

**CITY OF SUMMERSET PLANNING AND ZONING BOARD
ONLINE ZOOM MEETING
REGULAR MEETING
7055 LEISURE LANE
TUESDAY APRIL 14, 2020
6:00 P.M.**

Agenda

1) ROLL CALL

Bewley, Oldfield, Osten, Wilson

2) CALL FOR CHANGES

Approval of Agenda of the Regular Meeting of April 14, 2020 as presented or amended.

3) CONSENT CALENDAR

Approval of the minutes of the regular meeting of November 26, 2019, as presented or amended.

4) OATH OF OFFICE

A) Oath of office to new Board Member

Marcus Christensen

5) PRELIMINARY PLAT APPLICATION

A) Preliminary application: Preliminary Plat of Lots 17 thru 19, Block 1; Lots 5 thru 8, Block 2; and Lots 1 thru 12, Block 5; and Dedicated Public Right-of-Way for Glenwood Drive and Arapahoe Street of Sun Valley Estates. Formerly a Portion of the Un-platted Portion of the SE ¼ of Section 14 Township 4 North, Range 6 East, Black Hills Meridian, City of Summerset, Meade County, South Dakota.

6) PUBLIC HEARING

Motion to open public hearing on the following:

- 1) Zoning Request: **Not Zoned to Single Family Residential (R1)** Lot HG revised of Shadowland Ranch Subdivision in Tract 6 of the SW ¼ of Section 25 in Township 3 North, Range 6 East, Black Hills Meridian, City of Summerset, Meade County, South Dakota, and

Lot I of Shadowland Ranch Subdivision, in Tract 3 of NW1/4 of Section 36 all in T3N, R6E, BHM, City of Summerset, Meade County, SD

Motion to close public hearing

- 4B) Action item – Vote on proposed public hearing item

- 1) Zoning Request: **Not Zoned to Single Family Residential (R1)** Lot HG revised of Shadowland Ranch Subdivision in Tract 6 of the SW ¼ of Section 25 in Township 3 North, Range 6 East, Black Hills Meridian, City of Summerset, Meade County, South Dakota, and

Lot I of Shadowland Ranch Subdivision, in Tract 3 of NW1/4 of Section 36 all in T3N, R6E, BHM, City of Summerset, Meade County, SD

7) **ADJOURNMENT**

Information regarding accessibility for the disabled may be obtained by calling the Summerset City Finance Officer at 605-718-9858. Individuals needing special accommodations are asked to call at least 48 hours prior to the meeting.

In relation to the COVID-19 virus, and in following guidelines from the CDC in relation to minimizing exposure, the City will have a call-in number available (instructions below) for Thursday's City Commission meeting. For those that wish to participate in the meeting remotely, we encourage you to follow the instructions below.

Call-in instructions:

Topic: Planning and Zoning

Time: Apr 14, 2020 06:00 PM Mountain Time (US and Canada)

Join Zoom Meeting

<https://us04web.zoom.us/j/76874995042?pwd=UkZpV3MrUUZ0K2ZNUEN2a2d0d1RMdz09>

Meeting ID: 768 7499 5042

*If you are participating telephonically, please ensure that you mute your phone during times where you are not speaking to keep the background noise to a minimum.

**CITY OF SUMMERSET PLANNING AND ZONING BOARD
REGULAR MEETING
7055 LEISURE LANE
TUESDAY NOVEMBER 26, 2019
6:00 P.M.**

Minutes

1) ROLL CALL

Bewley, Oldfield, Osten, Wilson

Osten absent.

2) CALL FOR CHANGES

Approval of Agenda of the Regular Meeting of November 26, 2019 as presented or amended.

Agenda approved with all in favor.

3) CONSENT CALENDAR

Approval of the minutes of the regular meeting of November 12, 2019, as presented or amended.

Minutes approved with all in favor.

4) PRELIMINARY AND FINAL PLAT APPLICATION

A) Preliminary and Final plat application: Plat of Well Lot 2 of Wonderland Homes Subdivision, Formerly an Un-Platted Portion of the Remainder of the NW ¼ of Section 24. Located in the SE ¼ of the SW ¼ of the NW ¼ of Section 24, Township 3 North, Range 6 East, Black Hills Meridian, City of Summerset, Meade County, South Dakota.

Plat application is to obtain an easement to new well. Approved with all in favor.

5) PRELIMINARY PLAT APPLICATION

A) Preliminary plat application: Preliminary Plat of Lot 1 through Lot 9 and Norpeck Court Right of Way Located in Lot HG Revised of Shadowland Ranch Subdivision in Tract 6 of the SW ¼ of Section 25 in Township 3 North, Range 6 East, Black Hills Meridian, City of Summerset, Meade County, South Dakota

All comments and concerns have been addressed and changes made. All drainage issues have been adjusted and meet requirements with drainage report. New drainage report will be required if further subdivided. Application was passed with all in favor.

6) ADJOURNMENT

Adjournment at 6:13 P.M.

Information regarding accessibility for the disabled may be obtained by calling the Somerset City Finance Officer at 605-718-9858. Individuals needing special accommodations are asked to call at least 48 hours prior to the meeting.

Oath of Office

State of South Dakota)
County of Meade) SS.
)



I, Marcus Christensen, having been appointed to the Planning and Zoning Board for a three year term, within and for said City of Summerset, do solemnly swear that I will support the Constitution of the United States and the Constitution of the State of South Dakota, and that I will faithfully and impartially, to the best of my knowledge and ability, perform all duties of my said office as provided by law.

Marcus Christensen

Subscribed and sworn to before me this 14th day of April 2020.

Gregory Wilson, P & Z Chairman



COMMUNITY PLANNING & DEVELOPMENT SERVICES

City of Summerset
7055 Leisure Lane, Summerset, SD 57718

Phone: (605) 718-9858

Fax: (605) 718-9883

Web: www.summerset.us

APPLICATION FOR DEVELOPMENT REVIEW

REQUEST (please check all that apply)

- ☐ Annexation
☐ Comprehensive Plan Amendment
☐ Fence Height Exception
☐ Planned Development (Overlay)
☐ Designation
☐ Initial Plan ☐ Final Plan
☐ Major Amendment
☐ Minimal Amendment

- ☒ Subdivision
☒ Layout Plan
☒ Preliminary Plat
☐ Final Plat
☐ Minor Plat
☐ Rezoning
☐ Road Name Change

- ☐ Conditional Use Permit
☐ Major Amendment
☐ Minimal Amendment
☐ Vacation
☐ Utility / Drainage Easement
☐ R.O.W. / Section Line Highway
☐ Access / Non-Access
☐ Planting Screen Easement
☐ OTHER (specify) _____

LEGAL DESCRIPTION (Attach additional sheets as necessary)

EXISTING Lots 17 thru 19, Block 1; Lots 5 thru 8, Block 2 and Lots 1 thru 12, Block 5; and
Dedicated Public Right of Way for Glenwood Dr.

PROPOSED

LOCATION Unplatted Portion of SE 1/4 of sec 14 Township 3 North Range 6 East

Size of Site—Acres 7.358

Square Footage

Proposed Zoning

DESCRIPTION OF REQUEST:

Plat new lots

Utilities: Private / Public

Water

Sewer

APPLICANT

Name Brandon Powles

Phone 605 431-2678

Address PO Box 9652

E-mail brandonpowles@yahoo.com

City, State, Zip Rapid City SD 57709

Signature [Signature] Date 3-19-20

PROJECT PLANNER - AGENT

Name _____

Phone 605 430 7740

Address _____

E-mail gingras@gmail.com

City, State, Zip _____

Signature [Signature] Date 3/19/20

OWNER OF RECORD (If different from applicant)

Name James E Gingras

Phone 605 430 7740

Address 7765 Elk Creek Rd

E-mail gingras@gmail.com

City, State, Zip Piedmont, SD 57769

[Signature]
Property Owner Signature

Date

Property Owner Signature

Date

Signature

Date

Signature

Date

Print Name: _____

Print Name: _____

Title*: _____

Title*: _____

*required for Corporations, Partnerships, etc.

FOR STAFF USE ONLY

ZONING
Current
North
South
East
West
Planner
File No.
Comp Plan
Received By:

- ☐ Sewer Utility
☐ Fire Department
☐ Public Works
☐ Planning
☐ Building Inspector
☐ Engineering
☐ City Code Enforcement
☐ Police
☐ City Attorney

- ☐ BHP&L
☐ Finance Officer
☐ Register of Deeds
☐ County - Planning
☐ SD DOT
☐ SD DENR
☐ Auditor - Annexation
☐ Drainage
☐ Parks & Recreation

- ☐ Diamond D Water
☐ Black Hills Water
☐ Quaal Road District
☐ Other: _____
☐ Other: _____
☐ Other: _____
☐ Other: _____

Planning and Zoning Meeting Date: _____

Commission Meeting Date: _____

Date Paid: _____

Payment Type: Cash ☐ Check ☐ Credit Card ☐

POWLES & SONS CONSTRUCTION
PO BOX 9652
RAPID CITY, SD 57709
PH. 605-431-2678

78-850/914

4995

DATE 3-18-20

PAY TO THE
ORDER OF

City of Summerfield

\$ 1000⁰⁰

one thousand 00/100

DOLLARS



Security Features
Included
Details on Back

usbank.

MEMO

Preliminary Plat

Bel R

MP

⑆091408501⑆ 175080066061⑈4995

Memo

Date: Friday, April 03, 2020

Project: Lots 17-19, Block 1; Lots 5-8, Block 2; and Lots 1-12, Block 5; and Dedicated Public Right-of-way for Glenwood Drive and Arapahoe Street of Sun Valley Estates

To: Lonnie Harmon, City Administrator

From: HDR Engineering

Subject: Preliminary Plat Review

General

1. Need letter of approval from Diamond A Water.
2. Need letter of approval from Piedmont Fire Department.
3. Will Somerset Wastewater Treatment Plant access road be moved to come off the end of the new Glenwood? If so, we don't need the End of Road Diamonds

Lighting

4. Somerset has new lighting design standards that need to be incorporated into the plans:
 - a. 30' tall w/ 8' arm extension
 - b. 40 watt LED
 - c. direct bury style
 - d. poles shall be galvanized steel material as manufactured by HAPCO, Millerbernd, and Valmont
 - e. 185' spacing, with poles placed at intersections and curves
 - f. placed in line with property lines and 2' off the back of curb for boulevards and 1' off sidewalk for curbside sidewalk
 - g. light pole details attached

Roadway

5. Why does the proposed Glenwood Drive roadway jog at the connection to the existing Glenwood Drive?
6. PI shown at approximately Station 2+12 needs to be a vertical curve. We only allow a PI without a vertical curve in the road profile if the change in grade is 1% or less.

Water

7. Water main should be located per Figure 3-1 in Somerset.

Sanitary Sewer

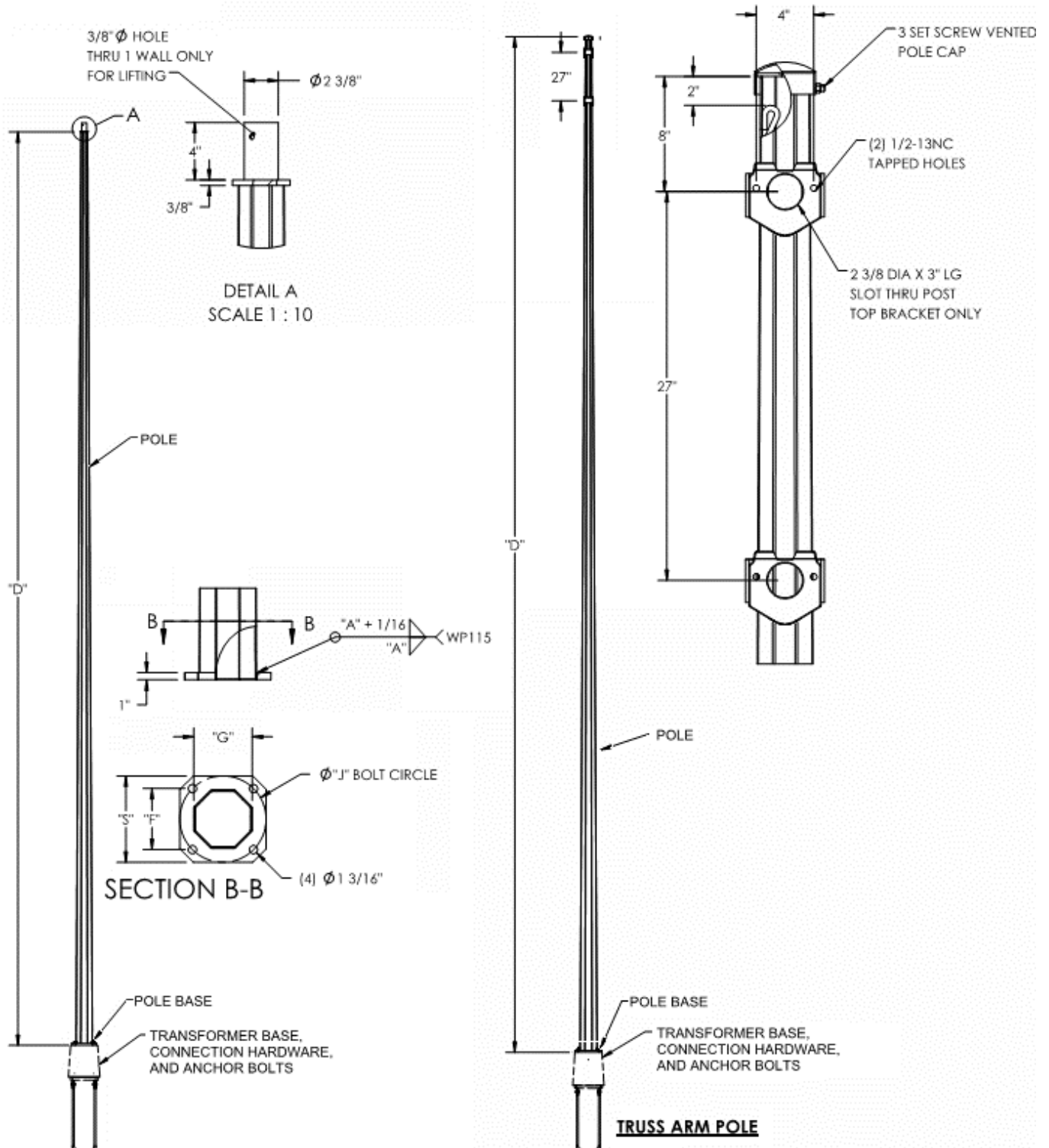
8. Why is there such a steep grade in the sewer between the existing manhole in Glenwood and Manhole #1?

Drainage

9. Where does the runoff from Basin 3 flow?
10. The report is showing this development is adding 12.65 cfs to the Stagebarn Canyon and South Channels. It is understood that this is one phase of the development and final detention will be addressed when providing culverts at the the Glenwood Dr. and Arapahoe St. channel crossings. However, the runoff added by this phase of the development should be detained so no runoff over the existing 100 year runoff is flowing beyond the borders of the development.

ROADWAY LIGHTING

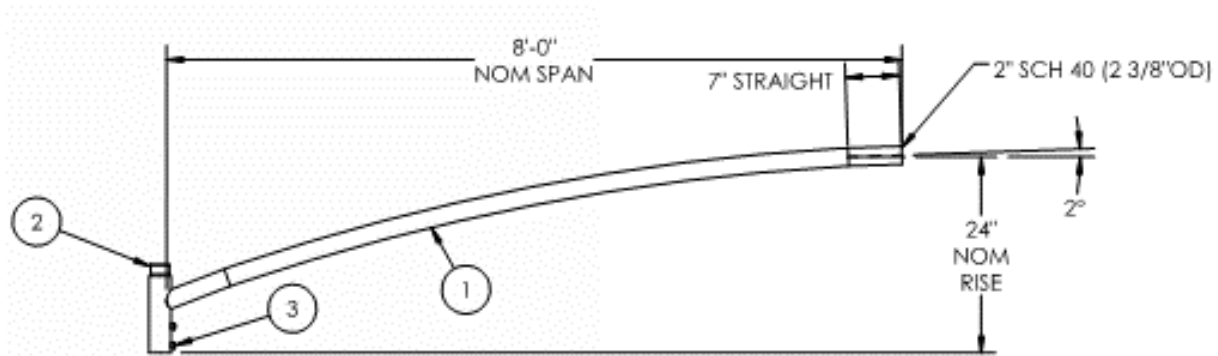
Detail for 25', 30', 40' and 50' Pole with Base



POLE TYPE	LUM ARM TYPE	POLE DATA				BASE DATA			
		"A" TK	"B" BASE DAC	"C" TOP DAC	"D" LENGTH	"S" SQ	"F" CTRS	"G" DAF BASE OPENING	"J" BOLT CIRCLE
25' LIGHT POLE		.1196" (11GA)	6.5	4.05	20'-0"	12"	8 1/2"	6 1/8"	12"
30' LIGHT POLE		.1196" (11GA)	7.18	3.40	28'-0"			6 3/4"	
40' LIGHT POLE		.1196" (11GA)	8.63	3.45	38'-0"			8 1/16"	
50' LIGHT POLE		.1196" (11 GA)	10.29	3.57	48'-0"	15"	10 5/8"	9 5/8"	15"
50' LIGHT POLE	15' TRUSS ARM	.1196" (11GA)	10.29	3.71	47'-0"				

ROADWAY LIGHTING

Detail for 8' Arm



SINGLE 8' UPSWEEP LUMINAIRE ARM
FOR USE WITH TENON MOUNT POLES

ITEM NO.	DESCRIPTION	QTY.
1	WLDMT ARM UPSWEEP CAN 2 1/2 X 8' ARM	1
2	CAP NON THD PL 2-3/8	1
3	SCRW STHXSKCPPT 1-2-13NC X 1 SS	2

Final Plat Review

General Information:

Parcel Acreage 6.815 acres
Location City of Summerset, SE ¼ Section 14, T3N, R6E.
Date of Application 3-18-2020
Reviewed By: **Gary Anderson, LS, HDR Engineering, Inc.**

Purpose: Create additional lots in Sun Valley Estates

Access and Utilities: Glenwood Dr. and Arapahoe St.

Fire Protection: Piedmont Fire Department

Drainage: No major drainage easements in this plat. 8' drainage and utility easement on interior of all lots lines is notes.

Final Plat Review:

Un-platted ground not suitable for subdividing and surrounded by platted land will not be allowed (un-platted portion b/w Lot 16 and Lot 17, Block 1 & un-platted portion b/w Lot 228 and Lot 1 of Block 5).

Williston Basin Gas Line Easement ground (on Lots 7 & 8, Block 2 and Lot 12, Block 5) shall be platted as a separate lot/green space/park as it is in previous plats and the piece on the north side of Arapahoe St needs to be platted as well, as it is shown now it would be un-platted ground.

Lot 4, Block 5 does not meet minimum lot size of 8,500 S.F. established in Summerset Ordinance 155.058.E.

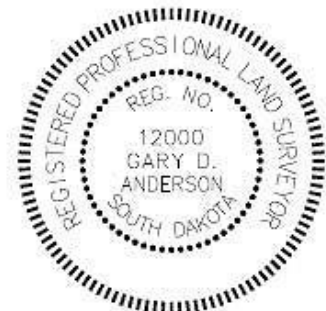
Lot 7 does not meet minimum lot width of 75' at the front building line established in Summerset Ordinance 155.058.D.

Change line data font (at lot lines and in table). It is difficult to read and may be even more difficult in a scanned copy.

Block 5 has a misclosure of .467



Gary Anderson, LS 12000



MEMORANDUM

PROJECT: Sun Valley Estates Subdivision Phase 2
LOCATION: Summerset, South Dakota
DATE: April 10, 2020
TOPIC: Responses to Preliminary Plat Review Comments

Comments have been inserted from the original attached document in order to respond effectively in line with *response* directly below the comment.

General

1. Need letter of approval from Diamond A Water.
Response: Letter shall be provided by Owner.
2. Need letter of approval from Piedmont Fire Department.
Response: Letter shall be provided by Owner.
3. Will Summerset Wastewater Treatment Plant access road be moved to come off the end of the new Glenwood? If so, we don't need the End of Road Diamonds
Response: Yes, the access road will be adjusted to the new end of Glenwood Dr. The End of Road Diamonds have been removed.

Lighting

4. Summerset has new lighting design standards that need to be incorporated into the plans:
 - a. 30' tall w/ 8' arm extension
 - b. 40 watt LED
 - c. direct bury style
 - d. poles shall be galvanized steel material as manufactured by HAPCO, Millerbernd, and Valmont
 - e. 185' spacing, with poles placed at intersections and curves
 - f. placed in line with property lines and 2' off the back of curb for boulevards and 1' off sidewalk for curbside sidewalk
 - g. light pole details attached

Response: New lighting standards have been incorporated.

Roadway

5. Why does the proposed Glenwood Drive roadway jog at the connection to the existing Glenwood Drive?
Response: We have the new roadway centered in the ROW. If there is a jog it would be a slight adjustment in the field with a smooth transition.

6. PI shown at approximately Station 2+12 needs to be a vertical curve. We only allow a PI without a vertical curve in the road profile if the change in grade is 1% or less.

Response: A vertical curve has been added at this location.

Water

7. Water main should be located per Figure 3-1 in Summerset.

Response: The water main in Arapahoe St. has been revised to meet the requirements of Figure 3-1

Sanitary Sewer

8. Why is there such a steep grade in the sewer between the existing manhole in Glenwood and Manhole #1?

Response: This location is the transition point to allow the new sanitary sewer main to be located at a responsible depth of 9' not 14'+. Based on future phasing, this will support future expansion of Glenwood and Arapahoe as well.

Drainage

9. Where does the runoff from Basin 3 flow?

Response: Basin 3 is located at the general north end of the Sun Valley Subdivision. Basin 3 consists of three (3) residential lots where the north property lines shall be directly adjacent to the drainage way of the South Channel for the Stagebarn Canyon Drainage area. The east side of this Basin (157') is adjacent to the Stagebarn Canyon Channel. The additional runoff from this Basin for a 100 year event is a mere 1.92 CFS and is therefore considered for this location insignificant.

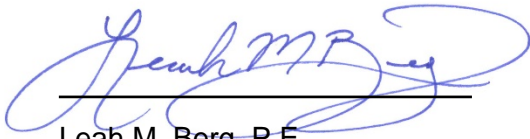
10. The report is showing this development is adding 12.65 cfs to the Stagebarn Canyon and South Channels. It is understood that this is one phase of the development and final detention will be addressed when providing culverts at the Glenwood Dr. and Arapahoe St. channel crossings. However, the runoff added by this phase of the development should be detained so no runoff over the existing 100 year runoff is flowing beyond the borders of the development.

Response: Correct, the final detention will be addressed with the culverts at the Glenwood Dr. and Arapahoe St. crossings. The flow from Basin 3 is discussed above and Basin 2 does not contribute to the Stagebarn Canyon Channel, which means that Basin 1 contributes 10.73 CF of additional flow for the 100 year storm event to the Stagebarn Canyon Channel.

Even though this phase has not directly evaluated major flow channels, Phase 4 located upstream on this dry Stagebarn Canyon Channel was developed last year. It was determined through the drainage evaluation that the channel provided 92% additional capacity above the required flow capacity. It is planned to retain the large open channel through the development in order

to retain this storage capacity. Therefore, it can safely be assumed that the 10.73 CF of flow being added to the Stagebarn Canyon Channel at the end of Glenwood Drive will be acceptable within the extra storage capacity of the open channel.

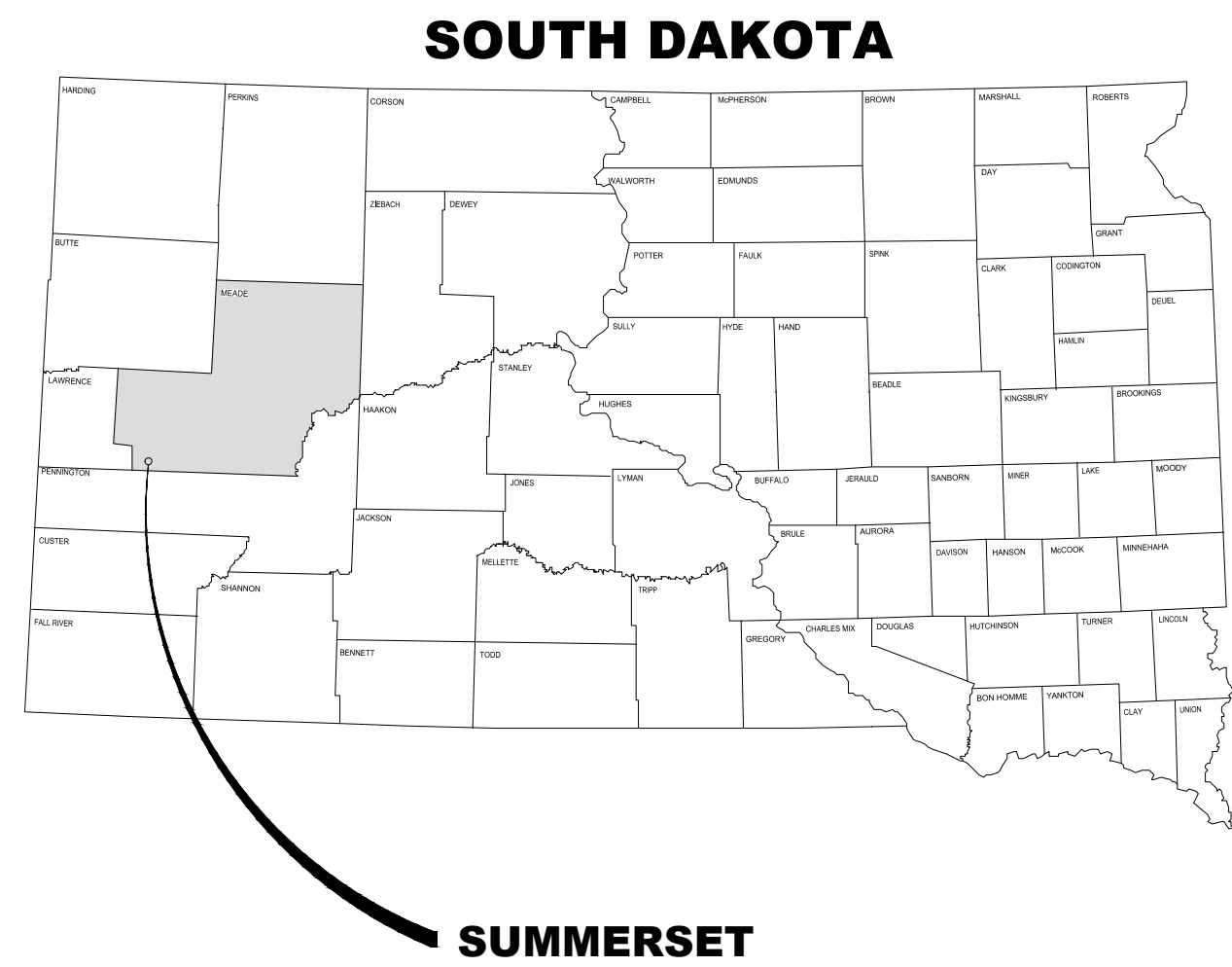
This additional contributing flow will be evaluated with the next phase expansion off of Glenwood Dr. and Arapahoe St. where there will be the drainage way crossings.



Leah M. Berg, P.E.

SUN VALLEY ESTATES SUBDIVISION PHASE 2

MEADE COUNTY, SUMMERSET, SOUTH DAKOTA

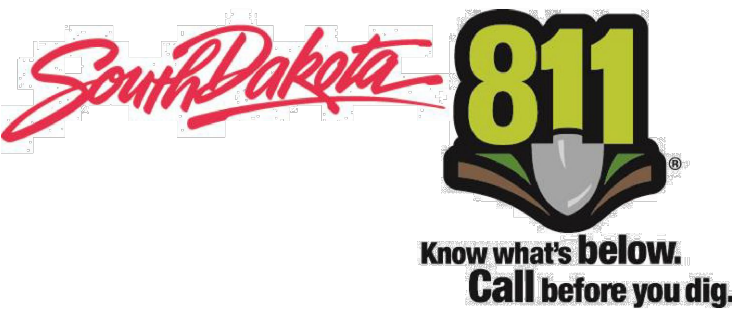


SUN VALLEY ESTATES - PHASE 2



INDEX OF SHEETS

- 1.0 COVER SHEET
- 2.0 GENERAL NOTES
- 2.1 MATERIAL QUANTITIES
- 3.0 LOT LAYOUT & FUTURE PHASING PLAN
- 4.0 GRADING AND DRAINAGE PLAN
- 5.0 EROSION AND SEDIMENT CONTROL
- 6.0 GLENWOOD DRIVE PLAN & PROFILE STA. 0+00 - 5+00
- 6.1 ARAPAHOE STREET PLAN & PROFILE STA. 0+00 - 5+00
- 6.2 ARAPAHOE STREET PLAN & PROFILE STA. 5+00 - 8+00
- 7.0 DETAILS
- 7.1 DETAILS
- 7.2 DETAILS



SUN VALLEY ESTATES
SUBDIVISION - PHASE 2 PROJECT

BRANDON POWLES
MEADE COUNTY, SUMMERSET, SOUTH DAKOTA

ACES

AFFORDABLY CREATIVE ENGINEERING SERVICES

AFFORDABLY CREATIVE ENGINEERING SERVICES, INC.
324 Saint Joseph Street, Suite 200, Rapid City, SD 57701
(605) 716-4646 * Fax (605) 716-1144

FOR CONSTRUCTION	
REVISIONS:	DATE:
DRAWN BY: LB/AW	CHECKED BY: LB
ACES PROJECT NO: 20-1099	DATE: 4/9/2020

TITLE:	COVER SHEET
SHEET NUMBER:	1.0

SPECIFICATIONS TO BE USED

ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF SUMMERSET INFRASTRUCTURE DESIGN CRITERIA, EXCEPT AS NOTED. WHERE NECESSARY, THE PROJECT SPECIFICATIONS WILL BE SUPPLEMENTED WITH THE CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2007 EDITION.

PROJECT INTENT

THIS PROJECT IS THE EXPANSION OF THE SUN VALLEY ESTATES SUBDIVISION IN SUMMERSET, SOUTH DAKOTA. THIS INCLUDES THE GENERAL CONSTRUCTION OF: ASPHALT SURFACED ROADS WITH CURB AND GUTTER, SIDEWALK, WATER MAIN, SEWER MAIN WITH MANHOLES, STREET LIGHTING AND A TEMPORARY GRAVEL SURFACED TURN-AROUND. PROJECT SHALL BE PHASE 2 AT END OF GLENWOOD DRIVE AND THE COMMENCEMENT OF ARAPAHOE STREET.

GENERAL SURVEY NOTES

THE TOPOGRAPHIC SURVEY WAS PROVIDED BY BASELINE SURVEYING, INC. THE SURVEY WAS COMPLETED IN APRIL 2018 AND UPDATED IN 2020.

THE UTILITY LOCATIONS SHOWN ARE BASED ON FIELD LOCATES AND RECORDS. THE SIZE AND LOCATION OF UNDERGROUND UTILITIES WAS NOT VERIFIED BY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING UTILITIES DURING CONSTRUCTION.

GENERAL NOTES:

THE CONTRACTOR IS REQUIRED TO OBTAIN COVERAGE UNDER THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES GENERAL STORM WATER CONSTRUCTION PERMIT WITH THE PROJECT DISTURBING MORE THAN 1 ACRE IN LAND AREA. CONTACT SD DENR AT 1-800-737-8676 FOR INFORMATION.
PROJECT SOIL DISTURBANCE AREA IS 3.51 ACRES.

IF WATER FROM TEMPORARY DEWATERING WILL BE DISCHARGED TO WATERS OF THE STATE DURING CONSTRUCTION, CONTRACTOR MUST FIRST OBTAIN COVERAGE UNDER THE DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES GENERAL PERMIT FOR TEMPORARY DEWATERING. FOR MORE INFORMATION CONTACT SD DENR AT (605) 773-3351.

CONTRACTOR SHALL UTILIZE THE SOUTH DAKOTA ONE CALL NOTIFICATION PROCESS TO PROVIDE ADVANCE NOTICE FOR ALL UTILITY LOCATIONS, 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

THE CONTRACTOR SHALL MEASURE AND RECORD ANY HORIZONTAL OR VERTICAL DEVIATIONS FROM THE CONTRACT DRAWINGS. THE CHANGES SHALL BE RECORDED IN AN ACCURATE, NEAT FASHION ON 11" X 17" DRAWINGS AND FURNISHED TO THE OWNER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER FOR COMPACTION OF GRANULAR MATERIALS AND TRENCH BACKFILL AS REQUIRED.

THE CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS FROM DAMAGE. DAMAGE TO IMPROVEMENTS DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

DEWATERING PERMIT

ALTHOUGH NOT ANTICIPATED, DEWATERING OF TRENCHES AND RELATED EXCAVATIONS MAY BE REQUIRED ON THIS PROJECT.

DEWATERING ACTIVITIES SHALL BE CONDUCTED IN COMPLIANCE WITH THE "GENERAL PERMIT TO DISCHARGE UNDER THE SURFACE WATER DISCHARGE FOR TEMPORARY DEWATERING

ACTIVITIES IN SOUTH DAKOTA", SDDENR PERMIT NUMBER SDG 070000. THE CONTRACTOR IS REQUIRED TO FURNISH THE "REQUEST FOR AUTHORIZATION" TO SDDENR AS REQUIRED UNDER THE PERMIT, TO OBTAIN SDDENR AUTHORIZATION, AND FURNISH A COPY TO THE OWNER PRIOR TO CONDUCTING ANY DEWATERING ACTIVITIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING SELF-MONITORING ACTIVITIES SUCH AS SAMPLING, TESTING, AND REPORTING AS MAY BE DETERMINED TO BE REQUIRED UNDER THE AUTHORIZATION TO DISCHARGE.

GRAVEL SURFACING MATERIAL

AGGREGATE BASE COURSE SHALL BE IN ACCORDANCE WITH SECTION 880 OF THE SDDOT STANDARD SPECIFICATIONS.

MATERIAL TESTING

THE CONTRACTOR SHALL PROVIDE ALL NEEDED MATERIAL TESTING FOR THE PROJECT INCLUDING, SUBGRADE AND GRAVEL SURFACING. THESE TESTS SHALL BE COMPLETED BY AN INDEPENDENT TESTING AGENCY.

AGGREGATE SHALL BE PROOF ROLLED AND DENSITY TESTED BY AN INDEPENDENT TESTING AGENCY TO THE SATISFACTION OF THE ENGINEER AND OWNER.

A MINIMUM OF 3 DENSITY TESTS SHALL BE TAKEN ON THE SUBGRADE, AND AGAIN ON THE AGGREGATE COURSE SECTIONS OF THE PROJECT PER PHASE. THESE TESTS SHALL BE EVENLY SPREAD OVER THE PROJECT AREA PER PHASE. THE SUBGRADE AND AGGREGATE COURSE SHALL BE COMPACTED TO 95% MAX DRY DENSITY +/- 3% OPTIMUM MOISTURE CONTENT. (ASTM D-698).

FAILING TESTS: CONTRACTOR SHALL RE-COMPACT AND RE-TEST AREAS REPRESENTED BY FAILING TESTS AT THEIR OWN EXPENSE.

UTILITIES

THE CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES FOR SERVICES OR UTILITIES ENCOUNTERED ON THE SITE.

THE INFORMATION ON THESE DRAWINGS CONCERNING THE TYPE, SIZE AND LOCATION OF UTILITIES HAS BEEN SHOWN BASED UPON THE BEST INFORMATION AVAILABLE. THE UTILITY LOCATIONS SHOWN WERE BASED ON FIELD LOCATES AND FROM OWNER'S RECORDS. THE SIZE AND LOCATION OF UNDERGROUND UTILITIES WAS NOT VERIFIED BY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

NEW UTILITIES WITHIN THE SUBDIVISION: POWER, COMMUNICATIONS, AND GAS SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY, SEE THE PLAN AND PROFILE SHEETS 6.0-6.2.

UTILITY INFORMATION:
SOUTH DAKOTA ONE-CALL 1-(800)-781-7474

(ELECTRIC)
BLACK HILLS ENERGY
409 DEADWOOD AVE., RAPID CITY, SD
(605)-721-3200

(PHONE DATA CABLE)
MIDCONTINENT COMMUNICATIONS
1310 OMAHA ST.
RAPID CITY SD
(605)-888-1300

(GAS)
MONTANA-DAKOTA UTIL.
718 STEELE AVE., RAPID CITY, SD
(605)-342-0160

(PHONE DATA)
CENTURY LINK
(800)-573-1311

EXCAVATION

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 AND STANDARD SPECIFICATIONS.

GRADING SHALL BE DONE AS MAY BE NECESSARY TO PREVENT SURFACE WATER FROM FLOWING INTO EXCAVATIONS, AND ANY OTHER WATER ACCUMULATING THEREIN SHALL BE PROMPTLY REMOVED. UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES.

TRENCH BACKFILL

TYPE 1 BEDDING PER THE STANDARD SPECIFICATIONS IS CONSIDERED INCIDENTAL TO PIPE INSTALLATION. TYPE 1 IS REQUIRED FROM 3" ABOVE THE PIPE CROWN TO 3" BELOW THE PIPE INVERT.

SELECT BACKFILL (TYPE III FOUNDATION MATERIAL) IS REQUIRED FROM 3" ABOVE THE PIPE CROWN TO 12" ABOVE THE PIPE AS REQUIRED.

TRENCH CHECK DAM

CHECK DAM LOCATIONS ARE INDICATED ONN THE PLANS. CONTRACTOR SHALL PLACE WITHIN THE TRENCH A COMPACTED COHESIVE CLAY CHECK DAM. IT SHALL EXTEND FROM THE TRENCH BASE THROUGH THE BEDDING MATERIAL AND EXTEND FROM TRENCH WALL TO TRENCH WALL. INSTALLATION OF THE CHECK DAM SHALL BE CONSIDERED INCIDENTAL TO PIPE INSTALLATION.

PVC WATER PIPE

PIPE FOR WATER MAIN SHALL BE 8" AND 6" PVC PRESSURE PIPE CONFORMING TO AWWA STANDARD C-900, DR18.

WATER MAIN INSTALLATION

WATER MAIN PIPING, INSTALLATION, FLUSHING, DISINFECTION AND TESTING SHALL CONFORM TO THE RAPID CITY STANDARD SPECIFICATIONS, SECTION 8.

THRUST BLOCKS

THRUST BLOCKS SHALL BE PROVIDED AT FIRE HYDRANTS AND OTHER SELECT FITTINGS AS SHOWN ON THE PLANS. REFER TO THE THRUST BLOCK DETAIL FOR SIZING. THRUST BLOCKS SHALL BE CURED FOR AT LEAST 4 HOURS BEFORE BEING COVERED AND AT LEAST 48 HOURS PRIOR TO THE MAIN BEING ACTIVATED. THRUST BLOCKS ARE CONSIDERED INCIDENTAL TO WATER MAIN INSTALLATION AND NO ADDITIONAL PAYMENT WILL BE MADE.

PIPE DEFLECTION

PIPE DEFLECTION OF PIPE BARRELS AND SPIGOTS IS PROHIBITED. HIGH DEFLECTION COUPLINGS MAY BE USED FOR DEFLECTIONS LESS THAN 5 DEGREES ON 12" AND SMALLER PIPE.

WATER MAIN JOINT & FITTING RESTRAINT

RESTRAINED JOINTS SHALL BE USED FOR THE FITTINGS LISTED BELOW. ALL VALVES, FITTINGS, AND JOINTS WITHIN THE SPECIFIED RESTRAINED LENGTH SHALL BE RESTRAINED USING THE EBBA, OR APPROVED EQUAL RESTRAINING SYSTEMS. EQUAL RESTRAINING SYSTEM WILL INCLUDE FOSTER ADAPTOR BOLT-THRU MECHANICAL JOINT RESTRAINT WHERE PRACTICAL. RESTRAINTS SHALL BE INCIDENTAL TO PIPE INSTALLATION AND NO ADDITIONAL PAYMENT SHALL BE MADE.

VERTICAL BEND: 8" - 11.25° BEND
3 FEET BOTH SIDES

VERTICAL BEND: 8" – 22.5° BEND
8 FEET BOTH SIDES

HORIZONTAL BEND: 8" – 45° BEND
4 FEET BOTH SIDES

MAIN LINE VALVES: 8"
28 FEET BOTH SIDES

VERTICAL BEND: 6" - 11.25° BEND
2 FEET BOTH SIDES

VERTICAL BEND: 6" – 22.5° BEND
4 FEET BOTH SIDES

HORIZONTAL BEND: 6" – 45° BEND
2 FEET BOTH SIDES

MAIN LINE VALVES: 6"
20 FEET BOTH SIDES

REDUCER: 8" TO 6" HORIZONTAL
17 FEET LARGE SIDE

WATER SERVICE LINES AND CURB STOPS

UNLESS SHOWN OTHERWISE ON THE PLANS WATER SERVICE LINES SHALL BE 1" POLYETHYLENE.

CURB STOPS ARE TO BE LOCATED 4' WITHIN THE PROPERTY LINES ON EACH LOT. CURB STOPS SHALL BE MUELLEER H5150 OR APPROVED EQUAL.

SERVICE LINE SHALL BE FOR FUTURE CONNECTION AS LOTS ARE DEVELOPED. CURB STOPS AND CORPORATION STOPS SHALL BE RATED FOR 300 PSIG.

CURB STOPS AND CURB BOXES SHALL BE MINNEAPOLIS PATTERN.

VALVE BOXES

VALVE BOXES SHALL BE RATED HEAVY DUTY.

WATER MAIN DISINFECTION AND TESTING

THE PIPELINE SHALL BE DISINFECTED UTILIZING THE TABLET METHOD SPECIFIED IN SECTION 8 OF THE RAPID CITY STANDARD SPECIFICATIONS.

PIPE SEGMENTS USED IN TIE-INS THAT NEED TO BE ACTIVATED IMMEDIATELY AFTER INSTALLATION SHALL BE DISINFECTED BY SWABBING WITH A 1% HYPOCHLORITE SOLUTION, AND SHALL BE LEFT EXPOSED FOR 4 HOURS TO OBSERVE LEAKS.

ALL COSTS OF DISINFECTION ARE INCLUDED IN INSTALLATION OF THE PIPE AND NO ADDITIONAL PAYMENT SHALL BE MADE.

HIGHLY CHLORINATED WATER NEUTRALIZATION

HIGHLY CHLORINATED WATER SHALL NOT BE DISCHARGED TO SURFACE WATER. NEUTRALZATION SHALL BE ACCOMPLISHED BY INTRODUCING "NO-CHLOR" USING EQUIPMENT SPECIFICALLY FOR THAT PURPOSE.

AS AN OPTION TO DECHLORINATION THE CONTRACTOR MAY DISCHARGE THE WATER TO A TANK TRUCK FOR LAND APPLICATION. THE LAND APPLICATION SITE SHALL BE APPROVED BY THE ENGINEER.

NEUTRALIZATION COSTS SHALL BE CONSIDERED INCIDENTAL TO PIPE INSTALLATION AND NO ADDITIONAL PAYMENT SHALL BE MADE.

TYPE III FOUNDATION MATERIAL

TYPE III FOUNDATION MATERIAL MAY BE USED WHEN TRENCH BOTTOM MATERIAL IS DEEMED UNSUITABLE BY THE ENGINEER. PRIOR APPROVAL BY THE ENGINEER IS REQUIRED BEFORE PLACING THE MATERIAL.

TRACER WIRE ACCESS BOX

TRACER WIRE ACCESS BOXES SHALL BE INSTALLED AS LOCATED ON THE PLANS. BOXES SHALL BE VALCO, INC. #TWAB OR APPROVED EQUAL.

TRACER WIRE

TRACER WIRE SHALL BE #12 AWG INSULATED WITH HIGH MOLECULAR WEIGHT POLYETHYLENE (HMWPE) WITH IDENTIFICATION "CAUTION WATER LINE BELOW" AND BLUE IN COLOR AS MANUFACTURED BY KRIS-TECH WIRE CO. OR APPROVED EQUAL. SPLICES SHALL BE MADE USING DIRECT BURY SPLICE KIT (DBY) BY 3M OR APPROVED EQUAL.

TRACER WIRE SHALL BE CONSIDERED INCIDENTAL TO PIPE INSTALLATION AND NO ADDITIONAL PAYMENT WILL BE MADE.

POLYETHYLENE ENCASEMENT

FOR FITTINGS AND JOINT RESTRAINING DEVICES, WHICH ARE NOT EPOXY COATED, THE ENCASEMENT SHALL BE 8-MIL THICKNESS SHEET POLYETHYLENE MEETING AWWA C105. JOINT TAPE FOR ENCASEMENT SHALL BE 3M SCOTCHWRAP 50, OR EQUAL. ENCASEMENT IS CONSIDERED INCIDENTAL TO PIPE INSTALLATION AND NO ADDITIONAL PAYMENT WILL BE MADE.

PVC SEWER PIPE

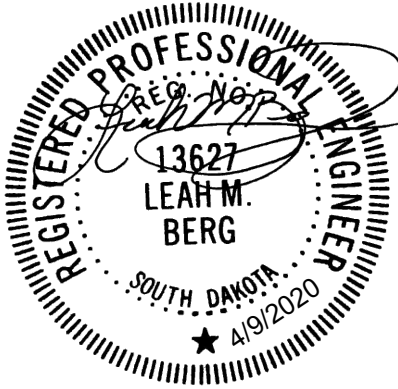
8" PVC SEWER PIPE SHALL CONFORM TO SECTION 9 OF THE RAPID CITY STANDARD SPECIFICATIONS.

SEWER MAIN INSTALLATION

SEWER MAIN PIPING, INSTALLATION, FLUSHING, AND TESTING SHALL CONFORM TO THE RAPID CITY STANDARD SPECIFICATIONS, SECTION 9.

RIP-RAP

RIP-RAP MATERIAL SHALL BE CLASS A. THICKNESS SHALL BE 2' MINIMUM. REINFORCEMENT FABRIC (MSE) SHALL BE PLACED UNDER THE RIP-RAP. FABRIC SHALL BE OVERLAPPED A MINIMUM OF 12".



SUN VALLEY ESTATES
SUBDIVISION - PHASE 2 PROJECT

BRANDON POWLES
MEADE COUNTY, SUMMERSET, SOUTH DAKOTA

ACES

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324 Saint Joseph Street, Suite 200, Rapid City, SD 57701
(605) 716-4646 * Fax (605) 716-1144

FOR CONSTRUCTION

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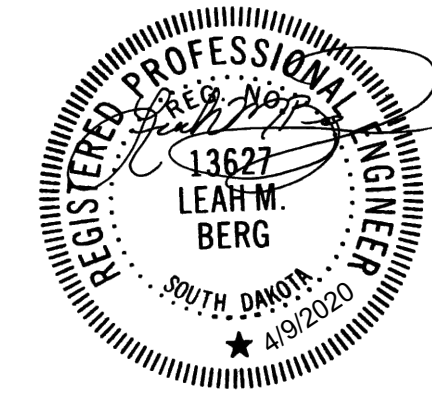
ACES PROJECT NO: 20-1099 DATE: 4/9/2020

TITLE: GENERAL NOTES

SHEET NUMBER: 2.0

ESTIMATED PROJECT QUANTITIES:

Item No.	Description of Item	Estimated Quantity	Unit
1	Mobilization	1.0	LS
2	Miscellaneous and Incidentals	1.0	LS
3	Erosion and Sediment Control	1.0	LS
4	Construction Staking	1.0	LS
5	Remove Asphalt Pavement and Curb & Gutter	1.0	LS
6	Unclassified Excavation	25.0	CY
7	48" Sanitary Sewer Manhole	3.0	EA
8	Sewer Main, 8" PVC	934.0	LF
9	Sewer Service Line, 4" PVC	691.9	LF
10	Mark stubbed out 4" sewer service with post	18.0	EA
11	Connect service to new sewer main	17.0	EA
12	Connect service to existing sewer main	1.0	EA
13	6" Water Main C-900, DR-18	748.0	LF
14	8" Water Main C-900, DR-18	238.0	LF
15	1" Polyethylene Water Service	641.0	LF
16	1" Tapping Saddle	18.0	EA
17	1" Curb Stop & Box	18.0	EA
18	8" X 6" X 8" Tee	2.0	EA
19	8" Gate Valve	1.0	EA
20	8" to 6" Reducer	1.0	EA
21	6" 11.25 Degree Vertical Bend	2.0	EA
22	6" 22.5 Degree Bend	4.0	EA
23	6" 11.25 Degree Bend	2.0	EA
24	6" X 6" X 6" Tee	1.0	EA
25	6" Gate Valve	3.0	EA
26	Fire Hydrant w/Aux Valve	3.0	EA
27	Relocate Fire Hydrant	1.0	EA
28	Flush Mounted Tracer Wire Box	4.0	EA
29	Provide gravel surfaced temporary turn-around	1.0	LS
30	Rip-Rap (at temp. turn-around)	150.0	TON
31	Aggregate Base Course, 8"	1339.3	TON
32	Asphalt Pavement, 5" Thickness	837.1	TON
33	PCC 6' wide drainage pan	27.0	LF
34	PCC Sidewalk	870.1	SY
35	Curb and Gutter Type B	1929.0	LF
36	Seed, Fertilize and Mulch	6430.0	SY
37	Material Testing	1.0	LS
38	Light Pole	5.0	EA



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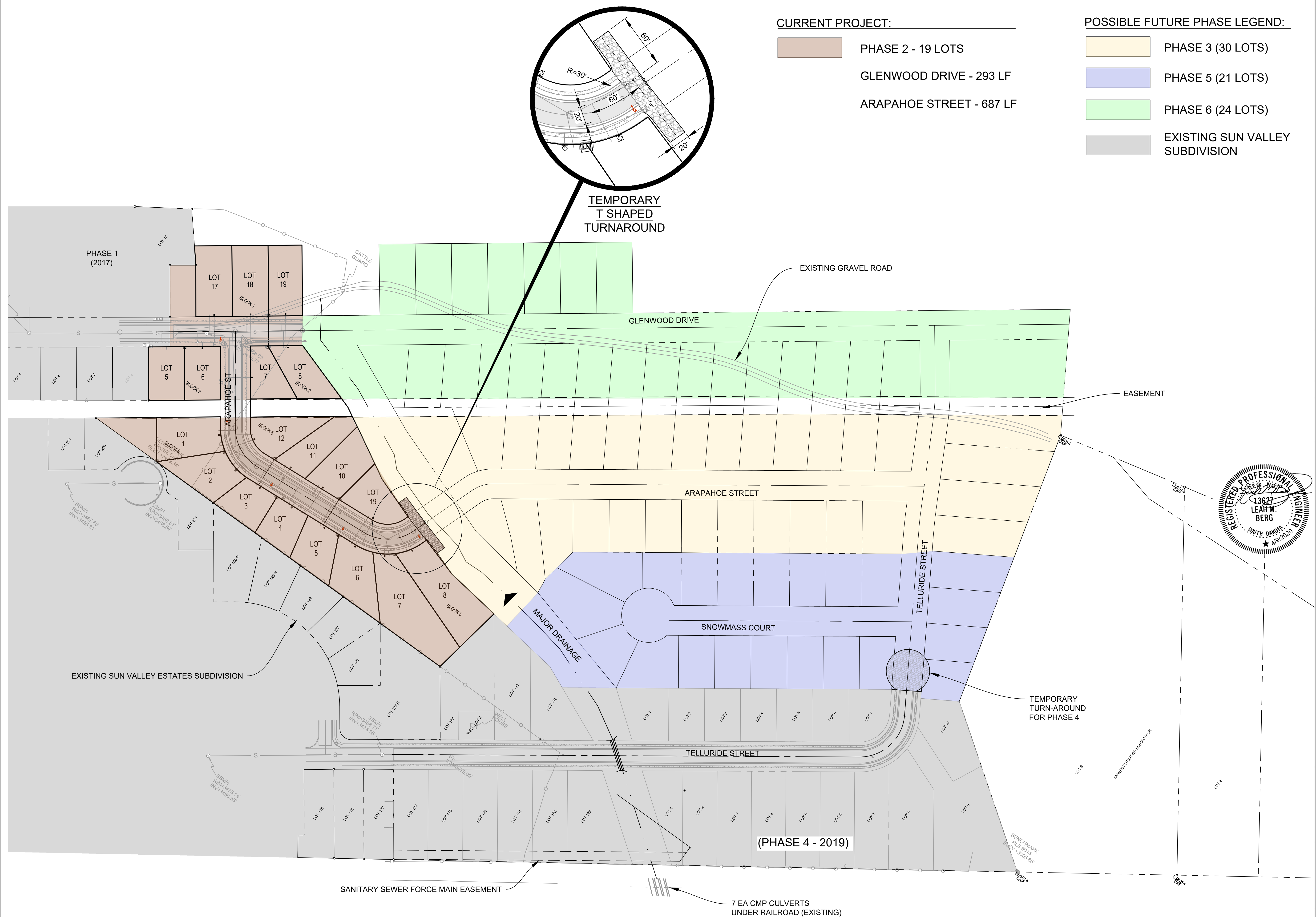
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MEADE COUNTY, SUMMERSET, SOUTH DAKOTA

TITLE:
MATERIAL QUANTITIES

SHEET
NUMBER:

2.1



CURRENT PROJECT:

PHASE 2 - 19 LOTS

POSSIBLE FUTURE PHASE LEGEND:

PHASE 3 (30 LOTS)

EXISTING SUN VALLEY SUBDIVISION

ACES

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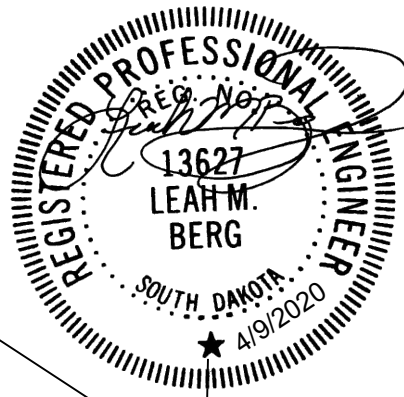
ACES PROJECT NO:

DATE:

SUN VALLEY ESTATES
SUBDIVISION - PHASE 2 PROJECT

BRANDON POWLES

MEADE COUNTY, SUMMERSET, SOUTH DAKOTA



TITLE:
LOT LAYOUT & FUTURE
PHASING PLAN

SHEET
NUMBER:

3.0

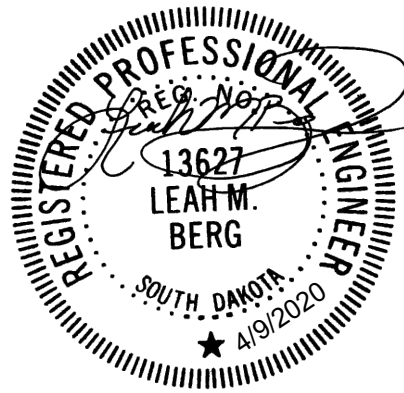
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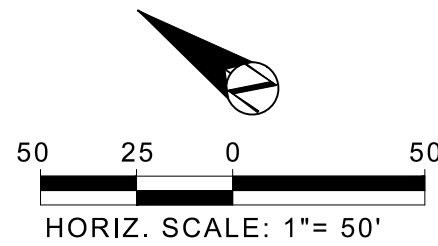
LEGEND:

- 5349 — EXISTING CONTOURS
— 5350 — INTERVAL 1' & 5'
- 5354 — PROPOSED CONTOURS
— 5355 — INTERVAL 1' & 5'
- ➔ DRAINAGE FLOW ARROW



SUN VALLEY ESTATES
SUBDIVISION - PHASE 2 PROJECT

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TITLE:
GRADING AND
DRAINAGE PLAN

SHEET
NUMBER: **4.0**

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G:\My Drive\Jobs\20-1099 Sun Valley Estates - Phase\Drawings\Sheets\20-1099 EROSION AND SEDIMENT CONTROL.dwg 4/10/2020 9:36:23 AM



NOTES:

INSTALL TEMPORARY VEHICLE TRACKING CONTROL AT ALL LOCATIONS WHERE VEHICLES ENTER FROM PAVEMENT INTO CONSTRUCTION SITE. CONTRACTOR TO CLEAN PAVEMENTS OF SEDIMENTS AND MUD THAT IS NOT CONTROLLED BY VEHICLE TRACKING.

EROSION CONTROL MEASURES SHOWN ARE BASED ON THE ENGINEER'S JUDGEMENT. NO EXTRA PAYMENT WILL BE MADE IN THE EVENT ADDITIONAL MEASURES ARE REQUIRED.

CONTRACTOR TO SEED, FERTILIZE, & COVER ALL AREAS DISTURBED BY CONSTRUCTION WITH NON-IRRIGATED SEED MIX.

SILT FENCES, CONSTRUCTION ENTRANCES, AND/OR OTHER SUITABLE PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY GRADING OR LAND DISTURBING OR AS SOON AS POSSIBLE.

THE CONTRACTOR SHALL INSTALL BMP'S CORRECTLY AND MAINTAIN THEM REGULARLY THROUGH THE CONSTRUCTION PROCESS. INSPECTIONS OF BMP'S SHALL BE CONDUCTED ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.

THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE CONSTRUCTION LIMITS DURING ALL DEMOLITION, EXCAVATION, TRENCHING, GRADING OR OTHER CONSTRUCTION OPERATIONS OF THIS PROJECT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

APPROVED EROSION AND SEDIMENT CONTROL "BEST MANAGEMENT PRACTICES" (BMP'S) SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.

EROSION CONTROL SHOWN MAY BE FIELD ADJUSTED BY THE ENGINEER AS NECESSARY DURING CONSTRUCTION.

THE CONTRACTOR SHALL MODIFY (INSTALL ADDITIONAL AND/OR ADJUST BEST MANAGEMENT PRACTICES) AS NECESSARY TO REDUCE EROSION AND/OR SEDIMENT TRANSPORT.

EROSION CONTROL SHOWN IS A MINIMUM. CONTRACTOR SHALL ADD ADDITIONAL MEASURES AS NECESSARY.

STABILIZED CONSTRUCTION ENTRANCES MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT MUST BE REMOVED FROM ALL OFFSITE SURFACES WITHIN 24 HOURS OF DISCOVERY. TEMPORARY STABILIZED CONSTRUCTION ENTRANCES SHALL BE RELOCATED AS NECESSARY DEPENDENT UPON PHASING.

ANY SILT FENCES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/3 OF THE HEIGHT OF THE FENCE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

THE CONTRACTOR SHALL LEAVE THE EROSION CONTROLS IN PLACE FOR THE DURATION OF THIS PROJECT, AND UNTIL VEGETATION IS ESTABLISHED TO 70% OF PRE-CONSTRUCTION CONDITIONS. ONCE VEGETATION MEETS THE 70% REQUIREMENT, THE CONTRACTOR SHALL REMOVE EROSION AND SEDIMENT CONTROL MEASURES.

LEGEND:

EXISTING CONTOURS
INTERVAL 2' & 10'

PROPOSED CONTOURS
INTERVAL 2' & 10'

DRAINAGE FLOW ARROW

INSTALL SEDIMENT FILTERING DEVICES. TYPE OF
SEDIMENT FILTERING DEVICES SHALL BE DETERMINED
BY THE CONTRACTOR

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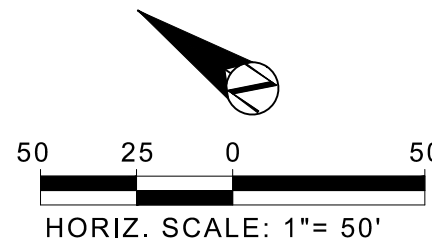
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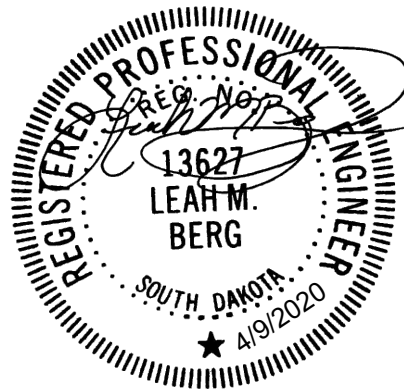
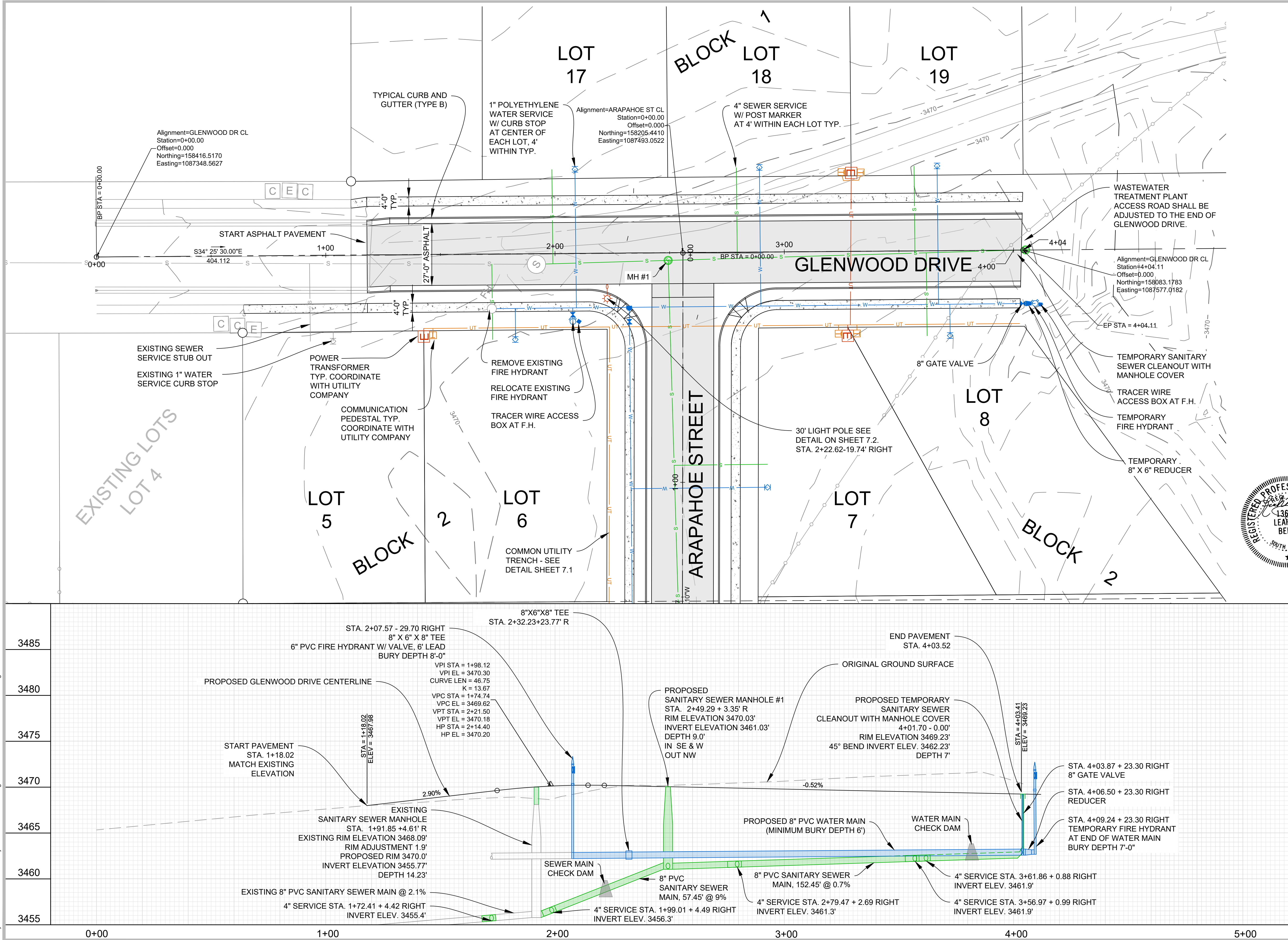


TITLE: EROSION AND
SEDIMENT CONTROL

SHEET
NUMBER: 5.0

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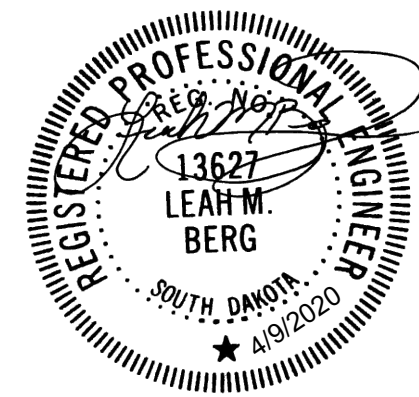
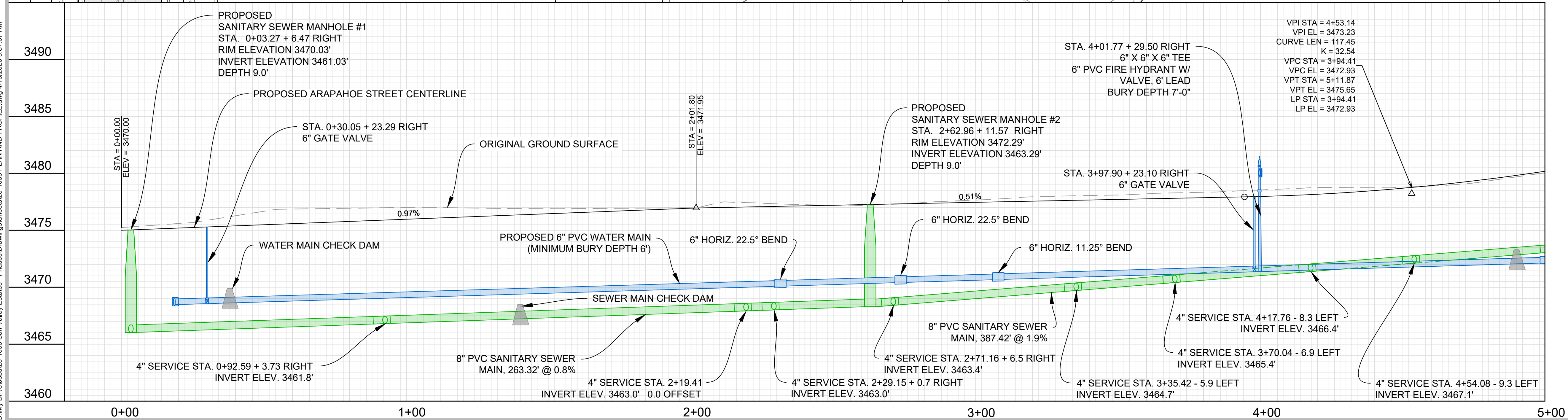
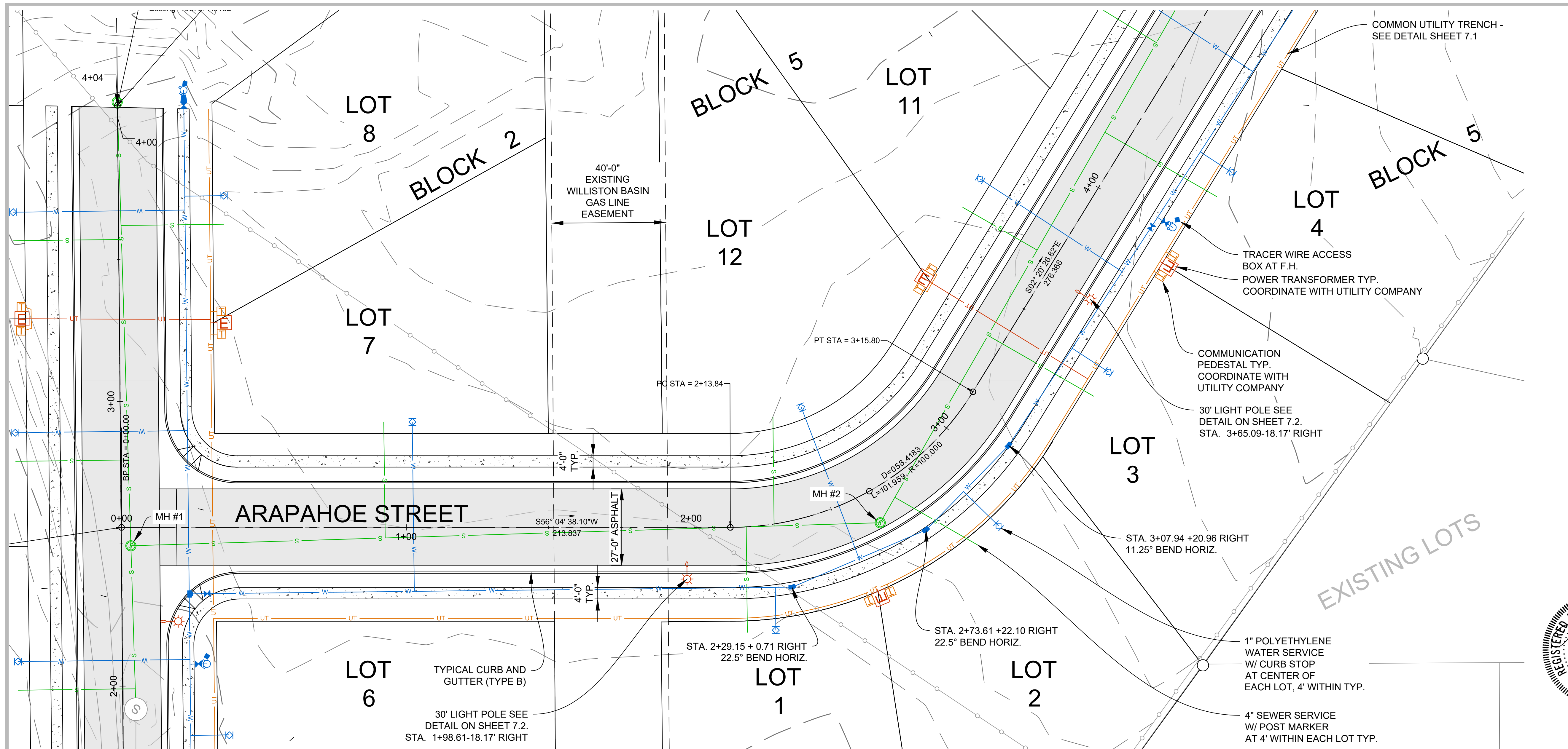
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HORIZ. SCALE: 1"= 20'

TITLE:
GLENWOOD DRIVE
PLAN & PROFILE
STA. 0+00 - 5+00

SHEET
NUMBER:
6.0

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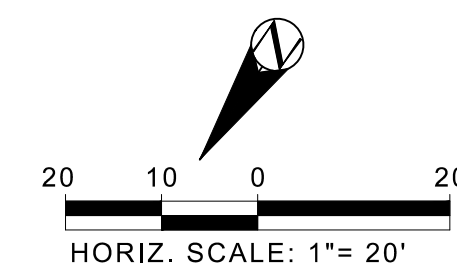
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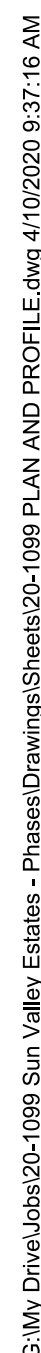
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TITLE:
ARAPAHOE STREET
PLAN & PROFILE
STA. 0+00 - 5+00

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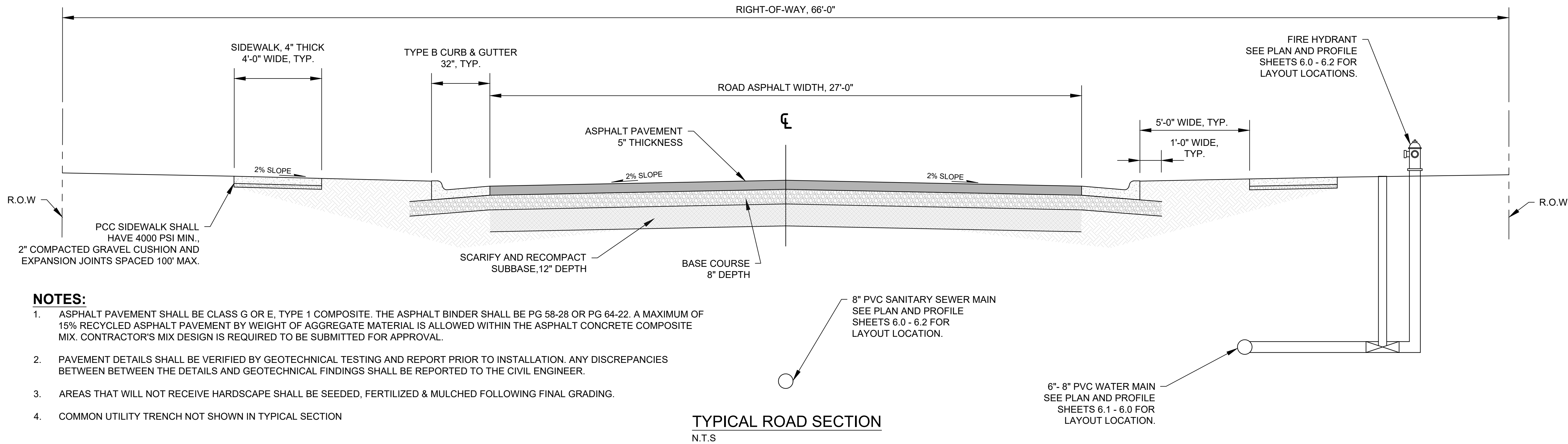


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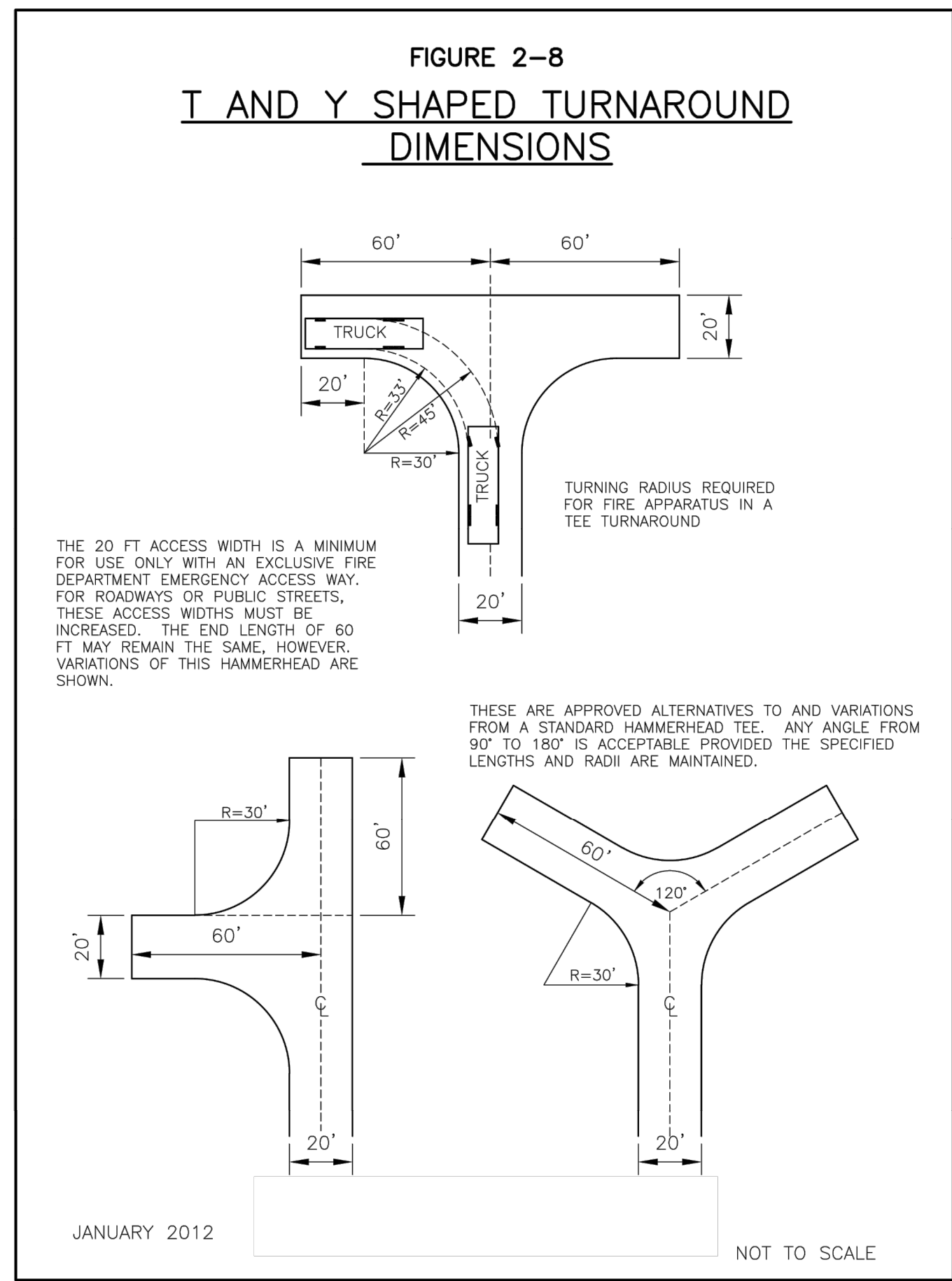
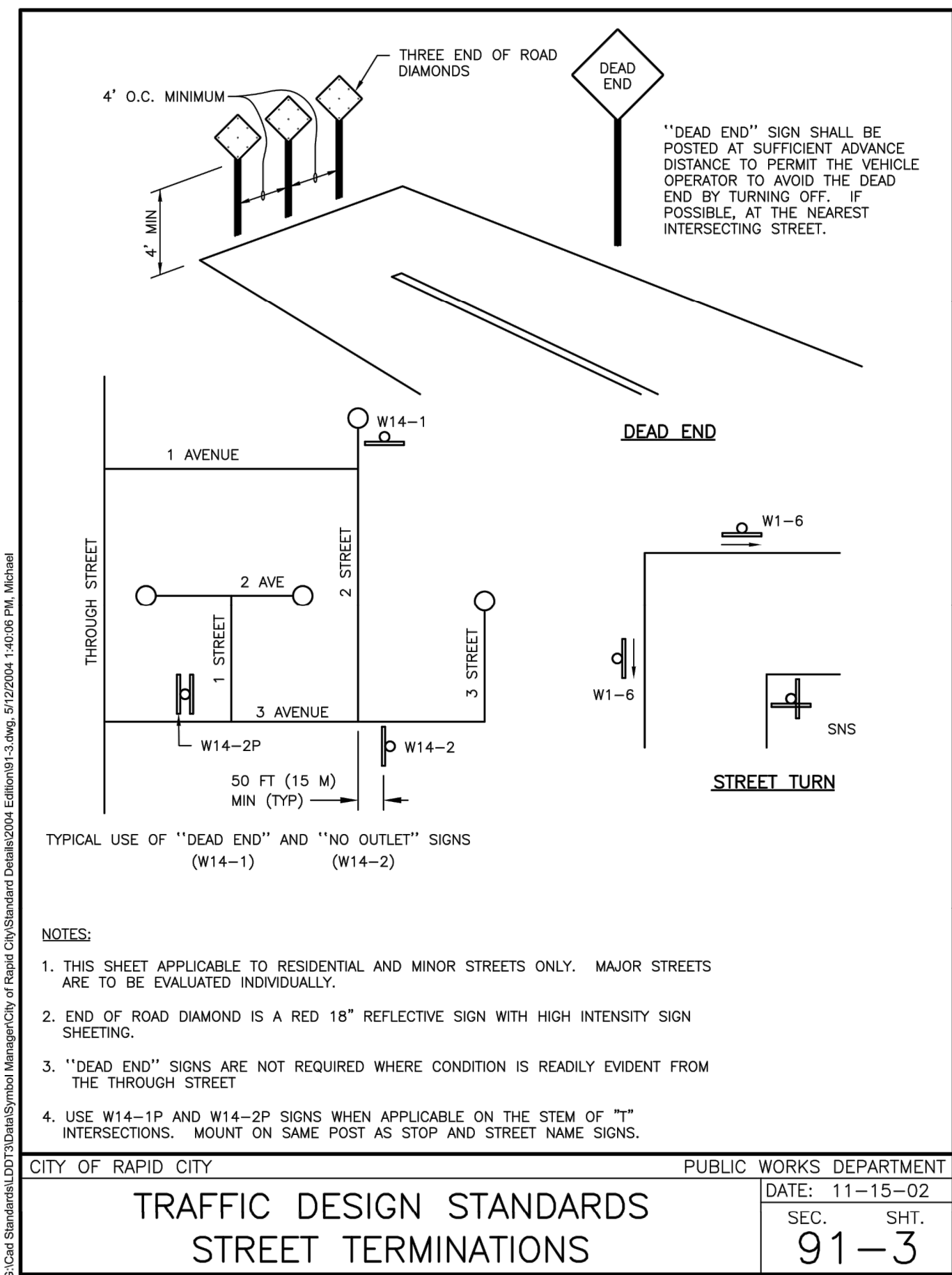
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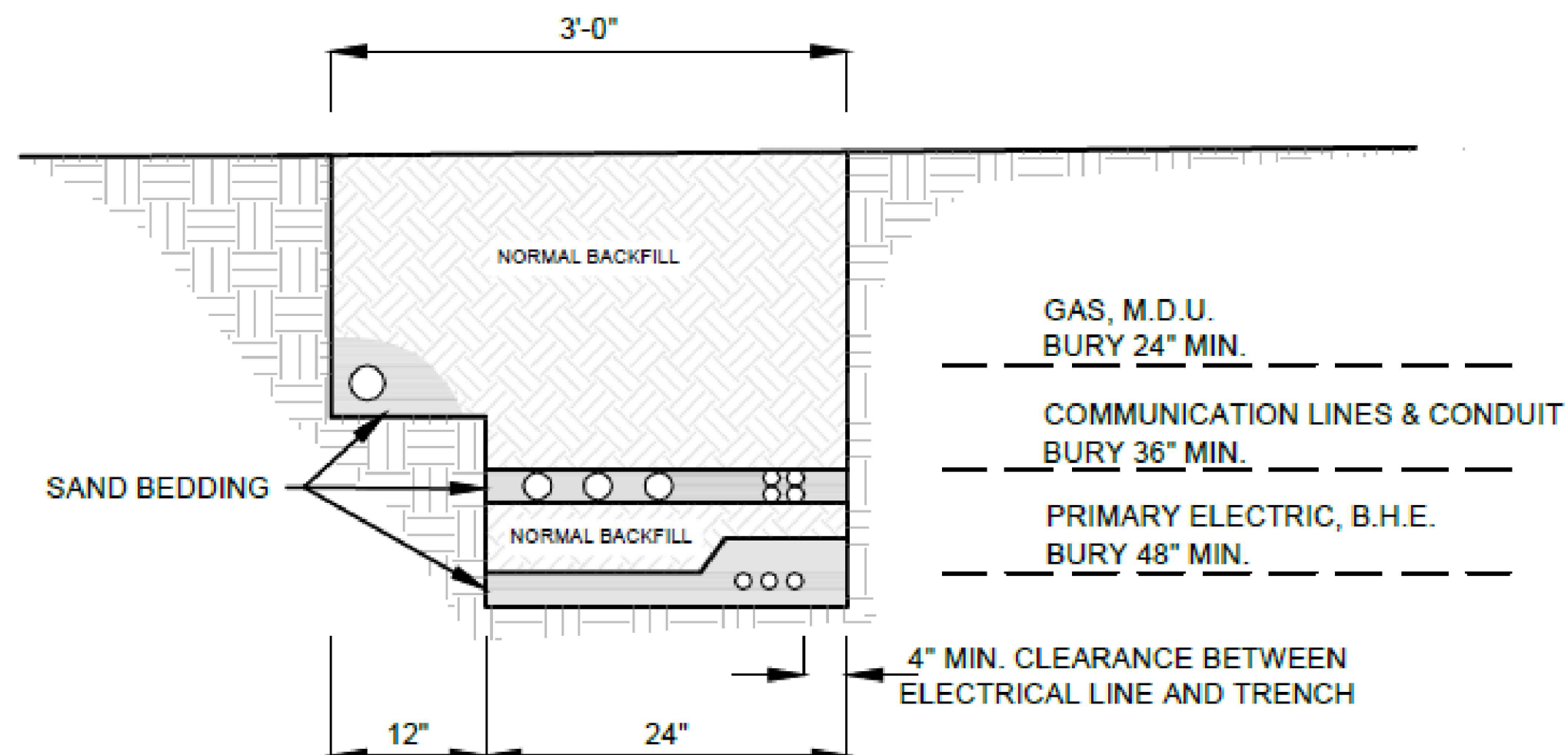


- NOTES:**
1. ASPHALT PAVEMENT SHALL BE CLASS G OR E, TYPE 1 COMPOSITE. THE ASPHALT BINDER SHALL BE PG 58-28 OR PG 64-22. A MAXIMUM OF 15% RECYCLED ASPHALT PAVEMENT BY WEIGHT OF AGGREGATE MATERIAL IS ALLOWED WITHIN THE ASPHALT CONCRETE COMPOSITE MIX. CONTRACTOR'S MIX DESIGN IS REQUIRED TO BE SUBMITTED FOR APPROVAL.
 2. PAVEMENT DETAILS SHALL BE VERIFIED BY GEOTECHNICAL TESTING AND REPORT PRIOR TO INSTALLATION. ANY DISCREPANCIES BETWEEN BETWEEN THE DETAILS AND GEOTECHNICAL FINDINGS SHALL BE REPORTED TO THE CIVIL ENGINEER.
 3. AREAS THAT WILL NOT RECEIVE HARDSCAPE SHALL BE SEEDED, FERTILIZED & MULCHED FOLLOWING FINAL GRADING.
 4. COMMON UTILITY TRENCH NOT SHOWN IN TYPICAL SECTION

TYPICAL ROAD SECTION
N.T.S



- NOTES:**
1. SEE PLAN SHEET 6.0 FOR DROP INLET LOCATIONS.
 2. FRAME AND GRATE MODEL SHOWN SHALL BE BY NEENAH FOUNDRY, OR APPROVED EQUAL.
 3. OUTLET FOR DROP INLET BOX SHALL BE LOCATED ON THE BOTTOM OF EACH BOX AND SHALL BE AN 18" RCP SECTION TO TEE INTO THE FAR NORTH 24" RCP CULVERT UNDER TELLURIDE STREET.
 - 3.1. PIPE CONNECTIONS SHALL BE GROUTED IN PLACE.
 4. INLET END OF 24" RCP CULVERTS SHALL HAVE A CONTINUOUS 4000 PSI CONCRETE HEADWALL WITH ANGLED WING WALLS ON EACH SIDE.
 5. OUTLET END OF 24" RCP CULVERTS SHALL HAVE CONCRETE FLARED ENDS WITH RIP-RAP OR A CONTINUOUS 4000 PSI CONCRETE HEADWALL WITH ANGLED WING WALLS ON EACH SIDE.

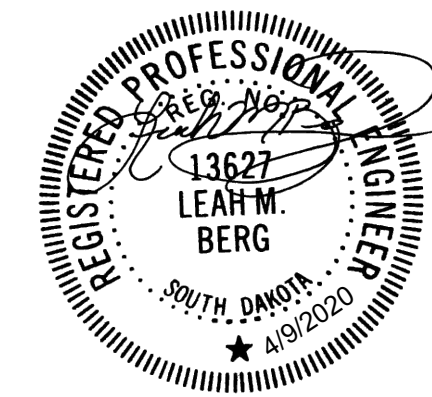


EXAMPLE COMMON UTILITY TRENCH LAYOUT
N.T.S

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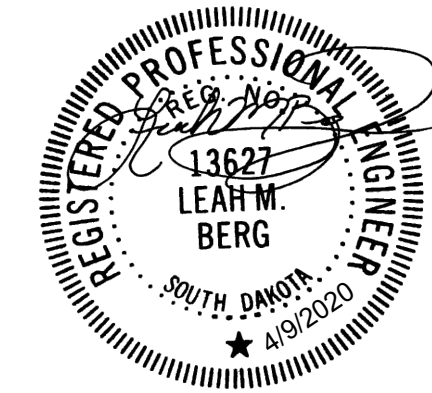
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MEADE COUNTY, SUMMERSET, SOUTH DAKOTA



TITLE: DETAILS

SHEET NUMBER: 7.1

1. CHANNEL AT TEMPORARY 'T' SHAPED TURN AROUND SHALL BE MODIFIED AS SHOWN IN THE PROFILE ABOVE.
2. THE CHANNEL SHALL BE STABILIZED DURING CONSTRUCTION AND UPON COMPLETION.
3. RIP-RAP MATERIAL SHALL BE INCLUDED ON SIDE SLOPES AND THROUGH THE BASE OF THE CHANNEL WITHIN MODIFIED AREA.
4. DRAINAGE FLOW PATH MUST BE MAINTAINED AT ALL TIMES.



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