PCL Reconstruction Protocol

	Phase I: 0-7 days (PT 1x per week)	Phase II: 1-4 weeks (PT 1x per week)	Phase III: 5-8 weeks (PT 2-3x per week)
Weight-Bearing and Immobilization	• Progress from TTWB to PWB (25-50%) with brace locked in full extension • Brace locked in full extension at all times	• Progress from PWB (25-50%) to WBAT with crutches with brace locked in full extension • At rest, place pillow/bump behind proximal tibia to prevent posterior tibial sag	• WBAT with crutches with brace 0-90° and then unlock as tolerated • Discontinue brace and crutches at 6-8 weeks when no extension lag with SLR, excellent quadriceps control, and quadriceps strength adequate for stable and normalized gait pattern
Aerobic	• None	• None	• None
Range of Motion (ROM) and Strengthening	• Isometric quad sets • Patellar mobilization • Straight-leg raises • Ankle pumps • Hip abduction and adduction	• Continue Phase I exercises • PROM 0-60° only while supine and in brace to prevent posterior tibia sag • Hamstrings and gastrocnemius stretching • Hip extension exercises • Calf press with light bands and progression to bilateral standing calf raises in full extension and then single calf raises in full extension	• Continue Phase II exercises • Isometric wall sits/slides 0-45° and then progress to active against body weight • Standing hip flexion, extension, abduction, and adduction with resistance (resistance must be proximal to knee)
Other	• Modalities as needed to reduce pain/swelling and for muscle re-education • Home Exercise Program (HEP) per discretion of Physical Therapist		
Goals	• Pain control • Protection of tissue healing	• Pain control • Protection of tissue healing • Minimize joint stiffness • Achieve full knee extension	• Progress to WBAT with normalized gait pattern • Progress knee ROM

	Phase IV: 9-12 weeks (2-3x per week)	**Phase V: 3-6 months (2x per month)**	**Phase VI: 6+ months**
Weight-Bearing and Immobilization	• WBAT • No brace		
Aerobic	• Stationary bike (elevated seat height initially, and normalize height as ROM allows, low resistance) • Begin treadmill walking, elliptical machine, and stairclimber	• Begin walk-jog-run progression at 5 months	• Continue walk-jog-run progression

Range of Motion (ROM) and Strengthening	• Continue Phase III exercises
	• Closed chain terminal knee extension (lights bands initially and gradual progression to weights)
	• Leg press 0-90°
	• Begin proprioception and balance
		• Continue Phase IV exercises
		• Advance closed chain exercise program
		• Advance balance and proprioception
		• Begin agility exercises at 5 months
			• Continue HEP to maintain strength, endurance, and flexibility
			• Begin sport-specific training after completing general program
			  ‣ Pass Leg Press Test
			  ‣ Pass Single Hop Test
			  ‣ Quadriceps and hamstring strength >90% of uninvolved limb
			• Begin plyometric training with jumping and landing mechanics if indicated

Other	• Modalities as needed to reduce swelling and for muscle re-education • Home Exercise Program (HEP) per discretion of Physical Therapist		

Goals	• Achieve full knee ROM
	• Progress strengthening
		• Achieve full knee ROM
		• Progress strengthening
		• Begin working towards passing Leg Press Test and Single Hop Test
			• Begin sport-specific training
			• Return to sports criteria:
			  ‣ Pass Leg Press Test
			  ‣ Pass Single Hop Test
			  ‣ Quadriceps strength >90% of uninvolved limb
			  ‣ Hamstring strength >90% of uninvolved limb
			  ‣ Jog, run, shuttle-run, and agility exercises without pain, swelling, or difficulty