

DEVELOPER:

ICON CONSTRUCTION AND DEVELOPMENT, LLC
1980 WILLAMETTE FALLS DR., SUITE 200
WEST LINN, OR 97068
PHONE (503)657-1094 / FAX (503)655-6026
CONTACT: MARK HANDRIS

SURVEYOR:

CENTERLINE CONCEPTS, INC. 640 82ND DRIVE GLADSTONE, OR 97027-1801 PHONE (503)650-0188 / FAX (503)650-0189 CONTACT: WADE G. DONOVAN III

IMPERVIOUS AREA

PUBLIC ROADS = 10,067 SF 7 LOTS X 2,640 SF/LOT = 18,490 SF

UTILITY COMPANIES

CITY OF WEST LINN

CITY OF WEST LINN

NORTHWEST NATURAL GAS

PORTLAND GENERAL ELECTRIC

U.S. WEST

CITY OF WEST LINN

TELEPHONE CABLE TV -COMCAST

BENCH MARK

CITY OF WEST LINN BENCH MARK REFERENCE NUMBER 9, BEING A BRASS DISC STAMPED "Z450" AT WEST OF EAST END OF FIELDS BRIDGE OVER TUALATIN RIVER ON SOUTH SIDEWALK. ELEVATION = 116.58

LOCATION

T2S RIE SEC 34DD TAX LOTS 2300 & 2400

REPAIR EMERGENCIES

NORTHWEST NATURAL GAS - 800-882-3377 PORTLAND GENERAL ELECTRIC - 503-464-7750 - 800-573-1311 - 800-483-1000 VERIZON - 503-722-5501 CITY OF WEST LINN CITY OPERATIONS - 503-656-6081

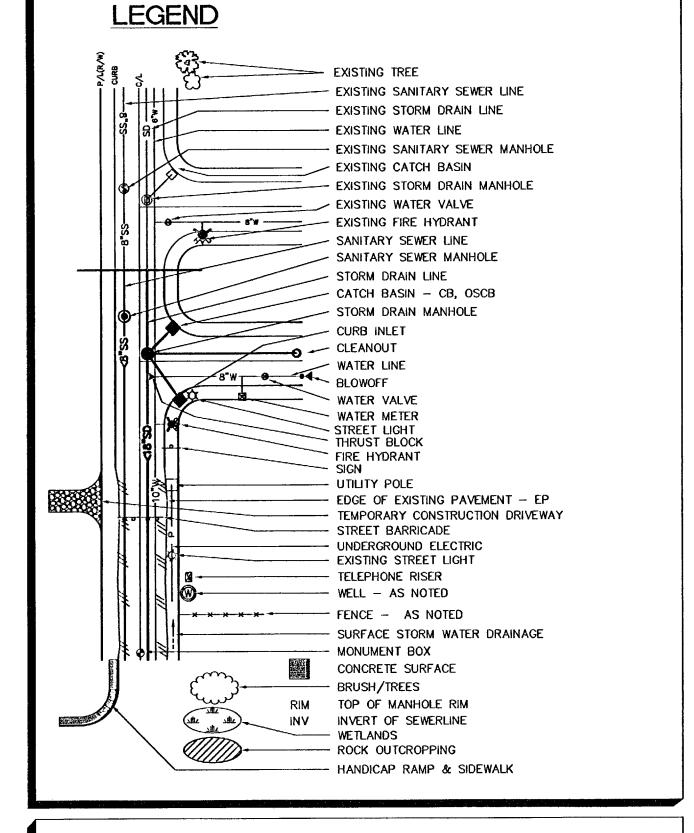
THE CONTRACTOR, IN LOCATION AND PROTECTING UNDERGROUND UTILITIES, MUST COMPLY WITH THE REGULATIONS OF O.R.S. 757.541 TO 757.571.

LOCATES (48 HOURS NOTICE REQUIRED)

ONE CALL SYSTEM - 246-6699 (GENERAL TELEPHONE, NORTHWEST NATURAL GAS. PORTLAND GENERAL ELECTRIC) CABLE TELEVISION - TCI - 246-6699

AS-BUILT

DATE JDF 3-07-08



ABBREVIATIONS

ASPHALT CONCRETE POINT OF CURVATURE ASBESTOS CEMENT PIPE POINT OF COMPOUND CURVATURE AGGREGATE BASE POINT OF INTERSECTION BEGIN CURB RETURN PROPERTY LINE BENCH MARK POINT OF REVERSE CURVATURE BEGIN VERTICAL CURVE POINT OF TANGENCY CAST IRON PIPE POLY-VINYL CHLORIDE CONTROL JOINT RADIUS REINFORCED CONCRETE PIPE CENTERLINE RIGHT-OF-WAY CORRUGATED METAL PIPE SEWER CONCRETE MASONARY UNIT STORM DRAIN **CLEANOUT** SEWER LATERAL CABLE TELEVISION STATION DROP INLET STANDARD DETAIL DUCTILE IRON PIPE TELEPHONE THRUST BLOCK END CURB RETURN TOP OF CURB **EXPANSION JOINT** TOP OF CONCRETE ELEVATION TOP OF DIKE END VERTICAL CURVE TOP OF FOOTING **EXISTING** TOP OF GRATE FINISH FLOOR TRAFFIC INDEX FINISH GRADE TRAFFIC LIGHT FIRE HYDRANT TOP OF PAVEMENT FLOWLINE TYPICAL FLANGE TOP OF WALL VITRIFIED CLAY PIPE GAS METER VERTICAL POINT OF INTERSECTION GRADE BREAK WATER GALVANIZED STEEL PIPE WATER METER WATER VALVE CURVE LENGTH DELTA (CURVE CENTRAL ANGLE) LINEAL FEET APPROXIMATELY MANHOLE PERCENT MECHANICAL JOINT LESS THAN NOT INCLUDED IN CONTRACT GREATER THAN OCEW ON CENTER EACH WAY

SHEET INDEX

- TITLE SHEET
- CONSTRUCTION NOTES
- **EXISTING CONDITIONS & DEMOLITION PLAN**
- GRADING AND EROSION CONTROL PLAN
- STREET AND STORM PLAN
- STREET AND STORM PROFILES
- STREET AND STORM PROFILES
- SANITARY AND WATER PLAN
- SANITARY AND WATER PROFILES CONSTRUCTION DETAIL SHEETS
- STORMWATER POND PLANTING PLAN

LIGHTING PLAN

Wendy CE Timeley Lo VICINITY MAP

N.T.S.

FINAL DECISION NOTICE

SUB 06-02

IN THE MATTER OF A SEVEN LOT SUBDIVISION AT 2133 AND 2121 OSTMAN ROAD

At their regular meeting of April 27, 2006, the West Linn Planning Commission held a public hearing to consider the request by ICON Construction Company to approve a seven-lot subdivision. The site consists of tax lots 2300 and 2400 of Assessor's Map 2-1E-34DD. The approval criteria for a subdivision are found within Chapter 85 of the Community Development Code. The hearing was conducted pursuant to the provisions of CDC, Chapter 99.

The hearing commenced with a staff report presented by Peter Spir, Associate Planner. The applicant, represented by Matt Sprague of SFA Design Group, provided a presentation. Robert Harding of 2075 Ostman Road testified. His main concern was that the root system of his trees that line the common property line could be damaged by grading associated with this project. He also asked about Short Street. Tim Countryman of 1212 Orchard Street and Gary Barnes of 2108 19th Street asked what would trigger the extension of Short Street. Staff responded to the testimony by stating that conditions could be imposed to minimize disturbance of the root systems. Staff also noted that the site is flat and thus grading will be limited to about two feet in the street area. Staff stated that Short Street would not go through any adjacent property until such time that the owner of that property decides to subdivide. The City's record since at least 1985 shows that the city has never tried to take or regulate right of way from property owners for the purpose of building a road. The public hearing was closed.

A motion by Commissioner Jones was made and seconded by Commissioner Babbitt to approve the application with amended conditions of approval. The motion was approved unanimously. The following conditions of approval are as follows:

- The applicant shall hire an arborist to make a determination of the likely impacts of site grading on roots extending from the trees on the adjacent lot to the south. The arborist shall also recommend methods to avoid, and only when avoidance is not possible, to minimize impacts to the trees, including, where appropriate, recommending where the footprint shall be sited. A written arborist report detailing findings and recommendations shall be submitted to the City Arborist.
- The applicant shall utilize the report prepared per COA #1 as the basis for on-site work where the arborist identifies, with review by the City Arborist, the appropriate location of the chain link fence so that it is installed at the edge of the roots. The chain link fencing shall be installed prior to any site clearing or grading and shall remain in place throughout the development of the site and construction of the homes. If site work is to be conducted in the chain link fenced area, the arborist shall be present.
- All public improvements, to include all conditions of approval listed herein, must be in accordance with the City of West Linn design and construction standards, professional engineering standards, and accepted industry standard construction practice. Where conflict between standards exist, the most stringent will apply unless allowed by the City Engineer, but in no case may the City Engineer allow a lesser standard than required by the City's design and construction standards, except to the extent that adjustments,
- All overhead utilities along proposed project frontage shall be undergrounded, whenever

variances or exceptions are allowed by those standards.

This decision will become effective 14 days from the date of mailing of this final decision as identified below. Those parties with standing (i.e., those individuals who submitted letters into the record, or provided oral or written testimony during the course of the hearing, or signed in on the attendance sheet at the hearing, or who have contacted City Planning staff and made their identities known to staff) may appeal this decision to the West Linn City Council within 14 days of the mailing of this decision pursuant to the provisions of Chapter 99 of the Community Development Code. Such appeals would require a fee of \$400 and a completed appeal application form together with the specific grounds for appeal to the Planning Director prior to the appeal-filing deadline.

JOHN KOVASH, CHAIR WEST LINN PLANNING COMMISSION

Mailed this 8 day of May , 2006.

Therefore, this decision becomes final at 5 p.m., _________, 2006.

2 N

<u>–</u> ඉ ක

PROJECT FIELD'S PARK No. 2 105-011 ENGINEERING TYPE

GENERAL NOTES:

- 1. ALL CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN CONSTRUCTION STANDARDS.
- 2. THE DESIGN ENGINEER WILL BE RESPONSIBLE FOR INSPECTION OF THE PROPOSED IMPROVEMENTS WITH OVER SIGHT FROM CITY'S PUBLIC WORKS AND ENGINEERING STAFF.
- 3. 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.
- 4. THE CONTRACTOR IS TO RECEIVE THE APPROVAL OF THE ENGINEER OF ANY PROPOSED CHANGES TO THE PLANS OR STANDARD REQUIREMENTS.
- 5. A BUILDING DEPARTMENT PLUMBING PERMIT IS REQUIRED FOR UTILITIES BEYOND THE FIRST CLEANOUT OR METER ON PRIVATE PROPERTY.
- 6. A PRE-CONSTRUCTION MEETING WITH THE CITY OF WEST LINN IS 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.
- 7. ALL PUBLIC IMPROVEMENTS SHALL BE IN PLACE AND ACCEPTED PRIOR BY THE CITY PRIOR TO ANY FINAL PLAT RECORDING AND ISSUANCE OF BUILDING PERMITS.
- 8. ALL PEDESTRIAN RAMPS SHALL MEET ADA REQUIRMENTS.

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".
- THRUST BLOCKS ARE TO BE PROVIDED AT ALL CHANGES IN DIRECTION AND BRANCHES. THRUST BLOCKING CONCRETE STRENGTH IS TO BE 3000 PSI MIN. SEE DETAILS FOR THRUST BLOCK SIZING. POUR THRUST BLOCKS AGAINST UNDISTURBED EARTH. ALL THRUSTS BLOCKS SHALL BE INSPECTED BY THE CITY PRIOR TO POURING AND PRIOR TO BACKFILLING.
- 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 OR EQUAL.
- FIRE HYDRANTS SHALL CONFORM TO AND SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARDS. PUMPER OUTLET IS TO FACE THE DIRECTION OF ACCESS.
- 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.
- 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. REFER TO STANDARD DETAIL WL-402.
- ALL WATERLINES SHALL PASS ALL TESTS PER CITY OF WEST LINN CONSTRUCTION STANDARDS PRIOR TO ACCEPTANCE. PRESSURE TEST SHALL BE CONDUCTED AT 180psi FOR 1 HOUR WITH NO LOSS.
- (NOT USED)
- 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

STREETS:

- 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.
- 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.
- 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.
- ASPHALT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF APWA DIVISION II, SECTION 211. 2" BASE LIFT SHALL BE CLASS 'B' A.C. AND THE FINAL LIFT SHALL BE 1 1/2" OR 2" CLASS 'C' A.C. AS PER APWA DIVISION II, SECTION 211.2.01 AND AS SPECIFIED ON SHEET #4. THE TOP LIFT OF ASPHALT CONCRETE SHALL NOT BE PLACED PRIOR TO RECEIVING PERMISSION FROM THE CITY OF WEST LINN ENGINEERING DEPARTMENT.
- 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).
- ALL MATERIALS, INSTALLATION, TESTS, AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH APWA'S STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE SUPPLEMENTAL STANDARDS AND SPECIFICATIONS OF THE CITY OF WEST LINN STREET/UTILITY DESIGN AND CONSTRUCTION STANDARDS.
- 7. A STREET CONSTRUCTION ENCROACHMENT PERMIT OR SIMILAR PERMIT MAY BE REQUIRED FROM THE CITY OF WEST LINN. CONSTRUCTION PERMIT FEES OR OTHER SIMILAR FEES OR BONDING REQUIRED OF THE CONTRACTOR WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN.

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; COMCAST - JAMIE STENCIL, 243-7497, U.S. WEST COMMUNICATIONS - JACKIE LOLLAR 242-8496.

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.
- MANHOLE BASE SHALL BE PRECAST CONCRETE BASE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI, AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM C478. THE BASE RISER SECTION SHALL BE INTEGRAL WITH THE BASE SLAB. 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.
- 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
- 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 AND MARKED WITH THE DEPTH OF THE LATERAL.
- 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 THE CITY OF WEST LINN.
- 8. A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR SANITARY SEWER LATERALS BEYOND THE FIRST CLEANOUT.
- 9. ALL MATERIALS, INSTALLATION, TESTS, AND INSPECTIONS TO BE MADE IN STRICT ACCORDANCE WITH CITY OF WEST LINN'S STREET/UTILITY CONSTRUCTION STANDARDS, WITH APWA'S STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AND WITH THE UNIFORM PLUMBING CODE.

STORM SEWER:

- 1. PIPE 24" OR LESS, SHALL BE SEAMLESS PVC PIPE CONFORMING TO PVC D-3034.
- 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.
- 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
- 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.
- 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.
- 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
- 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 THE 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 INTENT OF THE REQUIREMENT IS TO PREVENT SILTATION FROM REACHING STORM DRAIN SYSTEMS AND
- 2. THE MINIMUM MEASURES NEED TO BE MADE ON ALL PROJECTS.
 - A) A GRAVEL PAD, AT LEAST 50 FEET LONG, IS REQUIRED WHERE VEHICLES WILL LEAVE THE CONSTRUCTION SITE.
 - B) A SEDIMENT BARRIER IS TO BE CONSTRUCTED OF STRAW BALES OR A SEDIMENT FENCE WHERE NOTED IN THE DETAILS OR WHERE SEDIMENT WILL CROSS OUTSIDE THE WORK AREA.
 - C) WHERE EXCAVATED MATERIAL IS PLACED ON HARD SURFACES (SUCH AS STREETS) MATERIAL MUST BE BROOMED OR SCRAPED CLEAN AS SOON AS POSSIBLE.
 - D) RIPRAP EXITS FROM ALL CULVERTS AND STORM DRAIN PIPES DRAINING INTO THE DITCHES OR SWALES. RIPRAP IS TO BE CLASS 50 RIPRAP OR LARGER OR AS NOTED ELSEWHERE IN THE PLANS.
 - E) RESEED OR COVER DISTURBED AREAS AS SOON AS IS POSSIBLE AND PRACTICAL BUT NO LATER THAN THE COMPLETION OF CONSTRUCTION ON THE OTHER PHASES OF WORK. EROSION CONTROL MEASURES SUCH AS HAY BALES AND SILT FENCES MUST REMAIN IN PLACE UNTIL SEEDED AREAS SHOW GROWTH SUBSTANTIAL TO PREVENT EROSION.

GENERAL:

- 1. APPROVAL OF THIS EROSION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- 2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND VEGETATION OF LANDSCAPING IS ESTABLISHED.
- 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.
- 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
- 5. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH, OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
- 7. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- 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:

- 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 NOT TO EXCEED SIX INCHES, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.
- 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
- 3. LARGE ORGANIC MATERIAL, MISCELLANEOUS PIPE OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
- NO FILLING OR CUTTING SHALL BE DONE OUTSIDE OF APPROVED GRADING AREAS.
- 5. ALL EROSION CONTROL FACILITIES SHALL MEET THE REQUIREMENTS OF THE CLACKAMAS COUNTY DEPARTMENT OF UTILITIES, EROSION PREVENTION AND SEDIMENT CONTROL PLANS TECHNICAL GUIDANCE HANDBOOK (ECTGH), REVISED AUGUST, 1994; CHAPTER 31 OF THE COMMUNITY DEVELOPMENT CODE; AND THE OREGON ADMINISTRATIVE RULES.

SEEDING/MULCHING:

- 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.
- RECOMMENDED SEED MIXTURE: 80% ELKA DWARF PERENNIAL RYEGRASS AND 20% CREEPING RED FESCUE. BY WEIGHT. APPLICATION RATE SHALL BE 100 POUNDS MINIMUM PER ACRE.
- 3. FERTILIZER SHALL BE 12-16-8 WITH 50% OF THE NITROGEN DERIVED FROM UREA FORMALDEHYDE, AND APPLIED AT A RATE OF 400 POUNDS PER ACRE.
- 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

4. SEED AND MULCH AT A RATE OF 2000 LBS/AC WITH HEAVY BONDING AGENT OR NETTING AND ANCHORS.

WHENEVER PERENNIAL COVER CANNOT BE ESTABLISHED ON SITES WHICH WILL BE EXPOSED FOR 60 DAYS OR MORE.

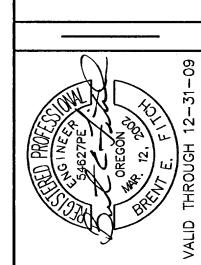
SEDIMENT FENCE:

- 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.
- 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 STEFL. THE FENCE POST MUST BE A MINIMUM OF 48" LONG. THE FILTER FABRIC SHALL NOT BE STAPLED OR ATTACHED TO EXISTING TREES.
- 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.

DATE JDF 3-07-08

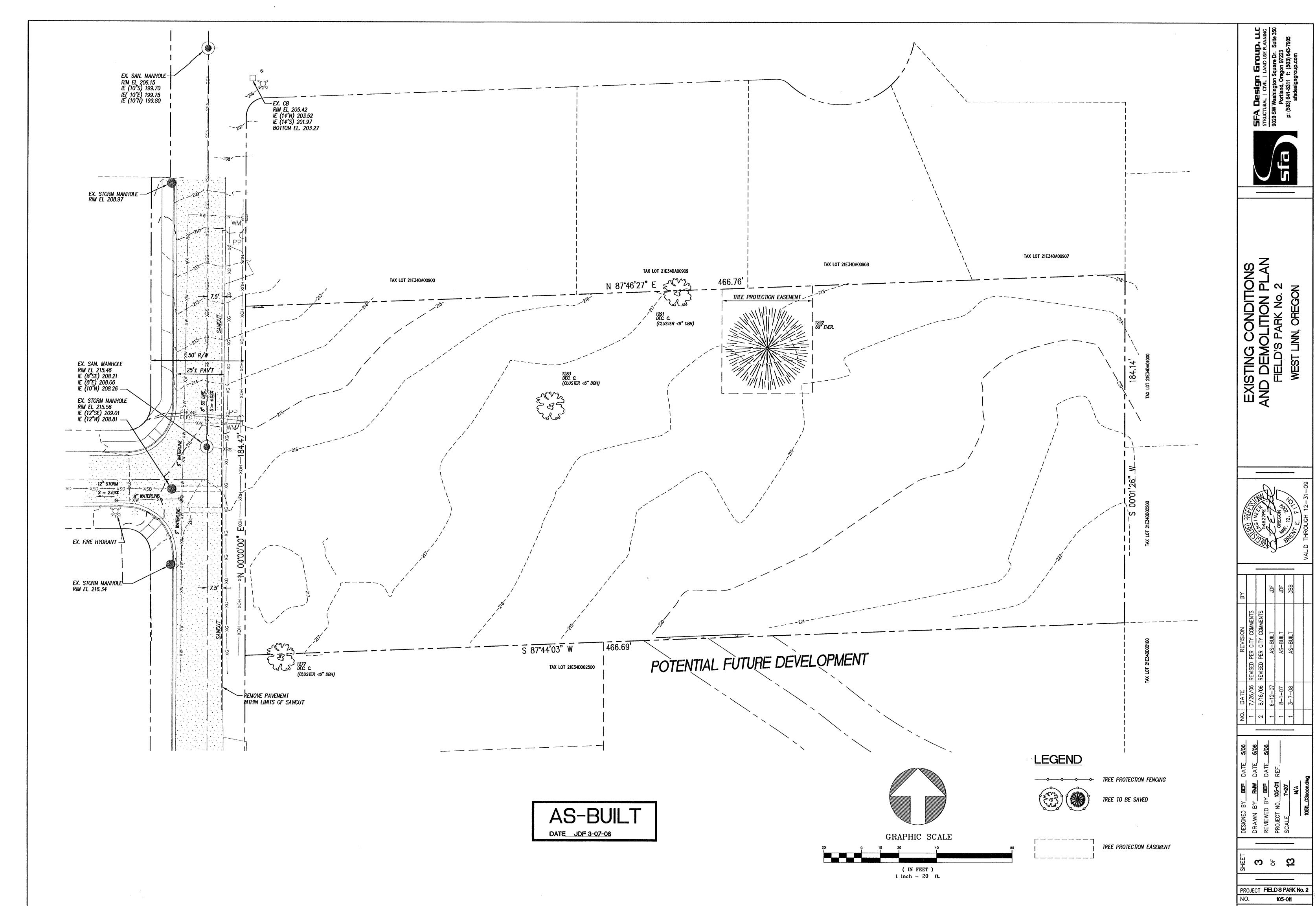


NOL

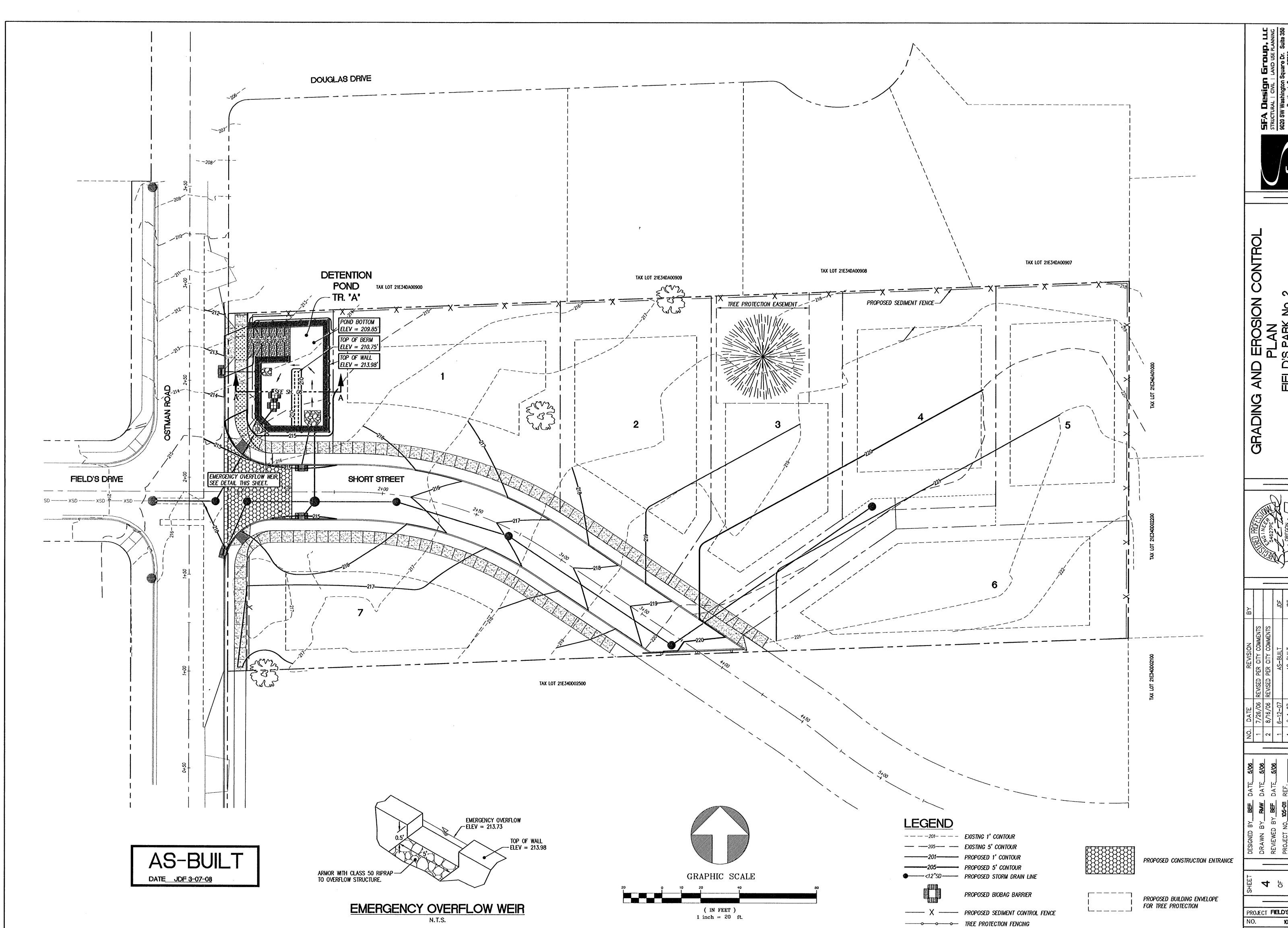


PROJECT **FIELD'S PARK No. 2** 105-011

ENGINEERING

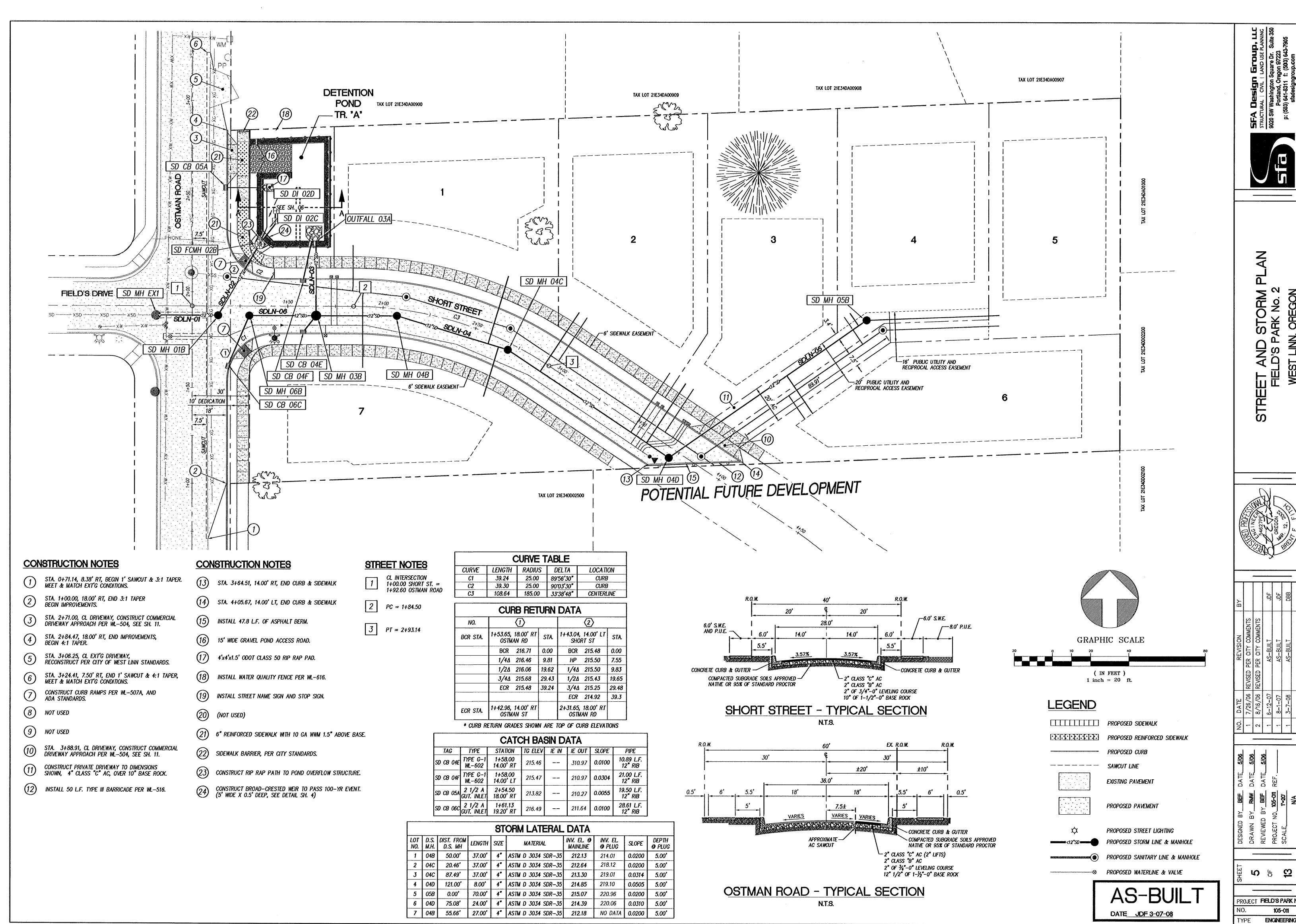


TYPE **ENGINEERING**

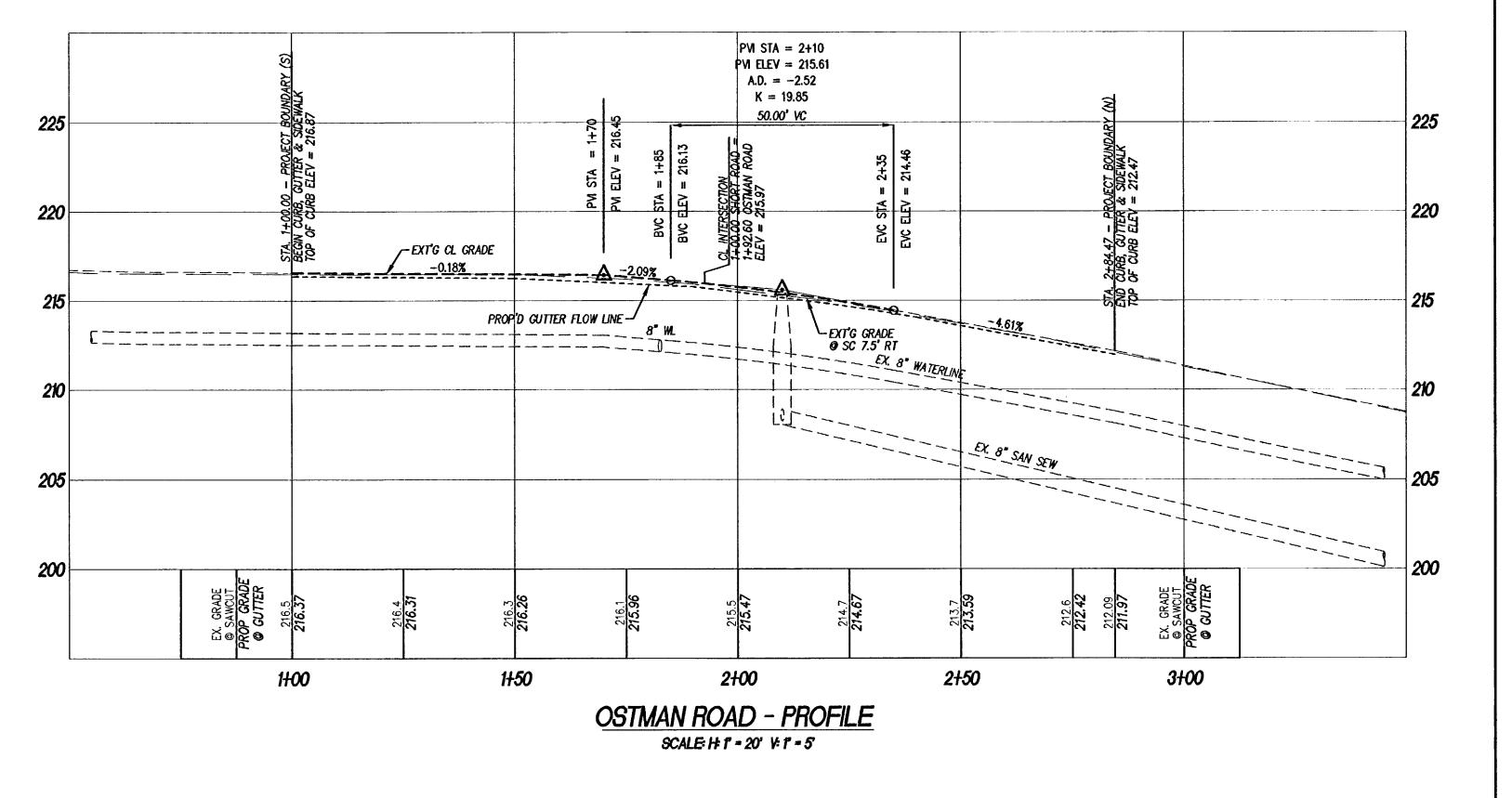


4 ₽ ₩

PROJECT FIELD'S PARK No. 2 105-011 TYPE **ENGINEERING**



PROJECT FIELD'S PARK No. 2 105-011 ENGINEERING



CLASS "B" BACKFILL

60.72 LF.

S = 0.0142

12" ASTM D 3034 STM SEW

SD MH 048 1+42.41 SDLN-04 = ST STA 2+07.72 RT 3.57* RM = 215.90 12" INV IN (SE) = 211.31 12" INV OUT (W) = 211.16

2+00

SDLN-04

2+50

CLASS "B" BACKFILL

SDLN+01

1+00

225

220

215

200

0+50

S = 0.0062 12" ASTM D 3034

STM SEW -

LP ELEV = 215.44 LP STA = 1+58.10PM STA = 1+70PM ELEV = 215.03

A.D. = 3.50K = 28.60

100.00° VC *COMFORT CURVE, STREET LIGHTING REQUIRED*

42.41 L.F.

S = 0.0200

12" ASTM D 3034 STM SEW

8" SAN SEW

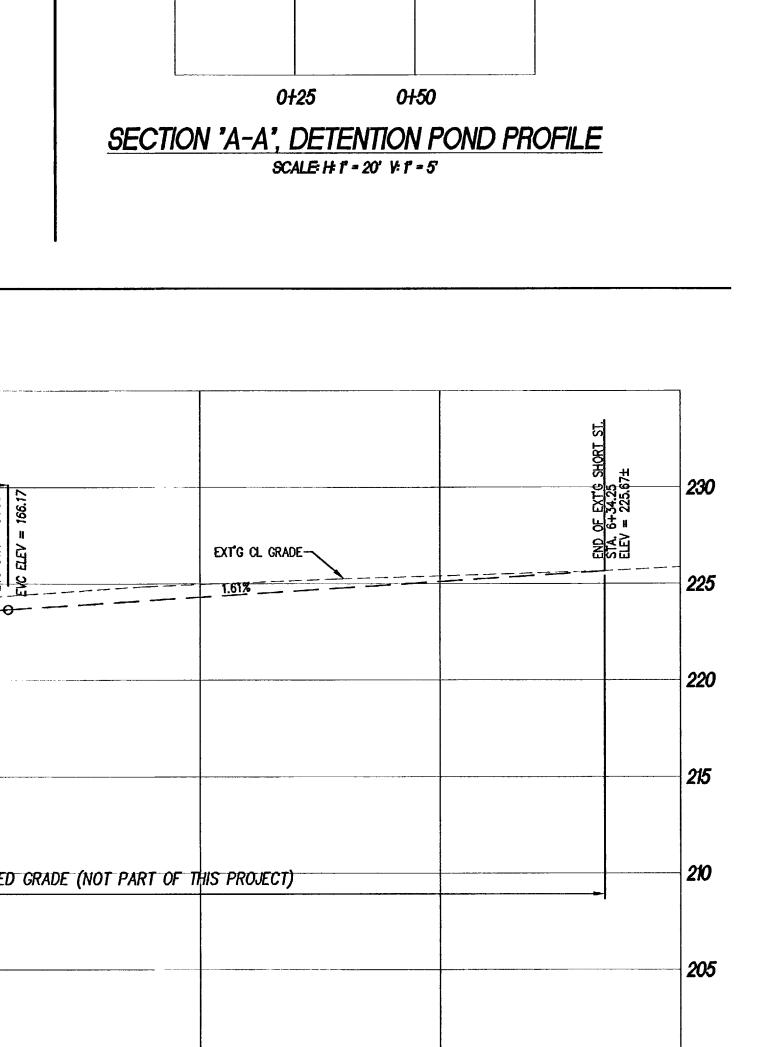
34.99 LF.

S = 0.0297

12" ASTM D 3034 — STM SEW

SDLN+06

1+50



TRACT "A"
DETENTION POND

PERMANENT POOL ELEV = 210.25

BOTTOM OF POND ELEV = 209.85

BOTTOM OF POND ELEV = 209.85

PROP'D RETAINING WALL

PROP'D GRADE -

EXT'G CL GRADE-— Possible future CL Grade PROP'D CL GRADE-6" DI WATERLINE 12" ASTM D 3034 STM SEW S = 0.0123101.41 LF. POSSIBLE FUTURE ALIGNMENT & FINISHED GRADE (NOT PART OF THIS PROJECT) RT 3.57' 212.37 = 212.17 5100 5150 6+00 3+00 3+50 4+00 4+50 SHORT ROAD, SDLN-01, SDLN-04 AND SDLN-06 - PROFILE SCALE: # f = 20' V: f' = 5

PVI STA = 3+35 PVI ELEV = 165.76 A.D. = -1.39 K = 36.08

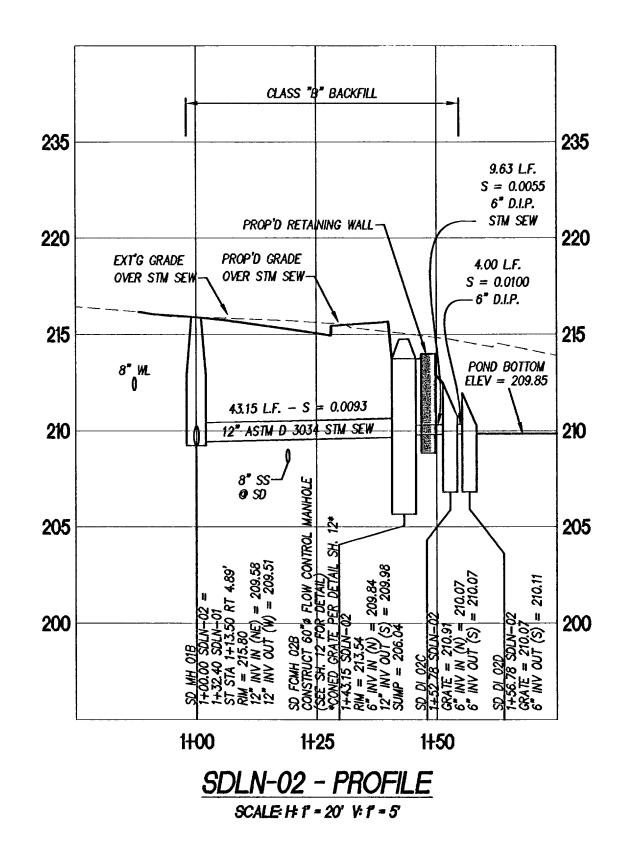
50.00' VC

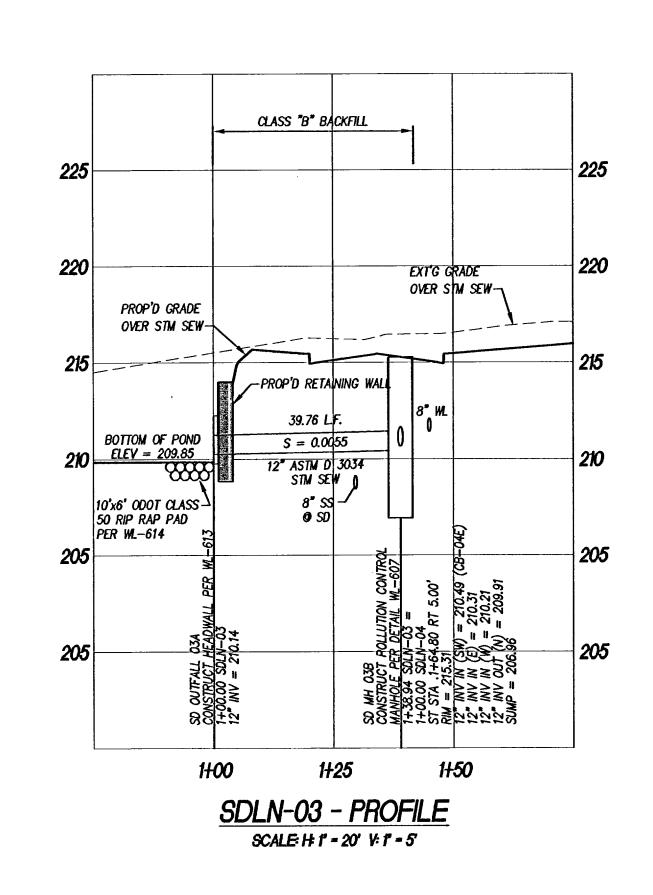
AS-BUILT DATE <u>JDF 3-07-08</u>

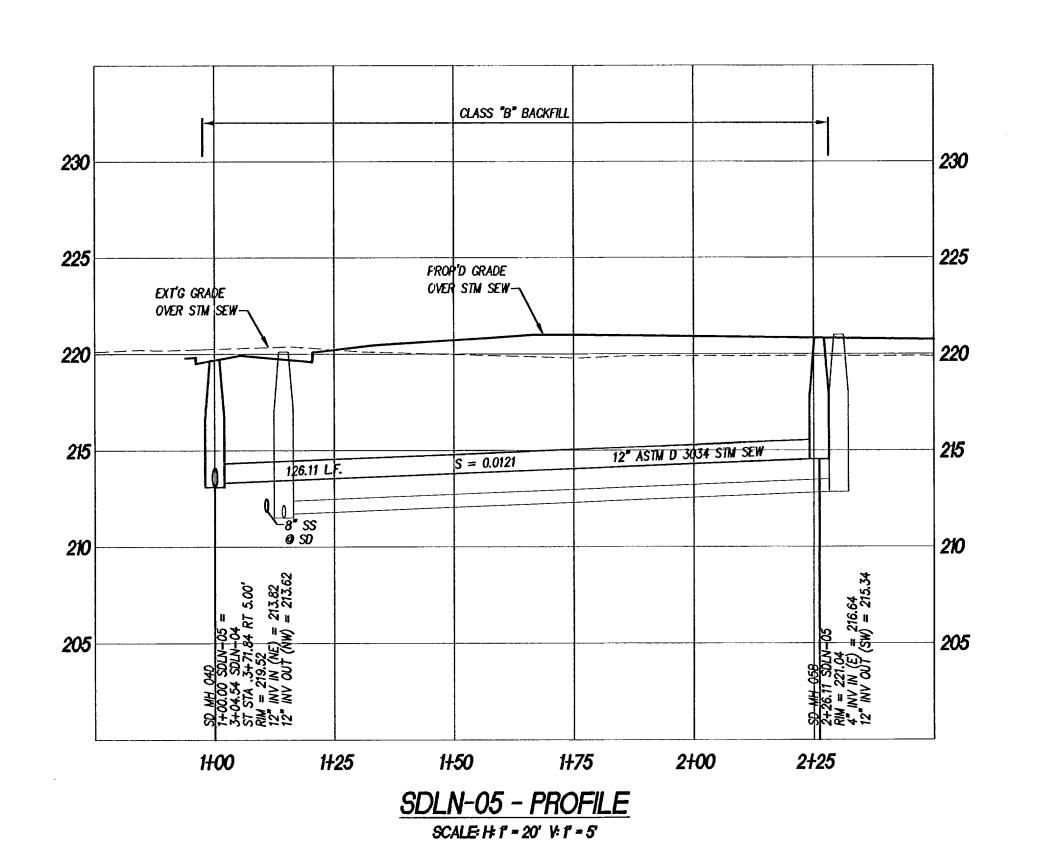
STREE

PROJECT FIELD'S PARK No. 2 105-011

ENGINEERING







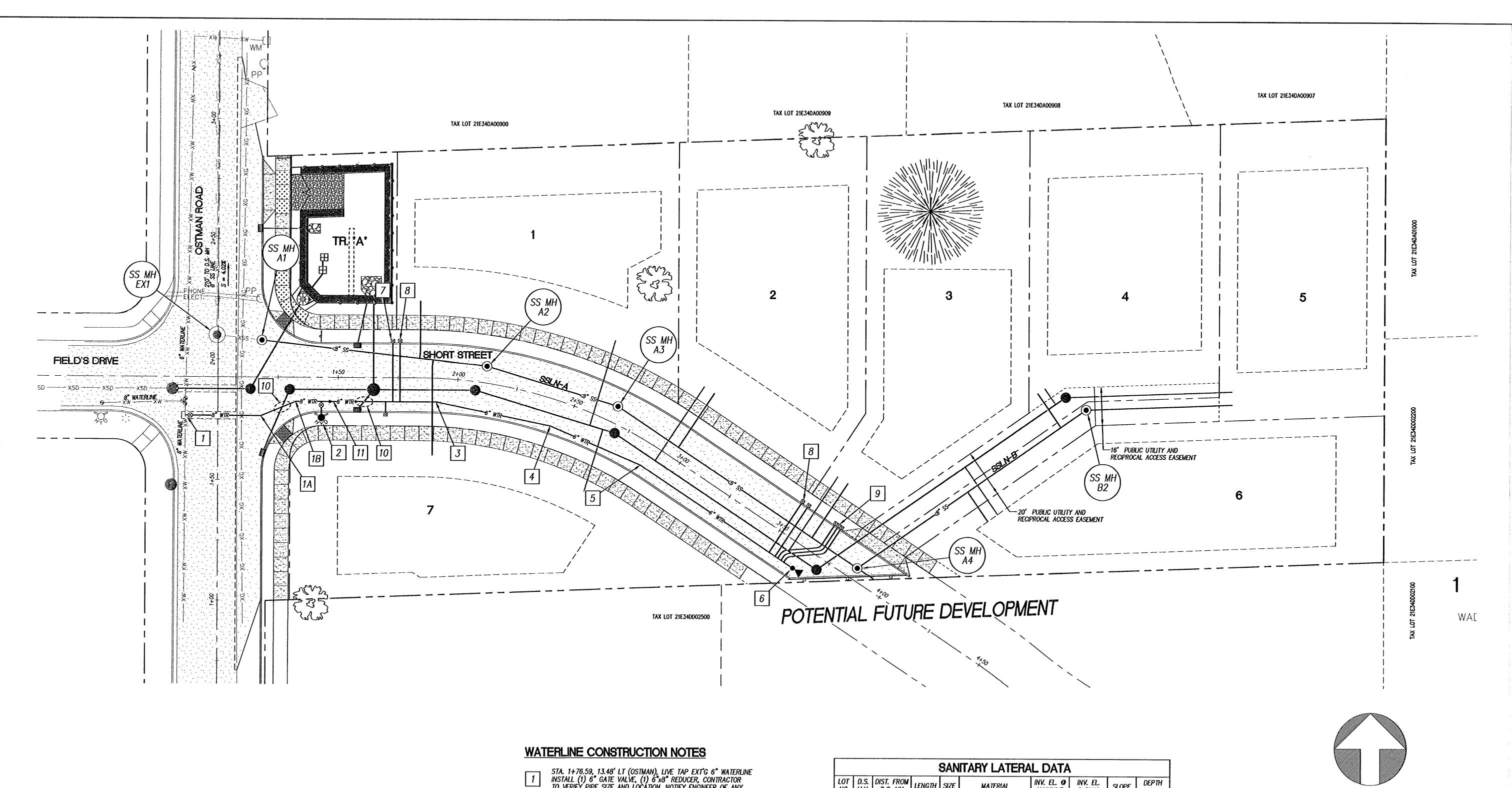
AS-BUILT DATE <u>JDF 3-07-08</u>

AND STORM PROFILES FIELD'S PARK No. 2

<u>~</u> ඉ ස

PROJECT **FIELD'S PARK No. 2** 105-011

ENGINEERING



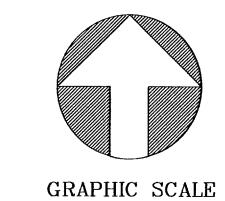
- STA. 1+76.59, 13.48' LT (OSTMAN), LIVE TAP EXT'G 6" WATERLINE INSTALL (1) 6" GATE VALVE, (1) 6"x8" REDUCER, CONTRACTOR TO VERIFY PIPE SIZE AND LOCATION. NOTIFY ENGINEER OF ANY DISCREPANCY PRIOR TO LIVE TAP.
- 1A STA. 1+17.79 16.00° RT, INSTALL 22.50° BEND W/RESTRAINT JOINT.
- 1B STA. 1+32.28 10.00' RT, INSTALL 22.50" BEND W/RESTRAINT JOINT.
- 2 STA. 1+43.00, 16.50' RT, INSTALL FIRE HYDRANT ASSEMBLEY.
- STA. 1+91.23, 9.88' RT, INSTALL 11.25' BEND W/RESTRAINT JOINT.
- 4 STA. 2+42.97, 11.09,' RT, INSTALL 11.25' BEND W/RESTRAINT JOINT.
- STA. 2+86.35, 9.88, RT, INSTALL 11.25° BEND W/RESTRAINT JOINT.
- STA. 3+63.22, 10.00' RT, INSTALL STANDARD 2" BLOWOFF, PER WL-404A.
- INSTALL IRRIGATION METER FOR WATER QUALITY FACILITY, WITH APPROVED BACKFLOW PREVENTION.
- INSTALL 1" WATER SERVICE (TYP.)
- BANK WATER METERS FOR LOTS 4-6, RUN 2" SCHEDULE 40 PVC FROM EACH METER TO LOT SERVICED. 18" MIN. SEPARATION REQUIRED ON 1" TAPS.
- CRITICAL CROSSING, DEFLECT WATERLINE UNDER STORM SEWER IN THESE AREAS, MAXIMUM 3° PER JOINT.
- 11 STA. 1+48.00, 10.00, RT, INSTALL 8"x6" REDUCER.

				SAN	IITARY LATERA	L DATA	\		
LOT NO.	D.S. M.H.	DIST. FROM D.S. MH	LENGTH	SIZE	MATERIAL	INV. EL. © MAINLINE	INV. EL. @ PLUG	SLOPE	DEPTH © PLUG
1	A1	35.13'	27.00'	4"	ASTM D 3034 SDR-35	209.23	211.36	0.0200	5.90'
2	A3	30.40'	27.00'	4"	ASTM D 3034 SDR-35	210.78	216.80	0.0454	6.00'
3	A3	97.41'	27.00'	4"	ASTM D 3034 SDR-35	211.45	218.35	0.0632	6.00'
4	A4	103.00'	17.00'	4"	ASTM D 3034 SDR-35	212.91	216.39	0.0200	6.92'
5	B2	0.00'	61.00'	4"	ASTM D 3034 SDR-35	213.37	215.93	0.0213	6.00'
6	A4	55.74'	14.80'	4"	ASTM D 3034 SDR-35	212.43	223.07	0.0501	7.00'
7	A1	40.13'	37.00'	4"	ASTM D 3034 SDR-35	209.28	210.02	0.0200	6.46

RTIC	AL BEND	RESTRAIN	TABLE	HORIZONTA	AL BEND REST	RAINT TABLE
PIPE PIZE	BEND	UPPER RESTRAINT LENGTH	LOWER RESTRAINT LENGTH	PIPE SIZE	BEND	RESTRAINT LENGTH
8 "	11.25*	4 L.F.	1 L.F.	8"	11.25*	2 L.F.
8 "	22.5°	8 L.F.	2 L.F.	8"	22.5*	4 L.F.
8"	45°	16 L.F.	5 L.F.	8"	45*	7 L.F.
_	_	-	-	8*	90°	16 L.F.
	-	_	_	8"	REDUCER 8"x6"	16 L.F.
-	_	-	-	8"	DEAD END	37 L.F.

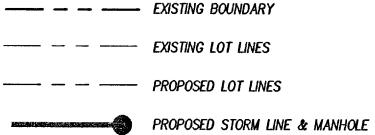
PIPE MATERIAL - DUCTILE IRON
SOIL TYPE BACKFILL - WELL GRADED GRAVELS
FACTOR OF SAFETY - 1.5:1
TRENCH TYPE - COMPACTED GRANULAR MATERIAL 90% T-99
TEST PRESSURE - 150 PSI DEPTH OF BURY ON UPPER RUN IS 3' DEPTH OF BURY ON LOWER RUN IS 5'

8"	DEAD END	37 L.F.
PIPE MATERIAL -		
	LL – WELL GRADED	GRAVELS
FACTOR OF SAFET		
TRENCH TYPE - (COMPACTED GRANULA	R MATERIAL 90% T-99
TEST PRESSURE -	· 150 PSI	
DEPTH OF BURY (ON PIPE IS 3'	



(IN FEET) 1 inch = 20 ft.

LEGEND

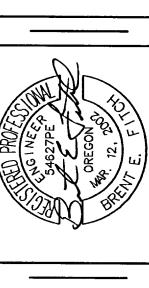


PROPOSED SANITARY LINE & MANHOLE -----<8*WTR-----⊗ PROPOSED WATERLINE & VALVE

PROPOSED WATER METER INSTALL 1" SERVICE LINE

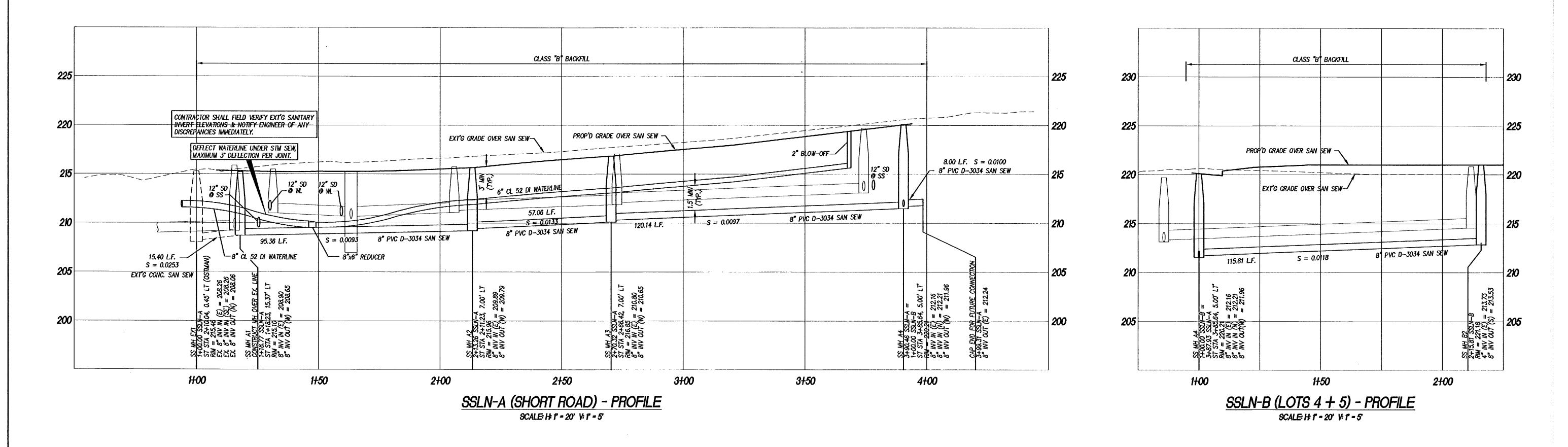
AS-BUILT DATE <u>JDF 3-07-08</u>





ထ ှု 🐱

PROJECT FIELD'S PARK No. 2 105-011 ENGINEERING



AS-BUILT
DATE_JDF 3-07-08

SFA Design Eroup, LLC
STRUCTURAL | CIVIL | LAND USE PLANNING
9020 SW Washington Square Dr. Suite 35/
Portland, Oregon 97223
p: (503) 641-8311 f: (503) 643-7905
sfadesigngroup.com



FRLINE PROFILES
RX No. 2

VALID THROUGH 12-31-09

ВҮ			JOF	JOF	880	
REVISION	26/06 REVISED PER CITY COMMENTS	16/06 REVISED PER CITY COMMENTS	AS-BUILT	AS-BUILT	AS-BUILT	
A TE	26/06	16/06	12-07	1-07	7-08	

					L
A H	DATE	2/06		Š.	
₩	DATE	2/06		•	
<u> </u>	1			7	
	UA !F	90/6		,	
₽ 5	REF.			-	1
1-20					- 1
			_	•	

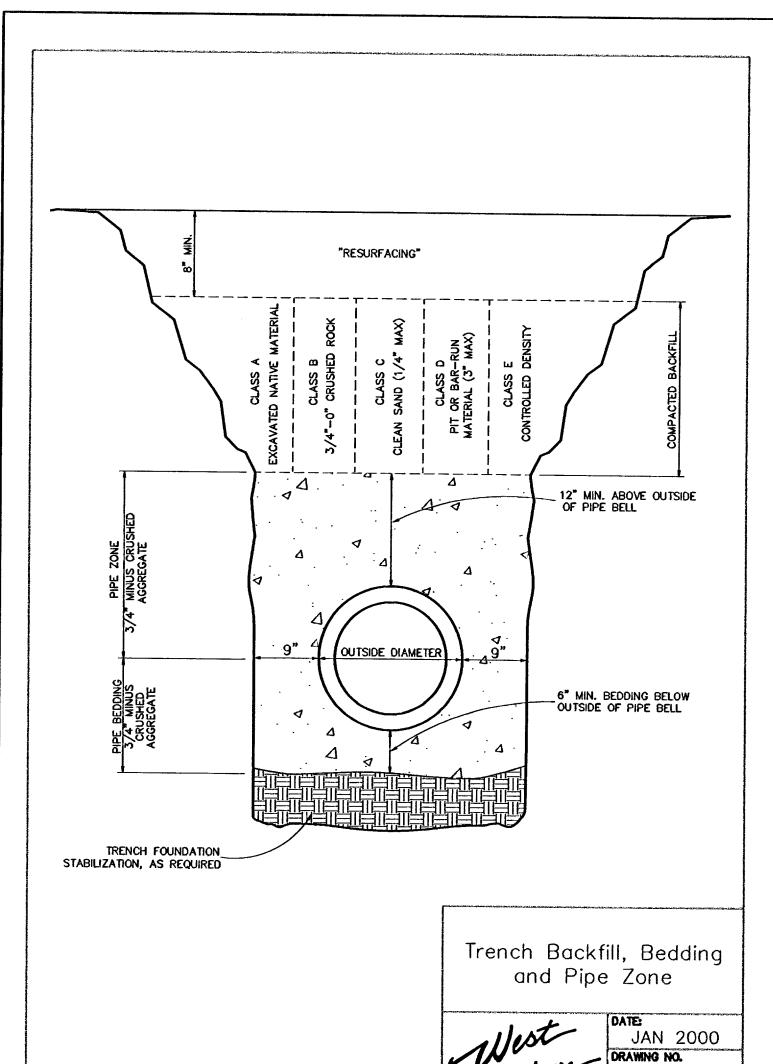
DRAWN BY RWW
REVIEWED BY BEF
PROJECT NO. 105-011
SCALE 1'-20'

<u>ප</u> ව ල ස

PROJECT FIELD'S PARK No. 2

NO. 105-011

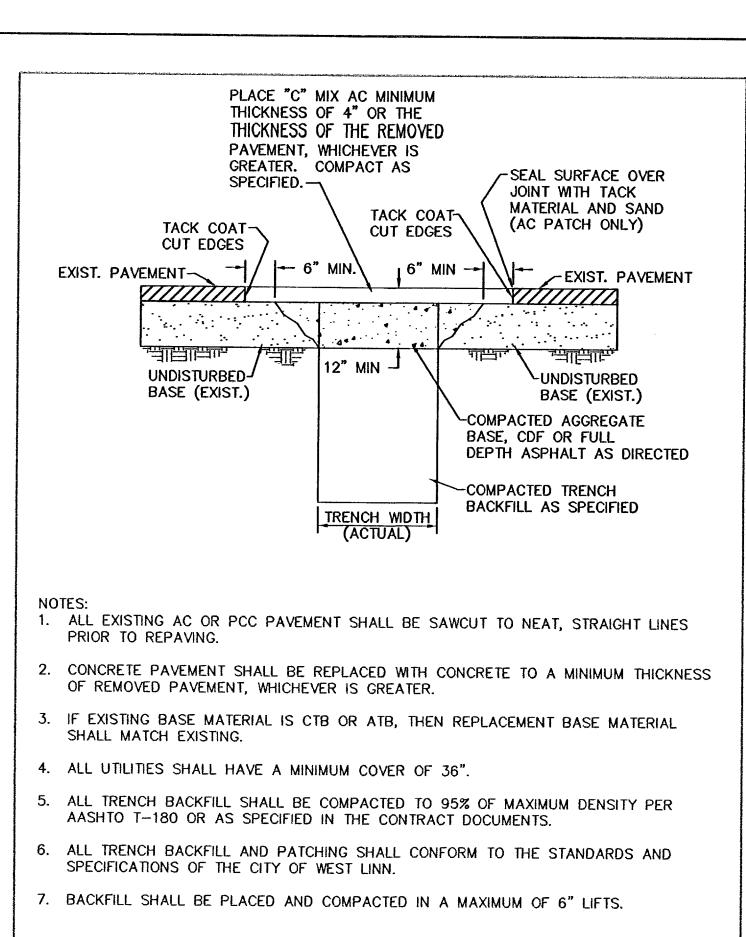
TYPE ENGINEERING



WL-200

00-200

00-216

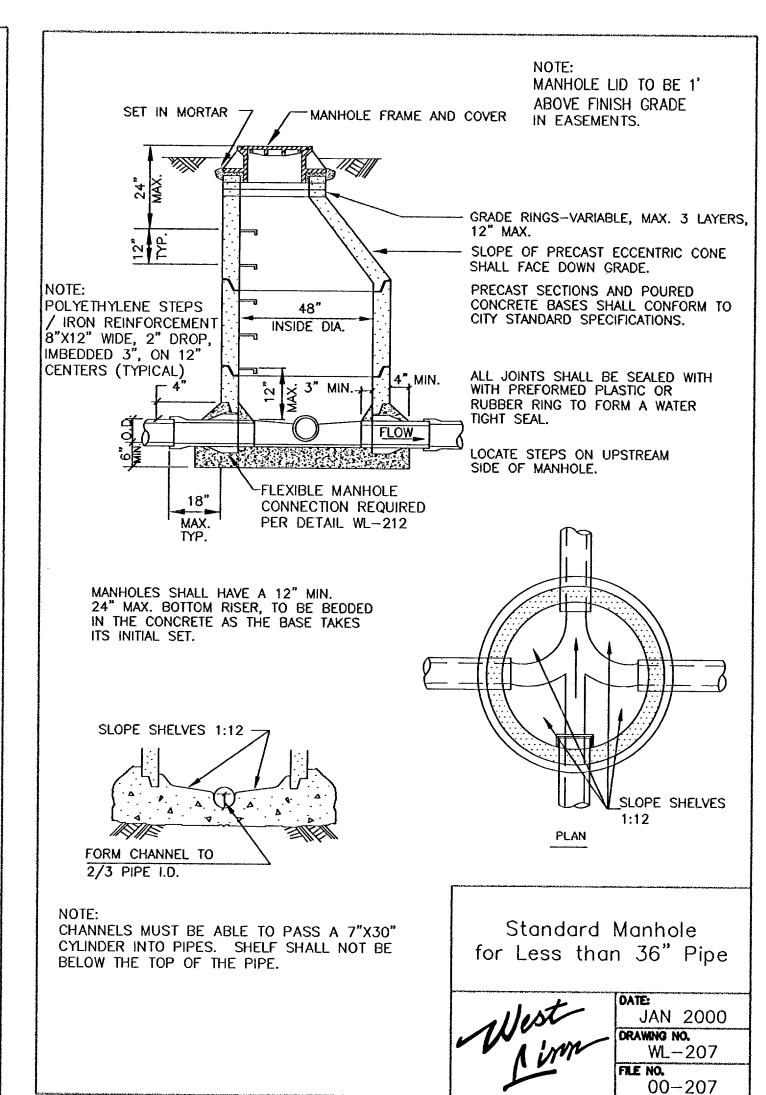


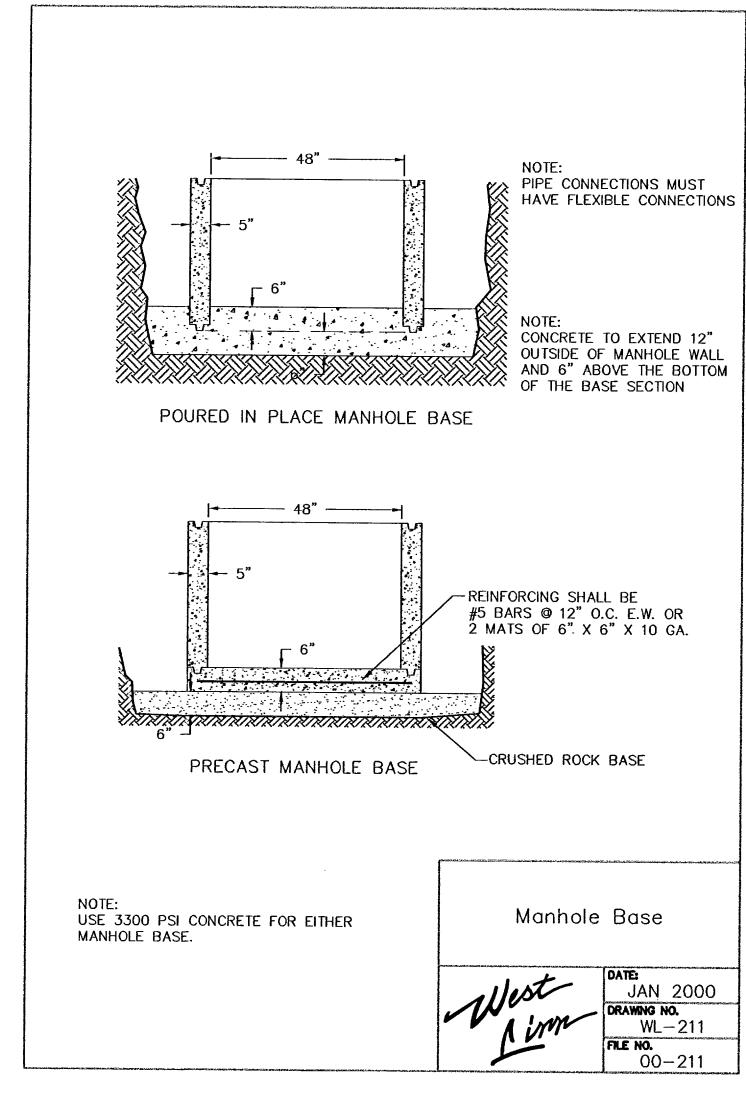
Street T-Cut

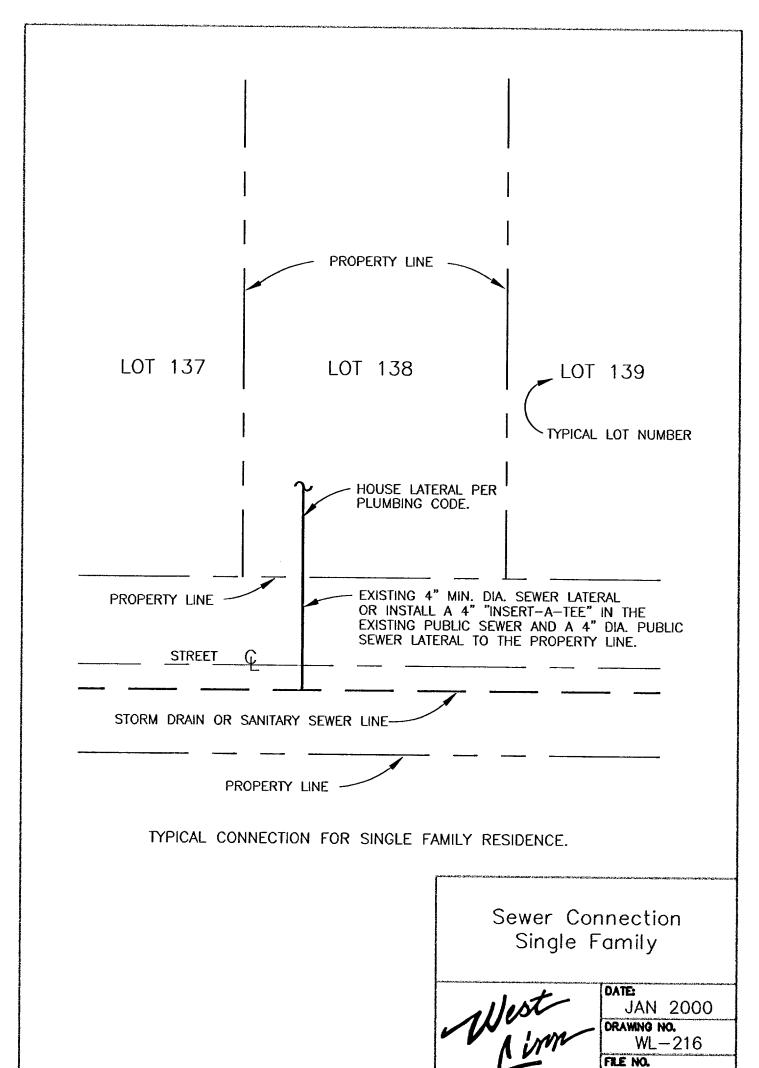
JAN 2000

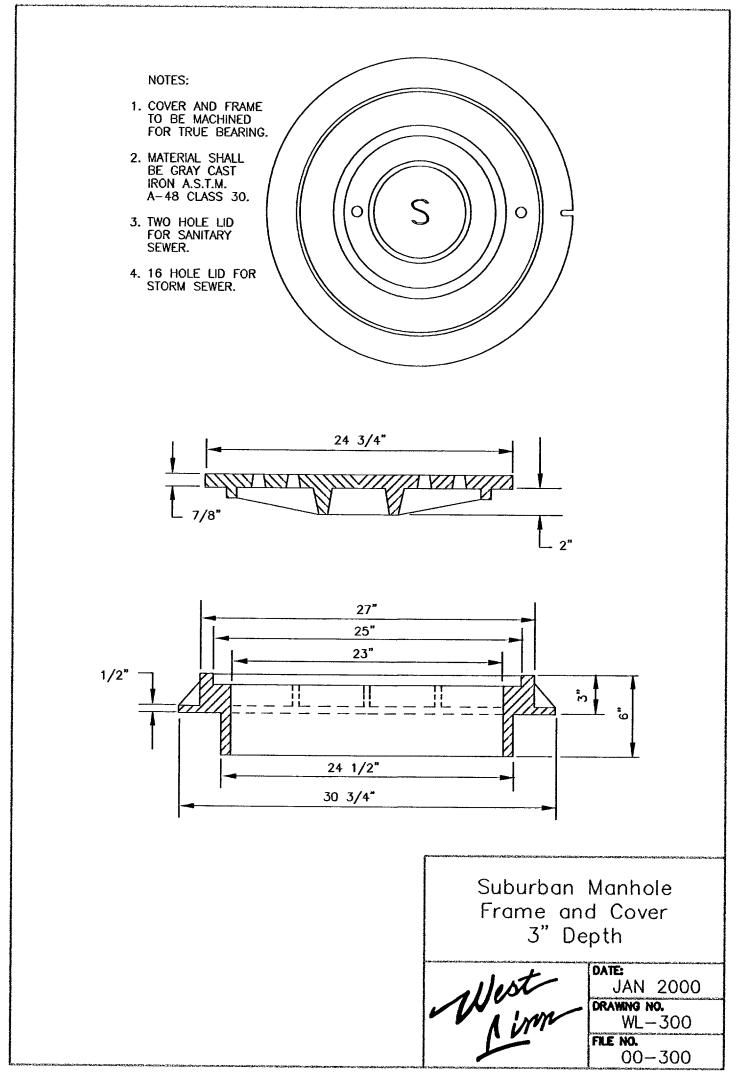
WL - 203

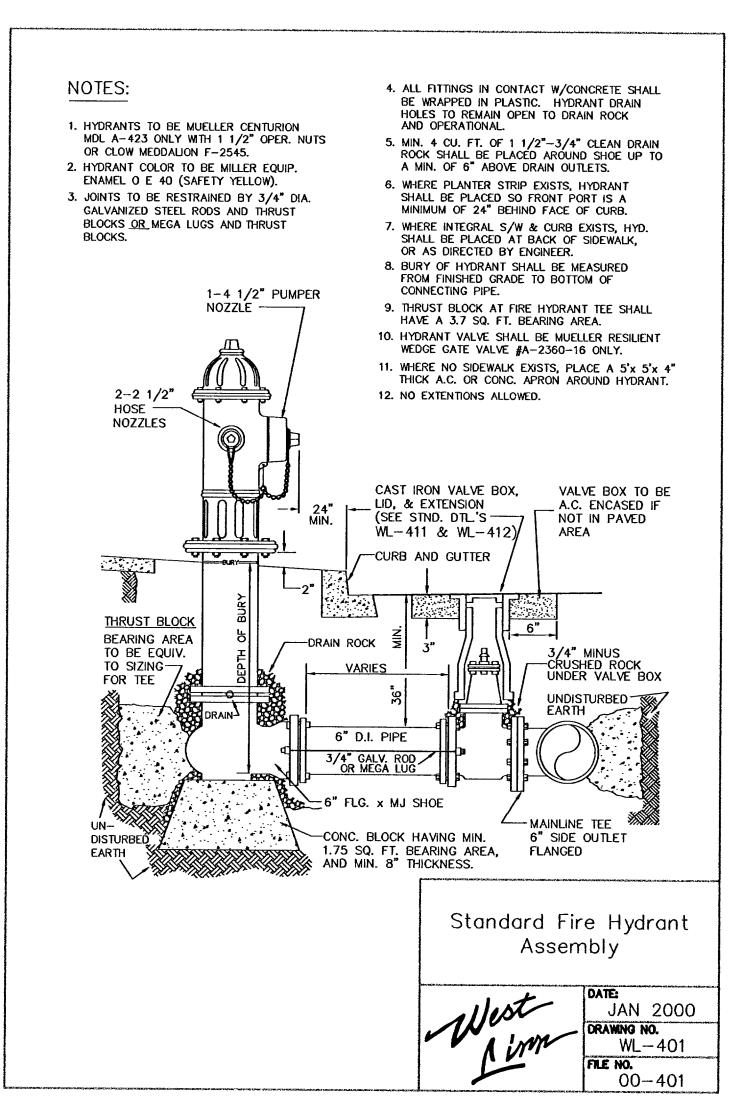
00-203

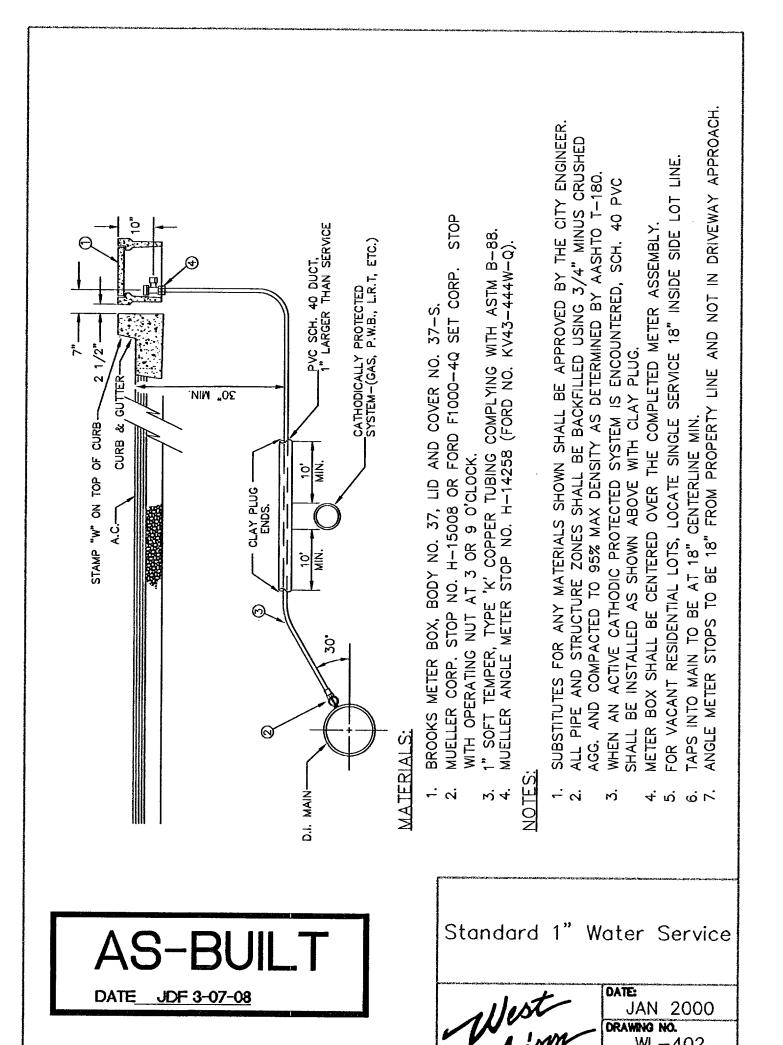


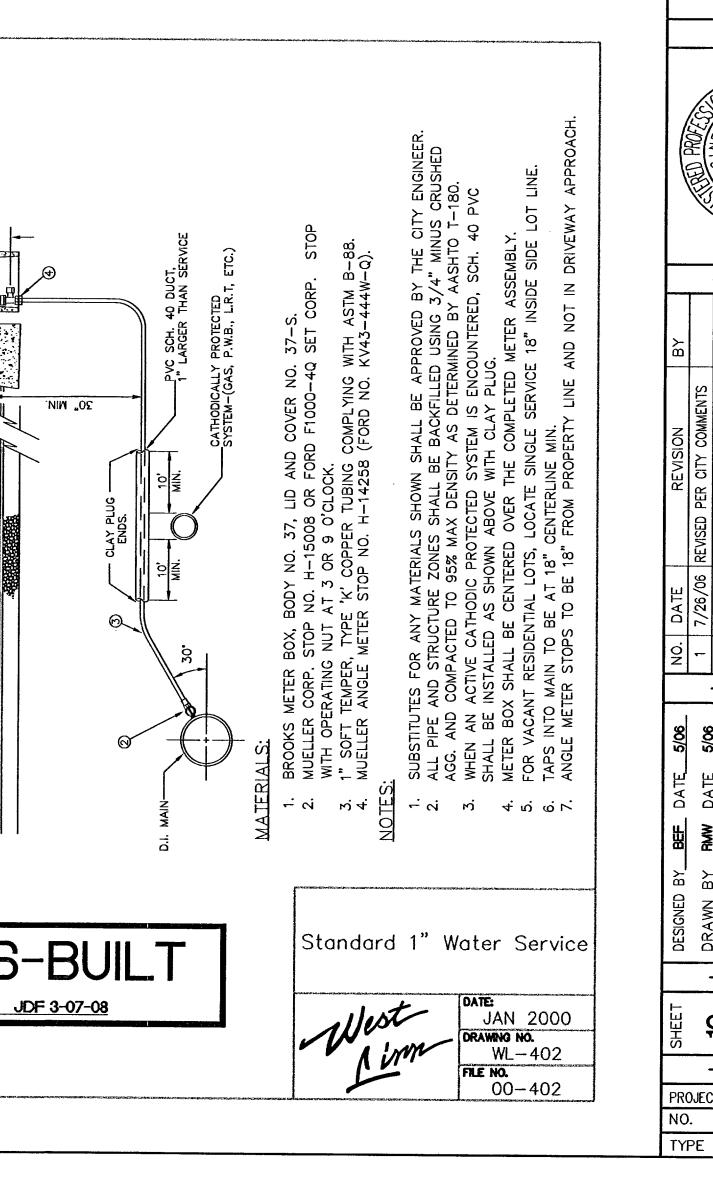


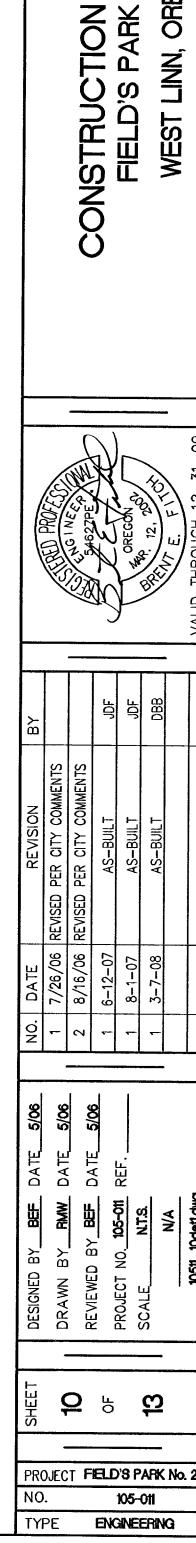






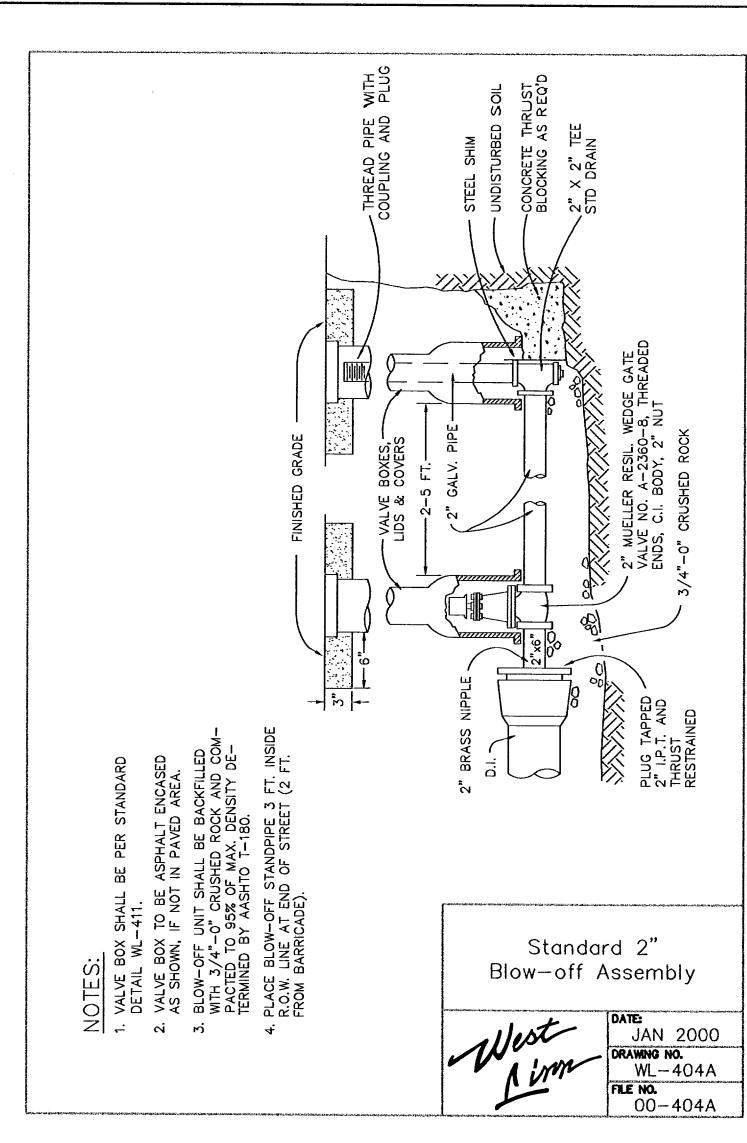


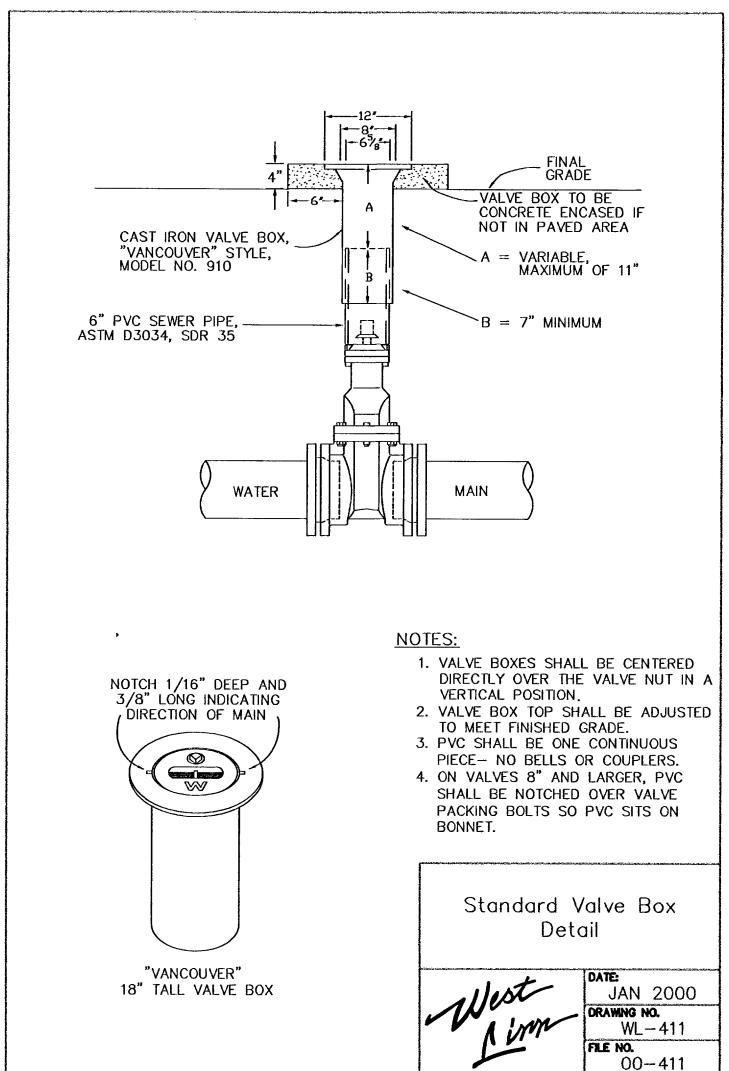


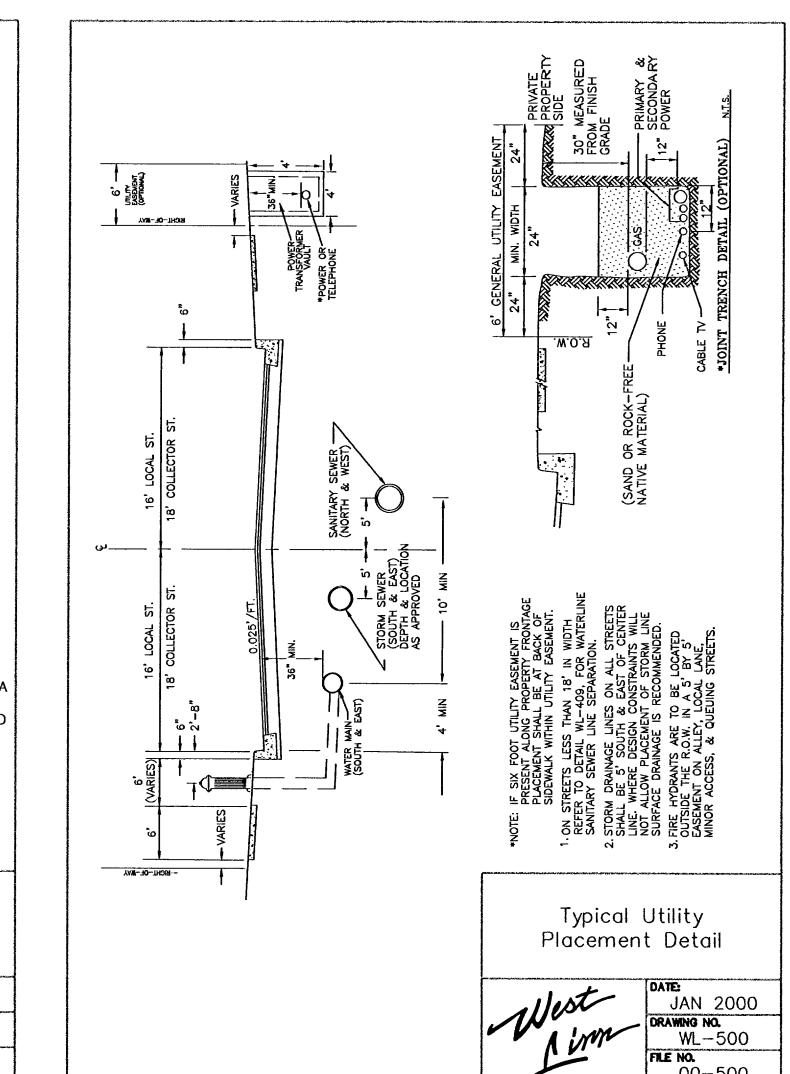


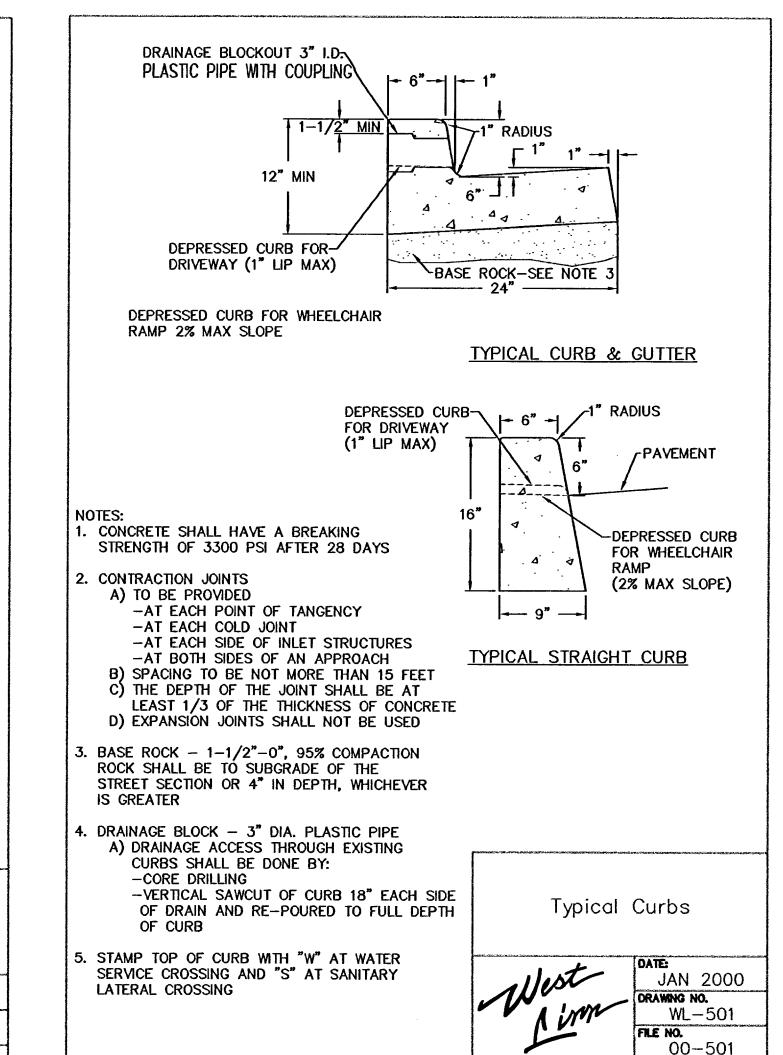
7 0

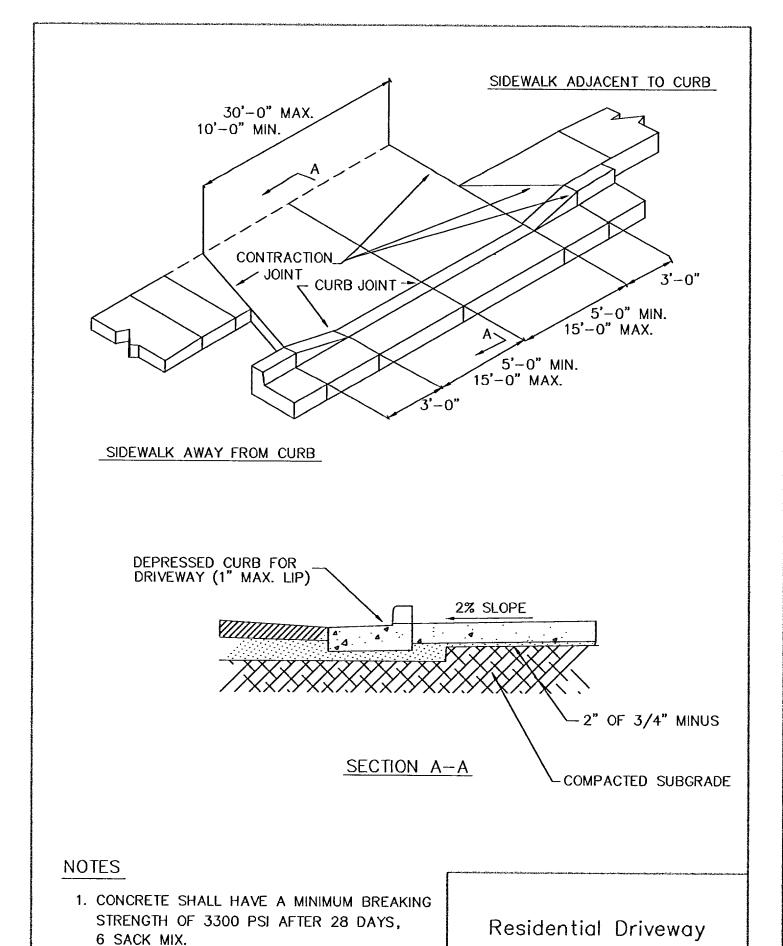
105-011 ENGINEERING







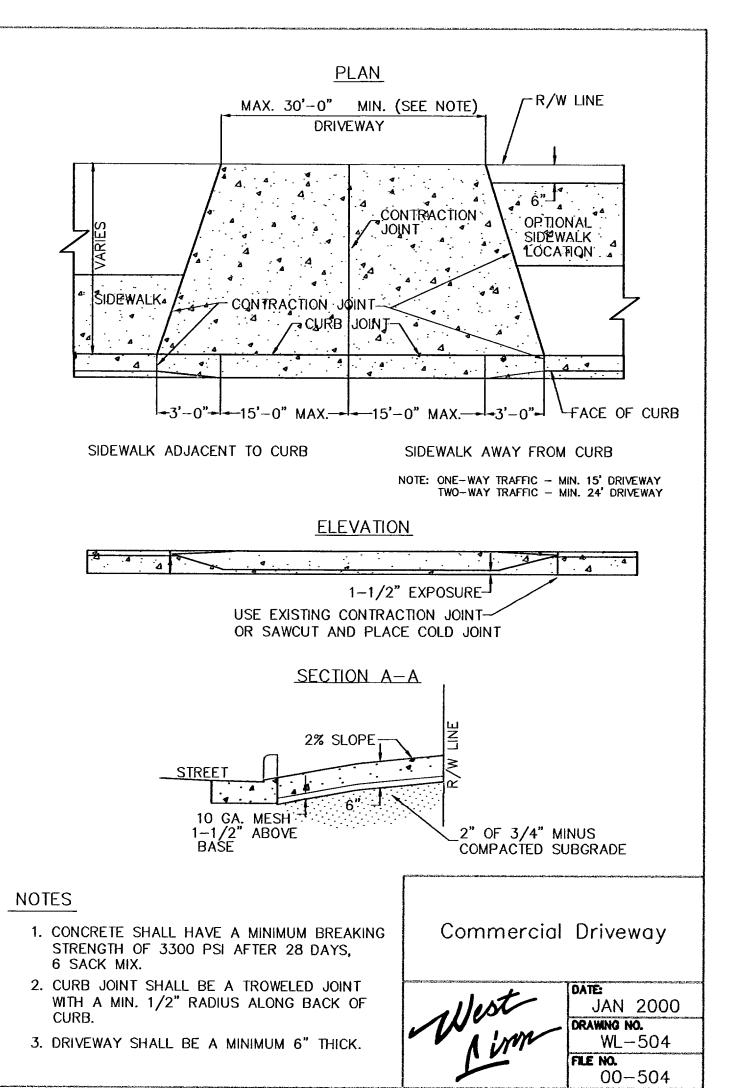


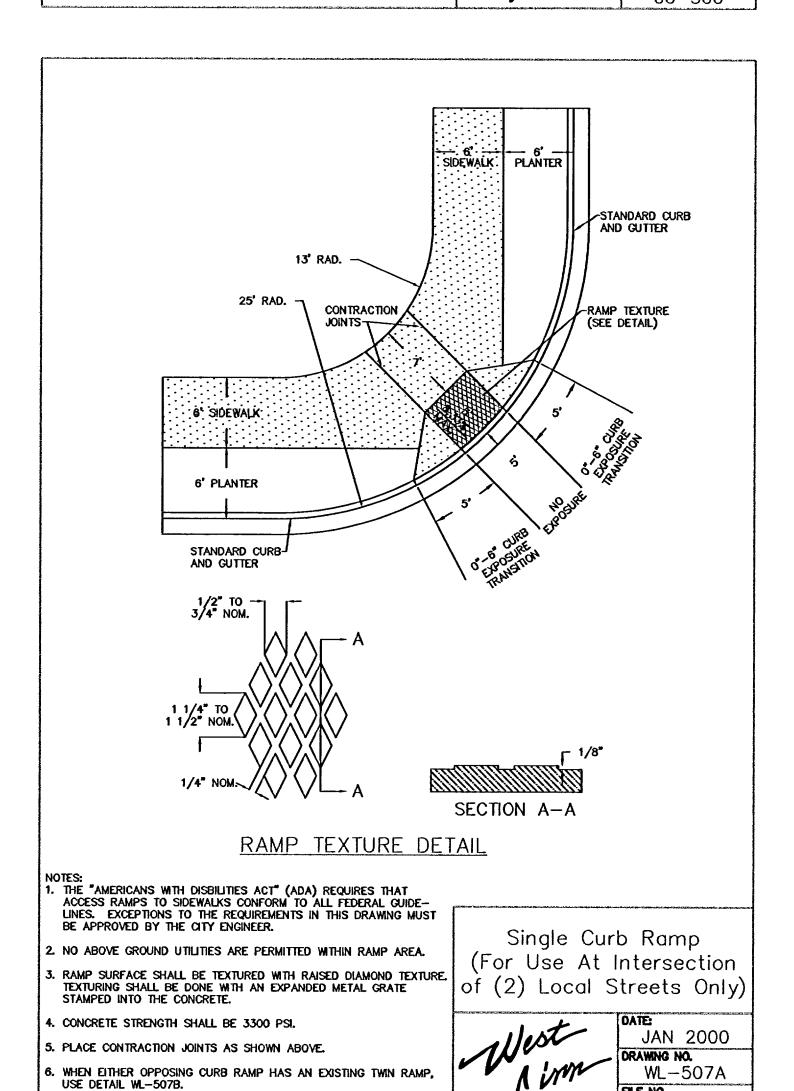


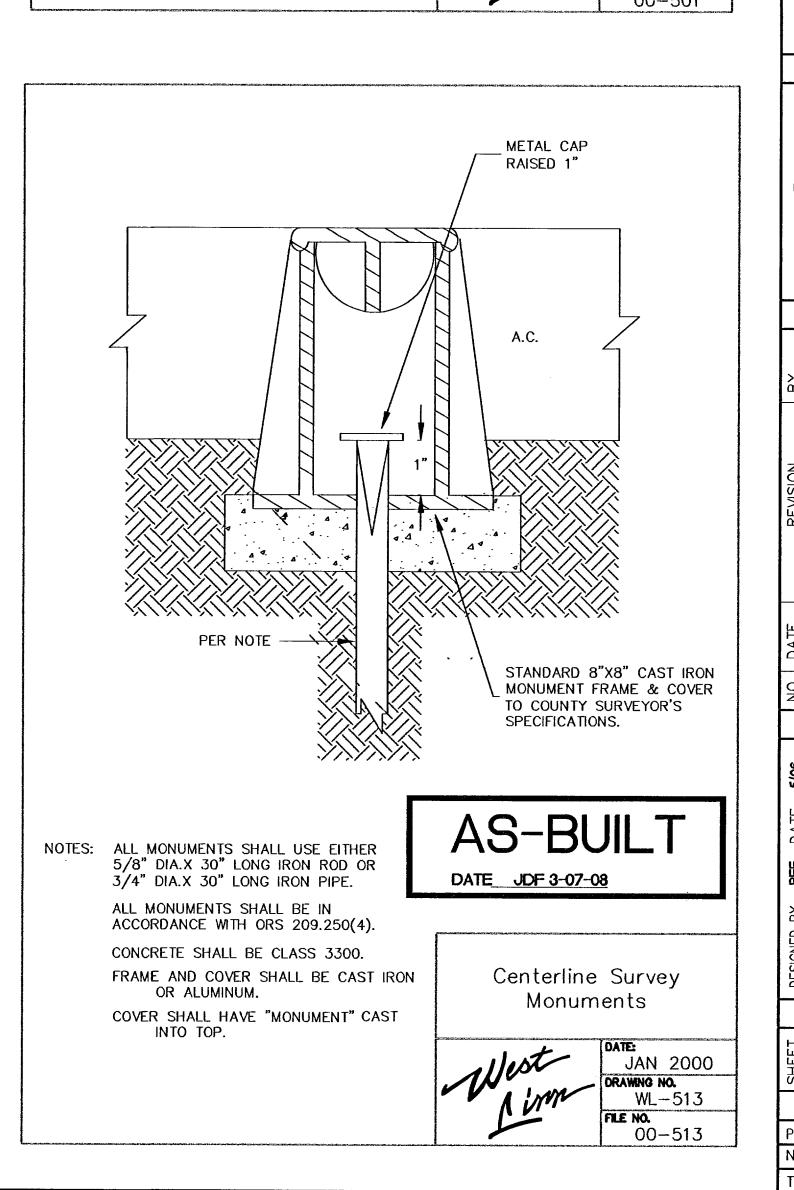
JAN 2000

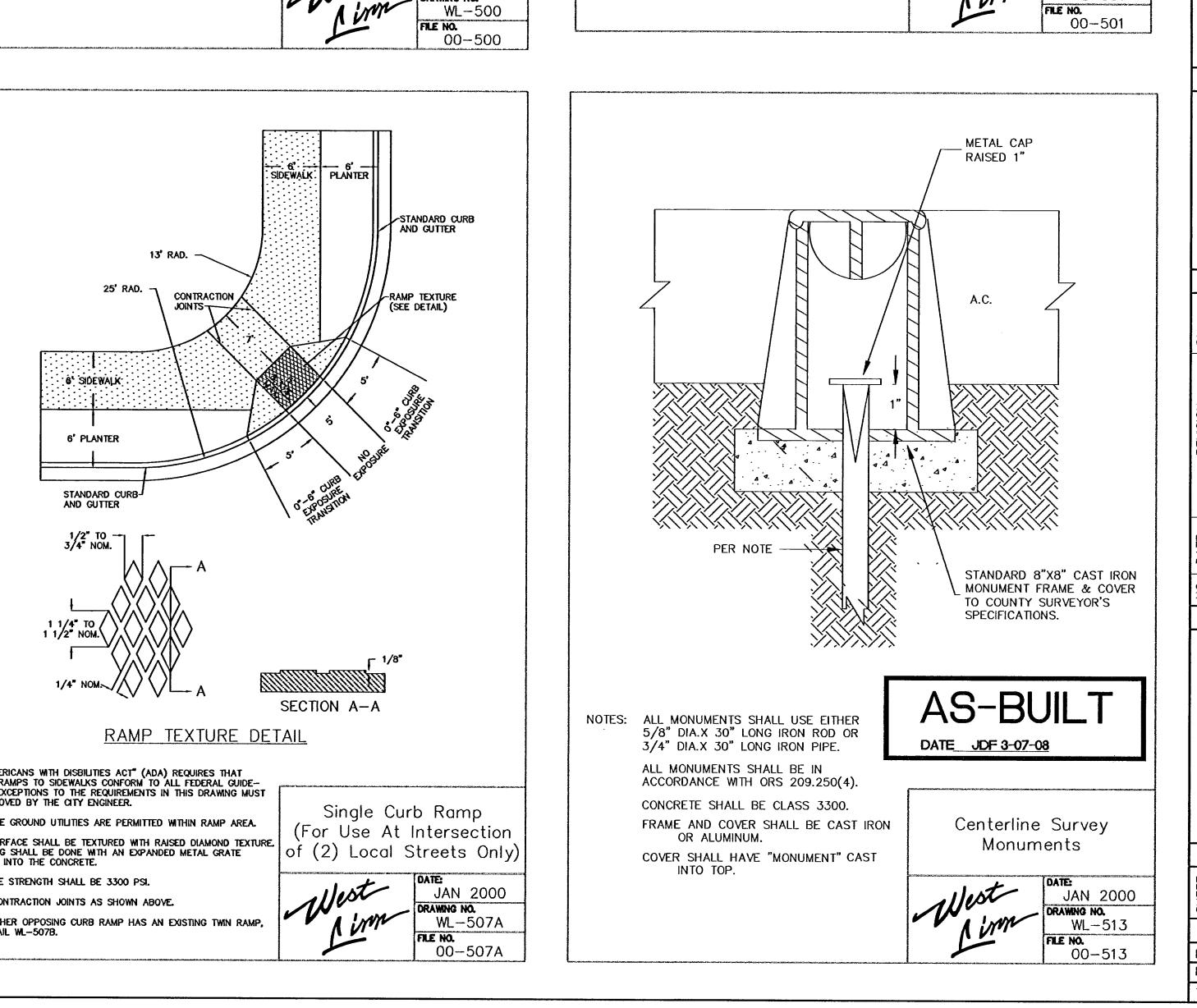
WL - 503

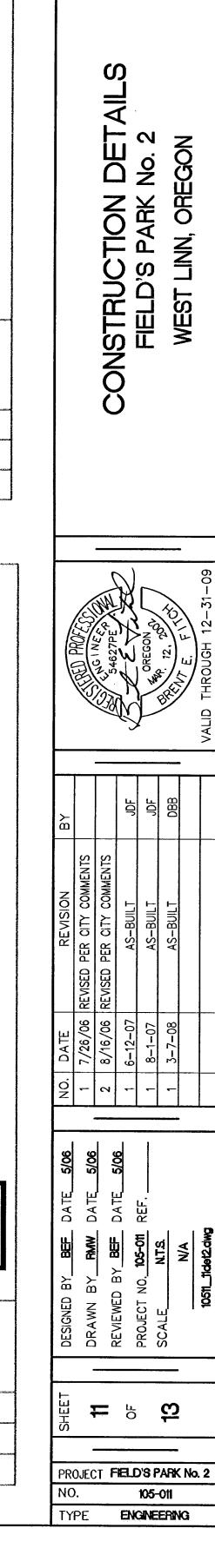
00 - 503







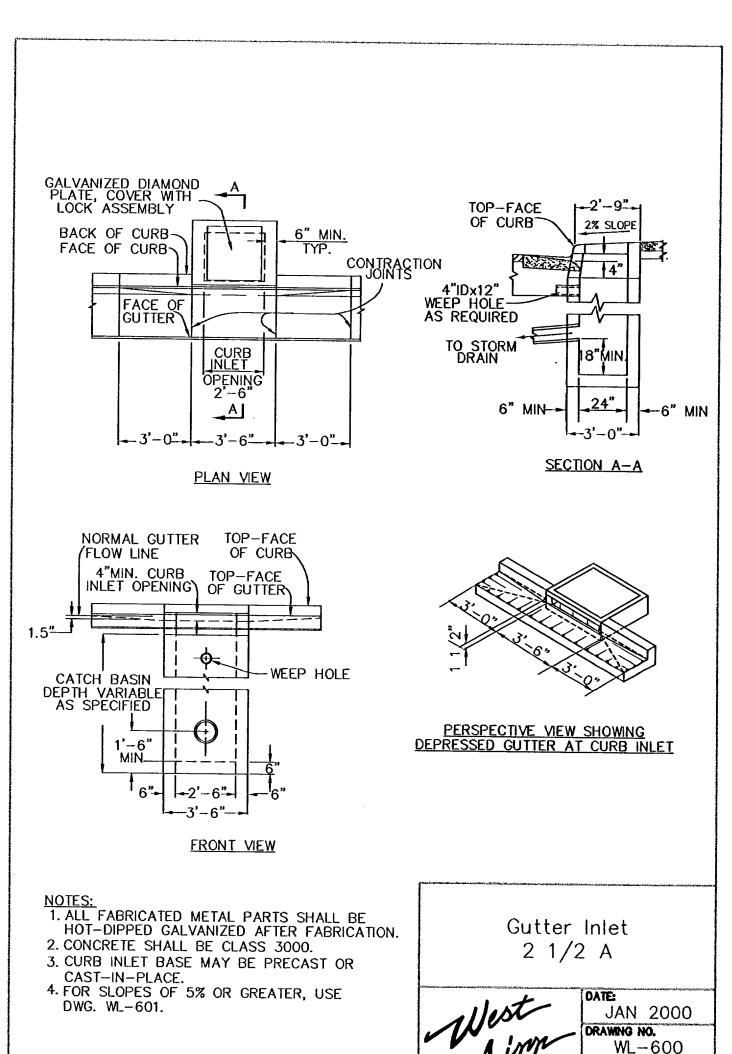


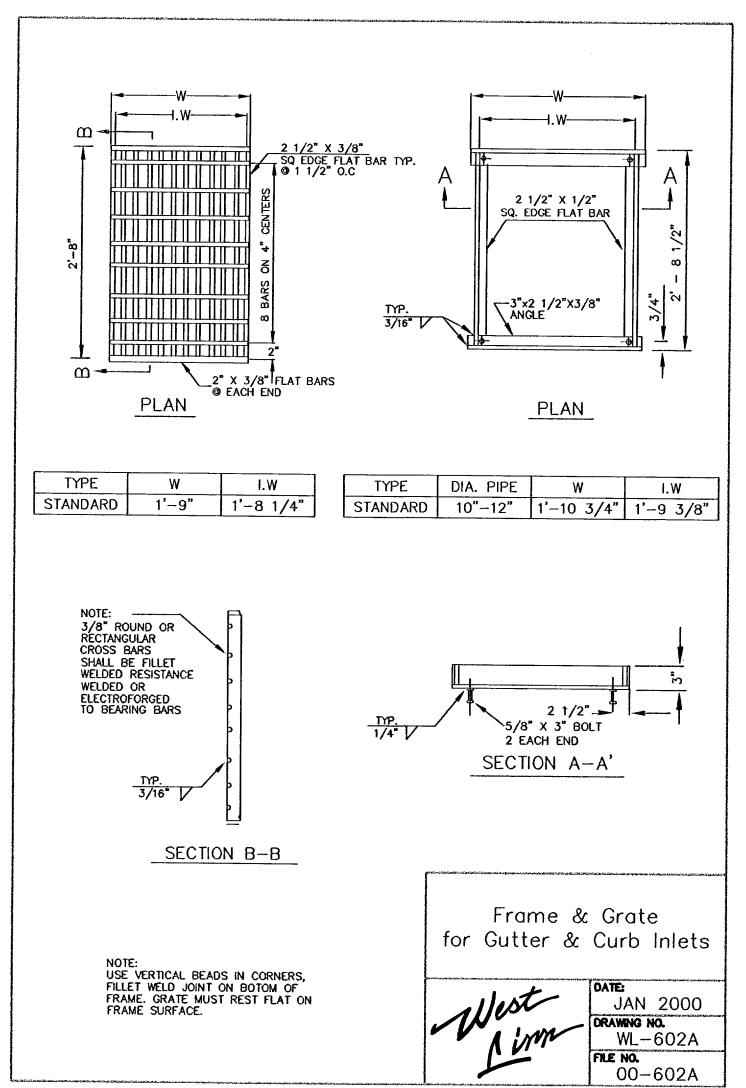


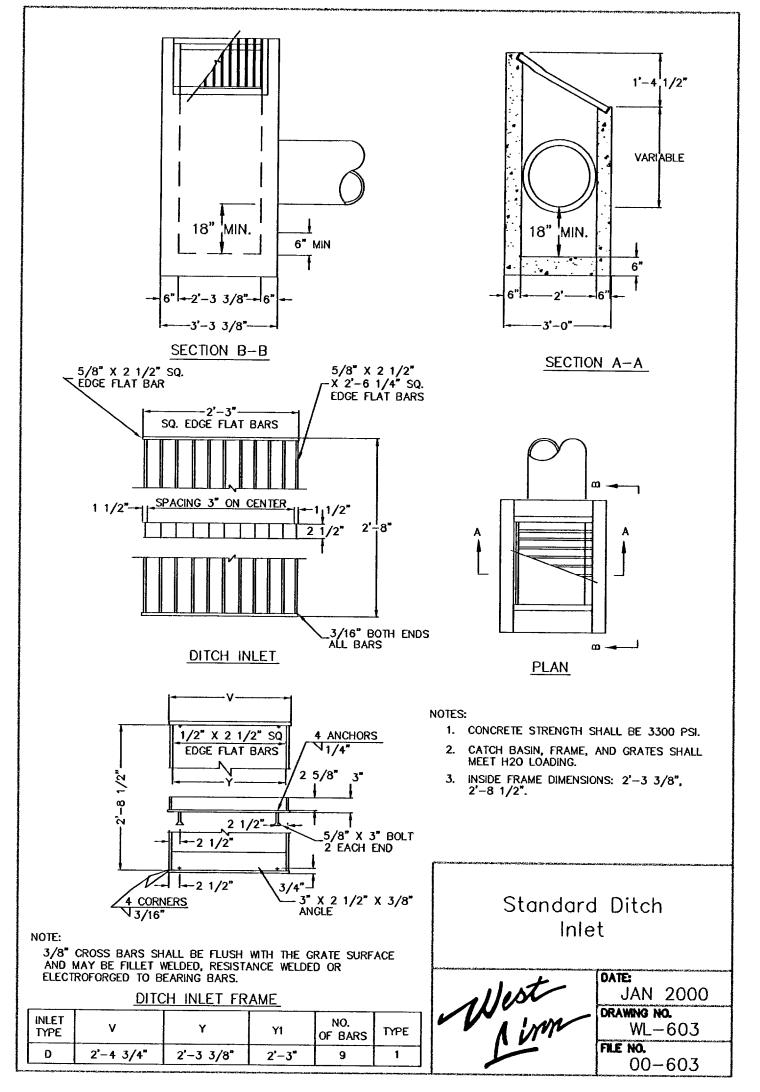
2. CURB SHALL BE TROWELED JOINT WITH A

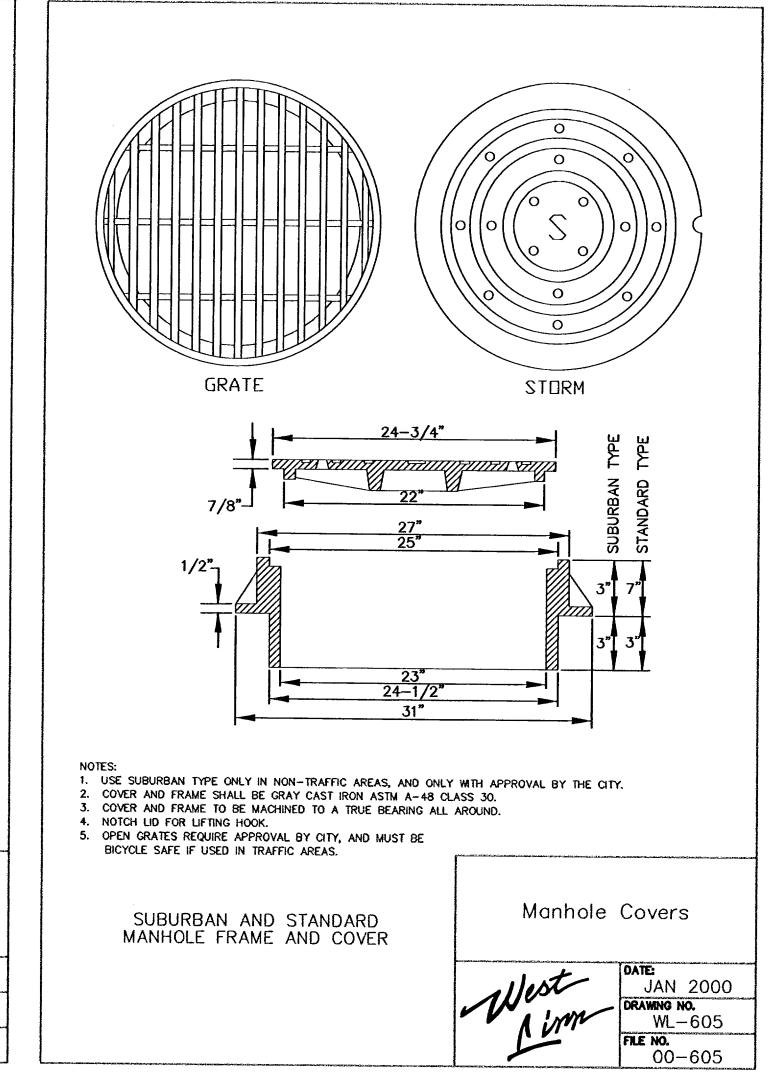
MIN. 1/2" RADIUS ALONG BACK OF CURB.

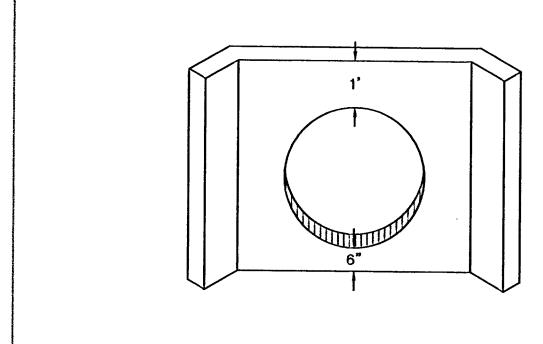
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK.

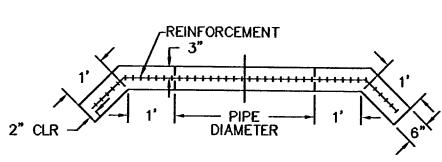






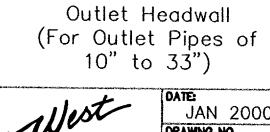


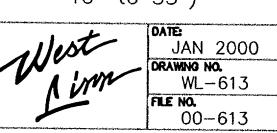




1. USE CONCRETE HAVING A 28 DAY DESIGN STRENGTH OF 3300 PSI.

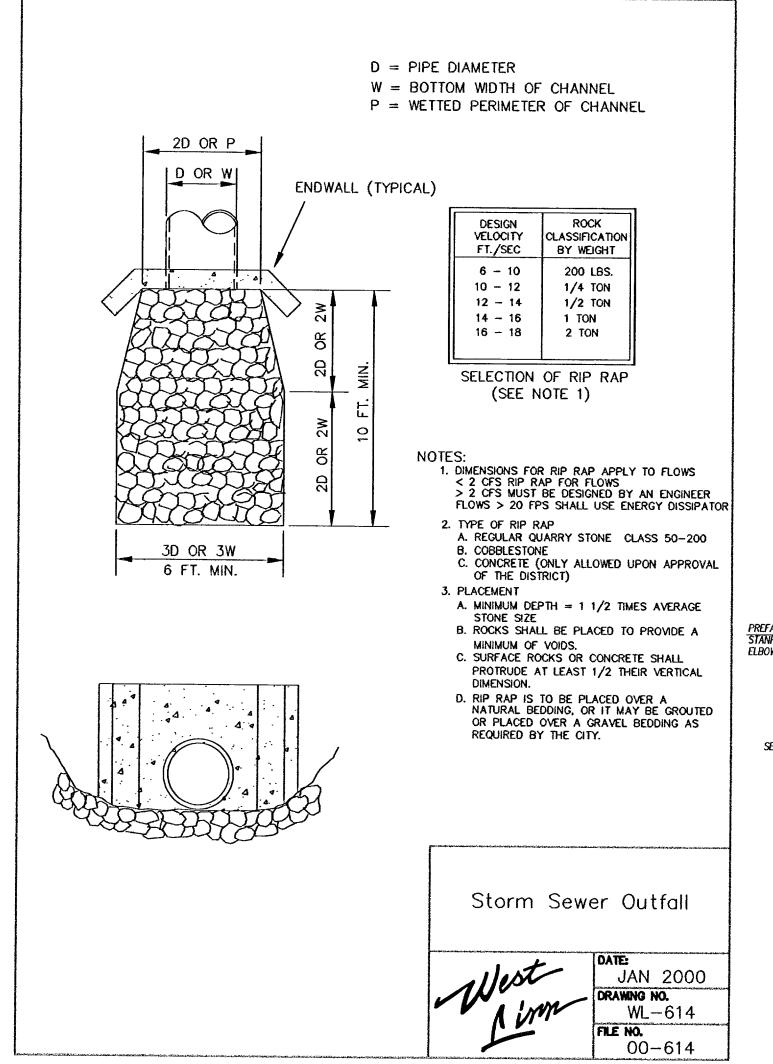
- 2. OUTLET WING WALL SHALL BE USED FOR ALL OUTFALL PIPES FROM 10" TO 36".
- 3. THIS DETAIL REPRESENTS THE MINIMUM REQUIREMENT. THE NEED FOR ADDITIONAL STEEL, A FOOTING AND DRAINAGE BEHIND THE WALL SHALL BE INVESTIGATED BY THE DESIGN ENGINEER.
- 4. FOR PIPES LARGER THAN 33" OR MULTIPLE PIPE OUTLETS, USE DETAIL WL-612.
- 5. CONCRETE REINFORCEMENT SHALL CONSIST OF: A) ADDING A POLY-FIBER MESH TO THE CONCRETE MIX OR USE (2) #4 BARS ABOVE AND BELOW PIPE AND #4 BARS AT 6" O.C. VERTICALLY.

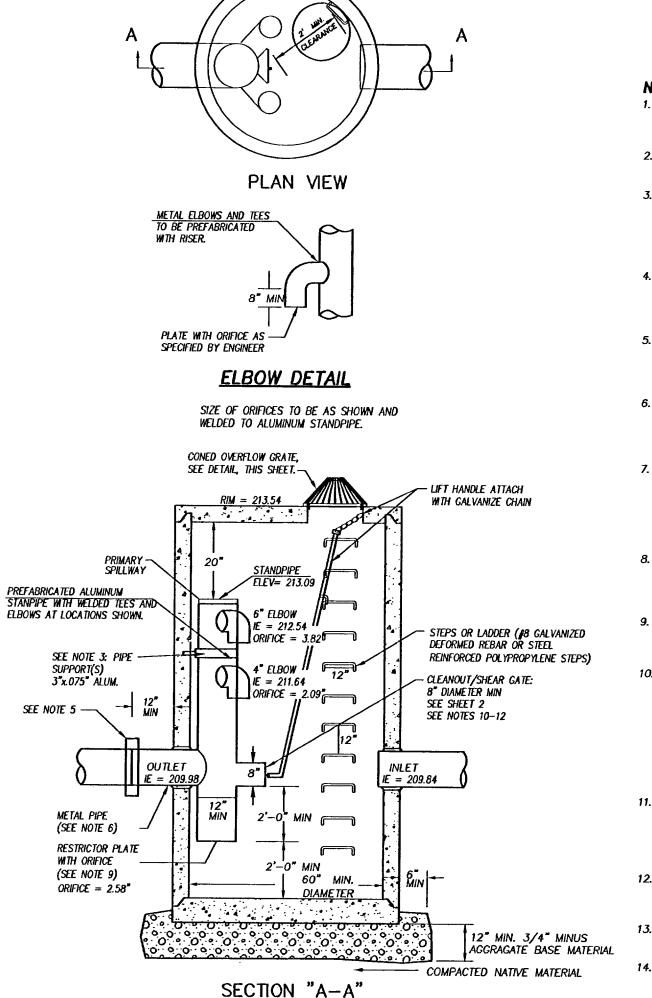




FILE NO.

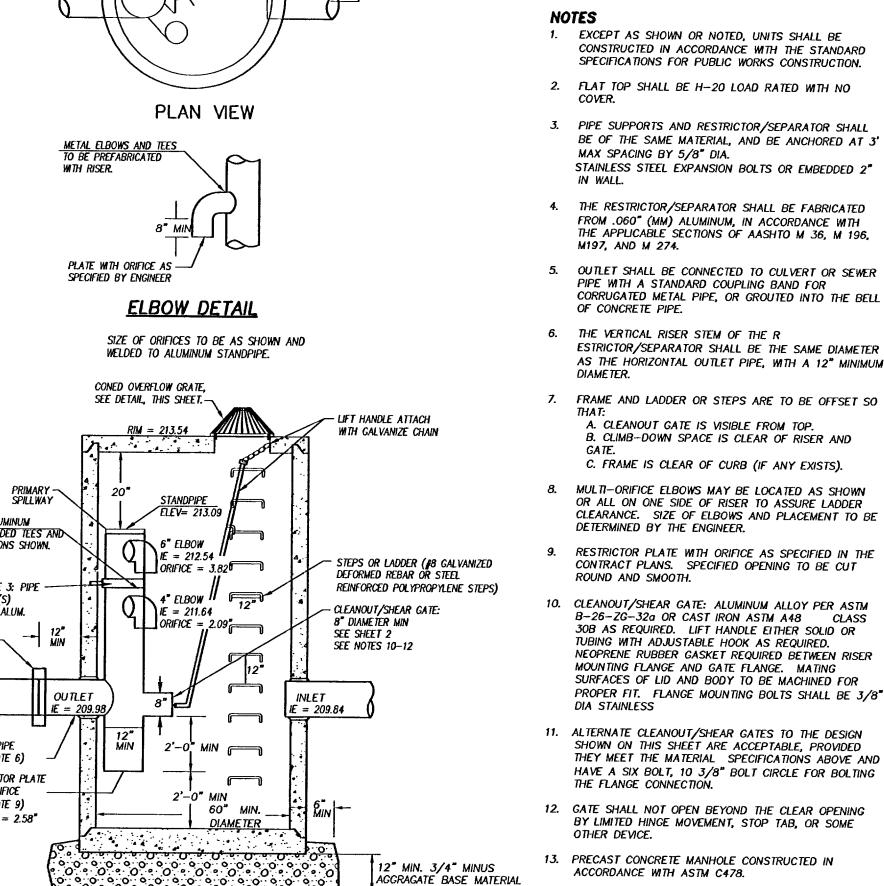
00-600





FLOW CONTROL MANHOLE SD FCMH 02B

N.T.S.



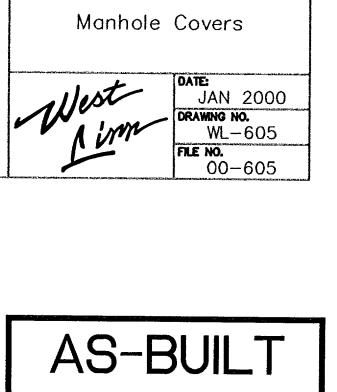
6. THE VERTICAL RISER STEM OF THE R ESTRICTOR/SEPARATOR SHALL BE THE SAME DIAMETER AS THE HORIZONTAL OUTLET PIPE, WITH A 12" MINIMUM 7. FRAME AND LADDER OR STEPS ARE TO BE OFFSET SO A. CLEANOUT GATE IS VISIBLE FROM TOP. B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND C. FRAME IS CLEAR OF CURB (IF ANY EXISTS). 8. MULTI-ORIFICE ELBOWS MAY BE LOCATED AS SHOWN OR ALL ON ONE SIDE OF RISER TO ASSURE LADDER CLEARANCE. SIZE OF ELBOWS AND PLACEMENT TO BE DETERMINED BY THE ENGINEER.

RESTRICTOR PLATE WITH ORIFICE AS SPECIFIED IN THE CONTRACT PLANS. SPECIFIED OPENING TO BE CUT ROUND AND SMOOTH.

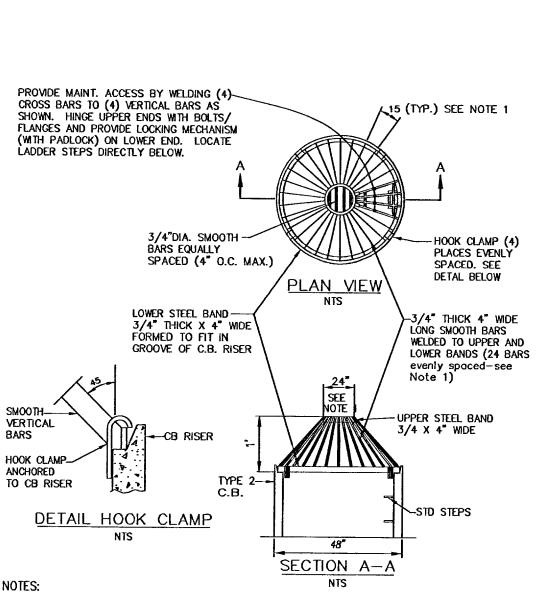
10. CLEANOUT/SHEAR GATE: ALUMINUM ALLOY PER ASTM B-26-ZG-32a OR CAST IRON ASTM A48 CLASS 30B AS REQUIRED. LIFT HANDLE EITHER SOLID OR TUBING WITH ADJUSTABLE HOOK AS REQUIRED. NEOPRENE RUBBER GASKET REQUIRED BETWEEN RISER MOUNTING FLANGE AND GATE FLANGE. MATING SURFACES OF LID AND BODY TO BE MACHINED FOR PROPER FIT. FLANGE MOUNTING BOLTS SHALL BE 3/8" DIA STAINLESS

11. ALTERNATE CLEANOUT/SHEAR GATES TO THE DESIGN SHOWN ON THIS SHEET ARE ACCEPTABLE, PROVIDED THEY MEET THE MATERIAL SPECIFICATIONS ABOVE AND HAVE A SIX BOLT, 10 3/8" BOLT CIRCLE FOR BOLTING THE FLANGE CONNECTION.

- 12. GATE SHALL NOT OPEN BEYOND THE CLEAR OPENING BY LIMITED HINGE MOVEMENT, STOP TAB, OR SOME
- 13. PRECAST CONCRETE MANHOLE CONSTRUCTED IN ACCORDANCE WITH ASTM C478.
- 14. SEE THIS SHEET FOR DETAILS ON ELBOW AND FOR PLAN VIEW.



DATE <u>JDF 3-07-08</u>



1. DIMENSIONS ARE FOR INSTALLATION ON 54" DIA. C.B. FOR DIFFERENT DIA. C.B.'S A DIMENSIONS TO MAINTAIN 45 ANGLE ON "VERTICAL" BARS AND 7" O.C. MAX. SPACING OF BARS AROUND LOWER STEEL BAND.

2. METAL PARTS: CORROSION RESISTANT. 3. THIS DEBRIS BARRIER IS ALSO RECOMMENDED FOR USE ON THE INLET TO ROADWAY CROSS-CULVERTS WITH HIGH POTENTIAL FOR DEBRIS COLLECTION (EXCEPT ON CLASS 2 S

> OVERFLOW GRATE FOR FLOW CONTROL MANHOLE SD FCMH 02B

N.T.S.

ත ඉ හ

Project **field's park no. 2**

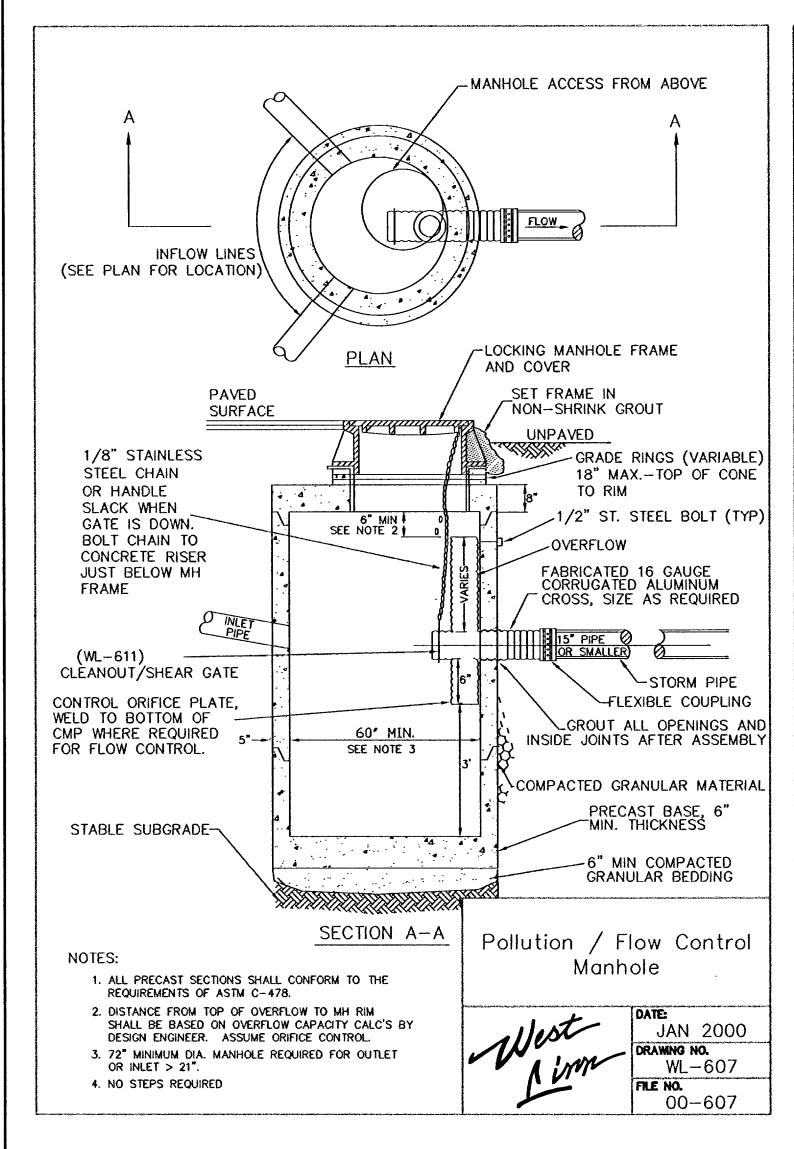
TYPE **ENGINEERING**

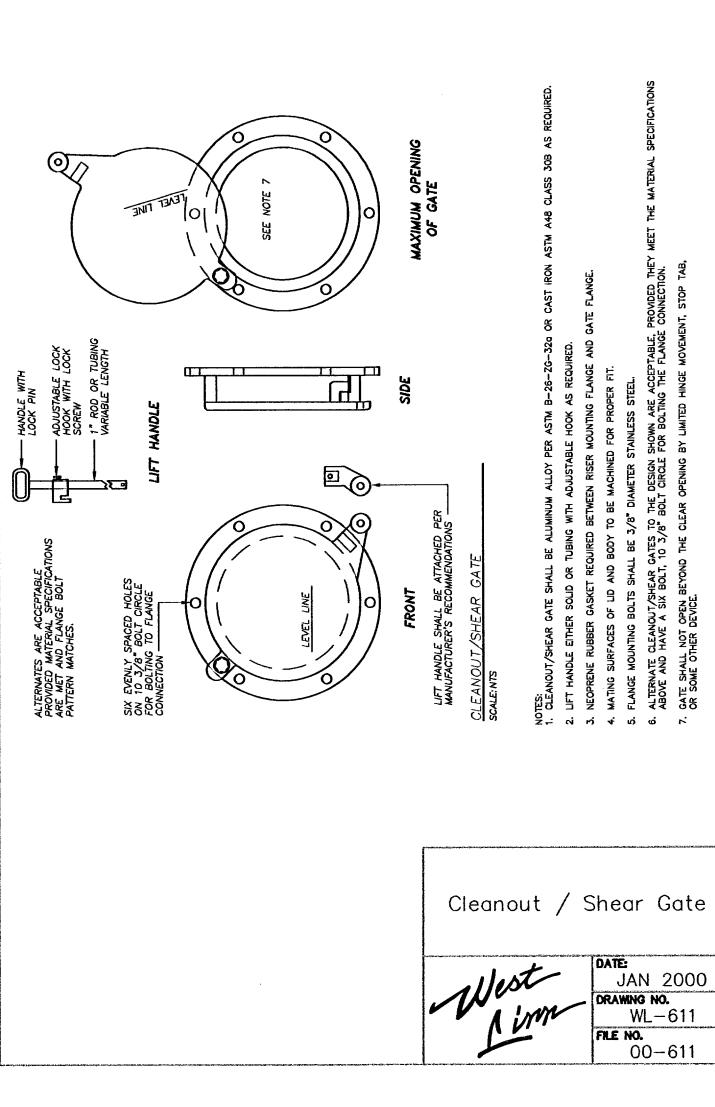
105-0tl

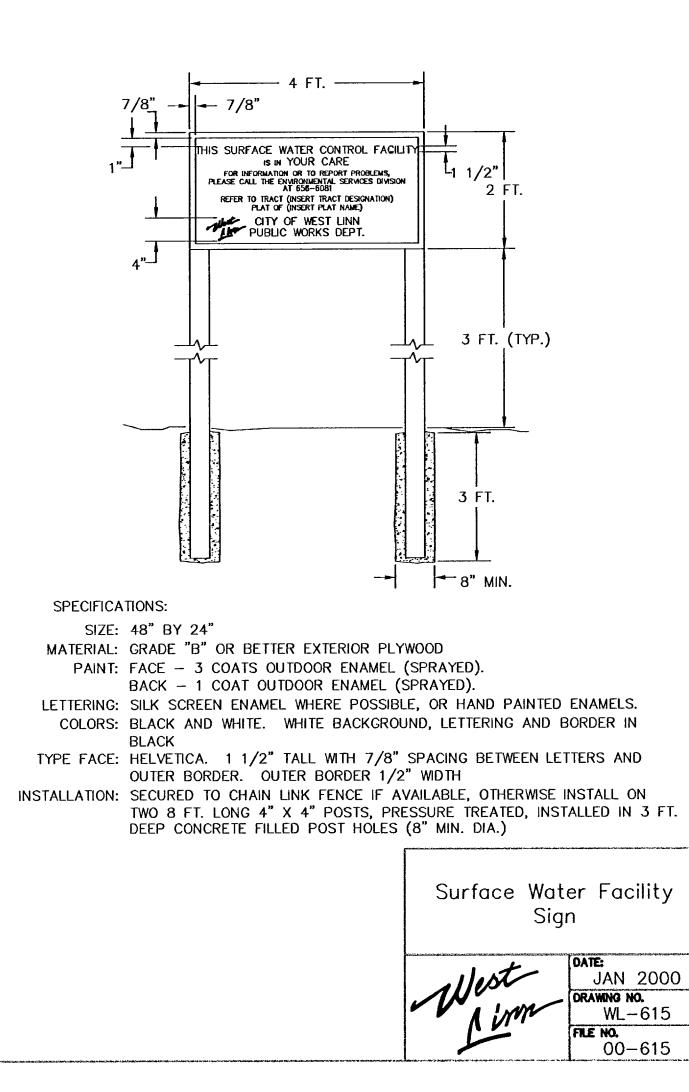
TION DE PARK No. 2

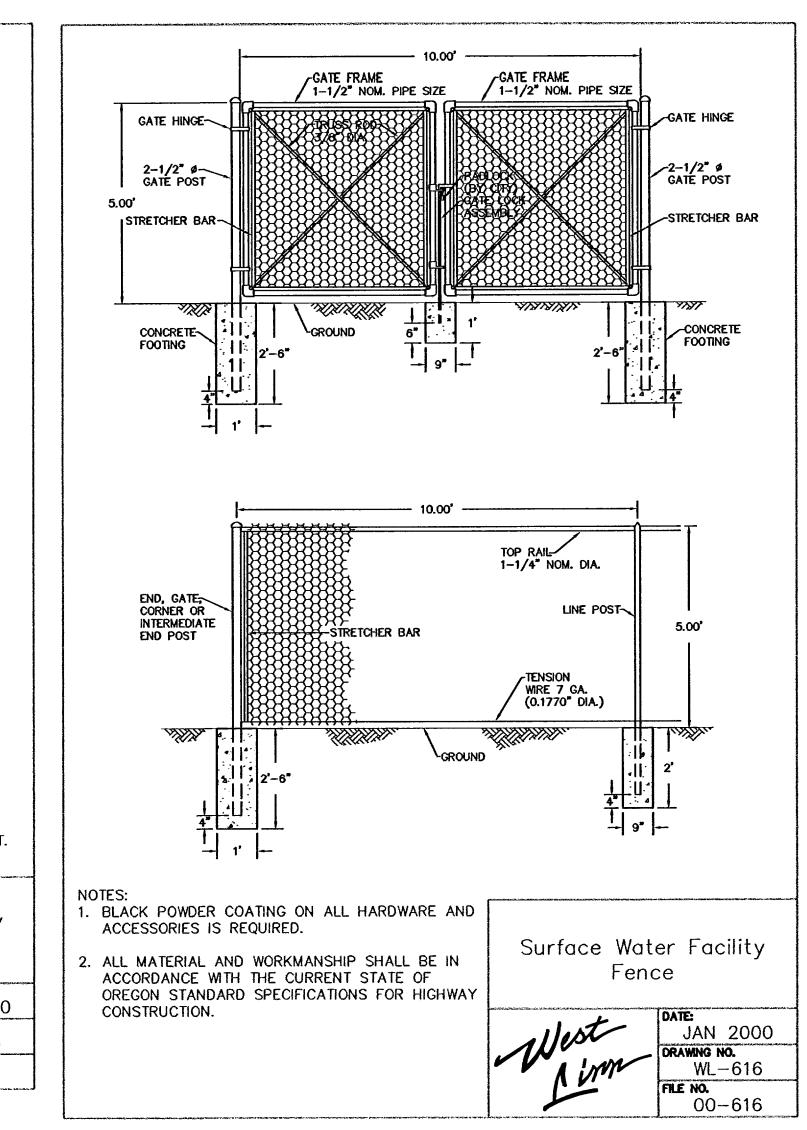
STRUCT FIELD'S I

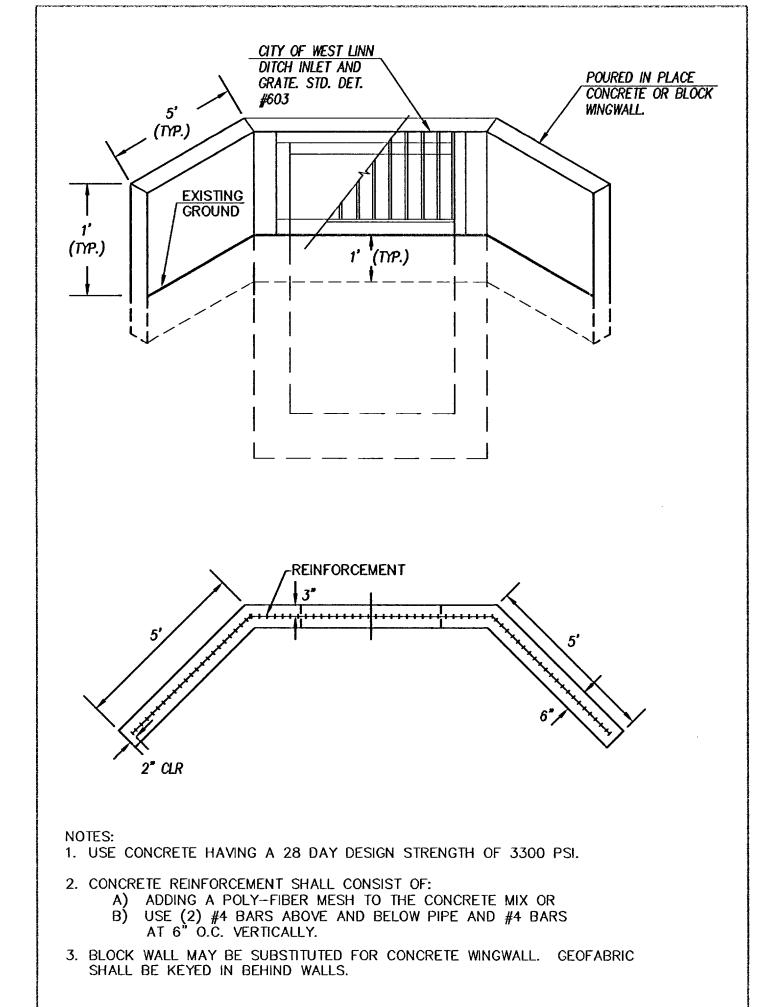
Z:\105-011\dwg\As-Builts\10511_12det3.dwg, 3/20/2008 9:00:39 AM, sneilsen

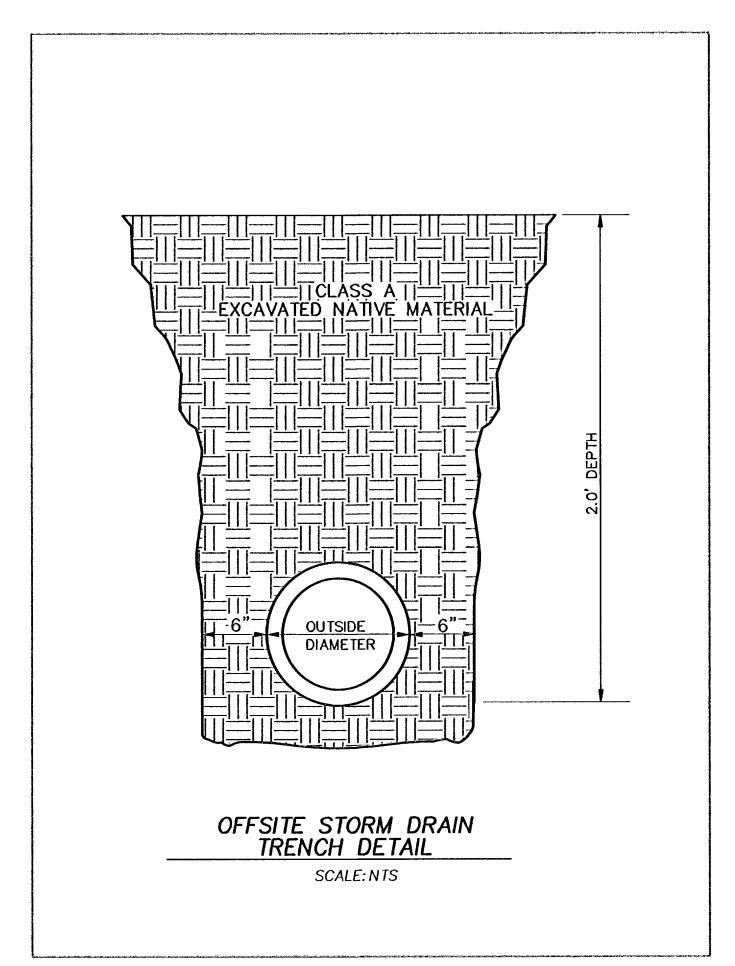


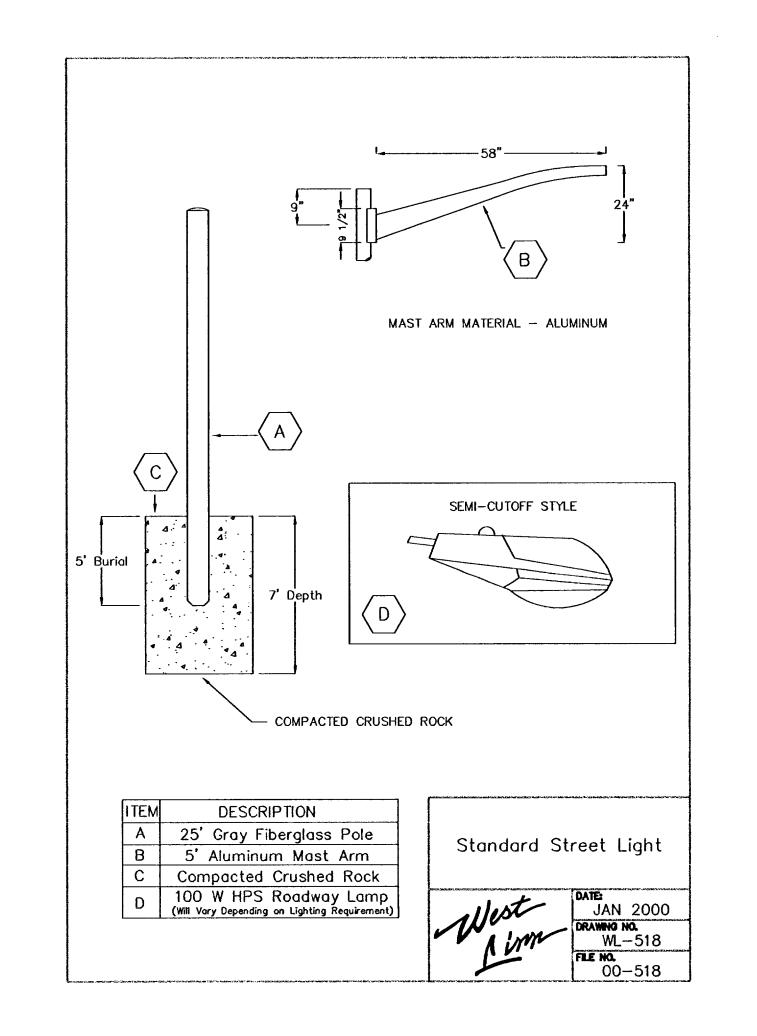


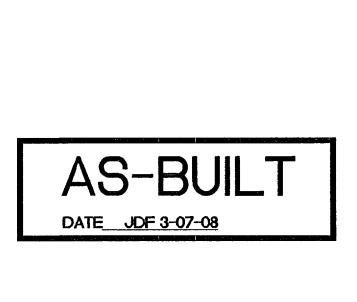


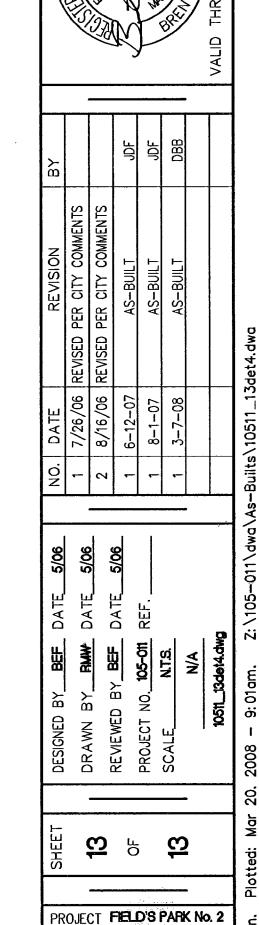






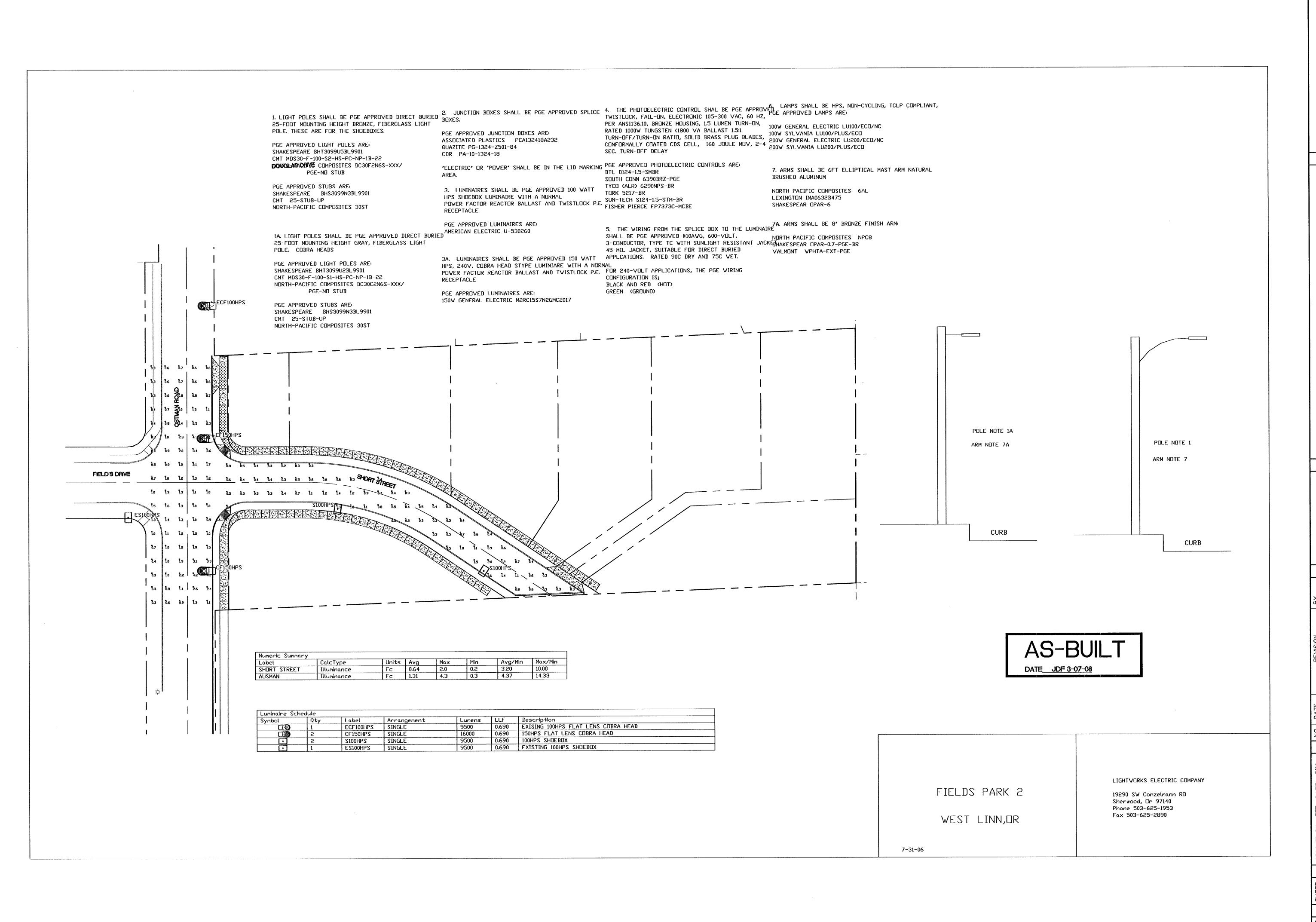






105-011 ENGINEERING

ISTRUCT FIELD'S



STRUCTURAL | CIVIL | LAND USE PLANNING 9020 SW Washington Square Dr. Suite 350 Portland, Oregon 97223 p: (503) 641-8311 f: (503) 643-7905 sfadesigngroup.com



LIGHTING PLAN FIELD'S PARK No. 2

DE REVISED PER CITY COMMENTS

DE REVISED PER CITY COMMENTS

AS-BUILT

AS-BUILT

DBB

AS-BUILT

DBB

5/06 | 2 8/16/06 | REVISED PER C | 1 6-12-07 | AS- | 1 8-1-07 | AS- | 1 3-7-08 | AS- | 1 3-

AWN BY RAW DATE 5/06
VIEWED BY BEF DATE 5/06
DJECT NO. 105-011
ALE N.T.S.

N/A

10511 1411 1411

PROJECT FIELD'S PARK No. 2

NO. 105-011

TYPE ENGINEERING