GENERAL NOTES

- 1. ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PERMIT CONDITIONS, THE KING COUNTY CODE (KCC), ROAD STANDARDS (KCRS), WASHINGTON STATE DOT (WSDOT) STANDARD SPECIFICATIONS AND THE CONDITIONS OF PRELIMINARY APPROVAL. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND OF THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO KING COUNTY.
- 2. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE KING COUNTY DEPARTMENT OF DEVELOPMENT AND ENVIRONMENTAL SERVICES (DDES) ENGINEERING REVIEW CHECKLIST. SOME ELEMENTS MAY HAVE BEEN OVERLOOKED OR MISSED BY THE DDES PLAN REVIEWER. ANY VARIANCE FROM ADOPTED STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY KING COUNTY PRIOR TO CONSTRUCTION.
- 3. APPROVAL OF THIS ROAD. GRADING. AND DRAINAGE PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION (E.G., DOMESTIC WATER CONVEYANCE, SEWER CONVEYANCE, GAS, ELECTRICAL, ETC.).
- 4. BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRECONSTRUCTION MEETING MUST BE HELD BETWEEN THE DDES LAND USE INSPECTION SECTION, THE APPLICANT, AND THE APPLICANT'S CONSTRUCTION REPRESENTATIVE.
- 5. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 6. GRADING ACTIVITIES (SITE ALTERATION) ARE LIMITED TO THE HOURS OF 7 A.M. TO 7 P.M. MONDAY THROUGH SATURDAY AND 10 A.M. TO 5 P.M. ON SUNDAY, UNLESS OTHERWISE APPROVED WITH A WRITTEN DECISION BY THE REVIEWING AGENCY.
- 7. IT SHALL BE THE APPLICANT'S/CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS NECESSARY BEFORE INITIATING OFF-SITE WORK. EASEMENTS REQUIRE REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- FRANCHISED UTILITIES OR OTHER INSTALLATIONS THAT ARE NOT SHOWN ON THESE APPROVED PLANS SHALL NOT BE CONSTRUCTED UNLESS AN APPROVED SET OF PLANS THAT MEET ALL REQUIREMENTS OF KCRS CHAPTER 8 ARE SUBMITTED TO THE DDES LAND USE INSPECTION SECTION THREE DAYS PRIOR TO CONSTRUCTION.
- 9. DATUM SHALL BE KCAS UNLESS OTHERWISE APPROVED BY DDES.
- 10. DEWATERING SYSTEM (UNDERDRAIN) CONSTRUCTION SHALL BE WITHIN A RIGHT-OF-WAY OR APPROPRIATE DRAINAGE EASEMENT, BUT NOT UNDERNEATH THE ROADWAY SECTION. ALL UNDERDRAIN SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS.
- 11. ALL UTILITY TRENCHES AND ROADWAY SUBGRADE SHALL BE BACKFILLED AND COMPACTED TO 95 PERCENT DENSITY, STANDARD PROCTOR.
- 12. OPEN CUTTING OF EXISTING ROADWAYS FOR NON-FRANCHISED UTILITY OR STORM WORK IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY DDES AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH KCRS.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL APPLY. WORK IN RIGHT-OF-WAY IS NOT AUTHORIZED UNTIL A TRAFFIC CONTROL PLAN IS APPROVED BY KING COUNTY.

DRAINAGE NOTES

- PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO DDES PRIOR TO THE CONSTRUCTION OF THE DRAINAGE FACILITIES, PREFERABLY AT THE PRECONSTRUCTION MEETING.
- 2. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT SPECIFICATIONS. THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL, AND ANY REQUIRED BEDDING, TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
- 3. STEEL PIPE SHALL BE ALUMINIZED, OR GALVANIZED WITH ASPHALT TREATMENT #1 OR BETTER INSIDE AND OUTSIDE.
- 4. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS AND MANHOLES, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT RETENTION/DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS
- 5. ALL CATCH BASIN GRATES SHALL CONFORM TO KCRS WHICH INCLUDES THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS" AND "PROPERTY OF KING COUNTY", EXCEPT THAT PRIVATE DRAINAGE SYSTEMS SHALL NOT HAVE THE WORDS "PROPERTY OF KING COUNTY".
- 6. ALL DRIVEWAY CULVERTS LOCATED WITHIN KING COUNTY RIGHT-OF-WAY SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM 3:1 SLOPE FROM THE EDGE OF THE DRIVEWAY TO THE BOTTOM OF THE DITCH. CULVERTS SHALL HAVE BEVELED END SECTIONS TO MATCH THE SIDE SLOPE KCRS.
- ROCK FOR EROSION PROTECTION OF DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF ONE FOOT, AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8"/40%-70% PASSING; 2"-4" ROCK/30%-40% PASSING; AND -2" ROCK/10%-20% PASSING. INSTALLATION SHALL BE IN ACCORDANCE WITH KCRS.
- DRAINAGE OUTLETS (STUB-OUTS) SHALL BE PROVIDED FOR EACH INDIVIDUAL LOT, EXCEPT FOR THOSE LOTS APPROVED FOR INFILTRATION BY KING COUNTY. STUB-OUTS SHALL CONFORM TO THE FOLLOWING:
- a) EACH OUTLET SHALL BE SUITABLY LOCATED AT THE LOWEST ELEVATION ON THE LOT, SO AS TO SERVICE ALL FUTURE ROOF DOWNSPOUTS AND FOOTING DRAINS, DRIVEWAYS, YARD DRAINS, AND ANY OTHER SURFACE OR SUBSURFACE DRAINS NECESSARY TO RENDER THE LOTS SUITABLE FOR THEIR INTENDED USE. EACH OUTLET SHALL HAVE FREE-FLOWING, POSITIVE DRAINAGE TO AN APPROVED STORMWATER CONVEYANCE SYSTEM OR TO AN APPROVED OUTFALL LOCATION.
- b) OUTLETS ON EACH LOT SHALL BE LOCATED WITH A FIVE-FOOT-HIGH, 2" X 4" STAKE MARKED "STORM" OR "DRAIN". THE STUB-OUT SHALL EXTEND ABOVE SURFACE LEVEL, BE VISIBLE, AND BE SECURED TO THE STAKE.
- c) PIPE MATERIAL SHALL CONFORM TO UNDERDRAIN SPECIFICATIONS DESCRIBED IN KCRS AND. IF NON-METALLIC, THE PIPE SHALL CONTAIN WIRE OR OTHER ACCEPTABLE DETECTION.
- d) DRAINAGE EASEMENTS ARE REQUIRED FOR DRAINAGE SYSTEMS DESIGNED TO CONVEY FLOWS THROUGH INDIVIDUAL LOTS.
- e) THE APPLICANT/CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS OF ALL STUB-OUT CONVEYANCE LINES WITH RESPECT TO UTILITIES (E.G., POWER, GAS, TELEPHONE, TELEVISION).
- f) ALL INDIVIDUAL STUB-OUTS SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE LOT HOMEOWNER.
- 9. ALL DISTURBED PERVIOUS AREAS (COMPACTED, GRADED, LANDSCAPED, ETC.) OF THE DEVELOPMENT SITE MUST DEMONSTRATE ONE OF THE FOLLOWING: THE EXISTING DUFF LAYER SHALL BE STAGED AND REDISTRIBUTED TO MAINTAIN THE MOISTURE CAPACITY OF THE SOIL, OR; AMENDED SOIL SHALL BE ADDED TO MAINTAIN THE MOISTURE CAPACITY.
- 10. SEASONAL CLEARING IS LIMITED BETWEEN OCTOBER 1 AND MARCH 30 INCLUSIVE, UNLESS OTHERWISE APPROVED WITH A WRITTEN DECISION BY THE REVIEWING AGENCY.
- 11. IMPROVEMENTS AND/OR BUILDINGS SHALL NOT BE INSTALLED UNTIL DRAINAGE FACILITIES ARE "IN OPERATION", (KCC 9.04).

SHEET INDEX

- KING COUNTY COVER SHEET
- DRAINAGE PLAN DETAILS
- C04 TESC PLAN TESC NOTES AND DETAILS
- C06 WATER PLAN ROAD SECTIONS
- DRAINAGE AND PAVING DETAILS **EXISTING CONDITIONS**

HORIZONTAL CONTROL

1. KING COUNTY SURVEY CONTROL POINT No. 6897. EAST QUARTER OF SECTION 28, T 21 N, R 4 E, W.M., CONCRETE MONUMENT WITH LEAD AND BRASS TACK, SET 1.6 FEET BELOW GRADE, IN STANDARD KC MON. CASE. NORTHING: 105165.739 (FEET) EASTING: 1278265.994 (FEET)

2. KING COUNTY SURVEY CONTROL POINT No. 6907. NE CORNER OF SECTION 33, T 21 N, R 4E, W.M., CONCRETE MONUMENT WITH LEAD AND BRASS TACK, SET 0.6 FEET BELOW GRADE, IN STANDARD KC MON. CASE. NORTHING: 102529.986 (FEET) EASTING: 1278209.517 (FEET)

VERTICAL DATUM:

NAVD 88

BENCH MARK:

KING COUNTY SURVEY CONTROL POINT No. 6905. SW CORNER OF SECTION 27, T 24 N, R 4 E, W.M., CONCRETE MONUMENT WITH LEAD AND BRASS TACK, SET 1.2 FEET BELOW GRADE, IN STANDARD KC MON. CASE. ELEVATION = 367.06

TO CONVERT FROM NAVD 88 TO NGVD-29 USE -3.58'

EXAMPLE : 367.06 NAVD 88

363.48 NGVD-29

THE DATUM WILL BE CONVERTED TO KCAS (NGVD-29) DURING 'AS-BUILTING' STAGE.

LEGAL DESCRIPTION:

ALL OF BLOCK 4, JOVITA, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 19 OF PLATS, PAGE 14, RECORDS OF KING COUNTY, WASHINGTON.

SITE DATA:

EXISTING ZONE: R-4 PROPERTY AREA: 5.78 ACRES PERCEL NUMBER: 3750600012

PREVIOUS BUILDING PERMIT: B04L2425 ADDRESS: 4511 SOUTH 360TH STREET, FEDERAL WAY, WA 98001

SOIL BEARING CAPACITY

1500 LB/SF

UTILITY PURVEYORS

WATER: LAKEHAVEN UTILITY DISTRICT SEWER: LAKEHAVEN UTILITY DISTRICT POWER: PUGET SOUND ENERGY TELEPHONE. QWEST COMMUNICATIONS CABLEVISION: ATT BROADBAND GAS: PUGET SOUND ENERGY

SCHOOL DISTRICT: FEDERAL WAY #210

SOUTH KING FIRE AND RESCUE

CUP PERMIT NUMBER

L08CU002

PROJECT ENGINEER

PACIFIC ENGINEERING DESIGN, LLC 15445 53RD AVE. S. SEATTLE, WA, 98188 PHONE: (206) 431-7970 FAX: (206) 388-1648

ARCHITECT

RUTLEDGE MAUL ARCHITECTS 19336 47TH AVE NE LAKE FOREST PARK, WA 98155-2954 PHONE: (206) 440-0330 FAX: (206) 362-4381

LANDSCAPE ARCHITECT

GLENN TAKAGI SHORELINE, WA 98133-3984 PHONE: (206) 542-6100 FAX: (206) 546-1128

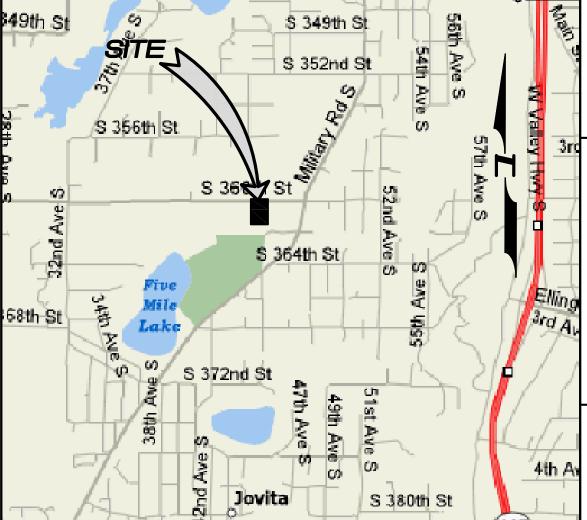
TRAFFIC ENGINEER

14400 BEL RED ROAD # 206 BELLEVUE, WA 98007-3952 PHONE: (425) 401-1030

18550 FIRLANDS WAY N STE 102

WILLIAM POPP ASSOCIATES, INC.

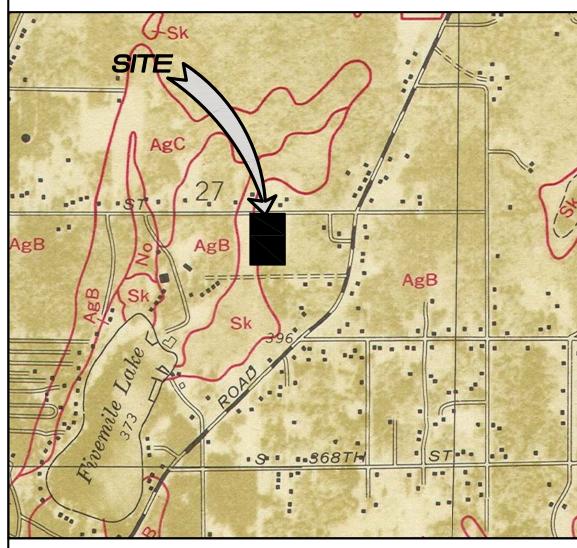
Scale 1"=2000'



Soils Map

Vicinity Map

Scale 1"=1000'



Notice Required

Contractors shall notify operators who maintain underground utility lines in the area of proposed excavation or blasting at least two business days, but not more than ten working days prior to commencement of excavation or demolition in accordance with RCW Title 19. Names and telephone numbers of the operators of underground utility lines in this project appear below. These numbers shall also be used to serve in an emergency conditions as

(253) 941-1516 LAKEHAVEN UTILITY DISTRICT Sanitary Sewer (253) 941-1516LAKEHAVEN UTILITY DISTRICT Water District PUGET SOUND ENERGY (800) 321-4123Gas Company PUGET SOUND ENERGY (800) 321-4123Power Company

Notes

DIAL-A-DIG

1. The Developer is required to notify the Land Use Services Division, Land Use Inspection Section (206) 296-6642, three days prior to the beginning of construction for a preconstruction conference and specifically request inspection before beginning:

1-800-424-5555

A. Installing siltation and erosion control measures B. Clearing and grubbing C. Earthwork

Call Before You Dig

- Installation of any underground utility . Before placing subbase, base or paving surfaces F. Installation of any forms or placing any concrete
- 2. A permit must be obtained from the office of the Resident Engineer, Washington State Department of Transportation, before any construction is started on any existing state route.

3. A Hydraulic Project Approval (HPA) Permit must be obtained from the Washington State Department of Fisheries prior to any work when required.

Bonding	Inform	natior
Donaing		I G CI OI

Restoration Bond Amount Performance Bond Amount Site Plan Approval

Approval of these plans is for construction of road and drainage improvements, site drainage & grading and temporary erosion control in unincorporated King County only. These plans do not authorize any other utility approval or improvements proposed in any State right of way.

Site plan approval is void if the commercial building permit has not been obtained or renewed within two years of approval.

Subdivision plan approval is void if the final plat is not recorded prior to the preliminary plat approval expiration.

	PRO RAT	TA SHARE	ASSESSMENT ANALYSIS	
		(County	Use Only)	
ection	Township	Range	Tax Parcel	Number
Ш	Ш	ш		

Pro Rata Share Assessment(s) are: \square Required \square Not Required Peak Runoff Assessment Rate(\$) per c.f.s. increases.(10 year, 2 hour storm) Peak Volume Assessment Rate(\$) per Ac. Ft. increases.(2 year, 2 hour storm

> AGREEMENTS, PLAN REFERENCES, PERMITS ETC. (To be completed by Consultant)

Preliminary Plat Approval/Permit Issued Date: ___ **Expiration Date:**

Other Related Permit Numbers Received: Right-of-Way Use Permit

Grading Building/Structura

Board feet of tree removal on site: Cubic yards of material hauled on/off the site:

Is this a highly sensitive area site? (Yes/No): Note: If "yes", per SWDM Appendix D44 a Highly Sensitive Site Erosion Control Supervisor is required. See ESC plan.

Emergency

Police-Fire-Rescue

		MENDED FOR APPROVAL completed by King County)	
Date			
	_	Review Engineer	
	_	Senior Engineer	
	_	Traffic & Planning Engineer	
	_	Sensitive Areas	

Structural Review Engineer

King County

Other

APPROVED FOR CONSTRUCTION DEPARTMENT OF DEVELOPMENT & ENVIRONMENTAL SERVICES

Molly A. Johnson, P.E. Date Development Engineer

> PROJECT CONTACT INFORMATION (To be completed by Consultant)

t t	PAUL PUREWAL	<u>(253</u>) 839–8853
licant tract er se	Name		Phone
Applic Contro Owner Lease	24820 PACIFIC HWY S, KENT, WAS	98032	
	Address and Zip Code		_
		□ A	Partnership

☐ An Individual SATGURU RAM SINGH STANG (<u>206</u>) <u>304–191</u>1 Phone

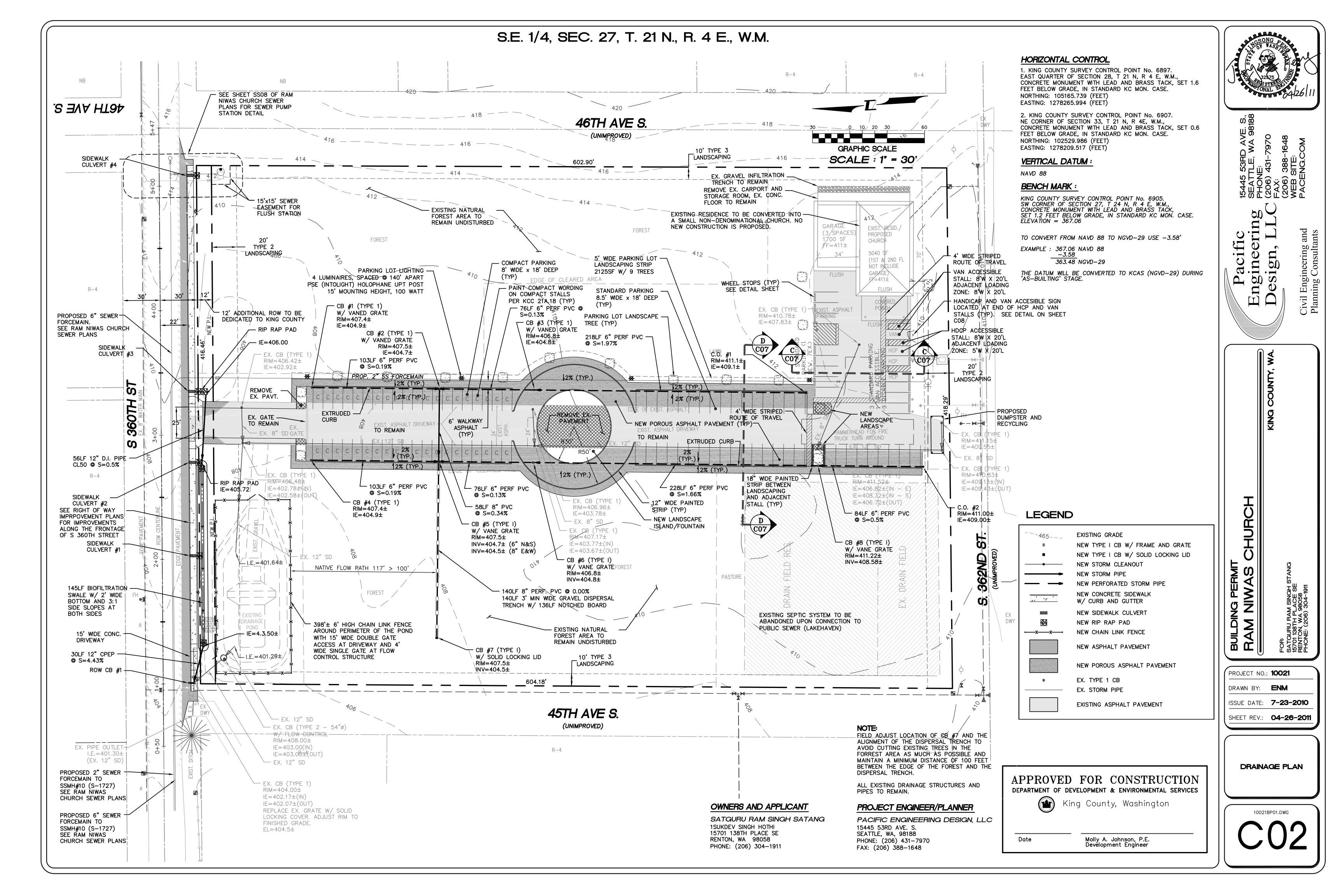
15701 138TH PLACE SE, RENTON, WA 98058 Address and Zip Code

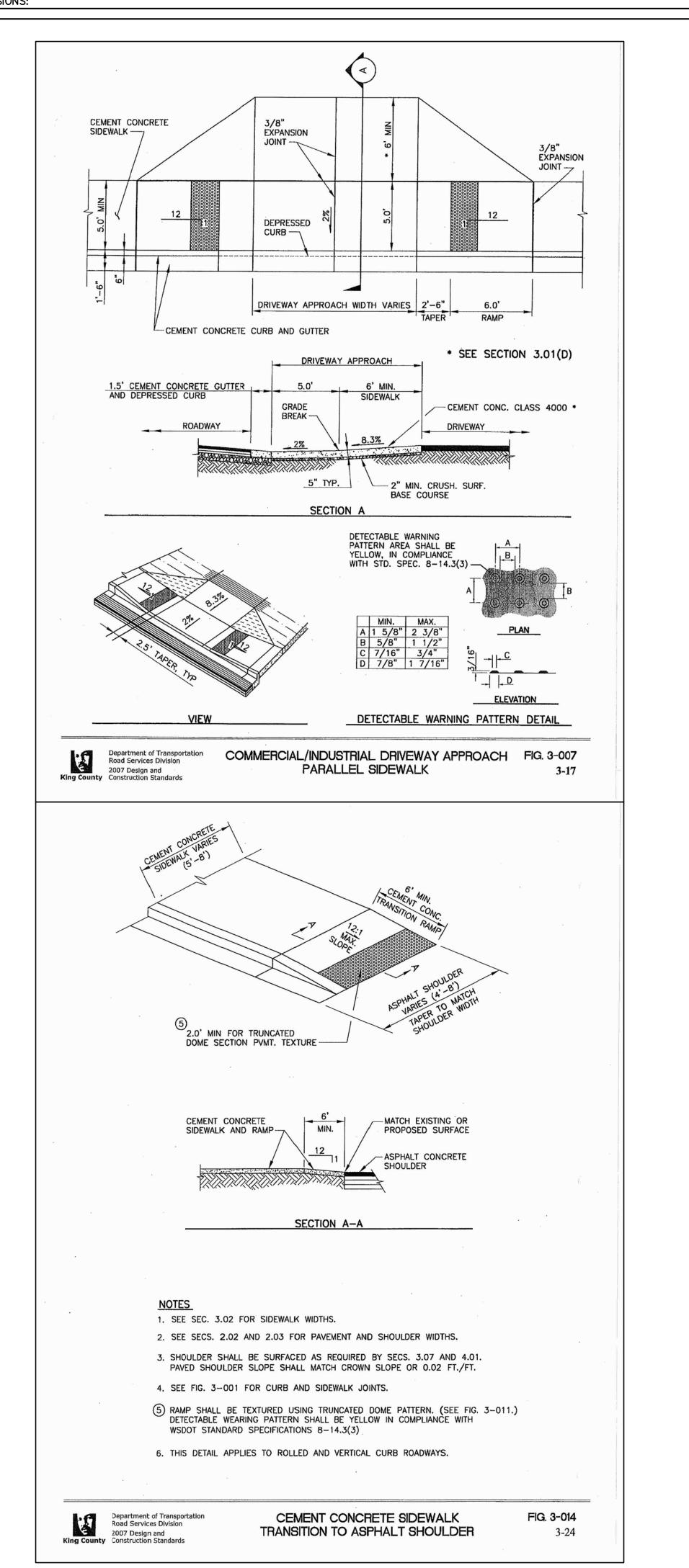
Address and Zip Code

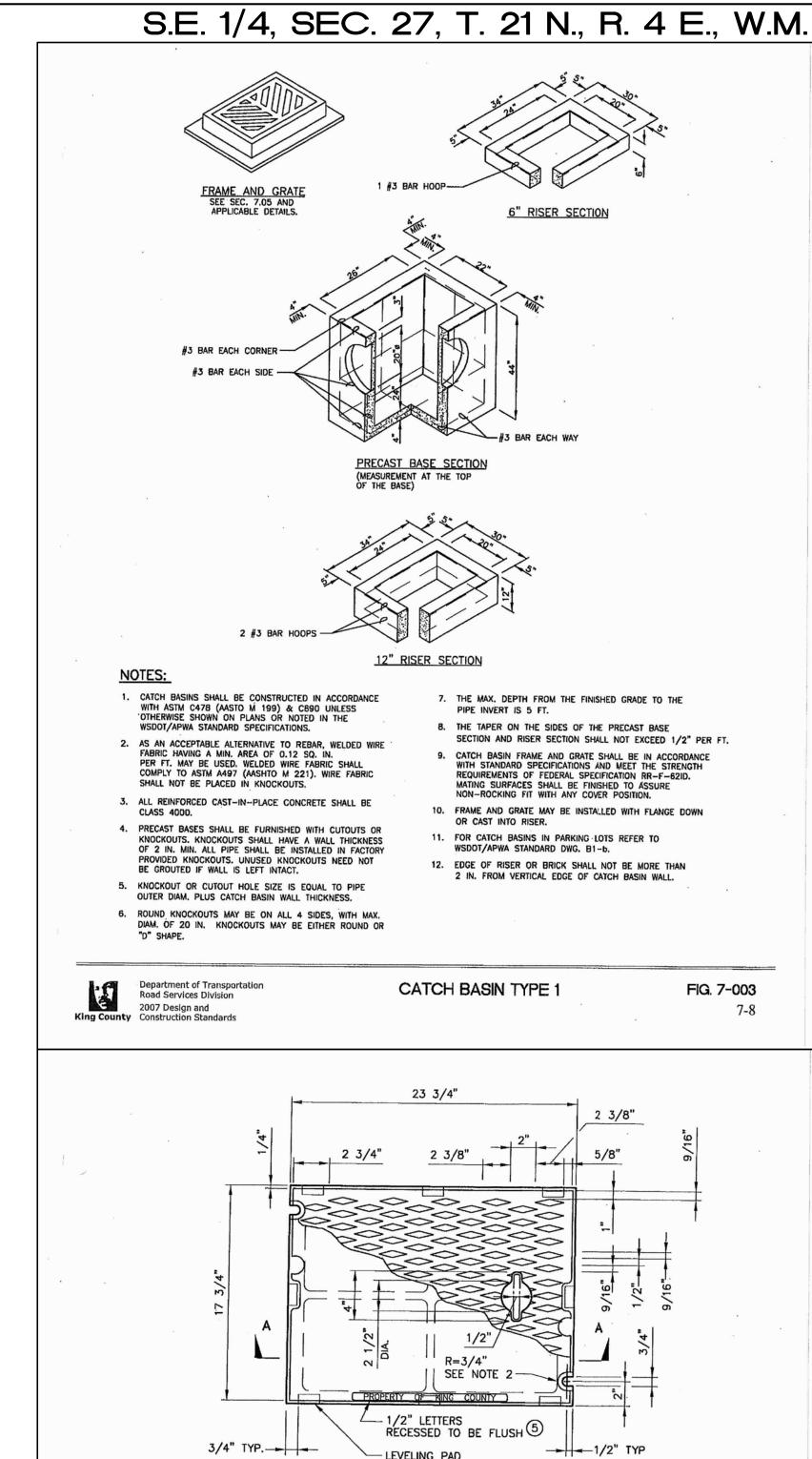
☑ A Corporation □ A Partnership □ An Individual (206) 431-7970Phone

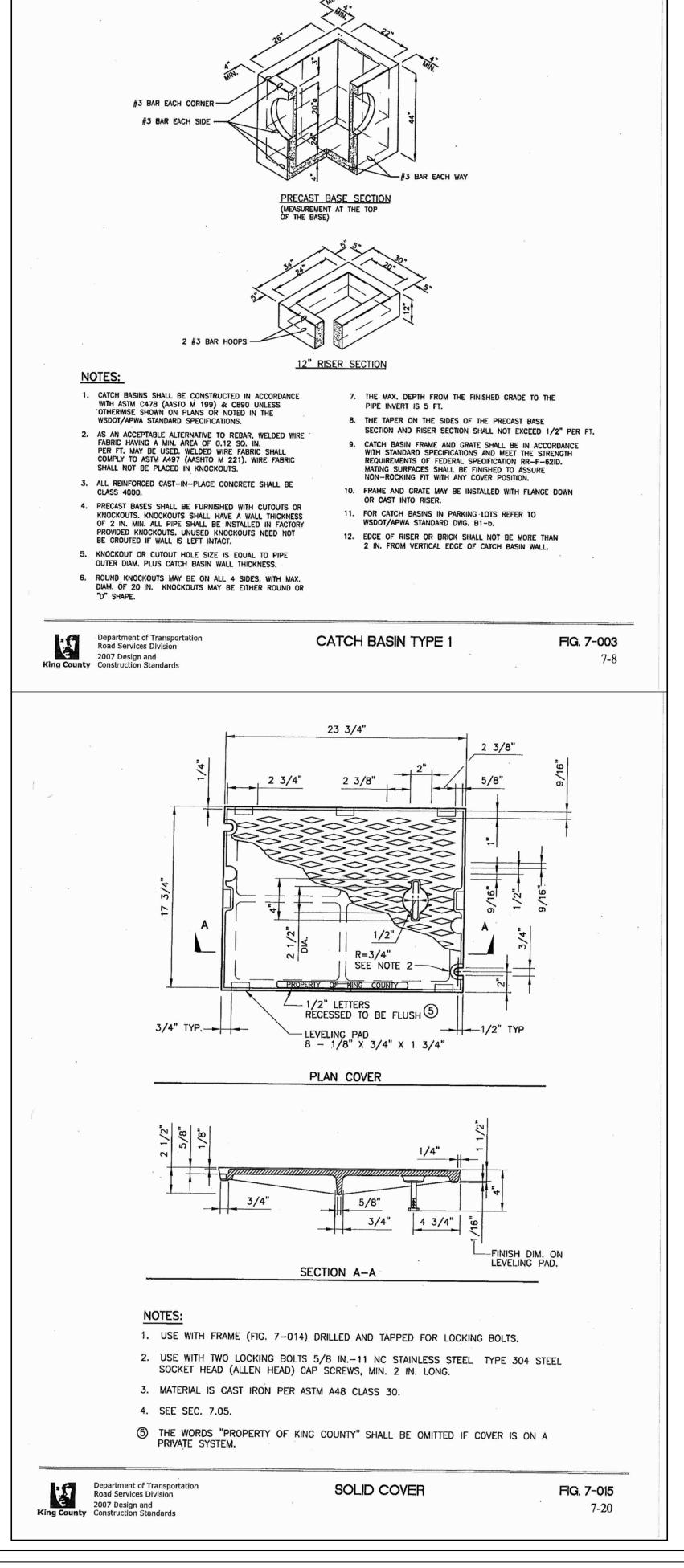
PACIFIC ENGINEERING DESIGN, LLC Name 15445 53RD AVE. S., SEATTLE, WA, 98188

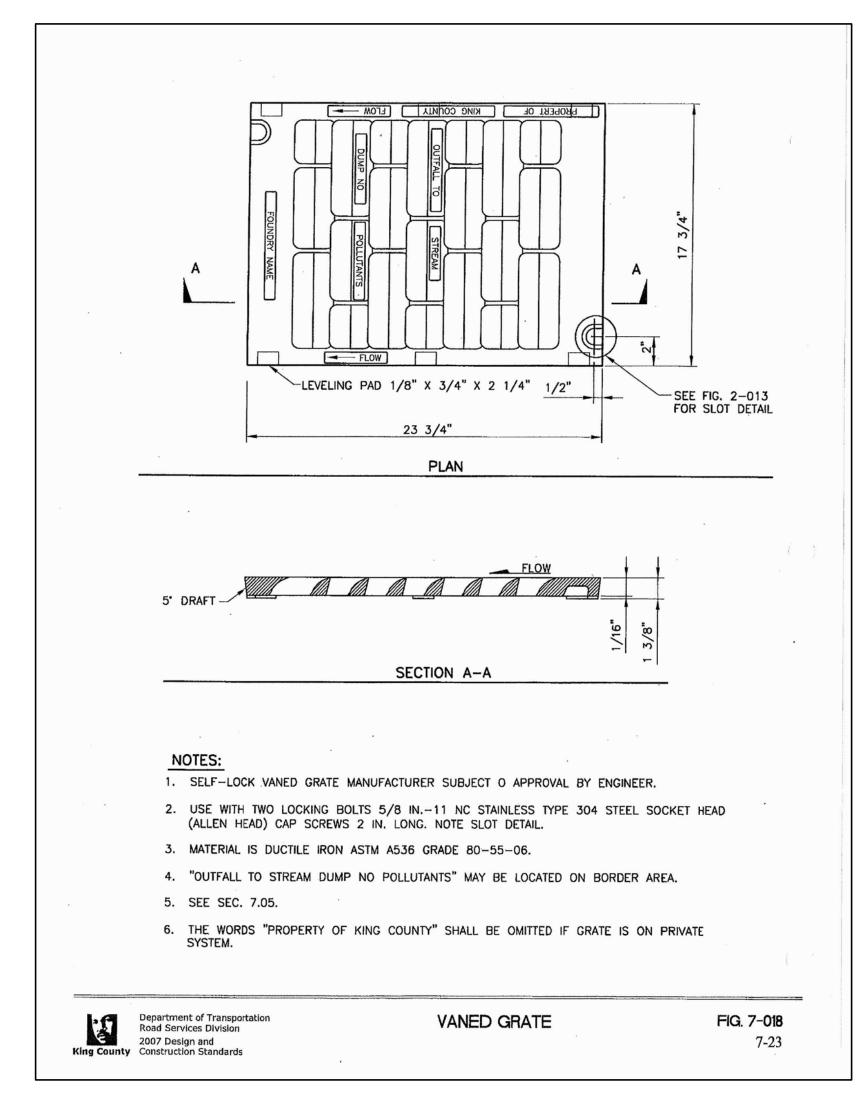
Sheet 1 of 9

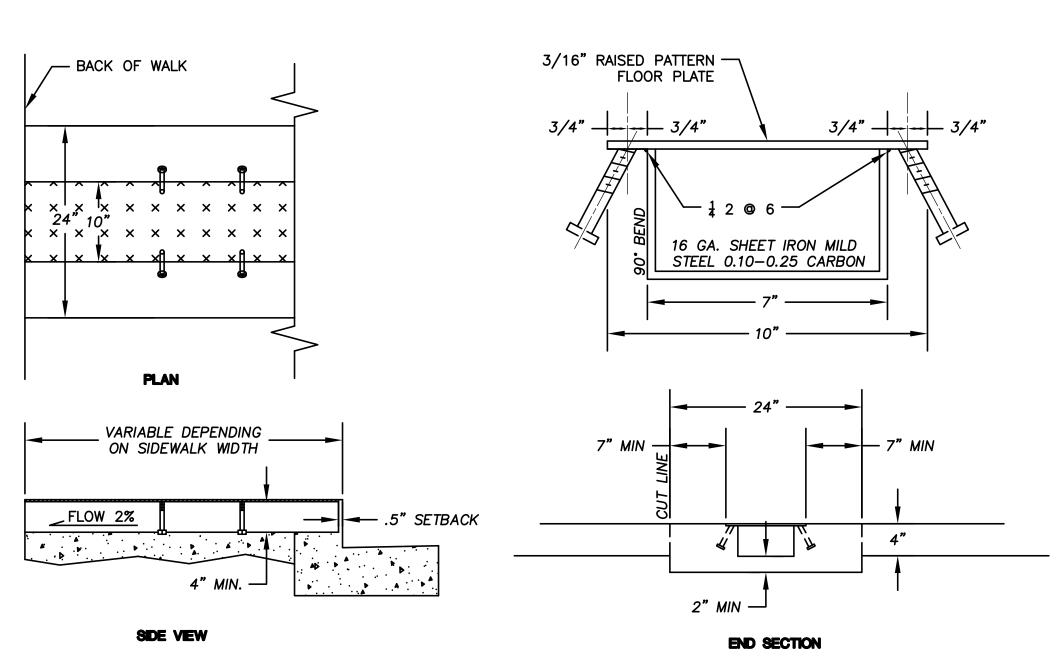






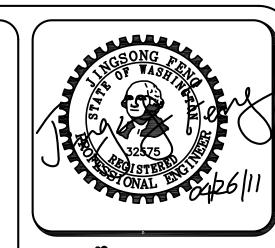






SIDEWALK CULVERT DETAILS





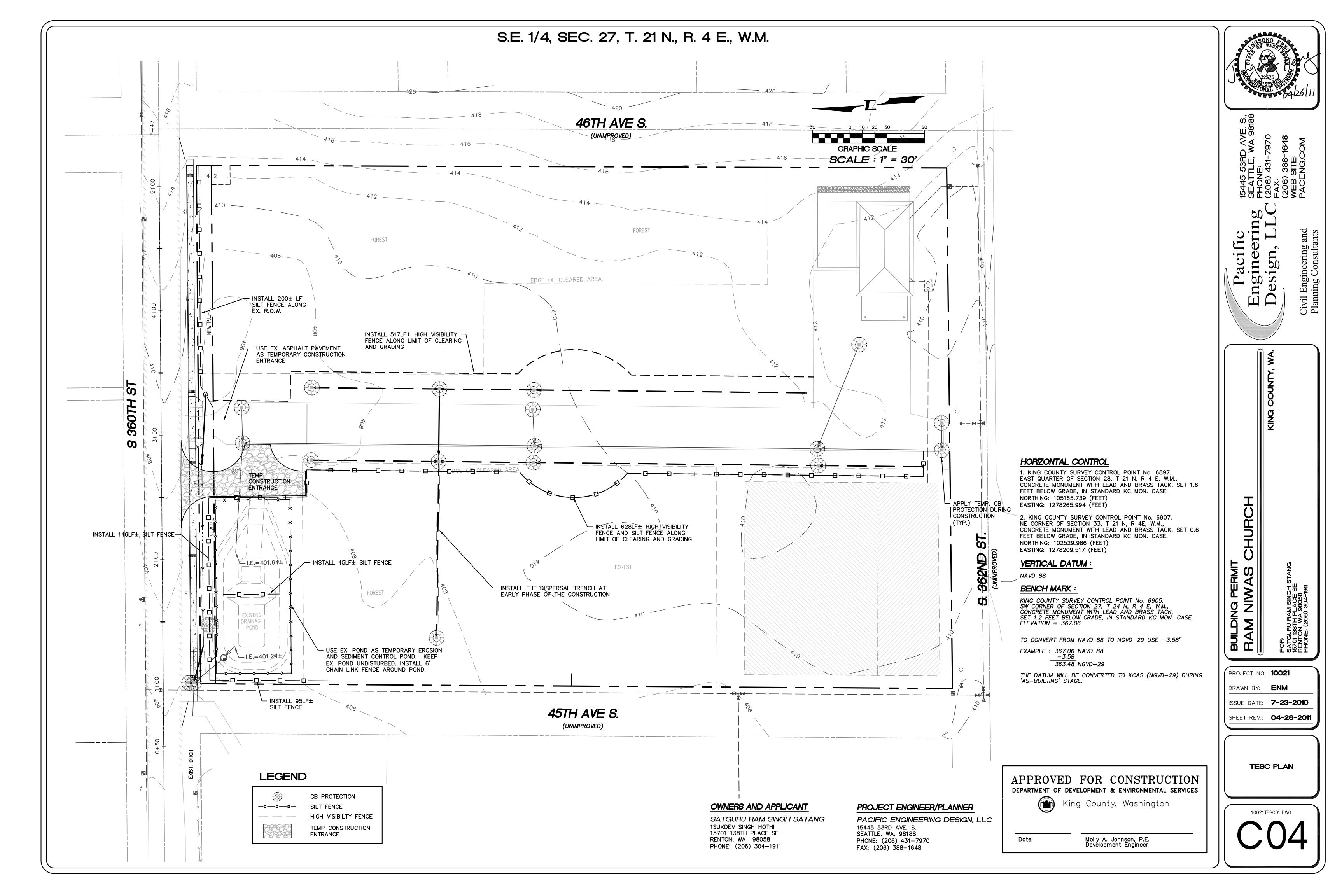
Civil Plann

PROJECT NO.: **10021** DRAWN BY: **CJB** ISSUE DATE: **7-23-2010**

SHEET REV.: **04-26-2011**

DETAILS

10021DT02.DWG



S.E. 1/4, SEC. 27, T. 21 N., R. 4 E., W.M.

WET WEATHER CLEARING REQUIREMENTS

KCC 16.82.150D

CONSTRUCTION PROJECTS CAN BE A SIGNIFICANT CONTRIBUTOR OF POLLUTION TO STREAMS AND WETLANDS. THEREFORE, FROM OCTOBER 1 THROUGH MARCH 31.

- 1. CLEARING AND GRADING SHALL ONLY BE PERMITTED IF SHOWN TO THE SATISFACTION OF THE DIRECTOR THAT SILT-LADEN RUNOFF EXCEEDING STANDARDS IN KING COUNTY SURFACE WATER DESIGN MANUAL WILL BE PREVENTED FROM LEAVING THE CONSTRUCTION SITE THROUGH A COMBINATION OF THE **FOLLOWING:**
 - A. SITE CONDITIONS INCLUDING VEGETATIVE COVERAGE, SLOPE, SOIL TYPE AND PROXIMITY TO RECEIVING WATERS:
 - B. LIMITATIONS ON ACTIVITIES AND THE EXTENT OF DISTURBED AREAS; AND
 - C. PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES.
- 2. THE DIRECTOR SHALL SET FORTH IN WRITING THE BASIS FOR APPROVAL OR DENIAL OF CLEARING OR GRADING DURING THIS PERIOD.
- 3. CLEARING AND GRADING WILL BE ALLOWED ONLY IF THERE IS INSTALLATION AND MAINTENANCE OF AN EROSION AND SEDIMENTATION CONTROL PLAN APPROVED BY THE DEPARTMENT WHICH SHALL DEFINE ANY LIMITS ON CLEARING AND GRADING OR SPECIFIC EROSION AND SEDIMENT CONTROL MEASURES REQUIRED DURING THIS PERIOD. ALTERNATE BEST MANAGEMENT PRACTICES MAY BE APPROVED OR REQUIRED ON-SITE BY THE INSPECTOR.
- 4. IF, DURING THE COURSE OF CONSTRUCTION, SILT-LADEN RUNOFF EXCEEDING STANDARDS IN THE KING COUNTY SURFACE WATER DESIGN MANUAL LEAVES THE CONSTRUCTION SITE OR IF CLEARING AND GRADING LIMITS OR EROSION AND SEDIMENT CONTROL MEASURES SHOWN IN THE APPROVED PLAN ARE NOT MAINTAINED. A NOTICE OF VIOLATION SHALL BE ISSUED.
- 5. IF THE EROSION AND SEDIMENT CONTROL PROBLEM DEFINED IN THE VIOLATION IS NOT ADEQUATELY REPAIRED WITHIN TWENTY-FOUR HOURS OF THE NOTICE OF VIOLATION, THEN A NOTICE AND ORDER MAY BE ISSUED BY THE INSPECTOR TO INSTALL ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES TO STOP SILT-LADEN RUNOFF FROM LEAVING THE SITE. THE NOTICE AND ORDER MAY ALSO REQUIRE THE CONTRACTOR TO DISCONTINUE ANY FURTHER CLEARING AND GRADING, EXCEPT FOR EROSION AND SEDIMENT CONTROL MAINTENANCE AND REPAIR. UNTIL THE FOLLOWING MARCH 31.

EROSION CONTROL SEEDING NOTES

PURPOSE

TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING EXPOSED SOILS THAT WILL NOT BE BROUGHT TO FINAL GRADING OR PERMANENT COVER TREATMENT OR VEGETATION WITHIN 30 DAYS OF THE EXPOSURE.

- CONDITIONS WHERE PRACTICE APPLIES PERMANENT STRUCTURES ARE TO BE INSTALLED OR EXTENSIVE GRADING OF THE AREA WILL OCCUR PRIOR TO THE ESTABLISHMENT OF PERMANENT VEGETATION.
- EXPOSED SOIL SURFACES WHICH ARE NOT TO BE FINAL GRADE WITHIN 30 DAYS.
- AREAS WHICH WILL NOT BE SUBJECTED TO HEAVY WEAR BY CONSTRUCTION TRAFFIC.
- AREAS SLOPING UP TO 10% FOR 100 FT. OR LESS.

DESIGN CRITERIA/SPECIFICATIONS

- TIME OF PLANTING DURING THE TIME PERIOD BETWEEN APRIL 1 THROUGH JUNE 30 AND SEPTEMBER 3 THROUGH OCTOBER 31. (NOTE: IF PLANTING BETWEEN JULY 1 AND AUGUST 31, IRRIGATION MAY BE REQUIRED. IF PLANTING BETWEEN NOVEMBER 1 AND MARCH 31, MULCHING WILL BE REQUIRED IMMEDIATELY AFTER PLANTING.)
- SITE PREPARATION BEFORE SEEDING, INSTALL NEEDED SURFACE RUNOFF CONTROL MEASURES SUCH AS GRADIENT TERRACES, INTERCEPTOR DIKE/SWALES, LEVEL SPREADERS AND SEDIMENT BASINS.
- SEEDBED PREPARATION THE SEEDBED SHOULD BE FIRM, BUT NOT COMPACT, WITH A FAIRLY FINE SURFACE FOLLOWING SURFACE ROUGHENING. SURFACE ROUGHENING SHOULD BE DONE AT RIGHT ANGLES TO THE SLOPE AND PREFERABLY "CAT WALKED" UP SLOPE.
- FERTILIZATION AS PER SUPPLIER'S RECOMMENDATIONS. DEVELOPMENTS ADJACENT TO WATER BODIES
- AND WETLANDS MUST USE NON-PHOSPHORUS FERTILIZER. — SEEDING — APPLY THE FOLLOWING MIXTURE TO THE PREPARED SEED BED AT A RATE OF 20 LBS/ACRE:

NAME	PROPORTIONS BY WEIGHT	PERCENT PURITY	PERCENT GERMINATION	
REDTOP (AGROSTIS ALBA)	10 %	92	85	
ANNUAL RYE (LOLIUM MULTIFOR	RUM) 40 %	98	90	
CHEWINGS FESQUE (FESTUCA RUBRA COMMUTATA)	40 %	98	90	
(JAMESTOWN, BANNER, SHADOV	V OR KOKET)			
WHITE DUTCH CLOVER	10%	95	90	

FINAL STABILIZATION NOTES

- 1. ALL DISTURBED AREAS OF THE SITE SHALL BE VEGETATED OR OTHERWISE PERMANENTLY STABILIZED. AT A MINIMUM. DISTURBED AREAS SHALL BE SEEDED AND MULCHED (SECTION 5.4.2.4) WITH A HIGH LIKELIHOOD THAT SUFFICIENT COVER WILL DEVELOP SHORTLY AFTER FINAL APPROVAL. MULCH WITHOUT SEEDING IS NOT ADEQUATE TO ALLOW FINAL APPROVAL OF THE PERMIT. EXCEPT FOR SMALL AREAS OF MULCH USED FOR LANDSCAPING. THE ONLY EXCEPTIONS TO THESE REQUIREMENTS ARE LOTS WITHIN A PLAT THAT ARE TO BE DEVELOPED UNDER AN APPROVED RESIDENTIAL PERMIT IMMEDIATELY FOLLOWING PLAT APPROVAL. IN THESE CASES, MULCH AND/OR TEMPORARY SEEDING ARE ADEQUATE FOR COVER.
- 2. STRUCTURAL MEASURES SUCH AS, BUT NOT LIMITED TO, SILT FENCES, PIPE SLOPE DRAINS, CONSTRUCTION ENTRANCES. STORM DRAIN INLET PROTECTION, SEDIMENT TRAPS AND PONDS; SHALL BE REMOVED FROM THE SITE. MEASURES THAT WILL QUICKLY DECOMPOSE, SUCH AS BRUSH BARRIERS AND ORGANIC MULCHES, MAY BE LEFT IN PLACE. IN THE CASE OF SILT FENCES, IT MAY BE BEST TO REMOVE FENCES IN CONJUNCTION WITH THE SEEDING, SINCE IT MAY BE NECESSARY TO BRING MACHINERY BACK IN TO REMOVE THEM. THIS WILL RESULT IN DISTURBED SOILS THAT WILL AGAIN REQUIRE PROTECTION. THE DDES INSPECTOR MUST APPROVE AN APPLICANT'S PROPOSAL TO REMOVE FENCING PRIOR TO THE ESTABLISHMENT OF VEGETATION. IN SOME CASES, SUCH AS RESIDENTIAL BUILDING FOLLOWING PLAT DEVELOPMENT, IT MAY BE APPROPRIATE TO LEAVE SOME OR ALL TESC MEASURES FOR USING DURING SUBSEQUENT DEVELOPMENT. THIS SHALL BE DETERMINED ON A SITE-SPECIFIC BASIS.
- 3. ALL PERMANENT SURFACE WATER FACILITIES, INCLUDING CATCH BASINS, MANHOLES, PIPES, DITCHES, CHANNELS. R/D FACILITIES AND WATER QUALITY FACILITIES SHALL BE CLEANED. ANY OFF-SITE CATCH BASINS THAT REQUIRED PROTECTION DURING CONSTRUCTION (SECTION 5.4.5.3) SHALL ALSO BE CLEANED.
- 4. IF ONLY THE INFRASTRUCTURE OF THE SITE HAS BEEN DEVELOPED (E.G., SUBDIVISIONS, AND SHORT PLATS) WITH BUILDING CONSTRUCTION TO OCCUR UNDER A DIFFERENT PERMIT, THEN THE SENSITIVE AREA BUFFERS AND NATIVE GROWTH PROTECTION EASEMENTS SHALL BE CLEARLY MARKED AS PER SECTION 5.4.1 IN ORDER TO ALERT FUTURE BUYERS AND BUILDERS.

EROSION/ SEDIMENTATION CONTROL NOTES

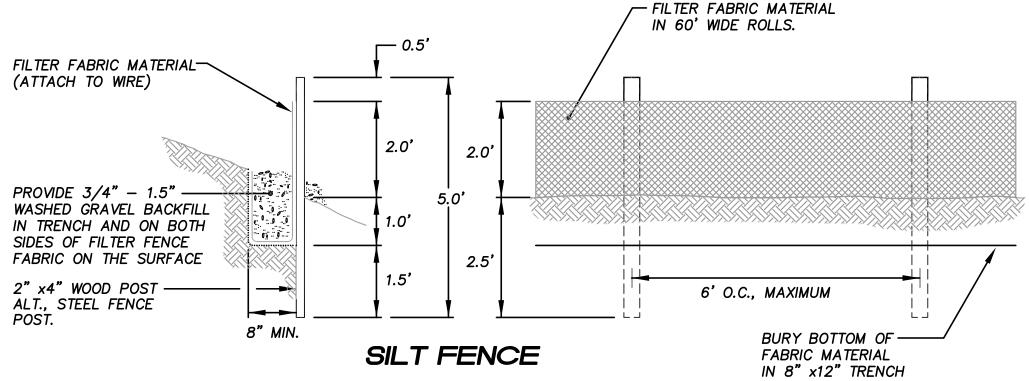
- 1. APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- 2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
- 3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
- 4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT-OF-WAY DOES NOT OCCUR FOR DURATION OF THE PROJECT.
- 5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
- 6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.).
- 7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.
- 8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC COVER METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
- 9. ANY AREA NEEDING ESC MEASURES NOT REQUIRING IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
- 10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING A STORM EVENT
- 11. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- 12. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM. THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
- 13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL.
- 14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DDES INSPECTOR FOR REVIEW.

RECOMMENDED CONSTRUCTION SEQUENCE

- 1. PRE-CONSTRUCTION MEETING.
- 2. POST NOTICE OF CONSTRUCTION ACTIVITY SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR.
- 3. FLAG OR FENCE CLEARING LIMITS.
- 4. INSTALL CATCH BASIN PROTECTION IF REQUIRED.
- 5. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
- 6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.)
- 7. INSTALL THE DISPERSAL TRENCH AND CB #1 TO 6.
- 8. USE EXISTING FOREST VEGETATION FOR FILTRATION OF SILT PARTICLES.
- 9. USE EXISTING DETENTION/WET POND FOR TEMPORARY SEDIMENT AND EROSION CONTROL.
- 10. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING, GRADING AND UTILITY INSTALLATIONS FOR PROJECT DEVELOPMENT.
- 11. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH KING COUNTY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- 12. RELOCATE SURFACE WATER CONTROLS AND EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE KING COUNTY EROSION AND SEDIMENT CONTROL STANDARDS.
- 13. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING OR EQUIVALENT.
- 14. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN SEVEN DAYS.
- 15. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- 16. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.

FILTER FABRIC FENCE INSTALLATION NOTES

- 1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY. FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.
- 2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS (WHERE FEASIBLE). THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 30 INCHES).
- 3. A TRENCH SHALL BE EXCAVATED, ROUGHLY 8 INCHES WIDE AND 12 INCHES DEEP, UPSLOPE AND ADJACENT TO THE WOOD POST TO ALLOW THE FILTER FABRIC TO BE BURIED.
- 4. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE 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 THEN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 5. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 20 INCHES OF THE FABRIC SHALL BE EXTENDED 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.
- 6. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSE 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 POST WITH ALL OTHER PROVISIONS OF STANDARD NOTE 5
- 7. THE TRENCH SHALL BE BACKFIELD WITH 3/4-INCH MINIMUM DIAMETER WASHED GRAVEL.
- 8. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
- 9. FILTER FABRIC FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.



TO RETAIN SEDIMENT FROM VERY SMALL DISTURBED AREAS BY CONSTRUCTION OF A TEMPORARY BARRIER MADE FROM RESIDUE MATERIALS AVAILABLE FROM CLEARING AND GRUBBING THE SITE.

CONDITIONS WHERE PRACTICE APPLIES: BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION, WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE FOR CONSTRUCTION OF SUCH A BARRIER. NOTE: DOES NOT REPLACE THE NEED FOR A SEDIMENT TRAP OR POND.

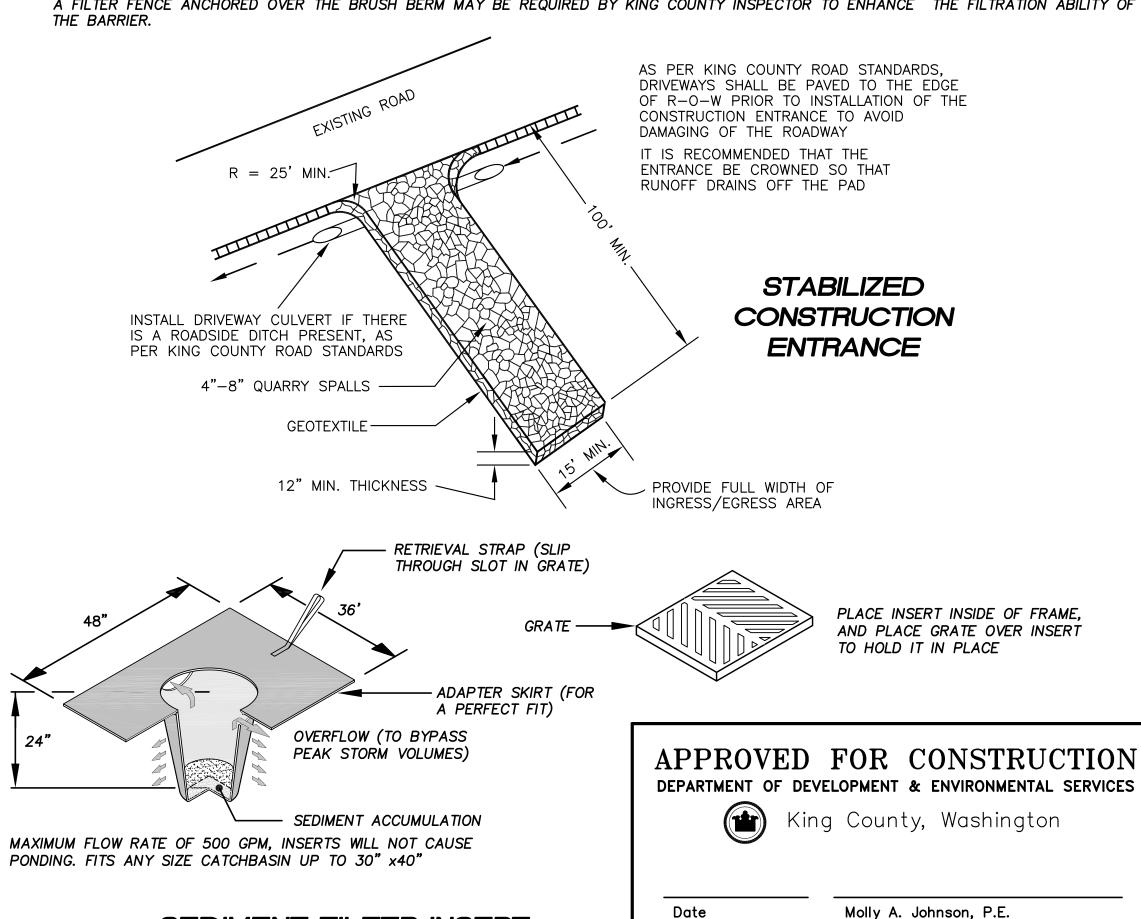
DESIGN CRITERIA/SPECIFICATIONS: MINIMUM HEIGHT= 3.0'.

SEDIMENT FILTER INSERT

MAXIMUM HEIGHT= 5.0'. MINIMUM WIDTH= 5.0' AT ITS BASE.

MAXIMUM WIDTH= 15.0'.

A FILTER FENCE ANCHORED OVER THE BRUSH BERM MAY BE REQUIRED BY KING COUNTY INSPECTOR TO ENHANCE THE FILTRATION ABILITY OF





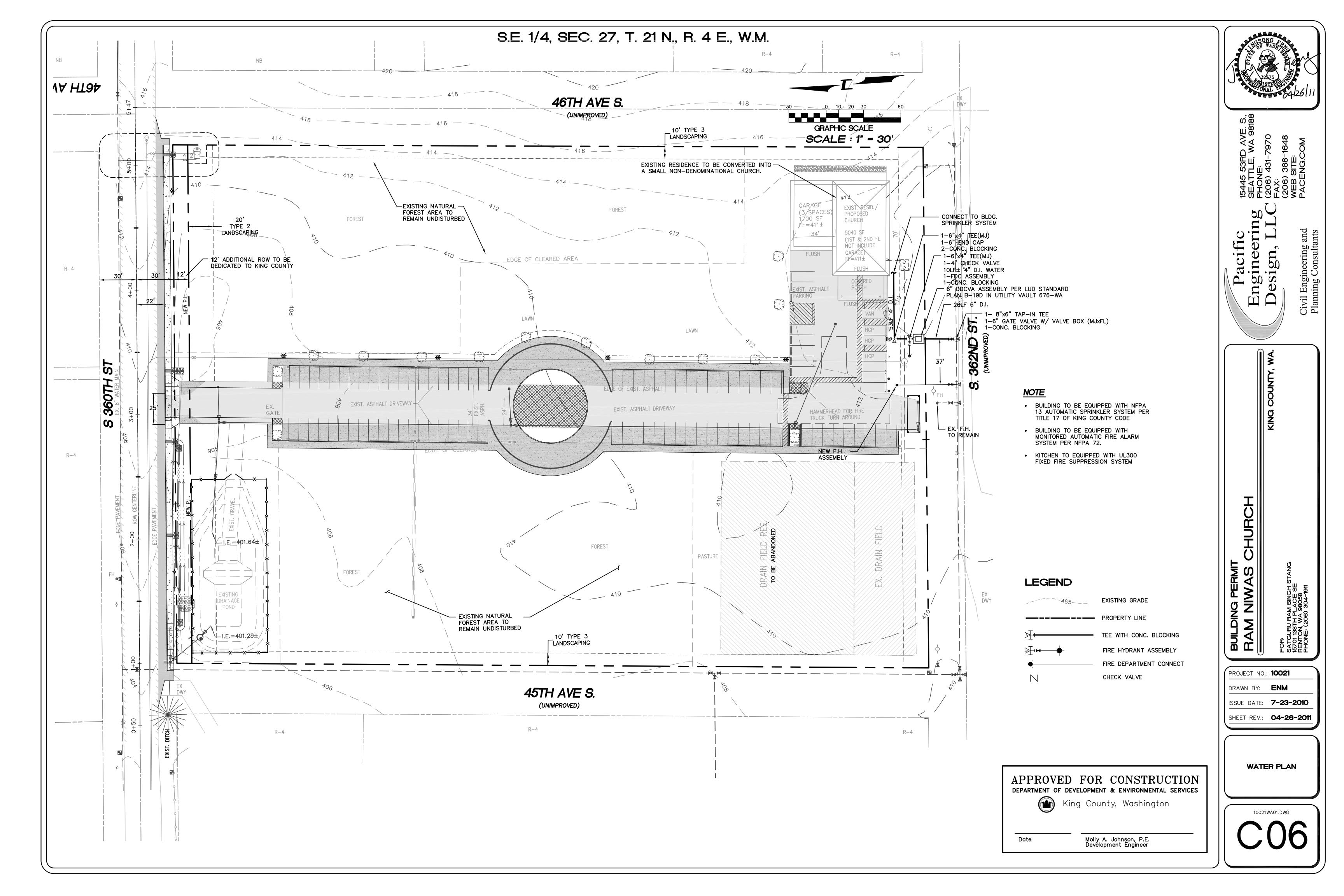
Civil Planr

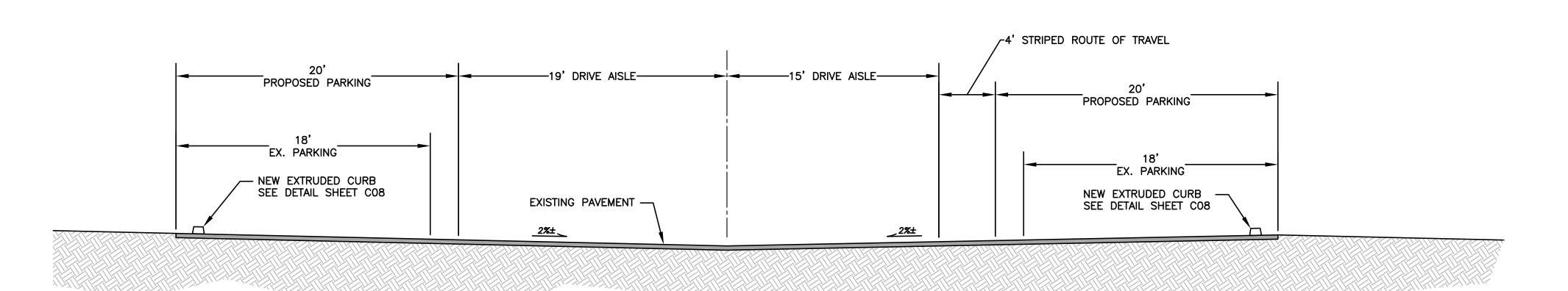
AKE ZAM PROJECT NO.: **10021**

DRAWN BY: CJB ISSUE DATE: **7-23-2010** SHEET REV.: **04-26-2011**

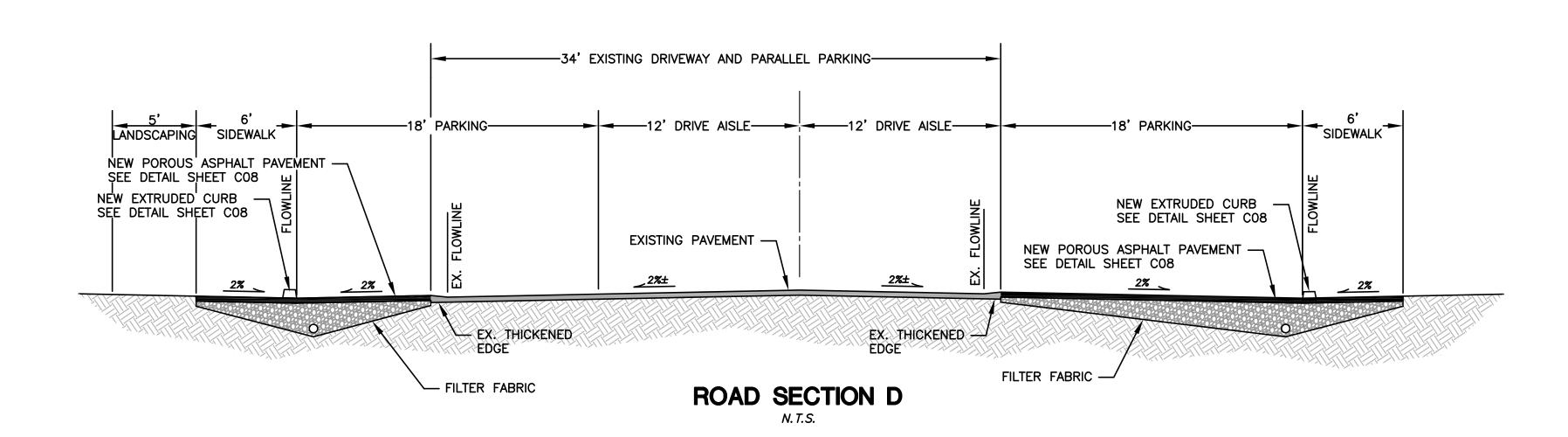
TESC NOTES AND **DETAILS**

10021TESCNT01.DWG





ROAD SECTION C



APPROVED FOR CONSTRUCTION DEPARTMENT OF DEVELOPMENT & ENVIRONMENTAL SERVICES

King County, Washington

Date

Molly A. Johnson, P.E. Development Engineer GSONG WASHINGTONAL SUB-6

SEATTLE, WA 98188 SPHONE: (206) 431–7970 FAX: (206) 388–1648 WEB SITE:

Engineering Design, LLC

KING COUNTY, WA.

VEN UTILITY DISTRICT PROJECT

PROJECT NO.: 10021
DRAWN BY: CJB

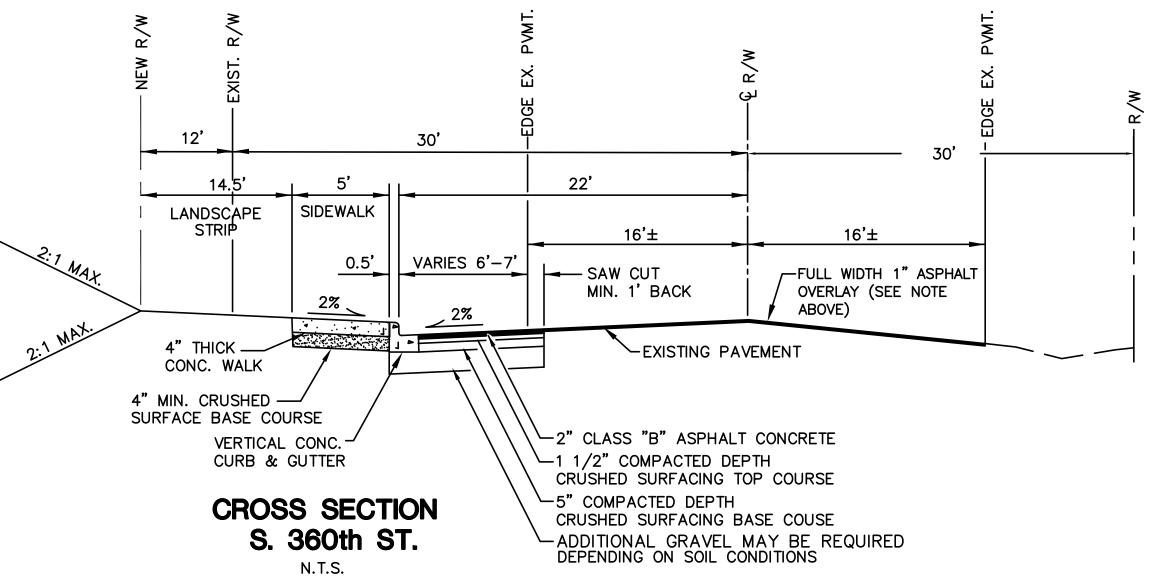
ISSUE DATE: **7-23-2010**SHEET REV.: **04-26-2011**

ROAD SECTIONS

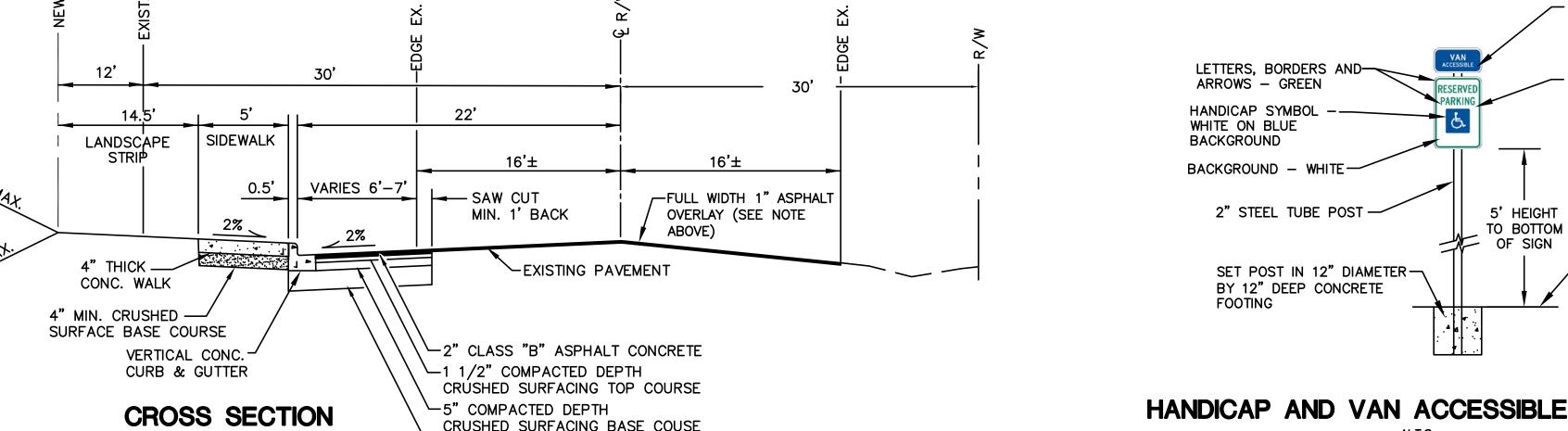
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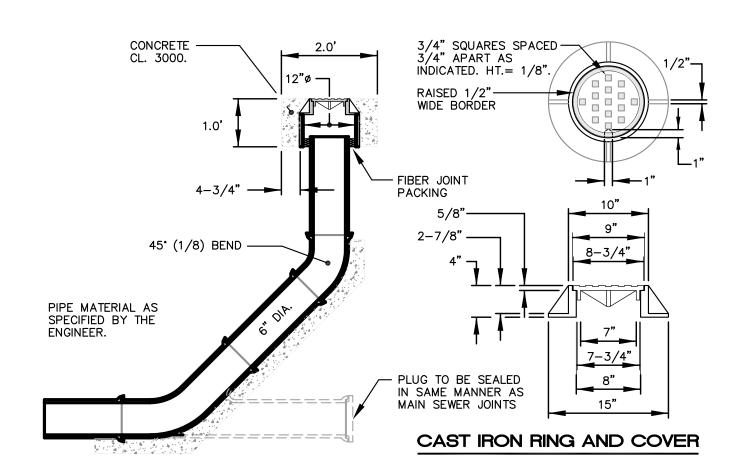
NOTE: PER KCRS SECTION 4.10F, THE EDGE OF EXISTING PAVEMENT SHALL BE SAWCUT TO PROVIDE A CLEAN, VERTICAL EDGE FOR JOINING TO THE NEW ASPHALT. AFTER PLACEMENT OF THE NEW ASPHALT SECTION, THE JOINT SHALL BE SEALED AND THE STREET OVERLAID 1 INCH, PLUS PRELEVEL COURSE, FULL WIDTH THROUGH THE WIDENED AREA. THE REQUIREMENT FOR OVERLAY MAY BE WAIVED BY THE ENGINEER OR REVIEWING AGENCY BASED ON THE CONDITION OF THE EXISTING PAVEMENT AND THE EXTENT OF REQUIRED CHANGES TO CHANNELIZATION.

- 1. FOR WIDTHS OF SIDEWALK SEE SEC. 3.02.
- 2. FOR WIDTHS OF PAVEMENT AND SHOULDER SEE SECS. 2.02, 2.03, AND 2.04.
- 3. SHOULDER SHALL BE SURFACED AS REQUIRED BY SECTIONS 3.07 AND 4.01. IF PAVED, SHOULDER SLOPE SHALL MATCH CROWN SLOPE OR .02 FT./FT.
- 4. FOR CURB AND SIDEWALK JOINTS SEE DWG. NO. 3-001.
- 5. TRANSITION RAMP SHALL BE TEXTURED WITH TRUNCATED DOME WARNING PATTERN.

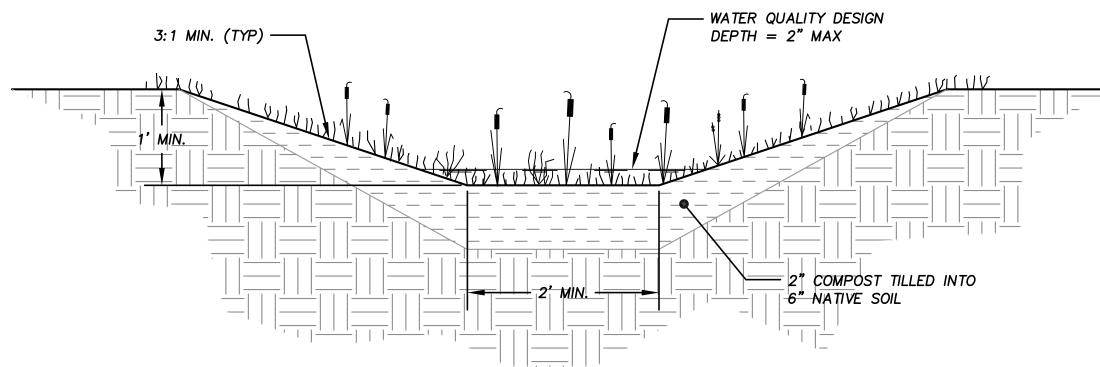


S.E. 1/4, SEC. 27, T. 21 N., R. 4 E., W.M.

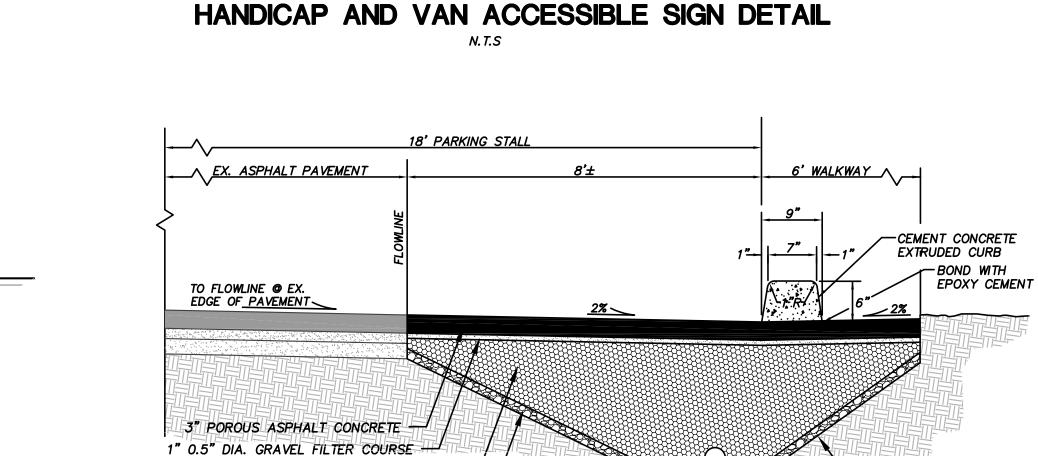




CLEAN OUT



BIOFILTRATION SWALE SECTION



- VAN ACCESSIBLE SIGN

RESERVED PARKING SIGN

SEE SITE PLAN FOR

SEE SITE PLAN FOR

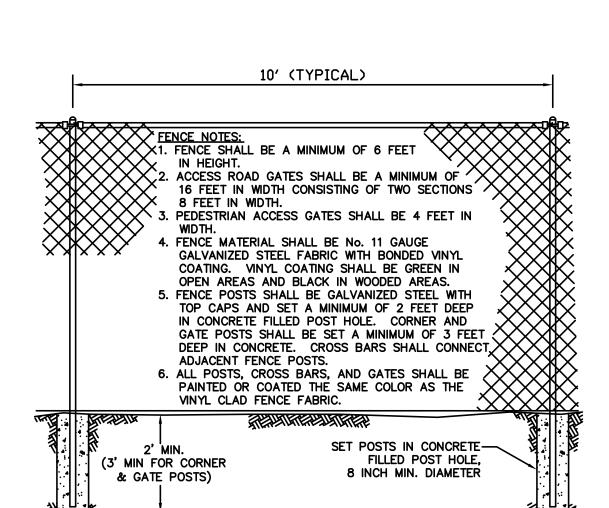
6"H X 12"W

18"H X 12"W

LOCATION

LOCATION

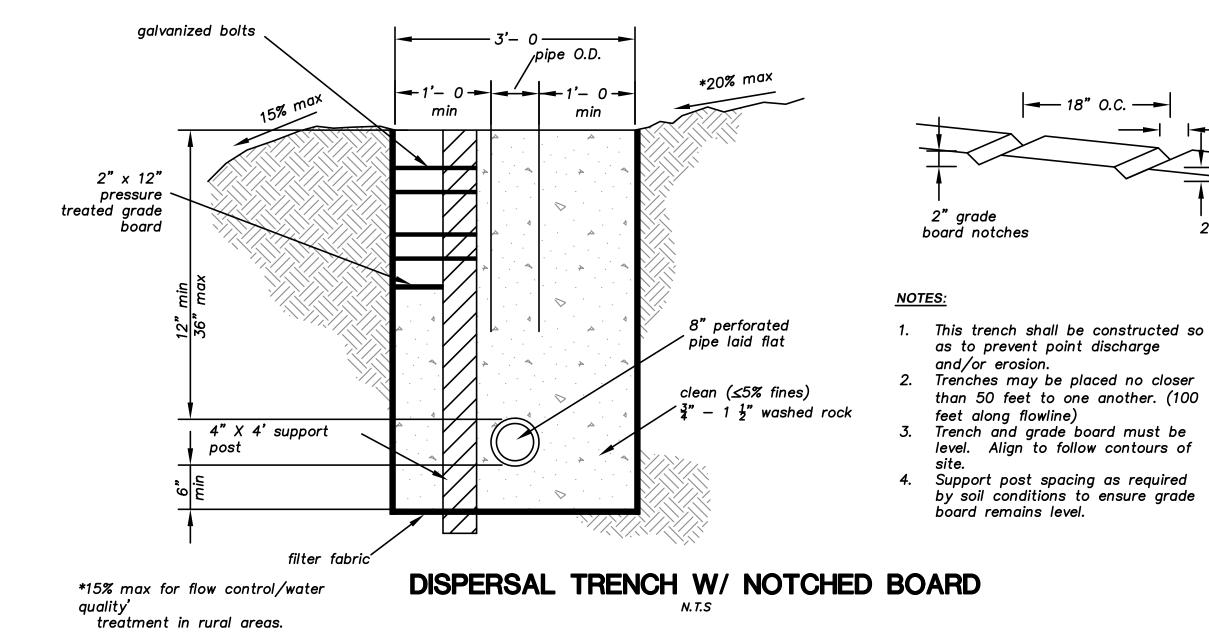
EXTRUDED CURB - ONSITE PAVEMENT SECTION N.T.S



DETENTION POND FENCING

ONLY APPLIES TO THE AREAS SHOWN AS CHAIN LINK FENCE ON THE PLAN

TABLE 6.3.1.C GRASS SEED MIXES SUITABLE FOR BIOFILTRATION SWALE TREATMENT AREAS			
75-80 PERCENT	TALL OR MEADOW FESCUE	60-70 PERCENT	TALL FESCUE
10-15 PERCENT	SEASIDE CREEPING BENTGRASS OR COLONIAL BENTGRASS	10-15 PERCENT	SEASIDE CREEPING BENTGRASS OR COLONIAL BENTGRASS
5-10 PERCENT	REDTOP	10-15 PERCENT	MEADOW FOXTAIL
		6-10 PERCENT	ALSIKE CLOVER
		1-5 PERCENT	MARSHFIELD BIG TREFOIL
		1-6 PERCENT	REDTOP
NOTE: ALL PERCENTAG	SES ARE BY WEIGHT.	•	•



4" MIN. 3/4" TO $1\frac{1}{2}$ " DIA. CLEAN CRUSHED ANGULAR STONE —

2" 0.5" DIA. GRAVEL FILTER COURSE

APPROVED FOR CONSTRUCTION DEPARTMENT OF DEVELOPMENT & ENVIRONMENTAL SERVICES King County, Washington

Molly A. Johnson, P.E. Development Engineer

Civil Plant

LAKEHAVEN RAM NIWA

PROJECT NO.: **10021** DRAWN BY: **CJB** ISSUE DATE: **7-23-2010** SHEET REV.: **04-26-2011**

DRAINAGE AND **PAVING DETAILS**

10021DT01.DWG

