



GENERAL NOTES:

THE FINISH GRADING SHALL BE IN ACCORDANCE WITH CURRENT REGULATIONS AND PROCEDURES FOR SUBDIVISION CONSTRUCTION IN RAPID CITY, SOUTH DAKOTA.

SITE GRADING IS THE RESPONSIBILITY OF THE GRADING CONTRACTOR. THE STREET AND UTILITIES CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH THE GRADING CONTRACTOR. THE STREET AND UTILITIES CONTRACTOR SHALL PROVIDE FINISH GRADING WITHIN THE LIMITS OF CONSTRUCTION FOR THE WORK SHOWN WITH THIS PLAN SET.

ANY REFERENCE TO "THE CONTRACTOR" HEREIN IS REFERRING TO THE PHASE 2 STREET AND UTILITIES CONTRACTOR.

THE CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

ALL EXISTING UTILITIES MAY NOT BE SHOWN OR THE LOCATIONS MAY VARY FROM THAT SHOWN. THE CONTRACTOR IS RESPONSIBLE TO HAVE ALL UTILITIES LOCATED PRIOR TO BEGINNING WORK.

PROVIDE TRAFFIC CONTROL DURING CONSTRUCTION IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALL WORK SHALL COMPLY WITH THE CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2007 EDITION).

PRIOR TO BEGINNING CONSTRUCTION, THE STREET AND UTILITIES CONTRACTOR SHALL OBTAIN AND COMPLY WITH:

- A VIET CONTROL PERMIT
- A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER RUNOFF
- CITY OF RAPID CITY EROSION AND SEDIMENT CONTROL PERMIT

THE CONTRACTOR SHALL FINISH GRADE THE SITE TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR STATED BY THE ENGINEER. EROSION CONTROL/TRENCHING SHALL INCLUDE ALL MATERIALS ENCOUNTERED OF WHATEVER NATURE.

ALL AREAS, WITHIN THE LIMITS OF CONSTRUCTION, EXCEPT THOSE AREAS TO BE PAVED, SHALL BE FERTILIZED, SEEDED AND MULCHED FOLLOWING COMPLETION OF THE FINISH GRADING OPERATIONS. THE TOPSOIL PLACEMENT, FERTILIZING, SEEDING, AND MULCHING SHALL BE DONE IN CONFORMANCE WITH THE CITY OF RAPID CITY, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2007 EDITION).

SEED MIX FOR ALL AREAS SHALL BE IN ACCORDANCE WITH CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2007 EDITION).

EXISTING UTILITIES

LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO EXCAVATION. RECORDS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL SUPPORT OR TUNNEL UNDER EXISTING UTILITIES IN A MANNER THAT THE EXISTING UTILITIES ARE NOT DAMAGED OR DISTURBED UNLESS OTHERWISE NOTED. ANY DISTURBANCE OR REPLACEMENT OF EXISTING UTILITIES SHALL BE INCIDENTAL TO THE PROJECT. IF REQUIRED, THE CONTRACTOR SHALL COORDINATE RELOCATION OF THE UTILITY WITH THE UTILITY OWNER. ALL UTILITIES ARE TO BE ADJUSTED AND/OR RELOCATED BY THE RESPECTIVE UTILITY COMPANIES UNLESS OTHERWISE INDICATED IN THESE DRAWINGS.

KNOWN UTILITIES TO BE RELOCATED INCLUDE BLACK HILLS POWER AND LIGHT OVERHEAD ELECTRIC, GOLDEN WEST, AND MONTANA DAKOTA UTILITIES. THE STREET AND UTILITIES CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ACTIVITIES WITH THE RESPECTIVE UTILITY COMPANY.

EROSION CONTROL

TEMPORARY EROSION CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL CONSIST OF STRAW BALES, SILT FENCE, OR OTHER MEANS TO CONTROL EROSION AS NEEDED (OR AS SHOWN ON THE PLANS). EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS FOR PUBLIC WORKS CONSTRUCTION.

MAINTENANCE SHALL BE PERFORMED ON ALL EROSION CONTROL PRACTICES AS SPECIFIED IN THE APPROVED STORM WATER POLLUTION PREVENTION PLAN.

CONSTRUCTION LIMITS

IN GENERAL, THE CONSTRUCTION LIMITS FOR THE PROJECT SHALL BE DEFINED AS SHOWN ON THE PLAN SHEETS AS FOLLOWS:

PROPERTY LINES, RIGHT OF WAY (ROW) LINES, GRADING LIMITS, AND EXISTING UTILITY EASEMENT LINES SHALL BE THE CONSTRUCTION LIMITS UNLESS INDICATED OTHERWISE ON THE DRAWINGS.

THE 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 OR STATE LAND FOR STAGING AREAS, MATERIAL STORAGE, SEDIMENTATION PONDS, BROWSLING AND/OR TOPSOIL STOCKPILING SHALL ONLY BE WITH PRIOR WRITTEN APPROVAL. ANY DAMAGES AND RESTORATION OUTSIDE THE CONSTRUCTION LIMITS SHALL BE AT THE CONTRACTOR'S EXPENSE.

TABLE OF FIRE HYDRANTS

STREET	STATION	OFFSET	FINISH GRADE	APPROX. INV. LEAD
FIELDSTONE DRIVE	9+22.10	30.50 R	3140.57	3151.00
FIELDSTONE DRIVE	13+85.94	30.50 R	3159.14	3151.00
FIELDSTONE DRIVE	19+01.10	30.50 L	3142.54	3136.87
SAINTE BURY COURT	0+00.00	31.00 L	3185.54	3179.52
SAINTE BURY COURT	3+94.06	29.56 R	3183.80	3183.00
RUST RIDGE COURT	0+12.52	40.54 L	3177.33	3171.25
VINCLIFF DRIVE	1+50.28	18.15 R	3172.03	3168.48
VINCLIFF DRIVE	17+96.30	50.29 R	3143.02	3136.92

UTILITY CONSTRUCTION NOTES

ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RAPID CITY UTILITY CONSTRUCTION CODE AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2007 EDITION.

THE DESIGNED PIPE JOINT DEFLECTIONS ARE ALL WITHIN THE PIPE MANUFACTURER'S RECOMMENDATION. JOINT DEFLECTIONS EXCEEDING THE MANUFACTURER'S ALLOWABLE LIMIT WILL BE ACCOMPLISHED USING HIGH DEFLECTION COUPLINGS AND MUST BE DESIGNED BY THE PROJECT ENGINEER.

FIRE HYDRANT ASSEMBLIES SHALL INCLUDE THE FIRE HYDRANT AND EITHER 6\"/>

SEWER SERVICES SHALL BE INSTALLED AT MINIMUM GRADE UNLESS OTHERWISE APPROVED BY THE OWNER. MARK END OF SEWER SERVICE LINES WITH A POST INDICATING DEPTH.

CONFIRM VERTICAL SEPARATION AT ALL LOCATIONS WHERE WATER MAINS CROSS SANITARY OR STORM SEWER MAINS. PROVIDE ENCLOSURE IN ACCORDANCE WITH CITY OF RAPID CITY UTILITY CONSTRUCTION CODE IF WATER MAIN IS LESS THAN 18\"/>

MANHOLES

MANHOLE DETAILS ARE SHOWN ON THE DRAWINGS. RIM ELEVATIONS OF MANHOLES AS SHOWN ON THE PLANS ARE APPROPRIATE. THE CONTRACTOR SHALL FIELD VERIFY THE REQUIRED RIM ELEVATIONS TO MATCH THE PROPOSED PAVEMENT ELEVATION AND GRADE. MANHOLE BARREL SECTIONS SHALL BE 6\"/>

RESTRAINTS AND DIMENSIONS
 ALL FITTINGS, VALVES, AND PIPE JOINTS WITHIN THE SPECIFIED RESTRAINED LENGTHS LISTED BELOW SHALL BE RESTRAINED.

INSTALLATION DIMENSIONS USED FOR CALCULATIONS

- SOIL TYPE - CL, SAND, FILL
- TRENCH TYPE - 1
- TEST PRESSURE - 150 PSI
- SAFETY FACTOR - 1.5
- DEPTH BURY - 8.0 FT
- TEST INSTRUMENTS MUST BE CALIBRATED WITHIN TOLERANCE LENGTHS OF 10 IN EACH DIRECTION ALONG THE RIM OF TEE

NOTE:
 CALCULATIONS FOR RESTRAINED LENGTHS WERE DERIVED FROM ENR 1900 IN-CH SOFTWARE. THESE RESTRAINED LENGTHS CAN NOT BE APPLIED THROUGH WOODS SHALL BE UTILIZED.

8" PVC		6" PVC	
FITTINGS	RESTRAINED LENGTHS	FITTINGS	RESTRAINED LENGTHS
BENNS		BENNS	
11 1/2"	2 FT	11 1/2"	11 LIN
122"	3 FT	122"	22 LIN
145"	6 FT	145"	45 LIN
190"	13.7 FT	190"	90 LIN
TEES		TEES	
18" x 6"	1 FT	18" x 6"	6X6 LIN
18" x 6"	1 FT	18" x 6"	6X6 LIN
VALVE/CAP	43 FT	VALVE/CAP	33 FT
REDUCERS/INCREASERS			
18" x 6"			

UTILITY CONTACTS

BLACK HILLS POWER
 MONTANA DAKOTA UTILITIES
 GOLDEN WEST
 XINLOSITY
 WILDCOINCENT COMMUNICATIONS
 GOLDEN WEST
 ROCKY MOUNTAIN PIPELINE
 RAPID VALLEY SANITARY DISTRICT
 WEST RIVER ELECTRIC ASSOCIATION, INC

ALAN VANBOCHVE 391 2142
 KEITH NELSON 342 0160
 TIMOTHY ERICKSON 504 4720
 TERRY HOFFER 791 7123
 DIK DEUTSCHER 719 2632
 MARK JORNING 343 9764
 RUSBY SCHMIDT 581 2964
 MATT SCHMIDT 293 1500

EXISTING

- ELECTRICAL RISER
- TELEPHONE RISER
- CONIFEROUS TREE
- DECIDUOUS TREE
- BUSH
- HEDGE/TREE LINE
- FIRE HYDRANT
- GATE VALVE
- CHARLARK FENCE
- SANDBAR WIRE FENCE
- WOOD FENCE
- BENCHMARK
- DOT ROW CAP
- SANITARY SEWER MANHOLE
- STORM SEWER LINE

LEGEND

- PROPOSED BLOW PREVENTER
- PROPOSED HIGH DEFLECTION COUPLER
- PROPOSED COUPLER OR VERTICAL BOND
- PROPOSED BUTTWOY VALVE
- PROPOSED CURBSTOP
- PROPOSED FIRE HYDRANT
- PROPOSED GATE VALVE
- PROPOSED CAP
- PROPOSED REDUCER OR INCREASER
- PROPOSED THROUGHBLOCK
- PROPOSED TEE
- PROPOSED CROSS
- PROPOSED 11 1/2" BOND
- PROPOSED 22 1/2" BOND
- PROPOSED 4" BOND
- PROPOSED CLEANOUT
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED TYPE E SILET (INSIDE DIMENSIONS)
- PROPOSED TYPE E SILET (INSIDE DIMENSIONS)
- PROPOSED CURB & GUTTER
- PROPOSED 4" SIDEWALK
- PROPOSED FUTURE CURB & GUTTER
- PROPOSED 4" SIDEWALK
- PROPOSED 18" SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER LATERAL
- PROPOSED STORM SEWER
- PROPOSED 6" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 18" WATER MAIN
- PROPOSED WATER LATERAL
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED SELF FENCE
- TOP OF PIPE
- PROPERTY LINE
- SECTION LINE
- CHARTER LINE
- FL
- FLOW LINE
- CONCRETE WATER MAIN EASEMENT-PLAN
- CONCRETE WATER MAIN EASEMENT-PROFILE
- MAJOR CONTOUR
- MINOR CONTOUR
- TELEPHONE CONTACT
- WATER SERVICE
- SEWER SERVICE
- VEHICLE TRACKING CONTROL
- EROSION CONTROL BALES
- STREET LIGHT



DREAM DESIGN
 AN INTERNATIONAL FIRM
 10000 10th Avenue S.E.
 Bellevue, WA 98006
 Phone: (206) 835-4600
 Fax: (206) 835-4601
 Website: www.dreamdesign.com

PRELIMINARY FOR REVIEW ONLY

CITY OF RAPID CITY
 GROWTH MANAGEMENT DEPT
 DEVELOPMENT SERVICES

Plans are prepared for general construction with applicable governmental regulations, standards, codes, criteria and engineering standards. The City of Rapid City does not verify the accuracy, availability or completeness of the data or design, which are the responsibility of the engineer. No responsibility is assumed for the construction of the proposed project.

Project Number: _____ Date: _____

Approved: _____
 Designer: GTB
 Drawn By: _____
 Checked By: _____
 Date: JUNE 2008

Company: RENNER & ASSOC

Project Name: _____

Sheet Number: _____

Scale: _____

Revision: _____

Notes: _____

Comments: _____

Drawings: _____

Specifications: _____

Permits: _____

Contracts: _____

Agreements: _____

Conditions: _____

Restrictions: _____

Requirements: _____

Standards: _____

Codes: _____

Regulations: _____

Procedures: _____

Methods: _____

Techniques: _____

Practices: _____

Operations: _____

Activities: _____

Tasks: _____

Steps: _____

Actions: _____