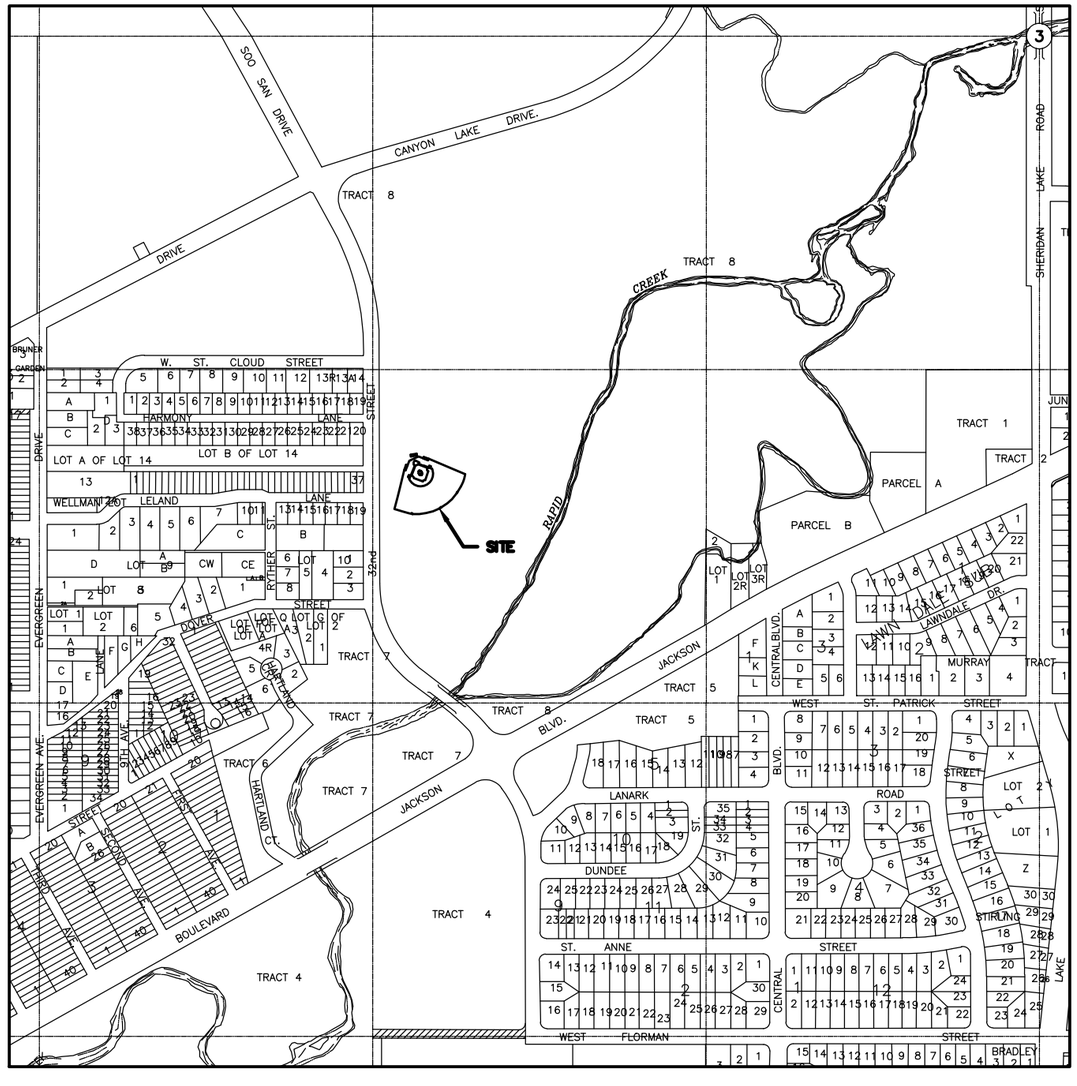
CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

RAPID CITY, SD

MAY 2013



VICINITY MAP
SCALE: 1" = 300'

INDEX OF SHEETS

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

NOT FOR CONSTRUCTION

Scale:	1"=20'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: APRIL 2013
Internal Job No: 1000	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title: TITLE

1. SPECIFICATIONS TO BE USED

Work shall be in accordance with the 2007 Edition of the City of Rapid City Standard Specifications for Public Works Construction and any current revisions and/or additions, Special Provisions or requirements on the drawings or in the proposal. Dugouts shall be constructed in accordance with 2012 IBC.

2. UTILITIES

All utilities within the limits of the work are to be adjusted by the individual utility owners unless otherwise indicated on the plans. The Contractor is required to call and coordinate with the private utility companies. The Contractor is responsible for coordinating his work schedule with the various private utilities. It is possible the existing telephone duct bank located on the west side of Elm Avenue may need to be supported for utility construction, coordinate with the utilities contractor for this. No extra payment or contract time extension will be made as the result of delays that may be caused by private utility work. Payment for utility coordination will be made under Lump Sum Contract Amount for "Private Utility Coordination".

The One Call number was called for utility locates during survey activities for project design. The utilities shown on the drawings are from the One Call markings. The Contractor is responsible to verify the locations of all utilities. No extra payment will be made as a result of different utility locations or any other utilities that may be present.

3. CONSTRUCTION STAKING

All construction staking will be furnished by the Contractor.

4. AIR QUALITY CONSTRUCTION PERMIT FROM THE RAPID CITY AREA AIR QUALITY DIVISION OF THE DEVELOPMENT SERVICE CENTER

The Contractor shall comply with the requirements of Section 7.28 of the Standard Specifications regarding fugitive emission control. Environmental permits shall be obtained prior to beginning work.

Contractor shall provide measures for dust control.

4. STORM WATER FLOWS

The Contractor is notified that the project is located near the mouth of a large urban drainage basin. Flows will be encountered during storm/rain events.

5. CLEARING AND GRUBBING

Trees approved for removal are shown on the plan drawings. Trees shown with an "X" are scheduled for removal.

6. EXCAVATION

It is estimated that excess excavation will result. The Contractor is responsible to dispose of all excess excavation at a location furnished by the Contractor.

TABLE OF EXCAVATION QUANTITIES

	UNIT	QUANTITY
TOTAL EXCAVATION	CY	270

	UNIT	QUANTITY
EMBANKMENT	CY	53
20% SHRINKAGE	CY	11
TOTAL EMBANKMENT	CY	64

	UNIT	QUANTITY
EXCAVATION	CY	270
EMBANKMENT	CY	- 64
WASTE EXCAVATION	CY	206

7. SAWING EXISTING PAVEMENT OR SIDEWALK

Where new concrete sidewalk is placed next to existing sidewalk, the existing sidewalk shall be sawed full depth to a true line with a vertical face.

8. DUGOUTS

Contractor shall salvage existing metal dugout doors to be used on the new dugouts. New hinges and hardware shall be used when the dugout doors are installed on the new dugouts.

Wood framed roof shall be salvaged. Care shall be taken not to damage roof during removal and installation on new dugouts. New 2x sill plates will be needed for installation onto new dugouts.

Dugouts shall be constructed for 8x8x16 CMU's with a minimum compressive strength (F'm) of 1500 psi. Type S mortar cement shall be used with a minimum compressive strength of 1800 psi. CMU's shall be constructed using running bond.

9. CHAIN LINK FENCE

Existing chain link fence shall be salvaged where possible and constructed in accordance with the details.

The location of the new dugouts will require relocation of the existing fence around the entrance to the dugouts. The contractor shall verify the dimensions of the entrance are reconstruct to similar dimensions. Refer to plan drawings locations of chain link fence.

10. PITCHER WARMUP AREAS

Pitcher mounds in the warm up areas along the playing field fence will need to be relocated due to the location of the new dugouts. Canyon Lake Little League will dictate where these warmup areas will be located.

11. REMOVALS

Concrete next to existing dugouts shall be removed and disposed of.

Existing dugouts shall be removed and disposed of with the exception of the benches inside, roof including wooden frame components, and metal doors.

Contractor shall dispose removed materials at a state licensed waste facility.

12. WOOD COMPONENTS

Wood components shall be treated for use in outdoor environments and shall be Spruce-Pine-Fir (SPF) No. 2 or better

13. CONCRETE

All concrete shall have a minimum compressive strength of 3000 psi at 28 days.

14. PVC DUGOUT DRAINS

Dugouts shall be constructed with drains as shown in the drawings. All pipe and fiitting leading from these drains shall be PVC meeting the requirements of ASTM D-3034 (saintary sewer pipe).

A metal grate provided by the contractor shall be placed in the concrete floor of the dugouts in the location of the drain.

15. EROSION CONTROL BLANKET

Erosion control blanket shall be installed at the locations noted in the table and at locations determined by the Engineer during construction.

The erosion control blanket provided shall be from the SD DOT approved product list. The approved product list for erosion control blanket may be viewed at the following internet site:

http: //www.state.sd.us/Applications/HC54ApprovedProducts/main.asp

The Contractor shall install erosion control blanket according to the manufacturer's installation instructions.

An additional quantity of 50 square yards of Type 2 Erosion Control Blanket has been added to the Estimate of Quantities for "Erosion Control Blanket, SD DOT Type 2".

16. TOPSOIL

The Contractor shall salvage 6" of topsoil and stockpile at a designated location near the project. Erosion control wattles shall be placed around the topsoil stockpile to prevent loss of topsoil and storm water pollution. Location of topsoil stockpile shall be shown on Sheet E2 along with wattles.

17. SEEDING AND SODDING

The contractor shall use a non-irrigated seed mixture in accordance with the standard specifications for the channel side slopes and bottom.

Sod shall be used in all other locations.

18. FERTILIZING

Sod and new seed shall be fertilized in accordance with the Standard Specifications.

19. WATER QUALITY AND EROSION CONTROL

Canyon Lake Little League is responsible for procuring coverage for the project under the SD DENR General Permit for Storm Water Discharges Associated with Construction Activities and the Rapid City Erosion Control Permit. The Contractor is solely responsible for implementation of the requirements of these Permits. FMG will assist Canyon Lake Little League for the procurement of these permits.

Erosion control and water pollution control work shall also be in accordance with Section 18 of the Standard Specifications. A Storm Water Pollution and Prevention Plan (SWPPP) and Erosion and Sediment Control drawings are provided to help guide the Contractor to meet the minimum requirements for Water Pollution Control. The Contractor is responsible for implementation of the SWPPP and make changes is necessary.

The Contractor is advised that environmentally sensitive areas are located within and downstream of the project and that the requirements of his Permit and Erosion and Sediment Control Plan must be fully implemented. Several agencies have authority to "stop work" if the pollution prevention controls are not implemented or are not effective in prevention of environmental damage.

Storm water pollution prevention plan is shown on sheets E1 through E3. Maintenance of teporary erosion devices will be the sole responsibility of the contractor.

CONTROL TABLE

	NORTHING	EASTING	ELEVATION	DESCRIPTION
BENCH MARK	4302.72	5217.65	3305.19	CITY BENCHMARK LOCATED SOUTH OF FIELD ALONG 32ND STREET

CHANNEL ALIGNMENT TABLE

Desc.	Station	Spiral/Curve Data		Northing	Easting
PI	1+00			5046.08	5046.06
	Length:	105.75	Course:	N 68° 02' 45" E	
		Circular Curve Data			
PC	2+05.75			5085.62	5144.14
RP				5141.27	5121.70
PT	2+26.99			5096.84	5162.03
	Delta:	20° 16' 46"	type:	LEFT	
	Radius:	60.00'	DOC:	95° 29' 35"	
	Length:	21.24	Tangent:	10.73	
	Mid-Ord:	0.937	External:	0.952	
	Chord:	21.13	Course:	S 57° 54' 22" E	
		Tangent Data			
	2+26.99			5096.84	5162.03
	2+92.02			5140.56	5210.19
	Length:	65.04	Course:	N 47° 45' 59" E	
Desc.	Station	Spiral/Curve Data		Northing	Easting
		Circular Curve Data			
PC	2+92.02			5140.56	5210.19
RP				5096.13	5250.52
PT	3+27.80			5155.54	5242.09
	Delta:	34° 09' 38"	Type:	RIGHT	
	Radius:	60.00	DOC:	95° 29' 35"	
	Length:	35.77	Tangent:	18.44	
	Mid-Ord:	2.65	External:	2.77	
	Chord:	35.25	Course:	N 64° 50' 48" E	
		Tangent Data			
	3+27.80			5155.54	5242.09
	3+59.25			5159.95	5273.23
	Length:	31.45	Course:	N 81° 55'37" E	

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

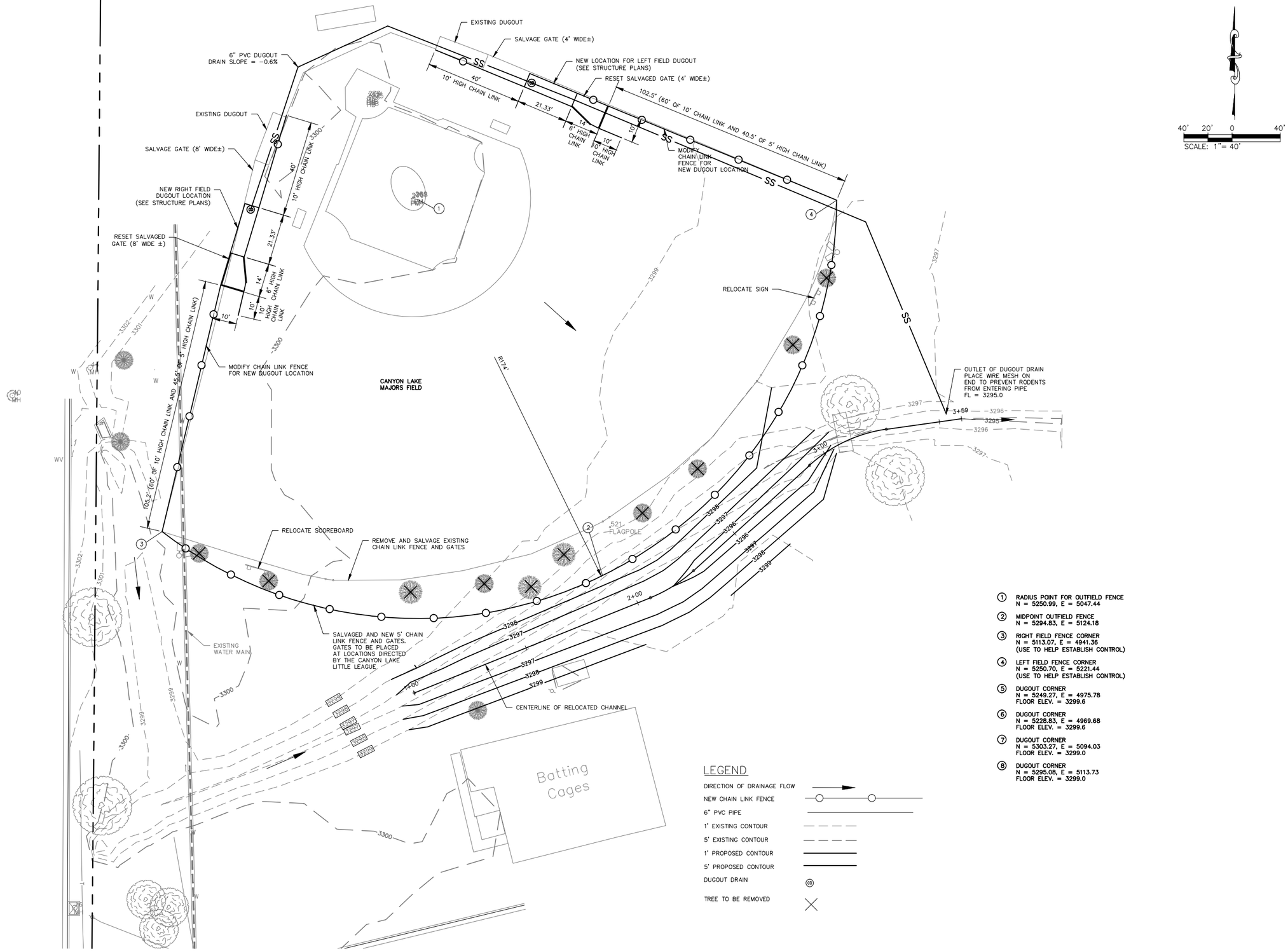
NOT FOR CONSTRUCTION

Scale:	1"=20'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: APRIL 2013
Internal Job No: 1000	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title: GENERAL NOTES

Sheet: 2 of 11



① RADIUS POINT FOR OUTFIELD FENCE
N = 5250.99, E = 5047.44

② MIDPOINT OUTFIELD FENCE
N = 5294.83, E = 5124.18

③ RIGHT FIELD FENCE CORNER
N = 5113.07, E = 4941.36
(USE TO HELP ESTABLISH CONTROL)

④ LEFT FIELD FENCE CORNER
N = 5250.70, E = 5221.44
(USE TO HELP ESTABLISH CONTROL)

⑤ DUGOUT CORNER
N = 5249.27, E = 4975.78
FLOOR ELEV. = 3299.6

⑥ DUGOUT CORNER
N = 5228.83, E = 4969.68
FLOOR ELEV. = 3299.6

⑦ DUGOUT CORNER
N = 5303.27, E = 5094.03
FLOOR ELEV. = 3299.0

⑧ DUGOUT CORNER
N = 5295.08, E = 5113.73
FLOOR ELEV. = 3299.0

LEGEND

- DIRECTION OF DRAINAGE FLOW
- NEW CHAIN LINK FENCE
- 6" PVC PIPE
- 1' EXISTING CONTOUR
- 5' EXISTING CONTOUR
- 1' PROPOSED CONTOUR
- 5' PROPOSED CONTOUR
- DUGOUT DRAIN
- TREE TO BE REMOVED

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

NOT FOR CONSTRUCTION

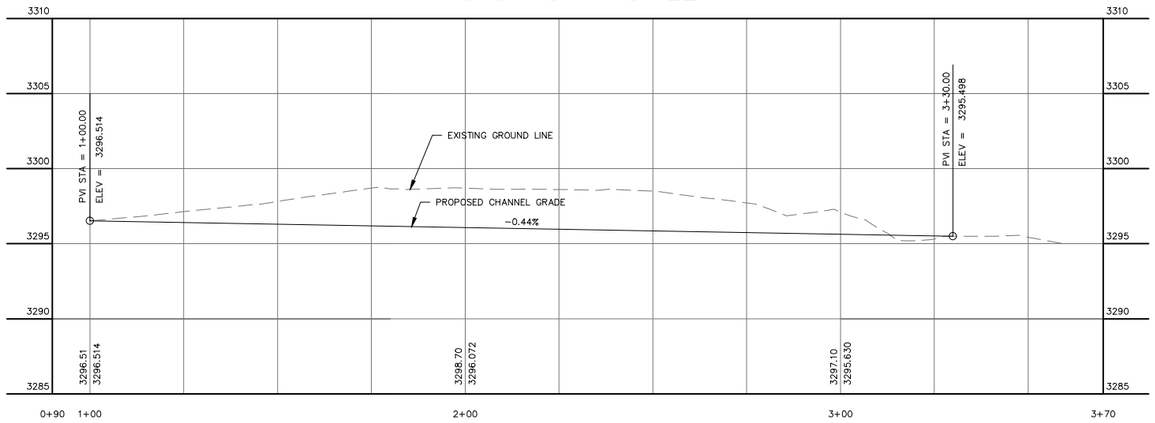
Scale:	1"=40'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

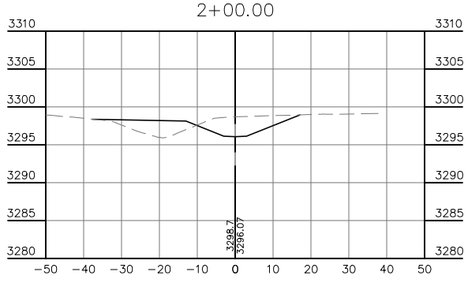
Sheet Title: PLAN

Sheet: 3 of 11

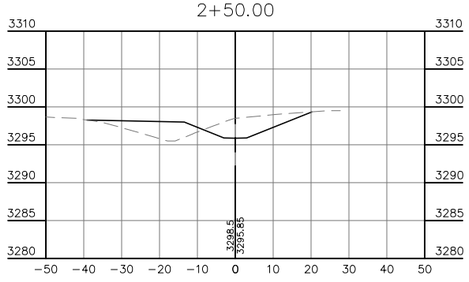
Channel PROFILE

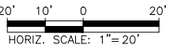


2+00.00

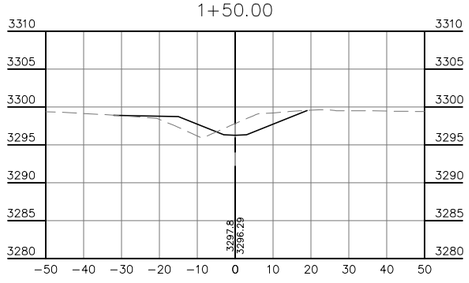


2+50.00

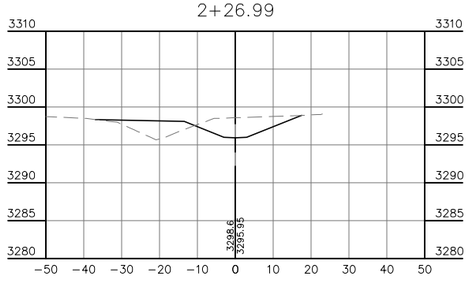




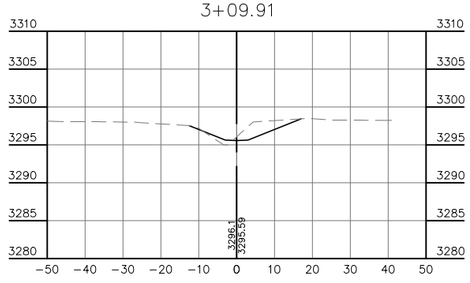
1+50.00



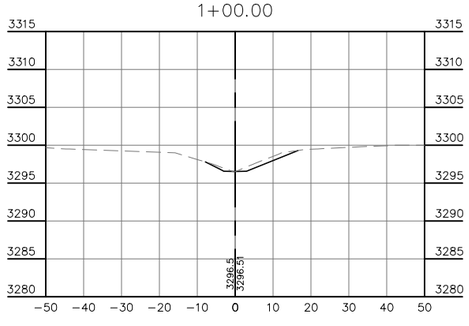
2+26.99



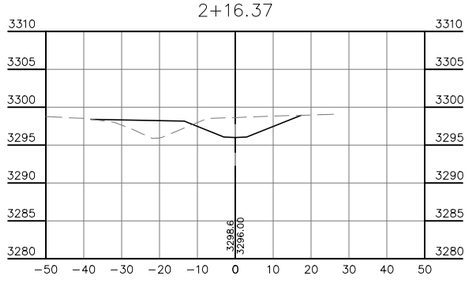
3+09.91



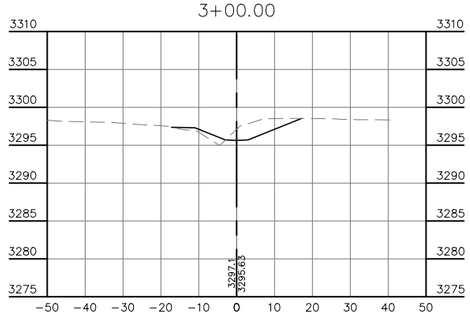
1+00.00



2+16.37



3+00.00



Prepared By:

F M G, Inc.

5700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

NOT FOR CONSTRUCTION

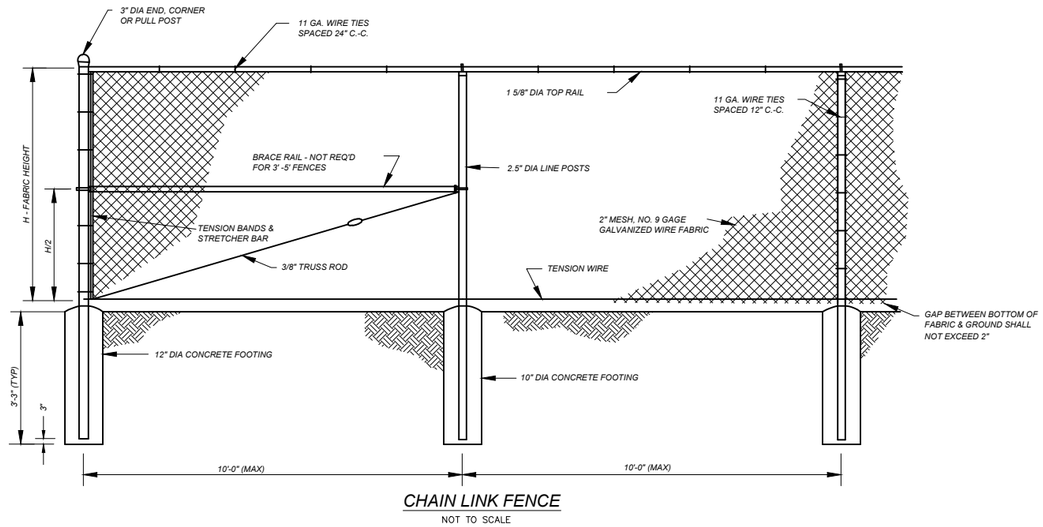
Scale:	1"=20'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title:

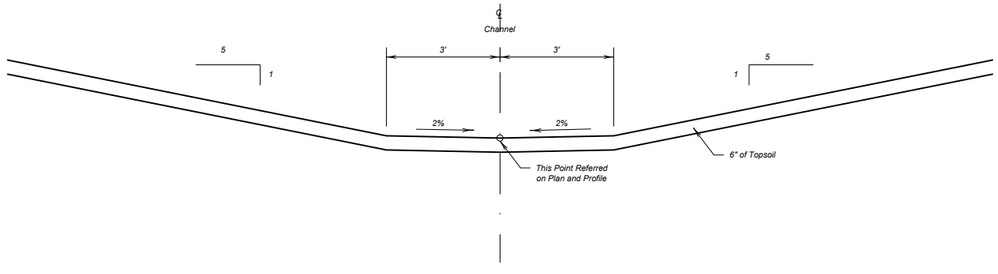
PROFILE AND CROSS SECTIONS

Sheet:



CHAIN LINK FENCE

NOT TO SCALE



TYPICAL SECTION

NOT TO SCALE

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

NOT FOR CONSTRUCTION

Scale:	1"=20'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: APRIL 2013
Internal Job No: 1000	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title: GRADING DETAILS

Sheet: 5 of 11

GENERAL STATEMENT
This Stormwater Pollution Protection Plan (SWPPP) and associated drawings for Erosion and Sediment Control, which are considered a part of SWPPP, are intended to fulfill the requirements of the South Dakota Department of Environment and Natural Resources General Permit for Stormwater Discharges Associated with Construction Activities (SD Permit). The SD Permit may be viewed online at the SDDENR website

This SWPPP and associated drawings for Erosion and Sediment Control are also intended to fulfill the requirements of the City of Rapid City Construction Site Stormwater Runoff Control Ordinance (RC Ordinance). The RC Ordinance may be viewed online at the City of Rapid City website.

Nothing in this SWPPP and drawings shall relieve the Contractor and Owner of their obligation to meet all requirements of the SD Permit and the RC Ordinance. The Contractor and Owner shall notify the Engineer of items in the SWPPP and drawings that are in conflict with their obligations in meeting the SD Permit and RC Ordinance.

OBTAINING PERMITS
The Owner is responsible to file the Notice of Intent (NOI) with SDDENR and to obtain a City of Rapid City Erosion Control Permit (ECP). Copies of the NOI, the SDDENR response letter, and the City ECP shall be provided to the Owner, Contractor, and Engineer.

If a new responsible party is selected after the submittal of the NOI, the responsible party must submit a Notice of Termination, and the new responsible party must submit a new NOI.

JOBSITE POSTINGS
The notice of Intent, SDDENR response letter, and City of Rapid City permit shall be posted at the jobsite in a prominent place for public viewing. Copies of the signed SWPPP, Erosion and Sediment Control drawings and inspection reports shall be kept at the job site. Information is required to be at the jobsite from date of initiation of construction to the date of final stabilization.

OVERALL RESPONSIBILITY FOR STORM WATER POLLUTION PROTECTION
The Prime Contractor has overall responsibility for implementation of the SWPPP.

CERTIFICATIONS

Certification of Compliance with Federal, State, and Local Regulations
The Storm Water Pollution Prevention Plan (SWPPP) for this project reflects requirements of all local municipal jurisdictions for storm water management and sediment and erosion control as established by ordinance, as well as other state and federal requirements for sediment and erosion control plans, permits, notices or documentation as appropriate.

Owner & Contractor Certification for City of Rapid City
This SWPPP appears to fulfill the technical requirements of the City of Rapid City. I understand that additional erosion control measures may be needed if unforeseen erosion or sediment control problems occur or if the submitted plan does not function as intended. The requirements of this plan shall run with the land and be the obligation of the landowner until such time as the plan is properly completed, modified, or voided.

_____
(Owner) Authorized Signature & Printed Name (Date)

_____
(Contractor) Authorized Signature & Printed Name (Date)

Owner Certification for SDDENR Permit (revise as necessary)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designated to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system , or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of for knowing violations.

_____
(Owner) Authorized Signature & Printed Name (Date)

Prime Contractor Certification for SDDENR Permit

This section is to be executed by the Contractor after the award of the contract. This section shall be executed any time there is a change in the Prime Contractor of the Project.

I certify under penalty of law that this document and all attachments will be revised or maintained under my direction.

_____
(Contractor) Authorized Signature & Printed Name (Date)

Engineer's Certification (Required for City of Rapid City

I hereby certify that these plans were prepared under my direct supervision and that I am a duly registered professional engineer under the laws of the State of South Dakota.

_____
(Engineer) Authorized Signature & Printed Name (Date)

CONTACT INFORMATION

Contractor Information:
- Prime Contractor Name:_____
- Contractor's Erosion Control Supervisor Name and 24 hour contact phone number:
  _____
- Address_____
- City_____ State_____ Zip_____
- Phone_____ Field_____ Cell_____Fax_____

Owner Information:
- Name_____
- Address_____
- City_____ State_____ Zip_____
- Phone_____ Field_____Cell_____Fax_____

SUBCONTRACTOR LISTING
Company: Responsible For:

_____
_____
_____
_____
_____
_____
_____

SUBCONTRACTOR CERTIFICATIONS
All Subcontractors are required to comply with the SWPPP for any work they perform on site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract.

Each Subcontractor engaged at activities at the construction site that could impact stormwater must be identified on this SWPPP. It is suggested that the Prime Contractor require a signed certification from each subcontractor outlining the scope of subcontractor work and whereby the subcontractor agrees to abide by the requirements of the SWPPP. The Prime Contractor has overall responsibility for the SWPPP regardless of subcontractor agreements and certifications.

TERMINATING COVERAGE AND FINAL STABILIZATION REQUIREMENTS
Permittees wishing to terminate coverage under the SD Permit shall submit a Notice of Termination (NOT). Compliance with the SD Permit is required until the NOT is submitted. The NOT shall be filled within 30 days after one or more of the following condition has been met:
- All storm water discharges authorized by the permit are eliminated and final stabilization has been achieved for the portions of the site for which the permitee is responsible.
- Another responsible party has assumed control, including a NOI, over all areas of the site which have not been finally stabilized.
- All individual lots within a residential construction project, or other phased development, have reached final stabilization.

Final stabilization means either:
- All soil disturbing activities have been completed and a uniform perennial vegetative cover with density of 70% of the natural cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization structures have been employed.
- For individual lots in residential subdivision, or other phased development, that either (1) the responsible party has completed final stabilization for the entire site of (2) the responsible party has established temporary stabilization for an individual lot before the owner of the lot assumes operation control of the lot and the permitted informs the lot owner of the requirements for temporary and final stabilization.

PROJECT DESCRIPTION

Project Limits & Site Maps: See Project Drawings

Project Location: Project is located in SW ¼, Section 3, T1N, R7E, BHM

Project Description: Canyon Lake Little League is relocating their outfield fence and dugouts. Also included as a part of the fence relocation are excavation and filling activities in the drainage channel to the south of the outfield fence.

Existing Site Conditions: The existing topography is within the Rapid Creek Floodplain and has slopes of less than 2%. The vegetation is primarily irrigated lawn and non-irrgated lawn that is maintained. The area drains from west to east. A drainage channel is located within the project that carries storm water discharges from the neighborhood to the west
Total Project Area: 1.6 Acres
Total Area Disturbed: 0.4 Acres
Existing Vegetative Cover (%): 90 %

Adjacent & Receiving Water Body/Bodies: The project is located adjacent to and within a drainage ditch that runs west to east along the south side of the project. This drainage channel discharges into Rapid Creek approximately 500' to the east.

Soil Properties: Soil Classification: Mostly loams with some clay loams and sandy clays. The soil is in the Hydrologic Group B and is moderately erodible.

Major Soil Disturbing Activities (check all that apply)
- ☒ Clearing and Grubbing
- ☒ Excavation/Borrow
- ☒ Grading and Shaping
- ☐ Filling
- ☒ Cutting and Filling
- ☒ Demolition
- ☒ Trenching
- ☒ Other (describe):_____

WETLANDS & WATER BODIES
Channel that is being adjusted is considered a wetland by the corp of engineers. Downstream of the project are Rapid Creek riparian areas.

Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes No
If yes, the structure and erosion and sediment controls have been included in the total project wetland impacts and have been included in the 404 permit process with the USACE.

SENSITIVE & CRITICAL SITES
The areas denoted as "Sensitive Site" on the erosion and sediment control plan sheets are environmentally sensitive areas that require extra measures for erosion and sediment control. **There are no Sensitive Sites with this project.**

The areas denoted as "Critical Site" on the erosion and sediment control plan sheets are environmentally sensitive areas that require extra measures for erosion and sediment control. Erosion and sediment control measures for temporary and final stabilization shall be completed at disturbed critical areas within 48 hours of disturbance. **There are no Critical Sites with this project.**

ORDER OF CONSTRUCTION ACTIVITIES & TIME SCHEDULE
- Remove Trees
- Install Silt Fence
- Strip Topsoil
- Perform channel grading and dugout work
- Replace topsoil in channel
- Relocate and install chain link fence
- Sod and seed disturbed areas

If channel grading is anticipated to be left dormant for more that 21 days, the Contractor shall hydo-rmulch disturbed areas at their own cost.

Advance stripping and demolition of the entire site is not permitted. Contractor shall only strip and demolish in phases as necessary for the various items of construction.

The above order of construction activities is as assumed by the Engineer. The Contractor shall provide the Engineer with a new order of construction activities for approval if different than above. Contractor is required to maintain a time log of all construction activities including SWPPP activities.

STRUCTURAL DIVERSION PRACTICES
Used to limit runoff from exposed areas.
If Contractor using diversions describe then below.

EROSION, SEDIMENT AND STABILIZATION CONTROLS
Temporary Erosion, Sediment and Stabilization Controls

Details are included in the plans
- ☒ Silt Fence
- ☐ Silt Ditch
- ☐ Straw Bale Check
- ☐ Temporary Diversion Dike
- ☐ Surface Roughening
- ☐ Sediment Control Wattle
- ☐ Diversion Channels/Swales
- ☐ Rough Cut Street Control
- ☒ Erosion Control Blanket or Mat
- ☐ Channel Liners (TRM)
- ☐ Stone Rip Rap
- ☐ Rock Check Dams
- ☐ Temporary Sediment Trap
- ☐ Sediment Basin Riser Filter
- ☐ Other_____
- ☐ Sediment Basin Horseshoe Filter
- ☐ Inlet Protection
- ☐ Outlet Protection
- ☐ Temporary Slope Drain
- ☒ Concrete Washout Area
- ☐ Temporary Vehicle Tracking Control
- ☐ Temp. Vehicle Tracking Control with Wash Rack
- ☒ Temporary Mulching (Hydro-mulch)
- ☐ Temporary Seeding of Disturbed Areas
- ☐ Temporary Seeding of Topsoil Stockpiles
- ☐ Temporary Stream Crossing
- ☒ Pavement Sweeping and Vacuuming

Permanent Stabilization Controls
- ☒ Permanent Seeding
- ☒ Sodding
- ☐ Planting
- ☐ Mulching (Type _)
- ☒ Erosion Control Blankets or Mats
- ☐ Other_____
- ☐ Channel Liners (TRM)
- ☐ Vegetation Buffer Strips
- ☐ Roughened Surface (Tracking)
- ☐ Gabions-Gabion Mattress
- ☐ Outlet Protection

Stabilization Time Limits
Stabilization Measures shall be initiated as soon as possible, but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Initiation of final or temporary stabilization may exceed the 14-day limit if earth disturbing activities will be resumed within 21 days.

All disturbed areas shall be mulched, with 14 days after final grade is reached on any portion of the site not to be otherwise permanently stabilized. Areas that will remain in an interim condition for more than 1 year shall also be seeded.

Soils stockpiled for more than 60 days shall be seeded with a temporary or permanent grass cover within 14 days of completion of stockpile construction. Mulch as necessary for vegetation establishment.

AIR QUALITY CONTROL MEASURES
- ☒ Dust Control
- ☐ Cover Haul Trucks
- ☐ Pavement Sweeping and Vacuuming
- ☐ Tacifier

STORM WATER MANAGEMENT CONTROLS
Storm water management will be handled by temporary controls outlined above, and as shown in the Erosion Control Plan sheet and details. Permanent control measures after construction are also noted above.

OTHER STORM WATER CONTROLS
- **Waste Disposal:** All liquid materials will be collected and stored in sealed metal containers that will not leak. All trash and construction debris from the site will be deposited in marked trash containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal, and notices stating proper practices will be posted in the field office. The general contractor's representative responsible for the conduct of work on the site will be responsible for seeing waste disposal procedures are followed.
- **Hazardous Waste:** All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacture. Site personnel will be instructed in these practices, and the individual designated as the contractor's on-site representative will be responsible for seeing that these practices are followed.
- **Sanitary Waste:** Portable sanitary facilities will be provided on the construction site. Sanitary waste will be collected from the portable units in a timely manner by a licensed waste management contractor.

MAINTENANCE AND INSPECTION
Maintenance and Inspection Practices
- Inspections will be conducted at least one time per week and after a storm event of 0.50 inches or greater or a snow melt event that causes surface erosion. The Prime Contractor is responsible for these inspections.
- All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.
- If sediment escapes the construction site, off site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts. The plan must be modified to prevent further off site sedimentation.
- Silt fence will be inspected for depth of sediment and for tears in order to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches ½ of the height of the silt fence.
- Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure capacity, and at the conclusion of the construction.
- Check dams will be inspected for stability. Sediment will be removed when depth reaches ½ the height of the dam
- All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
- Inspection and maintenance reports will be prepared for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
- The contractor's site superintendent are responsible for the inspections. Maintenance and repair activities are the responsibility of the contractor. The contractor will complete the inspection and maintenance reports and distribute copies to the project engineer & to the Owner.

Maintenance & Inspection Reporting
Reports shall summarize the areas inspected, the name(s) and title(s) of personnel making the inspection, the date(s) of the inspection, major observations, and corrective actions taken. These reports shall be retained as part of the plan for at least three (3) years after the site has reached final stabilization and coverage under the permit has been terminated. Such reports shall identify any incidents of non-compliance with the Storm Water Discharge Permit. Inspection report forms shall be letter size of a format similar to SDDOT or SDDENR forms or as otherwise approved.

Based on the results of the inspection, the SWPPP will be revised and implemented as needed, in no case later than seven calendar days following the inspection. Where an inspection does not identify any incidents of non-compliznce, the report shall contain a certification that the site is in compliance with the SWPPP and the Storm Water Discharge Permit.

NON-STORM WATER DISCHARGES
The following non-storm water discharges are anticipated during the course of this project (check all that apply).
- ☐ Discharges from water main flushing.
- ☐ Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.
- ☐ Uncontaminated ground water associated with dewatering activities. The Contractor is responsible to obtain dewatering permits
- ☐ Other_____
  (to be filled out by Contractor)

MATERIALS INVENTORY
The following materials or substances are anticipated to be present on the site during the construction period. These materials will be handled as noted under the headings "EROSION AND SEDIMENT CONTROLS" and "SPILL PREVENTION". Contractor shall fill in as necessary.

- ☐ Concrete and Portland Cement
- ☐ Detergents
- ☐ Paints
- ☐ Metals
- ☐ Bituminous Materials
- ☐ Petroleum Based Products
- ☐ Other_____
- ☐ Cleaning Solvents
- ☐ Wood
- ☐ Cure
- ☐ Texture
- ☐ Chemical Fertilizers

MATERIAL MANAGEMENT

Housekeeping
- Only needed products will be stored on-site by the Contractor.
- Except for bulk materials the contractor will store all materials under cover and in appropriate containers.
- Products must be stored in original containers and labeled.
- Material mixing will be conducted in accordance with the manufacturer's recommendations.
- When possible, all products will be completely used before properly disposing of the container off site.
- The manufacturer's directions for disposal of materials and containers will be followed.
- The contractor will inspect materials storage areas regularly to ensure proper use and disposal.
- Dust generated will be controlled in an environmentally safe manner.
- Vegetation areas not essential to the project will be preserved and maintained as noted on the plans.

Hazardous Materials
- Products will be kept in original containers unless the container is not re-sealable.
- Original labels and material safety data sheets will be retained onsite.
- Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
- Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any storm water system or storm water treatment system.
- Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, and mixer washout waters will be collected on site and managed to prevent contaminations of storm water runoff.

PRODUCT SPECIFIC MATERIAL PRACTICES
- **Petroleum Products:** All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.
- **Paints:** All containers will be tightly sealed and stored when not required for use. The excess will be disposed of according to the manufacturer's instructions and any applicable state and local regulations.
- **Fertilizers:** Fertilizers will be applied only in the amounts specified by the specifications. Once applied, fertilizers will be worked into the soil to limit the exposure to storm water. Fertilizers will be stored in an enclosed area. The contents of partially used fertilizer bags will be transferred to sealable containers to avoid spills.
- **Concrete Trucks:** Contractors will provide designated truck washout areas on the site. These areas must be self contained and not connected to any storm water outlet of the site. The contractor shall mark this location on the Erosion and Sediment Control Plan sheet. Upon completion of construction washout areas will be properly stabilized.

SPILL PREVENTION & CONTROL PRACTICES
In addition to the previous housekeeping and management practices, the following practices will be followed for spill prevention and cleanup if needed.

- For all hazardous materials stored on site, the manufacturer's recommended methods for spill clean up will be clearly posted. Site personnel will be made aware of the procedures and the locations of the information and cleanup supplies.
- Appropriate cleanup materials and equipment will be maintained by the contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for clean up purposes.
- All spills will be cleaned immediately after discovery and the materials disposed of properly.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- After a spill a report will be prepared describing the spill, what caused it, and the cleanup measure taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as cleanup instruction in the event of reoccurrences.
- The contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention an cleanup coordinator. The contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.

SPILL RESPONSE
The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site to prevent their release into receiving waters. If a spill of pollutants threatens storm water or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.
- The Contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
- If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.
- Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the contractor a the site.
- If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the sheen. The contractor will use appropriate materials to contain and absorb the spill. The source of oil sheen will also be identified and removed or repaired as necessary to prevent further releases.
- If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to the SD DENR.
- Personal with primary responsibility for spill response and clean up will receive training by the contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.
- Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

TRACKOUT CONTROL MEASURES
Contractor shall place vehicle tracking control measures at the entrance(s) to the project. Vehicle tracking control shall be installed per the detail included with the SWPPP.

If necessary the Contractor will install a vehicle washing area to remove sediment off of vehicles as they exist the project site.

SPILL NOTIFICATION
The Contractor is responsible for spill reporting.

A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to DENR immediately if any one of the following conditions exists:
- The discharge threatens or is in a position to threaten the water of the state (surface or ground water).
- The discharge causes an immediate danger to human health or safety.
- The discharge exceeds 25 gallons.
- The discharge causes a sheen on surface water.
- The discharge of any substance that exceeds the ground water quality standards of ARSD chapter 74:54:01
- The discharge of any substance that harms or threatens to harm wildlife or aquatic life.
- The discharge of crude oil in field activities under SDCL chapter 45-9 is greater than 1 barrel (42 gallons).

To report a spill, call DENR at 605-773-3296 (8am to 5pm Central Time). To report after hours, on weekends or holidays, call State Radio Communications at 605-773-3231. Reporting the spill to DENR does now meet any obligation for reporting to other state, local or federal agencies. Therefore, the responsible person must also contact local authorities to determine the local reporting requirements for releases. DENR recommends that spills also be reported to the National Response Center at 1-800-424-8802. **(If spills occur in Rapid City the Rapid City Fire Rescue and Rapid City Health Department shall be notified.)**

CONSTRUCTION CHANGES
When changes are made to the construction project that will require alterations in the erosion, sediment and stabilization controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent water.

The Contractor shall also amend the SWPPP if it proves to be ineffective in providing erosion, sediment and stabilization control. The Contractor shall record changes on the erosion control plan sheet(s) and the SWPPP.

Amendments to the SWPPP require approval of the Engineer and shall be documented on forms similar to SDDOT & SDDENR amendment logs or as otherwise approved. Copies of the changes and a log of the amendments will be retained with the SWPPP for review over the course of the project.

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

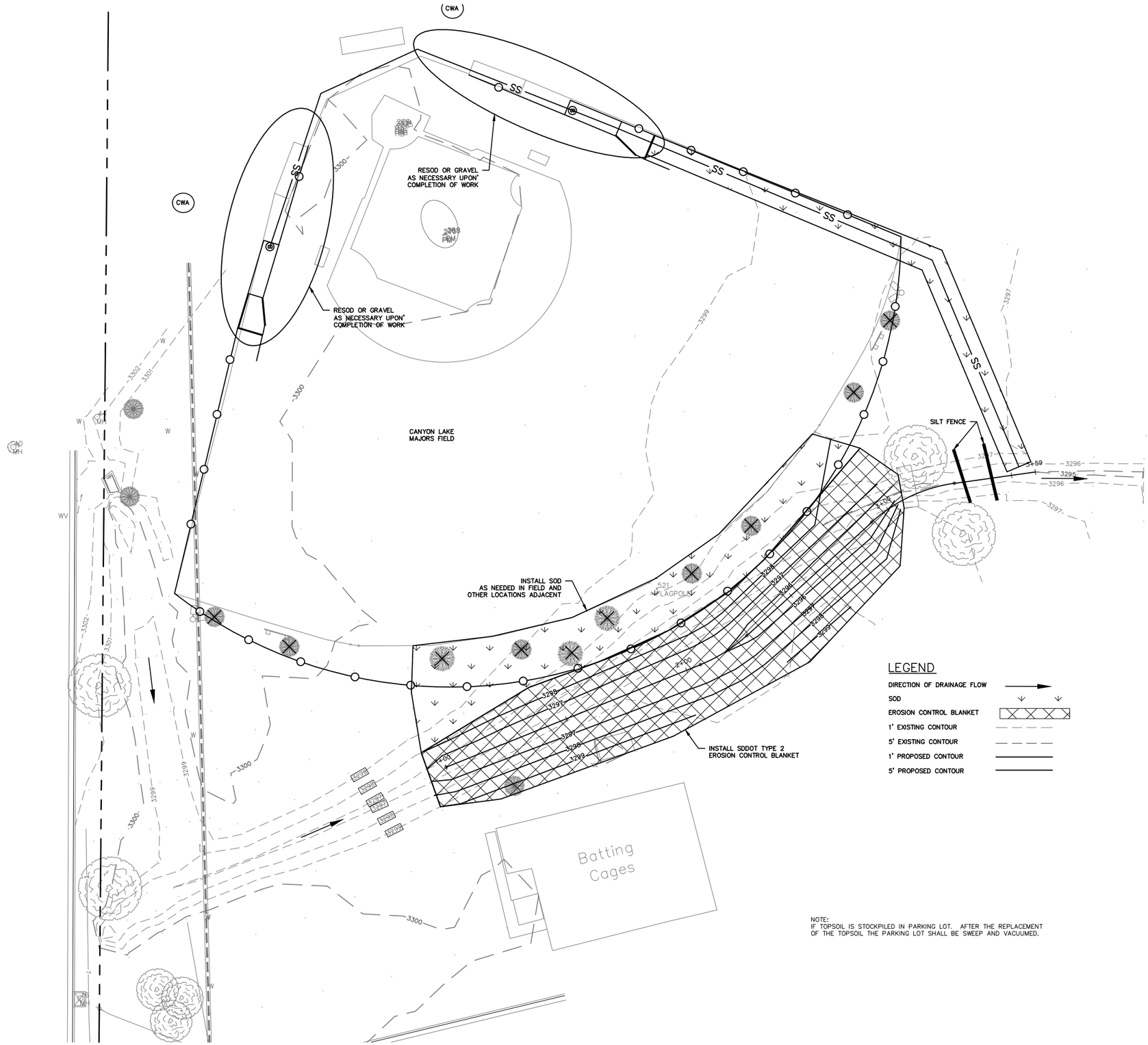
NOT FOR CONSTRUCTION

Scale:	1"=20'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title:
STORM WATER POLLUTION AND PREVENTION PLAN

Sheet:
6 of 11



NOTE:
IF TOPSOIL IS STOCKPILED IN PARKING LOT. AFTER THE REPLACEMENT OF THE TOPSOIL THE PARKING LOT SHALL BE SWEEP AND VACUUMED.

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

NOT FOR CONSTRUCTION

Scale:	1"=20'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE MAJORS FIELD FENCE RELOCATION

Sheet Title:
SEDIMENT AND EROSION CONTROL PLAN

Sheet:
7 of **11**

SILT FENCE

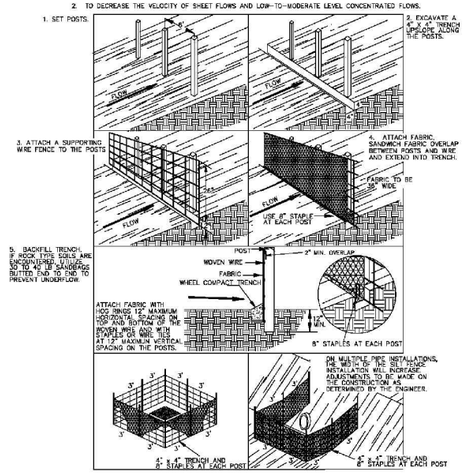
SF

DEFINITION:

A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED. THE SILT FENCE IS A TEMPORARY LINEAR BARRIER CONSTRUCTED OF SYNTHETIC FILTER FABRIC AND SUPPORTED BY WOODEN OR STEEL POSTS.

PURPOSES:

1. TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS IN ORDER TO REDUCE SEDIMENT IN RUNOFF FROM LEAVING THE SITE.
2. TO DECREASE THE VELOCITY OF SHEET FLOWS AND LOW-TO-MODERATE LEVEL CONCENTRATED FLOWS.



FENCE MATERIAL SHALL CONFORM TO GEOTEXTILE SPECIFICATIONS, SECTION 831 OF SDDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LATEST EDITION.

CITY OF RAPID CITY — PUBLIC WORKS DEPARTMENT

SILT FENCE (WOVEN WIRE) — DATE: 1-31-08 — SEC.-SHT. 146-12

TEMPORARY SEDIMENT TRAP

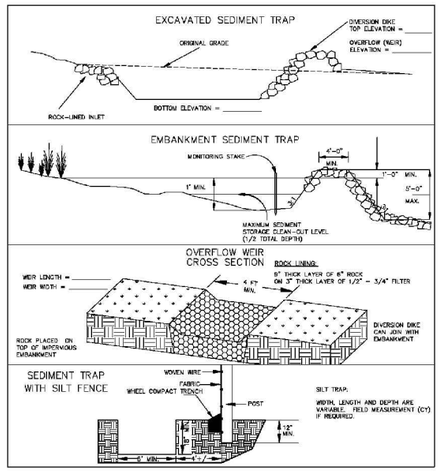
ST

DEFINITION:

A SMALL TEMPORARY PONDING AREA, FORMED BY CONSTRUCTING A EARTHEN EMBANKMENT WITH A ROCK-COVERED OUTLET ACROSS A DRAINAGE SWALE, OR BY EXCAVATION OF A DEPRESSION BELOW ORIGINAL GRADE. RELATIVE ELEVATIONS SHOULD CONTAIN ALL RUNOFF WITHIN THE TRAP AREA/

PURPOSES:

TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS LONG ENOUGH TO ALLOW THE MAJORITY OF THE SEDIMENT TO SETTLE OUT.



CITY OF RAPID CITY — PUBLIC WORKS DEPARTMENT

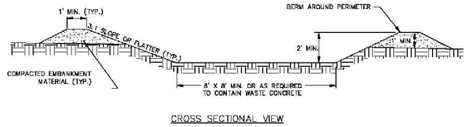
TEMPORARY SEDIMENT TRAP — DATE: 1-31-08 — SEC.-SHT. 146-13

CONCRETE WASHOUT AREA

CWA

NOTES:

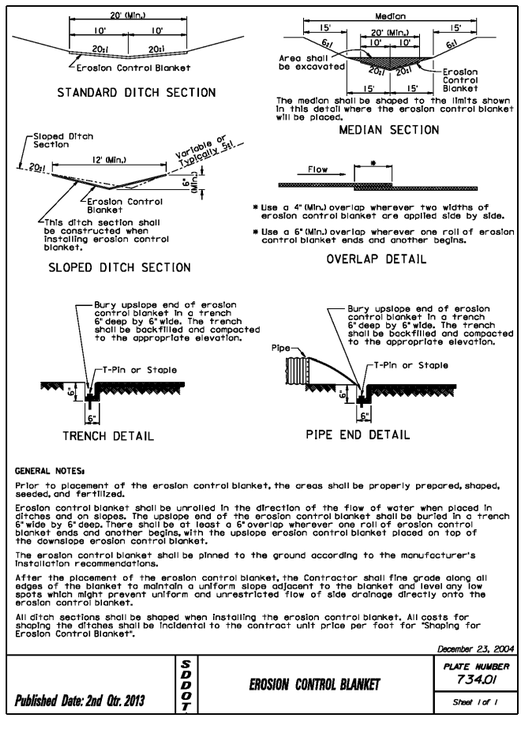
1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
3. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
4. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY THE INSPECTOR.



CROSS SECTIONAL VIEW

CITY OF RAPID CITY — PUBLIC WORKS DEPARTMENT

CONCRETE WASHOUT AREA — DATE: 1-31-08 — SEC. - SHT. 146-31



GENERAL NOTES:

Prior to placement of the erosion control blanket, the areas shall be properly prepared, shaped, seeded, and fertilized.

Erosion control blanket shall be unrolled in the direction of the flow of water when placed in ditches and on slopes. The upslope end of the erosion control blanket shall be buried in a trench 6" wide by 6" deep. There shall be at least a 6" overlap wherever one roll of erosion control blanket ends and another begins, with the upslope erosion control blanket placed on top of the downslope erosion control blanket.

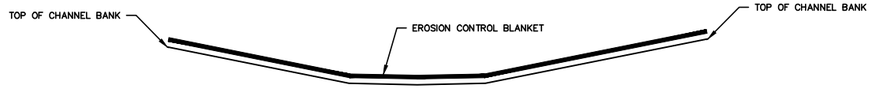
The erosion control blanket shall be pinned to the ground according to the manufacturer's installation recommendations.

After the placement of the erosion control blanket, the Contractor shall fine grade along all edges of the blanket to maintain a uniform slope adjacent to the blanket and level any low spots which might prevent uniform and unrestricted flow of side drainage directly onto the erosion control blanket.

All ditch sections shall be shaped when installing the erosion control blanket. All costs for shaping the ditches shall be incidental to the contract unit price per foot for "Shaping for Erosion Control Blanket".

December 23, 2004

Published Date: 2nd Qtr. 2013 — SDDOT — EROSION CONTROL BLANKET — PLATE NUMBER 734.01 — Sheet 1 of 1



TYPE 2 EROSION CONTROL BLANKET IN CHANNEL
NOT TO SCALE

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

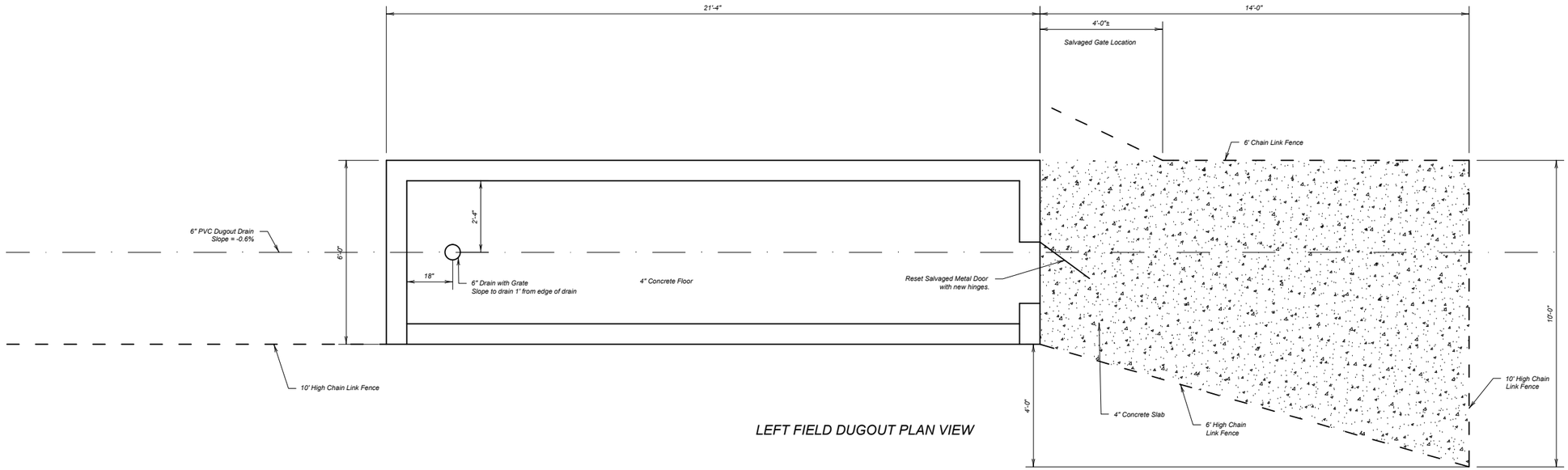
NOT FOR CONSTRUCTION

Scale:	1"=20'
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

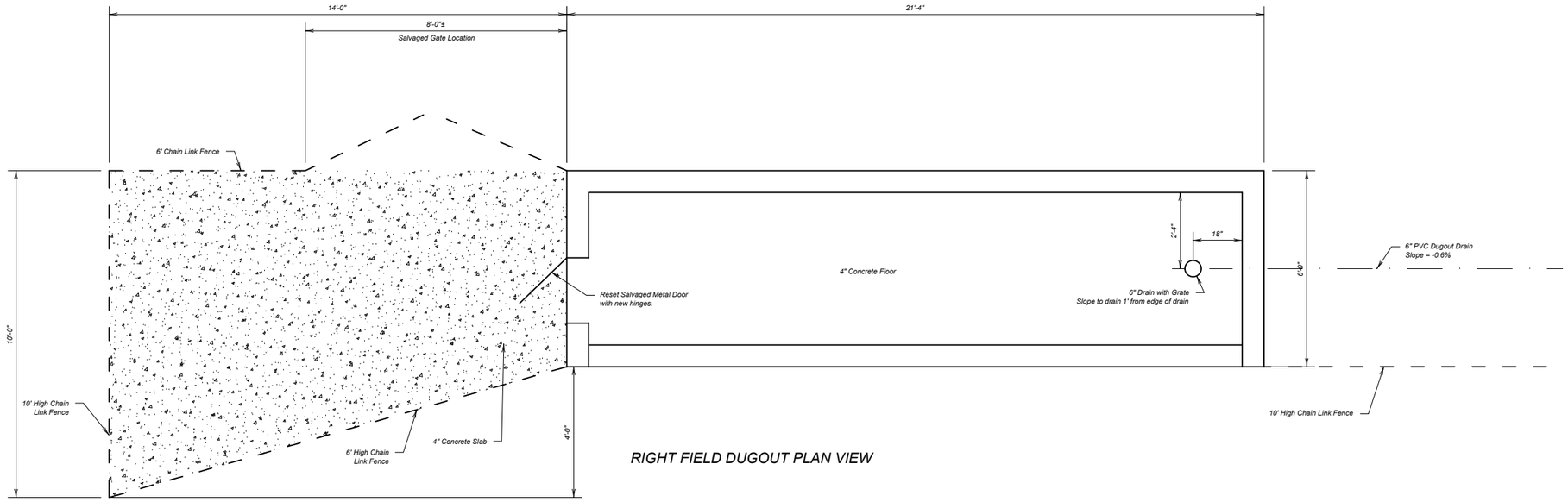
CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title: SEDIMENT AND EROSION CONTROL DETAILS

Sheet: 8 of 11



LEFT FIELD DUGOUT PLAN VIEW



RIGHT FIELD DUGOUT PLAN VIEW

Prepared By:

F M G, Inc.

3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

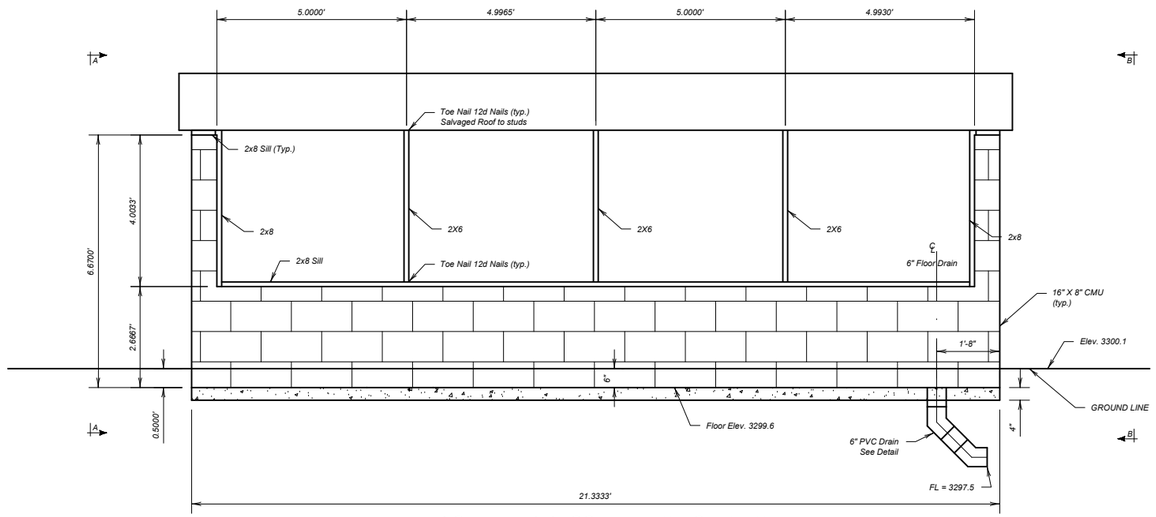
NOT FOR CONSTRUCTION

Scale: NA	
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

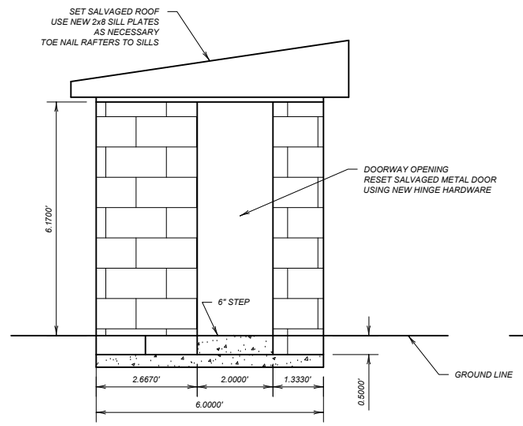
CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title:

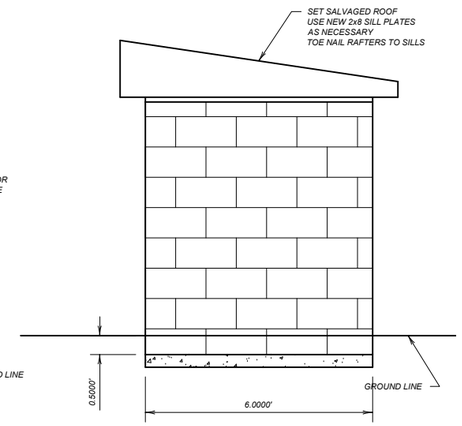
DUGOUT PLAN



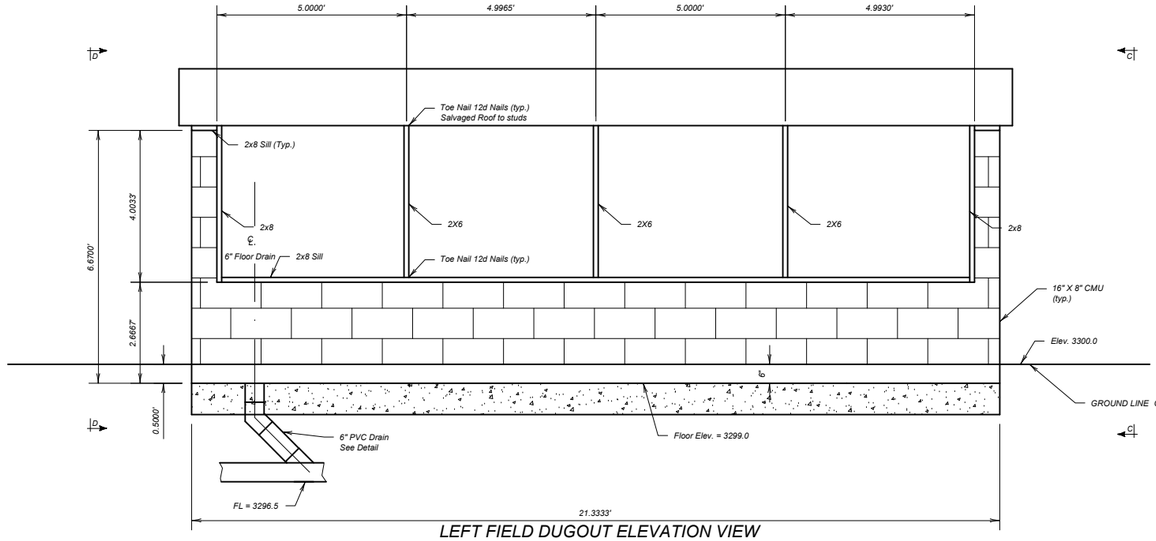
RIGHT FIELD DUGOUT ELEVATION VIEW



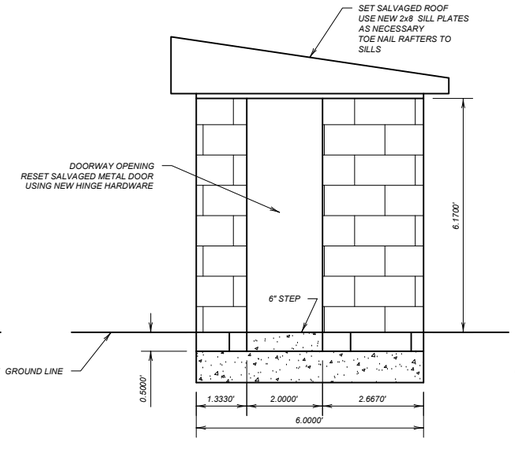
VIEW A-A



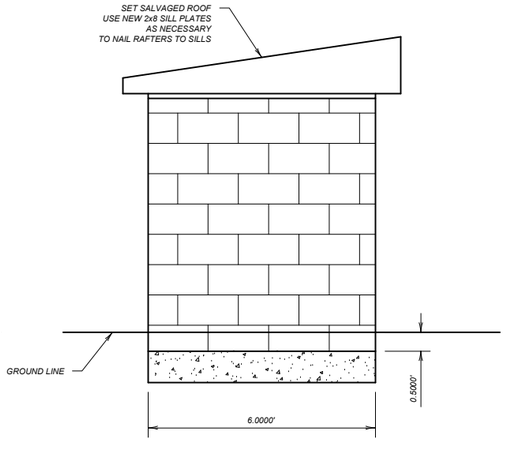
VIEW B-B



LEFT FIELD DUGOUT ELEVATION VIEW



VIEW C-C



VIEW D-D

Prepared By:

F M G, Inc.

3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

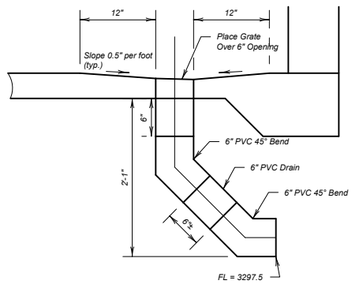
NOT FOR CONSTRUCTION

Scale:	NA
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

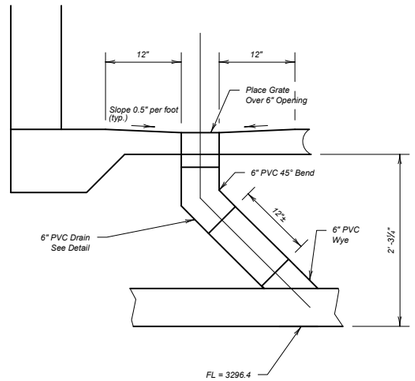
CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title:

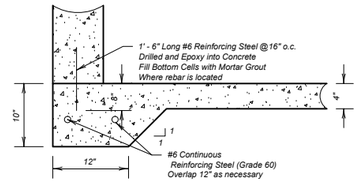
DUGOUT ELEVATIONS



RIGHT FIELD DUGOUT DRAIN



LEFT FIELD DUGOUT DRAIN



DUGOUT FOOTING DETAIL

Prepared By:
F M G, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317
(605) 342-4105 FAX (605) 342-4222
www.fmgengineering.com

NOT FOR CONSTRUCTION

Scale:	NA
Designed By: RAS	Drawn By: RS
Design Date: APRIL 2013	Print Date: MAY 2013
Internal Job No: P00245	
Surveyed By: FISK ENG.	Survey Date: UNKNOWN
Revisions:	

CANYON LAKE LITTLE LEAGUE
MAJORS FIELD FENCE RELOCATION

Sheet Title:
DUGOUT DETAILS

Sheet:
11 of 11