACTOR, IN LOCATION AND PROTECTING UNDERGROUND UTILITIES, MUST COMPLY WITH THE REGULATIONS OF O.R.S. 757.541 TO 757.571.

SHEET INDEX

AS-BUILT
DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY
1	11.03.03	AS-BUILTS	JMJ

DESIGNED BY ____ DATE ____
DRAWN BY JMJ DATE 4-10-03
REVIEWED BY ____ DATE ____
PROJECT NO. 658-005 REF 658GRAD, LINEWRK, 658SLOTS
SCALE HOR 1"=40' VERT: N/A
658STTL.dwg

REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17, 1990 MICHAEL J. TOMPKINS
VALID THROUGH 6-30-04

TITLE SHEET
FLORENDOS HIDEAWAY

SHEET 1 of 11

PROJECT FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION

N:\Proj\658-005\dwg\658STTL.dwg - SHEET: ENGINEERING Nov 03, 2003 - 4:26pm jmj

GENERAL NOTES:

1. THE DESIGN ENGINEER WILL BE RESPONSIBLE FOR INSPECTION OF THE PROPOSED IMPROVEMENTS WITH OVERSIGHT FROM 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 WEST LINN 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 AND A PRE-CONSTRUCTION MEETING WITH THE CITY OF WEST LINN ARE REQUIRED PRIOR TO BEGINNING CONSTRUCTION. 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.
6. ALL SPECIFIED 3/4"-0 OR 1 1/2" AGGREGATE SHALL MEET APWA STANDARDS.
7. ACCESS TO LOTS 1 THROUGH 6 SHALL BE FROM SUNBREAK LANE AND CRESTVIEW DRIVE ONLY. NO ACCESS WILL BE ALLOWED FROM BLAND CIRCLE.

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; AT&T CABLE – LINDA PETERSEN, 243-7497, QWEST COMMUNICATIONS – JACKIE LOLLAR 242-8496.

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 RICH MODEL 925 ON "VANCOUVER" TYPE MODEL 910.
5. FIRE HYDRANTS SHALL BE CLOW MEDALLION TYPE 2545 OR MUELLER CENTURION ONLY, AND SHALL BE INSTALLED IN ACCORDANCE WITH APWA DIVISION IV, SECTION 404. PUMPER OUTLET IS TO FACE THE DIRECTION OF ACCESS.
6. GRANULAR BACKFILL IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 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 SERVICE 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.
11. A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR SERVICE LATERAL INSTALLATIONS BEYOND THE WATER METER.
12. 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.

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 (1 1/2"-0) CRUSHED ROCK AND LEVELING COURSE SHALL BE (3/4"-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. 2" BASE LIFT SHALL BE CLASS 'B' A.C. AND 1 1/2" 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 1 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 COSNTRUCTION 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.

SANITARY SEWER:

1. PIPE SHALL BE PVC SEWER PIPE CONFORMING TO ASTM D-3034-SDR 35. MINIMUM STIFFNESS SHALL BE 46 PSI AND JOINT TYPE SHALL BE ELASTOMERIC GASKET CONFORMING TO ASTM D-3212.
2. MANHOLE BASE SHALL BE PRE-CAST OR POURED IN-PLACE CONCRETE BASE WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI. 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 IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 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 AN 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 ALSO WITNESSED & APPROVED BY THE CITY OF WEST LINN INSPECTOR.
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.
10. THE NEW SANITARY SEWER LINE SHALL NOT BE CONNECTED TO THE CITY'S SYSTEM PRIOR TO TESTING AND APPROVAL.

STORM DRAINS:

1. TEN INCH AND LARGER STORM DRAIN PIPE SHALL BE CLASS 3, NON-REINFORCED, CONCRETE PIPE CONFORMING TO ASTM C14, PIPE CONFORMING TO ASTM D-3034 OR SEAMLESS PVC PIPE CONFORMING TO ASTM F794. (PW RIB). WHERE REQUIRED, JOINTS ARE REQUIRED FOR ALL CONCRETE PIPE. EIGHT INCH AND SMALLER STORM DRAIN PIPE SHALL CONFORM TO ASTM D 3034 PVC PIPE. ALL JOINTS SHALL HAVE RUBBER GASKETS.
2. GUTTER INLETS 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.
3. 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. SOME OR ALL OF THE STORM DRAIN MANHOLES REQUIRED WILL BE OVERSIZED MANHOLES. INTERIOR DIMENSIONS NOTED ON THE PLANS ARE MINIMUMS. CHECK WITH MANHOLE MANUFACTURER FOR ACTUAL SIZE NEEDED FOR TYPE OF PIPE TO BE USED.
4. 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.
5. CLEANOUT PIPE, FITTINGS AND JOINTS SHALL BE THE SAME SPECIFICATION AS FOR PIPE. CASTINGS ARE SHOWN ON DETAIL AND SHALL CONFORM TO ASTM A 48 (GRADE 30). CLEANOUT RISER SHALL MATCH DOWNSTREAM PIPE DIAMETER.
6. GRANULAR BACKFILL IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 85% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL.
7. RIPRAP WHERE NOTED ON THE PLANS IS TO BE CLASS 50 IN ACCORDANCE WITH OREGON STATE HIGHWAY DIVISION SPECIFICATION 714.
8. STORM DRAINS SHALL BE TESTED FOR DEFLECTION WITH A MANDREL EQUAL TO 95% OF THE PIPE SIZE BEING TESTED. IN ADDITION, STORM LINES SHALL BE VIDEO INSPECTED BY THE CONTRACTOR PER APWA, DIVISION III, SECTION 303.3.11. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER.
9. A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR STORM DRAINS BEYOND THE FIRST CLEANOUT.
10. A BACKWATER CHECK VALVE SHALL BE INSTALLED ON THE 4" ROOF DRAIN SERVICE TO ANY LOT THAT HAS THE END OF ITS ROOF DRAIN STUB LOCATED BELOW THE DETENTION OVERFLOW ELEVATION. THESE CHECK VALVES SHALL BE A CANPLAS 3284 4" ABS VALVE OR OTHER EQUAL LOW PRESSURE VALVE.
11. 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 SPECIFICATION OF THE CITY OF WEST LINN STREET/UTILITY DESIGN AND CONSTRUCTION STANDARDS.

EROSION CONTROL:

SUMMARY:

1. THE CONTRACTOR, PRIOR TO BEGINNING WORK, SHALL OBTAIN AN EROSION CONTROL PERMIT.
2. THE INTENT OF THE REQUIREMENT IS TO PREVENT SILTATION FROM REACHING STORM DRAIN SYSTEMS AND DRAINAGE WAYS.
3. THE MINIMUM MEASURES NEED TO BE MADE ON ALL PROJECTS.
   - A)A GRAVEL PAD WITH 3"-6" ROCK, AT LEAST 50 FEET LONG, IS REQUIRED WHERE VEHICLES WILL LEAVE THE CONSTRUCTION SITE.
   - B)A SEDIMENT BARRIER IS TO BE CONSTRUCTED WITH A SEDIMENT FENCE WHERE NOTED IN THE DETAILS OR WHERE SEDIMENT WILL CROSS OUTSIDE THE WORK AREA.
   - C)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.
   - D)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 EVERY OTHER WEEK, OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
7. AT NO TIME SHALL MORE THAN 50% OF THE SEDIMENT RETENTION CAPACITY 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.

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, INCLUDING 4" OF TOP SOIL.
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, INCLUDING SPREADING OVER LOTS.
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.
6. EROSION CONTROL MEASURES DURING CONSTRUCTION SHALL BE GOVERNED BY CLACKAMAS COUNTY EROSION CONTROL STANDARDS.

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.
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.
   APPLICATION RATE SHALL BE 100 POUNDS MINIMUM 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 ARE 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.

DECISION

BASED UPON THE UPON THE APPLICANT'S RESPNSE TO THE APPROVAL CRITERIA, CONTAINED WITHIN THE APPLICANT'S SUBMITTAL, AND STAFF SUPPLEMENTAL FINDINGS, ATTACHED, STAFF FINDS THAT THERE ARE SUFFICIENT GROUNDS FOR THE PLANNING DIRECTOR AND CITY ENGINEER TO APPROVE THE APPLICATION AS A 12-LOT SUBDIVISION WITH THE FOLLOWING CONDITIONS OF APPROVAL.

1. REGRADING TREE PRESERVATION:
   - A. A TREE CONSERVATION EASEMENT SHALL BE ESTABLISHED FOR THE TREE AT THE SOUTHEAST CORNER OF LOT 1. THE EASEMENT MAY ONLY BE REMOVED IF A LICENSED ARBORIST CERTIFIES THAT THE TREE IS DEAD.
   - B. SIX FOOT TALL CHAIN-LINK FENCING SHALL BE PLACED 10 FEET BEYOND THE DRIP LINE OF THE TREE AT THE SOUTHEAST CORNER OF LOT 1.
   - C. THE CITY ARBORIST SHALL INSPECT AND APPROVE ALL ON-SITE TREE PROTECTION MEASURES, AND TREE PRUNING, INCLUDING PLACEMENT OF PROTECTION FENCES PRIOR TO THE START OF SITE WORK. IT IS THE APPLICANT'S RESPONSIBILITY TO CONTACT THE CITY ARBORIST AND ARRANGE FOR THIS APPROVAL TO TAKE PLACE. NO PERMITS FROM ENGINEERING, PLANNING, OR BUILDING DEPARTMENTS SHALL BE ISSUED WITHOUT APPROVAL FROM THE CITY ARBORIST REGARDING TREE PROTECTION MEASURES.
   - D. ALL TREE PROTECTION MEASURES SHALL REMAIN IN PLACE AND FULLY FUNCTIONAL FOR THE ENTIRE TIME THAT SITE WORK AND CONSTRUCTION IS TAKING PLACE.

REMOVE VIA APPEAL..

~~2. THE APPLICANT SHALL DEDICATE A 10-FOOT WIDE PUBLIC TRACT TO THE CITY OF WEST LINN THAT WILL ACCOMMODATE A PATH ALONG THE WEST PROPERTY LINE. THE APPLICANT SHALL PROVIDE FEES IN-LIEU-OF AMOUNTING TO 62.5% OF THE ESTIMATED COST OF AN 8-FOOT WIDE BIKE/PEDESTRIAN ASPHALTIC PATH LINKING BLAND CIRCLE NEAR LOT 3 AND THE NORTHWEST CORNER OF LOT 12. AT SUCH TIME THAT THE PROPERTY TO THE WEST OF RENAISSANCE 5 IS DEVELOPED, THAT DEVELOPER WILL PROVIDE A 10-FOOT WIDE PUBLIC TRAIL EASEMENT AND PAY HALF THE COST OF AN 8-FOOT ASPHALTIC PATH SO THAT THE PUBLIC WILL ULTIMATELY HAVE A 20-FOOT WIDE TRAIL EASEMENT CONTAINING AN 8-FOOT WIDE ASPHALTIC PATH, APPROXIMATELY 682-FEET IN LENGTH, FROM BLAND CIRCLE TO THE PROPERTY NORTHWEST OF LOT 12. THE APPLICANT'S FINAL GRADING PLAN SHALL BE REVIEWED AND APPROVED BY THE WEST LINN PARKS AND RECREATION DIRECTOR SO AS TO PROVIDE FOR THE FUTURE PLACEMENT BY THE PARKS DEPARTMENT OF A PAVED TRAIL WITHIN THE EASEMENT AREA. THE APPLICANT SHALL ALSO INSTALL, PRIOR TO FINAL PLATTING, A FENCE WITH A MINIMUM HEIGHT OF FOUR FEET ALONG THE EAST EDGE OF THE TRACT THAT IS CONVEYED TO THE CITY OF WEST LINN. THIS FENCE SHALL DELINEATE THE TRACT AND KEEP USERS OFF ABUTTING PRIVATE PROPERTY.~~

DOES NOT APPLY DO TO APPEAL.

3. THE APPLICANT SHALL INSTALL HALF STREET IMPOVEMENTS PLUS A TRAVEL LANE ALONG THE FRONTAGE OF THE PROTERY ON BLAND CIRCLE. NO SIDEWALKS ARE REQUIRED ON BLAND CIRCLE,(~~BUT AN ADA CURB CUT TO ACCESS THE FOOTPATH ON THE WEST EDGE OF THE PROPERTY IS REQUIERED.)~~

4. THE DETENTION METHOD AND FACILITY SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.

5. THE WATER QUALITY TREATMENT METHOD AND FACILITY SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.

6. A PLANTER STRIP ON BLAND CIRCLE SHALL HAVE STREET TREES (TWO-INCH CALIPER) PLANTED APPROXIMATELY 25 FEET ON CENTER FOR THE ENTIRE FRONTAGE.

7. ALL WATER METER LOCATIONS SHALL MEET CITY STANDARDS.

8. ALL PUBLIC IMPROVEMENTS SHALL MEET EXISTING CITY OF WEST LINN CONSTRUCTION STANDARDS.

9. ALL STREET LIGHTS SHALL BE DOWNWARD FOCUSED AND SHIELDED WITH NO GLOBE OR OMNIDIRECTIONAL LIGHTING PERMITTED.

MITIGATION APPROVED AS PROPOSED IN APPLICANT'S SUBMITTAL.

~~10. TO MITIGATE FOR THE REMOVAL OF NINE TREES WITHOUT APPROVAL, THE APPLICANT WILL PLANT 18 TREES IN HIS HALF OF THE TRAIL CORRIDOR. THE TREES WILL BE EVENLY DISTRIBUTED ALONG THE CORRIDOR. THE TREES SHALL CONSIST OF A NATIVE MIX OF TREES WITH EIGHT DOUGLAS FIRS (8-10 FEET IN HEIGHT, EXCLUDING ROOT BALL), FIVE MAPLES (TWO-INCH CALIPER) AND FIVE CEDARS (TWO-INCH CALIPER). THE APPLICANT SHALL INSTALL AN IRRIGATION SYSTEM TO ENSURE THE SURVIVAL OF THE TREES. THE CITY ARBORIST SHALL APPROVE THE IRRIGATION SYSTEM AND FINAL TREE SELECTION AND LOCATION.~~

11. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED PRIOR TO SITE PREPARATION OR GRADING.

12. STREET LIGHT FIXTURES AND LOCATION MUST BE APPROVED BY THE PLANNING DIRECTOR.

I/WE DECLARE TO HAVE NO INTEREST IN THE OUTCOME OF THIS DESICION 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.

ADDITIONAL NOTES:

1. *ALL EARTHWORK AND GRADING SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER.*
2. *SLOPES ON FILL SHALL NOT EXCEED 2:1.*
3. *CONNECTION TO EXISTING MANHOLE SHALL BE DONE WITH BORE AND RUBBER "BOOT".*
4. *IF THE RECENTLY PLACED PAVEMENT ON SW BLAND CIRLCE IS DAMAGED OR REMOVED DURING CONSTRUCTION DECISION ABOUT REPAIR WILL BE MADE BY THE CITY ON SITE PRIOR TO PAVING THE SUBDIVISION.*

AS-BUILT

DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY
2	11.03.03	AS-BUILTS	JMJ

DESIGNED BY ____ DATE ____
DRAWN BY **JRN** DATE **4-10-03**
REVIEWED BY ____ DATE ____
PROJECT NO **658-005** REF ____
SCALE **HOR: 1"=40'**
VERT: N/A
6585NOTE.dwg

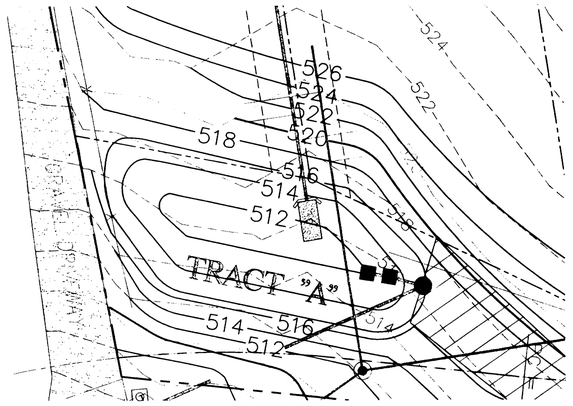
REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17, 1986 MICHAEL J. VAN ...
11/4/03
VALID THROUGH 6-30-04

CONSTRUCTION NOTES

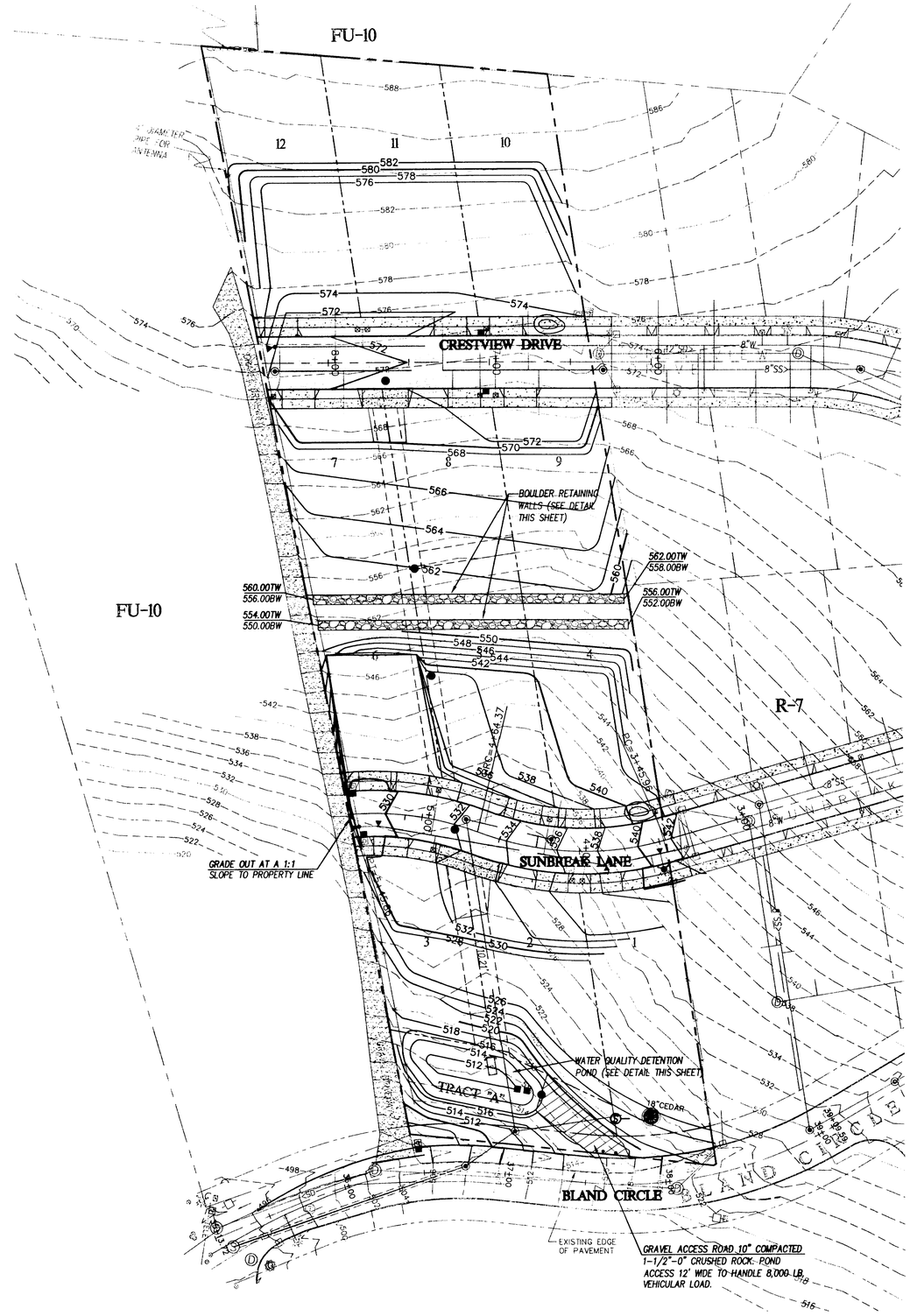
FLORENDO'S HIDEAWAY

SHEET **2** OF **11**

PROJECT **FLORENDO'S**
NO. **658-005**
TYPE **CONSTRUCTION**



DETENTION POND
SCALE: 1" = 20'-0"



7312 SW Durham Road
Portland, Oregon 97224
Tel: (503) 598-8445 Fax: (503) 598-8705

Renaissance Heights V
Project No. 02-8105

FIGURE 4

ROCKERYWALL DESIGN

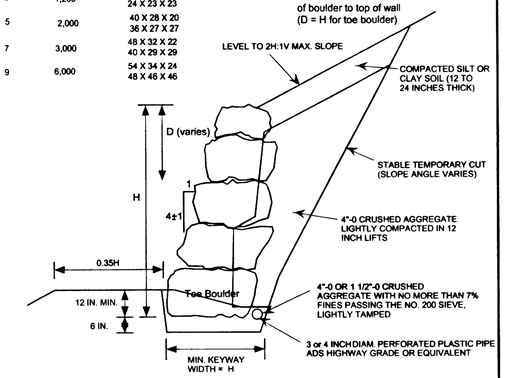
MAXIMUM WALL HEIGHT (H) = 9 FEET

DRAWING NOT TO SCALE

D is distance from base of boulder to top of wall (D = H for toe boulder)

ROCK SIZE SCHEDULE (See note 4 below)

D (FT)	MIN. WT. (LBS.)	TYPICAL SIZE (IN.)
1	650	24 X 18 X 14 19 X 19 X 19
3	1,200	32 X 27 X 20 24 X 23 X 23
5	2,000	40 X 28 X 20 36 X 27 X 27
7	3,000	48 X 32 X 22 40 X 29 X 29
9	6,000	54 X 34 X 24 48 X 46 X 46



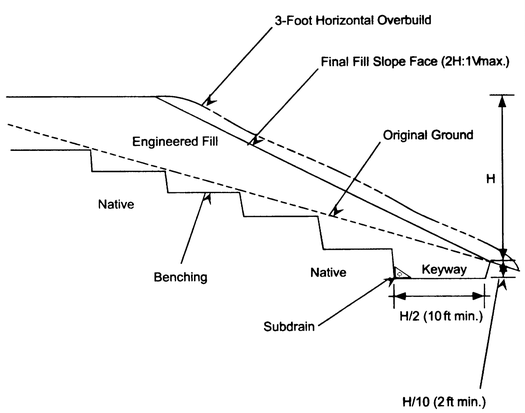
CONSTRUCTION NOTES:

1. For walls supporting engineered fill, the fill should be overbuilt as a temporary 1H:1V slope starting at a minimum distance of H/3 from the base of the wall. The slope should then be trimmed back such that the wall is constructed against a stable excavated face of compacted fill.
2. Keyway subgrade and embedment should be verified by GeoPacific Engineering, Inc.
3. Rocks should have a cubical, tabular, or semi-rectangular shape that roughly matches the space created by the previous rock course. Rocks should be laid flat with the long dimension oriented perpendicular to the wall and extending towards the excavation face. Rocks should be staggered such that each rock bears on at least two rocks below and vertical joints are discontinuous. Rock placement and wall integrity should be checked (by builder) by lightly hammering on the top of each rock with excavator bucket.
4. Minimum rock sizes should be determined using the ROCK SIZE SCHEDULE above, where D is the distance from the base of the rock to be placed to the top of the wall. Rocks should be no smaller than 650 lbs.
5. Voids greater than 6 inches wide where there is no contact between adjacent rocks should be chinked with a small rock.
6. Backfill behind the rocks should consist of an average 12-inch-wide sheet of 4"-0 crushed aggregate with no more than 7% fines passing the U.S. Standard No. 200 sieve. Backfill should be placed in 12 inch lifts and lightly compacted to an unyielding state as each course of rocks is placed.

7312 SW Durham Road
Portland, Oregon 97224
Tel: (503) 598-8445 Fax: (503) 598-8705

FILL SLOPE DETAIL

TYPICAL KEYWAY, BENCHING & FILL SLOPE DESIGN



Recommended subdrain is minimum 3-inch-diameter ADS Heavy Duty grade (or equivalent), perforated plastic pipe enveloped in a minimum of 3 cubic feet per lineal foot of 2" to 1/2" open-graded gravel drain rock wrapped with geotextile filter fabric (Mirafi 140N or equivalent).

Project: Renaissance Heights 5 West Linn, Oregon	Project No. 02 - 8105	FIGURE - 3

LEGEND

572	2' CONTOUR
570	10' CONTOUR
560	EXISTING 2' CONTOUR
	EXISTING 10' CONTOUR
	TREES TO BE SAVED AND PROTECTED

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

AS-BUILT
DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND, OR 97223

NO.	DATE	REVISION	BY
1	11.03.03	AS-BUILTS	JMJ

DESIGNED BY JMJ DATE
DRAWN BY JRN DATE 4-10-03
REVIEWED BY DATE
PROJECT NO. 658-005 REF 658SBAS 658SUTIL 658SLOTS 658SSOAR
SCALE HORZ: 1"=40' VERT: 1"=4'
658SGRAD.dwg

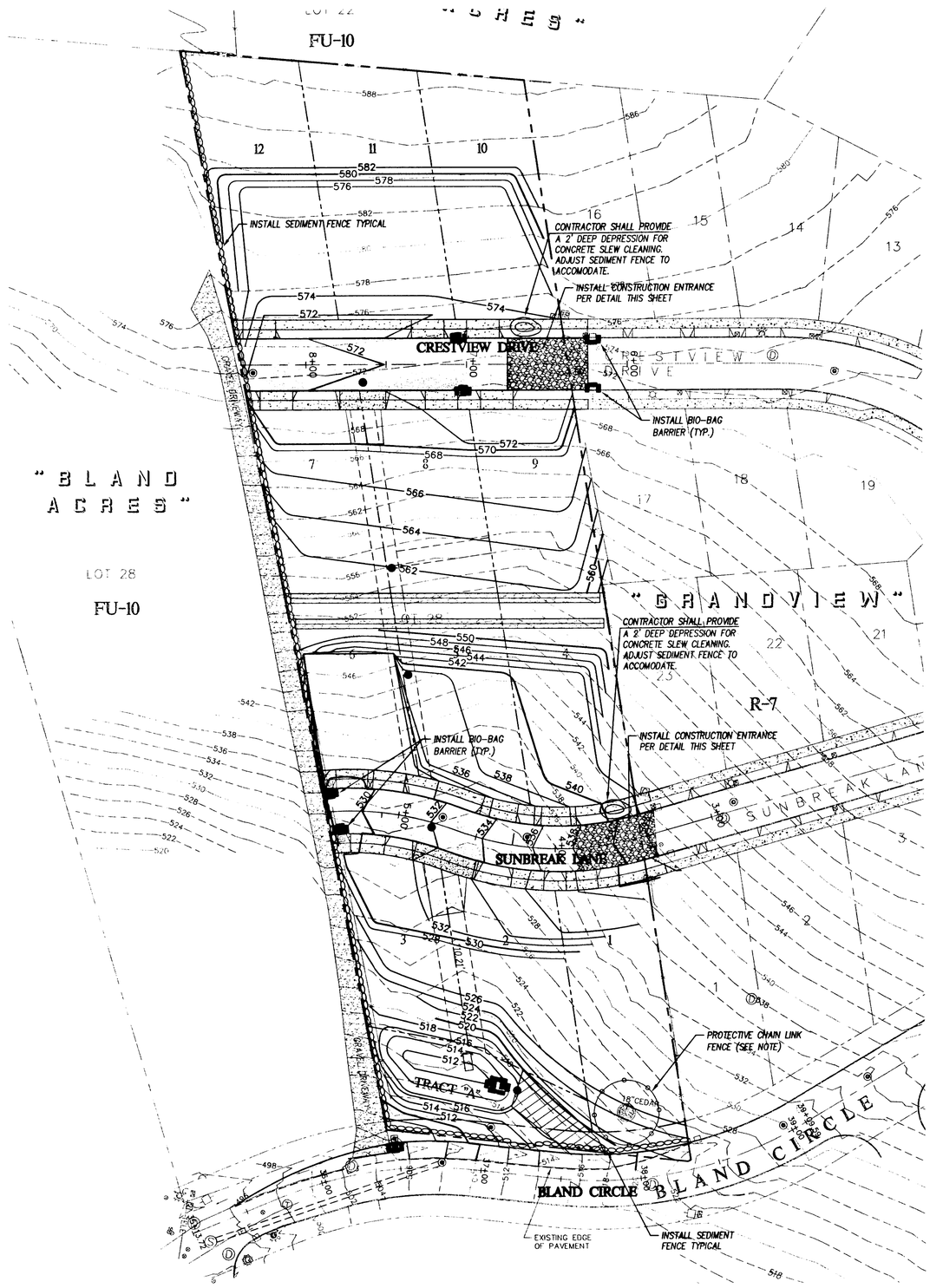
REGISTERED PROFESSIONAL ENGINEER
OREGON
MICHAEL J. MCGUIRE
VALID THROUGH 6-30-04

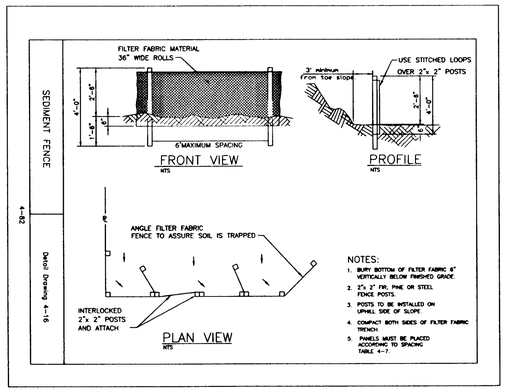
GRADING PLAN

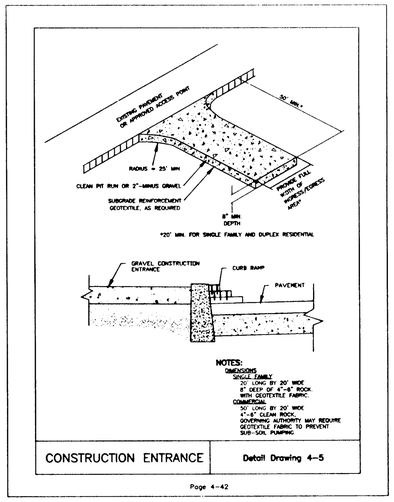
FLORENDO'S HIDEAWAY

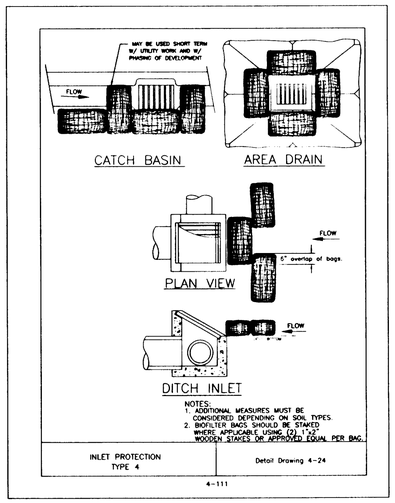
SHEET 3 OF 11

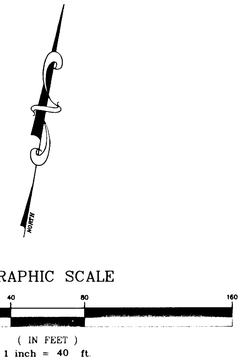
PROJECT FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION











WET WEATHER EROSION CONTROL NOTE:

THE WET WEATHER SEASON IS OCTOBER 1ST THROUGH APRIL 30TH.

IF VEGETATION HAS NOT BEEN ESTABLISHED AND LANDSCAPING DONE ON THE DETENTION POND AREA PRIOR TO THE WET WEATHER SEASON, DRAIN ROCK SHALL BE USED TO PROTECT THE BOTTOM AND AFFECTED SLOPES OF THE DETENTION POND.

TREE PROTECTION NOTE:

CONSTRUCT 6' HIGH, CHAIN LINK FENCE 10' FROM DRIP LINE EDGE OF 18" CEDAR TREE. CONTRACTOR SHALL HAVE CITY ARBORIST TO INSPECT FENCE PRIOR TO CONSTRUCTION.

LEGEND

- 572 — 2' CONTOUR
- 570 — 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN MANHOLE
- EXISTING STORM DRAIN CLEANOUT
- PROPOSED STORM DRAIN CLEANOUT
- EXISTING STORM DRAIN LINE
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING STORM DRAIN CATCH BASIN
- PROPOSED STORM DRAIN CATCH BASIN
- EXISTING SANITARY SEWER CLEANOUT
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- EXISTING BLOW-OFF
- PROPOSED BLOW-OFF
- EROSION CONTROL FENCE
- BIO-BAGS

AS-BUILT

DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY
2	11.03.03	AS-BUILTS	JMJ

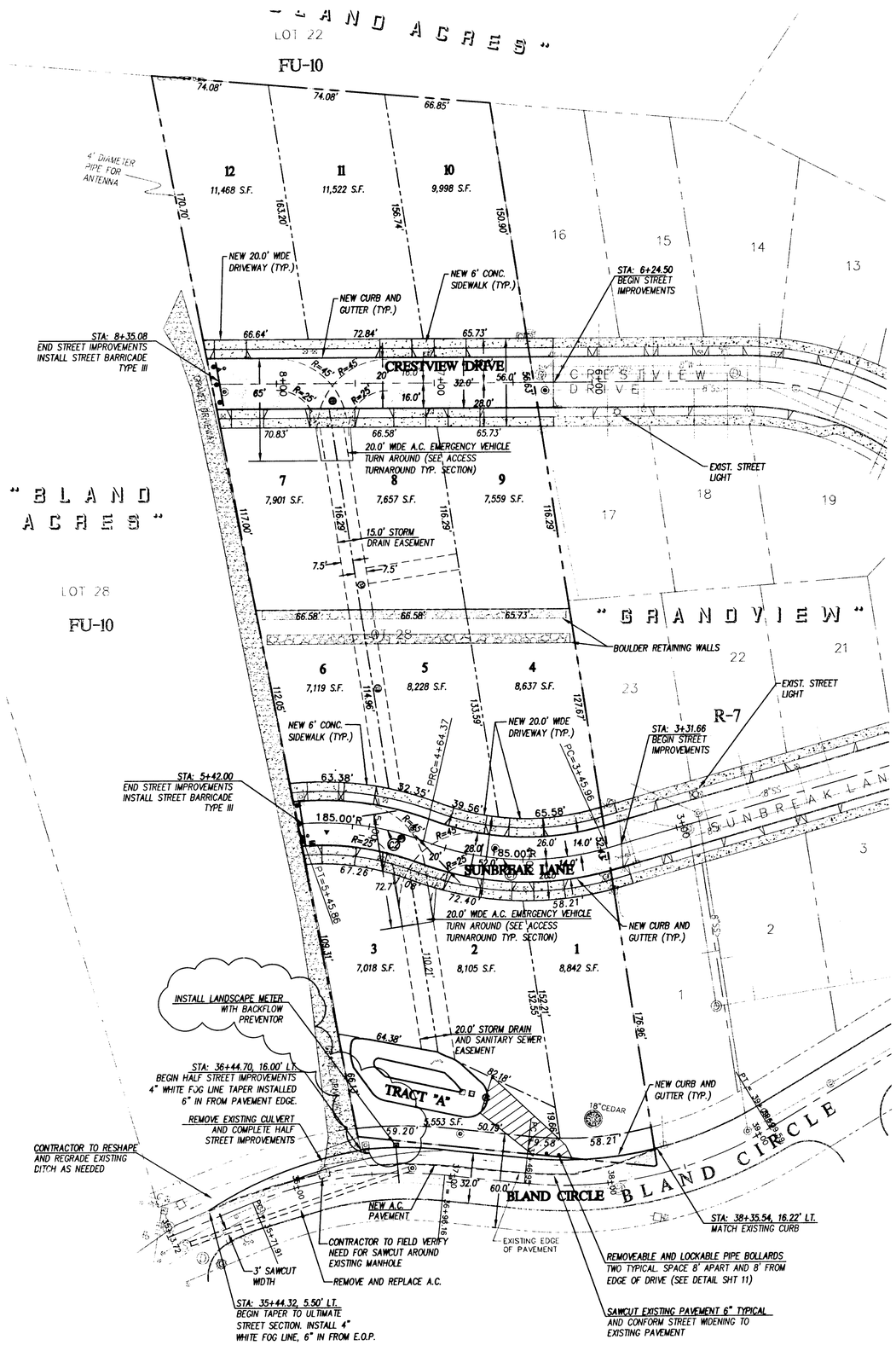
DESIGNED BY ___ DATE ___
DRAWN BY JRN DATE 4-10-03
REVIEWED BY ___ DATE ___
PROJECT NO 658-005 REF 658BAS 658SLOT 658SUNR 658STIL
SCALE HORZ. 1"=40' VERT. 1"=4'
658SERCR.dwg

REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17 1990 MICHAEL J. WEBER
VALID THROUGH 6-30-04

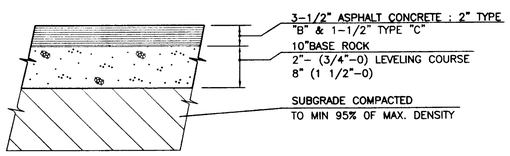
EROSION CONTROL AND TREE PRESERVATION PLAN
FLORENDOS HIDEAWAY

SHEET 4 OF 11

PROJECT FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION

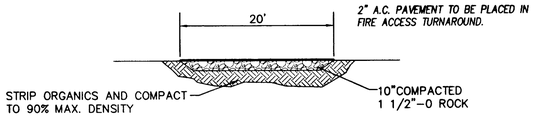


NOTE: SEE SEPARATE PLAN FOR STREET LIGHTS.



TYPICAL STREET A.C. PAVEMENT STRUCTURAL SECTION
NOT TO SCALE

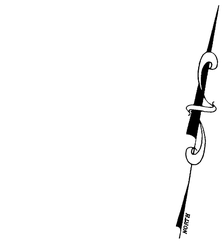
NOTES:
1. PROVIDE CONCRETE WHEEL STOP HELD IN PLACE W/ #4 REBAR SET 24" INTO GROUND @ LOTS 2/3 AND 7/8.
2. TURNAROUND DRIVEWAYS TO BE CONSTRUCTED AT TIME OF SITE IMPROVEMENT WORK.
3. CONSTRUCT COMMERCIAL TYPE DRIVEWAY FOR TURNAROUND. (SEE STD. DWG. WL-504)
4. RADII SHOWN AT EMERGENCY VEHICLE TURN AROUNDS ARE BASED ON VEHICULAR MOVEMENT.



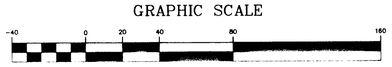
FIRE ACCESS TURNAROUND TYP. SECTION
NOT TO SCALE

CURVE TABLE				
CURVE #	LENGTH	RADIUS	TANGENT	DELTA
C1	118.41'	185.00'	61.31	36°40'25"
C2	81.49'	185.00'	41.42'	25°14'17"

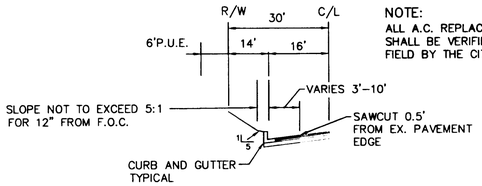
NOTES:
1. PROVIDE WEEP HOLES 1' IN FROM SIDE LOT LINE.
2. DRIVEWAYS SHALL HAVE 22' WIDE BOTTOMS.
3. CITY WILL MAKE DECISION TO REPAIR EXISTING PAVEMENT DAMAGED DURING CONSTRUCTION.
4. ALL CURB RAMPS TO MEET ADA REQUIREMENTS.



GRAPHIC SCALE

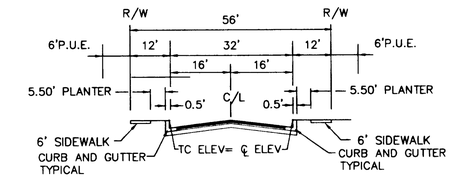


(IN FEET)
1 inch = 40 ft.

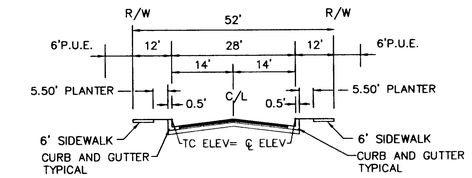


NOTE:
ALL A.C. REPLACEMENT LIMITS SHALL BE VERIFIED IN THE FIELD BY THE CITY INSPECTOR.

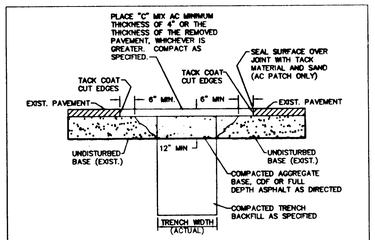
SW BLAND CIRCLE TYPICAL SECTION
NOT TO SCALE



CRESTVIEW DRIVE TYPICAL SECTION
NOT TO SCALE



SUNBREAK LANE TYPICAL SECTION
NOT TO SCALE



NOTES:
1. ALL EXISTING AC OR PCC PAVEMENT SHALL BE SAWCUT TO NEAT, STRAIGHT LINES PRIOR TO REPAVING.
2. CONCRETE PAVEMENT SHALL BE REPLACED WITH CONCRETE TO A MINIMUM THICKNESS OF REMOVED PAVEMENT, WHICHEVER IS GREATER.
3. IF EXISTING BASE MATERIAL IS CTB OR ATB, THEN REPLACEMENT BASE MATERIAL SHALL MATCH EXISTING.
4. ALL UTILITIES SHALL HAVE A MINIMUM COVER OF 36".
5. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-180 OR AS SPECIFIED IN THE CONTRACT DOCUMENTS.
6. ALL TRENCH BACKFILL AND PATCHING SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF WEST LINN.
7. BACKFILL SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 6" LIFTS.

Street T-Cut		
West Linn	DATE	JAN 2000
	DRAWING NO.	WL-203
	FILE NO.	00-203

AS-BUILT
DATE NORVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY
2	11.03.03	AS-BUILTS	JMJ

DESIGNED BY ___ DATE ___
DRAWN BY JRN DATE 4-10-03
REVIEWED BY ___ DATE ___
PROJECT NO 658-005 REF 6585BAS, 6585LOTS, 6585UTIL, 6585SUR
SCALE HORZ. 1"=40' VERT. 1"=4'
6585STRT1.DWG

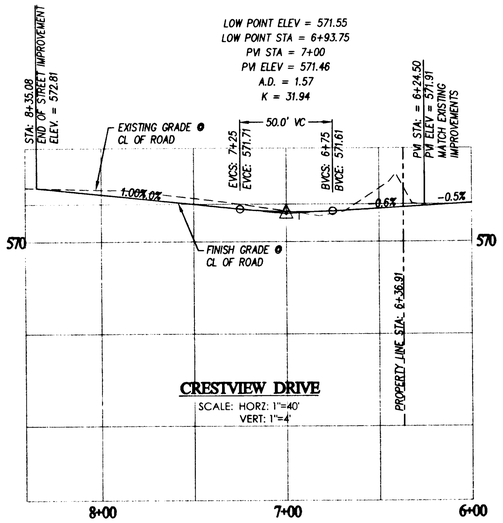
REGISTERED PROFESSIONAL ENGINEER
OREGON
JAMES R. NEWELL
MITCHELL
EXPIRES 6-30-04
VALID THROUGH 6-30-04

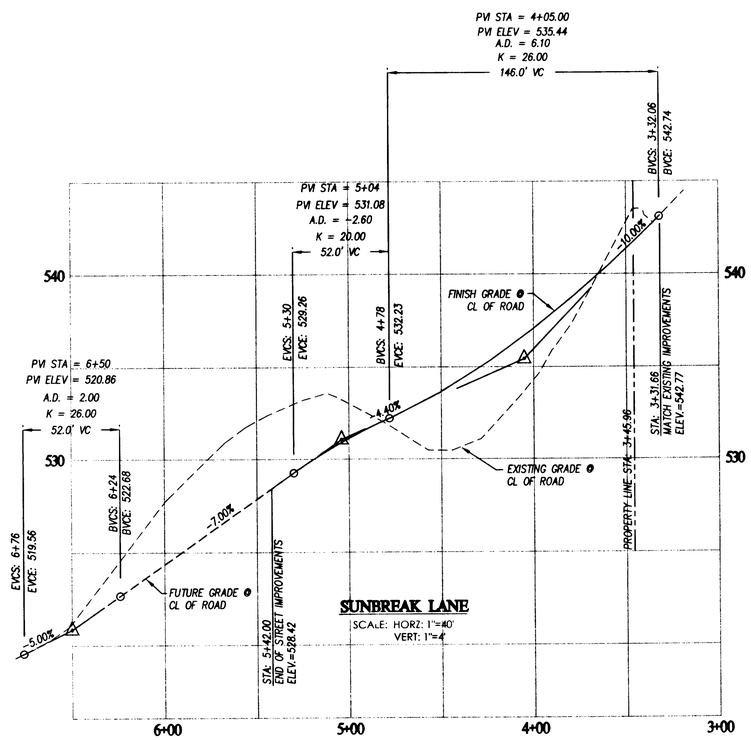
STREET AND SITE PLAN
FLORENDOS HIDEAWAY

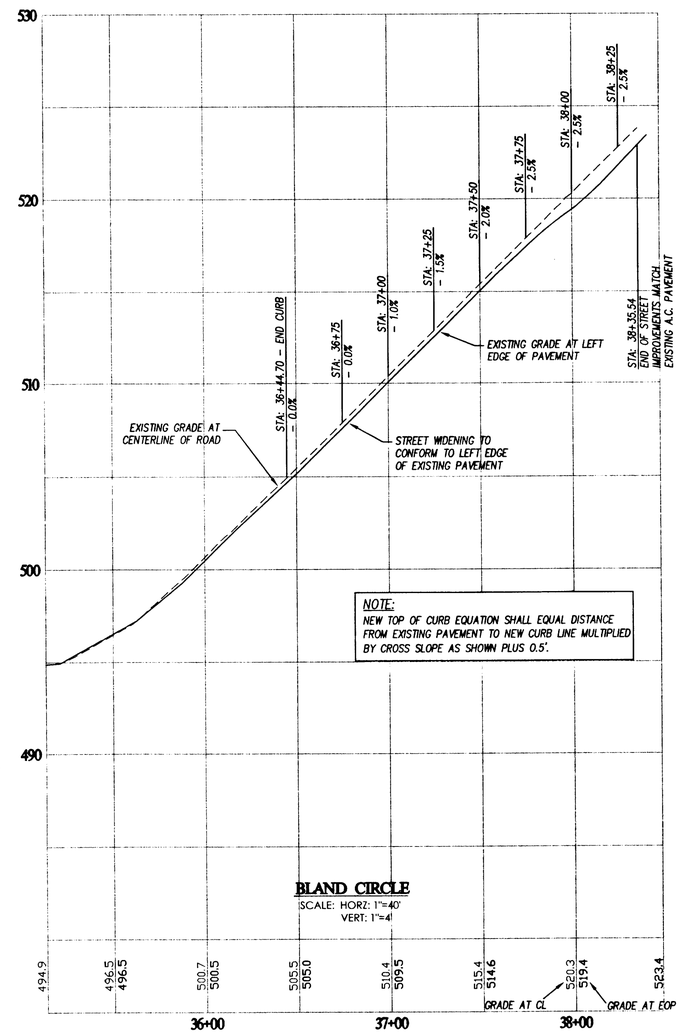
SHEET 5 OF 11

PROJECT: FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION

N:\Proj\658-005\dwg\6585STRT.dwg - SHEET: STREET PLAN Nov 04, 2003 - 9:29am jmj







AS-BUILT

DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY
2	11.03.03	AS-BUILTS	JMJ

DESIGNED BY ____ DATE ____
DRAWN BY JPN DATE 4-19-03
REVIEWED BY ____ DATE ____
PROJECT NO. 658-005 REF ____
SCALE HORZ: 1"=40' VERT: 1"=4'
658SBTPF.dwg

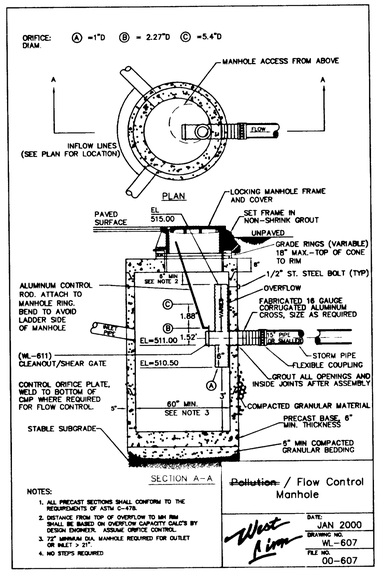
REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 17, 1986
MICHAEL J. WOLNY
VALID THROUGH 6-30-04

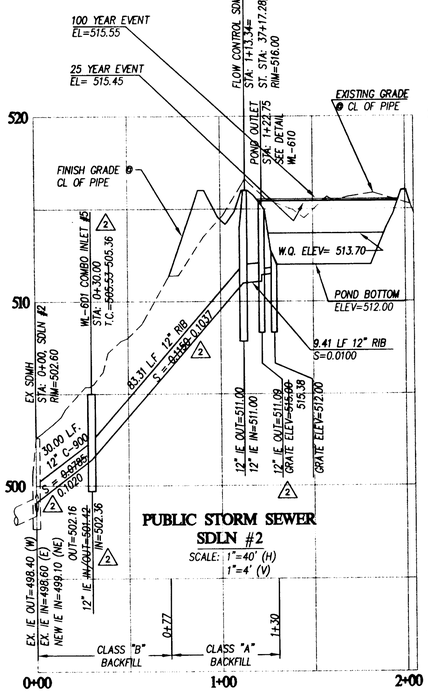
STREET PROFILES

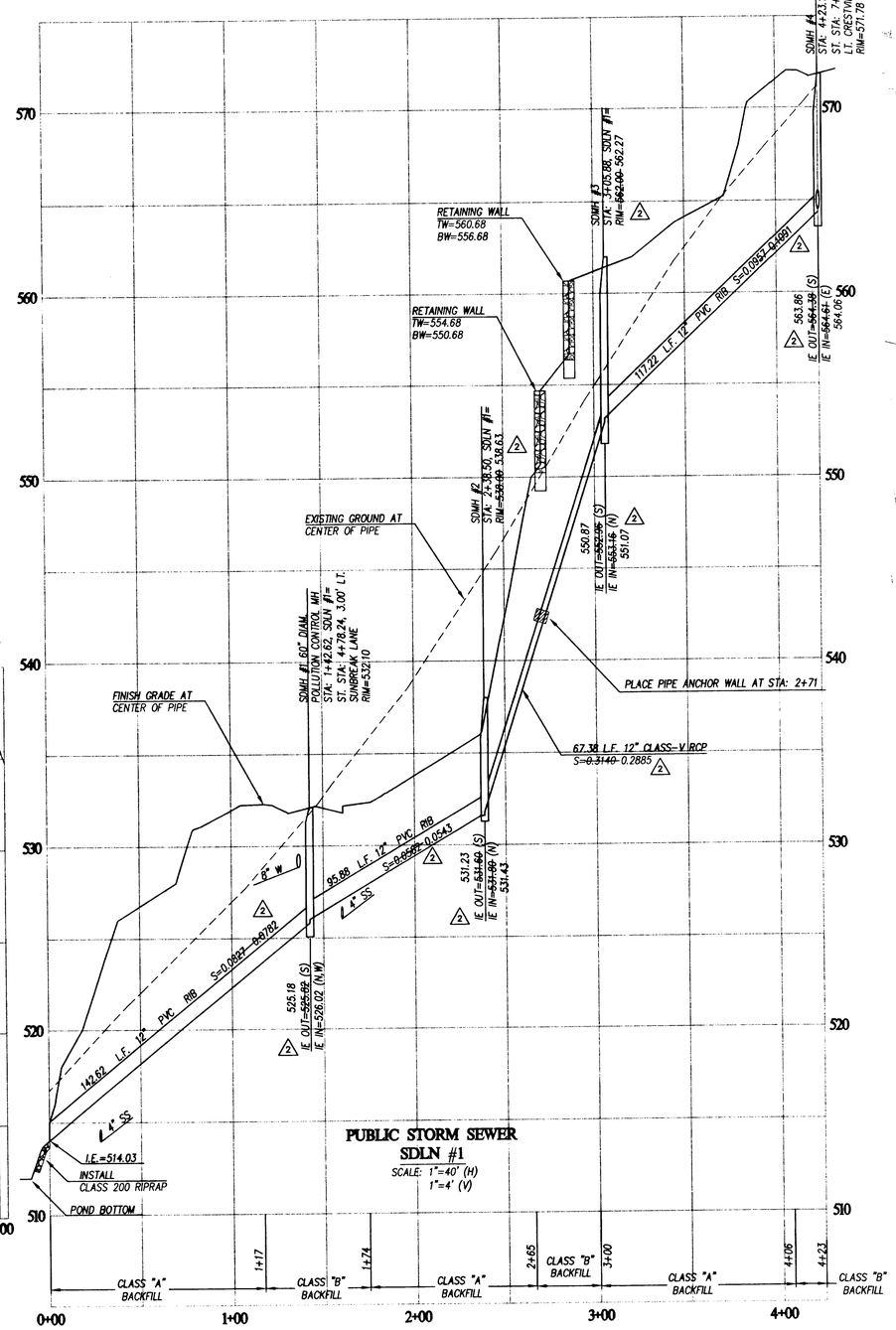
FLORENDO'S HIDEAWAY

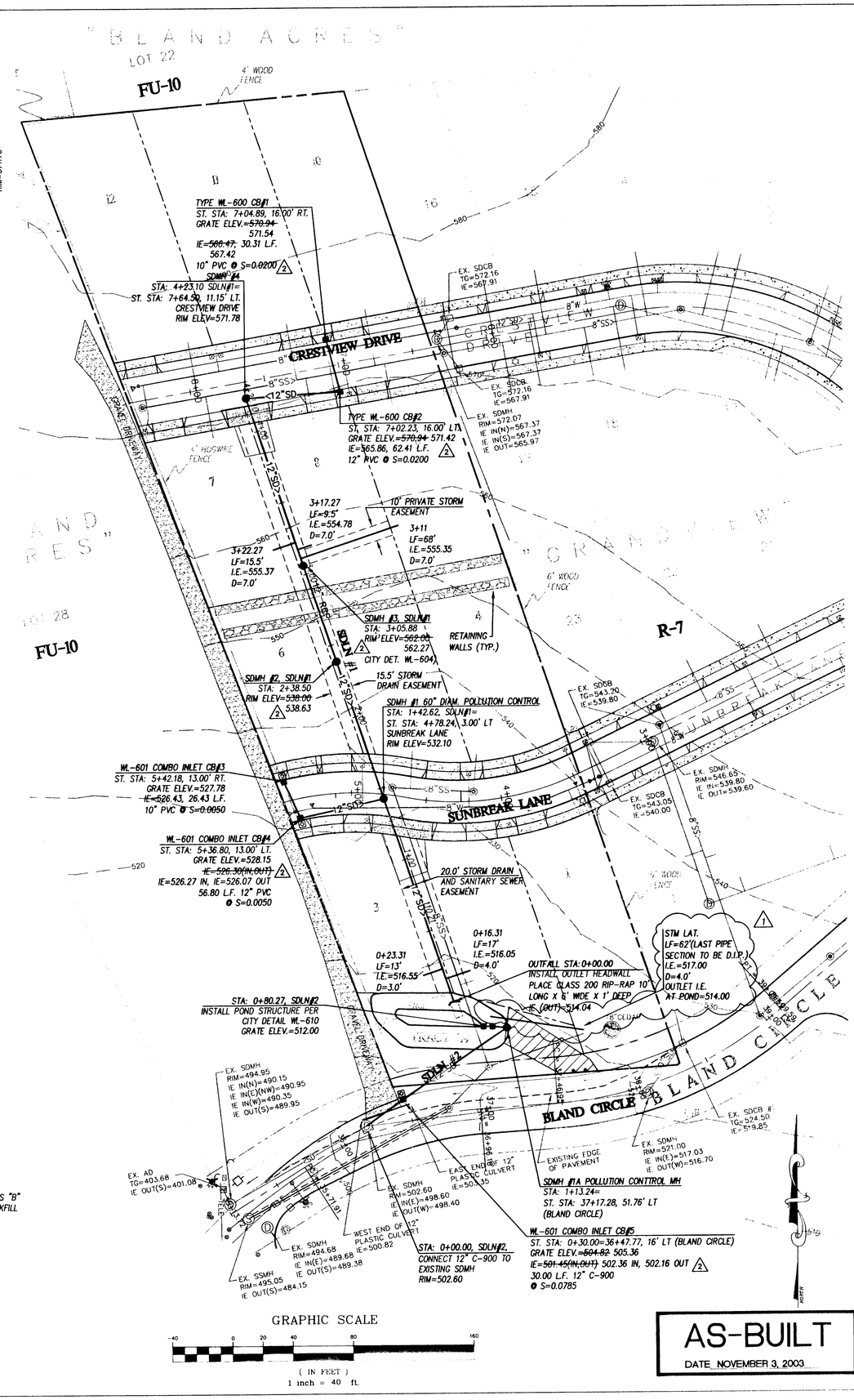
SHEET 6 OF 11

PROJECT: FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION









GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

AS-BUILT
DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND, OR 97223

NO.	DATE	REVISION	BY
1	6.24.03	ADD STRM LATERAL: LOT 1	MVL
2	11.03.03	AS-BUILTS	JMJ

DESIGNED BY JRN DATE
DRAWN BY JRN DATE 4-10-03
REVIEWED BY DATE
PROJECT NO. REF 6585UTL 6585CUR
SCALE HORZ. 1"=40' 6585SUR
VERT. 1"=4' 6585BAS
658585DPF.dwg

REGISTERED PROFESSIONAL ENGINEER OREGON 13,280 MICHAEL J. MARTIN
VALID THROUGH 6-30-04

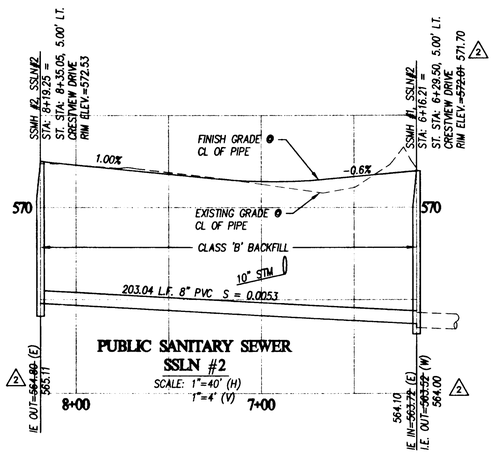
STORM DRAIN PLAN AND PROFILES

FLORENDO'S HIDEAWAY

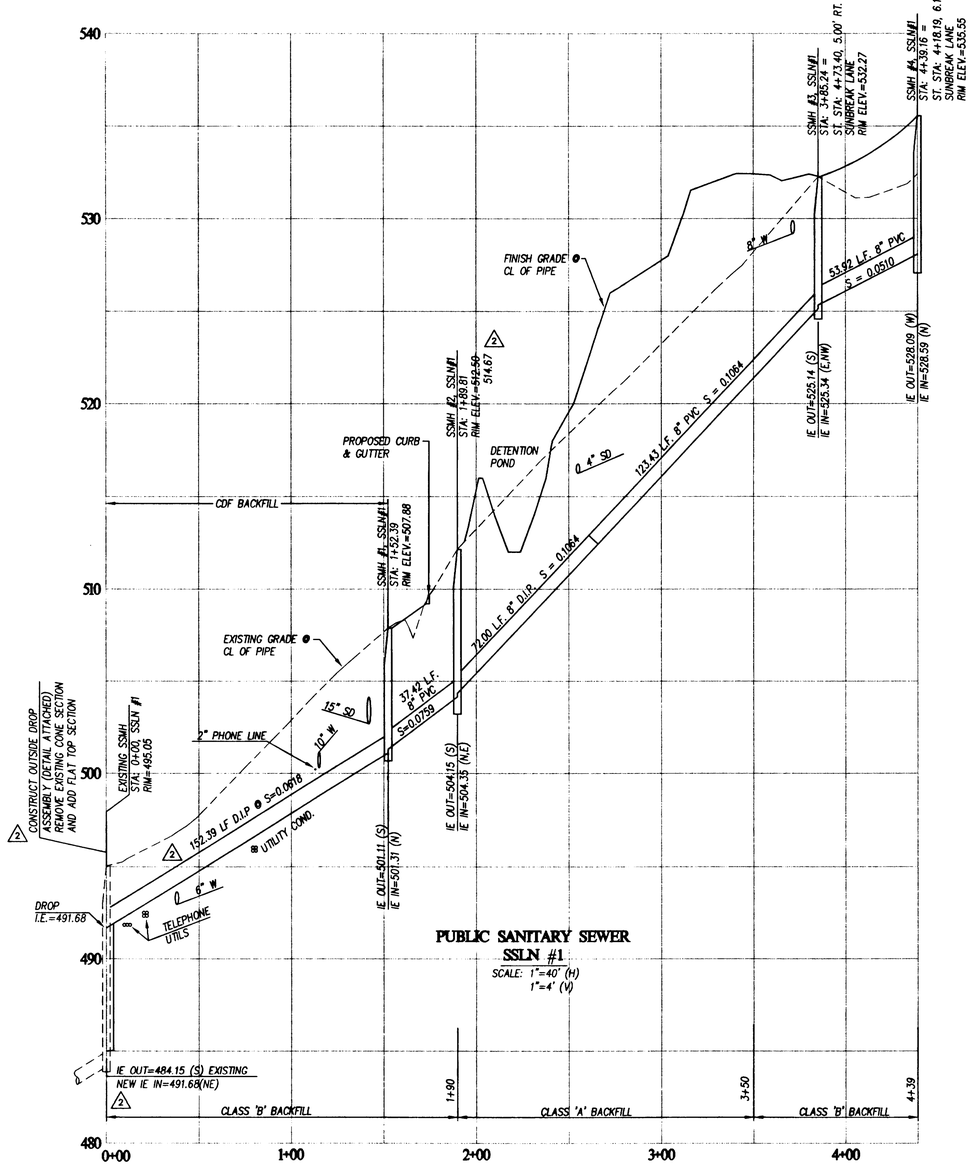
SHEET 7 OF 11

PROJECT FLOREND'S
NO. 658-005
TYPE CONSTRUCTION

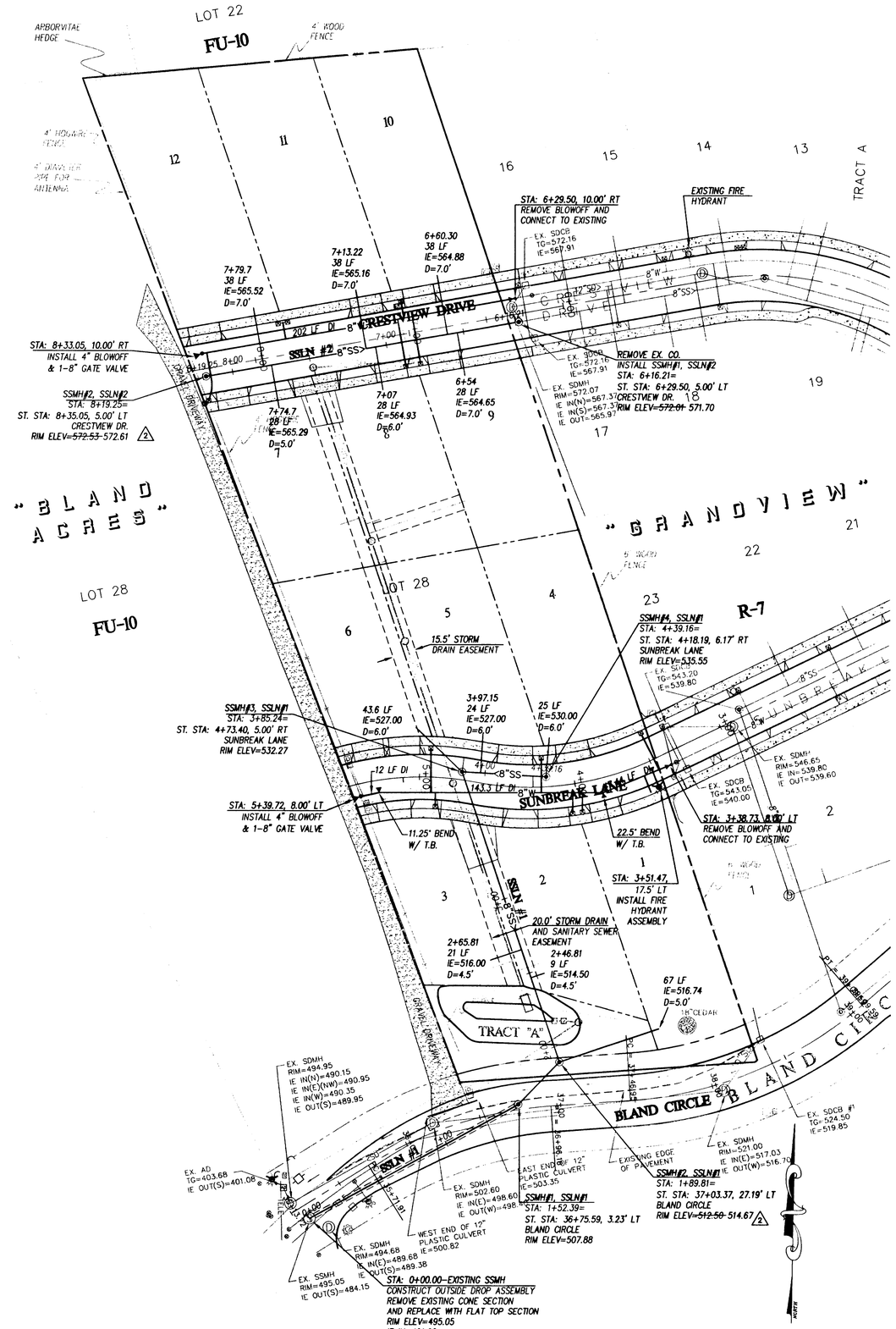
N:\proj\658-005\dwg\6585SDPF.dwg - SHEET: Eng. (SD Profiles) Dec 09, 2003 - 12:21pm jnc



PUBLIC SANITARY SEWER
SSLN #2
SCALE: 1"=40' (H)
1"=4' (V)



PUBLIC SANITARY SEWER
SSLN #1
SCALE: 1"=40' (H)
1"=4' (V)



GRAPHIC SCALE
-40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

AS-BUILT
DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY
2	11.03.03	AS-BUILTS	JMJ

DESIGNED BY JRN DATE
DRAWN BY JRN DATE 4-10-03
REVIEWED BY DATE
PROJECT NO. REF 6585LOTS 6585OTS 6585SAS
SCALE HORIZ. 1"=40' VERT. 1"=4' 6585SSPF.dwg

REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17, 1990 MICHAEL J. WALSH
VALID THROUGH 6-30-04

WATER AND SANITARY SEWER PLAN AND SANITARY SEWER PROFILES

FLORENDO'S HIDEAWAY

SHEET 8 OF 11

PROJECT FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION

N:\Proj\658-005\dwg\6585SSPF.dwg - SHEET: Eng (SS Profiles) Nov 04, 2003 - 8:27am jmj

LEGEND

- EXISTING STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN MANHOLE
- EXISTING STORM DRAIN CLEANOUT
- PROPOSED STORM DRAIN CLEANOUT
- EXISTING STORM DRAIN LINE
- 12" SD — PROPOSED STORM DRAIN LINE
- EXISTING SANITARY SEWER LINE
- 8" SS — PROPOSED SANITARY SEWER LINE
- EXISTING WATER LINE
- 8" W — PROPOSED WATER LINE
- EXISTING STORM DRAIN CATCH BASIN
- PROPOSED STORM DRAIN CATCH BASIN
- EXISTING SANITARY SEWER CLEANOUT
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- EXISTING BLOW-OFF
- PROPOSED BLOW-OFF
- PROPOSED POWER DROP

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

AS-BUILT

DATE NOVEMBER 3, 2003

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY
2	11.03.03	AS-BUILTS	JMJ

DESIGNED BY ____ DATE ____
DRAWN BY JRN DATE 4-10-03
REVIEWED BY ____ DATE ____
PROJECT NO. 658-005 REF. 6585BAS 6585UTIL 6585LOT 6585SURF
SCALE HORZ. 1"=40' VERT. 1"=5'
6585UT1.dwg

REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17, 1990 MICHAEL J. WEBB
VALID THROUGH 6-30-04

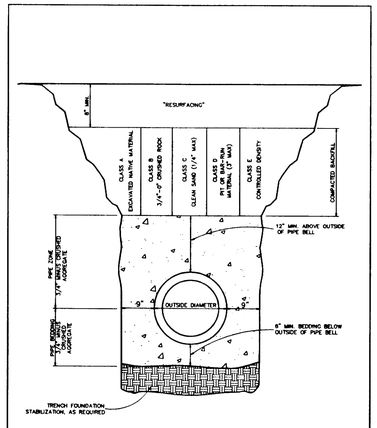
COMPOSITE UTILITY PLAN

FLORENDO'S HIDEAWAY

SHEET 9 OF 11

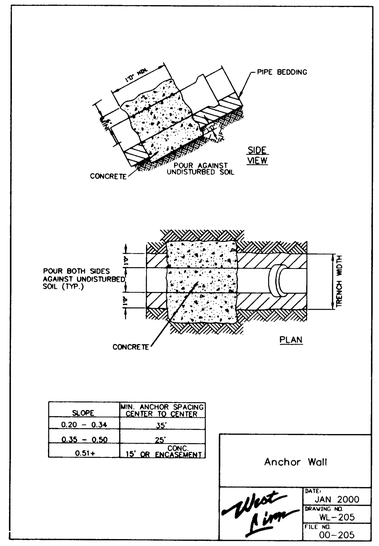
PROJECT FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION

N:\Proj\658-005\dwg\6585UT1.dwg - SHEET: CONSTRUCTION Nov 04, 2003 - 9:33am jmj



Trench Backfill, Bedding and Pipe Zone

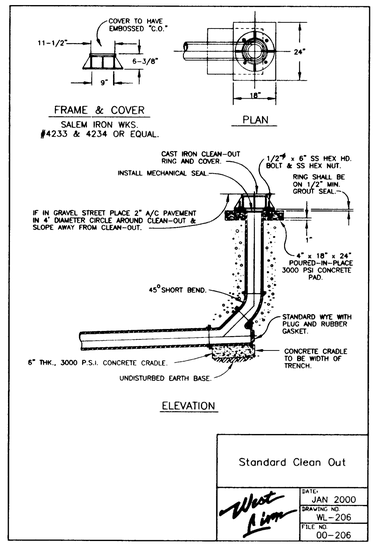
West Linn | DATE: JAN 2000 | DRAWING NO. WL-200 | FILE NO. 00-200



SLOPE	MIN. ANCHOR SPACING CENTER TO CENTER
0.20 - 0.34	35'
0.35 - 0.50	25'
0.51+	CONC 15' OR ENCASEMENT

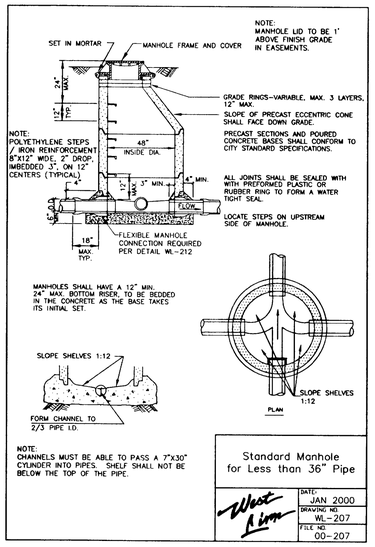
Anchor Wall

West Linn | DATE: JAN 2000 | DRAWING NO. WL-205 | FILE NO. 00-205



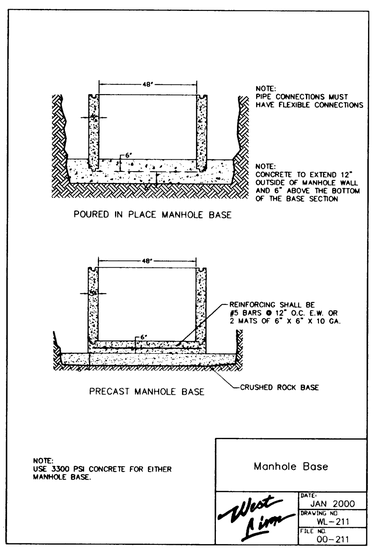
Standard Clean Out

West Linn | DATE: JAN 2000 | DRAWING NO. WL-206 | FILE NO. 00-206



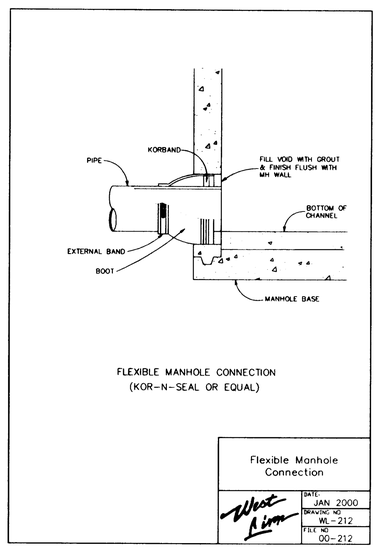
Standard Manhole for Less than 36" Pipe

West Linn | DATE: JAN 2000 | DRAWING NO. WL-207 | FILE NO. 00-207



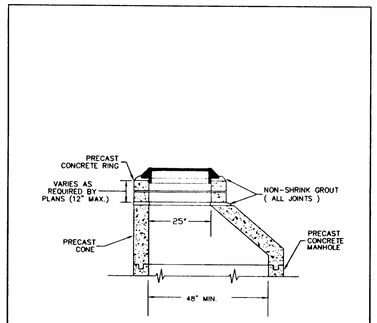
Manhole Base

West Linn | DATE: JAN 2000 | DRAWING NO. WL-211 | FILE NO. 00-211



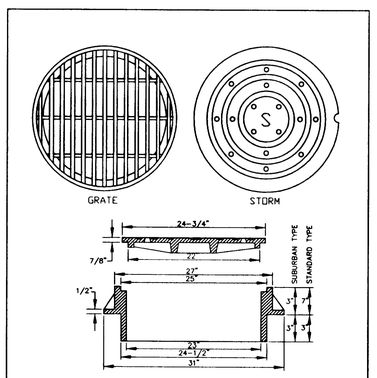
Flexible Manhole Connection

West Linn | DATE: JAN 2000 | DRAWING NO. WL-212 | FILE NO. 00-212



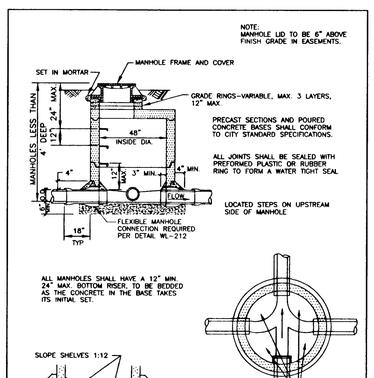
Precast Ring Extension

West Linn | DATE: JAN 2000 | DRAWING NO. WL-213 | FILE NO. 00-213



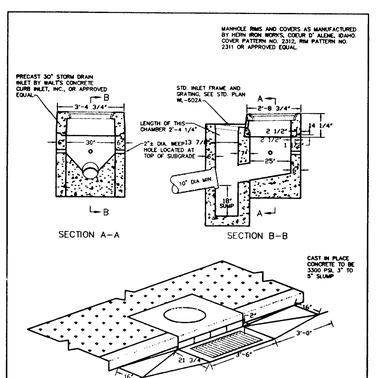
Manhole Covers

West Linn | DATE: JAN 2000 | DRAWING NO. WL-605 | FILE NO. 00-605



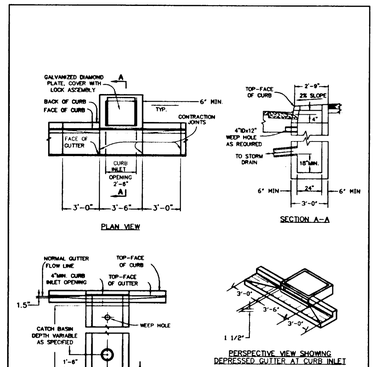
Shallow Manhole for Less than 36" Pipe

West Linn | DATE: JAN 2000 | DRAWING NO. WL-208 | FILE NO. 00-208



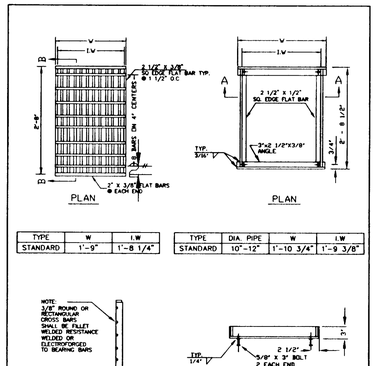
Combination Curb Inlet

West Linn | DATE: JAN 2000 | DRAWING NO. WL-601 | FILE NO. 00-601



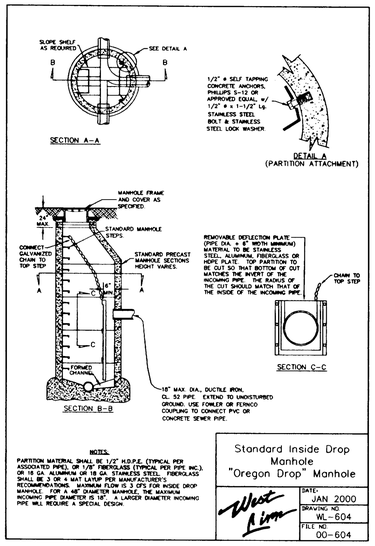
Gutter Inlet 2 1/2 A

West Linn | DATE: JAN 2000 | DRAWING NO. WL-600 | FILE NO. 00-600



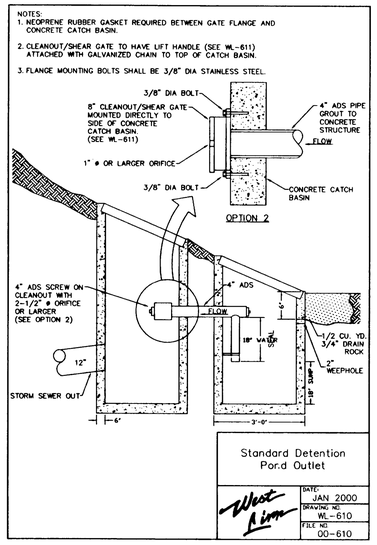
Frame & Grate for Gutter & Curb Inlets

West Linn | DATE: JAN 2000 | DRAWING NO. WL-602A | FILE NO. 00-602A



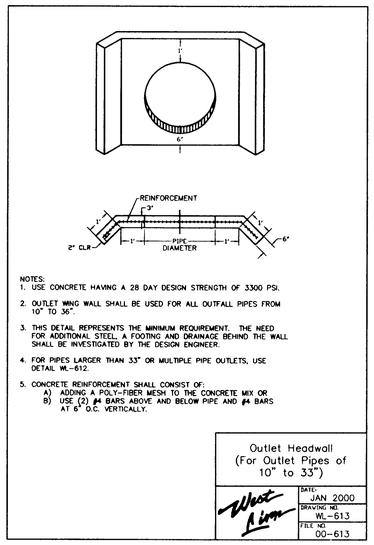
Standard Inside Drop Manhole "Oregon Drop" Manhole

West Linn | DATE: JAN 2000 | DRAWING NO. WL-604 | FILE NO. 00-604



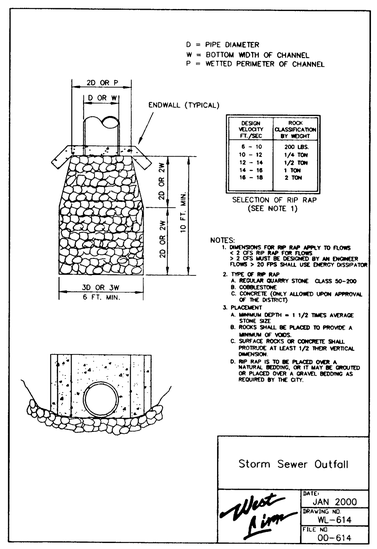
Standard Detention Pond Outlet

West Linn | DATE: JAN 2000 | DRAWING NO. WL-610 | FILE NO. 00-610



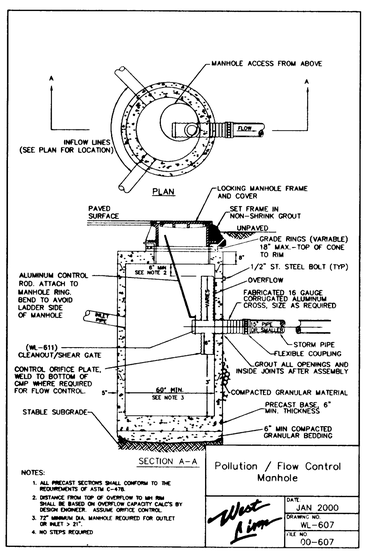
Outlet Headwall (For Outlet Pipes of 10" to 33")

West Linn | DATE: JAN 2000 | DRAWING NO. WL-613 | FILE NO. 00-613



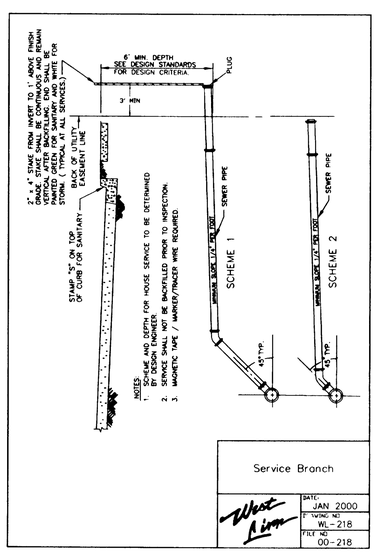
Storm Sewer Outfall

West Linn | DATE: JAN 2000 | DRAWING NO. WL-614 | FILE NO. 00-614



Pollution / Flow Control Manhole

West Linn | DATE: JAN 2000 | DRAWING NO. WL-607 | FILE NO. 00-607



Service Branch

West Linn | DATE: JAN 2000 | DRAWING NO. WL-218 | FILE NO. 00-218

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND, OR 97223

NO.	DATE	REVISION	BY

DESIGNED BY JRN DATE 11/25/02
DRAWN BY JRN DATE 11/25/02
REVIEWED BY MML DATE
PROJECT No. 658-005 REV.
SCALE NO SCALE N/A
6585dtl1.dwg

REGISTERED PROFESSIONAL ENGINEER MICHAEL L. LEWIS 13,280 OREGON MAY 17, 1990 MICHAEL L. LEWIS
VALID THROUGH 6-30-04

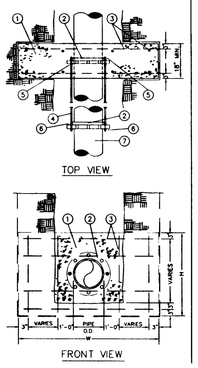
CONSTRUCTION DETAILS

FLORENDO'S HIDEAWAY

SHEET 10 OF 11

PROJECT FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION

N:\Proj\658-005\dwg\6585dtl1.dwg - SHEET: Engineering Nov 04, 2003 - 9:35am jmj



MATERIALS:

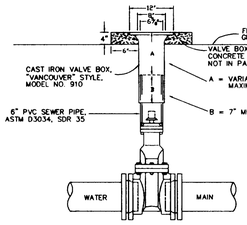
1. CONCRETE STRADDLE BLOCK.
2. UNI-FLANGE SERIES 400C, CLASS 125
3. #4 REBAR EACH WAY, 12" O/C
4. 3/4" ALL THREAD GALVANIZED STEEL TIE RODS, QUANTITY PER ENGINEER.
5. 3/4" GALVANIZED NUTS, 2-EACH SIDE
6. 3/4" GALVANIZED NUTS, 1-EACH SIDE
7. FLANGED FITTING

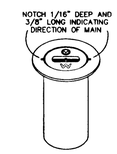
NOTES:

1. STRADDLE BLOCKS SHALL BE DESIGNED INDIVIDUALLY BY THE ENGINEER AND SHALL BE BASED ON THE FOLLOWING:
   a.) 200 PSI WATER PRESSURE
   b.) SOIL BRG. CAPACITY, STEEL SIZE AND SPACING BY THE ENGINEER.
2. BEARING AREA OF BLOCK SHALL BE AGAINST UNDISTURBED SOIL.
3. STRADDLE BLOCK SHALL HAVE A MINIMUM OF 18" COVER.
4. CONCRETE SHALL HAVE A MIN. 28-DAY STRENGTH OF 3300 PSI
5. ALL FITTINGS WITHIN THE CONC. SHALL BE WRAPPED IN PLASTIC OR BE COATED W/ KOPPER'S #50.
6. STRADDLE BLOCK HEIGHT(H) & WIDTH(W) SHALL BE DETERMINED BY THE ENGINEER.

Standard Straddle Block

West Linn | DATE: JAN 2000 | DRAWING NO. WL-408 | FILE NO. 00-408





"VANCOUVER" 18" TALL VALVE BOX

NOTES:

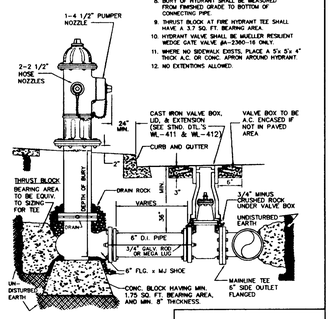
1. VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
2. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISHED GRADE.
3. PVC SHALL BE ONE CONTINUOUS PIECE- NO BELLS OR COUPLERS.
4. ON VALVES 8" AND LARGER, PVC SHALL BE NOTCHED OVER VALVE PACKING BOLTS SO PVC SITS ON BONNET.

Standard Valve Box Detail

West Linn | DATE: JAN 2000 | DRAWING NO. WL-411 | FILE NO. 00-411

NOTES:

1. HYDRANTS TO BE MUELLER CENTURION MDL A-423 ONLY WITH 1 1/2" OPER. NUTS OR GLOW MEDIALION F-2545.
2. HYDRANT COLOR TO BE MULLER EQUIP. ENAMEL O E 40 (SAFETY YELLOW).
3. JOINTS TO BE RESTRAINED BY 3/4" DIA. GALVANIZED STEEL RODS AND THRUST BLOCKS OR MEGA LUGS AND THRUST BLOCKS.
4. ALL FITTINGS IN CONTACT W/CONCRETE SHALL BE WRAPPED IN PLASTIC. HYDRANT DRAIN HOLES TO REMAIN OPEN TO DRAIN ROCK AND OPERATIONAL.
5. MIN. 4 CU. FT. OF 1-1/2"-3/4" CLEAN DRAIN ROCK SHALL BE PLACED AROUND SHOE UP TO A MIN. OF 6" ABOVE DRAIN OUTLETS.
6. WHERE PLANTER STRIP EXISTS, HYDRANT SHALL BE PLACED SO FRONT PORT IS A MINIMUM OF 24" BEHIND FACE OF CURB.
7. WHERE INTEGRAL S/W & CURB EXISTS, HYD. SHALL BE PLACED AT BACK OF SIDEWALK, OR AS DIRECTED BY ENGINEER.
8. BURY OF HYDRANT SHALL BE MEASURED FROM FINISHED GRADE TO BOTTOM OF CONNECTING PIPE.
9. THRUST BLOCK AT FIRE HYDRANT TEE SHALL HAVE A 3.7 SQ. FT. BEARING AREA.
10. HYDRANT VALVE SHALL BE MUELLER RESILIENT WEDGE GATE VALVE #A-2360-18 ONLY.
11. WHERE NO SIDEWALK EXISTS, PLACE A 5'x 5'x 4" THICK A.C. OR CONC. APRON AROUND HYDRANT.
12. NO EXTENTIONS ALLOWED.



Standard Fire Hydrant Assembly

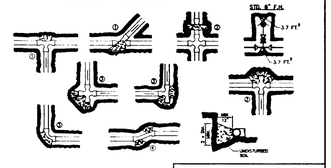
West Linn | DATE: JAN 2000 | DRAWING NO. WL-401 | FILE NO. 00-401

FITTING SIZE (inches)	TEE, WYE, & ① HYDRANTS	STRADDLE BLOCK, ②	90° BEND ① PLUGGED CROSS ② TEE PLUGGED-RUNS	45° BEND ①	22 1/2° BEND ①	11 1/2° BEND ①
2	*	*	*	*	*	*
4	1.7	2.1	2.4	1.3	*	*
6	3.7	4.9	5.3	2.9	1.5	*
8	6.7	8.7	9.5	5.1	2.7	1.3
10	10.5	13.8	14.9	8	4.1	2
12	15.1	19.6	21.3	11.6	5.9	2.9
14	*	*	*	*	*	*
16	26.8	34.8	37.9	20.5	10.4	5.2
18	33.9	44	47.9	25.9	12.8	6.7
LARGER	* *	* *	* *	* *	* *	* *
BEARING AREA OF THRUST BLOCKS (sq. ft.)						

1. ALL VALUES ARE BASED ON THE FOLLOWING ASSUMPTIONS: AVG. PRESSURE = 100 PSI X 2 (safety factor); 1500 PSF SOIL BEARING CAPACITY; NORMAL DISTRIBUTION DESIGN VELOCITY NOT TO EXCEED 5 F/S.
2. ALL FITTINGS SHALL BE WRAPPED IN PLASTIC PRIOR TO PLACEMENT OF CONCRETE.
3. BEARING SURFACE OF THRUST BLOCKING SHALL BE AGAINST UNDISTURBED SOIL.
4. ALL CONCRETE MIX SHALL HAVE A MIN. 28 DAY STRENGTH OF 3000 PSI.
5. ALL PIPE ZONES SHALL BE GRAVEL FILLED AND COMPACTED.
6. THRUST BLOCKS FOR PLUGGED CROSS AND PLUGGED TEE SHALL HAVE #4 REBAR LIFTING LOOPS INSTALLED AS SHOWN.
7. VERTICAL THRUST DETAILS-SEE DWG. WL-407.
8. STRADDLE BLOCK DETAILS-SEE DWG. WL-408.

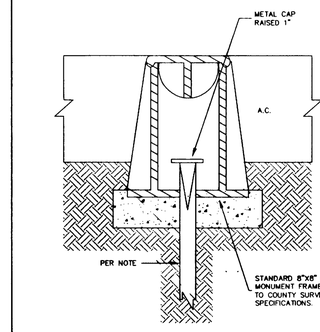
* BLOCK TO UNDISTURBED TRENCH WALLS

** THRUST BLOCKS FOR PIPES LARGER THAN 18" WILL BE INDIVIDUALLY DESIGNED BY THE ENGINEER.



Horizontal Thrust Blocking

West Linn | DATE: JAN 2000 | DRAWING NO. WL-406 | FILE NO. 00-406



NOTES: ALL MONUMENTS SHALL USE EITHER 5/8" DIA.X 30" LONG IRON ROD OR 3/4" DIA.X 30" LONG IRON PIPE.

ALL MONUMENTS SHALL BE IN ACCORDANCE WITH ORS 209.250(4).

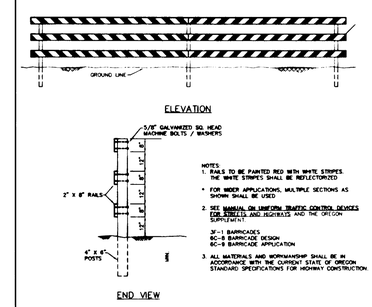
CONCRETE SHALL BE CLASS 3300

FRAME AND COVER SHALL BE CAST IRON OR ALUMINUM

COVER SHALL HAVE "MONUMENT" CAST INTO TOP.

Centerline Survey Monuments

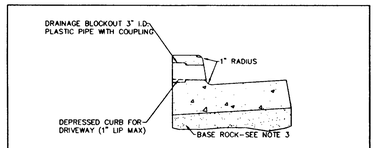
West Linn | DATE: JAN 2000 | DRAWING NO. WL-513 | FILE NO. 00-513



NOTES:
1. RAILS TO BE PAINTED RED WITH WHITE STRIPES. THE WHITE STRIPES SHALL BE REFLECTORIZED.
* FOR WIDER APPLICATIONS, MULTIPLE SECTIONS AS SHOWN SHALL BE USED
2. SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE OREGON SUPPLEMENT
3F-1 BARRICADES
6C-5 BARRICADE DESIGN
6C-6 BARRICADE APPLICATION
3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF OREGON STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION

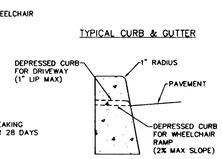
Street Barricade Type 3

West Linn | DATE: JAN 2000 | DRAWING NO. WL-516 | FILE NO. 00-516



DEPRESSED CURB FOR WHEELCHAIR RAMP 2% MAX SLOPE

TYPICAL CURB & GUTTER

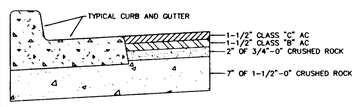


TYPICAL STRAIGHT CURB

NOTES:
1. CONCRETE SHALL HAVE A BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS
2. CONTRACTION JOINTS
   A) TO BE PROVIDED
      -AT EACH POINT OF TANGENCY
      -AT EACH COLD JOINT
      -AT EACH SIDE OF INLET STRUCTURES
      -AT BOTH SIDES OF AN APPROACH
   B) SPACING TO BE NOT MORE THAN 15 FEET
   C) THE DEPTH OF THE JOINT SHALL BE AT LEAST 1/3 OF THE THICKNESS OF CONCRETE
   D) EXPANSION JOINTS SHALL NOT BE USED
3. BASE ROCK - 1-1/2"-0", 95% COMPACTION ROCK SHALL BE TO SUBGRADE OF THE STREET SECTION OR 4" IN DEPTH, WHICHEVER IS GREATER
4. DRAINAGE BLOCK - 3" DIA. PLASTIC PIPE
   A) DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE DONE BY:
      -CORE DRILLING
      -VERTICAL SAWCUT OF CURB 18" EACH SIDE OF DRAIN AND RE-POURED TO FULL DEPTH OF CURB
5. STAMP TOP OF CURB WITH "W" AT WATER SERVICE CROSSING AND "S" AT SANITARY LATERAL CROSSING

Typical Curbs

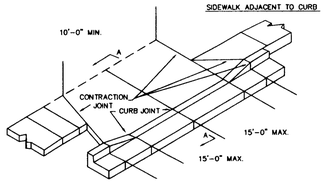
West Linn | DATE: JAN 2000 | DRAWING NO. WL-501 | FILE NO. 00-501



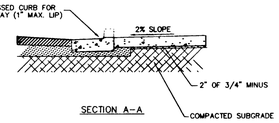
NOTES:
1. THE ENGINEER SHALL PROVIDE A STREET STRUCTURAL DESIGN SECTION FOR ALL ROADWAYS CLASSIFIED COLLECTOR OR HIGHER.
2. UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER, STREETS SHALL BE PAVED TO FINAL GRADE USING 2 OR MORE LIFTS. FINAL LIFT SHALL BE PLACED AT A TIME AS DIRECTED OR APPROVED BY THE CITY ENGINEER.

Alley, Local and Neighborhood Route Street Sections

West Linn | DATE: JAN 2000 | DRAWING NO. WL-502 | FILE NO. 00-502



SIDEWALK AWAY FROM CURB



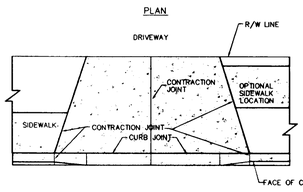
SECTION A-A

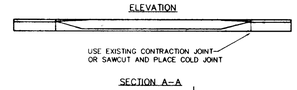
NOTES

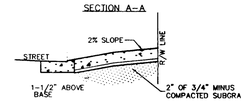
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS, 6 SACK MIX.
2. CURB SHALL BE TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB.
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK.

Residential Driveway

West Linn | DATE: JAN 2000 | DRAWING NO. WL-503 | FILE NO. 00-503





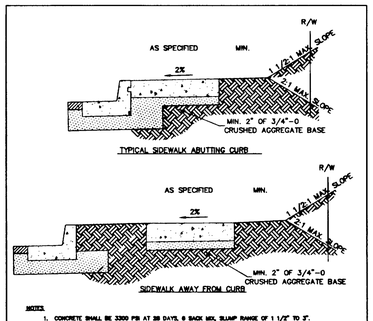


NOTES

1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS, 6 SACK MIX.
2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB.
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK.

Commercial Driveway

West Linn | DATE: JAN 2000 | DRAWING NO. WL-504 | FILE NO. 00-504

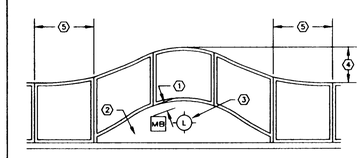


NOTES

1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS, 6 SACK MIX, SLUMP RANGE OF 1 1/2" TO 3".
2. PANEL LENGTHS SHALL BE EQUAL TO THE SIDEWALK WIDTH, BUT MAY BE ADJUSTED WITH THE CITY ENGINEER'S APPROVAL.
3. CONTRACTION JOINTS (1/4RD OF THE THICKNESS OF CONCRETE) SHALL BE PLACED EVERY THIRD PANEL, WITH A MAX. SPACING OF 15 FEET.
   JOINTS SHALL ALSO BE PLACED AT THE SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, AND WHEELCHAIR RAMPS.
4. A CURING COMPOUND SHALL BE USED. WHITE REFLECTIVE SHEETING SHALL BE USED IN CASE OF RAIN.
5. FOR SIDEWALKS ADJACENT TO THE CURB AND POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS.
6. THE SIDEWALK SHALL HAVE A MIN. THICKNESS OF 6" IF MOUNTABLE CURB IS USED OR IF THE SIDEWALK IS INTENDED AS A PORTION OF THE DRIVEWAY. OTHERWISE, THE SIDEWALK SHALL HAVE A MIN. THICKNESS OF 4".
7. DRAIN BLOCKOUTS IN THE CURB SHALL BE EXTENDED TO THE BACK OF THE SIDEWALK WITH A 3" DIA. PLASTIC PIPE AT A 2% SLOPE. A CONTRACTION JOINT SHALL BE PLACED OVER THE PIPE.

Concrete Sidewalk Cross Section

West Linn | DATE: JAN 2000 | DRAWING NO. WL-508 | FILE NO. 00-508



SPECIFICATIONS

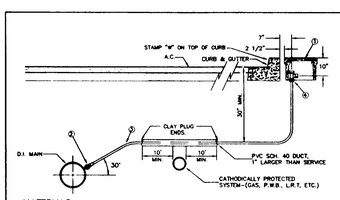
1. MIN. 3" CLEARANCE BETWEEN FACE OF SIDEWALK & CLOSEST POINT ON BACK OF MAILBOX.
2. CENTER OF MAILBOX SHALL BE 2' FROM FACE OF CURB.
3. LIGHT POLES & FIRE HYDRANTS ARE TO BE CENTERED IN ISLAND.
4. 2' FOR FIRE HYDRANTS & LIGHTPOLES
   3' FOR MAILBOXES
5. THE REVERSE CURVE SHALL EXTEND 5' BEYOND THE RE-ROUTED AREA.

GENERAL NOTES

1. SIDEWALKS TO BE RE-ROUTED AROUND ALL LIGHT POLES, MAILBOXES, & FIRE HYDRANTS THAT EXIST IN THE SIDEWALK AREA.
2. MAILBOXES SHALL NOT BE INSTALLED ADJACENT TO THE FIRE HYDRANTS.
3. SIDEWALKS SHALL NOT BE RE-ROUTED IF THE EXISTING METER BOXES, UTILITY POLES, ETC., WILL BE IN RE-ROUTED SIDEWALK.
4. IF THE SIDEWALK IS IN PLACE PRIOR TO THE INSTALLATION OF THE LIGHT POLE, MAILBOX, OR FIRE HYDRANT, THEN THE SIDEWALK SHALL BE REMOVED AND RE-ROUTED.

Concrete Sidewalk Clearances for Curb Tight Sidewalks

West Linn | DATE: JAN 2000 | DRAWING NO. WL-509 | FILE NO. 00-509



MATERIALS:

1. BROOKS METER BOX, BODY NO. 37, LID AND COVER NO. 37-S.
2. MUELLER CORP. STOP NO. H-15008 OR FORD F1000-4Q SET CORP. STOP WITH OPERATING NUT AT 3 OR 9 O'CLOCK.
3. 1" SOFT TEMPER, TYPE 'K' COPPER TUBING COMPLYING WITH ASTM B-88.
4. MUELLER ANGLE METER STOP NO. H-14258 (FORD NO. KV43-444W-Q).

NOTES:

1. SUBSTITUTES FOR ANY MATERIALS SHOWN SHALL BE APPROVED BY THE CITY ENGINEER.
2. ALL PIPE AND STRUCTURE ZONES SHALL BE BACKFILLED USING 3/4" MINUS CRUSHED AGG. AND COMPACTED TO 95% MAX DENSITY AS DETERMINED BY AASHTO T-180.
3. WHEN AN ACTIVE CATHODIC PROTECTED SYSTEM IS ENCOUNTERED, SCH. 40 PVC SHALL BE INSTALLED AS SHOWN ABOVE WITH CLAY PLUG.
4. METER BOX SHALL BE CENTERED OVER THE COMPLETED METER ASSEMBLY.
5. FOR VACANT RESIDENTIAL LOTS, LOCATE SINGLE SERVICE 18" INSIDE SIDE LOT LINE.
6. TAPS INTO MAIN TO BE AT 18" CENTERLINE MIN.
7. ANGLE METER STOPS TO BE 18" FROM PROPERTY LINE AND NOT IN DRIVEWAY APPROACH.

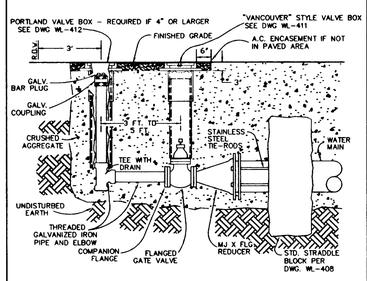
Standard 1" Water Service

West Linn | DATE: JAN 2000 | DRAWING NO. WL-402 | FILE NO. 00-402

BLOW-OFF SIZES REQUIRED	
MAIN SIZE	BLOW-OFF SIZE
4" TO 6"	2"
8" TO 12"	4"
14" TO 18"	6"
20" & UP	PER ENGR.

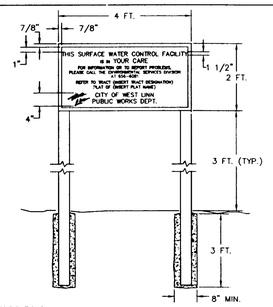
NOTES:

1. BACKFILL WITH SELECT CRUSHED AGGREGATE A MINIMUM OF 6" ON ALL SIDES.
2. ON TEMPORARY BLOW-OFFS ONLY, AN MJ CAP TAPPED 4" OR 6" MAY BE SUBSTITUTED FOR REDUCER.
3. TEMPORARY BLOW-OFF IS ONE REMOVED AT THE END OF PROJECT CONSTRUCTION. A PERMANENT BLOW-OFF REMAINS ON THE PROJECT AFTER ACCEPTANCE.
4. PLACE BLOW-OFF STANDPIPE 3 FT. INSIDE R.O.W. LINE AT END OF STREET (OFT. FROM BARRICADE).



Permanent or Temporary 4" & 6" Blow-off

West Linn | DATE: JAN 2000 | DRAWING NO. WL-404B | FILE NO. 00-404B



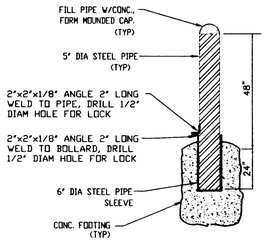
SPECIFICATIONS:

SIZE: 48" BY 24"
MATERIAL: GRADE "B" OR BETTER EXTERIOR PLYWOOD
PAINT: FACE - 3 COATS OUTDOOR ENAMEL (SPRAYED).
BACK - 1 COAT OUTDOOR ENAMEL (SPRAYED).
LETTERING: SILK SCREEN ENAMEL WHERE POSSIBLE, OR HAND PAINTED ENAMELS.
COLORS: BLACK AND WHITE. WHITE BACKGROUND, LETTERING AND BORDER IN BLACK
TYPE FACE: HELVETICA. 1 1/2" TALL WITH 7/8" SPACING BETWEEN LETTERS AND OUTER BORDER. OUTER BORDER 1/2" WIDTH
INSTALLATION: SECURED TO CHAIN LINK FENCE IF AVAILABLE, OTHERWISE INSTALL ON TWO 8 FT. LONG 4" X 4" POSTS, PRESSURE TREATED, INSTALLED IN 3 FT. DEEP CONCRETE FILLED POST HOLES (8" MIN. DIA.)

Surface Water Facility Sign

West Linn | DATE: JAN 2000 | DRAWING NO. WL-615 | FILE NO. 00-615

INSTALL TWO BOLLARDS AT POND ACCESS ROAD. PLACE 5' APART AND 4' BEHIND CURB



NOTE: 1.CONC. TO BE 3000 PSI (28 DAY ULTIMATE STRENGTH-SLUMP = 2" TO 5") AND 1 1/2" MINUS AGGREGATE
2.MOUND CONC. AT BASE TO DRAIN

LOCKING AND REMOVABLE PIPE BOLLARD

N.T.S.

ALPHA ENGINEERING INC.
PLANNING DEVELOPMENT SERVICES SURVEYING
OFFICE 503-452-8003 FAX 503-452-8043
PLAZA WEST SUITE 230 9600 SW OAK PORTLAND,OR 97223

NO.	DATE	REVISION	BY

DESIGNED BY JRN DATE 4-10-03
DRAWN BY JRN DATE 11/25/02
REVIEWED BY WL DATE
PROJECT NO. 658-005 REF
SCALE NO SCALE
N/A
658SDTL2.dwg

REGISTERED PROFESSIONAL ENGINEER
OREGON
JAMES R. NEWELL
MAY 17, 1986
VALID THROUGH 6-30-04

CONSTRUCTION DETAILS

FLORENDO'S HIDEAWAY

SHEET 11 OF 11

PROJECT FLORENDO'S
NO. 658-005
TYPE CONSTRUCTION

N:\Proj\658-005\...\658SDTL2.dwg - SHEET: Engineering Nov 04, 2003 - 9:36am jmj