

10909 Mill Valley Rd, Ste 100 | Omaha, NE 68154 402.895.4700 eacg.com

Dear Homeowner,

The SID has contracted concrete work to be done on the streets in your SID. A contractor will be on site to do work which includes removing the existing concrete that is damaged and replacing it with new pavement.

Throughout the course of this project, there could be some minimal damage done to yards and or sprinkler systems. The contractor that is on site will be responsible for replacing any damaged sprinkler lines and/or heads. They will also be responsible for any yard damage. Once the new seed and mat and/or sod is installed, it will be the responsibility of the homeowner at each lot to water the new seed and mat and/or sod until it has re-established itself.

Before starting the work on site, each contractor must put in a call and have all the utilities in the area located. You might notice some areas in your yard that have been flagged and/or spray painted. This does not indicate the area in which they will be working. It is just to give them an idea of what kind of utilities are in the area that could possibly be hit while the contractor is on site working.

All work that is completed in public Right-of-Way and follow City of Omaha and Sarpy County specifications.

The work in your SID should not take longer than 30 days to complete. Please let me know if you have any questions or concerns on this at all.

Thank You,

Chris Anderson

Construction Admin Tech Engineering Answers...by transforming concepts into reality E & A Consulting Group, Inc. 10909 Mill Valley Road, Suite 100 • Omaha, NE 68154 402.895.4700 (o) • 402.506.5084 (m) canderson@eacg.com



APPROXIMATE BID QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT	Located in the NE
1	INSTALL CONSTRUCTION ENTRANCE	2	EA	-
2	INSTALL STRAW WATTLE	337	LF	
3	INSTALL CURB INLET PROTECTION	3	EA	
4	INSTALL SILT FENCE	186	LF	
5	CLEARING & GRUBBING - GENERAL	1	LS	
6	EXCAVATE, DRY, AND RE-COMPACT SILT OR HAUL OFF SITE	1,180	CY	
7	EXCAVATION ON-SITE (ESTABLISHED QUANTITY)	2,763	CY	
8	HAUL OFF (ESTABLISHED QUANTITY)	1,291	CY	
9	REMOVE AND RELAY 24" FES	1	EA	
10	REMOVE AND RELAY 30" FES	1	EA	
11	REMOVE AND RELAY 36" FES	1	EA	
12	REMOVE AND REPLACE SIDEWALK	165	SF	
13	CONSTRUCT 24" RCP	24	LF	
14	CONSTRUCT 30" RCP	16	LF	
15	CONSTRUCT 36" RCP	24	LF	
16	CONSTRUCT 24" COLLAR	1	EA	
17	CONSTRUCT 30" COLLAR	1	EA	
18	CONSTRUCT 36" COLLAR	1	EA	
19	CONSTRUCT 24" COLLAR (AS NEEDED FOR FES RE-USE)	1	EA	
20	CONSTRUCT 30" COLLAR (AS NEEDED FOR FES RE-USE)	1	EA	
21	CONSTRUCT 36" COLLAR (AS NEEDED FOR FES RE-USE)	1	EA	
22	REMOVE AND RELOCATE SIGN	6	EA	
23	INSTALL NORTH AMERICAN GREEN S150 - TYPE A SEED & MAT	6,661	SY	
24	INSTALL NORTH AMERICAN GREEN S150 - RAIN GARDEN MIX SEED & MAT	1,924	SY	
25	INSTALL NORTH AMERICAN GREEN VMAX C350 - TYPE A SEED & MAT	591	SY	
26	INSTALL FLEXAMAT	856	SF	
Note to	Bidders:			
Basins from ba basin. Item 1 -	to be removed or converted and graded as shown. All silt is to be removed from basin b isin using BMP of contractors selection. Contractor to remove trees and rip rap as neede Install Construction Entrance. This item is intended to pay the Contractor for the installa	efore grading can be started ed. Removals shall be consid ation, maintenance and rem	d. Contractor dered subsidi oval of the co	to pump any water ary to removing
	Jostell Strow Wattle. This item is intended to new the Contractor for the installation main	ntenence and removal of at	ou unattle mi	ion to populing
item 2 -	install Straw Wattle. This item is intended to pay the Contractor for the installation, main		aw wallie pri	or to seeding.
Item 3 - prior to	Install Curb Inlet Protection. This item is intended to pay the Contractor for the installati seeding.	ion, maintenance and remov	al of the cur	o inlet protection
Item 4 -	Install Silt Fence. This item is intended to pay the Contractor for the installation, mainte	nance and removal of the s	ilt fence prior	to seeding.
Item 6 - Specific conditio remove Silt rem site or r constru back to be cons	Excavate, Dry & Recompact Silt. The Excavation of silt and placement as backfill shall cations. This Item is intended to pay the Contractor for dewatering and silt removal accuration of the silt (either on-site or off-site) and the placement and compaction as structural silt to virgin ground (see Basin Removal Detail). A Geotechnical subconsultant shall inspoval may be trucked off site or at the discretion of the contractor, dried to within acceptal noisture conditioned on site, additional embankment shall be supplied to bring the elevation. At this point, the excavation on site or borrow from off site can commence. The cation of the construction grade shall be subsidiary to excavate, dry & recompact silt. The sidered an established quantity and will only be changed by a written change order.	be per Section 201 of the C mulated in the bottom of the I fill to the pre-construction e pect and approve silt remov ble moisture content levels. tion back to the original elev ost of bringing additional so The Engineers estimate of si	ity of Omaha e existing bas elevations. T al prior to pla Whether the ation of the s I to the site to It is <u>1,180 C</u>	Standard in, the moisture he Contractor shall cement of any fill. soil is trucked off silt prior to o bring the elevations <u>Y</u> . This quantity will
Item 7 - compac compac (adjuste is the c	Excavation (on-site) - Established Quantity. This item is intended to pay the contractor of material located on site. The unit cost bid shall include the cost of excavation, loading oftion to fill. Compaction requirement is 95% Standard (ASTM D-698) with moisture limits ad - See details below). A topographic survey will be done before construction begins. To ontractors responsibility to determine if the estimated amount is accurate. No adjustment	tor materials necessary to e for transport, transport, unlo of - 3% to + 4% optimum. This item is paid for at an es it to this quantity bid will be a	xcavate, trar bading, place The Enginee tablished qua accepted with	Isport, place and ment and Irs estimate <u>2,763 CY</u> antity unit price, and it hout an approved

Item 8 - Haul off - Established Quantity. This item is also intended to pay the contractor for material required to be hauled off to complete the project to the grade shown on the plan. The unit cost bid shall include the cost of loading for transport, transport, unloading and placement. The Engineers estimate <u>1,291</u> <u>CY</u> (adjusted - See details below). This item is paid for at an established quantity unit price, and it is the contractors responsibility to determine if the estimated amount is accurate. No adjustment to this quantity bid will be accepted without an approved written change order.

BENCHMARK:

written change order.

BENCHMARK #1: ELEV:	CHISELED "X" IN RIM OF ROAD ON THE WEST SID 1215.78'	FIRST CURB INLET ON N DE OF 200TH STREET. BO	NORTH SIDE OF GILES DOK 4610, PAGE 44.			Greenleaf Street	e e e GILES ROAD	
BENCHMARK #2: CHISLED "X" IN RIM OF CURB INLET ON THE SOUTH SIDE OF GREENLEAF STREET, FIRST CURB INLET EAST OF 199TH STREET. BOOK 4726, PAGE 30 ELEV: 1213.53' Cut/Fill Summary				 			E1/2 N SEC. 19-T12	
Name		Cut Factor	Fill Factor	2d Area	Cut	Fill	Net	
Cut and Fi Cut and Fi	ll - Basin A ll - Basin B	1.000 1.000	1.350 1.350	53656.86 Sq. Ft. 18262.79 Sq. Ft.	2234.17 Cu. Yd. 528.68 Cu. Yd.	1016.30 Cu. Yd. 456.11 Cu. Yd.	1217.86 Cu. Yd. <cu 72.57 Cu. Yd.<cut></cut></cu 	ut> >
Totals				71919.65 Sq. Ft.	2762.85 Cu. Yd.	1472.42 Cu. Yd.	1290.43 Cu. Yd. <cu< th=""><th>ıt></th></cu<>	ıt>

REMINGTON WEST

SEDIMENT BASIN A & B CONVERSION

E 1/4 of the SW 1/4 and the SE1/4 of the SW 1/4 of Section 18, Township 14N, Range 11E,

of the 6th P.M.

SID NO. 343

SARPY COUNTY, NEBRASKA



	SAR-20190
Project Number Assigned by PWD	Grading Permit Proje
Basin A-B Conversion	
Project Name	
S 200th Street and Giles Road	d
Address	
X	
City Council Resolution Number Granting Project Appro	oval
PROJECT D	ESCRIPTION
This project converts (2) basi	ins from temp
permanent water quality basi	ns.
SID 317	
Gerald Torczon, Chairman	leresa Wo
10250 Regency Cir, Ste 300	10909 Mill Va
Omaha, NE 68114	Omaha, NE
P:402.397.5500	P: 402.895.47
F: 402.397.4853	F: 402.895.35
bachman@pheblaw.com	twooten@e
INSPECTOR	CON
E & A Consulting Group, Inc	
Randall L. Pierce, P.E.	
10909 Mill Valley Road, Suite 100	
Omaha, NE 68154	
P: 402.895.4700	
F: 402.895.3599	
rpierce@eacg.com	
	L



GENERAL NOTES All project procedures, materials, bonds and reserves shall conform to the City of Omaha's Standard Specifications for Public Works Construction, 2024 Edition ("Standard Specifications"). It is the responsibility of the CONTRACTOR to be familiar with the contents of the Standard Specifications. The Standard Specifications can be found at: CONTRACTOR. https://publicworks.cityofomaha.org/contractors-consultants2/contractors/standard-plates-curb-ramps-and-specifications References to "Standard Plates" refers to the City of Omaha's 2024 Standard Plate list. These approval of the DESIGNER and City of Gretna Public Works Department. Standard Plates can be found at: https://publicworks.cityofomaha.org/2024-standard-plate-list The CONTRACTOR is referred to the following Standard Plates for use on this project: PLATE NO. DESCRIPTION **REVISION DATE** 502-01 02/13/2024 Concrete Curbs 503-01 Sidewalk Construction 02/13/2024 503-02 02/13/2024 Sidewalk Location 504-01 02/13/2024 Concrete Curb Ramps fully reconstructed at the end of each working day prior to leaving the site. 700-01 02/13/2024 Concrete Collar and Cradle 700-02 Sewer Tap 02/13/2024 700-03 Pipe Plug 02/13/2024 0.999635086. 700-04 Reinforced Concrete Pipe Couplers 02/13/2024 700-05 02/13/2024 19. Elevations are referenced to U.S.G.S. Datum, NAVD 88. Cast Iron Manhole Rings and Covers 700-06 02/13/2024 Manhole Steps 701-01-01 02/13/2024 Sewer Bedding 701-01-02 Sewer Bedding 02/13/2024 701-01-03 Sewer Bedding 02/13/2024 702-08 02/13/2024 Area Inlets 02/13/2024 702-11 Storm Sewer Manhole 702-12-01 02/13/2024 Flared End Section and Bar Grates Flared End Section and Bar Grates 702-12-02 02/13/2024 Barricades shall conform to the Omaha Public Works "Barricading Standards, Specifications, Methods and Materials" and/or the "Manual on Uniform Traffic Control Devices" and any additions thereto. The aforementioned publications can be found at: https://publicworks.cityofomaha.org/images/PDF/TRAFFIC_BARRICADE_MANUAL_-_MARCH_2022.pdf and https://mutcd.fhwa.dot.gov/kno_11th_Edition.htm construction documents, the most stringent construction methodology shall rule. 4. The time limit to complete the work is listed in the Proposal in the Specifications. The INSPECTOR shall certify the CONTRACTOR's Work adheres to and meets all construction grades or line stakes. specifications and plans; maintenance, safety, workmanship, and testing requirements; and applicable regulatory compliance issues. destroyed by his operations. Approval shall be obtained from the City of Gretna Public Works Department for all applicable public improvements prior to the commencement of construction. The CONTRACTOR shall check with the INSPECTOR for City of Gretna Public Works Department approval of the project before starting work. The CONTRACTOR and INSPECTOR shall ensure all impacted government agencies (City of Gretna, Sarpy County, State of Nebraska, Corps of Engineers, Papio-Missouri River Natural acceptance of the work. Resource District, United States Federal Government, etc.) have granted all applicable permission to proceed with construction prior to mobilization. Furthermore, 48 hours prior to the commencement of construction, the INSPECTOR shall notify all concerned parties that work will sediment from leaving the construction site. be proceeding within each impacted government agency jurisdictional boundary. Construction found to be unacceptable to the City of Gretna Public Works Department shall be removed and replaced at the CONTRACTOR's expense. The INSPECTOR shall notify the following City of Gretna Public Works Department personnel 48 hours prior to all preconstruction meetings and 48 hours prior to the start of any construction: Greg Perry (Phone: 402-399-0227; email: gregp@eagleengineeringgroup.com). 10. The INSPECTOR shall submit weekly progress reports to the following City of Gretna Public Works Department employee no later than the following week ending date: Greg Perry (Phone: 402-399-0227; email: gregp@eagleengineeringgroup.com). 11. The INSPECTOR shall notify the following City of Gretna Public Works Department personnel 48 hours prior to lane closures and 24 hours prior to lane restrictions: Greg Perry (Phone: 402-399-0227; email: gregp@eagleengineeringgroup.com). 12. All operations conducted on the premises, including the warming-up, repair, arrival, departure, or running of trucks, earthmoving equipment, construction equipment, and any other associated equipment shall be limited to the period between 7:00 A.M. and 6:00 P.M., Monday through Friday. No earthmoving or grading operations shall be conducted on the premises on Saturdays or Sundays or legal holidays, unless waived by the INSPECTOR and the City of Gretna Public Works Department. 13. The CONTRACTOR shall notify all impacted utility companies via One Call (dial 811 or 800-331-5666) 48 hours before work is started to verify utility locations. 14. The existence and location of any overhead or underground utility lines, pipes, or structures shown on these plans are obtained by a research of the available records. Existing utilities are approximate and for record purposes. Existing utilities are located on plans only for the convenience of the CONTRACTOR. Existing utility service lines may not be shown on the plans. The CONTRACTOR shall locate all underground and overhead interferences which may affect his operation during construction and shall take all necessary precautions to avoid damage to the same.

15. The CONTRACTOR shall take all precautionary measures necessary to protect existing utility lines, structures and street improvements which are to remain in place, from damage, and all such improvements or structures damaged by the CONTRACTOR'S operations shall be repaired or replaced satisfactory to the INSPECTOR and owning utility company at the expense of the

16. All construction shall be as shown on these plans. Any revisions shall have the prior written

17. Construction may require the disturbance of existing drainage and erosion control measures. The CONTRACTOR shall make themselves aware of the existing drainage and erosion control measures prior to bidding this work. A copy of the Grading and Erosion Control Plan SAR-20190130-4865 GP1 is available for review at the office of the DESIGNER and INSPECTOR. The function of these items must be maintained throughout construction with emphasis placed on restoring their integrity prior to any rainfall event. Erosion control improvements have been constructed on this site, including terraces, silt fencing, and temporary sediment basins. The CONTRACTOR shall be responsible for prompt reconstruction of any erosion control improvements disturbed by his operations. All disturbed erosion control improvements shall be

18. All coordinates shown are Nebraska State Plane Coordinates modified using a scale factor of

20. CONTRACTOR shall adjust all new and existing inlets, valve boxes, manhole rims, and sewer clean outs, etc. to finish grade as applicable whether or not they are shown on the plans.

21. The CONTRACTOR shall adhere to good housekeeping best management practices at all times. Good housekeeping best management practices focus on keeping the work site clean and orderly while handling materials and waste in a manner that eliminates the potential for pollutant runoff.

22. The construction documents (e.g., Contract, Bond, Insurance, Specifications, and Construction Plans) are essential and a requirement in one part is as binding as though occurring in all. Thus, the construction documents are complementary in nature. The documents describe and provide the complete construction project. The CONTRACTOR may not take advantage of any apparent construction project errors or omissions. The CONTRACTOR shall notify the INSPECTOR promptly of any omissions or errors. In the case of a discrepancy between parts of the

23. The CONTRACTOR shall be responsible for coordinating their work with the ENGINEER in requesting line stakes and grades. The OWNER will not be responsible for delays due to lack of

24. The CONTRACTOR shall be charged for replacing construction stakes and lot pins which are

25. The CONTRACTOR is hereby referred to Subsection 100.03-E of the Standard Specifications relative to cleaning of the work area. The final estimate will not be processed until the CONTRACTOR has satisfactorily cleaned and flushed the pavement slab of all rubbish, excess material, mud and debris, and all parts of the work area have been left in a neat and presentable manner. All disturbed right-of-way areas shall be restored to a level and smooth section prior to

26. The CONTRACTOR shall place silt fence as shown and as directed by the ENGINEER to prevent

GRADING AND SWPPP GENERAL NOTES

1.	Utilities are shown as a convenience for the Contractor. The locations of all aerial and underground utilities may or may not be indicated in these plans. The Contractor shall notify all utility companies before work is started to verify utility locations. No excavation will be permitted in the area until all utilities have been located and identified to the astisfaction of all parties and then antwrith outputs or area to avoid any provide the demage.	1.
	The Contractor will be responsible for repair of utilities damaged during construction.	2.
2.	The Contractor shall maintain positive drainage in existing road ditches and culverts draining into the project area.	
3.	Payment for earthwork shall be based upon the bid Item "EXCAVATION ON-SITE (ESTABLISHED	3.
	QUANTITY)". This quantity is the fixed plan cut volume determined by a comparison of the proposed grade surface to the existing grade surface. The project has not been designed to balance assuming a 35% shrinkage factor on the fill unless otherwise indicated.	
	change order resulting from a plan revision or field change. Work shall include excavation, haul, placing and compacting earthwork necessary for a completed project for this fixed established quantity.	4.
4.	Fill placed on a slope steeper than a 5H:1V shall be benched before placing fill, with a maximum riser height on the order of 2', separated by horizontal steps that are wide enough to accommodate compaction equipment.	
5.	All fill and backfill shall be placed in lifts of 8" or less in loose thickness. All fill shall be compacted to a minimum	

6. Fill and Backfill shall be inspected and tested periodically at the discretion of the ENGINEER for adherence to material, compaction, and moisture specifications.

D698 (Standard Proctor) or as recommended by the Geotechnical Engineer.

95% of the maximum dry density at a moisture content 3% below to 4% above optimum as determined by ASTM

- a. Fill or backfill failing to meet compaction and moisture content specifications shall be reworked and retested at the Contractor's expense.
- b. Material deemed unsuitable by the ENGINEER shall be removed and replaced. Reimbursement for removal of unsuitable materials will be made at the contract unit price for, "EXCAVATION ON-SITE (ESTABLISHED QUANTITY)".
- 7. Fill and backfill material shall be impervious material (clay/silt) free of frost, snow, ice, concrete, brick, stone, refuse, cinder ashes, organic matter, or any other material deemed unsuitable by the ENGINEER.
- 8. Excavation necessary for construction of the basins is incorporated into the "EXCAVATION ON-SITE (ESTABLISH QUANTITY)" quantity.
- 9. Existing ditches and eroded areas shall be undercut a minimum of 12 inches on all bottoms and sides prior to placement of any fill. Separate payment will not be made for undercutting.
- 10. The Contractor shall give the ENGINEER 72 hours notice to allow time to perform a survey check of the graded site prior to respreading topsoil. The Contractor shall obtain the ENGINEER's approval of the work prior to respreading topsoil or removing equipment from the site. Any re-mobilization or re-work required due to the circumstances described in this paragraph shall be performed by the Contractor at no additional cost.
- 11. The Contractor shall monitor perimeter silt fencing and install additional silt fencing if necessary or as directed by the ENGINEER. Payment shall be made at the unit price for "Install Silt Fence". (See the Erosion Control Feature Maintenance Schedule).
- 12. No tree removal shall occur between April 1 and July 15, unless a migratory bird inventory has been completed and no nesting of migratory birds is found. Tree removal between June 1 and July 31 shall further require a bat roosting inventory.
- 13. The Contractor shall comply with all OSHA regulations.
- 14. A Geotechnical Exploration Report has been prepared for this project and is incorporated herein by reference. All recommendations of said report shall be followed in performing grading, paving, and utility operations. See Geotechnical Report prepared for this project by ISG & Associates, Inc. Project #18214, Dated November 19, 2018.
- 15. The Contractor shall maintain and preserve utilities traversing and servicing premises as long as those utilities are required.
- 16. Where open excavations are not backfilled within 24 hours, the Contractor shall encircle the open area by a standard snow fence.
- 17. All rubbish, unsuitable material, debris, equipment, etc., resulting from demolition work shall be disposed of properly and in a legal manner.
- 18. The Contractor shall control dust during demolition and removals.
- 19. All demolition, removals, clearing and grubbing shall be paid for in a lump sum at the bid price for "CLEARING AND GRUBBING - GENERAL".
- 20. If Tensar BX1100 Geogrid and 3" Clean Limestone are required by Geotechnical Engineer, the geogrid and limestone shall be placed 10' below the top of curb.

STORM SEWER CONSTRUCTION NOTES

The storm sewer system (pipe, manholes, inlets, appurtenances, special structures, etc,) shall be supplied and installed in accordance with the Standard Specifications.

The CONTRACTOR shall ensure all storm sewer pipe supplied for construction has been certified by the American Concrete Pipe Association (ACPA). All pipe must display the Q-CAST symbol to verify the manufacturer has met the ACPA's certification program. Visual inspections for defects shall continue to take place on the site.

No storm sewer service connections to any private lot shall be permitted prior to final acceptance by the City of Gretna Public Works Department, Greg Perry (Phone: 402-399-0227; email: gregp@eagleengineeringgroup.com), which shall include approved rectification of all punch list items and the submittal of mylar as-built drawings.

Aggregate bedding is required for all storm sewer pipe. Pipe bedding shall be in accordance with the Standard Specifications and as indicated on City of Omaha Standard Plate 701-01-1, 701-01-2, 701-01-3. Pipe bedding required for Rigid Pipe shall conform to Type R2 as included on Standard Plate 701-01. Any variances to the required bedding type will be as noted in the project plans. Recycled concrete is not an acceptable pipe bedding material. The cost of aggregate for pipe bedding shall be subsidiary to the cost of the pipe.

Additional aggregate bedding or foundation rock required for the sewers shall be placed as directed by the ENGINEER at locations where unstable trench bottom conditions are encountered. Install in accordance with Subsection 700.03-H of the Standard Specifications and Standard Plate 701-01.

Joints for storm sewer pipes are required to have a fabricated gasket or bitumastic sealant meeting the material and installation requirements noted under Section 702 of the Standard Specifications.

7. Pipe couplers conforming to Standard Plate 700-04 shall be installed at the first three (3) ioints of flared end sections.

8. Flared end sections are not required to have the concrete footing or pile support shown on Standard Plate 702-12.

9. All inlet structures will be located in the field by the ENGINEER.

10. Manholes shall be constructed in accordance with Standard Plate 702-11 including installation of external frame seals for all manholes within paving.

11. All rip-rap shall be underlain with geotextile filter fabric (Mirafi 180N) or approved equal. The filter fabric is subsidiary to the rip-rap.

12. The CONTRACTOR shall ensure all storm sewer lines, manholes, and inlets are cleaned of debris (leaves, stone, dirt, construction material, etc.) prior to the APPLICANT taking ownership.

13. All storm sewer pipe installed under this project shall be inspected by Closed Circuit Television (CCTV) camera by an independent sewer inspection service. The CCTV inspection will be paid for by the OWNER. Video record of the inspected pipe(s) and written assessment of pipe conditions and any deficiencies shall be provided to the ENGINEER in electronic format. Any subsequent CCTV inspections required after necessary pipe system repairs shall be paid by the CONTRACTOR.



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CSMP

TYPE:

PROJECT

5-

486



SECTION B - B

FLEXAMAT TABLE									
BASIN	A	В	PAY QUANTITY						
Basin A - 36"	19'	15'	285 SF						
Basin A - 30"	19'	15'	285 SF						
Basin A - 24"	13'	11'	143 SF						
Basin B - 24"	13'	11'	143 SF						

FLEXAMAT DISSIPATION DETAIL NOT TO SCALE



NOTES:

- 1. A preconstruction conference shall be held with contractor, engineer, and geotechnical engineer prior to basin removal construction starting.
- 2. Entire basin shall be cleaned of silt, riser pipe/outlet pipe and inlet pipe removed, and side walls cleaned. At this point, the inspection by the Geotechnical Engineer must take place before the sidewalls are benched with 2' vertical steps and embankment placed.
- 3. All embankment shall be free of debris and placed in lifts of 8". Density testing must be performed at 1' intervals throughout the entire basin closure process. Compaction requirements shall be 95% compaction (Standard Proctor), with moisture requirements of - 3% to +4% optimum.
- 4. Sheeps foot or pad foot compactor required. Vibratory compactors will be required if compactions are not met on regular basis.

BASIN REMOVAL DETAIL & NOTES NOT TO SCALE



SILT FENCE NOT TO SCALE

NOTES:

- 1. Acceptable silt fence specifications- AOS (#20 - 50 Sieve), Water Flow Rate (50 gpm/ sq. ft. - 125 gpm/ sq.ft), Tensile Strength (Grab) - (Min. 120 Warp or greater and Elongation (5-25%).
- 2. On each new run of silt fence spray paint the beginning of the run with 0+00 and spray paint the end with the date of installation and LF of the run.
- 3. Silt fence should be securely fastened to each steel support post or to woven wire which is in turn attached to the steel fence posts. A minimum of 3 ties are required for each post. To be located in the top 12"of the silt fence.
- Steel posts which support the silt fence shall be installed 4. on a slight angle toward the anticipated runoff source. (Incline all posts 20° Max. from vertical, toward flow)
- Silt fence shall be trenched in with a silt fence plow so that 5. the downslope face of the trench is flat and perpendicular to the line of flow.
- 6 Silt fence shall be removed when it has served its usefulness so as not to block or impede storm flow or drainage.
- 7. Sediment trapped by this practice shall be uniformly distributed on the source area prior to topsoiling.











Dial: 811

Finished paving € Profile 0.0 Grading elevation -0.3 (plan contour lines)

RN 3

(RN 27) 🔆 🗙

RN 1

 $\langle \mathcal{S}_{0} \rangle$

-5.15%

1228-

(RN 24)-

Des har

(NO) **REFERENCE NOTES**

- RN 1 Install, maintain & remove construction entrance, 1 EA. Contractor to verify with engineer for permission to construct.
- RN 2 Install silt fence (J-hooks every 100 ft), <u>191 LF</u> See Sheet 3 for detail.
- RN 3 Install curb inlet protection 3 EA (total this sheet).
- RN 4 Install straw wattle, 265 LF.
- RN 5 Remove temporary sediment basin See Sheet 3 for detail.
- RN 6 Excavate, dry, and recompact silt or haul off site, 941 CY.
- RN 7 Existing 72" Type II Area Inlet to remain.
- RN 8 Existing 36" RCP to remain.
- RN 9 Existing 36" FES to remain.
- RN 10 Remove and relay 24" FES, 1 EA. Grade to drain. (Pipe Couplers on first 3 sections from flared end, per Standard Plate 700-83, 3 couplers per joint, Subsidiary). Construct 24" concrete collar, 1 EA, (if required) - See Plan & Profile Sheet 6.
- RN 11 Construct 24" concrete collar, 1 EA See profile sheet 6 for details
- RN 12 Construct 24" RCP, 24 LF contractor to maintain 0.50% slope (concrete collar subsidiary). See Plan & Profile Sheet 6.
- RN 13 Remove and relay 30" FES, 1 EA. Grade to drain. (Pipe Couplers on first 3 sections from flared end, per Standard Plate 700-83, 3 couplers per joint, Subsidiary). Construct 30" concrete collar, 1 EA, (if required) - See Plan & Profile Sheet 6.
- RN 14 Construct 30" concrete collar, 1 EA See profile sheet 6 for details
- RN 15 Construct 30" RCP, 16 LF. Contractor to maintain 0.10% slope (concrete collar subsidiary). See Plan & Profile Sheet 6.
- RN 16 Remove and relay 36" FES, 1 EA. Grade to drain. (Pipe Couplers on first 3 sections from flared end, per Standard Plate 700-83, 3 couplers per joint, Subsidiary). Construct 24" concrete collar, 1 EA, (if required) - See Plan & Profile Sheet 6.
- RN 17 Construct 36" concrete collar, 1 EA See profile sheet 6 for details
- RN 18 Construct 36" RCP, 24 LF. Contractor to install pipe at 0.00% slope (concrete collar subsidiary). See Plan & Profile Sheet 6.
- RN 19 Reshape bank to match proposed contours (3:1 slope max).
- RN 20 Emergency spillway, 100 LF, install Type A seed & North American Green VMAX C350, 491 SY, install per manufacturer's recommendation.
- RN 21 Construct Flexamat, total quantity including embedment <u>713 SF</u> (total this sheet) per manufacturer's recommendations - See Sheet 3 for detail.
- RN 22 Seed and mat bottom of basin with Rain Garden Mix, 1,647 SY . Planting method shall be per manufacturer's recommendation. See detailed list in the legend on this sheet. Matting shall be North American Green S150, or approved equal.
- RN 23 Install Type A seed and North American Green S150 Matting, 4,424 SY. Planting method shall be per manufacturer's recommendation.
- RN 24 Remove and Replace Concrete Sidewalk, <u>165 SF</u>, Contractor Shall Abut Sidewalk to Existing Pavement with Thickened Edge. Install Expansion Joint at Connection. Adjust Elevation as Needed to Match Existing Grade. (Subsidiary of Remove and Replace Concrete Sidewalk). Barricading Sidewalk closure required (subsidiary).
- RN 25 Grout Existing Sediment Basin Weep Holes (subsidiary).
- RN 26 Core Drill (5) 3" holes through Inlet at CL Elev 1210.70. Holes shall be spaced a minimum of 8" on center (subsidiary).
- RN 27 Remove and relocate sign, 3 EA.

UTILITIES NOTE:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM OBSERVED EVIDENCE TOGETHER WITH EVIDENCE FROM PLANS OBTAINED FROM UTILITY COMPANIES OR PROVIDED BY CLIENT, AND MARKING BY UTILITY COMPANIES AND OTHER APPROPRIATE SOURCES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, IN WHICH CASE THE SURVEYOR SHALL NOTE ON THE PLAT OR MAP HOW THIS AFFECTED THE SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES.

Note:

To receive final PCSMP approval the construction of all PCSMP BMP's is required to be certified by E&A Consulting Group, Inc. Contractor shall contact Randall Pierce of E&A Consulting Group (402-709-3085 office / 402-510-1321 cell) a minimum of 48 hours prior to starting construction on any PCSMP BMP.



	DRY DETENTION BASIN NOTES										
					RISER EMERGENCY SPILLWAY					1/2" WATERS	HED VOLUME
BASIN	BOTTOM ELEVATION (FT)	TOP ELEVATION (FT)	EXISTING OUTLET PIPE DIAMETER	RISER PIPE DIAMETER	RISER THROAT ELEVATION (FT)	RISER RIM ELEVATION (FT)	ELEVATION (FT)	WIDTH (FT)	DRAINAGE AREA (AC)	REQUIRED (CF)	PROVIDED (CF)
A	1211	1218	36"	TYPE II AI (72") Modified	1215.24	1216.49	1217	100	21.79	39,549	71,192



$\overline{\bigtriangledown}$	7	REM	IOVE & RELOCA	TE FLARED E	ND SECTION
ID	Storm Sta.	a. Description (Size) Details		Coordinates	Remarks
F1	0+15.79	36"	FL = 1210.76 (36")	N: 513641.52 E: 2679639.17	Remove & Relay FES (pipe couplers subsidiary) Construct 36" Concrete Collar (as needed for FES re-use)
F2	0+21.79	30"	FL = 1210.98 (30")	N: 513652.06 E: 2679673.94	Remove & Relay FES (pipe couplers subsidiary) Construct 30" Concrete Collar (as needed for FES re-use)
F3	0+33.15	24"	FL = 1211.15 (24")	N: 513647.95 E: 2679722.96	Remove & Relay FES (pipe couplers subsidiary) Construct 24" Concrete Collar (as needed for FES re-use)

\bigcirc	CONSTRUCT REINFORCED CONCRETE PIPE												
ID	START STRUCTURE	END STRUCTURE	Dia.	Class	Length	Slope	Remarks						
P1	EF1	F1	36"	D(0.01)=1,350	24.00	0.00%							
P2	EF2	F2	30"	III	16.00	0.10%							
P3	EF3	F3	24"	III	24.00	0.50%							





	DRY DETENTION BASIN NOTES												
				RISER		EMERGENCY SPILLWAY			1/2" WATERSHED VOLUME				
om Tion)	TOP ELEVATION (FT)	EXISTING OUTLET PIPE DIAMETER	RISER PIPE DIAMETER	RISER THROAT ELEVATION (FT)	RISER RIM ELEVATION (FT)	ELEVATION (FT)	WIDTH (FT)	DRAINAGE AREA (AC)	REQUIRED (CF)	PROVIDED (CF)			
2	1220	24"	TYPE II AI (60") Modified	1217.83	1219.08	1219.75	30	9.17	16,644	28,207			



- RN 1 Install, maintain & remove construction entrance, 1 EA. Contractor to verify with Engineer for permission to construct.
- RN 2 Existing silt fence to remain.
- RN 3 Remove temporary sediment basin See Sheet 3 for detail.
- RN 4 Excavate, dry, and recompact silt or haul off site, <u>239 CY</u>.
- RN 5 Existing 60" Type II Area Inlet to remain.
- RN 6 Existing 24" RCP to remain.
- RN 7 Existing 24" FES to remain.
- RN 8 Reshape bank to match proposed contours (3:1 slope max).
- RN 9 Emergency spillway, 30 LF, install Type A seed & North American Green VMAX C350, 101 SY, install per manufacturer's recommendation.
- RN 10 Construct Flexamat, total quantity including embedment <u>143 SF</u> (total this sheet) per manufacturer's recommendations - See Sheet 3 for detail.
- RN 11 Seed and mat bottom of basin with Rain Garden Mix, <u>277 SY</u>. Planting method shall be per manufacturer's recommendation. See detailed list in the legend on this sheet. Matting shall be North American Green S150, or approved equal.
- RN 12 Install Type A seed and North American Green S150 Matting, 2,237 SY. Planting method shall be per manufacturer's recommendation.
- RN 13 Grout Existing Sediment Basin Weep Holes (subsidiary).
- RN 14 Core Drill (3) 2" holes through Inlet at CI Elev 1212.01 (subsidiary).
- RN 15 Install straw wattle, 72 LF.
- RN 16 Remove and relay sign, <u>3 EA</u>.

Contractor shall pump and remove ponded water and suspended sediment and solids from the existing basin. Suspended sediments shall be removed from the basin water using a best management practice of the contractors choosing. Once water has been removed, the basin shall be cleaned and prepared for infilling. Trees shall be removed and grubbed, sediment basin improvements including rip-rap, baffles, refuse, and any unsuitable soils shall be removed and disposed of legally. All removal, clean-up and disposable costs shall be considered incidental to Clearing and Grubbing as part of the Basin Removal Project.

