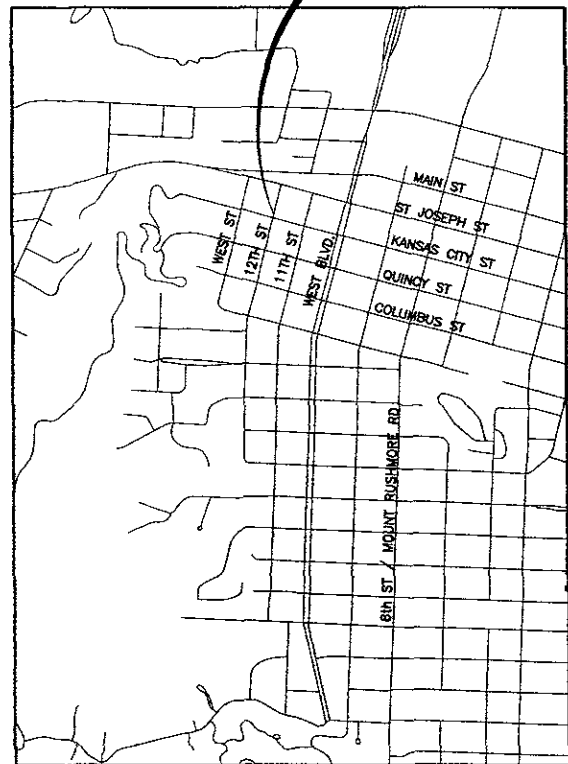


EARLY FOUNDATIONS CHILD CARE CENTER

1123 KANSAS CITY STREET
RAPID CITY, SOUTH DAKOTA

LEGAL DESCRIPTION: LOTS 19-24 OF BLOCK 9, BOULEVARD ADDITION.
SECTION 2, T1N, R7E, B.H.M., RAPID CITY
PENNINGTON COUNTY, SOUTH DAKOTA

**PROJECT
LOCATION**



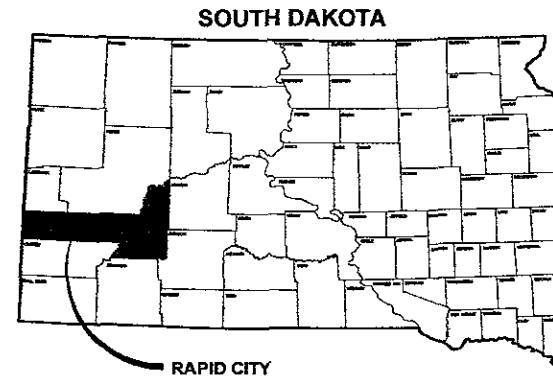
PROJECT LOCATION MAP

NOT TO SCALE

INDEX OF SHEETS:

- C1.0 COVER SHEET
- C2.0 EROSION CONTROL PLAN AND DETAILS
- C3.0 EXISTING SITE PLAN & DEMO PLAN
- C4.0 PROPOSED SITE PLAN
- C5.0 NOTES AND DETAILS
- C5.1 DETAILS

SEE ARCHITECTURAL SHEET T1 FOR LANDSCAPE AND PARKING CALCULATIONS.



RECEIVED

APR 27 2010

Rapid City City Clerk
Management Information System

ONE CALL
BEFORE DIGGING
1-800-781-7474

**ADVANCED ENGINEERING
& SURVEYING, INC.**
441 WEST MAIN STREET
RAPID CITY, SOUTH DAKOTA 57702
PHONE 605-716-8888 FAX 605-716-8877
EMAIL: info@adveng.com



Revisions	
No	Date
1	4/27/10
	DESCRIPTION: DRAINAGE
	BY: [Signature]
	CHECKED BY: [Signature]
	DATE: April 2010



Henriksen, Inc.
526 Saint Joseph Street, Suite A
Rapid City, South Dakota 57701
Phone (605) 394-0189 Fax (605) 341-9288



COVER SHEET
EARLY FOUNDATIONS CHILD CARE CENTER
1123 Kansas City Blvd Rapid City, SD



C1.0
Drawing Number

Erosion Control Report

Owner:
 Jimmy Day
 1123 Kansas City
 Rapid City, SD 57701

Erosion Control Consultant:
 Advanced Engineering & Surveying, Inc.
 3421 West Main Street
 Rapid City, SD 57702
 605-718-8825

Project Description
 The project consists of a 21,000 Sq.Ft. parcel of which is fully developed. Abuilding remodel is planned, a new entrance with minor site grading and paving of alley

The project is located in the SE Quadrant of Kansas City & 12th streets or 1123 Kansas City street, City of Rapid City, Pennington County, South Dakota.

The project includes Building Remodel, fencing and outdoor play area. Addition of an entrance from Kansas City street, minor site grading to install entrance and at alley, and paving of the gravel alley

Existing Site Conditions
 The site is currently developed and is 100 % asphalt, roof, gravel or grass

The site is relatively flat across the developed area. The site generally drains from southwest to northeast

There are no wetlands located on the site. The site drains to city streets and thru to municipal storm sewer

Adjacent Areas
 The site is generally bounded by Central Business property and Residential Property

Soils
 Predominant soils are loam, 0% to 2% slopes.

Area
 It is anticipated that approximately 54 Sq. Ft. will be disturbed during minor grading operations during construction. The grading will be limited to the parking lot and the Alley. Excavation will be limited to removal of existing asphalt, gravel, and debris, and minor grading. The proposed grades will generally follow the existing grades

Erosion Control Measures
 Erosion and Sediment Control Measures will consist of the following

Construction Site Nonstructural Control Measures

Spill Control Practices
 Chemical and Petroleum Product spills of toxic or hazardous material shall be reported to the appropriate state or local government agency. All spills shall be cleaned up immediately after discovery.

Spill Prevention
 Petroleum Products On-site construction equipment shall be monitored for leaks & receive regular preventive maintenance. Concrete trucks shall be allowed to wash only at designated areas or be required to return to the plant for washout.

Regularly pick-up and dispose of garbage and waste material. Routinely inspect equipment and processes for leaks or conditions that could lead to discharges of chemicals or contact of storm water with raw materials, intermediate materials, waste materials, or products used on-site

Assure all spill clean up procedures are understood by employees. Training of employees on proper clean up procedures shall be implemented

Clean up leaks, drips, and other spills immediately

Cover and maintain dumpsters and waste receptacles.

Assign responsibility of hazardous material inventory to a limited number of people who are trained to handle such materials. In the event of spills of any dangerous or hazardous material, notify City Public Works Department

Drain or replace motor oil or other automotive fluids in an area away from storm or sanitary sewer inlets. Collect spent fluids and recycle or dispose of properly

In fueling areas, clean up spills with dry clean up methods (absorbents)

Make sure employees are trained in spill prevention practices and adhere to them

The Erosion control plan shows the erosion control devices to be installed. These items shall be installed as per City of Rapid City standard details and specifications.

Dewatering
 If water from temporary dewatering shall be discharged to water of the state during construction, Contractor must first get coverage under DENR's General Permit for Temporary Dewatering. For more information, contact Al Spangler at (605) 773-3351

Permanent Stabilization
 Areas not paved will have permanent landscaping developed as shown in the landscaping Plan (See Architectural Sheets).

Erosion control will be maintained until final stabilization is achieved

Storm Water Management Considerations
 Storm Water run-off will essentially be the same following construction as it is today

During construction, applicable BMPs will be utilized. Storm water will flow to the developed streets and entry to municipal storm sewer. Storm water will ultimately flow to the same downstream location after construction as it did before construction.

Maintenance
 Inspection of Erosion and Sediment Control Measures should be scheduled weekly and following any storm event of 0.5 inches or greater. All measures will be maintained in good working order. Inspection and maintenance procedures will continue until all disturbed areas have reached final stabilization.

Paved streets adjacent to the site shall be cleaned at the end of each working day to remove sediment buildup from construction activities.

Erosion and Sediment Control Plan Certification
 The Erosion and Sediment Control narrative and attached Erosion and Sediment Control Plan, appears to fulfill the technical criteria and the criteria for erosion control and the requirements of the City of Rapid City. I understand that additional Erosion and Sediment Control Measures may be needed if unforeseen erosion 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 responsible party until such time as the plan is properly completed, modified or voided.

Date _____ Owner/Developer _____

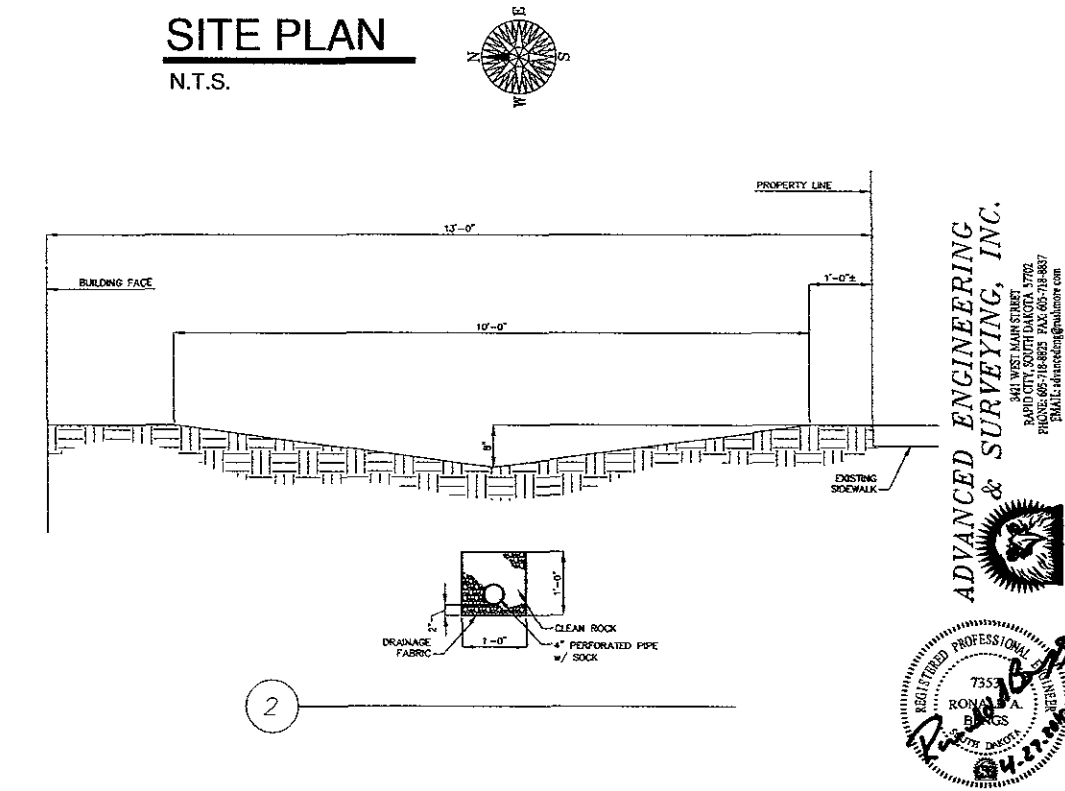
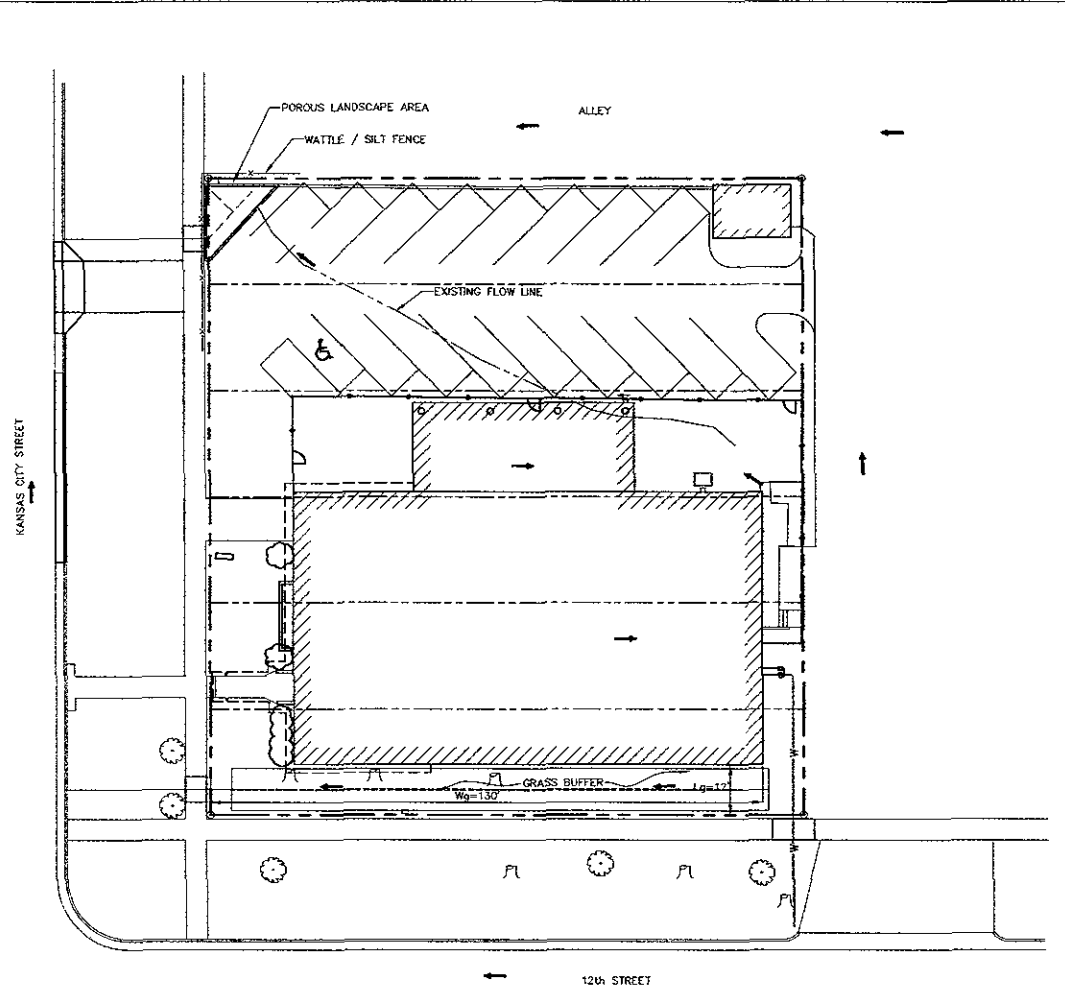
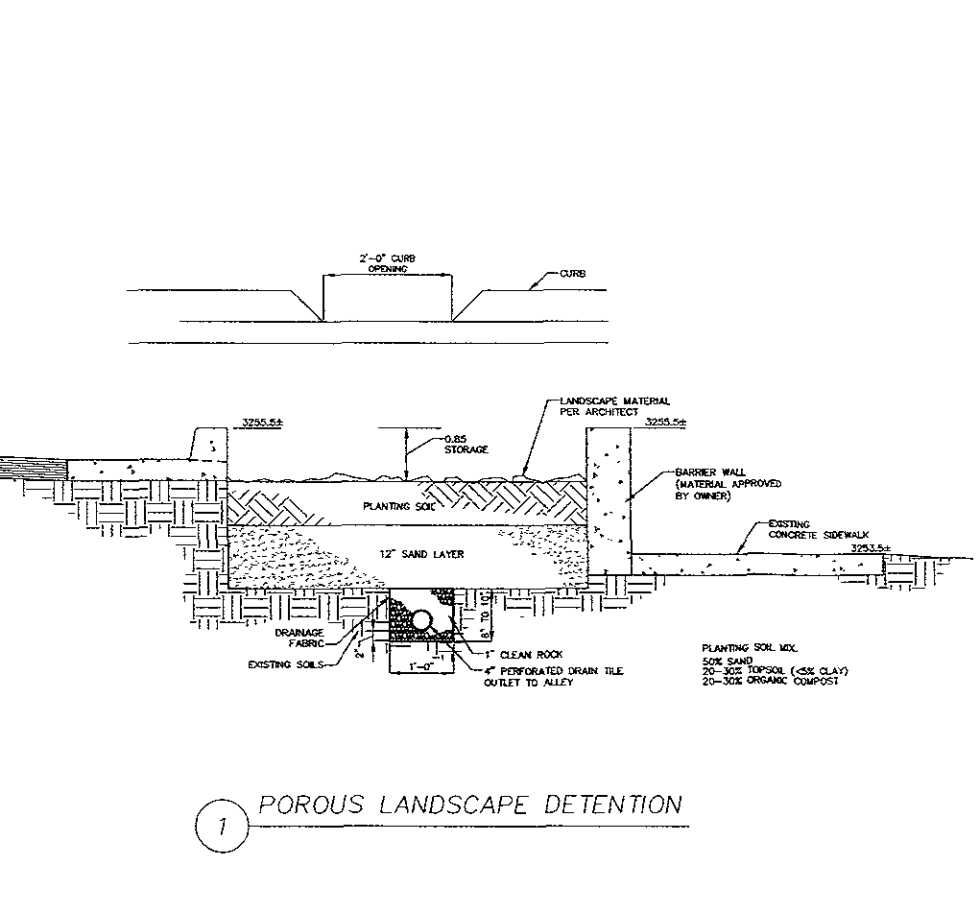
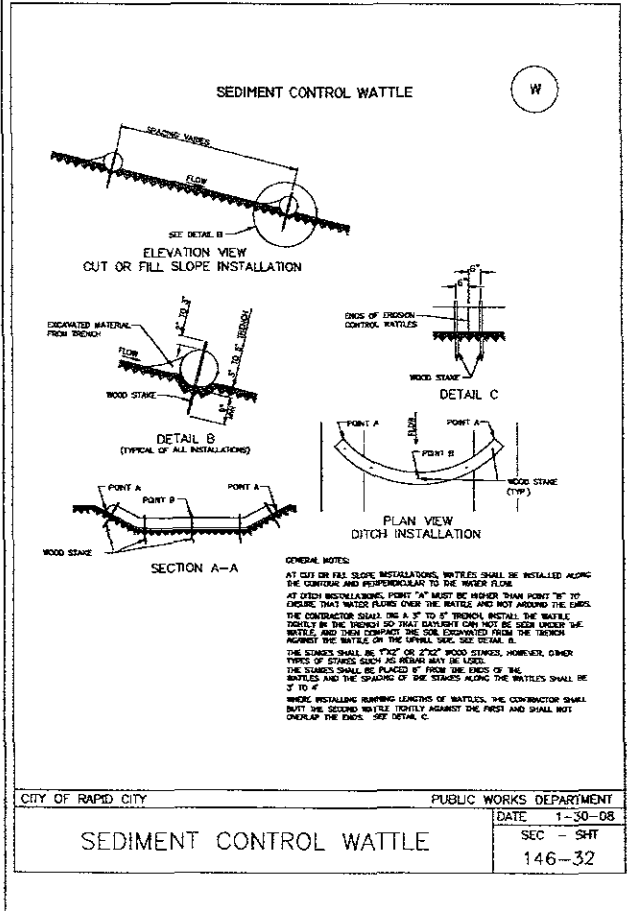
Date _____ General Contractor _____

Engineer's Certificate

I hereby certify that these plans were prepared under my direct supervision and that I am duly Registered Professional Engineer under the laws of the State of South Dakota

4-27-2010
 Date

Ronald A. Bengt
 Ronald A. Bengt, PE, Registration No. SD 7353



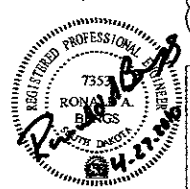
Revisions	
No.	Description
1	4-27-10 DRAINAGE

Project Number: AES 10.013
 File Name: C2.0
 Drawn By: GCH
 Checked By: RAB
 Date: JAN 2010
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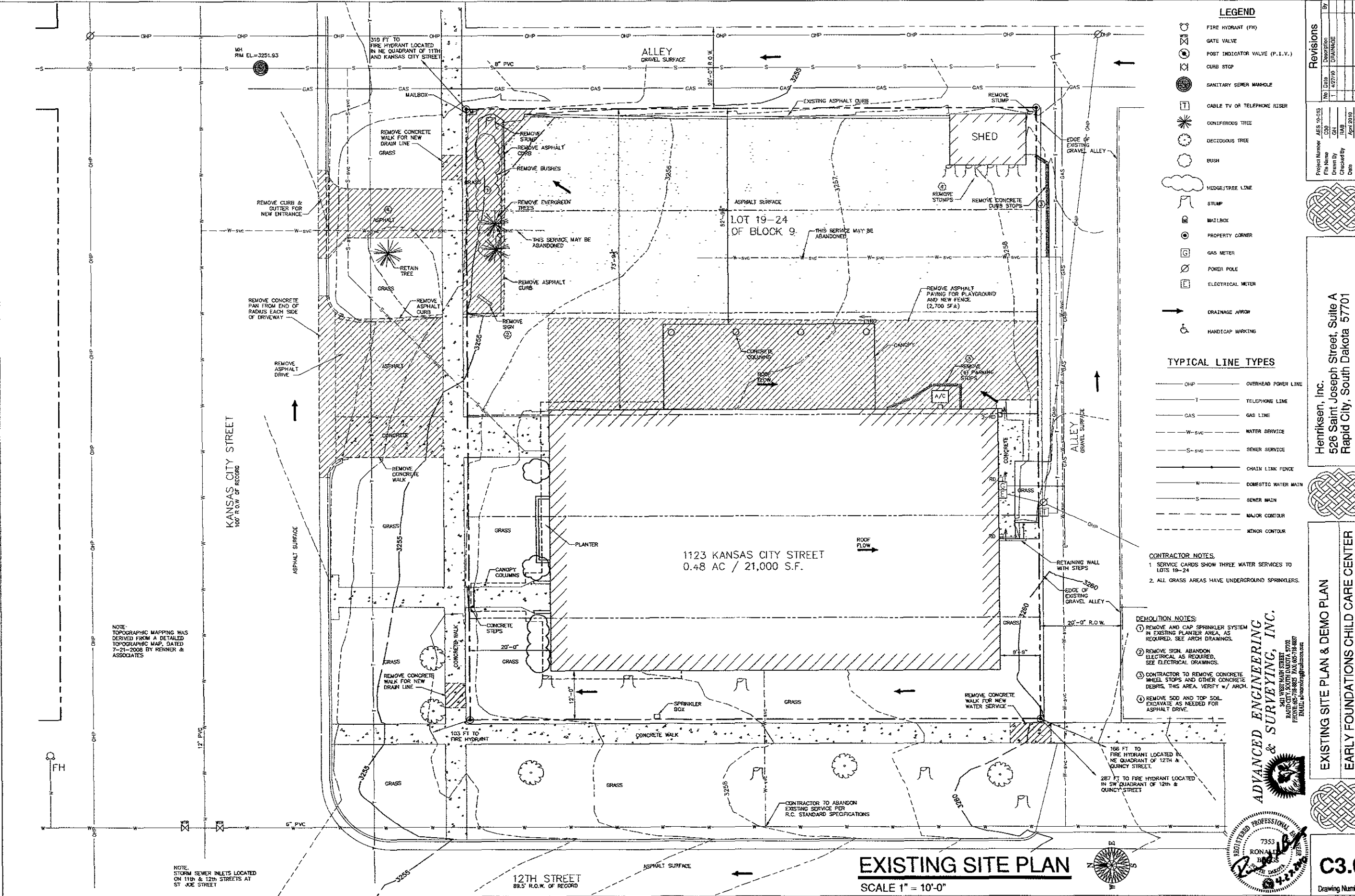
Henriksen, Inc.
 526 Saint Joseph Street, Suite A
 Rapid City, South Dakota 57701
 Phone (605) 394-0189 Fax (605) 341-9288

ADVANCED ENGINEERING & SURVEYING, INC.
 3421 WEST MAIN STREET
 RAPID CITY, SOUTH DAKOTA 57702
 PHONE: 605-718-8825 FAX: 605-718-8827
 EMAIL: rhab@adveng.com

Erosion Control Plan
 EARLY FOUNDATIONS CHILD CARE CENTER
 1123 Kansas City Blvd Rapid City, SD



C2.0
 Drawing Number



LEGEND

- FIRE HYDRANT (FH)
- GATE VALVE
- POST INDICATOR VALVE (P.I.V.)
- CURB STOP
- SANITARY SEWER MANHOLE
- CABLE TV OR TELEPHONE RISER
- CONIFEROUS TREE
- DECIDUOUS TREE
- BUSH
- HEDGE/TREE LINE
- STUMP
- MAILBOX
- PROPERTY CORNER
- GAS METER
- POWER POLE
- ELECTRICAL METER
- DRAINAGE ARROYO
- HANDICAP MARKING

TYPICAL LINE TYPES

- OHP OVERHEAD POWER LINE
- TELEPHONE LINE
- GAS LINE
- W-SVC WATER SERVICE
- S-SVC SEWER SERVICE
- CHAIN LINK FENCE
- DOMESTIC WATER MAIN
- SEWER MAIN
- MAJOR CONTOUR
- MINOR CONTOUR

- CONTRACTOR NOTES:**
- SERVICE CARDS SHOW THREE WATER SERVICES TO LOTS 19-24
 - ALL GRASS AREAS HAVE UNDERGROUND SPRINKLERS.

- DEMOLITION NOTES:**
- REMOVE AND CAP SPRINKLER SYSTEM IN EXISTING PLANTER AREA, AS REQUIRED. SEE ARCH DRAWINGS.
 - REMOVE SIGN, ABANDON ELECTRICAL AS REQUIRED. SEE ELECTRICAL DRAWINGS.
 - CONTRACTOR TO REMOVE CONCRETE WHEEL STOPS AND OTHER CONCRETE DEBRIS. THIS AREA, VERIFY W/ ARCH.
 - REMOVE SOD AND TOP SOIL EXCAVATE AS NEEDED FOR ASPHALT DRIVE.

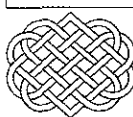
Revisions

No	Date	Description
1	4/27/10	DRAINAGE

Project Number: AES 10-013
 File Name: C30
 Drawn By: GH
 Checked By: GH
 Date: April 2010
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 526 Saint Joseph Street, Suite A
 Rapid City, South Dakota 57701
 Phone (605) 394-0188 Fax (605) 341-9288



EXISTING SITE PLAN & DEMO PLAN
EARLY FOUNDATIONS CHILD CARE CENTER
 1123 Kansas City Blvd Rapid City, SD

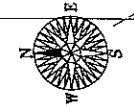


ADVANCED ENGINEERING & SURVEYING, INC.
 841 WEST MAIN STREET
 RAPID CITY, SOUTH DAKOTA 57702
 PHONE 605-718-9825 FAX 605-718-8887
 EMAIL: info@advancesurvey.com



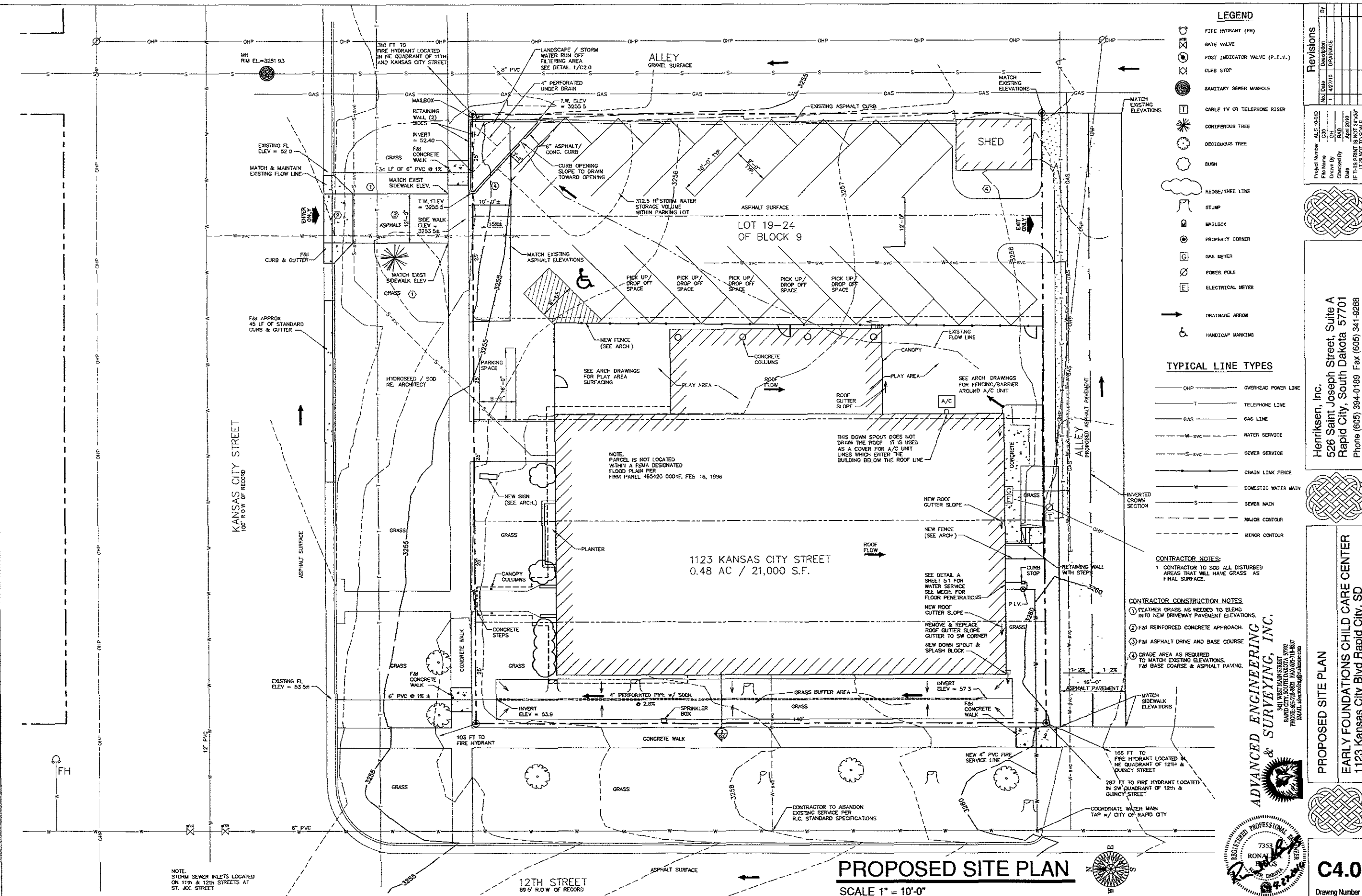
EXISTING SITE PLAN

SCALE 1" = 10'-0"



NOTE: TOPOGRAPHIC MAPPING WAS DERIVED FROM A DETAILED TOPOGRAPHIC MAP, DATED 7-21-2008 BY RENNER & ASSOCIATES

NOTE: STORM SEWER INLETS LOCATED ON 11th & 12th STREETS AT ST JOE STREET



LEGEND

- FIRE HYDRANT (FH)
- GATE VALVE
- POST INDICATOR VALVE (P.I.V.)
- CURB STOP
- SANITARY SEWER MANHOLE
- CABLE TV OR TELEPHONE RISER
- CONIFEROUS TREE
- DECIDUOUS TREE
- BUSH
- HEDGE/TREE LINE
- STUMP
- MAILBOX
- PROPERTY CORNER
- GAS METER
- POWER POLE
- ELECTRICAL METER
- DRAINAGE ARROW
- HANDICAP MARKING

TYPICAL LINE TYPES

- OVERHEAD POWER LINE
- TELEPHONE LINE
- GAS LINE
- WATER SERVICE
- SEWER SERVICE
- CHAIN LINK FENCE
- DOMESTIC WATER MAIN
- SEWER MAIN
- MAJOR CONTOUR
- MINOR CONTOUR

CONTRACTOR NOTES:

- 1 CONTRACTOR TO SOD ALL DISTURBED AREAS THAT WILL HAVE GRASS AS FINAL SURFACE.
- 2 FEATHER GRASS AS NEEDED TO BLEND INTO NEW DRIVEWAY PAVEMENT ELEVATIONS.
- 3 F&I REINFORCED CONCRETE APPROACH.
- 4 F&I ASPHALT DRIVE AND BASE COURSE.
- 5 GRADE AREA AS REQUIRED TO MATCH EXISTING ELEVATIONS. F&I BASE COURSE & ASPHALT PAVING.

CONTRACTOR CONSTRUCTION NOTES

- 1 FEATHER GRASS AS NEEDED TO BLEND INTO NEW DRIVEWAY PAVEMENT ELEVATIONS.
- 2 F&I REINFORCED CONCRETE APPROACH.
- 3 F&I ASPHALT DRIVE AND BASE COURSE.
- 4 GRADE AREA AS REQUIRED TO MATCH EXISTING ELEVATIONS. F&I BASE COURSE & ASPHALT PAVING.

No.	Date	Description	BY
1	4/27/10	ISSUANCE	

Project Number: AES-10-013
 File Name: C30
 Drawn By: GH
 Checked By: RAB
 Date: April 2010
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 Rapid City, South Dakota 57701
 Phone (605) 394-0189 Fax (605) 341-9288



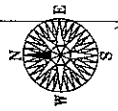
PROPOSED SITE PLAN
EARLY FOUNDATIONS CHILD CARE CENTER
 1123 Kansas City Blvd Rapid City, SD



C4.0
 Drawing Number

NOTE: STORM SEWER INLETS LOCATED ON 17TH & 12TH STREETS AT ST. JOE STREET

PROPOSED SITE PLAN
 SCALE 1" = 10'-0"



GENERAL NOTES:

SPECIFICATIONS:
CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2007 EDITION, REQUIRED PRELIMINARIES, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS AS PER PLANS AND PLAN NOTES EXCEPT AS NOTED: ALL BACK FILL SHALL BE FREE FROM CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATERIAL, BOULDERS, ROCKS OR STONES, OR OTHER MATERIAL WHICH THE ENGINEER DETERMINES TO BE UNSUITABLE. STONES LARGER THAN THREE INCHES (3") IN DIAMETER SHALL NOT BE PLACED WITHIN TWO FEET (2') OF THE TOP OF THE SANITARY WATER PIPE.

PERMITS:
IF WATER FROM TEMPORARY DEWATERING WILL BE DISCHARGED TO WATERS OF THE STATE DURING CONSTRUCTION, CONTRACTOR MUST FIRST GET COVERAGE UNDER THE SDDENR'S GENERAL PERMIT FOR TEMPORARY DEWATERING. FOR MORE INFORMATION CONTACT SDDENR AT (605) 773-3351. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COVERAGE UNDER THE SDDENR'S GENERAL STORM WATER PERMIT AS REQUIRED. CONTACT SDDENR AT 1-800-737-8686 FOR MORE INFORMATION. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS

GENERAL NOTES:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD INSPECT THE PROJECT LIMITS PRIOR TO BIDDING AND DETERMINE SIZE, NUMBER, AND LIMITS OF VISIBLE OBSTRUCTIONS WHICH ARE TO BE REMOVED, RELOCATED OR SALVAGED INCLUDING TREES, UTILITIES, ETC. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AFTER TRENCHING AND BACK FILL. DISTURBED GRASS AREAS SHALL RECEIVE 6" TOPSOIL AND SOD. CLASS C FLY ASH SHALL NOT BE PERMITTED IN CONCRETE PLACED IN DIRECT CONTACT WITH SOIL.

CONSTRUCTION LIMITS:
IN GENERAL, THE CONSTRUCTION LIMITS FOR THE PROJECT SHALL BE DEFINED AS FOLLOWS: PROPERTY LINES, RIGHT-OF-WAY (ROW) LINES AND EXISTING UTILITY EASEMENT LINES SHALL BE THE CONSTRUCTION LIMITS UNLESS INDICATED OTHERWISE ON THE DRAWINGS. CONTRACTOR SHALL CONFINE CONSTRUCTION WORK WITHIN THE CONSTRUCTION LIMITS DEFINED. CONSTRUCTION ACTIVITIES SHALL BE RESTRICTED TO THE CONSTRUCTION LIMITS UNLESS PRIOR APPROVAL IS RECEIVED FROM THE ENGINEER. USE OF CITY LANDS FOR STAGING AREAS, MATERIAL STORAGE, SEDIMENTATION PONDS, DEWATERING AND/OR TOPSOIL STOCKPILING SHALL ONLY BE WITH PRIOR WRITTEN APPROVAL FROM THE ENGINEER. ANY DAMAGES AND RESTORATION OUTSIDE THE CONSTRUCTION LIMITS SHALL BE AT THE CONTRACTOR'S EXPENSE.

GRADING AND TRENCHING OPERATIONS:
THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL EXCAVATION, TRENCHING AND SHORING, AND THE LIKE SHALL BE PERFORMED IN A MANNER THAT MEETS WITH THE OSHA DEPARTMENT OF LABOR, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION.

EROSION CONTROL:
EROSION CONTROL SHALL BE AS CALLED FOR ON THE PLANS. SPECIFIC SITE CONDITIONS MAY REQUIRE REVISION TO THE SPECIFIED CONTROL MEASURES AS DEEMED NECESSARY BY THE ENGINEER. ALL CONTROL MEASURES SHALL UTILIZE BEST MANAGEMENT PRACTICES. EROSION CONTROL WILL GENERALLY CONSIST OF SILT FENCE AND/OR WATTLES. MAINTENANCE: AFTER SIGNIFICANT RUNOFF EVENTS, THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL STRUCTURES FOR SILT BUILD UP. THE CONTRACTOR SHALL REMOVE ALL SILT BUILD UP THAT INTERFERES WITH THE PERFORMANCE OF THE EROSION CONTROL STRUCTURES. STORM DRAIN INLETS IN THE IMMEDIATE CONSTRUCTION AREA SHOULD BE PROTECTED FROM SEDIMENT RUNOFF.

UTILITIES:
EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATIONS & DEPTH OF ALL EXISTING UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT SD ONE CALL AT 1-800-781-7474 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION OR TRENCHING FOR UTILITY LOCATES. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF ALL UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. ANY UNDERGROUND UTILITIES THAT ARE ENCOUNTERED AND SEVERED OR OTHERWISE DAMAGED SHALL BE REPAIRED IMMEDIATELY. ANY DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE SATISFACTORILY REPAIRED AT THEIR EXPENSE. THE CONTRACTOR SHALL PROTECT ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL SUPPORT OR TUNNEL UNDER EXISTING UTILITIES, WHEN REQUIRED, IN A MANNER THAT THE EXISTING UTILITIES ARE NOT DAMAGED OR DISTURBED.

WASTE DISPOSAL SITE:
THE CONTRACTOR SHALL FURNISH A SITE SATISFACTORY TO THE ENGINEER FOR THE DISPOSAL OF BROKEN CONCRETE, EXCESS DIRT, ROCK, TREES AND OTHER CONSTRUCTION/DEMOLITION DEBRIS GENERATED BY THIS PROJECT. THE WASTE DISPOSAL SITE MAY NOT BE A STREAM, STREAM BANK, LAKE, LAKESHORE OR WETLAND, UNLESS THE CONTRACTOR HAS OBTAINED A "404 PERMIT" FROM THE U.S. ARMY CORPS OF ENGINEERS. DISPOSAL WITHIN THE RIGHT OF WAY SHALL NOT BE ALLOWED.

SAW CUTTING & REMOVAL OF PAVEMENT:
PAVEMENT AREAS TO BE REMOVED ARE SHOWN ON THE DRAWINGS. THESE AREAS REPRESENT THE FINAL PAVEMENT SAW CUT AND REMOVAL LIMITS. SAW CUTTING OF THE PAVEMENT AREAS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS ITEMS TO BE SAW CUT WILL INCLUDE ASPHALT PAVEMENT, SIDEWALKS, CURB AND GUTTERS, AND MISCELLANEOUS CONCRETE AND ASPHALT ITEMS AS SHOWN ON THE PLANS

RATES OF MATERIALS:
THE RATES OF MATERIALS SHOWN ARE PROVIDED AS INFORMATION ONLY TO THE CONTRACTOR. THE EXACT RATE SHALL BE SET BY THE ENGINEER ON CONSTRUCTION BASED ON CONDITIONS AT THE SITE AND ON CHARACTERISTICS OF MATERIALS FURNISHED BY THE CONTRACTOR

THE ESTIMATE OF QUANTITIES IS BASE ON THE FOLLOWING RATES OF MATERIALS:

ASPHALT CONCRETE COMPOSITE:	SODOT CLASS G ESTIMATED @ 150 P.C.F.
ASPHALT TACK:	0.05 GALLONS/SQUARE YARD RESIDUAL ASPHALT @ 8.5 POUNDS/GALLON
AGGREGATE BASE COURSE:	1.89 TONS/CUBIC YARD
GRAVEL SURFACING:	150 P.C.F.
TYPE I GRANULAR BACK FILL:	1.89 TONS/CUBIC YARD
TYPE II FOUNDATION MATERIAL:	2 TONS/CUBIC YARD

REMOVALS
THE CONTRACTOR SHALL REMOVE & DISPOSE OF ALL REMOVAL ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN ACCEPTABLE DISPOSAL SITE.

CONCRETE SIDEWALK
CONCRETE SIDEWALK TO BE REMOVED AND REPLACED IS SHOWN ON THE DRAWINGS. REMOVAL AND REPLACEMENT BEYOND THE LIMITS SHOWN SHALL BE AT THE CONTRACTOR'S EXPENSE. HOWEVER, DURING CONSTRUCTION, THE ENGINEER MAY DIRECT A LESSER OR GREATER REMOVAL LIMIT DUE TO THE PROXIMITY OF CONCRETE JOINTS OR OTHER CONDITIONS. REMOVAL AND REPLACEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. NEW CONCRETE SIDEWALK SHALL BE PLACED ON 2" GRAVEL CUSHION OR BASE COURSE.

INCIDENTAL WORK
THE ITEMS AND WORK LISTED BELOW ARE TO BE INCLUDED IN THE INCIDENTAL WORK ITEM, BUT THE LIST IS NOT ALL INCLUSIVE AND DOES NOT LIMIT THE SCOPE TO ONLY THOSE ITEMS. THE CONTRACTOR SHALL INCLUDE THOSE ITEMS THAT MAY BE SPECIFIC TO HIS CONSTRUCTION PROCEDURES.

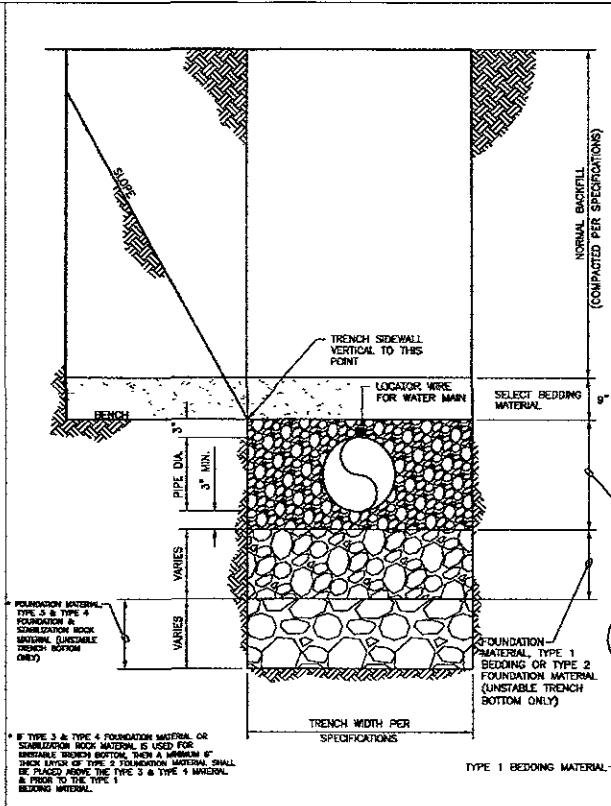
- MAINTAIN TEMPORARY SURFACING
- DUST CONTROL
- PROTECT OTHER UTILITIES FROM MOVEMENT DURING EXCAVATION
- OBTAIN ALL NECESSARY PERMITS

TRAFFIC CONTROL
THE CANTILEVER SHALL PROVIDE TRAFFIC CONTROL AS REQUIRED THROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR'S SIGNING AND TRAFFIC CONTROL SHALL CONFORM TO SECTIONS 90 & 91 OF THE STANDARD SPECIFICATIONS AND TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

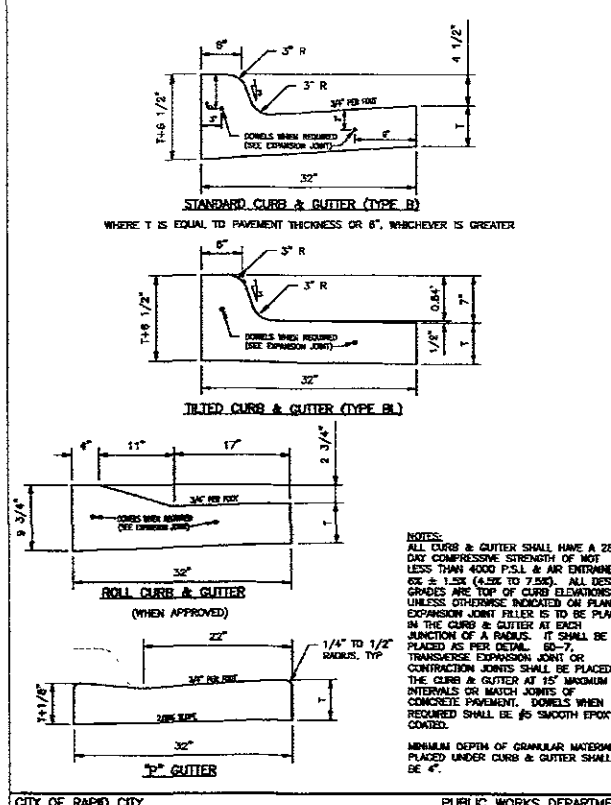
EXISTING SIGNS
ALL TRAFFIC CONTROL SIGNS REMOVED OR DAMAGED BY THE CONTRACTOR SHALL BE RESET OR REPLACED, AND SHALL BE INCIDENTAL.

SODDING
ALL EXISTING GRASSED AREAS SHALL BE RESTORED WITH SOD. SODDING SHALL CONFORM TO SECTION 73 OF THE STANDARD SPECIFICATIONS.

COMPACTION REQUIREMENTS
BACK FILL/UTILITY LINES MOISTURE CONDITIONED TO WITHIN ±3% OF OPTIMUM MOISTURE CONTENT AND SHALL BE COMPACTED TO AT LEAST 92% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD, ASTM D1557. BASE COURSE: MOISTURE CONDITIONED TO OR NEAR OPTIMUM MOISTURE CONTENT AND SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD, ASTM D1557. ASPHALT CONCRETE COMPOSITE SHALL BE COMPACTED BY THE SPECIFIED DENSITY METHOD. COMPACTION SHALL BE TO BE USED FOR ACCEPTANCE TESTING.



CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
TRENCH DETAIL FOR WATER & SEWER MAIN DATE: 5-1-07 SEC. SHT. 11-3



CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
CURB & GUTTER DATE: 5-1-07 SEC. SHT. 60-2

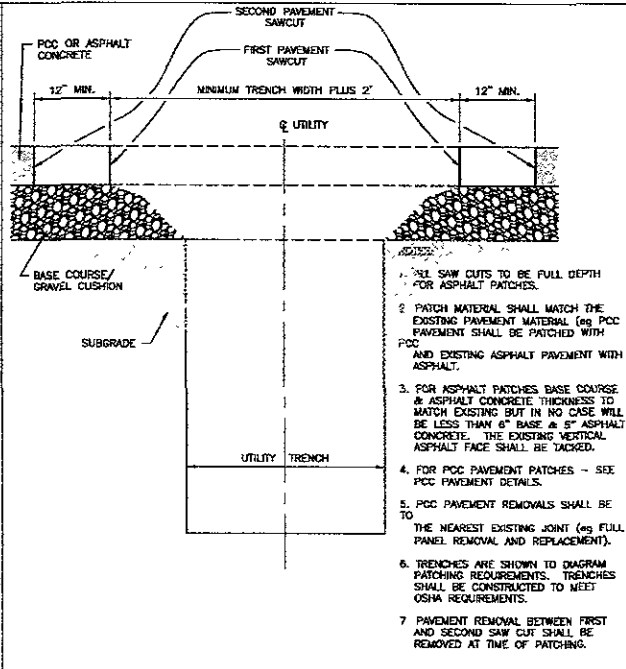
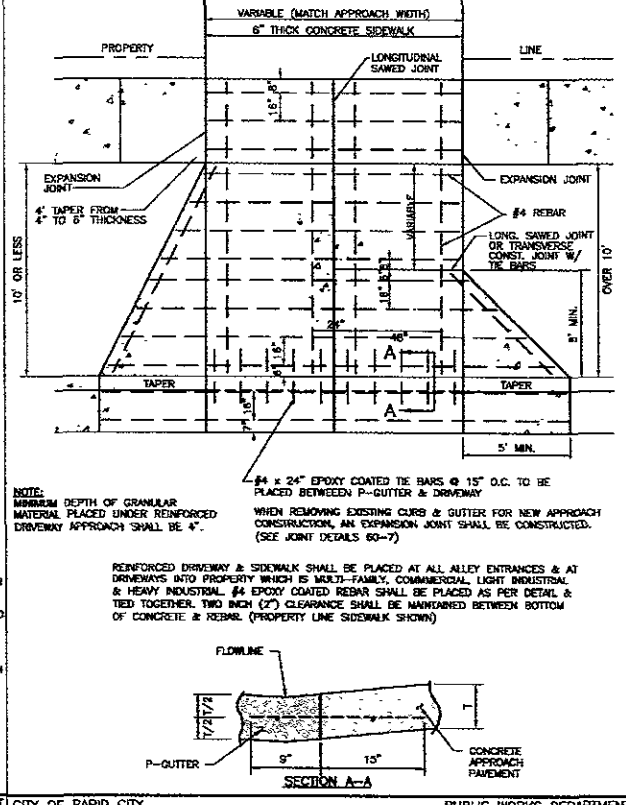


TABLE 11-1 MINIMUM TRENCH WIDTH TABLE

PIPE DIAMETER	MINIMUM WIDTH	MINIMUM BETWEEN FIRST SAWCUTS	MINIMUM BETWEEN SECOND SAWCUTS	POC PAVEMENT
<8 in	24"	4'-6"	6'-6"	SECOND SAWCUTS SHALL BE AT EXISTING JOINTS SEE NOTE #5
8in - 12in	30"	4'-6"	6'-6"	
14in - 18in	36"	5'-8"	7'-8"	
20in - 24in	42"	5'-8"	7'-8"	
24in - 36in	48"	5'-8"	7'-8"	
>36in	1.25 (PIPE OD) PLUS 12in PER PLANS	MIN. WIDTH PLUS 2'	MIN. WIDTH PLUS 4'	

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
UTILITY TRENCH PATCH DETAIL DATE: 5-1-07 SEC. SHT. 41-1



CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
REINFORCED DRIVEWAY APPROACH DATE: 5-1-07 SEC. SHT. 60-4

Revisions

No	Date	Description	By
1	4/27/10	DRAINAGE	

Project Number: AES 10-013
File Name: C50
Drawn By: GSH
Checked By: BJB
Date: April 2010
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Rapid City, South Dakota 57701
Phone (605) 394-0189 Fax (605) 341-9288



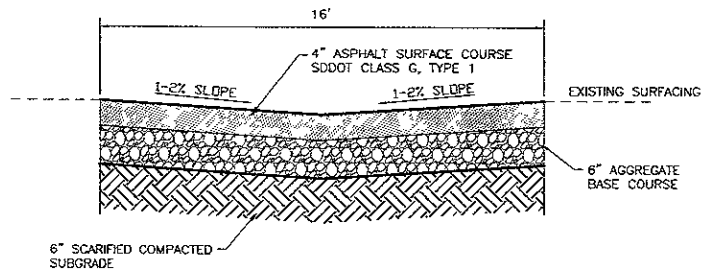
NOTES AND DETAILS
EARLY FOUNDATIONS CHILD CARE CENTER
1123 Kansas City Blvd Rapid City, SD



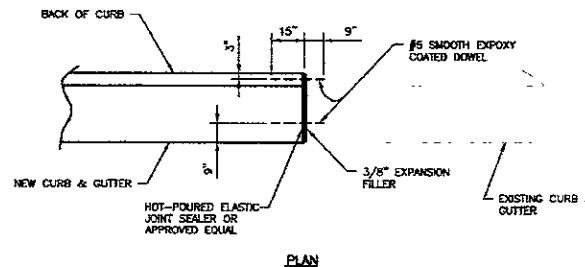
ADVANCED ENGINEERING & SURVEYING, INC.
301 WEST MAIN STREET
RAPID CITY, SOUTH DAKOTA 57701
PHONE (605) 342-2001 FAX (605) 378-8867
EMAIL: aeh@advancedeng.com



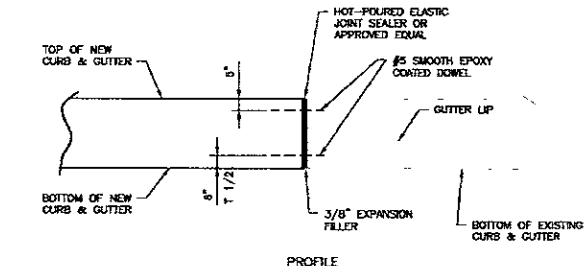
C5.0
Drawing Number



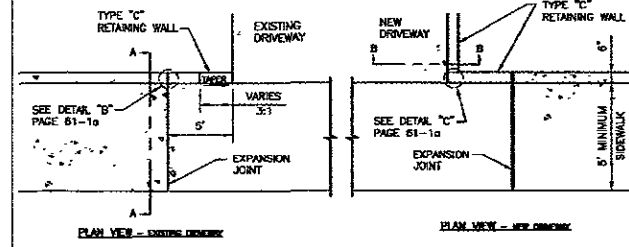
ASPHALT PAVEMENT DETAIL (ALLEY)
NTS



PLAN

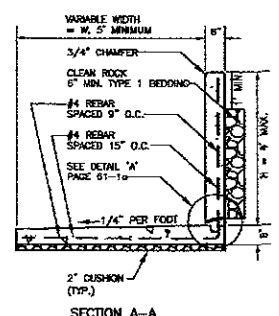


PROFILE

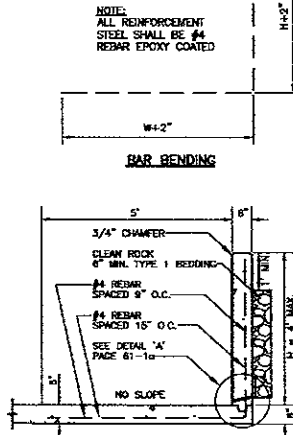


PLAN VIEW - EXISTING DRIVEWAY

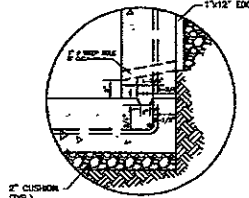
PLAN VIEW - NEW DRIVEWAY



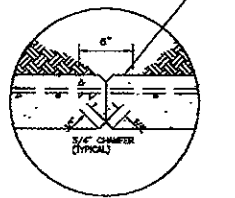
SECTION A-A



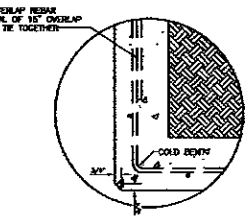
SECTION B-B



DETAIL 'A'



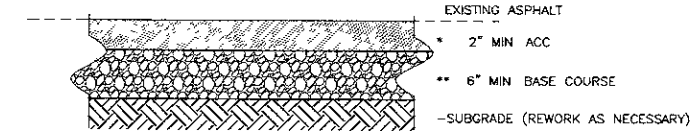
DETAIL 'B'



DETAIL 'C'

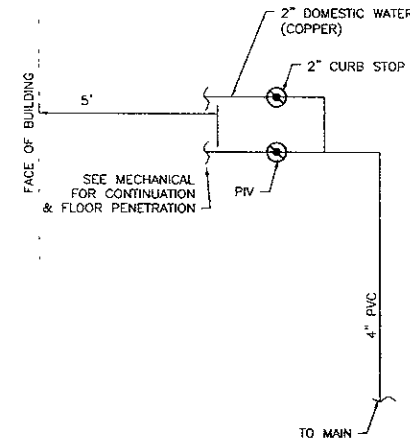
GENERAL NOTES:

1. CONCRETE FOR RETAINING WALLS SHALL BE POURED ON UNDISTURBED SOIL. ANY NECESSARY BACK FILLING SHALL BE WITH A MECHANICAL TAMPER, OR AS APPROVED BY THE ENGINEER.
2. THE CONTRACTOR MUST USE KEY JOINT WHEN THE SLAB AND THE WALL ARE POURED SEPARATELY (SEE DETAIL 'A').
3. A 3/4\"/>



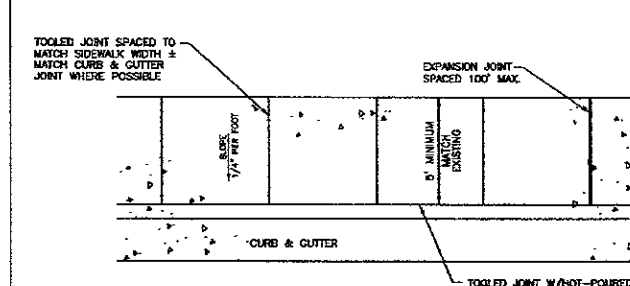
* MATCH EXISTING ASPHALT
** MATCH EXISTING BASE COURSE

PARKING LOT SECTION
NTS

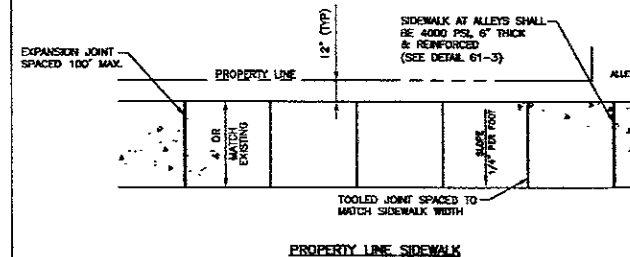


DETAIL A
NTS

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
CURB & GUTTER EXPANSION JOINT
DATE: 5-1-07
SEC. 60-7



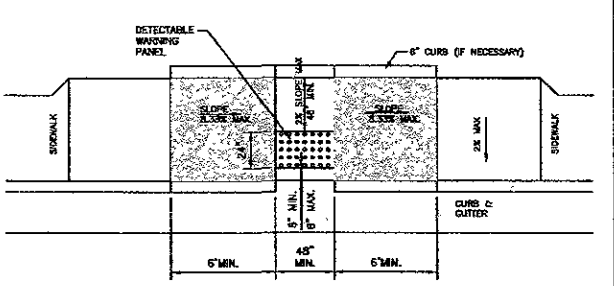
ALL SIDEWALKS SHALL BE A MINIMUM OF 4\"/>



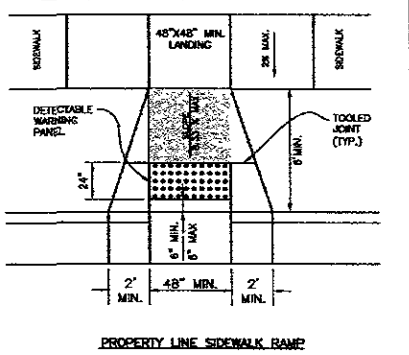
PROPERTY LINE SIDEWALK

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
SIDEWALKS
DATE: 5-1-07
SEC. 61-2

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
TYPE "C" RETAINING WALL
DATE: 5-1-07
SEC. 61-1



GENERAL NOTES:
SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY A COARSE BROOMING PERPENDICULAR TO THE SLOPE OF THE RAMP.
DETECTABLE WARNING PANEL SHALL BE PER SPECIFICATIONS.
CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, FREE OF GAPS AND SHORT GRADE CHANGES.
THE NORMAL GUTTER LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP OPENING.
CROSS SLOPES SHALL NOT EXCEED 2%.
WHEN REMOVING EXISTING CURB AND GUTTER FOR NEW RAMP CONSTRUCTION AN EXPANSION JOINT SHALL BE CONSTRUCTED PER DETAIL 60-7.
ALL RAMP ARE REQUIRED TO HAVE A MAXIMUM 48 INCH BY 48 INCH LANDING AREA WITH NO MORE THAN A 2% SLOPE IN ANY DIRECTION.
ALL RAMP SHALL HAVE A MAXIMUM RUNNING SLOPE OF 8.33% (1 INCH PER FT.).
OBSTRUCTIONS SUCH AS SIGNAL POLES, LIGHT POLES, TRAFFIC CONTROLLER CABINETS, ETC. CAN NOT BE LOCATED IN THE LANDING AREA OR THE RAMP SLOPE.



PROPERTY LINE SIDEWALK RAMP

ENSURE THE SURFACE OF THE DETECTABLE WARNING PANEL IS CLEAN AND FREE OF RESIDUE.
JOINTS SHALL BE TOOLED INTO THE CONCRETE ADJACENT TO THE DETECTABLE WARNING PANELS TO ALLEVIATE POSSIBLE CORNER CRACKING.

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
HANDICAP ACCESS RAMPS
DATE: 5-1-07
SEC. 61-5

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
TYPE "C" RETAINING WALLS
DATE: 5-1-07
SEC. 61-1a

Project Number	AES 10-015
File Name	CSB
Drawn By	GBR
Checked By	RMB
Date	JUNE 2010
IF THIS PRINT IS NOT TO SCALE	IT IS NOT TO SCALE



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7353
RONALD A. BRIGGS
STATE OF SOUTH DAKOTA
0422-2000



C5.1
Drawing Number