

# STREET AND DRAINAGE PLANS

## FOXTAIL ESTATES

### SPOKANE COUNTY, WASHINGTON

#### NE 1/4 SECTION 7, T. 24 N., R. 42 E., W.M.



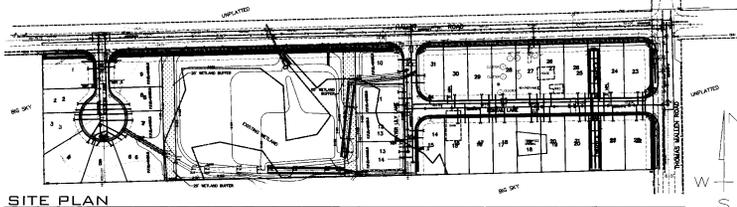
#### STREET GENERAL NOTES

THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT TO CONSTRUCT AND INSTALL TO PROPER WORKING ORDER. ALL IMPROVEMENTS AS DETAILED OR CALLED OUT ON THESE PLANS.

1. ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION, CURRENT EDITION", AND AS AMENDED.
2. THE CONTRACTOR IS REQUIRED TO HAVE A VALID CONSTRUCTION PERMIT ON SITE AT ALL TIMES. THE ABSENCE OF THE PERMIT WILL RESULT IN AN IMMEDIATE SHUTDOWN OF WORK AND THE POSSIBLE REMOVAL OF THOSE ITEMS CONSTRUCTED WITHOUT THE PERMIT.
3. LOCATIONS OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. ANY CORRECTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES.
4. THE CONTRACTOR IS REQUIRED TO HAVE A COMPLETE SET OF THE APPROVED ROAD AND DRAINAGE PLANS ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
5. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER, TODD R. WHIPPLE, P.E., @ 893-2617, THE SITE PROJECT INSPECTING ENGINEER OR HIS REPRESENTATIVE, ALBERT PAUL NELSON, P.E., @ 524-4411 AND THE SPOKANE COUNTY ENGINEER'S OFFICE, CONSTRUCTION ENGINEER, @ 477-3600.
6. FOR CONSTRUCTION OF DRYWELLS, INSTALL FILTER FABRIC, "AMOCO" #4545 OR APPROVED EQUAL, BETWEEN THE WASHED DRAINCOB AND NATIVE SOILS PER SPOKANE COUNTY STANDARD DETAIL B-16.
7. PRIOR TO SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. CALL THE UNDERGROUND UTILITY LOCATION SERVICE AT 456-8000 BEFORE YOU DIG.

#### GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF SITE IMPROVEMENTS SHALL MEET OR EXCEED SITE WORK STANDARDS AND THE STANDARDS AND SPECIFICATIONS SET FORTH BY SPOKANE COUNTY REGULATIONS AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER DUALITY SHALL GOVERN. ALL WORK WITHIN PUBLIC ROW OR EASEMENTS SHALL BE APPROVED BY THE SPOKANE COUNTY INSPECTOR. INSPECTION SERVICES AND CONSTRUCTION CERTIFICATION TO BE PROVIDED BY DESIGNER OF PROJECT SPONSOR/OWNER.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE SPOKANE COUNTY ENGINEER AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION AND TO VERIFY THE LOCATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT THE CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE SPOKANE COUNTY INSPECTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS.
4. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE SPOKANE COUNTY AND ALL UTILITY COMPANIES WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.
5. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NECESSARY FOR THE WORK ON-SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
7. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
8. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
9. FOR WORK AFFECTING PUBLIC ROADWAYS OR IF REQUIRED BY SPOKANE COUNTY THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND SIGNAGE PLAN MULTICOPY FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THESE PLANS. PRIOR TO INSTALLATION AND RECONSTRUCTION CONFERENCE SHALL BE HELD WITH SPOKANE COUNTY.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.
11. PER AGENCY STANDARDS THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING RECORD INFORMATION ON A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE SPOKANE COUNTY INSPECTOR AT ALL TIMES.
13. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. FOR ADDITIONAL INFORMATION CONTACT THE ENGINEER FOR CLARIFICATION AND NOTE ON THE RECORD DRAWINGS.
14. ALL EROSION AND SEDIMENT CONTROL (E.S.C.) MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO GROUND-DISTURBING ACTIVITY. ALL E.S.C. MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR LANDSCAPING.
15. THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF WATER LINES AND DRY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL UTILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACTORS SCHEDULE FOR THIS PROJECT, WHETHER SHOWN OR NOT SHOWN, AS IT RELATES TO THE CONSTRUCTION ACTIVITIES CONTEMPLATED IN THESE PLANS.
16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SUBJECT TO THE JURISDICTION OF THE SPOKANE COUNTY ENGINEERING DEPARTMENT STANDARD DETAILS AND SPECIFICATIONS.
17. ALL CONSTRUCTION OPERATIONS, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTH MOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED EQUIPMENT SHALL GENERALLY BE LIMITED TO THE TIME PERIOD APPROVED BY SPOKANE COUNTY.
18. BASED ON A REQUIREMENT FROM THE SPOKANE COUNTY THE ENGINEER OR HIS DESIGNEE SHALL PERFORM MATERIALS TESTING AND QUALITY CONTROL ON THE PROJECT AND SHALL SUBMIT COPIES OF DAILY REPORTS, TEST REPORTS, PROJECT CERTIFICATION AND RECORD DRAWINGS TO THE SPOKANE COUNTY ENGINEER.
19. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL BY THE SPOKANE COUNTY ENGINEER AND NOTIFICATION OF THE ENGINEER OF RECORD.



#### STORM DRAINAGE NOTES

1. SEE STREET PLAN AND PROFILE SHEETS FOR DRYWELL AND CATCH BASIN TYPES AND LOCATIONS.
2. DRYWELLS SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF THESE DRAWINGS INCLUDING GRADING, SO2, AND DRYWELL INSTALLATION. ALL SWALES WITHIN TRACTS SHALL INCLUDE AN IRRIGATION SYSTEM. ALL IRRIGATION SHALL CONFORM TO SPOKANE COUNTY SWALE IRRIGATION SYSTEM GUIDELINES.
3. ALL SWALES SHOWN SHALL BE ROUGH GRADED PRIOR TO PAVING OF ADJACENT ROADWAY.
4. CONTRACTOR SHALL PROVIDE SPOKANE COUNTY WITH AS-BUILT IRRIGATION PLANS UPON COMPLETION OF ALL POND CONSTRUCTION.
5. INSTALL "AMOCO" #4545 FILTER FABRIC (OR APPROVED EQUAL) IN ALL DRYWELLS. SEE SPOKANE COUNTY STANDARDS (1998 EDITION) SHEET B-16 FOR INSTALLATION LOCATIONS.
6. ALL SWALES WITHIN THE SPOKANE COUNTY RIGHT-OF-WAY IN THE AREA ASSOCIATED WITH THIS PROJECT SHALL BE COMPLETED DURING THE CONSTRUCTION OF THE ROADWAY. THE CONTRACTOR SHALL PERFORM THE SWALE GRADE WORK. INSTALL THE IRRIGATION SYSTEM AND PLACE THE SO2 WITHIN THE SWALE FOLLOWING THE ROAD PAVING WORK.
7. THE CONTRACTOR SHALL MAKE AN EFFORT TO PROTECT ALL DRAINAGE STRUCTURES FROM BEING CONTAMINATED WITH SILT BY INSTALLING FILTER FABRIC UNDER THE LID FOR AT LEAST 4 WEEKS, OR UNTIL THE ESTABLISHMENT OF GRASS AND/OR OTHER SITE CONSTRUCTION WORK HAS ENDED. IN THE EVENT THAT SILT OR OTHER DELETERIOUS MATERIAL IS ALLOWED TO ENTER THE DRYWELLS OR CATCH BASINS, THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE DRYING OR CATCH BASIN PRIOR TO THE SATISFACTION OF THE CERTIFYING ENGINEER.
8. ALL LANDSCAPE AREAS (20" SWALES) ARE TO BE IRRIGATED BY AN AUTOMATIC IRRIGATION SYSTEM INSTALLED BY OR UNDER THE DIRECTION OF THE LANDSCAPE CONTRACTOR. THE IRRIGATION SYSTEM SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES (90 DAY GUARANTEE). AN APPROVED BACKFLOW DEVICE SHALL BE INSTALLED TO PREVENT WATER FROM GOING INTO THE CURB, SIDEWALKS, DRIVEWAYS, ETC. AS SLEEVING; PROVIDE SLEEVING AS REQUIRED UNDER SIDEWALKS, PATHS, DRIVEWAYS, ETC. THE SLEEVING OF THE CONTRACTOR SHALL BE A MEDIUM TO HEAVY DUTY SLEEVING WITH AT LEAST 12" OF COVER (1) FOOT BELOW FINISH GRADE. THE OWNER/ENGINEER IS RESPONSIBLE FOR INSTALLING SLEEVING BEFORE CURBING, SIDEWALKS, PAVING, ETC. IS INSTALLED. PATCH ASPHALT AS NEEDED.
9. LAWN AREAS: LAWN AREAS ARE TO BE IRRIGATED WITH TORO POP-UP HEADS OR EQUIVALENT. (TEST SYSTEM BEFORE BACKFILLING), ETC. TO PREVENT OVERWATERING.
- ADJUSTMENT: AFTER INSTALLATION, ADJUST WALLS, HEADS, EMITTERS, COVERAGE AND TO MINIMIZE OVER SPRAY ON WALLS, FENCES, FAUCETS, DRIVEWAYS.
10. WATER POWER SUPPLY: THE OWNER / GENERAL CONTRACTOR IS TO SUPPLY WATER TAPS FOR HOSE-UP AND SUPPLY POWER FOR CONTROLLER. THE FLOOR OF A GRASSED PERCOLATION AREA (G.P.A.) SWALE INCLUDES THE LEVEL POSITION OF THE FLOOR OF THE SWALE AND THE SLOPE OF THE SWALE UP TO THE G.P.A. OVERFLOW ELEVATION OR TOP OF SWALE. WELL BELOW THE FLOOR OF THE G.P.A. SWALE SHALL BE A MEDIUM TO HEAVY DRAINING MATERIAL WITH A MINIMUM INFILTRATION RATE OF 0.5 INCHES PER HOUR. THE ENGINEER SHALL PROVIDE A WRITTEN STATEMENT WHICH VERIFIES THAT ALL G.P.A. SWALES CONFORM TO THIS REQUIREMENT. THIS WRITTEN STATEMENT SHALL BE SUBMITTED TO THE SPOKANE COUNTY ENGINEER'S OFFICE PRIOR TO INSTALLED FINISHED LANDSCAPING / SO2 AND PRIOR TO FINAL ACCEPTANCE. THE SWALE FLOOR SHALL BE INSTALLED TO HAVE SO2 SWALE WHICH ALSO MEETS OR EXCEEDS THIS MINIMAL PERCOLATION RATE OF 0.5 INCHES PER HOUR.

#### ABBREVIATIONS

SS.....SANITARY SEWER	PI.....POINT OF INTERSECTION	STA.....STATION
W.....WATER MAIN	CU.....POINT OF CURVE	G.....GRADE
MH.....MANHOLE	PT.....POINT OF TANGENCY	GB.....GRADE BREAK
EXIST.....EXISTING	PRC.....POINT OF REVERSE CURVE	IN.....INVERT ELEVATION
CO.....SEWER CLEANOUT	COU.....COURT	CON.....CONCRETE
HYD.....HYDRANT	RD.....ROAD	DI.....DIAMETER
RT.....RIGHT	LN.....LANE	S.....STREET INTERSECTION
LT.....LEFT	STA L.....STATION LENGTH	BDRY.....BOUNDARY
	ACT L.....ACTUAL LENGTH	PET.....PETROLEUM

#### COUNTY DATUM

ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88). ORIGINATING FROM U.S.G.S. MONUMENT #534 NEAR THE INTERSECTION OF GEORGE BLVD AND HAYWARD RD. ELEV=2425.34

DEVELOPERS APPROVAL DATE 8/22/04

<b>ROADWAYS</b> SPOKANE COUNTY ENGINEERS 1026 WEST SPRAGUE AVENUE SPOKANE, WASHINGTON 99260 PHONE: 509-477-3600 FAX: 509-477-7655 CONTACT: WATT ZARECOR, P.E.	<b>WATER PURVEYOR</b> SPOKANE WATER/BYORDER SERVICES E. 914 FOOTHILLS BLVD. SPOKANE, WASHINGTON 99207 PHONE: 509-477-3600 FAX: 509-625-7816 CONTACT: LISA WALSTROM, P.E.	<b>SEWER</b> SPOKANE SEWER DEPARTMENT 909 EAST SPRAGUE AVENUE SPOKANE, WASHINGTON 99202 PHONE: 509-625-7900 FAX: 509-625-7940 CONTACT: MIKE YARME, P.E.
<b>FIRE DEPARTMENT</b> FIRE DISTRICT NO. 10 10 SOUTH PRESLEY DRIVE CHENEY, WASHINGTON 99004 PHONE: 509-624-7103 CONTACT: BRUCE HOLLOWAY, CHIEF	<b>TELEPHONE</b> CREST 904 NORTH COLUMBUS SPOKANE, WASHINGTON 99202 PHONE: 509-455-2580 FAX: 509-455-2104 CONTACT: DAN CRESS	<b>POWER</b> INLAND POWER AND LIGHT 320 EAST SECOND AVENUE SPOKANE, WASHINGTON 99202 PHONE: 509-747-7151 FAX: 509-747-7187 CONTACT: MARY SHEELLY
<b>NATURAL GAS</b> AVISTA UTILITIES 1411 EAST MISSION AVENUE SPOKANE, WA 99202 PHONE: 509-485-4774 FAX: 509-495-8713 CONTACT: LOS MCCAN	<b>CABLE</b> COMCAST BROADBAND 1717 EAST BUCKEY SPOKANE, WASHINGTON 99207 PHONE: 509-484-4931(532426) FAX: 509-484-9281 CONTACT: BRYAN RICHARDSON	<b>ENGINEER</b> WHIPPLE CONSULTING ENGINEERS 824 NORTH MADEIRA STREET SPOKANE, WASHINGTON 99202 PHONE: 509-363-2617 FAX: 509-926-2736 CONTACT: BRUCE R. LARSEN, P.L.S.
<b>SURVEYOR</b> LANDTEK, LLC 624 NORTH MADEIRA STREET SPOKANE, WASHINGTON 99202 PHONE: 509-326-2925 FAX: 509-926-2736 CONTACT: BRUCE R. LARSEN, P.L.S.	<b>ENGINEER</b> COMCAST BROADBAND 1717 EAST BUCKEY SPOKANE, WASHINGTON 99207 PHONE: 509-484-4931(532426) FAX: 509-484-9281 CONTACT: BRYAN RICHARDSON	<b>OWNER</b> FARIBA 601 SOUTH DIVISION STREET SPOKANE, WASHINGTON 99 PHONE: 509-334-4441 CONTACT: BRIAN BALCH

<b>INSPECTION</b>		<b>OWNER</b>	
ALLMEST	12929 E. INDIANA AVENUE	FARIBA	601 SOUTH DIVISION STREET
SPOKANE, WA 99216	PHONE: 509-334-4411	SPOKANE, WASHINGTON 99	PHONE: 509-334-4441
CONTACT: SPOKANE COUNTY ENGINEER'S OFFICE		CONTACT: BRIAN BALCH	

THE DESIGN IMPROVEMENTS SHOWN IN THIS SET OF PLANS AND CALCULATIONS CONFORM TO APPLICABLE EDITIONS OF THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT. ALL DESIGN DEVIATIONS HAVE BEEN APPROVED BY THE SPOKANE COUNTY ENGINEER. I APPROVE THESE PLANS FOR CONSTRUCTION.

#### INDEX TO PLAN SHEETS

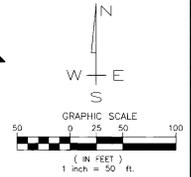
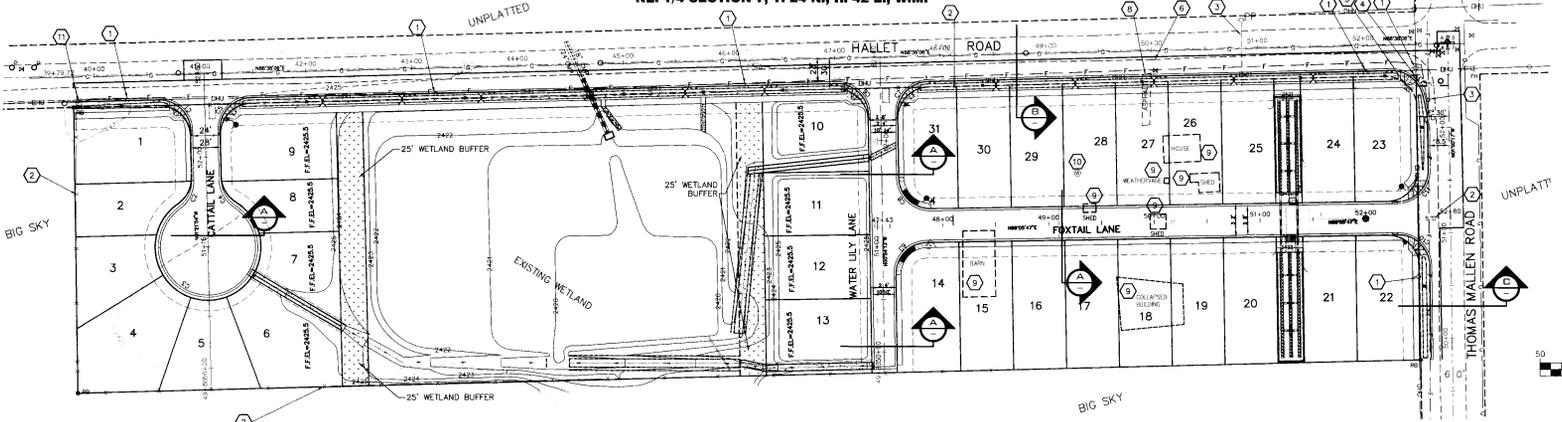
- SHEET NO. 1 COVER AND NOTES
- SHEET NO. 2 SITE PLAN - SECTIONS - DETAILS
- SHEET NO. 3 GRADING PLAN
- SHEET NO. 4 HALLETT ROAD, 39+74.74 TO 52+80.00
- SHEET NO. 5 THOMAS MALLEN ROAD, 49+84.91 TO 52+80.00
- SHEET NO. 6 FOXTAIL LANE, 47+43.00 TO 52+80.00
- SHEET NO. 7 WATER LILY LANE, 49+80.00 TO 52+80.00
- SHEET NO. 8 CATTLE LANE, 49+80.00 TO 52+80.00
- SHEET NO. 9 SWALE DETAILS
- SHEET NO. 10 SWALE DETAILS
- SHEET NO. 10A SWALE DETAILS
- SHEET NO. 11 EROSION CONTROL PLAN
- SHEET NO. 12 EROSION CONTROL DETAILS



**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**HALLETT ROAD AND THOMAS MALLEN ROAD**  
**SPOKANE COUNTY, WASHINGTON**

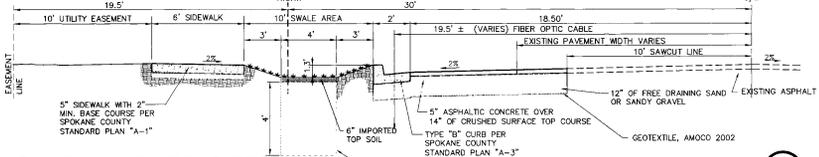
**SHEET**  
**1 OF 12**  
 JOB NUMBER  
**2004-31**

P-1946 *Englund Survey*



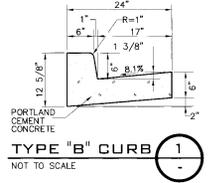
**SITE AND DEMOLITION PLAN**

SCALE: 1" = 50'



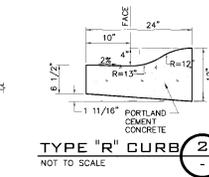
**THOMAS MALLEM ROAD SECTION**

NOT TO SCALE



**TYPE "B" CURB 1**

NOT TO SCALE



**TYPE "R" CURB 2**

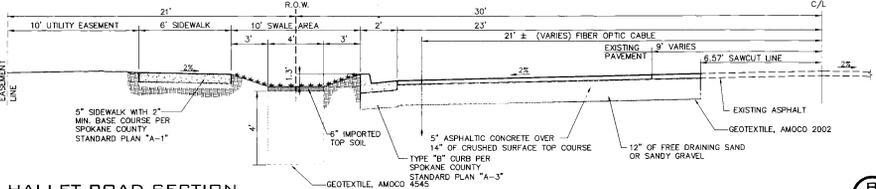
NOT TO SCALE

**DEMOLITION AND CONSTRUCTION NOTES**

- 1 EXISTING POWER POLES ALONG HALLET ROAD RIGHT TO BE RELOCATED; STA. 40+30.81, 43+22.49; 45+24.83, GUY POLE; 46+16.03; 52+01.45 AND 52+49.23 TO 2' BEHIND CURB MINIMUM, CONTACT INLAND POWER AND LIGHT 72 HOURS PRIOR TO CONSTRUCTION.
- 2 EXISTING FENCE TO BE REMOVED.
- 3 EXISTING UNDERGROUND POWER TO SITE TO BE ABANDONED BY INLAND POWER AND LIGHT. CONTACT 72 HOURS PRIOR TO ANY CONSTRUCTION.
- 4 EXISTING SIGN STA. 52+49.16, 30.78' RT. TO BE RELOCATED PER SPOKANE COUNTY STANDARDS.
- 5 EXISTING SIGN STA. 52+41.44, 43.06' RT. TO BE RELOCATED PER SPOKANE COUNTY STANDARDS.
- 6 EXISTING WATER SERVICE AND VALVE TO BE ABANDONED PER CITY OF SPOKANE STANDARDS CONTACT THE CITY OF SPOKANE WATER AND HYDRO DEPARTMENT 72 HOURS PRIOR TO CONSTRUCTION.
- 7 EXISTING ASPHALT DRIVEWAY STA. 49+94.88, 22.68' RT. TO BE REMOVED AND DISPOSED OF PER SPOKANE COUNTY ENGINEERING DEPARTMENT.
- 8 EXISTING HOUSE, SHEDS; COLLAPSED BUILDING, WEATHER VANE, BARN TO BE REMOVED AND DISPOSED OF PER SPOKANE COUNTY STANDARDS.
- 9 EXISTING WATER WELL (CISTERN) TO BE ABANDONED PER CITY OF SPOKANE, SPOKANE COUNTY AND D.O.E STANDARDS.
- 10 EXISTING POWER VAULT TO BE RELOCATED.

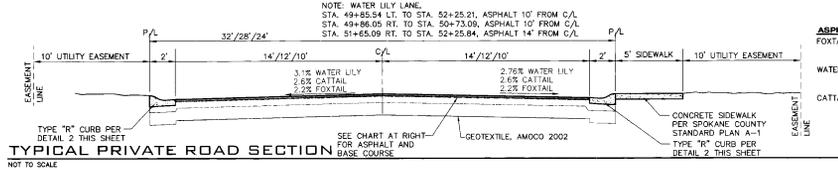
**THOMAS MALLEM ROAD**

- 1 EXISTING POWER POLE STA. 50+59, LT. TO REMAIN AND SIDEWALK TO BE POURED AROUND POLE, CONTACT INLAND POWER AND LIGHT 72 HOURS PRIOR TO CONSTRUCTION.
- 2 EXISTING SIGN STA. 51+15.71, LT. TO BE RELOCATED PER SPOKANE COUNTY STANDARDS.
- 3 EXISTING FIBER OPTIC CABLE MANHOLE SEE DETAIL 1 SHEET 5 FOR REVISIONS TO THE NEW CURB.



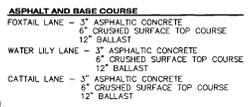
**HALLET ROAD SECTION**

NOT TO SCALE



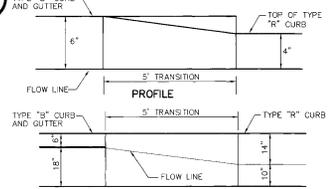
**TYPICAL PRIVATE ROAD SECTION**

NOT TO SCALE



**ASPHALT AND BASE COURSE**

- HALLET LANE - 3" ASPHALTIC CONCRETE
- 6" CRUSHED SURFACE TOP COURSE
- 12" BALLAST
- WATER LILY LANE - 3" ASPHALTIC CONCRETE
- 6" CRUSHED SURFACE TOP COURSE
- 12" BALLAST
- CATTAIL LANE - 3" ASPHALTIC CONCRETE
- 6" CRUSHED SURFACE TOP COURSE
- 12" BALLAST



**"B" TO "R" CURB TRANSITION 3**

NOT TO SCALE



COUNTY DATUM  
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) ORIGINATING FROM U.S.G.S. MONUMENT AREA NEAR THE INTERSECTION OF QUINN BLVD. AND HAYWARD RD. SEELY-4125.24

*Tom H*  
DEVELOPER'S APPROVAL

8/22/06  
DATE

NO.	DATE	BY	REVISIONS
08/21	RLM	SUBMITTAL TO SPOKANE COUNTY ENGINEERS	
10/17	RLM	ORIGINAL PLAN PREPARATION	

SCALE: HORIZONTAL: AS SHOWN  
VERTICAL: N.A.  
PROJ #: 2004-31  
DATE: 08/21/06  
DRAWN: RLM  
APPROVED: TRW



**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
SITE PLAN-SECTIONS-DETAILS-NOTES  
SPOKANE COUNTY, WASHINGTON

SHEET 2 OF 12  
JOB NUMBER 2004-31

p. 1946 Eng Road Drainage

UNDERGROUND SERVICE ALERT  
 ONE-CALL NUMBER  
**456-8000**  
 CALL TWO BUSINESS DAYS  
 BEFORE YOU DIG

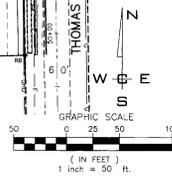
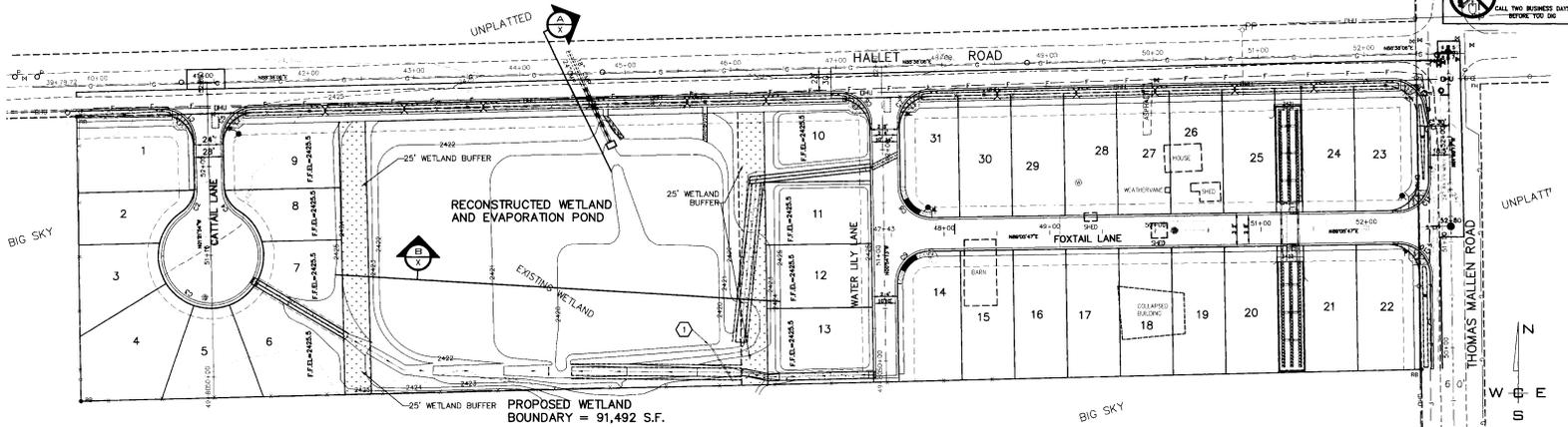
**EXISTING WETLAND**  
 ELEVATION AREA  
 < 2422 10,798 S.F.  
 2422-2423 29,195 S.F.  
 2423-2424 19,758 S.F.

**PROPOSED WETLAND**  
 ELEVATION AREA  
 < 2422 11,326 S.F.  
 2422-2423 30,452 S.F.  
 2423-2424 33,180 S.F.

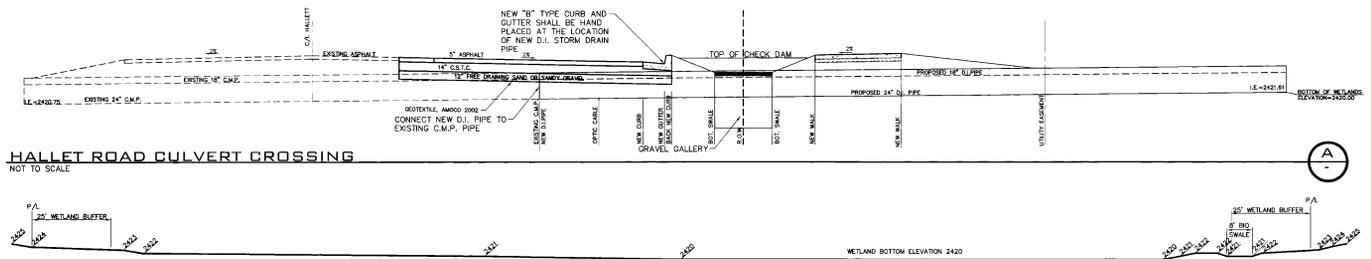
**AREA OF LOSS**  
 24,891 S.F. X 1.25 =  
 31,113 S.F.

**REPLACEMENT AREA**  
 AVAILABLE  
 34,307 S.F.

**BIOFILTRATION SWALE**  
 AREA IN BUFFER:  
 1,010 S.F. BOTTOM AREA  
 (NOT INCLUDING SIDE  
 SLOPES)



**SITE / GRADING PLAN**  
 SCALE: 1" = 50'



**SECTION - WETLAND**  
 NOT TO SCALE

**CONSTRUCTION NOTES**

1 PROVIDE AND INSTALL 42 ± L.F. OF 12" C.P. STORM DRAIN PIPE, STA. (S)49+82.83, 145.07' L.T., I.E.=2420.70, TO STA. (N)50+18.15, 167.13' L.T., I.E.=2420.00, SLOPE=0.0167'/FT.

**COUNTY DATUM**  
 ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88), ORIGINATING FROM USGS MONUMENT NEAR THE INTERSECTION OF GROSS BLVD AND HAYWARD RD. ELEV=2422.34'

*Tom PL*  
 DEVELOPER'S APPROVAL

**8/22/06**  
 DATE

NO.	DATE	BY	REVISIONS
06/04		RLM	SUBMITTAL TO SPOKANE COUNTY ENGINEERS
07/17		RLM	ORIGINAL PLAN PREPARATION

**SCALE:**  
 HORIZONTAL: AS SHOWN  
 VERTICAL: N.A.

**PROJ #:** 2004-01  
**DATE:** 08/06/06  
**DRAWN:** RLM  
**APPROVED:** TRW

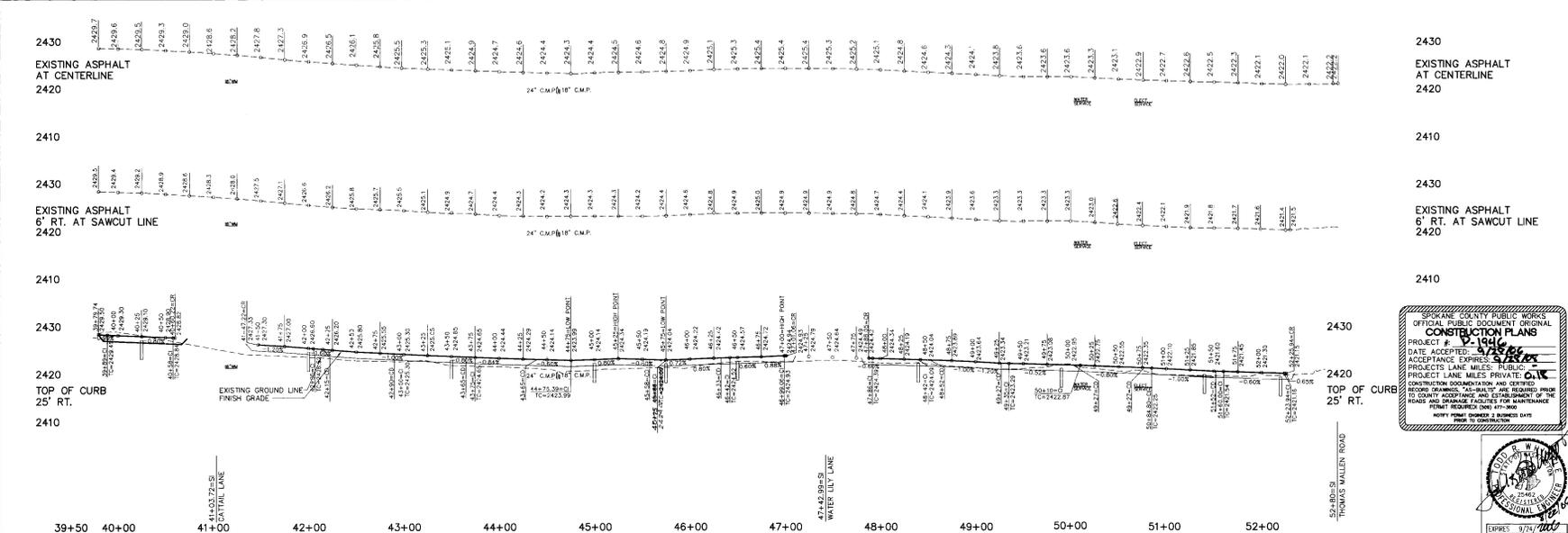
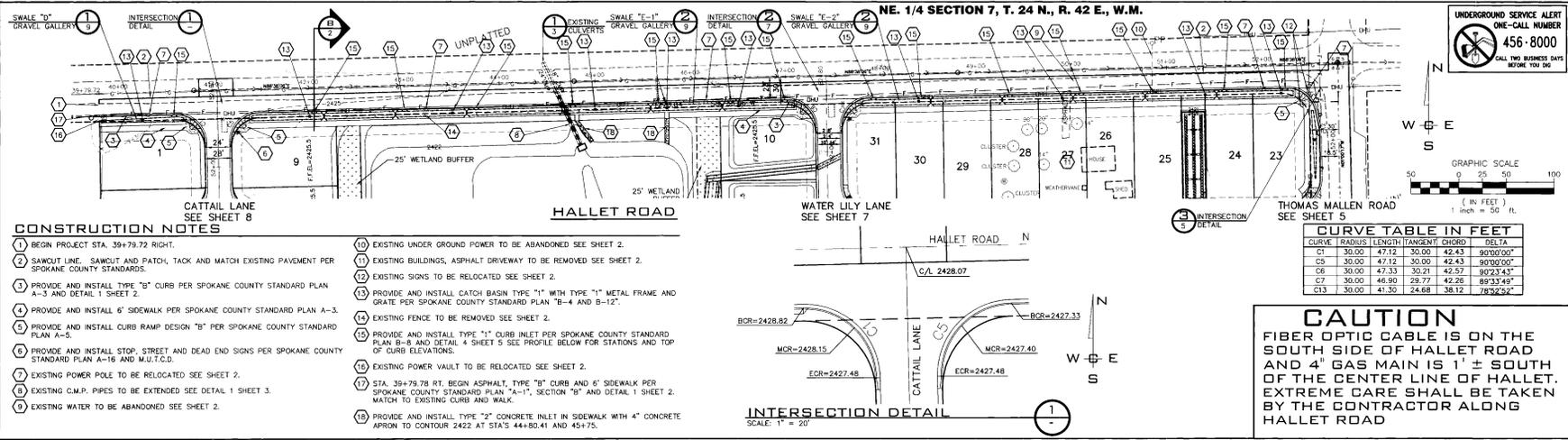


**STREET AND DRAINAGE PLANS  
 FOXTAIL ESTATES  
 GRADING PLAN  
 SPOKANE COUNTY, WASHINGTON**



**SHEET 3 OF 12**  
**JOB NUMBER 2004-031**

*p. 1946 Eng. Road Drainage*



**COUNTY DATUM**

**SCALE:**  
HORIZONTAL: 1" = 90'  
VERTICAL: 1" = 10'

**PROJ #:** 2004-31  
**DATE:** 08/21/06  
**DRAWN:** RLM  
**APPROVED:** TRW

**WCE**  
WHITFIELD CONSULTING ENGINEERS  
CIVIL AND TRANSPORTATION ENGINEERING  
2008 NORTH SHELLEMAN ROAD  
SPOKANE, WASHINGTON 99207  
PH: 509-625-2677 FAX: 509-625-0277

**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**HALLET ROAD**  
STA. 39+79.72 TO STA. 52+80  
SPOKANE COUNTY, WASHINGTON

**DEVELOPER'S APPROVAL**  
DATE: 8/22/06

**REVISIONS**

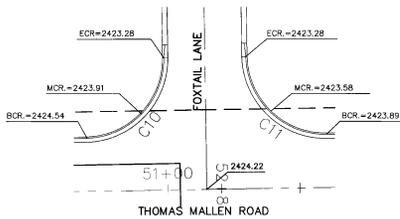
NO.	DATE	BY	REVISIONS
08/21	RLM	SUBMITTAL TO SPOKANE COUNTY ENGINEERS	
10/24	RLM	ORIGINAL PLAN PREPARATION	

**OFFICIAL PUBLIC DOCUMENT ORIGINAL CONSTRUCTION PLANS**  
PROJECT # 21946  
DATE ACCEPTED: 8/22/06  
PROJECTS LANE MEES: PUBLIC  
PROJECT LANE MEES: PRIVATE: C.W.K.  
CONSTRUCTION DOCUMENTATION AND CERTIFIED PROPOSAL DRAWINGS, AND ALL OTHERS, ARE REQUIRED UNDER THE RULES AND REGULATIONS OF THE SPOKANE COUNTY ENGINEERING BOARD.  
PRINTED REVISIONS: 08/22/06  
FOXY PRINTING COMPANY SPOKANE WA 99201

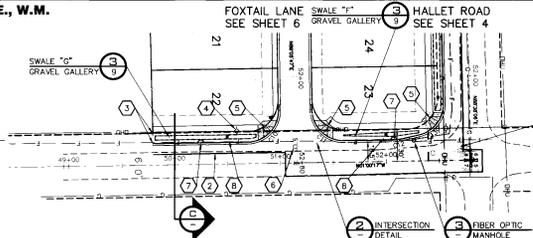
**SHEET 4 OF 12**  
JOB NUMBER 2004-31

*P. 1946 Eng Road Drainage*

NE. 1/4 SECTION 7, T. 24 N., R. 42 E., W.M.



INTERSECTION DETAIL  
SCALE: 1" = 20'

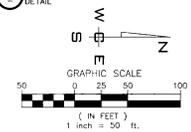


THOMAS MALLEM ROAD  
CONSTRUCTION NOTES

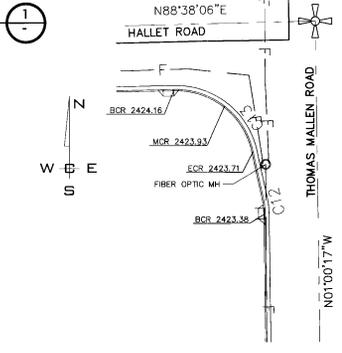
- (1) NOT USED
- (2) SAWCUT LINE. SAWCUT AND PATCH, TACK AND MATCH EXISTING PAVEMENT PER SPOKANE COUNTY STANDARDS.
- (3) STA. 49+79.81, 20' LT., BEGIN ASPHALT, TYPE "B" CURB, AND 4' SIDEWALK PER SPOKANE COUNTY STANDARD PLAN A-1, SECTION "C" AND DETAIL 1 SHEET 2, MATCH TO EXISTING CURB AND WALK.
- (4) POWER POLE TO REMAIN, CONTRACTOR SHALL POUR SIDEWALK CONCRETE AROUND POLE ALSO SEE SHEET 2.
- (5) PROVIDE AND INSTALL CURB RAMP DESIGN "B" PER SPOKANE COUNTY STANDARD PLAN A-5.
- (6) EXISTING SIGN TO BE RELOCATED SEE SHEET 2.
- (7) PROVIDE AND INSTALL TYPE "T" CURB INLET PER SPOKANE COUNTY STANDARD PLAN "B"-B" AND SEE DETAIL 4 THIS SHEET.
- (8) PROVIDE AND INSTALL CATCH BASIN TYPE "T" WITH TYPE "T" METAL FRAME AND GRATE PER SPOKANE COUNTY STANDARD PLAN "B"-4 AND B-12."

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C10	30.00	43.12	30.00	42.43	90°00'00"
C11	30.00	47.12	30.00	42.43	90°00'00"
C12	30.00	6.06	3.04	6.05	113°54'50"
C13	30.00	41.30	24.68	38.12	78°22'29"

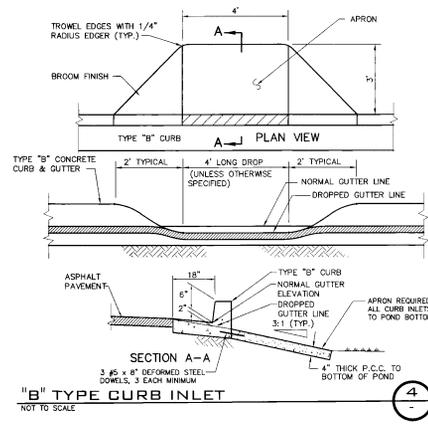
UNDERGROUND SERVICE ALERT  
ONE-CALL NUMBER  
456-8000  
CALL TWO BUSINESS DAYS BEFORE YOU DIG



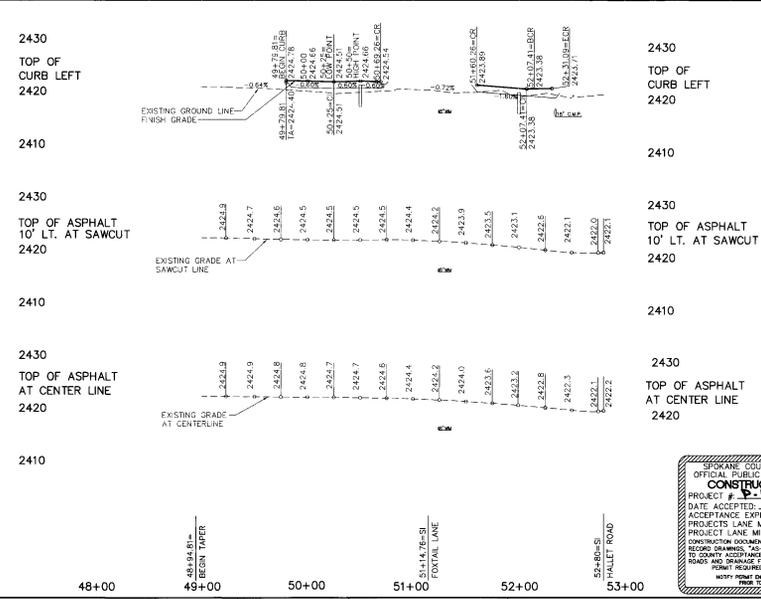
NOT USED  
SCALE: 1" = 1'-0"



INTERSECTION DETAIL  
SCALE: 1" = 20'



"B" TYPE CURB INLET  
NOT TO SCALE



**CAUTION**  
FIBER OPTIC CABLE IS ON THE WEST SIDE OF THOMAS MALLEM ROAD AND 24" WATER MAIN IS ON THE WEST SIDE. EXTREME CARE SHALL BE TAKEN BY THE CONTRACTOR ALONG THOMAS MALLEM ROAD.

SPOKANE COUNTY PUBLIC WORKS  
OFFICIAL PUBLIC DOCUMENT ORIGINAL  
**CONSTRUCTION PLANS**  
PROJECT # 2004-31  
DATE ACCEPTED: 8/22/04  
ACCEPTANCE EXPIRES: 8/22/05  
PROJECTS LANE MILES, PUBLIC WORKS  
CONSTRUCTION DOCUMENTATION AND CERTIFIED  
DRAWINGS ARE THE PROPERTY OF SPOKANE COUNTY AND SHALL REMAIN THE PROPERTY OF SPOKANE COUNTY. ACCEPTANCE AND ESTABLISHMENT OF THE ROAD AND DRAINAGE FACILITIES FOR MAINTENANCE PURPOSES REQUIRED UNDER RCW 66.03.010 AND 66.03.020.  
ISSUED BY: SPOKANE COUNTY PUBLIC WORKS



COUNTY DATUM  
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1985. NAVD-83, ORIGINATING FROM U.S.G.S. MONUMENT MARK NEAR THE INTERSECTION OF CENTER BLVD. AND HAYWARD RD. ELEV.=442.24

*Travis W.*  
DEVELOPER'S APPROVAL

8/22/04  
DATE

NO.	DATE	BY	REVISIONS
08/21	RLM	SUBMITTAL TO SPOKANE COUNTY ENGINEERS	
10/26	RLM	ORIGINAL PLAN PREPARATION	

SCALE:  
HORIZONTAL:  
1" = 50'  
VERTICAL:  
1" = 10'

PROJ #: 2004-31  
DATE: 08/21/06  
DRAWN: RLM  
APPROVED: TRW

**IWCE**  
INTEGRATED WORKS CONSULTING ENGINEERS  
CIVIL AND TRANSPORTATION ENGINEERING  
2508 NORTH SULLY/BALTIMORE  
SPOKANE VALLEY, WASHINGTON 99208  
PH: (509) 835-3111 FAX: (509) 835-0227

**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**THOMAS MALLEM ROAD**  
STA. 48+94.81 TO STA. 52+81.07  
SPOKANE COUNTY, WASHINGTON

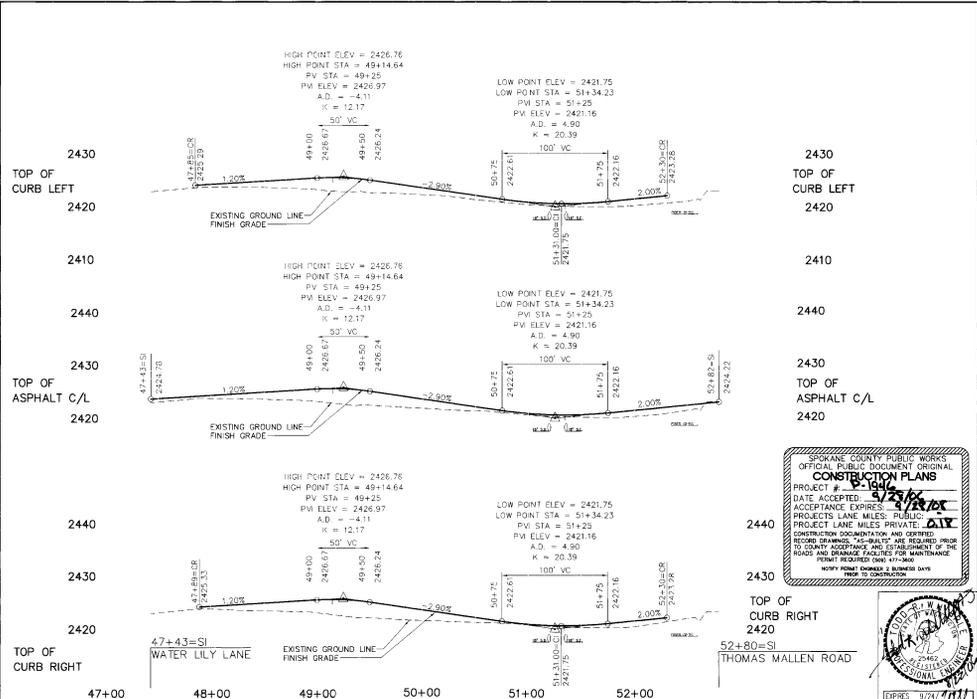
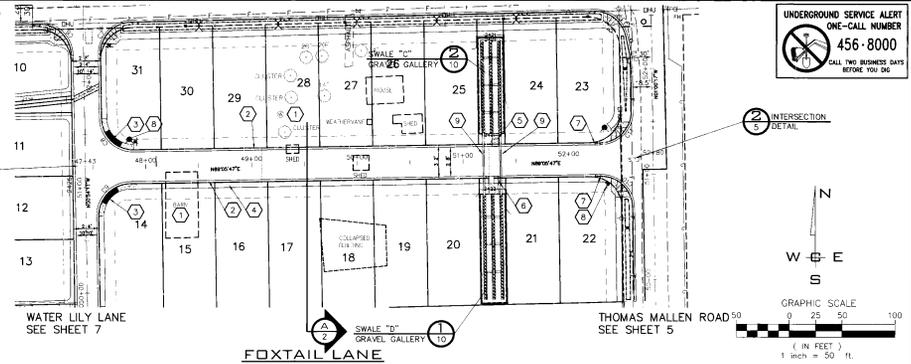
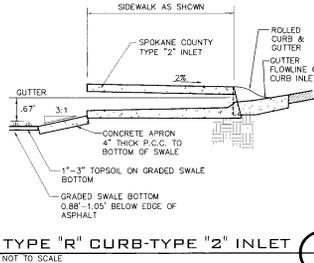
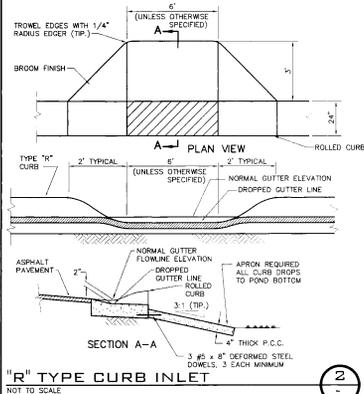
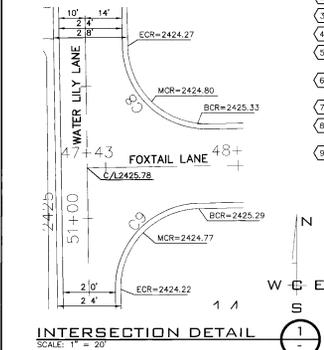
SHEET  
5 OF 12  
JOB NUMBER  
2004-31

P. 1946 Eng Road Drainage

**CONSTRUCTION NOTES**

- 1 ALL STRUCTURES TO BE RAISED AND WELL TWO BE ABANDONED SEE SHEET 2.
- 2 PROVIDE AND INSTALL "R" TYPE CURB SEE DETAIL 2 SHEET 2.
- 3 PROVIDE AND INSTALL CURB RAMP DESIGN "A" PER SPOKANE COUNTY STANDARD PLAN A-5.
- 4 PROVIDE AND INSTALL 5' SIDEWALK PER SPOKANE COUNTY STANDARD PLAN A-1.
- 5 STA. 51+31 LEFT PROVIDE AND INSTALL "R" TYPE CURB INLET 6" TYPE "1" PER SPOKANE COUNTY STANDARD PLAN B-8 AND DETAIL 2 THIS SHEET.
- 6 STA. 51+31 RIGHT PROVIDE AND INSTALL "R" TYPE CURB INLET DOUBLE TYPE "2" PER SPOKANE COUNTY STANDARD PLAN B-9.
- 7 PROVIDE AND INSTALL "B" TYPE CURB TO "R" TYPE CURB TRANSITION SEE DETAIL 3 SHEET 2.
- 8 PROVIDE AND INSTALL STREET AND STOP SIGN PER SPOKANE COUNTY STANDARD PLAN "A-16" AND M.U.T.C.D.
- 9 PROVIDE AND INSTALL 18" C.P. STORM DRAIN PIPE PER SPOKANE COUNTY STANDARDS SEE DETAIL 1 AND 2 SHEET 10.

CURVE TABLE IN FEET					
CURVE	RADIUS	LENGTH TANGENT	CHORD	DELTA	
C8	30.00	47.12	30.00	42.43	90°00'00"
C9	30.00	47.12	30.00	42.43	90°00'00"
C10	30.00	47.12	30.00	42.43	90°00'00"
C11	30.00	47.12	30.00	42.43	90°00'00"



COUNTY DATUM  
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88), ORIGINATING FROM U.S.G.S. MONUMENT NEAR THE INTERSECTION OF GESSER BLVD. AND HAYWARD RD. ELEV=2424.24

*PL*  
DEVELOPER'S APPROVAL

8/22/06  
DATE

NO.	DATE	BY	REVISIONS
08/21	RLM		SUBMITTAL TO SPOKANE COUNTY ENGINEERS
11/23	RLM		ORIGINAL PLAN PREPARATION

SCALE:  
HORIZONTAL:  
1" = 50'  
VERTICAL:  
1" = 10'

PROJ.#: 2004-31  
DATE: 08/21/06  
DRAWN: RLM  
APPROVED: TRW

**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**FOXTAIL LANE**  
STA. 47+43 TO STA. 52+80  
SPOKANE COUNTY, WASHINGTON

OFFICIAL PUBLIC DOCUMENT ORIGINAL  
**CONSTRUCTION PLANS**  
PROJECT # 08-1946  
DATE ACCEPTED: 8/22/06  
ACCEPTANCE EXPRES: [Signature]  
PROJECT LANE MILES: PUBLIC  
CONSTRUCTION LANE MILES: PRIVATE  
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS TO BE FILED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROAD AND DRAINAGE FACILITIES FOR MAINTENANCE  
PRINT REQUIRED ONLY 47+30  
NOTIFY FIRST RESPONSE & BUSINESS DATA



SHEET  
6 OF 12  
JOB NUMBER  
2004-31

8/19/06 Eng. Road Drainage

**REINFORCING NOTES**

- DIMENSION SHOWN FOR REINFORCING BARS ARE OUT TO OUT. ALL HOOKS ARE A.C.I. STANDARD HOOKS.
- REINFORCING STEEL SHALL CONFORM TO A.S.T.M. A-615, GRADE 60 OR BETTER.
- CONCRETE SHALL HAVE A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. AND SHALL BE AIR-ENTRAINED.
- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER.
- CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN MUST BE APPROVED BY THE ENGINEER.
- ALL CONSTRUCTION JOINTS SHALL BE 1/2" DEEP WITH A WIDTH OF 1/3 OF THE MEMBER THICKNESS UNLESS SHOWN OTHERWISE.

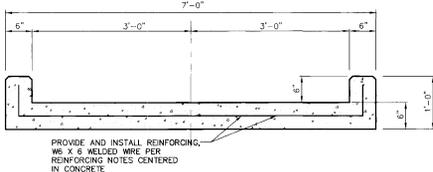
**STRUCTURAL NOTES**

- 1. CODES:**
- UNIFORM BUILDING CODE 1997 EDITION
  - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE A.C.I.-318-89.
- 2. DESIGN LOADINGS:**
- SEISMIC - ZONE 2B
  - WIND - U.S.C. METHOD 1 (NORMAL FORCE METHOD) 70 M.P.H. BASIC EXPOSURE C.
  - NOW - 30 P.S.F., ROOF DEAD LOAD = 15 P.S.F.
  - FLOOR - 250 P.S.F. LL
  - ALLOWABLE SOIL PRESSURE - 3000 P.S.F.
- 3. CAST-IN-PLACE CONCRETE**
- SPECIAL INSPECTION REQUIRED FOR CONCRETE AND BOLTS EMBEDDED IN CONCRETE
  - FC = 3,000 P.S.I. AT 28 DAYS
  - 6 SACKS OF CEMENT PER CUBIC YARD MINIMUM CEMENT CONTENT
  - PLACE AND CURE PER A.C.I. STANDARDS
  - 5" MAXIMUM SLUMP - PLACE AND CURE PER A.C.I. STANDARDS
- 4. REINFORCING STEEL**
- ALL REINFORCING BARS TO BE A.S.T.M. A-615 GRADE 60 EXCEPT NO. 3 BARS TO BE GRADE 40
  - PLACE AND CURE PER A.C.I. STANDARDS
  - FABRICATE AND PLACE REINFORCING PER A.C.I. STANDARDS
  - WELD WIRE MESH TO BE A.S.T.M. A-185
- 5. SHOP DRAWINGS:**
- THE FOLLOWING ITEMS SHALL HAVE SHOP DRAWINGS SUBMITTED TO AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION. IF THE ITEM IS DESIGNED BY THE SUPPLIER, CALCULATIONS STAMPED BY A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER ARE ALSO REQUIRED
- REINFORCING FOR CAST-IN-PLACE CONCRETE

**CONSTRUCTION NOTES**

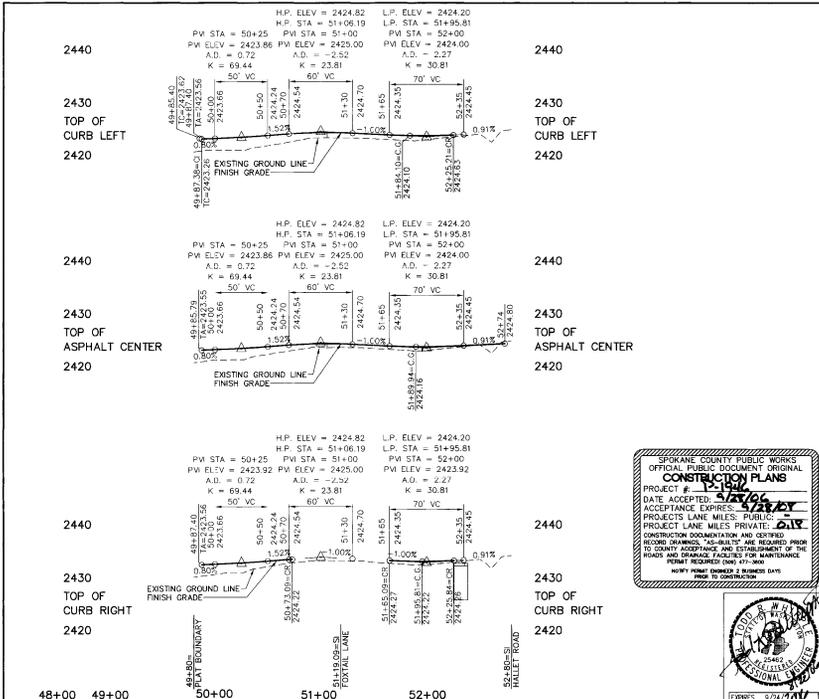
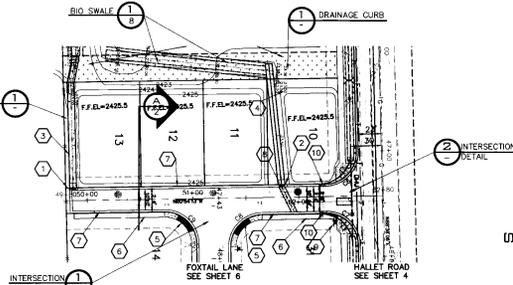
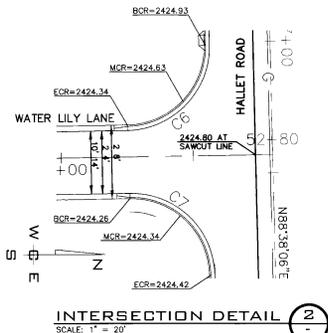
- PROVIDE AND INSTALL, STA. 49+85.27 LT. CURB INLET 6" TYPE "1" PER SPOKANE COUNTY STANDARD PLAN "B-8", TOP OF CURB EL.=2423.64.
- PROVIDE AND INSTALL, STA. 51+89.37 LT. CURB INLET 6" TYPE "1" PER SPOKANE COUNTY STANDARD PLAN "B-8", TOP OF CURB EL.=2424.26.
- PROVIDE AND INSTALL 125' ± L.F. OF DRAINAGE CURB SEE DETAIL 1 THIS SHEET.
- PROVIDE AND INSTALL 108' ± L.F. OF DRAINAGE CURB SEE DETAIL 1 THIS SHEET.
- PROVIDE AND INSTALL CURB RAMP, DESIGN "A", PER SPOKANE COUNTY STANDARD PLAN A-5.
- PROVIDE AND INSTALL 5 FOOT CONCRETE SIDEWALK PER SPOKANE COUNTY STANDARD PLAN A-1.
- PROVIDE AND INSTALL TYPE "R" CURB PER DETAIL 2 SHEET 2.
- PROVIDE AND INSTALL 6" WIDE CONCRETE CROSS UTTER, STA. 51+89.28 TO STA. 51+95.81 SIMILAR TO SPOKANE COUNTY STANDARD PLAN "B-18".
- PROVIDE AND INSTALL STREET AND STOP SIGN PER SPOKANE COUNTY STANDARD PLAN "A-16" AND M.U.T.C.D.
- PROVIDE AND INSTALL CURB TRANSITION PER DETAIL 3 SHEET 2.

CURVE TABLE IN FEET					
CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
CB	30.00	47.33	30.21	42.57	90°23'43"
C7	30.00	46.90	29.77	42.26	89°33'48"
CB	30.00	47.12	30.00	42.43	90°00'00"
C9	30.00	47.12	30.00	42.43	90°00'00"



**DRAINAGE CURB**

SCALE: 1" = 1'



SPokane County Official Public Document Original  
**CONSTRUCTION PLANS**  
 PROJECT # 19146  
 DATE ACCEPTED: 9/23/10  
 PROJECT LANE MILES: PUBLIC  
 PROJECT LANE MILES: PRIVATE: 0.17  
 PROJECT LANE MILES: OTHER: 0.00  
 CONSTRUCTION DOCUMENTATION AND CLEARING PERMITS REQUIRED FOR THIS PROJECT  
 COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROAD AND GRADE FACILITIES FOR MAINTENANCE PERMIT REQUIRED (CWA 401-300)  
 NORTH ARROW INDICATES 2 BUSINESS DAYS



**COUNTY DATUM**  
 ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) ORIGINATING FROM U.S.C.S. BENCHMARK MARK NEAR THE INTERSECTION OF GARDNER BLVD AND HAYWARD RD. EL=2423.24

**DEVELOPER'S APPROVAL**  
 [Signature]

8/22/16  
 DATE

NO.	DATE	BY	REVISIONS
0001		RLM	SUBMITTAL TO SPOKANE COUNTY ENGINEERS
1215		RLM	ORIGINAL PLAN PREPARATION

**SCALE:**  
 HORIZONTAL: 1" = 50'  
 VERTICAL: 1" = 10'

**PROJ #:** 2004-31  
**DATE:** 08/21/06  
**DRAWN:** RLM  
**APPROVED:** TRW

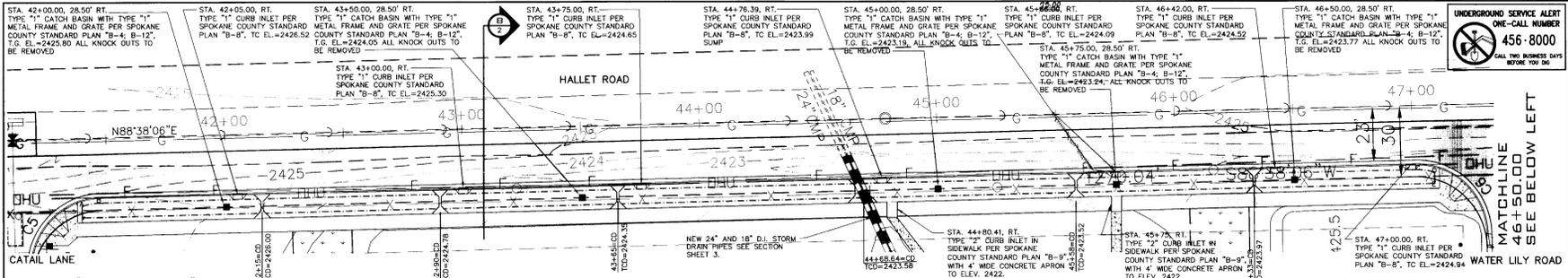
**IWCE**  
 WILHELM CONSULTING ENGINEERS  
 CIVIL AND TRANSPORTATION ENGINEERING  
 1030 NORTH WASHINGTON AVENUE  
 SPOKANE VALLEY, WASHINGTON 99216  
 TEL: 800-880-8317 FAX: 509-838-0201

**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**WATER LILY LANE**  
 STA. 49+80 TO STA. 52+80  
 SPOKANE COUNTY, WASHINGTON

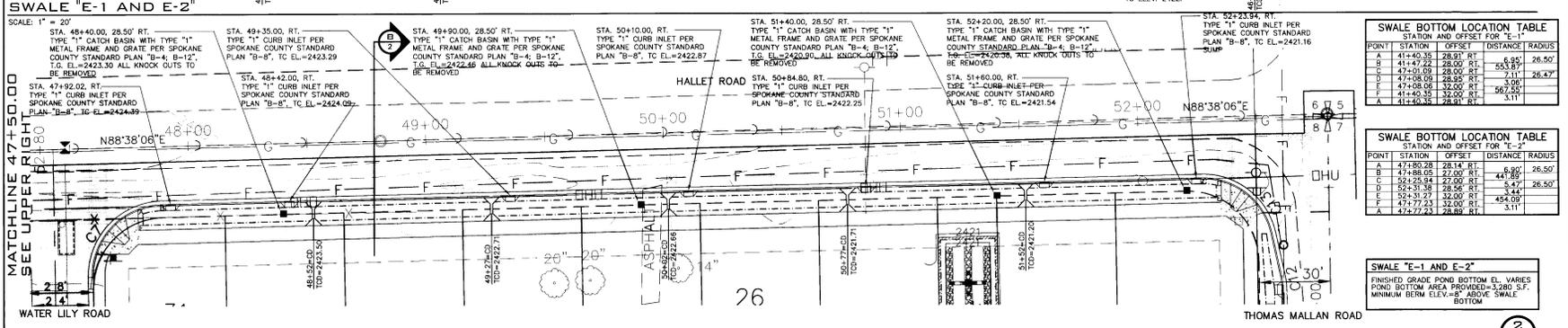
**SHEET**  
 7 OF 12  
 JOB NUMBER  
 2004-31

19146 City Road drainage





**UNDERGROUND SERVICE ALERT**  
**ONE-CALL NUMBER**  
**456-8000**  
 ALL TIE IN BUSINESS DAYS BEFORE YOU DIG



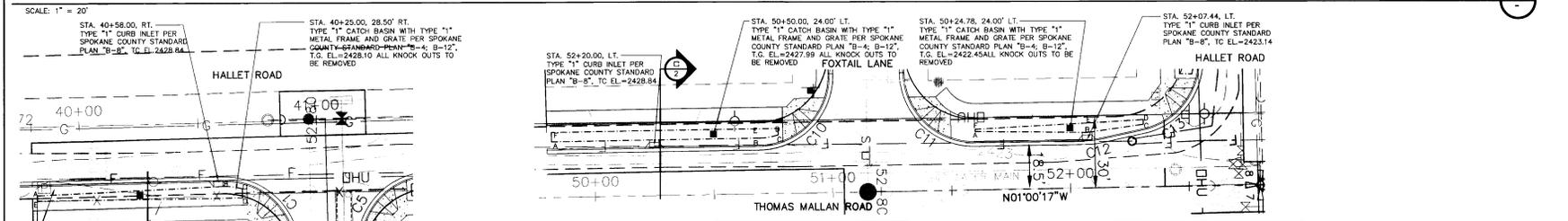
**SWALE BOTTOM LOCATION TABLE**  
 STATION AND OFFSET FOR "E-1"

POINT	STATION	OFFSET	DISTANCE	RADIUS
A	41+43.28	28.00 RT	6.95	26.50'
B	41+47.29	28.00 RT	7.11	26.47'
C	47+08.09	28.00 RT	3.00	26.50'
D	47+08.09	28.00 RT	3.00	26.50'
E	47+08.09	28.00 RT	3.00	26.50'
F	47+08.09	28.00 RT	3.00	26.50'
G	41+43.28	32.00 RT	3.11	

**SWALE BOTTOM LOCATION TABLE**  
 STATION AND OFFSET FOR "E-2"

POINT	STATION	OFFSET	DISTANCE	RADIUS
A	47+80.28	28.14 RT	6.90	26.50'
B	47+86.05	27.00 RT	4.88	26.50'
C	52+31.09	28.56 RT	3.44	26.50'
D	52+31.09	28.56 RT	3.44	26.50'
E	47+77.23	32.00 RT	3.11	

**SWALE "E-1 AND E-2"**  
 FINISHED GRADE POND BOTTOM EL. VARIES  
 POND BOTTOM AREA PROVIDED=3390 S.F.  
 MINIMUM BERM ELEV.=8' ABOVE SWALE  
 BOTTOM



**SWALE "D"**

POINT	STATION	OFFSET	DISTANCE	RADIUS
A	39+81.73	28.00 RT	78.51	27.50'
B	40+60.22	27.00 RT	8.08	27.50'
C	40+68.70	28.15 RT	3.03	
D	40+68.15	32.01 RT	3.03	
E	39+81.92	31.00 RT	2.40	
F	39+81.73	30.00 RT	2.40	

**SWALE "G"**

POINT	STATION	OFFSET	DISTANCE	RADIUS
A	52+00.00	24.00 LT	87.48	
B	52+00.00	23.50 LT	8.98	26.50'
C	50+77.22	28.72 LT	2.78	
D	50+77.22	27.50 LT	66.48	
E	49+81.73	27.50 LT	4.00	
F	49+81.73	23.50 LT		

**SWALE "I"**

POINT	STATION	OFFSET	DISTANCE	RADIUS
A	51+60.26	24.78 LT	47.20	
B	52+07.44	23.58 LT	23.84	
C	52+07.44	23.58 LT	23.84	
D	52+31.09	28.62 LT	2.00	
E	52+31.09	27.58 LT	21.84	
F	52+307.43	27.58 LT	42.23	
G	52+307.43	27.58 LT	25.11	
A	52+60.26	24.78 LT	0.94	

**SWALE "F"**

POINT	STATION	OFFSET	DISTANCE	RADIUS
A	52+07.44	24.78 LT	47.20	
B	52+07.44	23.58 LT	23.84	
C	52+31.09	28.62 LT	2.00	
D	52+31.09	27.58 LT	21.84	
E	52+307.43	27.58 LT	42.23	
F	52+307.43	27.58 LT	25.11	
A	52+60.26	24.78 LT	0.94	

OFFICIAL PUBLIC DOCUMENT ORIGINAL  
**CONSTRUCTION PLANS**  
 PROJECT # **12-1946**  
 DATE ACCEPTED: **9/23/10**  
 ACCEPTANCE EXPRESSES: **4/10/10**  
 PROJECTS LANE MILLS PUBLIC  
 PROJECT LANE MILLS PRIVATE: **0.15**  
 CONSTRUCTION DOCUMENTATION AND GRIEVANCE  
 BOARD: **0.15**  
 COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE  
 ROAD AND DRAINAGE FACILITIES FOR MAINTENANCE  
 POINT REQUIRED: **0.15**  
 NIGHT PERMIT REQUIRED: **0.15**  
 8/24/10



**COUNTY DATUM**  
 ELEVATIONS SHOWN ARE BASED ON NORTH  
 AMERICAN VERTICAL DATUM OF 1988  
 (NAVD-88) ORIGINATING FROM USGS  
 MONUMENT NEAR THE INTERSECTION OF  
 OREGON BLVD AND HAYWARD RD.  
 ELEV=242.34'

*W. W. W.*  
**DEVELOPER'S APPROVAL**  
 DATE: **8/22/10**

**SCALE: 1" = 20'**

**NE. 1/4 SECTION 7, T. 24 N., R. 42 E., W.M.**

NO.	DATE	BY	REVISIONS
08/21	RLM	SUBMITTAL TO SPOKANE COUNTY ENGINEERS	
10/24	RLM	ORIGINAL PLAN PREPARATION	

**SCALE: 1" = 20'**

**SCALE:**  
 HORIZONTAL: AS SHOWN  
 VERTICAL: AS SHOWN

PROJ #: 2004-31  
 DATE: 08/21/06  
 DRAWN: RLM  
 APPROVED: TRW

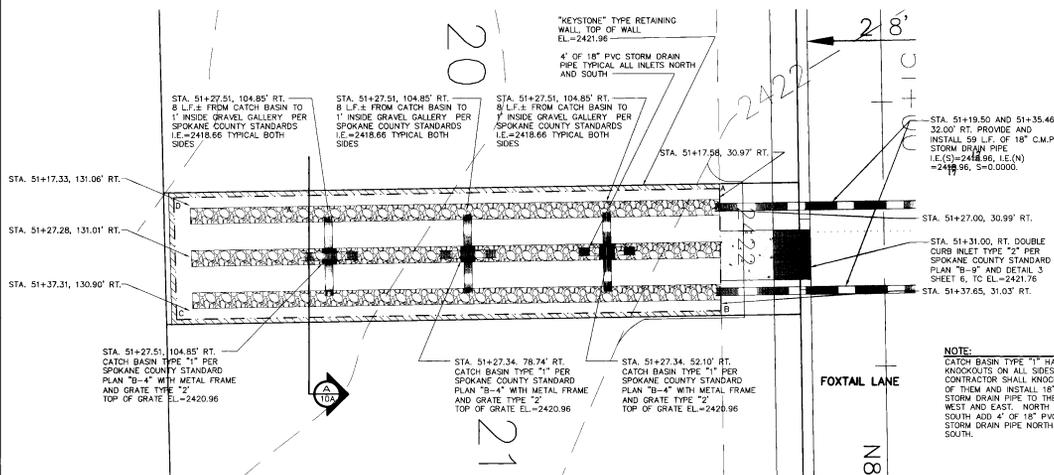
**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**SWALE DETAILS, WASHINGTON**

**WCE**  
 WHEELER CONSULTING ENGINEERS  
 CIVIL AND TRANSPORTATION ENGINEERS  
 2501 NORTH SULLY AVENUE  
 SPOKANE VALLEY, WASHINGTON 99208  
 PH: 800-893-0311 FAX: 509-336-0000

**SHEET**  
**9** OF 12  
 JOB NUMBER  
**2004-31**

8/2/10 1946 England Drainage

NE. 1/4 SECTION 7, T. 24 N., R. 42 E., W.M.

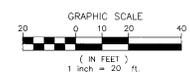


**SWALE BOTTOM LOCATION TABLE**  
STATION AND OFFSET

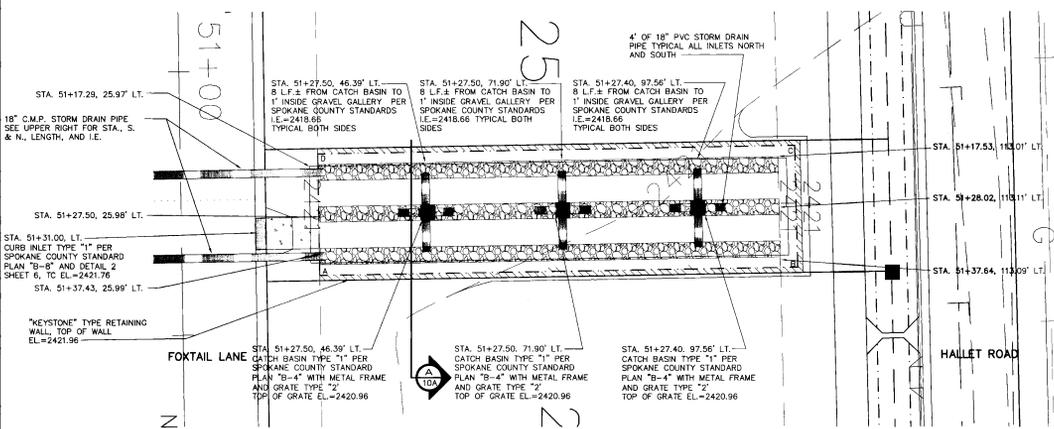
POINT	STATION	OFFSET	DISTANCE	RADIUS
A	51+15.93	30.99' RT.	21.14'	
B	51+39.07	31.06' RT.	102.91'	
C	51+39.07	133.97' RT.	23.14'	
D	51+15.93	134.10' RT.	103.15'	
A	51+15.93	30.99' RT.		

**SWALE "B"**  
FINISHED GRADE POND BOTTOM EL.=2420.29  
POND BOTTOM AREA PROVIDED=2,384 S.F.  
MINIMUM BERM ELEV.=2421.06  
INLET RIMS AT EL.2420.96

**NOTE:**  
CATCH BASIN TYPE "1" HAS 20" KNOCKOUTS ON ALL SIDES. CONTRACTOR SHALL KNOCK OFF ALL OF THEM AND INSTALL 18" STORM DRAIN PIPE TO THE WEST AND EAST. NORTH AND SOUTH ADD 4" OF 18" PVC STORM DRAIN PIPE NORTH AND SOUTH.



**SWALE "B"**  
SCALE: 1" = 10'

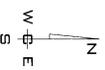


**SWALE BOTTOM LOCATION TABLE**  
STATION AND OFFSET

POINT	STATION	OFFSET	DISTANCE	RADIUS
A	51+39.00	26.00' LT.	90.22'	
B	51+39.00	116.35' LT.	23.17'	
C	51+16.00	116.17' LT.	90.17'	
A	51+39.00	26.00' LT.	10.14'	

**SWALE "C"**  
FINISHED GRADE POND BOTTOM EL.=2420.29  
POND BOTTOM AREA PROVIDED=2,080 S.F.  
MINIMUM BERM ELEV.=2421.40  
INLET RIMS AT EL.2420.96

**NOTE:**  
CATCH BASIN TYPE "1" HAS 20" KNOCKOUTS ON ALL SIDES. CONTRACTOR SHALL KNOCK OFF ALL OF THEM AND INSTALL 18" STORM DRAIN PIPE TO THE WEST AND EAST. NORTH AND SOUTH ADD 4" OF 18" PVC STORM DRAIN PIPE NORTH AND SOUTH.



**SWALE "C"**  
SCALE: 1" = 20'

**COUNTY DATUM**  
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. NAD=83, ORIGINATING FROM U.S.G.S. MONUMENT ROCK NEAR THE INTERSECTION OF CEDAR BLVD AND HAYWARD RD. ELEV=2418.34

*Tom M.*  
**DEVELOPER'S APPROVAL**

8/22/06  
DATE

NO.	DATE	BY	REVISIONS
08/21	RLM		SUBMITTAL TO SPOKANE COUNTY ENGINEERS
10/24	RLM		ORIGINAL PLAN PREPARATION

**SCALE:**  
HORIZONTAL: AS SHOWN  
VERTICAL: AS SHOWN

PROJ #: 2004-31  
DATE: 08/21/06  
DRAWN: RLM  
APPROVED: TRW

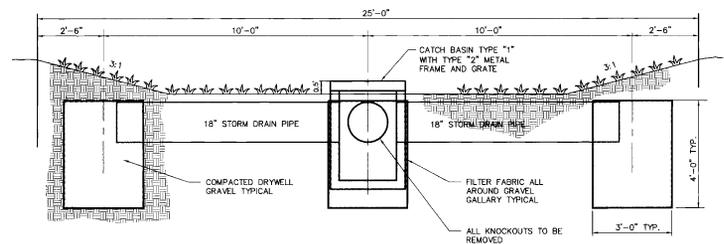


**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**SWALE DETAILS**  
SPOKANE COUNTY, WASHINGTON

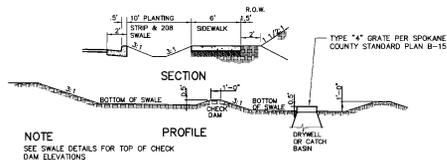


**SHEET**  
10 OF 12  
JOB NUMBER  
2004-31

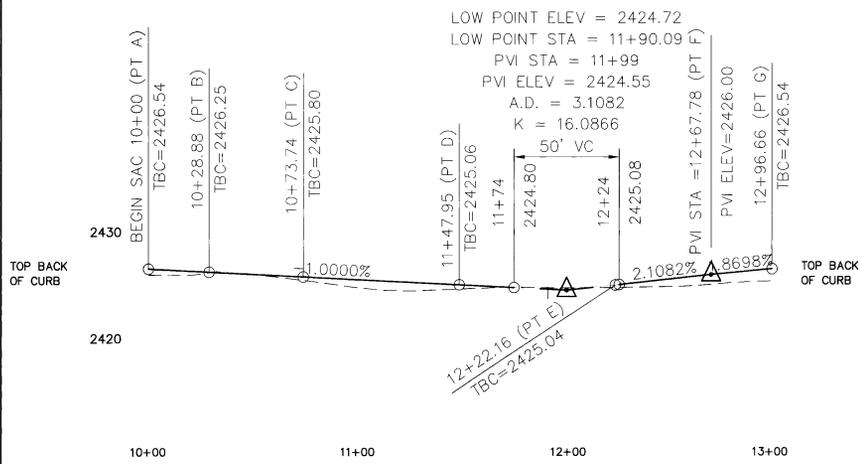
R-1946 Eng. Tom M. No. 24467



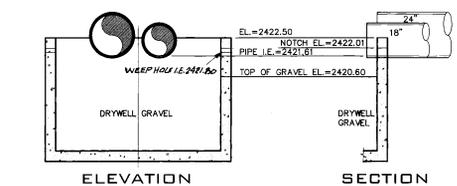
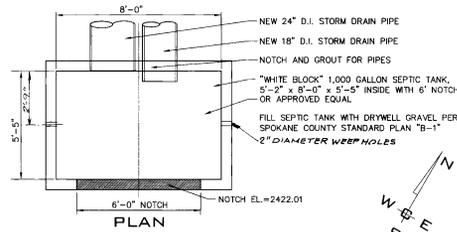
**SECTION**  
SCALE: 1" = 20'



**CHECK DAM DETAIL**  
NOT TO SCALE



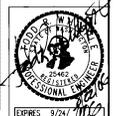
**PROFILE - CUL-DE-SAC**  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 10'



**OUTLET STRUCTURE**  
SCALE: 3/8" = 1'-0"



SPokane County Public Works  
OFFICIAL PUBLIC DOCUMENT ORIGINAL  
**CONSTRUCTION PLANS**  
PROJECT # **1924**  
DATE ACCEPTED: **4/22/06**  
ACCEPTANCE EXPIRES: **4/22/06**  
PROJECT'S LANE MILES: PUBLIC  
PROJECT LANE MILES PRIVATE: **0.15**  
CONSTRUCTION COORDINATION AND CERTIFIED  
PROJECT DRAWINGS "AS-BUILT" ARE REQUIRED PRIOR  
TO GRANT ACCEPTANCE AND ESTABLISHMENT OF THE  
ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE  
FORMAT REQUIRED FORM #1-2000  
NOTIFY FRONT OFFICE @ BUSINESS DAYS  
PRIOR TO CONSTRUCTION



EXPIRES 9/21/11  
**SHEET**  
**10A OF 12**  
JOB NUMBER  
**2004-31**

**COUNTY DATUM**  
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988  
HATCH-BL. GROUNDING FROM UTILITIES  
MOUNDING AREA NEAR THE INTERSECTION OF GARDEN BLVD AND HAYWARD RD.  
ELEV=2412.34'

*[Signature]*  
**DEVELOPERS APPROVAL**

**8/22/06**  
**DATE**

NO.	DATE	BY	REVISIONS
08/21	RLM		SUBMITTAL TO SPOKANE COUNTY ENGINEERS
10/24	RLM		ORIGINAL PLAN PREPARATION

**SCALE:**  
HORIZONTAL: AS SHOWN  
VERTICAL: AS SHOWN

**PROJ #:** 2004-31  
**DATE:** 08/21/06  
**DRAWN:** RLM  
**APPROVED:** TRW

**STREET AND DRAINAGE PLANS**  
**FOXTAIL ESTATES**  
**SWALE DETAILS**  
**SPOKANE COUNTY, WASHINGTON**

*R-1946 City Land Drainage*

# EROSION CONTROL PLAN

## FOXTAIL ESTATES

### SPOKANE COUNTY, WASHINGTON

#### NE 1/4 SECTION 7, T. 24 N., R. 42 E., W.M.

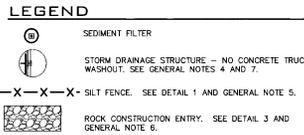
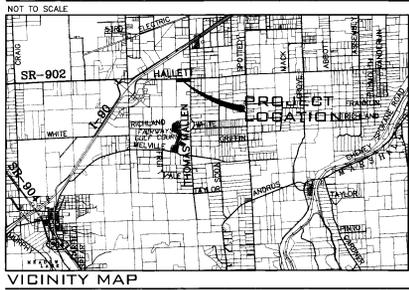
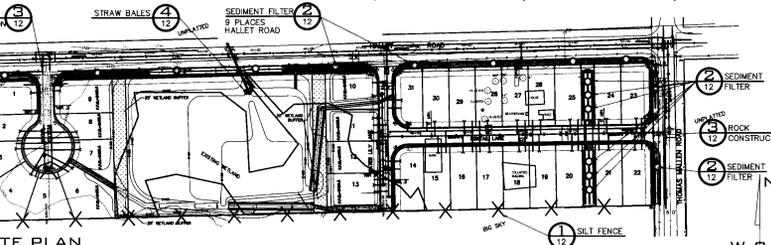


### GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF SITE IMPROVEMENTS SHALL MEET OR EXCEED SITE WORK STANDARDS AND THE STANDARDS AND SPECIFICATIONS SET FORTH IN SPOKANE COUNTY REGULATIONS AND APPLICATIONS FOR STATE AND FEDERAL REGIONS, WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN PUBLIC R.O.W. OR EASEMENTS SHALL BE INSPECTED AND APPROVED BY SPOKANE COUNTY INSPECTOR. INSPECTION SERVICES AND CONSTRUCTION CERTIFICATION TO BE PROVIDED BY DESIGNER OF PROJECT SPONSOR/OWNER.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY EXISTENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT THE CONNECTION POINTS AND AT POTENTIAL UTILITY CROSSINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING TO REMOVE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE SPOKANE COUNTY ENGINEER AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS.
4. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE SPOKANE COUNTY AND ALL UTILITY COMPANIES WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.
5. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ON-SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
7. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHO WOULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
8. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
9. FOR WORK AFFECTING PUBLIC ROADWAYS OR IF REQUIRED BY SPOKANE COUNTY THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND PHASING PLAN, IN ACCORDANCE WITH S.C.C.D.C. FOR APPROVAL PRIOR TO ANY WORK AFFECTING THE ROADWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY SAID PLANS. PRIOR TO INSTALLATION AND PRODUCTION CONFORMANCE SHALL BE HELD WITH SPOKANE COUNTY.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.
11. PER AGENCY STANDARDS THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING RECORD INFORMATION ON A SET OF RECORD DRAWINGS LOCATED AT THE CONSTRUCTION SITE AND AVAILABLE TO THE SPOKANE COUNTY INSPECTOR AT ALL TIMES.
13. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. FOR ADDITIONAL INFORMATION CONTACT THE ENGINEER FOR CLARIFICATION AND NOTE ON THE RECORD DRAWINGS.
14. ALL EROSION AND SEDIMENT CONTROL (E.S.C.) MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO GROUND-DISTURBING ACTIVITY. ALL E.S.C. MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR LANDSCAPING.
15. THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. INSTALLATION OF SANITARY SEWER SHALL BE COMPLETED PRIOR TO INSTALLATION OF WATER LINES AND DRY UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL UTILITY LOCATIONS CONSISTENT WITH THE CONTRACTORS SCHEDULE FOR THIS PROJECT, WHETHER SHOWN OR NOT SHOWN, AS IT RELATES TO THE CONSTRUCTION ACTIVITIES COMPLETED IN THESE PLANS.
16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO THE JURISDICTION OF THE SPOKANE COUNTY ENGINEERING DEPARTMENT STANDARD DETAILS AND SPECIFICATIONS.
17. ALL CONSTRUCTION OPERATIONS, INCLUDING THE WARNING, UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTH MOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED EQUIPMENT SHALL GENERALLY BE LIMITED TO THE TIME PERIOD APPROVED BY SPOKANE COUNTY.
18. BASED ON A REQUIREMENT FROM THE SPOKANE COUNTY THE ENGINEER OR HIS DESIGNEE SHALL PERFORM MATERIALS TESTING AND QUALITY CONTROL ON THE PROJECT AND SHALL SUBMIT COPIES OF DAILY REPORTS, TEST REPORTS, PROJECT CERTIFICATION AND RECORD DRAWINGS TO THE SPOKANE COUNTY ENGINEER.
19. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL BY THE SPOKANE COUNTY ENGINEER AND NOTIFICATION OF THE ENGINEER OF RECORD.

### ABBREVIATIONS

SS.....SANITARY SEWER	PI.....POINT OF INTERSECTION	STA.....STATION
WM.....WATER MAIN	PC.....POINT OF CURVE	G.....GRADE
MH.....MANHOLE	PT.....POINT OF TANGENCY	GB.....GRADE BREAK
EXIST.....EXISTING	PRC.....POINT OF REVERSE CURVE	I.....INVERT ELEVATION
CO.....EXISTING CLEANOUT	CT.....COURT	RM ELEV.....RM ELEVATION
HYD.....HYDRANT	RD.....ROAD	DIA.....DIAMETER
RT.....RIGHT	LN.....STREET INTERSECTION	SI.....STREET INTERSECTION
LT.....LEFT	STA.....STATION LENGTH	BDY.....BOUNDARY
	ACT.....ACTUAL LENGTH	PET.....PETROLEUM



### LEGAL DESCRIPTION

THE EAST 1300 FEET OF THE NORTH 300 FEET OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 24 NORTH, RANGE 42 EAST, WILLAMETTE MERIDIAN, SPOKANE COUNTY, WASHINGTON; EXCEPT THE NORTH 30 FEET THEREOF FOR PUBLIC ROAD RIGHT OF WAY.

**ROADWAYS**  
SPOKANE COUNTY ENGINEERS  
1026 WEST BROADWAY AVENUE  
SPOKANE, WASHINGTON 99260  
PHONE: 509-477-3600  
FAX: 509-477-7655  
CONTACT: MATT ANDERSON, P.E.

**FIRE DEPARTMENT**  
FIRE DISTRICT NO. 3  
10 SOUTH PRESLEY DRIVE  
CENETRY, WASHINGTON 99004  
PHONE: 509-424-7103  
FAX: 509-426-2821  
CONTACT: BRUCE HOLLOWAY, CHIEF

**NATURAL GAS**  
AVISTA UTILITIES  
1411 EAST MISSOIN AVENUE  
SPOKANE, WA 99220  
PHONE: 509-495-4774  
FAX: 509-495-8713  
CONTACT: LOIS MCCAIN

**SURVEYOR**  
LANDTEK, LLC  
624 NORTH MADRUJA STREET  
SPOKANE, WASHINGTON 99202  
PHONE: 509-926-2821  
FAX: 509-926-2736  
CONTACT: BRUCE R. LARSEN, P.L.S.

**INSPECTION**  
ALLWEST  
1229 E. INDIANA AVENUE  
SPOKANE, WA 99216  
PHONE: 509-534-4411  
FAX: 509-534-4206  
CONTACT: PAUL NELSON, P.E.

**WATER PURVEYOR**  
SPOKANE WATER/WASTEWATER SERVICES  
E. 914 FOOTBALLS BLVD.  
SPOKANE, WASHINGTON 99207  
PHONE: 509-825-7800  
FAX: 509-825-7816  
CONTACT: LISA WALSTROM, P.E.

**TELEPHONE**  
QWEST  
804 NORTH COLUMBUS  
SPOKANE, WASHINGTON 99202  
PHONE: 509-455-2580  
FAX: 509-455-2104  
CONTACT: DAN ORESS

**CABLE**  
COMCAST BROADBAND  
1717 EAST BUCKEYE  
SPOKANE, WASHINGTON 99207  
PHONE: 509-484-4931(52420)  
FAX: 509-483-9261  
CONTACT: BRYAN RICHARDSON

**ENGINEER**  
WHIPPLE CONSULTING ENGINEERS  
EAST 1301B SPRAGUE AVENUE  
SPOKANE VALLEY, WA 99216  
PHONE: 509-993-2017  
FAX: 509-926-0227  
CONTACT: TODD R. WHIPPLE, P.E.

**SEWER**  
SPOKANE SEWER DEPARTMENT  
909 EAST SPRAGUE AVENUE  
SPOKANE, WASHINGTON 99202  
PHONE: 509-625-7800  
FAX: 509-625-7940  
CONTACT: MIKE YANE, P.E.

**POWER**  
INLAND POWER AND LIGHT  
320 EAST SECOND AVENUE  
SPOKANE, WASHINGTON 99202  
PHONE: 509-747-7151  
FAX: 509-747-7867  
CONTACT: MARY SHELLY

**SOLID WASTE**  
WASTE MANAGEMENT  
PHONE: 509-466-3400

**OWNER**  
PAKIRA  
601 SOUTH DIVISION STREET  
SPOKANE, WASHINGTON 99201  
PHONE: 509-444-4411  
CONTACT: BRIAN BALCH

### EROSION & SEDIMENT CONTROL GENERAL NOTES AND INFORMATION

1. AN EROSION/SEDIMENT CONTROL (E.S.C.) PLAN IS REQUIRED FOR THIS PROJECT. IMPLEMENTATION OF THE E.S.C. PLAN AND CONSTRUCTION MAINTENANCE OF E.S.C. FACILITIES ARE THE RESPONSIBILITY OF THE DEVELOPER UNTIL CONSTRUCTION IS COMPLETED AND ACCEPTED BY SPOKANE COUNTY OR UNTIL VEGETATION IS ESTABLISHED THROUGHOUT THE SITE, AND ACCEPTED BY SPOKANE COUNTY, WHICHEVER IS LATER.
2. APPROVAL OF THE E.S.C. PLAN DOES NOT CONSTITUTE APPROVAL OF ANY OF THE PROPOSED ROAD, STORM DRAINAGE, GRADING OR UTILITY DESIGN ELEMENTS SHOWN ON THE E.S.C. PLAN.
3. THE EROSION/SEDIMENT CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN THESE E.S.C. MEASURES DAILY AND SHALL MAINTAIN AND UPGRADE THESE MEASURES AS NECESSARY TO PREVENT SEDIMENT-LOADED WATER FROM EITHER FLOWING OFF SITE, OR INTO EXISTING/STORM DRAINAGE FACILITIES, SUCH AS DRAINAGE DRAINAGE, OR GRAVEL GULLIES.
4. GEOTEXTILE FABRIC IS TO BE PLACED ON THE RIMS, CATCH BASINS AND INLETS UNTIL SUCH TIME THAT THE VEGETATION ON THE SITE IS ESTABLISHED AND THE THREAT OF SEDIMENT DEPOSITION INTO THE DRAINAGE SYSTEM IS MITIGATED.
5. THE SILT FENCES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO OTHER SITE WORK, AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ROCK CONSTRUCTION ENTRIES AT ANY AND ALL LOCATIONS USED TO ENTER OR EXIT THE PROJECT SITE.
7. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNATING A LOCATION WHERE CONCRETE TRUCKS AND EQUIPMENT CAN BE WASHED OUT, NOT LOCATED NEAR OR DRAINING INTO A STORM DRAINAGE AREA.
8. PROPERTY OWNER: PAKIRA, 601 SOUTH DIVISION STREET, SPOKANE, WA  
CONTACT PERSON ON SITE: BOB GRAHAM OF ALLWEST, 509-534-4411
9. PROJECT LOCATION: IN SPOKANE COUNTY, SOUTH AND WEST OF THE INTERSECTION OF HALLET ROAD AND THOMAS MALLEN ROAD IN THE NE 1/4 SECTION 7, TOWNSHIP 24 NORTH, RANGE 42 EAST, WA.
10. PROJECT DESCRIPTION: FOXTAIL ESTATES IS A RESIDENTIAL SUBDIVISION CONSISTING OF 32 LOTS AND WILL REQUIRE CONSTRUCTION OF ROADS, AND STORM DRAINAGE. THE IMPROVEMENTS CONSIST OF APPROXIMATELY 2,800 LINEAR FEET OF DRAINAGE AND ELECTRICAL FACILITIES, 2,800 LINEAR FEET OF NEW ASPHALT ROADWAY AND ASSOCIATED STORM DRAINAGE.
11. DESCRIPTION OF E.S.C. MEASURES: USE OF SILT FENCES AND ROCK CONSTRUCTION ENTRANCES. ALL E.S.C. MEASURES MENTIONED ABOVE ARE TEMPORARY AND WILL BE REMOVED AFTER YARDS ARE LANDSCAPED.
12. EXISTING VEGETATION: LONG GRASS AND TREES
13. PLAN PREPARATION DATE: MARCH, 2008
14. SOILS: ON SITE SOILS, CHENEY/HUGG COMPLEX SILT LOAM (OH); HESSELTINE STONY SILT LOAM (HSH)
15. STABILIZATION OF DENuded AREAS: ANY DISTURBED AREAS WHICH WOULD BE LEFT BARE FOR MORE THAN 7 DAYS AND ARE NOT INTENDED TO BE REWORKED WITHIN 30-45 DAYS SHALL BE SEEDDED WITH A FAST STRATIFIED NATIVE DRYLAND GRASS SUCH AS ANNUAL RYE, OR APPROVED EQUAL, AT A RATE OF 60 LB/ACRE.
16. CONTROL OF POLLUTANTS: ANY SPILLS WILL BE HANDLED ACCORDING TO O.C.E. AND D.O.H. GUIDELINES.
17. LIMITS OF GRADING: DURING THE COURSE OF CONSTRUCTION, THE AMOUNT OF DISTURBED AREA SHALL BE KEPT TO A MINIMUM AND SHALL BE LIMITED TO THE AREA SHOWN AS 'LIMITS OF GRADING' ON THIS SHEET OF THE EROSION CONTROL PLANS.

### MAINTENANCE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF THE TEMPORARY E.S.C. MEASURES.
2. SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL-PRODUCING RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF FILTER FABRIC SHALL BE ACCOMPLISHED PROMPTLY.
4. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH RAINFALL-PRODUCING RAINFALL. DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY 1/2 THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE E.S.C. STRUCTURE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED FOR REUSE.
6. ALL TEMPORARY AND PERMANENT E.S.C. PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
7. ALL TEMPORARY E.S.C. MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING DIRT, MUD AND OTHER CONSTRUCTION DEBRIS FROM ANY ACCUMULATION ON PAVED STREETS ADJACENT TO THE SITE AS A RESULT OF CONSTRUCTION ACTIVITY. CLEANING SHALL BE ON AN "AS NEEDED" BASIS USING SWEEPING AND WATER TO WASH THE CONSTRUCTION DEBRIS FROM THE STREET.
9. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY USING WATER. APPLICATIONS OF WATER MAY BE REQUIRED SEVERAL TIMES PER DAY DURING CONSTRUCTION ACTIVITY.

CERTIFICATION STATEMENT: I CERTIFY THAT THIS EROSION AND SEDIMENT CONTROL PLAN MEETS THE E.S.C. REQUIREMENTS AS LISTED IN CHAPTER 17.02 OF SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT.

ENGINEER: *Todd R. Whipple*  
TODD R. WHIPPLE, P.E.

SPokane County Official Public Document Original

CONSTRUCTION PLANS PROJECT

DATE ACCEPTED: 3/27/08

ACCEPTANCE EXPIRES: 3/27/09

PROJECT LANE MILES PRIVATE: 0.17

RECORDS DEPARTMENT: ALL "AS-BUILT" ARE REQUIRED PER SPOKANE COUNTY RECORDS DEPARTMENT. PERMIT REQUIRED UNDER 17-2000. THIS DOCUMENT IS NOT VALID UNLESS IT IS ACCOMPANIED BY THE RECORDS DEPARTMENT STAMP.

STAMP: SPOKANE COUNTY RECORDS DEPARTMENT, 17-2000, 03/27/08

THE DESIGN IMPROVEMENTS SHOWN IN THIS SET OF PLANS AND CALCULATIONS CONFORM TO APPLICABLE EDITIONS OF THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT. ALL DESIGN DEVIATIONS HAVE BEEN APPROVED BY THE SPOKANE COUNTY ENGINEER. I APPROVE THESE PLANS FOR CONSTRUCTION.

± COUNTY DATUM  
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988  
MAY BE USED FOR CONSTRUCTION OF IMPROVEMENTS WITHIN THE INTERSECTION OF SPOKANE VALLEY AND HAYFORD RD.  
ELEV=2472.54

DEVELOPERS APPROVAL: *T. Whipple*

8/26/08  
DATE

NO.	DATE	BY	REVISIONS
08/21	RLM		SUBMITTED TO SPOKANE COUNTY ENGINEER
10/17	RLM		ORIGINAL PLAN PREPARATION

SCALE:  
HORIZONTAL: N/A  
VERTICAL: N/A

PROJ. #: 2004-31  
DATE: 08/21/08  
DRAWN: RLM  
APPROVED: TRW



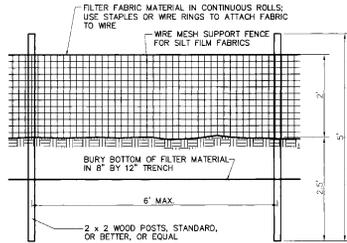
EROSION CONTROL PLAN  
FOXTAIL ESTATES  
SPOKANE COUNTY, WASHINGTON

SHEET 11 OF 12  
JOB NUMBER 2004-31

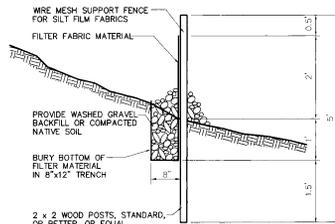
P-1948  
Eng' Todd Whipple

# FOXTAIL ESTATES SPOKANE COUNTY, WASHINGTON NE 1/4 SECTION 7, T. 24 N., R. 42 E., W.M.

UNDERGROUND SERVICE ALERT  
ONE-CALL NUMBER  
**456-8000**  
CALL TWO BUSINESS DAYS  
BEFORE YOU DIG



**ELEVATION**

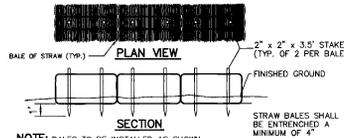


**SECTION**

**SILT FENCE DETAIL**

NOT TO SCALE

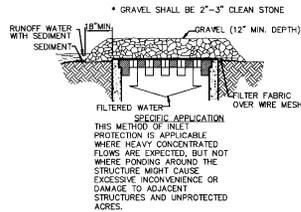
1



**STRAW BALE DETAIL**

NOT TO SCALE

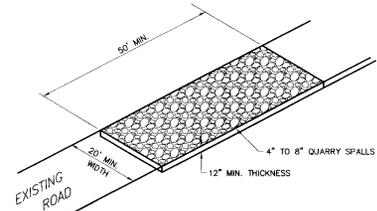
4



**GRAVEL AND WIRE MESH  
INLET SEDIMENT FILTER**

NOT TO SCALE

2



**ROCK CONSTRUCTION ENTRY**

NOT TO SCALE

3

COUNTY DATUM

ELEVATIONS SHOWN ARE BASED ON NORTH  
AMERICAN VERTICAL DATUM OF 1988  
NAVD-88, ORIGINATING FROM U.S.G.S.  
MONUMENT MARK NEAR THE INTERSECTION  
OF GARDEN BLVD AND HAYWARD RD.  
ELEVANCE 52.7

*T.M.L.*

DEVELOPER'S APPROVAL

8/22/06

DATE

NO.	DATE	BY	REVISIONS
08/21	FLM		SUBMITTAL TO SPOKANE COUNTY ENGINEERS
10/17	FLM		ORIGINAL PLAN PREPARATION

SCALE:		PROJ #:
HORIZONTAL:	N.A.	2004-31
VERTICAL:	N.A.	DATE: 08/21/06
		DRAWN: FLM
		APPROVED: TFW

**IWCE**  
WAPPLI CONSULTING ENGINEERS  
CIVIL AND TRANSPORTATION ENGINEERING  
1028 NORTH BILLYEVA ROAD  
SPOKANE VALLEY, WASHINGTON 99216  
PH: 509-893-2617 FAX: 509-893-0227

**EROSION CONTROL DETAILS  
FOXTAIL ESTATES**  
SPOKANE COUNTY, WASHINGTON

OFFICIAL PUBLIC DOCUMENT ORIGINAL  
CONSTRUCTION PLANS  
PROJECT # P-1946  
DATE ACCEPTED: 9/27/06  
ACCEPTANCE EXPIRES: 12/31/07  
PROJECTS LAKE MILES: PUBLIC  
PROJECT LAKE MILES PRIVATE: 0.00  
CONSTRUCTION DOCUMENTATION AND CERTIFIED  
RECORD DRAWINGS, AS-BUILT'S ARE REQUIRED UPON  
TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE  
ROADS AND DRIVEWAYS FACILITIES FOR MAINTENANCE  
PERMIT REQUIRED (DNR) 477-2600  
HOURS: 9:00 AM - 5:00 PM MON-FRI  
EXPIRES: 9/27/10



EXPRES 9/27/10  
**SHEET  
12 OF 12**  
JOB NUMBER  
**2004-31**

P-1946

*Eng. Troy M. L...*