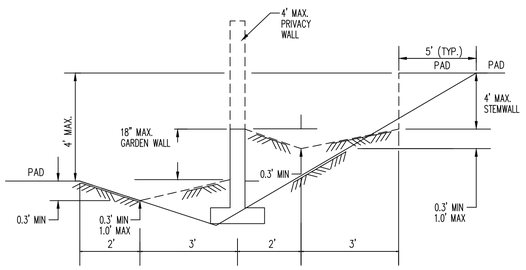
EROSION CONTROL/ENVIRONMENTAL PROTECTION/STORM WATER POLLUTION PREVENTION PLAN WATER AND WASTEWATER GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULFILLING ALL NECESSARY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, OBTAINING AN NPDES PERMIT PRIOR TO CONSTRUCTION, FILLING OUT THE NOTICE OF INTENT (NOI) APPLICATION, AND FILLING OUT THE NOTICE OF TERMINATION (NOT) APPLICATION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE IMPLEMENTATION OF AND INSPECTION REPORTS FOR THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL SUBMIT THE SWPPP WITH THE PROPOSED CONSTRUCTION STAGING AREA AND TEMPORARY SANITARY FACILITIES CLEARLY SHOWN. ANY CHECK DAMS, SILT FENCES, OR OTHER BEST MANAGEMENT PRACTICES (BMPS) THAT ARE REQUIRED IN THE APPROVED SWPPP SHALL BE INCLUDED IN AND ARE INCIDENTAL TO THE SWPPP BID AMOUNT.
2. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED SWPPP ON-SITE AT ALL TIMES, AND SHALL COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY NECESSARY DUST OR EROSION CONTROL PERMITS FROM THE REGULATORY AGENCIES.
4. THE CONTRACTOR SHALL EITHER PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR INSTALL BMPS IDENTIFIED IN THE APPROVED SWPPP TO PREVENT DISCHARGE OF EXCAVATED MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY DURING A RAIN OR WIND EVENT.
5. THE CONTRACTOR SHALL IMPLEMENT THE APPROVED SWPPP AND ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
6. THE CONTRACTOR SHALL MITIGATE EROSION OF TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING BMPS IDENTIFIED IN THE APPROVED SWPPP IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW, AND AT INTERVALS AS SPECIFIED IN THE SWPPP.
7. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR.
8. ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR AN IMPERVIOUS SURFACE SHALL BE REVEGETATED WITH NATIVE GRASS SEEDING. WHEN CONSTRUCTION ACTIVITIES CEASE AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME WITHIN 14 DAYS, STABILIZATION MEASURES MUST BE INITIATED. UNLESS INDICATED OTHERWISE ON THESE PLANS OR ON THE LANDSCAPING PLAN, NATIVE GRASS SEEDING SHALL BE SEEDING PER SECTION 1012 OF THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, APWA NM CHARTER, LATEST EDITION.
9. ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNATED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.) GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC. SHALL BE APPROPRIATELY DISPOSED OF OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMITS REQUIRED TO HAUL OR DISPOSE OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINTS, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE TEAM AT 505-827-9329.
11. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.
12. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.
13. WHERE STORM INLETS ARE SUSCEPTIBLE TO INFLOW OF SILT OR DEBRIS FROM CONSTRUCTION ACTIVITIES, PROTECTION SHALL BE PROVIDED ON THEIR UPSTREAM SIDE UTILIZING BMPS IDENTIFIED IN THE APPROVED SWPPP.

NOTE:

ALL SLOPES ON HOA TRACTS TO BE STABILIZED BY NATIVE SEED AND MULCH PER STD SPEC 1012 WITH GRAVEL MULCH OR BETTER.

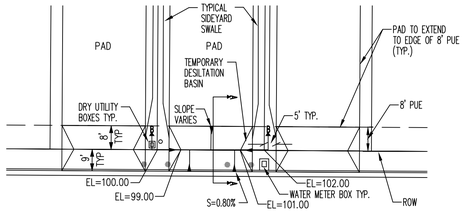


TYPICAL SIDE LOT LINE SECTION
NOT TO SCALE

NOTE: DASHED LINES IN TYP. SIDE LOT LINE SECTIONS REPRESENT THE FINAL CONDITION AFTER THE GARDEN, STEM, AND PRIVACY WALLS HAVE BEEN CONSTRUCTED. THE INTERIM CONDITION, WHICH IS TO BE CONSTRUCTED BY THE GRADING CONTRACTOR AND CERTIFIED BY THE ENGINEER, IS REPRESENTED BY THE SOLID LINES. RETAINING WALLS WILL BE CONSTRUCTED PRIOR TO GRADING CERTIFICATION.

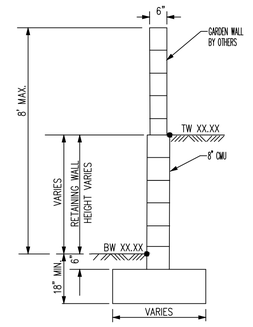
EROSION AND SEDIMENT CONTROL PLAN (ESC PLAN)

TOTAL SITE ACRES 21.2 ACRES
TOTAL DISTURBED AREA 21.2 ACRES
REFER TO SITE SWPPP FOR ADDITIONAL COMPLIANCE REQUIREMENTS. REFER TO THE ESC BMP DETAILS FOR INSTALLATION, INSPECTION AND MAINTENANCE REQUIREMENTS.



TEMPORARY DESILTATION BASIN
NOT TO SCALE

** BOTTOM OF BASIN IS 1' BELOW PROPERTY LINE ELEVATION SEE GRADING PLANS FOR EXACT ELEVATIONS

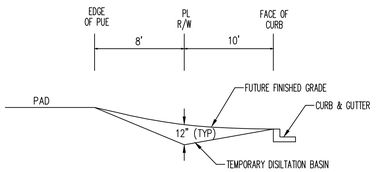


TW=FINISHED GRADE ELEVATION AT TOP OF RETAINING WALL
BW=FINISHED GRADE ELEVATION AT BOTTOM OF RETAINING WALL

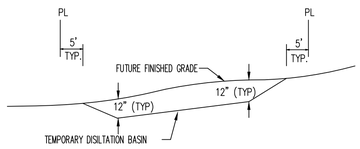
TYPICAL RETAINING WALL NOMENCLATURE
NOT TO SCALE

(RETAINING HEIGHT IS TAKEN TO BE DIFFERENCE IN FINISHED GRADES ON LEFT AND RIGHT SIDE OF WALL.)

HEIGHT IS IN ACCORDANCE WITH CITY COMPREHENSIVE ZONING CODE, SECTION 14-16-3-19, GENERAL HEIGHT AND DESIGN REGULATIONS FOR WALLS, FENCES, AND RETAINING WALLS.



TEMPORARY DESILTATION SECTION A-A
NOT TO SCALE



TEMPORARY DESILTATION SECTION B-B
NOT TO SCALE

GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.

2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.

3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.

5. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.

6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.

7. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

8. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.

9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).

10. ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.

11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.

12. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.

13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.

14. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.

GRADING NOTES

1. EXCEPT AS PROVIDED HERIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.

2. CONTRACTOR SHALL OBTAIN AND ABIDE BY A TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DIVISION, PRIOR TO CONSTRUCTION. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.

3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SOILS REPORT PREPARED BY XBEVNYARD DATED JULY 22, 2013. ALL OTHER WORK, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS (FIRST PRIORITY), AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).

4. TWO WORKING DAYS PRIOR TO EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE (765-1264) FOR LOCATION OF EXISTING UTILITIES.

5. PRIOR TO GRADING, ALL VEGETATION DEBRIS, AND NEAR SURFACE ORGANICALLY CONTAMINATED SOIL SHALL BE STRIPPED FROM ALL AREAS TO BE GRADED. VEGETATION AND DEBRIS SHALL BE DISPOSED OF OFF-SITE OR STOCK-PILED FOR USE IN PLANTERS AND NON-STRUCTURAL FILLS.

6. EARTH SLOPES SHALL NOT EXCEED 4 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.

7. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.

8. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.

9. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION AND UNSUITABLE MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

10. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATIONS.

11. ALL SPOT ELEVATIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOWLINE ELEVATION.

AS-BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS REVISED BY — DATE

BENCH MARKS
USC&GS BRASS DISC STAMPED "REWARD 1969"
GEOGRAPHIC POSITION (NAD 83)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
N=1487364.063 E=1491190.819
GROUND TO GRID = 0.999675005

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO. — DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
MICHAEL DAVID TULL — NEW MEXICO — 21757 — 7-9-18 — PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
			DESIGNED BY MDT — DATE 7/5/18
			DRAWN BY MDT — DATE 7/6/18
			CHECKED BY MDT — DATE 7/9/18

Bohannan Huston
www.bhinc.com 800.877.5332

green globe ENVIRONMENTAL
888-712-5120
PO BOX 400
LOS LUNAS NM 87031

N

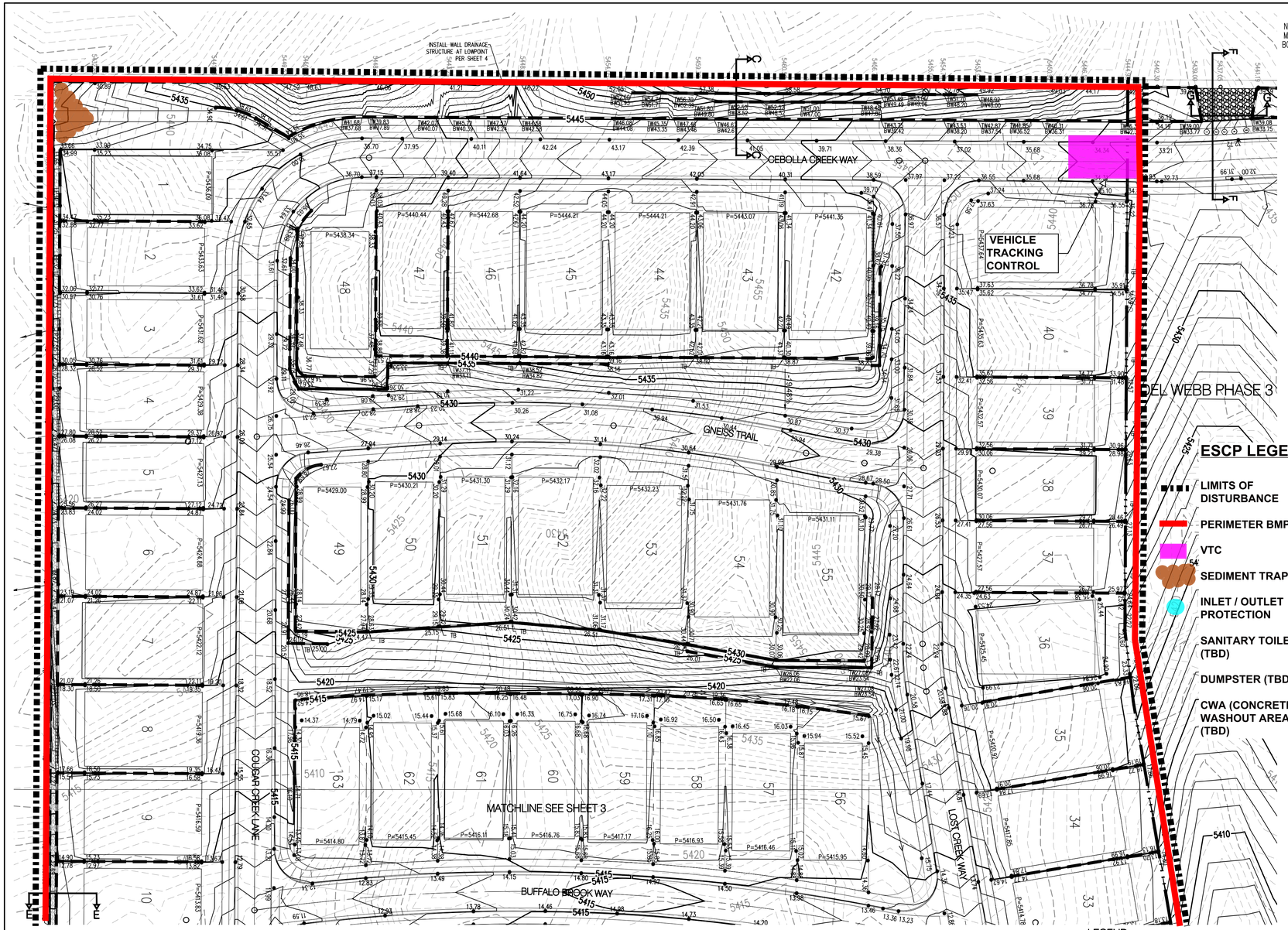
200 100 0 200
1"=200'

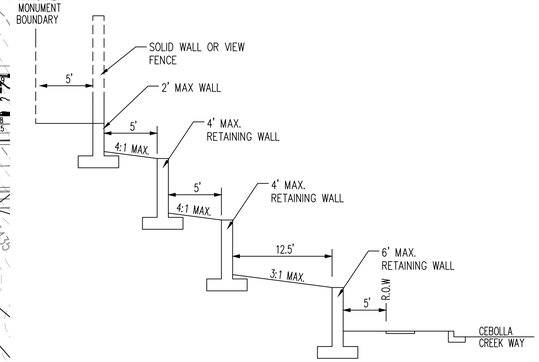
CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

DEL WEBB @ MIREHAVEN PHASE 4
EROSION AND SEDIMENT CONTROL PLAN

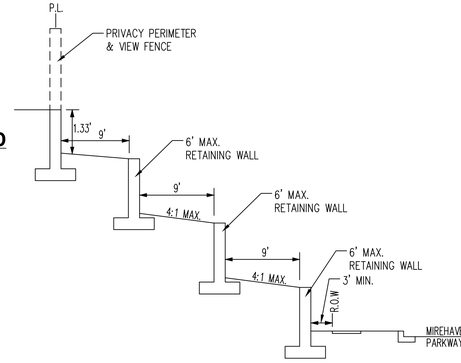
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO. | ZONE MAP NO. H-8/9 | SHEET NO. ESC 101

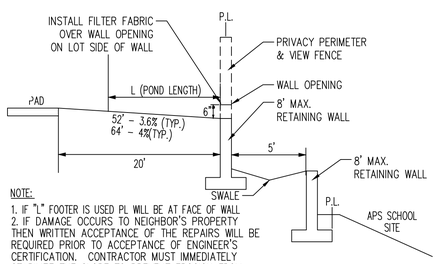




TYPICAL CROSS SETION C-C
NOT TO SCALE



TYPICAL CROSS SETION D-D
NOT TO SCALE



NOTE:
1. IF "L" FOOTER IS USED PL WILL BE AT FACE OF WALL
2. IF DAMAGE OCCURS TO NEIGHBOR'S PROPERTY THEN WRITTEN ACCEPTANCE OF THE REPAIRS WILL BE REQUIRED PRIOR TO ACCEPTANCE OF ENGINEER'S CERTIFICATION. CONTRACTOR MUST IMMEDIATELY STABILIZE THE SLOPE TO PREVENT EROSION FROM ENCROACHING INTO THE NEIGHBOR'S PROPERTY PER DETAILS THIS SHEET.

TYPICAL CROSS SETION E-E
NOT TO SCALE

POND VOLUMES LOTS 1-15:

PAD WIDTH (FT)	Turn Block Ht (in)	POND WIDTH L (FT)	V (cf)
52	4	9.2	79.73
	6	13.9	180.7
	8	18.6	322.4
64	4	8.25	88
	6	12.5	200
	8	16.75	357.3

SEE SECTION E-E FOR "L" LOCATION

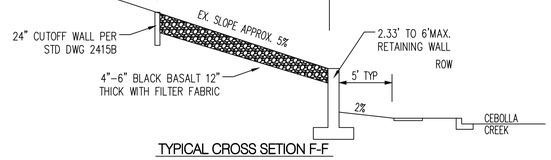
	EXISTING VOLUME TO APS (CF)	DEV. VOLUME TO APS (CF)	REQ'D VOLUME (CF)
2YR	1309.145	3627.139	2317.994
10YR	7788.43	7697.964	N/A
100YR	21707.34	14264.53	N/A

TOTAL POND VOLUME = 8-52' PLUS 8-64' LOTS

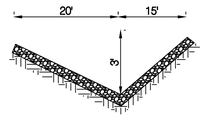
Turn Block Ht (in)	Total V(cf)
4	1341.86667
6	3045.6 *
8	5437.86667

* 6" TURN BLOCK HT WILL RETAIN THE REQ'D VOLUME . SEE SECTION E-E

CONTRACTOR SHALL INSTALL 5' WIDE 0.825' DEEP SWALE ALONG THE SOUTHSIDE OF LOTS 1 THROUGH LOT 15.



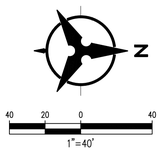
TYPICAL CROSS SETION F-F
NOT TO SCALE



TYPICAL CROSS SETION G-G
NOT TO SCALE-SECTION DEPICT EXISTING SWALE

LEGEND

PROPOSED SPOT ELEVATION	● 5235.25
EXISTING SPOT ELEVATION	● EX 5235.25
PROPOSED CONTOUR	5025
EXISTING STORM DRAIN LINE	
PROPOSED STORM DRAIN INLET	
PROPOSED STORM DRAIN LINE	
PROPOSED STORM DRAIN MANHOLE	
PROPOSED WATER BLOCK	
RETAINING WALL	
PAD	10 P=5300.00
TURNED BLOCK	TB
STREET SLOPE	XX



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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

DEL WEBB @ MIREHAVEN PHASE 4
EROSION AND SEDIMENT CONTROL PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.

ZONE MAP NO. H-8/9

SHEET **ESC 102**

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
MICHAEL DAVID TULL
NEW MEXICO
21757
7-9-18
PROFESSIONAL ENGINEER

BENCH MARKS

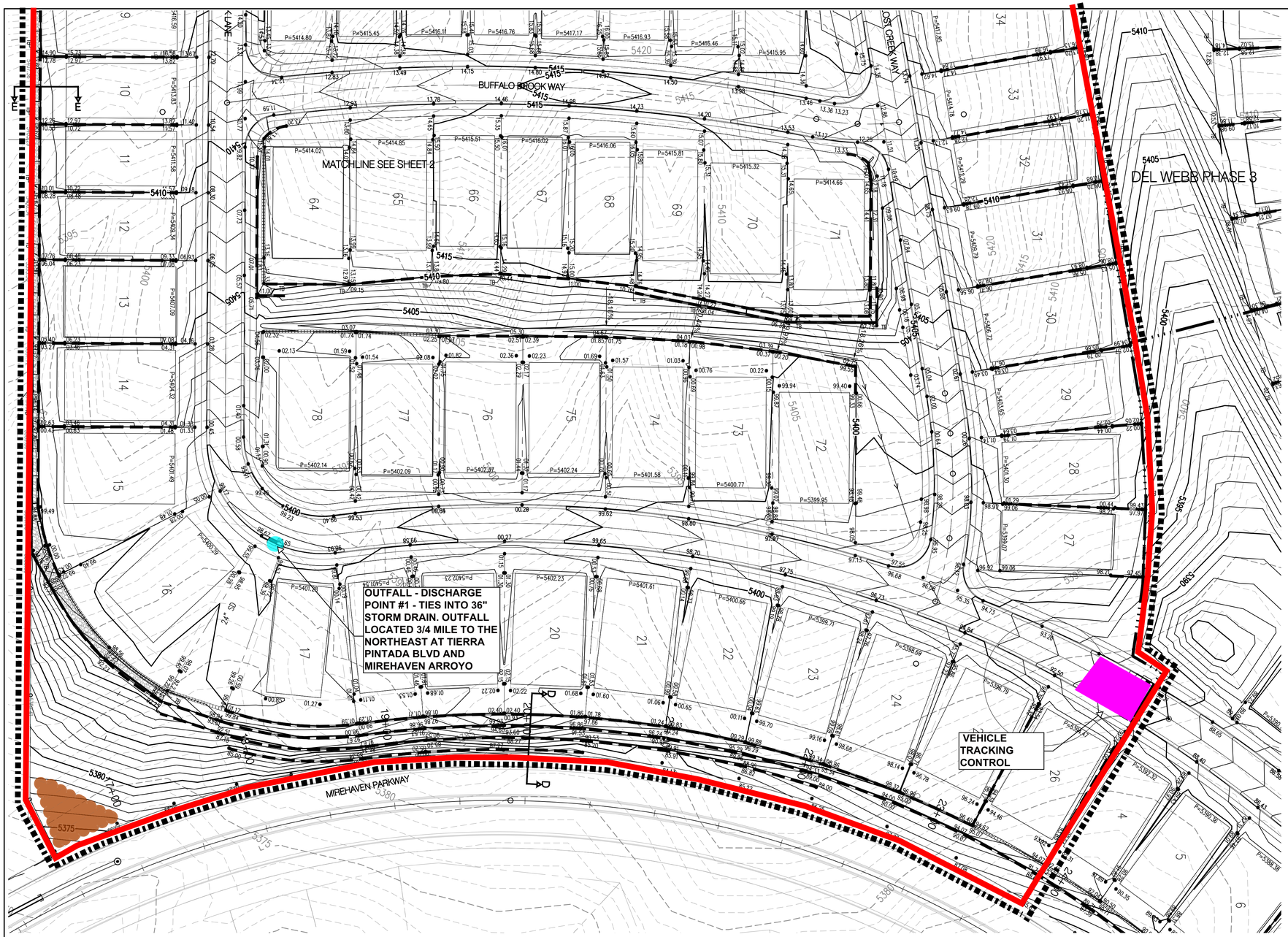
USC&GS BRASS DISC STAMPED "REWARD 1969"	
GEOGRAPHIC POSITION (NAD 83)	
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)	N=1497364.063 E=1491190.819
GROUND TO GRID = 0.999675005	
DELTA ALPHA = -00°17'12.26"	
NAVD 1988 ELEVATION = 5319.688	

AS-BUILT INFORMATION

CONTRACTOR	DATE
WORK STARTED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
VERIFICATION BY	DATE
DRAWINGS PREPARED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	DATE

NO.	DATE	REMARKS	BY	DATE
		REVISIONS		DATE 7/5/18
				DATE 7/6/18
		DESIGN		DATE 7/9/18

DESIGNED BY MDT
DRAWN BY MDT
CHECKED BY MDT



LEGEND

PROPOSED SPOT ELEVATION	● 5235.25
EXISTING SPOT ELEVATION	● EX 5235.25
PROPOSED CONTOUR	5025
EXISTING STORM DRAIN LINE	
PROPOSED STORM DRAIN INLET	
PROPOSED STORM DRAIN LINE	
PROPOSED STORM DRAIN MANHOLE	
PROPOSED WATER BLOCK	
RETAINING WALL	
PAD	10 P=5300.00
TURNED BLOCK	TB
STREET SLOPE	XY

ESCP LEGEND

- LIMITS OF DISTURBANCE
- PERIMETER BMP
- VTC
- SEDIMENT TRAP
- INLET / OUTLET PROTECTION
- SANITARY TOILETS (TBD)
- DUMPSTER (TBD)
- CWA (CONCRETE WASHOUT AREA)(TBD)

N

40 20 0 40

1"=40'

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888-712-5120
PO BOX 400
LOS LUNAS NM 87031

AS-BUILT INFORMATION

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BENCH MARKS

USC&GS BRASS DISC STAMPED "REWARD 1969"
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MICRO-FILM INFORMATION

NO.	DATE
RECORDED BY	DATE
NO.	DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

MICHAEL DAVID TULL
NEW MEXICO
21757
7-9-18
PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
			DESIGNED BY MDT DATE 7/5/18
			DRAWN BY MDT DATE 7/6/18
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

DEL WEBB @ MIREHAVEN PHASE 4
EROSION AND SEDIMENT CONTROL PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

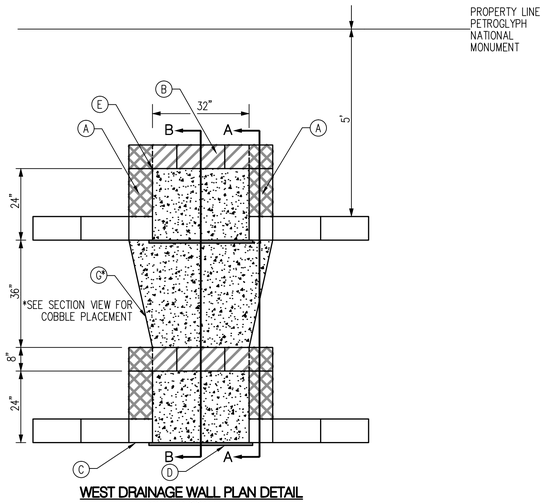
CITY PROJECT NO. | ZONE MAP NO. H-8/9 | SHEET **ESC 103**

KEYED NOTES

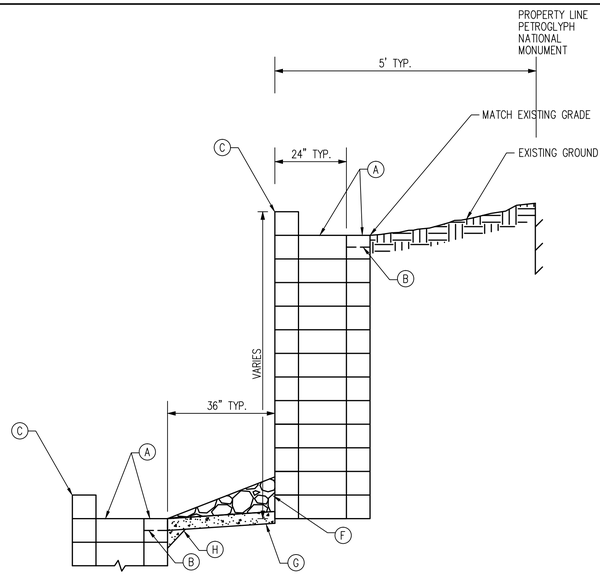
- (A) SIDE WALLS OF HORSESHOE NOTCH SHALL MATCH EXISTING GRADE AND SHALL BE ONE COURSE (8") LOWER THAN FACE OF WALL HEIGHT.
- (B) BACK WALL OF HORSESHOE NOTCH SHALL BE 1.5 COURSES (APPROX. 12") LOWER THAN FACE OF WALL HEIGHT.
- (C) FACE OF WALL ONE COURSE (8") HIGHER THAN EXISTING GROUND AT NOTCH.
- (D) METAL PLATE TO BE ATTACHED TO FACE OF WALL. TOP OF METAL METAL PLATE TO MATCH TOP OF FACE OF WALL. TO BE INSTALLED BY OTHER.
- (E) PREVENTATIVE GRATING TO BE ANCHORED TO CORNERS OF WALL (3/4" STEEL BARS PLACED 4" O.C.)
- (F) 6" COBBLE (2 LIFTS, 12" TOTAL)
- (G) 3" CONCRETE SLAB, 4000 PSI
- (H) 6"X6" TRIANGULAR CONCRETE WEDGE

GENERAL NOTES

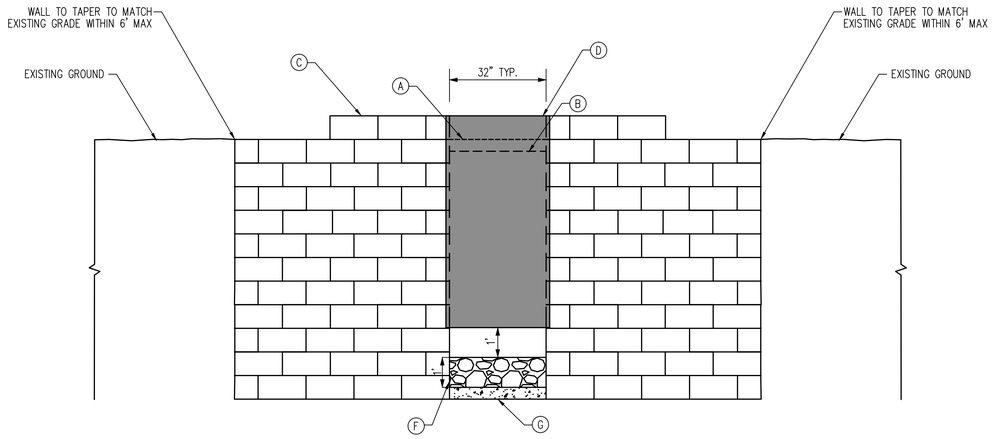
1. CONTRACTOR SHALL COORDINATE WITH ENGINEER AND OWNER PRIOR TO CONSTRUCTION.
2. NO DISTURBANCE IS ALLOWED ON THE MONUMENT, IF DAMAGE OCCURS TO NEIGHBOR'S PROPERTY THEN WRITTEN ACCEPTANCE OF THE REPAIRS WILL BE REQUIRED PRIOR TO ACCEPTANCE OF ENGINEER'S CERTIFICATION. CONTRACTOR MUST IMMEDIATELY STABILIZE THE SLOPE TO PREVENT EROSION FROM ENCROACHING INTO THE NEIGHBOR'S PROPERTY PER DETAILS THIS SHEET.



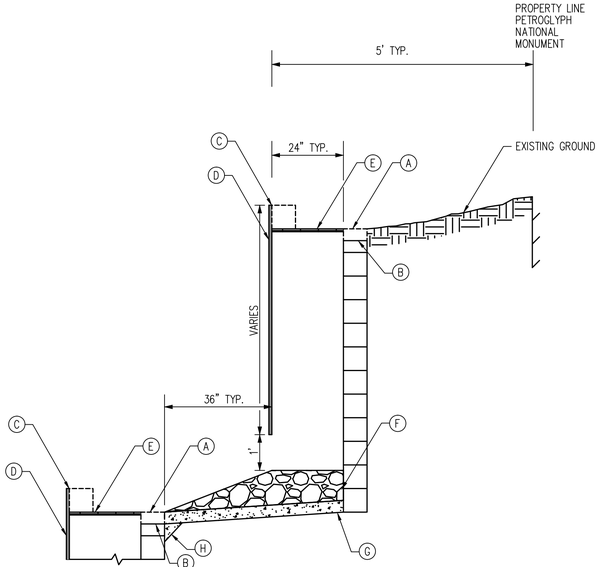
WEST DRAINAGE WALL PLAN DETAIL
NOT TO SCALE



WEST DRAINAGE WALL SECTION A-A
NOT TO SCALE



WEST DRAINAGE WALL FRONT SECTION
NOT TO SCALE



WEST DRAINAGE WALL SECTION B-B
NOT TO SCALE

Bohannan Huston
www.bhinc.com 800.877.5332

AS-BUILT INFORMATION

	DATE
CONTRACTOR	
WORK STAKED BY	
SURVEY WORKS ACCEPTANCE BY	
FIELD VERIFICATION BY	
DRAWINGS CORRECTED BY	

BENCH MARKS

USC&GS BRASS DISC STAMPED "REWARD 1969"
GEOGRAPHIC POSITION (NAD 83)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE)
N=1487364.063 E=1491190.819
GROUND TO GRID = 0.999675005
DELTA ALPHA = -00°17'12.26"
NAVD 1988 ELEVATION = 5319.688

MICRO-FILM INFORMATION

RECORDED BY DATE
NO. DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

MICHAEL DAVID TULL
NEW MEXICO
21757
7-9-18
PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DESIGNED BY YPM	DATE 04/18
		DRAWN BY AR	DATE 04/18
		CHECKED BY YPM	DATE 04/18

green globe ENVIRONMENTAL
888-712-5120
PO BOX 400
LOS LUNAS NM 87031

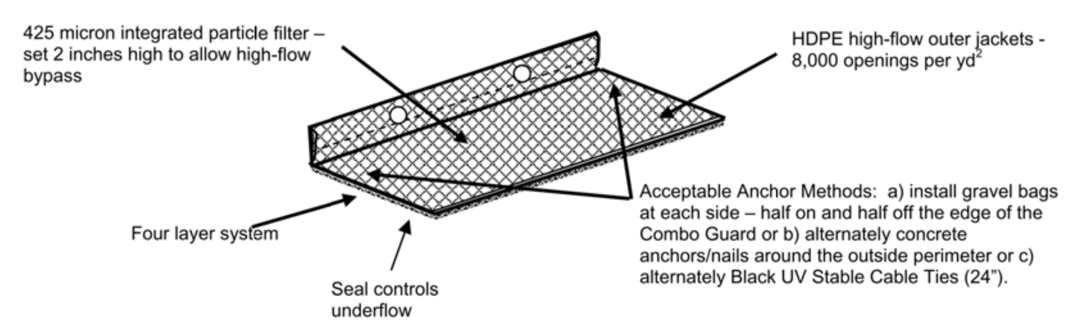
CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

DEL WEBB @ MIREHAVEN PHASE 4
EROSION AND SEDIMENT CONTROL PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.
ZONE MAP NO. H-8/9
SHEET **ESC 104**

SWPPP Binder Insert - Curb & Grate Inlet Protection
ERTEC Combo Guard™



Product Designation	Grate Size
CG 28x22	Fits 23" by 19" Grate
CG 58x22	Fits 36" x 18" **and** 36" x 20" **and** 40" x 17" Grates
CG 48x27	Fits 40" x 24" Grate
CG 58x30	Fits 42" x 28" Grate
Custom sizes available upon request	

Definition – ERTEC Combo Guard
A temporary sediment filter made of high density polyethylene with an integrated filter. During construction, place device over the grate and curb opening of the drain inlet near disturbed soil. Anchor with 2 Gravel Bags, or alternately 2 ERTEC GR-8 Hooks™ or alternately concrete anchors/nails or alternately black UV stable cable ties (24 to 36").

Purpose
Storm drain inlet protection is used to intercept sediment laden water at the curb and grate opening and prevent the sediment, associated pollutants and debris from entering the storm water underground pipe systems. The system reduces water velocity which causes heavier soil particles to be deposited above ground. While allowing flow through the module, the barrier filters certain smaller sized particles from suspension and prevents them from flowing through the device and into the pipes. Heavy flows are passed over the top of the filter. Advantages are that it is effective, durable, re-usable, easily installed and cleaned.

Conditions Where the Practice Applies
It is recommended for use over curb & grate openings with small drainage areas. Generally, the drainage areas should be less than 1/3 acre and the total for inlets in series should be 1 acre or less with slopes flatter than 5 percent in the contributing drainage area.

Design Criteria
- Geo-textile Filter: Apparent Opening Size (AOS) = 425 micron integrated particle filter. Flow rate (ASTM D-4491) = 145 gpm/ft². Provide a bypass over the top.
- Outer Jacket Material: HDPE. For detailed characteristics contact ERTEC. Module weight = 3 to 5 lbs. Module height = 6.0". Module length/opening size protected varies as per the chart above – according to grate size. Service temperature (deg F) = -30 to 160.
- Install system with the vertical section covering the curb inlet and the horizontal section covering the grate. Alternate anchor methods listed above. If using Gravel Bags - place small gravel bags containing clean, pea-sized graded gravel on each end of the cover and butt the bags tightly against the curb to keep water in the gutter from flowing behind the filter (do not use sandbags). The porosity of the gravel bag should allow for design flow rate through the bag. The bag should be durable enough to last the period of intended use. If the storm inlet opening exceeds 5.0' in length, overlap one module by 6" over side of adjoining module for a continuous run until the desired length is achieved. Anchor thru the overlap as necessary.

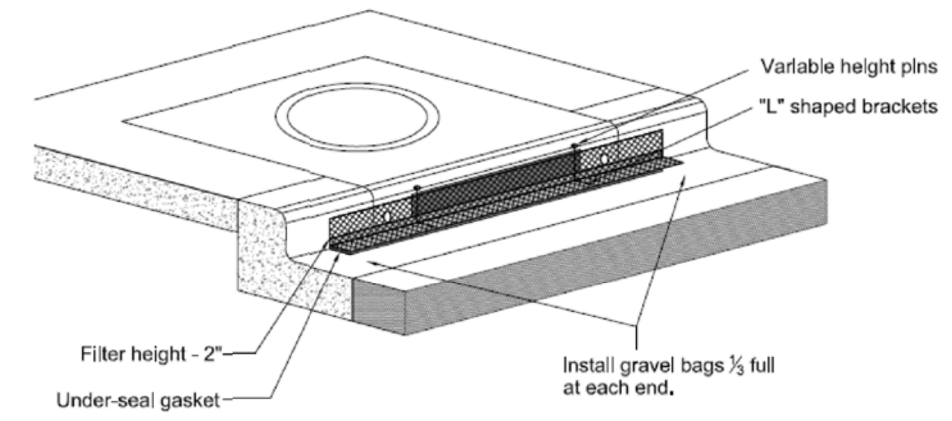
Maintenance
Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Debris shall be removed daily and sediment shall be removed when the sediment accumulation reaches 2 inches. Removed sediment shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements. Remove the device after final stabilization has been achieved.

Combo Guard™

www.ertecsystems.com
Toll Free: 866-521-0724

SWPPP Binder Insert - Curb Inlet Protection
ERTEC Curb Inlet Guard™

Inlet Size	# of Modules
5.0'	1 Module
10.0'	2 Modules
15.0'	3 Modules
20.0'	4 Modules



Definition – ERTEC Curb Inlet Guard
A temporary sediment barrier, "L" shaped, made of high density polyethylene (HDPE) with an integrated filter (woven geo-textile). During construction, place device over the opening of the curb storm inlet near where soil is disturbed (See drawings).

Purpose
Storm drain inlet protection is used to intercept sediment laden water at the curb gutter opening and prevent sediment, debris and associated pollutants from entering the storm water underground pipe systems. The barrier reduces water velocity which in turn causes heavier soil particles to be deposited in front. While allowing flow through the module, the barrier filters certain smaller sized particles from suspension and prevents them from flowing through the device and into the pipes. Excessive flows are passed over the top of the filter. Advantages are that it is effective, durable, re-usable, easily installed and cleaned.

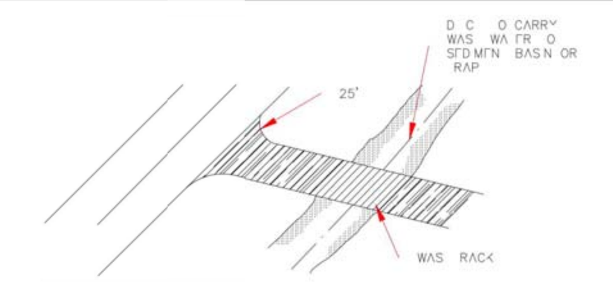
Conditions Where the Practice Applies
It is recommended for use in curb openings in front of areas with small drainage areas. Generally, the drainage areas should be less than 1/3 acre and the total for inlets in series should be 1 acre or less with slopes flatter than 5 percent in the contributing drainage area.

Design Criteria
- Geo-textile Filter: See drawing for dimensions. Apparent Opening Size (AOS) = 425 micron integrated particle filter. Flow rate (ASTM D-4491) = 145 gpm/ft². Provide a bypass over the top.
- Outer Jacket Material: HDPE. For detailed characteristics contact ERTEC. Module weight = 3.5 lbs. Module height = 7.5". Module length/opening size protected = 6' 3"/5.0 ft. Service temperature (deg F) = -30 to 160.
- Install barrier with the anchor flap facing upstream toward the street. Place small gravel bags containing clean, pea-sized graded gravel on each end of the flap and butt the bags tightly against the curb to keep water in the gutter from flowing behind the filter. Additional bags can be placed on the flap as necessary; however, bags should be kept off the street for safety reasons. The porosity of the gravel bag should allow for design flow rate through the bag. The bag should be durable enough to last the period of intended use. If the storm inlet opening exceeds 5.0' in length, overlap one of module by 6" over end of adjoining module for a continuous run until the desired length is achieved. When overlapping, note the gasket material under the flap is cut-out where the flap of top module sits on flap of bottom module.

Maintenance
Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Trash shall be removed daily and sediment shall be removed when the sediment accumulation reaches 1 inch. Removed sediment shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements. Remove the device after final stabilization has been achieved.

Curb Inlet Guard™
ERTEC Environmental Systems
www.ertecsystems.com
Toll Free: 866-521-0724

Stabilized Construction Entrance/Exit



Applications
- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- ✓ Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ✓ Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- Floatable Materials
- Construction Wastes

Impact
- ✓ Significant
- ✓ Medium
- Low
- Unknown or Questionable

DESCRIPTION
A stabilized construction entrance consists of a pad of crushed stone, recycled concrete, or other rock-like material on top of a geotextile filter cloth, which is used to facilitate the washdown and removal of sediment and other debris from construction equipment prior to exiting the site. During the construction phase of a project, regular street sweeping should be performed to remove debris carried from the site.

PRIMARY USE
Stabilized construction entrances are used to reduce offsite sediment tracking from trucks and construction equipment, and for sites where considerable truck traffic occurs each day. They also reduce the need to clean adjacent pavement as often, and help route site traffic through a single point.

APPLICATIONS
As a part to the erosion-control plan required for sites larger than five acres, and recommended for all construction sites.

LIMITATIONS
Selection of the construction entrance location is critical. To be effective, it must be used exclusively.

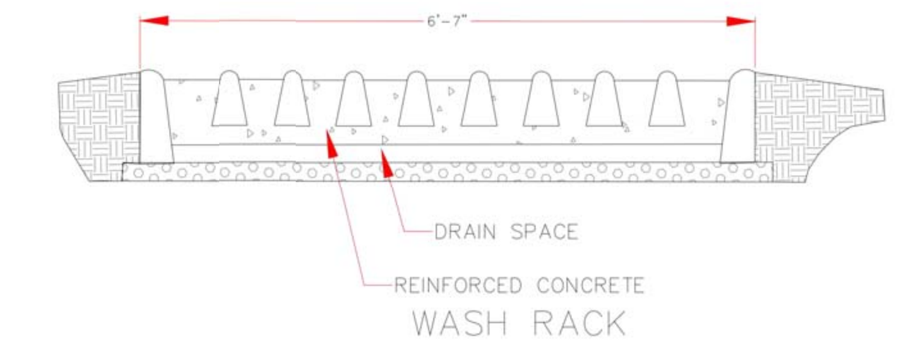
Stabilized entrances are rather expensive, considering that they must be installed in combination with one or more other sediment control techniques. It may be more cost effective, however, than labor-intensive street cleaning.

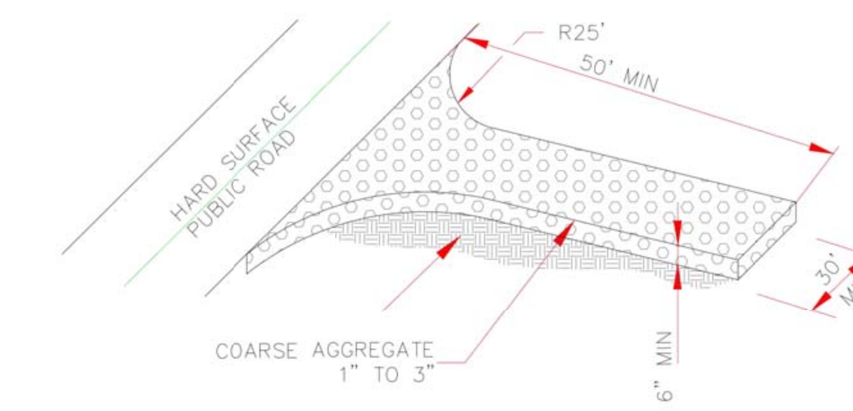
MAINTENANCE REQUIREMENTS
Inspections should be made on a regular basis and after large storm events in order to ascertain whether or not sediment and pollution are being effectively detained on site.

When sediment has substantially clogged the void area between the rocks, the aggregate mat must be washed down or replaced.

Periodic re-grading and top dressing with additional stone must be done to keep the efficiency of the entrance from diminishing.

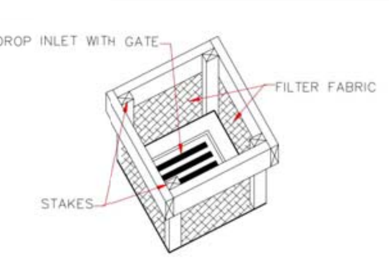
Stabilized Construction Entrance/Exit (continued)





ROCK / AGGREGATE VEHICLE TRACKING CONTROL

Drop Inlet Protection

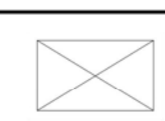


TYPE I

Applications
- Perimeter Control
- Slope Protection
- ✓ Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ✓ Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- ✓ Floatable Materials
- Construction Wastes

Impact
- ✓ Significant
- ✓ Medium
- Low
- Unknown or Questionable



DESCRIPTION
A variety of drop inlet protection methods are used to intercept sediments at inlets through the use of stone, filter fabric, or other materials.

PRIMARY USE
Drop inlet protection is normally used as a second defense in site erosion control. A backup to onsite systems that have limited effectiveness.

APPLICATIONS
- Filter barrier when site is less than one acre and slope is less than 5%
- Block and gravel are used when flows exceed 0.5 cfs
- Wire mesh and gravel are used where traffic crosses inlet

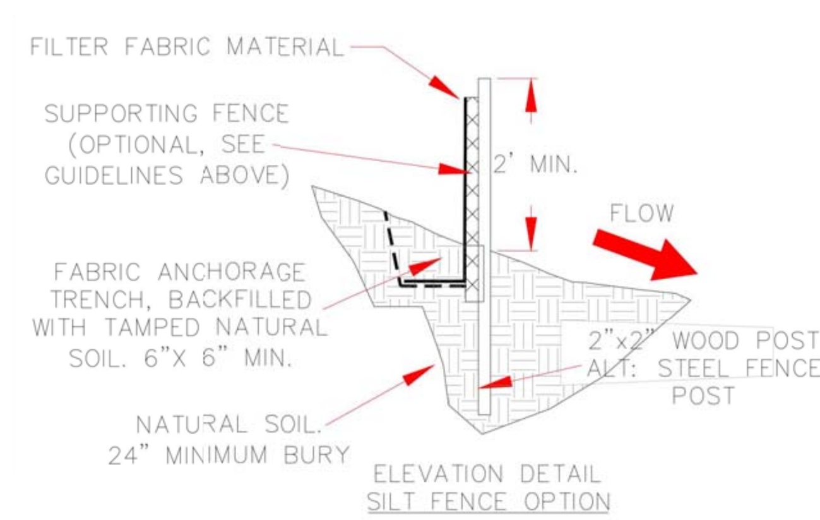
LIMITATIONS
Ponding will occur at the inlet, with possible flooding as a result.

Inlet protection is only viable at low-point inlets. Inlets that are on a slope cannot be effectively protected because storm water will bypass the inlet and continue downstream, causing an overload condition at inlets beyond.

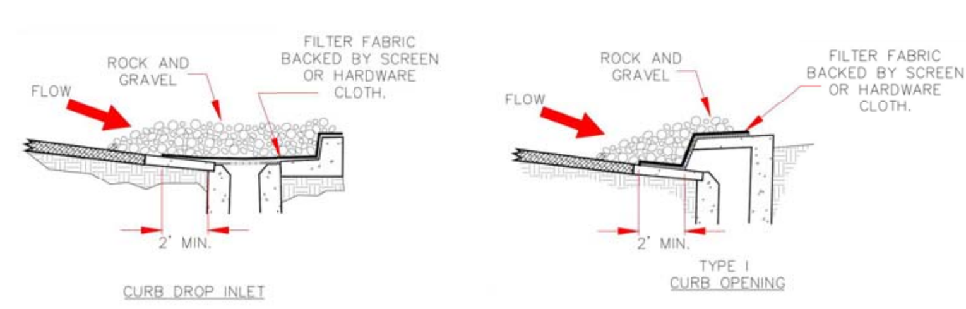
MAINTENANCE REQUIREMENTS
Inspections should be made on a weekly basis, especially after large (>0.5 inches) storm events. When silt fence is used and the fabric becomes clogged, it should be cleaned or, if necessary, replaced. Also, sediment should be removed when it reaches approximately one-half the height of the fence. If a sump is used, sediment should be removed when the volume of the basin is reduced by 50%.

For systems using stone filters, when the stone filter becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced. Since cleaning of gravel at a construction site may be difficult, an alternative approach would be to use the clogged stone as fill material and put new stone around the inlet.

Drop Inlet Protection (continued)

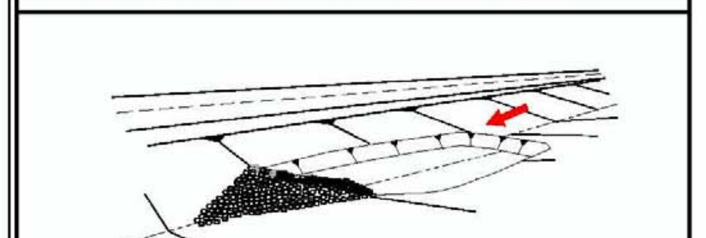


TYPE I



TYPE II

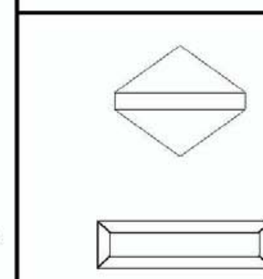
Sediment Trap – Berm/Excavated



Applications
- Perimeter Control
- Slope Protection
- ✓ Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents
- ✓ Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- Floatable Materials
- Construction Wastes

Impact
- Significant
- ✓ Medium
- Low
- Unknown or Questionable



DESCRIPTION
A sediment trap is a small temporary ponding area with a gravel outlet, either excavated or formed by an embankment.

PRIMARY USE
Sediment traps are used to collect and store sediment from small sites cleaned or graded during construction. A temporary measure maintained until permanent measures are installed.

APPLICATIONS
Sediment traps are used where the site area is less than ten acres, usually installed in drainage way or point of discharge from disturbed area.

LIMITATIONS
There are limited applications for sediment traps due to the cost of construction, the availability of materials, and the amount of land required.

Can cause minor flooding upstream of dam, impacting construction operations.

This technique serves as a temporary measure during construction. It should not be used for more than 18 months due to reduced efficiency.

MAINTENANCE REQUIREMENTS
Sediment shall be removed and the area directly behind the berm shall be re-graded to its original dimensions when the capacity of the impoundment has been reduced to one-half of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas that are protected from erosion.

The stone outlet structure should be inspected frequently and after each major rain event to check for clogging of the void spaces between stones. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced.

Sediment Trap – Berm/Excavated (continued)

NOTES
- Traps should be located at points of discharge from disturbed areas.
- A rectangular and shallow trap with a length-to-width ratio of 2:1 or greater is recommended.
- Maximum embankment height shall be 5 feet measured on the downstream side. The minimum top embankment width shall be 4 feet. Side slopes for the embankment and the excavated areas shall be 2:1 or flatter.
- The outlet structure shall consist of a stone section in the embankment formed by a combination coarse aggregate/riprap to provide for filtering/detention capability. Riprap shall be 4 inches to 8 inches of rock, while the coarse aggregate shall be ½ inch to ¾ inch.
- The outlet crest shall be at least 1 foot below the top of the embankment.
- The minimum outlet length in feet shall be 1.5 times the contributing drainage area to the trap.
- Sediment traps, along with other perimeter controls, shall be installed before any land disturbance takes place in the drainage area.
- A geotextile can be placed at the stone-soil interface to act as a separator.
- Sediment shall be removed from the trap when the wet storage volume is reduced by one half.
- Outlet structure should be regularly inspected; rocks clogged with sediment shall be cleaned or replaced.

Green Globe ENVIRONMENTAL
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ARCHITECT

ENGINEER

MICHAEL DAVID TULL
NEW MEXICO
21757
7-9-18
PROFESSIONAL ENGINEER

PROJECT

DEL WEBB @ MIREHAVEN PHASE 4

REVISIONS

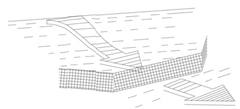
△
△
△
△
△

DRAWN BY SLK
REVIEWED BY MDT
DATE **7-6-18**
PROJECT NO.
DRAWING NAME

EROSION AND SEDIMENT CONTROL DETAILS AND NOTES

SHEET NO.
ESC 105

Silt Fence



Applications

- ✓ Perimeter Control
- ✓ Slope Protection
- ✓ Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

DESCRIPTION

A silt fence consists of geotextile fabric supported by backing stretched between posts, with the lower edge securely embedded in soil downstream of disturbed areas. Intercepts runoff in the form of sheet flow and provides filtration, sedimentation, and velocity reduction.

PRIMARY USE

Silt fences are used as perimeter control downstream of disturbed areas, and for non-concentrated sheet-flow conditions.

APPLICATIONS

Silt fences provide an economical way to mitigate overflow, non-concentrated flows, and as a perimeter control device. Best with coarse to silty soil types and to control wind erosion on sandy soils.

LIMITATIONS

Minor ponding will likely occur at the upstream side of the silt fence, resulting in minor localized flooding.

Fences that are constructed in swales or low areas subject to concentrated flow may be overtopped, resulting in failure of the filter fence. Silt fences subject to areas of concentrated flow (waterways with fows >1 cfs) are not acceptable.

Silt fence can interfere with construction operations; therefore, planning of access routes onto the site is critical.

Silt fence can fail structurally under heavy storm flows, creating maintenance problems and reducing the effectiveness of the system.

MAINTENANCE REQUIREMENTS

Inspections should be made on a weekly basis, especially after large storm events. If the fabric becomes clogged, it should be cleaned or, if necessary, replaced.

Sediment should be removed when it reaches approximately one-half the height of the fence.

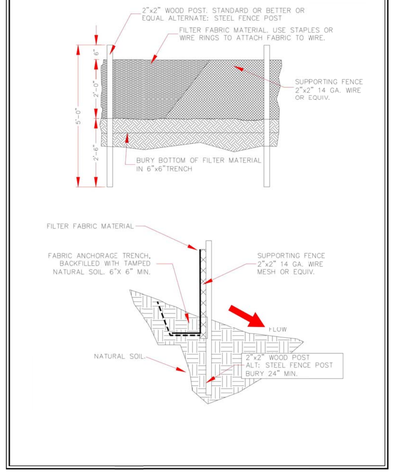
Targeted Constituents

- ✓ Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- ✓ Floatable Materials
- Construction Wastes

Impact

- ✓ Significant
- ✓ Medium
- Low
- Unknown or Questionable

Silt Fence (continued)



filtrexx® LAND IMPROVEMENT SYSTEMS

SWPPP Cut Sheet: Filtrexx® Sediment Control

Sediment & Perimeter Control Technology

PURPOSE & DESCRIPTION

Filtrexx® Sediment control is a three-dimensional tubular sediment control and storm water runoff filtration device typically used for **perimeter control** of sediment and other soluble pollutants (such as phosphorus and petroleum hydrocarbons), on and around construction activities.

APPLICATION

Filtrexx® Sediment control is to be installed down slope of any disturbed area requiring erosion and sediment control and filtration of soluble pollutants from runoff. Sediment control is effective when installed perpendicular to sheet or low concentrated flow. Acceptable applications include:

- Site perimeters
- Above and below disturbed areas subject to sheet runoff, interrill and rill erosion
- Above and below exposed and erodable slopes
- Around area drains or inlets located in a 'sump'
- On compacted soils where trenching of silt fence is difficult or impossible
- Around sensitive trees where trenching of silt fence is not beneficial for tree survival or may unnecessarily disturb established vegetation.
- On frozen ground where trenching of silt fence is impossible.
- On paved surfaces where trenching of silt fence is impossible.

INSTALLATION

1. Sediment control used for perimeter control of sediment and soluble pollutants in storm runoff shall meet Filtrexx® Soxx™ Material Specifications and use Certified Filtrexx® FilterMedia™.
2. Contractor is required to be Filtrexx® Certified™ as determined by Filtrexx® International, LLC (440-926-2607 or visit website at www.filtrexx.com). Certification shall be considered current if appropriate identification is shown during time of bid or at time of application (current listing can be found at www.filtrexx.com). Look for the Filtrexx® Certified™ Seal.
3. Sediment control will be placed at locations indicated on plans as directed by the Engineer.
4. Sediment control should be installed parallel to the base of the slope or other disturbed area. In extreme conditions (i.e., 2:1 slopes), a second Sediment control shall be constructed at the top of the slope.
5. Effective Soxx™ height in the field should be as follows: 8" Diameter Sediment control = 6.5" high, 12" Diameter Sediment control = 9.5" high, 18" Diameter SiltSoxx™ = 14.5" high, 24" Diameter Sediment control = 19" high.
6. Stakes shall be installed through the middle of the Sediment control on 10 ft (3m) centers, using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) hard wood stakes. In the event staking is not possible, i.e., when Sediment control is used on pavement, heavy concrete blocks shall be used behind the Sediment control to help stabilize during rainfall/runoff events.
7. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
8. Loose compost may be backfilled along the upslope side of the Sediment control, filling the seam between the soil surface and the device, improving filtration and sediment retention.
9. If the Sediment control is to be left as a permanent filter or part of the natural landscape, it may be seeded at time of installation for establishment of permanent vegetation. The Engineer will specify seed requirements.
10. Filtrexx® Sediment control is not to be used in perennial, ephemeral, or intermittent streams.

See design drawing schematic for correct Filtrexx® Sediment control installation (Figure 1.1).

INSPECTION AND MAINTENANCE

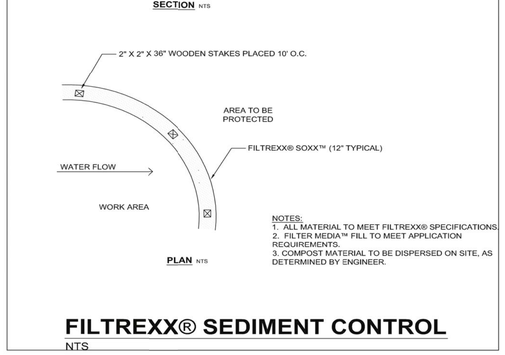
Routine inspection should be conducted within 24 hrs of a runoff event or as designated by the regulating authority. Sediment control should be regularly inspected to make sure they maintain their shape and are producing adequate hydraulic flow-through. If ponding becomes excessive, additional Sediment control may be required to reduce effective slope length or sediment removal may be necessary. Sediment control shall be inspected until area above has been permanently stabilized and construction activity has ceased

1. The Contractor shall maintain the Sediment control in a functional condition at all times and it shall be routinely inspected.
2. If the Sediment control has been damaged, it shall be repaired, or replaced if beyond repair.
3. The Contractor shall remove sediment at the base of the upslope side of the Sediment control when accumulation has reached 1/2 of the effective height of the Sediment control, or as directed by the Engineer. Alternatively, a new Sediment control can be placed on top of and slightly behind the original one creating more sediment storage capacity without soil disturbance.
4. Sediment control shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
5. The FilterMedia™ will be dispersed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.
6. For long-term sediment and pollution control applications, Sediment control can be seeded at the time of installation to create a vegetative filtering system for prolonged and increased filtration of sediment and soluble pollutants (contained vegetative filter strip). The appropriate seed mix shall be determined by the Engineer.

Slope Percent	Maximum Slope Length Above Sediment Control in Feet (meters)*				
	8 in (200 mm) Sediment control	12 in (300 mm) Sediment control	18 in (450 mm) Sediment control	24 in (600mm) Sediment control	32 in (800mm) Sediment control
	6.5 in (160 mm)**	9.5 in (240 mm) **	14.5 in (360 mm) **	19 in (480 mm) **	26 in (650 mm) **
2 (or less)	600 (180)	750 (225)	1000 (300)	1300 (400)	1650 (500)
5	400 (120)	500 (150)	550 (165)	650 (200)	750 (225)
10	200 (60)	250 (75)	300 (90)	400 (120)	500 (150)
15	140 (40)	170 (50)	200 (60)	325 (100)	450 (140)
20	100 (30)	175 (36)	140 (47)	760 (80)	400 (170)
25	80 (24)	100 (30)	110 (33)	200 (60)	275 (85)
30	60 (18)	75 (23)	90 (27)	130 (40)	200 (60)
35	60 (18)	75 (23)	80 (24)	115 (35)	150 (45)
40	60 (18)	75 (23)	80 (24)	100 (30)	125 (38)
45	40 (12)	50 (15)	60 (18)	80 (24)	100 (30)
50	40 (12)	50 (15)	55 (17)	65 (20)	75 (23)

* Based on a failure point of 36 in (0.9 m) super silt fence (wire reinforced) at 1000 ft (303 m) of slope, watershed width equivalent to receiving length of sediment control device, 1 in/ 24 hr (25 mm/24 hr) rain event.
** Effective height of Sediment control after installation and with constant head from runoff as determined by Ohio State University.

SWPPP Cut Sheet - 1.1. Filtrexx® Sediment Control



FILTREXX® SEDIMENT CONTROL
NTS

Concrete Waste Management

DESCRIPTION

Concrete waste management prevents or reduces the discharge of pollutants to storm water by conducting washout offsite, performing onsite washout in a designated area, and training employees and subcontractors.

APPLICATIONS

The following low-cost measures will help reduce storm water pollution from concrete wastes:

- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement onsite.
- Perform washout of concrete trucks offsite or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite except in designated areas.
- For onsite washout:
  - Locate washout area at least 50 feet from storm drains, open ditches, or water bodies. Prevent runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
  - Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed of properly.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water to a bermed or level area.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stock pile, or dispose in the trash.
- Train employees and subcontractors in proper concrete waste management.

LIMITATIONS

Offsite washout of concrete wastes may not always be possible.

MAINTENANCE REQUIREMENTS

Inspect subcontractors to ensure that concrete wastes are being properly managed.

If using a temporary pit, dispose of hardened concrete on a regular basis.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- ✓ Waste Management
- ✓ Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- Floatable Materials
- ✓ Construction Wastes

Impact

- Significant
- ✓ Medium
- Low
- Unknown or Questionable

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ARCHITECT

ENGINEER

MICHAEL DAVID HULL
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7-9-18
PROFESSIONAL ENGINEER

PROJECT

DEL WEBB @ MIREHAVEN PHASE 4

REVISIONS

DRAWN BY SLK
REVIEWED BY MDT
DATE **7-6-18**
PROJECT NO.
DRAWING NAME

EROSION AND SEDIMENT CONTROL DETAILS AND NOTES

SHEET NO.

ESC 106