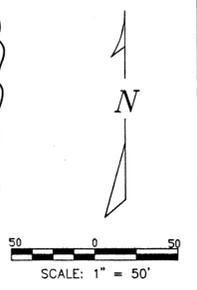


# UPPER TERRACE ESTATES

LOCATED IN  
A PORTION OF THE WEST 1689.24 FEET OF THE S 1/2 N 1/2 N 1/2 NE 1/4  
SECTION 29, T27N, R43E W.M., SPOKANE COUNTY, WASHINGTON

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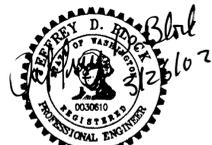
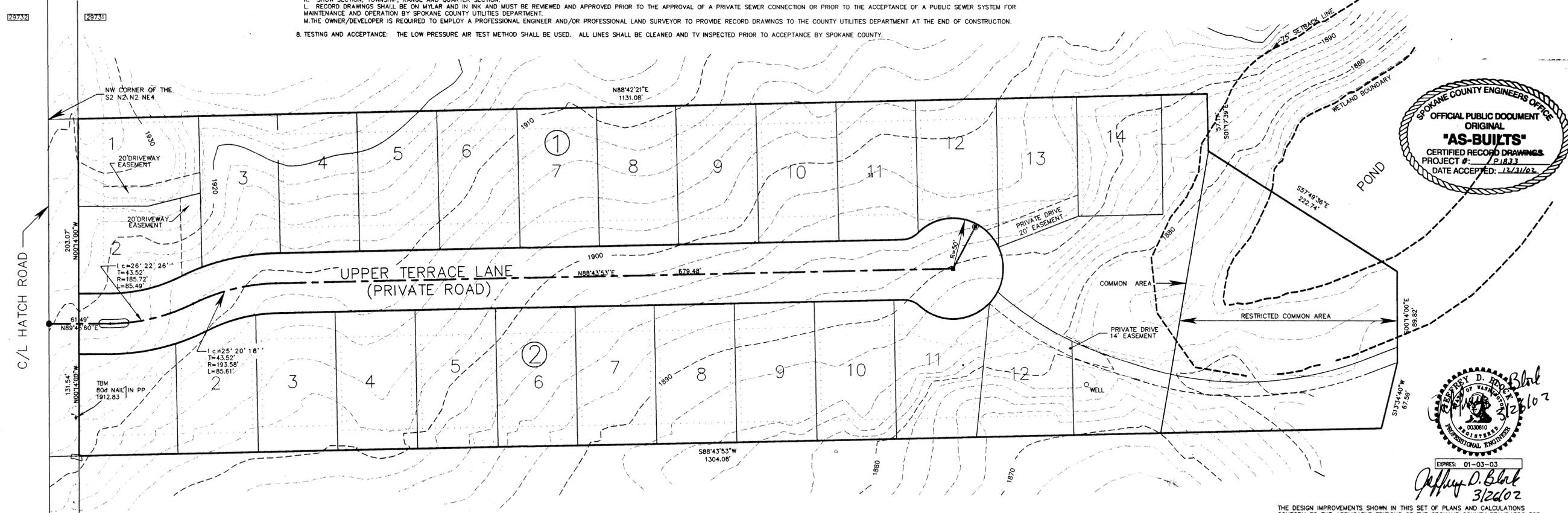
1. GENERAL: ALL SEWER LINE CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AS JOINTLY PROMULGATED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND THE WASHINGTON STATE PUBLIC WORKS ASSOCIATION, CURRENT EDITION, AS ADOPTED AND REVISED BY THE SPOKANE COUNTY UTILITIES DEPARTMENT. THESE PLANS ARE SCHEMATIC AND ARE NOT INTENDED TO DEPICT ALL DETAILS OF THE WORK REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE TO FAMILIARIZE HIMSELF WITH ACTUAL SITE CONDITIONS AND FACTORS AFFECTING THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH SPOKANE COUNTY TO DEVELOP A TRAFFIC CONTROL PLAN AND INSPECTION REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED PERMITS. PAVEMENT PATCHING REQUIREMENTS SHALL BE AS DETERMINED BY THE SPOKANE COUNTY ROAD DEPARTMENT. IN ADDITION, THE CONTRACTOR SHALL ADHERE TO ALL SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT TO CONSTRUCT AND INSTALL TO PROPER WORKING ORDER, AS DETAILED OR CALLED OUT IN THESE PLANS AND SPECIFICATIONS.
2. PIPE: ALL SEWER PIPE SHALL BE PVC IN ACCORDANCE WITH A.S.T.M. D 3034, SDR 35.
3. TRENCH EXCAVATION AND BACKFILL: ALL TRENCH EXCAVATION AND BACKFILL SHALL CONFORM TO W.S.D.O.T. SECTION 7-08.3(1). ALL BEDDING SHALL CONSIST OF APPROVED BEDDING MATERIAL PLACED AROUND THE PIPE AND BACKFILLED AS PER W.S.D.O.T. SECTION 7-08.3(1)(C). BEDDING SHALL MEET W.S.D.O.T. 9-03.16 SPECIFICATIONS EXCEPT PERCENT PASSING 200 SIEVE IS CHANGED TO 10% MAXIMUM. COMPACTION OF BACKFILL IN ROADWAY SHALL BE TO MEET SPOKANE COUNTY ENGINEER'S REQUIREMENTS. TESTING CONTRACTOR SEWERS AND SIDE SEWERS SHALL BE DONE IN ACCORDANCE WITH SPOKANE COUNTY UTILITIES DEPARTMENT.
4. MANHOLES: SHALL BE IN ACCORDANCE WITH SANITARY SEWER MANHOLE DETAILS AS ADOPTED BY SPOKANE COUNTY UTILITIES DEPARTMENT.
5. SIDE SEWERS: EACH SEWER SERVICE LINE SHALL BE A MINIMUM OF 10 FEET FROM SIDE LOT LINES. EACH SEWER SERVICE LINE AND MAINLINE STUB SHALL BE MARKED WITH A 4X4 MARKER POST EXTENDING VERTICALLY FROM THE SEWER SERVICE OR MAINLINE STUB INVERT TO A MINIMUM OF 24" ABOVE FINISHED GRADE. EACH 4X4 MARKER POST SHALL HAVE A 6 GAUGE GALVANIZED WIRE SECURELY ATTACHED FOR ITS ENTIRE LENGTH AND SHALL BE CLEARLY MARKED SHOWING THE 4X4 LENGTH IN FEET AT THE EXPOSED END.
6. INSPECTION WORK: ALL SEWER CONSTRUCTION INSPECTIONS, RECORD DRAWINGS AND ENGINEERING STATEMENTS SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE SPOKANE COUNTY POLICY ADOPTED SEPTEMBER 22, 1998 VIA RESOLUTION 98-0771. PROJECT SPONSOR OR HIS ENGINEER SHALL NOTIFY THE SPOKANE COUNTY DIVISION OF UTILITIES AT LEAST 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION OF THE SEWER SYSTEM, AND THE CONTRACTOR SHALL PROVIDE A GENERALIZED CONSTRUCTION SCHEDULE FOR THE PROGRESS OF WORK. THE CONTRACTOR SHALL COORDINATE THE WORK WITH THE ENGINEER AND PROVIDE ALL MEANS NECESSARY TO ALLOW THE ENGINEER TO INSPECT AND VERIFY THE SEWER ITEMS LISTED BELOW. FOR EACH ITEM TO BE INSPECTED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER A LEAST 48 HOURS IN ADVANCE.
  - A. CONFORMANCE OF ALL CONSTRUCTION MATERIALS WITH COUNTY STANDARDS SHALL BE VERIFIED PRIOR TO INSTALLATION.
  - B. THE SEWER TRENCH SHALL BE INSPECTED FOR PROPER DIMENSIONS AND PIPE ZONE CLEARANCES PRIOR TO PLACEMENT OF PIPE.
  - C. THE PLACEMENT AND COMPACTION OF THE PIPE ZONE MATERIAL AND BEDDING SHALL BE INSPECTED.
  - D. THE PIPE JOINTS SHALL BE INSPECTED VISUALLY FOR PROPER INSERTION.
  - E. HORIZONTAL ALIGNMENT AND GRADE OF THE PIPE SHALL BE CHECKED FOR CONFORMANCE TO THE STANDARDS PRIOR TO BACKFILLING OF THE TRENCH.
  - F. SEWER SERVICE TEES AND STUBS SHALL BE INSPECTED FOR CORRECT INSTALLATION PRIOR TO BACKFILLING OF THE TRENCH.
  - G. ACCURATE MEASUREMENTS SHALL BE MADE AND RECORDED TO FACILITATE THE RE-ESTABLISHMENT OF SEWER SERVICE TEE LOCATIONS AND STUB END LOCATIONS. THE PLACEMENT OF THE REQUIRED STUB MARKERS SHALL BE VERIFIED.
  - H. MANHOLES SHALL BE INSPECTED FOR PROPER MATERIALS, LOCATION, ASSEMBLY, AND INSTALLATION.
  - I. TRENCH BACKFILLING OPERATIONS SHALL BE OBSERVED AND COMPACTION TESTS SHALL BE PERFORMED. MINIMUM REQUIREMENTS FOR BACKFILLING SHALL BE AS SET FORTH IN THE ACCEPTED PLANS AND/OR SPECIFICATIONS FOR THE PROJECT.
  - J. MANDREL TESTING, HYDROSTATIC AND/OR AIR PRESSURE TESTING, AND MANHOLE TESTING SHALL BE PERFORMED FOLLOWING COMPLETION OF TRENCH BACKFILLING OPERATIONS. THE TESTING SHALL BE OBSERVED UNTIL PASSING RESULTS ARE OBTAINED. MANHOLE TESTING SHALL BE PERFORMED ON TEN PERCENT OF THE MANHOLES IN THE PROJECT, IN ACCORDANCE WITH DEPARTMENT OF ECOLOGY'S "CRITERIA FOR SEWER WORKS DESIGN".
  - K. THE SPONSOR'S ENGINEER SHALL SCHEDULE TELEVISION INSPECTION OF THE SEWER LINES THROUGH THE DIVISION OF UTILITIES ONCE THE OTHER TESTING HAS BEEN SATISFACTORILY COMPLETED. THE DIVISION OF UTILITIES WILL THEN PERFORM THE TELEVISION INSPECTION AND REVIEW THE TAPES FOR DEFICIENCIES REQUIRING CORRECTION OR REPAIR.
  - L. ITEMS LISTED UNDER RECORD DRAWINGS (NOTE #7) SHALL BE INCLUDED IN THE INSPECTION AND TESTING WORK.
7. RECORD DRAWINGS: REPRODUCIBLE RECORD DRAWINGS WITH "ENGINEER STATEMENT" ARE TO BE SUBMITTED TO AND APPROVED BY THE SPOKANE COUNTY UTILITIES DEPARTMENT AT THE COMPLETION OF CONSTRUCTION. 2 HORIZONTAL AND 1 VERTICAL TIE SHALL BE SHOWN ON RECORD DRAWINGS FOR ALL SIDE SEWER SERVICES, MAIN LINE STUBS, AND CLEANOUTS; STUBS THAT ARE NOT CONSTRUCTED PERPENDICULAR TO SEWER MAIN WILL NEED A STATION AND OFFSET FROM SEWER MAIN TO END CAP SHOWN ON RECORD DRAWINGS. STATIONS SHALL BE FROM DOWNSTREAM MANHOLE AND MEASURED ON MAIN SEWER LINE. MINIMUM SEWER RECORD DRAWING REQUIREMENTS ARE AS FOLLOWS:
  - A. PIPE SIZE AND TYPE/LENGTH AND SLOPE BETWEEN MANHOLES.
  - B. ACTUAL RIM AND INVERT ELEVATION AT EACH MANHOLE.
  - C. DISTANCE FROM DOWNSTREAM MANHOLE TO SIDE SEWER SERVICE STUB ENDS. 90' OFFSET DISTANCE TO STUB END FROM SEWER MAIN OR BACK OF CURB (NOT PROPERTY LINES). ALL ANGLE POINTS OR BENDS ON SIDE SERVICE LINE SHALL BE LOCATED WITH 2 HORIZONTAL SWING TIES. STUBS NOT CONSTRUCTED PERPENDICULAR TO SEWER MAIN WILL REQUIRE A STATION ON THE SERVICE TEE ALSO SHOWN ON RECORD DRAWINGS.
  - D. ACTUAL INVERT ELEVATION OF STUB AND CALCULATED DEPTH FROM ADJOINING CURB OR NATURAL GROUND. THE ENGINEER SHALL COMPLETE 8 1/2 X 11 COUNTY STANDARD PLAN SHEET U-16 (SIDE SERVICE CONNECTION RECORD DRAWING) FOR EACH SIDE SERVICE WITHIN PROJECT OR PLAT AND SUBMIT WITH RECORD DRAWINGS OF PLAN AND PROFILE SHEETS PRIOR TO PROJECT SIGN OFF.
  - E. STREET WIDTH/BACK TO BACK OF CURBS/WIDTH OF RIGHT-OF-WAY.
  - F. LOCATION OF SEWER MAIN WITHIN STREET. FORCE MAIN ANGLE POINTS SHALL BE LOCATED 2 WAYS HORIZONTALLY AND ONE WAY VERTICALLY FROM PERMANENT SURFACE FEATURES.
  - G. STUBS NOT 10' FROM THE SIDE LOT LINES MUST BE MOVED OR A MAINTENANCE EASEMENT MUST BE PROVIDED OR A HOLD COUNTY HARMLESS AGREEMENT MUST BE PROVIDED.
  - H. SHOW ALL SERVICED LOTS, LOT NUMBERS, BLOCK NUMBERS AND LOT LINES.
  - I. SHOW DIMENSIONS AND INCLUDE A COPY OF THE RECORDED EASEMENT DOCUMENT FOR ALL MAINLINE SANITARY SEWER EASEMENTS (10' MINIMUM EACH SIDE OF PIPE).
  - J. INCLUDE COUNTY MANHOLE NUMBERS.
  - K. SHOW SECTION, TOWNSHIP, RANGE AND QUARTER SECTION.
  - L. RECORD DRAWINGS SHALL BE ON MYLAR AND INK AND MUST BE REVIEWED AND APPROVED PRIOR TO THE APPROVAL OF A PRIVATE SEWER CONNECTION OR PRIOR TO THE ACCEPTANCE OF A PUBLIC SEWER SYSTEM FOR MAINTENANCE AND OPERATION BY SPOKANE COUNTY UTILITIES DEPARTMENT.
  - M. THE OWNER/DEVELOPER IS REQUIRED TO EMPLOY A PROFESSIONAL ENGINEER AND/OR PROFESSIONAL LAND SURVEYOR TO PROVIDE RECORD DRAWINGS TO THE COUNTY UTILITIES DEPARTMENT AT THE END OF CONSTRUCTION.
8. TESTING AND ACCEPTANCE: THE LOW PRESSURE AIR TEST METHOD SHALL BE USED. ALL LINES SHALL BE CLEANED AND TV INSPECTED PRIOR TO ACCEPTANCE BY SPOKANE COUNTY.

NOTES:

1. ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION" 1995, AND AS AMENDED.
2. LOCATIONS OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES.
3. 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.
4. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER AND THE SPOKANE COUNTY ENGINEER'S OFFICE.
5. FOR CONSTRUCTION OF DRYWELLS, INSTALL FILTER FABRIC (AMOCO 4545 OR APPROVED EQUIVALENT) BETWEEN THE DRYWELL BARREL AND THE WASHED DRAINROCK, AND BETWEEN THE WASHED DRAINROCK AND THE NATIVE SOILS.
6. PRIOR TO SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES. CALL THE UNDERGROUND UTILITY LOCATION SERVICE AT 456-8000 BEFORE YOU DIG.
7. FOR ANY CURB GRADES LESS THAN 0.8% (0.008 FT/FT), A WASHINGTON STATE LICENSED PROFESSIONAL LAND SURVEYOR SHALL VERIFY THAT THE CURB FORMS ARE AT THE GRADES NOTED ON THE APPROVED PLANS, PRIOR TO PLACEMENT OF CURB MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING AND COORDINATING WORK WITH THE PROFESSIONAL LAND SURVEYOR.
8. THE FLOOR OF A GRASSED PERCOLATION AREA (GPA) SWALE INCLUDES THE LEVEL PORTION OF THE FLOOR OF THE SWALE, AND THE SIDESLOPES OF THE SWALE UP TO THE GPA OVERFLOW ELEVATION OR TOP OF DRYWELL. THE SOIL LOCATED IN THE FLOOR OF THE GPA SWALE SHALL BE A MEDIUM TO WELL-DRAINING MATERIAL, WITH A MINIMUM INFILTRATION RATE OF 0.5 INCHES PER HOUR. THE ENGINEER SHALL PROVIDE A WRITTEN STATEMENT WHICH VERIFIES THAT ALL GPA SWALES CONFORM TO THE REQUIREMENT. THIS WRITTEN STATEMENT SHALL BE SUBMITTED TO THE SPOKANE COUNTY ENGINEER'S OFFICE PRIOR TO INSTALLING FINISHED LANDSCAPING/SOIL AND PRIOR TO FINAL ACCEPTANCE. THE SWALE FLOOR MATERIAL SHALL BE INSTALLED TO A NATIVE SOIL STRATUM WHICH ALSO MEETS OR EXCEEDS THIS MINIMUM PERCOLATION RATE OF 0.5 INCHES PER HOUR.

DESCRIPTION

A PORTION OF THE WEST 1689.24 FEET OF THE S 1/2 N 1/2 N 1/2 NE 1/4 SECTION 29, T27N, R43E W.M., SPOKANE COUNTY, WASHINGTON, IS FURTHER DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID S 1/2 N 1/2 N 1/2 NE 1/4 SECTION 29; THENCE N88°42'21"E ALONG THE NORTH LINE OF THE S 1/2 N 1/2 N 1/2 NE 1/4 A DISTANCE OF 300.00 FEET TO THE TRUE POINT OF BEGINNING FOR THIS DESCRIPTION; THENCE CONTINUING ALONG SAID NORTH LINE N88°42'21"E A DISTANCE OF 1131.08 FEET; THENCE S01°17'39"E A DISTANCE OF 57.17 FEET; THENCE S57°49'36"E A DISTANCE OF 222.74 FEET; THENCE S00°4'00"E A DISTANCE OF 89.82 FEET; THENCE S13°34'40"W A DISTANCE OF 67.50 FEET TO THE INTERSECTION WITH THE SOUTH LINE OF SAID S 1/2 N 1/2 N 1/2 NE 1/4; THENCE S88°43'53"W A DISTANCE OF 1304.08 FEET TO THE INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY OF THE COUNTY ROAD (HATCH ROAD); THENCE N00°14'00"W A DISTANCE OF 334.62 FEET TO THE TRUE POINT OF BEGINNING. CONTAINS 9.624 ACRES MORE OR LESS.



Jeffrey D. Block  
3/26/02

*[Signature]*  
DEVELOPER'S APPROVAL

3/26/02  
DATE

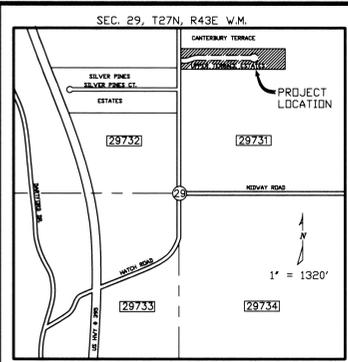
THE DESIGN IMPROVEMENTS SHOWN IN THIS SET OF PLANS AND CALCULATIONS CONFORM TO THE APPLICABLE EDITIONS OF THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE SPOKANE COUNTY GUIDELINES FOR STORM WATER MANAGEMENT. THE SPOKANE COUNTY ENGINEER HAS APPROVED ALL DESIGN DEVIATIONS. I APPROVE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

K.A. DURTSCHI & ASSOC., INC.  
SURVEYING-PLANNING  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 5  
HAYDEN LAKE, ID 83835  
(208) 772-2233  
FAX: 772-9531  
PROJECT NO. 2050

JEFFREY D. BLOCK, P.E.  
CONSULTING ENGINEER  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 4  
HAYDEN LAKE, ID 83835  
(208) 772-2233  
FAX: 772-9531  
PROJECT NO. 1246

UPPER TERRACE ESTATES  
COVER SHEET & NOTES  
UPPER TERRACE LANE & HATCH ROAD  
COVER SHEET & NOTES

REVISION	HORIZ. SCALE	AS SHOWN	DATE
11-5-01	VERT. SCALE	CHECKED BY:	
	APPROVED BY:	DESIGN BY:	
	DRAWN BY:	PLAN DWG. NO.	10-12-01
	DATE	PROF. DWG. NO.	

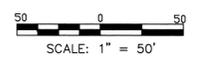


VICINITY MAP

# UPPER TERRACE ESTATES

LOCATED IN  
A PORTION OF THE WEST 1689.24 FEET OF THE S 1/2 N 1/2 N 1/2 NE 1/4  
SECTION 29, T27N, R43E W.M., SPOKANE COUNTY, WASHINGTON

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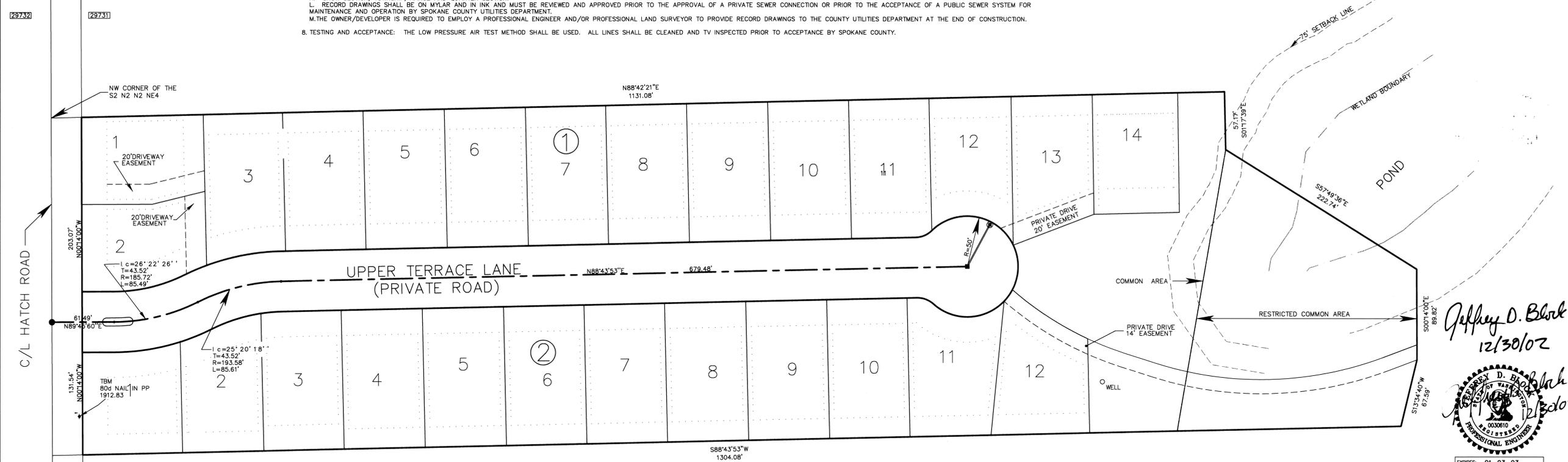


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- ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION" 1995, AND AS AMENDED.
  - LOCATIONS OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES.
  - 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.
  - IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER AND THE SPOKANE COUNTY ENGINEER'S OFFICE.
  - FOR CONSTRUCTION OF DRYWELLS, INSTALL FILTER FABRIC (AMOCO 4545 OR APPROVED EQUIVALENT) BETWEEN THE DRYWELL BARREL AND THE WASHED DRAINROCK, AND BETWEEN THE WASHED DRAINROCK AND THE NATIVE SOILS.
  - PRIOR TO SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES. CALL THE UNDERGROUND UTILITY LOCATION SERVICE AT 456-8000 BEFORE YOU DIG.
  - FOR ANY CURB GRADES LESS THAN 0.8% (0.008 FT/FT), A WASHINGTON STATE LICENSED PROFESSIONAL LAND SURVEYOR SHALL VERIFY THAT THE CURB FORMS ARE AT THE GRADES NOTED ON THE APPROVED PLANS, PRIOR TO PLACEMENT OF CURB MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING AND COORDINATING WORK WITH THE PROFESSIONAL LAND SURVEYOR.
  - THE FLOOR OF A GRASSED PERCOLATION AREA (GPA) SWALE INCLUDES THE LEVEL PORTION OF THE FLOOR OF THE SWALE, AND THE SIDESLOPES OF THE SWALE UP TO THE GPA OVERFLOW ELEVATION OR TOP OF DRYWELL. THE SOIL LOCATED IN THE FLOOR OF THE GPA SWALE SHALL BE A MEDIUM TO WELL-DRAINING MATERIAL, WITH A MINIMUM INFILTRATION RATE OF 0.5 INCHES PER HOUR. THE ENGINEER SHALL PROVIDE A WRITTEN STATEMENT WHICH VERIFIES THAT ALL GPA SWALES CONFORM TO THE REQUIREMENT. THIS WRITTEN STATEMENT SHALL BE SUBMITTED TO THE SPOKANE COUNTY ENGINEER'S OFFICE PRIOR TO INSTALLING FINISHED LANDSCAPING/SOD AND PRIOR TO FINAL ACCEPTANCE. THE SWALE FLOOR MATERIAL SHALL BE INSTALLED TO A NATIVE SOIL STRATUM WHICH ALSO MEETS OR EXCEEDS THIS MINIMUM PERCOLATION RATE OF 0.5 INCHES PER HOUR.

### DESCRIPTION

A PORTION OF THE WEST 1689.24 FEET OF THE S 1/2 N 1/2 N 1/2 NE 1/4 SECTION 29, T27N, R43E W.M., SPOKANE COUNTY, WASHINGTON AND FURTHER DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID S 1/2 N 1/2 N 1/2 NE 1/4 SECTION 29; THENCE N88°42'21"E ALONG THE NORTH LINE OF THE S 1/2 N 1/2 N 1/2 NE 1/4 SECTION 29; THENCE CONTINUING ALONG SAID NORTH LINE N88°42'21"E A DISTANCE OF 1131.08 FEET; THENCE S01°17'39"E A DISTANCE OF 57.17 FEET; THENCE S57°49'36"E A DISTANCE OF 222.74 FEET; THENCE S00°14'00"E A DISTANCE OF 89.82 FEET; THENCE S13°34'40"W A DISTANCE OF 67.59 FEET TO THE INTERSECTION WITH THE SOUTH LINE OF SAID S 1/2 N 1/2 N 1/2 NE 1/4; THENCE S88°43'53"W A DISTANCE OF 1304.08 FEET TO THE INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY OF THE COUNTY ROAD (HATCH ROAD); THENCE N00°14'00"W A DISTANCE OF 334.62 FEET TO THE TRUE POINT OF BEGINNING. CONTAINS 9.624 ACRES MORE OR LESS.



Jeffrey D. Block  
12/30/02  
Professional Engineer Seal

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

RECORD DRAWING

DEVELOPER'S APPROVAL

12/30/02  
DATE

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

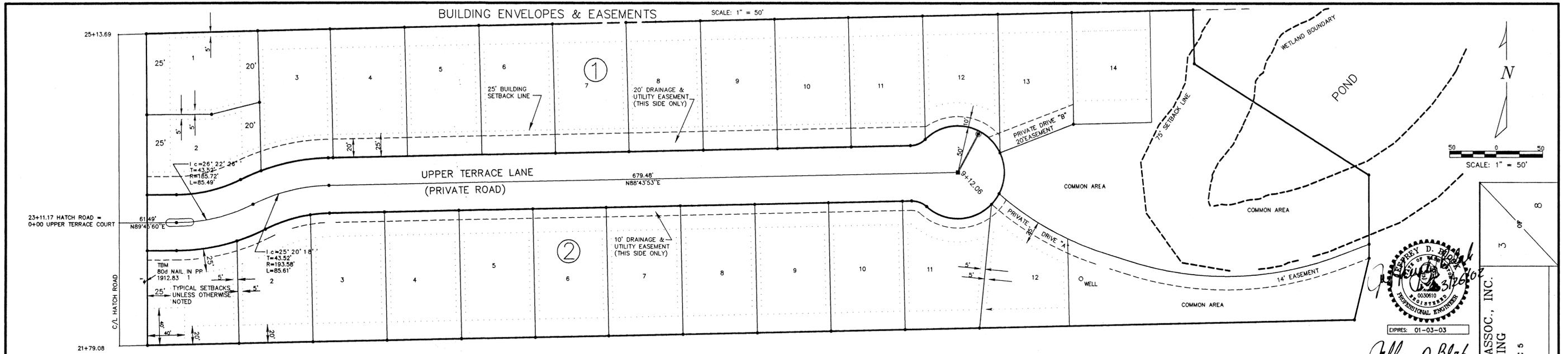
K.A. DURTSCHI & ASSOC., INC.  
SURVEYING-PLANNING  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 5  
HAYDEN LAKE, ID 83855  
(208) 772-2233  
FAX: 772-9231  
PROJECT NO. 2050

JEFFREY D. BLOCK, P.E.  
CONSULTING ENGINEER  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 4  
HAYDEN LAKE, ID 83855  
(208) 772-2233  
FAX: 772-9231  
PROJECT NO. 1246

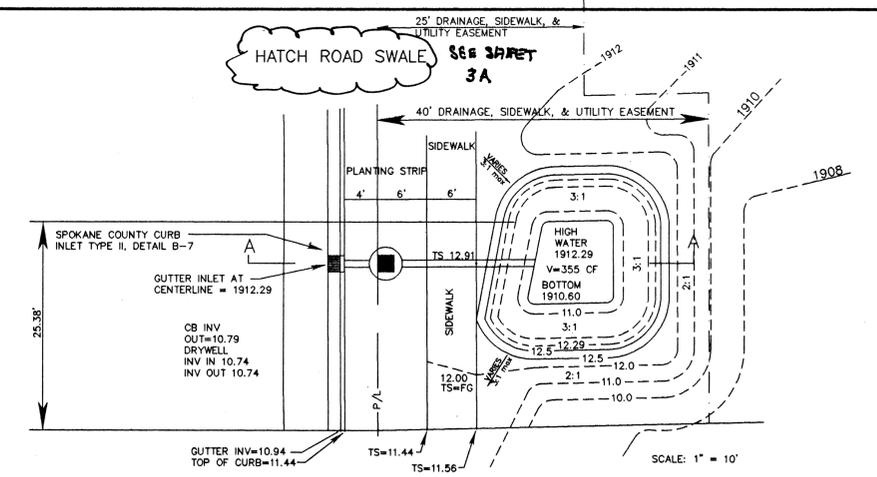
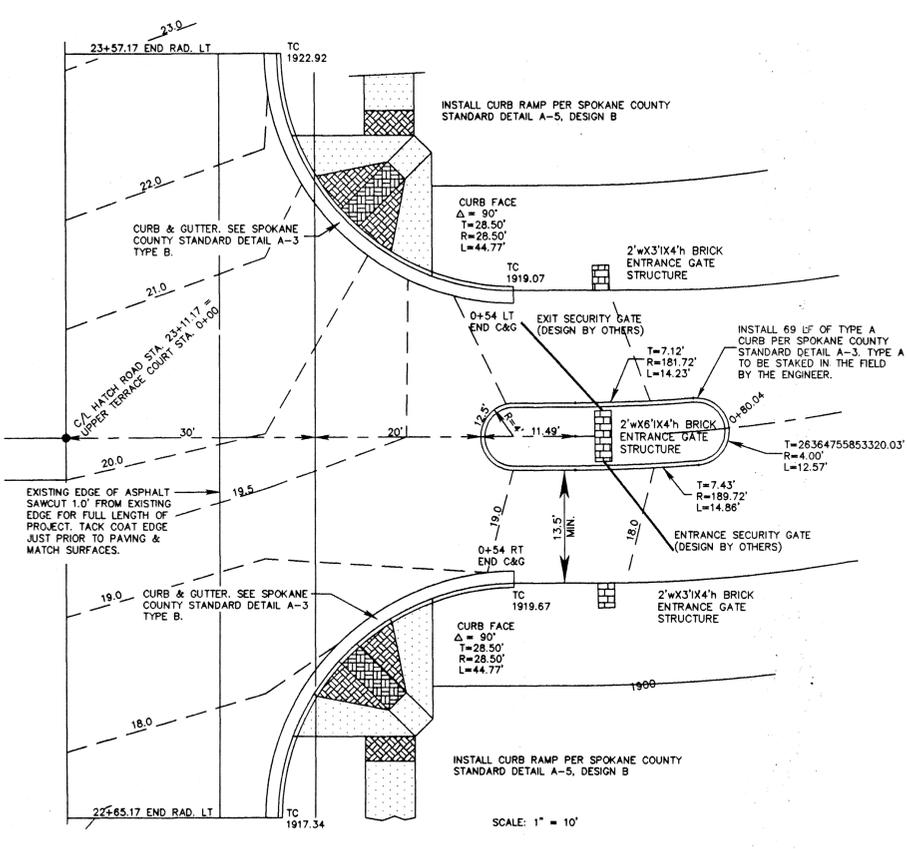
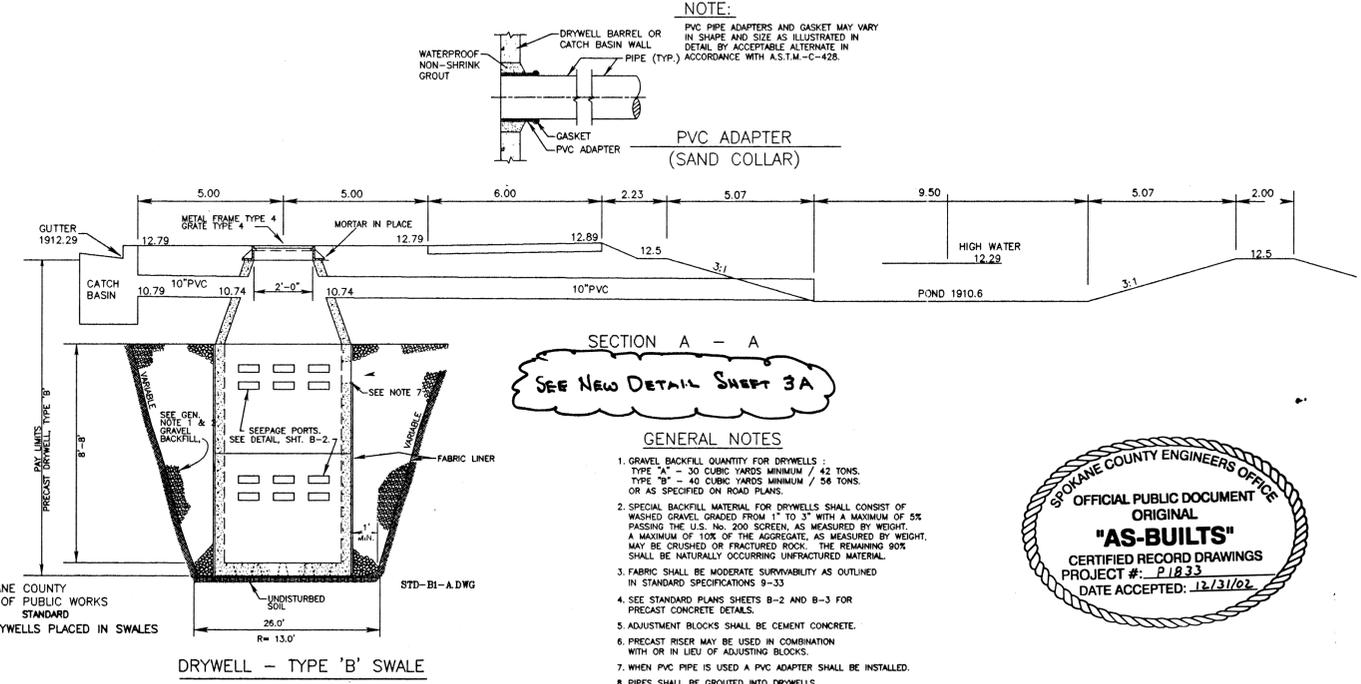
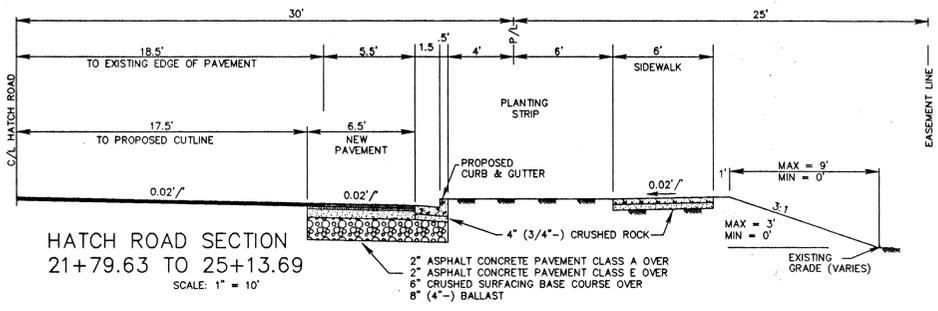
UPPER TERRACE ESTATES  
COVER SHEET & NOTES

REVISION	HORIZ. SCALE	AS SHOWN	DATE
11-5-01	VERT. SCALE		
7-9-02	CHECKED BY:		
9-19-02	APPROVED BY:		
12-2-02	DESIGN BY:		
12-26-02	DRAWN BY:	EES	10-12-01
	PLAN DWG. NO.		
	PROFILE DWG. NO.		

P-1833 Eng. A. B. Benth



**JEFFREY D. BLOCK**  
PROFESSIONAL ENGINEER  
EXPIRES: 01-03-03  
*Jeffrey D. Block*  
3/22/02



SEE DETAIL SHEET 3A



*Developer's Signature*  
DEVELOPER'S APPROVAL

3/22/02  
DATE

**K.A. DURTSCHI & ASSOC., INC.**  
SURVEYING-PLANNING  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 5  
HAYDEN LAKE, ID 83835  
FAX: 772-9231  
PROJECT NO. 2050

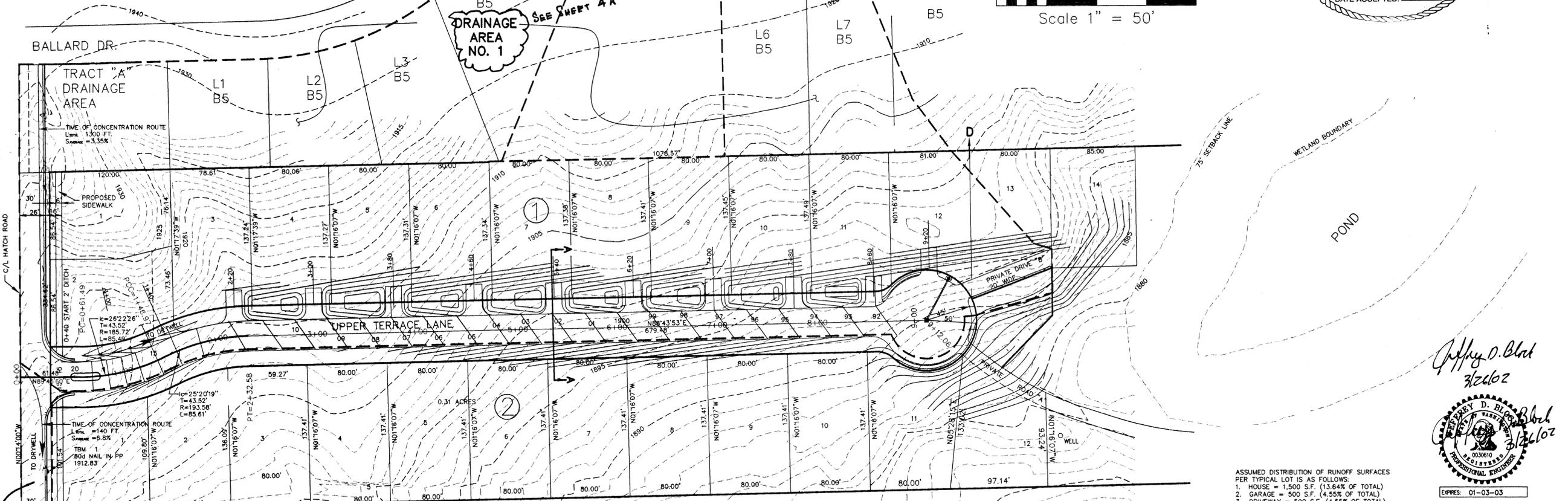
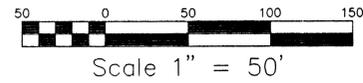
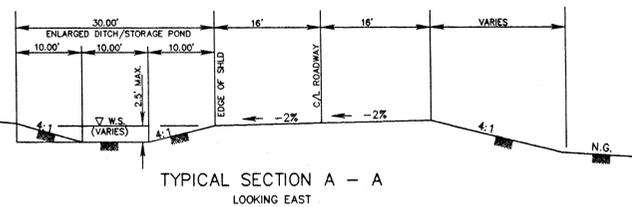
**JEFFREY D. BLOCK, P.E.**  
CONSULTING ENGINEER  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 4  
HAYDEN LAKE, ID 83835  
FAX: 772-9231  
PROJECT NO. 1248

UPPER TERRACE ESTATES  
MISC. DETAILS

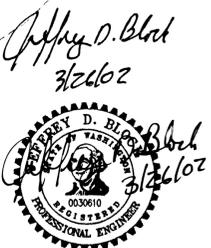
REVISION	HORIZ. SCALE AS SHOWN	DATE
11-5-01 <td></td> <td></td>		
2-2-02		

APPROVED BY: JDB  
DESIGN BY: JDB  
DRAWN BY: BEB  
PLAN DWG. NO.  
PROFILE DWG. NO.



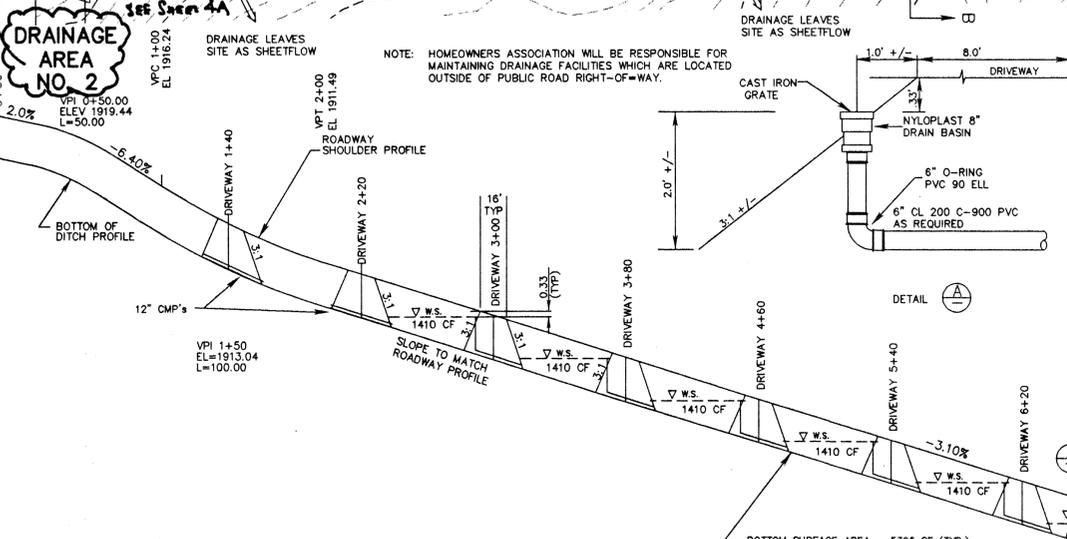


ASSUMED DISTRIBUTION OF RUNOFF SURFACES PER TYPICAL LOT IS AS FOLLOWS:  
 1. HOUSE = 1,500 S.F. (13.64% OF TOTAL)  
 2. GARAGE = 500 S.F. (4.55% OF TOTAL)  
 3. DRIVEWAY = 500 S.F. (4.55% OF TOTAL)  
 4. LAWN/LANDSCAPING = 8,500 S.F. (77.27% OF TOTAL)  
 5. TOTAL = 11,000 S.F.



K.A. DURTSCHI & ASSOC., INC.  
 SURVEYING-PLANNING  
 P.O. BOX 700  
 9751 GOVERNMENT WAY, SUITE 5  
 HAYDEN LAKE, ID 83835  
 (208) 772-2233  
 FAX: 772-9231  
 PROJECT NO. 2050

JEFFREY D. BLOCK, P.E.  
 CONSULTING ENGINEER  
 P.O. BOX 700  
 9751 GOVERNMENT WAY, SUITE 4  
 HAYDEN LAKE, ID 83835  
 (208) 772-2233  
 FAX: 772-9231  
 PROJECT NO. 245



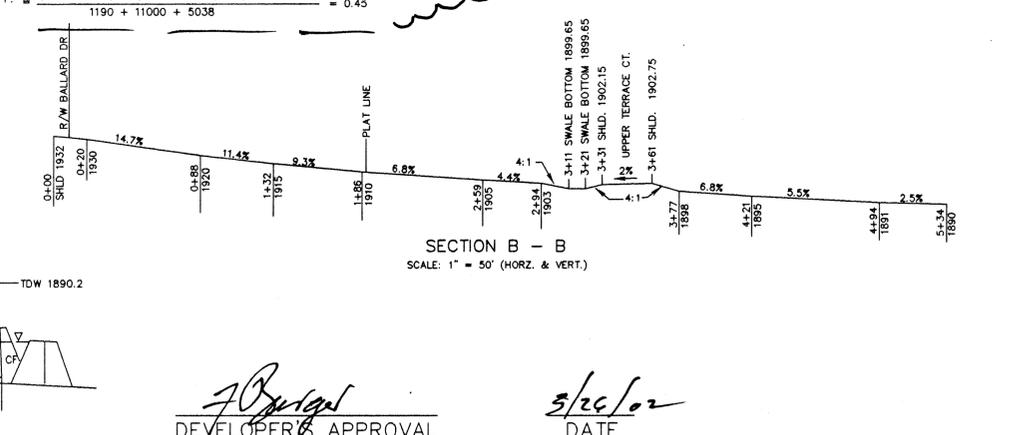
DRAINAGE AREA NO.	ROADWAY					ON-SITE					OFF-SITE				
	IMPERVIOUS S.F. (ROADWAY & PARTIAL DRIVEWAYS)	NON-IMPERVIOUS S.F. SWALE/G.I.A.	TOTAL S.F.	IMPERVIOUS S.F. (DRIVEWAY)	NON-IMPERVIOUS S.F. (RESIDENCE ROOF)	TOTAL S.F.	IMPERVIOUS S.F. (ROADWAY)	NON-IMPERVIOUS S.F. (SWALE/G.I.A.)	TOTAL S.F.	IMPERVIOUS S.F. (DRIVEWAY)	NON-IMPERVIOUS S.F. (RESIDENCE ROOF)	TOTAL S.F.	IMPERVIOUS S.F. (YARD/LANDSCAPING)	NON-IMPERVIOUS S.F. (YARD/LANDSCAPING)	TOTAL S.F.
ONE	33312	10388	43700	6500	26000	110500	3600	1800	5400	3500	14000	58500	0	0	77000
TWO	2240	8310	11550	5500	22000	93500	0	0	0	0	0	0	0	0	
THREE	224	966	1190	500	2000	8500	2519	5038	2519	0	0	0	0	0	

AVERAGE RUNOFF COEFF. = (0.75 x 43700) + (0.32 x 175500) + (0.68 x 5400) + (0.40 x 77000) = 0.41  
 DRAINAGE AREA NO. 1: 43700 + 175500 + 5400 + 77000

AVERAGE RUNOFF COEFF. = (0.38 x 11550) + (0.40 x 121000) = 0.40  
 DRAINAGE AREA NO. 2: 11550 + 121000

AVERAGE RUNOFF COEFF. = (0.37 x 1190) + (0.40 x 11000) + (0.58 x 5038) = 0.45  
 DRAINAGE AREA NO. 3: 1190 + 11000 + 5038

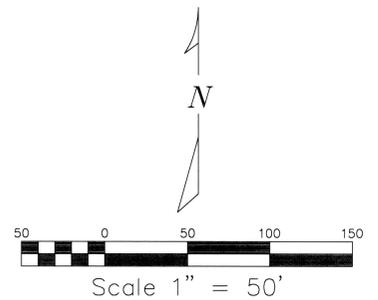
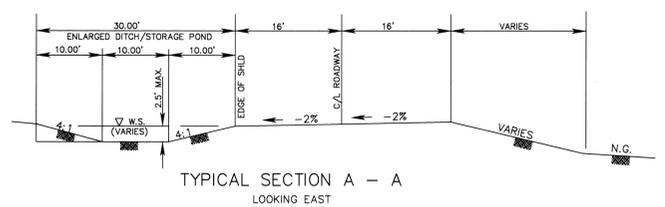
NOTES:  
 1. TOTAL STORAGE CAPACITY BETWEEN STA. 2+00 DRIVEWAY AND 8+60 DRIVEWAY EQUALS 12330 +/- CU. FT.



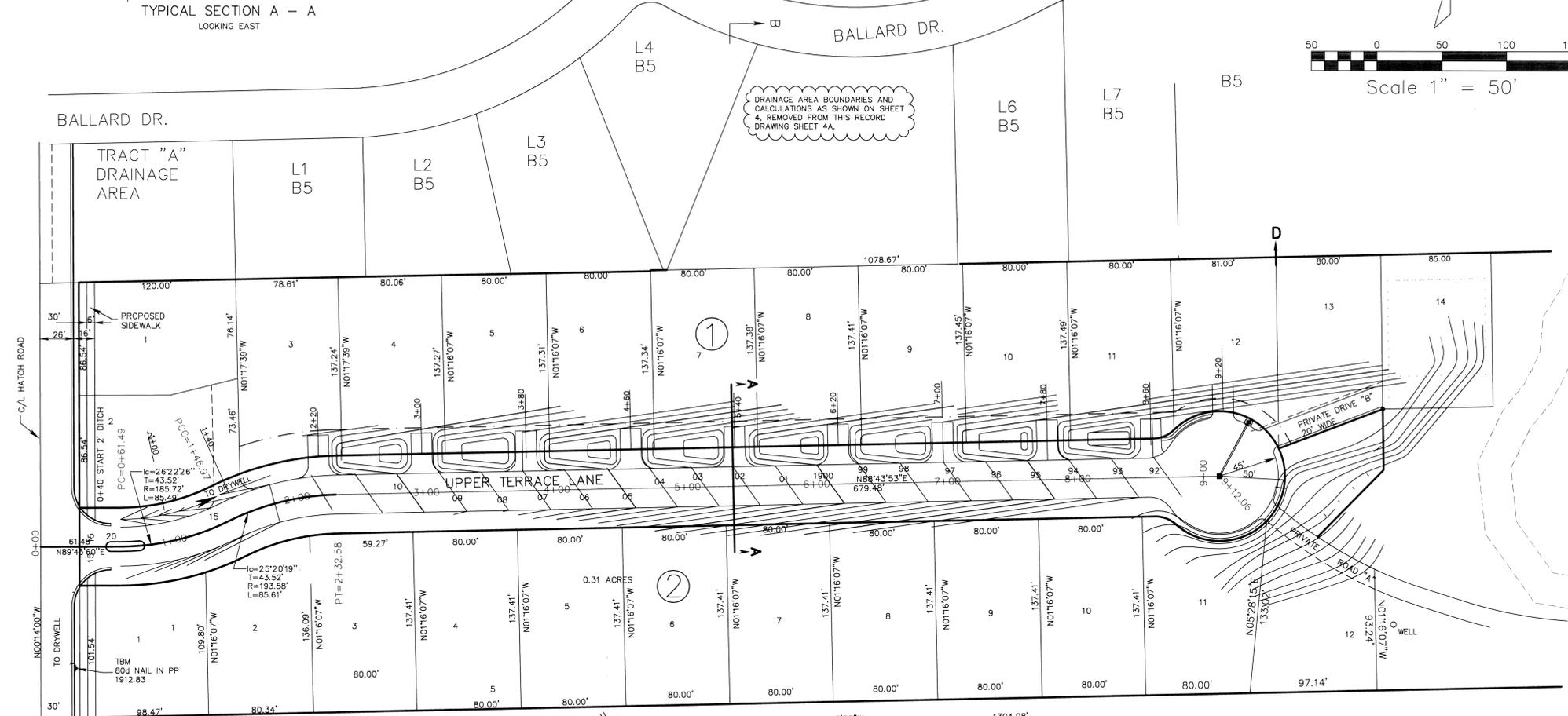
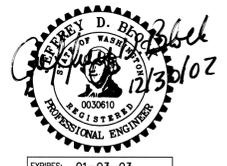
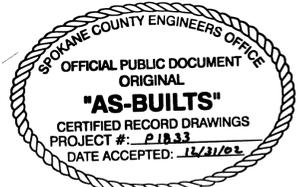
DEVELOPER'S APPROVAL: *[Signature]*  
 DATE: 3/26/02

UPPER TERRACE ESTATES  
 DRAINAGE PLAN  
 ENLARGED DITCH/STORAGE POND

REVISION	HORIZ. SCALE AS SHOWN	DATE
11-5-01	VERT. SCALE	
2-12-02	CHECKED BY: JDB	
	APPROVED BY: JDB	
	DESIGN BY: JDB	
	DRAWN BY: RES	10-12-01
	PLAN DWG. NO.	
	PROFILE DWG. NO.	



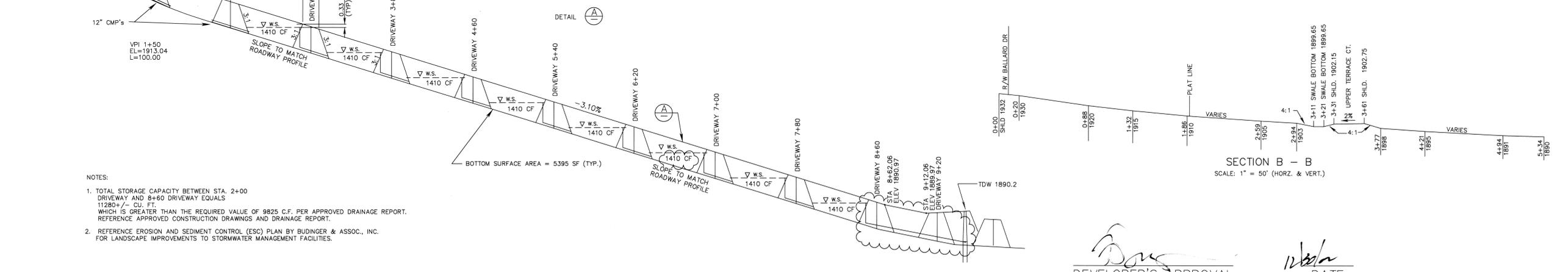
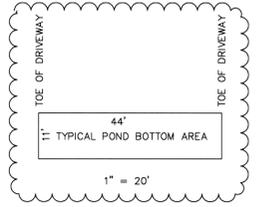
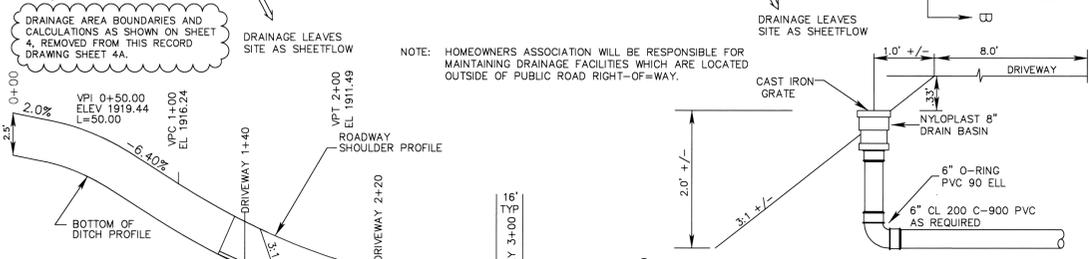
RECORD DRAWINGS  
THESE RECORD DRAWINGS REPRESENT THE CORRECT  
LOCATIONS OF IMPROVEMENTS MADE TO THIS PROJECT  
BASED ON FIELD OBSERVATIONS MADE DURING  
CONSTRUCTION.



- ASSUMED DISTRIBUTION OF RUNOFF SURFACES  
PER TYPICAL LOT IS AS FOLLOWS:
- HOUSE = 1,500 S.F. (13.64% OF TOTAL)
  - GARAGE = 500 S.F. (4.55% OF TOTAL)
  - DRIVEWAY = 500 S.F. (4.55% OF TOTAL)
  - LAWN/LANDSCAPING = 8500 S.F. (77.27% OF TOTAL)
  - TOTAL = 11,000 S.F.

RECORD DRAWING

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE  
FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE  
APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS  
EXCEPT AS NOTED.



- NOTES:
- TOTAL STORAGE CAPACITY BETWEEN STA. 2+00 DRIVEWAY AND 8+60 DRIVEWAY EQUALS 11280 +/- CU. FT. WHICH IS GREATER THAN THE REQUIRED VALUE OF 9825 C.F. PER APPROVED DRAINAGE REPORT. REFERENCE APPROVED CONSTRUCTION DRAWINGS AND DRAINAGE REPORT.
  - REFERENCE EROSION AND SEDIMENT CONTROL (ESC) PLAN BY BUDINGER & ASSOC., INC. FOR LANDSCAPE IMPROVEMENTS TO STORMWATER MANAGEMENT FACILITIES.

DEVELOPER'S APPROVAL

DATE

4A OF 8

K.A. DURTSCHI & ASSOC., INC.  
SURVEYING-PLANNING  
P.O. BOX 700  
HAYDEN LAKE, ID 83835  
FAX: 772-9231  
PROJECT NO. 2026

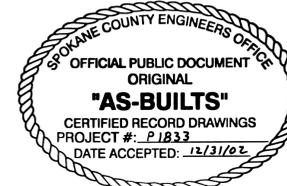
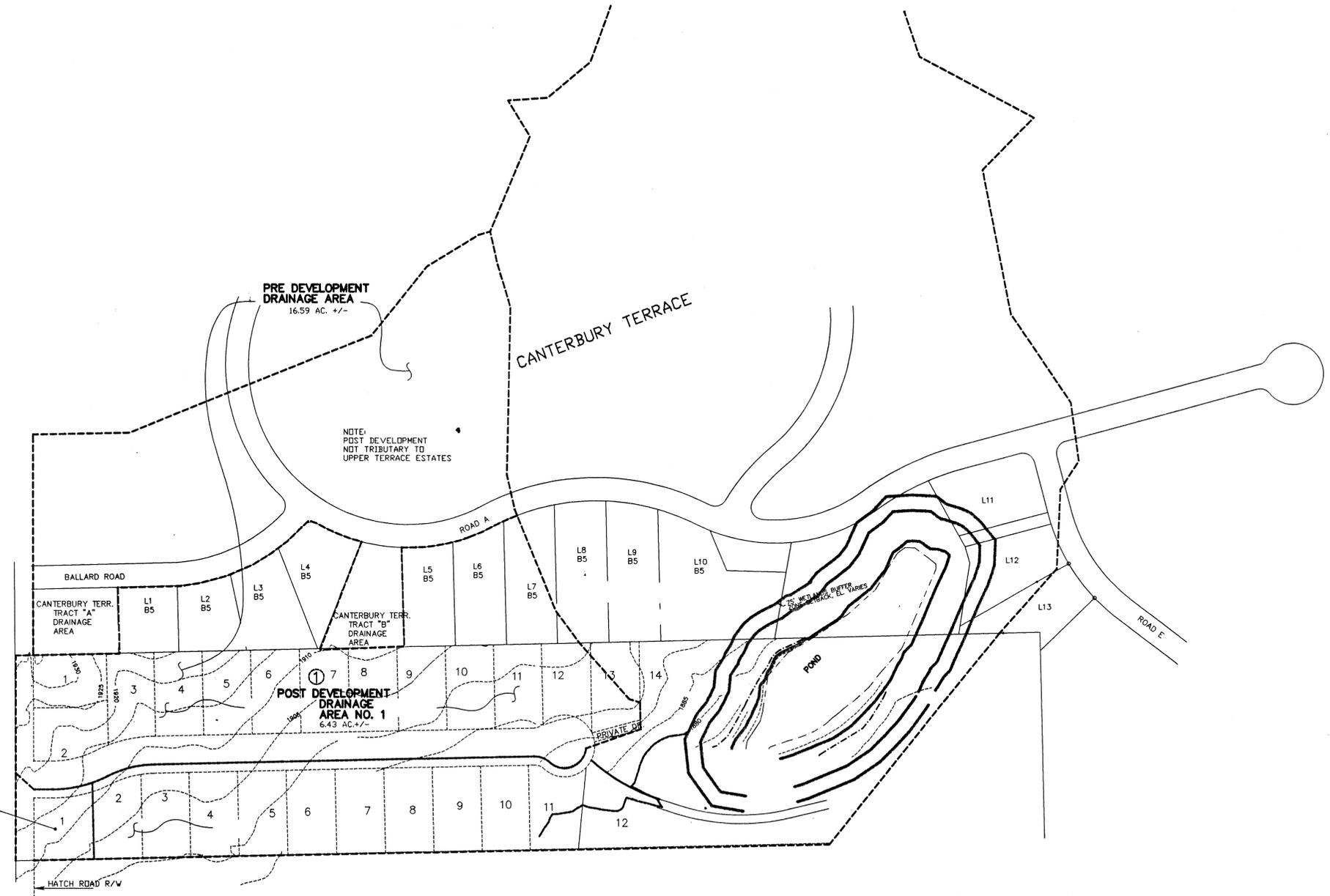
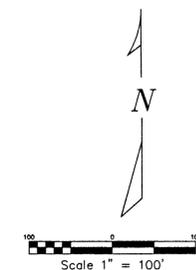
JEFFREY D. BLOCK, P.E.  
CONSULTING ENGINEER  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 4  
HAYDEN LAKE, ID 83835  
(208) 772-2233  
FAX: 772-9231  
PROJECT NO. 2026

UPPER TERRACE ESTATES  
DRAINAGE PLAN  
ENLARGED DITCH/STORAGE POND

REVISION	HORIZ. SCALE	AS SHOWN	DATE
11-5-01	VERT. SCALE	CHECKED BY: JDB	
2-12-02		APPROVED BY: JDB	
7-9-02		DESIGN BY: JDB	
12-2-02		DRAWN BY: JES	10-12-01
12-26-02		PLAN DWG. NO.	
		PROFILE DWG. NO.	

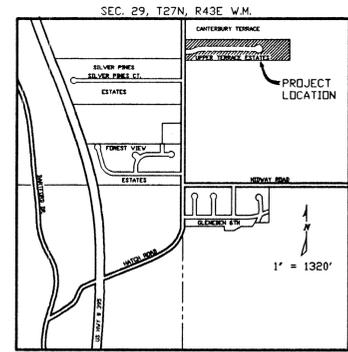
# UPPER TERRACE ESTATES

A PORTION OF THE WEST 1689.24 FEET OF THE S 1/2 N 1/2 N 1/2 NE 1/4



NOT INCLUDED IN RECORD DRAWINGS  
SHEET 8A INCLUDED IS SEWER SERVICE  
SITE INFORMATION

POST DEVELOPMENT  
DRAINAGE  
AREA NO. 3  
0.35 AC +/-



VICINITY MAP



*Jeffrey D. Block*  
11/07/01

*Ed Smith* 12/17/01  
DEVELOPERS APPROVAL DATE

*Adams* 3/26/02

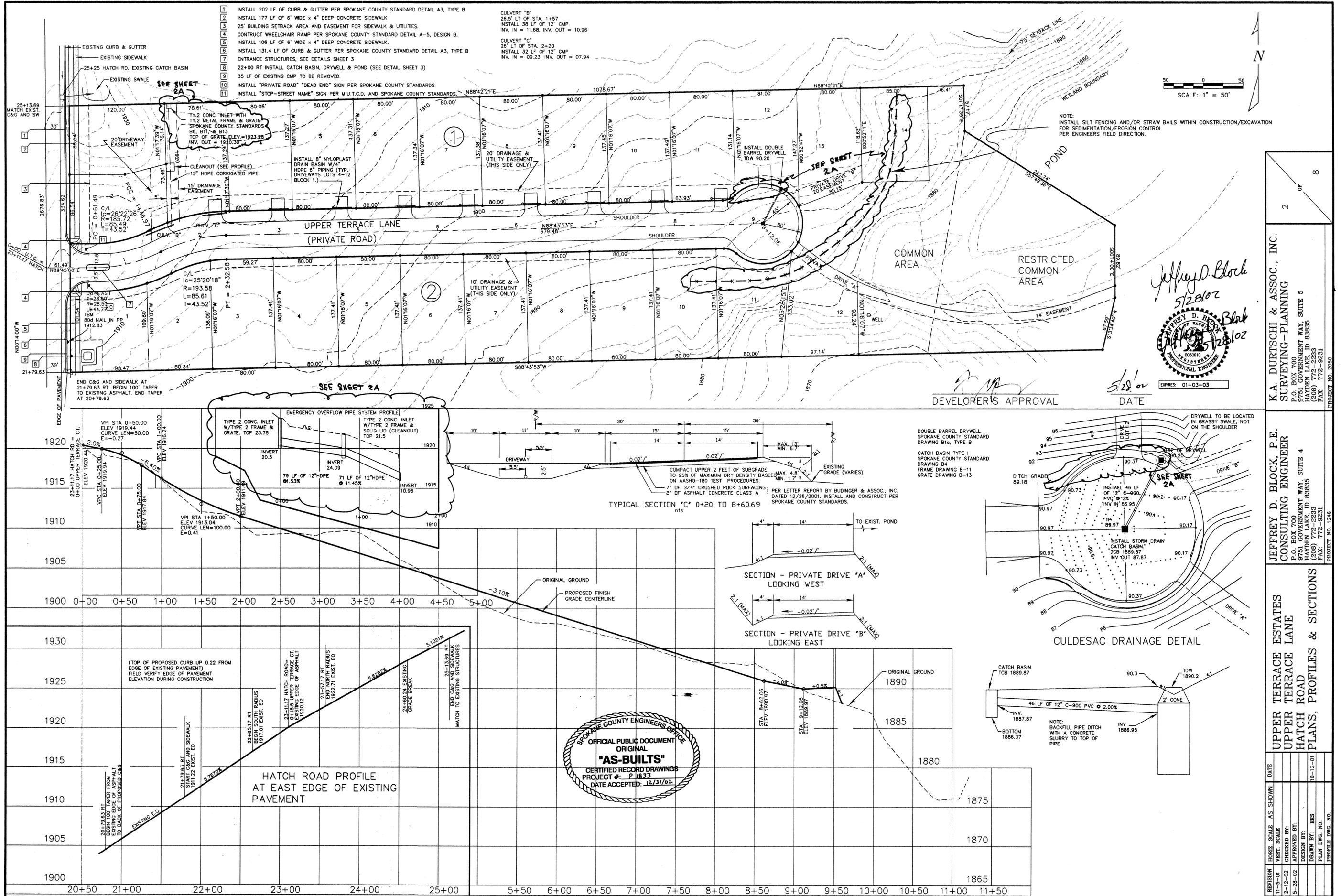
REVISION	HORIZ. SCALE AS SHOWN	DATE
11-5-01	VERT. SCALE	
	CHECKED BY:	
	APPROVED BY:	
	DESIGN BY:	
	DRAWN BY: EES	10-12-01
	PLAN DWG. NO.	
	PROFILE DWG. NO.	

## UPPER TERRACE ESTATES DRAINAGE AREAS

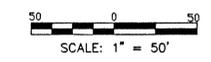
**JEFFREY D. BLOCK, P.E.**  
CONSULTING ENGINEER  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 4  
HAYDEN LAKE, ID 83835  
(208) 772-2233  
FAX: 772-9231  
PROJECT NO. 1346

**K.A. DURTSCHI & ASSOC., INC.**  
SURVEYING-PLANNING  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 5  
HAYDEN LAKE, ID 83835  
(208) 772-2233  
FAX: 772-9231  
PROJECT NO. 2050

8  
OF  
8



- 1 INSTALL 202 LF OF CURB & GUTTER PER SPOKANE COUNTY STANDARD DETAIL A3, TYPE B
- 2 INSTALL 177 LF OF 6" WIDE x 4" DEEP CONCRETE SIDEWALK
- 3 25' BUILDING SETBACK AREA AND EASEMENT FOR SIDEWALK & UTILITIES.
- 4 CONTRACT WHEELCHAIR RAMP PER SPOKANE COUNTY STANDARD DETAIL A-5, DESIGN B.
- 5 INSTALL 106 LF OF 6" WIDE x 4" DEEP CONCRETE SIDEWALK.
- 6 INSTALL 131.4 LF OF CURB & GUTTER PER SPOKANE COUNTY STANDARD DETAIL A3, TYPE B
- 7 ENTRANCE STRUCTURES, SEE DETAILS SHEET 3
- 8 22+00 RT INSTALL CATCH BASIN, DRYWELL & POND (SEE DETAIL SHEET 3)
- 9 35 LF OF EXISTING CMP TO BE REMOVED.
- 10 INSTALL "PRIVATE ROAD" "DEAD END" SIGN PER SPOKANE COUNTY STANDARDS
- 11 INSTALL "STOP-STREET NAME" SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.



*Jeffrey D. Block*  
 5/28/02  
  
 Jeffrey D. Block  
 PROFESSIONAL ENGINEER

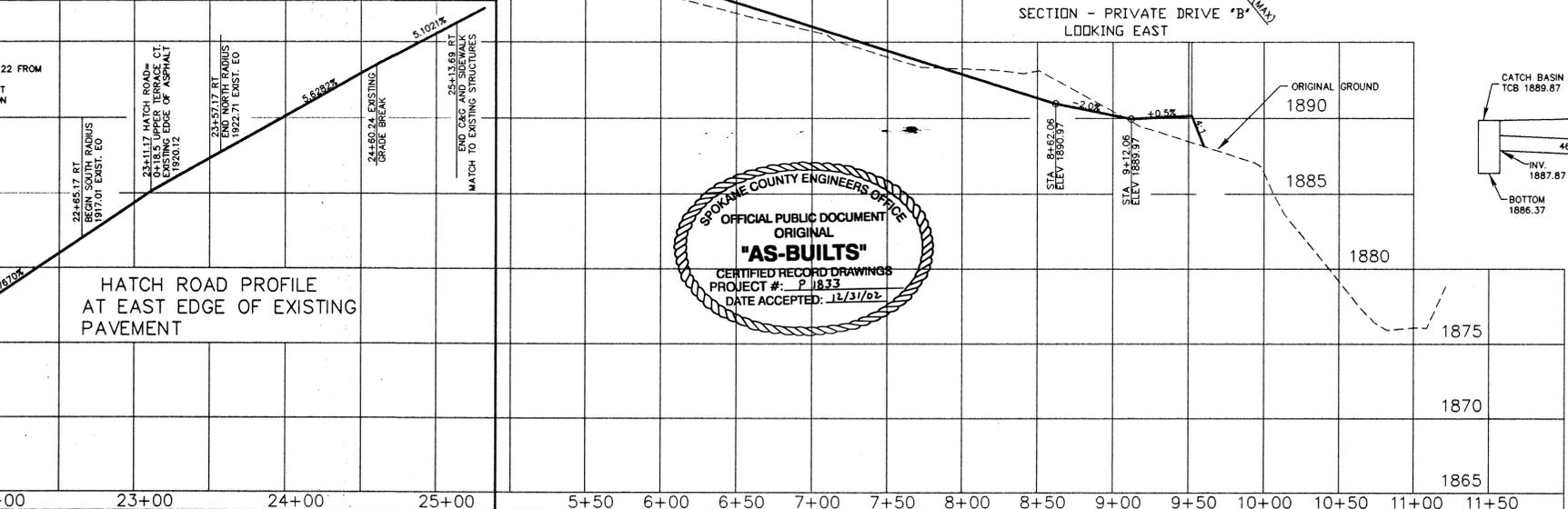
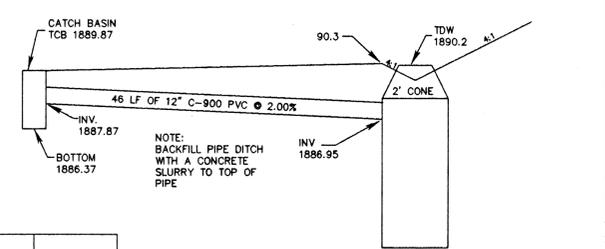
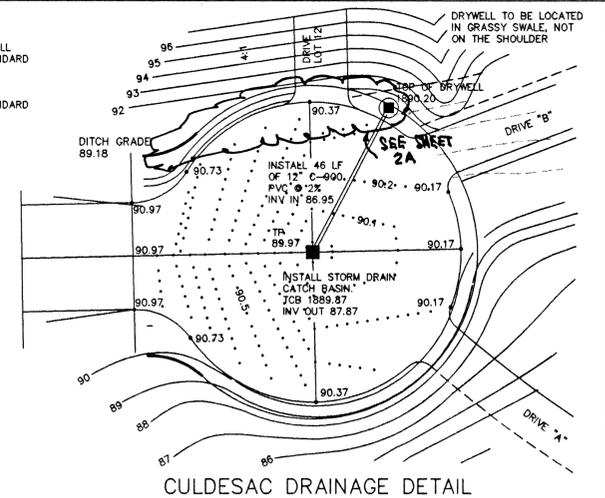
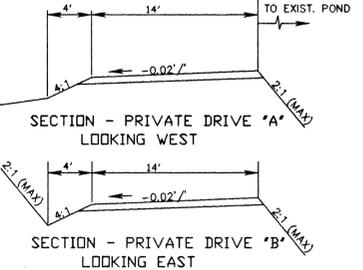
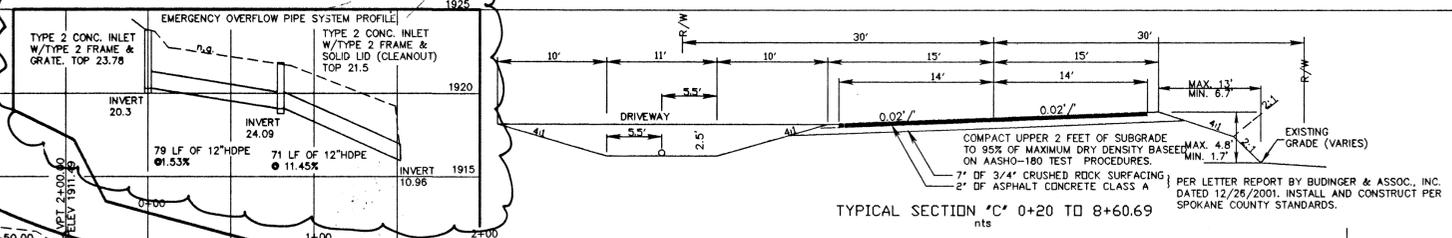
**K.A. DURTSCHI & ASSOC., INC.**  
 SURVEYING-PLANNING  
 P.O. BOX 700  
 9751 GOVERNMENT WAY, SUITE 5  
 HAYDEN LAKE, ID 83835  
 (208) 772-2233  
 FAX: 772-9231  
 PROJECT NO. 7090

**JEFFREY D. BLOCK, P.E.**  
 CONSULTING ENGINEER  
 P.O. BOX 700  
 9751 GOVERNMENT WAY, SUITE 4  
 HAYDEN LAKE, ID 83835  
 (208) 772-2233  
 FAX: 772-9231  
 PROJECT NO. 1246

**UPPER TERRACE ESTATES**  
**UPPER TERRACE LANE**  
**HATCH ROAD**  
**PLANS, PROFILES & SECTIONS**

REVISION	HORIZ. SCALE	AS SHOWN	DATE
11-5-01	1" = 50'		
2-12-02			
5-28-02			

CHECKED BY: [Signature]  
 APPROVED BY: [Signature]  
 DESIGN BY: [Signature]  
 DRAWN BY: RES  
 PLAN DWG. NO.: [Blank]  
 PROFILE DWG. NO.: 10-12-01



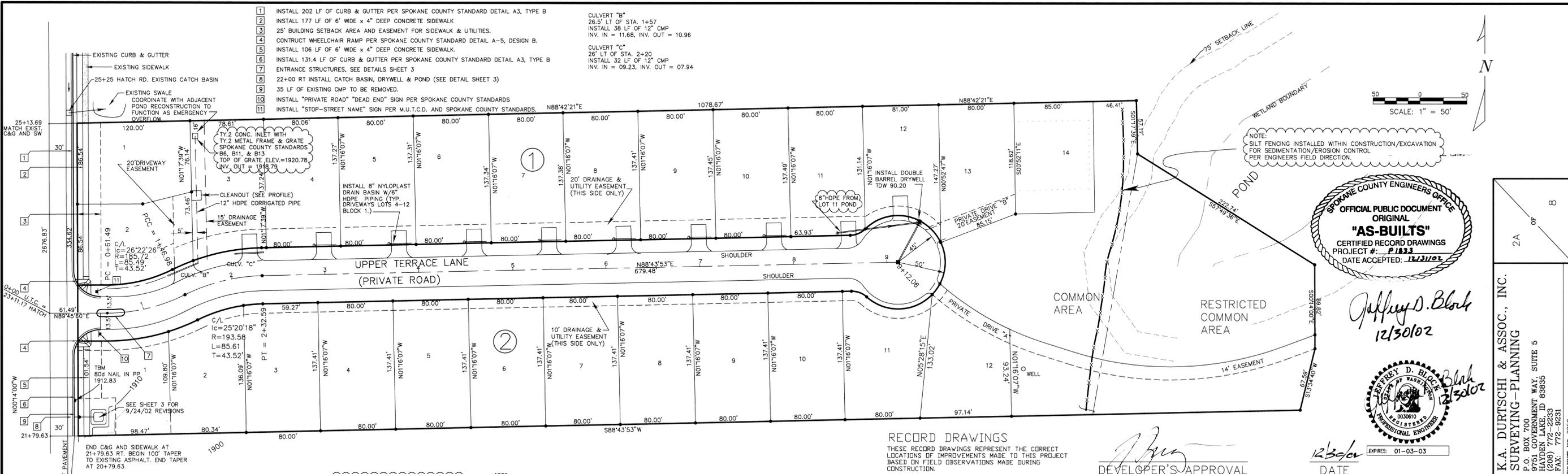
**SPOKANE COUNTY ENGINEERS OFFICE**  
 OFFICIAL PUBLIC DOCUMENT  
 ORIGINAL  
**"AS-BUILTS"**  
 CERTIFIED RECORD DRAWINGS  
 PROJECT #: P 1833  
 DATE ACCEPTED: 12/31/02

P-1833 Eng. As-Built

- 1 INSTALL 202 LF OF CURB & GUTTER PER SPOKANE COUNTY STANDARD DETAIL A3, TYPE B
- 2 INSTALL 177 LF OF 6" WIDE x 4" DEEP CONCRETE SIDEWALK
- 3 25' BUILDING SETBACK AREA AND EASEMENT FOR SIDEWALK & UTILITIES.
- 4 CONSTRUCT WHEELCHAIR RAMP PER SPOKANE COUNTY STANDARD DETAIL A-5, DESIGN B.
- 5 INSTALL 106 LF OF 6" WIDE x 4" DEEP CONCRETE SIDEWALK.
- 6 INSTALL 131.4 LF OF CURB & GUTTER PER SPOKANE COUNTY STANDARD DETAIL A3, TYPE B
- 7 ENTRANCE STRUCTURES, SEE DETAILS SHEET 3
- 8 22+00 RT INSTALL CATCH BASIN, DRYWELL & POND (SEE DETAIL SHEET 3)
- 9 35 LF OF EXISTING CMP TO BE REMOVED.
- 10 INSTALL "PRIVATE ROAD" "DEAD END" SIGN PER SPOKANE COUNTY STANDARDS
- 11 INSTALL "STOP-STREET NAME" SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

CULVERT "B"  
26.5' LT OF STA. 1+57  
INSTALL 38 LF OF 12" CMP  
INV. IN = 11.68, INV. OUT = 10.96

CULVERT "C"  
26' LT OF STA. 2+20  
INSTALL 32 LF OF 12" CMP  
INV. IN = 09.23, INV. OUT = 07.94



*Jeffrey D. Block*  
12/30/02

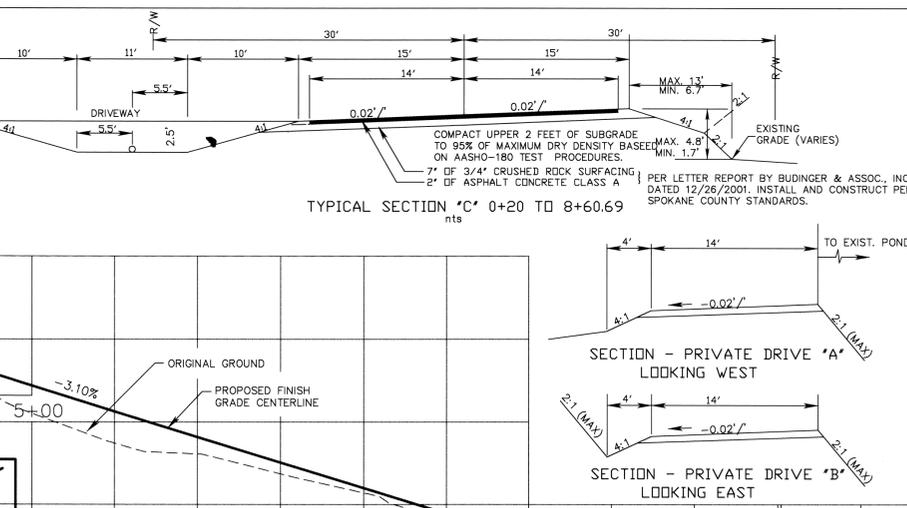
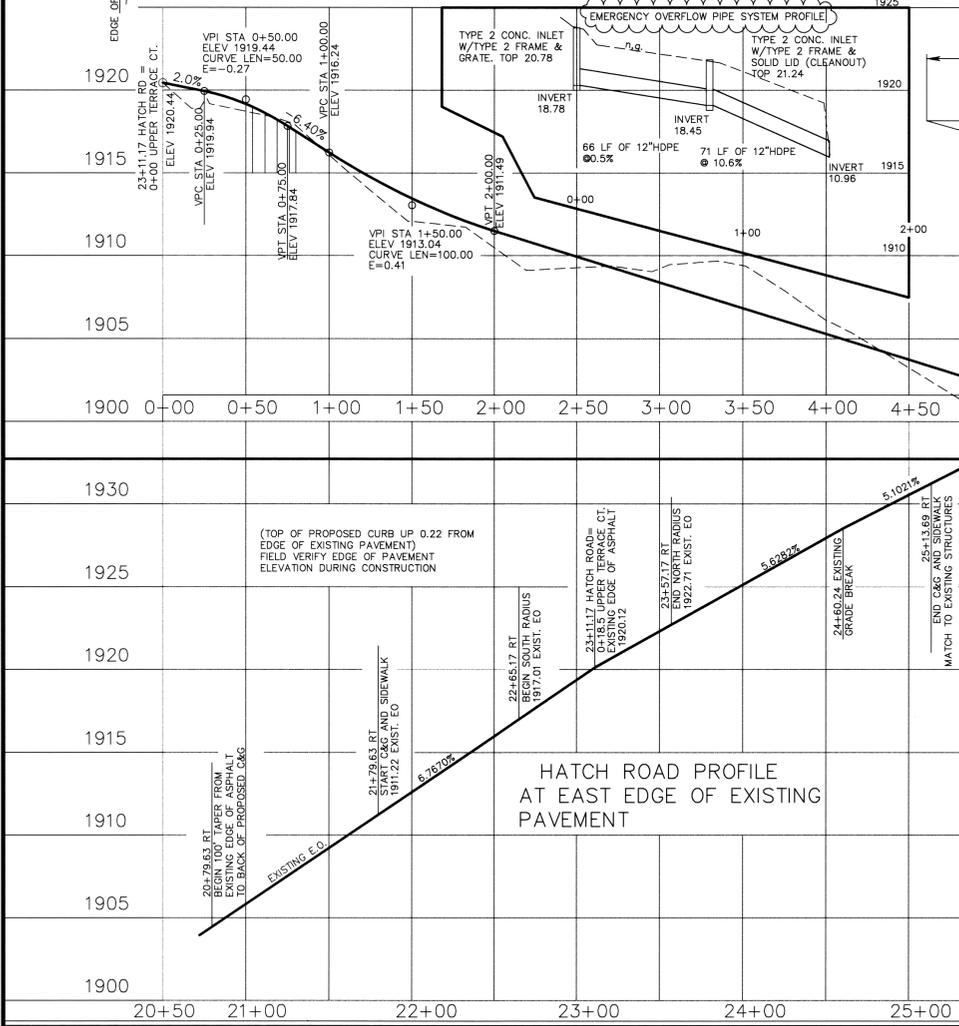


RECORD DRAWINGS  
THESE RECORD DRAWINGS REPRESENT THE CORRECT  
LOCATIONS OF IMPROVEMENTS MADE TO THIS PROJECT  
BASED ON FIELD OBSERVATIONS MADE DURING  
CONSTRUCTION.

*Jeffrey D. Block*  
DEVELOPER'S APPROVAL

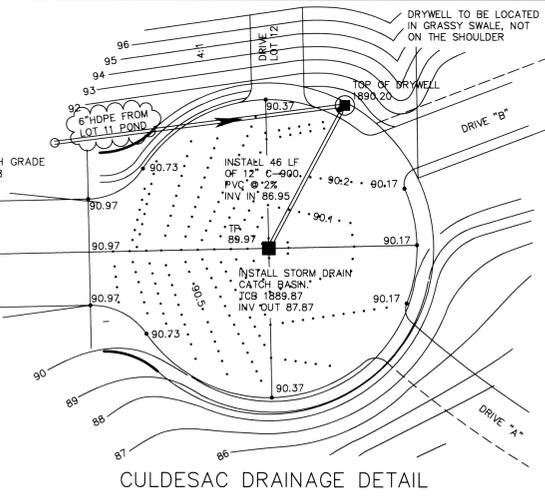
12/30/02 DATE  
EXPIRES: 01-03-03

K.A. DURTSCHI & ASSOC., INC.  
SURVEYING-PLANNING  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 5  
HAYDEN LAKE, ID 83835  
(208) 772-2233  
FAX: 772-9231  
PROJECT NO. 2090



DOUBLE BARREL DRYWELL  
SPOKANE COUNTY STANDARD  
DRAWING B10, TYPE B

CATCH BASIN TYPE I  
SPOKANE COUNTY STANDARD  
DRAWING B4  
FRAME DRAWING B-11  
GRATE DRAWING B-13



JEFFREY D. BLOCK, P.E.  
CONSULTING ENGINEER  
P.O. BOX 700  
9751 GOVERNMENT WAY, SUITE 4  
HAYDEN LAKE, ID 83835  
(208) 772-2233  
FAX: 772-9231  
PROJECT NO. 1246

UPPER TERRACE ESTATES  
UPPER TERRACE LANE  
HATCH ROAD  
PLANS, PROFILES & SECTIONS

REVISION	HORIZ. SCALE	AS SHOWN	DATE
11-5-01	VERT. SCALE		
2-12-02	CHECKED BY:		
5-28-02	APPROVED BY:		
12-2-02	DESIGN BY:		
12-26-02	DRAWN BY: BBS		10-12-01
	PLAN DWG. NO.		
	PROFILE DWG. NO.		

P-1833 Eng As-Built