REVISIONS:

NW 1/4 OF SW 1/4 OF SEC. 34, T. 24 N., R. 05 E., W.M.

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____

CITY OF NEWCASTLE

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS, OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DRAWINGS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NEWCASTLE MUNICIPAL CODE (NMC), NEWCASTLE PUBLIC WORKS STANDARDS, AND THE CITY OF NEWCASTLE'S CONDITIONS OF APPROVAL. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND 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 THE CITY.
2. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE NEWCASTLE DEPARTMENT OF PUBLIC WORKS ENGINEERING REVIEW CHECKLIST. SOME ELEMENTS MAY HAVE BEEN OVERLOOKED OR MISSED BY THE PLAN REVIEWER. ANY VARIANCE FROM ADOPTED STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY 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 PUBLIC WORKS DEPARTMENT, COMMUNITY DEVELOPMENT DEPARTMENT, 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. CONSTRUCTION NOISE SHALL BE LIMITED IN ACCORDANCE WITH NMC; NORMALLY THIS IS 7 A.M. TO 7 P.M. ON WEEKDAYS AND 9 A.M. TO 6 P.M. ON WEEKENDS AND LEGAL HOLIDAYS.
7. IT SHALL BE THE APPLICANT'S/CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS NECESSARY BEFORE INITIATING OFFSITE WORK WITHIN THE ROAD RIGHT-OF-WAY.
8. FRANCHISED UTILITIES OR OTHER INSTALLATIONS THAT ARE NOT SHOWN ON THESE APPROVED PLANS SHALL NOT BE CONSTRUCTED UNLESS A PERMIT HAS BEEN ISSUED BY THE CITY OF NEWCASTLE OR ITS DESIGNATED REPRESENTATIVE AGENCY.
9. DATUM SHALL BE NAVD 1988 UNLESS OTHERWISE APPROVED BY THE CITY.
10. GROUNDWATER SYSTEM CONSTRUCTION SHALL BE WITHIN A RIGHT-OF-WAY OR APPROPRIATE DRAINAGE EASEMENT, BUT NOT UNDERNEATH THE ROADWAY SECTION, UNLESS SPECIFICALLY APPROVED BY THE CITY. ALL GROUNDWATER SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH SECTION B1 3.02 OF THE APWA STANDARD SPECIFICATIONS.
11. ALL UTILITY TRENCHES SHALL BE BACKFILLED AND COMPACTED TO 95 PERCENT MAXIMUM DENSITY, MODIFIED PROCTOR.
12. ALL ROADWAY SUBGRADE SHALL BE BACKFILLED AND COMPACTED TO 95 PERCENT MAXIMUM DENSITY (WSDOT 2-06.3).
13. OPEN CUTTING OF EXISTING ROADWAYS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH THE NEWCASTLE PUBLIC WORKS STANDARDS.
14. 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. SECTION 1- 07.23, "TRAFFIC CONTROL", OF THE STANDARD SPECIFICATIONS SHALL APPLY IN ITS ENTIRETY.
15. CALL UNDERGROUND UTILITY LOCATE LINE 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

DRAINAGE NOTES

1. ALL FEES, BONDING, AND PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO THE PRECONSTRUCTION MEETING.
2. ALL STORM MAINS AND RETENTION/DETENTION AREAS SHALL BE STAKED FOR GRADE AND ALIGNMENT BY AN ENGINEERING OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK, AND CURRENTLY LICENSED IN THE STATE OF WASHINGTON TO DO SO.
3. STORM DRAIN PIPELINES SHALL BE INSTALLED TO THE FAR PROPERTY LINE(S) TO SERVE ADJACENT TRIBUTARY AREAS MAY BE WARRANTED. THEY SHALL BE APPROPRIATELY SIZED TO ACCOMMODATE FLOWS AS FURTHER IDENTIFIED HEREIN. PIPES SHALL BE DESIGNED TO FACILITATE A MINIMUM 2 FEET/SECOND FLOW UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
4. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT 7-02.3(1). THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL, AND ANY REQUIRED PIPE BEDDING TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
5. STEEL PIPE SHALL BE GALVANIZED AND HAVE ASPHALT TREATMENT #1 OR BETTER INSIDE AND OUTSIDE.
6. 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.
7. ALL CATCH BASIN GRATES SHALL CONFORM TO CITY OF NEWCASTLE DRAWINGS, AND SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS" AND "PROPERTY OF CITY OF NEWCASTLE".
8. ALL DRIVEWAY CULVERTS LOCATED WITHIN THE 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 (SEE CITY OF NEWCASTLE DRAWINGS).
9. ROCK FOR EROSION PROTECTION FOR ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF ONE FOOT, AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8" ROCK/40-70% PASSING; 2"-4" ROCK/30-40% PASSING; AND 2" MINUS ROCK/10-20% PASSING. INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF NEWCASTLE DRAWINGS.
10. DRAINAGE OUTLETS (STUB-OUTS) SHALL BE PROVIDED FOR EACH INDIVIDUAL LOT OR BUILDING, EXCEPT FOR THOSE LOTS APPROVED FOR INFILTRATION BY THE CITY. 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 DRAIN 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 AN APPROVED OUTFALL LOCATION.
    - b) OUTLETS ON EACH LOT SHALL BE MARKED WITH A FIVE FOOT HIGH, 2"x4" 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 BE A MINIMUM OF 4 INCHES IN DIAMETER, PERFORATED, SMOOTH INTERIOR, RIGID DRAIN PIPE. A METALLIC TRACER WIRE SHALL BE ATTACHED THE ENTIRE LENGTH OF THE PIPE.
    - d) INDIVIDUAL LOTS STUB-OUTS MAY CONNECT DIRECTLY TO THE ROADWAY STORM DRAINAGE SYSTEM, PROVIDED, THAT SAID CONNECTION IS MADE THROUGH USE OF A MANUFACTURED TEE SPECIFICALLY FOR THIS PURPOSE. IF STUB-OUTS MUST PASS ACROSS INDIVIDUAL LOTS, THEY SHALL BE LOCATED IN DRAINAGE EASEMENTS.
    - e) THE APPLICANT/CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS OF ALL STUB-OUT CONVEYANCE LINES WITH RESPECT TO UTILITIES (E.G., POWER GAS, PHONE, CABLE).,
    - f) ALL INDIVIDUAL STUB-OUTS SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE LOT HOMEOWNER.

STRUCTURAL NOTES

1. THESE PLANS ARE APPROVED FOR STANDARD ROAD AND DRAINAGE IMPROVEMENTS ONLY. PLANS FOR STRUCTURES SUCH AS BRIDGES, VAULTS, ROCKERIES AND RETAINING WALLS REQUIRE A SEPARATE REVIEW AND APPROVAL BY THE BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
2. ROCKERIES ARE CONSIDERED TO BE A METHOD OF BANK STABILIZATION AND EROSION CONTROL. ROCKERIES SHALL NOT BE CONSTRUCTED TO SERVE AS RETAINING WALLS. ALL ROCKERIES IN THE CITY SHALL BE CONSTRUCTED IN ACCORDANCE TO THE CITY OF NEWCASTLE DRAWINGS.

EROSION AND SEDIMENT CONTROL NOTES

1. APPROVAL OF THIS EROSION AND SEDIMENTATION 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 A CONTINUOUS LENGTH OF ORANGE PROTECTION FENCING PRIOR TO CONSTRUCTION. DURING CONSTRUCTION, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
4. 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 PREVENTED.
5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE COURSE OF CONSTRUCTION, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS.
6. 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 DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30).
7. 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 METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
8. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.
10. 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.
11. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
12. ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE FINAL GRADE OF THE PERMANENT FACILITY.
13. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
14. PRIOR TO SEPTEMBER 15, ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED PRIOR TO OCTOBER 1. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE CITY INSPECTOR. THE CITY INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

CONSTRUCTION SEQUENCE

1. CLEARING LIMITS, TREES TO BE RETAINED, AND SENSITIVE AREAS FLAGGED, FENCED, AND INSPECTED BY THE CITY.
2. HOLD A PRE-CONSTRUCTION MEETING.
3. POST A SIGN WITH THE NAME AND PHONE NUMBER OF THE PROJECT SUPERVISOR.
4. INSTALL CATCH BASIN PROTECTION.
5. GRADE AND INSTALL CONSTRUCTION ENTRANCE.
6. INSTALL PERIMETER SILT FENCE PROTECTION.

CONSTRUCTION SEQUENCE (CONTINUED)

7. CONSTRUCT SEDIMENT POND AND TRAP.
8. GRADE AND STABILIZE CONSTRUCTION ROAD AND STAGING AREA.
9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DITCHES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
11. RELOCATE SURFACE WATER CONTROLS OR EROSION CONTROL MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL STANDARDS PER THE KING COUNTY SURFACE WATER DESIGN MANUAL.
12. 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.,
13. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
14. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
15. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPS IF APPROPRIATE.

LEGEND

PROPOSED:		EXISTING:	
	BOUNDARY		RIGHT OF WAY
	CENTERLINE		CENTERLINE
	LOT LINE		LOT LINE (EXISTING)
	EASEMENT LINE		EASEMENT LINE
PAD= 396	PAD ELEVATION	396	EXISTING GROUND CONTOUR
396	FINISHED GROUND CONTOUR		WATER FIRE HYDRANT
	CATCHBASIN		WATER VALVE
	CATCHBASIN (TYPE II)		WATER METER
	CATCHBASIN (SOLID LID)		WATER CABNET
	YARD DRAIN		WATER MANHOLE
	WATER BEND WITH CONC. BLOCKIING	PET	GAS LINE
	FIRE HYDRANT ASSEMBLY		CHAINLINK FENCE
	WATER VALVE		POWER POLE
	WATER METER		GUY ANCHOR
	AIR VACUUM		AREA LIGHT
	WATER TEE IN PROFILE		DECIDUOUS
	WATER BEND IN PROFILE		CONIFER
	FIRE HYDRANT ASSEMBLY IN PROFILE		
	WATER VALVE IN PROFILE		ASPHALT PAVEMENT
	SANITARY SEWER MANHOLE		
	6" INLINE SEWER CLEANOUT		
	SEWER MANHOLE IN PROFILE TURNED 90°		
	TYPE II CATCH BASIN IN PROFILE (90°)		
	TYPE I CATCH BASIN IN PROFILE (90°)		
2 4	ROCKERY OR MSC WALL WITH WALL HEIGHTS		
8 C-101	DETAIL CALLOUT		
100.00 EP	SPOT ELEVATION		
	ASPHALT PAVEMENT		
	CEMENT CONCRETE		

JIANGSONG FENG STATE OF WASHINGTON 32875 REGISTERED PROFESSIONAL ENGINEER
08/22/08
EXPIRES: 2/18/09

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CITY OF NEWCASTLE

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PROJECT NO.:	06015
DRAWN BY:	JGC
ISSUE DATE:	02-01-08
SHEET REV.:	08-22-08

STANDARD NOTES AND SPECIFICATIONS

CD\06015NT01-C02.DWG

C02