

SOILS MAP
LAKEWATCH DRIVE (EXTENSION)
SECOND WATCH DRIVE
WATERLINE 900
WATERLINE 1000
WATERLINE 1100
GRAVITY SEWER 2
COMMERCIAL LOT C-27

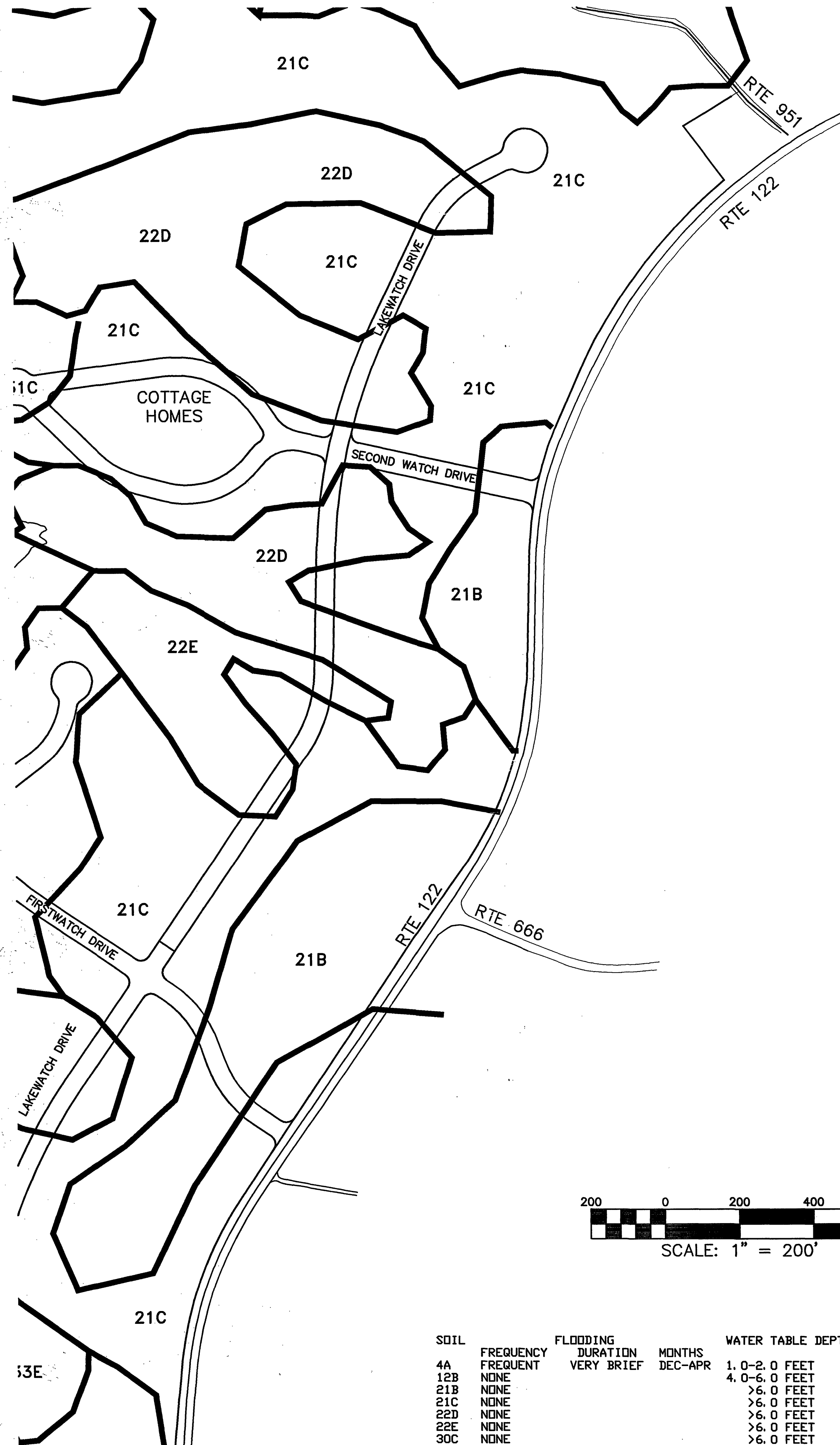
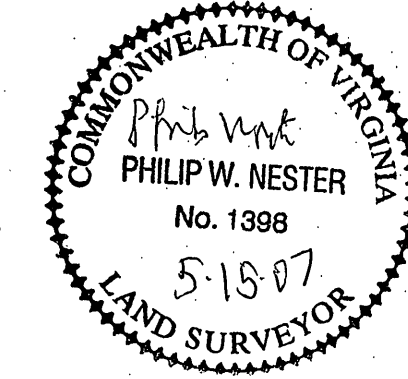
AT
LAKEWATCH PLANTATION

PLANNED COMMERCIAL DEVELOPMENT
DEVELOPED BY: LAKE WATCH, L.L.C.
GILLS CREEK MAGISTERIAL DISTRICT
FRANKLIN COUNTY, VIRGINIA

JOB NO 21-04

MAY 15, 2007

SOILS MAP
SHEET 3 OF 32



- 4A: CODDORUS LOAM ON 0% TO 3% SLOPES SOIL MAP UNIT IS CLASSIFIED "NOT HIGHLY ERODIBLE" AND "HYDRIC". A TYPICAL SURFACE LAYER IS 6 INCHES THICK BROWN LOAM WITH YELLOWISH RED MOTTLES. THE SUBSOIL, 6 TO 18 INCHES, IS PALE BROWN LOAM, 18 TO 26 INCHES, IS LIGHT BROWNISH GRAY LOAM, 26 TO 34 INCHES, IS GRAYISH BROWN CLAY LOAM AND ALL CONTAIN MANY STRONG BROWN MOTTLES EXCEPT FOR THE LOWEST LAYER WHICH HAS FEW STRONG BROWN MOTTLES. THE SUBSTRATUM, 54 TO 62 INCHES, IS DARK GRAY LOAMY SAND. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER ARE COVER CROPS, MINIMUM TILLAGE PLANTING AND CROP ROTATIONS THAT INCLUDE GRASSES, LEGUMES AND SMALL GRAINS.
- 12B: THURMONT FINE SANDY LOAM ON 2% TO 7% SLOPES SOIL MAP UNIT IS CLASSIFIED "POTENTIALLY HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 11 INCHES YELLOWISH BROWN GRAVELLY FINE SANDY LOAM. THE SUBSOIL, 11 TO 19 INCHES, IS YELLOWISH BROWN CLAY LOAM, 19 TO 46 INCHES, YELLOWISH BROWN CLAY LOAM WITH COMMON RED MOTTLES, 46 TO 59 INCHES, STRONG BROWN CLAY LOAM WITH MANY RED AND COMMON REDDISH BROWN MOTTLES, 59 TO 61 INCHES MOTTLED REDDISH BROWN, STRONG BROWN, BROWNISH YELLOW, AND WHITE CLAY LOAM. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER ARE COVER CROPS, CONTOUR TILLAGE, NO-TILL PLANTING AND CROP ROTATIONS THAT INCLUDE GRASSES, LEGUMES AND SMALL GRAINS.
- 21B: CLIFFORD FINE SANDY LOAM ON 2% TO 7% SLOPES SOIL MAP UNIT IS CLASSIFIED "POTENTIALLY HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 6 INCHES THICK REDDISH BROWN FINE SANDY LOAM. THE SUBSOIL, 6 TO 23 INCHES, IS RED CLAY WITH COMMON FINE AND MEDIUM MICA, 23 TO 42 INCHES, RED CLAY WITH MANY FINE AND MEDIUM MICA FLAKES, 42 TO 51 INCHES, RED CLAY LOAM WITH MANY FINE AND MEDIUM FLAKES OF MICA. THE SUBSTRATUM, 51 TO 62 INCHES, IS MULTICOLORED LOAM SAPROLITE WITH MANY FINE AND MEDIUM MICA FLAKES. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER ARE COVER CROPS, CONTOUR TILLAGE, NO-TILL PLANTING AND CROP ROTATIONS THAT INCLUDE GRASSES, LEGUMES AND SMALL GRAINS.
- 21C: CLIFFORD FINE SANDY LOAM ON 7% TO 15% SLOPES SOIL MAP UNIT IS CLASSIFIED "POTENTIALLY HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 6 INCHES THICK REDDISH BROWN FINE SANDY LOAM. THE SUBSOIL, 6 TO 23 INCHES, IS RED CLAY WITH COMMON FINE AND MEDIUM MICA, 23 TO 42 INCHES, RED CLAY WITH MANY FINE AND MEDIUM MICA FLAKES, 42 TO 51 INCHES, RED CLAY LOAM WITH MANY FINE AND MEDIUM FLAKES OF MICA. THE SUBSTRATUM, 51 TO 62 INCHES, IS MULTICOLORED LOAM SAPROLITE WITH MANY FINE AND MEDIUM MICA FLAKES. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER INCLUDE NO-TILL PLANTING OF GRASSES AND OTHER GROUND COVER.
- 22D: CLIFFORD FINE SANDY LOAM ON 15% TO 25% SLOPES SOIL MAP UNIT IS CLASSIFIED "HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 7 INCHES THICK BROWN LOAM. THE SUBSOIL, 7 TO 19 INCHES, IS YELLOWISH RED CLAY LOAM WITH COMMON FINE AND MEDIUM MICA, 19 TO 34 INCHES, YELLOWISH RED CLAY LOAM WITH MANY FINE AND MEDIUM MICA FLAKES, AND 34 TO 41 INCHES, YELLOWISH RED LOAM WITH MANY FINE AND MEDIUM FLAKES OF MICA. THE SUBSTRATUM, 41 TO 52 INCHES, IS MULTICOLORED LOAM SAPROLITE WITH MANY FINE AND MEDIUM FLAKES, 53 TO 62 INCHES, MULTICOLORED FINE SANDY LOAM SAPROLITE WITH MANY FINE AND MEDIUM FLAKES. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER INCLUDE NO-TILL PLANTING OF GRASSES AND OTHER GROUND COVER.
- 22E: CLIFFORD FINE SANDY LOAM ON 25% TO 45% SLOPES SOIL MAP UNIT IS CLASSIFIED "HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 7 INCHES THICK BROWN LOAM. THE SUBSOIL, 7 TO 19 INCHES, IS YELLOWISH RED CLAY LOAM WITH COMMON FINE AND MEDIUM MICA, 19 TO 34 INCHES, YELLOWISH RED CLAY LOAM WITH MANY FINE AND MEDIUM MICA FLAKES, AND 34 TO 41 INCHES, YELLOWISH RED LOAM WITH MANY FINE AND MEDIUM FLAKES OF MICA. THE SUBSTRATUM, 41 TO 53 INCHES, IS MULTICOLORED LOAM SAPROLITE WITH MANY FINE AND MEDIUM FLAKES, 53 TO 62 INCHES, MULTICOLORED FINE SANDY LOAM SAPROLITE WITH MANY FINE AND MEDIUM FLAKES. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER INCLUDE NO-TILL PLANTING OF GRASSES AND OTHER GROUND COVER.
- 30C: MINNIEVILLE LOAM ON 7% TO 15% SLOPES SOIL MAP UNIT IS CLASSIFIED "HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 0 TO 8 INCHES THICK REDDISH BROWN LOAM. THE SUBSOIL, 8 TO 11 INCHES, IS REDDISH BROWN CLAY LOAM AND 11 TO 56 INCHES IS DARK RED CLAY. THE SUBSTRATUM, 56 TO 62 INCHES, IS RED CLAY LOAM. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER ARE COVER CROPS, CONTOUR TILLAGE, NO-TILL PLANTING AND CROP ROTATIONS THAT INCLUDE GRASSES, LEGUMES AND SMALL GRAINS.
- 30D: MINNIEVILLE LOAM ON 15% TO 25% SLOPES SOIL MAP UNIT IS CLASSIFIED "HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 0 TO 8 INCHES THICK REDDISH BROWN LOAM. THE SUBSOIL, 8 TO 11 INCHES, IS REDDISH BROWN CLAY LOAM AND 11 TO 56 INCHES IS DARK RED CLAY. THE SUBSTRATUM, 56 TO 62 INCHES, IS RED CLAY LOAM. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER ARE COVER CROPS, CONTOUR TILLAGE, NO-TILL PLANTING AND CROP ROTATIONS THAT INCLUDE GRASSES, LEGUMES AND SMALL GRAINS.
- 31C: DRENDA LOAM ON 7% TO 15% SLOPES SOIL MAP UNIT IS CLASSIFIED "HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 0 TO 6 INCHES THICK BROWN LOAM. THE SUBSOIL, 6 TO 25 INCHES, IS YELLOWISH RED CLAY. THE SUBSTRATUM, 25 TO 51 INCHES, IS MULTICOLORED STRONG BROWN, YELLOWISH BROWN, BLACK, AND GRAYISH BROWN SOFT WEATHERED HORNBLENDE GNEISS SAPROLITE THAT IS LOAM. PRACTICES THAT HELP REDUCE EROSION AND INCREASE ORGANIC MATTER INCLUDE NO-TILL PLANTING OF GRASSES AND OTHER GROUND COVER.
- 33D: SPRIGGS GRAVELLY LOAM ON 15% TO 25% SLOPES (STONY) SOIL MAP UNIT IS CLASSIFIED "HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 0 TO 5 INCHES THICK VERY DARK BROWN GRAVELLY LOAM. THE SUBSOIL, 5 TO 23 INCHES, IS STRONG BROWN GRAVELLY CLAY LOAM. THE SUBSTRATUM, 23 TO 34 INCHES, IS MULTICOLORED WHITE, BLACK, AND LIGHT OLIVE BROWN PARTIALLY WEATHERED HORNBLENDE GNEISS SAPROLITE THAT CRUSHES TO FINE SANDY LOAM, AND 34 INCHES IS HARD HORNBLENDE GNEISS BEDROCK. NOT SUITABLE FOR CULTIVATED CROPS.
- 33E: SPRIGGS GRAVELLY LOAM ON 25% TO 45% SLOPES (STONY) SOIL MAP UNIT IS CLASSIFIED "HIGHLY ERODIBLE" AND "NOT HYDRIC". A TYPICAL SURFACE LAYER IS 0 TO 5 INCHES THICK VERY DARK BROWN GRAVELLY LOAM. THE SUBSOIL, 5 TO 23 INCHES, IS STRONG BROWN GRAVELLY CLAY LOAM. THE SUBSTRATUM, 23 TO 34 INCHES, IS MULTICOLORED WHITE, BLACK AND LIGHT OLIVE BROWN PARTIALLY WEATHERED HORNBLENDE GNEISS SAPROLITE THAT CRUSHES TO FINE SANDY LOAM, AND 34 INCHES IS HARD HORNBLENDE GNEISS BEDROCK.

SOIL	FREQUENCY	FLOODING DURATION	MONTHS	WATER TABLE DEPTH	BEDROCK DEPTH	FROST POTENTIAL	SHRINK/SWELL	DWELLINGS	BASEMENTS	COMMERCIAL	ROADS	ROAD FILL	LAWNS	SOIL
4A	FREQUENT	VERY BRIEF	DEC-APR	1. 0-2. 0 FEET	>60 INCHES	HIGH	LOW	SEVERE; FLOODING	SEVERE; FLOODING	SEVERE; FLOODING	SEVERE; FLOODING/FROST	FAIR; LOW STRENGTH	SEVERE; FLOODING	4A
12B	NONE			4. 0-6. 0 FEET	>60 INCHES	MODERATE	LOW	SLIGHT	MODERATE	MODERATE	MODERATE; FROST	GOOD	SLIGHT	12B
21B	NONE			>6. 0 FEET	>60 INCHES	MODERATE	LOW	MODERATE; SLOPE	MODERATE; SLOPE	MODERATE; SLOPE	MODERATE; LOW STRENGTH	GOOD	SLIGHT	21B
21C	NONE			>6. 0 FEET	>60 INCHES	MODERATE	LOW	MODERATE; SLOPE	MODERATE; SLOPE	MODERATE; SLOPE	MODERATE; LOW STRENGTH	GOOD	MODERATE; SLOPE	21C
22D	NONE			>6. 0 FEET	>60 INCHES	MODERATE	LOW	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	FAIR; SLOPE	SEVERE; SLOPE	22D
22E	NONE			>6. 0 FEET	>60 INCHES	MODERATE	LOW	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	POOR; SLOPE	SEVERE; SLOPE	22E
30C	NONE			>6. 0 FEET	>60 INCHES	MODERATE	LOW TO MODERATE	MODERATE; SHRINK SWELL	MODERATE; SHRINK SWELL	SEVERE; SLOPE	MODERATE; SHRINK	SWELL; GOOD	MODERATE; SLOPE	30C
30D	NONE			>6. 0 FEET	>60 INCHES	MODERATE	LOW TO MODERATE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	FAIR; SLOPE	SEVERE; SLOPE	30D
31C	NONE			>6. 0 FEET	>60 INCHES	MODERATE	LOW TO MODERATE	MODERATE; SHRINK SWELL	MODERATE; SHRINK SWELL	SEVERE; SLOPE	SEVERE; LOW STRENGTH	POOR; LOW STRENGTH	MODERATE; SLOPE	31C
33D	NONE			>6. 0 FEET	20-40 INCHES	MODERATE	LOW TO MODERATE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	POOR; DEPTH	SEVERE; SLOPE	33D
33E	NONE			>6. 0 FEET	20-40 INCHES	MODERATE	LOW TO MODERATE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	SEVERE; SLOPE	POOR; DEPTH	SEVERE; SLOPE	33E