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Cottonwood Sand Mining Project
Visual Resources Report

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Prepared for:

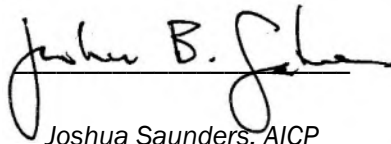
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Executive Summary

The existing visual character and quality of the Cottonwood Sand Mine Project (Project) site and surrounding area is characterized as a balance of suburban, semi-rural agricultural, recreational (i.e., golf course) and open space land uses, with the Rancho San Diego area developed with large-scale, master-planned residential and commercial developments interspersed with large areas of green-belt and biological open space for wildlife habitat preservation. The primary visual elements that the Project would introduce into views of the Jamacha Valley would be site clearing, mining equipment, grading and exposed soil, processing equipment and stockpiles, reclamation and revegetation activities, and, eventually, the post-reclamation native riparian and upland vegetation communities. Mining operations would occur over an approximately ten (10) year period, with additional active reclamation occurring for another two years and periodic maintenance activities occurring until performance standards and compensatory mitigation standards are met. Where visible to motorists, recreationists and residents, the appearance of the Project elements within the overall visual landscape would visibly detract from and contrast with the existing visual character and quality of the area. Further, the visual effects of the proposed mining use would be incompatible with adjacent natural areas and developed uses during the mining and initial reclamation phases of the Project.

Due to the anticipated severity of visual contrast with existing visual character and quality of the community and localized area resulting from vegetation removal and mining activities, impacts to existing visual character were determined to be significant and unmitigable. Project operations would be phased such that individual subareas (approximately 14 to 29-acres in size) are mined at a time which limits vegetation removal and results in incremental as opposed to wholesale visual change. In addition, some existing screening trees would be retained on site (screening trees are located adjacent to Willow Glen Drive; approximately 67 trees would be removed), a landscape screening and entrances plan would be implemented to reduce visibility of the processing plant from Willow Glen Drive, the site would be reclaimed and revegetated with riparian and upland vegetation, and fencing with screening mesh would be strategically installed to screen the processing plant from motorists (and other road users) on Willow Glen Drive and the Steele Canyon Road Bridge. Despite the implementation of these measures and others (see Section 6, Visual Mitigation and Design Consideration), active mining in subphases would create strong visual contrast and the severity of effects to existing visual character and quality could not be reduced to a less than significant level.

As Project effects would be visible from identified scenic vistas at nearby recreational areas, public roads and components of the County scenic highway, and due to strong visual contrast as experienced from these public vantage points, the Project would interrupt and detract from available views. As described above for visual character and quality, the implementation of design considerations and mitigation measures would not reduce anticipated impacts to scenic vistas to a less than significant level as project effects would interrupt and detract from existing views. Further, because anticipated effects to the visual landscape could not be screened from view at scenic vistas without fundamentally altering the scenic qualities of the view, further mitigation measures were not identified. Therefore, impacts to scenic vistas were determined to be significant and unmitigable.

Implementation of the Project would present conflicts with applicable goals and policies of the Valle de Oro Community Plan, including several established for Community Character, Open Space, and Conservation. Goal and policy conflicts with the County of San Diego General Plan Conservation and Open Space Element would also occur. Due to the anticipated severity of visual impacts to the existing setting and views, the duration of mining and reclamation activities (i.e., 12 years) and the establishment and maturation period of container stock plantings and hydroseeded plant materials, conflicts with applicable goals and policies of the Valle de Oro Community Plan and County of San Diego General Plan Conservation and Open Space Element would be significant and unavoidable.

Mining operations would be conducted during daylight hours, such that only safety lighting within the plant area would be required. All light fixtures would conform to the County Light Pollution Code (LPC), or Dark Skies Ordinance, and no highly reflective building materials would be used. Project lighting would not adversely affect nighttime views or astronomical observations because it would conform to the County LPC lighting requirements as well as the hours of operation detailed in the LPC. Therefore, visual impacts associated with Project-related lighting and glare would be less than significant.

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1 Introduction

1.1 Purpose of the Visual Resources Report

The purpose of this study is to assess the visual impacts of the proposed project, determine the significance of the impacts under CEQA, and to propose measures to avoid, minimize or mitigate adverse visual impacts associated with the construction of the Cottonwood Sand Mining Project on the surrounding visual environment.

1.2 Key Issues

Key issues addressed in this report are the potential visual impacts to the existing character of the Jamacha Valley and Sweetwater River corridor within the community of Valle De Oro. Further, this assessment examines potential impacts to existing views associated with the transformation of the existing Cottonwood Golf Club into a sand mining operation that would be active for approximately 12 years. In summary, this report determines the severity of changes to the visual character of the area, whether these changes would be noticeable and negatively perceived by viewer groups and if so, whether the changes can be mitigated.

1.3 Principal Viewpoints to be Covered

Selected in collaboration with County of San Diego Planning and Development Services staff, the key views of the Project site comprise sensitive and/or representative views available to primary viewer groups in the surrounding area. A total of four key views were identified and are listed below in Table 1, Key Views. All four key views are analyzed in detail by creating three-dimensional (3d) photosimulations to accurately illustrate the visual effects of the Project in its context. One of the key views occupies an elevated vantage point in the nearby San Diego National Wildlife Refuge and another is located at a neighborhood overlook off Wind River Road (located 0.20 mile to the north of Willow Glen Drive). The remaining two key views encompass views from the roads nearest to the Project site (i.e., Willow Glen Drive and Steele Canyon Road). Key views are further discussed and described in Section 5.2, Key Views.

Table 1 Key Views

Key View Number	Directional Description of Viewpoint	Viewer Group	View Description
1	Looking northeast towards Sweetwater River corridor from the “upper” Wildlife Refuge Loop Trail	Trail users	Represents an elevated, public views from a trail in the San Diego National Wildlife Refuge
2	Looking northeast-east from Steele Canyon Road bridge towards the Sweetwater River corridor and Cottonwood Golf Club	Motorists and other users of Steele Canyon Road; area residents	Represents northbound public view

3	Looking west-southwest from Willow Glen Drive towards Project site	Motorists and other users of Willow Glen Drive; area residents	Represents westbound public view
4	Looking southeast from neighborhood overlook down to Project site, Jamacha Valley, and Steele Canyon	Residents in the Wind River Road neighborhood	Represents scenic public view from overlook

2 Project Description

The Project site is in the unincorporated community of Rancho San Diego in eastern San Diego County, north of State Route (SR) 94/Campo Road and east of SR 54/Jamacha Road (see Figure 1, Project Location). The project site consists of approximately 280-acres and currently developed with two 18-hole golf courses of the Cottonwood Golf Club. The eastern Ivanhoe Course remains in operation while the western Lakes Course has been closed and is no longer being maintained or irrigated. The Project site extends west to east from approximately 600 feet east of the intersection of Willow Glen Drive and Jamacha Road, to approximately 0.25 miles west of the intersection of Willow Glen Drive and Hillsdale Drive. Willow Glen Drive parallels the north side of the project site and Steele Canyon Road bisects the western portion of the site.

The 280-acre Project site comprises the following Assessor’s Parcel Numbers (APNs): 506-021-19-00, 506-020-52-00, 518-012-13-00, 518-012-14-00, 518-030-05-00 thru 518-030-08-00, 518-030-10-00, 518-030-12-00, 518-030-13-00, 518-030-15-00, 518-030-21-00, 518-030-22-00, 519-010-15-00, 519-010-17-00, 519-010-20-00, 519-010-21-00, 519-010-33-00, 519-010-34-00, 519-010-37-00, 519-011-03-00, 506-021-31-00, and 506-021-30-00. The Major Use Permit and Reclamation Plan proposes sand mining activities on 251 acres of an approximately 280-acre site. Approximately 214.4 acres of the approximately 280-acre site are proposed for extractive use. Principal site access is from Willow Glen Drive, with regional access from SR 54/Jamacha Road and SR 94/Campo Road.

2.1 Project Features

The project proponent, New West Investment Group, is proposing to extract and process approximately 4.3 million cubic yards (CY) (6.40 million tons) of material, with approximately 3.8 million CY (5.7 million tons) of marketable aggregate produced for sale over a 10-year period. Extraction operations would be limited to a maximum production of 380,000 CY (570,000 tons) of construction grade aggregate per calendar year.

Sand mining activities would be conducted in three phases over a period of 10 years beginning with Phase 1 in the western portion of the site that is currently occupied by the closed 18-hole Lakes golf course. Extraction activities would occur in excavation areas within the Project site and aggregate would be sorted and processed at a centrally located processing plant (see Figure 2, Site Plan and Figure 3, Processing Plant). As shown in Figure 2, mining operations would be further parceled into subphase areas to reduce active disturbance of the Project site at any given time. The acreage of disturbance and approximate duration of mining activities within each subphase is listed in Table 2, Subphase Acreage and Duration.

Table 2 Subphase Acreage and Duration

Subphase	Acreage	Duration (years; approximate)
1A	22.10	1
1B	26.46	1
1C	30.42	1
Phase 1¹ Total	78.98	3
2A	15.26	1
2B	19.08	1
2C	13.74	1
Phase 2 Total	48.18	3
3A	29.42	1
3B	16.15	1
3C	14.13	1
3D	18.87	1
Phase 3 Total	78.57	4
<i>Processing Plant /Phase 4¹</i>	8.65	1
Total	214.4	11

Notes

¹ Phase 4 would not encompass commercial mine operations. During this phase, the processing plant would be removed, the area would be graded to final contours, and final reclamation efforts, cleanup, and equipment removal would be conducted.

Phase 1 would also include construction of improvements to Willow Glen Drive east of Steele Canyon Road. Prior to the initiation of Phase 1, pre-mining activities such as the restriping of Willow Glen Drive between Steele Canyon Road and the project ingress driveway to provide Class II buffered bike lanes on both sides of the roadway, improvements to the access point from Willow Glen Drive to the Phase 1 excavation area, and installation of screening landscaping would be implemented. To facilitate deceleration of right-turning vehicles into the Project ingress driveway, a dedicated right-turn lane would also be constructed, which would serve as the primary access for mining operations, material sales, employees, and vendors. A new egress point would also be established in the approximate center of the existing golf course parking lot. Removal of over 60 existing trees on the Project site and along Willow Glen Drive would be necessary to accommodate the proposed dedicated right-turn lane.

Phase 1 would include grading and construction of the processing plant on the west side of the Cottonwood Golf Club clubhouse; placement of a mobile conveyor line from the processing plant to the Phase 1 extraction area; and development of a new access point to the Phase 1 area at the intersection of Willow Glen Drive and Muirfield Drive, west of the Steele Canyon Road. See Figures 2a and 2b (the new access to the Project site at Willow Glen Drive and Muirfield Drive is called out on Figure 2b). This new access would be necessary as the clearance height of the bridge that crosses the Sweetwater River on Steele Canyon Road does not allow large trucks or heavy equipment used for mining operations to pass beneath the bridge. The new access point will be used to allow access to the area by employees, vendor’s service vehicles and reclamation crews during Phase 1 operations. This access point would not be used for material transport. Both the Muirfield Drive access and existing driveways with gates would remain in place for the property owner after mining activities have been completed.

As shown on Figure 2b, the processing plant site would consist of aggregate screening and washing facilities, three settling ponds, loadout area, and support structures and buildings (e.g., modular scale house and weigh scales, two tool storage containers, office kiosk, and office trailer). The mobile conveyor line would transport excavated aggregate materials to the plant from the Phase 1 area by extending under the Steele Canyon Road bridge. The

conveyor line would be mobile to provide material transport from each phase to the processing plant. Mobile conveyor lines are depicted on Figure 2 as feature extending east and west from the processing plant to the various subphases on the Project site. Depending on subphase of active mining, the total length of the conveyor line would range from between 200 feet to over ½ mile.

Shielded night lighting may be installed around the processing plant for safety and security purposes. Lights would be mounted at heights of 15 to 20 feet and would be similar in illumination to the existing lighting within the golf course parking lots. Lighting would be designed to minimize light trespass, glare, and reflection onto neighboring areas. Generally, mounted sodium, metal halide, fluorescent, or light-emitting diode (LED) lighting would be employed. Lights would be directed downward and would have cut-offs installed to minimize spillover onto adjacent properties. Each light would provide the lowest light level necessary and project lighting would be compliant with the applicable lamp sources and shielding requirements of County Light Pollution Code (LPC).

Mining would proceed from Phase 1 towards the east to Phases 2 and 3. The mobile conveyor line would be moved to transport aggregate from Phases 2 and 3 to the processing plant. The entire extraction process is expected to be complete after a 10-year period. Approximately 20 to 25 acres would be subject to active extraction at any one time. The maximum excavation depth is proposed to be 40 feet below the existing land surface outside the Sweetwater River channel. The average depth of excavation is expected to be approximately 20 feet. Excavation of the existing river channel would not occur; however, excavation would result in an increased channel width of 250 to 300 feet. The existing river channel would hold and transfer low flow through the project site. Reclamation and revegetation of the mined area would comprise a fourth phase (Phase 4) and begin in the second year as mining proceeds to the east and would end two years after mining activities cease. Topsoil material would be salvaged and stored in low berms or windrows along the edges of the excavation boundaries and then mixed with wash fines and placed as final cover on areas that have reached final grade.

Reclamation would occur concurrently with extraction activities. As the project progresses, cut slopes would be brought to final grade and revegetated beginning at the western boundary and moving eastward throughout the site. Following completion of mining activity in any given area, reclamation and backfilling of excavation areas would commence. The final landform of the site would be a relatively flat plain that gently slopes downward from east to west. See Figures 4a and 4b, Plot Plan (1 of 2 and 2 of 2), and Figures 5a and 5b, Reclamation Plan (1 of 2 and 2 of 2). See also Figures 5c, Final Landform Plan and Figures 6a and 6b, Site Cross-Sections (1 of 2 and 2 of 2).

A widened river channel would bisect the length of the site. Banks of the river channel would slope up to the plain surface at a 3:1 ratio (horizontal: vertical) or shallower. The elevation difference between the bottom of the river channel and the top of the slope may be up to 25 feet (see Figure 6c, Typical Slope Grading Detail). The reclaimed river channel would average approximately 250 to 300 feet in width. In some areas, benches may be constructed on the face of the riverbanks to accommodate varying vegetation types and/or recreational trails. The riparian corridor would be re-established with native habitat and natural landforms consistent with the surrounding area. Reclaimed upland areas (outside of the 250 to 300-foot-wide reclaimed river channel) would be similar in elevation to Willow Glen Drive.

Phase 4 would include final reclamation grading, clean-up and removal of the processing plant, and completion of revegetation of remaining excavated areas with native plant species. Thus, total project duration would be 12 years. Revegetated and restored habitat would be maintained and monitored for a minimum of five years, or until the project's performance standards are met. Performance standards would include specifications for amount of native cover, non-native cover, invasive species cover, and native species richness criteria. Reclamation of each area

would begin in the fall of each year as the final landforms are established. The final landform of the site would be consistent with the topography of river floodplains (see Figure 5c). Revegetation with native plant species would begin immediately once reclamation is completed in excavated areas. Revegetation would occur through a combination of container stock plantings and hydroseeding of riparian vegetation communities. Figure 7, Conceptual Reclamation Revegetation and Compensatory Mitigation Areas, illustrates the proposed approach to revegetation and restoration, and conceptual compensatory mitigation, on the Project site. Lastly, plant palettes and seed mixtures associated with revegetation and restoration (and erosion control) are listed in Tables 3 through 8, below.

Table 3 Riparian Scrub Plant Palette¹

CONTAINER PLANTINGS ²				
Scientific Name	Common Name	Spacing on Center (ft.)	Grouping Size	Number Per Acre
<i>Artemisia dracunculus</i>	tarragon	5	5	200
<i>Baccharis salicifolia</i>	mule fat	6	10	250
<i>Croton californicus</i>	California croton	5	5	200
<i>Distichlis spicata</i>	saltgrass	10	3	200
<i>Iva hayesiana</i>	San Diego marsh elder	5	5	200
<i>Platanus racemosa</i>	western sycamore	15	3	30
<i>Populus fremonti</i> ssp. <i>fremonti</i>	western cottonwood	15	3	30
<i>Salix exigua</i>	sand bar willow	8	5	200
<i>Salix gooddingii</i>	black willow	12	5	100
<i>Salix laevigata</i>	red willow	12	5	30
<i>Salix lasiolepis</i>	arroyo willow	12	5	30
<i>Sambucus nigra</i>	blue elderberry	10	3	100
Total				1,570
SEED MIXTURE ²				Pounds per Acre
Scientific Name	Common Name	%Purity/ Germination		
<i>Ambrosia psilostachya</i>	western ragweed	45/45	4	
<i>Artemisia douglasiana</i>	Douglas' sagewort	15/40	3	
<i>Artemisia palmeri</i>	Palmer's sagebrush	20/50	2	
<i>Baccharis salicifolia</i>	mule fat	10/20	3	
<i>Baccharis sarothroides</i>	broom baccharis	7/42	1	
<i>Bolboschoenus maritimus</i>	alkali bulrush	90/60	1	
<i>Croton californicus</i>	California croton	90/40	1	
<i>Eleocharis macrostachys</i>	pale spike-rush	95/60	1	
<i>Isocoma menziesii</i>	goldenbush	18/40	1	
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	95/80	1	
<i>Juncus effusus</i> var. <i>pacificus</i>	Pacific rush	95/60	0.5	
<i>Oenothera elata</i> ssp. <i>hookeri</i>	evening primrose	98/84	0.5	
<i>Pluchea odorata</i>	salt marsh fleabane	30/40	2	
Total				21.0*

¹ The quantities and amount of container stock and seed to be order would be determined following reclamation of each phase/subphase based on the exact of area disturbed as part of mining activities. Substitutions require approval of the Restoration Specialist.

* No less than 20 lbs. per acre of seed shall be installed

Table 4 Riparian Scrub/Forest Rehabilitation Plant Palette

CONTAINER PLANTINGS ¹				
Scientific Name	Common Name	Spacing on Center	Grouping Size	# Per Acre
<i>Baccharis salicifolia</i>	mule fat	6	10	230
<i>Distichlis spicata</i>	saltgrass	10	3	50
<i>Platanus racemosa</i>	western sycamore	15	2	25
<i>Platanus racemosa</i>	western sycamore	15	2	25
<i>Populus fremontii ssp. fremontii</i>	western cottonwood	15	2	25
<i>Salix exigua</i>	sand bar willow	8	4	90
<i>Salix gooddingii</i>	black willow	12	5	120
<i>Salix laevigata</i>	red willow	12	5	120
<i>Salix lasiolepis</i>	arroyo willow	12	5	120
<i>Sambucus nigra</i>	blue elderberry	10	3	85
TOTAL				890
SEED MIX ¹				
Scientific Name	Common Name	Percent Germination	Purity/	Pounds per Acre
<i>Ambrosia psilostachya</i>	western ragweed	45/45		4
<i>Anemopsis californica</i>	yerba mansa	55/80		1
<i>Artemisia douglasiana</i>	Douglas' sagewort	15/40		3
<i>Artemisia palmeri</i>	Palmer's sagebrush	20/50		2
<i>Baccharis salicifolia</i>	mule fat	10/20		3
<i>Bolboschoenus maritimus</i>	bulrush	90/60		1
<i>Cyperus eragrostis</i>	tall flatsedge	80/75		1
<i>Distichlis spicata</i>	saltgrass	90/75		1
<i>Eleocharis macrostachya</i>	pale spike-rush	95/60		1
<i>Isocoma menziesii</i>	goldenbush	18/40		1
<i>Juncus acutus ssp. leopoldii</i>	southwestern spiny rush	95/80		0.5
<i>Juncus effusus var. pacificus</i>	Pacific rush	95/60		0.5
<i>Oenothera elata ssp. hookeri</i>	evening primrose	98/84		0.5
<i>Pluchea odorata</i>	salt marsh fleabane	30/40		2
TOTAL				21.5

¹ Substitutions require approval of the Restoration Specialist.

Table 5 Diegan Coastal Sage Scrub Plant Palette¹

CONTAINER PLANTINGS ²				
Scientific Name	Common Name	Spacing on Center	Grouping Size	Number per Acre
<i>Artemisia californica</i>	California sagebrush	5	25	250
<i>Bebia juncea</i>	rough sweetbush	10	3	50
<i>Encelia californica</i>	coast sunflower	5	20	100
<i>Eriogonum fasciculatum</i>	flat top buckwheat	5	25	250
<i>Hazardia squarrosa</i>	saw-toothed goldenbush	5	10	100
<i>Hesperoyucca whipplei</i>	chaparral yucca	3	3	50
<i>Heteromeles arbutifolia</i>	toyon	10	3	150
<i>Mimulus aurantiacus</i>	bush monkey flower	5	10	100
<i>Rhus integrifolia</i>	lemonadeberry	10	5	50
<i>Salvia apiana</i>	white sage	5	10	250
TOTAL				1,350
SEED MIX ²				
Scientific Name	Common Name	Percent Purity/ Germination	Pounds Per Acre	
<i>Acmispon glaber</i>	deerweed	95/80	0.5	
<i>Amsinkia intermedia</i>	common fiddleneck	45/65	1	
<i>Artemisia californica</i>	California sagebrush	30/60	4	
<i>Deinandra fasciculata</i>	fascicled tarplant	25/65	3	
<i>Encelia californica</i>	California encelia	30/45	2	
<i>Eriogonum fasciculatum</i>	flat top buckwheat	50/20	7	
<i>Ericameria palmeri var. palmeri</i>	Palmer's goldenbush	N/A	2	
<i>Eriophyllum confertiflorum</i>	golden yarrow	N/A	2	
<i>Eschscholzia californica</i>	California poppy	98/80	2	
<i>Lupinus bicolor</i>	miniature lupine	98/85	1	
<i>Phacelia parryi</i>	Parry's phacelia	95/80	1	
<i>Salvia apiana</i>	white sage	88/30	3	
<i>Stipa lepida, deawned</i>	foothill needlegrass	90/71	3	
<i>Stipa pulchra, deawned</i>	purple needlegrass	90/75	3	
TOTAL				34.5*

¹The quantities and amount of container stock and seed to be order would be determined following reclamation of each phase/subphase based on the exact of area disturbed as part of mining activities. Substitutions require approval of the Restoration Specialist.

² Substitutions require approval of the Restoration Specialist.

* No less than 30 lbs. per acre of seed shall be installed.

Table 6 Riparian Forest Plant Palette¹

CONTAINER STOCK ²					
Scientific Name	Common Name	Spacing on Center	Grouping Size	Number per Acre	
<i>Artemisia dracunculus</i>	tarragon	5	5	100	
<i>Baccharis salicifolia</i>	mule fat	6	10	230	
<i>Distichlis spicata</i>	saltgrass	10	3	150	
<i>Iva hayesiana</i>	San Diego marsh elder	5	5	120	
<i>Platanus racemosa</i>	western sycamore	15	3	50	
<i>Populus fremonti ssp. fremonti</i>	western cottonwood	15	3	50	
<i>Salix exigua</i>	sand bar willow	8	5	120	
<i>Salix gooddingii</i>	black willow	12	5	150	
<i>Salix laevigata</i>	red willow	12	5	200	
<i>Salix lasiolepis</i>	arroyo willow	12	5	200	
<i>Sambucus nigra</i>	blue elderberry	10	3	50	
				TOTAL	1,420
SEED MIX ²					
Scientific Name	Common Name	Percent Germination	Purity/	Pounds per Acre	Per
<i>Ambrosia psilostachya</i>	western ragweed	45/45		4	
<i>Ambrosia pumila</i>	San Diego ambrosia	-		0.5	
<i>Anemopsis californica</i>	yerba mansa	55/80		1	
<i>Artemisia douglasiana</i>	Douglas' sagewort	15/40		3	
<i>Artemisia palmeri</i>	Palmer's sagebrush	20/50		2	
<i>Baccharis salicifolia</i>	mule fat	10/20		3	
<i>Baccharis sarothroides</i>	broom baccharis	7/42		1	
<i>Bolboschoenus maritimus</i>	alkali bulrush	90/60		1	
<i>Croton californicus</i>	California croton	90/40		1	
<i>Eleocharis macrostachys</i>	pale spike-rush	95/60		1	
<i>Isocoma menziesii</i>	goldenbush	18/40		1	
<i>Juncus acutus ssp. leopoldii</i>	southwestern spiny rush	95/80		1	
<i>Juncus effusus var. pacificus</i>	Pacific rush	95/60		0.5	
<i>Oenothera elata ssp. hookeri</i>	evening primrose	98/84		0.5	
<i>Pluchea odorata</i>	salt marsh fleabane	30/40		2	
				TOTAL	22.5*

1 The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed as part of mining activities.
 2 Substitutions require approval of the Restoration Specialist.
 * No less than 15 lbs. per acre of seed shall be installed.

Table 7 Streambed (Emergent Wetland) Seed Mix¹

SEED MIX ²					
Scientific Name	Common Name	Percent Germination	Purity/	Pounds Acre	Per
<i>Anemopsis californica</i>	yerba mansa	55/80		1	
<i>Artemisia douglasiana</i>	Douglas' sagewort	15/40		3	
<i>Bolboschoenus maritimus</i>	alkali bulrush	90/60		1	
<i>Cyperus eragrostis</i>	tall flatsedge	80/75		1	
<i>Eleocharis macrostachys</i>	pale spike-rush	95/60		1	
<i>Euthamia occidentalis</i>	western goldenrod	24/45		1	
<i>Juncus effusus var. pacificus</i>	Pacific rush	95/60		0.5	
<i>Pluchea odorata</i>	salt marsh fleabane	30/40		2	
TOTAL				10.5*	

- 1 The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed as part of mining activities.
- 2 Substitutions require approval of the Restoration Specialist.
- * No less than 10 lbs. per acre of seed shall be installed.

Table 8 Erosion Control Seed Mix¹

SEED MIX ^{1,2}					
Scientific Name	Common Name	Percent Germination	Purity/	Pounds Acre	Per
<i>Ambrosia psilostachya</i>	western ragweed	45/45		6	
<i>Bromus carinatus</i>	California brome grass	95/90		8	
<i>Plantago insularis</i>	plantain	98/75		20	
<i>Vulpia microstachys</i>	small fescue	90/80		20	
TOTAL				54*	

- 1 The quantity of seed ordered for each phase/subphase will be determined based on the exact size of the area disturbed as part of mining activities.
- 2 Substitutions require approval of the Restoration Specialist.
- * No less than 50 lbs. per acre of seed shall be installed.

Except for required tree removal to accommodate improvements to/widening of Willow Glen Drive (see above), existing onsite landscaping along Willow Glen Drive would be maintained during Project operations to provide a visual screen between Project activities and off-site viewers. Existing mature trees present along the northern property boundary include eucalyptus (*Eucalyptus* spp.), California sycamore (*Platanus racemosa*), Peruvian pepper trees (*Schinus molle*), and California pepper trees (*Schinus terebinthifolius*) of varying heights and canopy densities. Additional landscaping would be installed adjacent to the Project entrances and to provide enhanced screening of the processing plant (see Figures 8aa through 8f, Conceptual Landscape Screening and Entrances Plan). To aid in screening of the processing plant site, the conceptual landscape screening and entrances plan plant schedule includes western redbud (*Cercis occidentalis*; 36-inch box), coast live oak (*Quercus agrifolia*; 24-inch box and 15-gallon containers) and Fremont/western cottonwood (*Populus fremontii*; 15-gallon containers). At initial planting, western redbud trees would be approximately 8 to 10-foot tall, coast live oak trees would be approximately 4 to 6-foot tall, and cottonwood trees would be 6 to 8-foot tall. Shrubs including (California lilac [*Ceanothus* x 'Ray Hartman'], toyon [*Heteromeles arbutifolia*], lemonade berry [*Rhus integrifolia*], and groundcovers are also included in the conceptual landscape screening and entrances plan (refer to Figure 8a).

In addition to new ingress and egress, a new access point to the property from Willow Glen Drive west of Steele Canyon Road at Muirfield Drive(Phase 1 area) is proposed as the clearance height of the bridge that crosses the Sweetwater River on Steele Canyon Road would not allow most large trucks used by service vendors (e.g., to provide fuel and maintenance to the heavy equipment utilized during mining) to pass beneath the bridge.

Sand excavation and processing is proposed to occur Monday through Friday, between the hours of 7:00 A.M. and 5:00 P.M. Trucking operations for material sales would occur during the week from 9:00 A.M. to 3:30 P.M. to avoid peak traffic periods in the area. No material sales or trucking will occur on weekends. A total of 88 one-way (176 round trip) truck trips per day would be generated. In addition, a total of 14 one-way (28 round trip) light vehicle trips and 4 one-way (8 round trip) vendor trips (fuel, supplies, service companies, etc.) would be generated per day. The existing driveways and parking lot located on Willow Glen Drive next to the clubhouse would be modified to accommodate site access for mining operations and material sales.

2.1.1 Post-Reclamation Land Use

As discussed above, reclamation of disturbed portions of the Project site would be phased with mine operations. Reclaimed lands would generally consist of natural open space revegetated with native vegetative cover and appropriate landforms and topography for site drainage. The area of the resulting plain outside of the reclaimed, revegetated, and widened river channel would total approximately 50 acres. Also, dedication of a public recreational trail along the length of the site, generally following Willow Glen Drive, is included in the project. Specifically, a pedestrian pathway would be provided along the northern Project frontage/Willow Glen Drive east of Steele Canyon Road to provide pedestrian access within the Project vicinity where there are no existing sidewalks. Lodge pole fencing would be installed on the south side of the proposed pathway along the northern Project frontage/Willow Glen Drive east of Steel Canyon Road. Lastly, a publicly accessible community trail is also proposed to be constructed within the Project site that would connect to the pathway constructed along Willow Glen Drive.

For additional project description details, please refer to the Project Description included in the Project Environmental Impact Report.

2.2 Land Use Designations and Zoning

The site is subject to the General Plan Semi-Rural Regional Category, and Specific Plan Area Land Use Designation, and is shown as Open Space (Recreation) on the Valle de Oro Land Use Map of the General Plan. The Project site is currently zoned as Open Space (S80, with 8-acre minimum lot sizes), Specific Planning Area (S88), and Holding Area (S90).

The Rancho San Diego Specific Plan (SP 79-005) was originally approved in 1980 and has been amended several times since; most recently on December 4, 2013. There are two parcels in the southwestern portion of the Project site that are included in the Specific Plan. These parcels are 506-021-19-00 (8.2 acres) and 519-011-03-00 (23.8 acres). Both parcels are zoned as S88, Specific Planning Area. Current zoning restricts extractive uses to site preparation, which allows the off-site removal of materials when it is secondary to the future use of the site.

The S80 designation is used to provide appropriate controls for areas considered generally unsuitable for intensive development, including hazard or resource areas, public lands, recreation sites, or lands subject to open space

easement or similar restrictions. One four-acre parcel located in the southwestern corner of the Project site is zoned S80 (only 0.3 acre of which would be disturbed).

Most of the site (19 parcels and approximately 244 acres) is zoned S90. The S90 designation is used to prevent premature urban or non-urban development until more precise zoning regulations are prepared. Permitted uses are like those associated with zone A70 (Limited Agriculture) and several uses can be permitted with an approved MUP.

The California Geological Survey (CGS), operated by the California Department of Conservation, produces maps identifying mineral resource zones (MRZs) with potential to produce geologic resources such as metals, minerals, and construction aggregate important to the state's economy (CGS 2019). The property was previously classified by CGS as a combination of MRZ-3 and MRZ-4 (undetermined or unknown mineral resource significance) with a small section of MRZ-2 (identified mineral resource significance) land located on the northeast end of the property (CGS 1982). In 2017, CGS released Special Report 240 Update of Mineral Land Classification: Portland Cement Concrete-Grade Aggregate in The Western San Diego County Production-Consumption Region, California, which reclassified the property from MRZ-3 and MRZ-4 to MRZ-2 (CGS 2017). This reclassification action was based on an aggregate resource evaluation report provided to CGS in 2016 by the property owner (CGS 2017). A classification of MRZ-2 indicates that the area is underlain by mineral deposits where geologic data show that significant measured or indicated resources are present.

2.3 Regulatory Framework

The Proposed Project is subject to several regulations applicable to the protection of visual resources, as well as plans and policies that ensure adequate consideration is given to preserving and/or enhancing the visual qualities of an area. These policies aid in evaluation of the planning agency/ community perception of visual qualities within an area, as well as providing guidance as to whether Proposed Project modifications would be visually compatible with County and/or community goals. The Proposed Project is subject to the following guidelines and policies.

2.3.1 Caltrans State Scenic Highway Program

The San Diego region includes several officially designated scenic highways protected by the California Scenic Highway Program, administered by the California Department of Transportation (Caltrans). Designated scenic highways are in areas of outstanding natural beauty and are provided with special conservation treatment to keep the natural views protected. There are also highways identified by the program as eligible scenic highways, which are considered scenic resources, but the local jurisdiction has not adopted a scenic corridor protection program or applied to Caltrans for official designation.

The five highways in the San Diego region that are officially designated by Caltrans as state scenic highways include SR 52 (from Santo Road to Mast Boulevard adjacent to Mission Trails Regional Park), SR 75 (San Diego-Coronado Bay Bridge and Silver Strand), SR 78 (adjacent to Anza Borrego State Park), SR 163 (adjacent to Balboa Park), and SR 125 (from Interstate 8 to SR 94) (Caltrans 2019). None of the officially designated highways is in proximity to the Project site. One eligible scenic highway, SR 94 from Interstate 8 to SR 125, comes within one mile west/south of the Project site.

2.3.2 County of San Diego General Plan

The San Diego County General Plan (General Plan) was adopted in August 2011 and provides a framework for the future growth and development of the unincorporated areas of the County consistent with an established community vision (County of San Diego 2011A). The General Plan is based on a set of guiding principles designed to protect the County's unique and diverse natural resources and maintain the character of its rural and semi-rural communities. It reflects an environmentally sustainable approach to planning that balances the need for adequate infrastructure, housing, and economic vitality, while maintaining and preserving each unique community within the County, agricultural areas, and extensive open space. The General Plan consists of six countywide elements: Land Use, Circulation (Mobility), Conservation and Open Space, Housing, Safety, and Noise. The Conservation and Open Space Element has relevant visual resource policies and is described below.

Conservation and Open Space Element

The Conservation and Open Space (COS) Element of the County General Plan combines what were formerly four separate elements (Open Space, Conservation, Scenic Highway, and Energy) and describes the natural resources within the County and goals and policies to preserve them. The COS Element provides direction for future growth and development in the County with respect to the conservation, management, and utilization of natural (biological, water, agricultural, paleontological, mineral, visual [including scenic corridors and dark skies]) and cultural resources; protection and preservation of open space; and provision of park and recreation resources.

The following policies of the COS Element pertain to visual resources and are particularly applicable to the proposed Project:

- **GOAL COS-11: Preservation of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- **COS-11.1: Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- **COS-11.2: Scenic Resources Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.
- **COS-11.3: Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
 - Creative site planning
 - Integration of natural features into the project
 - Appropriate scale, materials, and design to compliment the surrounding natural landscape
 - Minimal disturbance of topography
 - Clustering of development so as to preserve a balance of open space vistas, natural features, and community character.
 - Creation of contiguous open space networks

- **COS-13.1: Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.
- **COS-14.11: Native Vegetation.** Require development to minimize the vegetation management of native vegetation while ensuring sufficient clearing is provided for fire control.

Regarding Policy COS-13.1, the maintenance of dark skies in San Diego County is vital to the two observatories that depend on them for astronomical research: Palomar Observatory and Mount Laguna Observatory. Both observatories are distant from the Project site and dark skies policies specific to these facilities are not applicable to the Project.

In addition to these policies, the COS Element includes a Scenic Corridors section, which establishes a County Scenic Highway System. The goal of the County Scenic Highway System is to protect and enhance the aesthetic quality of the natural landscape within the viewshed of all scenic highway corridors. Roadways in the vicinity of the Project site that are identified as scenic roadways in the COS Element include SR 94 (from SR 125 to Interstate 8) and Willow Glen Drive) from Jamacha Road to Dehesa Road, which fronts the northern Project boundary). These roadways are included as part of the County Scenic Highway System.

2.3.3 Valle de Oro Community Plan

The Valle de Oro Community Plan (adopted in August 2011) augments the 2011 General Plan and contains goals and policies as well as design guidelines specific to the Valle de Oro CPA (County 2011B). The Project site is in the eastern portion of the Valle de Oro CPA. Relative to community character, the Community Plan envisions a “unique balance of urban, semi-rural, agricultural, and open space land uses.” Specific guidance provided in the Valle de Oro Community Plan related to community character, land use, open space, community design, specific plan areas, conservation, and protection of scenic highway corridors is listed below. It is also noted that while the Valle de Oro Community Plan identifies Willow Glen Drive and Jamacha Road/SR 54 from SR 94 to El Cajon as scenic highway corridors. Although the western end of the Project site is located just 700 feet from SR 54, it is not visible from this roadway due to intervening topography, development and vegetation.

- **Community Character Goal:** Retain the unique balance of urban, semi-rural agricultural and open space land uses within the community, with open space and low-density buffers that separate the community from adjacent cities and unincorporated communities, while new development within the community conserves natural resources and topography.
- **Community Character Policy 6:** Require landscaping, including trees, along all Mobility Element roads.
- **Land Use Industrial Goal:** Provide for the kind of industrial development that does not detract from the existing character of the community.
- **Land Use – Industrial Policy 3:** All industrial activities shall provide buffering or screening when located adjacent to residential areas.
- **Land Use – Industrial Policy 4:** Require strict regulation of all extraction industries to minimize dust, noise, traffic, unsightly views, and undesirable accumulation of water, and safety and health hazards.
- **Land Use – Industrial Policy 5:** Require specific guidelines for extraction operations and rehabilitation of the landscape.

- **Land Use – Industrial Policy 6:** Support strict regulation of all extraction industries to ensure proper rehabilitation of the landscape.
- **Community Design Goal:** Preserve, maintain, and enhance distinct community identities within the Valle de Oro Planning Area by encouraging quality design and appropriate land use patterns.
- **Community Design Policy 2:** Mature trees, shrubs, and significant landforms should be conserved in all public and private development projects.
- **Open Space Goal:** The preservation of open space including sensitive habitat, steep slopes, canyon, floodplains, and agricultural lands; and regulation of the use of open space within the community.
- **Open Space Policy 9:** Encourage the preservation of open space areas in which potential natural hazards exist (flood plains, fault lines, mudslides, etc.).
- **Open Space Policy 11:** Areas to be preserved as natural open space shall be included in open space easements.
- **Open Space Policy 14:** The following site design criteria shall be used for all industrial development in the plan area (only applicable criteria are listed below).
 - c. Appropriate screening from adjacent properties zoned for non-industrial uses shall consist of a six-foot high fence made of wood, masonry, or stucco material, and a minimum five-foot wide strip of dense landscaping.
 - e. All industrial uses shall provide curb, gutter, and sidewalk improvements for parcel frontage along public and private streets.
- **Rancho San Diego Specific Plan – A. General, Policy 2:** All goals, objectives, and policies of the Valle de Oro Community Plan shall apply.
- **Rancho San Diego Specific Plan – A. General, Policy 2:** Design should be compatible with surrounding development.
- **Rancho San Diego Specific Plan – C. Commercial/Industrial, Policy 2:** Industrial uses should be located in areas adjacent to existing industrial activities or in areas located adjacent to freeways or prime arterial roads and should not exceed three percent of the plan area.
- **Rancho San Diego Specific Plan – D. Conservation, Policy 1:** Significant natural resources as identified in the community plan (see Resource Conservation areas) shall be conserved through open space easement dedication, limited recreational uses, or by any other appropriate means.
- **Rancho San Diego Specific Plan – D. Conservation, Policy 2:** A system of open space and recreation areas providing linkages, trails, and buffers within specific planning areas shall be provided and protected.
- **Conservation Goal:** Promote conservation and planned management of all valuable resources, natural and man-made, and prevent wasteful exploitation and destruction of these resources.
- **Conservation Policy 24:** All outdoor lighting fixtures shall be shaded on top so that all light will shine downward.
- **Conservation Policy 25:** Cut-off luminaries, using low-pressure sodium or equivalent monochromatic light sources, which eliminate unwanted light scattering into the atmosphere shall be used for outdoor lighting.
- **Scenic Highways Goal:** Utilize scenic highway corridors as one method of protecting and enhancing the appearance of scenic, historical, and recreational areas.
- **Scenic Highways Policy 1:** Support the protection of the scenic highway corridors in Valle de Oro as designated in the County General Plan.

2.3.4 Valle de Oro Community Trails and Pathways Plan

The San Diego County Trails Program (adopted in June 2005) Valle de Oro Community Trails and Pathways Plan identifies existing and future trails and pathways within the Valle de Oro community. The recreational trails in the Valle De Oro CPA serve about 42,000 people (County of San Diego 2005 ; as of January 1, 2018, SANDAG estimated that the CPA includes a total population of 42,025 persons (SANDAG 2019)). The plan identifies several existing recreational trails and features within the community, including the Sweetwater Regional Trail; SDNWR trails; and other nature walks, jogging loops, and equestrian trails within the Rancho San Diego area.

2.3.5 Rancho San Diego Specific Plan

The Rancho San Diego Specific Plan covers a total of approximately 2,963 acres located generally around the intersection of SR 94/Campo Road and SR 54/Jamacha Road. The Specific Plan is based on the Valle de Oro Community Plan, which provides the guidelines for developing the Specific Plan within the Community Plan text. Approximately 32 acres located in the southwestern portion of the Project site are within the Rancho San Diego Specific Plan area. This area was incorporated into the Specific Plan area as an extension of the Cottonwood Golf Club to replace the fairways affected by the Steele Canyon Road Bridge over the Sweetwater River (County 2013A). Only the 32-acre portion of the site located within the Specific Plan area is subject to the provisions of the Specific Plan.

2.3.6 County of San Diego Zoning Ordinance

A MUP is required for the proposed Mining Operations (Extractive Use). In accordance with Section 7358 of the Zoning Ordinance (County 2013), before any use permit may be granted or modified, it shall be found that:

- a. That the location, size, design, and operating characteristics of the proposed use will be compatible with adjacent uses, residents, buildings, or structures, with consideration given to:
 1. Harmony in scale, bulk, coverage and density;
 2. The availability of public facilities, services and utilities;
 3. The harmful effect, if any, upon desirable neighborhood character;
 4. The generation of traffic and the capacity and physical character of surrounding streets;
 5. The suitability of the site for the type and intensity of use or development which is proposed; and
 6. Any other relevant impact of the proposed use; and
- b. That the impacts, as described in paragraph “a” of this section, and the location of the proposed use will be consistent with the San Diego County General Plan.
- c. That the requirements of the California Environmental Quality Act have been complied with. (County 2013B)

2.3.7 County of San Diego Resource Protection Ordinance

The County’s Resource Protection Ordinance (RPO) provides special regulations applicable to certain types of discretionary applications, including MUPs. The ordinance focuses on the preservation and protection of the County’s unique topography, natural beauty, diversity, natural resources, and quality of life. It is intended to protect the integrity of sensitive lands including wetlands, wetland buffers, floodplains/floodways, sensitive habitats, cultural resources, and steep slopes (lands having a natural gradient of 25 percent or greater and a minimum rise

of 50 vertical feet, unless said land has been substantially disturbed by previous legal grading), all of which are components of visual quality and community character.

Pursuant to Section 86.605(d) of the County Code of Regulatory Ordinances, sand, gravel or mineral extraction projects (such as the Proposed Project) are exempt from RPO requirements provided that certain mitigation measures are required as a condition of the MUP. In addition, the RPO prohibits impacts to mature riparian forest for mineral extraction. Areas to be mined on the Project site consist of a landscaped golf course and mature riparian forest does not occur within areas that would be mined. Therefore, compliance with the provisions of the County's RPO are not discussed further in this section.

2.3.8 County of San Diego Light Pollution Code

The Light Pollution Code, also known as the Dark Sky Ordinance, was adopted "to minimize light pollution for the enjoyment and use of property and the night environment by the citizens of San Diego County and to protect the Palomar and Mount Laguna observatories from the effects of light pollution that have a detrimental effect on astronomical research by restricting the permitted use of outdoor light fixtures on private property" (Sections 59.101 of the County Code of Regulatory Ordinances). The County designates all areas within a 15-mile radius centered on the Palomar Observatory and within a 15-mile radius centered on the Mount Laguna Observatory as Zone A, with all other areas of the County designated as Zone B. Zone A has specific light emission restrictions that are more stringent than those for Zone B.

The Project site is located over 40 miles from the Palomar observatory and approximately 28 miles from the Mount Laguna Observatory, and is therefore, within the Outdoor Lighting Ordinance Zone B. As such, outdoor lighting, such as security or parking lot lighting, must be less than 4,050 lumens and fully shielded within Zone B and on the Project site.

2.4 Design Policies and Guidance

Please refer to Section 2.3.3, Valle De Oro Community Plan, for a list of community design goals and policies.

3 Visual Environment of the Project

3.1 Project Setting

3.1.1 On-Site

The Project site is in an unincorporated area of San Diego County, within the community of Rancho San Diego. The site is located within the Jamacha Valley and almost entirely within the floodplain of the Sweetwater River (FEMA 2012). Willow Glen Drive forms the northern boundary of the Project site, which is bisected by the Steele Canyon Road bridge over the Sweetwater River (refer to Figure 1). The Project site gently slopes from east to west, with elevations ranging from approximately 380 feet amsl in the northeastern portion of the site to 320 feet amsl in the

southwestern portion of the site. The Sweetwater River runs through the length of the site entering at the northeastern Project boundary and continuing in a mostly northeast to southwest direction to the southwestern boundary, where it exits the site and continues southwest toward the Sweetwater Reservoir. The river is channelized with a natural bottom and is relatively narrow (approximately 13 feet wide) where it enters the Project site, but gradually expands to a width of approximately 119 feet below the Steele Canyon Road Bridge (HELIX 2019). West of the bridge, the river channel narrows to widths ranging from approximately 54 to 110 feet as it meanders through the closed Lakes Course in a northeast-southwest direction toward the southwestern property boundary.

The Project site is currently occupied by the Cottonwood Golf Club, which consists of two 18-hole courses, the eastern Ivanhoe Course, and the western Lakes Course. While the Ivanhoe Course is active and open to the public, the Lakes Course has been closed since 2017 and is no longer being maintained. The Project site has operated as a public golf course since the 1960s. The site was previously used for commercial ranching and agriculture prior to the 1940s, followed by mining for construction aggregates in the 1950s to the south of Sweetwater River and west of Steele Canyon Road, and adjacent to Willow Glen Drive at the western end of the site. Mineral extraction activities expanded to the east side of Steele Canyon Road in the 1960s and continued into the 1970s as both golf courses were developed. Sand extraction activities have continued intermittently within the site, allowing for the creation of the water hazards and bunkers that are currently visible on site. Figure 10, Existing Facilities, identifies existing features (including ponds and previous quarried areas) on the site and the location of the Lakes and Ivanhoe courses.

The site currently operates as a public golf course, though golf play and maintenance of landscaped turf in the western portion of the site (Lakes Course) has not been active since 2017. The Sweetwater River seasonally flows through the northern and central portion of the Ivanhoe Course, with four cart bridges spanning the river to allow access to fairways and facilities on either side of the river channel (refer to Photo A on Figure 11, Existing Conditions: Onsite (1 of 2)). Located east of Steele Canyon Road, the Ivanhoe Course has relatively linear fairways that include bunkers and water hazards and are lined with mature native and non-native trees (e.g., eucalyptus, Fremont/western cottonwood [*Populus fremontii*]), and willows [*Salix* spp.]) to separate fields of play (see Photo B, Figure 11). As it is no longer being maintained and is only subject to periodic mowing, low and dry, weedy shrubs and grasses are distributed throughout the western portion of the project site (i.e., Lakes Course) and are interspersed with pockets of exposed soils (see Photo C, Figure 11). In addition, clusters of trees, two ponds/water hazards, and several dry depressions that previously supported golf course water hazards occur on site. Lastly, several sandy paths traverse the unmaintained area.

On the Ivanhoe Course, on-site facilities include a clubhouse, equipment maintenance and storage area, and two on-course restrooms. The approximately 11,500 square foot (SF), single-story and rectangular clubhouse is located centrally within the eastern Ivanhoe Course and occupies approximately 0.75 acre (see Photo D, Figure 11 and the inset map on Figure 10). The clubhouse was constructed in the 1960s when the golf courses were developed and is situated near a fenced driving range that extends east of the Sweetwater River. The building has a white brick and wood-siding façade with decorative stone elements and a low-pitched roof with wooden lattice screening lining the edges of the roof to screen mechanical equipment. An open, 13,000-SF storage yard is located south of the clubhouse and is enclosed and separated from the clubhouse and golf course by fencing and hedges. Course parking occurs in two connected asphalt-paved parking lots located north of the clubhouse and adjacent to Willow Glen Drive (refer to Photo E, Figure 12, Existing Conditions: Onsite (2 of 2)). The upper lot, located adjacent to Willow Glen Drive, is the larger lot (1.6 acres) with designated spaces for approximately 200 vehicles. There are two ingress/ egress locations to/from the parking lot, which is located slightly downslope from Willow Glen Drive (approximately 10 feet) (see Photo E). The lower lot (approximately 0.75 acre) is adjacent to the clubhouse and has

space for approximately 120 vehicles. The lower lot is accessed by two one-way ingress/egress ramps from the upper lot and sits approximately 8 feet lower in elevation than the upper lot. A small landscaped slope separates the parking lots; mature trees line the southern edge of the lower lot and separate the parking areas from the clubhouse and adjacent storage yard.

An approximately 2.2-acre equipment maintenance and repair facility is located within the Ivanhoe Course, southwest of the clubhouse. This facility provides a maintenance and storage area for the tractors, mowers, and other landscaping equipment used for course maintenance. The maintenance area includes two aboveground fuel storage tanks, two garage repair structures (3,440 SF and 3,800 SF), and an approximately 375 SF office building. Covered parking bays are provided on the north and southwest perimeter of the yard for equipment. The facility is surrounded by mature trees and landscaping, which provide some visual shielding from the clubhouse, golf house, and off-site vantage points. Other existing structures include two single-stall restroom buildings, one on each of the courses. One vacant one-story residential building is located on an approximately 1.1-acre parcel immediately adjacent to Willow Glen Drive within the western Lakes Course. Based on review of a 1953 aerial image of the Project site, the building was present at that time. The structure appears to be California ranch in style and is surrounded by a chain-link fence with green mesh, mature trees, and dense landscaping which largely shields it from passing viewers on Willow Glen Drive.

As shown on Figure 9, the Project site supports 20 vegetation communities/land use types. Native vegetation communities are mapped on the Project site; however, these areas are generally outside of proposed extraction areas. The portion of the Project site west of Steele Canyon Road, consists of the unmaintained Lakes Course, which is primarily characterized by unmaintained disturbed ruderal vegetation, several man-made ponds, non-native vegetation along Willow Glen Drive and a mixture of native and non-native vegetation along the southern boundary. The eastern portion of the site (i.e., the active Ivanhoe golf course), is characterized by landscaped turf grass, native and non-native planted trees, cart paths, parking lots, clubhouse, and other maintenance facilities. In addition, the Ivanhoe course is traversed by an electrical transmission corridor that supports three transmission lines (see Photos F and H, Figure 12). Two large and geometric steel lattice towers and a single tall tubular steel pole are installed approximately 700 feet to the west of the equipment maintenance and repair facility.

Vegetation along the Sweetwater River channel has been heavily modified by past and current uses and is currently dominated by low, maintained, and irrigated grass or bare ground. During most of the year, the channelized riverbed appears dry and barren compared to the verdant, irrigated fairways of the eastern Ivanhoe Course (see Photo G, Figure 12). A comparable color contrast does not occur on the idle western Lakes Course due to the dominance of low and brown/olive ruderal shrubs and grasses and lack of irrigation. Occasionally during wet winters, water released from the upstream Loveland Reservoir flows within the Sweetwater Riverbed (see Photo H, Figure 12). A small section of the river along the southwestern Project boundary (approximately 2,360 feet in length [0.45 miles] and 130 to 250 feet in width) is densely vegetated with riparian vegetation dominated by willows intermixed with non-natives such as giant reed (*Arundo donax*) and tamarisk (*Tamarix* sp.). This section of the river is located outside the boundary of mining subphases.

Small patches of Diegan coastal sage scrub habitat occur at the southeastern and southwestern Project boundaries. These patches are connected to larger swaths of coastal sage scrub that occur within nearby preserved lands and open space. Dominant species include California sage brush, California buckwheat, single whorl burrobrush (*Ambrosia monogyra*), and broom baccharis (*Baccharis sarothroides*). Disturbed coastal sage scrub on site occurs as narrow bands of habitat to the south of Willow Glen Drive at the northeastern boundary, and to the west of Steele Canyon Road along the southern boundary. These areas consist of scattered shrubs of California sagebrush and California buckwheat growing among planted non-native trees and woody debris deposited on the

slopes. Scattered stands of eucalyptus woodland occur throughout the site, mostly at the northeastern, southeastern, and southern boundaries. Scattered eucalyptus trees also occur throughout the golf course among the trees lining the fairways. Peruvian pepper trees, eucalyptus, and oleander line Willow Glen Drive along the site's northern boundary. Existing mapped vegetation and land use types on the Project site are shown on Figure 9.

Man-made ponds on site consist of open water habitat excavated in upland areas. Six constructed ponds are present on site, which serve as water hazards and aesthetic features for the golf courses. Four ponds are present in the eastern portion of the site and six occur to the west of Steele Canyon Road. The water level in these constructed ponds is maintained artificially by pumping water into them. Several dry depressions that previously supported water hazards are present on the western Lakes Course.

3.1.2 Off-Site

The Jamacha Valley and surrounding mesas and mountainous topography characterize the physical setting of the areas surrounding the Project site. Biological resources that contribute to the visual context in the region generally include core blocks of coastal sage scrub and chaparral, open space conserved within the SDNWR, and perennial waters and riparian habitat associated with Sweetwater River. Due to the presence of the Cottonwood Golf Course (i.e., the Project site), the continuity of vegetation and biological resources in the greater Project Area is noticeably broken. In some areas both upstream and downstream of the Project site, the Sweetwater River is scantily vegetated and open, similarly to its on-site appearance. In other areas, the river corridor is heavily vegetated with riparian vegetation, including dense stands of trees such as cottonwoods (*Populus* spp.), willows, and western sycamores (*Platanus racemosa*) intermixed with non-natives such as giant reed, tamarisk, eucalyptus, peppertree (*Schinus* spp.), and Mexican fan palm (*Washingtonia robusta*). Undeveloped lands to the north, east, and south of the site are primarily comprised of coastal sage scrub and chaparral habitat, with smaller areas of grassland also present. A mesa rises to the north of the Project site creates a notable "wall" that, along with area mountains and hillsides, informs the Project viewshed. Residences line the mesa edge north of the site. South of the Project site, hillsides and mountains line the river valley.

The existing visual character and quality of the surrounding area is characterized by the Valle de Oro Community Plan as a balance of urban, semi-rural agricultural, and open space land uses, with the Rancho San Diego area developed with large-scale, master-planned residential and commercial developments interspersed with large areas of green-belt and biological open space for wildlife preservation. Land uses in the surrounding area include residences, parks, and commercial uses of the Rancho San Diego community to the north and west and undeveloped land and extractive operations to the northeast. Rural residential development, small-scale agricultural uses, and the Steele Canyon Golf Club (including a 27-hole golf course and estate-style residential uses) are located to the south and southeast and the SDNWR is located to the southwest. Existing land uses and facilities in the surrounding area are illustrated in Figure 10.

Land use in the vicinity is limited by physical constraints associated with the presence of the Sweetwater River channel, which passes through the area in a northeast-to-southwest direction, and by the afore-mentioned steep terrain on the north and south. The Sweetwater River has several artificial impoundments upstream of the Project site, including Loveland Reservoir, which is subject to water transfers and controlled releases by the Sweetwater Authority. In the Project vicinity, the Sweetwater River channel slopes gently from approximately 400 feet amsl to 300 feet amsl. Land to the north and east slopes steeply to over 700 feet amsl. The area to the south consists of rugged terrain rising quickly to elevations over 800 feet amsl, and continuing to rise to San Miguel Mountain, at over 2,500 feet amsl, approximately 3 miles to the south.

Willow Glen Drive generally parallels the alignment of the Sweetwater River, and provides access to rural and tract-style residential neighborhoods, recreational facilities including golf courses, and extractive operations. The roadway consists of four-lanes west of Steele Canyon Road and two lanes east of the golf course. The Project site is crossed by Steele Canyon Road via a bridge that spans the Sweetwater River. An existing view from the northbound lane of Steele Canyon Road as it spans the river is shown on Figure 13, Existing Setting: Offsite (see middle photo).

Residential development in the area includes several subdivisions of tile-roofed, single-family homes generally larger than 1,500 SF on landscaped, fenced yards. These include Emerald Point and Corte Madera, adjacent subdivisions located north of the site with access off Willow Glen Drive at Muirfield Drive and Medina Drive, respectively; the gated Monarch Ridge development located northeast of the site of Hillsdale Road and Vista Grande Road; the Cottonwood community located north of the site off Hillsdale Road and Wind River Road; and the La Tierra development located south of the Project off Ivanhoe Ranch Road. Several developments north of the Project site including the mesa-top Cottonwood community off Wind River Road are visible in Figure 13 (see middle photo that presents a northeastern view from the Steele Canyon Road Bridge). Larger estate-style single-family residences on large lots are located south of the Project site, including those immediately adjacent to the Project site located on Heatherwood, Wildwind Drive, and Cottonwood Springs Lane, as well as the gated Steele Canyon Estates and golf club located to the southeast. The proximity of residential lands uses to the Project site is shown on Figure 10.

The visual environment to the south and southwest of the Project site is shown on Figure 10 and further illustrated on Figure 13 (see bottom photo). One isolated single-family residence is located north of the Project site, just east of the clubhouse and parking lot with access from Willow Glen Drive. Two additional homes and a small-scale agricultural operation are located off Ivanhoe Ranch Road along the southern property boundary between the Project site and the Steele Canyon Golf Course. Schools in the area include Jamacha Elementary School located approximately 0.25 mile to the south, Steele Canyon High School located approximately 0.5 mile to the south, Valhalla High School located approximately 0.75 mile to the northwest, Hillsdale Middle School located approximately 0.5 mile to the west, and Cuyamaca College located approximately 0.66 mile to the west.

Several parks are located within the residential developments near the Project site, including Cottonwood, Damon Lane, Hillsdale, Hilton Head, Steele Canyon, and Woodhaven County parks. These parks range from large grassy areas featuring mature shade trees, benches, and paths/paved walkways (e.g., Cottonwood, Damon Lane, Woodhaven) to facilities offering playgrounds, playing fields, and picnic areas (Hillsdale, Hilton Head, Steele Canyon). The closest park is Hilton Head County Park, located at 1605 Hilton Head Road, which features a children's playground, splash pad, multi-use sports field, basketball court, exercise stations, shaded picnic and barbecue areas, and a concrete walking path. County parks and existing trails in the Project vicinity are shown on Figure 14, Viewshed Analysis. Of the parks listed above, views to the Project site and more specifically, a small portion of the Phase 1 area, are only available at Hilton Head County Park (see bottom photo of Figure 15, Existing Views from Willow Glen Drive and Hilton Head County Park).

Located southwest and east of the Project site, the SDNWR includes an existing trail system that includes two trails in the vicinity with potential views of the Project: Wildlife Refuge Loop Trail and McGinty Mountain Trail (Hiking San Diego 2019a, 2019b). The trails are currently open to hiking, biking, and horseback riding. Located south of the Project site at the dead end of Par Four Drive, the Wildlife Refuge Loop Trail trailhead provides access to an approximately 3.3-mile loop trail through the eastern portion of the SDNWR. The loop trail includes a "lower" and "upper" segment and the upper segment provides elevated vantage points to the Lakes Course and western portions of the Ivanhoe Course. The McGinty Mountain trailhead is located on Jamul Drive, approximately 2.3 miles

southeast of the Project site. This trail reaches the McGinty Mountain Peak at approximately 2,183 feet amsl and is 5 miles total out and back. While distant and present within an expansive viewshed, the Project site is faintly detectable (primarily, the bright greens of the irrigated Ivanhoe golf course) from the switchbacks and ridgeline segments of the trail.

The County has identified a number of existing and proposed community pathway and trails located along public rights-of-way, over private property, and through County-owned land in the vicinity of the Project in the Valle De Oro Community Trails and Pathways Plan which is a component of the County Trails Program Community Trails Master Plan (CTMP; 2005, as amended). The following list identifies those existing community trails and pathways located within areas of the Project viewshed. Visibility to the site is additionally restricted due to intervening land uses and/or vegetation. The numbers of the trails and pathways as listed in the Valle De Oro Community Trails and Pathways Plan are provided in parentheses.

- Sweetwater Regional Trail (Trail E): existing and proposed regional trail totals approximately 7.6 miles in length in the Valle de Oro CPA and would extend into the Crest/Dehesa, Spring Valley, and Sweetwater CPAs along the Sweetwater River. As shown in Figure 14 (identified as Sweetwater River Trail), a portion of this trail west of the Project site (and north and west of the Sweetwater River) has been completed. However, views to the Project site from the completed trail segment are restricted due to intervening vegetation and development. The proposed segment of the trail parallels Willow Glen Drive and the entire length of the northern boundary of the Project site for approximately 1.7 miles.
- Wildlife Refuge Loop Trail (Trail 5): existing trail totals approximately 6.0 miles within the SDNWR, south and southwest of the Project site. The alignment follows the Par 4 trail described above and extends to the south. As the Wildlife Refuge Loop Trail overlies and extends beyond the Par 4 Trail, “Wildlife Refuge Loop Trail” is used throughout this report and herein place of the Par 4 Trail.

Lastly, existing mine operations and storage yards occur within the vicinity of the Project. These facilities include the approximately 94-acre, privately-owned Hester’s Granite Pit operated by Robertson’s Ready Mix, located approximately 0.7 mile northeast of the Project site and the County Department of Public Works Roads Division 1 Headquarters (includes gravel, rock, miscellaneous equipment and materials storage; located off Highway 94 at Singer Lane), located approximately 0.7 mile southwest of the Project site. Hester’s Granite Pit is generally located outside of the Project viewshed due to intervening terrain and the 60-acre borrow pit (located off SR-94 and Singer Lane) is obscured from public view due to vegetation and development off SR-94.

3.2 Project Viewshed

A “viewshed” is an analytical tool to aid in identification of views that may be affected by a potential project. The viewshed is defined as the surrounding geographic area from which the on-site elements of the Project are likely to be seen. The viewshed boundary represents the geographic limits for this visual assessment.

Figure 14, Viewshed Analysis, illustrates the Project viewshed on an aerial photographic base with topography shown within a three-mile radius. For the Project area, views within a three-mile radius were considered close enough to allow viewers to perceive Project elements such as landform modification, vegetation removal, and (potentially) the spatial mass and form of temporary structures and processing equipment. Note that although built versus natural elements are distinguishable from further distances, topographic modifications, and

structures beyond one mile tend to begin to become visually muted and distinguishable only as facets of the larger regional landscape.

The percentage of visibility is a conservative number, since visual screening by intervening structures or landscaping is not considered by the model. Because of intervening development, vegetation and landscaping, the entire Project site and multiple subphase areas would not be visible from all the identified locations within the viewshed area. Even under conditions in which topography or other intervening elements do not obstruct views, views to any given point within a viewshed may not be clear due to levels of humidity or haze. Atmospheric conditions such as fog, mist, haze, and/or smog can decrease visibility and cause features to lose sharpness at approximately 0.5 mile.

The Project site is in an area of varied topography which somewhat limits the number of surrounding public vantage points. The viewshed is generally defined by the surrounding hillsides that would limit views to the site. As shown in Figure 14, based on topography alone, the viewshed indicates that the Project site is potentially visible mostly from nearby areas within the Jamacha Valley and adjacent hillsides/ridgelines that face the Project site, as well as segments of SR 54/Jamacha Road, SR 94/Campo Road, and other more distant roadways. The undeveloped hillsides and mountainous areas to the south and east of the Project site generally delineate the southern and eastern extent of the viewshed boundary. The hillsides and mountains that are shown to have visibility can easily be seen from the Project site because of the scale of and silhouettes displayed by these features; however, since the Project site is confined within the context of the valley, it may not be as visually distinct in views from these distant locations. The northern and western viewshed boundary is defined by the varied topography within developed areas of Rancho San Diego and El Cajon. These areas primarily support residential and commercial uses, with parks and educational facilities as well as open space areas interspersed throughout. The viewshed analysis was field checked by Project analysts and specific sensitive locations (segments of SR 54 and SR 94, existing trails, and areas of the adjacent Rancho San Diego community) were visited to confirm or eliminate visibility. Particularly along roadways and trails that abut structures and landscaping associated with the surrounding development, views are generally obscured due to these intervening features. Specific views available from roadways, trails, and residential development within the Project viewshed are discussed in more detail in the analysis below. See Sections 4.2.2, Viewer Exposure and 5.2, Key Views.

3.3 Landscape Units

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers. Specifics related to visibility and intervening uses are provided as relevant within analyses below.

The overall “outdoor room” within which the Project is located consists of a single landscape unit, characterized by the Sweetwater River valley landscape. The landscape unit is defined by a mix of recreational/golf course uses, agriculture, residential, and undeveloped areas within and adjacent to the river corridor. The Sweetwater River is generally contained by the surrounding mountains and hillsides that enclose the Project viewshed. This unit is defined for the Project by the topography (e.g., hills, mesas, and ridgelines) that confine views to the valley and by more distant mountainous slopes.

4 Existing Visual Resources and Viewer Response

4.1 Existing Visual Resources

4.1.1 Visual Character

The visual character of the Project area encompasses visually diverse forms, including the uniformly landscaped golf course areas within the Project site, geometric and rectilinear structures in the residential areas, and more natural, complex vegetation in the riparian and mountainous areas. The hillsides rise from the valley floor, creating a visual contrast with the flatter land areas of the valley and a visually diverse pattern of elements within the landscape. The result is a mix of the natural and man-made environment with an emphasis on mature vegetation (both planted and native).

The Project site is relatively flat, with the Sweetwater River channel comprising a consistent linear element as it curves through the site. In the eastern Ivanhoe Course, the river channel sits at a lower elevation than the golf course areas that comprise most of the site. Low growing maintained grasses appear relatively smooth and regular but are punctuated by mature trees and other contrasting features including sand traps, manmade ponds, cart bridges, and pathways. Tall and greyish steel lattice towers and a single tubular steel pole on the Project site also punctuate the low grasses. Mature trees are generally of a standard shape and height throughout the site, and blend with the naturally vegetated river channel in the southwestern portion of the site, as well as with off-site areas. On-site structures are generally screened by mature trees and shrubs and do not appear to be dominant or out-of-scale features within the visual environment. The western portion of the site features some of the same pattern elements, but textures are noticeably less smooth due to the unmaintained, disturbed nature of the existing vegetation.

The visually dominant colors in the viewshed generally are the green and brown tones displayed by vegetation. Shades of green are brighter in irrigated areas and these colors fade into ashy and brown shades within unmaintained and scrub habitat areas. The dense riparian vegetation of the Sweetwater River creates a notable swath of dark green along the southwestern Project boundary and southwest of the site. The structures in the surrounding area are often experienced as white or light-colored geometric and rectilinear elements, and frequently have red tiled roofs. Residential subdivisions to the north of the Project site are massed in groupings large enough to be visually dominant within the landscape unit, and those on the developed mesa are skylined as viewed from the south, particularly at lower elevations such as along Willow Glen Drive and Steele Canyon Road.

Overall, the visual character of the landscape unit is suburban in nature due to the integration of the man-made environment primarily comprised of suburban residential neighborhoods and the golf course with natural features of the river corridor and surrounding hillsides and mountainous landforms.

4.1.2 Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed. This approach to evaluating visual quality can help identify specific methods for mitigating specific adverse impacts that may occur because of a project. The three criteria for evaluating visual quality are as follows:

- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape.
- **Intactness** is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.
- **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns.

The visual unity of the valley within which the Project site is located is considered moderately high. The area generally displays compositional harmony; however, disparate features (i.e., undeveloped open space areas, recreational uses such as the Cottonwood and Steele Canyon golf courses, and residential development) are present and visible. Similar vegetative elements such as mature trees tend to unify the different land uses. McGinty Mountain, the San Miguel Mountains, and the hillsides north of the Project site are visually dominant features that highlight the topographic diversity within the viewshed. These topographic features tend to emphasize the overall coherence of the visual environment. The Project site has moderately high visual unity, due mostly to its low diversity and visual organization of repeating aesthetic features (flat areas covered with low-growing vegetation interspersed with uniformly planted mature tree, and built elements of the golf course such as buildings, pathways, water features, and sand traps). Mature trees, which are located throughout the site and along the perimeter, tend to emphasize the general consistency of the vegetative elements on the site and visually connect the site to surrounding areas and the Sweetwater River channel.

The intactness of the area is moderate. While the diverse elements within the area do not detract from the visual coherence of the environment as a whole, when viewed more closely, the developed areas and structures encroach somewhat into the natural areas of the valley, reducing the intactness. Most of the structures and more dense residential development are located along the hillsides north of the valley and south of the Project on the valley floor and adjacent hillsides. The intactness of the Project site is moderate, with the assessed intactness degraded by the disturbed nature of the western Lakes Course, which is unmaintained, unirrigated and displays a much less manicured appearance relative to the Ivanhoe Course. The western and eastern portions of the Project site, divided by the Steele Canyon Road bridge, visually contrast from one another and also are somewhat dissimilar to the surrounding areas, which are either more densely developed (e.g., residential areas) or more naturally vegetated (e.g., off-site portions of the Sweetwater River and mountainous areas).

The vividness of the Project Area is moderately high. The view of the valley edged by the surrounding ridgelines and natural segments of the Sweetwater River are memorable. However, the noticeable contrast between the adjacent Lakes and Ivanhoe Course, unmaintained golf course signage and chain-link fencing, and multiple transmission lines and support structures, notably detracts from the overall memorability of the area. The Project site itself is moderately vivid within the larger valley landscape, although vividness and visual cohesiveness of the golf course scenery is reduced by the appearance of the unmaintained, unirrigated western Lakes Course.

4.2 Viewer Response

Viewer response, or awareness, is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a project's implementation.

Viewer sensitivity is defined as both the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of the view, the speed at which the viewer moves, and position of the viewer. A viewer's response is also affected by the degree to which he/she is receptive to the visual details, character, and quality of the surrounding landscape. A viewer's ability to perceive the landscape is affected by his/her activity. For example, a viewer on vacation in San Diego County would probably take pleasure in looking at the landscape, and an individual may be strongly attached to the view from his home. However, a local County resident commuting to work may not "register" those same visual resources daily.

4.2.1 Viewer Groups and Sensitivity

Motorists

Motorists traveling along Willow Glen Drive have screened to somewhat open views onto the Project site. Roadway improvements and tree removal would however be unscreened and located in the foreground distance zone of motorists. According to the San Diego Association of Governments (SANDAG), average daily trips (ADT) on Willow Glen Drive range from approximately 8,500 ADT for the segment from Hillsdale Road east of the Project site to Steele Canyon Road, to approximately 20,700 ADT for the segment between Steele Canyon Road and Jamacha Road/ SR 54 (SANDAG 2015). At a moderate speed of 45 mph, motorists traveling in either direction on Willow Glen Drive experience views of the site for approximately 2.5 minutes. A relatively open view towards the northeastern corner of the Project site and more distant mountains from the westbound lane of Willow Glen Drive is depicted on Figure 15. An existing photo towards the Project site where dense landscaping is installed along Willow Glen Drive is also included on Figure 15. Duration of views to phase areas would be experienced over a shorter duration. At the intersection with Steele Canyon Road, longer view durations or "static" views may be experienced due to the traffic signal, where motorists may slow down approaching a red light or stop during the red phase. While some vegetative screening is provided along the property boundary adjacent to the roadway from existing shrubs and mature trees, partial to open views onto the site can be experienced along the entire length of the Project. Motorists along this roadway are assessed as having a high sensitivity to change, given the high percentage of anticipated area residents among users of this local road, and the identification of this road as a scenic highway corridor in the Valle de Oro Community Plan.

Along the bridge span over Sweetwater River, motorists on Steele Canyon Road are provided brief views onto the Project site. On the approach and over the bridge, views are available to the idle Lakes Course and currently operating Ivanhoe Course. According to SANDAG, the segment of Steele Canyon Road from Willow Glen Drive south to Jamul Drive experiences approximately 14,500 ADT (SANDAG 2015). The roadway provides access to several residential neighborhoods, which is the principal land use along the roadway. Existing mature vegetation and development adjacent to the roadway south of the Project site restrict views such that views are only available where the roadway crosses the Project site and river. The site would be visible for less than approximately

30 seconds for motorists traveling south and north; nonetheless, sensitivity is assessed as moderately high since most motorists are anticipated to be residents from local neighborhoods.

Other roadways in the Project area, such as Muirfield Drive (perpendicular to Willow Glen Drive), are further removed from the site, carry less traffic, are not identified as scenic corridors, and would have limited views of the site due to intervening vegetation and development. Overall, however, Muirfield Drive is expected to carry almost wholly residents of the area, who are generally expected to be highly sensitive to change. The site (specifically, subphases 1B and 1C) would be visible for less than approximately 5 seconds for motorists traveling south on Muirfield Drive between Hilton Head road and Willow Glen Drive. At the intersection with Willow Glen Drive, views of slightly longer duration may be experienced by motorists due to the stop sign. Based on these considerations, motorists on Muirfield Drive are presumed to have moderate sensitivity.

Recreationalists

Public parks in the Project vicinity with potential views of the Project site include Hilton Head County Park and Steele Canyon County Park (refer to Figure 14). Due to intervening vegetation and structures associated with adjacent development, the Project site is not visible from Steele Canyon Park. Hilton Head County Park is surrounded by residential development, which limits views of the Project site; limited views are available from a small area of park where a narrow view corridor along Muirfield Drive is present and the Project site (Subphase 1B and 1C areas) is visible between homes adjacent to Muirfield Drive and a landscaped median (see Figure 15). Sensitivity to Project development and the resultant change to existing visual conditions from this park is assessed as moderately low, given the limited site visibility and the fact that park users would generally be focused on the features of and activities occurring in the park and not surrounding areas.

The County trails map shows that designated community trails and pathways are existing or planned within the SDNWR southwest of the Project site, and along other roadways with views to the Project site, including Willow Glen Drive, Hillsdale Road, and Ivanhoe Ranch Road. Existing County-designated trails with visibility of the Project site, the Sweetwater Regional Trail and Wildlife Refuge Loop Trail, are located west/southwest of the Project. For the Sweetwater Regional Trail, views of the Project are limited to the eastern portion of the trail where it terminates near the western Project boundary due to the presence of intervening vegetation and topography between the trail and the Project site along segments of the trail located further west and south. The Wildlife Refuge Loop Trail (also referred to as the Par 4 Trail by the USFWS) offers limited clear views into the Project site. For example, the loop trail includes a relatively short, elevated segment that, due to a narrow path, rocky characteristics, and less direct route from trailheads, is assumed to receive no use from equestrians and markedly less use than the more accessible “lower” segment of the trail situated closer to the Sweetwater River. Despite the proximity and visibility of the Phase 1 area of the Project site from the upper trail, project activities would be experienced within a broad visual environment and would comprise an overall small portion of the seen landscape. Recreationalists walking the trail that are already familiar with the area would be sensitive to Project-related changes. The Wildlife Refuge Loop Trail is within 150 feet of the Project site (Phase 1) at its closest location, and the majority of the Phase 1 area is visible from the upper trail located segments south of the southern property Boundary (see Figure 13, top photo). Sensitivity of recreationalists using the upper trail would be moderately high, due to the proximity of the Project site from the trail, the expansiveness of view, and the view duration.

From the lower trail, views are primarily focused on the mature riparian vegetation associated with the Sweetwater River and the hillside to the south. The southwestern portion of the Project site that is located outside of the subphase boundary and would not be mined is visible along a portion of this trail. Except for lower trail segments

to the east and west of the upper trail, the Project site is routinely screened from view by intervening elements (i.e., riparian vegetation) in the foreground.

From the McGinty Mountain Trail, which is located over two miles east of the Project site, the Project site is a component of the expansive views offered at higher elevations along the trail. Due to the expansive nature of the view, the Project site would occupy a relatively small portion of the visible landscape and project alterations would be somewhat muted. Sensitivity is assessed as moderately low, since changes in the visual environment resulting from implementation of the Project may be detectable for regular trail users but not overwhelmingly so due to the distance from the site. Where trails are future actions (e.g., proposed pathways and trails), viewers are not expected to be particularly sensitive to Project changes. Future recreationalists would not be located immediately adjacent to, or on, the project site until the mining is already occurring or the site has been reclaimed and revegetated, and therefore, would not be comparing the visual experience to an existing condition.

Designated Class II Bike Lanes are located within road right-of-way along Willow Glen Drive, Steele Canyon Road, Jamacha Road, Jamul Drive, and Hillsdale Road. Other local roadways may be utilized as bikeways but are not designated. Riders along these roadways are expected to be recreationalists as opposed to commuters. Sensitivity of bicyclists is expected to be like that of motorists traveling along the same roadways, which is assessed as moderately high depending on the location and distance from the Project site. Since bicyclists travel at slower speeds than motorists do, their sensitivity may be higher than that of motorists.

Residents

Several homes are located within the Project viewshed, including large, estate-style single-family residences and smaller, denser residential subdivisions. For these viewers, although views are private and most are restricted due to intervening topography, structures, or vegetation, the Project parcels contribute to an often seen and intimately known view. Although home orientation or screening vegetation would obstruct many views, residential viewers are expected to be highly sensitive to changes in the immediate visual environment.

4.2.2 Viewer Exposure

Motorists' Exposure

Motorists on Willow Glen Drive comprise the highest volume of potential viewers to the site, with ADT rates estimated by SANDAG ranging from 6,100 to 20,700 on nearby segments (SANDAG 2015). These viewers would also have the longest duration of potential views of the Project from a roadway within the viewshed. Travel time along the length of the Project is estimated at 2.5 minutes for drivers traveling at the posted speed limit of 45 mph. However, due to the presence of mature trees and shrubs that tend to line the Project boundary from Muirfeld Drive to the cluster of homes located near the northeast corner of the site, available views to the golf course are partially or entirely shielded. There are areas where breaks in road-adjacent vegetation allow for open, but discontinuous views, to select subphase areas. Figure 15 depicts the range in quality of existing views toward the site from Willow Glen Drive. Motorists on Steele Canyon Road comprise the second highest volume of potential viewers to the site, with ADT noted as 14,500 for the segment from Willow Glen Drive to Jamul Road (SANDAG 2015). On Steele Canyon Road, concrete k-rail barriers and metal railing partially block lower elevation features on the Project site in the foreground from view. Given the variables described above, motorists experience a moderate level of exposure to views onto the Project site.

For other roadways in the Project vicinity from which the Project may be viewed, although there are brief sections of roadway from which the Project can be seen; intervening topography, screening vegetation and/or abutting

residences generally obscure views to the Project site, as described throughout this report. Views also become additionally attenuated by distance. The brief duration of views available from moving vehicles and the relatively low number of viewers with access to these locations indicates that motorists on roads in the residential areas to the north and south of the Project have moderately low to low exposure.

Recreationalists' Exposure

While several existing parks are in the Project vicinity (see Figure 14), the only park with direct views of the Project site is Hilton Head County Park. As noted above, surrounding homes and landscaping limit views of the Project site from most of the park such that only narrow views along Muirfield Drive to the northwestern perimeter of the Project site are available. Park users with the ability to view the Project site, primarily from the multi-use sports field or briefly from the perimeter path, are expected to be focused on recreational activities occurring within the park. Therefore, the exposure associated with park users is assessed as low.

As noted above, several existing and proposed community trails and pathways are in the Project vicinity, including within the nearby SDNWR and along roadways with views to the Project site (e.g., Willow Glen Drive and Jamul Drive). Existing trails with views of the Project site include the Wildlife Refuge Loop Trail and McGinty Mountain Trail, as well as the Sweetwater River Trail located west of the Project site. Views from the Wildlife Refuge Loop and McGinty Mountain trails can be expansive especially at higher elevations (refer to Figure 13 for representative view from elevated segment of the Wildlife Refuge Loop Trail). There is mature vegetation that obscures views along lengths of the trails (particularly, lower elevation segments of the Wildlife Refuge Loop Trail, but views are generally open. Exposure is increased on the higher portions of the Wildlife Refuge Loop Trail since it is closer and the Project site and relative to the McGinty Mountain Trail, comprises a large portion of the available view. As viewers move west from the Wildlife Refuge Loop Trail trailhead, pockets of dense coastal sage scrub vegetation obscures views of the Project site. As experienced from the McGinty Mountain trail, the Project site (located over two miles away) comprises a small portion of the extremely expansive views available to trail users. Views to the westernmost portion the Project site from an approximate 415-foot-long segment of the Sweetwater River Trail are available.

Despite the opportunity for expansive views of the Project site and surrounding area, recreationalists in the nearby reserve lands and hiking on nearby trails overall have moderately low exposure, mainly due to the low number of users. Per the SDNWR, estimated users of the reserve lands within the trails near the Project site average approximately 2,300 individuals per year for the Wildlife Refuge Loop Trail and 4,300 individuals per year for the McGinty Mountain trail (USFWS 2019b). Where planned trails and pathways do not yet exist, viewers are not expected to be particularly sensitive to Project changes. These future recreationalists would not be walking immediately adjacent to, or on, the Project site until the mining is already occurring or the site has been reclaimed, and therefore, they would not be comparing it to an existing pre-project condition.

As noted above cyclists on designated Class II Bike Lanes on Willow Glen and Steele Canyon Road, as well as those utilizing other non-designated roadways, are considered recreationalists. Viewers using existing bike routes would be moving at cycling rates of travel and travelling within the narrow road corridors with motorized vehicles. While cyclists could have slightly more sustained views to visible portions of the Project site compared to motorists, the lack of a designated bike lane and travel with motorized vehicles suggests that cyclists may be equally focused on roadway conditions as motorists.

Residents' Exposure

The number of homes where residents may experience views of the Project site from their property is conservatively estimated for each view location below; it should be noted that actual views are expected to be reduced given the presence of landscaping and fencing associated with these properties, as well as the fact that the viewshed analysis does not consider intervening structures in determining the extent of views.

Residential development located just north of Willow Glen Drive with potential views of the Project site include an isolated residence located northeast of the clubhouse; a row of homes off Royal Saint James Drive (20 homes); homes within the Emerald Point development located off Emerald Point Court (17 homes); and homes within the Corte Madera development located off Wingfoot Place, Augusta Court, and Sawgrass Street (36 homes). For the homes immediately adjacent to Willow Glen Drive, the presence of mature trees located between the roadway and the residences obscure views toward the Project site. Further east and at higher elevations above the valley, the larger Cottonwood residential development would have the most homes (95) with potential views to portions of the Project site. Homes within the Cottonwood residential development with potential views to portions of the Project site are located off roads including Wind River Road, Lime Rock Court, Ricard Court, and Runabout Place. Generally, portions of the Project site would only be visible to the residences on the southern edge of the mesa with views looking south. Located east of Hillsdale Road and off Monarch Ridge Lane, the gated Monarch Ridge community would have fewer residences (13 homes) with potential views of the Project site due to the layout of the development, varied topography of the area and intervening elements between non-ridgeline homes and the Project site. South of the Project site, adjacent development with potential views of the Project site include approximately 16 homes located off Heatherwood and Wildwind Drive, 17 homes located in the La Tierra development off Cottonwood View Drive, Palm Vista Court, and Lasven Court; and potentially, several homes located off Cottonwood Springs Lane. Potential views from the Steele Canyon Estates development appear to be obscured due to intervening topography, landscaping/vegetation, and/or structures; however, there may be up to 10 homes located at the northern end of the development with potential views. For all the residences that have been identified with potential views of the Project site, views would be private and from the backyard of the residential properties or upper floor of homes.

Where residents in the viewshed have long-term, stationary views, they are rated as experiencing moderate to moderately high exposure.

4.2.3 Viewer Awareness

Motorists' Awareness

Viewer awareness for motorists and vehicle occupants would range from moderately low to high. For example, viewer awareness for Willow Glen Drive motorists travelling adjacent to the Phase 1 area would be moderate. While the presence of intervening mature trees and tall shrubs tend to screen the Project site from view, the removal of vegetation from the golf course and introduction of tan-colored and project features (e.g., soil stockpile, equipment and vehicles) would be visible to motorists and their passengers. Furthermore, the effects of roadway improvements would be clearly visible to motorists. Diminished views and viewer awareness would be similar where Willow Glen Drive parallels the Phase 2 area and would increase to a moderately high level near Phase 3 due to a reduced landscaping along the road. On Steele Canyon Road, viewer awareness to the Phase 1 and 2 areas would be high where the road crosses the Project site. Due to distance, viewer awareness to the Phase 3 area from Steele Canyon Road would be low due to distance and the screening effect of proposed intervening reclamation activities.

Although motorists on local roads may note Project-related changes, their primary focus generally would be on speed of travel and interaction with other drivers on the road, as well as attention to potential bicycle users. This, combined with both the relatively short duration of exposure time and the number of competing visual elements in the viewshed, is expected to lessen the importance of specific view elements for this group of viewers. Traffic conditions and competing visual elements would comprise an element of distraction from passenger views as well, but it generally would be less than for the driver. In these cases, passengers within the vehicle may be more focused on views of the landscape. Although lessened in level of effect, any distraction at all, when combined with the relatively short duration for visibility, would result in the visual impact of specific view elements being less important for this group of viewers (e.g., less important relative to viewers such as residents, discussed below).

Recreationalists' Awareness

For park users within the Hilton Head County Park, awareness of changes associated with the Proposed Project would be low, since views are limited, and park users would be focused on park activities and features. Hikers and equestrians in the nearby SDNWR and along existing County trails have a high awareness of the surrounding area and the available views, including those that encompass the Project site (primarily the Phase 1 area but also western portions of Phase 2). While some regular trail users may wish to retain the existing character of the Project site, others may prefer a more natural character consistent with adjacent segments of the unaltered river corridor. Occasional or first-time visitors may not have expectations regarding potential views; however, the visually contrasting elements of the project during the mining phases would be notable and increase Project awareness. Awareness of activities in the Phase 1 and western Phase 2 areas would be high for users of the Wildlife Refuge Loop Trail due to the proximity of the trail to the Project site and the focus of trail users on the views and scenery. Along the McGinty Mountain Trail, as well as the County-designated Sweetwater Regional Trail, views toward the Project site are not sustained for long durations, as the trail alignments have winding sections (or switchbacks) that alter the line of sight for hikers and other trail users. In addition, views onto the Project site from the majority of the Sweetwater Regional Trail are entirely blocked by intervening vegetation. The changing focus of the recreationalists on the McGinty Mountain Trail and Sweetwater Regional Trail, combined with intervening uses/vegetation, would be expected to reduce viewer awareness of activity on the Proposed Project to moderate levels.

Compared to motorists, cyclists on Willow Glen Drive and Steele Canyon Road would have similar expectations but greater awareness (i.e., moderately high awareness) due to a slower travel speed.

Residents' Awareness

Although views from many homes may be substantially obscured or absent based on intervening structures or vegetation, viewer awareness for residents with views of the Project site would typically be high, especially those with foreground views and for Wind River Road residences located along the ridge of the mesa to the north of the Project site. Residential viewers with long-term exposure to the site would be accustomed to the current visual environment and character of the Project site; however, views tend to be focused beyond the foreground and towards the area's rugged mountain topography. Still, nearby residents are expected to be highly aware of changes associated with Project implementation.

5 Visual Impact Assessment

5.1 Guidelines for the Determination of Significance

In accordance with the County Guidelines for Determining Significance – Visual Resources (July 30, 2007), a project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary:

1. The project would introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.
2. The project would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.
3. The project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:
 - a. a public road,
 - b. a trail within an adopted County or State trail system,
 - c. a scenic vista or highway, or
 - d. a recreational area.
4. The project would not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's Zoning.

In accordance with the County Guidelines for Determining Significance –Dark Skies and Glare (July 30, 2007, as modified on January 15, 2009), a project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary:

1. The project will install outdoor light fixtures that do not conform to the lamp type and shielding requirements described in Section 59.105 (Requirements for Lamp Source and Shielding) and are not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.
2. The project will operate Class I or Class III outdoor lighting between 11:00 p.m. and sunrise that is not otherwise exempted pursuant Section 59.108 or Section 59.109 of the San Diego County Light Pollution Code.
3. The project will generate light trespass that exceeds 0.2 foot-candles measured five feet onto the adjacent property.
4. The project will install highly reflective building materials, including but not limited to reflective glass and high-gloss surface color, that will create daytime glare and be visible from roadways, pedestrian walkways or areas frequently used for outdoor activities on adjacent properties.
5. The project does not conform to applicable Federal, State, or local statute or regulation related to dark skies or glare, including but not limited to the San Diego County Light Pollution Code.

5.2 Key Views

Analyzing all the views from which a proposed project would be seen is not feasible, and some potential views to the proposed project, such as those from private residences or property, are not accessible to the public. The selected key views consist of photographs taken from public viewpoints and were identified based on the number and frequency of views, scenic status, the potential sensitivity of viewers, depth and breadth of view, and the types of Project-related features that would be visible. In addition, consistent with County guidelines concerning the selection of key views, the selected viewpoint would clearly display the visual effects of the project and represent the primary viewer groups potentially affected by the project.

Based on these considerations and consultation among the visual analysis team, the Project proponent, and County staff, four key views have been selected. The location of Key Views is illustrated on Figure 16, Key Views. To ensure a full understanding of potential visual effects related to project implementation, simulations were created to illustrate anticipated conditions during mining and reclamation and post-reclamation. The purpose of simulations is to provide the public and decision makers with a reasonably accurate projection of future conditions based on Project-related changes to current views and existing visual conditions. Existing and proposed changes to visual character and quality as experienced from the selected key views are briefly described below. Changes to visual character and quality, viewer response, and resulting visual impact are addressed in Sections 5.3 through 5.5, below.

5.2.1 Key View 1

Orientation

Key View 1 is located on the “upper” Wildlife Refuge Loop Trail within the SDNWR located south and southwest of the Project site on the upper segment of the loop trail. The trailhead begins at the western end of Par 4 drive near the Project property boundary where it forks in two directions: one trail borders the southern edge of the Project site adjacent to the Sweetwater River channel at elevations ranging from 340 to 380 feet amsl and one trail extends upward following the curve of the hillside at elevations ranging from 370 to 470 feet amsl. Located approximately 0.10-mile south of the Project site and at an elevation of 445 feet amsl, Key View 1 is located on the upper trail and is orientated to the northeast (Figure 17a, Key View 1: Wildlife Refuge Loop Trail (Existing Conditions)).

Along with Key View 4 (see Section 5.2.4 below), Key View 1 is representative of the worst-case scenario in terms of public views and visual effects associated with the Project. From the elevated vantage point of Key View 1, viewers (recreationalists-hikers) are provided views to the entirety of the Phase 1 area. At Key View 1, Phase 2, 3, and the processing plant would be reduced in scale due to distance. However, the site visibility experienced by viewers at Key View 1 is notably greater than at other public vantage points that offer clear views to the Project, including Key Views 2, 3, and 4. Lastly, the upper trail appears to be used only by hikers. Mountain bikers, equestrians, and casual walkers with or without dogs appear to utilize the lower trail because the lower trail is a level and wide dirt trail.

From the lower trail, views are primarily focused on the mature riparian vegetation associated with the Sweetwater River and the hillside to the south; the southwestern portion of the Project site that is located outside of the subphase boundary and would not be mined is visible along a portion of this trail. In addition, with the exception of lower trail segments to the east and west of Key View 1, Phase 1 areas that would be mined and Phase 2 areas located further to the northeast are not visible from the lower trail due to intervening elements (i.e., riparian

vegetation) in the foreground. As depicted in Figure 17a, from the upper trail larger expanses of the Project site and in particular, the unmaintained Lakes Course, is visible.

Existing Visual Character and Quality

Existing views from Key View 1 encompasses the river valley and hillsides to the north, with distant views including the hill and mountain areas of Dehesa Mountain and Mount Sycuan to the northeast. As experienced from Key View 1, the river valley consists of flat areas covered with low-growing vegetation cut through by a swath of dense riparian vegetation associated with the Sweetwater River. The view is characterized by natural, undulating lines associated with the river channel, exposed soils, grasses, low shrubs, scattered trees, and unnatural lines of cart paths in the unmaintained Lakes Course. Two cart path bridges are prominent built features in the middleground view. Hillside areas to the north of the Project site are punctuated with rows of homes within residential developments immediately adjacent to Willow Glen Drive and the ridgeline homes on the hills to the north. Green and brown vegetation dominates the view, with the drab-toned coastal sage scrub in the foreground and on the hillsides to the north; dense riparian vegetation of varying shades of green in the middleground; and brown, unmaintained grassy areas of the former Lakes Course with clumps of green from the mature trees scattered throughout the course. The varying land uses appear to be in scale with one another, providing moderately high visual continuity.

The visual quality of the view is moderately high but visibly reduced by the disturbed nature of the former Lakes Course that tends to contrast with surrounding natural and more orderly developed areas. The riparian vegetation and adjacent coastal sage scrub habitat that dominate the foreground and middleground hillsides exhibit a high degree of unity and intactness and are moderately vivid elements. The surrounding mountain ranges and prominent peaks juxtaposed against the valley floor provide highly memorable visual elements that increase the overall vividness of the view. The uniformity of the red-roofed residences bordering the northern Property boundary contribute to the sense of unity, with cohesive landscaping and mature trees visible throughout.

Mining and Reclamation

Proposed Project Features

During Subphase 1A, existing golf cart bridge spans would be removed, and excavation activities would comprise the majority of the middleground landscape as viewed from Key View 1. The planting of new 15-gallon size willow or cottonwood trees in small pockets adjacent to the Sweetwater River (i.e., Subphase 1A-1) would also be evident in views from the upper segment of the Wildlife Refuge Loop Trail. Subphase 1A-1 plantings would be installed prior to and during preparation of the processing plant. This analysis assumes that at installation, newly planted willow and/or cottonwood trees in the Subphase 1A-1 areas would be approximately 4 to 6 feet high. As such, during mining of Subphase 1C, these plantings are conservatively assumed to be 7 to 10 feet high (7-foot-high trees are shown in Figure 17b, Wildlife Refuge Loop Trail (Visual Simulation – Mining)). Following installation, Subphase 1A-1 plantings along the Sweetwater River would be visible at Key View 1 but due to their height at planting/installation, would not block views to the processing plant. To clarify, Subphase 1A-1 planting are not a component of reclamation/revegetation. Rather, they would be planted prior to Phase 1 to reintroduce vegetation and add an element of interest in views.

In addition to the existing riparian vegetation and coastal sage scrub habitat in the foreground that would be retained, the subphase 1B and 1C areas would maintain their existing visual character during the 12 months (approximately) duration of Phase 1A mining. Approximately 22.10 acres (i.e., Subphase 1A) of the larger

approximately 79-acre Phase 1 area would be graded and mined over a twelve-month timeframe. During these activities, construction vehicles including loaders and the conveyor extending from the processing plant (located east of Steele Canyon Road and near the current Cottonwood Golf Course clubhouse) would introduce new stationary and mobile elements to the view. In addition, exposed tan soils displayed by the actively mined Subphase 1A area would also be detectable from Key View 1. The processing plant including settling and muck ponds, storage containers, stockpiles, and screening equipment would be partially obscured from view due to distance (the nearest element of the plant would be located approximately 0.85 mile away from Key View 1) and elements may be partially screened by the installation of mature box trees near the processing plant boundary. The irrigated, 36-inch mature box trees would be placed along the west and south boundary of the processing plant footprint and would be maintained throughout the duration of mine operations on the Project site. This analysis assumes that at installation, box trees installed in-ground near the west and south boundary of the processing plant would be approximately 6-feet high. The location of box trees is approximated on Figure 3. The box trees would be supplemented with in-the-ground native shrubs such as dwarf coyote brush consistent with those included in the landscape screening and entrances plan and subject to County approval.

After approximately 1 year and following subphase 1A mine operations, the approximately 22.1-acre area would be filled, brought to finished grade, and planted. Consistent with the Conceptual Revegetation and Compensatory Mitigation Plan (see Figure 7), the subphase 1A area would be planted with appropriate riparian vegetation to include willow, mule fat, cottonwood and other trees and shrubs. In addition, initiation of mine operations in the adjacent approximately 26.46-acre subphase 1B area would occur and similar visual features as described above for the subphase 1A during active mine operations would be visible from Key View 1. The subphase 1C area to the immediate north of subphase 1B would retain its existing visual character as mine operations would not occur in this area until the duration of subphase 1B is complete (i.e., approximately 1 year). Over the twelve-month period of mining, proposed project features in the subphase 1B area would include construction vehicles including loaders and the conveyor extending from the processing plant and through the subphase 1C area (a conveyor corridor would be established adjacent to the Sweetwater River alignment). Subphase 1B activities would add contrasting stationary and mobile elements to the view; however, receptors at Key View 1 would be somewhat familiar within these elements due to their presence during subphase 1A. In addition, during subphase 1B operations, plantings in the subphase 1A-1 areas adjacent to the river corridor and larger revegetation efforts associated with subphase 1A would be irrigated and would incrementally improve upon the post-mining view with each successive year of growth. As previously stated, riparian vegetation such as willows and mulefat planted in these areas would grow relatively quickly with irrigation and would be 5 to 8 feet (willows) and 2-3 feet (mulefat) high approximately one year following installation. As such, revegetation would have a moderating effect on visual impacts as mining progressing within any given subphase area. As experienced from Key View 1, exposed lightly colored soils displayed by the surface of the actively mined subphase 1B area would be detectable immediately north of the densely vegetated Sweetwater River corridor in the foreground. Lastly, the recently planted Phase 1A area and more specifically, the thin, vertical form of new trees and spreading shrubs intermixed with pockets of exposed tan soils, would be detectable.

Figure 17b, Key View 1 – Wildlife Refuge Loop Trail (Visual Simulation – Mining), depicts active mining of the Phase 1C area. In addition, the subphase 1A and 1B areas are shown at final backfill elevations and revegetated with approximately 2 years of growth (subphase 1A) and 1 year of growth (subphase 1B). For purposes of this analysis, plant materials in the revegetation plan are assumed to grow at an approximate annual rate of between 12 inches (shrubs) to 36 inches (fast-growing trees (cottonwood, willow) and shrubs (mulefat and Mexican elderberry) before reaching typical maximum heights. As with other subphases, visible project elements in the subphase 1C area would include construction vehicles including loaders and the conveyor extending from the processing plant and through the Phase 1C area. Construction vehicles and the conveyor are depicted in Figure 17b. Additional project

features depicted include the side slopes of the overexcavation area, the new project access point off Willow Glen Drive at Muirfeld Drive, and stockpiles located in the northern portion of subphase 1C. A staging area is proposed in the overexcavation area and would not be visible from Key View 1. As viewed from Key View 1, the flat form and lightly colored soils displayed by the surface of the actively mined and graded areas of subphase 1C would be visible immediately north of the newly planted subphase 1B area and the Sweetwater River corridor. In addition, overexcavation of the area would occur after initial grading and would result in a visible cut (approximately 30 to 35-foot-deep) into the surface of the subphase 1C area. Aggregate extraction in the approximately 30-acre subphase 1C area would occur for twelve months (approximate) and would be delivered to the processing plant via a conveyor that would appear as a low, dark horizontal line at Key View 1. In addition, the installation of noise barriers along the northern subphase 1 boundary (i.e., parallel to Willow Glen Drive) in accordance with Mitigation Measure M-N-1 would be visible from Key View 1 (see Figure 17b). Twelve (12-) foot high noise barriers would be installed around proposed stockpiles that would be located on the Project site and roughly parallel Willow Glen Drive. Noise barriers would be installed when Phase 1 excavation activities would occur within 400 feet of the nearest residences. Pursuant to the requirements of M-N-1, the noise barrier would be solid and may be constructed of wood, masonry, plastic, fiberglass and/or steel. The location of proposed noise barriers is illustrated in Figures 17b-1, 17b-2, and 17b-3 Noise Barriers (1 of 2, 2 of 2, and 3 of 3). See EIR Project Description and Noise Chapter (2.4) for additional detail.

Changes to Visual Character and Quality and Viewer Response

Implementation of the Proposed Project would substantially change the composition of the existing pattern elements and character of the site as viewed from Key View 1. Once initiated, active mining operations in Subphases 1A, 1B and 1C areas would remove remaining trees and vegetation within the unmaintained Lake Course and introduce visually contrasting elements such as excavation equipment and exposed soil excavated to depths of approximately 20 feet bgs. The anticipated visual impacts resulting from vegetation removal and grading/overexcavation would be strong at Key View 1. Mining of the individual subphase areas would occur over approximately 1 year each, and during this timeframe, contrasts in form, line and color would be apparent and attract attention. As depicted in Figure 17b, visible foreground disturbances would detract from the existing available view. Also, the noise barrier (Mitigation Measure M-N-1) would be visible from Key View 1 and would create a dark and relatively low horizontal line that would stretch across the northern boundary of the Phase 1 area.

With the removal of existing vegetation in Subphase 1A (and later in Subphase 1C), the currently obscured Steele Canyon Road Bridge and proposed processing plant site located to the east would be revealed in the middleground. However, due to distance and competing elements (i.e., subphase 1A mine operations), visible elements of the processing plant would not be visually prominent as experienced from Key View 1 (see Figure 17b). Phase 1 project elements would be in the foreground and middleground of the Key View 1 landscape for approximately 36 months, after which reclamation and revegetation activities would occur for up to an additional 24 months. These activities and specifically, the planting of fully irrigated riparian vegetation on previously mined lands, would achieve a visible reduction in contrasts associated with vegetation removal, grading, and excavation within a 2-year timeframe. Further, the subphase approach to mining operations would minimize visual change in the larger phase area and visible landscape (to the extent feasible) by avoiding vegetation removal and topographic disturbance until necessary (i.e., until the subphase area becomes active).

When mine operations are occurring in Phase 1 and early in Phase 2 (within the area closest to Steele Canyon Road, which is visible from Key View 1), the overall quality of the visual environment would be strikingly reduced. Currently, the unmaintained course exhibits moderately low vividness and intactness, but has a uniformly

disturbed/sparsely vegetated appearance across the western portion of the site. With the contrasting elements of the ground clearing, mine operations/exposed soil, and newly revegetated areas, the vividness, intactness, and unity of the middleground landscape would be noticeably reduced. Lastly, while removal of the golf cart bridge spans will eliminate built features that draw undo attention to the middleground view, the Project proposes the introduction of construction vehicles, and a conveyor all of which would be active elements in the landscape

The primary viewer groups from this key view (hikers using the upper Wildlife Refuge Loop Trail) would be sensitive to and highly aware of changes within the Project site due to the proximity of the Project site from the trail, the expansiveness of views, and the view duration. Approximately 2,300 recreationalists per year (or approximately 45 users per week) use the Wildlife Refuge Loop Trail, most likely on the lower trail segment. From the lower and more consistently trafficked segment of the trail, views to Phase 1 activities would be obscured and partially screened by existing mature vegetation in the river corridor. Overall, the moderately low overall exposure (i.e., Key View 1 is representative of a mobile viewpoint), and number of users of the upper trail would result in a moderately high viewer response.

Post-Reclamation

Proposed Project Features

Reclamation of completed Phases 1, 2, and 3, and the processing plant are depicted in Figure 17c, Key View 1: Wildlife Refuge Loop Trail (Visual Simulation – Post-Reclamation). In the visual simulation, the overexcavation area in subphase 1c has been backfilled and reclaimed to final elevation. Figure 17c depicts the application of an erosion control seed mix and the access road off Willow Glen Drive to the site is also shown. The processing plant area is also depicted with an erosion control seed mix in Figure 17c. Regarding the Sweetwater River and vegetation, the proposed low flow channel is depicted in Figure 17c as is mature vegetation in subphase 1A-1, subphase 1A, and subphase 1B. As the scenario depicted in Figure 17c is post-reclamation, trees in subphase 1A-1 are shown with approximately 12 years of growth, vegetation (i.e., trees and shrubs) in subphase 1A is shown with approximately 10 years of growth, and vegetation in subphase 1B is shown with approximately 9 years of growth. From Key View 1, vegetation in subphase 1A and 1B would display a similar height and spread.

As viewed from Key View 1, areas of the Project site disturbed by extraction operations would be progressively reclaimed as mining of individual subphase areas is completed. In addition, except for the higher elevation Subphase 1C area, the final landform on the Project site would be a relatively flat plain that is backfilled to achieve an elevation similar to adjacent riparian areas. Backfilled and reclaimed landforms would be revegetated through a combination of container plants and hydroseeding with a diverse native seed mix. Figure 17c depicts the revegetation completed in Phases 1 and 2 as incrementally maturing over time; weed control and maintenance on the site would occur continuously during Project operation and during the post-reclamation maintenance and monitoring period to reduce the occurrence of undesirable non-native species. The effects of revegetation efforts, including approximately ten acres of riparian enhancement (e.g., removal of exotic and invasive species, planting of riparian habitat), would be implemented adjacent to the Sweetwater River channel and may be visible from Key View 1.

From the elevated vantage point of Key View 1, the raised and flat form and tan color of subphase 1C would be result in strong contrast in form and color with adjacent areas of mature vegetation. While contrasts associated with this area would lessen as the erosion control seed mix germinates, and plant species fill in and cover the site, the light tones would stand out against the green tones displayed by existing and newly planted vegetation

Also, as depicted on Figure 17c, a new 4-foot high, steel pipe gate would be installed on the new access driveway off Willow Glen Drive. While not very discernable, small triangular planting areas would be constructed where the driveway meets Willow Glen Drive and would be planted with small shrubs. Existing trees would also be incorporated into these planting areas. See Figure 8d.

Changes to Visual Character and Quality and Viewer Response

At maturity (approximately ten to fifteen years post reclamation for each subphase), the visual character of the Project site would be enhanced with native vegetative cover and appropriate landforms for site drainage. As shown in Figure 17c, the existing riparian habitat visible in the foreground would be extended across the Project site with southern willow scrub and mule fat scrub vegetation proposed to be planted adjacent to the river channel. In addition, upland areas would be revegetated with coastal sage scrub vegetation, providing continuity with the adjacent coastal sage scrub habitat of the SDNWR visible in the foreground. Once mature (i.e., in ten to fifteen years' time), the revegetated areas would improve the visual character of the reclaimed Project site and visually blend the area with nearby vegetation of the river valley.

Reclamation and revegetation would result in a visual environment with enhanced harmony/unity and intactness. The intactness of the view would be increased with the introduction and maturity of native vegetation within the riparian corridor that would replace man-made seen elements of the existing unmaintained golf course and mine operations. The southern willow scrub, mule fat scrub, and coastal sage scrub plant palettes proposed in this area would provide visual continuity between the reclaimed areas of the Project site and the surrounding area. However, enhanced intactness and continuity would be limited as viewers at Key View 1 would experience an abrupt transition between new vegetation along the riparian corridor and the higher elevation area that would be hydroseeded with an erosion control seed mix. As shown in Figure 17c, both the prominence and horizontal scale of the higher elevation area would attract the attention of viewers and result in heightened awareness. Further, the consistent tan/brown color of this area would contrast with the green tones of riparian vegetation and like visible residential development in the view, this area would negatively affect visual character and quality of the landscape.

5.2.2 Key View 2

Orientation

Key View 2 was established on the northbound travel lane of Steele Canyon Road, on the bridge spanning the Sweetwater River, and looks to the east. Key View 2 depicts the clearest view of Phase 2 and the proposed processing plant from a public viewpoint. As shown in Figure 18a, Key View 2 – Steele Canyon Road Bridge (Existing Conditions), the Sweetwater River channel and Ivanhoe golf course areas are visible from this roadway. The unmaintained Lakes Course is also visible from the road to the west, but the key view is oriented to the east and the Ivanhoe Course. Steele Canyon Road is primarily used by motorists but also receives limited use by pedestrians (a sidewalk is present along the northbound lane) and cyclists. Limited use by pedestrians and cyclists are assumed because no sidewalks are provided along Steele Canyon Road south of the bridge and bike lanes are not striped on the road.

Existing Visual Character and Quality

Views from Key View 2 and the Steele Canyon Road Bridge highlight the disturbed river valley, surrounding hillsides and distant mountains that enclose the Project viewshed (see Figure 18a). In the foreground, the narrow and sparsely vegetated river channel creates a visible line in the landscape. Adjacent exposed soils covered slopes in

the foreground appear disturbed compared to the maintained golf course areas to the south. The view is also characterized by man-made elements including a dirt road used for golf course maintenance access and multiple power lines. The grey, arching line of a metal golf cart spanning the river channel is approximately 0.25 mile away and is off-center in the view. Tall lattice steel transmission poles are constructed on the naturally vegetated hillside to the north. Like Key View 1, at Key View 2 green and brown vegetation and tan soils dominate the view, with the disturbed vegetation of the river channel contrasting with the light to darker green grass of the maintained Ivanhoe Course. Further, the river channel and adjacent areas are lined by irregular rows of mature trees that display varying shades of green. Lastly, a dense row of mature dark green trees lines the property boundary along Willow Glen Drive, obscuring views to the scenic highway.

Adjacent hillsides to the north/northeast of the Project site, as well as the densely vegetated and brown/dark green slopes of McGinty Mountain located to the east and southeast are visible in the middleground (the peak of McGinty Mountain is not visible in the Key View 2 photograph). The reddish and dark stippled Dehesa Mountain, located approximately 4.5 miles to the northeast of the Project site, is also visible in the background beyond power transmission lines (Figure 18a). Lastly, the broad, mounded peak of Viejas Mountain and the slightly hazy and broad form of Cuyamaca Peak, are visible in the background to the east.

Overall, the visual quality of the view is moderate. The sparsely vegetated river channel that dominates the foreground of the view is not particularly vivid or intact due to the juxtaposition of unmaintained, unirrigated areas and maintained golf course fairways. Further, the prominence of the dirt maintenance road and the presence of silhouetted transmission poles reduces vividness and intactness. The combination of man-made and natural elements provides for a moderately low degree of intactness and unity. The skyline created by ridges, mountains, and hillsides in the background as well as the line of mature trees along the northern property boundary provide some degree of unity, however, the dark, albeit thin, transmission lines and multiple steel lattice towers and poles reduce overall unity. In addition, the contrasting appearance of the man-made elements that dominate the foreground view further diminish unity. Except for distant mountainous peaks, there are no highly memorable visual elements within this view. Although the riverbed is dry for the majority of the year, during wet winters when water released from the upstream Loveland Reservoir flows on site, a slightly higher degree of vividness would be perceived with the presence of flowing water within the riverbed (refer to photos of seasonal water flow in the Sweetwater River; Figure 12).

Mining and Reclamation

Proposed Project Features

Subphase 2A excavation and reclamation activities would comprise most of the eastward view from the Steele Canyon Road Bridge. Phase 2 mine operations would be initiated approximately 3 years after the initiation of Phase 1. At the time of subphase 2A project initiation, active mining of Phase 1 would be complete but Phase 1C would be in the reclamation and revegetation phase to the west of the bridge. During Subphase 2A, the approximately 15-acre Subphase 2A area (located north and south of the river channel) would be cleared and actively mined. All existing vegetation and man-made features such as a small bridge and cart paths within these areas would be removed and exposed soils would display a relatively consistent form and tan color (see Figure 18b, Key View 2: Steele Canyon Road Bridge (Visual Simulation - Mining)). In addition to vegetation removal, numerous project components would be visible in the eastward view from Key View 2 including the mine conveyor and parallel access road (visible along the south side of the river channel, tree removal to accommodate the widened extents of Willow Glen Drive, new landscaping included in the landscape screening and entrances plan, the processing plant and box trees to be placed in-ground along the west and south boundary of the processing plant. In addition, an 8-foot-high

noise wall would be installed parallel to the Willow Glen Drive on the Project site during active mining of subphase 2A. During the depicted scenario (i.e., Subphase 2A), new landscaping installed along Willow Glen Drive would have experienced approximately four years of growth post-installation and trees would be approximately 15 feet high and shrubs approximately 7 feet high. As viewed from Key View 2, the processing plant including stockpiles, equipment, settling and muck ponds, and trucks would be minimally screened by mature trees installed along the west and south plant footprint prior to the initiation of Phase 1 (see Figure 18b). During subphase 2A (i.e., approximately 4 years post-placement of box tree), trees would be approximately 10 feet high each assuming a conservative growth rate of 1 to 2 feet per year for Mexican elderberry. A portion of the immediate foreground (including the Project site) would be obscured by the low wall and rail present along the Steele Canyon Road Bridge.

Existing screening associated with the existing wall (approximately 3 feet high) and rail would be enhanced through the proposed installation of green screening mesh fencing along the bridge wall. As measured from the top of the concrete wall to the top of the fencing, screening mesh would be 3-feet high. During active mining in Phase 2 (Subphases 2A and 2B), the screening mesh would run the length of the Steele Canyon Road Bridge railing on the east side of the road. Fencing would not be installed to the north and south of the bridge. From this location, the excavated Subphase 2A areas north and south of the river channel and the slightly elevated processing plant would be screened from view of motorists; however, the mesh fencing would alter the view compared to existing conditions. Further, the effects of tree removal on the Project site occurring to the east of Key View 2, and the creation of stockpiles (and presence of processing equipment) at the processing plant, would be noticeable above the fencing. Figure 18bb, Key View 2: Steele Canyon Road Bridge (Visual Simulation – Mesh Screening) depicts a simulation of the proposed mesh screen fencing that would be installed prior to the initiation of Phase 2 mining operations. The fencing would remain in place during the approximately 24-month total duration of proposed mine operations in Subphases 2A and 2B.

As fencing would not be installed to the north and south of the bridge, views to the processing plant and Phase 2 mining activities would be available to northbound Steele Canyon Road users for approximately 145 feet north of the bridge to Willow Glen Drive and 185 feet south of the bridge to the existing presence of mature vegetation. Both the scale and density of the vegetation block the Project site in east-oriented views from Steele Canyon Road. As viewed from these segments of Steele Canyon Road, similar elements as described above in the unmitigated scenario of views from the Steele Canyon Road bridge would exist. Also, pedestrians occasionally use the sidewalk that parallels the northbound Steele Canyon Road travel lane (a sidewalk is not construct along the southbound lane on the bridge). On the bridge, views to the processing plant and Phase 2 mining activities would be clearly visible to pedestrians. With the installation of mesh fencing atop the bridge railing, the views of most pedestrians towards the processing plant would be blocked by the mesh screening fence.

Following the completion of mine operations and reclamation activities in the Subphase 2B area, the mesh screen fencing installed on the east side railing of the Steele Canyon Road Bridge would be removed. The Phase 2A areas would be reclaimed and replanted with riparian vegetation prior to the end of the approximately 1-year mine period for subphase 2B. Upon completion of the subphase 2B one-year mine period and removal of the bridge screen, southern willow scrub container plantings and riparian seed applied in subphase 2A would be noticeable but would remain visible. The processing plant (i.e., ponds, stockpiles, conveyors and screens, storage containers) would be minimally screened as container plants and applied seed mixtures installed in subphase 2A and 2B areas would not be of sufficient height to screen the plant. The visible sliver of the Phase 3d area to the south of the processing plant would retain its existing visual character (e.g., trees and low grasses would remain). South of the river, Phase 2C grading and mine operations would be visible beyond the newly planted Phase 2B area which would still be in the revegetation phase.

Changes to Visual Character and Quality and Viewer Response

At Key View 2, the visibility of and proximity to Project effects on existing visual character and quality would be clear and stark. Due to elements displaying high contrast, the unity of the foreground landscape would be greatly reduced. The vividness of focal mountain features in existing views would also be reduced as foreground activities and effects would attract attention. In the mitigated scenario, the installation of linear fence atop the bridge railing would block processing plant equipment and mining activities from view; however, the mesh fence would represent a notable departure from the current view of primarily green fairways and mature trees that characterize the Ivanhoe golf course. These elements create interest in the existing view. The mesh screen would also contrast with the existing open character of mobile views at Key View 2. For example, the straight line and rectangular form of the fence would be apparent to road users; however, while the local hills and mountains surrounding the Project site would remain visible above the fence, the lack of open views across the Project site would be perceived as a negative effect. Therefore, the unity, intactness, and vividness of the existing view would be reduced during mining and reclamation. The overall visual quality following project implementation would be low.

From Key View 2, motorists and other road users would experience “close up” views of the anticipated strong contrast associated with mining and processing activities on the Project site. Once installed, the mesh screen atop the bridge railing would screen onsite visual change associated with an active sand mining operation comprised of processing plant activities, alteration of existing terrain and removal of existing vegetation, vehicles, and equipment. While the neutral mesh screen is anticipated to be perceived more positively than unobstructed views of an active mine and reclamation activities at this location, the viewer response would be adverse. Viewer exposure for off-peak hour motorists and other road users would be brief (on the approach to and on the Steele Canyon Road Bridge, views to the Ivanhoe golf course are available for approximately 13 seconds assuming a travel speed of 45 mph). However, during peak hour travel times when queues tend to back up onto the bridge and further south, viewing duration would be considerably longer. During either scenario (i.e., peak, or off-peak) viewer response to the changes in visual character and quality would be high.

Post-Reclamation

Proposed Project Features

Revegetation completed during Phase 2 would be visible in the foreground and middleground of Key View 2 (see Figure 18c, Key View 2: Steele Canyon Road Bridge (Visual Simulation – Post-Reclamation)). In the figure a post-mining view is shown, the processing plant has been removed, final grade has been restored across the site, and revegetation plantings in the Phase 2A and 2B areas (including western sycamore, western cottonwood, mulefat, willow, Mexican elderberry and low wetland shrubs, grasses and sedges) are shown with approximately 7 and 6 years of growth, respectively. Assuming typical growth rates, cottonwood, willow, and other fast-growing trees would have grown to a height of up to 20 feet and shrubs approximately 7 to 8 feet high. Trees placed around the processing plant area would have been removed at the end of reclamation and thus, not present in the post-reclamation scenario. The proposed backfilled terrain at the processing plant would be blocked by mature vegetation in the foreground and middleground. Since southern willow scrub/riparian forest vegetation is proposed in these areas, views would be dominated by progressively maturing vegetation lining the river channel, which would eventually be of a density similar to the existing condition along the southwestern boundary of the Project site (see Figure 18c). Due to the elevated location of Key View 2 on Steele Canyon Road, the hillside to the north of the site, McGinty Mountain, and distant mountains to the east would remain visible above riparian vegetation on the Project site. While obscured by vegetation, the final landforms on the Project site would consist of a relatively flat floodplain

that gently slope downward from east to west; banks of the widened river floodplain are proposed to slope up to the adjacent landscape surface at a 3:1 (horizontal: vertical) or less gradient.

Changes to Visual Character and Quality and Viewer Response

The long-term visual environment of the reclaimed areas visible from Key View 2 would be characterized as a natural riparian river valley. Where the river channel currently appears sparsely vegetated and somewhat visually contrasting with the existing golf course (Figure 18a), it would be expanded and appear densely vegetated with riparian plant species, including a diverse mix of tall trees and shrubs proposed within the riparian plant palette. The natural features of the reclaimed river corridor would introduce a continuity of pattern elements currently absent from the site that would visibly extend the river corridor east to the surrounding hillsides and mountainous landforms that form the larger landscape unit.

Reclamation of the site would improve the overall visual quality of the existing visual environment and would create a vivid and memorable appearance with a high degree of unity and intactness (see Figure 18c). The Project would introduce native vegetation to the site and visibly extend the riparian river corridor, removing almost all of the competing visual elements (e.g., disturbed areas, sparse river channel, developed golf course landscaping and features) that currently detract from the intactness of the visible landscape. As illustrated in Figure 18c, electrical transmission towers, poles, and overhead lines visible above the trees and along ridgelines would be the single dissonant elements experienced at Key View 2. The natural components on the Project site experienced at Key View 2 would form a coherent, harmonious visual pattern that would extend to the surrounding hillsides and distant mountains. Like Key View 1, from Key View 2 the overall visual character and quality of the post-reclamation Project site would improve. Viewer response would be high and positive.

5.2.3 Key View 3

Orientation

Key View 3 was established on westbound Willow Glen Drive approximately 375 feet west of the driveway to the existing Cottonwood golf course parking lots. The view is oriented to the southwest towards the project site and includes a view of the Willow Glen Drive corridor (see Figure 19a, Key View 3 – Willow Glen Drive (Existing Conditions)). The primary viewers at this location are motorists and cyclists. In addition, the nearest sidewalk parallels the eastbound travel lane at this location and as such, pedestrians are considered in the context of visual change experienced at this key view. This key view was selected because it represents a typical view from the most heavily traveled roadway with available views to the Project site. The key view was also selected because Willow Glen Drive is included in the County Scenic Highway System. While Willow Glen Drive generally follows the alignment of the Sweetwater River, the river is lower in elevation than the road and is not visible at or near Key View 3. At Key View 3, Willow Glen Drive is approximately 25 feet higher in elevation than the existing grade of the proposed processing plant area. Further, existing mature trees alongside Willow Glen Drive are planted on a gradual slope that falls towards the processing plant area (the southern extent of the planted area is located approximately 5 to 7 feet lower in elevation than the surface of Willow Glen Drive).

Existing Visual Character and Quality

As shown in Figure 19a, Willow Glen Drive and the existing landscape screen that parallels the road occupy most of the existing view. Except for a visible gap that permits views onto the Project site, at Key View 3 the project site

is currently blocked from view of road users by the landscape screen that is comprised of tall (approximately 20 to 30 feet tall) eucalyptus and pepper trees. The Willow Glen Drive corridor is crossed by an assortment of transmission and communication lines and at Key View 3, multiple lines are visible and span the road (several visible utility poles are installed to the immediate south of the Willow Glen Drive). A dark, rugged ridgeline punctuated by a single knoll supporting a water tank is visible in the middleground beyond Willow Glen Drive.

At Key View 3, the presence of a dense screen of mature trees alongside Willow Glen Drive is unique in the area and due to uniform scale and similar color tones, the screen displays heightened unity and intactness. Along with glimpses of mountains and the golf course landscape, the landscape displays appealing and scenic qualities. However, prominent foreground elements including Willow Glen Drive and transmission infrastructure reduces the memorability of the view and contribute to overall moderate vividness. While the golf course is a man-made element set, it features naturalized components (primarily trees as experienced from Key View 3) that are visually compatible with the middleground and background visual landscape, providing a moderate to moderately high degree of unity and intactness.

Mining and Reclamation

Proposed Project Features

A visual simulation of the Project during active mining of Subphase 1A is depicted in Figure 19b, Key View 3 – Willow Glen Drive (Visual Simulation – Mining). As shown in the figure, the widened extents including the dedicated right-turn lane onto the project site and new striping associated with the undivided median, travel lanes, and bike lanes on Willow Glen Drive would be visible in the foreground. Further, the dedicated right-turn lane would provide access to a project ingress point/driveway that would be used regularly by haul trucks during project operations. The removal of existing trees to accommodate roadway improvements and the access driveway would also be visible. Approximately 67 trees currently adjacent to Willow Glen Drive would be removed to accommodate the roadway improvements and the removal of these elements would result in reduced visual quality. Within the Key View 3 viewshed, the removal of over 20 trees would occur. While distant mountain terrain currently blocked from view by screening trees would be revealed upon tree removal, the existing quality and character of the Willow Glen Drive corridor would be adversely impacted. As viewed from Key View 3 and with the exception of the project ingress alignment that would be cleared to accommodate operational access (the ingress alignment is proposed to the south of Key View 3), the installation of the landscape screening and entrances plan in the post-initial planting scenario would result in successful screening of the Project site from view of road users; however, sediment stockpiles, elevated belt conveyors, and potentially, construction vehicles, would be visible above the perimeter fencing. The elevational difference between Willow Glen Drive and the Project site would also provide for obscured views to the processing plant and activities. At Key View 3, the nearest portion of the landscape screening and entrances plan would be populated with 5-gallon shrubs (e.g., California lilac, toyon and lemonadeberry) that would be between 12 and 24 inches high at planting. The installation of Coast Live Oak and Fremont cottonwood trees (15-gallon and 24-inch box), and limited western redbud (36-inch box) trees is also proposed (western redbud plantings are proposed near the project access driveway visible from Key View 3). Initial planting of the landscape screening and entrances plan, and installation of a six-foot high chain link fence with green screening mesh is depicted in Figure 19b.

Figure 19b depicts a worse-case scenario wherein the majority of existing screening trees near Key View 3 and along the project perimeter in general would be removed to accommodate roadway improvements and the landscape screening and entrances plan. As shown in Figure 19b, existing trees including pepper and eucalyptus

species located closest to Key View 3 would be removed. However, as previously stated, perimeter fencing with screening fabric would block lower-scale features (e.g., storage containers, muck ponds, settling ponds, etc.) from view of users of Willow Glen Drive at Key View 3. Portions of taller components including aggregate milling equipment, blade mills and screens, elevated conveyor belts, and stockpiles would be visible above the perimeter fence. While visible in the Key View 3 simulation (see Figure 19b), construction vehicles are mobile, would around the site, and would typically be blocked from view by fencing. With the exception of landscaping planted near the access driveway, newly installed shrub and tree landscaping would not be visible as it would be located south of the perimeter fence and blocked from view by mesh screening fabric). Lastly, the removal of vegetation currently supported on the processing plant site including a limited number of ornamental trees would be apparent at Key View 3.

Changes to Visual Character and Quality and Viewer Response

As experienced from the Key View 3 location, the removal of existing trees along the Willow Glen Drive corridor would be visible and create a noticeable reduction in visual quality. Tree removal, and the installation of new trees, would also contrast with existing visual character as the corridor is partially defined by the presence of mature trees along eastbound travel lanes. Generally, views onto the Project site (with the exception of at the proposed access driveway which would be near Key View 3) would be blocked by the combination of the elevational difference between Willow Glen Drive and the processing plant and perimeter fencing with screening fabric; see Figure 19b). However, the resulting contrasts associated with tree removal and visibility of sediment stockpiles and taller project components/features would result in overall strong contrasts and response from road users. Road improvements to Willow Glen Drive would be visible; however, new striping for travel and bike lanes and a new dedicated right-turn lane onto the project site, would not contrast with the existing character of the corridor which currently includes striped lanes and occasional driveways. The visual dominance of foreground vegetation would cease and while new elements including chain-link fencing with mesh screening would have a moderate effect on existing character and quality, tree removal would have a strong adverse effect on character and quality of the corridor. Screening trees are a defining features of the existing corridor experience and while Figure 19b represents a worst-case scenario of tree removal, the resulting view at Key View 3 would be notably less memorable and distinct. Furthermore, and where visible, the form and line of stockpiles and processing equipment would be apparent in the context of the surrounding landscape but due to partial screening, these elements would create moderately weak contrast Key View 3. Project elements including Willow Glen Drive improvements, the landscape screening and entrances plan, and onsite components including the processing plant would not be dominant features in the Key View 3 landscape. Lastly, removal of screening trees would result in increased visibility to nearby steel lattice towers, a tubular steel poles, and multiple transmission lines crossing the project site and Willow Glen Drive. Due to proposed tree removal, the installation of screening mesh fencing along the Willow Glen Drive corridor, and enhance visibility of transmission line infrastructure, the unity, intactness, and vividness of the existing Key View 3 view would be reduced during mining and reclamation. As a result, the overall visual quality experienced at Key View 3 during active mining of Phase 1A is assessed as low.

Viewer response to the changes in visual conditions along the corridor would be high/strong given the number of viewers, scenic designation of the road by the County, and local familiarity with the Project. Motorists, cyclists, and pedestrians who currently experience relatively pleasing views of moderate to moderately high visual quality along the County-designated scenic corridor would be presented with a diminished experience at Key View 3 during active mining of Phase 1A. Visual change on the Project site would be briefly experienced as motorists and other road users pass the new ingress driveway onto the Project site (i.e., south of Key View 3) and the reduced scale and spread of new landscape trees compared to existing mature trees and as such, effects to existing character and

quality are anticipated to be strong. Also, the viewer response is expected to be adverse due to the removal of existing screening trees experienced to the east and west of Key View 3, visibility of haul trucks entering and exiting the site, widened extents of Willow Glen Drive, and views (albeit narrow) of effects associated with processing plant operations.

Post-Reclamation

Proposed Project Features

Figure 19c, Key View 3 – Willow Glen Drive (Visual Simulation – Post-Reclamation) depicts a post-reclamation view of the Project site as experienced from Willow Glen Drive. As depicted in the figure, the screening mesh installed on the six-foot high chain link fence paralleling Willow Glen Drive would be removed. The scenario depicted in Figure 19c is approximately 12 years post-installation of the landscape screening and entrances plan and includes backfilling of the processing plan area, revegetation of the subphase 2A area (at 7 years post-install) and subphase 2B area (at 6 years post-install). At this time, both subphase 3D and the processing plant area would be reclaimed and recently seeded with grasses included in the erosion control seed mix (see Figure 7; also, see Table 8). Grasses on the subphase 3D area and the processing plant would be apparent from Key View 3 due to regular management (i.e., mowing), distance between the areas and Willow Glen Drive, and the presence of mature screening trees in the foreground. In the post-reclamation scenario, riparian trees, and shrubs in the subphase 2A and 2B areas would be approximately 12 to 18 feet high (or taller depending on species and container size at install). However, views to revegetated areas on the project site would be mostly blocked by mature shrubs in the foreground associated with the landscape screening and entrances plan. In the post-reclamation scenario (i.e., 12 years post initiation of Phase 1A mining), trees and shrubs closest to Key View 3 in the landscape screening and entrances plan would be of sufficient height to block most views onto the Project site (gaps in trees would allow for some views beyond the perimeter of the project site).

Changes to Visual Character and Quality and Viewer Response

For viewers along Willow Glen Drive, the post-reclamation visual environment would display a noticeable reduction in visual quality due to tree removal and increased visibility to transmission line infrastructure. The post-reclamation views would include additional hill and mountain terrain (compared to existing conditions); however, the removal of dense screening trees in the Key View 3 landscape would result in a less distinct and interesting visual experience. While some existing eucalyptus and pepper trees would remain in place, Figure 19c depicts a worst-case scenario wherein the majority of existing screening trees visible at Key View 3 would be removed. Under this scenario, the loss of tall and mature screening trees would be apparent and new trees would not yet be of sufficient height to replace the scale of screening trees in the existing condition. Further, the density of new plantings would be less than that of existing screening trees and would allow for clear viewing “windows” onto the project site (unobstructed views to the upland area adjacent to Willow Glen Drive would be available at Key View 3). The overall vividness and memorability of the view would be moderate and at Key View 3, Project effects would reduce the overall visual quality of the County-designated scenic corridor compared to existing conditions. Viewer response at Key View 3 would be expected to be adverse since the overall visual character and quality of the visible landscape would be reduced when compared to existing conditions.

The overall vividness and memorability of the site would be high and would slightly enhance the overall visual quality of the County-designated scenic corridor compared to existing conditions (from this location). Like the other key

views, viewer response at Key View 3 would be expected to be positive since the overall visual character and quality would improve over existing conditions.

5.2.4 Key View 4

Orientation

Key View 4 was established at an overlook off Wind River Road in the Cottonwood residential neighborhood located atop an elevated mesa landform to the north of the Project site (see Figure 16). The key view is located between two private residential lots at the edge of a 25-foot wide, wood-chipped covered strip of undeveloped land and is oriented towards the southeast (see Figure 20a, Key View 4 – Wind River Road Lookout (Existing Conditions)). As shown in Figure 20a, rugged mountains, the river valley, and flat, and seasonally tan-colored undeveloped open areas beyond the Cottonwood Golf course are dominant features from this vantage point.

The primary viewers at this location are residents along Wind River Road and nearby neighborhood streets. In 2007, the local homeowners installed two benches and several palm trees and agaves just south of the Wind River Road; however, as observed during fieldwork conducted in August 2019, the seat portions of the benches have been removed rendering the benches unusable for the intended purpose. From Wind River Road and the adjacent sidewalk, views to the Project site are obscured by a slight topographic rise in the immediate foreground. Similarly, views to the Project site from a seated position at the benches (assuming the presence of bench seats) are partially obscured by terrain in the immediate foreground. While a greater volume of potential viewers occurs on Wind River Road, the adjacent sidewalk, or at the overlook benches, Key View 4 was established at the edge of the overlook as this location provides improved visibility to the Project site.

Existing Visual Character and Quality

As shown in Figure 20a, the easternmost portion of the Project site is notably lower in elevation than the overlook (i.e., by approximately 350 feet) and appears to extend to the east due to similar forms, lines, and colors displayed by the adjacent Steele Canyon golf course. From Key View 4, the verdant grass of the Ivanhoe course is punctuated by pockets and lines of unirrigated, yellow grasses, sandy areas of disturbance, and irregular lines of mature trees. Narrow sand-colored bands created by cart paths traverse the Project site and several irrigated ponds break up the continuity of these elements. The dense and darkly colored riparian corridor of Sweetwater River is detectable on the left side of Key View 4 and on the Project site, the channelized segment of the river is marked by an overall subtle line of clumped mature trees to the immediate south of Willow Glen Drive (the visible two-lane road in the foreground). These elements are visible in the foreground/middleground and while notable, viewer's focus at Key View 4 tends to drift to the narrow valley marked by relatively flat and seasonally tan/gold strips of land separated by thin bands of upland vegetation, visibly altered hills and eventually, to a broad "V" created by rugged ridgelines to the southeast. Like the Project site, the verdant greens and curvilinear form of Steele Canyon golf course fairways and greens contrast with dark and densely vegetated hills and more distant mountains including prominent (and broad) McGinty Mountain to the east. The pyramidal peak of Jamul Butte and the hazy, mounded form of Lyons Peak, contribute scenic qualities to the view. Middleground hills and slopes to the southeast have been visibly altered by residential development and vegetation removal. As a result, patches of tan color soils and straight lines are evident on visible topography to the southeast (see Figure 20a).

Overall, the visual quality of the view is moderately high. The available view is broad and includes contrasting golf course elements that are surrounded by unmodified hills and mountainous topography. Due to the rugged

composition of visible mountains that form consistent backdrop to the view, vividness is considered moderately high and is reduced by valley components (golf greens and trees) that contrast with more natural topography and vegetation. Intactness and unity are reduced to a moderate level due to the competing colors and lines in the landscape and the notable alterations to hills and slopes to the southeast. Lightly colored patches and stripes in the middleground to background topography interrupts the continuity of dark, dense vegetation and tends to attract attention. The Project site itself displays moderately high intactness and unity however, visible pockets of exposed soils disrupts and reduces the perceived visual quality.

Mining and Reclamation

Proposed Project Features

The mining scenario in Figure 20b, Key View 4: Wind River Road Lookout (Visual Simulation – Mining) depicts active mining of Subphase 3B including mining of the overexcavation area in the eastern portion of the subphase. This scenario assumes that the overexcavation area active in Subphase 3A would have been backfilled, brought to finished graded and seeded with an erosion control mixture. The balance of the Subphase 3A area (located closest to Willow Glen Drive and Key View 4) would be brought to an elevation higher than the backfilled overexcavation area. In accordance with the Revegetation Plan, most this area would be planted with the southern willow scrub plant palette (riparian) that would include fast growing trees and shrubs including mule fat, western sycamore, western cottonwood, willow and Mexican elderberry (a riparian seed mixture would also be applied to the area). Smaller linear bands of mule fat scrub and upland coastal sage scrub plantings would border the riparian planted area to the east and south. Figure 20b depicts new vegetation in a portion of the Subphase 3A at initial planting height. Planting of 15 gallon or larger cottonwood, sycamore and willow trees are assumed as therefore, Figure 20b depicts most of the tree vegetation on Subphase 3A at an approximate height of 4 to 6 feet.

As shown in Figure 20b, excavation/ mine operations in the approximately 16.5-acre Subphase 3B area would be visible in the foreground/middleground on the Project site. Specifically, mining and the operation of construction equipment and vehicles would be focused in the area paralleling Willow Glen Drive except for the northeast corner of the Project site that comprises the area of Subphase 3A that would mostly be planted with the southern willow scrub plant palette. As previously stated, trees depicted in the Subphase 3A area are shown at approximate heights of 4 to 6 feet. Existing vegetation in the Subphase 3B area would have been previously removed prior to the initiation of mining activities. In addition to vegetation removal, initial visual change on the Subphase 3B area would include the exposure of underlying soils and consistent tan/brown color that would extend across the Subphase 3B area. A visible rectangular cut in the surface of the site would progressively deepen and become approximately 40 feet lower in elevation than surrounding lands. The 3:1 side slopes of the overexcavation area would be visible and changes in elevation (and depth of the overexcavation area) would be apparent to the higher elevation viewers at Key View 4. Areas of pooled groundwater may be detectable in the overexcavation area. Aggregate extraction would be focused in this area during the duration of Subphase 3B. A conveyor line and parallel access road would be installed and constructed and would traverse the Subphase 3B area from west to east in a general diagonal alignment. In addition to mining equipment and vehicles in the overexcavation area including excavators and haul trucks, haul and water trucks would also be visible on the Subphase 3B area. As viewed from Key View 4, the over excavation area would be visually prominent and produce strong contrast within the existing setting.

Proposed tree removal associated with widening Willow Glen Drive east of the existing golf club parking lot would also be visible at Key View 4. While modifications to Willow Glen Drive would not be visually prominent, Key View 4 viewers at the overlook may elect to access a narrow trail extending south and west from the overlook and providing views that include

the Willow Glen Drive corridor. The narrow trail also provides views to the processing plant area and portions of Phase 2. From trail vantage points, proposed road widening, and related tree removal would be more visible than at the overlook. In addition to road widening and related activities, 8-foot-high noise barriers installed in accordance with Mitigation Measure M-N-1 (see Noise Section of Project EIR) would be visible from Key View 4. Barriers would be installed when mining activities in Subphase 3A and 3B are located within 400 feet of the Steele Canyon Golf Course (i.e., along the southern boundary of Subphase 3A) or within 400 feet of residential land uses north of Willow Glen Drive (and downslope of Key View 4) (see Figure 17b-2 for location of noise barriers that would be temporarily visible from Key View 4). During instances of noise barrier installation, dark and low continuous lines that parallel segments of the project boundary would be visible from Key View 4. In addition, a proposed drop structure at the eastern end of the site where the Sweetwater River enters the property would be visible from the elevated vantage point of Key View 4. As described in the EIR Project Description, the drop structure (which would prevent head cutting of the channel during infrequent, high flow events) would be the width of the modified river channel (610 feet) on the slope face, extend approximately 20 feet below the slope face, and be constructed of grouted riprap. The drop structure is included in Figure 20b and appears as greyish texture on the slope at the east end of the overexcavation area. Lastly, stockpiles would be visible along the southern boundary of the Subphase 3B area.

Changes to Visual Character and Quality and Viewer Response

Project components visible from Key View 4 (e.g., removal of existing vegetation, excavation effects and related grade-separation with off-site and adjacent Phase 3 areas), exposed soil and aggregate processing activities, presence of processing equipment and trucks, and stockpiling of aggregate materials) would introduce visually contrasting elements that would substantially change the existing visual character of the Project site and existing visual quality of the landscape. Once initiated, mining of the individual subphase areas visible from Key View 4 (i.e., Subphases 3A through 3C) would occur over approximately 1 year each, respectively. Specifically, Subphase 3B project elements would be in the foreground of the Key View 4 landscape for approximately 1 year. While some of the Subphase 3B area would be screened from view at Key View 4 due to foreground topography, more open views to the entirety of Subphase 3B, Subphase 3C (and Subphase 3D) are available from the narrow trail that extends south and west from the overlook. See discussion above under Proposed Project Features for more detail. Active mine operations for Subphases 3A through 3D and resulting strong contrasts/changes to the existing visual character of the Ivanhoe golf course would persist for approximately 42 months. Visual change occurring on the site would continue beyond the approximately 4 years during mining activities during reclamation, implementation of the revegetation plan, and establishment and maturation of the revegetation plan and plant species (see Tables 3 to 8).

During active mine operations and reclamation activities in Subphases 3A and 3B, the quality of view from Key View 4 would be noticeably and strongly reduced. While existing disturbances and patches of unirrigated areas are visible on the Ivanhoe golf course, the Project would sequentially remove the verdant elements of the golf course from east to west. Golf course elements including golf carts would be replaced with dry, tan to brown tones of dying grasses, exposed lightly colored soils results from vegetation removal and grading/extraction activities, and the geometric form of the overexcavation area. Construction equipment and vehicles (including water and aggregate haul trucks), aggregate stockpiles, and a conveyor line and parallel access road would also be visible and contribute to the strong contrast associated with the construction scenario. In addition, the installation of noise barriers would create straight linear elements in the view that would parallel the lines associated with the manufactured slopes resulting from excavation. Due to anticipated contrasts, the Project site would display low intactness within the context of the surrounding landscape. Similarly, intactness and unity would be reduced as the contrasting and

interruptive elements on the Project site in the foreground of the view would persist until the maturation of revegetation.

The primary viewer group from this key view –residents in the Wind River Road neighborhood—would be highly sensitive and aware of changes on the Project site due to the proximity, the available duration of views, and familiarity with the Project. Viewer response would be high and adverse during active mining operations.

Post-Reclamation

Proposed Project Features

Reclamation of completed Subphases 3A and 3B would be visible in the Key View 4 foreground and middleground (see Figure 20c, Key View 4: Wind River Road Lookout (Visual Simulation – Post-Reclamation)). While the area of visible disturbance on the Project site comprises a relatively small portion of the overall view at Key View 4, visual effects anticipated to be experienced during the establishment of revegetation would be strong and prominent. As proposed, reclamation would occur immediately following completion of mine operations in the Subphase 3A and 3B areas. Once finished grades are achieved, subphase areas (except for the southeastern portion of Subphase 3A) would generally be revegetated with container stock trees and shrubs and seed mixes in accordance with the project conceptual revegetation and compensatory mitigation plan (see Figure 7). The southeastern portion of Subphase 3A would be brought to finished grade and seeded with an erosion control seed mix primarily comprised of grasses. As illustrated in Figure 20c, areas outside of Subphase 3A would be covered with vegetation that would establish and mature over time. Figure 20c depicts the revegetation completed at the end of Phases 3A and 3B with height and density incrementally increasing over time and with approximately 8 and 9 years of growth. Prior to this time frame, vegetative density and height on the Project site would be less prominent and large pockets of exposed soils would be visible between planting groupings. Regarding revegetation, a wide area supporting a southern willow scrub plant palette would be centrally located on the Project site and would be bordered by thin areas of mulefat scrub and coastal sage scrub vegetation on east and south. The eastern border of Subphase 3A and the southern boundary of Subphase 3B would be seeded with an erosion control seed mix and in the post-reclamation scenario, would display the gold hues of low grasses. Visible vegetation within the southern willow scrub area includes fast-growing trees (e.g., willows, sycamores, and cottonwoods) and shrubs (i.e., mule fat and Mexican elderberry) and low grasses and herbaceous and grass-like plants including western ragweed, Douglas mugwort, and Pacific rush. In the post-reclamation scenario, riparian trees are shown at an approximate height of 12 to 18 feet.

Changes to Visual Character and Quality and Viewer Response

Post-reclamation and upon maturity of container stock plantings and seed mixture palettes, the visual character of the Project site would be enhanced with native vegetative cover. Areas revegetated with native plantings would display consistency in density and theme (in particular, the wider swath southern willow scrub planting areas). These planting areas would also be visually compatible with natural and mature vegetation located offsite and in the Sweetwater River corridor (see Figure 20c). However, the finished elevation and revegetation following completion of Subphase 3A would be maintained throughout the completion of Subphases 3B, 3C, and 3D mining and post-reclamation activities and would create visible form, color, and texture contrasts with adjacent areas of revegetated lands. As depicted in Figure 20c, Phase 3A would be visible in the foreground and would be notable due to brown tones, smooth texture of soils, and the lack of tall vegetative growth (an erosion control seed mix comprised of

grasses would be applied and would be regularly maintained). As shown in Figure 20c, Phase 3A bordering vegetation would also create strong straight lines that would attract attention.

At maturity, areas revegetated with native plant palettes would notably improve the visual character of the reclaimed Project site. Dense clusters of native riparian and upland vegetation would also somewhat blend the former golf course area with the densely vegetated river corridor and nearby hills and mountains that support coastal sage scrub and chaparral vegetation. With maturity of proposed revegetation, intactness and vividness would be substantially improved relative to existing and active mining conditions. Resulting intactness, vividness and unity would; however, be weakened by the presence of the area of Phase 3A that would be revegetated only with an erosion control seed mix and would be central to the Key View 4 view.

5.3 Assessment of Visual Character and Visual Quality

The assessment of visual character considers the compatibility of the Proposed Project with the visual character of the existing landscape. The assessment of visual quality compares the visual quality of the existing resources with the projected visual quality of the Proposed Project. A discussion of the existing conditions changes in the visual environment during the mining and reclamation phases, and visual character once the site has been reclaimed is provided below. Specific assessment of the significance of these anticipated changes is provided in Section 5.5.

To provide a baseline perspective, most of the Project site contains low intensity uses with the remainder consisting of densely vegetated areas. The primary visual elements introduced to the river valley by the Project would include site clearing, mining equipment, grading and exposed soil, processing equipment and stockpiles, post-mine reclamation and revegetation activities, and, eventually, the post-reclamation native vegetation communities and open space.

5.3.1 Assessment of Visual Character

Existing Condition

The visual character of the Project site and surrounding area encompasses visually diverse forms, including north- and south-facing slopes to the Jamacha Valley within which the Project is located, surrounding hills with residential development, and large expanses of open space associated with McGinty Mountain, San Miguel Mountain, and the SDNWR. The eastern portion of Project site is dominated by low growing, maintained grasses punctuated by mature trees and other geometric features such as sand traps, man-made ponds, cart bridges, and pathways that create a diverse visual character. The western portion of the site is less diverse in character, with the unmaintained golf course facilities including cart paths, cart bridges, unmaintained turf grasses and disturbed vegetation blending more with the surrounding areas and reducing the visual dominance of the mature trees.

Mining and Reclamation

The mining and reclamation activities associated with the Project would substantially change the composition of the existing pattern elements and character of the site. Mining operations would visibly contrast with on-site existing conditions and would introduce substantial changes to views from land uses in the surrounding area. With approval of the Project, the currently operating Ivanhoe Course would be closed. The Project would sequentially remove existing vegetation and introduce new, visually contrasting elements, including mining equipment and associated

structures, expose soil and create terrain modifications excavated to depths of up to 40 feet bgs, and stockpile excavated soils up to 25 feet in height. Excavation equipment would include front-end loaders, haul and water trucks, a bulldozer, and a skid steer loader. A low-profile conveyor would extend from the processing plant area to the active mining area, with the total length varying between 200 feet and upwards of ½ mile depending on the distance of mining activity from the processing plant. The stationary equipment and groundline conveyor would be painted a light color to blend with the color of the exposed soil and diminish the contrasting quality of these features. The equipment and the exposed soil, which would be lighter in color than the surrounding existing vegetation, would be visually dominant elements due to their high contrast with the existing visual environment. Stockpiles would appear as large, out-of-scale elements within the processing area. Railcar crossings that would allow excavation equipment to access either side of the river channel would have a lower profile and would not contrast highly with the surroundings. Crossing would be visible from the elevated vantage points to the north of the Project site but would be screened by mesh fencing on the Steele Canyon Road Bridge and existing and proposed landscaping on Willow Glen Drive.

Existing landscaped vegetation and mature trees along Willow Glen Drive would be removed to accommodate road improvements and project access, and new trees would be planted along the Willow Glen Drive and the Sweetwater River corridor and near the processing plant to provide additional screening. Despite these efforts the visually contrasting elements of the project would remain visible to off-site viewers, particularly from higher elevations with more expansive views such as the trails to the south of the site and the residences and roadways on the mesa/hillsides to the north of the site. Where vegetative screening is not available or could not be implemented as part of the Proposed Project at these higher elevation areas, the installation of chain link fencing with green screening mesh would introduce a new linear element along the northern Project boundary. While the fencing would screen the mining components and exposed soils from viewers traveling along Willow Glen Drive, it would introduce a temporary neutral, linear element that may be considered visually inconsistent with the existing visual character of the area. In addition, viewers from higher elevations (e.g., residences along the ridgelines to the north of the Project site) would experience both the fence and the on-site mine operations.

Phase 1 and 3 mining and reclamation activities would be separated into smaller sequential subphases and would generally proceed in an east to west direction. The duration of mining of individual subphases would be approximately 1 year each (see Table 2). However, visual change on the Project site would continue beyond active mining and especially, during backfilling of graded and mined areas, and during maturation of revegetation. The duration of reclamation for each subphase would vary by area size; however, container stock trees and hydroseeded seed mixtures included in the revegetation plan would typically reach maturity within ten to fifteen years post-planting/application. Phase 2 mining and reclamation activities would also be separated into smaller subphases but would proceed in a general west to east direction from Subphase 2A to 2B to 2C (see Figure 3). With the exception of the processing plant, which would be present for the duration of the proposed mining phases (approximately 10 years), excavation and mining equipment, exposed soils, and graded and excavated landforms within individual subphase areas would be visible for a duration of approximately 1 year. Reclamation of disturbed portions of the Project site would be phased to immediately follow completion of mine operations in subphase areas. Sequential backfilling and establishment of final landforms and revegetation of disturbed areas would gradually reduce the visual contrast of earlier onsite activities. The reclaimed areas would initially support vegetation densities that are visually sparse. Over time (approximately ten to fifteen years), southern willow scrub, mule fat scrub, and coastal sage scrub plantings would appear denser and display greater compatibility with vegetation within the Sweetwater River corridor.

Post-Reclamation

At maturity (approximately ten to fifteen years post reclamation for each subphase), reclaimed portions of the site would consist of natural open space areas with native vegetative cover and appropriate landforms for site drainage. The native plant palettes included in the Conceptual Revegetation and Compensatory Mitigation Plan (see Figure 7) would produce visual continuity between the Project site and the densely vegetated Sweetwater River corridor. The vegetative diversity created by the Project following reclamation would generally enhance visual character and help to visually blend the Project site with existing riparian forest and coastal sage scrub habitats within of the surrounding area. In the long term, the visual character of the Project site and surrounding and surrounding landscape would be improved.

5.3.2 Assessment of Visual Quality

Existing Condition

The visual unity of the valley within which the Project site is located is considered moderately high. The area generally displays compositional harmony even though disparate features (i.e., undeveloped open space areas, recreational uses such as the Cottonwood and Steele Canyon golf courses, and residential development) are present and visible. Similar vegetative elements such as mature trees tend to unify the different land uses. McGinty Mountain, the San Miguel Mountains, and the hillsides north of the Project site are visually dominant features that highlight the topographic diversity within the viewshed. These topographic features tend to emphasize the overall coherence of the visual environment. The Project site has moderately high visual unity, due mostly to its low diversity and visual organization of repeating aesthetic features (flat areas covered with low-growing vegetation interspersed with uniformly planted mature trees and built elements of the golf course such as buildings, pathways, water features, and sand traps). Landscape elements, which are located throughout the site and along the perimeter, tend to emphasize the general consistency of the vegetative elements on the site and visually connect the site to surrounding areas and the Sweetwater River channel.

The intactness of the Project site is moderate, with the assessed intactness degraded by the disturbed nature of the western Lakes Course, which is no longer being maintained. The western and eastern portions of the Project site, divided by the Steele Canyon Road bridge, visually contrast from one another and are also somewhat dissimilar to the surrounding areas, which are either more densely developed (e.g., residential areas) or more naturally vegetated (e.g., off-site portions of the Sweetwater River and mountainous areas). The view of the valley edged by the surrounding ridgelines and natural segments of the Sweetwater River is somewhat memorable; however, the noticeable contrast between the adjacent Lakes and Ivanhoe Courses, unmaintained golf course signage and chain-link fencing, and multiple transmission lines and support structures, slightly detracts from the overall memorability of the area. The Project site itself is moderately vivid within the larger valley landscape, with the vividness reduced due to the disturbed nature of the western Lakes Course.

Mining and Reclamation

The visual quality of the Project site and surroundings would be noticeably reduced during the mining phases of the Project. The removal of existing vegetation, exposed soil and aggregate processing activities, presence of processing equipment and trucks, stockpiling of aggregate materials, and mesh screen fencing would introduce visually contrasting elements that would disrupt and/or contrast with the existing on-site visual patterns. These new elements would draw the viewer's eye and distract from the overall visual composition and intactness of the area.

Removal of existing vegetation and mature trees would disrupt existing visual order and compositional harmony through the introduction of wide expanses of exposed soil and encroaching elements such as equipment and fencing. From vantage points where the processing plant and other extraction equipment are prominently visible (e.g., adjacent residential areas including those at a higher elevation than the Project site), the continuity of the river valley and area mountains would be disrupted.

The moderately high level of vividness and memorability of the Project site, particularly within the eastern Ivanhoe Course, also would be reduced during mining operations. While relatively short-term and isolated to subphase areas, proposed mine operations on the Project site would reduce existing visual quality of the site and the moderately high visual quality of the overall landscape unit. Although the entire Project site would not be mined at one time, and disturbed areas would be sequentially backfilled and revegetated in each area immediately following the completion of mine operations within each subphase area, visual contrasts would be prominent and strong. As such, effects to existing landscape intactness and unity would be notable and negatively perceived by most members of the public. Proposed riparian and upland plantings would appear somewhat orderly during the initial phases of establishment, with irrigation lines proposed to remain until plants are established (up to five years within each area). Gradual growth and maturity of revegetated areas would soften the visual contrast of mining activities; however, visible contrast could persist for a period of up to 10 years. Lastly, depending on vantage point of the viewer and/or viewer group, effects to the visual quality of the Project site during mining and reclamation activities would be strong.

Post-Reclamation

The proposed reclamation and revegetation of mined portions of the site would unify the Project site following subphase mine operations. Until the landscaping reaches a level of maturity (in approximately ten to fifteen years for each phase) visual impacts would be adverse. Once the vegetation reaches maturity, intactness, unity, and vividness of the landscape would generally increase due to a visible reduction in mining and reclamation-related contrasts and introduction of native plant materials to the Project site. In the long-term, visual quality would be enhanced and effects on visual quality would not be adversely affected.

5.4 Assessment of Viewer Response

Existing Condition

Viewer groups considered in this report include motorists and cyclists on Willow Glen Drive, Steele Canyon Road, and other nearby roadways; recreationalists using nearby trails, Hilton Head County Park, and the Cottonwood and Steele Canyon golf courses; and nearby residents to the north and south of the Project site. Those with highest exposure (i.e., larger number of viewers) are motorists and their passengers, particularly along the heavily traveled Willow Glen Drive that parallels the northern property boundary and Steele Canyon Road, which bisects the Project site and separates the Phase 1 and 2 areas. While mature trees partially screen the Project site from motorists along segments, proximal and on occasion, relatively clear views, to the Project site are available from Willow Glen Drive and Steele Canyon Road. As such, viewer response for motorists is assessed as moderate to high depending on the distance to the Project site and visibility of the Project site from the roadway.

Nearby trails offering hikers and recreationists views to the Project site include the Wildlife Refuge Loop Trail (SDNWR) and McGinty Mountain trail. While exposure is low from both trails, the Wildlife Refuge Loop Trail includes segments higher in elevation compared to the Sweetwater River corridor. At these locations, viewer response is

heightened. Elsewhere on the trail, existing vegetation in the river corridor partially to fully blocks views to the Project site. Although the trail offers elevated mountainous vantage points within the viewshed of the Project, distance reduces the visibility of the Project site. Further, the wide available view from the ridgeline trail results in a low viewer response. The only park in the Project viewshed from which the Project site is visible is Hilton Head County Park. Surrounding homes and landscaping limit views of the Project from most of the park, and recreationalists' exposure and overall response is assessed as moderately low. Overall viewer response for trail users would be moderate. For users of the adjacent golf course, viewer response would range from low to high depending on the location of users on the golf course and visibility of mining activities.

Residents within the viewshed have high sensitivity to changes and although most views would be distant or blocked by intervening topography, vegetation, or structures, at least 260 homes appear to have open views of the Project site and are assessed as having moderate to moderately high exposure. Views from these residences would be static in nature and occur over a long duration, making residents highly sensitive to potential changes in the existing visual environment and resulting in a high level of anticipated viewer response.

Mining and Reclamation

During the mining and reclamation phases of the Project, exposed soil and aggregate processing activities, processing equipment and trucks, stockpiles, and fencing would be visible from public roads, homes, and recreational facilities (i.e., trails and a portion of Hilton Head County Park) within the Project viewshed. Individual Project elements and the overall change in the visual environment would be noticeable by all viewer groups (i.e., motorists and cyclists, recreationalists, and residents) because of the visually contrasting elements that would be introduced into the viewshed throughout the duration of the Project. Further, viewers would experience active mining, backfilling, reclamation, and revegetation activities for 2 years or more depending on the view.

Key View 2 (Figure 18b) and Key View 3 (Figure 19b) are representative views to the Project site from Steele Canyon Road and Willow Glen Drive, respectively, that would be experienced by road users during mining and reclamation. Including screening mesh fencing, the proposed changes to the existing Project site would be in the foreground for viewers traveling in either direction on these roadways. These viewers currently experience views of moderate to moderately high visual quality. Due to vegetative screening and fencing (existing and proposed), continuous views into the Project site would not be from Steele Canyon Road and Willow Glen Drive. However, where visible, project effects would produce strong contrasts and would be present in the foreground view of motorists. Vehicle occupants on Willow Glen Drive, a County-designated scenic corridor, and Steele Canyon Road have high sensitivity; exposure to views from these roadways would be moderate given the number of viewers and duration and proximity of views. Motorists' response to the changes in the visual environment is expected to be moderately high. The response to changes to the Project site would be moderately low for motorists on other area roadways, since they are either farther away from the Project or have more limited views due to intervening topography, vegetation, or structures.

Limited views of the Project site are available from Hilton Head County Park (see Figure 15); however, visible features during mining and reclamation would include the new project driveway extending south from Willow Glen Drive, new striping and stop signage, tree removal (to accommodate the new driveway) minimal new landscaping, and a new gate. Due to the narrow available view and presence of trees that would partially block mining activities from view of park users, viewer response would be low. Views of the Project site are available from three existing trails within the viewshed: the Wildlife Refuge Loop and McGinty Mountain trails located within the SDNWR areas to the south and east of the Project, respectively. In addition, the Sweetwater Regional Trail is located east/southeast of the Project and offers limited views to the westernmost portion of the Project site.

Recreationalists would be sensitive to Project-related changes since they would be familiar with the existing conditions. Key View 1 (Figure 17a) is a representative view from the Wildlife Refuge Loop Trail within the SDNWR to the south of the Phase 1 area. The exposed soil, excavation equipment/conveyor, and recently reclaimed areas within Phase 1 would be prominently visible from this location on the “upper” trail, with more distant views of Phase 2 and the processing plant available. The visual exposure to mine activities would be different for most recreationalists on the loop trail because the majority of the trail is situated at a lower elevation relative to the mine site and therefore, most mine activities would be screened by intervening riparian vegetation. Further, a small number of recreationalists use the loop trail (approximately 2,300 individuals annually) and the duration of views would be short to moderate. From higher elevations along the McGinty Mountain trail, located over two miles east of the site, viewers may be able to distinguish the contrast between the exposed soil of the areas being actively mined or newly revegetated and the adjacent vegetation, but their overall response and sensitivity to the change would be low given the focus on the expansiveness of the views in general and the relatively small component the Project would be represented in background views. Recreationalists using the trails near the Project would have low to moderately low exposure to the Project features. Viewers within the northern portion of the Sweetwater River Trail would have a moderately low response to Project changes due to the distance from the Project and views encompassing only Phase 1, which would be the first phase to be mined and reclaimed.

Upon approval of the Proposed Project, the currently operating Ivanhoe Course at the Cottonwood Golf Club, which originally operated two 18-hole courses, would be closed. As such, operations of the Cottonwood Golf Club would cease, and golfers would not be provided views to Project activities and effects.

Residential viewers would generally see the same Project features described above for the other groups, namely exposed soil, excavation areas, equipment (including conveyors) and vehicles, processing plant, and stockpiles. The temporary removal of vegetation would also be apparent from private residences in the surrounding area that are currently provided clear views to the Project site. Key View 4 (see Figure 20a) provides a representative existing view from residential areas with elevated vantage points to the north of the Project site. Given the topography and linear configuration of the site, there are few, if any, residential areas that would have views of the entire Project site. Depending on which and how many phases are visible to the different residential areas, Project effects would be lessened within ten to fifteen years as the mining areas are sequentially reclaimed, revegetated, and trees and shrubs mature. The residents would have high sensitivity to Project-related changes and their view duration is long.

Post-Reclamation

As noted throughout this Visual Resources Report, the long-term visual quality of the Project site would be improved because of the Project. However, viewer response to Project changes would be heightened until native plant materials indicated in the revegetation plan becomes established and matures (in approximately ten to fifteen years for each subphase) and screening fence is removed from Steele Canyon Road bridge. While viewer response is anticipated to be positive once the vegetation reaches maturity across the Project site and overall visual character and quality improves, viewer response during establishment of vegetation would be negative due to perceptible contrast that would persist.

5.5 Determination of Significance

5.5.1 Significance Threshold 1: Contrast with Existing Visual Character and/or Quality

Would the Project introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines?

Section 5.2, above, focused on visible changes from key public viewpoints that would clearly display the visual effects of the Project. Overall changes to visual character and quality of the visual environment due to Project implementation are described in Section 5.3. Visual impacts resulting from changes associated with the Proposed Project are determined by assessing the change in the character and quality of the visual resource and predicting viewer response to that change. The level of visual impact is determined by combining the severity of the resource change with exposure (number of people) and the degree to which people are likely to oppose the change.

5.5.1.1 Visual Character and Quality

Project Features During Mining and Reclamation

The visual character and quality of the existing landscape would change substantially during the mining and reclamation phases of the Project. Proposed activities would result in a gradual visual resource transition from a partially open golf course to an active aggregate extraction operation featuring a processing plant, construction vehicles and equipment, stockpiles, and excavated pits. Overall, the existing visual character of the river valley is suburban in nature, with the residential neighborhoods and golf courses integrated into the natural features of the river corridor and surrounding ridgelines and hillsides. The visual quality of the Project site and surrounding area is moderately high and moderate in terms of visual unity and intactness, and the setting is highly vivid, due to the scenic and memorable nature of the valley edged by the surrounding ridgelines. Mining operations would strongly contrast with existing conditions and would introduce substantial changes to terrain and vegetation in views at public vantage points in the Project vicinity. For example, existing on-site vegetation and structures associated with the current and former golf courses would be removed, and soil would be excavated outside the river channel in individual subphase areas including within excavation pits with maximum depths of up to 40 feet bgs. The processing plant area and associated equipment (see Figure 3), and the overland conveyor and extraction equipment would be visible from public trails, roads, and private residences and would create moderately strong contrast within the existing visual environment. The overland conveyor would extend from the processing plant area to the active mining subphase areas and would comprise a new linear element extending upwards of ½ mile in length across the site. The removal of grasses and trees and exposure of soils, which would be lighter in color than the existing on- and off-site vegetation, and the presence of equipment would be visually codominant due to their high contrast in color, form, and line with the existing visual environment. Where visible, stockpiles (up to 25 feet tall) would appear as conical or mounded features within the processing area and along the edges of subphases areas.

From approximately the west edge of the project site to Steele Canyon Road, existing landscape vegetation south of Willow Glen Drive and along the project frontage, which primarily consists of trees and shrubs such as acacia, Peruvian pepper trees, and oleander, would be maintained during mining and reclamation operations (to the extent feasible) to provide a visual screen between Project activities and the public. Approximately 67 trees would be removed from the Project site to accommodate roadway improvements and project operations. Tree removal would be concentrated east of Steele Canyon Road and west of the existing golf course parking lot. . While tree removal would allow for open and relatively clear views onto the project site from Willow Glen Drive, the project would implement the landscape entrances and screening plan and would install mesh screening on existing site perimeter fencing. Near the processing plant area, container plantings including coast live oak (*Quercus agrifolia*) (15-gallon container and 24-inch box size), Fremont cottonwood (*Populus fremontii*) (15-gallon container size and 24-inch box size), and Western redbud (*Cercis occidentalis*) (36-inch box size) would be planted immediately south of Willow Glen Drive. While trees would be spaced approximately 20 to 25 feet on center, at installation coast live oak trees would be approximately 6 to 8 feet tall, Fremont cottonwood trees would be approximately 6 to 8 feet tall, and Western redbud trees would be 8 to 10 feet tall. Tree plantings would be supplemented with 5- and 15-gallon container size shrubs including California lilac [*Ceanothus* x 'Ray Hartman'] (approximately 18 to 24 inches tall at installation), toyon [*Heteromeles arbutifolia*] (approximately 1 to 2 feet tall at installation), and lemonade berry [*Rhus integrifolia*] (approximately 1 to 2 feet tall at installation). Due to tree spacing and the 1- to-2- foot height of container shrubs at initial planting, views to the processing plant area and prominent features including stockpiles, wash screens, feed hoppers, storage containers, settling ponds and the bare ground underlying the plant area could be available to Willow Glen Drive users during Phase 1 mining activities. However, as depicted on the landscape screening and entrances plan, a six-foot-high chain-link fence with green mesh screening would be installed between new landscaping and Willow Glen Drive and would effectively block lower profile elements at the processing plant, and the bare ground surface underlying the plant, from view. The visual experience of the mesh screening would create a monotonous, walled viewing experience for road users and would reduce the visual quality of the Willow Glen Drive landscape.

While most of the Project site is currently surrounded by approximately six-foot-high chain link fencing, mesh screening is not installed. Therefore, views of the Project site are available through the existing fencing and on-site elements (i.e., the river corridor, greens and fairways, and trees) contribute to the existing scenic qualities of the Willow Glen Drive corridor. In addition to mesh screening installed along the Willow Glen Drive frontage near the processing plant, temporary mesh screening is proposed to be installed atop the Steele Canyon Road Bridge parapet rail (along the northbound travel lane of the bridge) during mine operations in Phase 1 and 2 to screen views of the processing plant and mine activities and effects from users of Steele Canyon Road. Under existing conditions, views to the east and west from the Steele Canyon Road Bridge are open and extend beyond the project site to local hills and prominent mountain terrain including San Miguel Mountain (to the west) and McGinty and Dehesa Mountains (to the east). Mesh screening would block elements of the project from view of road users at select locations including the Steele Canyon Road Bridge and Willow Glen Drive near the processing plant. However, the installation of mesh screen would also notably alter existing visual experience of these roads and the quality of existing views. As noted previously, mesh screening would introduce a continuous walled element to the corridor that would contribute to reduced views and a monotonous visual experience. Mesh screening near the processing plant would be maintained throughout the duration of active mine operations (up to 10 years). The bridge screening mesh would be removed following completion of subphase 2B mining, approximately one year after reclamation plantings in subphase 2A. As such, the bridge mesh screening would be in place for approximately 5 years. Once mining and reclamation activities have been completed and site security is no longer a concern, the temporary fencing along the property boundary would be removed.

Areas disturbed by mining activities would be progressively reclaimed and revegetated as mining proceeds across the project site. Mining activities are planned to occur in smaller subphase areas to limit disturbance and implement phased reclamation and revegetation. Mining activities in each subphase area would occur over an approximate duration of one year each. Backfilling, reclamation, and revegetation would occur immediately following the completion of mine operations in each subphase area. Generally, reclamation and revegetation of each subphase would occur over a two-year period following the completion of mining. While riparian trees and shrubs would incrementally soften the overall character of the reclaimed area and gradually mask the appearance of exposed soil, both mining and reclamation activities would produce strong visual contrast that would degrade the existing character of the project site and result in reduced visual quality through reduced intactness and unity of elements. Compared to the golf course, the active mining operation, backfilled and denuded terrain, and newly planted (and seeded) areas of riparian and upland plant palettes would contrast with the existing character of the site through the removal of notable elements (e.g., golf course greens and fairways, and trees) and land cover and terrain disturbance associated with extraction/mining activities. In addition, the final elevation and vegetation with an erosion control seed mix on the Phase 1C area would create internal site contrasts in form, line, and color with areas of revegetation (see Figure 17c).

Project Features Post Reclamation

The post-reclamation visual environment would be an extension of existing pattern elements characteristic of the Sweetwater River valley. However, until landscaping of the revegetation plan reaches maturity (in approximately ten to fifteen years for each subphase), revegetated areas would display a stippled character that would contrast with adjacent areas of dense vegetation along the Sweetwater River corridor. See Figures 17b and 20b. Differences in vegetative density, size, and coverage would be apparent to viewers at Key Views 1 and 4 and at locations along Willow Glen Drive and Steele Canyon Road. Once the vegetation reaches maturity across the Project site (approximately 15 to 20 years from the initiation of mining activities), the vegetative diversity created by the Project would be compatible with the existing visual character of the community and would blend with the existing riparian forest and coastal sage scrub habitats within the Project site and surrounding area. At this time, the Project would result in a visual environment with high compositional harmony/unity that appears intact. The overall vividness and memorability of the site would be high and would enhance the overall visual quality of the Project site and surrounding area, especially from elevated vantage points where broad views are available.

5.5.1.2 Consistency with Applicable Goals and Policies

Mining and Reclamation

The Project is subject to the goals and policies of the Valle de Oro Community Plan. For the portion of the Project site that is located within the Rancho San Diego Specific Plan area, applicable conditions of the Specific Plan are included in the goals and policies of the Valle de Oro Community Plan. A detailed consistency analysis of the visual changes associated with mining and reclamation activities with the applicable goals and policies is provided in Section 5.5.4 (Significance Guideline 4) and Appendix A, *Goals and Policies Consistency Evaluation*, of this visual report. Mining and reclamation activities were found to be inconsistent with most identified plan goals and policies.

Post Reclamation

The visual changes in the post-reclamation period were also analyzed for consistency with applicable goals and policies of the Valle de Oro Community Plan. See Section 5.5.4 and Appendix A. The proposed reclamation would

ensure the long-term compatibility of the site with the surrounding environment and the applicable goals and policies, and no inconsistencies or nonconformance issues were identified.

5.5.1.3 Perceived Contrast/Changes to Visual Character and Visual Quality

Mining and Reclamation

The Project would change the composition of the existing pattern elements and character of the site, and mining operations and reclamation activities would visibly contrast with existing on-site conditions. The proposed mining and reclamation elements would replace existing views of the currently maintained Ivanhoe Course and the unmaintained Lakes Course with exposed soil and aggregate processing activities, processing equipment and trucks, and stockpiles of the proposed mining operations; perimeter fencing and mesh screening; and newly reclaimed, sparsely vegetated areas with temporary irrigation. Further, proposed mine operations would create substantial contrast and reduce the existing visual quality of the site and surrounding area. As described in detail within the Key View discussion in Section 5.2 and in the assessment of viewer response discussed in Section 5.4, the Project features during mining and reclamation would be visible from public roads and recreational facilities, as well as private residences within the Project viewshed. Views from land uses in the immediate Project vicinity would change substantially and the overall change in the visual environment would be noticeable by all viewer groups (i.e., motorists and other road users, recreationalists, and residents). The largest number of viewers, as well as the viewers having the most direct views onto the Project from public viewpoints, would be those traveling along Willow Glen Drive and Steele Canyon Road. Both roads border the project site and offer open, and partially to fully screened views onto the project site. Motorists on Willow Glen Drive, a component of the County Scenic Highway System, and Steele Canyon Road have high sensitivity and their response to the perceived changes in the visual character/quality of the area would be high and adverse. From other nearby public roadways (e.g., Muirfeld Drive located perpendicular to Willow Glen Drive, Ivanhoe Ranch Road located south of the Project site, and Hillsdale Drive located northeast of the Project site), limited views to the Project site are available. Where views are available along these roads, response to perceived changes to the visual character and quality of the site would be high and adverse.

For park users within the Hilton Head County Park, perceived changes to visual character and quality associated with proposed project effects would be negligible. Limited views to the project site are available from the park and while recreating and/or relaxing, park users would be focused on park activities and features. Recreationalists using the nearby SDNWR (in particular, elevated segments of the Wildlife Refuge Loop Trail) and County trails would have a high awareness of the surrounding area and the available views, and visible elements of the Proposed Project during the mining and early reclamation phases would display strong contrast. Responses to the perceived Project changes would vary for each of the three trails due to varying visibility of the Project site. Due to proximity and the lack of intervening screening elements, effects to the existing landscape due to proposed mining and reclamation activities would be apparent from the Wildlife Refuge Loop Trail and Sweetwater River Trail. As such, response to perceived changes to the visual character and quality of the site from these trails would be high and adverse. The McGinty Mountain Trail is distant from the project site and while in the project views, effects would be muted by distance and diminished by the broad nature of available views. Thus, response to perceived changes to the visual character and quality of the site would be low and not adverse.

Private residential viewers would generally experience views of the same Project features described above for the other groups, namely vegetation removal and resulting exposed soils, mining equipment and vehicles, excavation of terrain, processing plant operations, stockpiles, and truck traffic. For most of the ridgeline homes located north

of the Project site, higher elevations offer expansive views of the Jamacha Valley and surrounding mountains terrain. Due to proximity, the lack of screening elements, and the elevated vantage point allowing overhead views of entire subphase areas, response to perceived Project changes to visual character and quality of the site and surroundings would be high and adverse.

Post Reclamation

The perceived contrast/changes to the visual setting resulting from Proposed Project changes may continue as assessed above for each of the identified viewer groups until the vegetation reaches a level of visual maturity (in approximately ten to fifteen years for each phase). Following the active mining and reclamation phases of the Project, the reclaimed terrain and establishing vegetation would gradually support and facilitate visual continuity between the Project site and the surrounding area. Further, mature vegetation would soften contrasts between with newly planted areas and offsite areas support dense riparian vegetation. While response to perceived response to perceived Project changes to visual character and quality of the site and surroundings would be high and adverse post reclamation and during establishment of vegetation in subphases areas (it could take up to 20 years post mining of Phase 1A for vegetation across the project site to be considered mature). Ultimately, visual quality of the site would improve over time as vegetation becomes denser and taller and presents a coherent and unified appearance with that of the densely vegetated Sweetwater River corridor.

5.5.1.4 Summary of Resulting Visual Impacts

Mining and reclamation activities would result in adverse changes to vegetation and terrain that would substantially alter the existing visual character and composition of the visual environment. The unity, intactness, and vividness of the existing visual environment would be strongly reduced during mining and reclamation. The overall visual quality of the site during mining and reclamation would be moderately low due to the introduction of new encroaching elements that would noticeably contrast with the existing composition of the project site and quality of the visual environment. Visibility of the processing plant and Phase 2A and Phase 2B activities would be reduced by the installation of screening mesh and landscaping along portions of Willow Glen Drive and Steele Canyon Road and by the in-ground installation of 36' box trees around the western and southern boundary of the processing plant (see Section 6). However, the adverse visual impacts that would occur during mining including the walled effects associated with the installation of mesh screening along segments of Willow Glen Drive and Steele Canyon Road would be experienced over approximately 10 years. Furthermore, adverse visual impacts and strong visual contrast would persist beyond the active mining timeframe and would continue during reclamation of subphase areas and the establishment and maturation of revegetated areas. Due to the severity of anticipated visual change (and contrasts in form, line and texture), the proximity of public vantage points to the project site, and the 10 year duration of mining activities, impacts to visual resources would be **significant and unmitigable** under Significance Guideline 1.

5.5.2 Significance Threshold 2: Removal of/or Change to Valued Visual Element

Would the Project result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings?

Whereas the discussion in Section 5.5.1 addressed overall visual effects related to Project implementation and visual compatibility with the overall community, the Significance Threshold 2 analysis concerns specific on-site elements and whether those elements constitute valued visual elements of the onsite environment. No designated landmarks (i.e., a visual feature or element designated or identified in an adopted land use plan as an important visual or scenic resource) or identified visual resources such as unique topographical features, designated historic resources, or prominent rock outcroppings or ridgelines occur on site. Therefore, these issues are not discussed. The analysis below addresses potentially visually important trees and sensitive vegetation.

5.5.2.1 Potentially Visually Important Trees and Sensitive Vegetation

The Project site is primarily comprised of a golf course landscaped with low grass and ornamental trees. There are few areas of the site that support notable stands of trees or large areas of sensitive vegetation. No trees within these areas were identified heritage trees. Occurrences of potentially important trees located on site primarily occur along the southern border of the Project site, east of Steele Canyon Road and in the southeastern corner. As shown on Figure 9, southern cottonwood-willow riparian forest and south willow scrub vegetation is located within the Project site boundary. Most of the mapped southern Cottonwood-willow riparian forest and south willow scrub areas would not be mined. Rather, these areas would be subject to removal of invasive species or left in the current condition. As such, these areas would be retained and would continue to contribute diverse visual elements to the landscape.

Riparian vegetation communities are valued for both biological value and visual aspects, and most of these resources would be retained during implementation of the Proposed Project. However, as described in the Biological Resources Technical Report prepared for the Project, the Project would result in direct impacts to approximately 0.28 acre of sensitive vegetation communities, including 0.26 acre of southern cottonwood-willow riparian forest, 0.01 acre of Arundo-dominated riparian, and less than 0.01 acre of disturbed wetland (HELIX 2019). While impacts to sensitive vegetation communities would be limited, the riparian corridor of the Sweetwater River is a major scenic resource of the community and thus, mature trees within the corridor would likely be considered visually notable at the local level. Therefore, implementation of the Project would result in **significant and unmitigable** impacts related to the loss of on-site visually notable trees (i.e., Significance Guideline 2).

5.5.3 Significance Threshold 3: Impacts to Focal or Panoramic Vistas

Would the Project substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:

- ***a public road,***
- ***a trail within an adopted County or State trail system,***
- ***a scenic vista or highway, or***
- ***a recreational area.***

No designated or mapped scenic vistas, view corridors, or state-designated scenic highways are located near the Project site. Therefore, these issues are not discussed in the analysis below. The following analysis discusses valued focal or panoramic views from County-designated scenic highways and other public roadways, as well as existing trails and recreation areas in the viewshed. The County includes Willow Glen Drive, SR 54/Jamacha Road and SR 94/Campo Road in the County Scenic Highway System, and these roads are located within the Project viewshed as illustrated in Figure 14. Although the viewshed analysis conducted for the Project indicates that views may be available from the latter two roadways (i.e., SR 54/Jamacha Road and SR 94/Campo Road), site visits and field review indicated that no views to the Project site are available from these roadways due to intervening vegetation and development. Therefore, these roadways are not discussed in the analysis below.

5.5.3.1 County Scenic Highways and Other Public Roads

Willow Glen Drive

The Valle de Oro Community Plan identifies Willow Glen Drive as a scenic highway corridor and the County includes Willow Glen Drive in its Scenic Highway System.

Users of Willow Glen Drive comprise the largest viewer group in the Project area. Further, motorists and other users of the road comprise the largest number of viewers offered direct views onto the Project site from public viewpoints. The visibility of the Project site, project components, and visual effects from Willow Glen Drive is discussed in detail throughout this report. In addition, Key View 3 was established on Willow Glen Drive and visual simulations from the road (see Figure 19b and Figure 19c) represents the anticipated visual change that would be experienced by road users during mining/reclamation and post-reclamation, respectively. Near the processing plant, new landscaping is proposed along the project site frontage of Willow Glen Drive and would gradually over time screen the plant and mining subphases from view of road users. In addition, six-foot-high, chain-link fencing with mesh screening would border the new landscaping and would generally limit views onto the project site from a segment of Willow Glen Drive (taller project components and occasionally, mobile construction vehicles would be visible above perimeter fencing). Despite partially blocked views of project features and effects, the mesh screening itself is a contrasting feature that limits views and reduces visual quality along the Willow Glen Drive corridor. In addition, where new landscaping and mesh screening on fences is not proposed to be installed, road users would be offered glimpses into the project site and visual change associated with vegetation removal and mining activities would be experienced (albeit briefly).

Views to the verdant fairways and mature trees of the maintained Ivanhoe Course and the jumbled landscape of the closed Lakes Course would be partially screened by new fencing and landscaping to be installed along Willow Glen Drive. However, as mining activities advance from west to east across the site, vegetation on the Ivanhoe Course would be removed and the predominant features of the site would no longer occur. And despite the discordant elements on the Lakes Course compared to the Ivanhoe Course, the removal of vegetation, exposure of soils, excavation of terrain and presence of an active sand extraction operation would further impact landscape intactness and unity. While views to Project elements would be partially screened, narrow views to the Project site (and visible contrasts) would detract from the scenic landscape visible from a designated scenic highway corridor. Further, the presence of mesh screening near the processing plant would interrupt and obstruct views and would create a partially “walled” experience for road users. Views to more distant ridgelines and mountainous terrain would not be obscured by the fence and mesh screening; however, the inclusion of fast-growing trees and shrubs in the landscape screening and entrances plan (designed to screen project components from view) would gradually obstruct views to distant mountains visible from the westbound travel lane near the processing plant location. Thus, impacts to existing views from Willow Glen Drive during mining and reclamation would be **significant and unmitigable** under Significance Guideline 3.

Post-reclamation and trees and shrubs identified in the Revegetation Plan reach maturity, long-term changes within the Project site would contribute positively to the visual experience of Willow Glen Drive motorists. At maturity (approximately ten to fifteen years post reclamation for each subphase), the existing visual character of the Project site would be enhanced with native vegetative cover and appropriate landforms for site drainage. The visual experience along the segment of the roadway bordering the Project site would be an extension of the continuous pattern elements of the surrounding visual environment within the river valley. While views to distant mountain terrain may be (briefly) partially obscured or interrupted by trees and shrubs associated with the landscape screening and entrances plan, the maturation of plant materials would create a unified appearance of vegetation along the Willow Glen Drive corridor that would mimic and build upon existing landscaping. As such, long-term effects to a valued focal or panoramic vista from Willow Glen Drive would be **less than significant** under Significance Guideline 3.

Other Public Roadways

As discussed above under Significance Guideline 1, implementation of the Project would alter the existing elements on the Project site visible from adjacent public roadways. Therefore, the Project would alter the existing visual character of these views. However, no designated valued focal or panoramic vistas are located along other roadways near the project site including Steele Canyon Road. As a result, associated impacts to valued views from other public roadways would be **less than significant** under Significance Guideline 3.

Trails

Panoramic views are available from the two SDNWR trails within the Project viewshed (Wildlife Refuge Loop Trail and McGinty Mountain Trail). Key View 1 was established from the upper Wildlife Refuge Loop Trail and represents the existing view available from the elevated portion of the trail. Views of Project elements from the more heavily traveled (by equestrians, casual hikers, runners, mountain bikers, and walkers with dogs) lower trail would be screened by existing mature riparian vegetation associated with the Sweetwater River. Simulations from Key View 1 are presented in Figures 17b and 17c and illustrate anticipated visual changes on the Project site that would be experienced by users of the upper trail during mining/reclamation and post reclamation, respectively. As illustrated in the visual simulations, the exposed soil, excavation equipment/conveyor, and recently reclaimed areas within

Phase 1 would be visible in the middleground from this trail and would create strong contrasts in form, line, and color on the project site. Further, areas of exposed soils, the overreaction pit, and presence of mining equipment and mobile vehicles would detract from and interrupt the existing view as these components would grab the attention of viewers. Phase 2 mining activities and operations at the processing plant would be visible but distant. Mining of Phase 1 would occur over a three-year period and reclamation of the overall area would be completed approximately 5-years post initiation of mining in Subphase 1A.

Until revegetation within the reclaimed subphase areas reaches maturity, the visual effects of Phase 1 mining activities would generally persist and be experienced at Key View 1. Assuming a 10 to 15-year period for plant communities in the revegetation plan to reach maturity, the Phase 1 area would visually blend with retained areas of riparian and coastal sage scrub vegetation within approximately 10 years post-initiation of mining activities in Subphase 1A. However, while denser and taller trees and shrub would gradually improve visual character and the quality of views compared to the active mining and reclamation scenarios, the Subphase 1C area revegetated with only an erosion control seed mix may detract from and interrupt the scenic view available at Key View 1. Further, the wide swath of grass seeded terrain would draw attention from the river corridor and mountains and reduce landscape intactness, unity, and overall visual quality. See Figure 17c. While the prominent peaks, ridgelines, and hills in the background of views from this area would not be obstructed the volume of viewers at Key View 1 is assumed to be low, anticipated visual change would be strong and detract from and interrupt the available view. See Figures 17b and 17c. Therefore, the anticipated impacts to existing views from elevated portions of the Wildlife Refuge Loop Trail would be **significant and unmitigable** under Significance Guideline 3.

From higher elevations along the McGinty Mountain trail, located over two miles east of the site, hikers may be able to distinguish between areas on the project site being actively mined and off-site vegetation due to variations in color. However, the distance between the trail and the project site would generally obscure prominent form and lines contrasts associated with vegetation removal and mining activities such that the perceived changes would not substantially affect scenic views. Further due to the broad, panoramic nature of available views and the wide geographic area visible, color variations on the project site would occupy a small portion of the seen landscape and would be a minor component. Also, with each year of vegetation growth following installation on the project site, the distant, minor contrasts on the Project site would be reduced. Therefore, impacts to valued focal and/or panoramic vistas from the McGinty Mountain Trail would be **less than significant** under Significance Guideline 3.

In the project area, the Sweetwater Regional Trail parallels Jamacha Road from approximately Cuyamaca College Drive East to Willow Glen Drive. Near Willow Glen Drive, the trail alignment turns to the east and winds behind a small strip commercial development. An approximately 200 foot-long, north-south segment of the trail borders the western boundary of the project site. Vegetation removal and mining activities in Subphases 1B and 1C would be visible from the trail. Further, existing easterly views from the short trail segment are primarily comprised of the unmaintained Lakes Course in the foreground and mountainous terrain in the background. Despite the low visual quality displayed by elements on the Lakes Course, the removal of all vegetation, alteration of terrain including the overexcavation area, and presence of mining equipment and vehicles would sharply contrast with the existing character of the project site. Further, foreground project element would be visual prominent during active mining and maturation of vegetation and as a result, would substantially detract from available views to local hills and mountains. Therefore, potential impacts to views across the Project site from the Sweetwater Regional Trail would be **significant and unmitigable** under Significance Guideline 3.

Recreational Areas – Hilton Head County Park

Hilton Head County Park is the only park in the Project viewshed with potential views of the Project site and project activities. As experienced from the park's perimeter pedestrian path near Muirfield Drive and the southwestern corner of the baseball/soccer field, visible activities on the project site and specifically in the Subphase 1B and 1C areas, would not substantially detract from existing views. As previously stated, the existing view "down" Muirfield Drive from the park's perimeter path towards the Project site is narrow. Further, existing landscaping planted along the path occasionally blocks the southerly view. An existing view from the park's path down Muirfield Drive is shown on Figure 15. As shown in the figure, a sliver of grass on the unmaintained Lakes Course is visible but mature trees along the Willow Glen Drive corridor (and on the Project site) effectively block elements of the Lakes Course (i.e., surface features) from views. Trees on the course are visible above perimeter screen trees. While the construction of a new driveway onto the Project site, access gate, vegetation removal and mining activities in Subphase 1B and 1C areas would be visible, most screening trees would remain in place during project operations. Thus, views to the Project site would continue to be blocked by existing perimeter trees. Further, mature trees within the Sweetwater River corridor located south of the Project site would not be disturbed and as such, a tree line above the Project site and against the coastal sage scrub covered hill to the south would persist. Therefore, impacts associated with views of Project effects from Hilton Head County Park would be **less than significant** under Significance Guideline 3.

5.5.4 Significance Threshold 4: Compliance with Goals, Policies or Requirements

Would the Project not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's Zoning?

Applicable local land use plans governing visual character and quality include the Valle De Oro Community Plan and Conservation and Open Space Element of the General Plan. Policies within the Community Plan include specific goals and policies directed at visual quality and community character and address the conditions governing development within the Rancho San Diego Specific Plan area. General Plan policies include the protection of scenic resources and pertain to development siting and design and restriction of lighting and glare. A consistency evaluation of the Project and these applicable goals and policies is provided in Appendix A to this report. In summary, during the mining and reclamation phase the Project would be inconsistent with several goals and policies related to aesthetics in the Valle De Oro Community Plan including the Community Character Goal, Community Character Policy 6, Land Use Industrial Goal, Community Design Policy 2, and Conservation Goal and Scenic Highways Goal. Regarding the County General Plan Conservation and Open Space Element, the Project (specifically, mining and reclamation) would be inconsistent with several goals and policies related to aesthetics including the following:

- GOAL COS-11: Preservation of Scenic Resources
- Policy COS-11.1: Protection of Scenic Resources
- Policy COS-11.2: Scenic Resources Connections
- Policy COS-11.3: Development Siting and Design

During mining and reclamation, project components and the visual effects of mining and reclamation activities would be visually incompatible with the existing visual setting and natural features of the surrounding area. Further,

proposed activities and effects to landforms and vegetation would contrast with the existing character of the community. Proposed fencing and landscaping would help screen the visual effects of the Project from the largest viewer group in the surrounding area (motorists); however, due to the duration of mining activities (up to 10 years), the visible removal of vegetation from the site, the installation of linear screening mesh that would limit views and reduce visual quality, and resulting contrasts between actively mined (and newly reclaimed and revegetated) lands and the adjacent riparian corridor of the Sweetwater River, impacts would be adverse. While the Project would comply with applicable goals and policies to the extent feasible for an extractive use and would implement a comprehensive reclamation plan to ensure that mined areas are backfilled and revegetated with appropriate plant communities, impacts would be **potentially significant** under Significance Guideline 4.

Implementation of the proposed Reclamation Plan and revegetation of subphase areas would ensure that the Project would comply with the applicable goals and policies of the Valle de Oro Community Plan and County of San Diego General Plan Conservation and Open Space Element. Long-term visual impacts under Significance Guideline 4 would be **less than significant**.

5.5.5 Lighting and Glare Effects

Lighting within the Project site currently consists of safety lighting within the clubhouse and maintenance building areas and the parking lots. The Ivanhoe Course only operates during daylight hours and the Lakes Course is no longer in operation. Roadways within the vicinity of the Project site are lit with streetlights. Visible night lighting in the area is primarily associated with private homes and commercial areas.

The Project would be designed to use the least amount of lighting possible while remaining in compliance with state and local regulations for safety. No highly reflective building materials would be used. Mining operations are only proposed to occur during daylight hours and the only new source of on-site lighting would be from shielded fixtures that would be installed around the processing plant area for safety and security purposes. Proposed safety lighting would be required to adhere to Division 9 of the County LPC. Lighting would be selectively placed and of the lowest illumination necessary for human safety (i.e., limited to less than 4,050 lumens output, maintaining compliance with State and local regulations, including the County LPC and dark skies policies). Generally, mounted sodium, metal halide, fluorescent, or light-emitting diode (LED) lighting would be employed. Lights would be mounted at heights between 15 and 20 feet and would be similar in illumination to streetlights. Lighting would be directed downward and/or fully shielded and designed to minimize glare and reflection onto neighboring areas; no light would spill beyond the boundary of the Project site. Once the Project site is reclaimed (after a period of approximately 12 years), all safety lighting would be removed from the site.

The Project site is located approximately 40 miles from Palomar Observatory, in Zone B as identified by the LPC (all areas beyond 15 miles). Project lighting would not adversely affect nighttime views or astronomical observations because it would conform to the lamp type and shielding requirements as well as the hours of operation detailed in the LPC. Based on compliance with the County's LPC and Dark Sky Ordinance, visual impacts associated with Project-related lighting and glare would be **less than significant**.

5.6 Cumulative Impact Analysis

As stated in CEQA Guidelines Definitions and Section 15130, cumulative impacts are those resulting from proposed project effects combined with those of past, present, or probable future projects producing related or cumulative

effects. For visual issues, projects within the Project viewshed (including the Proposed Project) would potentially contribute to regionally cumulative visual effects and are evaluated in this discussion. The viewshed includes areas with views to, or from, any single point on the Project, and therefore includes those projects that may be experienced in concert with the Proposed Project. Although these projects are within the Project viewshed, they would not all be visible at any one time or from one point; they are not concentrated in one portion of the viewshed, and local topography, vegetation, intervening structures and land uses often block views between these projects.

Cumulative projects within the Project viewshed are presented in Table 9, *Cumulative Projects*. The two projects include the Cuyamaca College Facilities Master Plan Update and the proposed Ivanhoe Ranch residential development. The Cuyamaca College Facilities Master Plan Update encompasses the Cuyamaca College campus, the southeastern corner of which is located approximately 0.3-mile northwest of the Project site. The Master Plan Update is proposed to provide updated long-range guidance for the replacement or modernizations of existing facilities and infrastructure improvements to serve the existing and future campus population; no expansion of classroom capacity is proposed (Grossmont-Cuyamaca Community College District 2019). It also proposes improvements to the existing landscaping, gateway entry at Cuyamaca College Drive West, and open space restoration. The proposed activities would alter the appearance of certain portions of the campus; however, because no new facilities are proposed and the renovations/ modernizations would be relatively small in scale, the Master Plan Update would not result in a substantial adverse effect on panoramic scenic vistas or block views of important visual resources. On-campus development would be a continuation of existing community college uses, contiguous with existing campus development, and perceived as a logical extension of existing facilities. Since the proposed improvements would be consistent with existing campus development and would undergo design review to ensure compatibility, potential changes to visual character and quality would not be notable to off-site viewers. The Cuyamaca College development would not be highly visible in conjunction with the Proposed Project due to distance from the Project site and intervening topography, built uses, and landscaping. While there may be some areas at higher elevations that may have views of the improvements proposed within Cuyamaca College and the Project site (e.g., along trails located within the SDNWR), the combination of visual effects resulting from both projects is anticipated to be negligible, especially given the scale of proposed on-campus improvements. Additionally, the Cuyamaca College campus is buffered from County-designated scenic roadways and other nearby roadways by existing landscaping and commercial and residential development, such that there would be limited, if any, roadways from which views of both projects (i.e., Cuyamaca College and the Proposed Project) would be available.

The Ivanhoe Ranch project site is located on approximately 122 acres immediately southeast of the eastern portion of the Project site, adjacent to the existing Steele Canyon Estates. The project proposes the development of 119 single-family residences and the designation of open space areas. The project is in the early stages of planning and no environmental analysis is currently available. Relative to potential visual impacts, the project would introduce many buildings and suburban elements adjacent to an existing residential development (Steele Canyon Estates) within the open space area between the Project site and the Steele Canyon Golf Course. Visual changes associated with this development are anticipated to be relatively minor as experienced from public viewpoints such as roadways and trails, since the proposed structures would be located on relatively flat terrain that currently displays visual qualities consistent with that of nearby developed building pads. In addition, the new structures would be located adjacent to an existing rural residential neighborhood and as such, would visually blend with similar surrounding uses. For private views from nearby residential areas, particularly the Steele Canyon Estates, visual impacts associated with construction of the residential development would not be compounded by the visual impacts associated with implementation of the Proposed Project. Temporally, there may be some overlaps between the two projects (e.g., site grading for the Ivanhoe Ranch Project could overlap with Phase 3 mining activities and both projects would be visible from the Wind River Road lookout). While the Ivanhoe Ranch Project would result in

the construction of new structures and the primary visual effects of the Proposed Project would include vegetation removal, excavation, and equipment operations, the combined visual change associated with the projects would temporarily create strong contrast in the landscape. Given the duration of the project’s activities and potential overlap with the construction of the Ivanhoe Ranch Project, a potential cumulative impact would occur and the project’s contribution would be cumulatively considerable..

Table 9 Cumulative Projects

Project Name	County Reference Number	Location	Size (acres)	Development Type	Proposed Improvements
Ivanhoe Ranch	PDS2018-TM-5629, PDS2018-REZ-18-004, PDS2018-GPA-18-005	5261 Ivanhoe Ranch Road (between Cottonwood Golf Course and Steele Canyon Golf Course) APNs: 518-030-34 and 518-030-37	122	Residential	119 dwelling units, open space
Cuyamaca College Facilities Master Plan Update	N/A	Bound by Fury Lane to the east and SR 54/ Jamacha Road to the south	165	Educational	Modernization/ renovations and site improvements/ infrastructure upgrades to existing facilities

GPA = General Plan Amendment; REZ = Rezone; TM = Tentative Map; N/A = Information Not Available or Not Applicable

5.7 Summary of Project Impacts and Significance Conclusions

Significance Guideline 1

The Project would introduce a phased mining operation, including reclamation and revegetation of disturbed areas, into the visual environment of the Project site and surrounding setting. The Proposed Project would change the composition of the visual environment in terms of dominance, scale, diversity, and continuity, by introducing exposed soil, mining operations and equipment, a processing plant area, and stockpiles that would be out of scale and visually dominant features. This would create notable physical changes in the composition of the visual environment, as viewed from Willow Glen Drive, Steele Canyon Road, and surrounding recreational and residential areas that would be inconsistent with the existing visual character of the area. However, existing vegetation and fencing combined with targeted screening elements including screening mesh, new landscaping associated with the landscape screening and entrances plan would, to the extent feasible, moderate the visual effects of the Project until reclaimed and revegetated areas reach mature vegetation densities and height (at approximately 15 to 20 years post-initiation of Subphase 1A mining, trees and shrubs in all subphase areas would reach maturity).

While the Project is proposed to be phased such that only smaller subphase areas are mined individually, the visual effects of vegetation removal, mining, and extractive activities would create strong contrasts in the landscapes. In addition, the installation of new landscaping and mesh screening near the processing plant would block portions of the processing plant from view but would also shorten available views and reduce visual quality through creation of a walled experienced for road users. Views onto the Project site would be available from nearby roads, trails, and residential properties and contrasting forms, lines, and colors resulting from mining activities would be apparent from public and private vantage points. Once mining has been completed in each subphase area (the duration of each subphase is approximately 1 year each), terrain would be backfilled and reclaimed. The revegetation plan would be implemented and would entail the planting of container trees, shrubs, and the application of seed mixes. Over time, the native riparian and upland plant palettes would help reduce the visual effects of mining and reclamation activities by screening the ground surface and enhancing densely vegetate segments of the nearby Sweetwater River corridor. Several Project design features, such as installation of new landscaping (i.e., the landscape screening and entrances plan), fencing, mesh screening, trees along the western and southern boundary of the processing plant, painting of mining equipment to blend with the color of the exposed soil, and limiting the height of stockpiles to 25 feet (see Section 6 for all Design Considerations), would help to reduce the visual impacts and enhance screening of project components during active mining of the site. However, due to the anticipated strong contrasts associated with project effects to terrain, and vegetation, visibility of effects from roads, trails, and residences, and the duration of mining and reclamation activities (i.e., up to 12 years), impacts would be **significant and unmitigable** (Significance Guideline 1).

Significance Guideline 2

No designated landmarks (i.e., a visual feature or element designated or identified in an adopted land use plan as an important visual or scenic resource) or identified visual resources such as unique topographical features, designated historic resources, or prominent rock outcroppings or ridgelines occur on site. The areas of potentially important trees on site primarily occur along the southern portion of the site where no mining is proposed. Riparian vegetation communities are valued for their both biological value and visual aspects, and most of these resources would be retained during implementation of the Proposed Project. However, the Project would result in direct impacts to approximately 0.28 acre of sensitive vegetation communities, including 0.26 acre of southern cottonwood-willow riparian forest, 0.01 acre of arundo-dominated riparian, and less than 0.01 acre of disturbed wetland (HELIX 2019). While impacts to sensitive vegetation communities would be limited, the riparian corridor of the Sweetwater River including the golf course is a major scenic resource of the community and the golf course and mature vegetation within the corridor would be considered features that contribute to the valued visual character and image of the neighborhood, community . Implementation of the Project would result in the loss of these features during mining which would be considered a **significant and unmitigable** impact related to the loss of on-site sensitive vegetation and trees within the Sweetwater River corridor.

Significance Threshold 3

The Valle de Oro Community Plan identifies Willow Glen Drive as a scenic highway corridor. The Project would introduce visually contrasting elements into views from the roadway to the golf course that under existing conditions, are partially screened and broken. Changes to views during mining and reclamation of the Project would be notable. Visually contrasting elements such as mine operations, construction equipment and vehicles, and stockpile would be partially screened from view of motorists through the installation of screening fences and landscaping. However, detectable visual contrasts would remain strong and would be perceived negatively by road users. Further, scenic elements of existing views would be obscured by Project features and while these views would be restored once motorists travel beyond the Project site; the existing character of the site would be negatively affected. Lastly, the visual quality of the

scenic landscape visible from Willow Glen Drive would be degraded as mining activities would impact existing intactness, unity, and memorability. Thus, scenic vista impacts from Willow Glen Drive would be **significant and unmitigable**.

The changes created by the project in the vistas available from the Wildlife Refuge Loop Trail would be notable during Phase 1 and would create strong contrasts in form, line, and color on the project site. Further, areas of exposed soils, the overexcavation pit, and presence of mining equipment and mobile vehicles would detract from and interrupt the existing view as these components would grab the attention of viewers. Phase 2 mining activities and operations at the processing plant would be visible but distant. Mining of Phase 1 would occur over a three-year period and reclamation of the overall area would be completed approximately 5 years post initiation of mining in Subphase 1A. While the prominent peaks, ridgelines, and hills in the background of views from this area would not be obstructed and the volume of viewers at the Wildlife Refuge Loop Trail is assumed to be low, anticipated visual change would be strong and project elements would detract from and interrupt the available view. Therefore, the anticipated impacts to existing views from elevated portions of the Wildlife Refuge Loop Trail would be **significant and unmitigable** under Significance Guideline 3.

Distance between the McGinty Mountain Trail and the project site would generally obscure prominent form and lines contrasts associated with vegetation removal and mining activities such that the perceived changes would not substantially affect scenic views. Further due to the broad, panoramic nature of available views and the wide geographic area visible, color variations on the project site would occupy a small portion of the seen landscape and would be a minor component. Therefore, impacts to valued focal and/or panoramic vistas from the McGinty Mountain Trail would be **less than significant**.

Vegetation removal and mining activities in Subphases 1B and 1C would be visible from the Sweetwater Regional Trail. Further, existing easterly views from the short trail segment are primarily comprised of the unmaintained Lakes Course in the foreground and mountainous terrain in the background. Despite the low visual quality displayed by elements on the Lakes Course, the removal of all vegetation, alteration of terrain including the over excavation area, and presence of mining equipment and vehicles would sharply contrast with the existing character of the project site. Further, foreground project element would be visually prominent during active mining and maturation of vegetation and as a result, would substantially detract from available views to local hills and mountains. Therefore, potential impacts to views across the Project site from the Sweetwater Regional Trail would be **significant and unmitigable**.

Impacts associated with views of Project effects from Hilton Head County Park would be **less than significant**.

Significance Threshold 4

The Project would be inconsistent with several applicable goals and policies related to aesthetics contained within the Valle De Oro Community Plan. In addition, during mining and reclamation the Project would be inconsistent with goals and policies of the County of San Diego General Plan Conservation and Open Space Element. During mining and reclamation, the visual elements of the Project would be visually incompatible with the existing visual setting and natural features of the surrounding area and would contrast with the existing character of the Project site and surrounding community. While the Project has been designed to comply with the applicable goals and policies to the extent feasible for an extractive use, including implementation of a comprehensive reclamation plan that would ensure that the long-term conditions on-site would be in compliance, impacts during mining and reclamation would be significant and create several conflicts with goals and policies of applicable planning documents. As such, impacts related to compliance with the goals, policies, and requirements of applicable land use plans would be **significant and unmitigable**.

Significance Threshold 5

Mining operations are planned to be conducted during daylight hours, such that only safety lighting within the processing plant area would be required. All light fixtures would conform to the County LPC and no highly reflective building materials would be used. Project lighting would not adversely affect nighttime views or astronomical observations because it would conform to the County LPC lighting requirements as well as the hours of operation detailed in the LPC. Visual impacts associated with Project-related lighting and glare would be **less than significant**.

Cumulative Impacts

The Project would result in less than considerable contribution to a less than significant cumulative visual impact since potential visual impacts attributed to the two cumulative projects within the viewshed are not expected to be substantial or compounded by the effects of the Proposed Project.

6 Visual Mitigation and Design Considerations

Several Project design considerations would be implemented during the mining and reclamation phases of the Project. These considerations will become Project Conditions to ensure their implementation if the Project is approved.

1. The Project shall retain a minimum of 23 percent of the Project property acreage (approximately 64 acres) where no mining activities would be permitted. Within these open space areas that occur outside of the subphase boundaries (see Figure 2), removal of exotic and invasive species and planting of riparian and/or upland habitat may occur.
2. The project shall adhere to the proposed subphase plan and sequence of subphase mining operations. See Figure 2.
3. The project shall remove sections of conveyor and other stationary equipment in a timely manner once the need for this equipment is no longer required within the subphase area.
4. Prior to Phase 1 of development, the conceptual landscape screening and entrances plan would be implemented within select areas of the property boundary along Willow Glen Drive.
5. Prior to initiation of Phase 1 mining, minimum 36" box Mexican Elderberry (*Sambucus mexicana*) shrubs (or similar native species approved by the County) shall be installed in-ground along the western and southern boundary of the processing plant area as indicated in Figure 3 of this report prior to commencement of processing plant operations. Supplemental tree plantings would be irrigated in a similar manner as vegetation associated with the conceptual landscape screening and entrances plan.
6. Six-foot high chain link fencing with screening mesh shall be selectively installed along Willow Glen Drive and 3-foot-high fencing with screening mesh shall be installed on the northbound Steele Canyon Road Bridge railing to help screen the processing plant and exposed soils and mining activities in Phases 1 and 2 from motorists and cyclists. These screens may be installed and removed sequentially during the adjacent actively mined subphase areas (subphase 1A and subphase 2A). The location of the mesh screening is illustrated on the Conceptual Landscape Screening and Entrances Plan.
7. Removal of screen fence shall occur as soon as possible following attainment of reclamation goals and vegetation performance standards.
8. Lighting shall be designed in compliance with the County LPC, oriented downward, and shall not spill onto open space or off-site areas.
9. Mining equipment shall be selected or painted in a light color to help diminish the contrasting quality of these features.
10. Aggregate material being processed and stored within the processing plant area shall be limited to stockpiles up to 25 feet in height.

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7 References

- Department of Conservation, California Geologic Society (CGS). 1982. Special Report 153. Mineral Land Classification: Aggregate Materials in the Western San Diego County Production-Consumption Region. 1982.
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- SANDAG. 2019. Data Surfer: 2018 Population Estimate for the Valle De Oro Community Plan Area. <http://datasurfer.sandag.org/dataoverview>. Accessed October 2, 2019.
- United States Fish and Wildlife Service (USFWS) 2019. Personal communication with Ms. Jill Terp of USFWS and Mr. Josh Saunders of Dudek regarding trail user estimates for the McGinty Mountain and Par 4 trails. September 17.

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8 Report Preparers

This report was prepared by Dudek

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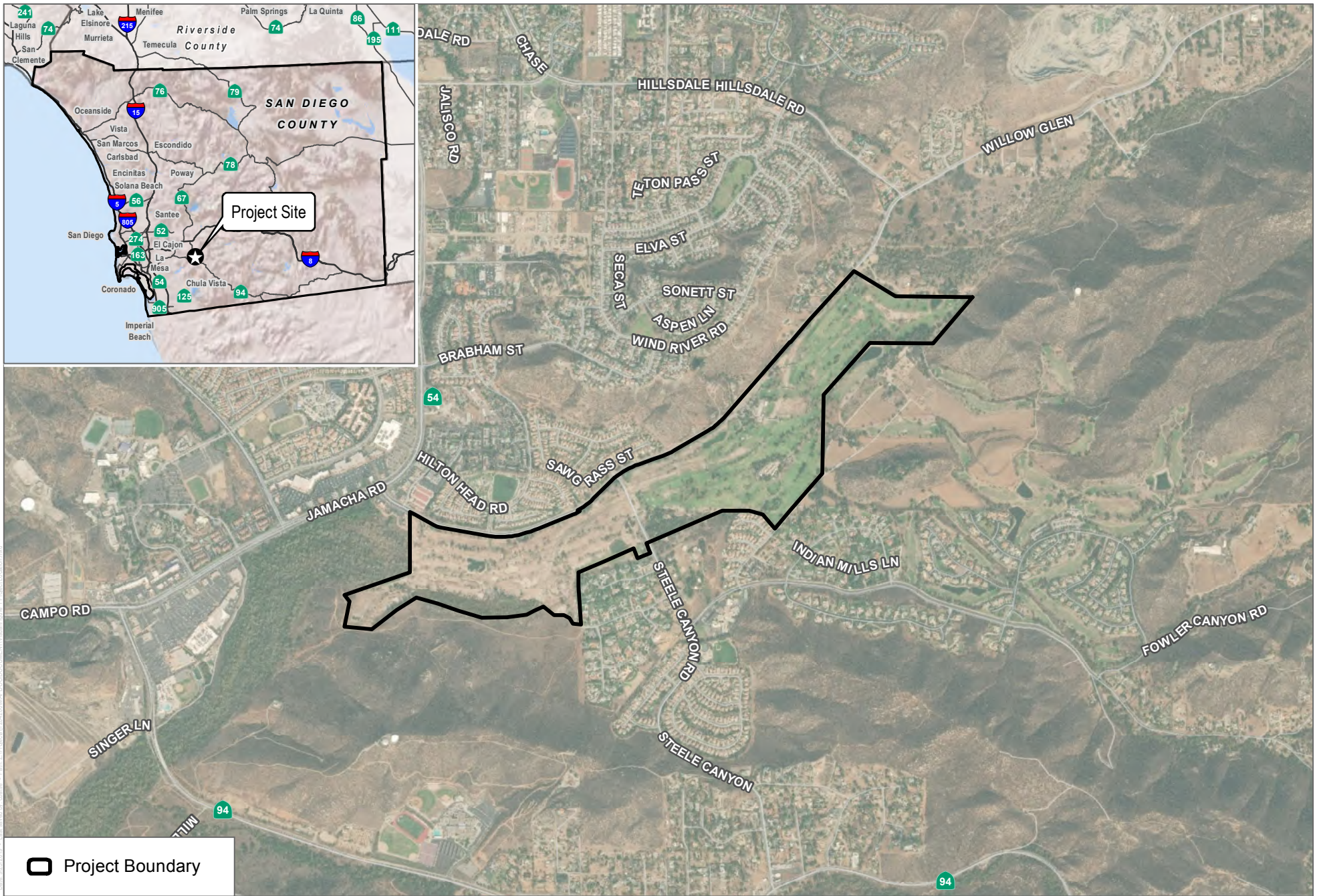
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Graphics: Curtis Battle, GIS Specialist

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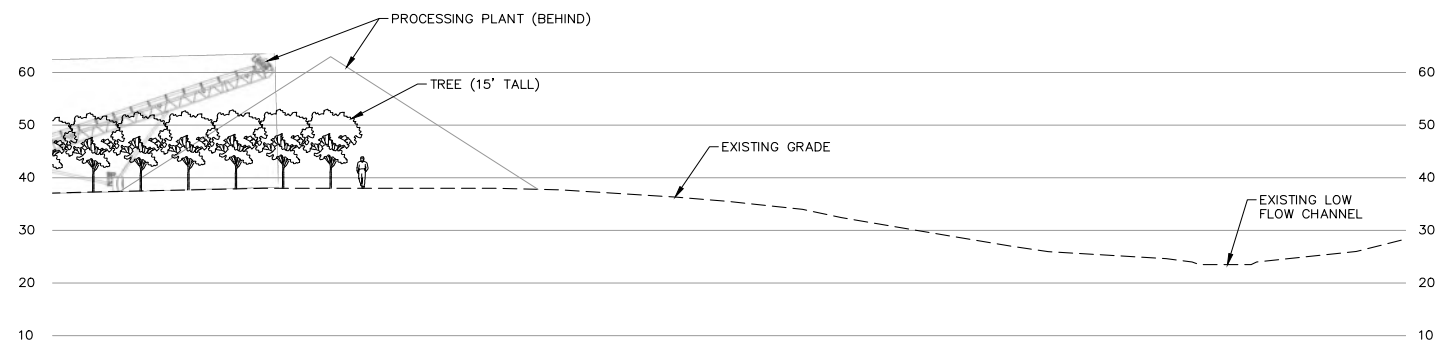
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FIGURE 1

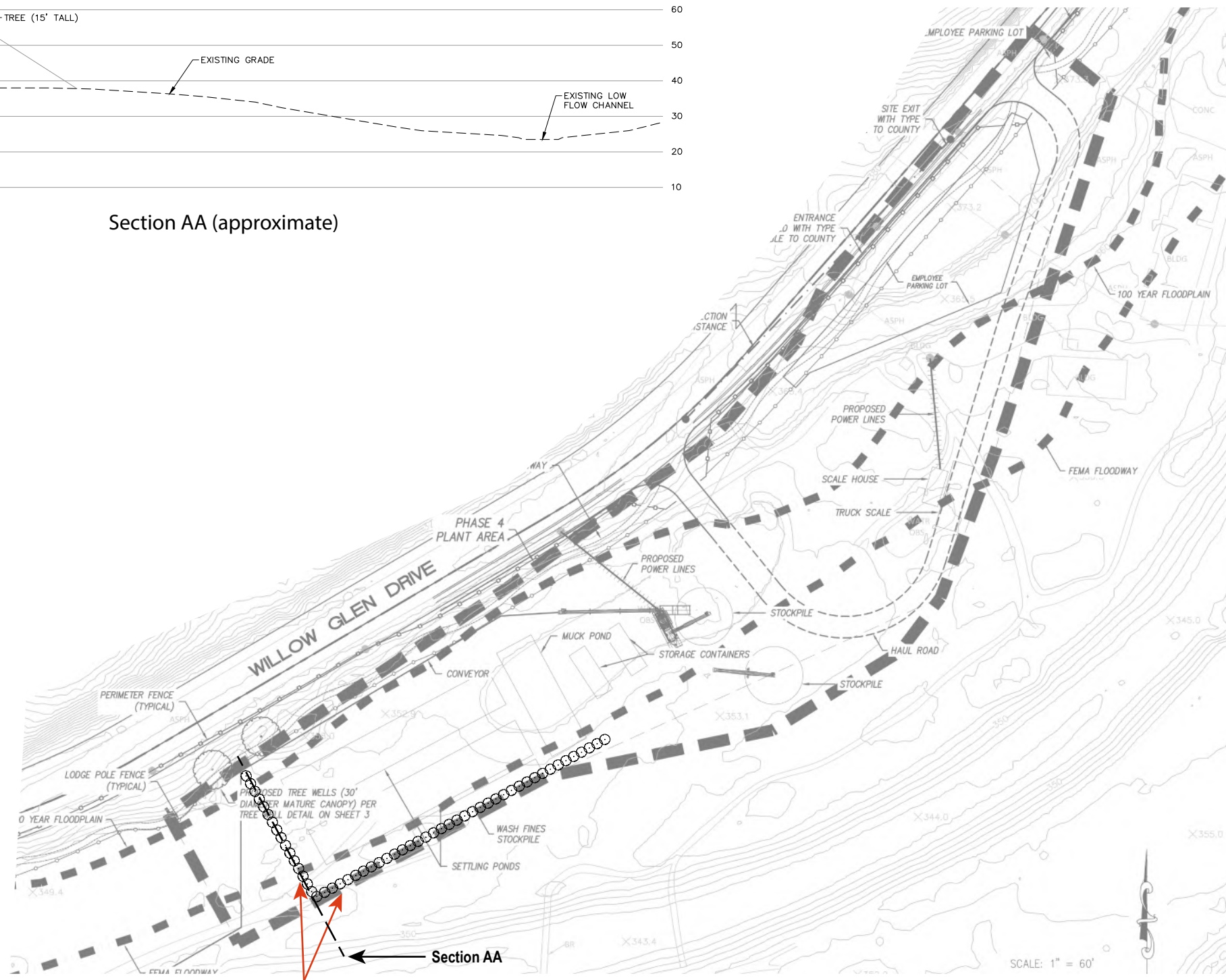
Project Location

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Section AA (approximate)



Section AA
 Approx. location of supplemental landscaping (36" box trees) NTS

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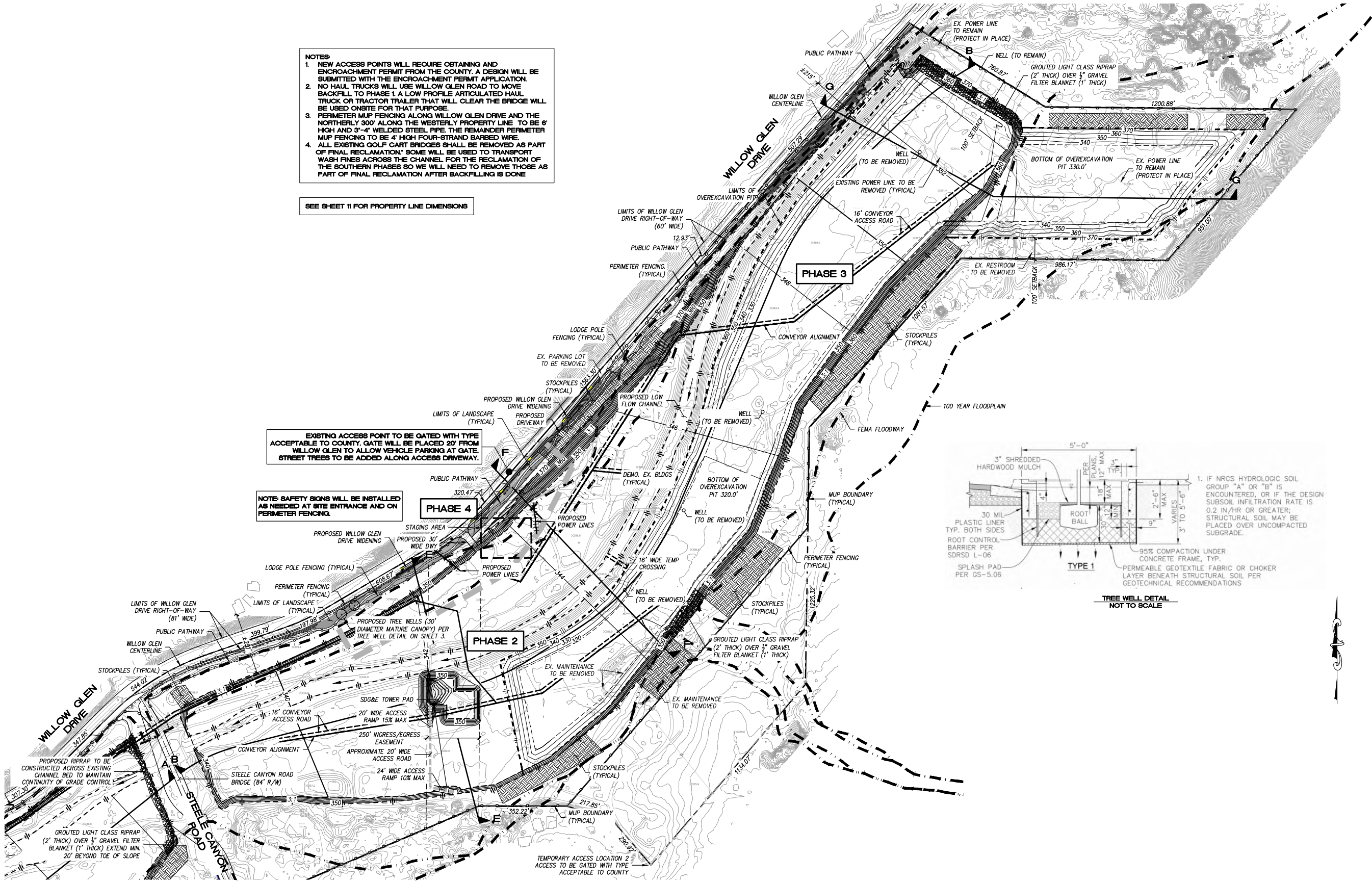
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- NOTES**
1. NEW ACCESS POINTS WILL REQUIRE OBTAINING AN ENCROACHMENT PERMIT FROM THE COUNTY. A DESIGN WILL BE SUBMITTED WITH THE ENCROACHMENT PERMIT APPLICATION.
 2. NO HAUL TRUCKS WILL USE WILLOW GLEN ROAD TO MOVE BACKFILL TO PHASE 1. A LOW PROFILE ARTICULATED HAUL TRUCK OR TRACTOR TRAILER THAT WILL CLEAR THE BRIDGE WILL BE USED ON-SITE FOR THAT PURPOSE.
 3. PERIMETER MUP FENCING ALONG WILLOW GLEN DRIVE AND THE NORTHERLY 300' ALONG THE WESTERLY PROPERTY LINE TO BE 6' HIGH AND 3'-4" WELDED STEEL PIPE. THE REMAINDER PERIMETER MUP FENCING TO BE 4' HIGH FOUR-STRAND BARBED WIRE.
 4. ALL EXISTING GOLF CART BRIDGES SHALL BE REMOVED AS PART OF FINAL RECLAMATION. SOME WILL BE USED TO TRANSPORT WASH FINES ACROSS THE CHANNEL FOR THE RECLAMATION OF THE SOUTHERN PHASES SO WE WILL NEED TO REMOVE THOSE AS PART OF FINAL RECLAMATION AFTER BACKFILLING IS DONE.

SEE SHEET 11 FOR PROPERTY LINE DIMENSIONS

EXISTING ACCESS POINT TO BE GATED WITH TYPE ACCEPTABLE TO COUNTY. GATE WILL BE PLACED 20' FROM WILLOW GLEN TO ALLOW VEHICLE PARKING AT GATE. STREET TREES TO BE ADDED ALONG ACCESS DRIVEWAY.

NOTE: SAFETY SIGNS WILL BE INSTALLED AS NEEDED AT SITE ENTRANCE AND ON PERIMETER FENCING.

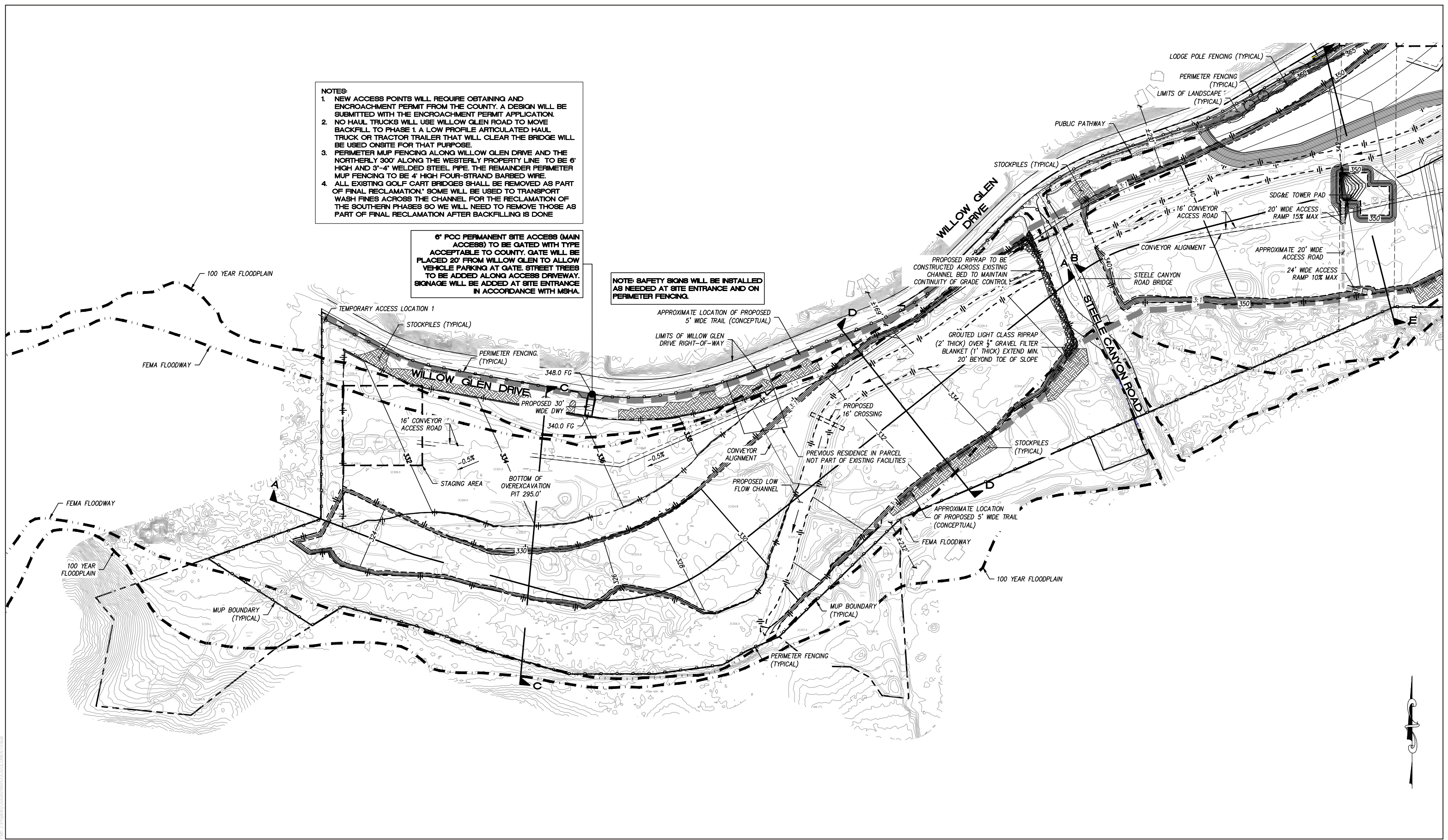


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- NOTES:**
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 4. ALL EXISTING GOLF CART BRIDGES SHALL BE REMOVED AS PART OF FINAL RECLAMATION. SOME WILL BE USED TO TRANSPORT WASH FINES ACROSS THE CHANNEL FOR THE RECLAMATION OF THE SOUTHERN PHASES SO WE WILL NEED TO REMOVE THOSE AS PART OF FINAL RECLAMATION AFTER BACKFILLING IS DONE.

6" PCC PERMANENT SITE ACCESS (MAIN ACCESS) TO BE GATED WITH TYPE ACCEPTABLE TO COUNTY. GATE WILL BE PLACED 20' FROM WILLOW GLEN TO ALLOW VEHICLE PARKING AT GATE. STREET TREES TO BE ADDED ALONG ACCESS DRIVEWAY. SIGNAGE WILL BE ADDED AT SITE ENTRANCE IN ACCORDANCE WITH MSHA.

NOTE: SAFETY SIGNS WILL BE INSTALLED AS NEEDED AT SITE ENTRANCE AND ON PERIMETER FENCING.



SOURCE: Chang Consultants 2021

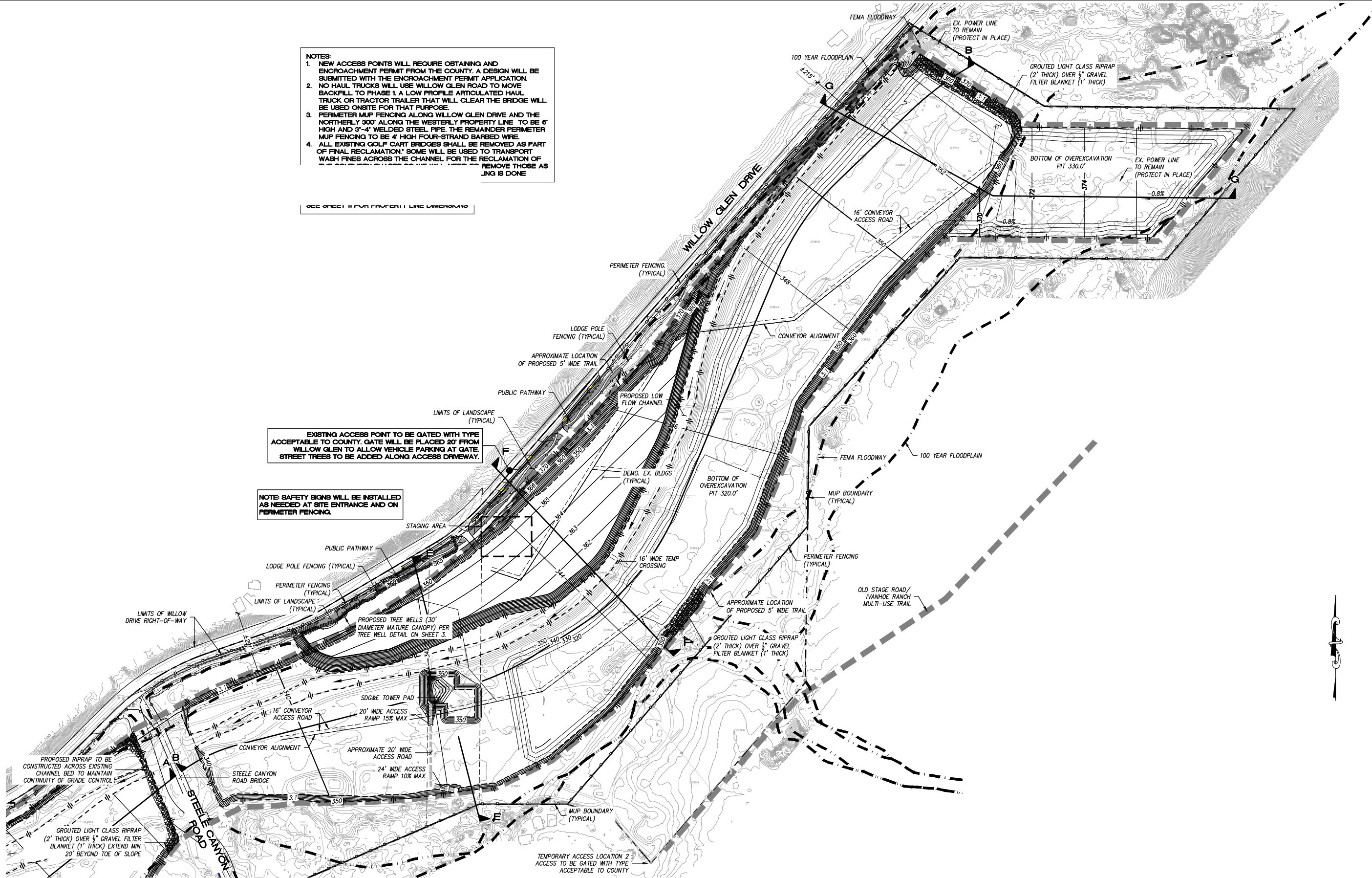
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1. NEW ACCESS POINTS WILL REQUIRE OBTAINING AND ENCROACHMENT PERMIT FROM THE COUNTY. A DESIGN WILL BE SUBMITTED WITH THE ENCROACHMENT PERMIT APPLICATION.
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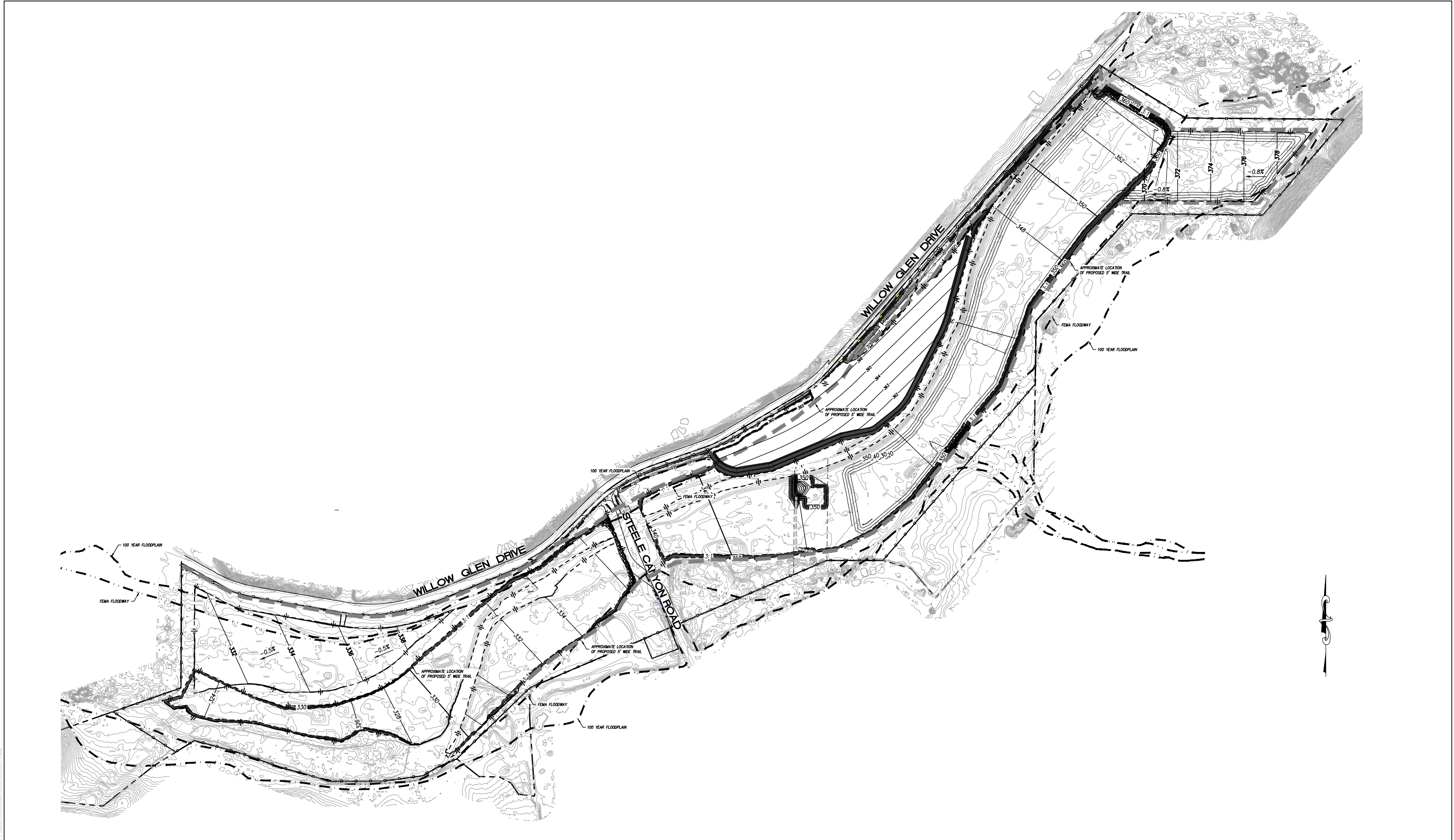
SEE SHEET # FOR PROPERTY LINE DIMENSIONS

EXISTING ACCESS POINT TO BE GATED WITH TYPE ACCEPTABLE TO COUNTY. GATE WILL BE PLACED 20' FROM WILLOW GLEN TO ALLOW VEHICLE PARKING AT GATE. STREET TREES TO BE ADDED ALONG ACCESS DRIVEWAY.

NOTE: SAFETY SIGNS WILL BE INSTALLED AS NEEDED AT SITE ENTRANCE AND ON PERIMETER FENCING.



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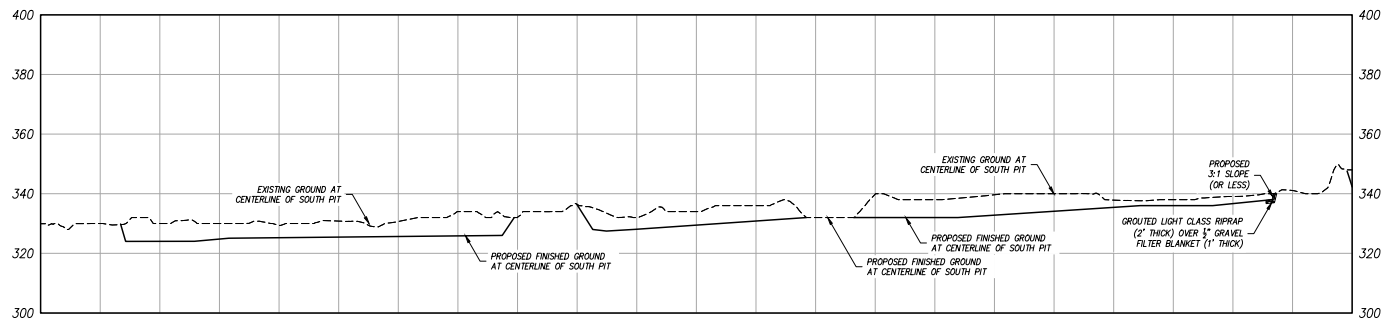
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FIGURE 5c

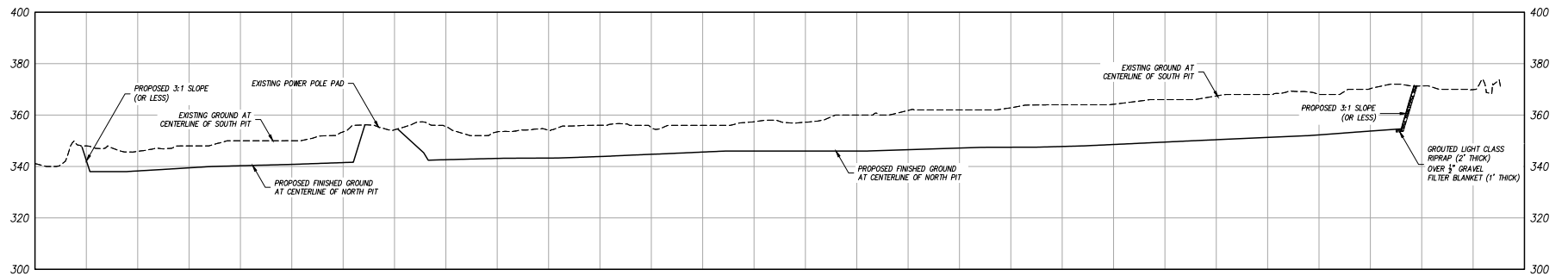
Final Landform Plan

Cottonwood Sand Mining Project Visual Resources Report

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SECTION A-A
SCALE HORIZ: 1" = 200' VERT: 1"=20'

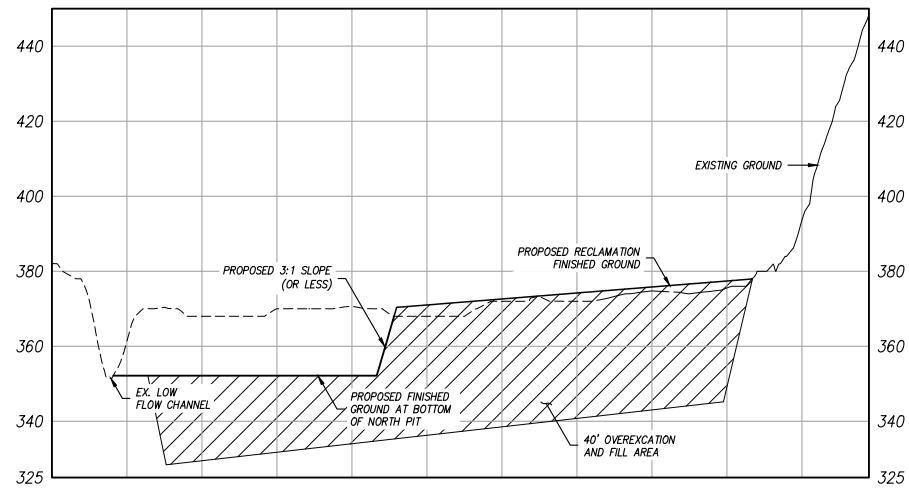
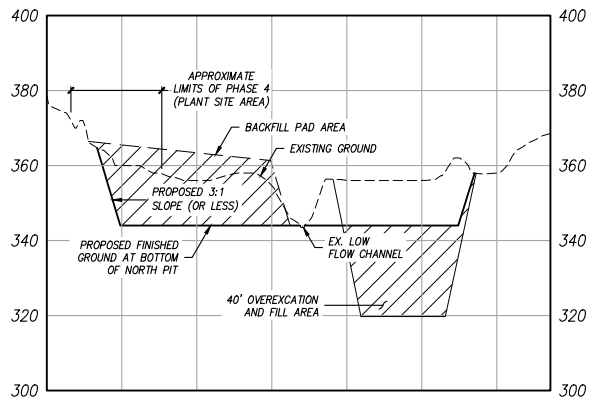
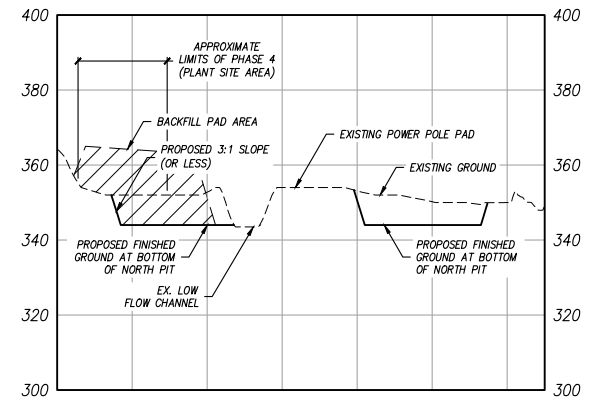
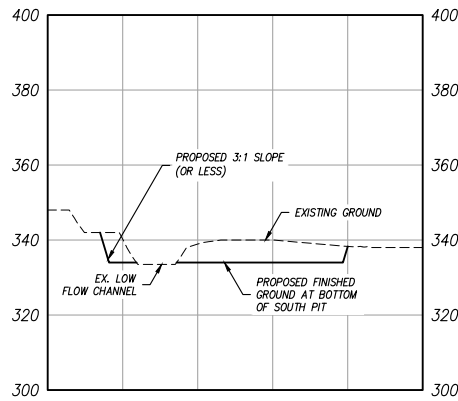
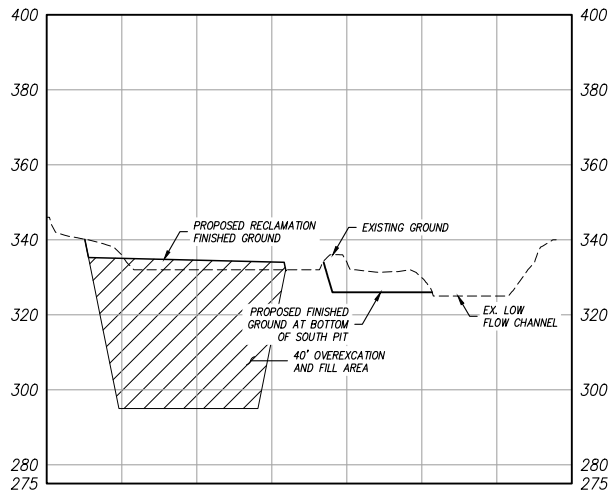


SECTION B-B
SCALE HORIZ: 1" = 200' VERT: 1"=20'

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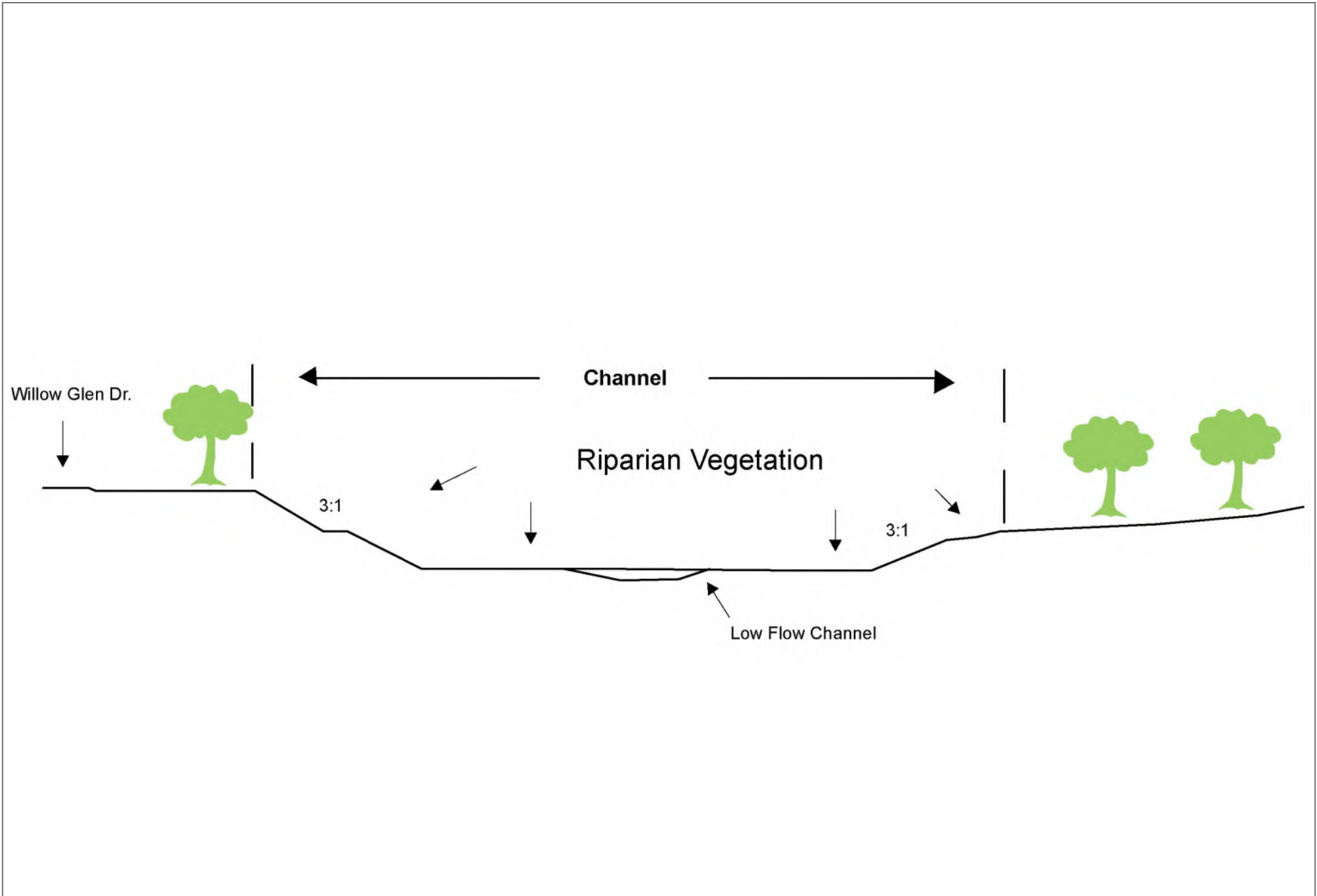
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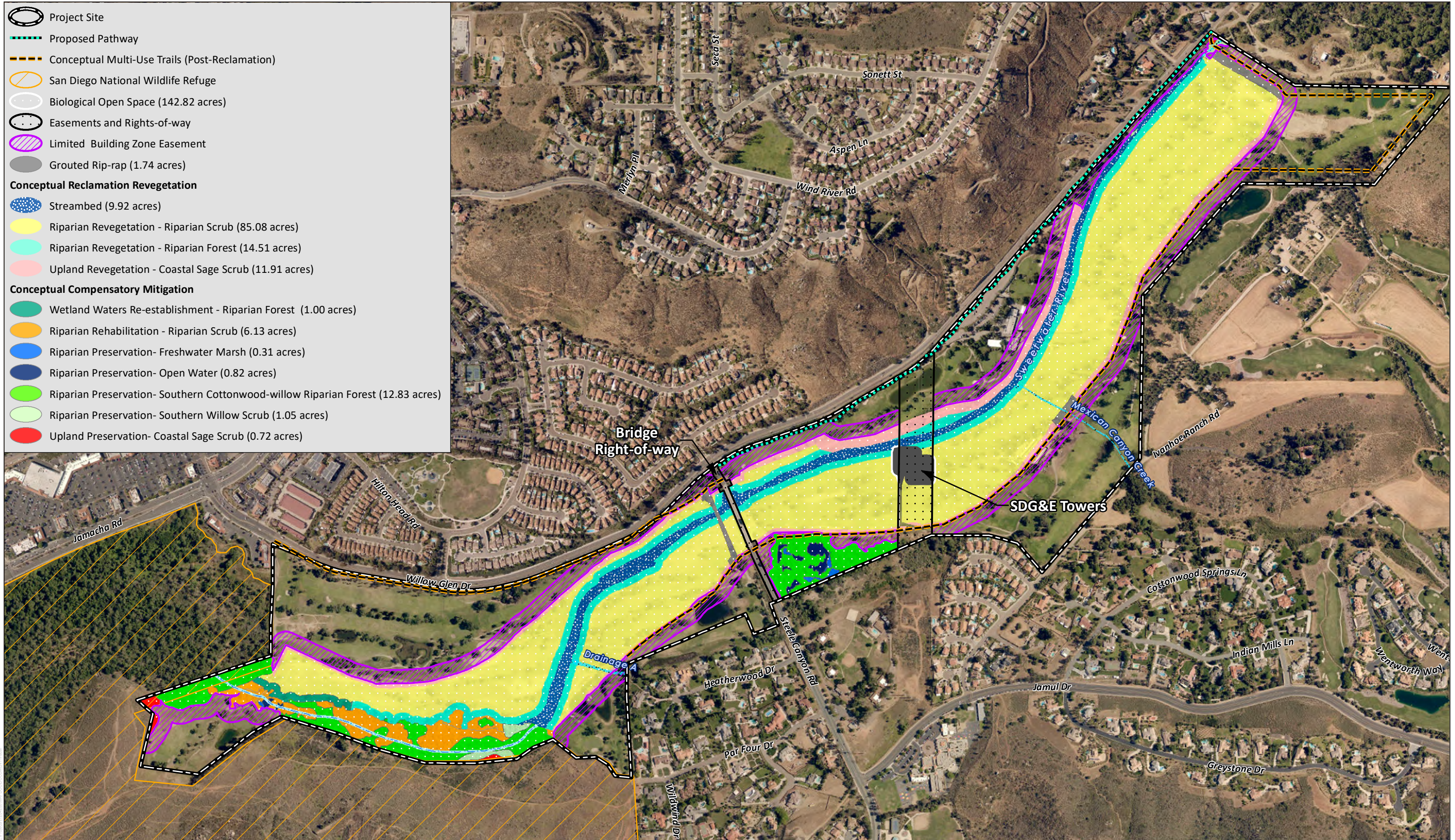
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SOURCE: Helix Environmental Planning 2020

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SOURCE: Helix Environmental Planning 2021

FIGURE 7

Conceptual Reclamation Revegetation and Compensatory Mitigation Areas

Cottonwood Sand Mining Project Visual Resources Report

LANDSCAPE NOTES

- OWNER SHALL MAINTAIN ALL LANDSCAPE, TRAILS AND FENCING INCLUDING IN THE RIGHT OF WAY. OWNER SHALL MAINTAIN VEGETATION IN A HEALTHY DISEASED FREE CONDITION.
- ROOT BARRIERS SHALL BE PROVIDED FOR ALL TREES WITHIN 5' OF HARDSCAPE.
- A 2" MINIMUM THICK LAYER OF SHREDDED WOOD MULCH SHALL BE PROVIDED IN ALL AREAS OF BARE SOIL, 3:1 SLOPE OR LESS, EXCEPT WHERE MULCH IS CONTRAINDICATED.
- TREES AND SHRUBS SHALL BE PLACED A MINIMUM OF 5' AWAY FROM WATER METER, OR SEWER LATERALS; A MINIMUM OF 10' AWAY FROM POWER POLES; A MINIMUM OF 8' AWAY FROM FIRE HYDRANTS AND FIRE DEPARTMENT SPRINKLER AND STANDPIPE LOCATIONS.
- ALL LANDSCAPE AREAS SHALL BE FINISH GRADED TO REMOVE ROCKS AND ENSURE SURFACE DRAINAGE AWAY FROM BUILDINGS. ALL REQUIRED STREET TREES SHALL BE PLANTED OUTSIDE THE PUBLIC RIGHT-OF-WAY ON PRIVATE PROPERTY.
- LANDSCAPE IMPROVEMENTS, INCLUDING, BUT NOT LIMITED TO, PLANTS, BERMS, WALLS (DECORATIVE OR RETAINING), SIGNS, AND STRUCTURES HAVE BEEN SELECTED AND POSITIONED SO AS TO AVOID OBSTRUCTING VIEWS OF MOTORISTS NEAR INTERSECTIONS OR AISLES, DRIVES, AND PEDESTRIAN WALKWAYS. TREES HAVE BEEN SELECTED (AND SHALL BE MAINTAINED) SUCH THAT, AT MATURE SIZE, SCAFFOLD BRANCHES WILL BE A MINIMUM OF 60 INCHES ABOVE FINISH GRADE.
- PLANTINGS ADJACENT TO OPEN SPACE LOTS DO NOT CONTAIN ANY NON-NATIVE, INVASIVE, OR FIRE PRONE PLANTS. EROSION CONTROL PLANTING IS PROVIDED FOR ALL SLOPES OVER 3 FEET IN VERTICAL HEIGHT AND ADDITIONAL PLANTING (AS PER SECTION 07.411 OF THE GRADING ORDINANCE) IS PROVIDED FOR SLOPES OVER 15 FEET IN VERTICAL HEIGHT. AN AUTOMATIC CONTROLLER SHALL BE WEATHER BASED (OR HAVE A MOISTURE SENSOR) AND UTILIZE A RAIN SENSOR EITHER INTEGRAL OR AUXILIARY, CAPABLE OF SHUTTING OFF THE UNIT.
- AVOID SPRINKLER RISERS IN CORNER, ALONG WALLS AND PARKING AREAS. NO OVERHEAD IRRIGATION WITHIN 24" OF AN IMPERMEABLE SURFACE OR IN AREAS LESS THAN 10' WIDE IN ANY DIRECTION.
- EXISTING ON-SITE WELL WATER SHALL BE UTILIZED FOR IRRIGATION INCLUDING DURING CONSTRUCTION. SOLAR POWERED AND / OR BATTERY OPERATED IRRIGATION CONTROLLERS AND VALVES SHALL BE USED.
- PROTECT EXISTING TREES TO REMAIN FROM SOIL COMPACTION TO ROOT ZONES BY INSTALLING ORANGE CONSTRUCTION FENCING A 25' MINIMUM DISTANCE BETWEEN TREE TRUNKS AND STOCKPILE AREAS AND SAND MINING ACTIVITIES DURING EACH PHASE OF WORK.
- FUTURE ROAD WIDENINGS WILL CAUSE SOME EXISTING SCREENING TREES TO BE REMOVED. SEE SHEETS 6 AND 7. NEW SCREENING TREES AND SHRUBS (SEE SHEETS 2-5) ARE PROPOSED TO BE PLANTED WHERE ADJACENT TO THE PROPOSED PLANT, EXIT AND ENTRANCES PRIOR TO THE ROAD WIDENING, PROVIDING A HEAD START TO SCREENING.

REVISIONS TO APPROVED PLANS DATED 5/21/2021 INCLUDE..

- ADDED TO-SCALE PEOPLE SYMBOLS TO CROSS-SECTIONS AT 2' PATHWAYS, SHEETS 4, 10 AND 11.
- CORRECTED SHEET NUMBER (SHEET 4).
- REVISED SOME PLANT SYMBOLS TO IMPROVE GRAPHICS: TOYON -- SYMBOL SIZE, COAST LIVE OAK -- SYMBOL TYPE.
- REMOVAL OF EXISTING TREE SYMBOLS IN CONFLICT WITH PROPOSED STRIPING PLAN IMPROVEMENTS.

PLAN NOTES

KEY [Symbol] DESCRIPTION

- PLANT SITE MAIN ENTRANCE.
- PLANT SITE EXIT.
- RIGHT-OF-WAY LINE.
- ORIGINAL CENTER LINE.
- FEMA 100 YEAR FLOODZONE.
- FEMA FLOODWAY.
- SDG&E EASEMENT.
- PROPOSED EDGE OF PAVING.
- EXISTING POWER POLE.
- EMPLOYEE PARKING. (N/A)
- 6' HIGH CHAIN LINK FENCING WITH GREEN MESH SCREENING.
- SCALE HOUSE. (N/A)
- TRUCK SCALE. (N/A)
- GOLF COURSE.
- HAUL ROAD. (N/A)
- STOCKPILE. (N/A)
- STORAGE CONTAINERS. (N/A)
- CONVEYOR. (N/A)
- EXISTING SCREENING TREES. SEE SHEETS 6, 7 AND 8. (TYPICAL).
- SETTLING POND. (N/A)
- VEHICLE SIGHT DISTANCE TRIANGLE AT DRIVEWAY. MAINTAIN SHRUBS 36" MAXIMUM HEIGHT, TREE LIMBS TO CLEAR 80" ABOVE FINISH GRADE.
- 495' INTERSECTION SIGHT DISTANCE.
- 3" MIN. SHREDDED WOOD MULCH AT CONTAINER PLANTED GROUND COVER (TYPICAL).
- MUCK POND. (N/A)
- GATE, 4' HIGH WITH 3"-4" WELDED STEEL PIPE.
- WEST PLANT SITE ENTRANCE.
- LIMIT OF LANDSCAPE SCREENING WORK.
- PATHWAY / MULTI-USE TRAIL. SEE DET. A / SHT. 14.
- LODGE POLE FENCE. SEE DET. B / SHT. 14.
- WAYFINDING SIGN / TRAIL MARKER. SEE DET. C / SHT. 14.
- PROPOSED RIGHT-OF-WAY.
- DAYLIGHT LINE.

LANDSCAPE SHEET INDEX

- TITLE SHEET, PLANT SCHEDULES, LANDSCAPE NOTES
- WEST PLANT SITE ENTRANCE
- PLANT SITE SCREENING
- PLANT SITE ENTRANCE, PLANT SITE SCREENING
- PLANT SITE EXIT, PLANT SITE SCREENING
- EXISTING TREES PLAN
- EXISTING TREES PLAN
- EXISTING TREES SURVEY CHART
- CROSS-SECTIONS, INITIAL PLANTING
- CROSS-SECTIONS, 5 YEARS GROWTH
- CROSS-SECTIONS, 10 YEARS GROWTH
- PROPOSED PATHWAY
- CROSS-SECTIONS, PATHWAY
- PATHWAY DETAILS

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	QTY
	<i>Cercis occidentalis</i> / Western Redbud H 10'-18', W 10'-18', NATIVE, WUCOLS LOW	36"box	4
	<i>Eucalyptus polyanthemos</i> / Silver Dollar Gum	Existing	23
	<i>Myoporum laetum</i> / No Common Name	Existing	4
	<i>Platanus racemosa</i> / California Sycamore	Existing	2
	<i>Populus fremontii</i> / Fremont Cottonwood H 40'-60', W 30', NATIVE, WUCOLS MOD	15 gal	24
	<i>Populus fremontii</i> / Fremont Cottonwood H 40'-60', W 30', NATIVE, WUCOLS MOD	24"box	9
	<i>Quercus agrifolia</i> / Coast Live Oak H 20'-70', W 20'-70', NATIVE, WUCOLS LOW	15 gal	37
	<i>Quercus agrifolia</i> / Coast Live Oak H 20'-70', W 20'-70', NATIVE, WUCOLS LOW	24"box	12
	<i>Schinus molle</i> / California Pepper	Existing	17
	<i>Schinus terebinthifolius</i> / Brazilian Pepper	Existing	1
	Unknown Species / Unknown Species	Existing	1
SHRUBS	BOTANICAL / COMMON NAME	SIZE	QTY
	<i>Ceanothus</i> x 'Ray Hartman' / California Lilac H 8'-15', W 8'-15', NATIVE, WUCOLS LOW	5 gal	217
	<i>Heteromeles arbutifolia</i> / Toyon H 15'-25', W 15'-25', NATIVE, WUCOLS VERY LOW, SINGLE TRUNK / STANDARD.	5 gal	59
	<i>Rhus integrifolia</i> / Lemonade Berry H 10', W 10', NATIVE, WUCOLS VERY LOW	5 gal	163
GROUND COVERS	BOTANICAL / COMMON NAME	CONT	SPACING
	COASTAL SAGE SCRUB SEED MIX <i>Baccharis pilularis</i> / Dwarf Coyote Brush 2 lbs./acre, Purity 90 / Germination 80	seed	
	<i>Bromus carinatus</i> / California Brome-Grass 20 lbs./acre, Purity 95 / Germination 80	seed	
	<i>Encelia californica</i> / California Encelia 1 lb./acre, Purity 40 / Germination 60	seed	
	<i>Lotus scoparius</i> / California Deer Weed 3 lbs./acre, Purity 90 / Germination 60	seed	
	<i>Salvia apiana</i> / White Sage 2 lbs./acre, Purity 70 / Germination 50	seed	
	<i>Trifolium tridentatum</i> / Tomcat Clover 8 lbs./acre, Purity 90 / Germination 80	seed	
	<i>Vulpia microstachys</i> / Small Fescue 8 lbs./acre, Purity 90 / Germination 80	seed	
	<i>Baccharis pilularis</i> / Dwarf Coyote Brush H 8"-24", W 6", NATIVE, WUCOLS LOW	1 gal	36" o.c.

