STANDARD ENGINEERING DEPARTMENT CONDITIONS OF APPROVAL

ENCROACHMENT PERMIT: ANY IMPROVEMENTS, PROPOSED OR REQUIRED, WITHIN THE PUBLIC WAY OR ANY EXISTING PUBLIC SEWER OR WATER EASEMENTS SHALL BE REVIEWED AND APPROVED WITH AN ENCROACHMENT PERMIT APPLICATION. ONLY CONSTRUCTION PLANS SUBMITTED WITH THE ENCROACHMENT PERMIT APPLICATION ARE FINAL PLANS AND WILL BE APPROVED FOR CONSTRUCTION. SUBMIT PLANS SHOWING ALL WORK IN THE PUBLIC RIGHT OF WAY, OR IN PUBLIC EASEMENTS, INCLUDING ALL WORK ON PUBLIC UTILITIES (WATER METER BOXES, SEWER LATERAL CLEANOUTS, BACKFLOW DEVICES, ETC.) TO THE RESILIENT PERMIT OFFICE AT 100 SANTA ROSA AVE, ROOM 6. NO WORK SHALL BE PERFORMED IN THE PUBLIC RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT.

- 2. WATER METER: WATER METERS MAY NEED TO BE SIZED TO A 3/4" METER BASED UPON WHAT THE FIRE DEPARTMENT APPROVES TO MEET THE FIRE SPRINKLER REQUIREMENTS. FEES WILL BE DUE FOR A LARGER METER.
- WATER LATERAL: THE WATER LATERAL MUST BE SIZED TO MEET DOMESTIC, IRRIGATION, AND FIRE SPRINKLER DEMAND. IF THE WATER SERVICE MUST BE UPSIZED, THE EXISTING SERVICE MUST BE ABANDONED AT THE MAIN PER CURRENT CITY STANDARDS. IF THE EXISTING WATER SERVICE OR METER BOX HAS BEEN DAMAGED, THEY WILL NEED TO BE REPAIRED/REPLACED. ANY OF THIS WORK WILL REQUIRE AN ENCROACHMENT PERMIT.
- 4. BACKFLOW: FIRE SPRINKLERS ARE REQUIRED, SO A BACKFLOW DEVICE WILL BE REQUIRED PER CURRENT CITY STANDARDS. AN IN-LINE CHECK BACKFLOW PER STD. 875F MAY BE INSTALLED IF THE PROPERTY HAS AN AMI METER INSTALLED (AN AMI WATER METER WILL NEED TO BE INSTALLED FOR THIS OPTION TO BE ALLOWED, CONTACT WATER ENGINEERING SERVICES TO SEE WHEN AMI WILL BE AVAILABLE TO THIS LOCATION). IF AMI IS NOT AVAILABLE, A DOUBLE CHECK BACKFLOW DEVICE PER STD. 875 WILL BE REQUIRED. EITHER DEVICE WILL NEED TO BE INSTALLED UNDER AN ENCROACHMENT PERMIT.
- 5. SEWER LATERAL: A CLEANOUT MUST BE INSTALLED PER CITY STANDARD 513 IF NONE EXISTS. IF ONE NEEDS TO BE INSTALLED OR IF THE SEWER LATERAL NEEDS TO BE REPLACED, AN ENCROACHMENT PERMIT WILL BE REQUIRED. PROVIDE THE BUILDING INSPECTOR WITH A REPORT INDICATING THAT THE SEWER LATERAL IS IN WORKING CONDITION PRIOR TO THE WATER SERVICE BEING RE-INSTATED.
- FEES: FEES TO UPSIZE THE EXISTING WATER METER WILL BE DUE. FEES CANNOT BE DETERMINED UNTIL IT IS KNOWN WHAT IS BEING REQUIRED BY FIRE. IF A 3/4" METER WILL BE REQUIRED, \$10 WILL BE DUE PRIOR TO THE LARGER METER BEING INSTALLED.

GENERAL NOTES

- 1. DRAINAGE AROUND PERIMETER OF HOUSE AND AT UNDERFLOOR AREAS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. TOPOGRAPHY AND BOUNDARY INFORMATION PROVIDED BY DUNDAS GEOMATICS, INC.
- 3. CONTRACTOR SHALL COORDINATE TRENCH AND CONNECTION LOCATIONS OF COMMUNICATION LINES (TELEPHONE, CABLE) WITH UTILITY PROVIDERS.
- 4. FINISH GRADES SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING, OR TIE INTO PUBLIC STORM DRAIN SYSTEM. ALL DOWNSPOUTS TO DRAIN TO SPLASHBLOCKS DRAINAGE AT LEAST 24" FROM FOUNDATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MANAGEMENT OF EROSION CONTROL MEASURES INCLUDING FIBER ROLLS, SILT FENCING AND ANY OTHER MEASURES DEEMED NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE. THE CONTRACTOR IS ADVISED TO REFERENCE THE CALIFORNIA STORMWATER QUALITY ASSOCIATION CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) MANUAL.
- CONTRACTOR SHALL ENSURE SOIL IS NOT TRACKED INTO THE ROADWAY. IF FUGITIVE DUST/SOIL IS TRACKED ONTO THE ROADWAY, CONTRACTOR SHALL SWEEP AND REMOVE IT
- CONTRACTOR SHALL ENSURE THAT THE SITE IS GRADED SO THAT STORM RUNOFF LEAVING THE SITE CAN POSITIVELY DRAIN TO THE STORM SYSTEM OR GUTTER.
- CONTRACTOR SHALL ENSURE DRIVEWAY IS IN GOOD CONDITION AND SHALL REPAIR AS NECESSARY TO MEET CITY OF SANTA ROSA STANDARDS.
- 10. ALL ROOF DOWNSPOUTS SHALL BE CONNECTED TO STORM DRAIN SYSTEM OR TO THE SIDEWALK DRAINS. 11. FINISH GRADE AROUND THE STRUCTURE SHALL SLOPE AWAY FROM THE FOUNDATION A MINIMUM OF 5% (2% AT IMPERVIOUS SURFACES).
- 12. EASEMENTS SHOWN ARE PER SUBDIVISION MAP BOOK 489, PGS. 38-46 AND ARE SHOWN WITHOUT A CURRENT TITLE REPORT. EASEMENTS SHOWN DO NOT CONSTITUTE A FULL AND COMPLETE INVESTIGATION AS TO ALL EASEMENTS OF RECORD.
- 13. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS, CONDITIONS AND CONNECTION POINTS PRIOR TO CONSTRUCTION. IF CONDITIONS OF EXISTING UTILITIES ARE INADEQUATE OR DO NOT MEET UTILITY PROVIDERS REQUIREMENTS AND CODES. CONTRACTOR SHALL REMOVE AND REPLACE AS NEEDED.

EROSION CONTROL NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MANAGEMENT OF EROSION CONTROL MEASURES INCLUDING FIBER ROLLS, SILT FENCING AND ANY OTHER MEASURES DEEMED NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE. THE CONTRACTOR IS ADVISED TO REFERENCE THE CALIFORNIA STORMWATER QUALITY ASSOCIATION CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) MANUAL.
- CONTRACTOR SHALL ENSURE SOIL IS NOT TRACKED INTO THE ROADWAY. IF FUGITIVE DUST/SOIL IS TRACKED ONTO THE ROADWAY, CONTRACTOR SHALL SWEEP AND REMOVE IT.
- 3. ALL DISTURBED SOIL / GRADING AREAS NOT RECEIVING HARDSCAPE MATERIALS SUCH AS ASPHALT, CONCRETE, ROCK, OR GRAVEL SHALL BE REVEGETATED.



CONTRACTOR SHALL CONTACT B11 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO Know what's below. BEGINNING CONSTRUCTION







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FILL AND BACKFILL:

- 1. FILL MATERIAL SHALL BE FREE FROM DEBRIS, VEGETATION, AND OTHER FOREIGN SUBSTANCES.
- 2. BACKFILL TRENCHES SHALL BE COMPACTED TO 90% RELATIVE COMPACTION PER ASTM D1557 TO WITHIN 12" OF FINISHED GRADE. THE TOP 12" SHALL BE LANDSCAPE FILL (IN NON-STRUCTURAL AREAS).
- BACKFILL AT PIPE TRENCHES SHALL BE COMPACTED ON BOTH SIDES OF PIPE IN 6" LIFTS.
- 4. TRENCH BACKFILL PLACED IN LOCATIONS UNDER JURISDICTION OF PUBLIC UTILITIES OR LOCAL PUBLIC WORK AGENCIES SHALL BE PLACED IN ACCORDANCE WITH THE RESPECTIVE AGENCY SPECIFICATIONS. IF SUCH SPECIFICATIONS EXCEED REQUIREMENTS NOTED ABOVE.
- 5. WATERPROOF EXTERIOR FACES OF ALL FOUNDATION WALLS ADJACENT TO USABLE SPACES. WATERPROOFING OF ALL FOUNDATION AND RETAINING WALLS TO BE THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR. ALL BACKFILL AGAINST FOUNDATION WALLS MUST BE COMPACTED TO 90% RELATIVE COMPACTION PER ASTM D1557.
- FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 6 IN. IN COMPACTED THICKNESS, MOISTENED OR DRIED AS NECESSARY TO NEAR OPTIMUM MOISTURE CONTENT AND COMPACTED BY AN APPROVED METHOD. FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557 (MODIFIED TO 3 LAYERS) OR SIMILAR APPROVED METHODS. SOME FILL AREAS MAY REQUIRE COMPACTION TO A GREATER DENSITY AS CALLED FOR IN THE CONSTRUCTION DOCUMENTS.

EARTHWORK AND GRADING

- 1. NO CLASSIFICATION OF MATERIAL TO BE EXCAVATED IS MADE WITH THESE PLANS AND SPECIFICATIONS. EXCAVATION SHALL INCLUDE THE REMOVAL AND SUBSEQUENT HANDLING OF ALL EARTH. GRAVEL. ROCK. OR OTHER MATERIAL ENCOUNTERED REGARDLESS OF THE TYPE, CHARACTER, COMPOSITION, OR CONDITION OF THE MATERIAL IN ACCORDANCE WITH THESE NOTES AND APPLICABLE LAWS AND CODES.
- 2. GRADING FINISH GRADES AND EXISTING OR NATURAL GRADES ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL DO ALL GRADING, FILLING-IN OR EXCAVATING AS REQUIRED TO COMPLETELY GRADE THE SITE TO LINES AND GRADES SHOWN, AND TO PROVIDE FOR THE INDICATED DRAINAGE. WHERE FINISH GRADE CORRESPONDS PRACTICALLY WITH EXISTING GRADE, THE GROUND SHALL BE WORKED UP AND GRADED OFF EVENLY WITH EXISTING GRADE. THE TOP SOIL SHALL BE STRIPPED AND FREE OF ORGANICS IF PROPOSED FOR USE AS ENGINEERED FILL. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR TOP LAYERS OF FILL FOR LANDSCAPING. THE GRADING OPERATION SHALL GENERALLY CONSIST OF MOVING AND TRANSPORTING MATERIALS WITHIN THE AREA; HOWEVER, THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL FILL MATERIAL IF NECESSARY TO COMPLETE THE SITE GRADING TO THE ELEVATIONS SHOWN, OR TO OFFHAUL ANY EXCESS MATERIAL WHICH MAY RESULT.

EARTHWORK QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES ARE GIVEN FOR INFORMATION ONLY.

TOTAL CUT: TOTAL FILL: NET:

4 C.Y. <u>218 C.Y.</u> 214 C.Y. IMPORT

ASSUMPTIONS: FILL FACTOR = 1.0CUT FACTOR = 1.0

CLEARING LOSS = 3 INCHES

UTILITY TRENCH / INFILTRATION SPOILS: NOT INCLUDED IN THIS CALCULATION.

- 4. THE TOPOGRAPHY FROM WHICH THE ABOVE QUANTITIES WERE COMPUTED WAS OBTAINED FROM A FIELD TOPOGRAPHIC SURVEY, RESULTING IN A 2' CONTOUR INTERVAL MAP THAT WAS PROVIDED FROM CINQUNI & PASSARINO, INC.
- 5. THE CONTRACTOR IS ADVISED TO MAKE AN INDEPENDENT EVALUATION OF THE EARTHWORK QUANTITIES INVOLVED. THE OWNER AND MILLENNIUM PLANNING AND ENGINEERING DO NOT, EXPRESSLY OR BY IMPLICATION, AGREE THAT THE ACTUAL EARTHWORK QUANTITIES WILL CORRESPOND TO THOSE GIVEN ABOVE. EARTHWORK QUANTITIES MAY FLUCTUATE DEPENDING UPON SIZE AND AMOUNT OF ROCK ENCOUNTERED. ANY EXCESS OR UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE OWNER'S PROPERTY AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
- 6. THE IMPORTATION OF SOIL MATERIAL FROM OFF-SITE SHALL ONLY BE HAULED TO THE PROJECT SITE DURING NON-PEAK HOURS (9 AM TO 4 PM), MONDAY THROUGH FRIDAY. THE IMPORTATION OF ACTIVITIES SHALL MEET ALL IDENTIFIED NOISE THRESHOLDS AND DUST CONTROL MEASURES SHALL IMPLEMENTED AT THE PROJECT SITE.

BUILDING SETBACKS

SEE MAP BOOK 489, PG. 46

SHEET INDEX

- C1.0 COVER SHEET AND NOTES
- C2.0 SITE AND GRADING PLAN C3.0 DETAILS



DATE SIGNED: 06-11-2020

CONSTRUCTION NOTES

- 1 INSTALL FIBER ROLLS (DETAIL 1, SHEET C2.0).
- 2 INSTALL 6" TRENCH DRAIN.
- (3) CONSTRUCT 4" THICK P.C.C. OVER 2" SAND (CITY OF SANTA ROSA DETAIL 234).
- (4) INSTALL 4" PVC SDR 35 SEWER LATERAL @ 2% MIN. SLOPE AND CONNECT TO EXISTING 4" SEWER LINE. CONTRACTOR TO COORDINATE CONNECTION TO BUILDING WITH ARCHITECT.
- 5 CONNECT NEW 2" POLYETHYLENE WATER LINE TO EXISTING WATER LINE. CONTRACTOR TO COORDINATE CONNECTION TO BUILDING WITH ARCHITECT.
- 6 EXISTING MYERS "MW SERIES" SEWAGE PUMP. CONTRACTOR TO VERIFY CONDITION AND REPAIR OR REPLACE IF NECESSARY
- (7) INSTALL STORM DRAIN INLET PROTECTION (DETAIL 2, SHEET C2.0).
- (8) INSTALL 5' WIDE X 5' LONG VELOCITY DISSIPATER WITH #2 BACKING.
- 9 FOUNDATIONS DRAINS TO BE CONNECTED TO EXISTING 4" HAND CORE AND DISCHARGE INTO EXISTING CONCRETE SWALE.
- (10) CONSTRUCT 4" THICK P.C.C. OVER 6" AB COMPACTED TO 90% RC, OVER 12" NATIVE SOIL COMPACTED TO 95% RC W/ #4 REBAR @24"O.C. EA. WAY.
- (1) INSTALL 4" PERFORATED DRAIN PIPE @ 1% MIN. SLOPE WRAPPED IN MIRAFI FILTER FABRIC WITH CLEAN DRAIN ROCK (SEE STRUCTURAL PLANS FOR DETAILS). DISCHARGE DRAINS A MINIMUM 20' FROM HOUSE. ROOF DOWNSPOUTS AND SURFACE DRAINS MUST BE MAINTAINED SEPARATE FROM SUBDRAINS AND FOUNDATION DRAINS.

629.0 DI

627.47 DECK

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<u>629.3</u> FG

5% MIN. 20% MAX.

- 630 -

· 620.

608.00FG

<u>19-10BC</u>

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- (12) CONSTRUCT SWALE @ 1% MIN. SLOPE.
- (13) INSTALL KEYSTONE RETAINING WALL (DETAIL 4, SHEET C2.0).
- (14) INSTALL 3" PVC PERFORATED PIPE @ 0.5% MIN. SLOPE.



LEGEND				
	PROPERTY LINE			
	BUILDING SETBACK LINE (B.S.L.)			
	PUBLIC UTILITY EASEMENT (P.U.E.)			
FR	SE-5-FIBER ROLLS			
s	SANITARY SEWER LINE			
w	WATERLINE			
SD SD	STORM DRAIN LINE			
· · · · <	FLOWLINE			
	PROPOSED RETAINING WALL			
	PROPOSED CONCRETE			
_ <u>606.00TOW</u>	TOP OF WALL ELEVATION			
606.00BOW	BOTTOM OF WALL ELEVATION			
_ <u>_606.00FG</u>	FINISH GRADE ELEVATION			
_ <u>606.00C</u>	CONCRETE ELEVATION			



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				SANTA ROSA
DATE				
DESCRIPTION	GRADING REVISIONS			
REV.	1			
DESIGNED: DEC	DRAWN: DEC	PROJ. NO: 18-0803	DWG: SEE DAYSTAMP	DATE: JUNE, 2020
SHEET NUMBER				
C2.0				



DATE SIGNED: 06-11-2020





-FINISHED GRADE

FILTER BERMS FLOW – DRAIN INLET FLOW

2

NOTE: THE MAXIMUM EXPOSED HEIGHT OF RETAINING WALLS SHALL BE 4 FEET. RETAINING WALLS MAY BE "STEPPED", WITH A MINIMUM SEPARATION OF 5' BETWEEN WALLS. MAXIMUM HEIGHT MAY BE EXCEEDED IN AREAS OF STEEPER SLOPES TO REDUCE GRADING AND SAVE TREES.

8" MIN. LOW PERMEABLE SOII —

^>/^>/^>/^>/^>//>//>/// (RETAINED SOIL

12" WIDE 3/4" CRUSHED ROCK OR STONE

APPROXIMATE LIMITS OF EXCAVATION 3" PVC PERFORATED PIPE__ SEE SITE PLAN FOR LOCATION









DATE SIGNED: 06-11-2020

RETAINING KEYSTONE WALL DETAIL

NTS



STORM DRAIN INLET PROTECTION DETAIL NTS



