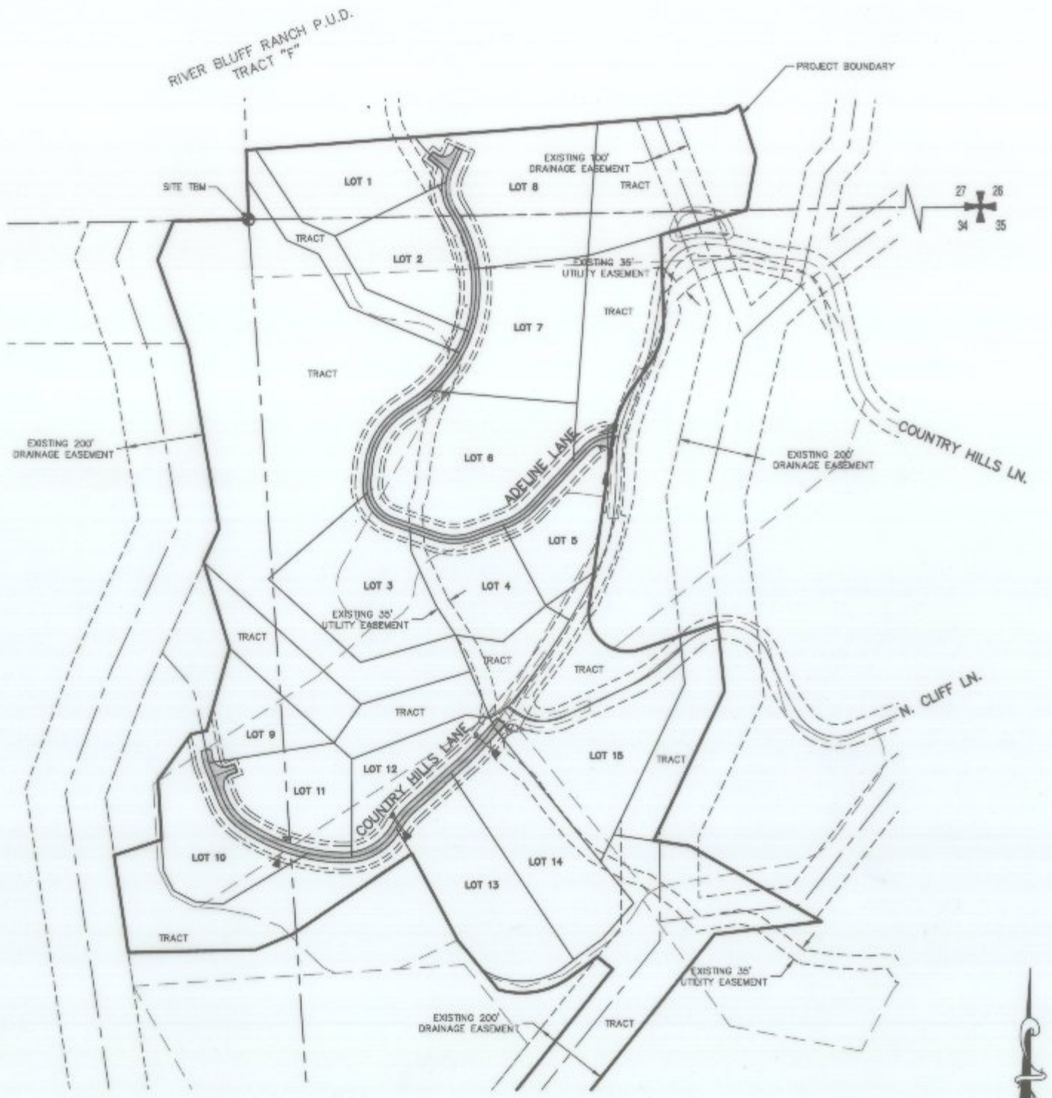
PRIVATE ROAD CONSTRUCTION PLANS

RIVER BLUFF RURAL CLUSTER DEVELOPMENT, 3RD ADDITION

SECTION 34 & 27, TOWNSHIP 27 NORTH, RANGE 42 EAST, W.M.
SPOKANE COUNTY, WASHINGTON
PN 2017-08



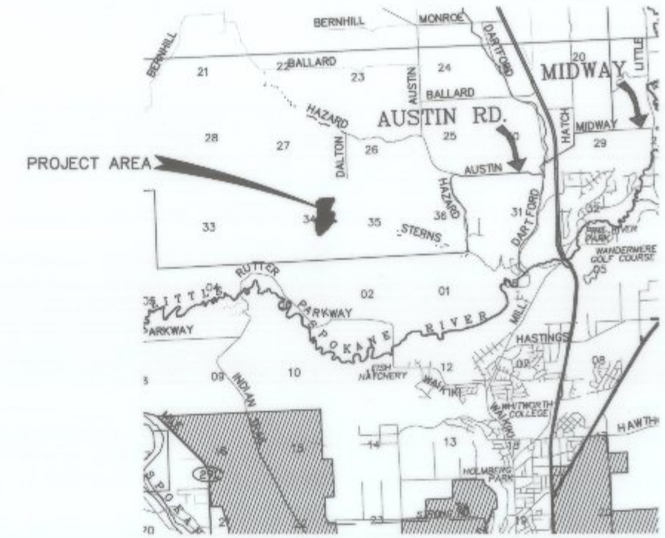
LEGEND

EXISTING FEATURES

- ACP PAVEMENT
- FOUND POINT AS NOTED
- GUY WIRE POLE
- POWER POLE
- TELEPHONE ENCLOSURE
- WATER VALVE
- FIRE HYDRANT
- WA — WATER LINE
- SD — STORM DRAIN LINE / CULVERT
- OHP — POWER LINE (OHP OR UGP)
- OHT — TELEPHONE LINE (OHT OR UGT)
- GA — GAS LINE
- 2410 — CONTOURS
- X — FENCE

PROPOSED IMPROVEMENTS

- ACP PAVEMENT
- SD — STORM DRAIN LINE / CULVERT
- 2410 — CONTOURS
- DIRECTION OF SURFACE STORM WATER DRAINAGE
- 1924.50 / 1924.00 — TOP OF CURB ELEVATION / FLOWLINE ELEVATION
- CURB INLET / 1924.00 — CURB INLET / INLET ELEVATION AT FLOWLINE
- 1924.00 — FINISHED GRADE ELEVATION
- (2407.20) — EXISTING GRADE / CONTRACTOR TO VERIFY
- TRAFFIC SIGN
- RIP RAP
- SUMP



VICINITY MAP
NTS

LEGAL DESCRIPTION

PORTIONS OF THE NORTHEAST ¼ OF SECTION 34 AND THE NORTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 35, T. 27 N., R 42 E. W.M., SPOKANE COUNTY, WASHINGTON

SHEET INDEX

SHEET 1	COVER SHEET – STREET AND STORM DRAINAGE
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SHEET 4	ADELINE LANE, STA. 20+50 TO 26+50
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SHEET 6	DETAIL SHEET
SHEET 7	DETAIL SHEET

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: R-2016
DATE ACCEPTED: 02-03-17
ACCEPTANCE EXPIRES: 02-03-19
PROJECT LANE MILES PUBLIC: .42
PROJECT LANE MILES PRIVATE: .42
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

GRAPHIC SCALE
200 0 100 200 400
(IN FEET)
1 inch = 200 ft.

ELEVATION DATUM
NAVD88 DATUM ESTABLISHED FROM GPS OBSERVATION OF LOCAL CONTROL POINTS USING WASHINGTON STATE REFERENCE NETWORK.

SITE TBM
A REBAR AT THE NORTH 1/4 CORNER OF SECTION 34
ELEV.= 2396.30 (NAVD88)

LOCATES (2 WORKING DAYS NOTICE REQUIRED PRIOR TO EXCAVATION)
LOCAL CALLING NUMBERS
SPOKANE COUNTY
8-1-1

DEVELOPER DATE

PN 2017-08

16-102 ST.dwg 1 COVER

No.	DESC. / DATE	BY
5		
4		
3		
2		
1		

storhaug
civil engineering | planning
landscape architecture | surveying
510 east third avenue | spokane, wa | 99202
p 509.242.1000 | f 509.242.1001

SHEET TITLE: COVER SHEET
PROJECT TITLE: RIVER BLUFF RCD, 3RD ADDITION
SPOKANE COUNTY, WASHINGTON

SEAL
MARK E. JOHNSON
STATE OF WASHINGTON
43185
REGISTERED PROFESSIONAL ENGINEER
1-27-17

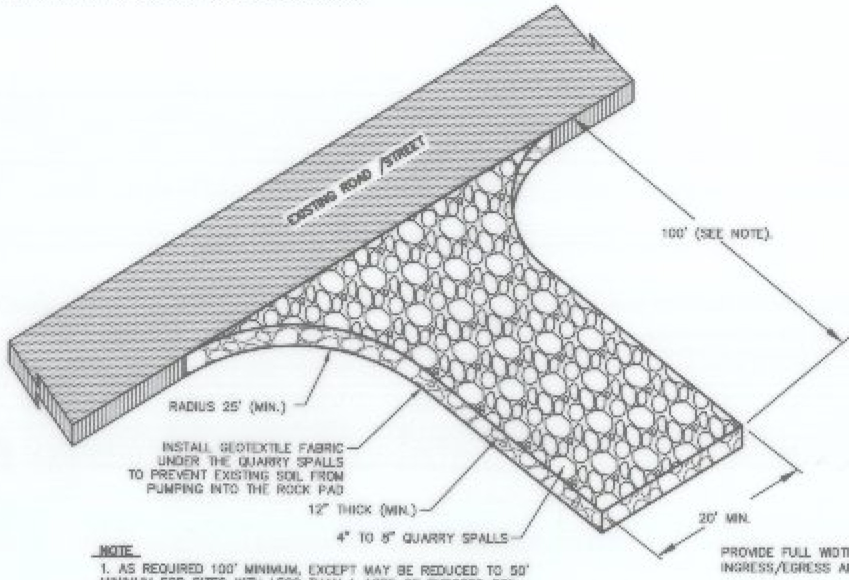
DATE	10/10/2016
DRAWN	LMC
CHECKED	MJ
PROJECT NUMBER	16-102
DRAWING NO.	1 OF 7
	COVER

DEFINITION: A TEMPORARY STONE-STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE.

PURPOSE: TO REDUCE THE AMOUNT OF MUD, DIRT, ROCK, ETC. TRANSPORTED ONTO PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF BY CONSTRUCTING A STABILIZED PAD OF ROCK SPALLS AT ENTRANCES TO CONSTRUCTION SITES AND WASHING OF TIRES DURING EGRESS.

CONDITIONS WHERE PRACTICE APPLIES: WHEREVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED AREAS.

MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONES. AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED.



NOTE

1. AS REQUIRED 100' MINIMUM, EXCEPT MAY BE REDUCED TO 50' MINIMUM FOR SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL.
2. THIS ESC PLAN SHOWS TWO CONSTRUCTION ENTRANCES. CONTACT THE OWNER FOR INFORMATION CONCERNING WHETHER THE ENTRANCE ON BROADWAY, OR THE ENTRANCE ON CONKLIN, OR BOTH OF THE ENTRANCES WILL BE UTILIZED FOR THIS PROJECT.

STABILIZED CONSTRUCTION ENTRANCE/ TIRE WASH (CE)
NTS

DEFINITION: A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED. THE FILTER FENCE IS CONSTRUCTED OF STAKES AND SYNTHETIC FILTER FABRIC WITH A RIGID WIRE FENCE BACKING WHERE NECESSARY FOR SUPPORT.

PURPOSE:
1. TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT UNDER SHEET FLOW CONDITIONS FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE.
2. TO DECREASE THE VELOCITY OF SHEET FLOWS.

STANDARD NOTES:

A. THE FILTER FABRIC FENCE SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, OVERLAP FILTER CLOTH AND SECURELY FASTEN BOTH ENDS TO THE POST.

B. POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 30 INCHES (WHERE PHYSICALLY POSSIBLE).

C. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 8 INCHES WIDE AND 12 INCHES DEEP ALONG THE LINE OF POSTS AND UP-SLOPE FROM THE BARRIER. THE TRENCH SHALL BE CONSTRUCTED TO FOLLOW THE CONTOURS.

D. WHEN SLIT FILM FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UP-SLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 4 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

E. SLIT FILM FILTER FABRIC SHALL BE WIRED TO THE FENCE, AND 20 INCHES OF THE FABRIC SHALL EXTEND INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES. OTHER TYPES OF FABRIC MAY BE STAPLED TO THE FENCE.

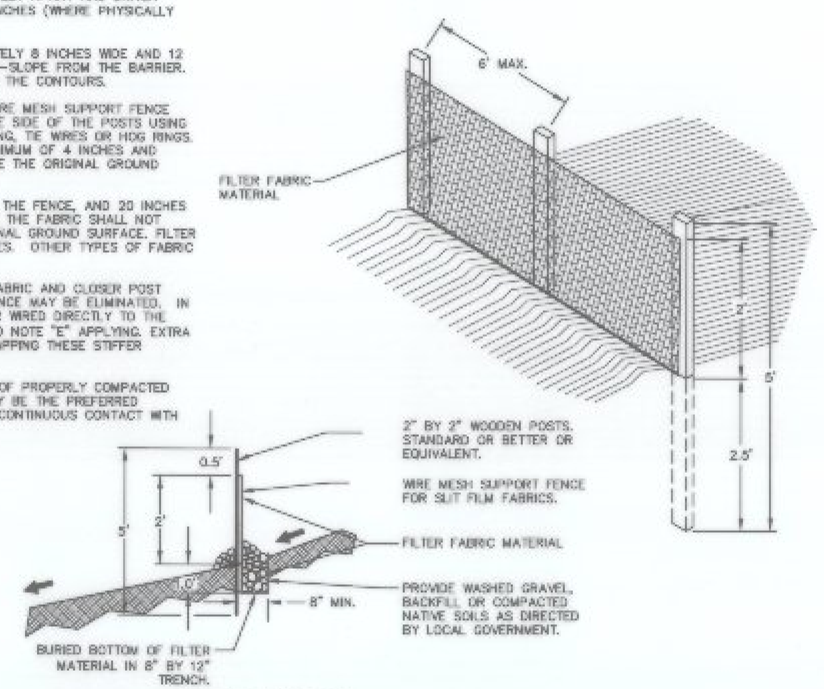
F. WHEN EXTRA-STRENGTH OR MONOFILAMENT FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF STANDARD NOTE "E" APPLYING. EXTRA CARE SHOULD BE USED WHEN JOINING OR OVERLAPPING THESE STIFFER FABRICS.

G. LOCAL GOVERNMENTS MAY SPECIFY THE USE OF PROPERLY COMPACTED NATIVE MATERIALS. IN MANY INSTANCES, THIS MAY BE THE PREFERRED ALTERNATIVE BECAUSE THE SOIL FORMS A MORE CONTINUOUS CONTACT WITH THE TRENCH BELOW.

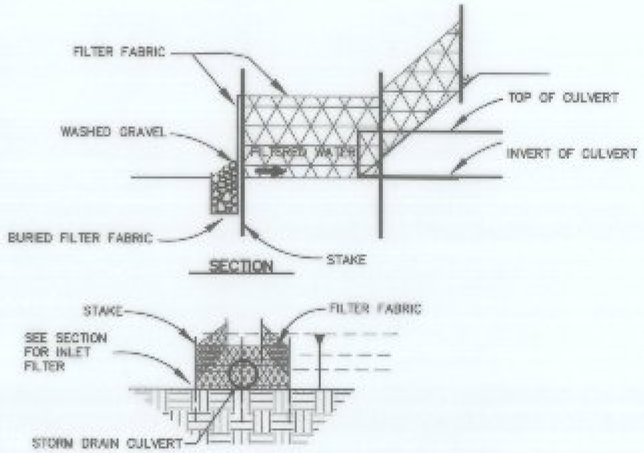
CONDITIONS WHERE PRACTICE APPLIES: FILTER FENCES MUST BE PROVIDED JUST UPSTREAM OF THE POINT(S) OF DISCHARGE OF RUNOFF FROM A SITE, BEFORE THE FLOW BECOMES CONCENTRATED. THEY MAY ALSO BE REQUIRED:

1. BELOW DISTURBED AREAS WHERE RUNOFF MAY OCCUR IN THE FORM OF SHEET AND RILL EROSION; WHEREVER RUNOFF HAS THE POTENTIAL TO IMPACT DOWNSTREAM RESOURCES.
2. PERPENDICULAR TO MINOR SWALES OR DITCH LINES FROM CONTRIBUTING DRAINAGE AREAS UP TO ONE ACRE IN SIZE.
3. CONTRACTOR SHALL COORDINATE WITH DESIGN ENGINEER FOR ACTUAL PLACEMENT LOCATIONS.

MAINTENANCE: THE FILTER FENCE AND INLET PROTECTIONS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD AND SEDIMENT OFF OF THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC CLEANING WHEN SEDIMENT BUILD UP IS SIX INCHES OR ONE-THIRD OF THE FENCE OR INLET PROTECTION'S ORIGINAL HEIGHT.



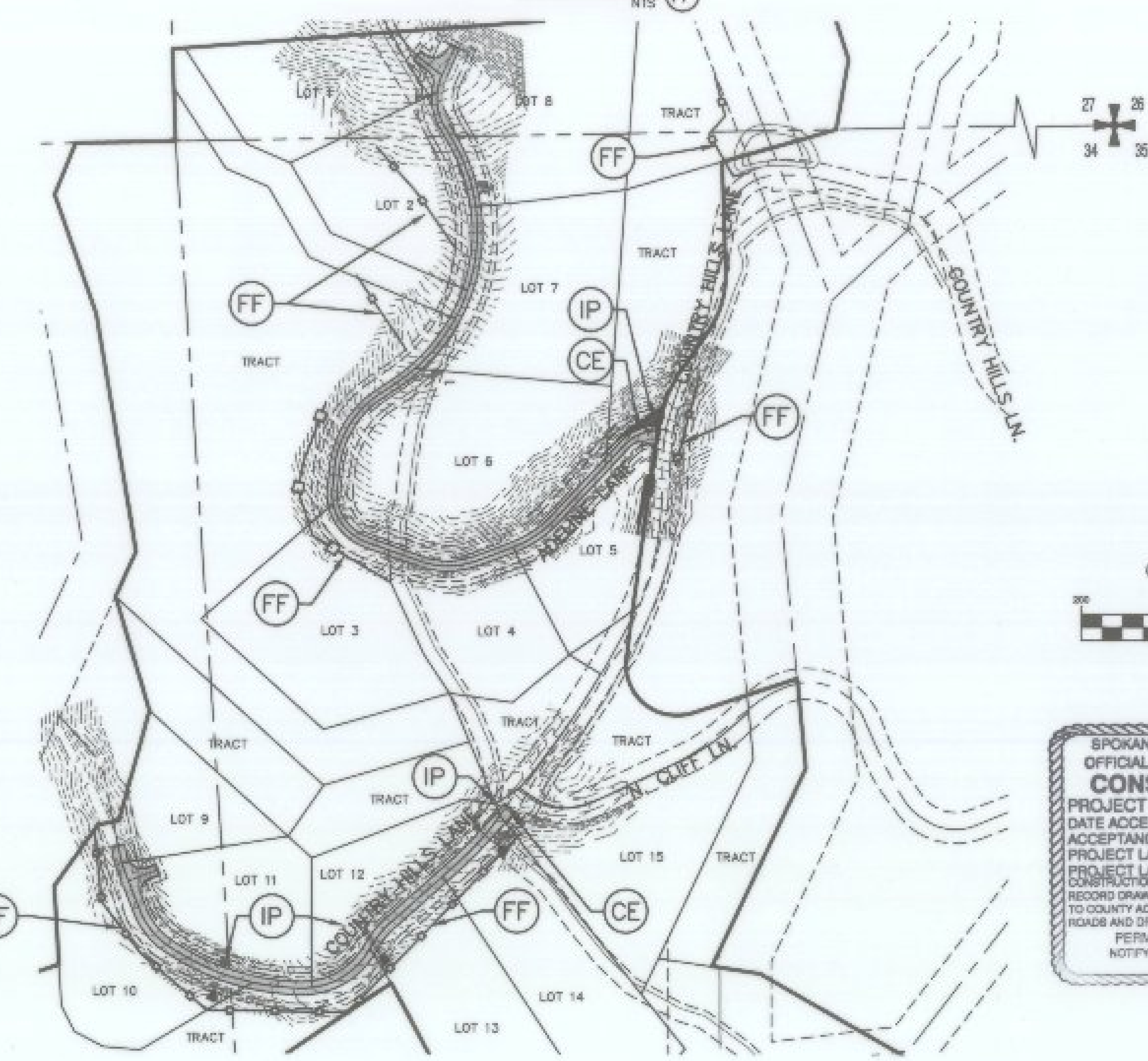
FILTER FENCE (FF)
NTS



NOTE:

1. ALL DRYWELLS, INLETS, CATCH BASIN AND ANY OTHER STORMDRAIN FIXTURES INCLUDING UPSTREAM ENDS OF CULVERTS SHALL BE PROTECTED.
2. PROTECTION SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED.
3. SEDIMENT MUST BE REMOVED WHEN IT REACHES 6" OR ½ OF THE HEIGHT OF THE FENCE.

TEMPORARY INLET PROTECTION (IP)
NTS



GRAPHIC SCALE

200 0 100 200 400

(IN FEET)
1 inch = 200 ft.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2017C
DATE ACCEPTED: 02-23-17
ACCEPTANCE EXPIRES: 02-23-19
PROJECT LANE MILES PUBLIC:
PROJECT LANE MILES PRIVATE: .92
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

NOTE: REFER TO COVER AND INDEX SHEET FOR VICINITY MAP.

CONTACT PERSON/PERMIT APPLICANT

CHRIS HEFTEL
4425 W. LOOKOUT MTN. LANE #A
SPOKANE, WA. 99208
509-464-0123

PROJECT ADDRESS

EXTENSION OF COUNTRY HILLS LANE AND ADELINE LANE

PROJECT / SITE DESCRIPTION

PRIVATE ROAD CONSTRUCTION WITH ASSOCIATED DRAINAGE FACILITIES.

SOIL TYPE

THE SITE IS LOCATED ON BERNHILL AND SPOKANE SOILS PER THE SCS SOILS MAP.

EXISTING CONDITIONS

THE EXISTING VEGETATION FOR THE SITE IS LIGHTLY TREED PINE AND DOUGLAS FIR FOREST SITUATED ON MODERATE TO STEEP TOPOGRAPHY.

1. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE FOLLOWED IN ORDER TO BEST MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION CONTROL PROBLEMS:
   - 1.a. CLEAR AND GRUB SUFFICIENTLY FOR INSTALLATION OF TEMPORARY ESC BMPS;
   - 1.b. INSTALL TEMPORARY ESC BMPS, CONSTRUCTING SEDIMENT TRAPPING BMPS AS ONE OF THE FIRST STEPS PRIOR TO GRADING;
   - 1.c. CLEAR, GRUB AND ROUGH GRADE FOR ROADS, TEMPORARY ACCESS POINTS AND UTILITY LOCATIONS;
   - 1.d. STABILIZE ROADWAY APPROACHES AND TEMPORARY ACCESS POINTS WITH THE APPROPRIATE CONSTRUCTION ENTRY BMP;
   - 1.e. CLEAR, GRUB AND GRADE INDIVIDUAL LOTS OR GROUPS OF LOTS;
   - 1.f. TEMPORARILY STABILIZE, THROUGH RE-VEGETATION OR OTHER APPROPRIATE BMPS, LOTS OR GROUPS OF LOTS IN SITUATIONS WHERE SUBSTANTIAL CUT OR FILL SLOPES ARE A RESULT OF THE SITE GRADING;
   - 1.g. CONSTRUCT ROADS, BUILDINGS, PERMANENT STORMWATER FACILITIES (I.E. INLETS, PONDS, UIC FACILITIES, ETC.);
   - 1.h. PROTECT ALL PERMANENT STORMWATER FACILITIES UTILIZING THE APPROPRIATE BMPS;
   - 1.i. INSTALL PERMANENT ESC CONTROLS, WHEN APPLICABLE; AND,
   - 1.j. REMOVE TEMPORARY ESC CONTROLS WHEN:
     - 1.j.a. PERMANENT ESC CONTROLS, WHEN APPLICABLE, HAVE BEEN COMPLETELY INSTALLED;
     - 1.j.b. ALL LAND-DISTURBING ACTIVITIES THAT HAVE THE POTENTIAL TO CAUSE EROSION OR SEDIMENTATION PROBLEMS HAVE CEASED; AND,
     - 1.j.c. VEGETATION HAD BEEN ESTABLISHED IN THE AREAS NOTED AS REQUIRING VEGETATION ON THE ACCEPTED ESC PLAN ON FILE WITH THE LOCAL JURISDICTION.
2. INSPECT ALL ROADWAYS, AT THE END OF EACH DAY, ADJACENT TO THE CONSTRUCTION ACCESS ROUTE. IF IT IS EVIDENT THAT SEDIMENT HAS BEEN TRACKED OFF SITE AND/OR BEYOND THE ROADWAY APPROACH, CLEANING IS REQUIRED.
3. IF SEDIMENT REMOVAL IS NECESSARY PRIOR TO STREET WASHING, IT SHALL BE REMOVED BY SHOVELING OR PICKUP SWEEPING AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
4. IF STREET WASHING IS REQUIRED TO CLEAN SEDIMENT TRACKED OFF SITE, ONCE SEDIMENT HAS BEEN REMOVED, STREET WASH WASTEWATER SHALL BE CONTROLLED BY PUMPING BACK ON-SITE OR OTHERWISE PREVENTED FROM DISCHARGING INTO SYSTEMS TRIBUTARY TO WATERS OF THE STATE.
5. RESTORE CONSTRUCTION ACCESS ROUTE EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION.
6. RETAIN THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICAL.
7. INSPECT SEDIMENT CONTROL BMPS WEEKLY AT A MINIMUM, DAILY DURING A STORM EVENT, AND AFTER ANY DISCHARGE FROM THE SITE (STORMWATER OR NON-STORMWATER). THE INSPECTION FREQUENCY MAY BE REDUCED TO ONCE A MONTH IF THE SITE IS STABILIZED AND INACTIVE.
8. CONTROL FUGITIVE DUST FROM CONSTRUCTION ACTIVITY IN ACCORDANCE WITH THE STATE AND/OR LOCAL AIR QUALITY CONTROL AUTHORITIES WITH JURISDICTION OVER THE PROJECT AREA.
9. STABILIZE EXPOSED UNWORKED SOILS (INCLUDING STOCKPILES), WHETHER AT FINAL GRADE OR NOT, WITHIN 10 DAYS DURING THE REGIONAL DRY SEASON (JULY 1 THROUGH SEPTEMBER 30) AND WITHIN 5 DAYS DURING THE REGIONAL WET SEASON (OCTOBER 1 THROUGH JUNE 30). SOILS MUST BE STABILIZED AT THE END OF A SHIFT BEFORE A HOLIDAY WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST. THIS TIME LIMIT MAY ONLY BE ADJUSTED BY A LOCAL JURISDICTION WITH A "QUALIFIED LOCAL PROGRAM," IF IT CAN BE DEMONSTRATED THAT THE RECENT PRECIPITATION JUSTIFIES A DIFFERENT STANDARD AND MEETS THE REQUIREMENTS SET FOURTH IN THE CONSTRUCTION STORMWATER GENERAL PERMIT.
10. PROTECT INLETS, DRYWELLS, CATCH BASINS AND OTHER STORMWATER MANAGEMENT FACILITIES FROM SEDIMENT, WHETHER OR NOT FACILITIES ARE OPERABLE.
11. KEEP ROADS ADJACENT TO INLETS CLEAN.
12. INSPECT INLETS WEEKLY AT A MINIMUM AND DAILY DURING STORM EVENTS.
13. CONSTRUCT STORMWATER CONTROL FACILITIES (DETENTION/RETENTION STORAGE POND OR SWALES) BEFORE GRADING BEGINS. THESE FACILITIES SHALL BE OPERATIONAL BEFORE THE CONSTRUCTION OF IMPERVIOUS SITE IMPROVEMENTS.
14. STOCKPILE MATERIALS (SUCH AS TOPSOIL) ON SITE, KEEPING OFF OF ROADWAY AND SIDEWALKS.
15. COVER, CONTAIN AND PROTECT ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCT, AND NONINERT WASTES PRESENT ON SITE FROM VANDALISM (SEE CHAPTER 173-304 WAC FOR THE DEFINITION OF INERT WASTE), USE SECONDARY CONTAINMENT FOR ON-SITE FUELING TANKS.
16. CONDUCT MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM REPAIRS, SOLVENT AND DEGREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CLEAN ALL CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. IF RAINING OVER EQUIPMENT OR VEHICLE, PERFORM EMERGENCY REPAIRS ON SITE USING TEMPORARY PLASTIC BENEATH THE VEHICLE.
17. CONDUCT APPLICATION OF AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, IN SUCH A MANNER, AND AT APPLICATION RATES, THAT INHIBITS THE LOSS OF CHEMICALS INTO STORMWATER RUNOFF FACILITIES. AMEND MANUFACTURER'S RECOMMENDED APPLICATION RATES AND PROCEDURES TO MEET THIS REQUIREMENT, IF NECESSARY.
18. INSPECT ON A REGULAR BASIS (AT A MINIMUM WEEKLY, AND DAILY DURING/AFTER A RUNOFF PRODUCING STORM EVENT) AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL BMPS TO ENSURE SUCCESSFUL PERFORMANCE OF THE BMPS. NOTE THAT INLET PROTECTION DEVICES SHALL BE CLEANED OR REMOVED AND REPLACE BEFORE SIX INCHES OF SEDIMENT CAN ACCUMULATE.
19. REMOVE TEMPORARY ESC BMPS WITHIN 30 DAYS AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED. PERMANENTLY STABILIZE AREAS THAT ARE DISTURBED DURING THE REMOVAL PROCESS.
20. BMP'S SHALL BE IN ACCORDANCE WITH CHAPTER 7 OF THE STORMWATER MANAGEMENT MANUAL FOR EASTERN WASHINGTON.

ESC STANDARD NOTES

ELEVATION DATUM
NAVD88 DATUM ESTABLISHED FROM GPS OBSERVATION OF LOCAL CONTROL POINTS USING WASHINGTON STATE REFERENCE NETWORK.

SITE TBM
A REBAR AT THE NORTH 1/4 CORNER OF SECTION 34
ELEV.= 2398.30 (NAVD88)

LOCATES (2 WORKING DAYS NOTICE REQUIRED PRIOR TO EXCAVATION)
LOCAL CALLING NUMBERS
SPOKANE COUNTY 8-1-1

16-102 ST.dwg 2 EROS

PN 2017-08

No.	DESC. / DATE	BY
5		
4		
3		
2		
1		

storhäug
civil engineering | planning
landscape architecture | surveying
510 east third avenue | spokane, wa | 99202
p 509.242.1000 | f 509.242.1001

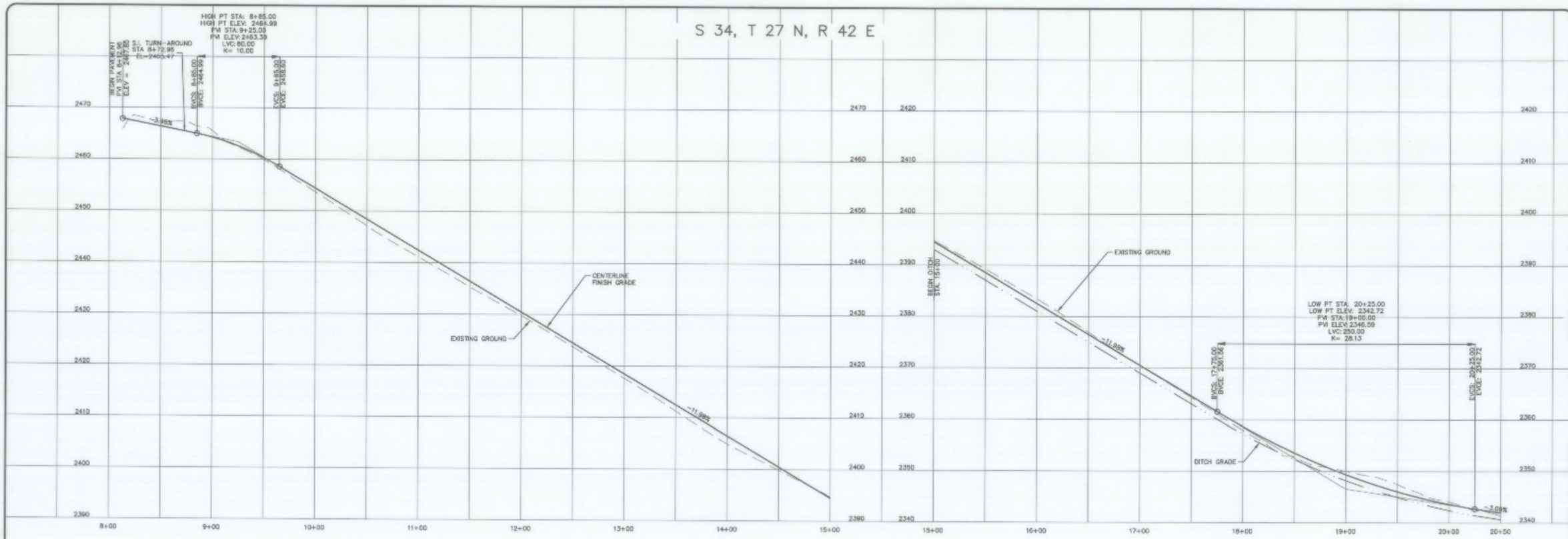
SHEET TITLE: EROSION AND SEDIMENT CONTROL PLAN

PROJECT TITLE: RIVER BLUFF RCD, 3RD ADDITION SPOKANE COUNTY, WASHINGTON

SEAL: MARK E. JOHNSON, STATE OF WASHINGTON, 43188, REGISTERED PROFESSIONAL ENGINEER, 1-27-17

DATE	10/10/2016
DRAWN	LMC
CHECKED	MJ
PROJECT NUMBER	16-102
DRAWING NO.	2 OF 7
	EROSION

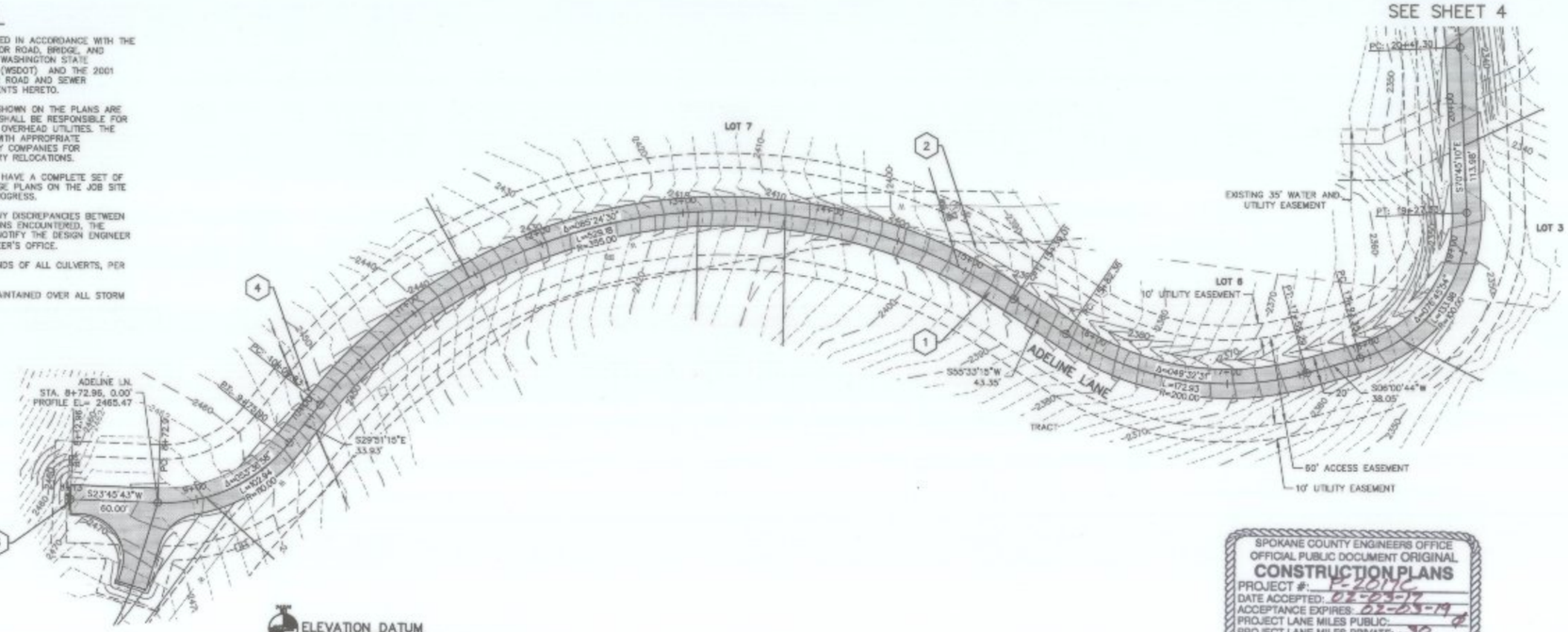
S 34, T 27 N, R 42 E



NOTES

1. CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE 2002 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AND THE 2001 SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION; AND ALL AMENDMENTS HERETO.
2. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND AND OVERHEAD UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH APPROPRIATE REGULATORY AGENCIES AND UTILITY COMPANIES FOR REQUIREMENTS AND ANY NECESSARY RELOCATIONS.
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. INSTALL RIP-RAP PAD AT BOTH ENDS OF ALL CULVERTS, PER DETAIL SHEET.
6. 1.0' (MIN.) OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.

SEE SHEET 4



TABLE

1. ASPHALT CONCRETE PAVING, SEE PRIVATE ROAD CROSS SECTION SHEET 6.
2. BEGIN ROADSIDE DITCH STA. 15+00 SEE CROSS-SECTION SHEET 6.
3. PERMANENT WSDOT TYPE 3 BARRICADE PER WSDOT STD. PLAN K-80.20-00.
4. "ROAD ENDS 200 FEET" SIGN AND POST PER SPOKANE COUNTY STD. PLAN A-16.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: E-2016
DATE ACCEPTED: 02-23-17
ACCEPTANCE EXPIRES: 02-23-19
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: .30
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

ELEVATION DATUM
NAVD88 DATUM ESTABLISHED FROM GPS OBSERVATION OF LOCAL CONTROL POINTS USING WASHINGTON STATE REFERENCE NETWORK.

SITE TBM
A REBAR AT THE NORTH 1/4 CORNER OF SECTION 34 ELEV.= 2396.30 (NAVD88)

LOCATES (2 WORKING DAYS NOTICE REQUIRED PRIOR TO EXCAVATION)
LOCAL CALLING NUMBERS
SPOKANE COUNTY
8-1-1

16-102 ST.dwg 3 ADELINE

PN 2017-08

No.	DESC. / DATE	BY
5		
4		
3		
2		
1		

storhaug
civil engineering | planning
landscape architecture | surveying
510 east third avenue | spokane, wa | 99202
p 509.242.1000 | f 509.242.1001

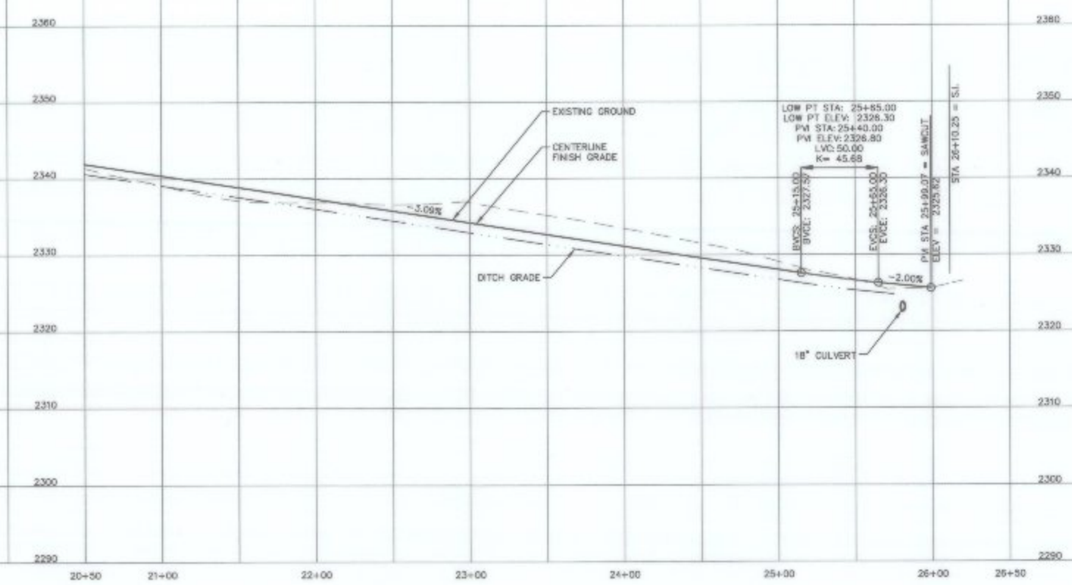
SHEET TITLE: ADELINE LANE
STA. 12+68 TO STA. 20+50

PROJECT TITLE: RIVER BLUFF RCD, 3RD ADDITION
SPOKANE COUNTY, WASHINGTON

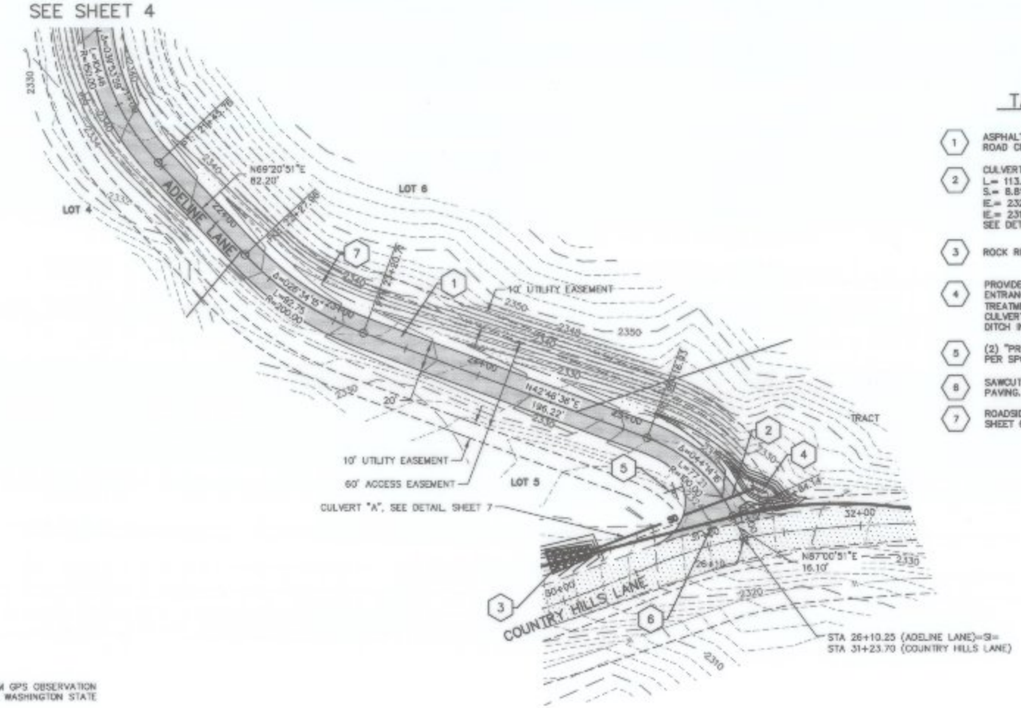
SEAL: MARK E. JOHNSON, STATE OF WASHINGTON, 43186, REGISTERED PROFESSIONAL ENGINEER, 1-27-17

DATE	10/10/2016
DRAWN	LMC
CHECKED	MJ
PROJECT NUMBER	16-102
DRAWING NO.	3 OF 7
	STREET

S 34, T 27 N, R 42 E



SEE SHEET 4



NOTES

1. CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE 2002 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AND THE 2001 SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION; AND ALL AMENDMENTS HERETO.
2. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND AND OVERHEAD UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH APPROPRIATE REGULATORY AGENCIES AND UTILITY COMPANIES FOR REQUIREMENTS AND ANY NECESSARY RELOCATIONS.
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. INSTALL RIP-RAP PAD AT BOTH ENDS OF ALL CULVERTS, PER DETAIL SHEET.
6. 1.0' (MIN.) OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.

TABLE

1. ASPHALT CONCRETE PAVING, SEE PRIVATE ROAD CROSS SECTION SHEET 6.
2. CULVERT "A", 18" CMP
   L.= 113.5'
   S.= 8.81%
   IE.= 2323.0 (N)
   IE.= 2313.0 (S)
   SEE DETAIL SHEET 7 OF 7.
3. ROCK RIP RAP PAD, SEE DETAIL SHEET.
4. PROVIDE SUMP AT CULVERT ENTRANCE AND RIP RAP ROCK END TREATMENT AROUND 18" CMP CULVERT SHAPING ENTRANCE FROM DITCH INTO CULVERT.
5. (2) "PRIVATE ROAD" SIGNS WITH POST PER SPOKANE COUNTY DETAIL A-16
6. SAWCUT, TACK COAT PRIOR TO PAVING. MATCH EXISTING
7. ROADSIDE DITCH SEE CROSS-SECTION SHEET 6.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-22172
DATE ACCEPTED: 02-03-17
ACCEPTANCE EXPIRES: 02-03-19
PROJECT LANE MILES PUBLIC: .22
PROJECT LANE MILES PRIVATE: .22
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

LOCATES (2 WORKING DAYS NOTICE REQUIRED PRIOR TO EXCAVATION)
LOCAL CALLING NUMBERS
SPOKANE COUNTY 8-1-1

ELEVATION DATUM
NAVD88 DATUM ESTABLISHED FROM GPS OBSERVATION OF LOCAL CONTROL POINTS USING WASHINGTON STATE REFERENCE NETWORK.

SITE TBM
A REBAR AT THE NORTH 1/4 CORNER OF SECTION 34
ELEV.= 2396.30 (NAVD88)

PN 2017-08

16-102 ST.dwg 4 ADELINE

No.	DESC. / DATE	BY
5		
4		
3		
2		
1		

storhaug
civil engineering | planning
landscape architecture | surveying
510 east third avenue | spokane, wa | 99202
p 509.242.1000 | f 509.242.1001

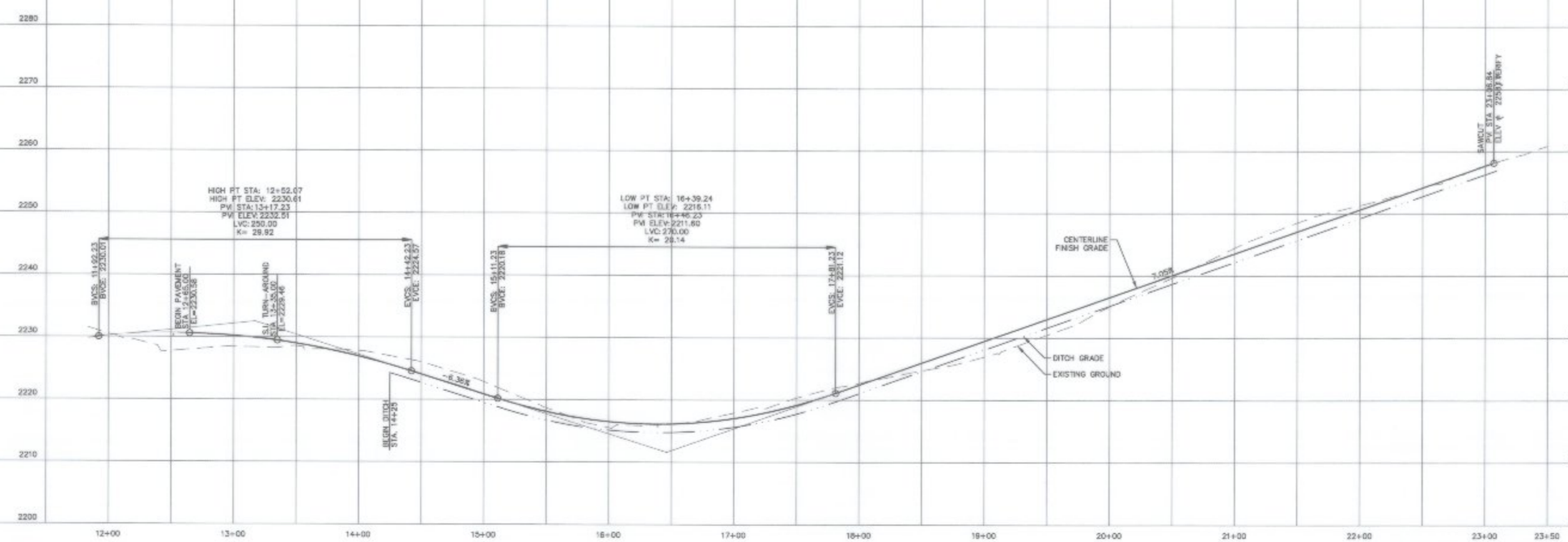
PROJECT TITLE: RIVER BLUFF RCD, 3RD ADDITION
ADELINE LANE
STA. 20+50 TO STA. 26+50
SPOKANE COUNTY, WASHINGTON

SHEET TITLE

SEAL
MARK E. JOHNSON
STATE OF WASHINGTON
43186
REGISTERED PROFESSIONAL ENGINEER
1-27-17

DATE	10/10/2016
DRAWN	LMC
CHECKED	MJ
PROJECT NUMBER	16-102
DRAWING NO.	4 OF 7
	STREET

S 34, T 27 N, R 42 E



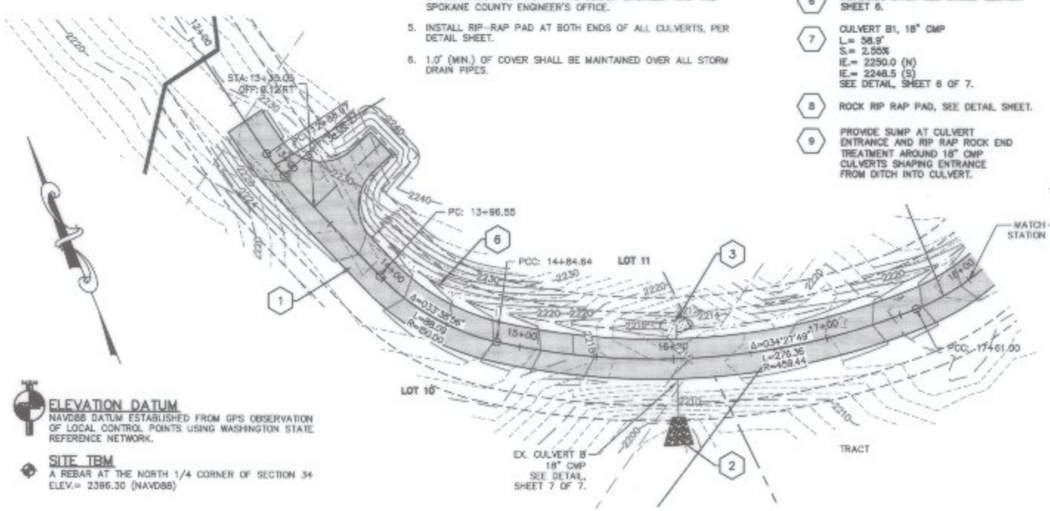
NOTES

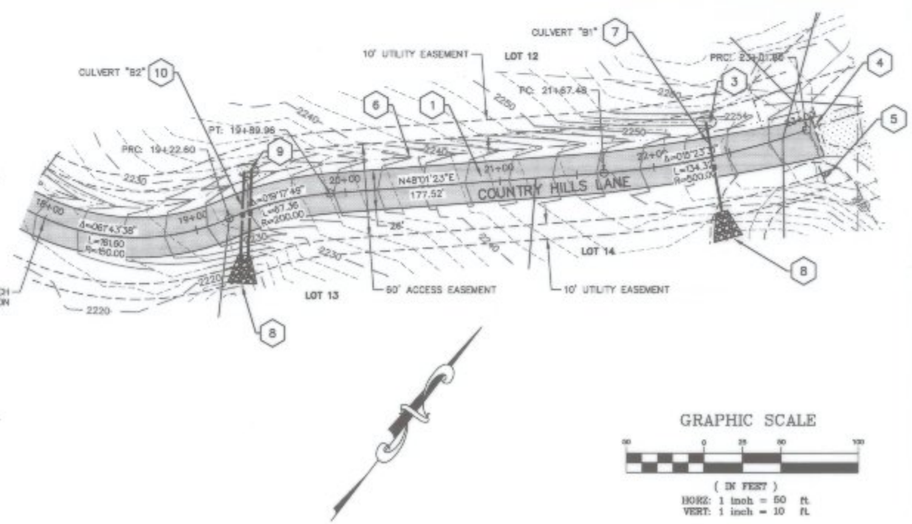
1. CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE 2002 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AND THE 2001 SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION; AND ALL AMENDMENTS HERETO.
2. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND AND OVERHEAD UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH APPROPRIATE REGULATORY AGENCIES AND UTILITY COMPANIES FOR REQUIREMENTS AND ANY NECESSARY RELOCATIONS.
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. INSTALL RIP-RAP PAD AT BOTH ENDS OF ALL CULVERTS, PER DETAIL SHEET.
6. 1.0' (MIN.) OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.

TABLE

1. ASPHALT CONCRETE PAVING, SEE PRIVATE ROAD CROSS SECTION SHEET 6.
2. ROCK RIP RAP PAD, SEE DETAIL SHEET.
3. PROVIDE SUMP AT CULVERT ENTRANCE AND RIP RAP ROCK END TREATMENT AROUND 18" CMP CULVERT SHAPING ENTRANCE FROM DITCH INTO CULVERT.
4. SAWCUT, TACK COAT PRIOR TO PAVING. MATCH EXISTING
5. (2) "PRIVATE ROAD" SIGNS WITH POST PER SPOKANE COUNTY DETAIL A-16
6. ROADSIDE DITCH SEE CROSS-SECTION SHEET 6.
7. CULVERT B1, 18" CMP
   L= 56.9'
   S.= 2.55%
   IE.= 2250.0 (N)
   IE.= 2248.5 (S)
   SEE DETAIL, SHEET 6 OF 7.
8. ROCK RIP RAP PAD, SEE DETAIL SHEET.
9. PROVIDE SUMP AT CULVERT ENTRANCE AND RIP RAP ROCK END TREATMENT AROUND 18" CMP CULVERTS SHAPING ENTRANCE FROM DITCH INTO CULVERT.
10. CULVERT B2, (2) 18" CMP
    L= 54.9'
    S.= 4.74%
    IE.= 2227.6 (N)
    IE.= 2225.0 (S)
    SEE DETAIL, SHEET 6 OF 7.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-20176
DATE ACCEPTED: 01-09-17
ACCEPTANCE EXPIRES: 01-09-19
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: .40
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION





ELEVATION DATUM
NAVD88 DATUM ESTABLISHED FROM GPS OBSERVATION OF LOCAL CONTROL POINTS USING WASHINGTON STATE REFERENCE NETWORK.

SITE TBM
A REBAR AT THE NORTH 1/4 CORNER OF SECTION 34
ELEV.= 2396.30 (NAVD88)

LOCATES (2 WORKING DAYS NOTICE REQUIRED PRIOR TO EXCAVATION)
LOCAL CALLING NUMBERS
SPOKANE COUNTY
8-1-1

GRAPHIC SCALE
(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

PN 2017-08

18-102 ST.dwg 5 COUNTRY HILLS

No.	DESC. / DATE	BY
5		
4		
3		
2		
1		

storhäug
civil engineering | planning
landscape architecture | surveying
510 east third avenue | spokane, wa | 99202
p 509.242.1000 | f 509.242.1001

PROJECT TITLE
COUNTRY HILLS LANE
STA. 12+50 TO 23+10
RIVER BLUFF RCD, 3RD ADDITION
SPOKANE COUNTY, WASHINGTON

SHEET TITLE

SEAL
MARK E. JOHNSON
STATE OF WASHINGTON
43185
REGISTERED
PROFESSIONAL ENGINEER
1-27-17

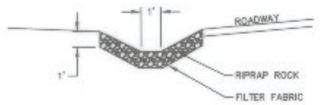
DATE	10/10/2016
DRAWN	LMC
CHECKED	MJ
PROJECT NUMBER	16-102
DRAWING NO.	5 OF 7

STREET

NOTES:
1. DITCHES SHALL BE RIP-RAPPED AT THE FOLLOWING LOCATIONS.

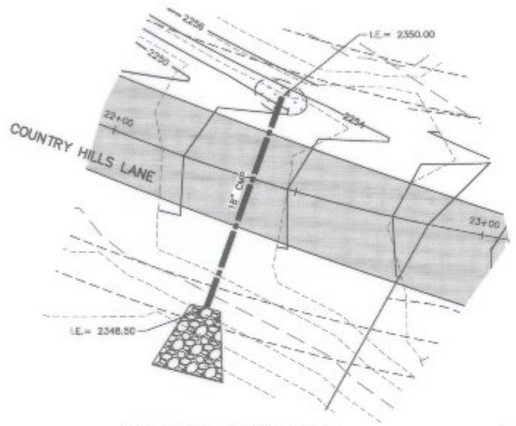
   STA. 15+00 TO 20+25 ADELINE LANE
   STA. 14+25 TO 23+50 COUNTRY HILLS LANE

2. FILTER FABRIC TO BE AMOCO #4545 OR EQUIVALENT.
3. 50% OF RIP-RAP TO BE 3" OR LARGER, MIN. 6" THICK, RIP-RAP TO BE IN ACCORDANCE WITH SECTION 9-13.1 OF THE WSDOT/APWA STANDARD SPECIFICATIONS. FILTER FABRIC SHALL BE PLACED BETWEEN THE NATIVE SOIL AND THE RIP-RAP.



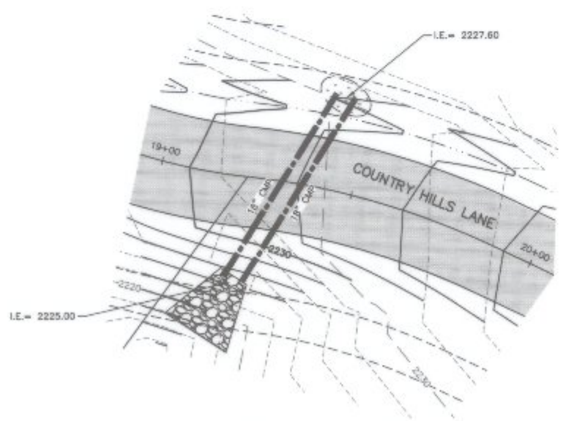
RIPRAP DITCH DETAIL

NTS



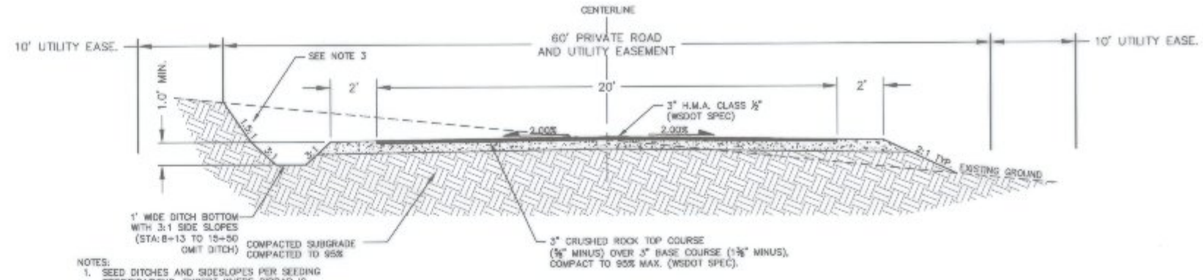
CULVERT "B1" DETAIL

1" = 20'



CULVERT "B2" DETAIL

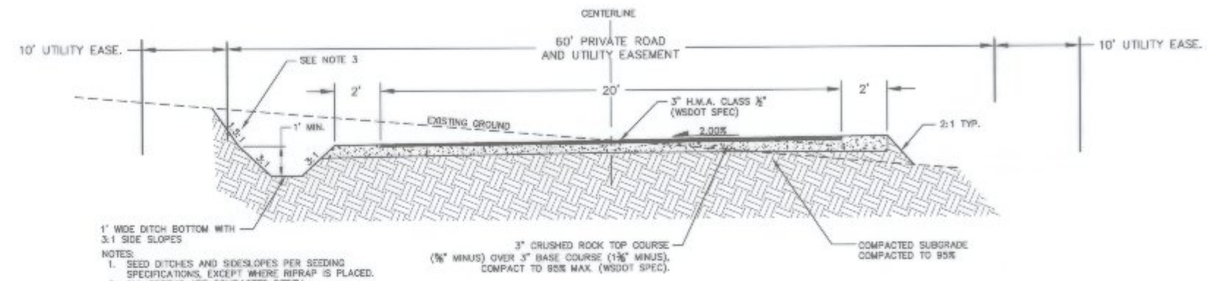
1" = 20'



NOTES:
1. SEED DITCHES AND SIDESLOPES PER SEEDING SPECIFICATIONS, EXCEPT WHERE RIPRAP IS PLACED.
2. ALL DEPTHS ARE COMPACTED DEPTH.
3. SLOPES STEEPER THAN 2:1 MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. NO CONSTRUCTED SLOPE SHALL BE STEEPER THAN 1.5:1.

ADELINE LANE STA. 8+13 TO 15+00
& STA. 22+50 TO 26+10

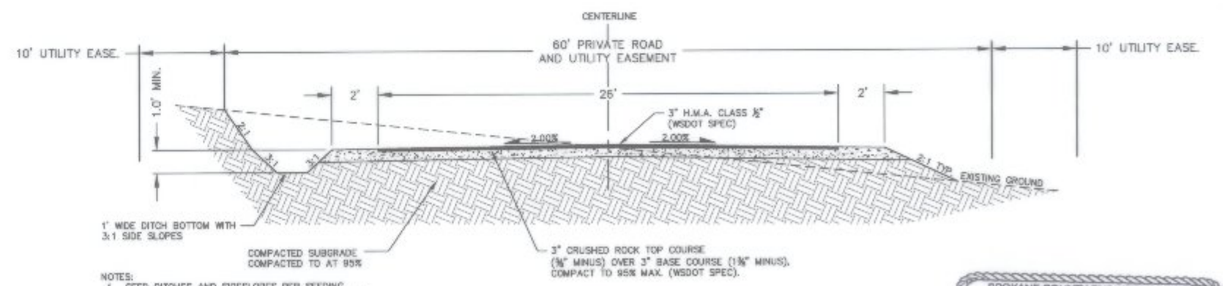
NTS



NOTES:
1. SEED DITCHES AND SIDESLOPES PER SEEDING SPECIFICATIONS, EXCEPT WHERE RIPRAP IS PLACED.
2. ALL DEPTHS ARE COMPACTED DEPTH.
3. SLOPES STEEPER THAN 2:1 MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. NO CONSTRUCTED SLOPE SHALL BE STEEPER THAN 1.5:1.

ADELINE LANE STA. 15+50 TO 22+00

NTS



NOTES:
1. SEED DITCHES AND SIDESLOPES PER SEEDING SPECIFICATIONS, EXCEPT WHERE RIPRAP IS PLACED.
2. ALL DEPTHS ARE COMPACTED DEPTH.

COUNTRY HILLS LANE STA. 12+65 TO 23+07

NTS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2017C
DATE ACCEPTED: 02-23-17
ACCEPTANCE EXPIRES: 02-23-19
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: .92
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

LOCATES (2 WORKING DAYS NOTICE REQUIRED PRIOR TO EXCAVATION)
LOCAL CALLING NUMBERS
SPOKANE COUNTY 8-1-1

PN 2017-08

10-102 ST.dwg 6 DETAILS

No.	DESC. / DATE	BY
5		
4		
3		
2		
1		

storhaug
civil engineering | planning
landscape architecture | surveying
510 east third avenue | spokane, wa | 99202
p 509.242.1000 | f 509.242.1001

SHEET TITLE: DETAIL SHEET

PROJECT TITLE: RIVER BLUFF RCD, 3RD ADDITION
SPOKANE COUNTY, WASHINGTON

SEAL: MARK E. JOHNSON, STATE OF WASHINGTON, 43166, REGISTERED PROFESSIONAL ENGINEER, 1-27-17

DATE	10/10/2016
DRAWN	LMC
CHECKED	MJ
PROJECT NUMBER	16-102
DRAWING NO.	6 OF 7
	DETAILS

1. CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE 2002 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AND THE 2001 SPOKANE COUNTY STANDARDS FOR FOR ROAD AND SEWER CONSTRUCTION, AND ALL AMENDMENTS HERETO.

2. LOCATIONS OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. PRIOR TO SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND AND OVERHEAD UTILITIES. ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES. CALL THE UNDERGROUND UTILITY LOCATION SERVICE AT 456-8000 BEFORE YOU DIG.

3. THE CONTRACTOR IS REQUIRED TO HAVE A COMPLETE SET OF 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. THE CONTRACTOR SHALL REVIEW ALL GEOTECHNICAL RECOMMENDATIONS AND INVESTIGATION REPORTS ASSOCIATED WITH THE SUBJECT DEVELOPMENT PRIOR TO STARTING CONSTRUCTION. ANY DISCREPANCIES BETWEEN DESIGN PLANS AND THE GEOTECHNICAL REPORT SHALL BE REPORTED TO THE DESIGN ENGINEER. CONSTRUCTION SHALL COMPLY WITH RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.

6. THE CONTRACTOR SHALL DEMOLISH AND REMOVE EXISTING STRUCTURES AND ASSOCIATED IMPROVEMENTS ON THE SUBJECT SITE CONFLICTING WITH THE PROPOSED IMPROVEMENTS PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL COORDINATE DEMOLITION ACTIVITIES WITH OWNER FOR FURTHER DIRECTION AND EXTENT OF WORK.

7. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL CLEARANCE BETWEEN WATER PIPE AND PIPE CARRYING NON-POTABLE WATER. AT CROSSINGS, THERE SHALL BE A MINIMUM VERTICAL CLEARANCE OF 18 INCHES BETWEEN WATER PIPE (ABOVE) AND PIPE CARRYING NON-POTABLE WATER (BELOW). INSTALLATIONS FOR UTILITIES OTHER THAN POTABLE WATER MAY BE INSTALLED AT A CLEARANCE LESS THAN THOSE STATED ABOVE IF THE NON-POTABLE LINE IS SLEEVED PER CONSOLIDATED IRRIGATION DISTRICT SPECIFICATIONS. THE SLEEVE PIPE SHALL BE ONE SIZE LARGER THAN THE CONSTRUCTION PIPE. THE SLEEVE SHALL BE AT LEAST 20 FEET IN LENGTH AND CENTERED ON THE CROSSING TO PROVIDE FOR A MINIMUM HORIZONTAL SEPARATION OF 10 FEET EACH SIDE OF THE CROSSING, MEASURED PERPENDICULAR TO THE CROSSED LINE. EACH END OF THE SLEEVE SHALL BE SEALED WITH A FERNCO RUBBER COUPLER.

8. UTILITY TRENCHING SHALL BE DONE IN ACCORDANCE WITH WSDOT STANDARD PLAN B-55.20-00.

9. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

10. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY AND SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING STORM WATER MANAGEMENT SYSTEM FROM SEDIMENTATION. THE CONTRACTOR SHALL TAKE THE NECESSARY MEASURES TO PROTECT EXISTING IMPROVEMENTS BY USING EROSION AND SEDIMENT CONTROLS, INCLUDING BUT NOT LIMITED TO, STABILIZED CONSTRUCTION ENTRANCES, SEDIMENT BARRIERS, SILT FENCES, AND INLET PROTECTION.

11. UNLESS ELEVATIONS AND/OR CONTOURS ARE OTHERWISE SHOWN, NEW FINISH GRADE SURFACES SHALL BE PLACED TO ALLOW FOR POSITIVE DRAINAGE TO CURB, GUTTER, OR OTHER RUNOFF COLLECTION DEVICES. MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS.

12. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANIES FOR ALL REQUIREMENTS AND TO CONFIRM THAT AN ADEQUATE DEPTH OF COVER IS MAINTAINED OVER THE UTILITIES.

13. AREAS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE CONSTRUCTED OR REPAIRED TO ORIGINAL CONDITIONS OR BETTER.

14. EXISTING PROPERTY CORNERS AND SURVEY MONUMENTS SHALL BE PROTECTED DURING CONSTRUCTION. ANY DAMAGED OR OBLITERATED CORNERS OR MONUMENTS SHALL BE RE-ESTABLISHED BY A PROFESSIONAL SURVEYOR.

15. APPROVALS AND PERMITS REQUIRED BY THE GOVERNING REGULATORY AGENCIES SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION, INCLUDING A CONSTRUCTION GENERAL STORM WATER PERMIT IF REQUIRED. THE CONTRACTOR SHALL COORDINATE WITH THE GOVERNING REGULATORY AGENCIES TO DETERMINE IF A PRE-CONSTRUCTION MEETING IS REQUIRED.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL IN ACCORDANCE WITH MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. COORDINATE REQUIREMENTS WITH THE GOVERNING REGULATORY AGENCY.

17. SAFETY STANDARDS AND REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COMPLIED WITH AS SET FORTH BY OSHA.

18. THE CONTRACTOR SHALL COORDINATE WITH THE GOVERNING REGULATORY AGENCY REGARDING INSPECTION AND TESTING REQUIREMENTS. INSPECTION, TESTING, COMPACTION, AND DISINFECTION REQUIREMENTS SHALL CONFORM WITH WSDOT, AWWA, AND APWA SPECIFICATIONS.

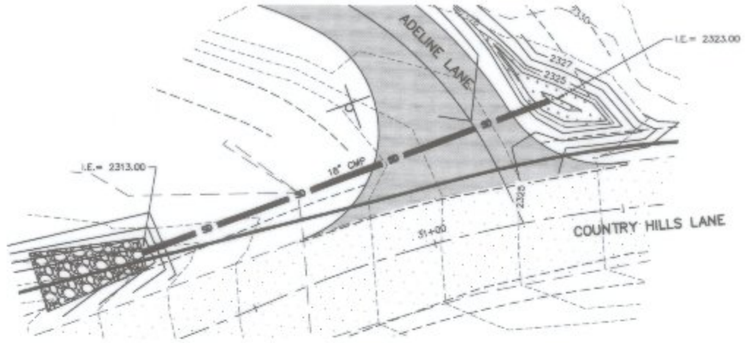
19. COORDINATE THE INSTALLATION OF REGULATORY SIGNS WITH THE GOVERNING REGULATORY AGENCY.

20. WHERE NEW ASPHALT JOINS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO A NEAT, VERTICAL EDGE AND TACKED WITH ASPHALT EMULSION IN ACCORDANCE WITH WSDOT SPECIFICATIONS. THE NEW ASPHALT SHALL BE FEATHERED BACK OVER THE EXISTING ASPHALT TO PROVIDE FOR A SEAL AT THE SAWCUT LOCATION.

21. GROUNDWATER OR UNANTICIPATED GEOLOGIC CONDITIONS SHALL BE REPORTED TO THE GEOTECHNICAL ENGINEER FOR ASSESSMENT AND RECOMMENDATIONS.

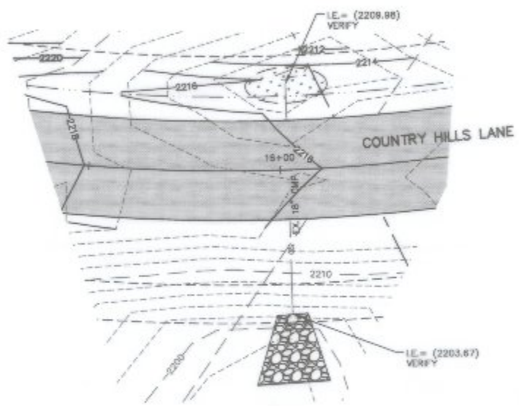
22. ALL COMPACTION EFFORTS SHALL BE MONITORED AND TESTED BY AN EXPERIENCED SOILS TECHNICIAN, UNDER THE SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER REPRESENTING THE OWNER. ALL MASS GRADING SHALL BE MONITORED, TESTED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER (GEOTECHNICAL ENGINEER).

GENERAL NOTES



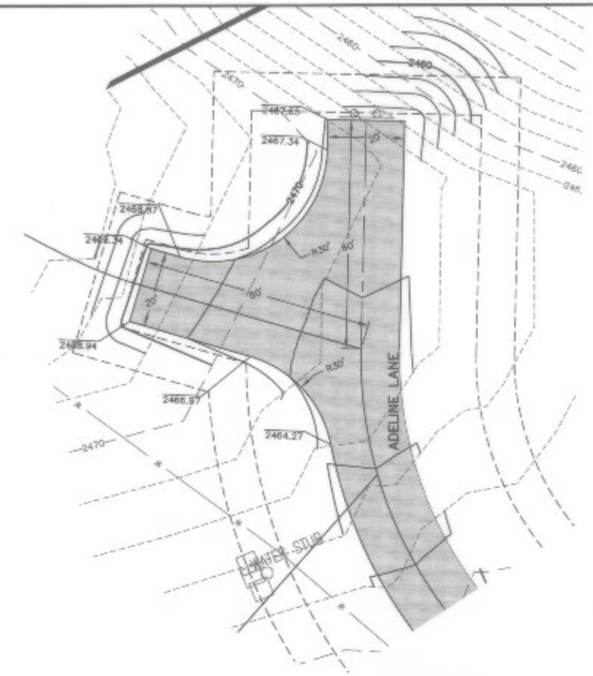
CULVERT "A" DETAIL

1" = 20'



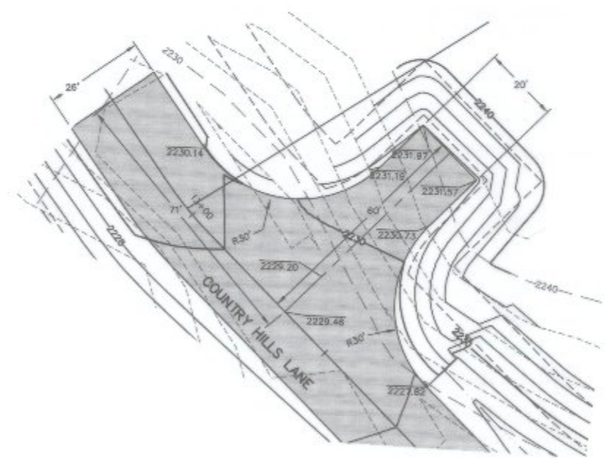
EX. CULVERT "B" DETAIL

1" = 20'



ADELINE LANE TURN-AROUND

1" = 20'



COUNTRY HILLS LANE TURN-AROUND

1" = 20'

PROVIDE FRESH, CLEAN NEW CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION ESTABLISHED BY OFFICIAL SEED ANALYSTS OF NORTH AMERICA. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES AND PERCENTAGES AS FOLLOWS:

20 PERCENT ELKA PERENNIAL RYE

20 PERCENT DURAR HARD FESCUE

45 PERCENT COVAR SHEEP /FESCUE

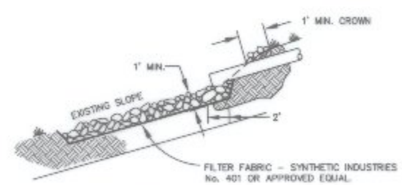
15 PERCENT REUBENS CANADIAN BLUEGRASS

PROVIDE MIXTURE COMPOSED OF GRASS SEED AND FERTILIZER IN PERCENTAGES AS FOLLOWS:

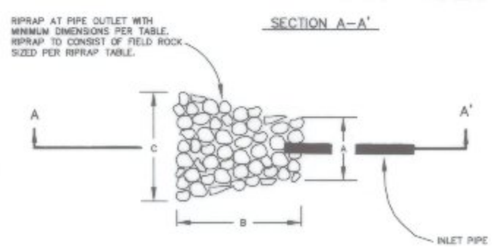
GRASS SEED MIXTURE: 90 LBS. PER ACRE
FERTILIZER: 16:16:16 TIMED RELEASE COMPOSITION, 300 LBS. PER ACRE

ALL SEEDING OF SLOPES SHALL BE DONE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS.

SEEDING SPECIFICATIONS



SECTION A-A'



DRAINAGE PIPE OUTFALLS								
LOCATION		ROCK SIZE			PAD DIMENSIONS			
ADELINE	NAME	MIN.	AVG.	MAX.	THICKNESS	A	B	C
18" CULVERT	A	5"	8"	10"	12"	5'	18"	10'
COUNTRY HILLS								
18" CULVERT	EX. B	7"	9"	12"	14"	6'	20'	15'
18" CULVERT	B-1	5"	8"	10"	12"	6'	22'	13'
DBL. 18" CULVURT	B-2	5"	8"	12"	12"	12'	17'	24'

NOTE:
RIP-RAP AT PIPE ENDS WITH MINIMUM DIMENSIONS AS SHOWN ABOVE. 50% OF RIP-RAP SHALL BE EQUAL TO OR GREATER THAN THE d50 VALUE LISTED. MINIMUM THICKNESS SHALL BE TWICE THE d50 VALUE. RIP-RAP SHALL BE IN ACCORDANCE WITH SECTION 9-13.1 OF THE WSDOT/APWA STANDARD SPECIFICATIONS. FILTER FABRIC SHALL BE PLACED BETWEEN THE NATIVE SOIL AND RIP-RAP.

RIPRAP DETAIL

NTS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2017C
DATE ACCEPTED: 02-03-17
ACCEPTANCE EXPIRES: 02-03-19
PROJECT LANE MILES PUBLIC: .92
PROJECT LANE MILES PRIVATE:
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

LOCATES (2 WORKING DAYS NOTICE REQUIRED PRIOR TO EXCAVATION)
LOCAL CALLING NUMBERS
SPOKANE COUNTY
8-1-1

16-102 ST.dwg 7 DETAILS

PN 2017-08

No.	DESC. / DATE	BY
5		
4		
3		
2		
1		

storhäug
civil engineering | planning
landscape architecture | surveying
510 east third avenue | spokane, wa | 99202
p 509.242.1000 | f 509.242.1001

SHEET TITLE: DETAIL SHEET

PROJECT TITLE: RIVER BLUFF RCD, 3RD ADDITION
SPOKANE COUNTY, WASHINGTON

SEAL: MARK R. JOHNSON, STATE OF WASHINGTON, 43466, REGISTERED PROFESSIONAL ENGINEER, 1-27-17

DATE	10/10/2016
DRAWN	LMC
CHECKED	MJ
PROJECT NUMBER	16-102
DRAWING NO.	7 OF 7

DETAILS