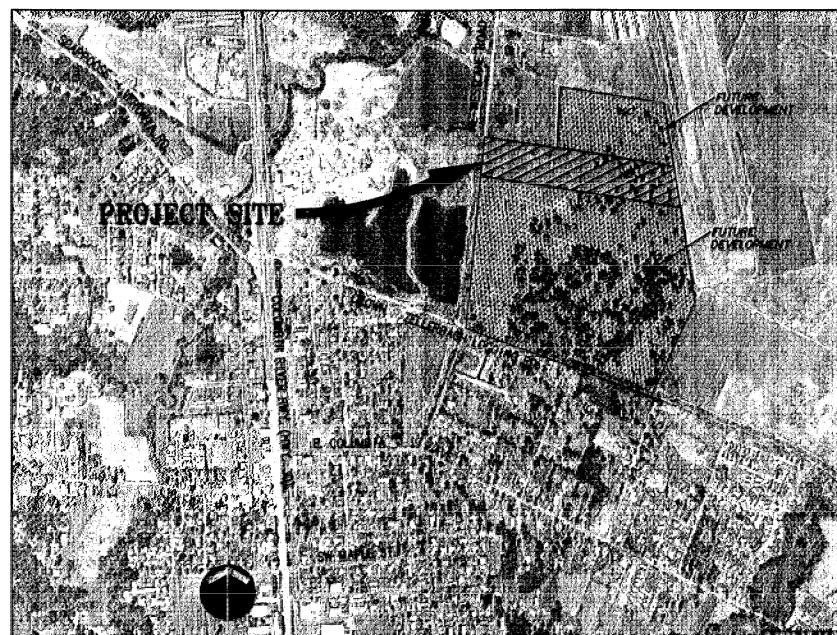
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AERO BUSINESS CENTER

SITE DEVELOPMENT PLANS SCAPPOOSE, OREGON



CONTACT INFORMATION

WATER - CITY OF SCAPPOOSE 503-543-7184 503-992-1212 GARBAGE - WASTE MANAGEMENT FIRE - SCAPPOOSE RURAL FIRE PROTECTION DISTRICT GAS - NORTHWEST NATURAL ELECTRIC - COLUMBIA RIVER PUD 503-397-1844 TELEPHONE - CENTURYTEL

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

BENCH MARK

ELEVATIONS ARE BASED ON A NOAA NATIONAL OCEAN SERVICE DISK AT THE SCAPPOOSE INDUSTRIAL AIRPARK. DESIGNATION: 1S4B ELEVATION: 28.30'

SITE INFORMATION

PARCEL I OF PARTITION PLAT

2005-26

18.99 ACRES

PUBLIC USE AIRPORT (PUA)

PROPOSED USE: AIRPORT INDUSTRIAL

COLUMBIA COUNTY ASSESSORS TAX ACCOUNT NUMBER 3106-000-00802,

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CONC. RETAINING WALL		
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SHEET INDEX

COVER SHEET

GENERAL CONSTRUCTION NOTES OVERALL SITE DEVELOPMENT PLAN

EXISTING CONDITIONS AND TREE PRESERVATION PLAN SITE PLAN

COMPOSITE UTILITY

SITE GRADING

GRADING & EROSION CONTROL PLAN GRADING & EROSION CONTROL NOTES AND DETAILS

PUBLIC INFRASTRUCTURE IMPROVEMENTS

STREET AND PUBLIC UTILITY - STA: 1+00 - 7+50 STREET AND PUBLIC UTILITY - STA: 7+50 - 14+00 STREET AND PUBLIC UTILITY - STA: 14+00-16+77.06

STORM LINE SD-A PLAN AND PROFILE

STORM DETAILS

STORM DETAILS STREET DETAILS

WATER DETAILS

PUBLIC SANITARY SEWER PLAN AND PROFILE

SS LINE "Z" STA 14+00 - 20+53.92 SS LINE "Z" STA 7+00 - 14+00 SS LINE "Z" STA I+00 - 7+00 SS LINE "Y" STA I+00 - 3+62.47

SANITARY SEWER DETAILS

OFFSITE PUBLIC SANITARY SEWER PLAN AND PROFILE

SS LINE "X" STA 20+50 TO 29+57.16

SS LINE "X" STA 1+00 TO 12+50 SS LINE "X" STA 12+50 TO 20+50

OFF-SITE PUBLIC STORM SEWER AND WATER PLAN AND PROFILE

SD LINE "C" STA 1+00 TO 5+12.96 SD LINE "B" STA 1+00 TO 11+00 SD LINE "B" STA 11+00 TO 21+50 SD LINE "B" STA 21+50 TO 29+32.47

OFFSITE PUBLIC SANITARY SEWER PLAN AND PROFILE

SS LINE "W" STA 1+00 TO 10+50 SS LINE "W" STA 10+50 TO 17+59.99

SANITARY SEWER DETAILS

DEVELOPER

SIERRA PACIFIC COMMUNITIES, LLC. P.O. BOX 1754 LAKE OSWEGO, OREGON 97035

ED FREEMAN

(503) 684-3175PHONE:

CIVIL ENGINEER

OTAK, INC. 17355 SW BOONS FERRY RD.

LAKE OSWEGO, OREGON 97035 BRANT FOSTER, P.E.

PHONE: (503) 635-3618 GEOTECHNICAL ENGINEER

GEODESIGN, INC.

15575 SW SEQUOIA PKWY - SUITE 100

PORTLAND, OREGON 97224 GEORGE SAUNDERS, P.E.

PHONE: (503) 968-8787

(503) 968-3068 FAX:

ALL SANITARY SEWER AND STORM DRAIN INFORMATION WAS COMPILED FROM SURVEY DATA COLLECTED IN THE FIELD AFTER CONSTRUCTION WAS COMPLETED.

These As Built Plans were compiled from changes to permitted plans as denoted by contractor and periodic observation during construction. It is suggested that these plans be used in conjunction with field verification of location and elevations of improvements in question. These plans are an accurate record of site improvements to the best of my information, knowledge and belief.

7/16/2007 Date

Incorporated 17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 (503) 635-3618 (503) 635-5395

Internet:

RECORD DRAWING

BY: Brunt Foster

DATE: 7/16/2007

Permitted design

Brant S. Foster

OR. P.E. 51051PE

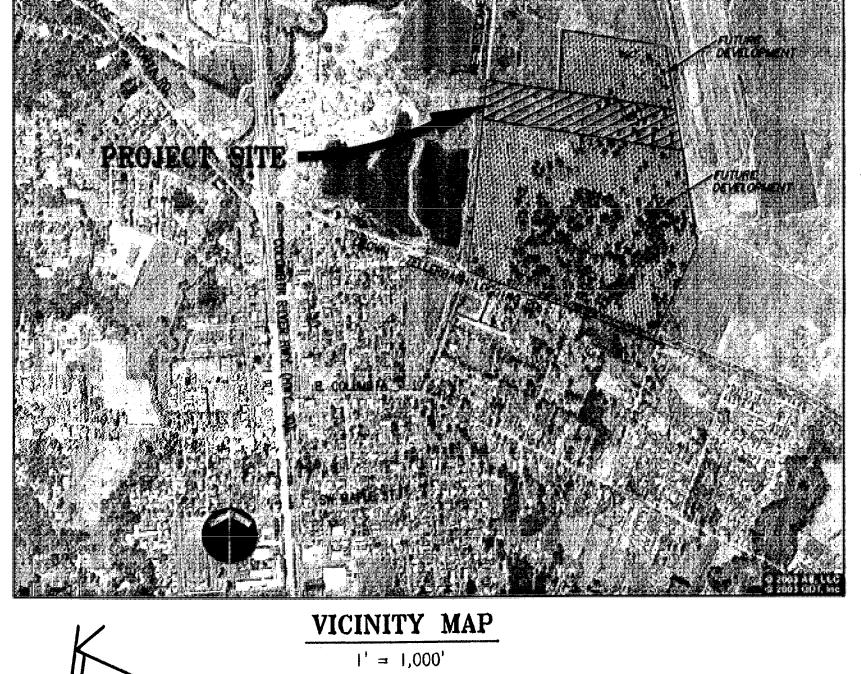
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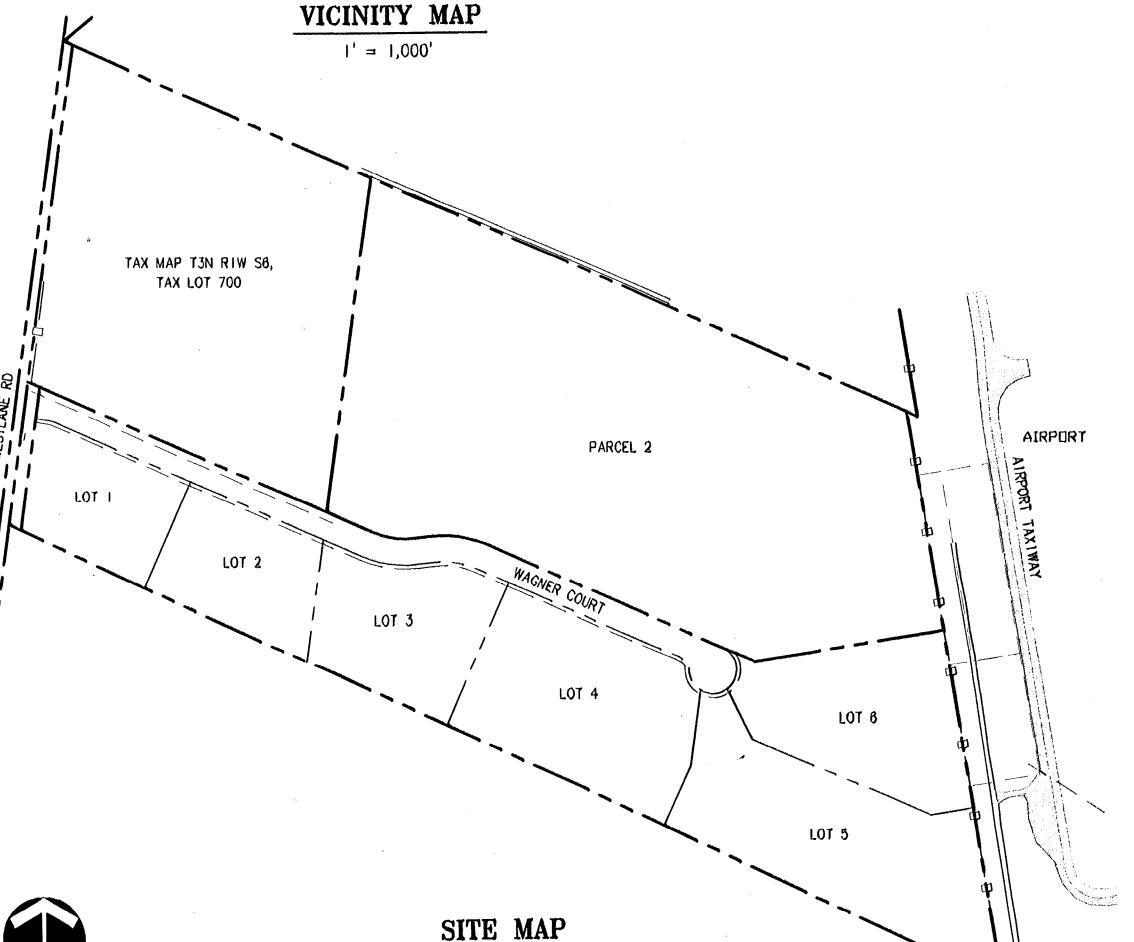
drawings stamped

Project No. Drawing No. C0.0

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SCALE: | " = 200"

Ltscale: 100 -----Resolved C880X020 C880X230

C880X190

C880X002

ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT AND APPLICABLE REGULATIONS, SPECIFICATIONS, CODES, AND REQUIREMENTS OF THE CITY OF SCAPPOOSE, COLUMBIA COUNTY, THE OREGON STATE PLUMBING SPECIALTY CODE (UPC), AND THE OREGON STATE STRUCTURAL SPECIALTY CODE (UBC)

GENERAL NOTES

- THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE PLANS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET APPLICABLE AGENCY REQUIREMENTS AND AS NECESSARY TO PROVIDE A COMPLETED PROJECT.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES PRIOR TO COMMENCING WORK ON THIS PROJECT.
- THE GEOTECHNICAL REPORT SHALL BE CONSIDERED PART OF THESE APPROVED CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL REVIEW THE PROJECT GEOTECHNICAL REPORT PREPARED BY GEODESIGN, INC. (DATED FEBRUARY 1, 2005). THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL RECOMMENDATIONS AND CONDITIONS SET FORTH IN THAT REPORT.
- 5. THE CONTRACTOR SHALL KEEP A COPY OF ALL REQUIRED PERMITS, AN APPROVED SET OF PLANS, THE SCAPPOSE PUBLIC WORKS DESIGN STANDARDS, AND THE GEOTECHNICAL REPORT WITH ALL APPROVED REVISIONS ON THE PROJECT SITE AT ALL TIMES.
- 6. THE EXISTENCE AND APPROXIMATE LOCATION OF KNOWN UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE DRAWINGS WERE DETERMINED BY A SEARCH OF AVAILABLE PUBLIC RECORDS AND AS-BUILTS. THE LOCATIONS AND DEPTHS OF THESE UTILITIES ARE FROM THESE RECORDS AND ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR. NO RESPONSIBILITY IS ASSUMED BY EITHER THE OWNER, THE CITY OF SCAPPOOSE, OR THE ENGINEER FOR ACCURACY OR COMPLETENESS OF THESE LOCATIONS.
- 7. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THIS SITE AND IN ADJACENT STREETS. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THIS DRAWING, SHALL BE REPAIRED / REPLACED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. EXISTING SURFACE FEATURES AND FENCING DAMAGED BY CONTRACTOR SHALL BE REPLACED IN KIND TO THE SATISFACTION OF THE OWNER.
- 8. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED PRIOR TO STARTING ANY WORK.
- ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH ON OAR 952-001-0010 THROUGH OAR 952-001-0080. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER.
- 10. THE CONTRACTOR SHALL NOTIFY ALL COMPANIES AND AGENCIES WITH UNDERGROUND FACILITIES IN THE PROJECT AREA 24 HOURS BEFORE COMMENCING CONSTRUCTION IN THEIR VICINITY.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF BURIED AND OVERHEAD UTILITIES. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER.
- 12. THE INSTALLATION OF NEW OR RELOCATION OF EXISTING ELECTRICAL, TELEPHONE, GAS, AND CABLE SERVICE SHALL BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF UTILITY TRENCHES, CONDUIT, VAULTS, PADS, PEDESTALS, AND UTILITY TRENCH BACKFILL IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND PLANS OF SERVICING UTILITIES (ELECTRICAL, TELEPHONE, GAS,

- 14. ALL EXISTING SITE CONDITIONS AND ELEVATIONS SHOWN ON THESE DRAWINGS ARE FROM A TOPOGRAPHIC SURVEY COMPLETED BY OTAK, INC. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND ELEVATIONS. CONTRACTOR SHALL CONFIRM BENCHMARK LOCATION AND ELEVATION WITH SURVEYOR.
- 15. PROPERTY AND RIGHT-OF-WAY LINES SHOWN ARE APPROXIMATE. THESE PLANS ARE NOT MEANT TO SERVE BOUNDARY SURVEY PURPOSES.
- 16. ANY ALTERATION OR VARIANCE FROM THESE PLANS, EXCEPT MINOR FIELD ADJUSTMENTS NEEDED TO MEET EXISTING FIELD CONDITIONS, SHALL BE APPROVED BY THE ENGINEER AND APPLICABLE REGULATORY AGENCY REPRESENTATIVE.
- 17. ANY CONSTRUCTION OBSERVATION BY THE CITY OF SCAPPOOSE, OR THE ENGINEER, SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND REGULATORY AGENCY REQUIREMENTS.
- 18. APPROVED EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH REGULATORY AGENCY REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, EQUIPMENT, AND PERSONNEL NECESSARY TO MAINTAIN SUCH EROSION PROTECTION MEASURES. ANY DAMAGE CAUSED BY EROSION SHALL BE CORRECTED BY THE CONTRACTOR AT ONCE.
- 19. THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
- 20. ALL OPEN CUTTING OF EXISTING STREETS SHALL BE PATCHED WITH A.C., COLD (TEMPORARY) OR HOT MIX, AT THE CLOSE OF EACH WORK DAY. TRENCHES SHALL NOT BE LEFT OPEN OVERNIGHT.
- 21. DEMOLITION WORK SHALL INCLUDE REMOVAL OF ALL STUMPS AND VEGETATION DEBRIS. CONFORMANCE WITH ALL REGULATIONS AND PERMITTING REQUIREMENTS FOR SUCH WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 22. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND COORDINATE THE REMOVAL AND/OR ABANDONMENT OF EXISTING UTILITIES OR PROPER FILLING OF THE UTILITIES (SEPTIC TANKS, LINES, ETC.) IF THEY ARE TO REMAIN. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE STATE OF OREGON WATER MASTER 503-681-7018 TO APPROVE THE FILLING OF ANY SEPTIC TANKS AND REMOVAL OF ANY EXISTING WATER WELLS.
- 23. ALL TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS MODIFIED BY THE OREGON SUPPLEMENTS. THE CONTRACTOR SHALL SUPPLY ENGINEER WITH A TRAFFIC CONTROL PLAN.
- 24. THE CONTRACTOR SHALL PROVIDE TRACING WIRE OVER ALL NONMETALLIC UNDERGROUND STORM DRAINS, WATERLINES, AND SANITARY SEWERS. (OR AS SPECIFIED BY LOCAL AGENCY). (DETAIL 418, SHEET C3.8)
- 25. A PRE-CONSTRUCTION CONFERENCE WITH CONTRACTOR, ENGINEER, OWNER, AND GOVERNING JURISDICTION IS REQUIRED PRIOR TO STARTING THIS PROJECT.
- 26. NO WORK WILL COMMENCE ON AIRPORT PROPERTY UNTIL A SPECIFIC AGREEMENT WITH THE AIRPORT HAS BEEN REACHED.

GRADING AND EROSION CONTROL NOTES

- I. PROJECT GRADING LIMITS SHALL BE ALL PROPERTY LINES AND STREET RIGHTS-OF-WAY, UNLESS OTHERWISE SHOWN ON THE GRADING PLANS,
- 2. STRAIGHT GRADES SHALL BE RUN BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN, UNLESS OTHERWISE
- 3. ALL PROPOSED ELEVATIONS SHOWN SHALL BE CONSIDERED TO BE FINISH SURFACE ELEVATIONS UNLESS OTHERWISE NOTED. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
- 4. DUST ABATEMENT SHALL BE MAINTAINED BY ADEQUATE WATERING OF THE
- 5. CONTRACTOR TO REMOVE ALL UNSUITABLE MATERIAL, DEBRIS, AND ORGANIC MATERIAL WITHIN GRADING AND FILL LIMITS PRIOR TO FILL PLACEMENT, NEW FILL MATERIAL SHALL BE BENCHED INTO EXISTING GROUND IN ACCORDANCE WITH RECOMMENDATIONS IN THE GEOTECHNICAL
- 6. THE REMOVAL OF UNSUITABLE MATERIAL SHALL BE DONE IN CONSULTATION WITH THE GEOTECHNICAL ENGINEER. UNSUITABLE MATERIAL SHALL BE LEGALLY DISPOSED OF AS DETERMINED BY THE GEOTECHNICAL ENGINEER. IF SUCH MATERIAL IS REMOVED FROM THE SITE IT SHALL BE REMOVED AT THE CONTRACTOR'S SOLE EXPENSE.
- 7. THE CONTRACTOR SHALL UTILIZE SUITABLE SUBGRADE MATERIAL FOR ALL FILLS. THE CONTRACTOR SHALL FOLLOW RECOMMENDATIONS MADE BY GEODESIGN, INC. (DATED 02/01/2005) TO CONSTRUCT FILLS.
- 8. ALL CUT OR FILL SLOPES SHALL BE CONSTRUCTED AT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL UNLESS OTHERWISE SHOWN ON THE PLANS OR SPECIFIED IN THE GEOTECHNICAL REPORT
- 9. IF SPRINGS OR GROUND WATER ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL ADVISE THE GEOTECHNICAL ENGINEER AND THE CIVIL ENGINEER OF THE CONDITION FOUND AND COORDINATE CONSTRUCTION ACTIVITIES IN A MANNER THAT WILL ALLOW THE ENGINEERS TIME TO REVIEW THE SITUATION AND PREPARE A PLAN TO PROPERLY DISPOSE OF THE WATER ENCOUNTERED.
- 10. THE CONTRACTOR SHALL HAVE A SUFFICIENT NUMBER OF COMPACTION TESTS PERFORMED TO MEET THE CITY OF SCAPPOOSE REQUIREMENTS. AT THE DEVELOPER'S EXPENSE. TESTS SHALL BE PERFORMED BY A GEO-TECHNICAL ENGINEER AND WRITTEN RESULTS SHALL BE PROVIDED TO THE APPROPRIATE AGENCY. SHOULD COMPACTION REQUIREMENTS NOT BE MET, CONTRACTOR SHALL RECOMPACT THE FILL AND PAY ALL ADDITIONAL TESTING COSTS RELATED TO THE RECOMPACTION.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL CATCH BASINS, CLEANOUTS, VAULTS, ETC., THAT ARE AFFECTED BY CONSTRUCTION AND/OR FILL TO FINISH GRADE. STORM DRAIN INLET STRUCTURES SHALL BE ADJUSTED SO WATER FLOWS INTO THE STRUCTURE WITHOUT PONDING.
- 12. ALL LOTS ARE TO BE GRADED TO DIRECT SURFACE DRAINAGE TO STREET OR APPROVED STORM DRAINAGE SYSTEM.
- 13. ORGANIC MATERIAL (TREES, BRUSH, ROOTS, STUMPS, ETC.) SHALL BE REMOVED FROM THE SITE. STRIPPING SHALL GENERALLY BE 3 INCHES, BUT MAY BE DEEPER IN WOODED AREAS. UNSUITABLE EXCESS STRIPPINGS SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR.

STREET NOTES

I. THE AC SHOULD BE PLACED IN TWO, EQUAL 2.5 INCH LIFTS. THE AC SHOULD BE LEVEL 3, 1/2" DENSE HMAC ACCORDING TO OSSC 00744 AND BE COMPACTED TO 91 PERCENT OF RICE DENSITY AS DETERMINED BY ASTM D2041. MINIMUM LIFT THICKNESS IS 2.0 INCHES FOR 1-INCH HMAC. ASPHALT BINDER SHOULD BE PERFORMANCE GRADED AND CONFORM TO PG 64-22 OR BETTER. THE AGGREGATE BASE SHOULD MEET THE REQUIREMENTS PROVIDED IN THE "STRUCTURAL FILL" SECTION OF THE GEOTECHNICAL

2. IMPORTED GRANULAR MATERIAL USED AS AGGREGATE BASE SHOULD BE CLEAN, CRUSHED ROCK OR CRUSHED GRAVEL AND SAND THAT IS FAIRLY WELL GRADED BETWEEN COARSE AND FINE. THE AGGREGATE BASE SHOULD MEET THE GRADATION DEFINED IN OSSC 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS BASE AGGREGATE, WITH THE EXCEPTION THAT THE AGGREGATE HAS LESS THAN 5 PERCENT BY DRY WEIGHT PASSING A US STANDARD NO. 200 SIEVE AND A MAXIMUM PARTICLE SIZE OF 1 ½ INCHES. THE BASE AGGREGATE SHOULD BE COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D 698.

3. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO 95% OF THE RELATIVE MAXIMUM DENSITY, ACCORDING TO OSHD TM 106 AND OSHD TM 306C. 4. ALL TREATED AND UNTREATED SUBGRADE MATERIALS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY, IN CONFORMANCE WITH AASHTO T-180 (ASTM D 1557)

5. CONTRACTOR SHALL INSTALL ALL SIGNAGE AND PAVEMENT MARKINGS PER CITY OF SCAPPOOSE STANDARDS. 6. CURBS SHALL BE PAINTED RED AND STENCILED "NO PARKING" AT HYDRANT LOCATIONS.

STORM DRAIN NOTES

- I. ALL STORM DRAIN LATERAL CONNECTIONS AT THE MAINLINE ARE TO CONNECT AT STRUCTURE (I.E. MANHOLE, CATCH BASIN), NO BLIND TEES.
- 2. ALL STORM SEWER PIPE SHALL BE INSTALLED WITH WATER-TIGHT JOINTS. 3. STORM SEWER PIPE, UNLESS OTHERWISE NOTED ON PLANS, SHALL BE:
- A. COVER GREATER THAN 36-INCH.

CORRUGATED EXTERIOR SMOOTH-INTERIOR, HIGH-DENSITY POLYETHYLENE PIPE (CPP). PIPE SHALL BE MANUFACTURED TO AASHTO M-294 B. COVER LESS THAN 36-INCH.

ASTM C-76, CLASS V REINFORCED CONCRETE PIPE (RCP) OR DUCTILE IRON, CLASS 50 PIPE. 4. BACKFILL MUST BE COMPACTED TO A DENSITY NOT LESS THAN 95% IN PAVED OR STRUCTURAL FILL AREAS. MINIMUM COMPACTION IN UNPAVED, NON-STRUCTURAL FILL AREA IS 90%. COMPACTION IS TO BE PER AASHTO T-180 UNLESS OTHERWISE NOTED IN GEOTECHNICAL REPORT BACKFILL MATERIAL PER DETAIL 329, SHEET C3.6.

5. STORM DRAIN LINES SHALL BE TESTED ACCORDING TO THE REQUIREMENTS OF THE CITY OF SCAPPOOSE. TESTING SHALL BE PERFORMED AFTER CONSTRUCTION IS COMPLETED INCLUDING BACKFILLING, COMPACTION OF BASE ROCK, AND THE LINES ARE THOROUGHLY CLEANED. 6. ALL PIPE SIZES LISTED ON PLANS ARE BASED ON THE INSIDE DIAMETER OF THE PIPE. CONTRACTOR IS TO VERIFY THAT THE INSIDE DIAMETER OF THE PIPE MATCHES THE SIZE REQUIRED ON THE PLANS.

SANITARY SEWER NOTES

- 1. THE ENDS OF SANITARY SERVICE LATERALS OR PIPE STUBS SHALL BE MARKED WITH A ONE PIECE 2"x4" MARKER EXTENDING A MINIMUM 12' ABOVE THE GROUND WITH THE END PAINTED WHITE. MARK TOTAL LENGTH OF 2"x4" AT EXPOSED END. ATTACH MAGNETIC TAPE ALONGSIDE THE 2"x4" MARKER.
- 2. ALL SANITARY SEWER PIPE SHALL BE PVC PIPE CONFORMING TO ASTM D-3034 (SDR 35) INSTALLED IN ACCORDANCE WITH ASTM D-2321, UNLESS OTHERWISE NOTED.
- MAINTAIN MINIMUM 10 FOOT HORIZONTAL CLEAR DISTANCE BETWEEN WATER AND SANITARY SEWER LINES EXCEPT AT CROSSINGS. VERTICAL SEPARATION SHALL BE A MINIMUM OF 18 INCHES CLEAR DISTANCE WHERE WATER LINES CROSS OVER SANITARY SEWER LINES.
- 4. BOTH SANITARY SEWER AND WATER LINES SHALL BE TESTED TO INSURE SYSTEM INTEGRITY. BOTH SHALL BE TESTED AFTER CONSTRUCTION IS COMPLETED (INCLUDING SERVICE LATERALS, BACKFILLING, AND COMPACTION OF BASE ROCK) AND THE LINES HAVE BEEN THOROUGHLY CLEANED.
- 5. UNLESS OTHERWISE NOTED ON PLANS, LATERALS SHALL BE 6" DIAMETER WITH A MINIMUM GRADE OF 2.0%.
- 6. THE LOCATION AND/OR STATIONING AND THE VERTICAL DISTANCE FROM THE GROUND TO THE INVERT ELEVATION OF ALL SEWER SERVICE LATERALS SHALL BE RECORDED BY THE CONTRACTOR AND PROVIDED TO THE ENGINEER.
- 7. MINIMUM COVER ON SANITARY SEWER LINES IS 36" FROM THE TOP OF THE PIPE TO FINISH GRADE. BACKFILL MUST BE COMPACTED TO A DENSITY NOT LESS THAN 95% IN PAVED OR STRUCTURAL FILL AREAS. MINIMUM COMPACTION IN UNPAVED, NON-STRUCTURAL FILL AREAS IS 90%. COMPACTION IS TO BE PER ASTM D-1557 UNLESS OTHERWISE NOTED IN GEOTECHNICAL REPORT.
- 8. PIPE BEDDING CLASS "B", UNLESS OTHERWISE APPROVED, CLASS "B" IS 12"-0" OR 2"-0" CRUSHED ROCK 6" UNDER INVERT TO FOOT OVER PIPE.
- 9. PLUG CONNECTION TO EXISTING PUBLIC SEWER UNTIL NEW LINE IS TESTED AND CONNECTION IS APPROVED BY CITY OF SCAPPOOSE AND ENGINEER.

WATER NOTES

- 1. ALL PUBLIC WATER LINE PIPE WITHIN PUBLIC RIGHT-OF-WAY SHALL BE POLYVINAL CHLORIDE (PVC) PIPE WHICH CONFORMS TO AWWA C 900 OR C905 AND UNI-B-II STANDARDS (SCHEDULE 300).
- 2. ALL WATER LINE PIPE SHALL HAVE A MINIMUM OF 36" OF COVER TO FINISH GRADE.
- ALL TEES, BENDS AND ENDS OF WATER LINES SHALL BE RESTRAINED WITH POURED IN PLACE CONCRETE THRUST BLOCKS OR APPROVED RESTRAINED JOINT SYSTEM (MEGALUG OR APPROVED EQUAL) IN ACCORDANCE WITH THE CITY OF SCAPPOOSE STANDARDS. THRUST BLOCKS ARE NOT TO BE POURED AGAINST ADJACENT UTILITIES. SEE DETAIL 408, SHEET C3.8.
- ALL WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SCAPPOOSE STANDARDS AND BE THOROUGHLY FLUSHED AND CHLORINATED AND POTABLE WATER TESTS SHALL BE APPROVED BY THE CITY OF SCAPPOOSE PRIOR TO ANY METERED SERVICE HOOK-UP.
- 5. PUBLIC WATER LINES SHALL BE PRESSURE TESTED PER CITY OF SCAPPOOSE STANDARDS PRIOR TO FINAL ACCEPTANCE.
- NO VALVES IN THE PUBLIC RIGHT-OF-WAY SHALL BE OPENED OR CLOSED WITHOUT APPROVAL FROM THE CITY OF SCAPPOOSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPER SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES AS REQUIRED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AND STATE DEPARTMENT OF HEALTH.
- 8. FIRE HYDRANT ASSEMBLIES ARE TO BE IN ACCORDANCE WITH GOVERNING JURISDICTION, OR APPROVED EQUAL, CONFORMING TO AWWA STANDARD C502, LATEST REVISION.
- 9. STENCIL "W" IN CURB FOR CURB WATER METER STOPS FOR LOCATIONS.

RECORD DRAWING RY. Brant Foster DATE: 7/16/2007

Permitted design drawings stamped

Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008

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Incorporated 17355 SW Boones Ferry Rd Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 FAX: (503) 635-5395 Internet: www.otak.com

Project No. Drawing No.

OVERALL SITE

SEVELOPMENT PLAN

EXISTING CONDITIONS &

THE PRESERVATION PLAN

AERO 3USINESS CENTER AS BUILTS

1. NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE TREE PROTECTION FENCING. FENCE SHALL IDEALLY BE LOCATED AT THE OUTER INCLUDING, BUT NOT LIMITED TO , PARKING EQUIPMENT, PLACING SOLVENTS
STORING BUILDING MATERIAL AND SOIL DEPOSITS, DUMPING CONCRETE WASHOUT AND LOCATING BURN HOLES. PERIMETER OF THE CRITICAL ROOT ZONE OF ALL TREES TO BE PROTECTED AS SEEN 2. WHERE EXCAVATION FOR NEW CONSTRUCTION IS REQUIRED WITHIN THE TREE PROTECTION FENCING HAND CLEAR AND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS. USE NARROW — TINE SPADING FORKS, COMB SOIL TO EXPOSE ROOTS AND CLEANLY CUT ROOTS AS CLOSE TO EXCAVATION AS POSSIBLE. ON THE SITE PLAN. COVER EXPOSED ROOTS WITH BURLAP AND WATER REGULARLY. REPLACE FENCING TAKEN DOWN -6'X2"X2" TREATED WOOD POSTS
ZIP TIE ATTACHMENT (3) PER POST DURING EXCAVATION OR ANY DAMAGED FENCING FOR PROTECTION. 3. DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY OBJECT TO ANY TREE DESIGNATED -4' HIGH ORANGE PLASTIC SNOW FENCING 4. MAINTAIN TREES THROUGHOUT CONSTRUCTION PERIOD BY WATERING AND FERTILIZING. - EXISTING GRADE 5. MAINTAIN THE PROTECTIVE BARRIERS IN PLACE UNTIL THE OWNERS ARBORIST AUTHORIZES THEIR REMOVAL OR A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED, WHICHEVER OCCURS FIRST. CRITICAL ROOT ZONE TO BE PROTECTED 6. ANY LANDSCAPING DONE IN THE PROTECTED ZONE SUBSEQUENT TO THE REMOVAL OF THE BARRIERS SHALL BE ACCOMPLISHED WITH LIGHT MACHINERY OR HAND LABOR. TREE PROTECTION DETAIL 7. TREES TO BE RETAINED SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. CLEARING OPERATIONS SHALL BE CONDUCTED SO AS TO EXPOSE THE SMALLEST PRACTICAL AREA OF SOIL TO EROSION FOR THE LEAST POSSIBLE TIME. SCALE: N.T.S. 8. PRUNE PROTECTED TREES AS REQUIRED TO AVOID DAMAGE FROM CONSTRUCTION. PRIOR TO ANY PROPOSED PRUNING CONTACT AND COORDINATE WITH THE OWNER'S ARBORIST. PRUNE PURSUANT TO NATIONAL ARBORIST ASSOCIATION STANDARDS. - REMOVE EXISTING FENCE. COORDINATE WITH ADJACENT LOT. PARCEL 12 OF PARTITION STEEL GATE /PLAT NO: 2005-26 REMOVE FENCE ONLY WHEN ALL NEW SECURITY FENCES ARE IN PLACE -15' PRIVATE ACCÉSS EASEMENT FOR THE BENEFIT OF PARCEL - REMOVE/EXISTING FENCE/ REMOVE FENCE ONLY
WHEN ALL NEW
SECURITY FENCES ARE
IN PLACE LEGEND 12" CSP /I.E. 29.41' PROPERTY LINE 5' CONTOUR 1' CONTOUR BARB WIRE FENCE -EXISTING EVERGREEN TREE TO BE PRESERVED. TREE CRITICAL ROOT ZONE (1 FOOT RADIUS PER 1 INCH CALIPER). -EXISTING DECIDUOUS TREE TO BE PRESERVED. TREE CRITICAL ROOT ZONE (1 FOOT RADIUS PER 1 INCH CALIPER).

JILT SUBMITTAL: 07/16/07

AERO BUSINESS CENTER

OVERALL SITE DEVELOPMENT PLAN EXISTING CONDITIONS AND TREE PRESER

RECORD DRAWING

BY: Brent Forty DATE: 7/16/2007

Permitted design drawings stamped

Brant S. Foster
OR. P.E. 51051PE
EXPIRES 6/6/2008

Otak

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2880 C880C1
oject No. Drawing No

Project No. Drawing No. C1.1

XREF LIST Ltscale: 1 Resolved C880X190 C880X230 C880X600 C880X002 _____ RECORD DRAWING BY: Bront Fosti DATE: 7/16/2007 Permitted design drawings stamped by: Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008 PARCEL 2 PARTITION PLAT 2005-26 26' ROW DEDICATION LOT 2 15' PUBLIC SANITARY SEWER EASEMENT LOT 3 - 22.5' PUBLIC UTILITY EASEMENT LOT 4 30' PUBLIC † UTILITY EASEMENT LEGEND 20' PUBLIC SANITARY SEWER EASEMENT FUTURE TAXIWAY (35' PAVED) RIGHT-OF-WAY LOT LINE LOT NUMBER UTILITY EASEMENT LINE STANDARD CURE PROPOSED KEY NOTES: LOT 5 90' PROPOSED TAXIWAY EASEMENT STORM DRAINAGE 2 STANDARD FIRE HYDRANT FUTURE TAXIWAY (35' PAVED) STORM DRAIN MANHOLE STORM DRAIN DRY WELL 3 8' PUBLIC UTILITY EASEMENT (PUE) & STREET TREE EASEMENT STORM DRAIN CLEAN OUT - 35' PROPOSED TAXIWAY EASEMENT 4 6' WIDE SIDEWALK STORM DRAIN AREA DRAIN (W/ SEDIMENT PROTECTION) 35' FUTURE-TAXIWAY EASEMENT 5 6" VERTICAL CURB 6 ASPHALTIC CONCRETE PAVEMENT STORM DRAIN LATERAL SANITARY SEWER WAGNER PROPERTY EXISTING
GRAVEL ACCESS
DRIVE SANITARY SEWER MANHOLE SANITARY SEWER CLEAN OUT SANITARY SEWER LATERAL WATER WATER VALVE WATER BLOW-OFF WATER METER WATER FIRE HYDRANT Copyright 2006 ©

OZ/ ENT SUBMITT **AERO**

OVERALL SITE PLA

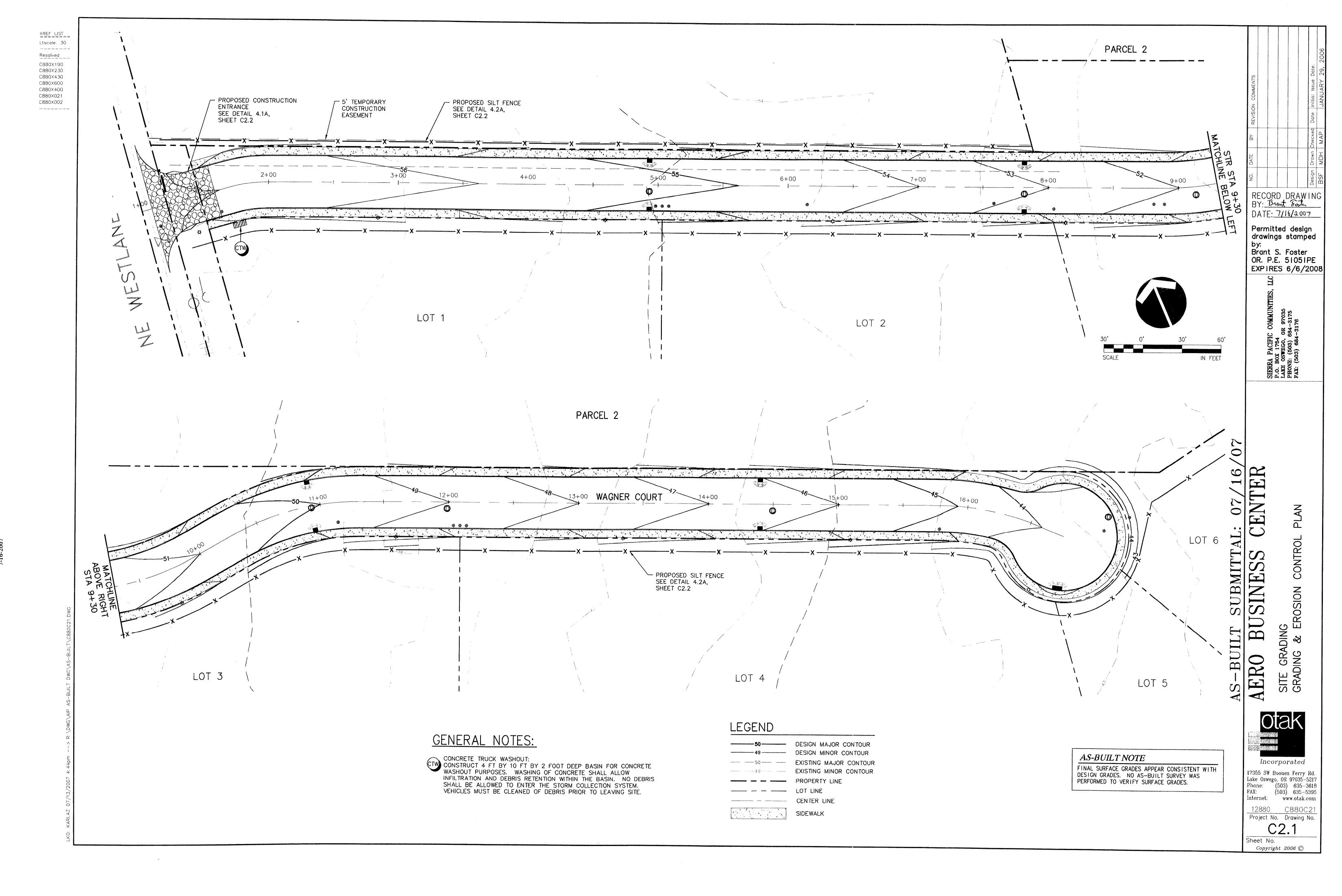
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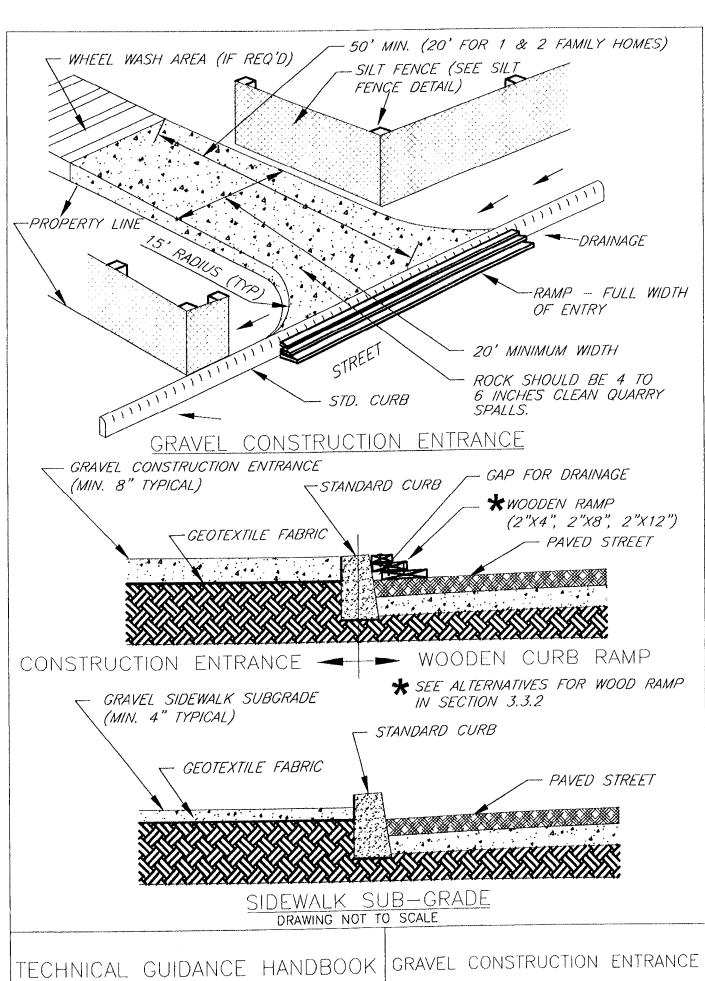
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Ltscale: 100 _____ Resolved C880X190 C880X230 C880X600 C880X002 C880X610 DATE: 7/16/2007 Permitted design drawings stamped by:
Brant S. Foster
OR. P.E. 51051PE
EXPIRES 6/6/2008 PARCEL 2 LOT I -30' PUBLIC \
UTILITY
LEASEMENT LOT 2 LOT 3 ILT SUBMITTAL: BUSINESS C SITE DEVELOPMENT - 22.5' PUBLIC UTILITY EASEMENT LOT 4 30' PUBLIC T UTILITY EASEMENT LOT 6 FUTURE TAXIWAY (35' PAVED) OVERALL COMPOSI AER0 WAGNER PROPERTY LOT 5 FUTURE TAXIWAY (35' PAVED) otak /- 35' PROPOSED TAXIWAY EASEMENT 20' PUBLIC UTILITY EASEMENT - PROPOSED SANITARY SEWER PROPOSED SANITARY SEWER CLEANOUT PROPOSED CATCH BASIN Incorporated35' FUTURE— TAXIWAY EASEMENT ------ SD ------- PROPOSED STORM DRAIN EXISTING GRAVEL ACCESS DRIVE 17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 FAX: (503) 635-5395 Internet: www.otak.com PROPOSED STORM DRAIN CLEANOUT - PROPOSED DOMESTIC WATER LINE PROPOSED WATER LINE FIRE HYDRANT OFF-SITE PUBLIC UTILITY EXTENSIONS, SEE CH. 5 & 6 12880 C880C13
Project No. Drawing No. PROPOSED WATER METER --- PUBLIC UTILITY EASEMENT Sheet No. Copyright 2006 ©

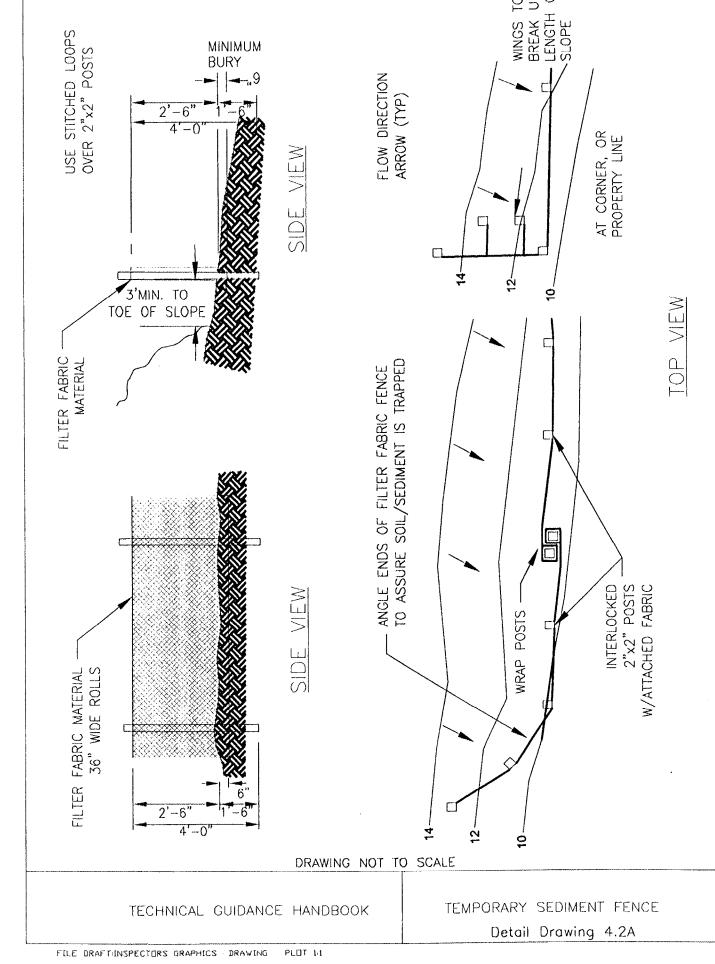


Ltscale: 1 _____ Resolved C880X002

CATCH BASIN GRATE - 1' REBAR FOR BAG REMOVAL EXPANSION RESTRAINT 2"X2"X¾" RUBBER BLOCKS STORM PIPE-POLYPROPLENE FILTER SACK (WOVEN) WOVEN POLYPROPLENE SACK CATCH BASIN GRATE POLYPROPLENE CATCH BASIN-STORM PIPE-POLYPROPLENE FILTER SACK (NON-WOVEN) NON-WOVEN POLYPROPLENE SACK 1. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER FABRIC INLET SACKS TO BE DETERMINED BY MANUFACTURER. INLET PROTECTION Detail Drawing 4-25 TYPE 5



Detail Drawing 4.1A



STANDARD NOTES FOR SEDIMENT FENCE

- 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. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 18 INCHES.
- 3. A TRENCH SHALL BE EXCAVATED, ROUGHLY 8 INCHES WIDE BY 6 INCHES DEEP AND ADJACENT TO THE WOOD POST TO ALLOW THE FILTER FABRIC TO BE BURIED A MINIMUM OF 6 INCHES. THE FABRIC SHALL NOT EXTEND MORE THAN 30 INCHES ABOVE THE ORIGINAL GROUND SURFACE. THE STITCHED LOOPS WILL BE ON THE UPHILL SIDE.
- 4. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
- 5. SEDIMENT FENCES SHALL BE INSPECTED BY APPLICANT/CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

EROSION AND POLLUTION CONTROL MEASURES

- OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURE, IN ACCORDANCE WITH LOCAL STATE, AND FEDERAL REGULATIONS.
- 2. THE IMPLEMENTATION OF THESE ESC PLANS AND CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE LOCAL JURISDICTION AND VEGETATION/LANDSCAPING IS ESTABLISHED. THE DEVELOPER SHALL BE RESPONSIBLE FOR MAINTENANCE AFTER THE PROJECT IS APPROVED UNTIL THE LOTS ARE SOLD.
- 3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THE PLAN SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE MARKINGS SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- 4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT ALL SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- 5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENTS LADEN WATER DOES NOT LEAVE THE SITE.
- 6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- 7. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE MORE THAN 1/3 OF THE BARRIER HEIGHTS. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION'S SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM
- 8. STABILIZED GRAVEL ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE
- 9. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT. STORM DRAIN INLETS, BASINS, AND AREA DRAINS SHALL BE PROTECTED UNTIL PAVEMENT SURFACES ARE COMPLETED AND/OR VEGETATION IS RE-ESTABLISHED.
- IO. PAVEMENT SURFACES AND VEGETATION ARE TO BE PLACED AS RAPIDLY AS POSSIBLE.
- SEEDING SHALL BE PERFORMED NO LATER THAN SEPTEMBER IST FOR EACH PHASE OF CONSTRUCTION.
- 12. IF THERE ARE EXPOSED SOILS OR SOILS NOT FULLY ESTABLISHED FROM OCTOBER IST THROUGH APRIL 30TH, THE WET WEATHER EROSION PREVENTION MEASURES WILL BE IN EFFECT. SEE THE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (CHAPTER 4) FOR REQUIREMENTS.
- 13. THE DEVELOPER SHALL REMOVE ESC MEASURES WHEN VEGETATION IS FULLY ESTABLISHED.
- 4. GRASS SHALL BE SEEDED AT THE RATE OF NOT LESS THAN ONE HUNDRED (100) POUNDS PER ACRE. SEED MIX SHALL INCLUDE:
- DWARF GRASS MIX (LOW HEIGHT, LOW MAINTENANCE)
 DWARF PERENNIAL RYEGRASS, 80% BY WEIGHT
- CREEPING RED FESCUE, 20% BY WEIGHT APPLICATION RATE 100 POUNDS MIN. PER ACRE
- STANDARD HEIGHT GRASS MIX ANNUAL RYEGRASS, 40% BY WEIGHT TURF-TYPE FESCUE, 60% BY WEIGHT APPLICATION RATE 100 POUNDS MIN. PER ACRE

ADDITIONAL TEMPORARY EROSION CONTROL (DURING CONST.)

- 1. APPROVAL OF THIS EROSION/SEDIMENTATION 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. SEDIMENT FENCING OR COMPOST BERMS WILL BE PLACED AT THE TOE OF ALL MAJOR FILL SLOPES WHEN NECESSARY, TO PREVENT SILT FROM WASHING INTO EXISTING DRAINAGE WAYS. (SILTATION BARRIER)
- TEMPORARY DITCHES WILL BE CONSTRUCTED AS NECESSARY TO ASSURE DRAINAGE IS CHANNELED TO THE FACILITIES BEING PROVIDED.
- 4. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF EVERY TWO WEEKS OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.

WET WEATHER CONDITIONS OCT. 1ST - APRIL 30TH

I. MULCH SHALL BE APPLIED TO ALL DISTURBED SURFACES AS DIRECTED BY THE PROJECT ENGINEER AND/OR HIS AGENT AS OUTLINED BELOW:

LOOSE WOOD FIBER MULCH SHALL BE APPLIED AT A RATE OF NO LESS THAN 2,400 POUNDS (1.2 TONS) PER ACRE, AND SHALL HAVE A MINIMUM DEPTH IN-PLACE OF 2" ON SLOPES < 20% AND 50,000 POUND (25 TONS) ON SLOPES > 20% ON SLOPES > 50% AND AREAS OF MODERATE SLOPES PRONE TO EROSION, MULCH MUST BE STABILIZED IN PLACE BY HAND OR MACHINE PUNCHING INTO THE SOIL, SPRAYING WITH A TACKING AGENT OR COVERING WITH AN EROSION BLANKET SECURELY ANCHORED PER MANUFACTURER'S RECOMMENDATIONS.

RECORD DRAWING BY: Brent Forte DATE: 7/16/2007

Permitted design drawings stamped

Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008

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Internet: www.otak.com C880C2 Project No. Drawing No.

Ltscale: 30

Resolved

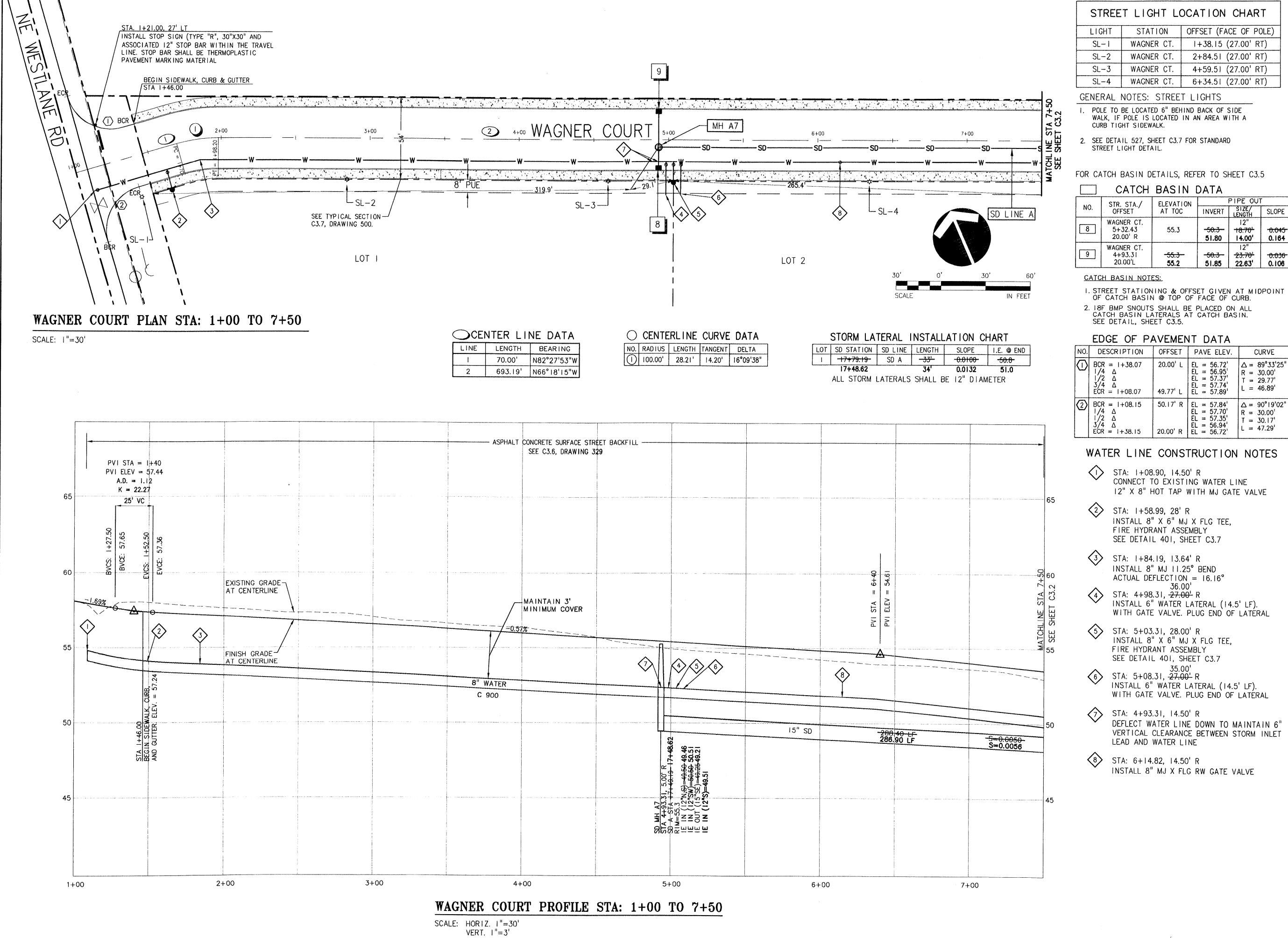
C880X190

C880X230

C880X900

C880X600 C880X430

C880X002



OFFSET (FACE OF POLE) 1+38.15 (27.00' RT) 2+84.51 (27.00' RT) 4+59.51 (27.00' RT) 6+34.51 (27.00' RT)

FOR CATCH BASIN DETAILS, REFER TO SHEET C3.5

	STR. STA./	ELEVATION	PIPE OUT		
NO.	OFFSET	AT TOC	INVERT	SIZE/ LENGTH	SLOPE
8	WAGNER CT. 5+32.43 20.00' R	55.3	-50.3 51.80	12" 18.70' 1 4.00'	-0.045- 0.164
9	WAGNER CT. 4+93.31 20.00'L	-55.3 - 55.2	50,3 51.85	12" 23.70' 22.63'	- 0.036 0.106

N	۱٥.	DESCRIPTION	OFFSET	PAVE ELEV.	CURVE
(D	BCR = $1+38.07$ $1/4$ Δ $1/2$ Δ $3/4$ Δ ECR = $1+08.07$	20.00' L 49.77' L	EL = 56.72' EL = 56.95' EL = 57.37' EL = 57.74' EL = 57.89'	$\triangle = 89^{\circ}33'25''$ $R = 30.00'$ $T = 29.77'$ $L = 46.89'$
	2	BCR = $1+08.15$ $1/4$ Δ $1/2$ Δ $3/4$ Δ ECR = $1+38.15$	50.17' R 20.00' R	EL = 57.84' EL = 57.70' EL = 57.35' EL = 56.94' EL = 56.72'	$\triangle = 90^{\circ}19'02''$ $R = 30.00'$ $T = 30.17'$ $L = 47.29'$

- 12" X 8" HOT TAP WITH MJ GATE VALVE
- WITH GATE VALVE. PLUG END OF LATÉRAL
- WITH GATE VALVE. PLUG END OF LATERAL
- DEFLECT WATER LINE DOWN TO MAINTAIN 6" VERTICAL CLEARANCE BETWEEN STORM INLET

田

INFRASTRUCTURE IMPROVEMENTS AND PUBLIC UTILITY PLAN & PI 00 - 7+50 SINES BU AERO PUBLIC STREET STA: 1+

RECORD DRAWING BY: Brunt Foster

DATE: 7/16/2007

Permitted design drawings stamped

Brant S. Foster

OR. P.E. 51051PE EXPIRES 6/6/2008

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Internet: www.otak.com Project No. Drawing No. C3.1

XREF LIST

Ltscale: 30 ______

Resolved C880X190

C880X230

C880X430 C880X900

C880X600 C880X002

- 240.8' -LOT MH A3 -SL-5 SD LINE A 3 5LOT 3 MH A5 WAGNER COURT PLAN STA: 7+50 TO 14+00 **CENTER LINE DATA** O CENTERLINE CURVE DATA NO. RADIUS LENGTH TANGENT DELTA LENGTH BEARING SCALE: 1"=30' 2) 200.00' 104.72' 53.59' 30°00'00" N83°41'45"E 31.131 3 200.00' 104.72' 53.59' 30°00'00" 446.24' | S66°18'15"E ASPHALT CONCRETE SURFACE STREET BACKFILL -SEE C3.6, DRAWING 329 FINISH GRADE -AT CENTERLINE

- MAINTAIN 3' MINIMUM COVER

5=0.0100 **\$=0.0096**

8" WATER COOO

10+00

15" SD

EXISTING GRADE -

AT CENTERLINE

STREET LIGHT LOCATION CHART LIGHT STATION OFFSET SL-5WAGNER CT. 8+13.47 (27.00' RT) SL-6 WAGNER CT. 9+73.35 (27.00' RT) SL-7WAGNER CT. 11+59.51 (27.00' RT) SL-8 WAGNER CT. 13+34.51 (27.00' RT)

GENERAL NOTES: STREET LIGHTS

- 1. POLE TO BE LOCATED 6" BEHIND BACK OF SIDE WALK, IF POLE IS LOCATED IN AN AREA WITH A CURB TIGHT SIDEWALK.
- 2. SEE DETAIL 527, SHEET C3.7 FOR STANDARD STREET LIGHT DETAIL.

FOR CATCH BASIN DETAILS, REFER TO SHEET C3.5

	CATCH	BASIN	DATA		
NO.	STR. STA./ OFFSET	ELEVATION AT TOC	INVERT	PIPE OUT	SLOPE
4	WAGNER CT. 10+93.80 20.00' R	-50.+ 49.9	45.50 46.59	12" +7.30' 17.65'	0.010 0.082
5	WAGNER CT. 10+93.80 20.00' L	-50.1- 50.0	-44.53- 46.7 1	12" 20.10' 1 8.93'	-0.010 0.138
6	WAGNER CT. 7+81.71 20.00' R	53.2 53. 1	47.93 49.95	12" 13.70' 1 4.03'	-0.005 0.168
7	WAGNER CT. 7+81.71 20.00' L	53.2 53.0	48.03 49. 41	2" 23.70 ' 22.47'	-0.007 0.079

CATCH BASIN NOTES:

- I. STREET STATIONING & OFFSET GIVEN AT MIDPOINT OF CATCH BASIN @ TOP OF FACE OF CURB.
- 2. 18F BMP SNOUTS SHALL BE PLACED ON ALL CATCH BASIN LATERALS AT CATCH BASIN. SEE DETAIL, SHEET C3.5.

	STORM LA	TERAL	INSTALL	ATION CH	HART
LOT	SD STATION	SD LINE	LENGTH	SLOPE	I.E. @ END
2	14+80:73	SD A	-33' 34'	0.0100 0.0356	-49.4 5 0.0
3	0+42.84	SD A	30' 42'	0.0+000.0205	-43.6 - 44.0
*	14+60:79	SD A	35' 42'	0.01000.0252	-49.4 - 49.9
*LAT	ERAL PROVI	DED FOR	FUTURE D	EVELOPMENT	OF

PARCEL TO THE NORTH OF THE PROPOSED PROJECT.

ALL STORM LATERALS SHALL BE 12" DIAMETER

WATER LINE CONSTRUCTION NOTES

STA: 7+84.65, 14.50' R DEFLECT WATER LINE TO MAINTAIN 6" VERTICAL CLEARANCE BETWEEN STORM INLET AND WATER LINE

(2) STA: 8+04.46, 28.00 R INSTALL 8" x 6" MJxFLG TEE, FIRE HYDRANT ASSEMBLY SEE DETAIL 401, SHEET C3.8

(3) STA: 8+81.31, 14.50' R INSTALL 8" MJ x 2" MJ TEE,

2" MJ x FLG RW GATE VALVE
29.00' R
STA: 8+81.31, 27.00' L
STUB AND PLUG 2"
DOMESTIC WATER LINE

5 STA: 8+89.39, 14.50' R INSTALL 8" MJ x 8" MJ TEE, 8" MJ x FLG RW GATE VALVE

6 STA: 8+89.39, 27.00' L STUB AND PLUG 8" FIRE LINE

This is a state of the state of INSTALL 8" MJ 22.50° BEND 40 (8) STA: 10+89.78, 11.83' R INSTALL 8" MJ 22.50° BEND

9 STA: 10+93.80, 12.60' R DEFLECT WATER LINE TO MAINTAIN 6" VERTICAL CLEARANCE BETWEEN STORM INLET LEAD AND WATER

STA: 11+13.54, 15.22' R
INSTALL 8" MJ x FLG RW
GATE VALVE

36.00' R STA: 12+03.88, 27.00' L INSTALL 6" WATER LATERAL (13 LF) WITH GATE VALVE, PLUG END OF

LATERAL.

STA: 12+08.88, 28.00' + R
INSTALL 8" x 6" MJxFLG
TEE, FIRE HYDRANT
ASSEMBLY SEE DETAIL 401,
SHEET C3.8

STA: 12+13.88, 27.00' R
INSTALL 6" WATER LATERAL LATERAL. STA: 12+08.88, 28.00' +- R
INSTALL 8" x 6" MJxFLG
TEE, FIRE HYDRANT

37.00' R

37.00' R

STA: 12+13.88, 27.00' L

INSTALL 6" WATER LATERAL

SINES

(13 LF) WITH GATE VALVE.
PLUG END OF LATERAL.
19.00' L

14 STA: 7+58.45, 14.50'
INSTALL 8" WATER LATERAL
(43.5 LF) WITH GATE VALVE.
PLUG END OF LATERAL.

AER0 PUBLIC STREET STA: 74 otak

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INFRASTRUCTURE IMPROVEMENTS AND PUBLIC UTILITY PLAN & PF 50 - 14+00

RECORD DRAWING BY: Brant Forte DATE: 7/16/2007

Permitted design drawings stamped

Brant S. Foster

OR. P.E. 51051PE EXPIRES 6/6/2008

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C880C3 Project No. Drawing No. C3.2

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WAGNER COURT PROFILE STA: 7+50 TO 14+00 SCALE: HORIZ. I"=30' VERT. I''=3'

11+00

15" SD

11+47.5 44.15 45.15 43.83

S=0.0100 S=0.0096

SD MH A3 STA 11+98.88, 5 R SD A STA +01+43.47-10 RIM=48.9 IE IN (15"W)=43.03-4; IE IN (12"SW)=42.28-4 IE OUT (18"SE)=42.78

12+00

18" SD

-250.70 LF 250.92 LF

13+00

S=0.0098

15" SD

8+00

133.34 LF

S=0.0105

9+00

Sheet No.

SD LINE A

SCALE: 1"=30'

LOT 4

FINISH GRADE-

AT CENTERLINE

EXISTING GRADE -\

AT CENTERLINE

WAGNER COURT PLAN STA: 14+00 TO 16+77.06

Ltscale: 30 Resolved C880X190 C880X230

STORM LATERAL INSTALLATION CHART LOT SD STATION SD LINE LENGTH SLOPE I.E. @ END 4 7+91.92 SD A 35' 0.0050 0.0394 40.7 41.9 ALL STORM LATERALS SHALL BE 12" DIAMETER

CENTER LINE DATA LINE LENGTH BEARING 20.32' N43°48'15"W

O CENTERLINE CURVE DATA NO. RADIUS LENGTH TANGENT DELTA (4) 200' 78.54' 39.78' 22°30'00"

3. SEE DETAIL 527, SHEET C3.7 FOR STANDARD STREET LIGHT DETAIL.

STATION

LIGHT

STREET LIGHT LOCATION CHART

SL-10 WAGNER CT. -16+77.06 (48.00' RT)

GENERAL NOTES: STREET LIGHTS

I. PROJECT SITE IS CLASSIFIED AS A RESIDENTIAL

POLE TO BE LOCATED 6" BEHIND BACK OF SIDE WALK, IF POLE IS LOCATED IN AN AREA WITH A CURB TIGHT SIDEWALK.

WAGNER CT. | 15+09.51 (25.40' RT)

OFFSET

16+67.93 (47.84' RT)

FOR CATCH BASIN DETAILS, REFER TO SHEET C3.5

	CATCH	BASIN	ATAC		
	STR. STA./	ELEVATION		PIPE OUT	
NO.	OFFSET	AT TOC	INVERT	SIZE/ LENGTH	SLOPE
	WAGNER CT. 16+88.03 39.51' R	43.4 43.3	38,50 38.3 1	12" 66.46' 63.51'	-0.010 0.023
2	WAGNER CT. 14+39.98 20.00' R	-46.6- 46.5	-41.94 - 43.18	12" 16.72' 1 6.80'	-0:010- 0.0847
3	WAGNER CT. 14+39.98 20.00' L	46.6 48.4	42.03 43 .13	12" 25.57' 24.66'	-0:0 0 0:057

CATCH BASIN NOTES:

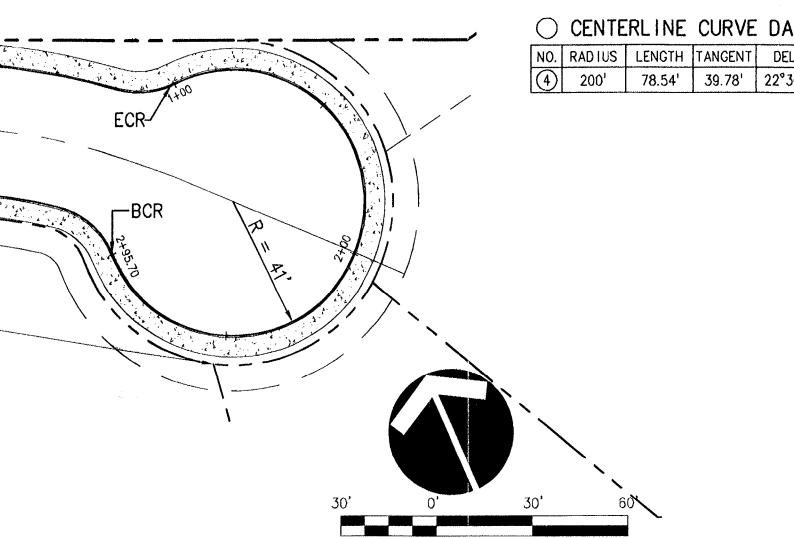
- I. STREET STATIONING & OFFSET GIVEN AT MIDPOINT OF CATCH BASIN @ TOP OF FACE OF CURB.
- 2. 18F BMP SNOUTS SHALL BE PLACED ON ALL CATCH BASIN LATERALS AT CATCH BASIN. SEE DETAIL, SHEET C3.5.
- 3. CATCH BASIN I IS A DOUBLE CATCH BASIN (CG-2). SEE DETAIL 610, SHEET C3.5.

CURB RETURN CURVE DATA

NC	. DESCRIPTION	OFFSET	TOC ELEV.	CURVE
(5)	BCR = $16+47.33$ $1/4$ Δ $1/2$ Δ $3/4$ Δ ECR = $16+32.54$	27.09' L 20.00' L	EL = 44.17' EL = 44.19' EL = 44.22' EL = 44.25' EL = 44.37'	$\triangle = 42^{\circ}10^{\circ}20^{\circ}$ $R = 25.00^{\circ}$ $T = 9.64^{\circ}$ $L = 18.40^{\circ}$
<u>(6</u>	BCR = $16+23.23$ $1/4 \Delta$ $1/2 \Delta$ $3/4 \Delta$ ECR = $16+46.95$	20.00' R 29.10' R	EL = 44.51' EL = 44.32' EL = 44.25' EL = 43.98' EL = 43.85'	$\triangle = 53^{\circ}58'48''$ $R = 25.00'$ $T = 12.73'$ $L = 23.55'$

WATER LINE CONSTRUCTION NOTES

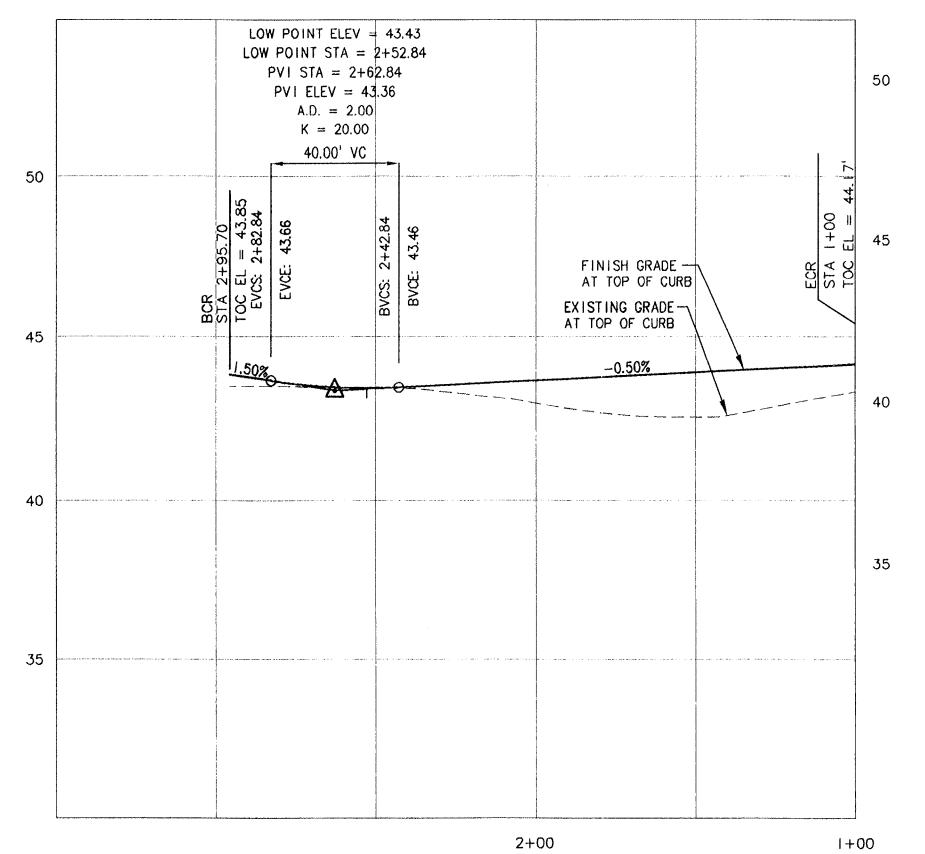
- STA: 14+41.87, 16.00' R DEFLECT WATER LINE TO MAINTAIN 6" VERTICAL CLEARANCE BETWEEN STORM INLET LEAD AND WATER LINE
- \$\frac{2}{2}\$ STA: 15+78.14, 28.00' R
 INSTALL 8" X 6" MJ X FLG TEE, FIRE HYDRANT ASSEMBLY SEE DETAIL 401, SHEET C3.7
- STA: 17+25.85, 10.90' R 17+26.20, 14.00' R INSTALL 6" WATER LATERAL (42.9' LF). WITH GATE VALVE. PLUG END OF LATERAL.
- 4 STA: 17+03.52, 19.85' L INSTALL 8" MJ 22.5+11.23' BENDS (ACTUAL DEFELECTION=33.36')



CUL-DE-SAC 'A' TOP OF CURB PLAN

SCALE: | "=30"

LOT 6



SCALE: HORIZ. I"=30' VERT. I"=3'

otak

RECORD DRAWING BY: Brent Fosts

DATE: 7/16/2007

Permitted design drawings stamped

Brant S. Foster

OR. P.E. 51051PE EXPIRES 6/6/2008

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www.otak.com

Project No. Drawing No C3.3 Sheet No.

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16+00 14+00 WAGNER COURT PROFILE STA: 14+00 TO 16+77.06 SCALE: HORIZ. I"=30' VERT. I"=3'

8" WATER C900

CENTER OF CUL-DE-SAC

MH AI

IN OFF-ROAD AREAS BACKFILL

SEE C3.6, DRAWING 329

- MAINTAIN 3' MINIMUM COVER

S=0.0098 S=0.0138

STA 16+77.06

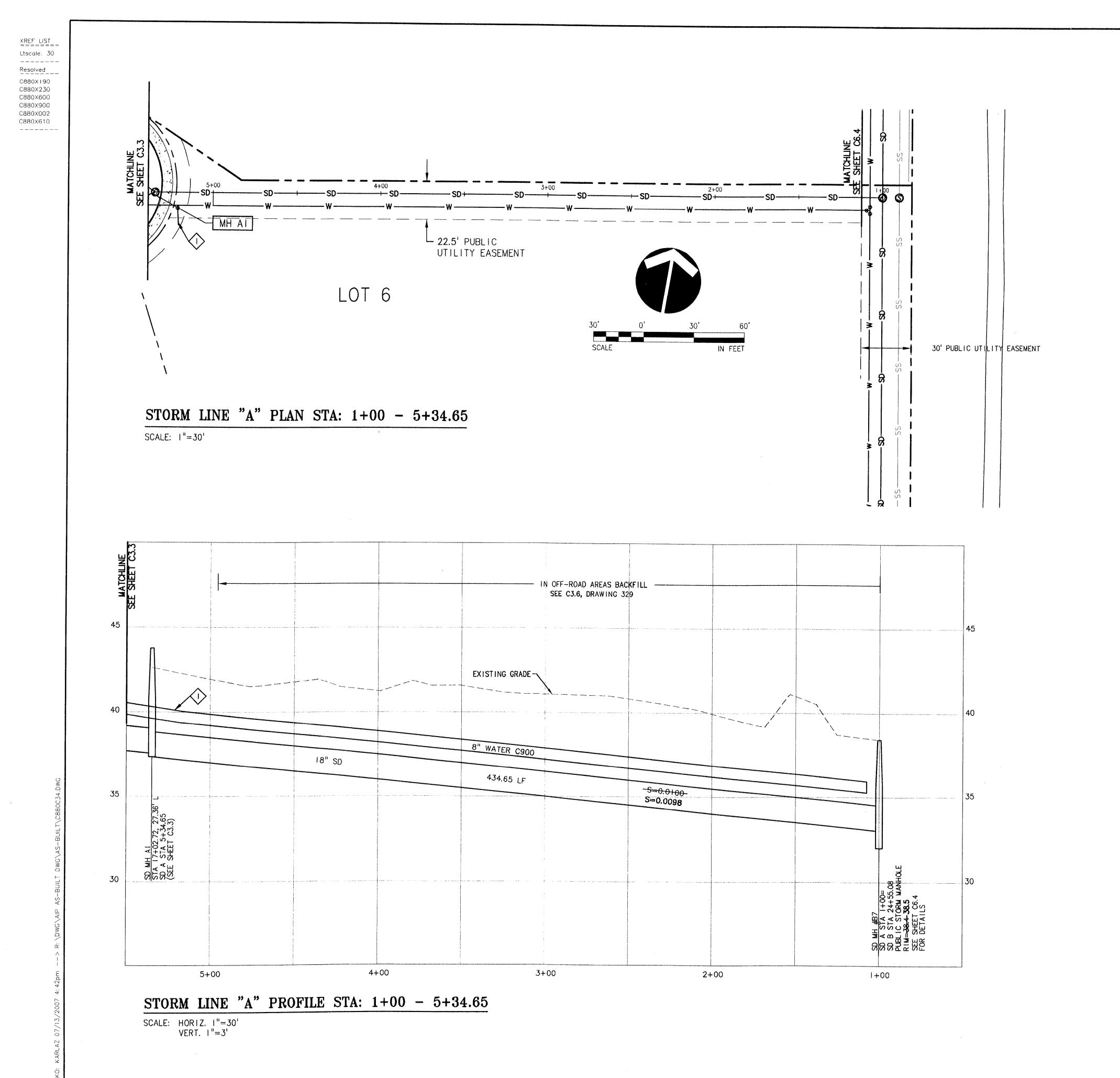
- ASPHALT CONCRETE SURFACE STREET BACKFILL -

SEE C3.6, DRAWING 329

258.12 LF 257.27 LF

CUL-DE-SAC 'A' TOP OF CURB PROFILE





WATER LINE CONSTRUCTION NOTES

STA: 5+21.27, 7.50' LT
INSTALL 6" WATER LATERAL (9.50' LF). WITH
GATE VALVE. PLUG END OF LATERAL.

LT SUBMITTAL: 07/ BUSINESS CENT AS-BUILT AERO RI

INFRASTRUCTURE IMPROVEMENTS LINE SD-A PLAN AND PROFILE

RECORD DRAWING BY: Drant Forth

DATE: 7/16/2007

Permitted design drawings stamped

by: Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008

PUBLIC STORM Otak

Incorporated 17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 FAX: (503) 635-5395 Internet: www.otak.com

12880 C880C34
Project No. Drawing No. C3.4

Ltscale: 40 ______ Resolved 4" PLUGGED C880X002 ____ 1'-10 3/4" HOLE --RECESSED AREA -----1'-9 3/8" ----SEE DETAILS 601-B,601-C 1" PVC ANTI-SIPHON
PIPE ADAPTER- -- 6.50"--REMOVABLE WATERTIGHT ACCESS PORT, 6" OPENING /- Ø18.00*"* -3"x2 1/2"X3/8" 2 *~3"x2"x3/8"∠ ~* 9.00" CONNECT TO EXISTING (TYP.) _3"x2 1/2"X3/8" ∠ 18" MAX. TO FLEXIBLE JOINT 2' WEEP 1 1/2" 3/16" HOLE 27.00" EACH SIDE SEE DETAIL 603 25.00" TYPICAL-FOR FRAME & GRATE USE VERTICAL BEADS IN CORNERS, FILLET WELD JOINT ON BOTTOM OF FRAME. GRATE MUST REST FLAT ON FRAME SURFACE. RECORD DRAWING BY: Brunt Fost TOP OF CURB 2.00" 16.00" DATE: 7/16/2007 - TOP OF PAVEMENT 2 1/2" ---3/8"x2" FLAT BAR EACH END-Permitted design 3/8"x2 1/2" FLAT —— ~5/8" X 3" BOLT SEE DETAIL 603 FOR drawings stamped BARS AT 1 7/8"O.C. FRAME & GRATE. SECTION A-A m ----Brant S. Foster - 20.00" -10.00" SUBGRADE -OR. P.E. 51051PE EXPIRES 6/6/2008 -24.00" 12.00" FRONT SIDE -STANDARD 3/8" ROUND OR MONOLITHIC RECTANGULAR CURB AND GUTTER CROSS BARS HOLE -EXISTING CURB SHALL BE FILLET WELDED, RESISTANCE WELDED OR ELECTROFORGED TO BEARING BARS US PATENT #6126817ADDITIONAL 6" -2'-4 1/2" -- 6" 3/16"/ PATENTS PENDING PLAN SECTION A-A PLAN SECTION B-B <u>ELEVATION</u> BMP, INC. 53 MT. ARCHER ROAD, LYME, CT. 06371 COMMUNITY DEVELOPMENT COMMUNITY DEVELOPMENT COMMUNITY DEVELOPMENT SCALE N.T.S. SCALE N.T.S. SCALE N.T.S. (800) 504-8008 FAX: (860)434-3195 CITY OF SCAPPOOSE CITY OF SCAPPOOSE CITY OF SCAPPOOSE DATE 2002 DATE 2002 DATE 5005 14485 E. COLUMBIA AVE., PO BOX "P", SCAPPOOSE, OREGON 34485 E. COLUMBIA AVE., PO BOX "P", SCAPPOOSE, OREGON 34485 E. COLUMBIA AVE., PO BOX "P", SCAPPOOSE, OREGON DESCRIPTION DATE SCALE CATCH BASIN SECTION AND CURB DETAIL 09/14/99 NONE CATCH BASIN OWG. NO. 601B FRAME AND GRATE 18F SNOUT DIL DWG. NO. 601—A DWG. NO. 603 DRAWING NUMBER & DEBRIS STOP (A) FLAT BARS S=0.50 '/'-SECTI SEE DE *─*-3"X2 1/2"X3/8"*_*-田 5 1/5, USE VERTICAL BEADS IN CORNERS, FILLET WELD JOINT ON BOTTOM OF FRAME. GRATE MUST REST FLAT ON FRAME SURFACE. PLAN (FRAME) SECTION A-A BU INFRAS DETAILS #3 BAR ---73/8" ROUND OR RECTANGULAR CROSS BARS SHALL BE FILLET WELDED, RESISTANCE WELDED OR ELECTROFORGED TO BEARING BARS EACH UNIT -TYPICAL BOTH ENDS 3/16" #3 BAR ---OUTER BARS & EVERY INNER BAR SECTION B-B 2A1/2" — 3/8" X 2" FLAT BAR EACH END SECTION B-B 3/8" X 2 1/2" FLAT BARS Ø 1 7/8" O.C. NOTES: 8 BARS @ 4" D.C. _____ 2" 1. #3 BARS SHALL BE PLACED DURING CURB CONSTRUCTION.
2. ALL BARS SHALL BE PLACED 1 1/2" CLEAR OF NEAREST FACE OF CONCRETE UNLESS SHOWN OR OTHERWISE NOTED. PLAN (GRATE) ALL BAR SPLICES LENGTHS SHALL BE A MIN. 20 DIA.
 CLASS 3300 CONCRETE SHALL BE USED IN ALL INLETS. Incorporated TYPE 2 GRATE 17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 FAX: (503) 635-5395 COMMUNITY DEVELOPMENT COMMUNITY DEVELOPMENT COMMUNITY DEVELOPMENT SCALE N.T.S. SCALE N.T.S. SCALE N.T.S. CITY OF SCAPPOOSE CITY OF SCAPPOOSE CITY OF SCAPPOOSE S002 3140 2005 DATE 2002 34485 E. COLUMBIA AVE., PO BOX "P", SCAPPOOSE, OREGON 34485 E. COLUMBIA AVE., PO BOX "P", SCAPPOOSE, OREGON 34485 E. COLUMBIA AVE., PO BOX "P", SCAPPOOSE, OREGON CG-2 DOUBLE CATCH BASIN CURB SECTION Internet: www.otak.com CG-2 FRAME AND GRATE CG-2 DOUBLE CATCH BASIN DVG. ND. 610 DVG. ND. 610-A DWG. NO. 611 Project No. Drawing No. C3.5 Sheet No. Copyright 2006 ©

IC INFRASTRUCT IMPROVEMENTS

XREF LIST Ltscale: 1 ______ Resolved C880X002

3" NOM.—— NON-SHRINK - GROUT CONNECTION. MANHOLE INSTALLATION ALL MATERIAL AND WORK SHALL COMPLY WITH CITY OF SCAPPOOSE STANDARD SPECIFICATIONS. THE SAND COLLAR SHALL BE FABRICATED BY AN APPROVED MANUFACTURER AND NOT FIELD MADE. THE NOMINAL PIPE SECTION (DIM. "G") SHALL BE COATED WITH AN EPOXY ADHESIVE COMPATIBLE WITH BOTH PVC AND CONCRETE GROUT AND COARSE AGGREGATE APPLIED. SECTION THROUGH ADAPTER 6.32" | 6.68" | 7.50" | 6.25" | 7.92" 8.46" 8.94" 10.10" 4.10" " | 10.50" | 9.90" | 10.57" | 11.17" | 12.40" | 4.70" | 12.50" 11.78" 12.58" 13.30" 14.50" 5.15" 15" | 15.30" | 14.43" | 15.36" | 14.49" | 18.00" | 5.95" | 18" | 18.70" | 17.63" | 18.76" | 19.83" | 21.98" | 5.90" | " 22.05" 20.79" 22.11" 23.37" 25.63" 6.40" 24" | 24.80" | 23.38" | 25.04" | 26.46" | 28.80" | 15.75" | 7.00" 27" 27.95" 26.35" 28.27" 29.87" 32.50" 18.30" * APPROXIMATE DIMENSION ALL MATERIAL AND WORK SHALL COMPLY WITH CITY OF SCAPPOOSE STANDARD SPECIFICATION: COMMUNITY DEVELOPMENT CITY OF SCAPPOOSE DATE 2002 34485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97056 MANHOLE ADAPTER DWG. NO. 303 (SAND COLLAR)

MATERIAL TO BE GRAY

CAST IRON ASTM A-48,

WEIGHT = 172 LBS.

() ZZZŽ

SCALE N.T.S.

DATE 2002

DWG. NO. 326

CLASS 30.

MACHINE TO TRUE 25"

MACHINE TO A TRUE

BEARING ALL AROUND-

SECTION "A"-"A"

COMMUNITY DEVELOPMENT

CITY OF SCAPPOOSE

34485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97056

SUBURBAN MANHOLE FRAME

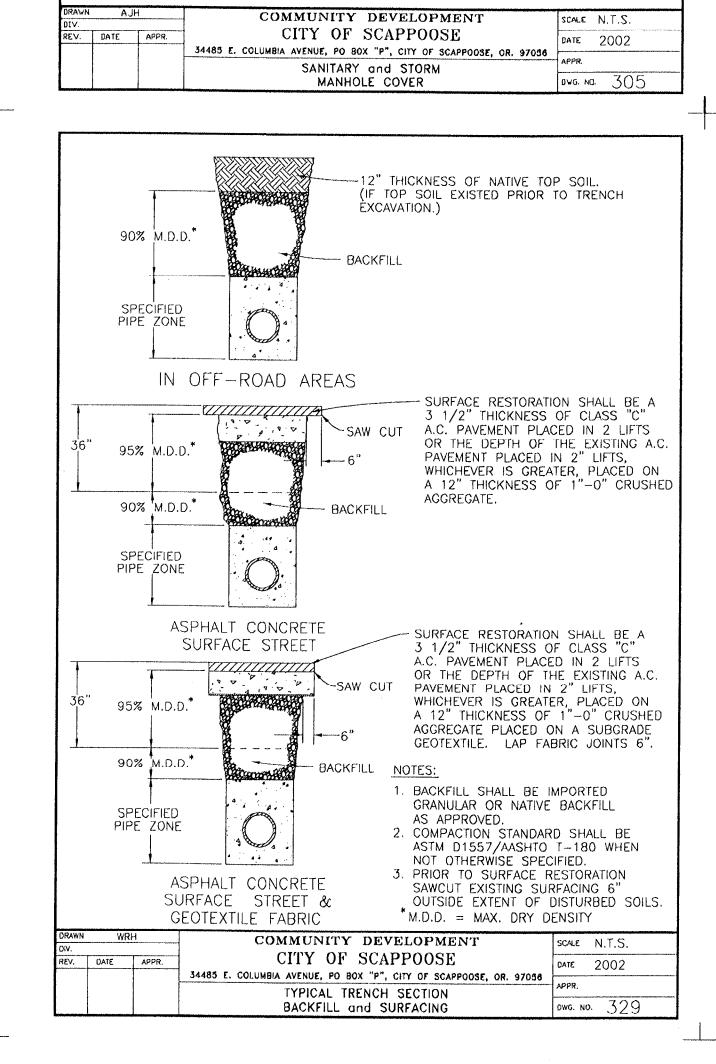
3" DEPTH

THIS MANHOLE FRAME

DATE APPR.

MAY BE USED ONLY FOR

LOCAL ROAD LOCATIONS.



NOTES:

3/4" TOP x 1" BOTTOM HOLES. -

THESE COVERS TO BE

USED FOR IN-ROAD

LOCATIONS ONLY.

1. COVER AND FRAME TO BE MACHINED FOR TRUE BEARING.

3. TWO HOLE LID FOR SANITARY SEWERS.

4. 16 HOLE LID FOR STORM SEWERS.

2. MATERIAL SHALL BE GRAY CAST IRON, ASTM A-48, CLASS 30. Wt. = 139 lbs. \pm

FOR SANITARY SEWERS ONLY (2) HOLES ARE USED AND SHOWN SHADED.

3" 3/4"

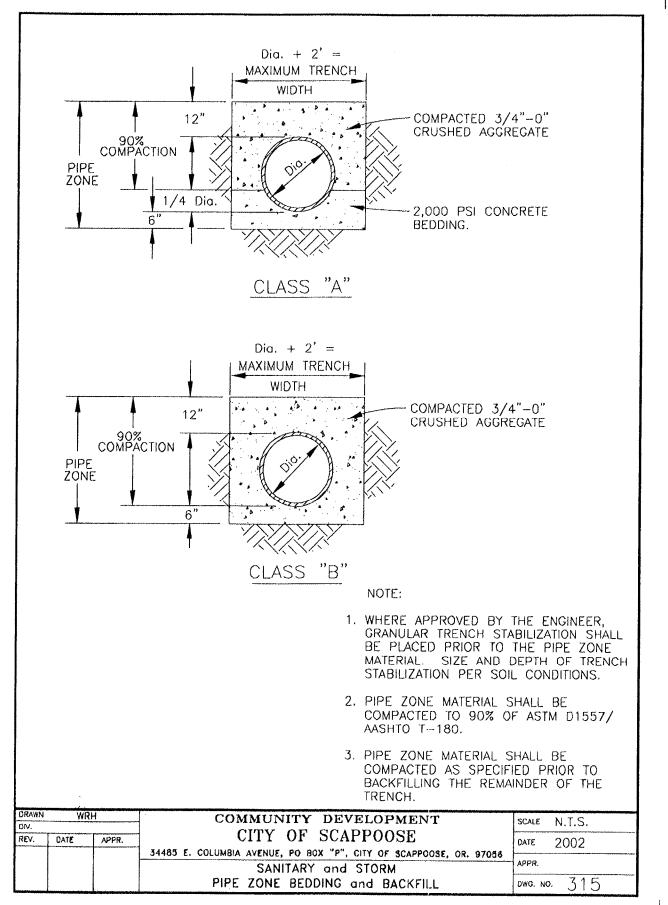
24 3/4"

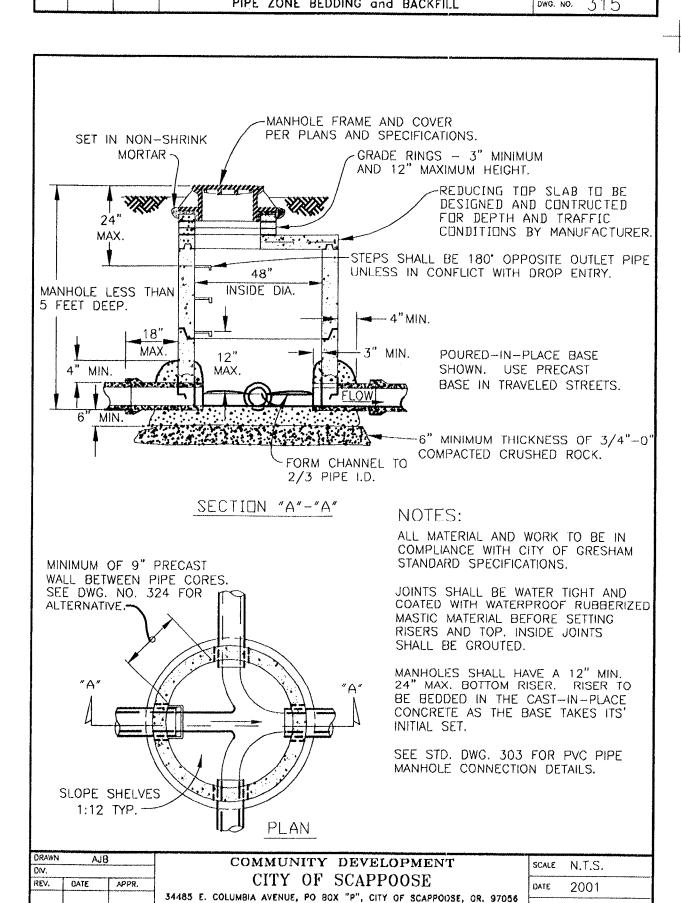
MACHINE TO A TRUE BEARING ALL AROUND.

SECTION "A"-"A"

FOR STORM SEWERS ONLY (16) HOLES ARE USED AND SHOWN OPEN & SHADED.

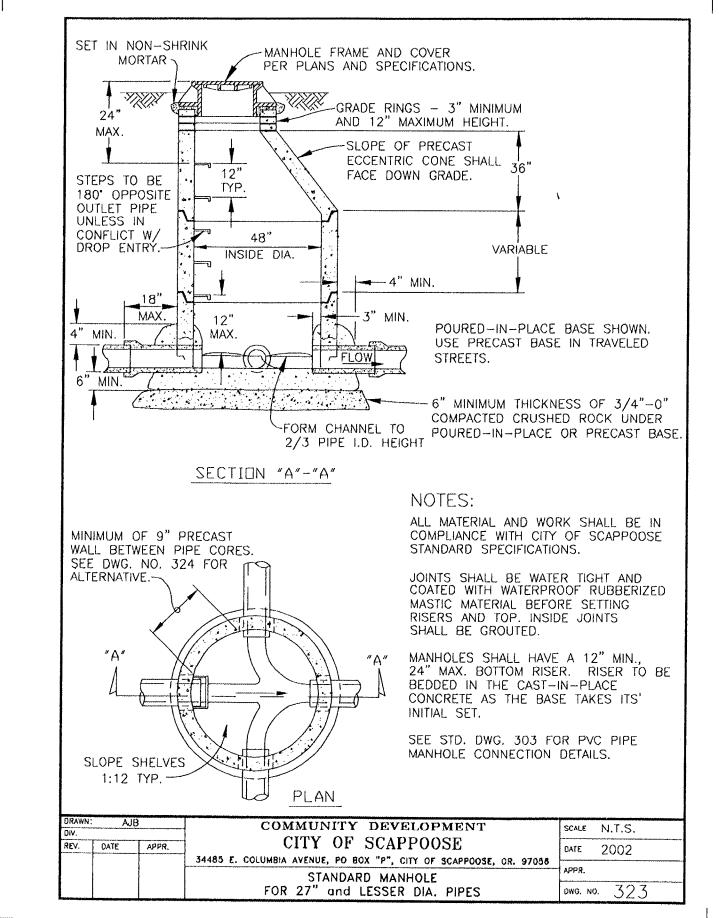
1 1/2"





SHALLOW MANHOLE

FOR 27" and LESSER DIA. PIPES





INFRASTRUCT DETAILS PUBLIC STORM otak

RECORD DRAWING

BY: Brunt Foster

DATE: 7/16/2007

Permitted design

drawings stamped

OR. P.E. 51051PE

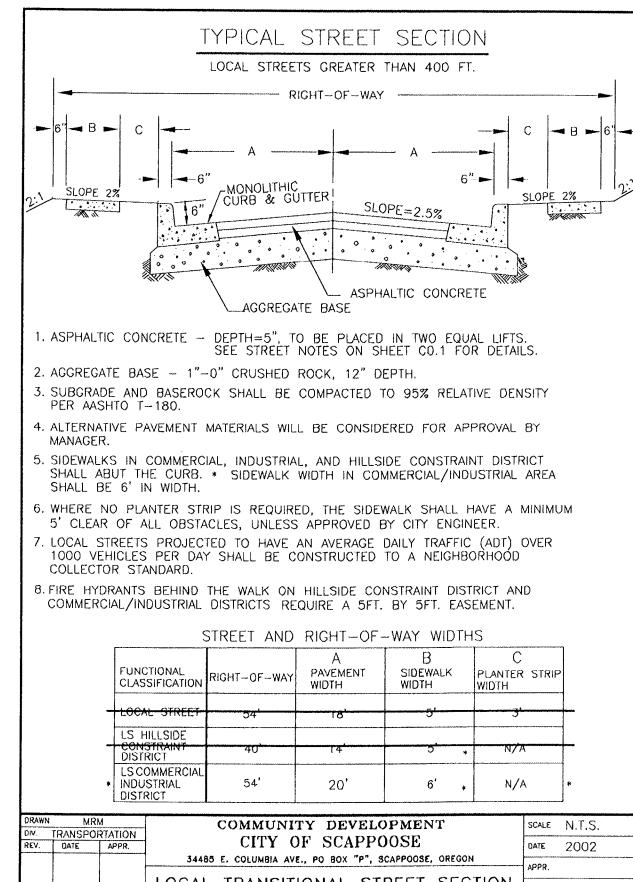
EXPIRES 6/6/2008

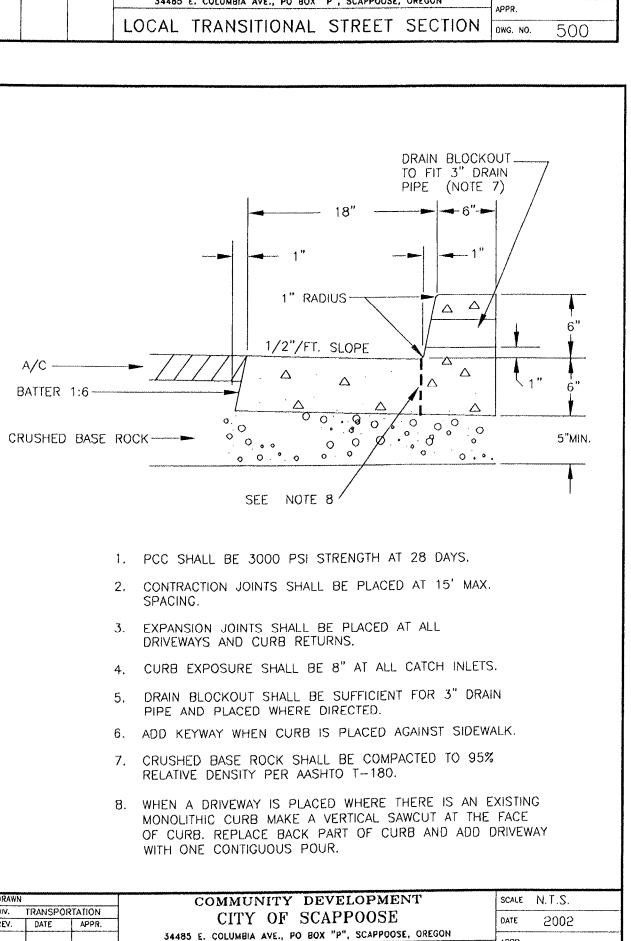
Brant S. Foster

Incorporated 17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 (503) 635-5395

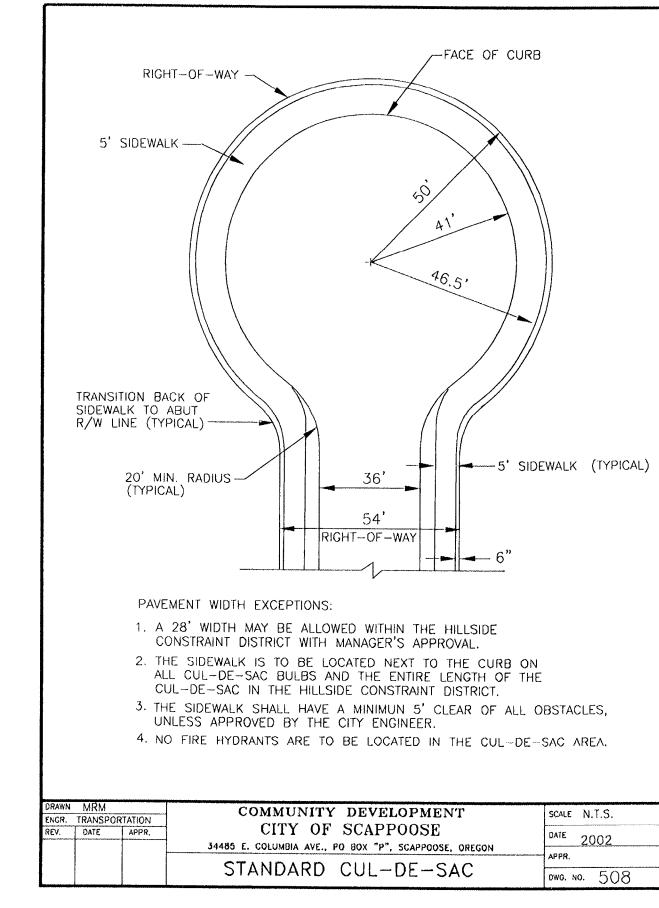
Internet: www.otak.com C880C Project No. Drawing No.

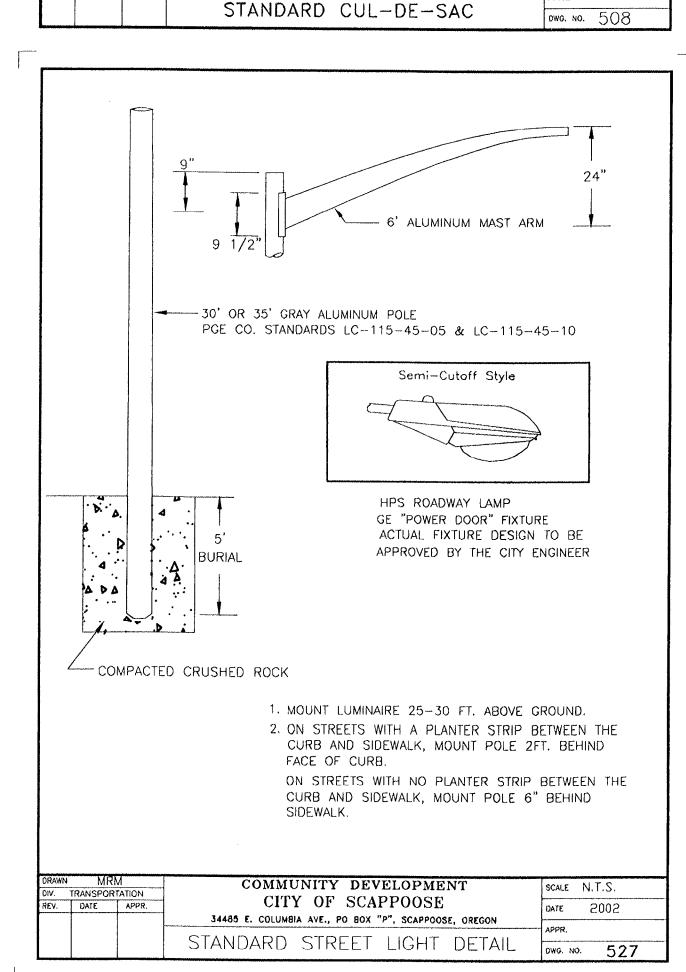


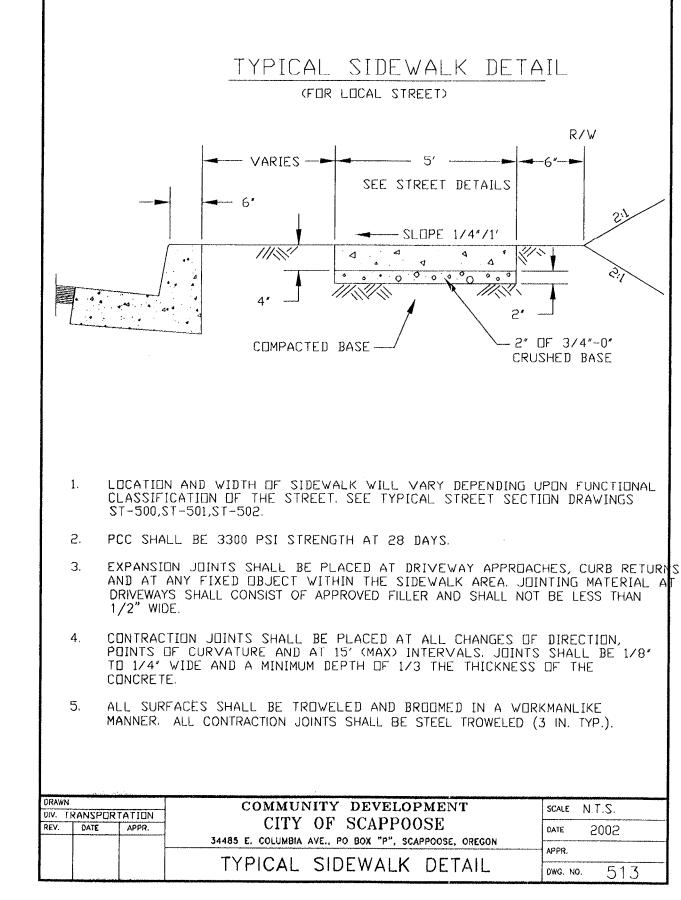


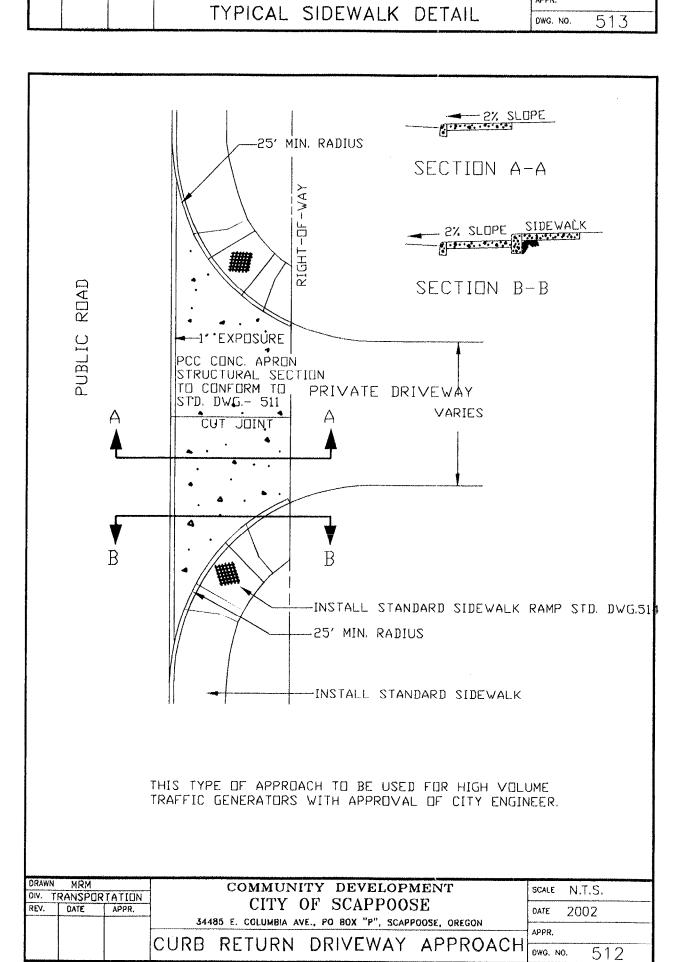


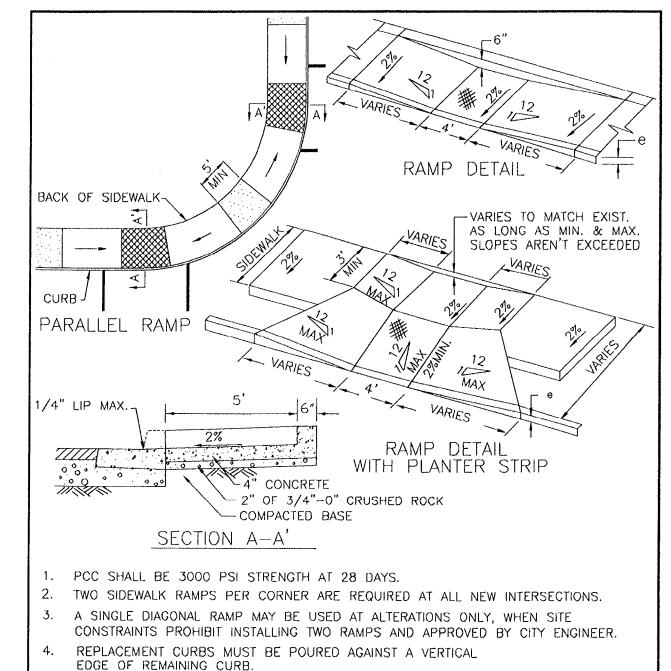
MONOLITHIC CURB AND GUTTER











EDGE OF REMAINING CURB.

CONCRETE IN A REPLACEMENT CURB SHALL NOT PROTRUDE PAST THE FACE OF THE CURB IN THE ASPHALT REPLACEMENT

HORIZONTAL AND VERTICAL ALIGNMENT SHALL BE WITHIN 1/8" IN 10 FEET. USE MASCO CASTINTACT DETECTABLE WARNING PANEL 48"X24" PART # MA TP42 IN CENTER RAMP.

SEE STANDARD DRAWING NUMBERS 518 AND 519 FOR CURB EXPOSURE DIMENSION 'e'.

DV. TRANSPORTATION			COMMUNITY DEVELOPMENT	SCALE N.T.S.	
REV.	DATE	APPR.	CITY OF SCAPPOOSE	DATE 2002	
		34485 E. COLUMBIA AVE., PO BOX "P", SCAPPOOSE, OREGON	APPR.		
			SIDEWALK RAMP	DWG, NO. 514	

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BU INFRA DETAIL PUBLIC STREET AER(

RECORD DRAWING

BY: Brent 80ster

DATE: 7/16/2007

Permitted design

Brant S. Foster

drawings stamped

OR. P.E. 51051PE

EXPIRES 6/6/2008



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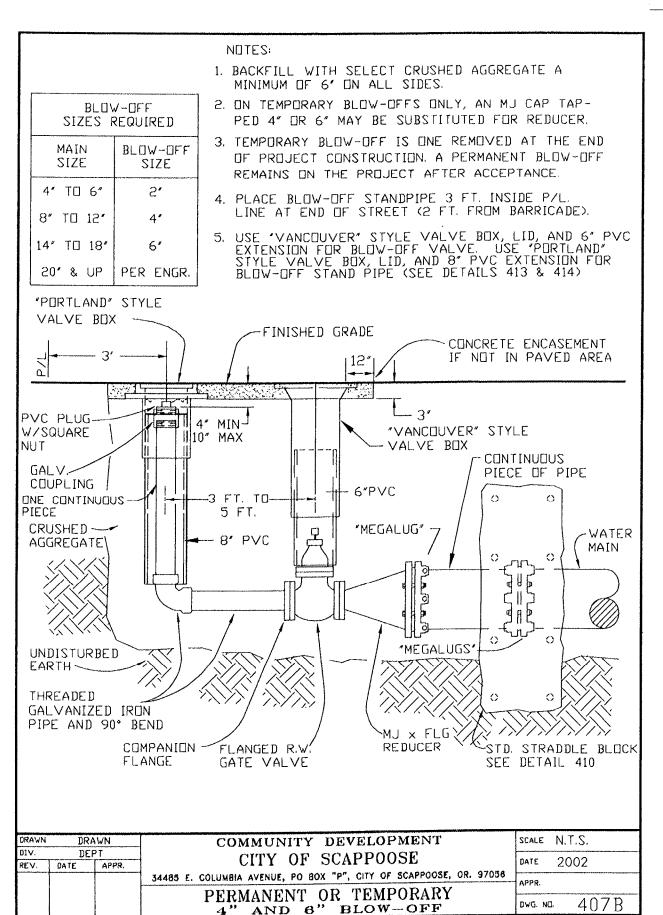
Internet: www.otak.com Project No. Drawing No.

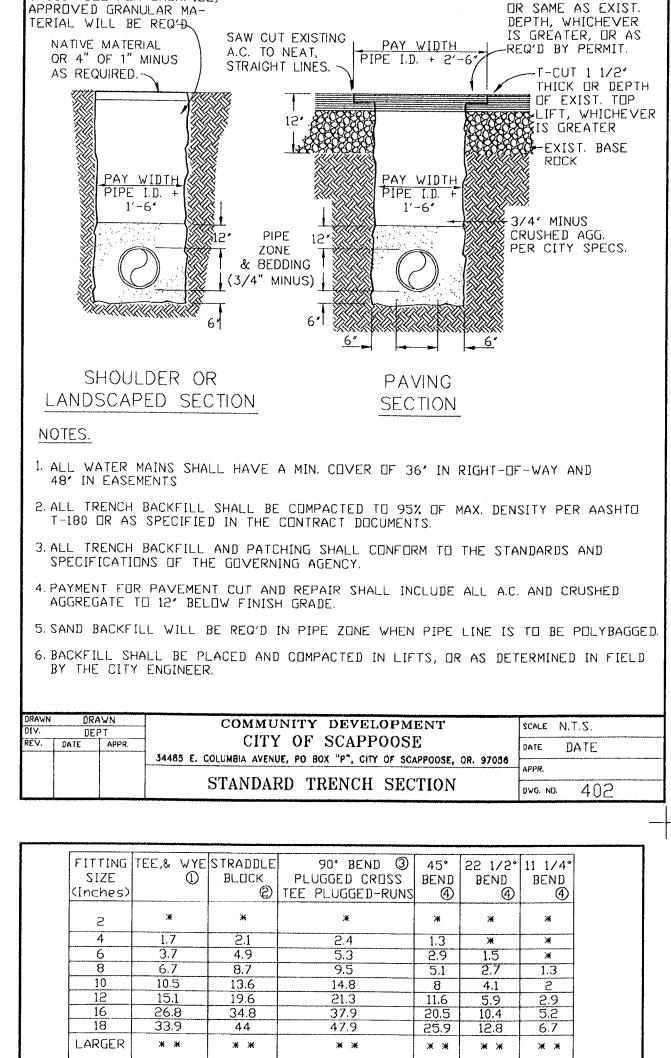
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Sheet No.

XREF LIST Ltscale: 1 -----Resolved C880X002

HYDRANTS TO BE APPROVED BY CITY 4. 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. HYDRANT COLOR TO BE SHERWIN WILLIAMS GCC-5006. ALL MJ'S ON TEE, VALVE & F.H. TO BE RESTRAINED WITH "MEGALUG" FOLLOWER GLANDS. RESTRAIN MIN 10' OF WHERE PLANTER STRIP EXISTS. HYDRANT SHALL_BE PLACED SO FRONT PORT IS A MIN. OF 24" BEHIND FACE OF CURB. PIPE EACH SIDE OF TEE ON MAIN LINE.
NO JOINTS BETWEEN VALVE AND SHOE
UNLESS OVER 18'. . WHERE INTEGRAL S/W & CURB EXIST, HYD. PUMPER PORT 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 PUMPER PIPE. HYDRANT SHALL HAVE A MAX. OF A 6' NOZZLE~ 9. HYDRANT VALVE SHALL BE MUELLER RESILIENT WEDGE GATE VALVE #A-2360-16 OR HOSE APPROVED EQUAL. NOZZLES 10. WHERE NO SIDEWALK EXISTS AROUND A HYDRANT, INCLUDING PLANTER STRIPS, PLACE A 5'x 5' x 4" THICK CONC. PAD AROUND HYDRANT. 11.INSTALL 5" STORZ COUPLING AND CAP ON 4 1/2" PUMPER NOZZLE. /SIDEWALK 'VANCOUVER' VALVE BOX, LID, & 6' P.V.C. PLANTER STRIP EXTENSION (SEE AREA STND. DTL. NO.413)~ -CURB AND GUTTER ---CONC. PAD 3/4" MINUS -DRAIN ROCK -CRUSHED ROCK UNDISTURBEDT EARTH 6' D.I. PIPE ~"MEGALUG"~ 6" FLG. × MJ SHOE - MAINLINE TEE -CONC. BLOCK HAVING MIN. 6" SIDE DUTLET 1.75 SQ. FT. BEARING AREA, FLANGED EARTH AND MIN. 6" THICKNESS COMMUNITY DEVELOPMENT SCALE N.T.S. CITY OF SCAPPOOSE DATE 2002 34485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97056 STANDARD FIRE HYDRANT ASSEMBLY



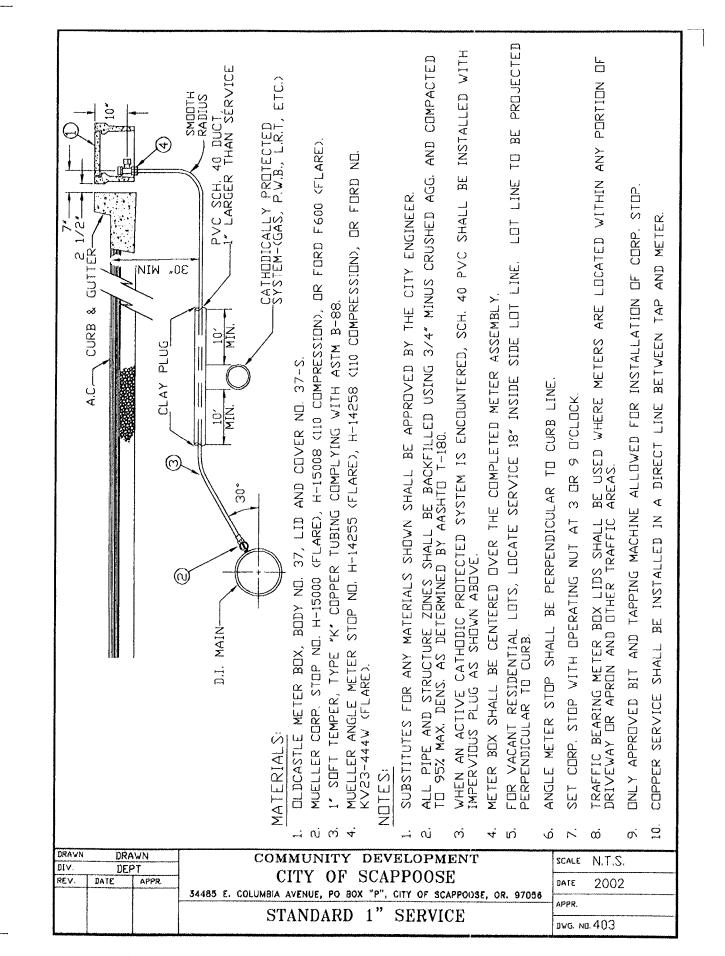


3" A.C. PAVEMENT

NATIVE MATERIAL IS

UNSUITABLE FOR BACKFILL,

4 1.7 2.1 2.4 1.3 *	1/4°
SIZE (Inches) BLOCK PLUGGED CROSS BEND BEND BEND BEND BEND BEND BEND BEND	1
SIZE (Inches)	1
SIZE	1
SIZE (Inches) ① BLOCK PLUGGED CROSS TEE PLUGGED-RUNS BEND WARD WARD WARD <td>1</td>	1
(Inches) © TEE PLUGGED-RUNS 4 2 * * 4 1.7 2.1 2.4 1.3 *	
2 * * * * * * * * * * * * * * * * * * *	ן עא
4 1.7 2.1 2.4 1.3 *	4
4 1.7 2.1 2.4 1.3 *	
	*
	ĸ
	K
8 6.7 8.7 9.5 5.1 2.7 1	.3
10 10.5 13.6 14.8 8 4.1	2
12 15.1 19.6 21.3 11.6 5.9 2	.9
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.)	
ALL VALUES ARE DASED ON THE EGG COUNTY ADDITIONS	nacconstant of
1. ALL VALUES ARE BASED ON THE FOLLOWING ASSUMPTIONS:	
AVG. PRESSURE = 100 PSI x 2 (safety factor); 1500 PSF SOIL BEAR	ING
CAPACITY; NORMAL DISTRBUTION DESIGN VELOCITY NOT TO EXCEED 5	: /S.
2. ALL FITTINGS SHALL BE WRAPPED IN PLASTIC PRIOR TO PLACEMENT D	IF CHNCKFU
 ALL THRUST BLOCKS SHALL BE FORMED TO ELIMINATE ANY CONCRETE FITTING BOLTS. 	AKUUNU
4. BEARING SURFACE OF THRUST BLOCKING SHALL BE AGAINST UNDISTURE	en enti
5. ALL CONCRETE MIX SHALL HAVE A MIN. 28 DAY STRENGTH OF 3000 PS	ירה פחורי
6. ALL PIPE ZONES SHALL BE GRAVEL FILLED AND COMPACTED.	1.
7. THRUST BLOCKS FOR PLUGGED CROSS AND PLUGGED TEE SHALL HAVE	HA DERAD
LIFTING LOOPS INSTALLED AS SHOWN.	איז ועבטרוג
8. VERTICAL THRUST DETAILS - SEE DWG. #409	
9. STRADDLE BLOCK DETAILS - SEE DWG. #410.	
* BLOCK TO UNDISTURBED TRENCH WALLS	
* * THRUST BLOCKS FOR PIPES LARGER THAN 18' WILL BE INDI	VIDUALLY
DESIGNED BY THE ENGINEER.	* ****
	aleleler.
	ISTURBED
	語 ISTURBED
TOUP (TYPICAL X VIII) WIND COMMUNITY DEVELOPMENT STORE	ISTURBED
TOMMUNITY DEVELOPMENT COMMUNITY DEVELOPMENT COMMUNITY OF SCAPPOOSE	ISTURBED N.T.S.
REBAR LIFTING LOUP (TYPICAL X VI VI VI VI VI VI VI VI VI	ISTURBED
REBAR LIFTING LOUP (TYPICAL X Z WN COMMUNITY DEVELOPMENT SCALE CITY OF SCAPPOOSE DATE APPR. J4485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97036 APPR. A	ISTURBED N.T.S.
REBAR LIFTING LOUP (TYPICAL VI COMMUNITY DEVELOPMENT SCALE CITY OF SCAPPOOSE JA485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97058	ISTURBED N.T.S. 2002



6 5/8"

NOTES:

STANDPIPES

COMMUNITY DEVELOPMENT

CITY OF SCAPPOOSE

34485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97056

STANDARD VALVE BOX DETAIL

VERTICAL POSITION.

- VALVE BOX TO BE

CONCRETE ENCASED

~A = VARIABLE,

B = 5" MINIMUM

MAIN

VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A

2. VALVE BOX TOP SHALL BE ADJUSTED

3. PVC SHALL BE ON CONTINOUOUS PIECE -

4. USE FOR ALL VALVES AND 2" BLOW-OFF

SCALE N.T.S.

DATE 2002

TO MEET FINISHED GRADE.

NO BELLS OR COUPLERS.

IF NOT IN PAVED AREA

MAXIMUM OF 13"

12*

CAST IRON VALVE BOX, "VANCOUVER" STYLE,

WATER

MODEL NO. 910

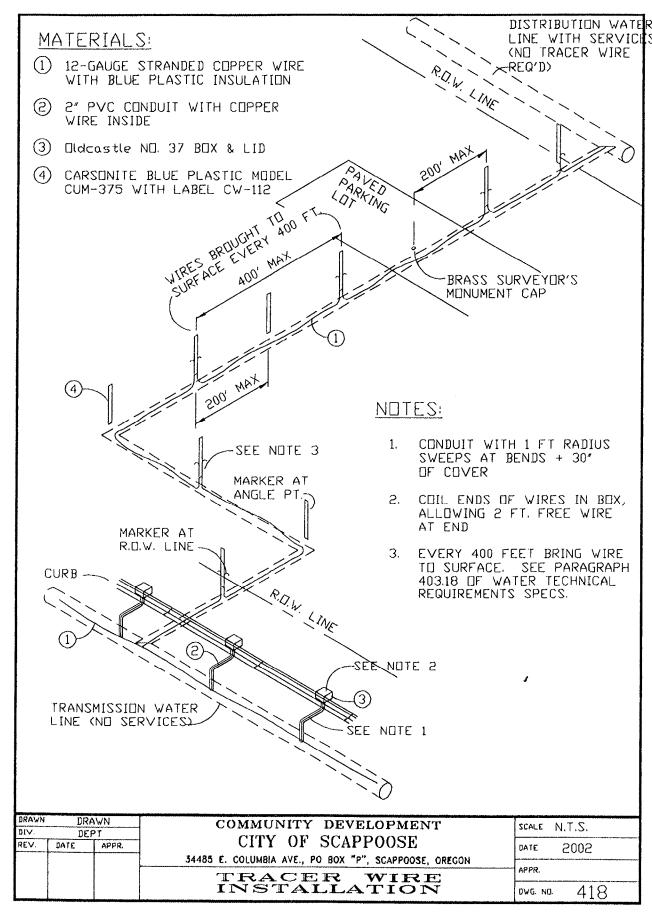
NOTCH 1/16"

DEEP INDICATING

DIRECTION OF MAIN

"VANCOUVER" 18" TALL VALVE BOX

6" PVC SEWER PIPE, ASTM D3034, SDR 35





F K M AER

INFRASTRUCTURE DETAILS PUBLIC WATER

RECORD DRAWING

BY: Brent Foste

DATE: 7/16/2007

Permitted design

Brant S. Foster

OR. P.E. 51051PE

EXPIRES 6/6/2008

drawings stamped

otak Incorporated

17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 FAX: (503) 635-5395 Internet: www.otak.com

C880C38 Project No. Drawing No.

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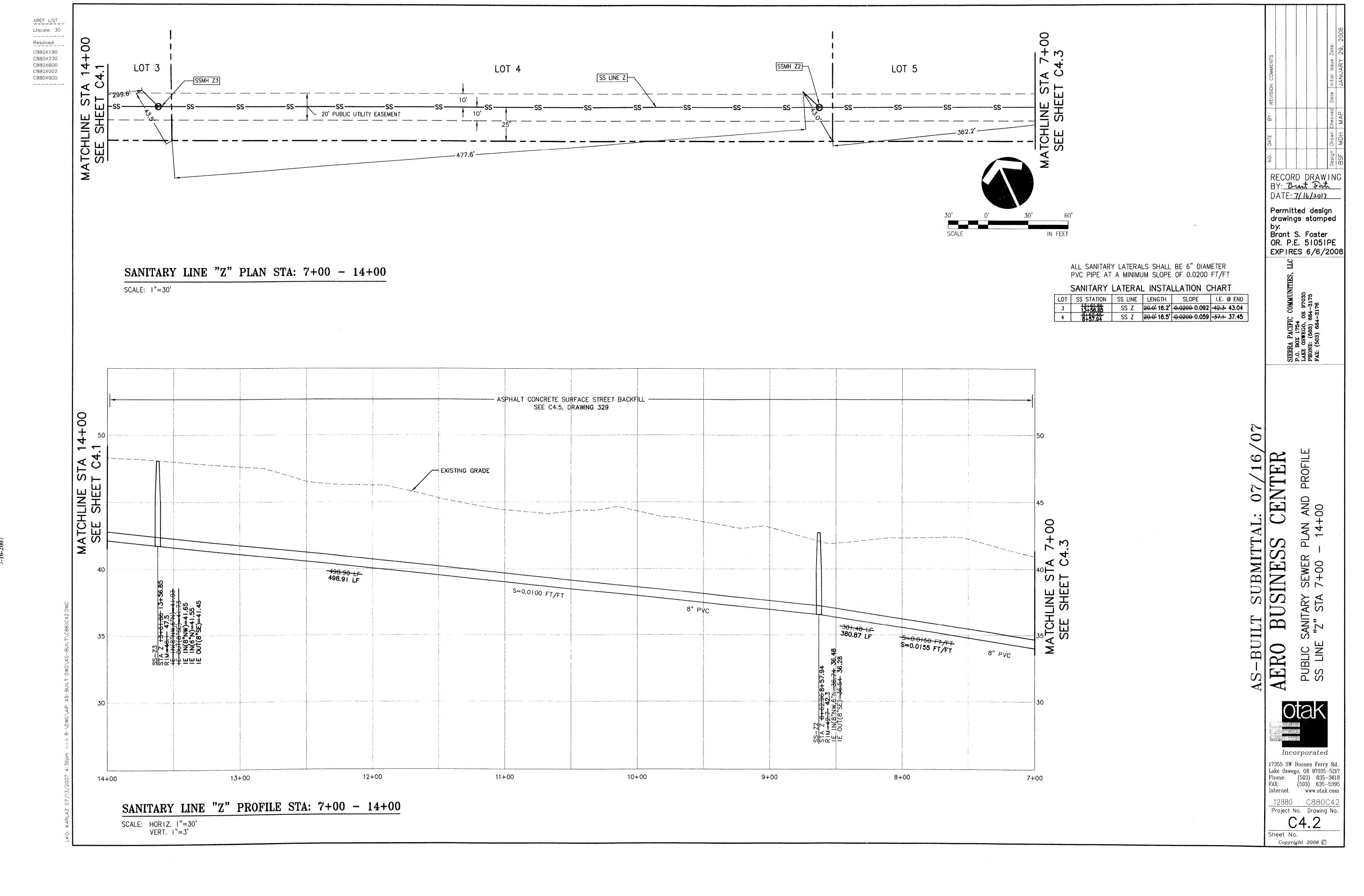
Sheet No.

SUBMITT

XREF_LIST MATCHLINE SS-Y STA 00+50 Ltscale: 30 SEE SHEET C4.4 ____ Resolved C880X190 C880X230 C880×600 LOT 1 LOT 2 LOT 3 C880X002 C880X900 SS LINE Z 20' PUBLIC UTILITY EASEMENT RECORD DRAWING BY: Brant & vista DATE: 7/16/2007 Permitted design drawings stamped by: Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008 ALL SANITARY LATERALS SHALL BE 6" DIAMETER PVC PIPE AT A MINIMUM SLOPE OF 0.0200 FT/FT SANITARY LINE "Z" PLAN STA: 14+00 - 20+53.92 SANITARY LATERAL INSTALLATION CHART SCALE: | "=30"
 LOT
 SS STATION
 SS LINE
 LENGTH
 SLOPE
 I.E. © END

 1
 20+53.91 20+49.39
 SS Z
 20.0'15.2'
 0.0200-0.131
 49.6-50.8
 16+87.93 SS Z 20.0'16.3' 0.0200-0.082 45.8-46.4 SEE SHEET C4.2 - ASPHALT CONCRETE SURFACE STREET BACKFILL ---SEE ¢4.5, DRAWING 329 - EXISTING GRADE 366.89 LF 367.43 LF MATCHLINE STA SEE SHEET S=0.0100 FT/FT S=0.0096 FT/FT 325.+7 LF 325.08 LF S=0.0100 FT/FT S=0.0099 FT/FT 20+00 19+00 21+00 18+00 17+00 16+00 15+00 14+00 SANITARY LINE "Z" PROFILE STA: 14+00 - 20+53.92 SCALE: HORIZ. I"=30' VERT. I"=3' Incorporated 17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 FAX: (503) 635-5395 12880 C880C41
Project No. Drawing No. C4.1 Sheet No. Copyright 2006 ©

Internet: www.otak.com

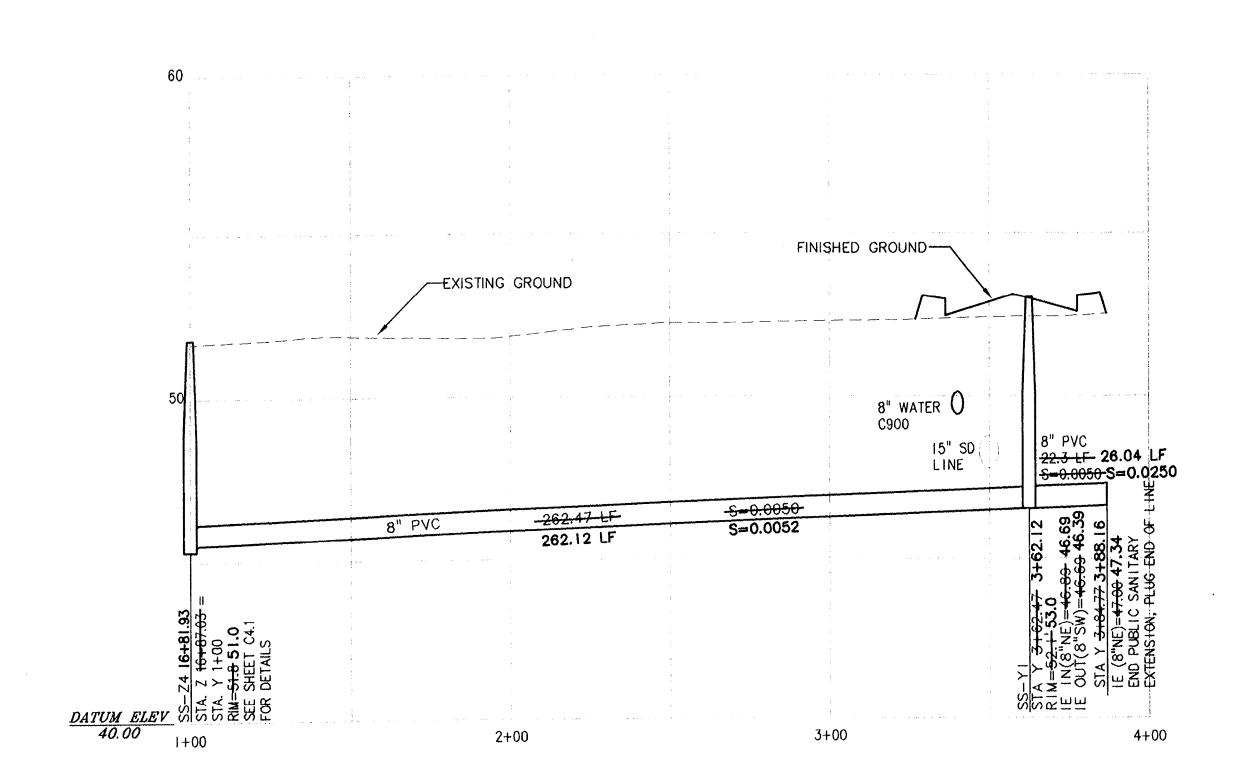


Ltscale: 30 ALL SANITARY LATERALS SHALL BE 6" DIAMETER PVC PIPE AT A MINIMUM SLOPE OF 0.0200 FT/FT Resolved__ C880X190 SANITARY LATERAL INSTALLATION CHART C880X230 C880X600 LOT 5
 LOT
 SS STATION
 SS LINE
 LENGTH
 SLOPE
 I.E. © END

 5
 -1.01.48 / 41.77.07
 SS Z
 20.0' 14.6' 0.0200
 0.083 31.2 31.6
 C880X002 C880X900 C880X610 SSMH X-6 - 20' PUBLIC UTILITY EASEMENT SS LINE Z RECORD DRAWING BY: Breat Fosti TCHLINE SEE SHE DATE: 7/16/2007 Permitted design drawings stamped by:
Brant S. Foster
OR. P.E. 51051PE
EXPIRES 6/6/2008 SANITARY LINE "Z" PLAN STA: 1+00 - 7+00 SCALE: I"=30' ASPHALT CONCRETE SURFACE STREET BACKFILL SEE C4.5, DRAWING 329 00 MATCHLINE STA SEE SHEET C4 - EXISTING GRADE 16 ER 07 381.48 LF 380.87 LF S=0.0150 FT/FT 8" PVC 30 J 01 301.48 LF 377.07 LF S=0.0134 FT/FT SANITARY "Z" STA 25 20 otak 5+00 4+00 3+00 6+00 2+00 1+00 7+00 Incorporated 17355 SW Boones Ferry Rd.
Lake Oswego, OR 97035-5217
Phone: (503) 635-3618
FAX: (503) 635-5395
Internet: www.otak.com SANITARY LINE "Z" PROFILE STA: 1+00 - 7+00 SCALE: HORIZ. I"=30' VERT. I"=3' 12880 C880C43
Project No. Drawing No. C4.3 Sheet No. Copyright 2006 ©

SANITARY LINE "Y" PLAN STA: 1+00 - 3+62.47

SCALE: | "=30"



SANITARY LINE "Y" PROFILE STA: 1+00 - 3+62.47

SCALE: HORIZ. I"=30' VERT. I"=3'

/16/ FER

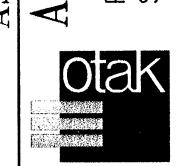
RECORD DRAWING BY: Brant Firster

DATE: 7/16/2007

Permitted design drawings stamped

by:
Brant S. Foster
OR. P.E. 51051PE
EXPIRES 6/6/2008

AS-BUI AERO



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12880 C880C44
Project No. Drawing No. C4.4

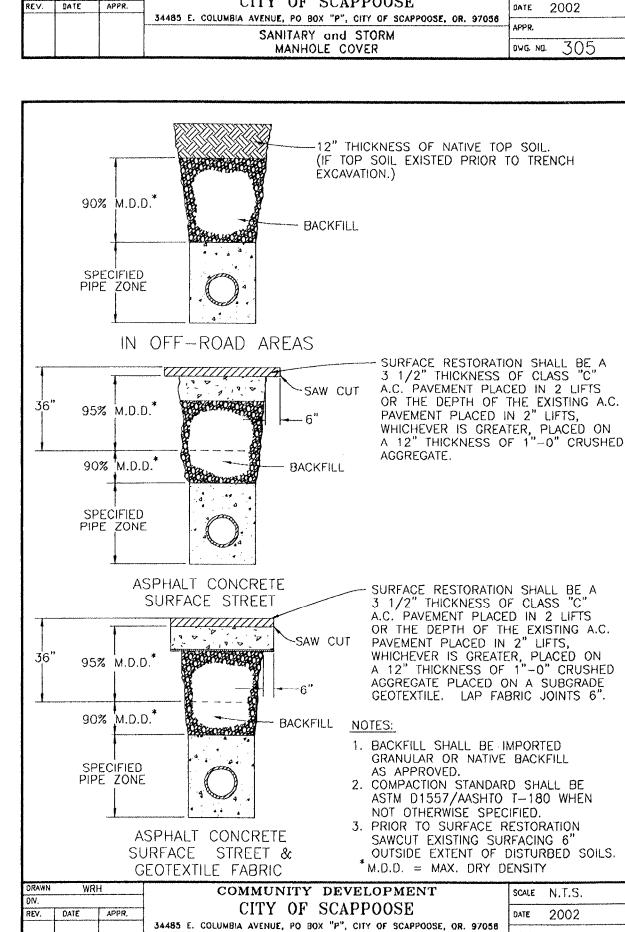
Ltscale: 1 -----Resolved C880X002

3" NOM. NON-SHRINK - GROUT CONNECTION. MANHOLE INSTALLATION ALL MATERIAL AND WORK SHALL COMPLY WITH CITY OF SCAPPOOSE STANDARD SPECIFICATIONS. THE SAND COLLAR SHALL BE FABRICATED BY AN APPROVED MANUFACTURER AND NOT FIELD MADE. THE NOMINAL PIPE SECTION (DIM. "G") SHALL B COATED WITH AN EPOXY ADHESIVE COMPATIBLE WITH BOTH PVC AND CONCRETE GROUT AND COARSE AGGREGATE APPLIED. SECTION THROUGH ADAPTER 4" 4.22" 3.97" 4.25" 4.50" 5.20" 2.90" 6" 6.28" 5.92" 6.32" 6.68" 7.50" 6.25" 8" 8.40" 7.92" 8.46" 8.94" 10.10" 4.10" 10" 10.50" 9.90" 10.57" 11.17" 12.40" 4.70" 24" | 24.80" | 23.38" | 25.04" | 26.46" | 28.80" | 15.75 27" 27.95" 26.35" 28.27" 29.87" 32.50" 18.30" * APPROXIMATE DIMENSION ALL MATERIAL AND WORK SHALL COMPLY WITH CITY OF SCAPPOOSE STANDARD SPECIFICATIONS COMMUNITY DEVELOPMENT CITY OF SCAPPOOSE DATE 2002 34485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97056 MANHOLE ADAPTER (SAND COLLAR)

THIS MANHOLE FRAME

MAY BE USED ONLY FOR

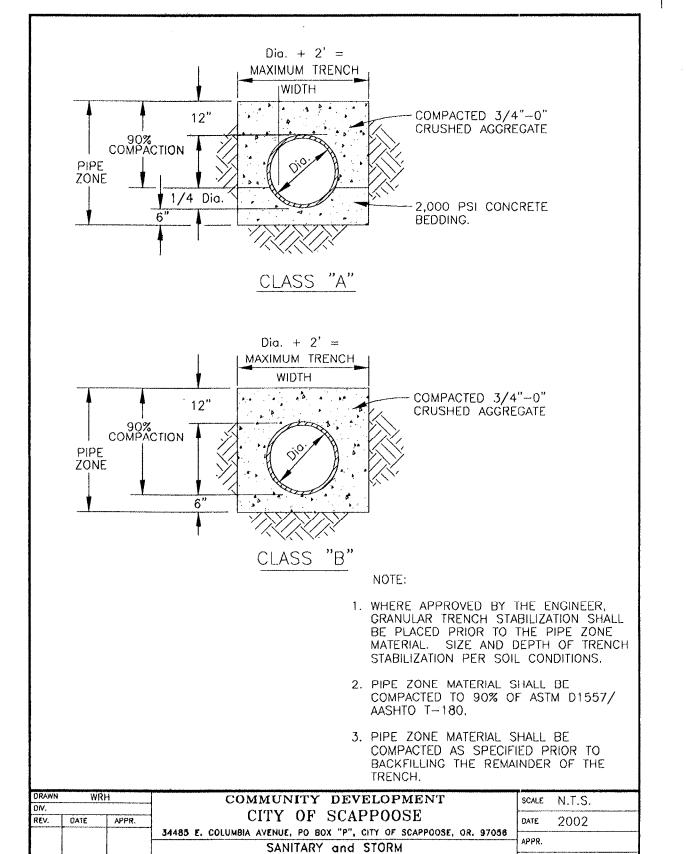
LOCAL ROAD LOCATIONS.



TYPICAL TRENCH SECTION

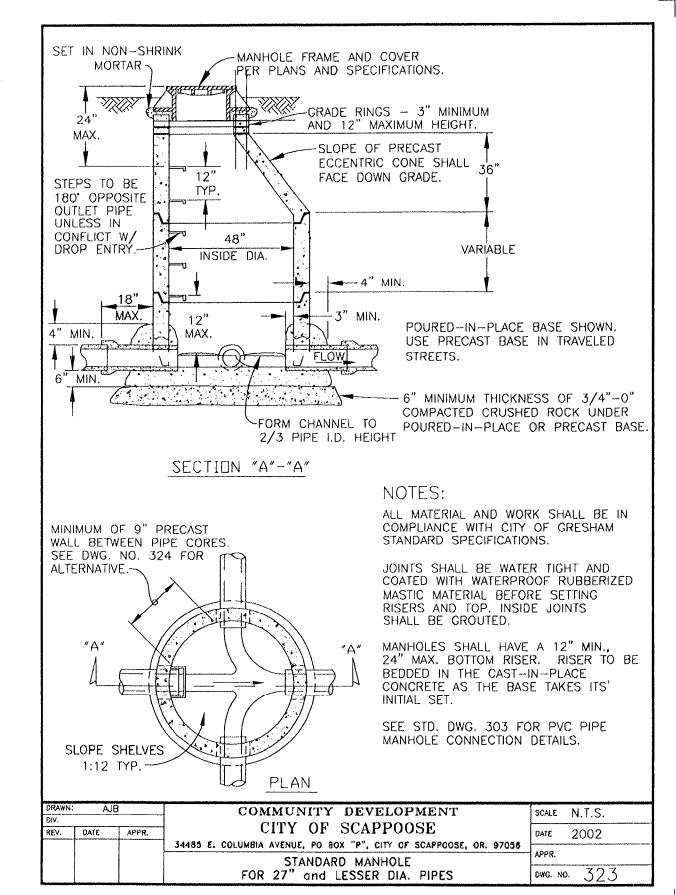
BACKFILL and SURFACING

DWG. NO. 329



PIPE ZONE BEDDING and BACKFILL

DWG. NO. 3





田 H INES M

OFIL SEWER DETAILS

RECORD DRAWING BY: Brant Foster

DATE: 7/16/2007

Permitted design

Brant S. Foster

drawings stamped

OR. P.E. 51051PE

EXPIRES 6/6/2008

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Project No. Drawing No.

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1. COVER AND FRAME TO BE MACHINED FOR TRUE BEARING. 2. MATERIAL SHALL BE GRAY CAST IRON, ASTM A-48, CLASS 30. Wt. = 139 lbs. +/-3. TWO HOLE LID FOR SANITARY SEWERS. 4. 16 HOLE LID FOR STORM SEWERS, 3/4" TOP x 1" BOTTOM HOLES. FOR SANITARY SEWERS ONLY (2) HOLES ARE USED AND SHOWN SHADED. FOR STORM SEWERS ONLY (16) HOLES ARE USED AND SHOWN OPEN & SHADED. THESE COVERS TO BE USED FOR IN-ROAD LOCATIONS ONLY. 24 3/4" MACHINE TO A TRUE BEARING ALL AROUND. 3" 3/4" SECTION "A"-"A" COMMUNITY DEVELOPMENT SCALE N.T.S. CITY OF SCAPPOOSE V. DATE APPR.

MATERIAL TO BE GRAY

CAST IRON ASTM A-48,

SCALE N.T.S.

DATE 2002

WEIGHT = 172 LBS.

CLASS 30.

PLAN

MACHINE TO TRUE 25"

MACHINE TO A TRUE

BEARING ALL AROUND

SECTION "A"-"A"

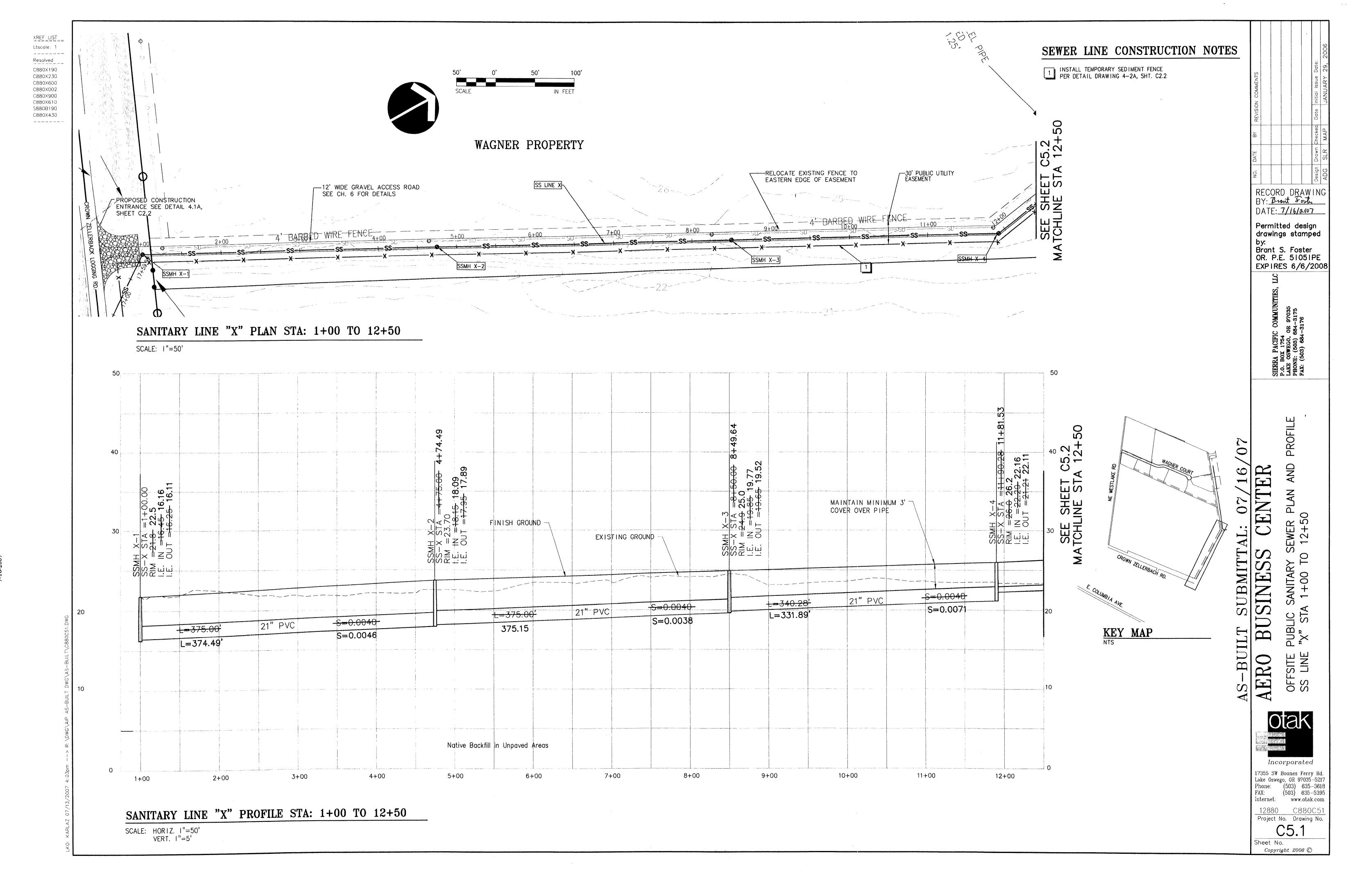
COMMUNITY DEVELOPMENT

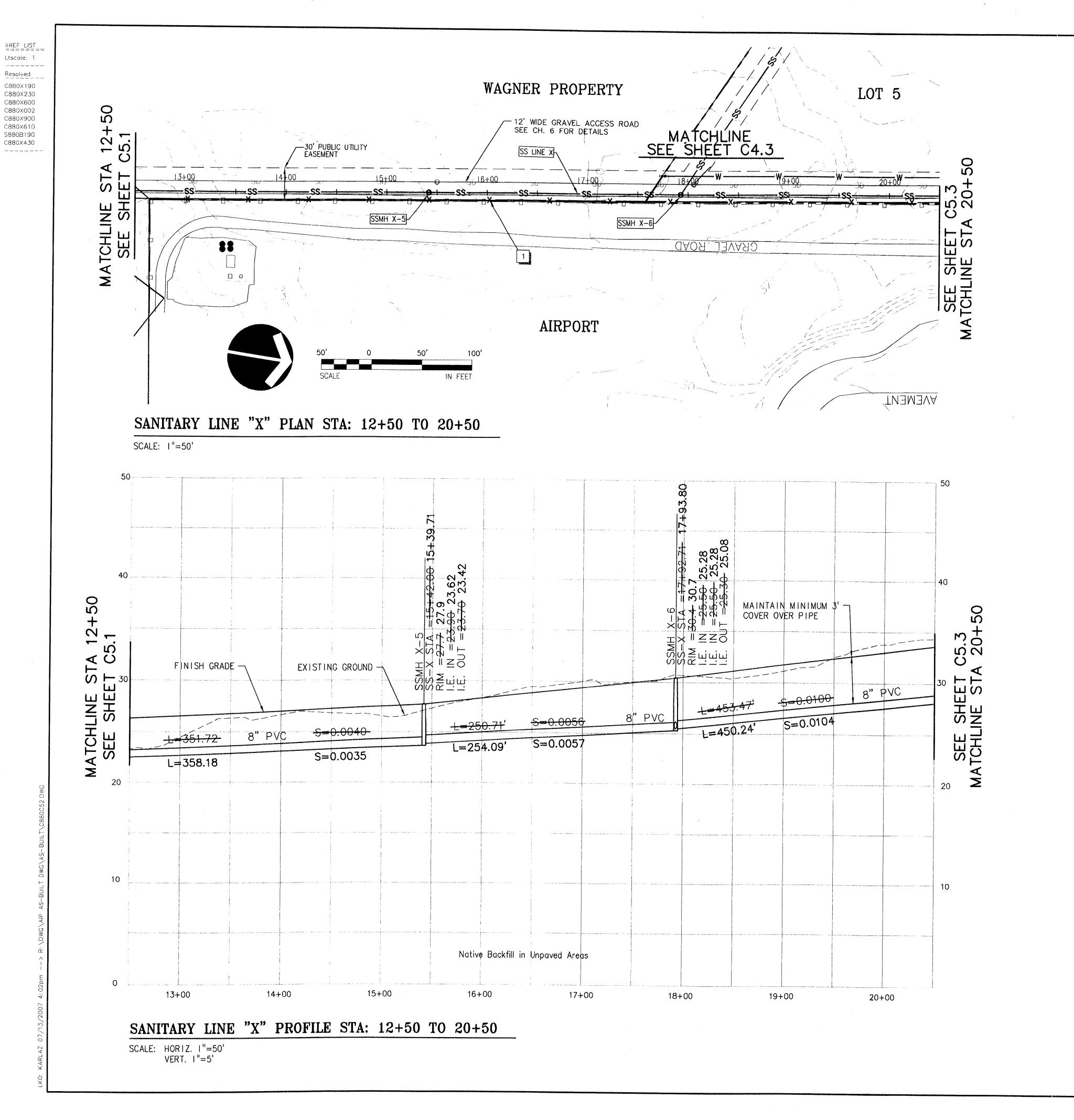
CITY OF SCAPPOOSE

34485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97056

SUBURBAN MANHOLE FRAME

3" DEPTH





SEWER LINE CONSTRUCTION NOTES

KEY MAP

1 INSTALL TEMPORARY SEDIMENT FENCE PER DETAIL DRAWING 4-2A, SHT. C2.2

SUBMITTAL:

L: 07/ CENTI BUSINESS

SEWER PLAN TO 20+50 SANITARY
12+50 1

RECORD DRAWING BY: Bunt Fast

DATE: 7/16/2007

Permitted design drawings stamped

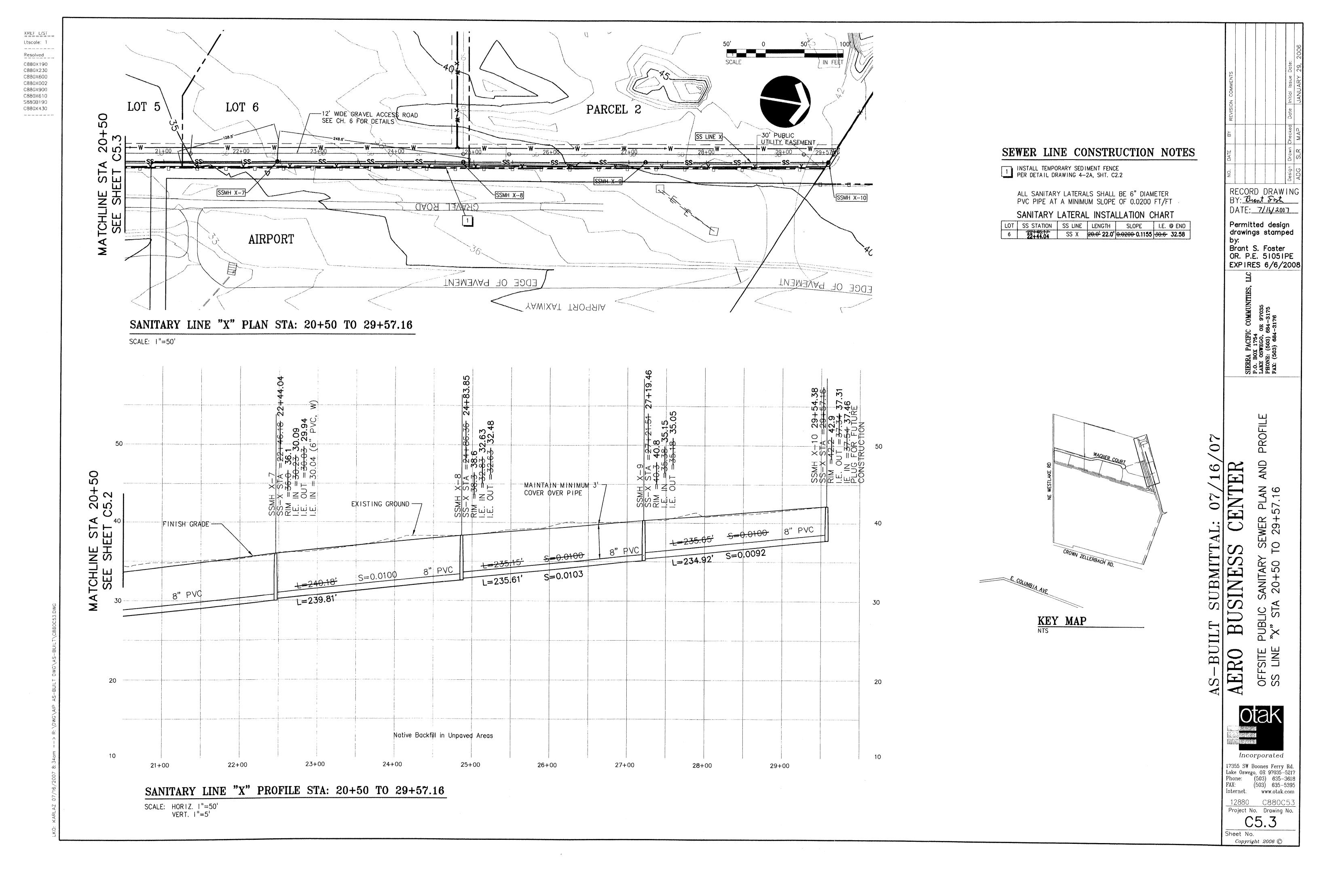
by: Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008

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Project No. Drawing No. C5.2



Ltscale: 50 -----Resolved C880X190 C880X600 C880X002 C880X900 C880X610 S880B190 C880X430 C880X230

12' GRAVEL ACCESS ROAD SEE
DETAIL THIS SHEET SEE SHEET C6.2 SEE SHEET C6.2 1+00 SDMH-CI SDMH-C3 CROWN ZELLERBACH ROAD - INSTALL RIP-RAP PAD AT OUTFALL PER DETAIL THIS SHEET

SD LINE "C" PLAN STA: 1+00 - 5+12.96

SCALE: | "=50"

12" OF 1"-0" COMPACTED ROCK (SEE STREET NOTE #2, SHEET CO.1 FOR DETAILS)

12' GRAVEL ACCESS ROAD
SD-C STA: 1+00 TO 5+12.96
SCALE: NTS

NOTES:
1. CONTROL LINE (C) IS DEFINED AS THE STORM DRAIN LINE.

STRAIGHT GRADES SHALL BE RUN FROM STORM DRAIN MANHOLE RIM ELEVATIONS.

3. CONTRACTOR TO GRADE ACCESS ROAD TO AVOID PONDING.

KEY MAP

FINISH GRADE - MAINTAIN MINIMUM 3' OF COVER OVER PIPE - EXISITING GROUND S=0.0030 S=0.0028 36" SD L=259.64 L=260.47 / 36" SD / L=60.92 -S=0.003 L=57.12 S=0.0033

SD LINE "C" PROFILE STA: 1+00 - 5+12.96

3+00

4+00

5+00

SCALE: HORIZ. I"=50' VERT. I"=5'

2+00

1+00

16 ER CENTE EUSINESS C AERO

OFFSITE SD LINE

SEWER PLAN TO 5+12.96

STORM 1+00

PUBLIC S

RECORD DRAWING BY: But Fort

DATE: 7/16/2007

Permitted design drawings stamped

by: Brant S. Foster OR. P.E. 51051PE

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Project No. Drawing No.

C6.1 Sheet No. Copyright 2006 ©

NOTES:
RIP RAP SHALL BE ODOT CLASS 200.
RIP RAP PROTECTION SHALL BE PLACED OVER A FILTER FABRIC BASE

SECTION

<u>PLAN</u>

RIP-RAP PAD DETAIL
SCALE: NTS

— ODOT CLASS 200 RIP RAP

OR A MINIMUM 6" THICK GRAVEL BASE.

--- FINISH GRADE

CULVERT

FILTER FABRIC OR-6" GRAVEL BASE

CULVERT

Ltscale: 50 -----Resolved C880X190 C880X230 C880X600 C880X002 C880X900 C880X610 S880B190 C880X430

WAGNER PROPERTY ------12" OF 1"-0" COMPACTED ROCK
(SEE STREET NOTE #2, SHEET CO.1
FOR DETAILS) SEE SHEET C6.1 MATCHLINE SD-C STA 5+12.96 30' PUBLIC -UTILITY EASEMENT 12' GRAVEL ACCESS ROAD

SD-B STA: 1+00 TO 11+58.20
SCALE: NTS 1. CONTROL LINE (C) IS DEFINED AS THE STORM DRAIN LINE. STRAIGHT GRADES SHALL BE RUN FROM STORM DRAIN MANHOLE RIM ELEVATIONS, 3. CONTRACTOR TO GRADE ACCESS ROAD TO AVOID PONDING. SD LINE "B" PLAN STA: 1+00 TO 11+00 SCALE: | "=50" +00 MATCHLINE STA 11 SEE SHEET C6.3 MAINTAIN 3' OF COVER -FINISH GROUND-EXISTING GROUND --BUILT KEY MAP S=0.0030 S=0.0034 L=358.62 L=358.39 S=0.0030 S=0.0029 L=360.00 L=360.27 S=0.0030 L=339.58 L=340.55 2+00 3+00 4+00 7+00 6+00 8+00 9+00 10+00 11+00 SD LINE "B" PROFILE STA: 1+00 TO 11+00 SCALE: HORIZ. |"=50' VERT. |"=5'

16 ER LT SUBMITTA BUSINESS

PUBLIC STORM : "B" STA 1+00 OFFSITE SD LINE AER0 otak

SEWER PLAN TO 11+00

RECORD DRAWING BY: Brant Fost

DATE: 7/16/2007

Permitted design drawings stamped

by: Brant S. Foster OR. P.E. 51051PE

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12880 C880C62 Project No. Drawing No. C6.2

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Ltscale: 50

_____ Resolved

C880X190 C880X230

C880X600

C880X002

C880X900 C880X610

S880X190

C880X430

SCALE: HORIZ. I"=50' VERT. I"=5'

WAGNER PROPERTY LOT 5 TRACER WIRE ---12' GRAVEL ACCESS ROAD SEE DETAIL THIS SHEET BROUGHT TO SURFACE 30' PUBLIC -UTILITY EASEMENT SD LINE B EASEMENT PROPOSED SDMH -B4 SANITARY SEWER GRAVEL ROAD SD LINE "B" PLAN STA: 11+00 TO 21+50 SCALE: | "=50" MATCHLINE STA 21 SEE SHEET C6.4 STA I C6. EXISTING GROUND-MAINTAIN 3' OF COVER OVER PIPE FINISH GROUND -30" SD 1-329.81 S-0.0 66 30" SD L=255.44 S=0.0100 L=257.17 S=0.0029 S=0.0039 S=0.0040 L=360.67 L=360.77 SDWH B-5 SD-B STA 17174.31 17 RIM =31.0 IE IN(N)=24.98 **22.41** IE IN(W)=26.28 **24.01** IE OUT(S)=24.78 **22.2**1 13+00 15+00 18+00 20+00 16+00 17+00 19+00 21+00 12+00 11+00 SD LINE "B" PROFILE STA: 11+00 TO 21+50

(SEE STREET NOTE #2, SHEET CO.I FOR DETAILS)

12' GRAVEL ACCESS ROAD SD-C STA: 11+58.20 TO 21+50 SCALE: NTS

NOTES:

I. CONTROL LINE (Ç) IS DEFINED AS THE STORM DRAIN LINE.

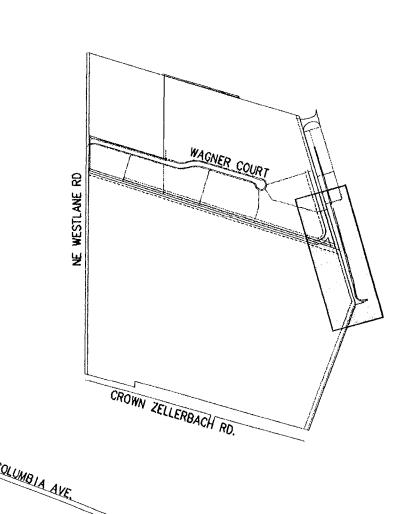
- STRAIGHT GRADES SHALL BE RUN FROM STORM DRAIN MANHOLE RIM ELEVATIONS.
- 3. CONTRACTOR TO GRADE ACCESS ROAD TO AVOID PONDING.

ALL STORM DRAIN LATERALS SHALL BE 12" DIAMETER PVC PIPE AT A MINIMUM SLOPE OF 0.020 FT/FT * = AT MINIMUM SLOPE

STORM SEWER LATERAL INSTALLATION CHART LOT SD STATION SD LINE LENGTH I.E. @ MAIN I.E. @ END SLOPE 5 @ MH B5 SD B2 20' 23' - 24.01 26.7 25.3 0.0200 **0.056** 6 @ MH B6 SD B2 20' 24' - 29.53 30.2 31.4 0.0200 **0.080**

WATER LINE CONSTRUCTION NOTES

STA: 17+43.11, 7.50 L INSTALL 8" MJ X FLG RW GATE VALVE AND BLOW-OFF VALVE. SEE DETAIL 407B, SHEET C3.8



KEY MAP

PUBLIC STORM SEWER "B" STA 11+00 TO 21 BUSINESS OFFSITE SD LINE otak

RECORD DRAWING BY: Brant Fost

DATE: 7/16/2007

Permitted design drawings stamped

by: Brant S. Foster OR. P.E. 51051PE

EXPIRES 6/6/2008

PROFILE

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12880 C880C63 Project No. Drawing No.

C6.3

XREF_LIST Ltscale: 50 -----Resolved

C880X190 C880X230 C880X600 C880X002 C880X900 C880X610

S880X190

C880X430 -----

(SEE STREET NOTE #2, SHEET CO.I FOR DETAILS) LOT 6 2% ----12' GRAVEL ACCESS ROAD SEE DETAIL THIS SHEET 12' GRAVEL ACCESS ROAD √TRACER WIRE\ 30' PUBLIC -BROUGHT TO UTILITY SD-C STA: 11+58.20 TO 21+50 SCALE: NTS SURFACE 200 EASEMENT NOTES:
1. CONTROL LINE (C) IS DEFINED AS THE STORM DRAIN LINE. SD STA 29+32.48- **29+33.26** END CONSTRUCTION STUB AND PLUG 24" STRAIGHT GRADES SHALL BE RUN FROM STORM DRAIN MANHOLE RIM ELEVATIONS. SDMH -B8 LINE FOR FUTURE USE SANITARY SEWER 3. CONTRACTOR TO GRADE ACCESS ROAD TO AVOID PONDING. AIRPORT ELECTRIC TRANSFORMERS WATER LINE CONSTRUCTION NOTES EDGE OF, PAVEMENT STA: 24+47.58, 7.50' L INSTALL 8"x8" MJ x FIG TEE WITH 8" GATE VALVES NORTH AND WEST AND SOUTH AIRPORT TAXIWAY STA: 29+37.41, 7.50' L INSTALL BLOW-OFF VALVE. SEE DETAIL 407B, SHEET C3.8 SD LINE "B" PLAN STA: 21+50 TO 29+32.47 SCALE: 1"=50' 32 ₹ 66. MAINTAIN 3' MINIMUM COVER-FINISH GROUND EXISTING GROUND -24" SD L=379.84 S=0.0119 L=351.96 S=0.0100 L=350.05 S=0.0096 KEY MAP

28+00

29+00

25+00

26+00

27+00

24+00

23+00

SD LINE "B" PROFILE STA: 21+50 TO 29+32.47

22+00

SCALE: HORIZ. I"=50' VERT. I"=5'

PUBLIC STORM SEWER & "B" STA 21+50 TO 29+ LT SUBMITTA BUSINESS OFFSITE SD LINE **AERO**

田

RECORD DRAWING BY: Bunt Fosts

DATE: 7/16/2007

Permitted design drawings stamped

by: Brant S. Foster OR. P.E. 51051PE

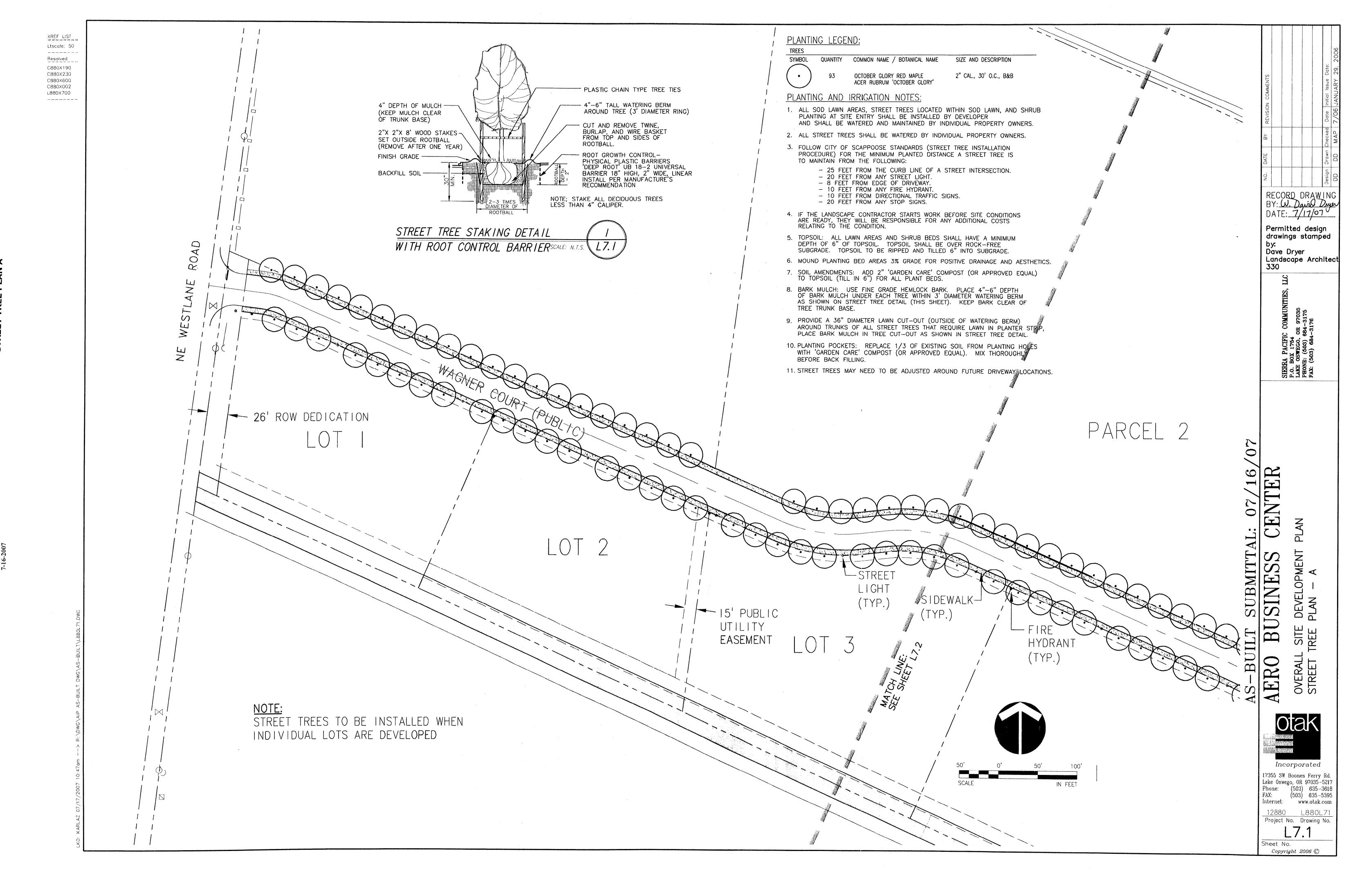
EXPIRES 6/6/2008

PROFILE

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Project No. Drawing No. C6.4

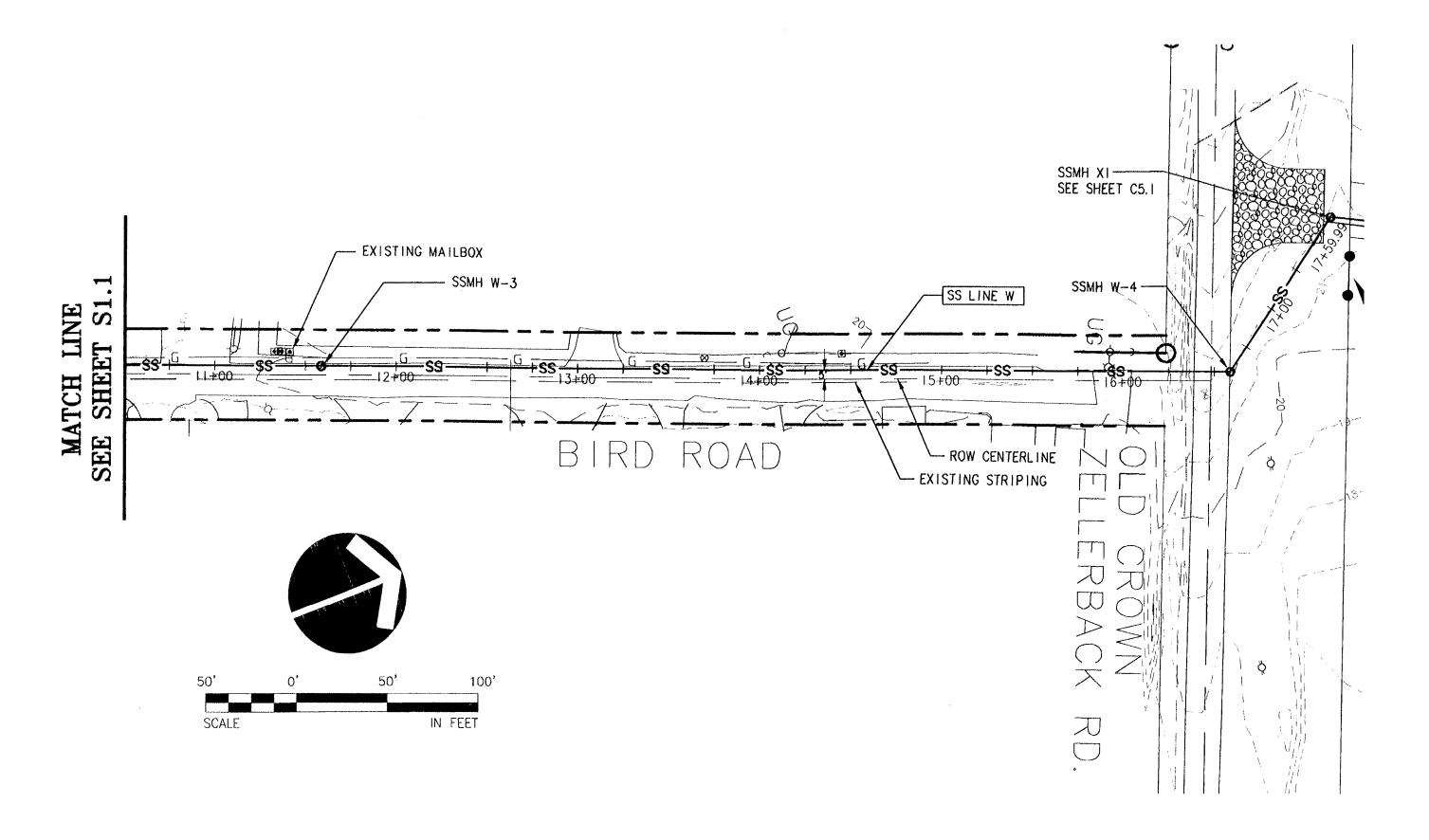
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XREF LIST Ltscale: 50 _____ Resolved C880X600 C880X002 C880X900 C880X430 C880X230 C880X610 S880X190 Unresolved \$8808190

- EXISTING MAILBOX (TYP) BIRD ROAD RECORD DRAWING BY: Bunt Fort DATE: 7/16/2007 Permitted design drawings stamped ---- ROW CENTERLINE - EXISTING STRIPING by: Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008 SS LINE W PLAN STA: 1+00 TO 10+50 SCALE: I"=50' ASPHALT CONCRETE SURFACE STREET BACK FILL SEE SHEET ¢3.6 DETAIL 329. 07 Y SEWER 10+50 MAINTAIN MINIMUM 3'-COVER OVER PIPE - EXISTING GROUND ISINESS MATCH LINE SEE SHEET S1. 21" PVC L=55.93 L=58.68 21" PVC S=0.0045 S=0.0068 S=0.0041 L=496.78 21" PVC S-0 0045 L-500.00 S=0.0043 L=502.69 AERO KEY MAP otak 4+00 2+00 3+00 5+00 6+00 7+00 1+00 8+00 9+00 10+00 17355 SW Boones Ferry Rd. Lake Oswego, OR 97035-5217 Phone: (503) 635-3618 FAX: (503) 635-5395 Internet: www.otak.com SS LINE "BIRD ROAD" PROFILE STA: 1+00 TO 10+50 12880 C880S11 Project No. Drawing No. SCALE: HORIZ. I"=50' VERT. I"=5' S1.1 Copyright 2006 ©

C880X610 S880X190 _____



SS LINE W PLAN STA: 10+50 TO 17+59.99 SCALE: |"=50"

-ASPHALT CONCRETE SURFACE STREET BACK FILL-SEE SHEET C3.6 DETAIL 329. MAINTAIN MINIMUM 3' COVER OVER PIPE - EXISTING GROUND 21" PVC MATCH LINE SEE SHEET S1. S-0.0045 21" PVC S=0.0046 S=0.0044 L=503.66

> SS LINE W PROFILE STA: 10+50 TO 17+59.99 SCALE: HOR | Z. | "=50' VERT. | "=5'

BUILT.

CROWN ZELLERBACH RD.

KEY MAP

PROFILE **AERO**

E PUBLIC SANITARY STA 10+50 TO 17+

RECORD DRAWING BY: Bront Fostin

DATE: 7/16/2007

Permitted design drawings stamped

by: Brant S. Foster OR. P.E. 51051PE EXPIRES 6/6/2008

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www.otak.com 12880 C880S12 Project No. Drawing No.

XREF LIST Ltscale: 1 Resolved

C880X002

3" NOM. NON-SHRINK - GROUT CONNECTION. MANHOLE INSTALLATION ALL MATERIAL AND WORK SHALL COMPLY WITH CITY OF SCAPPOOSE STANDARD SPECIFICATIONS. THE SAND COLLAR SHALL BE FABRICATED BY AN APPROVED MANUFACTURER AND NOT FIELD MADE. THE NOMINAL PIPE SECTION (DIM. "G") SHALL BE COATED WITH AN EPOXY ADHESIVE COMPATIBLE WITH BOTH PVC AND CONCRETE GROUT AND COARSE AGGREGATE APPLIED. SECTION THROUGH ADAPTER 4" 4.22" 3.97" 4.25" 4.50" 5.20" 2.90" 7.00" 6" 6.28" 5.92" 6.32" 6.68" 7.50" 6.25" 7.00°
 6
 6.28
 5.92
 6.32
 6.68
 7.50
 6.25
 7.00

 8"
 8.40"
 7.92"
 8.46"
 8.94"
 10.10"
 4.10"
 7.00"

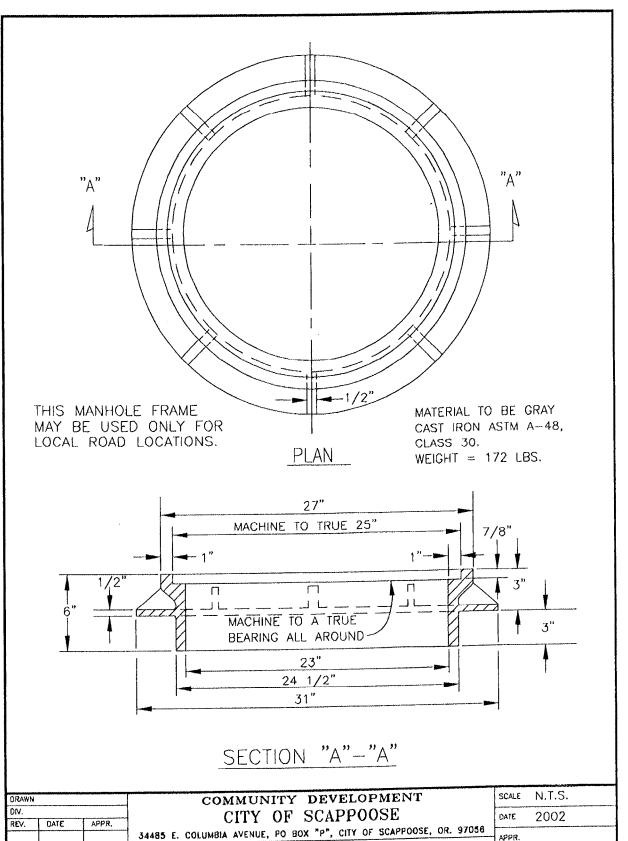
 10"
 10.50"
 9.90"
 10.57"
 11.17"
 12.40"
 4.70"
 7.00"

 12"
 12.50"
 11.78"
 12.58"
 13.30"
 14.50"
 5.15"
 7.00"

 15"
 15.30"
 14.43"
 15.36"
 14.49"
 18.00"
 5.95"
 7.00"

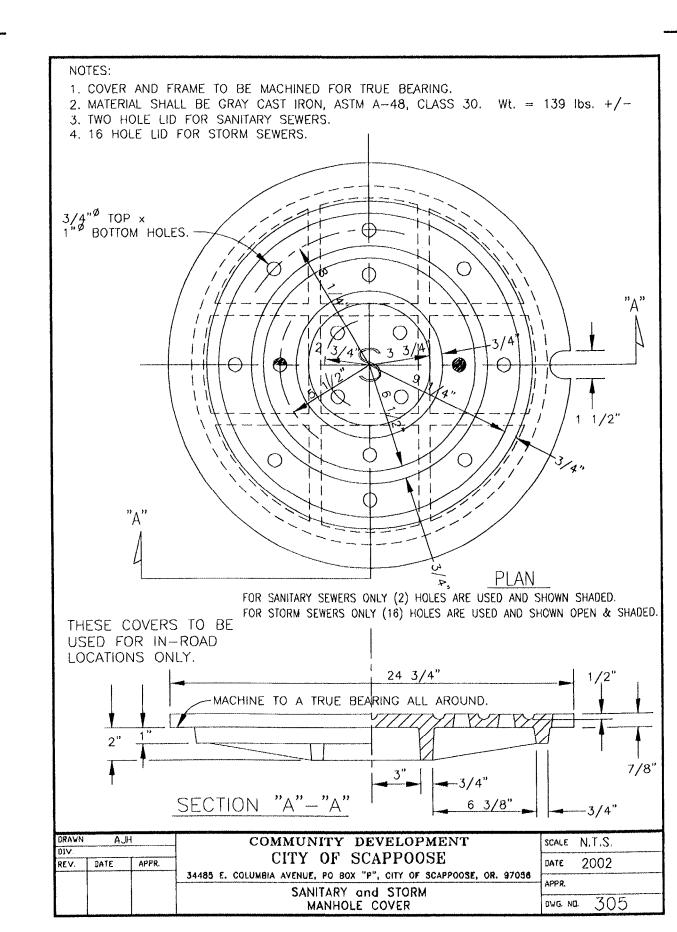
 18"
 18.70"
 17.63"
 18.76"
 19.83"
 21.98"
 5.90"
 7.00"

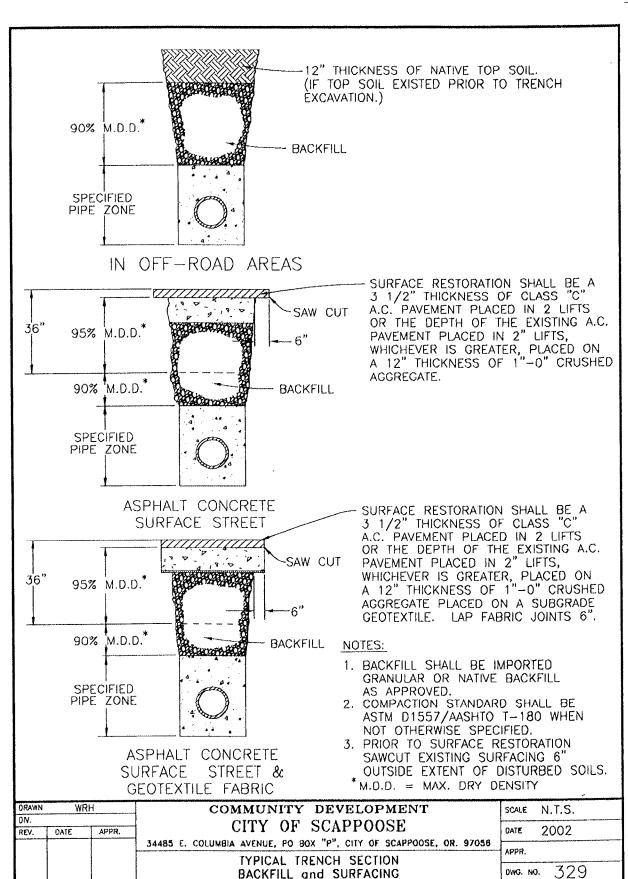
 21"
 22.05"
 20.79"
 22.11"
 23.37"
 25.63"
 6.40"
 7.00"
 24" 24.80" 23.38" 25.04" 26.46" 28.80" 15.75" 27" 27.95" 26.35" 28.27" 29.87" 32.50" 18.30" 7.00 35.00" 7.00 41.50" * APPROXIMATE DIMENSION ALL MATERIAL AND WORK SHALL COMPLY WITH CITY OF SCAPPOOSE STANDARD SPECIFICATIONS SCALE N.T.S. COMMUNITY DEVELOPMENT CITY OF SCAPPOOSE DATE 2002 34485 E. COLUMBIA AVENUE, PO BOX "P", CITY OF SCAPPOOSE, OR. 97058 MANHOLE ADAPTER DWG. NO. 303 (SAND COLLAR)

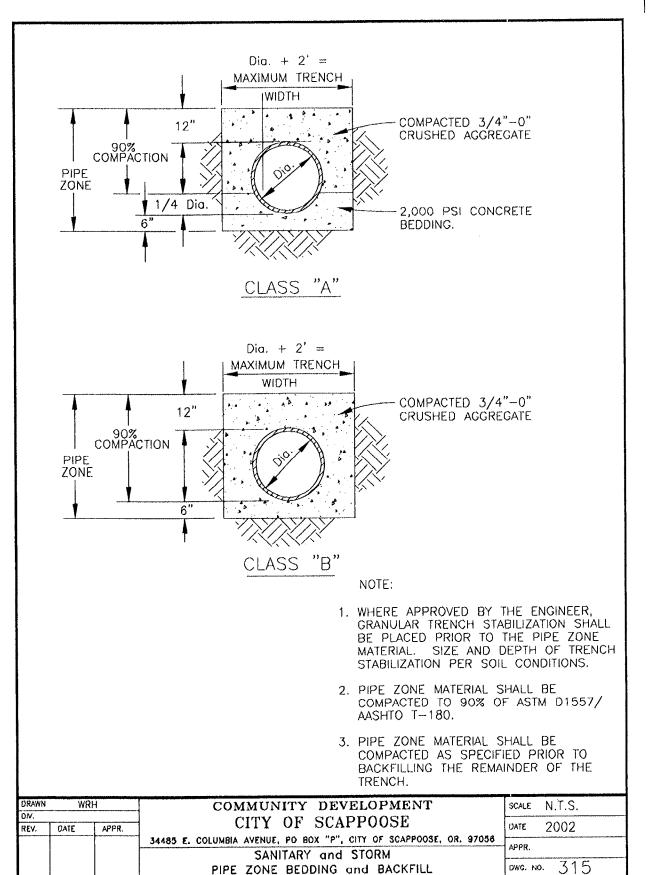


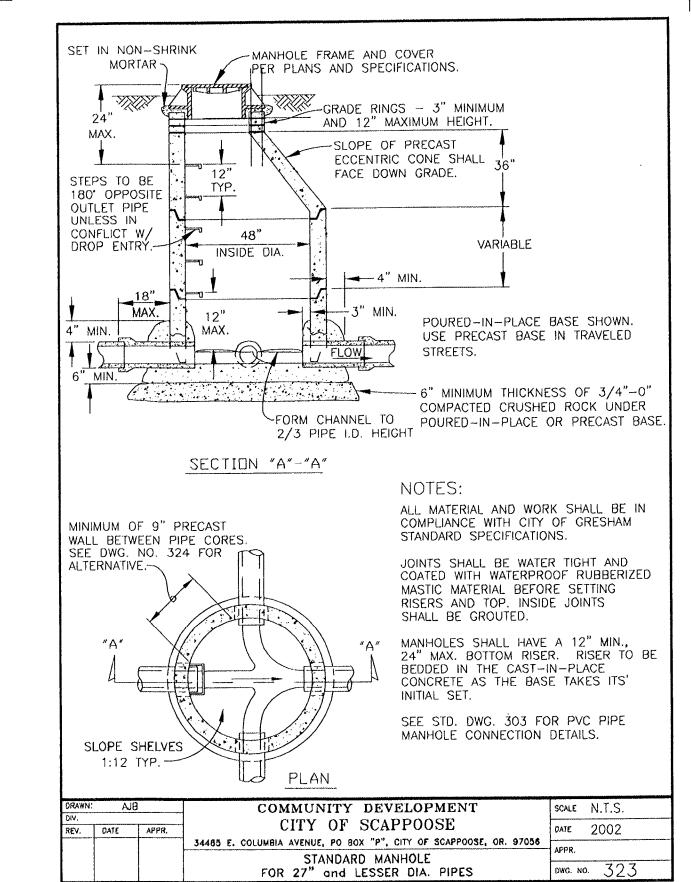
SUBURBAN MANHOLE FRAME

3" DEPTH











田 SUBMITT SANITARY DETAILS

OFF-SITE SANITARY Incorporated

RECORD DRAWING

BY: Brent Fosts

DATE: 7/16/2007

Permitted design

Brant S. Foster

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BACKFILL and SURFACING

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