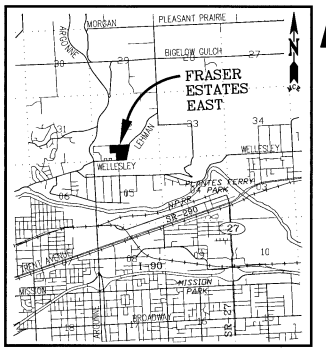
FRASER ESTATES EAST

STREET PLANS

SECTION 32, T.26 N., R.44 E., W.M.
SPOKANE COUNTY, WASHINGTON



VICINITY MAP

GENERAL NOTES – STREET/DRAINAGE

GENERAL:

1. ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION" 2001, AND AS AMENDED.
2. LOCATIONS OF EXISTING UTILITIES SHOWN IN THESE 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 ACCEPTED 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 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. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE RIMS AND GRATES OF DRYWELLS, CATCH BASINS AND INLETS UNTIL SUCH TIME THE VEGETATION ON THE SITE IS ESTABLISHED AND THE THREAT OF SEDIMENT DEPOSITION INTO THE DRAINAGE SYSTEM IS MITIGATED.

SUPPLEMENTAL – WHEN APPLICABLE:

8. FOR ANY CURB GRADES LESS THAN 0.8% (0.0080 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.
9. THE CONTRACTOR SHALL EMPLOY A WASHINGTON STATE-LICENSED PROFESSIONAL LAND SURVEYOR TO VERIFY THAT THE CROSS-GUTTER FORMS ARE AT THE CORRECT PLANE GRADE, PRIOR TO CONCRETE PLACEMENT. THE CROSS-GUTTERS SHALL BE CONSTRUCTED PRIOR TO PAVING, AND THE PAVEMENT SHALL THEN MATCH THE EDGE OF THE CONCRETE GUTTER.

GRASSED PERCOLATION AREA (GPA) – WHEN APPLICABLE:

10. 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 VERIFYING THAT ALL GPA SWALES CONFORM TO THIS REQUIREMENT. THIS WRITTEN STATEMENT SHALL BE SUBMITTED TO THE SPOKANE COUNTY ENGINEER'S OFFICE PRIOR TO INSTALLING FINISHED LANDSCAPING AND/OR 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.

EROSION/SEDIMENTATION CONTROL (ESC) – WHEN APPLICABLE: (SEE SHEET 2)

11. AN EROSION/SEDIMENTATION CONTROL (ESC) PLAN IS REQUIRED FOR THIS PROJECT. IMPLEMENTATION OF THE ESC PLAN, AND CONSTRUCTION, MAINTENANCE AND UPGRADING OF THE ESC FACILITIES, ARE THE RESPONSIBILITY OF THE DEVELOPER UNTIL ALL CONSTRUCTION IS COMPLETED AND ACCEPTED BY SPOKANE COUNTY, OR UNTIL VEGETATION IS ESTABLISHED THROUGHOUT THE SITE AND ACCEPTED BY SPOKANE COUNTY, WHICH EVER IS LATER.
12. APPROVAL OF THE ESC PLAN DOES NOT CONSTITUTE APPROVAL OF ANY OF THE PROPOSED ROAD, STORM DRAINAGE, GRADING OR UTILITY DESIGN ELEMENTS SHOWN ON THE ESC PLAN.
13. THE EROSION/SEDIMENTATION CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE ESC MEASURES DAILY, AND SHALL MAINTAIN AND UPGRADE THE MEASURES AS NECESSARY TO PREVENT SEDIMENT-LADEN RUNOFF FROM EITHER FLOWING OFF THE SITE OR INTO NEW AND/OR EXISTING STORM DRAINAGE FACILITIES, SUCH AS DRYWELLS, CULVERTS, INLETS, CATCH BASINS OR GRAVEL GALLERIES.
14. THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR INSTALLING ROCK CONSTRUCTION ENTRIES AT ANY AND ALL LOCATIONS USED TO ENTER OR EXIT THE PROJECT SITE.

DATUM NAVD'88

BASED ON WSDOT GPS MON GP32290-22
LOCATED ON SOUTH SIDE OF TRENT AVENUE
APPROXIMATELY 200' WEST OF PINES ROAD.
ELEVATION = 1989.78' (606.484 METERS).

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-1892
DATE ACCEPTED: 10-18-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
"AS-BUILT" RED LINE PLANS ARE REQUIRED RECORD DRAWINGS, "AS-BUILT" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3000
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION.

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

PROJECT CONTACTS

CLIENT CONTACT	FRASER ESTATES, LLC MIKE HUME (509) 467-7400 FAX: 467-9771	PROJECT ENGINEER	MOUNTAIN CREST ENTERPRISES, INC. NELSON W. OGREN, P.E. (509) 466-5794 FAX: 466-1514
GOVERNING AGENCY	SPOKANE COUNTY UTILITIES KEVIN R. COOKE, P.E. (509) 477-5604 FAX: 477-4715	FIRE DISTRICT	SPOKANE COUNTY FIRE DISTRICT No. 9 DAN WALSH (509) 466-4602

LEGEND

EXISTING / PROPOSED

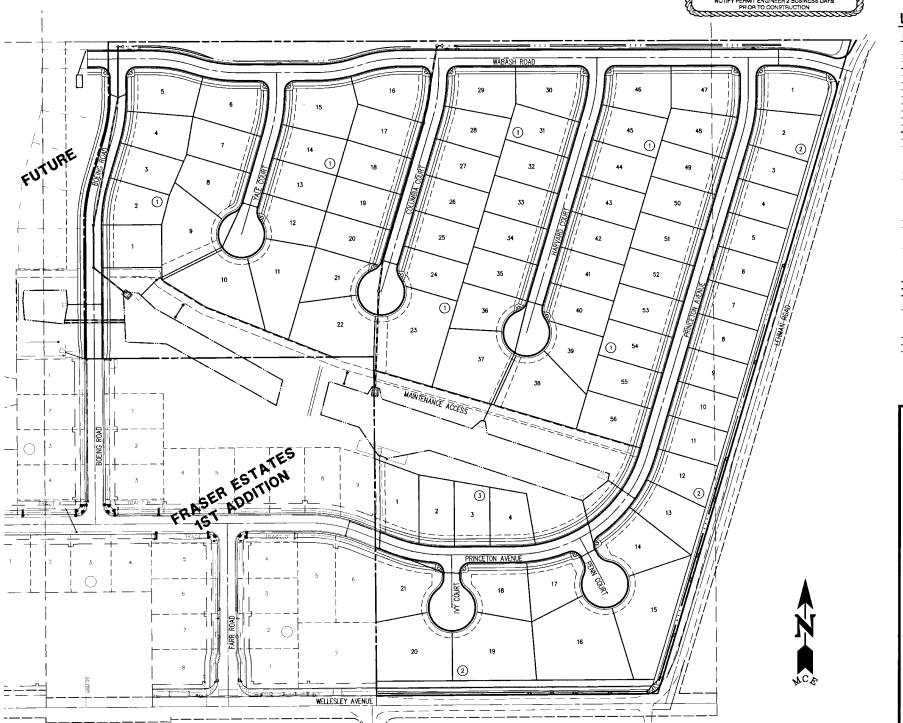
SURFACE FEATURES: PLAT BOUNDARY, CENTER LINE, RIGHT-OF-WAY LINE, PROPERTY LINE, EASEMENT LINE, CURB LINE, SIDEWALK, EDGE OF PAVEMENT, EDGE OF GRAVEL, DITCH LINE, FENCE LINE, BUILDINGS/STRUCTURES, CONTOUR (MAJOR), CONTOUR (MINOR)

SANITARY SEWER: SEWER MAIN (w/ Flow), MANHOLE, CLEAN-OUT, SIDE SERVICE

WATER: WATER MAIN, VALVE, HYDRANT, BLOW-OFF ASSEMBLY, AIR/VACUUM RELIEF, SERVICE

STORM DRAINAGE: STORM MAIN, CATCH BASIN, MANHOLE, DRYWELL, POND BOTTOM

UTILITIES: GAS MAIN, POWER LINE, TELEPHONE, POWER VAULT, POWER/LIGHT POLE



GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 inch = 100 ft.

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.

Don Mattson
FOR FRASER ESTATES L.L.C.
DEVELOPER'S APPROVAL

8/4/04
DATE

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PRINCETON AVE STA 29+50.00 TO STA 36+64.66	4
IVY CT / PENN CT STA 8+94.99 TO STA 10+00.00	5
HARVARD CT STA 4+34.00 TO STA 10+00.00	6
COLUMBIA CT STA 5+20.00 TO STA 10+00.00	7
YALE CT STA 6+69.21 TO STA 10+00.00	8
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Date	Activity	By
02/03/04	ORIGINAL PREPARATION	NWO
06/15/04	COUNTY REVIEW COMMENTS	NWO
08/04/04	COUNTY APPROVAL SET	NWO
10/18/04	RE-REVISED STREET SHEETS	

NELSON W. OGREN, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 18400
EXPIRES: 9/30/05

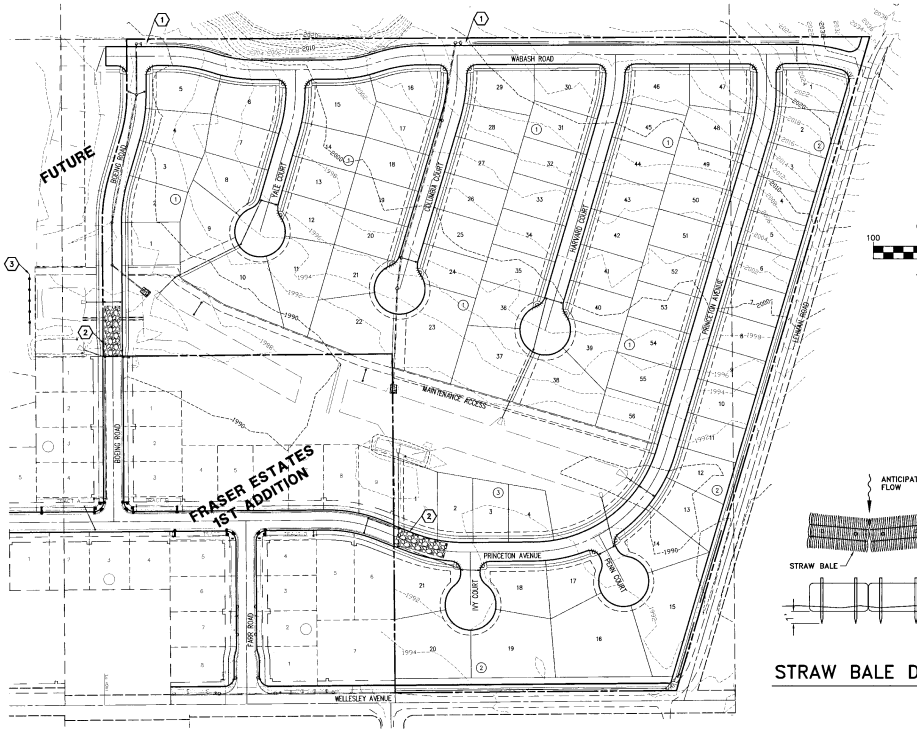
Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1700, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
COVER SHEET
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 1 of 19

P-1892 Eng Approval

SEC. 32, T.26 N., R.44 E.,W.M.



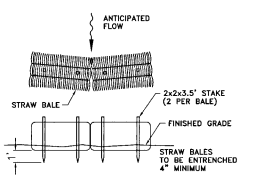
UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

EROSION & SEDIMENT CONTROL

1. AN EROSION AND SEDIMENT CONTROL (ESC) PLAN IS REQUIRED FOR THIS PROJECT. IMPLEMENTATION OF THE ESC PLAN, AND CONSTRUCTION, MAINTENANCE AND UPGRADING OF THE ESC FACILITIES ARE THE RESPONSIBILITY OF THE DEVELOPER UNTIL ALL 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 ESC PLAN DOES NOT CONSTITUTE APPROVAL OF ANY OF THE PROPOSED ROAD STORM DRAINAGE, GRADING OR UTILITY DESIGN ELEMENTS SHOWN ON THE ESC PLAN.
3. THE ESC MEASURES SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN THESE MEASURES DAILY, AND SHALL MAINTAIN AND UPGRADE AS NECESSARY TO PREVENT SEDIMENT-LADEN WATER FROM EITHER FLOWING OFF SITE, OR INTO NEW/EXISTING STORM DRAINAGE FACILITIES, SUCH AS DRYWELLS, INLETS, STORM PIPES OR CULVERTS.
4. GEOTEXTILE FABRIC IS TO BE PLACED BETWEEN THE RIMS AND GRATES OF DRYWELLS, 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. SILT FENCE (SEE DETAIL, THIS SHEET) SHALL BE INSTALLED BY THE CONTRACTOR AS NEEDED TO CONTROL OFFSITE EROSION, AND MAINTAINED THROUGH THE DURATION OF CONSTRUCTION. THE LENGTH OF SILT FENCE SPECIFIED IS THE MINIMUM REQUIRED. ADDITIONAL SILT FENCE MAY BE NECESSARY TO PREVENT SEDIMENT-LADEN WATER FROM EITHER FLOWING OFF SITE, OR INTO NEW/EXISTING STORM DRAINAGE FACILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ROCK CONSTRUCTION ENTRIES AT ANY AND ALL LOCATIONS USED TO ENTER OR EXIT THE PROJECT SITE.
7. PROPERTY DEVELOPER: FRASER ESTATES, L.L.C.
8. PROJECT LOCATION: NORTH OF WELLESLEY ROAD AND EAST OF ARGONNE ROAD, IN SPOKANE COUNTY, WASHINGTON.
9. PROJECT DESCRIPTION: 81 LOT RESIDENTIAL DEVELOPMENT ON APPROXIMATELY 30.4 ACRES.
10. DESCRIPTION OF ESC MEASURES: SILT FENCE SEDIMENT CONTROL, STRAW BALE INLET PROTECTION AND ROCK CONSTRUCTION ENTRANCES.
11. EXISTING VEGETATION: NATIVE PONDEROSA PINE AND FIR TREES, NATIVE GRASSES AND UNDERBRUSH.
12. PLAN PREPARATION DATE: JUNE, 2004.
13. NATIVE SOILS: GARRISON GRAVELLY LOAM (GgA) AND PHOEBE SANDY LOAM (PsA), BASED ON SHEET 57 OF THE SCS SOILS SURVEY OF SPOKANE COUNTY, WASHINGTON.
14. 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 SEEDED WITH A FAST STARTING NATIVE DRYLAND GRASS SUCH AS ANNUAL RYE, OR APPROVED EQUAL, AT A RATE OF 60 lbs/ACRE. SEE MIX SPECIFICATIONS, THIS SHEET.
15. ALL DRAINAGE CHANNELS SHALL BE EVALUATED FOR EROSION POTENTIAL. THOSE DRAINAGE COURSES WHICH ARE TO RECEIVE CONCENTRATED STORM WATER RUNOFF AND ARE FOUND TO BE SUBJECT TO EROSION FROM THE ANTICIPATED POST DEVELOPMENT RUNOFF SHALL BE EITHER LINED OR RIP-RAPPED TO MINIMIZE THE POTENTIAL FOR EXCESSIVE EROSION.

MAINTENANCE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ALL TEMPORARY ESC MEASURES.
2. SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RUNOFF-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 SHOULD BE REMOVED AFTER EACH RUNOFF-PRODUCING RAINFALL. DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY 1/2 THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSIT REMAINING IN PLACE AFTER THE ESC STRUCTURE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
6. ALL TEMPORARY AND PERMANENT ESC PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
7. ALL TEMPORARY ESC 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 WHICH MAY ACCUMULATE ON PAVED STREETS ADJACENT TO THE SITE AS A RESULT OF CONSTRUCTION ACTIVITY. CLEANING SHALL BE ON AN "AS NEEDED" BASIS USING WATER UNDER PRESSURE. SWEEPING AND WATER SHALL BE USED WHEN WATER PRESSURE ALONE WILL NOT WASH THE CONSTRUCTION DEBRIS FROM THE STREET.
9. DUST CONTROL: AN APPROVED METHOD OF DUST CONTROL, MEETING THE REQUIREMENTS OF LOCAL REGULATIONS SHALL BE UTILIZED DURING THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MATERIALS WHICH SPILL ONTO LOCAL STREETS DURING THE TRANSPORTATION OF THE EQUIPMENT. SHOULD A SPILL OCCUR, THE CONTRACTOR SHALL REMOVE THE MATERIAL BY THE END OF THE DAY. NO MATERIAL SHALL BE ALLOWED TO SET, DRY OR BE WASHED INTO ADJACENT STORMWATER FACILITIES.



STRAW BALE DETAIL

DRYLAND GRASS SEED MIX

PER APPENDIX E, SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT

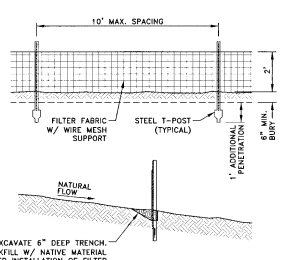
GRASS SEED: PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE OF PURITY AND GERMINATION ESTABLISHED BY THE OFFICIAL SEED ANALYSIS OF NORTH AMERICA. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES AND PERCENTAGES AS FOLLOWS:

10% - ELKA PERENNIAL RYE
20% - DURAR HARD FESCUE
45% - COVAR SHEEP/FESCUE
15% - REUBENS CANADIAN BLUEGRASS
10% - OTHER

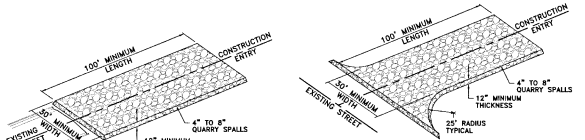
PROVIDE MIXTURE COMPOSED OF GRASS SEED AND FERTILIZER IN PERCENTAGES AS FOLLOWS:

GRASS SEED: 90 LBS. PER ACRE
FERTILIZER: 16-16-16 TIME RELEASE COMPOSITION, 300 LBS. PER ACRE

ALL SEEDING OF SLOPES SHALL BE DONE IN ACCORDANCE WITH THE WSDOT STANDARD SPECIFICATION, SECTION 8-01.



SILT FENCE DETAIL



CONSTRUCTION ENTRY DETAILS

CONSTRUCTION NOTES

1. INSTALL STRAW BALE EROSION CONTROL MEASURE PER DETAIL THIS SHEET.
2. INSTALL ROCK CONSTRUCTION ENTRANCE PER DETAIL THIS SHEET.
3. INSTALL 120 L.F. OF SILT FENCE PER DETAIL THIS SHEET.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT # P-1892
DATE ACCEPTED: 10-13-2004
ACCEPTANCE EXPIRES: 10-13-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
NOTE: ACCEPTANCE OF PLANS REQUIRED RECORD DRAWINGS, "AS-BUILT" 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

Don Matthew 8/4/04

P-1892 Eng Prod & Survey

DATUM NAVD'88
BASED ON WSDOT GPS MON CP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.464 METERS).

Date	Activity	By
06/30/04	ORIGINAL PREPARATION	
07/16/04	PRELIMINARY SUBMITTALS	
07/30/04	FINAL STREET SUBMITTALS	

WINN CORNELL STEVENS STATE OF WASHINGTON 14444 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
Post Office Box 1301
Cheney, Wa. 99004
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
EROSION CONTROL PLAN
SPOKANE COUNTY, WA

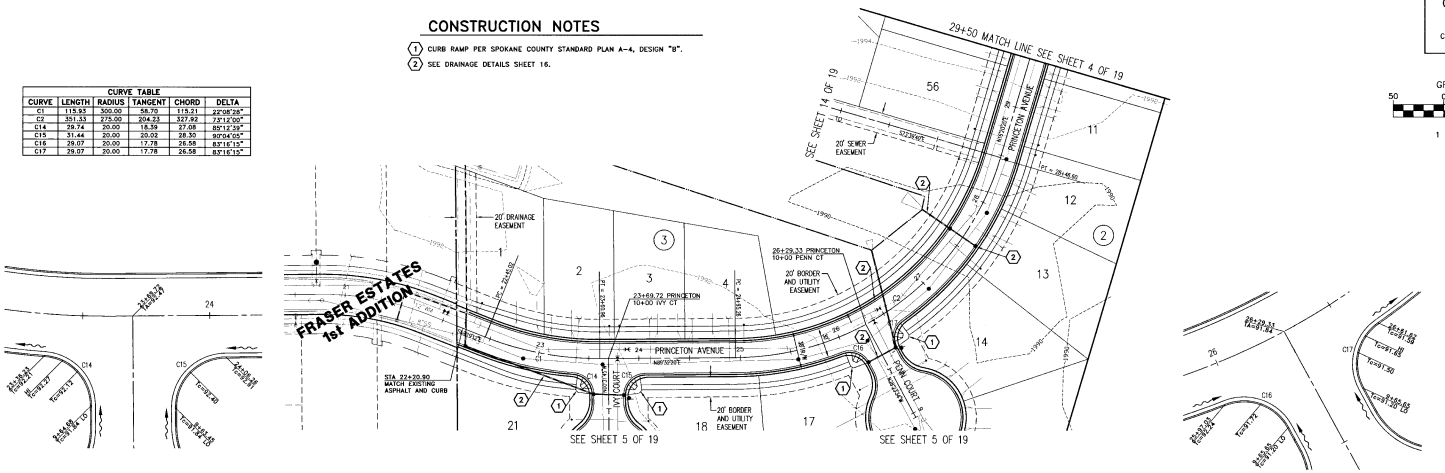
STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 2 of 19

SEC. 32, T.26 N., R.44 E.,W.M.

CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEET 16.

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C1	115.93	300.00	58.70	115.21	22°08'28"
C2	351.33	275.00	204.23	327.92	73°12'00"
C14	29.74	20.00	18.39	27.08	85°12'39"
C15	31.44	20.00	20.02	28.30	90°04'05"
C16	29.07	20.00	17.78	26.58	83°16'15"
C17	29.07	20.00	17.78	26.58	83°16'15"



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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

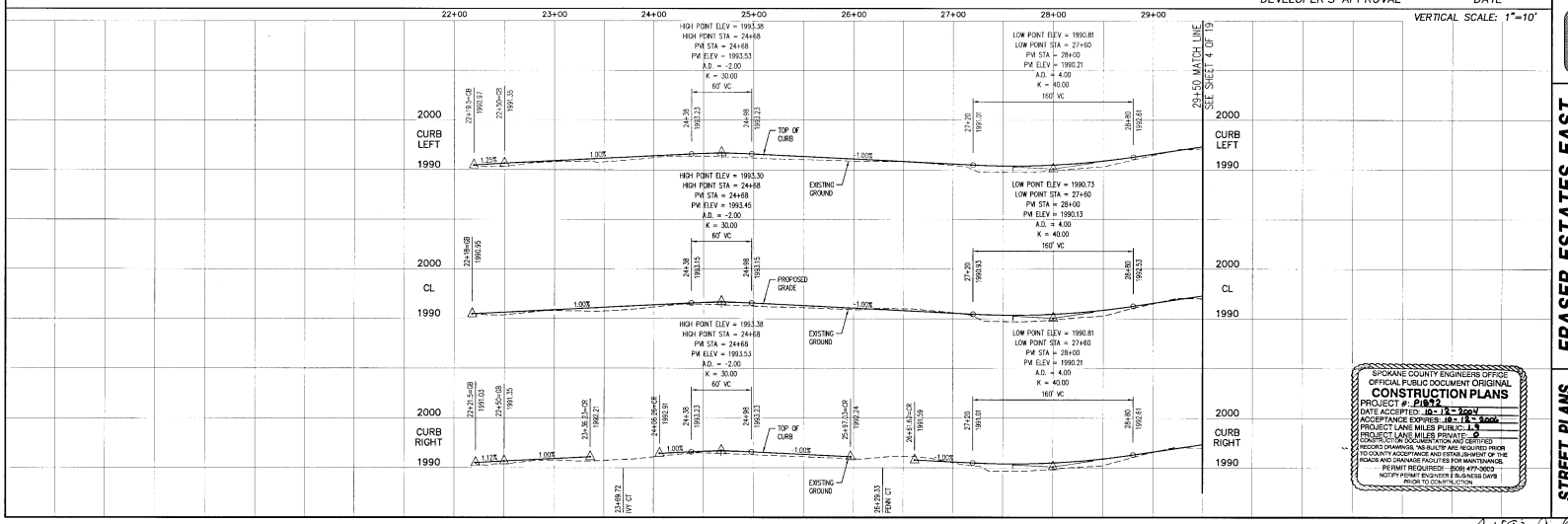
N
MCE

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22
LOCATED ON SOUTH SIDE OF TRENT AVENUE
APPROXIMATELY 200' WEST OF PINES ROAD.
ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 2.5
PROJECT LANE MILES PRIVATE: 0
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

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL STREET SUBMITTAL

NELSON WINN GREEN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
PRINCETON AVENUE
22+14.78 TO 29+50
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 3 of 19

P-1892 Enfield + Dunnage

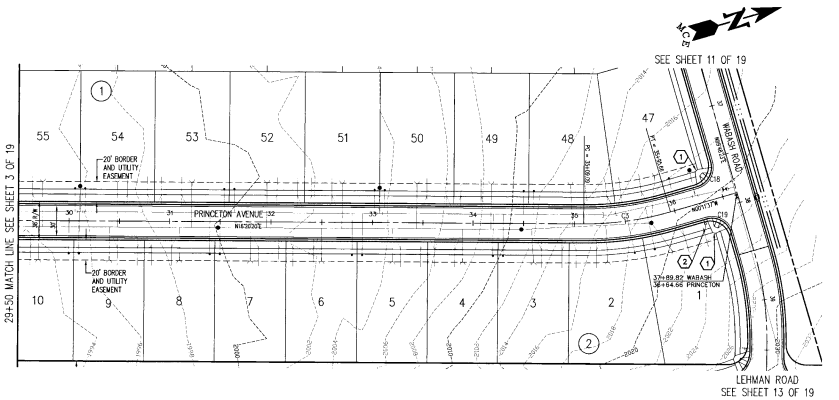
SEC. 32, T.26 N., R.44 E.,W.M.

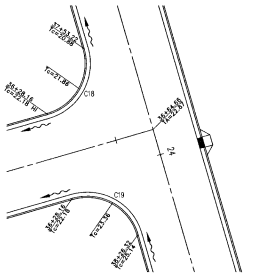
CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. INSTALL ~~STOP SIGN AND~~ STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.



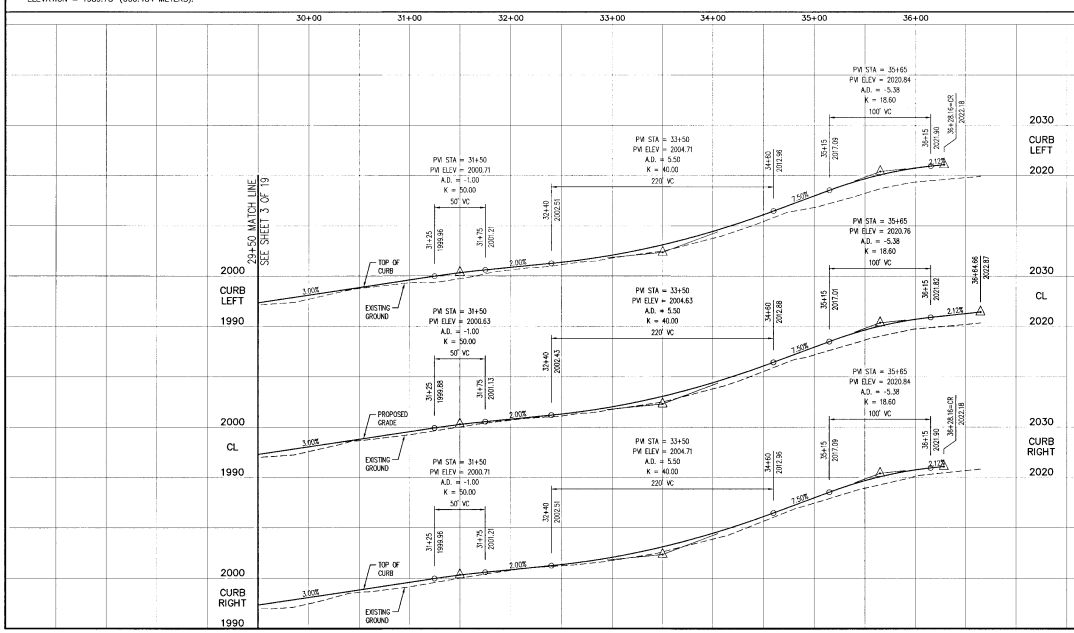


DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C3	86.56	300.00	43.58	86.26	16°31'57"
C18	31.42	20.00	20.00	28.28	90°00'00"
C19	31.42	20.00	20.00	28.28	90°00'00"

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILT" 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

Date | Activity
05/03/04 | ORIGINAL PREPARATION
06/15/04 | COUNTY REVIEW COMMENTS
07/30/04 | FINAL STREET SUBMITTAL
10/8/04 | REMOVED STOP SIGNS

NELSON WINN OGREN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
8/4/04
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
PRINCETON AVENUE
29+50 TO 36+64.66
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 4 of 19

P-1892 Eng Road & Drainage

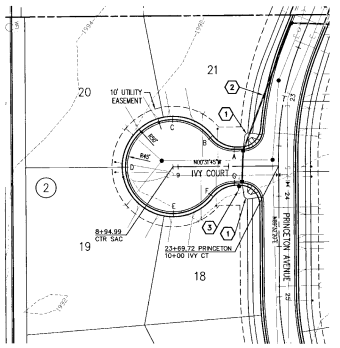
SEC. 32, T.26 N., R.44 E.,W.M.

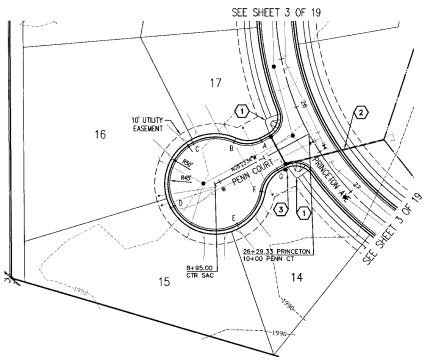
CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEET 16.
3. INSTALL ~~STOP SIGN AND~~ STREET NAME SIGN PER W.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

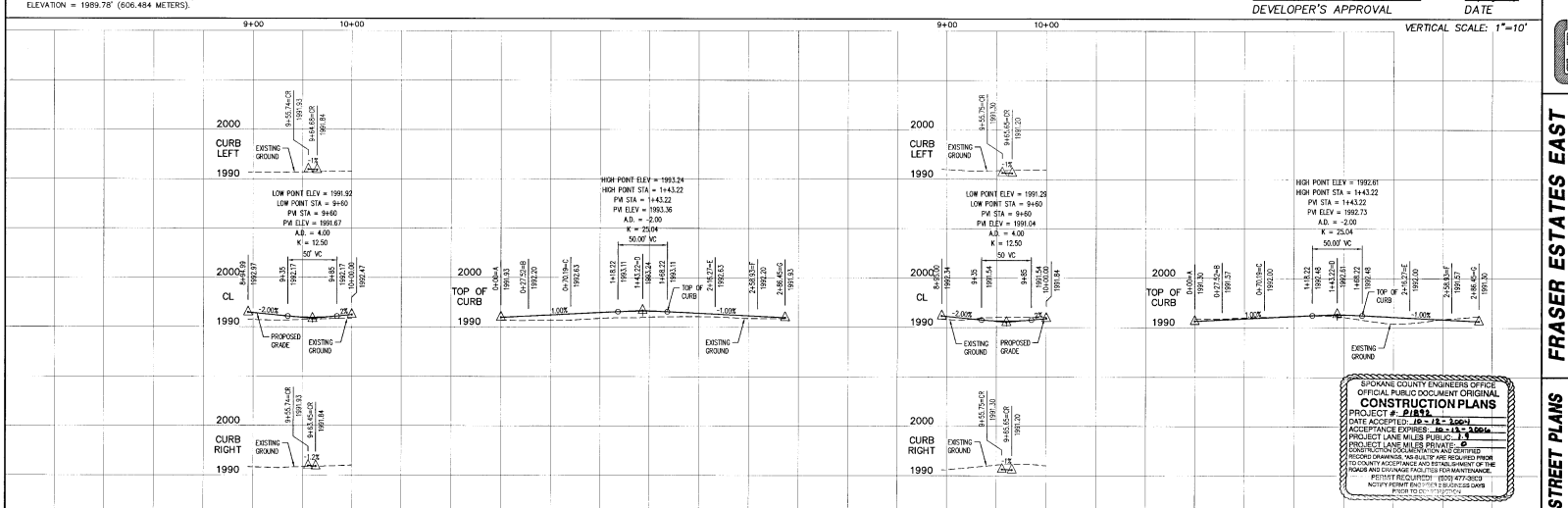




DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Dan Mattson 8/4/04
DEVELOPER'S APPROVAL DATE

VERTICAL SCALE: 1"=10'



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.8
PROJECT LANE MILES PRIVATE: 0
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

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/26/04	PUBLIC REVIEW COMMENTS
10/12/04	RECEIVED STOP SIGNS

DRWS 9/24/03

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1810, Moses Lake, WA 98837
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
IVY COURT - 8+94.99 TO 10+00
PENN COURT - 8+95 TO 10+00
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 5 of 19

P-1892 Engineer & Drainage

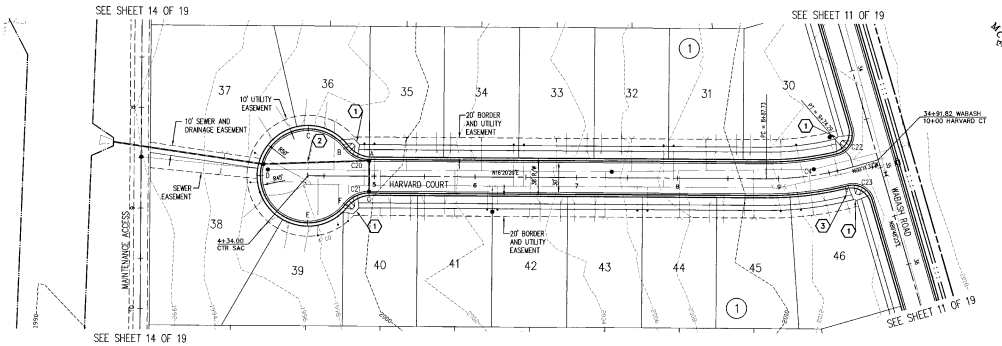
SEC. 32, T.26 N., R.44 E.,W.M.

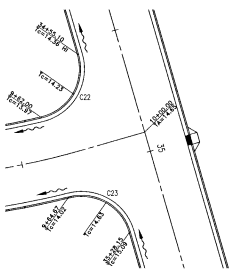
CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEET 16.
3. INSTALL ~~STOP SIGN AND~~ STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.



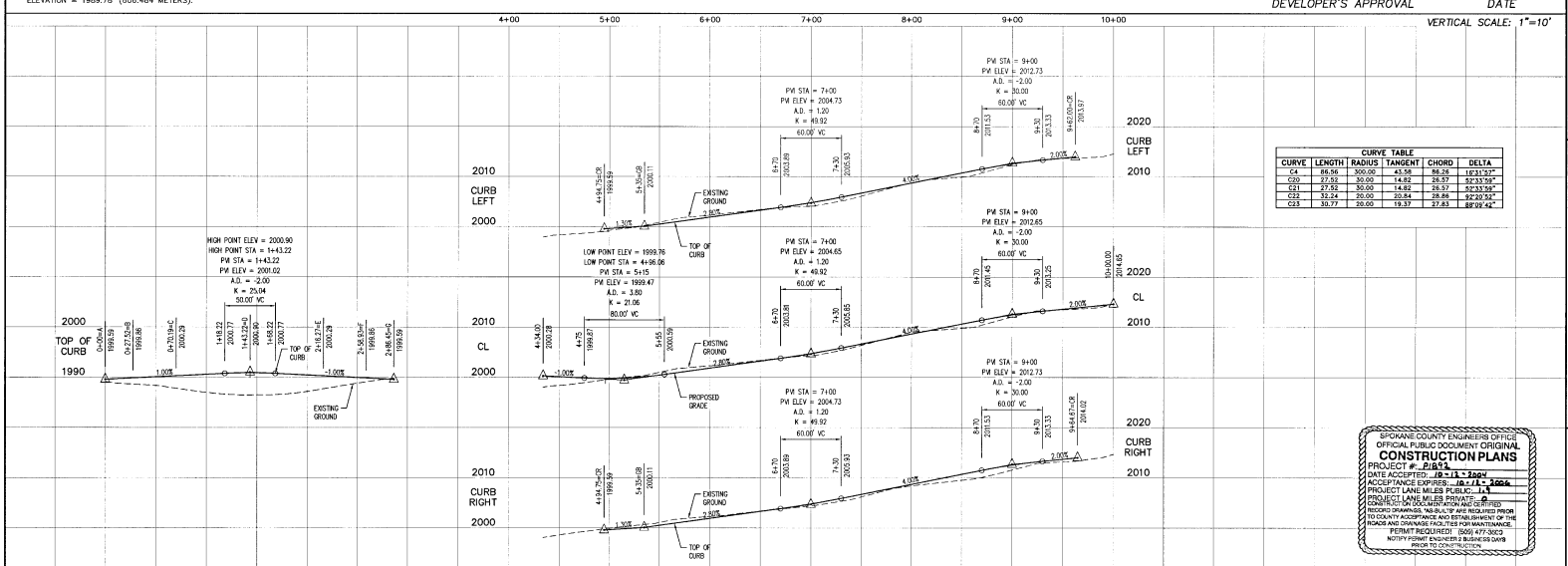


DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C4	86.56	300.00	43.58	86.26	16°31'57"
C20	27.52	30.00	14.82	26.57	52°33'59"
C21	27.52	30.00	14.82	26.57	52°33'59"
C22	32.24	20.00	20.84	28.86	92°20'52"
C23	30.77	20.00	19.37	27.83	88°09'42"

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
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

Date	Activity
05/03/04	ORIGINAL PREPARATION
08/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL STREET SUBMITTAL
10/8/04	REMOVED STOP SIGN

NELSON WINN OGREN
PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
HARVARD COURT
4+34 TO 10+00
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 6 of 19

P-1892 Eng Road & Drainage

SEC. 32, T.26 N., R.44 E.,W.M.

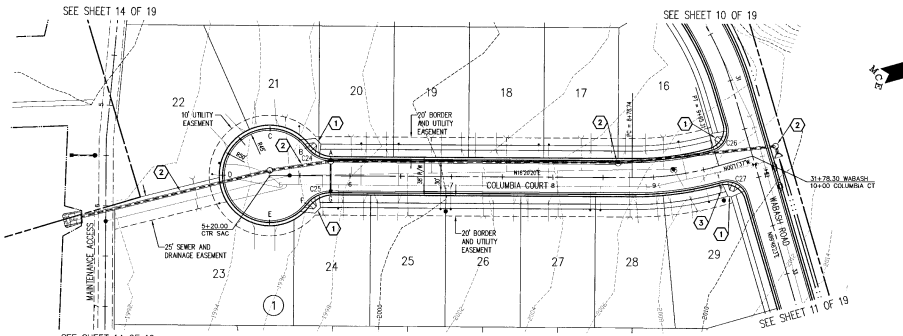
CONSTRUCTION NOTES

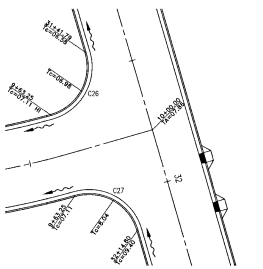
1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEET 17.
3. INSTALL ~~STOP SIGN AND~~ STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Date	Activity
02/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/19/04	PRELIMINARY PLAT
08/04/04	FINALIZED FOR PLAT



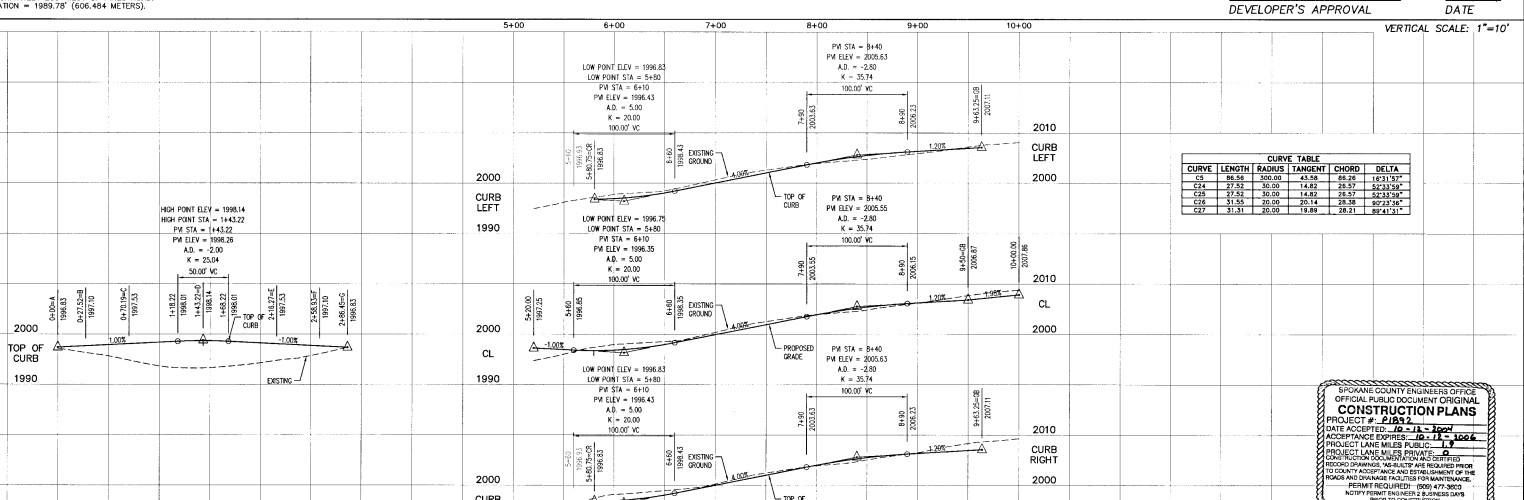


DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22
LOCATED ON SOUTH SIDE OF TRENT AVENUE
APPROXIMATELY 200' WEST OF PINES ROAD.
ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C5	86.56	300.00	43.58	86.26	16°31'57"
C24	27.52	30.00	14.82	26.57	52°33'59"
C25	27.52	30.00	14.82	26.57	52°33'59"
C26	31.55	20.00	20.14	28.38	90°23'36"
C27	31.31	20.00	19.86	28.21	89°41'31"

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT # P-1892
DATE ACCEPTED: 10-13-2004
ACCEPTANCE EXPIRES: 10-13-2006
PROJECT LANE MILES PUBLIC: 1.7
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION PLANS MUST BE 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

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
COLUMBIA COURT
5+20 TO 10+00
SPOKANE COUNTY, WA

STREET PLANS

County Plat No.: P-1892
MCE Project No.: 03-227

Sheet: 7 of 19

P-1892 England & Dunga

SEC. 32, T.26 N., R.44 E.,W.M.

CONSTRUCTION NOTES

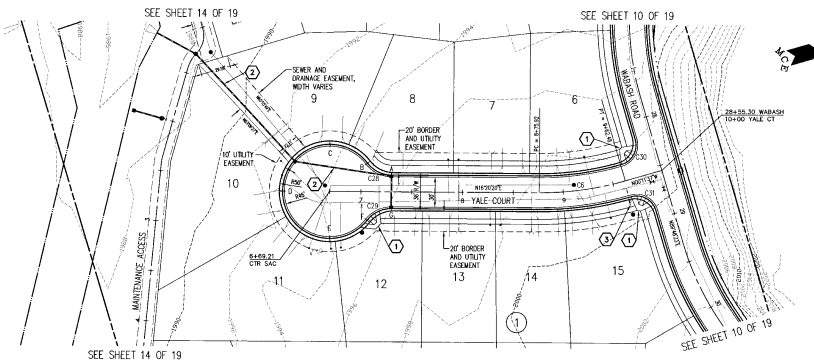
1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEET 17.
3. INSTALL ~~STOP SIGN AND~~ STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

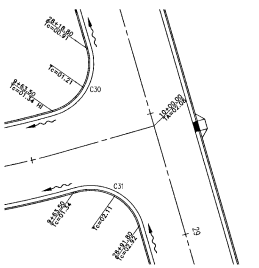
UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Date	Activity
06/03/04	ORIGINAL PREPARATION
08/16/04	COUNTY REVIEW COMMENTS
09/14/04	FINAL PLANS SUBMITTAL
10/13/04	~~REVISED Stop Sign~~
11/15/04	. . . .
	. . . .

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C8	86.56	300.00	43.58	86.28	16°31'53"
C28	27.52	30.00	14.82	26.57	52°33'38"
C29	27.52	30.00	14.82	26.57	52°33'38"
C30	31.42	20.00	20.00	28.28	90°00'00"
C31	31.42	20.00	20.00	28.28	90°00'00"



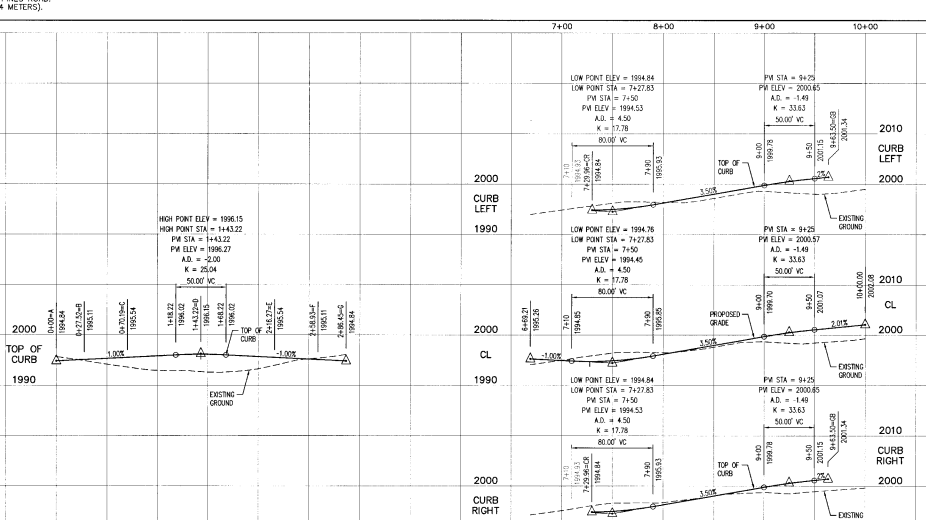


DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-1892
DATE ACCEPTED: 10-13-2004
ACCEPTANCE EXPIRES: 10-13-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION VOUCHERS ACCEPTED: 0
RECORD DRAWINGS "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3703
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1410
Mead, WA 99021
(509) 466-5794 FAX: 466-1514

FRASER ESTATES EAST

YALE COURT
6+69.21 TO 10+00
SPOKANE COUNTY, WA

STREET PLANS

County Plat No.: P-1892
MCE Project No.: 03-227

Sheet: 8 of 19

P-1892 England + Drainage

SEC. 32, T.26 N., R.44 E.,W.M.

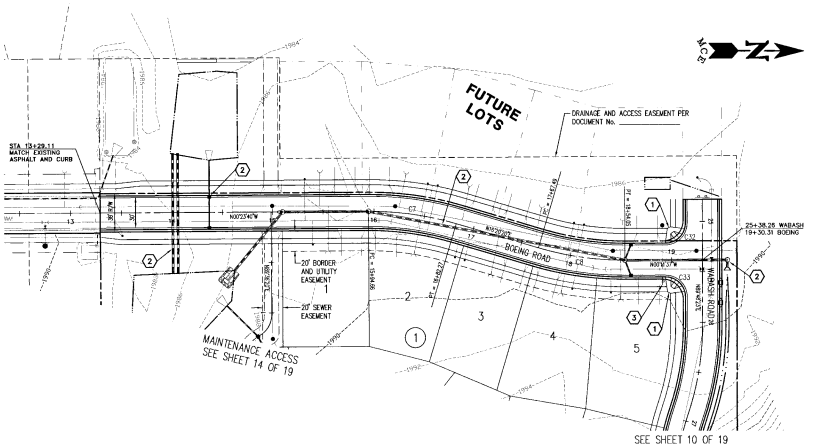
CONSTRUCTION NOTES

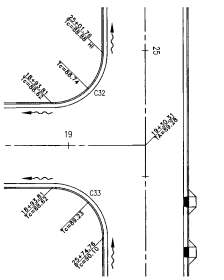
1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEET 18.
3. INSTALL ~~STOP SIGN AND~~ STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C7	87.62	300.00	44.12	87.30	16°44'00"
C8	86.56	300.00	43.58	86.26	16°31'57"
C32	31.42	20.00	20.00	28.28	90°00'00"
C33	31.42	20.00	20.00	28.28	90°00'00"



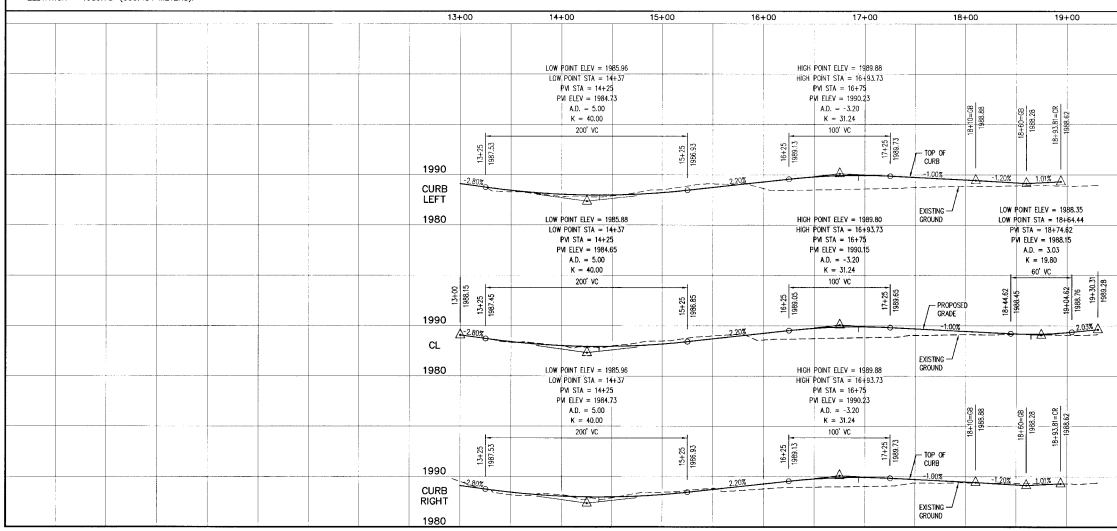


DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 19
PROJECT LANE MILES PRIVATE: 0
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

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL STREET SUBMITTAL
8/1/04	Removed Stop Sign

NELSON WINN OGREN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
BOEING ROAD
13+29.11 TO 19+30.31
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 9 of 19

P-1892 Eng Road Drawings

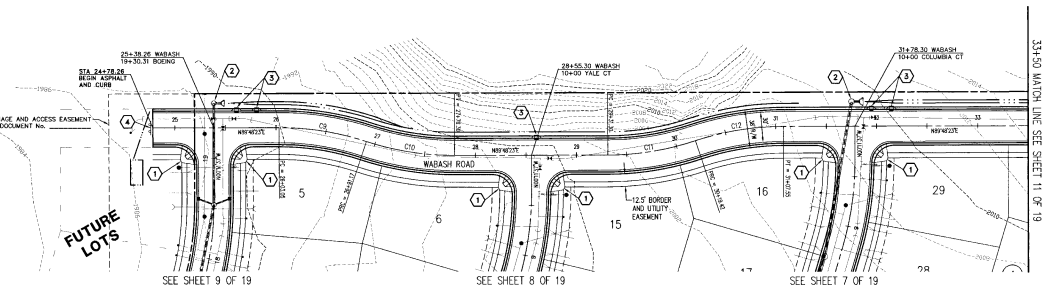
SEC. 32, T.26 N., R.44 E.,W.M.

CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEETS 17 AND 18.
3. CURB INLET TYPE 1 PER SPOKANE COUNTY STD PLAN B-8, L=4'.
4. WSDOT TYPE III BARRICADE WITH "END OF ROADWAY" SIGN.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

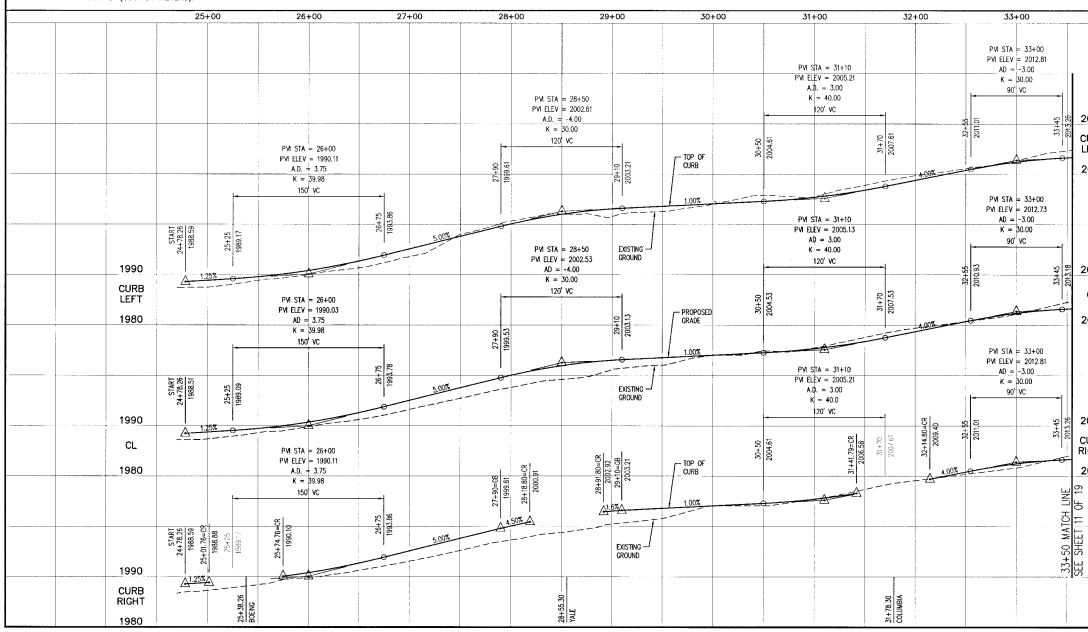


CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C9	88.13	275.00	44.44	87.75	18°21'39"
C10	88.13	275.00	44.44	87.75	18°21'39"
C11	88.13	275.00	44.44	87.75	18°21'39"
C12	88.13	275.00	44.44	87.75	18°21'39"

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattern
DEVELOPER'S APPROVAL
8/4/04
DATE

VERTICAL SCALE: 1"=10'



INLET STA
25+60.00
25+80.00
28+60.00
31+95.00
32+15.00

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.5
PROJECT LANE MILES PRIVATE: 0
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

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL STREET SUBMITTAL

NELSON WINN OGREN
STATE OF WASHINGTON
37401
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

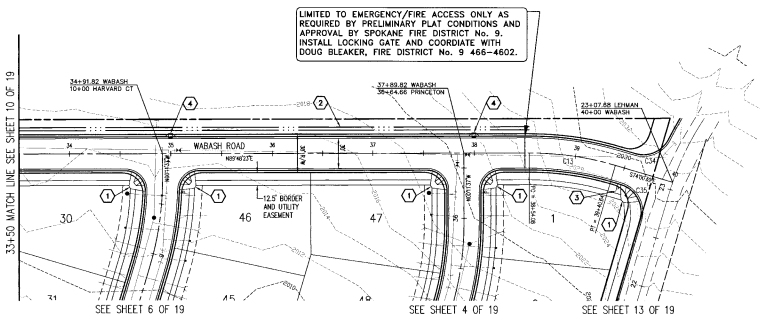
Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
WABASH ROAD
24+77.55 TO 33+50
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 10 of 19

P-1892 Eng Hand & Drainage

SEC. 32, T.26 N., R.44 E.,W.M.

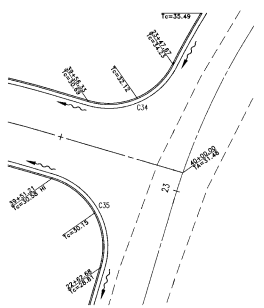


CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE SWALE SECTION SHEET 15.
3. INSTALL STOP SIGN AND STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.
4. CURB INLET TYPE 1 PER SPOKANE COUNTY STD PLAN B-8, L=4'.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.



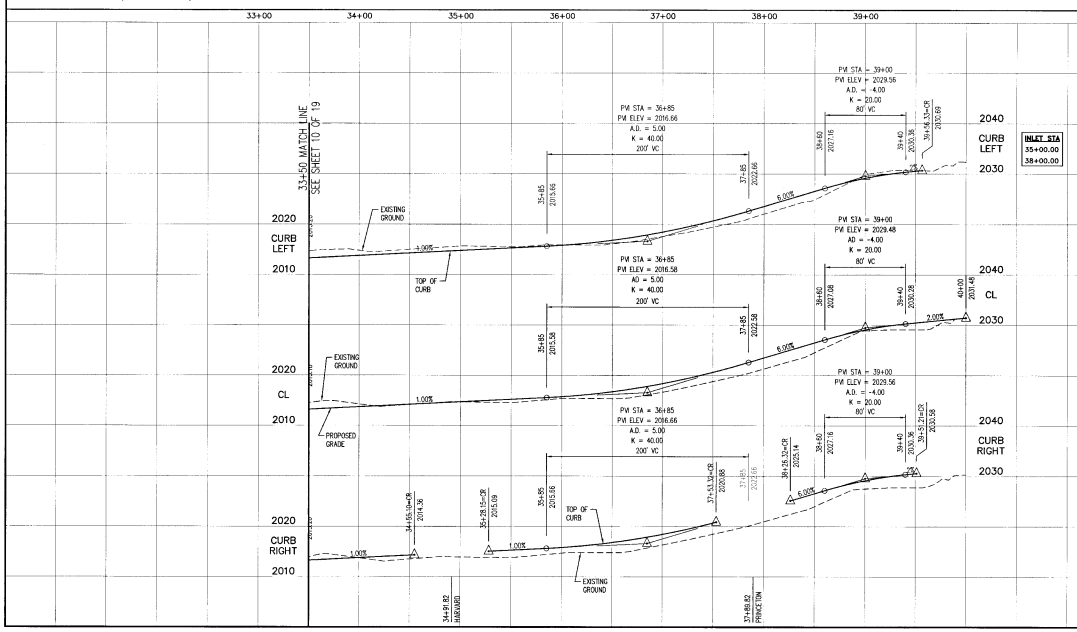
N
MCE

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C13	86.56	300.00	43.58	86.26	16°31'57"
C34	39.73	28.50	23.86	36.59	79°52'09"
C35	44.77	28.50	28.50	40.31	90°00'00"

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
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) 477-3800
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL STREET SUBMITTAL

NELSON WINN OGREN
STATE OF WASHINGTON
37451
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

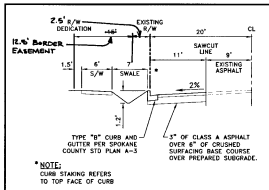
Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
WABASH ROAD
33+50 TO 40+00
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 11 of 19

P-1892 Eng Road & Drainage

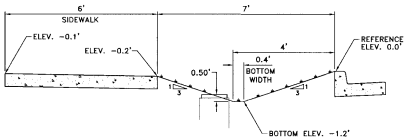
SEC. 32, T.26 N., R.44 E.,W.M.



* NOTE:
CURB STAKING REFERS TO TOP FACE OF CURB

ROADWAY SECTION

WELLESLEY AVE — NOT TO SCALE



SWALE SECTION

WELLESLEY AVE — 1 INCH = 2 FT

CONSTRUCTION NOTES

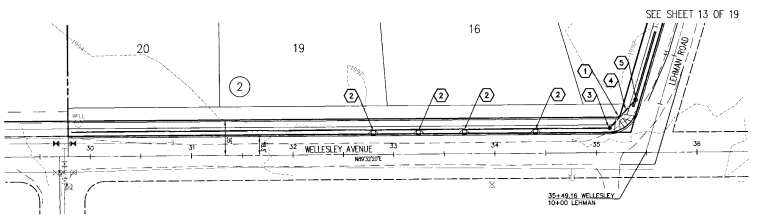
- ALL GRASS PERCOLATION AREAS (SWALES) SHALL BE SEEDED WITH DRYLAND GRASS SEED MIX (AT A MINIMUM), PER SPECIFICATIONS ON SHEET 2, OR SODDED AND IRRIGATED.

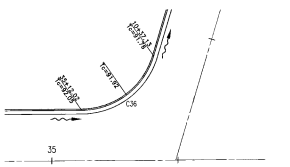
1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. CURB INLET TYPE 1 PER SPOKANE COUNTY STD PLAN B-8, L=4'.
3. WELLESLEY AVENUE STA 35+13.19, LT 24.3'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1991.35
4. 25 L.F. OF 10" ADS STORM PIPE. G=-0.1200, IE(SW)=1989.10, IE(NE)=1986.10
5. LEHMAN ROAD STA 10+47.00, LT 24.5'. TYPE B DRYWELL WITH TYPE 4 FRAME AND TYPE 4 GRATE. RIM ELEV=1991.00

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Date	Activity
03/03/04	ORIGINAL PREPARATION
09/15/04	COUNTY REVIEW COMMENTS
10/13/04	COUNTY REVIEW COMMENTS
9/12/06	REVISED ROADWAY SECTION





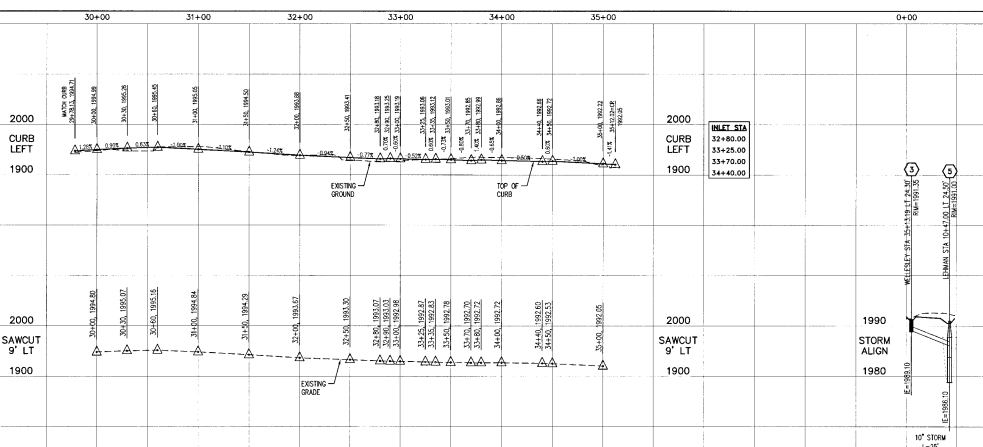
CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C36	36.33	30.00	22.28	35.77	73°12'00"

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-18-2004
ACCEPTANCE EXPIRES: 10-18-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS "AS-BUILT" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED: (509) 477-3672
NO PERMITS ENGINEERING BUSINESS DAYS PRIOR TO CONSTRUCTION

Mountain Crest Enterprises Inc.
4024 East First Street
Mead, WA 99021
(509) 466-5794 fax: 466-1914

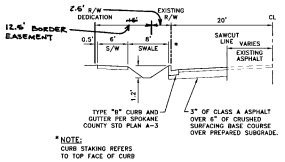
FRASER ESTATES EAST

WELLESLEY AVENUE
29+78.13 TO 35+49.16
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 12 of 19

P-1892 Eng Road + Drainage

SEC. 32, T.26 N., R.44 E.,W.M.

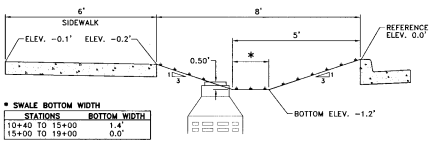


*NOTE:
CURB STAKING REFERS TO TOP FACE OF CURB

SAWCUT LINE OFFSETS	
STATION RANGE	OFFSET
10+37 TO 10+50	12'
11+00 TO 14+50	6'
15+00 TO 22+63	9'

ROADWAY SECTION

LEHMAN ROAD — NOT TO SCALE



* SWALE BOTTOM WIDTH

STATIONS	BOTTOM WIDTH
10+40 TO 15+00	1.4'
15+00 TO 19+00	0.0'

SWALE SECTION

LEHMAN ROAD — 1 INCH = 2 FT

CONSTRUCTION NOTES

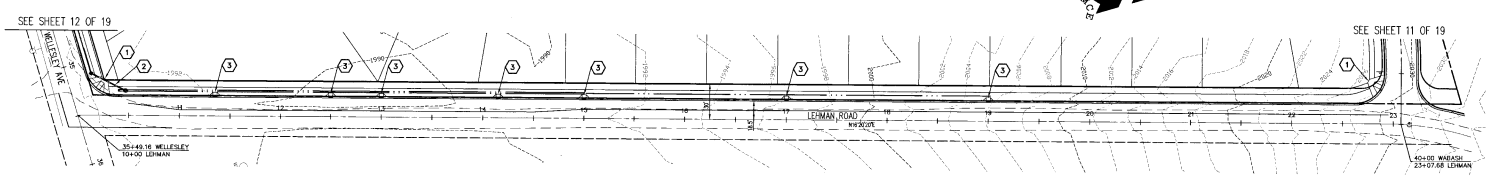
- ALL GRASS PERCOLATION AREAS (SWALES) SHALL BE SEEDED WITH DRYLAND GRASS SEED MIX (AT A MINIMUM), PER SPECIFICATIONS ON SHEET 2, OR SODDED AND IRRIGATED.

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "B".
2. SEE DRAINAGE DETAILS SHEET 12.
3. CURB INLET TYPE 1 PER SPOKANE COUNTY STD PLAN B-8, L=4'.

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

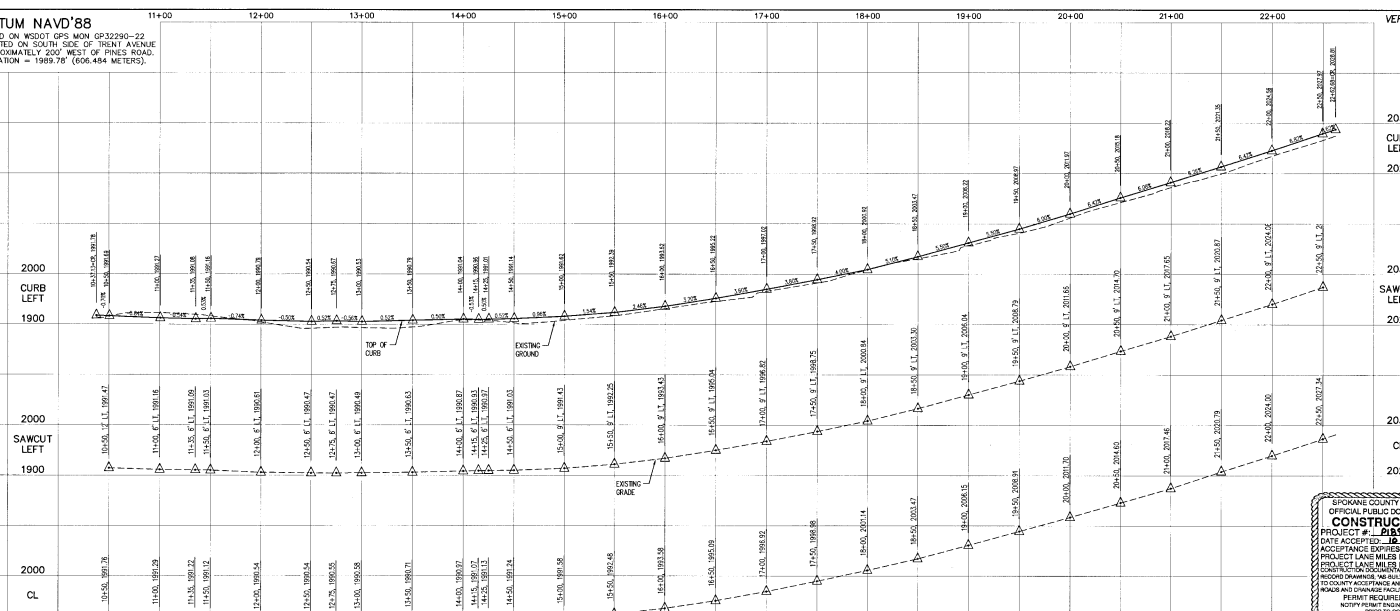
GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Date	Activity
05/03/04	ORIGINAL PREPARATION
05/13/04	COUNTY REVIEW COMMENTS
08/05/04	PRELIMINARY APPROVAL
8/16/04	REVISED ROADWAY SECTION



DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

VERTICAL SCALE: 1"=10'



INLET STA
11+35.00
12+50.00
13+00.00
14+15.00
15+00.00
17+00.00
19+00.00

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
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

Dan Matlock 8/4/04
DEVELOPER'S APPROVAL DATE

P-1892 Engineer & Drainage

STATE OF WASHINGTON
MINK JOSEPH
EXPIRES: 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Moses Lake, WA 98837
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST

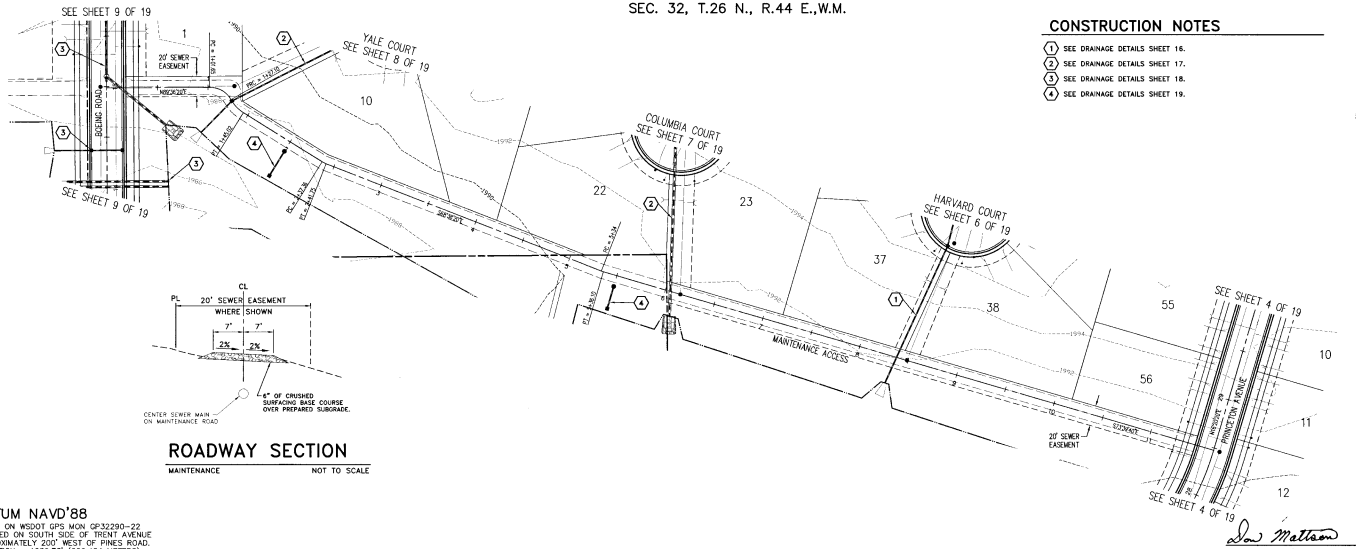
LEHMAN ROAD
10+00 TO 23+07.68
SPOKANE COUNTY, WA

STREET PLANS

County Plat No.: P-1892
MCE Project No.: 03-227

Sheet 13 of 19

SEC. 32, T.26 N., R.44 E.,W.M.



CONSTRUCTION NOTES

1. SEE DRAINAGE DETAILS SHEET 16.
2. SEE DRAINAGE DETAILS SHEET 17.
3. SEE DRAINAGE DETAILS SHEET 18.
4. SEE DRAINAGE DETAILS SHEET 19.

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

N
MCE

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/29/04	FINAL STREET SUBMITTAL

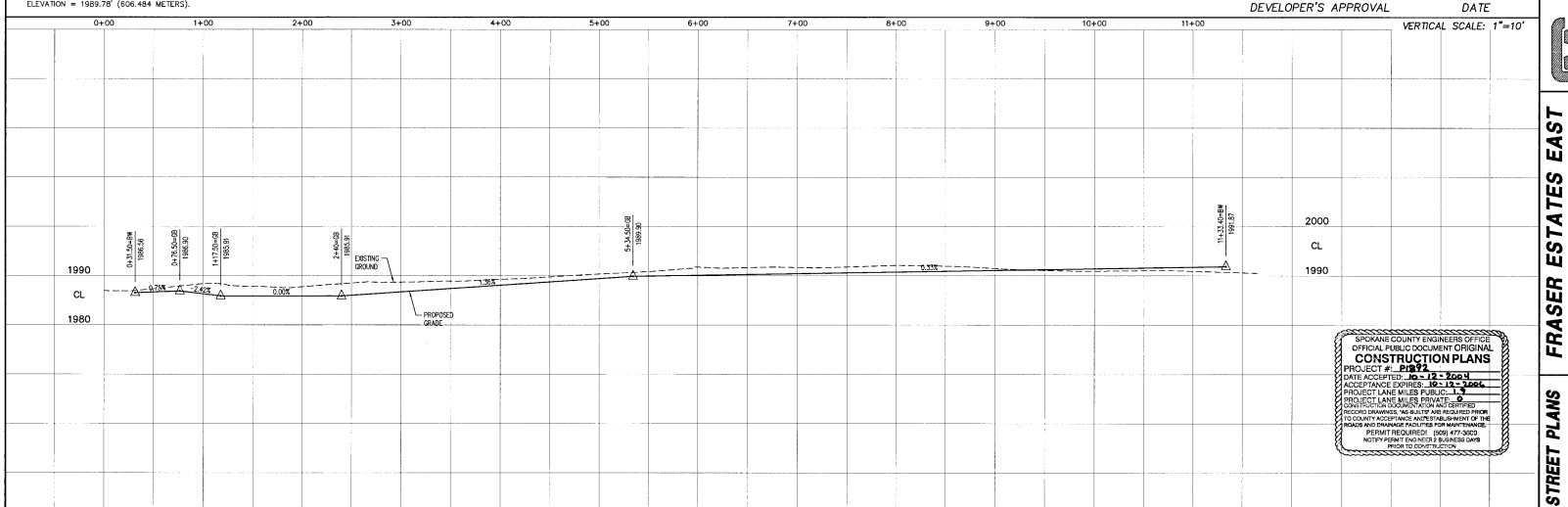
ROADWAY SECTION

MAINTENANCE NOT TO SCALE

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22
LOCATED ON SOUTH SIDE OF TRENT AVENUE
APPROXIMATELY 200' WEST OF PINES ROAD.
ELEVATION = 1989.78' (606.464 METERS).

Dan Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE



SPOKANE COUNTY ENGINEER'S OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.3
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" AND REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED: (509) 477-3620
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

MAIN OFFICE
SPOKANE, WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
ROBERT L. MANN
19344
8/4/04

DRWG: 3/26/03

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800,
Mead, WA 99021
(509) 466-3764 Fax: 466-1514

FRASER ESTATES EAST

MAINTENANCE ACCESS
0+00 TO 11+64.90
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 14 of 19

P-1892 Eng Road + Drainage

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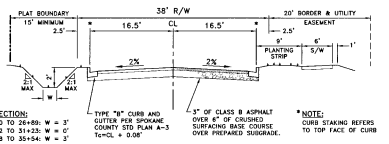
SEC. 32, T.26 N., R.44 E.,W.M.

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

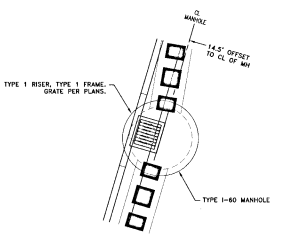
Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL STREET SUBMITTAL



TYPICAL ROADWAY SECTION

WABASH — NOT TO SCALE

NOTE:
DITCH SECTION SHALL BE ARMORED 2.5' MIN. DEPTH WITH "PYRAMAT" REINFORCEMENT MAT AND SEEDED WITH DRYLAND GRASS SEED MIX (AT A MINIMUM) AS SPECIFIED ON SHEET 2 OF 19.

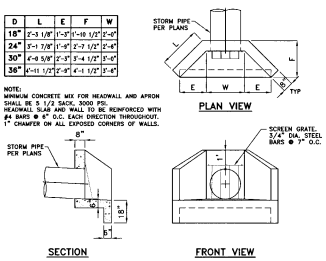


INLET DETAIL

TYPE I-60 MANHOLE WITH INLET — 1 INCH = 4 FT

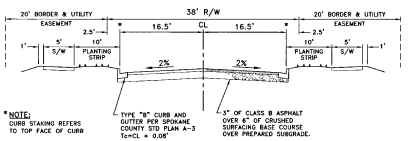
D	L	E	F	W
18"	2'-3 1/8"	1'-3"	1'-10 1/2"	2'-6"
24"	3'-1 7/8"	1'-9"	2'-7 1/2"	2'-6"
30"	4'-0 5/8"	2'-3"	3'-4 1/2"	3'-6"
36"	4'-11 1/2"	2'-9"	4'-1 1/2"	3'-6"

NOTE:
MINIMUM CONCRETE MIX FOR HEADWALL AND APRON SHALL BE 5 1/2 SACK, 3000 PSI. HEADWALL %L48 AND WALL TO BE REINFORCED WITH #4 BARS @ 6" O.C. EACH DIRECTION THROUGHOUT. 1" CHAMFER ON ALL EXPOSED CORNERS OF WALLS.



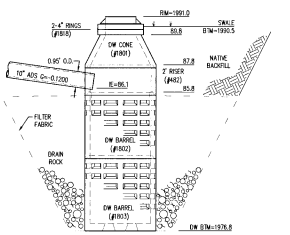
CONCRETE HEADWALL

WILBERT PRECAST - PRODUCT #4016



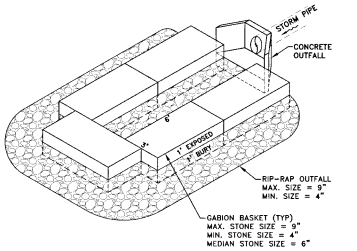
TYPICAL ROADWAY SECTION

IVY, PENN, PRINCETON, HARVARD, COLUMBIA, YALE, BOEING — NOT TO SCALE



DRYWELL DETAIL

LEHMAN ROAD STA 10+47, LT 24.5'



GABION DISSIPATER DETAIL

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-15-2004
ACCEPTANCE EXPIRES: 10-15-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
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

Don Mattson — DEVELOPER'S APPROVAL
8/4/04 — DATE

P-1892 Engineering

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF FINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1600, Mead, WA 99021
(509) 466-3764 Fax: 466-1544

FRASER ESTATES EAST
DETAILS
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 15 of 19

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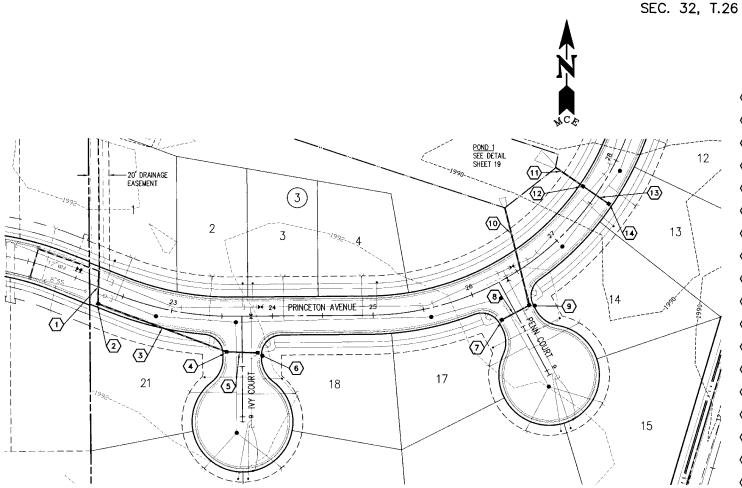
SEC. 32, T.26 N., R.44 E.,W.M.



CONSTRUCTION NOTES

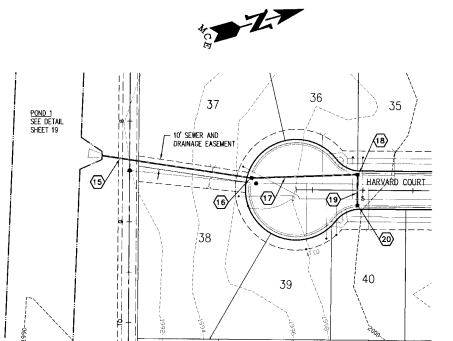
- ALL CONCRETE INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

1. 31 L.F. OF 12" ADS STORM PIPE. G=0.0055, IE(NW)=1988.04, IE(S)=1988.21
2. PRINCETON AVENUE STA 22+30.00, RT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 1 GRATE. RIM ELEV=1990.55
3. 125 L.F. OF 12" ADS STORM PIPE. G=0.0055, IE(W)=1988.21, IE(E)=1988.90
4. IVY COURT STA 9+64.68, LT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1991.26
5. 29 L.F. OF 12" ADS STORM PIPE. G=0.0055, IE(W)=1988.90, IE(E)=1989.06
6. IVY COURT STA 9+63.45, RT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1991.28
7. PENN COURT STA 9+65.65, LT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1990.62
8. 29 L.F. OF 12" ADS STORM PIPE. G=-0.0079, IE(W)=1988.42, IE(E)=1988.19
9. PENN COURT STA 9+65.65, RT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1990.62
10. 99 L.F. OF 12" ADS STORM PIPE. G=-0.0070, IE(S)=1988.19, IE(N)=1987.50
11. 33 L.F. OF 12" ADS STORM PIPE. G=0.0121, IE(NW)=1987.50, IE(SE)=1987.90
12. PRINCETON AVENUE STA 27+60.00, LT 15.5'. TYPE 2 CONCRETE INLET WITH TYPE 2 FRAME WITH HOOD AND TYPE 3 GRATE. RIM ELEV=1990.23
13. 29 L.F. OF 12" ADS STORM PIPE. G=0.0059, IE(NW)=1987.90, IE(SE)=1988.07
14. PRINCETON AVENUE STA 27+60.00, RT 15.5'. TYPE 2 CONCRETE INLET WITH TYPE 2 FRAME WITH HOOD AND TYPE 3 GRATE. RIM ELEV=1990.23
15. 148 L.F. OF 12" ADS STORM PIPE. G=0.0590, IE(S)=1987.50, IE(N)=1996.23
16. HARVARD CUL-DE-SAC STA 1+31.46. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 1 GRATE. RIM ELEV=2000.29
17. 104 L.F. OF 12" ADS STORM PIPE. G=0.0050, IE(S)=1996.23, IE(N)=1996.75
18. HARVARD COURT STA 4+94.75, LT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1999.01
19. 29 L.F. OF 12" ADS STORM PIPE. G=0.0052, IE(W)=1996.75, IE(E)=1996.90
20. HARVARD COURT STA 4+94.75, RT 15.5'. TYPE 2 CONCRETE INLET WITH TYPE 2 FRAME WITH HOOD AND TYPE 3 GRATE. RIM ELEV=1999.01

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

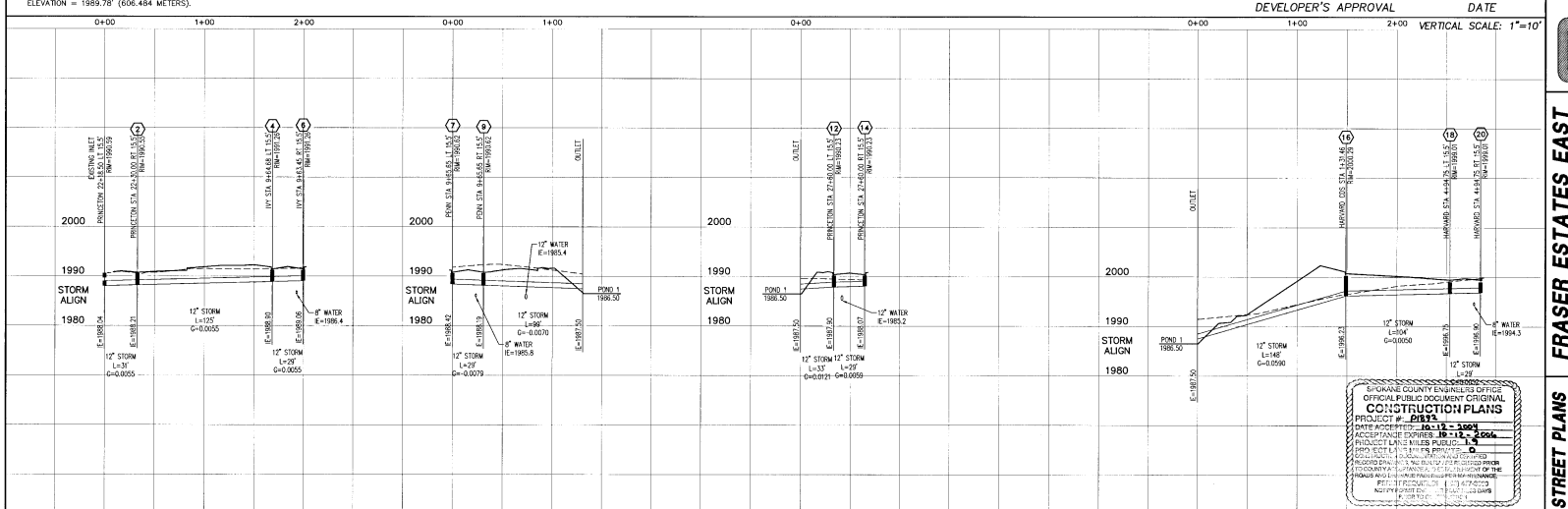
GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL STREET SUBMITTAL
. . . .	. . . .
. . . .	. . . .
. . . .	. . . .



DEVELOPER'S APPROVAL — DATE 8/4/04

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).



SPOKANE COUNTY ENGINEER'S OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT # P-1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.9
PRIVATE: 0
RECORD DRAWINGS NO BINDING UNTIL REVIEWED PRIOR TO COUNTY ACCEPTANCE AND ENTERED INTO THE MAINTENANCE PROGRAM
REQUIREMENTS: (509) 477-6900
NOTIFY PRIOR TO: 24 HOURS
FOR WORK: 48 HOURS

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5764 Fax: 466-1514

FRASER ESTATES EAST
DRAINAGE DETAILS
IVY, PENN, PRINCETON, HARVARD
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet: 16 of 19

P-1892 Eng Road + Drainage

N:\Projects\03-227\Aesgdstreet.dwg 05/04/2004 07:06:34 AM, NWD

SEC. 32, T.26 N., R.44 E.,W.M.

CONSTRUCTION NOTES

- ALL CONCRETE INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

(21) GABION ENERGY DISSIPATOR WITH CONCRETE OUTFALL (WILBERT PRECAST #4016-30"), PER DETAIL SHEET 15.

(22) 190 L.F. OF 30" ADS STORM PIPE, WITH TRASH RACK, S END. G=0.0055, IE(S)=1987.50, IE(N)=1988.55

(23) COLUMBIA COURT STA 5+20.00, LT 5'. TYPE I-60 MANHOLE WITH TYPE 4 FRAME AND SOLID COVER. RIM ELEV=1997.22

(24) 58 L.F. OF 30" ADS STORM PIPE. G=0.0040, IE(S)=1988.55, IE(N)=1988.78

(25) COLUMBIA COURT STA 5+80.75, LT 14.5'. TYPE I-60 MANHOLE WITH TYPE 1 RISER, TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1996.25 SEE DETAIL, SHEET 15.

(26) 280 L.F. OF 30" ADS STORM PIPE. G=0.0235, IE(S)=1988.78, IE(N)=1995.37

(27) COLUMBIA COURT STA 8+64.72, LT 14.5'. TYPE I-60 MANHOLE WITH TYPE 1 RISER, TYPE 1 FRAME AND TYPE 1 GRATE. RIM ELEV=2005.26 SEE DETAIL, SHEET 15.

(28) 152 L.F. OF 30" ADS STORM PIPE. G=0.0150, IE(S)=1995.37, IE(N)=1997.65

(29) WABASH ROAD STA 31+75.0, LT 24.5'. TYPE I-60 MANHOLE WITH TYPE 4 FRAME AND SOLID COVER. RIM ELEV=2007.62

(30) 6 L.F. OF 30" ADS STORM PIPE. G=0.1000, IE(W)=2004.55, IE(E)=2005.15

(31) WABASH ROAD STA 31+83.2, LT 24.5'. CONCRETE HEADWALL, PER DETAIL SHEET 15. WILBERT PRECAST #4016-30", OR EQUIVALENT.

(32) 27 L.F. OF 12" ADS STORM PIPE. G=0.0052, IE(W)=1993.86, IE(E)=1994.00

(33) COLUMBIA COURT STA 5+80.75, RT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 1 GRATE. RIM ELEV=1996.25

(34) 43 L.F. OF 12" ADS STORM PIPE. G=0.0151, IE(SW)=1983.00, IE(NE)=1983.65

(35) MAINTENANCE ROAD STA 1+28.73, CL. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 1 GRATE. RIM ELEV=1985.91

(36) 144 L.F. OF 12" ADS STORM PIPE. G=0.0530, IE(SW)=1983.65, IE (NE)=1991.28

(37) YALE CUL-DE-SAC STA 1+10.35, TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 1 GRATE. RIM ELEV=1995.36

(38) 95 L.F. OF 12" ADS STORM PIPE. G=0.0060, IE(S)=1991.28, IE(N)=1991.85

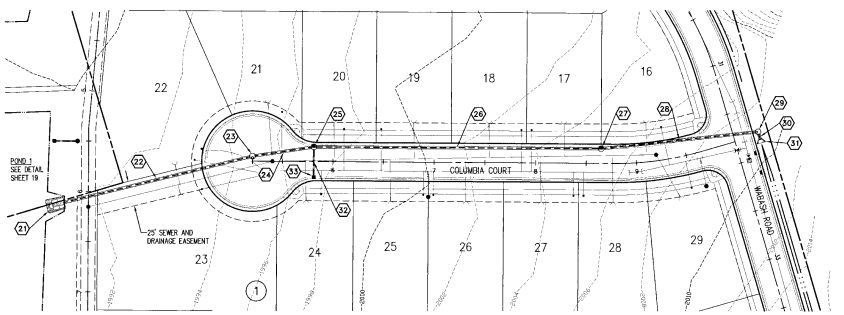
(39) YALE COURT STA 7+29.96, LT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1994.26

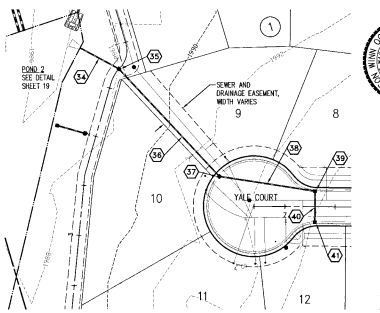
(40) 29 L.F. OF 12" ADS STORM PIPE. G=0.0055, IE(W)=1991.85, IE(E)=1992.01

(41) YALE COURT STA 7+29.96, RT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1994.26

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

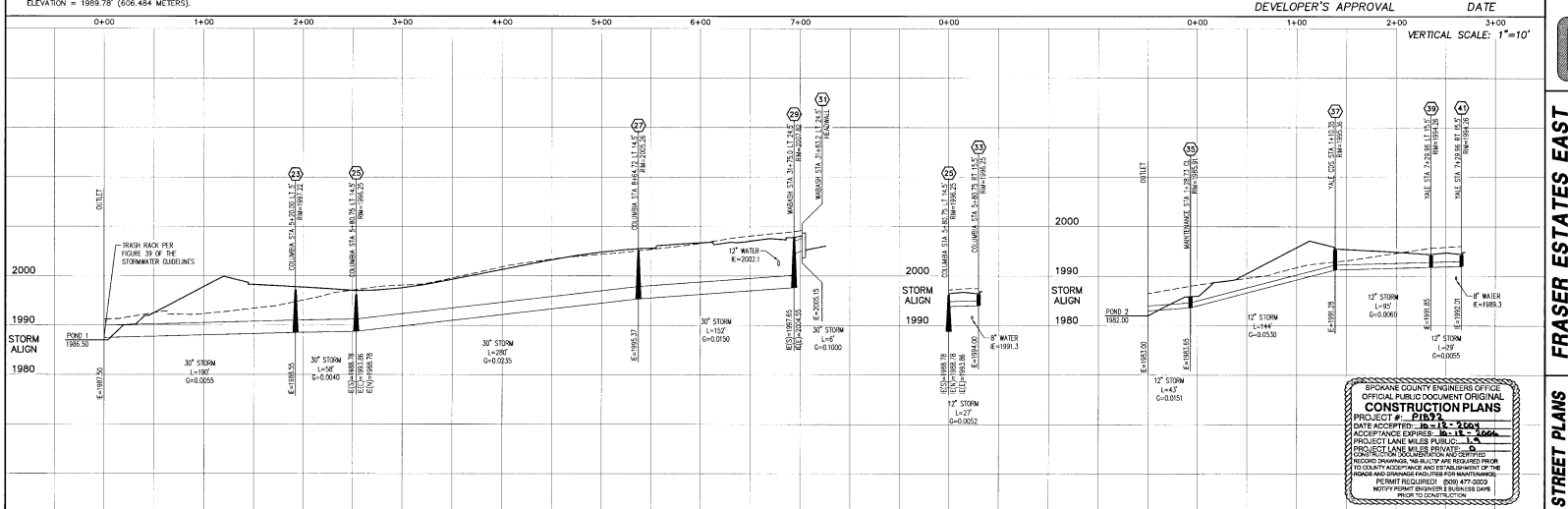




DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

Don Mattson
DEVELOPER'S APPROVAL

8/4/04
DATE



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-18-2004
ACCEPTANCE EXPIRES: 10-18-2006
PROJECT LANE MILES PUBLIC: 1.4
PROJECT LANE MILES PRIVATE: 0
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) 477-3003
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/20/04	FINAL STREET SUBMITTAL
. . . .	. . . . .
. . . .	. . . . .

MICHAEL GREEN STATE OF WASHINGTON 18411 REGISTERED PROFESSIONAL ENGINEER
EXPIRES: 9/24/05

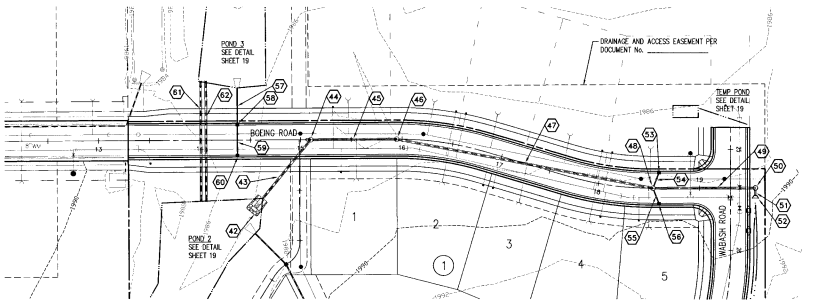
Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1401
Moses Lake, WA 98837
(509) 466-5794 Fax: 466-1514

FRASER ESTATES EAST
DRAINAGE DETAILS
COLUMBIA, WABASH, YALE
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet 17 of 19

P-1892 Eng Code Drainage

SEC. 32, T.26 N., R.44 E.,W.M.



CONSTRUCTION NOTES

- ALL CONCRETE INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

42 GABION ENERGY DISSIPATOR WITH CONCRETE OUTFALL (WILBERT PRECAST #4016-30"), PER DETAIL SHEET 15.

43 74 L.F. OF 24" ADS STORM PIPE. G=0.0050, IE(SE)=1982.00, IE(NW)=1982.37

44 BOEING ROAD STA 15+10.00, CL. TYPE I-48 MANHOLE WITH TYPE 4 FRAME AND SOLID COVER. RIM ELEV=1986.55

45 81 L.F. OF 24" ADS STORM PIPE. G=0.0051, IE(S)=1982.37, IE(N)=1982.78

46 BOEING ROAD STA 15+94.66, CL. TYPE I-48 MANHOLE WITH TYPE 4 FRAME AND SOLID COVER. RIM ELEV=1988.38

47 254 L.F. OF 24" ADS STORM PIPE. G=0.0050, IE(S)=1982.78, IE(N)=1984.05

48 BOEING ROAD STA 18+54.05, CL. TYPE I-48 MANHOLE WITH TYPE 4 FRAME AND SOLID COVER. RIM ELEV=1988.38

49 97 L.F. OF 24" ADS STORM PIPE. G=0.0108, IE(S)=1984.05, IE(N)=1985.10

50 WABASH ROAD STA 25+58.3, LT 24.5', TYPE I-48 MANHOLE WITH TYPE 4 FRAME AND SOLID COVER. RIM ELEV=1989.60

51 6 L.F. OF 24" ADS STORM PIPE. G=0.0400, IE(W)=1988.26, IE(E)=1986.50

52 WABASH ROAD STA 25+46.0, LT 24.5'. CONCRETE HEADWALL, PER DETAIL SHEET 15. WILBERT PRECAST #4016-30", OR EQUIVALENT.

53 BOEING ROAD STA 18+60.00, LT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1987.70

54 14 L.F. OF 10" ADS STORM PIPE. G=-0.0100, IE(W)=1985.45, IE(E)=1985.31

55 14 L.F. OF 10" ADS STORM PIPE. G=0.0100, IE(W)=1985.31, IE(E)=1985.45

56 BOEING ROAD STA 18+60.00, RT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1987.70

57 35 L.F. OF 10" ADS STORM PIPE. G=0.0051, IE(W)=1983.00, IE(E)=1983.18

58 BOEING ROAD STA 14+37.00, LT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1985.38

59 29 L.F. OF 10" ADS STORM PIPE. G=0.0052, IE(W)=1983.18, IE(E)=1983.33

60 BOEING ROAD STA 14+37.00, RT 15.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 3 GRATE. RIM ELEV=1985.38

61 120 L.F. OF 24" ADS STORM PIPE, WITH TRASH RACK, BOTH ENDS. G=0.0000, IE(W)=1982.00, IE(E)=1982.00

62 120 L.F. OF 24" ADS STORM PIPE, WITH TRASH RACK, BOTH ENDS. G=0.0000, IE(W)=1982.00, IE(E)=1982.00

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

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/20/04	FINAL STREET SUBMITTAL

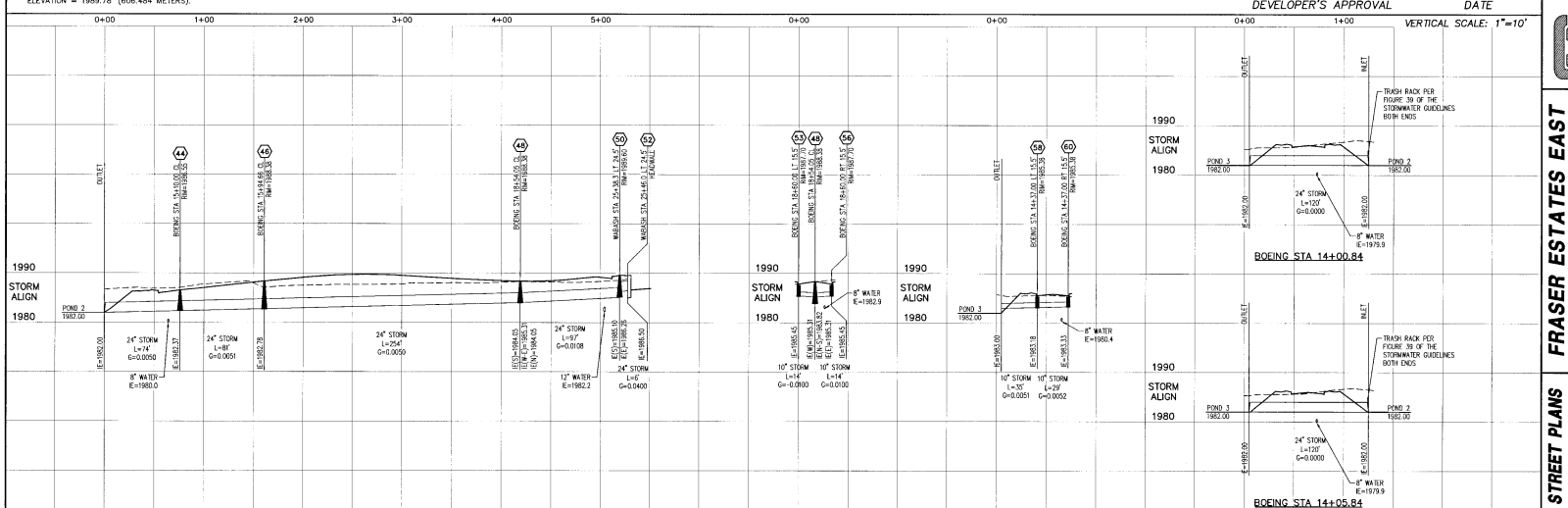
DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22 LOCATED ON SOUTH SIDE OF TRENT AVENUE APPROXIMATELY 200' WEST OF PINES ROAD. ELEVATION = 1989.78' (606.484 METERS).

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10-12-2004
ACCEPTANCE EXPIRES: 10-12-2006
PROJECT LANE MILES PUBLIC: 1.9
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION AND SURVEYED RECORD DRAWINGS MUST BE SUBMITTED PRIOR TO COUNTY ACCEPTANCE AND DEDICATION/ENTITLEMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
REQUEST REQUESTION (509) 477-3603
NOTIFY PERMIT ENGINEER 24 HOURS PRIOR TO CONSTRUCTION

Don Mathews
DEVELOPER'S APPROVAL

8/4/04
DATE

VERTICAL SCALE: 1"=10'



P-1892 Eng Prel Drainage

Mountain Crest Enterprises Inc.
4024 East First Street
Rock Island, WA 98821
(509) 466-5794 Fax 466-1914

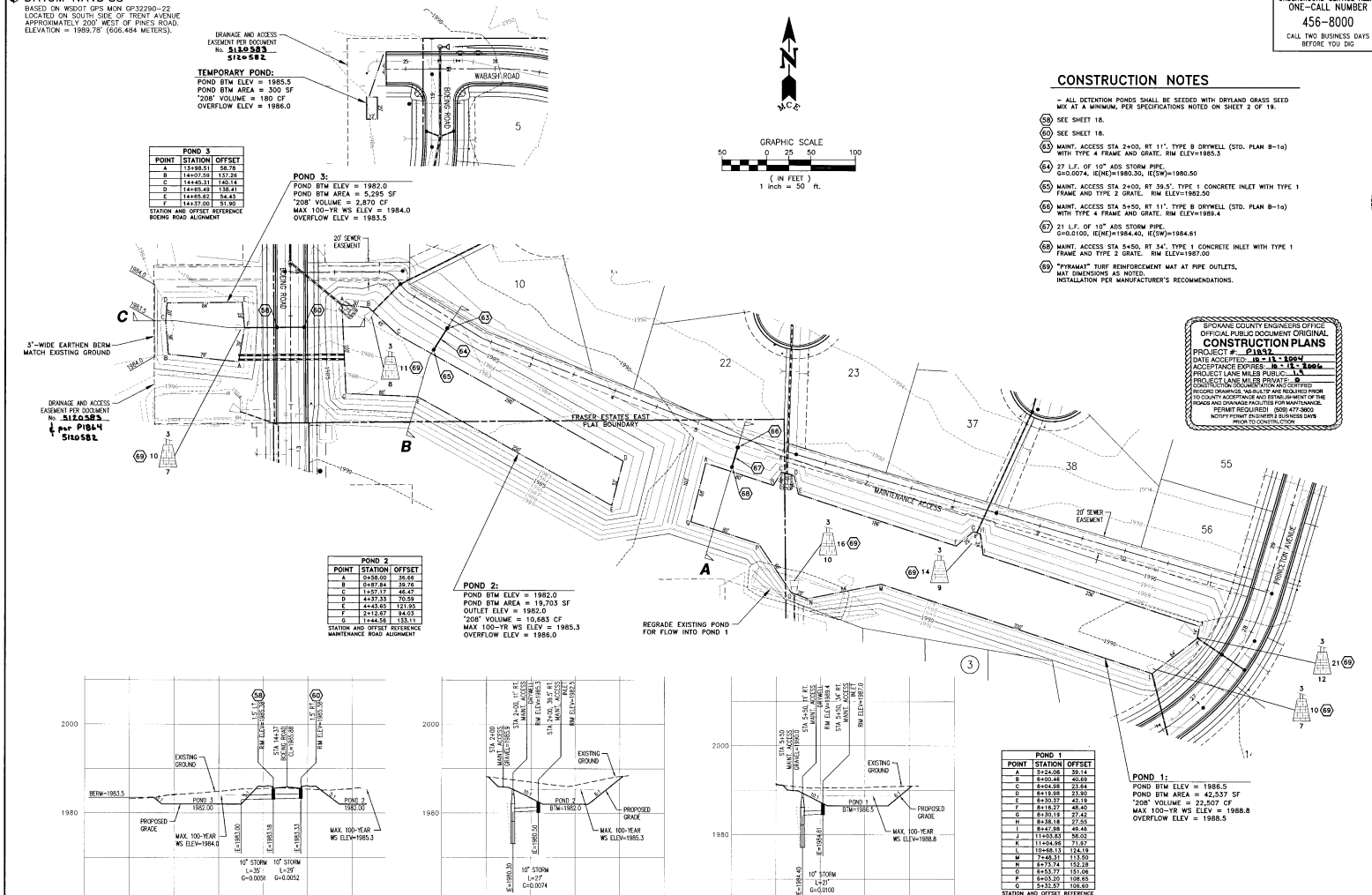
FRASER ESTATES EAST
DRAINAGE DETAILS
BOEING ROAD
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet 18 of 19

DATUM NAVD'88
BASED ON WSDOT GPS MON GP32290-22
LOCATED ON SOUTH SIDE OF TRENT AVENUE
APPROXIMATELY 200' WEST OF PINES ROAD.
ELEVATION = 1989.78' (606.484 METERS).

SEC. 32, T.26 N., R.44 E.,W.M.

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



CONSTRUCTION NOTES

- ALL DETENTION PONDS SHALL BE SEEDED WITH DRYLAND GRASS SEED MIX AT A MINIMUM, PER SPECIFICATIONS NOTED ON SHEET 2 OF 19.

(58) SEE SHEET 18.

(60) SEE SHEET 18.

(63) MAINT. ACCESS STA 2+00, RT 11'. TYPE B DRYWELL (STD. PLAN B-1a) WITH TYPE 4 FRAME AND GRATE. RIM ELEV=1985.3

(64) 27 L.F. OF 10" ADS STORM PIPE, G=0.0074, IE(NE)=1980.30, IE(SW)=1980.50

(65) MAINT. ACCESS STA 2+00, RT 39.5'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 2 GRATE. RIM ELEV=1982.50

(66) MAINT. ACCESS STA 5+50, RT 11'. TYPE B DRYWELL (STD. PLAN B-1a) WITH TYPE 4 FRAME AND GRATE. RIM ELEV=1989.4

(67) 21 L.F. OF 10" ADS STORM PIPE, G=0.0100, IE(NE)=1984.40, IE(SW)=1984.61

(68) MAINT. ACCESS STA 5+50, RT 34'. TYPE 1 CONCRETE INLET WITH TYPE 1 FRAME AND TYPE 2 GRATE. RIM ELEV=1987.00

(69) "PYRAMAT" TURF REINFORCEMENT MAT AT PIPE OUTLETS, MAT DIMENSIONS AS NOTED. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.

POND 3		
POINT	STATION	OFFSET
A	13+68.51	58.78
B	14+07.59	137.26
C	14+45.31	140.14
D	14+65.49	138.41
E	14+65.62	54.43
F	14+37.00	51.90

STATION AND OFFSET REFERENCE BOEING ROAD ALIGNMENT

POND 2		
POINT	STATION	OFFSET
A	0+58.00	36.66
B	0+87.84	39.76
C	1+57.17	46.47
D	4+37.35	70.59
E	4+43.65	121.95
F	2+12.67	94.03
G	1+44.56	133.11

STATION AND OFFSET REFERENCE MAINTENANCE ROAD ALIGNMENT

POND 1		
POINT	STATION	OFFSET
A	5+24.08	39.14
B	6+00.46	40.69
C	6+04.98	23.84
D	6+19.98	23.90
E	6+30.37	42.19
F	8+18.27	46.40
G	8+30.19	27.42
H	8+38.18	27.55
I	8+47.98	49.46
J	11+03.83	58.02
K	11+04.96	71.97
L	10+68.13	124.19
M	7+48.31	113.50
N	6+73.74	152.28
O	6+53.77	151.06
P	6+03.20	108.65
Q	5+32.57	106.60

STATION AND OFFSET REFERENCE MAINTENANCE ROAD ALIGNMENT

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1892
DATE ACCEPTED: 10 - 13 - 2004
ACCEPTANCE EXPIRES: 10 - 13 - 2006
PROJECT LANE MILES PUBLIC: 1.1
PROJECT LANE MILES PRIVATE: 0
RECORD DRAWINGS, AS-BUILT'S AND 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

Date	Activity
05/03/04	ORIGINAL PREPARATION
06/15/04	COUNTY REVIEW COMMENTS
07/30/04	FINAL SHEET SUBMITTAL

DEVELOPER'S APPROVAL — DATE 8/4/04

P-1892 Eng Roadway Drainage

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-9764 Fax: 466-1514

FRASER ESTATES EAST
POND DETAILS
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1892
MCE Project No.: 03-227
Sheet 19 of 19