

FINAL PERFORMANCE REPORT

GOLDEN SIERRA HIGH SCHOOL FIELD PROJECT

**State of California Sierra Nevada Conservancy
Grant Agreement
Application #: SNC 070221**

BLACK OAK MINE UNIFIED SCHOOL DISTRICT

2009

Final Performance Report

I. Resources

Resources leveraged to complete this project

- a) The Black Oak Mine Unified School District Board of Trustees approved the use of the District's accumulated Developer Fees to fund the majority of the District's portion of the project. In 2006, the voters of the Georgetown Divide passed Measure G, a \$6.9 million general obligation bond. The football field project was not included as part of Measure G at the time it was created, so bond funds could not be used to fund the project. The District also engaged in a fundraising event which resulted in approximately \$5,800 to be used for the football field project.

Black Oak Mine Unified School District also researched available outside funding sources and pursued two available grants to further fund the football field project. Aside from the Sierra Nevada Conservancy Grant, the District was granted funds from California Waste Management which related to the recycled material used for the turf material being installed.

All of these resources were leveraged to fund the GSHS Field project.

Resources leveraged as a result of this project

- b) In a continuing expansion of past cooperation, the Georgetown Divide Recreation District and Black Oak Mine Unified School District recently approved a greatly expanded MOU taking the partnership to the next level and providing the community with enhanced service and coordination of facility use. The District will now have a revenue stream generated by the permit fees for use of the GSHS Field by the various users throughout the year. This is a very beneficial resource to the District that will be used for the maintenance, operation and replacement of the GSHS field.

II. Impact on Collaboration and Cooperation Among Stakeholders

Number of people/entities involved in Project

Owner:	Black Oak Mine Unified School District
Site Users:	GSHS Administration, Staff, Sports Coaches and Students
Architect:	Brett Long Architects
Project Manager:	Premier Management Group
Sitework Contractor:	Landmark Construction
Turf Supplier:	FieldTurf
Turf Installer:	Grass Valley Turf
Testing and Inspection:	Youngdahl Consulting
Base Rock Supplier:	Teichert
Grading Subcontractor:	Valley Precision Grading
Concrete Subcontractor:	On Site Concrete
Landscape Subcontractor:	Aerco Pacific, Inc.

Number of people/entities involved in Project

- a) This project was one that required a high level of cooperation between the parties involved due to the various end users of the field as well as the great deal of interest that this project created in the overall community.

During the planning and design phase of the project, there was a great deal of input from multiple sources. This led to an increased level of collaboration between Black Oak Mine Unified District administration and Golden Sierra High School site personnel as they all worked to create a design that meets all parties' needs while maximizing every dollar of the grant funds and District's financial resources.

III. Capacity Building Within Region

Description of how completion of this Project improved capabilities of grant recipients, partners or larger community.

- a) The completion of the GSHS Field project has created a first rate sports field that will benefit not only the Golden Sierra High School site and the Black Oak Mine Unified School District, but the entire Georgetown Divide community.

The Golden Sierra High School Field will be useable year round, which greatly increases the capabilities of the field that was replaced. Whereas the previous field could not be used during seasons of inclement weather due to inadequate drainage, poor soil conditions and heavy wear and tear, the all-weather turf surface field can now be used throughout the year. This will greatly benefit the sports programs at Golden Sierra High School by not only allowing the football program to utilize the field for practice without interruption, but will now allow other sports such as soccer to hone their skills on a high quality playing field throughout the school year. Golden Sierra High School, as well as the other schools in the Black Oak Mine Unified School District can now elevate the level of competition with larger surrounding schools. Other activities such as graduation will benefit from the use of the field as well.

For the greater Georgetown Divide community, the GSHS Field will serve as a central location for youth sports, adult sports and community events.

IV. Project Accomplishments

Description of how the Project succeeded in accomplishing its intent and the direct benefits that resulted from the Project.

- a) The GSHS Field project was pursued in order to accomplish a number of different goals for the Golden Sierra High School site, Black Oak Mine Unified School District and the Georgetown Divide Community as a whole.

For the site, the goal was to replace the field that had become damaged due to bad weather, improper drainage and extensive wear and tear. The field was not usable much of the year and hindered the site's sports and physical education programs. Maintenance was also an issue for site maintenance staff. The field was constantly being repaired, fertilized and watered, all at a high cost to the District as well as the surrounding environment. It was determined that an artificial turf surface would be the ideal solution for these issues. For the District, the goal was to create a first rate location that could be used by all schools and serve all students in the District to improve their experience while attending the Black Oak Mine Unified School District throughout their academic career. For the larger community, the field was meant to serve the local youth and adult sports organizations that have previously had limited playing facility options.

The installation of the GSHS Field has accomplished all of the goals that were set out upon project conception. The 2009-10 school year will begin soon and the football team will be on the field practicing immediately in preparation for their upcoming season. During school hours, the physical education program will utilize the field for PE classes, allowing them to expand their curriculum outside of the classroom and gymnasium. The District is currently working on a plan to incorporate the other school sites into the field usage plans for middle school sports and other events. The Black Oak Mine Unified School District has partnered with the Georgetown Divide Parks and Recreation District to open the field for public during non-school hours. All parties agree that the field is a success for all involved.

Description of the follow-on or indirect benefits of the Project.

- b) Since the installation of the field, there has been a significant reduction in the water usage for the field and a complete elimination of potentially harmful fertilization. The field will be watered as part of the cooling system, but the amount of water used is a fraction of what was used to water the natural grass field. As a part of the GSHS field project, a filtered detention basin was created, which will filter the run-off from the field and allow for clear water to enter the Empire Creek free of dirt and sediment. The construction of the field allowed the site to repair the existing storm drain system so that now filters through the detention basin as well. The District

has also been able to maximize useable space onsite by utilizing the removed material at open space that was cleared on the upper campus for fire protection.

Description of any significant positive experiences and unanticipated occurrences, or other noteworthy events that happened during the Project and anything about the Project that gives you “goose bumps”.

- c) The most positive experience that came from the GSHS Field project is the overwhelming reaction of the students and the staff to their new facility. Everyone has expressed their tremendous pride at having such a high quality facility they can call their own, which now rivals those of larger schools and Districts. The community is also very pleased that there is now a central place that will unite the Georgetown Divide.

There were a few unexpected obstacles that were overcome during the course of construction, including the massive amount of unsuitable soils and the inclement weather conditions. While preparing the sub-base of the field, it was discovered the location of the field was previously a small canyon that had been filled with the soil spoils created from the building of the original campus, and the soil was not acceptable for the installation of the artificial turf. The contractor excavated the entire area of the field an additional 7-9 feet deeper than originally planned, relocated and recompactd the soil until it met the structural requirements of the turf manufacturer.

Once the soil was compacted and was nearing turf installation, the site received 6 inches of rain in a very short period of time and construction was halted. From May 1st through May 3rd, over 300,000 gallons of water were pumped from the field in order to dry the soil to optimum moisture content for turf installation and still maintain the June 30th completion deadline.

Despite these obstacles, all parties involved in the construction were able to complete the project on schedule.

Description of lessons learned during the course of completing the Project.

- d) The most important lesson learned during the course of construction related to the scope of the Geotechnical Report for the site. The Geotechnical Report is completed prior to the design of the project and describes the state of the soil and underlying material. The original report consisted of samples taken at the corners of the field only and did not give an accurate report of the conditions throughout the area of the field. In retrospect, doing more intensive sampling and investigation would have been a very good use of both time and money, that could have saved the soil issue from becoming such an obstacle during construction.

The other lesson learned from the completion of this project was that when the new field is installed, it exacerbates the deficiencies of the facility immediately surrounding it. While the new field itself is so impressive, the bleachers, track, equipment and stadium surrounding it seem incongruent. In the future, if possible, it would be beneficial to complete the entire facility upgrade simultaneously, or at the least expand the project scope to improve as much of the facility as possible to match the quality of the new field.

V. Square Footage of Artificial Surface Installed, Including Amount of Recycled Material Used

Total square footage of the artificial turf material installed was 78,651.68.

The total number of tire diverted from the waste stream and recycled into the crumbed rubber material was 18,916.

VI. Reductions in Monthly Water Use (Number of Gallons) and Amount of Fertilizers and Pesticides Associated with Track and Field Maintenance

The District estimates the water usage to decrease 75% and the reduction of 2000 pounds of fertilizer.

VII. Measurable Water Quality Improvements in Empire Creek Related to Sediment Load, Nutrients and Chemical Constituents

The District is expecting a significant improvement in the water shed quality from the prior conditions with the installation of the filtered detention basin. The exact improvement comparisons will not be known until after the completion of the upcoming rain season.

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PROJECT PHOTOGRAPHS



Removal of natural turf



Removal of natural turf



Removal of natural turf



Removal of natural turf



Removal of natural turf



Disposal of turf and subgrade



Removal of Unsuitable Soils



Compacting Sub-base (One side)



May 1st Storm



300,000 gallons of water pumped from site



May 1st Storm



Compacting Sub-base (One side)



Recovering from rain



Perimeter drainage system



Subgrade permeable base rock



High Jump, Long Jump and Pole Vault



Building new detention basin



Restored storm drain



Artificial Turf Installation



Artificial Turf Installation



Artificial Turf Installation



Completed Field



Filtered drainage swale



Sign identifying recycled material used