

AQ/GHG Phasing and Modeling Assumptions

Project Element/Phase	Start Date	End Date	Number of Work Days ¹
Phase 1			
Establish temporary overland routes	7/2/2018	11/30/2018	15
Establish work areas, staging areas, pull sites, and landing zones	7/2/2018	11/30/2018	75
Stage material and equipment	6/4/2018	7/2/2018	20
TSP Foundation/Pad concrete work	7/2/2018	11/30/2018	75
Install new poles/towers	7/2/2018	5/1/2019	88
Demolish and remove old towers	10/1/2018	5/1/2019	88
Install temporary guard structures	8/13/2018	4/8/2019	30
Install top cage extensions	10/1/2018	11/21/2018	44
Install new switches	10/1/2018	5/1/2019	4
Install new conductor	10/1/2018	5/1/2019	44
Site clean up	5/6/2019	8/9/2019	75
Helicopter Work ²	7/2/2018	5/1/2019	88
Phase 2			
Establish temporary overland routes	5/6/2019	11/21/2019	30
Establish work areas, staging areas, pull sites, and landing zones	5/6/2019	8/22/2019	75
Stage material and equipment	5/6/2019	6/7/2019	24
TSP Foundation/Pad concrete work	5/6/2019	8/22/2019	75
Install new poles/towers	5/6/2019	3/26/2020	88
Demolish and remove old towers	9/30/2019	3/26/2020	88
Install temporary guard structures	8/19/2019	3/16/2020	30
Install top cage extensions	9/30/2019	3/16/2020	10
Install new switches	9/30/2019	3/16/2020	4
Install new conductor	9/30/2019	3/26/2020	44
Site clean up	3/30/2020	6/30/2020	75
Helicopter Work ²	5/6/2019	3/26/2020	88
Phase 3			
Prepare temporary overland routes	8/26/2020	11/1/2019	20
Establish work areas, staging areas, pull sites, and landing zones	8/26/2020	11/1/2019	49
Stage material and equipment	8/26/2020	9/26/2019	20
TSP Foundation/Pad concrete work	8/3/2020	10/9/2020	75
Install temporary shoe fly poles	9/14/2020	1/22/2021	44
Install tubular steel poles	8/26/2020	1/22/2021	44
Demolish and remove steel towers	10/5/2020	2/26/2021	44
Install temporary guard structures	8/26/2020	1/29/2021	20
Install new conductor	10/5/2020	1/29/2021	44
Site clean up	2/1/2021	4/1/2021	75
Helicopter Work ²	8/26/2020	1/29/2021	44

¹ Number of Work Days represents the anticipated number of actual working days that would occur for each activity, and are less than the number of days between the starting and ending dates given for each construction activity.

² Note that multiple construction activities described above include the use of helicopters, and there are some activities with concurrent construction schedules (i.e., overlapping construction schedules). However, because a maximum of 3 helicopters (two light and one heavy) would operate during project construction on any given day, helicopters are listed as an individual activity that could potentially occur over the entire construction period for each of the three phases of construction.

Project Element/Phase	Equipment Type	Horsepower (CalEEMod Defaults)	Equipment Quantity	Hours/Day
Phases 1 and 2				
Establish temporary overland routes	Backhoe grader water truck foreman type pickups	97 174 NA NA	1 (all)	5 (all)
Establish work areas, staging areas, pull sites, and landing zones	Backhoe bulldozer compactor dump truck grader excavator water truck foreman type pickups	97 255 8 ? 174 162 NA NA	1 (all)	5 (all)
Stage material and equipment	Semi truck fork lift foreman pickups	NA 89 NA	8 1 4	5 (all)
TSP Foundation/Pad concrete work	Excavator augur water truck backhoe cement truck concrete pumps	162 205 NA 97 NA 84	1 (all)	5 (all)
Install new poles/towers	Backhoe excavator water truck foreman type pickups dump truck helicopters ¹	97 162 NA NA NA See footnote	1 1 1 6 1 See footnote	5 (all)
Demolish and remove old towers	Backhoe excavator water truck foreman type pickups dump truck helicopters ¹	97 162 NA NA NA See footnote	1 1 1 6 1 See footnote	5 (all)
Install temporary guard structures	Line truck bucket truck foreman pickups crane	NA NA NA 226	1 (all)	5 5 5 7
Install top cage extensions	Crane forklift foreman pickup trucks helicopters ¹	226 89 NA See footnote	1 1 2 See footnote	5 (all)
Install new switches	Crane line truck foreman type pickups	226 NA NA	1 (all)	5 (all)
Install new conductor	3 drum puller V grove puller reel trailers crane bucket truck line truck foreman type pickup helicopters ¹	150 190 14 226 NA NA NA See footnote	1 1 1 1 4 3 4 See footnote	5 5 5 5 2 5 5 See footnote
Site clean up	Excavator backhoe dump truck water truck foreman pickup	162 97 NA NA NA	1 (all)	5 (all)

Project Element/Phase	Equipment Type	Horsepower (CalEEMod Defaults)	Equipment Quantity	Hours/Day
Phase 3 Only				
Prepare temporary overland routes	Backhoe grader water truck foreman type pickups	97 174 NA NA	1 (all)	5 (all)
Establish work areas, staging areas, pull sites, and landing zones	Backhoe bulldozer compactor dump truck grader excavator water truck foreman type pickups	97 255 8 ? 174 162 NA NA	1 (all)	5 (all)
Stage material and equipment	Semi truck fork lift foreman pickups	NA 89 NA	8 1 4	5 (all)
TSP Foundation/Pad concrete work	Excavator augur water truck backhoe cement truck concrete pumps	162 205 NA 97 NA 84	1 (all)	5 (all)
Install temporary shoe fly poles	Line truck bucket truck crane foreman pickups construction digger	NA NA 226 NA 162	1 (all)	5 (all)
Install tubular steel poles	Backhoe excavator water truck foreman type pickups dump truck helicopters ¹	97 162 NA NA NA See footnote	1 1 1 6 1 See footnote	5 (all)
Demolish and remove steel towers	Backhoe excavator water truck foreman type pickups dump truck helicopters ¹	97 162 NA NA NA See footnote	1 1 1 6 1 See footnote	5 (all)
Install temporary guard structures	Line truck bucket truck foreman pickups crane	NA NA NA 226	1 (all)	5 5 5 7
Install new conductor	3 drum puller V grove puller reel trailers crane bucket truck line truck foreman type pickups helicopters ¹	150 190 14 226 NA NA NA See footnote	1 1 1 1 4 3 4 See footnote	5 5 5 5 2 5 5 See footnote
Site clean up	Excavator backhoe dump truck water truck foreman pickup	162 97 NA NA NA	1 (all)	5 (all)

Note that fuel type for all equipment except helicopters is diesel

¹Although multiple activities include the use of helicopters, and some of these construction activities may overlap (temporarily), a maximum of 3 total helicopters (two light, one heavy) would operate for project construction on any given day.

Helicopter details:

Light helicopter: 40 gal/hr

Heavy helicopter: 90 gal/hr

Average flight time for the light helicopters is 4.5 flight hours each, 9 hours (2 helicopters) @ 40 gallons = 360 gal/day

Average flight time for the heavy helicopter is 5 flight hours, 5 hours @ 90 gallons = 450 gal/day