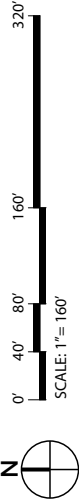
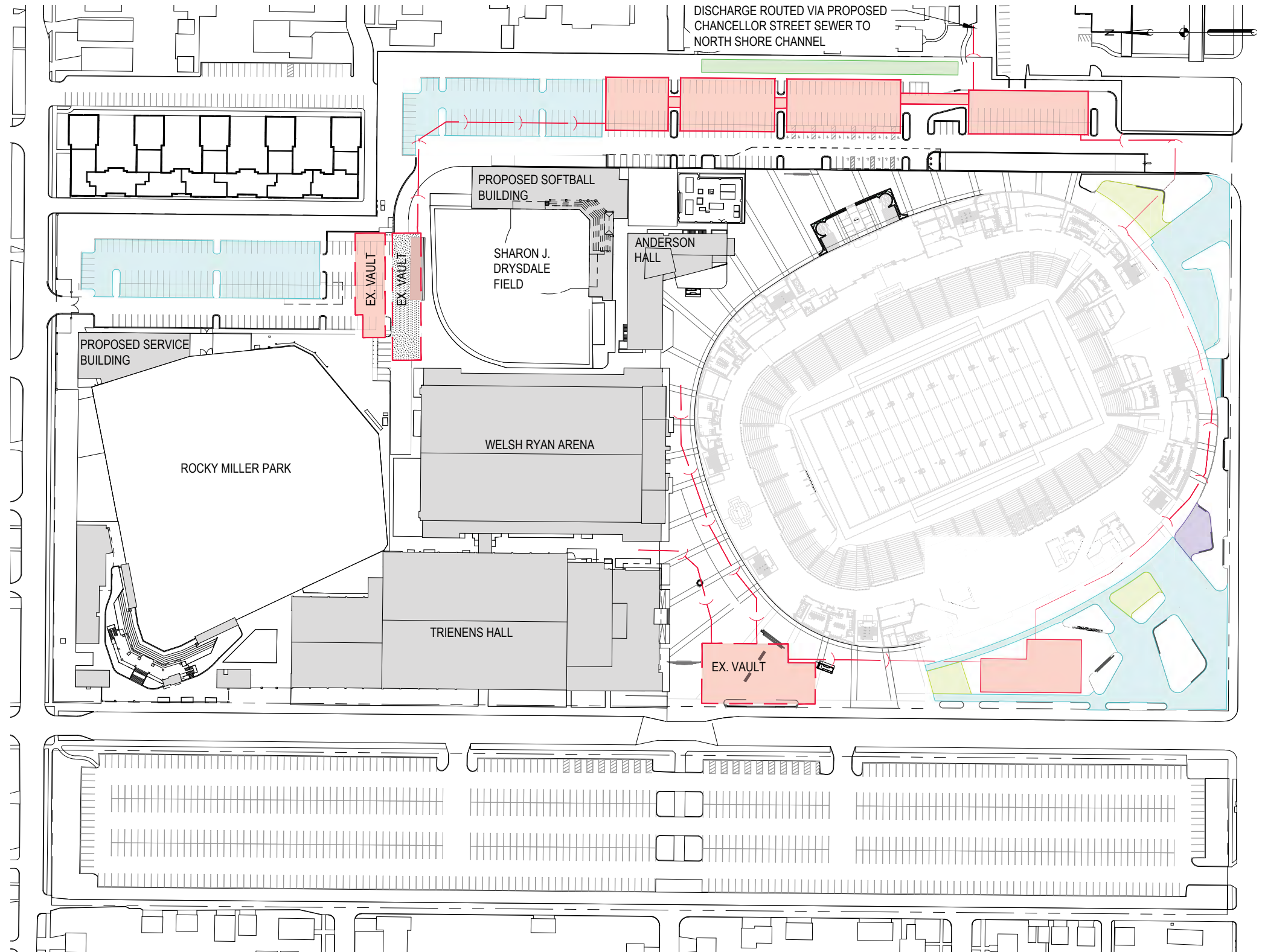


SITE UTILITIES PLAN





DISCHARGE ROUTED VIA PROPOSED
 CHANCELLOR STREET SEWER TO
 NORTH SHORE CHANNEL

SUMMARY

The Drainage Plan presents the concepts for overall storm and groundwater management. The development of engineering solutions and calculations is currently in progress.

Detention will be provided via existing and new underground vaults. The proposed vaults will be interconnected allowing them to function as one large system.

Volume control will be provided using a combination of permeable pavement, bioretention practices, and aggregate storage.

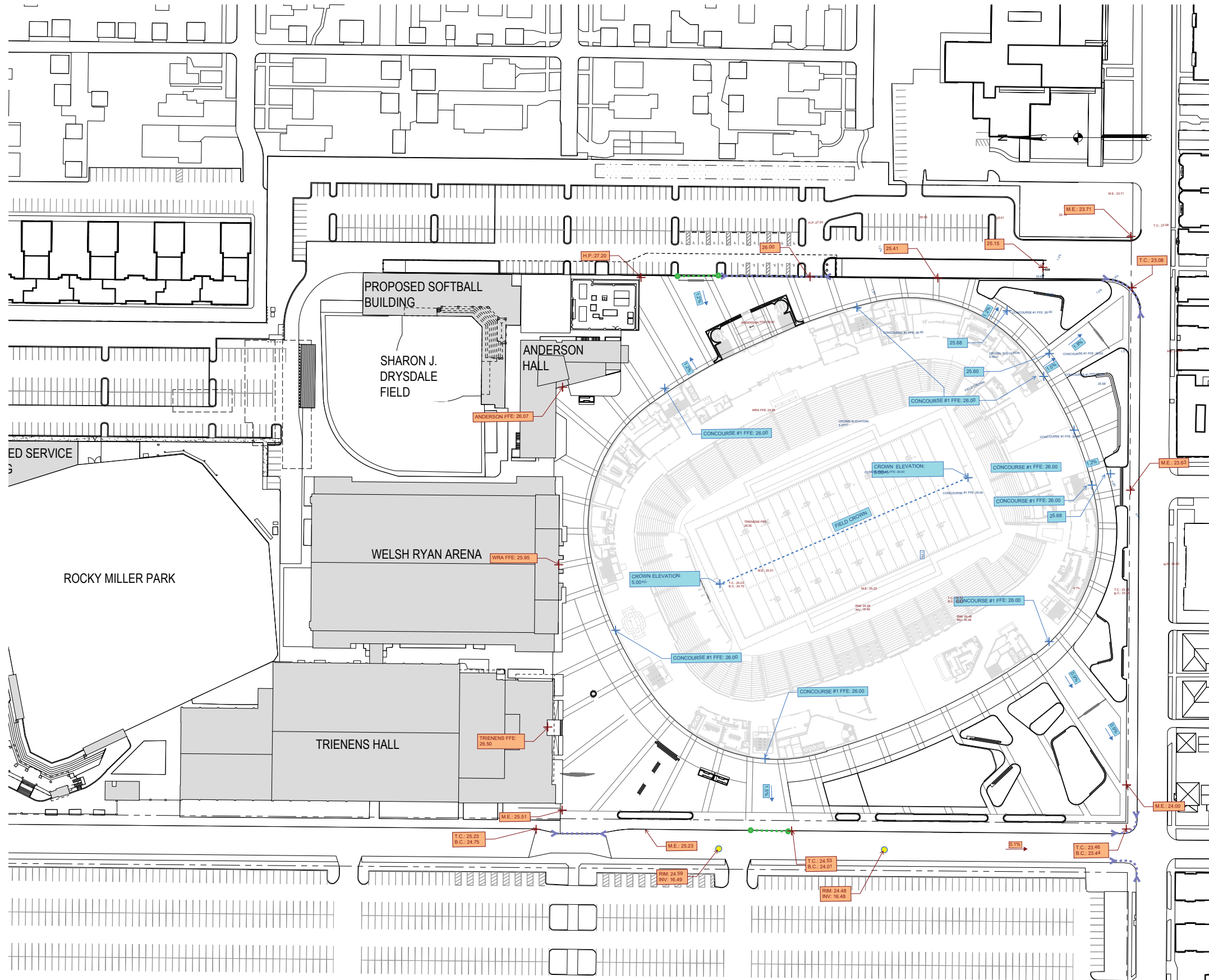
LEGEND

- Stormwater Detention (STORMTRAP)
- Permeable Pavers
- Play Surface
- Bioretention
- Synthetic Turf

DRAINAGE PLAN



CONCEPT SUBJECT TO
 VERIFICATION WITH MWRD



LEGEND

	EXISTING SPOT ELEVATIONS AND SLOPES	EXISTING SPOT ELEVATIONS AND SLOPES
	PROPOSED SPOT ELEVATIONS AND SLOPES	PROPOSED SPOT ELEVATIONS AND SLOPES
	PROPOSED ACCESSIBLE FLUSH CURBS	PROPOSED ACCESSIBLE FLUSH CURBS
	ROLLED CURB	ROLLED CURB
	RETAINING WALL	RETAINING WALL

ED SERVICE
ROCKY MILLER PARK

PROPOSED SOFTBALL BUILDING
SHARON J. DRYSDALE FIELD
ANDERSON HALL
WELSH RYAN ARENA
TRIENENS HALL

CONCOURSE #1 FFE: 26.00
FIELD CROWN
CROWN ELEVATION: 25.00@15.00' DIA.
CROWN ELEVATION: 5.00' H.

EXISTING TOPOGRAPHY PLAN

SCALE: 1" = 160'



Table 2: General subsurface profile and geotechnical parameters

Age	Unit	Log	Name	Description	T/Layer Elevation (ECD)	Total Unit Wt, γ	Mohr-Coulomb		Pressuremeter			LPile		
							Shear Strength, S_u (Adhesion, C_u)	Friction Angle, ϕ	Creep Pressure, P_c	Net Limit Pressure, P_l	Pressure Modulus, E_d	p-y Subgrade Modulus, k	E_{50}	
			Fill	VI	Man placed material consisting predominantly of sand-size particles with varying inclusions of cinders, brick, and concrete fragments.	+20 to +25	120-125 pcf	-	28-32 deg	-	-	-	40-60 pci	-
Pleistocene - Wisconsin	Glacial Drift	Lake Border moraines	Glacial Lake Bottom	V	Weathered, over-consolidated clay with low to medium PI. Identified by Peck and Reed as "Desiccated Clay Crust."	+15 to +20	125-130 pcf	1-2.5 ksf (0.5-1.3 ksf)	-	3-4	4-7	45-70	450-750 pci	0.006-0.008
			Blodgett and Deerfield	IVa	Grey to bluish grey clay and silty clay with occasional non-persistent silt and sandy silt seams. Normally to slightly overconsolidated with OCR between 1.1 and 1.6.	+0 to -5	122-127 pcf	0.4-0.6 ksf (0.3-0.5 ksf)	--	-	-	-	330-400 pci	0.01-0.014
				IVb		-10 to -15	125-127 pcf	0.45-0.7 ksf (0.3-0.4 ksf)	--	-	-	-	350-500 pci	0.009-0.011
			Park Ridge	II	Lacustrine and low plasticity clay with natural moisture content between 18-22%. Transitional zone of variable thickness.	-25 to -30	130-135 pcf	1.0-2.5 ksf (0.5-1.3 ksf)	-	10-15	15-22	130-150	550-900 pci	0.005-0.008
			Tinley moraine	II	Glacially consolidated low plasticity clay, silty clay and clayey silt. Blow counts in excess of 40 bpf and natural moisture contents below 14%. Locally referred to as "Chicago Hardpan."	-55 to -60	130-135 pcf	4.0-5.0 ksf (2.0-2.5 ksf)	-	17-25	26-39	230-620	1,000-1,200 pci	0.003 - 0.005
				Valparaiso moraine		I	Extremely dense sandy silt, silty gravel and gravelly sand with occasional cobbles and boulders.	-75 to -80	130-135 pcf	-	32-35 deg	25-35	42-55	870-1,150
Age	Unit	Log	Name	Description	T/Layer Elevation (CCD)	Total Unit Wt, γ	Uniaxial Strength	Young's Modulus, E_r	RQD (RMR)	GSI	c'	ϕ'	K_{rm}	
Silurian	Niagran Series		Dolomite	Extremely weathered to disintegrated dolomite	-90 to -92 (Variable)	135-140 pcf	-	-	-	20-25	20-30 ksf	18-23 deg	0.00008	
				Fresh to moderately weathered, hard to medium, grey to light tan, blocky, slightly to moderately vuggy dolomite and dolomite limestone. Generally near-horizontal bedding with slightly inclined to near-vertical joints.	-90 to -95 (Estimated)	150-160 pcf	7-30 ksi	1,500-3,000 ksi	71-98 (65-75)	60-70	85-210 ksf	35-38 deg	0.00005	