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CHECKED:	JRB
ENGINEER:	JRB
SURVEY FILE:	
DRAWING FILE:	C3D15-1571-01 BASE.dwg
CORRESPONDENCE:	CPG
GRID:	
DATE:	11/01/2017
SCALES: HORZ.	1:500

SIX STAR DEVELOPMENTS LTD.
FOREST PARK
30 LOT STRATA DEVELOPMENT
PHASE 1
LOT GRADING PLAN

1571-01
RAWING No.

SHEET No. REV. No. 3 OF 3 4

GENERAL CONSTRUCTION NOTES:

- 1. ALL WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF PRINCE GEORGE SUBDIVISION AND DEVELOPMENT SERVICING BYLAW #8618, 2014 (BYLAW #8618).
- 2. ALL WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE <u>GEOTECHNICAL REPORT</u> PREPARED BY GEONORTH ENGINEERING LTD. FILE NO. K-4555.
- 3. THE LOCATION OF EXISTING UTILITIES, AS SHOWN ON THE DESIGN DRAWINGS, ARE APPROXIMATE ONLY AND MAY NOT BE FULLY ACCURATE OR COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR A BC ONE CALL. THE CONTRACTOR SHALL EXPOSE ALL TIE-IN LOCATIONS AND POTENTIAL POINTS OF CONFLICT AND CONFIRM DESIGN ELEVATIONS PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR DIRECTION. THE CONTRACTOR SHALL ASSUME ALL COSTS AND EXPENSES THAT MAY ARISE FROM DAMAGES AND REPAIR TO SUCH UTILITIES.
- 4. FOR ANY <u>MATERIAL SUBSTITUTION</u> OR CHANGE TO THE DESIGN, THE CONTRACTOR MUST OBTAIN WRITTEN APPROVAL FROM THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
- 5. THE LOCATION OF THE <u>SURVEY CONTROL MONUMENTS</u> SHALL BE PROVIDED BY THE ENGINEER. ALL SURVEY MONUMENTS, BENCHMARKS, AND LEGAL PINS MUST BE PROTECTED AND ANY DAMAGE CAUSED BY NEGLIGENCE OF THE CONTRACTOR'S HALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 6. <u>ENVIRONMENTAL PROTECTION</u> SHALL CONFORM TO SECTION 01561 ENVIRONMENTAL PROTECTION OF BYLAW 8618 AND SECTION 02225 SITEWORK DEMOLITION AND REMOVAL OF BYLAW 8618. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE AN ENVIRONMENTAL MONITOR AND WILL DEVELOP AN ENVIRONMENTAL MANAGEMENT PLAN TO PROVIDE CONSTRUCTION RECOMMENDATIONS WITH RESPECT TO SILTATION ABATEMENT AND CONTROL, EROSION PROTECTION MEASURES, ENVIRONMENTAL CONTROLS AND DRAINAGE WORKS. CONTRACTOR SHALL ALSO PROVIDE A DUST MANAGEMENT PLAN AS PER COPG CLEAN AIR BYLAW 8622. THESE ARE TO BE PROVIDED TO THE ENGINEER AND CITY PRIOR TO CONSTRUCTION.
- 7. IF CLEARING OR GRUBBING OCCURS BETWEEN APRIL 1st AND AUGUST 1st, THE CONTRACTOR SHALL BE RESPONSIBLE FOR A <u>BIRD NESTING STUDY</u>. THE STUDY SHALL BE CONDUCTED BY A QUALIFIED PROFESSIONAL AND SUBMITTED TO THE ENGINEER AND THE COPG PRIOR TO CLEARING AND GRUBBING WORK.
- 8. TRAFFIC CONTROL SHALL CONFORM TO SECTION 01353 OF THE BYLAW #8618.
- 9. TEMPORARY BARRIERS SHALL CONFORM TO SECTION 01560 OF THE BYLAW #8618.
- 10. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ACCESS ROADS TO PREVENT ACCUMULATION OF MUD, DIRT, SAND, GRAVEL OR DEBRIS ON CITY ROADS, CITY LANDS OR PROVINCIAL HIGHWAYS AS PER SECTION 02311 LOT AND SITE GRADING OF THE BYLAW 8618 AND SECTION 4.01 (e) OF THE HIGHWAYS BYLAW 8665.

SITEWORK

- SITEWORK DEMOLITION AND REMOVAL SHALL CONFORM TO SECTION 02225 OF THE BYLAW #8618.
- 2. REMOVAL OF EXISTING ASPHALT PAVEMENT SHALL CONFORM TO SECTION 02226 OF THE BYLAW #8618.
- 3. <u>CLEARING, GRUBBING & STRIPPING</u> SHALL CONFORM TO SECTION 02231 OF THE BYLAW #8618.THE AVERAGE DEPTH OF STRIPPING IS ESTIMATED TO BE 300mm. CONTRACTOR TO TAKE MEASURES TO PREVENT DUST FROM LEAVING THE SITE AS PER CoPG CLEAN AIR BYLAW 8622.
- 4. LOT AND SITE GRADING SHALL CONFORM TO SECTION 02311 OF THE BYLAW #8618. LOT GRADING SHALL BE CONSTRUCTED TO THE DESIGN GRADES AS SHOWN ON DRAWING. ALL LOT FILL IS TO FOLLOW THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT.
- 5. EXCAVATION, TRENCHING, AND BACKFILLING (CoPG DRAWING G5) SHALL CONFORM TO SECTION 02315 OF THE BYLAW #8618.TRENCH BACKFILL FOR ALL WATER, STORM AND SANITARY MAINS AND SERVICES SHALL CONSIST OF TYPE "3" FILL (APPROVED NATIVE MATERIAL), COMPACTED IN 200mm (LOOSE) THICK LIFTS TO 97% STANDARD PROCTOR MAXIMUM DRY DENSITY. THE TOP 1000mm OF SUBGRADE IN ALL UTILITY TRENCHES SHALL BE COMPACTED IN 200mm (LOOSE) LIFTS TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY. CONTRARY TO SECTION 02701 2.4.1 THE PIPE BEDDING AND SURROUND MATERIAL WILL CONFORM TO THE PIPE MANUFACTURERS RECOMMENDATIONS.

6. EXCAVATION AND EMBANKMENT

a) ROADWAY SHALL CONFORM TO SECTION 02317 OF THE BYLAW #8618.ALL EXCAVATED NATIVE MATERIALS WHICH ARE USED FOR EMBANKMENT SHALL BE PLACED IN LIFTS NOT EXCEEDING 200mm IN LOOSE THICKNESS, AND UNIFORMLY COMPACTED TO 97% STANDARD PROCTOR MAXIMUM DRY DENSITY. THE TOP 1000mm OF SUBGRADE SHALL BE COMPACTED IN 200mm (LOOSE) LIFTS TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.

b) ENGINEERED FILL SHALL CONSIST OF SELECT NATIVE MATERIAL. THE LIFTS ARE TO BE PLACED IN LIFTS NOT EXCEEDING 200mm IN LOOSE THICKNESS AND UNIFORMLY COMPACTED TO 98% STANDARD PROCTOR MAXIMUM DRY DENSITY. PRIOR TO PLACEMENT OF ENGINEERED FILL, THE GEOTECHNICAL ENGINEER IS TO INSPECT THE SUBGRADE TO ENSURE IT IS SUITABLE FOR THE PLACEMENT OF FILL. THE WORK SHALL CONFORM TO SECTION 02317 OF THE BYLAW #8618

7. WATER MAINS SHALL CONFORM TO SECTION 02511 OF THE BYLAW #8618.

a) <u>WATER MAIN</u> SHALL BE POLY VINYL CHLORIDE PRESSURE PIPE (PVC) TO AWWA C900 & AWWA C905, PRESSURE CLASS 165 (DR 18). THE WATERMAIN SHALL HAVE 3.0m MINIMUM COVER.

b) <u>WATER SERVICE CONNECTIONS</u> (CoPG DRAWING W2 AND G4) SHALL BE 19mm DIAMETER COPPER TUBING TO ASTM B88M, TYPE K, ANNEALED. WATER SERVICES SHALL MAINTAIN A MINIMUM COVER OF 2.25m. WATER SERVICE CONNECTIONS SHALL BE INSTALLED WITH A DOUBLE STAINLESS STEEL BRONZE STRAP TAPPING SADDLE AT THE MAIN LINE COMPLETE WITH CORPORATION STOP AND CURB STOP. THE WATER SERVICE SHALL INCLUDE A No. 2 INSULATED COPPER THAW WIRE AS PER COPG DRAWING No. W2. ALL WATER SERVICE CONNECTIONS SHALL EXTEND 3.0m INSIDE THE PROPERTY LINE AND THE LOCATION SHALL BE MARKED WITH A 50mmX100mm WOOD MARKER STAKE PAINTED BLUE.

c) THRUST BLOCKS (CoPG DRAWING W1) SHALL BE CONSTRUCTED AS PER SECTION 02511 AND SECTION 03300 OF THE BYLAW #8618. REFER TO DRAWING C201 TO DRAWING C204 FOR THRUST BLOCK DIMENSIONS.

d) <u>FIRE HYDRANTS</u> (COPG DRAWING W5) SHALL BE CONSTRUCTED AS PER SECTION 02511 OF THE BYLAW #8618.THE HYDRANT SHALL BE SET A MINIMUM OF 150mm ABOVE FINISHED GROUND.

e) GATE VALVES (COPG DRAWING W3) SHALL BE CONSTRUCTED AS PER SECTION 02511 OF THE BYLAW #8618.

f) BUTTERFLY VALVES (COPG DRAWING W4) SHALL BE CONSTRUCTED AS PER SECTION 02511 OF THE BYLAW #8618.

g) BLOW OFFS (COPG DRAWING W8) SHALL BE CONSTRUCTED AS PER SECTION 02511 OF THE BYLAW #8618.

h) IF THE WATERMAIN INVERT AT THE CROSSING OF A SANITARY OR STORM SEWER IS NOT 0.5m CLEAR ABOVE THE OBVERT OF THE SANITARY OR STORM SEWER THEN ALL JOINTS WITHIN 3.0m OF THE CROSSING ARE TO BE WRAPPED WITH HEAT SHRINK PLASTIC OR PACKED WITH COMPOUND AND WRAPPED WITH PETROLATUM TAPE IN ACCORDANCE WITH THE LATEST VERSION OF THE AWWAS STANDARDS C217, C214, OR C209, REFER TO DETAIL BELOW.

g) PRESSURE TESTING OF THE WATERMAIN SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 02511 OF THE BYLAW #8618, HYDROSTATIC AND LEAKAGE TESTING SHALL CONFORM TO ANSI/AWWA C605 STANDARDS. APPLY A LEAKAGE TEST PRESSURE OF 1.5 TIMES DESIGN WORKING PRESSURE OR 1035 Kpa WHICHEVER IS HIGHER FOR 2 HOURS. ALL TESTING SHALL BE WITNESSED BY THE ENGINEER.

J) CHLORINATION OF THE WATERMAIN SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 02511 OF THE BYLAW #8618. AN INITIAL CHLORINE RESIDUAL OF 50ppm IS REQUIRED THROUGHOUT THE ENTIRE WATERMAIN SYSTEM.

AFTER 24 HOURS, A CHLORINE RESIDUAL OF 10ppm MUST BE PRESENT IN THE TEST SECTION.

K) FLUSHING OF THE WATERMAIN SHALL BE CONDUCTED PRIOR TO BACTERIOLOGICAL TESTING. THE CONTRACTOR IS TO OBTAIN APPROVAL FROM THE COPE PRIOR TO DISCHARGING CHLORINE SOLUTION INTO SANITARY MAINS.

I) THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING BACTERIOLOGICAL TESTS ON THE WATERMAIN.

BACTERIOLOGICAL TESTS SHALL BE TAKEN DAILY FOR A MINIMUM OF TWO DAYS. BACTERIOLOGICAL TESTS SHALL BE PERFORMED BY AN ACCREDITED LABORATORY APPROVED BY THE NORTHERN HEALTH AUTHORITY. ALL TESTING SHALL BE WITNESSED BY THE ENGINEER.

m) PRIOR TO CONNECTING THE NEW WATERMAIN TO THE EXISTING CITY WATERMAIN SYSTEM, THE WATERMAIN MUST BE PRESSURE TESTED, CHLORINATED, FLUSHED, AND BACTERIOLOGICAL TESTS CONDUCTED. IF THE CONTRACTOR WISHES TO UTILIZE CITY WATER TO PRESSURE TEST, CHLORINATE, AND FLUSH, THE CONTRACTOR MUST INSTALL A TEMPORARY BACKFLOW PREVENTOR IN ACCORDANCE WITH THE COPG DRAWING W10. THE CONTRACTOR IS TO PAY ALL CITY OF PRINCE GEORGE COSTS FOR THE INSTALLATION OF THE COPG'S PORTION OF THE CONNECTION WORK.

8. SANITARY SEWER GRAVITY MAINS SHALL CONFORM TO SECTION 02530 OF THE BYLAW #8618.

a) SANITARY SEWERMAIN SHALL BE 200mm or 150mm DIAMETER TYPE PSM POLY VINYL CHLORIDE (PVC) TO ASTM D3034, CAN/CSA-B182.2 STANDARDS WITH A MINIMUM SDR 35 SPECIFICATION. THE SANITARY SEWERMAIN SHALL HAVE A MINIMUM OF 2.25m COVER.

b) <u>SANITARY SERVICES</u>. ALL SANITARY SERVICE CONNECTIONS SHALL BE INSTALLED AS PER SECTION 02530 OF THE BYLAW#8618. (COPG DRAWING S10 AND G4) SHALL BE 100mm DIAMETER TYPE PSM POLY VINYL CHLORIDE (PVC, WHITE IN COLOR) TO CAN/CSA-B182.2 STANDARDS WITH A MINIMUM SDR 28 SPECIFICATION. ALL SANITARY SERVICE CONNECTIONS SHALL BE INSTALLED AS PER SECTION 02530 OF THE BYLAW #7652. A MINIMUM GRADE OF 2.0% AND 2.0m COVER SHALL BE MAINTAINED FROM THE MAINLINE TO 3.0m INSIDE THE PROPERTY LINE. ALL CONNECTIONS TO EXISTING MAIN SHALL BE MADE WITH A STANDARD TEE OR WYE FITTING OR APPROVED SADDLE. ALL SERVICE MAIN JOINTS ARE TO BE WRAPPED WITH PETROLATUM TAPE. ALL SERVICES SHALL BE CAPPED AT THE UPSTREAM END AND MARKED WITH A 50mmX100mm TREATED MARKER STAKE PAINTED WHITE AND MARKED WITH THE BLOCK LETTER 'S'. THE DEPTH FROM INVERT TO A REFERENCE LINE ON THE STAKE SHALL BE MARKED IN METRES TO 2 DECIMAL PLACES. THE SERVICE SHALL INCLUDE A CROWL C30 CAST IRON SERVICE CLEANOUT CAP.

c) PERFORM <u>AIR TESTING</u> ON ALL SANITARY MAINS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND TO BYLAW 8618. PERFORM TESTS IN THE PRESENCE OF ENGINEER. NOTIFY Copg 24 HOURS IN ADVANCE OF PROPOSED TESTS.

d) PERFORM <u>CLOSED CIRCUIT TELEVISION INSPECTIONS</u> (CCTV) OF INSTALLED SANITARY SEWERS BY CCTV CAMERA AND RECORDING DEVICES IN ACCORDANCE WITH WRC STANDARDS.

9. STORM SEWER GRAVITY MAINS SHALL CONFORM TO SECTION 02630 OF THE BYLAW #8618

a) <u>STORM SEWERMAIN</u> SHALL BE TYPE PSM POLY VINYL CHLORIDE (PVC) TO ASTM D3034, CAN/CSA-B182.2 STANDARDS WITH A MINIMUM SDR 35 SPECIFICATION. THE STORM SEWER MAINS SHALL HAVE A MINIMUM 2.25m COVER.

b) STORM SERVICES (COPG DRAWING S10 AND G4) SHALL BE 100mm DIAMETER TYPE PSM POLY VINYL CHLORIDE (PVC, NOT WHITE IN COLOR) TO CAN/CSA-B182.2 STANDARDS WITH A MINIMUM SDR 35 SPECIFICATION. ALL STORM SERVICE CONNECTIONS SHALL BE INSTALLED AS PER SECTION 02630 OF THE BYLAW #7652. A MINIMUM GRADE OF 2.0% AND 2.0m COVER SHALL BE MAINTAINED FROM THE MAINLINE TO 3.0m INSIDE THE PROPERTY LINE. ALL CONNECTIONS TO EXISTING MAIN SHALL BE MADE WITH A STANDARD TEE OR WYE FITTING OR APPROVED SADDLE. ALL SERVICE MAIN JOINTS ARE TO BE WRAPPED WITH PETROLATUM TAPE. ALL SERVICES SHALL BE CAPPED AT THE UPSTREAM END AND MARKED WITH A 50mmX100mm TREATED MARKER STAKE PAINTED GREEN AND MARKED WITH THE BLOCK LETTER 'D'. THE DEPTH FROM THE INVERT TO A REFERENCE LINE ON THE STAKE SHALL BE MARKED IN METRES TO 2 DECIMAL PLACES.

c) PERFORM <u>CLOSED CIRCUIT TELEVISION INSPECTIONS</u> (CCTV) OF INSTALLED STORM SEWERS BY CCTV CAMERA AND RECORDING DEVICES IN ACCORDANCE WITH WRC STANDARDS.

10. STORM WATER EXFILTRATION GALLERY - THE CONTRACTOR IS TO EXCAVATE A TEST HOLE IN THE LOCATION OF THE PROPOSED EXFILTRATION GALLERY TO THE DESIGN INVERT ELEVATIONS. THE OWNERS GEOTECHNICAL ENGINEER WILL THEN CONDUCT AN INFILTRATION RATE TEST TO CONFIRM THE DESIGN ASSUMPTIONS. THE CONTRACTOR MUST ALLOW A PERIOD OF SEVEN (7) DAYS FOR THE GEOTECHNICAL ENGINEER TO PREPARE THEIR REPORT PRIOR TO COMMENCING WITH THE EXCAVATION OF THE EXFILTRATION GALLERY.

11. MANHOLES, CATCHBASINS, AND VALVE BOXES SHALL CONFORM TO SECTION 02631 OF THE BYLAW #8618.

a) <u>PRECAST MANHOLE</u> (CoPG DRAWING S1 AND S4) UNITS SHALL CONFORM TO ASTM C478M, CIRCULAR, COMPLETE WITH LADDER RUNGS. MANHOLES SHALL BE 1050mm DIAMETER.

b) MANHOLE LIDS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED TO WITHSTAND H20 LOADING.
c) FRAMES AND COVERS SHALL BE DOBNEY C17 LID OR APPROVED EQUAL TO DIMENSIONS AS INDICATED ON DETAIL DRAWINGS.

d) <u>CATCH BASIN MANHOLE</u> SHALL BE DOBNEY C-39 OR APPROVED EQUAL TO DIMENSIONS AS INDICATED ON DETAIL DRAWINGS.

e) PRECAST CATCH BASIN (COPG DRAWING S7) SECTIONS SHALL CONFORM TO ASTM C139.

f) CATCHBASIN LEADS SHALL BE TYPE PSM POLY VINYL CHLORIDE (PVC) TO ASTM D3034, CAN/CSA-B182.2

STANDARDS WITH A MINIMUM SDR 35 SPECIFICATION. THE LEAD DIAMETER SHALL BE 200mm FOR SINGLE

CATCHBASINS AND 250mm FOR DOUBLE CATCHBASINS. THE MINIMUM GRADE ON CATCHBASIN LEADS IS 1.0%.

g) CATCHBASIN GRATING AND FRAME SHALL BE DOBNEY B-24 FRAME TYPE 'D' WITH DOBNEY B-23 GRATE.

h) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE THE FINISHED RIM ELEVATION OF ALL SEWER MANHOLES AND VALVE BOXES ARE SET 8mm TO 15mm BELOW FINISHED ASPHALT GRADE.

12. ROAD SUBGRADE SHALL CONFORM TO SECTION 02317 OF THE BYLAW #8618. FOLLOWING THE INSTALLATION OF ALL UNDER-GROUND UTILITIES AND SERVICE CONNECTIONS, THE TOP 1000mm OF SUBGRADE IS TO BE COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY. THE ENGINEER MAY ACCEPT SATISFACTORY PROOF ROLLING AS EVIDENCE OF ACCEPTABLE COMPACTION OF UNDISTURBED NATIVE SUBGRADE. DO NOT PLACE GRANULAR SUB-BASE UNTIL THE SUBGRADE IS INSPECTED AND APPROVED BY THE ENGINEER.

13. <u>GRANULAR SUBBASE</u> SHALL CONFORM TO SECTION 02723 OF THE BYLAW #8618. THE 400mm THICK LAYER OF 75mm MINUS GRANULAR SUBBASE MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 200mm MEASURED IN LOOSE THICKNESS AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.

14. GRANULAR BASE COURSE SHALL CONFORM TO SECTION 02721 OF THE BYLAW #8618. THE 225mm THICK LAYER OF 19mm MINUS GRANULAR BASE COURSE MATERIAL SHALL BE COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.

15. HOT-MIX ASPHALT CONCRETE PAVING SHALL CONFORM TO SECTION 02741 OF THE BYLAW #8618. THE ASPHALT SURFACE SHALL CONSIST OF A MINIMUM THICKNESS OF 65mm OF MIX 'C' INSTALLED IN ONE LIFT. THE CONTRACTOR SHALL SUBMIT THE ASPHALT CONCRETE MIX DESIGN AND TRIAL MIX TEST RESULTS TO THE ENGINEER FOR REVIEW AT LEAST TWO WEEKS PRIOR TO COMMENCING WORK.

16. CONCRETE SIDE WALKS, CURBS, AND GUTTERS (CoPG DRAWINGS C2,C4,C5,C6, AND C8) SHALL CONFORM TO SECTION 02770 OF THE BYLAW #8618. THE CONTRACTOR SHALL SUBMIT THE CONCRETE MIX DESIGN AND TRIAL MIX TEST RESULTS TO THE ENGINEER FOR REVIEW AT LEAST TWO WEEKS PRIOR TO COMMENCING WORK.

17. <u>UNDERGROUND POWER AND COMMUNICATION CABLE DUCTS</u> SHALL CONFORM TO SECTION 02582 OF THE BYLAW #8618. UTILITY LOCATION AND INSTALLATION SHALL BE AS PER ELECTRICAL ENGINEERING DESIGN DRAWINGS, UTILITY COMPANY SPECIFICATIONS, AND MANUFACTURES INSTRUCTIONS. PRIOR TO THE CONSTRUCTION OF HYDRO DUCTS, A PRE-JOB MEETING WITH BC HYDRO IS REQUIRED.

18. <u>CULVERTS</u> SHALL CONFORM TO SECTION 02641 OF THE BYLAW #8618. CULVERTS SHALL BE CORRUGATED STEEL PIPE (2.0 wt.) TO CAN3-G401.

19. <u>RIP RAP ROCK</u> SHALL CONFORM TO SECTION 31 37 10 OF THE MMCD AND SHALL BE HARD DURABLE ANGULAR QUARRY ROCK OF A QUALITY THAT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR THE ATMOSPHERE. THE GRADATION OF THE ROCK SIZES (MASS IN KG) IN EACH CLASS OF RIP-RAP SHALL BE AS SPECIFIED BY MoT SPECIFICATIONS.

20. $\underline{\mathsf{DRAIN}}$ ROCK SHALL CONFORM TO SECTION 02701 OF THE BYLAW #8618. DRAIN ROCK TO BE DOUBLE WASHED ROUND STONE WITH THE GRADATION:

SIEVE SIZE (mm) | PERCENT PASSING

25	100
19	0-100
9.5	0-5
4.75	0

21. GEOTEXTILE SHALL CONFORM TO SECTION 02072 OF THE BYLAW #8618.

a) <u>NON-WOVEN GEOTEXTILE</u> MINIMUM AVERAGE ROLL VALUES (MARV) MUST MEET OR EXCEED: GRAB TEXTILE STRENGTH (ASTM D4632) GREATER THAN 900N, GRAB TEXTILE ELONGATION (ASTM D4632) 50%, MULLEN BURST (ASTMD3786) GREATER THAN 2400kPa, PUNCTURE (ASTM D4833) GREATER THAN 350N, TRAPEZOID TEAR (ASTM D4533) GREATER THAN 320N, AND APPARENT OPENING SIZE (ASTM D4751) 0.18mm +/- 0.05mm.

22. <u>SIGNS & PAVEMENT MARKINGS</u> SHALL CONFORM TO SECTION 02761 OF THE BYLAW #8618 AND TO THE MINISTRY OF TRANSPORTATION MANUAL OF STANDARD TRAFFIC SIGNS AND PAVEMENT MARKINGS. ALL SIGNS SHALL BE DIAMOND GRADE.

23. <u>TOP SOIL</u> - SHALL CONFORM TO SECTION 02911 OF THE BYLAW #8618, ALL BOULEVARD AND DISTURBED AREAS ARE TO BE FINISHED WITH 100mm THICK TOP SOIL.

24. HYDRO-SEED - THE CONTRACTOR SHALL HYDRO-SEED ALL BOULEVARD AND DISTURBED AREAS. THE FOLLOWING SPECIFICATIONS SHALL BE USED FOR THE HYDRO-SEEDING. 25% PERENNIAL RYE - KEYSTONE II, 25% KENTUCKY BLUE - SHAMROCK, 25% KENTUCKY BLUE - QUANTUM LEAP, 25% KENTUCKY BLUE - RUGBY II. HYDRO-SEEDING MATERIALS SHALL INCLUDE: EVERGRO QUICK START FERTILIZER 13-26-6 AND EVERGRO TOTAL 23-3-23; GRASS SEED AS SPECIFIED ABOVE; HYDRO-SEEDING MULCH SPECIFICALLY DESIGNED FOR HYDRAULIC SEEDING AND DYED GREEN; M-BINDER TACKIFIER OR APPROVED EQUIVALENT.

25. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT WORK SAFE B.C. REGULATIONS

L& M

1210 FOURTH AVENUE PRINCE GEORGE, B.C. V2L 3J4 TEL. (250) 562-1977 FAX (250) 562-1967 LEGEND



1 21/02/17 ISSUED FOR REVIEW

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SIX STAR DEVELOPMENTS LTD.
FOREST PARK
30 LOT STRATA DEVELOPMENT
PHASE 1
CONSTRUCTION NOTES

CONSULTANTS PROJECT No.

1571-01

C301

SHEET NO. | REV. No. | 1 OF 4 4

ISSUED FOR CONSTRUCTION