

El Paso County Supplement to the 2008 Engineering Criteria Manual (Revision 2)

Adopted by the Board of County Commissioners on July 9, 2009

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Chapter 1

In section 1.5, bullet 8, delete “Department of Highways M&S Standards” and replace with the following

Department of Transportation M&S Standards

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Chapter 2

In Table 2-5, change centerline grade (min. to max) for gravel roads from 1-6% to 1-8%.

Section 2.3.3.D.2

Delete “GB” and replace with “Green Book”

In Section 2.3.3.E, delete the second sentence and replace with the following:

The minimum acceptable design radii are shown in Tables 2-4 through 2-7.

Remove Table 2-9

Remove Figure 2-18

Section 2.3.5, first paragraph

Delete “HAC” and replace with “Highway Access Code”

Delete “GB” and replace with “Green Book”

Delete “RDG” and replace with “Roadside Design Guide”

In Table 2-22, change site to sight in two places

Add Section 2.3.7.C.5 as follows:

Intersection Sight Distance

The sight distance at intersections shall be shown geographically on the construction plans. A note shall be added to each leg of the intersection stating that intersection sight distance exceeds the minimum sight distance for ___ mph design speed.

Section 2.3.7.D.3 shall include the following:

Where acceleration lanes are required, deviations may be considered at stop controlled intersections under certain circumstances. As stated in the AASHTO “Green Book” (PGDHS), acceleration lanes are not always desirable. Please refer to the “Green Book” for additional information concerning instances where acceleration lanes may not be desirable. Deviations may also be considered at intersections with traffic signals.

Section 2.3.7.E.1, in the fourth bullet, change “land” to “lane”

Table 2-25, delete the title and replace with the following:

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Required Deceleration Lane and Taper Lengths (for use with design of right turn deceleration lanes)

Table 2-27, delete the title and replace with the following:

Table 2-27. Required Bay Taper Lengths for 12-foot Lanes (for use with design of left turn deceleration lanes)

In section 2.4.1.C.2, delete the first sentence and replace with the following:

Maximum access grades are 4% for commercial and industrial properties with a required 30-foot landing length and 4% for rural residential properties with a required 15-foot landing length.

Section 2.5.2.A

Delete “GB” and replace with “Green Book”

Section 2.5.2.D, first sentence, change “intersection” to “intersects”

Section 2.6.7.E.5, second sentence; change “Kips” to “kips”

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Chapter 3

Section 3.3.4.A shall include the following:

In rural subdivisions where no overlot site grading will be performed and “natural” drainageways will be conveying developed runoff, the easement width for increased capacity of these drainage channels will be determined by the engineer. Typical lot line easements designated as drainage and utility easements are generally not adequate for the purpose of runoff control. The size of the drainage channel easement shall be large enough to accommodate the developed design runoff without impact to the adjacent lots or public improvements. The engineer must determine the easement width for these drainage channels early in the subdivision planning and design process. The easement size must also meet the requirements in the Land Development Code.

Add Section 3.4 as follows:

Section 3.4 Grading and Erosion Control Plans

(Replaces City of Colorado Springs/El Paso County Drainage Criteria Manual Section 4.8.2 Information to be included in the Erosion Control Plan)

The Board of Commissioners of El Paso County passed Resolution 07-279 on June 28, 2007 “Authorizing a Joint Policy Statement on Clarifications to Previously Approved Regulations Concerning Grading, Erosion Control, and Dust.” The clarifications include definitions and checklists of required components of Grading and Erosion Control Plans (GEC) and Stormwater Management Plans (SWMP) and Standard Notes for the GEC, SWMP and the construction plans.

The checklists and standard notes can be found in Appendix E of the El Paso County Engineering Criteria Manual. These checklists and standard notes replace the requirements in City of Colorado Springs/El Paso County Drainage Criteria Manual for GEC and the City of Colorado Springs Drainage Criteria Manual, Volume 2: Stormwater Quality Policies, Procedures, and Best Management Practices (BMPs) (DCM2) for SWMP.

Grading and Erosion Control (GEC) Plan: The intent of the GEC Plan is to provide for overall subdivision or development grading design as part of the engineering required for review and approval by the County. This plan is done at the time subdivision or development construction drawings are prepared by the Professional Engineer working for the developer. This is complex work whereby cuts and fills are analyzed for balance, slopes and contours are proposed as an integral part of the engineering design. A second important use of the GEC Plan is

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to estimate the cost of the overall grading, erosion control measures known as Best Management Practices (BMPs), and ultimate site stabilization. The County subdivision regulations require that collateral for these activities be posted prior to any land disturbing activity. The GEC Plan is therefore important to be completed and approved at the time of subdivision construction drawing approval so that these costs can be accurately estimated and included with the required subdivision collateral.

At the time of GEC Plan approval, the exact timing and phasing of the work is not always known. The exact starting date is sometimes delayed, and often the contractor that will do the earthwork is not yet under contract. The earthwork contractor has expertise in planning and phasing the earth disturbing activity to maintain compliance that is not yet a part of the project at the time of GEC Plan approval. Although overall phasing and general timing may be known and presented, the exact dates, phasing and progression of the earthwork and stabilization work is not known at plan approval. Detailed phasing of the work and the proposed construction schedule shall be deferred to the required SWMP.

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Chapter 4

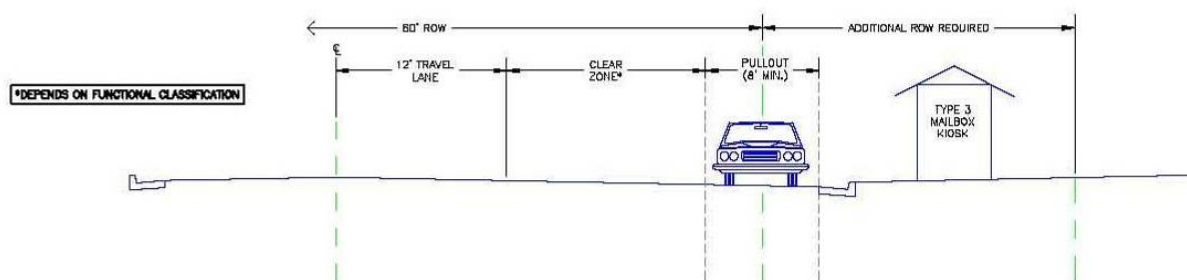
Include Section 4.4.5.E as follows:

E. Type 3 Mailbox Placement

Type 3 mailboxes and the pullout for the mailbox shall be located within the right-of-way dedication but outside the roadway clear zone. A license agreement with provisions for the structure to remain within the right-of-way is required. The Type 3 mailbox and associated structures shall be maintained by a private entity in accordance with the license agreement. Figures 4-1 and 4-2 show the required right-of-way and clear zone. The following conditions also apply:

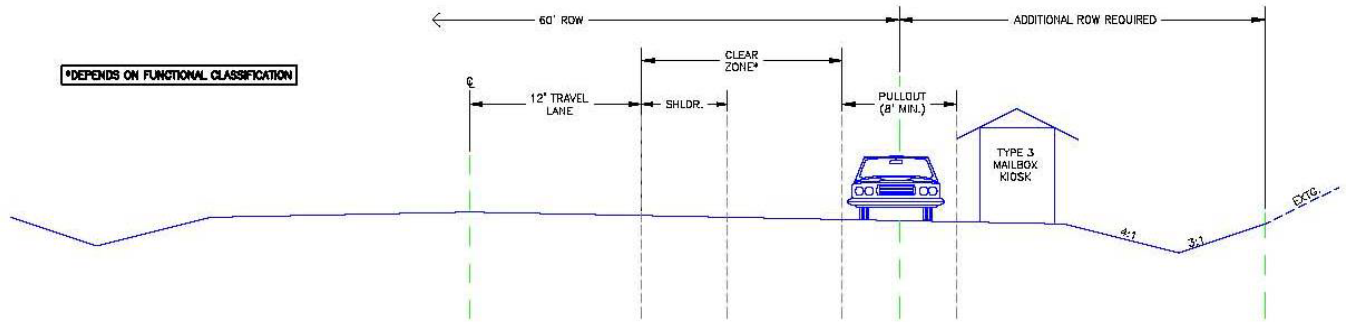
- The Type 3 mailbox must be within the right-of-way so additional right-of-way dedication is required
- Provisions shall include the ability to park vehicles temporarily outside the clear zone
- Discussions with Growth Management or the local Postmaster are required for mailbox location, concrete specifications, and mailbox type. If contact with Growth Management or the local Postmaster is bypassed, you may be required to relocate the concrete pad at your own expense and mail delivery may be delayed.

Figure 4-1. Mailbox Pad Pull-Off Area Detail, Urban Application



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Figure 4-2. Mailbox Pad Pull-Off Area Detail, Rural Application



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Chapter 5

Section 5.2.2

Include “Annual Maintenance Permit” as one of the permit types the ECM administrator can approve

Section 5.2.7.F, first sentence, delete \$2,500.00 and replace with \$10,000.00

Section 5.5.2.A, delete the third paragraph and replace with the following:

No work shall begin until a Work in the Right of Way Permit has been issued.

Add Section 5.5.2.B.4 as follows:

4. Annual Maintenance Permit

This permit is approved by the El Paso County Board of County Commissioners. The following conditions apply:

- The Annual Maintenance Permit is for maintenance of existing utilities requiring only access to vaults, cabinets, manholes, etc.
- No excavation is permitted

Section 5.5.2.D.1, delete the paragraph and replace with the following:

Non-registrants shall not work in the County right-of-way without a valid Work in the Right-of-Way Permit except as otherwise permitted.

Section 5.5.3.A.6, delete the paragraph and replace with the following:

An application will be considered complete if it is submitted in the required form and includes all mandatory information, including all supporting materials specified by the ECM Administrator. If an application is determined to be incomplete, the ECM Administrator shall provide notice to the applicant along with an explanation of the application’s deficiencies. No further processing of the application shall occur until the deficiencies are corrected in a resubmittal. An application which is determined to be incomplete may or may not retain its same processing cycle. The applicable fee is collected at permit issuance.

Section 5.5.4.A, delete the fourth paragraph and replace with the following:

A Work in the Right-of-Way Permit is valid once issued but the ECM Administrator might require a preconstruction meeting.

Delete Section 5.5.4.H

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Delete Section 5.5.7.A and replace with the following:

1. Excavation

The excavation fee shall be in an amount sufficient to recover the following costs if applicable:

- The County management and administrative cost;
- The Traffic Management Fee;
- The degradation cost;
- The trench fee for trenches over 1,320 linear feet; and
- The incentive/disincentive fee.

2. Temporary Obstruction Fee

The obstruction fee shall be in an amount sufficient to recover the following costs if applicable:

- The County management and administrative cost; and
- The Traffic Management Fee.

3. Encroachment

The encroachment fee shall be in an amount sufficient to recover the following costs if applicable:

- The County management and administrative cost;
- The Traffic Management Fee;
- The registration and monitoring costs;
- The degradation cost;
- The trench fee for trenches over 1,320 linear feet; and
- The incentive/disincentive fee.

4. Annual Maintenance Permit (\$600.00 currently)

- The County management and administration cost

Delete Section 5.5.7.C.3 and replace with the following:

3. Computation of Incentive/Disincentive

Incentive/Disincentive

- Earn 1 point for each item successfully completed per permit
- Track running average* of points earned for each permit holder
- Post averages on Transportation Division website

Five Rating Categories

1. 24-hours minimum notification of start and completion of project
2. Proper setup and continual maintenance of work zone per approved traffic control plan
3. Submit all required compaction test per ECM at time of project completion

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4. Perform all patch work and restoration per ECM
5. Completed project within time period specified on the permit(weather allowance is considered)

Permit costs using the incentive/disincentive points earned:

POINTS EARNED	PERMIT COST
0	200%
1	150%
2	125%
3	100%
4	90%
5	75%

*Running averages will be rounded up or down to the nearest whole number

Delete Section 5.7

Section 5.8.1 shall include the following:

There are two types of Special Transport Permits:

1. Annual
 - For vehicles and fleets moving multiple oversize/overweight loads during the year
 - Maximum width of 17', pilot cars requirements per section 5.8.6
 - Maximum length of 110', pilot cars requirements per section 5.8.6
 - Maximum height of 16', pilot cars requirements per section 5.8.6
 - Maximum weight of 200,000lbs; pilot cars requirements per section 5.8.6
2. Oversize/Overweight (Special)
 - Single oversize/overweight loads exceeding Annual Permit maximum dimensions or weights
 - Requires 1 or more pilot cars

Delete Section 5.8.2 and replace with the following:

5.8.2 Special Transport Permit Required

Pursuant to the laws of the State of Colorado, the County requires that a Special Transport Permit be obtained from the ECM Administrator, when transporting a

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load or vehicle on a County road where overall dimensions or weight of the load or vehicle exceed one or more of the following limits:

- Overall height (Total distance from ground to top part of load): 13 feet.
- Overall width: 8.5 feet.
- Overall length for single vehicles: 45 feet.
- Overall length for combination vehicles: 75 feet.
- Overhang: 4 feet front and 10 feet rear.
- Overall weight for combination vehicles: 85,000 pounds.
- Overall weight for single vehicles (3 or more axles): 54,000 pounds.
- Overall weight for single vehicles (2 axles): 36,000 pounds.
- Weight on Any Single Axle (with low-pressure tires): 20,000 pounds per single axle, 36,000 pounds for tandem axle, and 54,000 pounds for tridem axle.

In Section 5.8.6.A, first bullet, delete “18 feet” and replace with “16 feet”.

In Section 5.8.6.A, third bullet, delete “Overall length exceeds 40 feet for single vehicles or exceeds 7) feet for combination vehicles, but less than 100 feet” and replace with “Overall length exceeds 45 feet for single vehicles or exceeds 75 feet for combination vehicles, but less than 100 feet”

Delete Section 5.8.8.A and replace with the following:

A. Special Transport Permit

Special Transport Permit Fees shall be paid in full at the time of permit issuance. The fee for Special Transport Permit shall be as determined by resolution of the Board of County Commissioners.

1. Annual permit (fleet) costs:
 - 5 times oversize/overweight permit plus 5% of Annual permit cost per vehicle to be permitted
 - No security deposit
2. Oversize/Overweight Permit cost
 - Fee to be set by resolution of the Board of County Commissioners
 - Security deposit based on load dimensions

WIDTH OF LOAD	HEIGHT OF LOAD	DEPOSIT
≤14'	≤14'	\$0.00
>14'≤20'	>14'≤15'	\$100.00
>20'≤28'	>15'≤18'	\$250.00
>28'≤36'	>18'≤22'	\$1,000.00
>36'	>22'	\$2,500.00

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Appendix B

In Section B.4.1.A, sixth bullet, delete the last sentence and replace with the following:

For definition purposes, the threshold for acceptable LOS is not less than LOS D for peak hours.

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Appendix D

Section D.2.3 shall include the following:

Composite samples can be manufactured by combining small portions of each subgrade sample contained within the group and mixing to provide a uniform composite sample of the soil group. Soils are to be grouped based on the AASHTO classification of the bulk materials. When significant disparities in Group Index (greater than 7) are noted, the subgrade soil groups shall be subdivided into two or more groups.

Delete Table D-2 and replace with the following:

Table D-2. Minimum Pavement Sections

Roadway Functional Classification	ESAL	Composite Sections ¹		Full Depth Asphalt (in)	Portland Cement Concrete (in)
		Asphalt (in)	Base (in)		
Rural					
Local	32,850	3.0	4.0	4.0	5.0
Minor Collector	109,500	3.0	6.0	4.5	5.0
Major Collector	273,750	3.0	8.0	5.0	6.0
Minor Arterial	689,850	4.0	8.0	6.0	6.0
Principal Arterial, 4-lane	2,628,000	5.0	8.0	7.0	6.0
Principal Arterial, 6-lane	9,198,000	6.5	8.0	8.5	6.0
Expressway, 4-lane	3,942,000	6.5	10.0	7.5	6.0
Expressway, 6-lane	12,264,000	6.5	10.0	9.0	7.0
Urban					
Local (low volume)	32,850	3.0	4.0	4.0	5.0
Local (pavement only) ²	109,500	3.0	6.0	4.5	5.0
Local	292,000	3.0	8.0	5.0	5.0
Residential Collector	821,000	4.0	8.0	6.0	6.0
Nonresidential Collector	821,000	4.0	8.0	6.0	6.0
Minor Arterial	1,971,000	5.0	8.0	7.0	6.0
Principal Arterial, 4-lane	5,256,000	5.0	8.0	8.0	6.0
Principal Arterial, 6-lane	8,176,000	6.5	8.0	8.5	6.0
Expressway, 4-lane	7,884,000	6.5	8.0	8.5	6.0
Expressway, 6-lane	9,811,000	6.5	10.0	9.0	7.0
¹ A composite section can only be used where the R-value of the subgrade soil is 30 or lower; or the CBR value is 5 or lower					
² Section is for pavement design purposes only. All other design related requirements shall follow those designated under the Urban Local.					

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In Section D.3.4, delete the first sentence and replace with the following:

The standard design coefficients for pavement materials are provided in Table D-3

Delete Table D-3 and replace with the following:

Table D-3. Strength Coefficients

Pavement Structure Component	Strength Coefficients	Limiting Test Criteria
Conventional Materials		
Hot Mix Asphalt	0.44	See Section D.5.4
Existing Bituminous Pavement	0.20-0.40 ¹	N/A
Aggregate Base Course/Recycled Concrete ²	0.11	(CBR 80+ or R 78+)
Existing Aggregate Base Course/Existing Recycled Concrete ²	0.09	(CBR 50+ or R 69+)
Granular Subbase Course	0.07	(CBR 15 or R 50+)
Treated Materials		
Cement Treated Aggregate Base	0.23	(7 day, 640-1000 psi)
Fly Ash	0.10	(7 day, 150 psi @ 70°±)
Lime Treated Subgrade	0.14	(7 day, 160 psi, PI < 6)
Kiln Dust	0.10	(7 day, 150 psi, PI < 6)
Cement Stabilized Subgrade	0.11	(7 day, 125 psi)
Cement Stabilized Subgrade	0.12	(7 day, 200 psi)
Cement Stabilized Subgrade	0.13	(7 day, 275 psi)
Cement Stabilized Subgrade	0.14	(7 day, 350 psi)
Cement Stabilized Subgrade	0.15	(7 day, 425 psi)
¹ An average value of 0.30 can be used, unless analysis of existing pavement dictates a more representative coefficient. ² Materials must meet the requirements in Section D.5.5.I. However, the L.A. Abrasion test does not apply to recycled concrete materials.		

In Section D.4.1.E, add the following:

Pavement layer thickness shall be rounded up to the nearest ¼ inch.

Remove all references to EDLA.

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Appendix E

Rename Appendix E to “Checklists and Permits”

Appendix E shall include the following:

Introduction - Appendix E – “Checklists and Permits”

As described in Appendix I, an Erosion and Stormwater Quality Control Permit is required for any project disturbing 1 acre or more of land, as well as any disturbance associated with a nonresidential land use application. During the vertical building phase, builders of single-family residences and duplexes may obtain a Builders Erosion and Stormwater Quality Control Permit for each lot with a separate address instead.

Projects that go through any part of the development review process (land use applications include subdivision, site development plan, location approval, etc), shall obtain their ESQCP permit from Department of Community Services, Development Services Division. Projects that are not associated with a land use application, but propose to disturb more than one acre of land (e.g. roadwork, installation of minor utility lines, maintenance/minor upgrades within existing utility corridors), shall obtain their ESQCP Permits through Department of Public Services, Transportation Division (Stormwater Program).

To assist in preparing the plan sets required for the ESQCP approval, a land use committee comprised of DSD and the Housing and Building Association prepared a joint policy statement on grading, erosion control, and dust. The group sought to clarify the requirements of each plan to meet the current regulations. The effort resulted in checklists for Stormwater Management Plans and Grading and Erosion Control Plan Submittals plus Standard Notes for Grading and Erosion Control Plans.

Permits – Applications

Erosion and Stormwater Quality Control Permit – Issued by Department of Community Services, Development Services Division

Erosion and Stormwater Quality Control Permit – Issued by Department of Public Services, Transportation Division

Builders Erosion and Stormwater Quality Control Permit – Issued by Department of Community Services, Development Services Division

Checklists and Standard Notes

El Paso County Stormwater Management Plan Checklist

El Paso County Grading and Erosion Control Plan Submittal Checklist

Standard Notes for El Paso County Grading and Erosion Control Plans

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**Joint Policy Statement on Grading, Erosion Control and Dust
El Paso County Development Services Department, and
Housing and Building Association – Land Use Committee**

1. Summary:

Earthwork and grading operations at construction sites have long been a concern because of the potential for soil erosion carried by storm runoff and related dust generated during dry seasons. Dust first, then runoff sediment were both significant problems in El Paso County in 2006 and came to the attention of the County Commissioners, the County Health Department, and the Colorado Department of Public Health and the Environment (CDPHE). In meetings that followed, County Administration asked County Development Services Department (DSD) to work with the construction industry through the Housing and Building Association (HBA) to improve compliance with the current regulations. A working group was formed between DSD and the HBA to make improvements to processes, and make clarifications of requirements so that the result would be improved compliance (less erosion and related dust) at construction sites. The working group has met six times to date, and held “work” meetings where the current requirements were discussed and clarified in detail. The industry acknowledged that it can do a better job of compliance through required self- inspection and maintaining compliance at construction sites. The working group used the meetings to prepare submittal checklists for two of the main required documents: Grading and Erosion Control (GEC) Plans, and Storm Water Management Plans. A set of standard notes for GEC Plans was also prepared. These checklists and notes are attached. The meetings allowed for much improved understanding of specific regulations, requirements, and enforcement along with some of the challenges industry faces in maintaining compliance.

County staff believes that we are already seeing the benefit of this work in construction site compliance. No additional regulations have been proposed at this time. More thought about these issues and planning is being brought to pre-construction conferences. More attention is being paid in the field.

After endorsement from both El Paso County and the Industry, the working group proposes follow up actions. These clarifications and policies would be shared with the wider development and construction community through public workshops. A trial period of a year is proposed to allow for improvement and then evaluation of effectiveness. After that time, the working group could be convened again to make necessary changes to policies and procedures, and if necessary to propose changes to the regulations.

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The sections that follow provide detailed discussion of these policies and procedures in an effort to lessen the impact of construction and to improve construction site compliance.

2. Background:

Soil erosion along with blowing dust has long been a concern in the region. Dry weather early in 2006 and blowing dust that resulted made this a significant concern on construction sites that were undergoing earthwork and grading operations. Later in 2006, the other concern over construction site stabilization was illustrated as severe rain events threatened to send sediment laden runoff to downstream properties from many construction sites in the County.

The County development-related regulations concerning grading and erosion control requirements emphasize storm water management, water quality concerns, and prevention of soil erosion from rainfall events. It is clear that wind erosion is also a significant concern, both from the standpoint of soil transfer to surrounding properties, and the impact to public health. From ongoing experience on various construction sites it is also evident that the amount of disturbed land area actively being graded is directly related to dust production.

3. Current Regulations and Enforcement:

Dust is regulated in El Paso County by the County Health Department. Grading, Erosion Control and storm water quality is regulated in El Paso County by the County Development Services Department, the County Department of Transportation under the County MS4 (Municipal Separate Storm Sewer System) storm water quality permit, and by the Colorado Department of Public Health and Environment under a Colorado Discharge Permit for each construction site.

The overlapping requirements from different jurisdictions is confusing and has added to the problem. When County DSD or DOT staff receive dust complaints, those specific complaints are turned over to the County Health Department. If a construction site in the County is implicated by the complaint, DSD inspections staff does follow up with a site visit in order to determine if non-compliance with GEC or water quality best management practices are contributing to the dust complaint. The responsibility for dust enforcement is with the Health Department, but there are times when DSD or DOT get involved with enforcement of related GEC requirements.

The County Health Department issues Construction Activity Permits for projects that disturb more than one acre of ground under the County Air Quality Regulations. The permit regulates visual dust emissions (opacity), and often sets a maximum wind speed under which earthwork activities can be performed. The regulations list control measures such as compacting, minimizing disturbed areas, phasing, watering among others that may be required in order to minimize

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dust. Projects larger than 25 acres, or that will exceed six months in duration are also regulated by the CDPHE Air Quality Control Commission. County Health Department enforcement includes possible revocation of the permit, and civil penalties up to \$10,000.

Regulations concerning grading, erosion control and storm water quality management are primarily in the El Paso County Engineering Criteria Manual (ECM), and the City / County Drainage Criteria Manual (DCM) Volumes 1 and 2 that are administered by County DSD and DOT. Builder's Erosion and Storm water Quality Control Permits (BESQCP), and Erosion and Storm water Quality Control Permits (ESQCP) for development and larger projects are issued for construction projects under the County's MS4 permit.

The County regulations currently require that:

- "All earth disturbances shall be designed, constructed, and completed in such a manner so that the exposed area of any disturbed land shall be limited to the shortest practical period of time." (DCM, vol. 2)
- "All disturbed areas and stockpiles shall be mulched within 21 days after final grade is reached." (DCM, vol. 2)
- "The overall area being graded should be kept to a minimum per provisions presented in an approved Erosion and Stormwater Quality Control Permit (ESQCP)." (ECM)
- Areas that will be dormant for more than 30 days be stabilized by mulching. (DCM vol. 2)
- Areas that are at final grade or will be dormant for more than 60 days be stabilized by seeding and mulching (DCM vol. 2)

Enforcement provisions are carried out by DSD and DOT under the procedure provided in the ECM Appendix I and include: Letter of Non-Compliance, Stop Work Order, permit revocation, and ultimately court summons.

The Colorado Department of Public Health and Environment administers the NPDES water quality program for the EPA. CDPHE requires separate Colorado Discharge Permits for construction sites. State enforcement can include stop work orders and significant daily fines for violations.

4. County and Industry Committee Meetings:

To address the concerns over erosion, sediment and the related dust from construction sites, County DSD staff met with the County Health Department and the Housing and Building Association (HBA) land use committee. Initially, County staff discussed the possibility of specific disturbed area limits, similar to Douglas and Arapahoe County where a limit is placed on the amount of land (e.g., 40 acres, 50 acres, etc.) that could be undergoing active earth disturbance, at any given time.

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In August, 2006, the HBA provided a letter to County Administration requesting that disturbed area limits not be applied. The letter requested that the County work to better enforce the existing regulations, and acknowledged that the construction industry can do a better job of compliance with the regulations. The HBA requested that a committee be set up to work on these improvements. Upon direction from County Administration, County DSD and the HBA formed a grading and erosion control working group to provide clarification of the requirements and enforcement as called for in current regulations. To date, this group has met six times.

5. Resulting Clarification of County Engineering Criteria, Grading / Erosion Control Plans and Storm Water Management Plans:

As described earlier, there are overlapping regulations in the County and at the State level concerning grading and erosion control. The County's water quality permit required by the State (MS4 permit) is fairly recent. It began in 2004 with a 5-year implementation period. The County Engineering Criteria Manual (ECM) was initially adopted in December 2004, also with an implementation period. The ECM in place now sets forth construction site requirements for grading and erosion control in Chapter 5 and in Appendix I. These current County regulations are those that implement the County's obligation under the State MS4 permit.

Two critical requirements of the ECM are Grading and Erosion Control (GEC) Plans, and Storm Water Management Plans (SWMP). Because of the overlapping regulations and permit requirements, clarifying the scope and timing of these two plans has been the main focus of the County / HBA working group. Early on, the working group determined that clarifying these plan requirements would allow for more efficient preparation and County review, and much improved construction related compliance.

Because the GEC Plan and SWMP are so inter-related, the working group sought clarification on what each plan includes, when each of the plans is actually prepared, approved and carried out.

It is clear from the ECM that GEC Plans are required to be prepared by the Professional Engineer, reviewed and approved by County DSD as part of the development related Construction Drawings. It was less clear as to when the SWMP would be required in the development review process. Further, many of the State mandated requirements for the SWMP overlap with the GEC Plan.

Through much discussion, the working group sought to sort out the requirements and timing for each plan to meet all the current regulations. As a work product the group developed simplified checklists for both the GEC Plan and SWMP. As there has been inconsistency in the standard notes on GEC Plans that are intended to help the project stay in compliance with applicable regulations (many have evolved from other jurisdictions or old regulations, etc.), another work

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product was to develop together standard County notes to be placed on the GEC Plan. These checklists and standard notes are attached. The following are the resulting scope and timing policies that have resulted from the work of the working group:

Grading and Erosion Control (GEC) Plan: The intent of the GEC Plan is to provide for overall subdivision or development grading design as part of the engineering required for review and approval by the County. This plan is done at the time subdivision or development construction drawings are prepared by the Professional Engineer working for the developer. This is complex work whereby cuts and fills are analyzed for balance, slopes and contours are proposed as an integral part of the engineering design. A second important use of the GEC Plan is to estimate the cost of the overall grading, erosion control measures known as Best Management Practices (BMPs), and ultimate site stabilization. The County subdivision regulations require that collateral for these activities be posted prior to any land disturbing activity. The GEC Plan is therefore important to be completed and approved at the time of subdivision construction drawing approval so that these costs can be accurately estimated and included with the required subdivision collateral.

It was also determined that at the time of GEC Plan approval, the exact timing and phasing of the work is not always known. The exact starting date is sometimes delayed, and often the contractor that will do the earthwork is not yet under contract. The earthwork contractor has expertise in planning and phasing the earth disturbing activity to maintain compliance that is not yet a part of the project at the time of GEC Plan approval. Although overall phasing and general timing may be known and presented, the exact dates, phasing and progression of the earthwork and stabilization work is not known at plan approval. It is therefore the working group's recommendation that detailed phasing of the work and the proposed construction schedule be deferred to the required SWMP. The GEC Plan checklist and Standard Notes prepared by the working group are attached.

Storm Water Management Plan (SWMP): The SWMP is required before any ground disturbing activities. It describes in detail exactly what BMPs will be used prior to construction, during the construction period and at project closeout. It is the plan that is required to show how the project will maintain compliance throughout construction to final stabilization. The consulting engineer, the owner and contractors should collaborate on the preparation to provide the best information possible.

The SWMP does not have to be prepared by a registered Professional Engineer. The SWMP is required to be kept up to date on site by the designated permit Site Manager. On larger projects it will include "Living Maps" that are marked to show current status of disturbance, and stabilized areas. This plan is required before a notice to proceed is issued by the County and should be provided to the DSD

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Inspections group at least 2 weeks prior to ground disturbance. The SWMP checklist prepared by the working group is attached.

6. Enforcement of Regulations:

Concerning enforcement, the working group determined that the current County enforcement tools (i.e., Letter of Non-Compliance, Stop Work, Court injunction, etc.) are adequate. Letter of Non-Compliance and Stop Work orders have been used since the time of ECM adoption, and have been effective. During this intervening time, the CDPHE has also been active in enforcing its Colorado Discharge Permit regulations through inspection of construction projects in the unincorporated County. The State enforcement actions have also been effective. The working group is not recommending any changes to enforcement regulations at this time. The industry acknowledges that it can do a better job of self inspection and compliance with the regulations. It is the working group's belief that renewed focus on the regulations, and the beneficial clarifications in this policy will result in better compliance and a significant decrease in the concern of the public over construction related soil erosion and related dust.

Acknowledgements:

The Development Services Department and the Housing and Building Association wishes to thank the following individuals for participating in the working group meetings:

Kirk Ager, Rice and Rice, Inc.
Mike Mallon, Mallon Development Co.
Charlie Williams, Infinity Land Corp.
Brenda Quinones, Housing and Building Assoc.
Kim Cooper, Lennar
Bobby Ingels, Ingels Company
Matthew Merritt, Classic Consulting
Marc Whorton, Classic Consulting
Darin Moffatt, Classic Consulting
Jeff Dwire, Dwire Earthmoving
Chad Ellington, Oakwood Homes
Dean Blazik, Construction Site Management
Margie DeLaurell, JR Engineering
Larry Lee, Raw Land Detailing, Inc.
Mike Lee, Raw Land Detailing, Inc.
Mike DeGrant, Lowell Development
Rudy Cross, Cross Company
Ken Bailey, LaPlata
Jennifer Davis, Kiowa Engineering
Stewart Wills, Classic Homes

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John LeSage, Matrix Design Group
Tom Kerby, PBS&J
Jim Luthi, Century Communities
Roger DeKloe, New Generation Homes
Mel Keys, Banning Lewis Ranch
Tara McGowan, El Paso County DSD
Larry Syslo, El Paso County DSD
Paul Danley, El Paso County DSD
Robert Wolf, El Paso County DSD
Todd Sturtevant, City Stormwater Enterprise

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**EROSION AND STORMWATER QUALITY CONTROL PERMIT
(ESQCP)**

**EL PASO COUNTY DEPARTMENT OF PUBLIC SERVICES
APPLICATION AND PERMIT**

PERMIT NUMBER _____

APPLICANT INFORMATION

Applicant Contact Information	
Owner	
Name (person of responsibility)	
Company/Agency	
Position of Applicant	
Address (physical address, not PO Box)	
City	
State	
Zip Code	
Mailing address, if different from above	
Telephone	
FAX number	
Email Address	
Cellular Phone number	

CONTRACTOR INFORMATION

Contractor	
Name (person of responsibility)	
Company	
Address (physical address, not PO Box)	
City	
State	
Zip Code	
Mailing address, if different from above	
Telephone	
FAX number	
Email Address	
Cellular Phone number	
Erosion Control Supervisor (ECS)*	
ECS Phone number*	
ECS Cellular Phone number*	

*Required for El Paso County Department of Transportation Projects. Recommended for others.

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PROJECT INFORMATION

Project Specifications	
Project Name	
Legal Description	
Address (or nearest major cross streets)	
Acreage (total and disturbed)	Total: Disturbed:
Schedule	Start of Construction: Completion of Construction: Final Stabilization:
Project Purpose	
Description of Project	
Tax Schedule Number	

FOR OFFICE USE ONLY

The following signature from the ECM Administrator signifies the approval of this ESQCP. All work shall be performed in accordance with the permit, the El Paso County Engineering Criteria Manual (ECM) Standards, City of Colorado Springs Drainage Criteria Manual, Volume 2 (DCM2) as adopted by El Paso County Addendum, approved plans, and any attached conditions. The approved plans are an enforceable part of the ESQCP. Construction activity, except for the installation of initial construction BMPs is not permitted until issuance of a Construction permit and Notice to Proceed.

Signature of ECM Administrator: _____ Date _____

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1.1 REQUIRED SUBMISSIONS

In addition to this completed and signed application, the following items must be submitted to obtain an ESQCP:

- Permit fees
- Stormwater Management Plan (SWMP) meeting the requirements of DCM2 and ECM either as part of the plan set or as a separate document;
- Cost estimates of construction and maintenance of construction and permanent stormwater control measures (Cost estimates shall be provided on a unit cost basis for all stormwater BMPs);
- Financial surety in an amount agreeable to the ECM Administrator based on the cost estimates of the stormwater quality protection measures provided. The financial surety shall be provided in the form of a Letter of Credit, Surety with a Bonding Company, or other forms acceptable to El Paso County;
- Operation and Maintenance Plan for any proposed permanent BMPs; and
- Signed Private Stormwater Quality Structural Best Management Practices Agreement and Easement, if any private permanent BMPs are proposed.

1.2 RESPONSIBILITY FOR DAMAGE

The County and its officers and employees, including but not limited to the ECM Administrator, shall not be answerable or accountable in any manner, for injury to or death of any person, including but not limited to a permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder, or for damage to property resulting from any activities undertaken by a permit holder or under the direction of a permit holder. The permit holder shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to the permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder, or damage to property arising out of work or other activity permitted and done by the permit holder under a permit, or arising out of the failure on the permit holder's part to perform the obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity, or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit.

To the extent allowed by law, the permit holder shall indemnify, save, and hold harmless the County and its officers and employees, including but not limited to the BOCC and ECM Administrator, from all claims, suits or actions of every name, kind and description brought for or on account of injuries to or death of any person, including but not limited to the permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder and the public, or damage to property resulting from the performance of work or other activity under the permit, or arising out of the failure on the permit holder's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by state law. The permit holder waives any and all

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rights to any type of expressed or implied indemnity against the County, its officers or employees.

1.3 APPLICATION CERTIFICATION

I, as the Applicant or the representative of the Applicant, hereby certify that this application is correct and complete as per the requirements presented in this application and the El Paso County Engineering Criteria Manual and Drainage Criteria Manual, Volume 2 and El Paso County Addendum.

I, as the Applicant or the representative of the Applicant, have read and will comply with all of the requirements of the specified Stormwater Management Plan and any other documents specifying stormwater best management practices to be used on the site including permit conditions that may be required by the ECM Administrator. I understand that the Best Management Practices are to be maintained on the site and revised as necessary to protect stormwater quality as the project progresses. I further understand that a Construction Permit must be obtained and all necessary stormwater quality control BMPs are to be installed in accordance with the SWMP and the El Paso County Engineering Criteria Manual and Drainage Criteria Manual, Volume 2 and El Paso County Addendum before land disturbance begins and that failure to comply will result in a Stop Work Order and may result in other penalties as allowed by law. I further understand and agree to indemnify, save, and hold harmless the County and its officers and employees, including but not limited to the BOCC and ECM Administrator, from all claims, suits or actions of every name, kind and description as outlined in Section 1.2 Responsibility for Damage.

Date: _____

Signature of Applicant or Representative

Print Name of Applicant or Representative

Permit Fee	\$	
Surcharge	\$	
Financial Surety	_____	Type of Surety _____
Total	\$ _____	

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El Paso County Stormwater Management Plan Checklist

Revised 5/21/07

- 1) Applicant (owner/ designated operator), Prepared By, SWMP Administrator, and Contractor Information.
- 2) Table of Contents.
- 3) Site description and location to include vicinity map (not just Section, Township, Range)
- 4) Narrative description of construction activities proposed (e.g., may include clearing and grubbing, temporary stabilization, road grading, utility / storm installation, final grading, final stabilization, and removal of temporary control measures).
- 5) Phasing plan – may require separate drawings indicating initial, interim, and final site phases for larger projects. Provide “living maps” that can be revised in the field as conditions dictate.
- 6) Proposed sequence for major activities: Provide a construction schedule of anticipated starting and completion dates for each stage of land-disturbing activity depicting conservation measures anticipated, including the expected date on which the final stabilization will be completed.
- 7) Estimates of the total site area and area to undergo disturbance.
- 8) *An estimate of runoff coefficients before and after project construction (may not be required with next State update)*
- 9) Soil erosion potential and potential impacts upon discharge.
- 10) A description of existing vegetation at the site and percent ground cover.
- 11) The location and description of any other potential pollution sources such as fueling (mobile or stationary), chemical storage, etc.
- 12) Material handling to include spill prevention and response procedures.
- 13) Spill prevention and pollution controls for dedicated batch plants.
- 14) Other SW pollutant control measures to include waste disposal and off site soil tracking.

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- 15) The location and description of any anticipated non-stormwater components of discharge (springs, irrigation, etc.).

- 16) The name of ultimate receiving waters; size, type and location of stormwater outfall or storm sewer system discharge.

- 17) SWMP Map to include:
 - a) construction boundaries
 - b) all areas of disturbance
 - c) areas of cut and fill
 - d) areas used for storage of building materials, soils or wastes (stockpiles)
 - e) location of any dedicated asphalt / concrete batch plants
 - f) major erosion control facilities or structures (sedimentation ponds, etc.)
 - g) springs, streams, wetlands and other surface waters
 - h) boundaries of FEMA mapped 100 year flood plain

- 18) Narrative description of structural BMPs to be used, including silt fence, straw bales, check dams, sediment basins, drainage swales, etc. Ensure method is ECM / DCM approved.

- 19) Description of non-structural BMPs to be used including seeding, mulching, protection of existing vegetation, site watering, sod placement, etc.

- 20) Technical drawing details for BMP installation and maintenance.

- 21) Procedure for how the SWMP will be revised

- 22) Description of Final Stabilization and Long-term Stormwater Quality (describe measures to control SW pollutants after construction operations have been completed.

- 23) Provide for vegetative cover density to be 70% of pre-disturbed levels.

- 24) Outline of permit holder inspection procedures to install, maintain, and effectively operate BMPs, to manage erosion and sediment.

- 25) Record keeping procedures identified to include signature on inspection logs and location of SWMP records on-site.

Please note: all items need to be addressed. If not applicable, explain; simply identifying "not applicable" will not satisfy CDPHE requirement of explanation.

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El Paso County Grading and Erosion Control Plan
Submittal Checklist

Revised 5/21/07

- | | |
|---|--------------------------|
| 1) Vicinity map. | <input type="checkbox"/> |
| 2) North arrow and acceptable scale (1"=20' to 1"=100'). | <input type="checkbox"/> |
| 3) Existing and proposed Contours 2 feet or less (except for hillside). | <input type="checkbox"/> |
| 4) Standard EPC Grading and Erosion Control Notes included. | <input type="checkbox"/> |
| 5) Delineate mapped FEMA 100-yr floodplain. | <input type="checkbox"/> |
| 6) Construction site boundaries clearly delineated. | <input type="checkbox"/> |
| 7) Areas of soil disturbance shown. | <input type="checkbox"/> |
| 8) All proposed construction BMPs and Construction BMP details shown. | <input type="checkbox"/> |
| 9) Show existing vegetation. | <input type="checkbox"/> |
| 10) Existing and proposed water courses including springs, streams, wetlands,
Detention ponds, roadside ditches, irrigation ditches and other water surfaces. | <input type="checkbox"/> |
| 11) Show any existing structures. | <input type="checkbox"/> |
| 12) Show all existing utilities. | <input type="checkbox"/> |
| 13) Submit geotechnical investigation from soils engineer. | <input type="checkbox"/> |
| 14) Conclusions from soils report and geologic hazards report incorporated
in grading design. | <input type="checkbox"/> |
| 15) Show existing and proposed property lines and subdivision boundary. | <input type="checkbox"/> |
| 16) All existing and proposed easements (permanent and construction).including
required off site easements. | <input type="checkbox"/> |
| 17) Any offsite grading clearly shown and called out. | <input type="checkbox"/> |
| 18) Existing and proposed storm drainage facilities as necessary to show all BMPs. | <input type="checkbox"/> |
| 19) Temporary sediment ponds provided for disturbed drainage areas
greater than 1 acre. | <input type="checkbox"/> |
| 20) Proposed slopes steeper than 3:1 with top and toe of slope delineated. | <input type="checkbox"/> |
| 21) Erosion control blanketing shown on slopes steeper than 3:1. | <input type="checkbox"/> |
| 22) Retaining walls greater than or equal to 4ft in height require design by P.E. and
building permit from Regional Building Department. Locations to be shown on the
plan (not located in County ROW). | <input type="checkbox"/> |
| 23) Vehicle tracking shown at all construction entrances. | <input type="checkbox"/> |
| 24) The erosion control plan is to be certified by a Colorado Registered P.E. with
appropriate signature blocks for EPC and the Engineer and the statement "The Owner
will comply with the requirements of the Erosion Control Plan" signed by the owner. | <input type="checkbox"/> |
| 25) Required Signature blocks: | <input type="checkbox"/> |

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Engineer's Statement:

This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this report.

Name

Date

Owner's Statement:

The Owner will comply with the requirements of the Grading and Erosion Control Plan.

Name

Date

El Paso County:

County plan review is provided only for general conformance with County Design Criteria. The County is not responsible for the accuracy and adequacy of the design, dimensions, and/ or elevations which shall be confirmed at the job site. The County through the approval of this document assumes no responsibility for completeness and/ or accuracy of this document.

Filed in accordance with the requirements of the El Paso County Land Development Code, Drainage Criteria, and Engineering Criteria Manual as amended.

County Engineer / Director

Date

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Standard Notes for El Paso County Grading and Erosion Control Plans

1. Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off site waters, including wetlands.
2. Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations to regulations and standards must be requested, and approved, in writing.
3. A separate Stormwater Management Plan (SMWP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction. During construction the SWMP is the responsibility of the designated Stormwater Manager, shall be located on site at all times and shall be kept up to date with work progress and changes in the field.
4. Once the ESQCP has been issued, the contractor may install the initial stage erosion and sediment control BMPs as indicated on the GEC. A preconstruction meeting between the contractor, engineer, and El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting time and place with County DSD inspections staff.
5. Soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within 21 calendar days after final grading, or final earth disturbance, has been completed. Disturbed areas and stockpiles which are not at final grade but will remain dormant for longer than 30 days shall also be mulched within 21 days after interim grading. An area that is going to remain in an interim state for more than 60 days shall also be seeded. All temporary soil erosion control measures and BMPs shall be maintained until permanent soil erosion control measures are implemented and established.
6. Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and stabilized with permanent soil erosion control measures pursuant to standards and specification prescribed in the DCM Volume II and the Engineering Criteria Manual (ECM) appendix I.
7. All persons engaged in earth disturbance shall implement and maintain acceptable soil erosion and sediment control measures including BMPs in conformance with the erosion control technical standards of the Drainage Criteria Manual (DCM) Volume II and in accordance with the Stormwater Management Plan (SWMP).

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8. All temporary erosion control facilities including BMPs and all permanent facilities intended to control erosion of any earth disturbance operations, shall be installed as defined in the approved plans, the SWMP and the DCM Volume II and maintained throughout the duration of the earth disturbance operation.
9. Any earth disturbance shall be conducted in such a manner so as to effectively reduce accelerated soil erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time.
10. Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be designed to limit the discharge to a non-erosive velocity.
11. Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to runoff to State Waters, including any surface or subsurface storm drainage system or facilities.
12. Erosion control blanketing is to be used on slopes steeper than 3:1.
13. Building, construction, excavation, or other waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. BMP's may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.
14. Vehicle tracking of soils and construction debris off-site shall be minimized. Materials tracked offsite shall be cleaned up and properly disposed of immediately.
15. Contractor shall be responsible for the removal of all wastes from the construction site for disposal in accordance with local and State regulatory requirements. No construction debris, tree slash, building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
16. The owner, site developer, contractor, and/or their authorized agents shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, and sand that may accumulate in the storm sewer or other drainage conveyance system and stormwater appurtenances as a result of site development.
17. The quantity of materials stored on the project site shall be limited, as much as practical, to that quantity required to perform the work in an orderly sequence. All materials stored on-site shall be stored in a neat, orderly manner, in their original containers, with original manufacturer's labels.
18. No chemicals are to be used by the contractor, which have the potential to be released in stormwater unless permission for the use of a specific chemical is

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granted in writing by the ECM Administrator. In granting the use of such chemicals, special conditions and monitoring may be required.

19. Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled material from entering State Waters, including any surface or subsurface storm drainage system or facilities.
20. No person shall cause the impediment of stormwater flow in the flow line of the curb and gutter or in the ditchline.
21. Individuals shall comply with the “Colorado Water Quality Control Act” (Title 25, Article 8, CRS), and the “Clean Water Act” (33 USC 1344), in addition to the requirements included in the DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the contractor prior to construction (NPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirements and laws, rules, or regulations of other Federal, State, or County agencies, the more restrictive laws, rules, or regulations shall apply.
22. All construction traffic must enter/exit the site at approved construction access points.
23. Prior to actual construction the permittee shall verify the location of existing utilities.
24. A water source shall be available on site during earthwork operations and utilized as required to minimize dust from earthwork equipment and wind.
25. The soils report for this site has been prepared by _____ and shall be considered a part of these plans.
26. At least ten days prior to the anticipated start of construction, for projects that will disturb 1 acre or more, the owner or operator of construction activity shall submit a permit application for stormwater discharge to the Colorado Department of Public Health and Environment, Water Quality Division. The application contains certification of completion of a stormwater management plan (SWMP), of which this grading and erosion control plan may be a part. For information or application materials contact:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD – Permits
4300 Cherry Creek Drive South
Denver, CO 80246-1530
Attn: Permits Unit

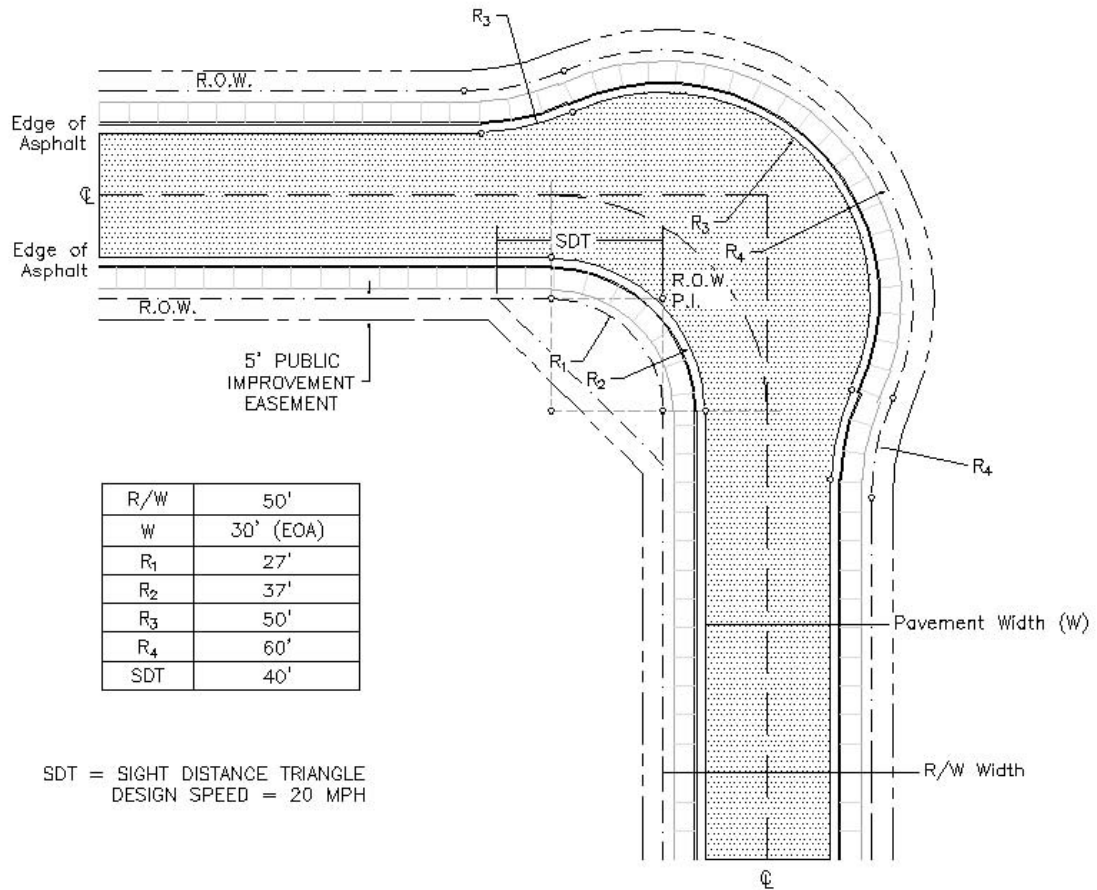
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Appendix F

Appendix F shall include the following:

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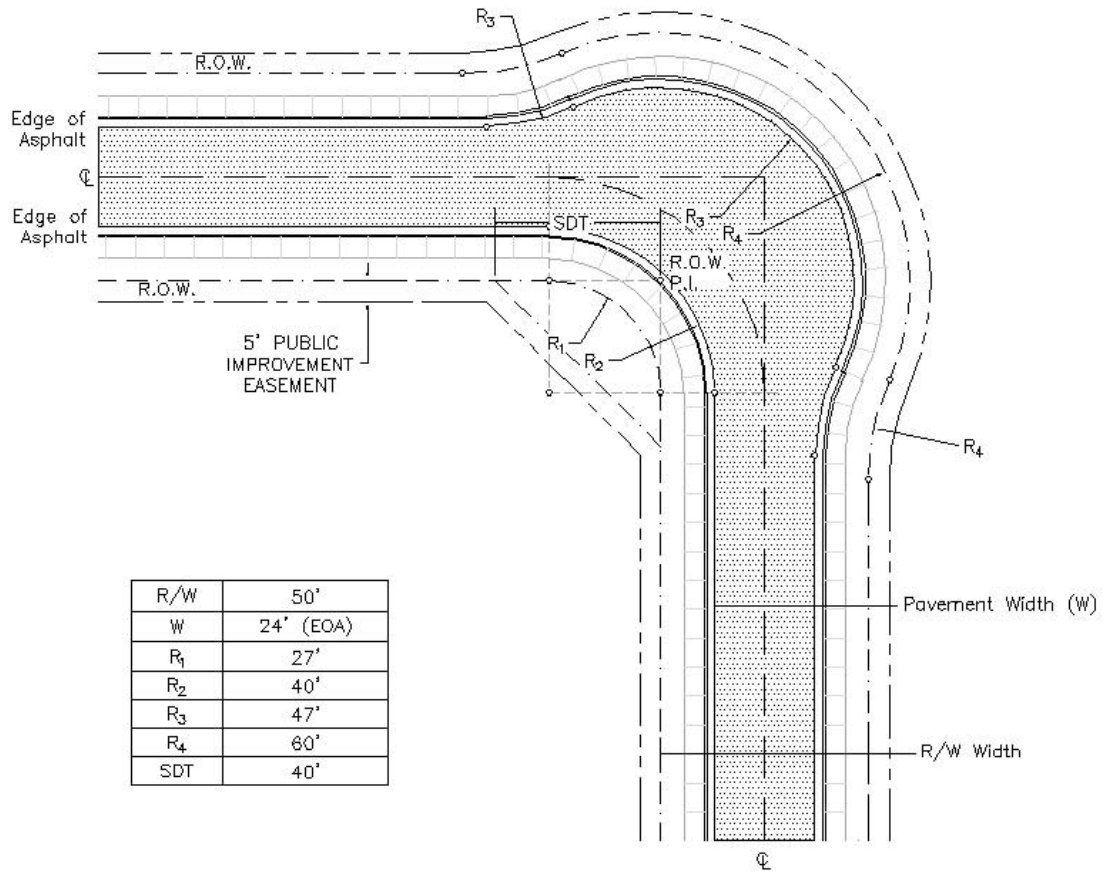
URBAN LOCAL KNUCKLE DETAILS



<p>July 9, 2009</p> <p>DATE APPROVED:</p> <p>André Brackin</p> <p>DEPARTMENT OF TRANSPORTATION</p>	<p align="center">Urban Local Knuckle</p> <p align="center">Standard Drawing</p> <p>REVISION DATE: 7/9/09</p> <p>FILE NAME: SD_2-77</p>	
--	---	--

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URBAN LOCAL LOW-VOLUME KNUCKLE DETAILS



R/W	50'
W	24' (EOA)
R ₁	27'
R ₂	40'
R ₃	47'
R ₄	60'
SDT	40'

SDT = SIGHT DISTANCE TRIANGLE
DESIGN SPEED = 20 MPH

<p>July 9, 2009 DATE APPROVED:</p>	<p align="center">Urban Local Low-Volume Knuckle Standard Drawing</p>		
<p>André Brackin DEPARTMENT OF TRANSPORTATION</p>			

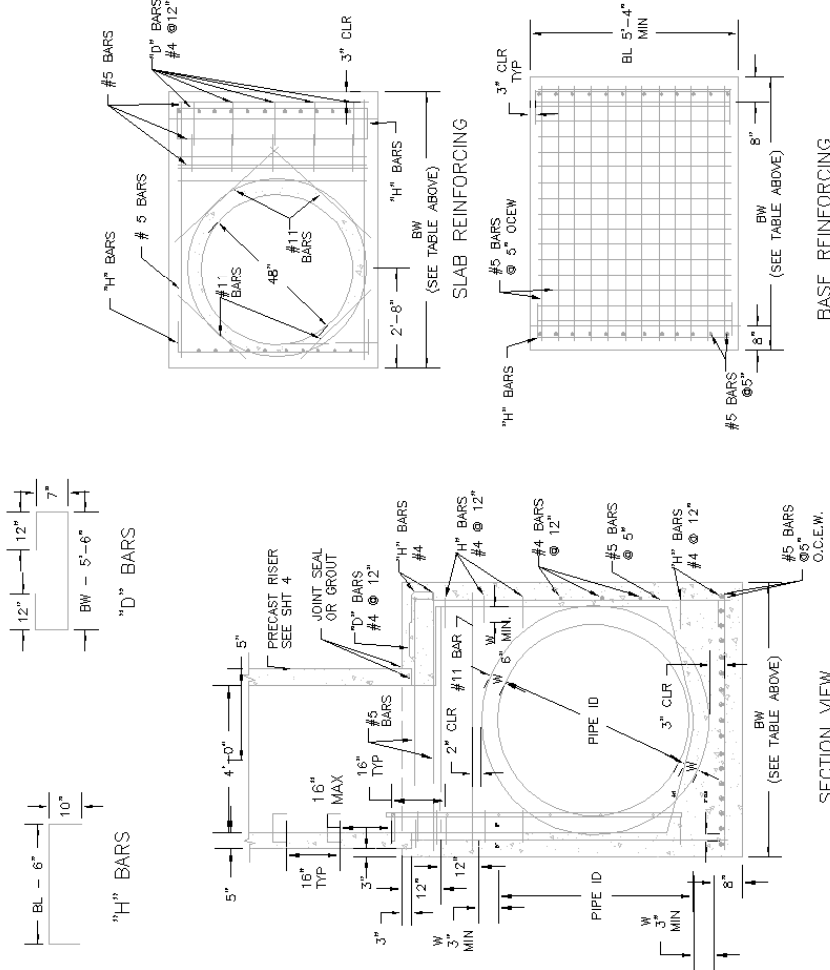
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PIPE ID	BW
48" AND SMALLER	6'-4"
54"	6'-10"
60" AND LARGER	OD + 16"

NOTES

1. TYPE I MANHOLE SHALL BE USED WHEN APPROPRIATE AND TYPICALLY FOR PIPE SIZES LARGER THAN 30 INCHES I.D..
2. VIEW AND DETAILS SHOWN ARE TYPICAL FOR STRAIGHT THROUGH DESIGN ONLY. DESIGN ENGINEER SHALL DETERMINE MANHOLE BASE CONFIGURATION AND DIMENSIONS FOR PARTICULAR PIPE SIZES AND ALIGNMENT.
3. EITHER LADDER OR STEPS SHALL BE INSTALLED WHEN MANHOLE DEPTH EXCEEDS 30". LOWEST STEP SHALL BE BE A MAXIMUM OF 16" ABOVE THE FLOOR.
4. FLOOR OF THE MANHOLE SHALL BE TROWELLED TO A SMOOTH, HARD SURFACE AND SHALL SLOPE TOWARDS THE OUTLET (8:1 MAX., 1/2" PER FT. MIN). FLOOR SHALL BE SHAPED AND CHANNELLED; SEE SD_3-2 FOR TYPICAL CHANNEL DETAILS.

SCALE: NOT TO SCALE

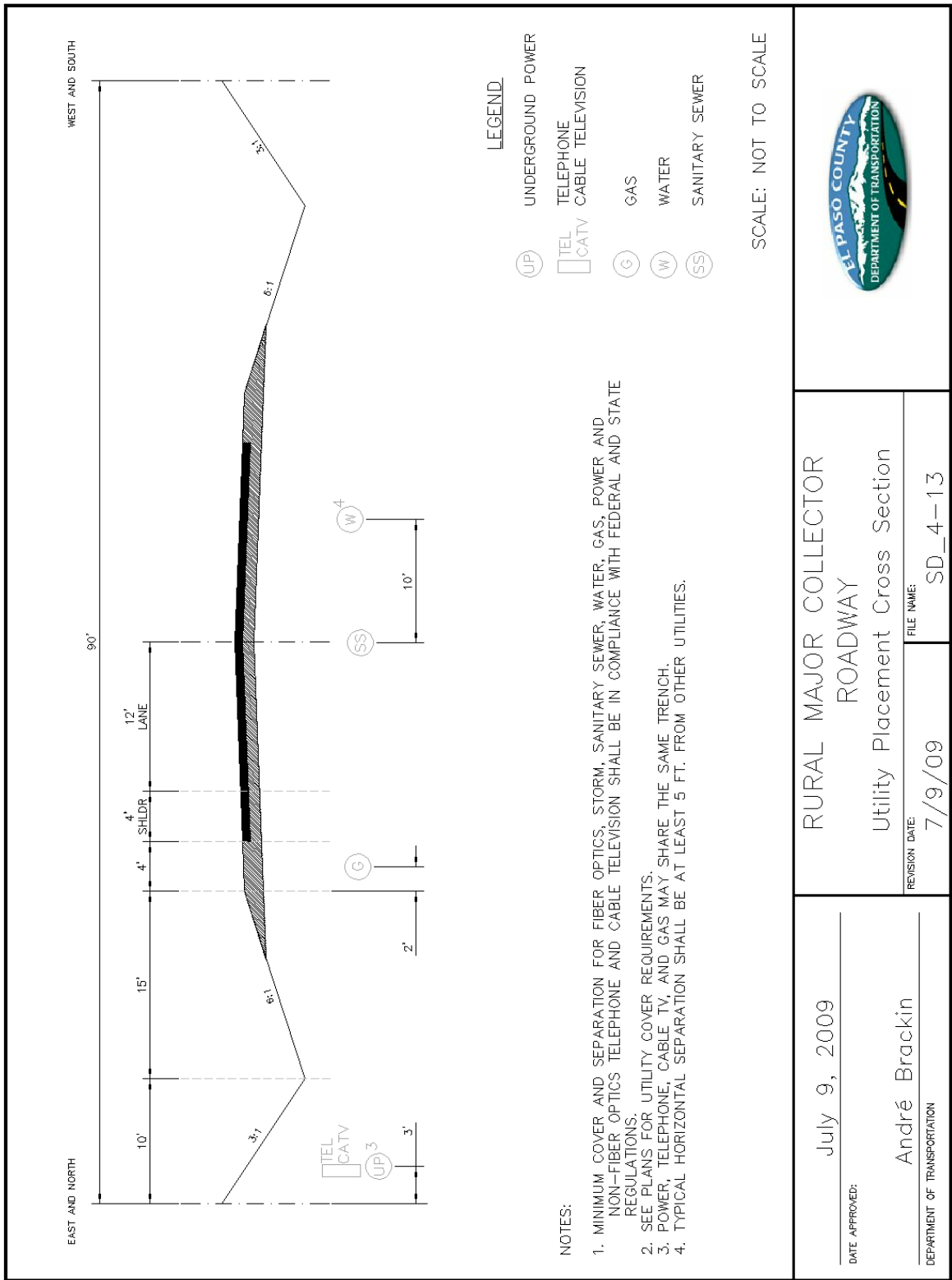


Storm Sewer Manhole Detail
Type I
Standard Drawing

DATE APPROVED: July 9, 2009
 ANDRÉ BRACKIN
 DEPARTMENT OF TRANSPORTATION

REVISION DATE: 7/9/09
 FILE NAME: SD_3-1

**EL PASO COUNTY SUPPLEMENT TO THE 2008 ENGINEERING CRITERIA
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RURAL MAJOR COLLECTOR ROADWAY Utility Placement Cross Section	FILE NAME: SD_4-13
DATE APPROVED: July 9, 2009 André Brackin DEPARTMENT OF TRANSPORTATION	REVISION DATE: 7/9/09

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Appendix G

Appendix G shall include the following:

Introduction:

To ensure good operation and maintenance of Post-Construction Best Management Practices (PBMPs), a responsible entity must inspect and provide appropriate services for the PBMPs. A maintenance agreement is required for this purpose. Maintenance agreements for three types of responsible entities are included in this appendix.

The maintenance agreement must cover any PBMP that is submitted as part of the water quality system, such as Extended Detention Basins (EDB) and Porous Landscape Detention (PLD) included in DCM2, plus any additional PBMPs such as Grassy Swales & Buffers that are used as part of “Minimizing Directly Connected Impervious Areas” (MDCIA), if they are used to decrease the size of WQCV as shown in Figure ND-1 of Drainage Criteria Manual, Volume 2.

Contents:

Private Detention Basin/Stormwater Quality Best Management Practice
Maintenance Agreement and Easement:

- Developer and Homeowners Associations
- Developer-Owner
- Metropolitan District

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**PRIVATE DETENTION BASIN /
STORMWATER QUALITY BEST MANAGEMENT PRACTICE
MAINTENANCE AGREEMENT AND EASEMENT**

This PRIVATE DETENTION BASIN / STORMWATER QUALITY BEST MANAGEMENT PRACTICE MAINTENANCE AGREEMENT AND EASEMENT (Agreement) is made by and between EL PASO COUNTY by and through THE BOARD OF COUNTY COMMISSIONERS OF EL PASO COUNTY, COLORADO (Board or County) and [Insert Developer's company name] (Developer) and [Insert first part of HOA name] HOMEOWNERS ASSOCIATION (Homeowners Association or Association), a Colorado nonprofit corporation. The above may occasionally be referred to herein singularly as "Party" and collectively as "Parties."

Recitals

A. WHEREAS, Developer is the owner of certain real estate (the Property or Subdivision) in El Paso County, Colorado, which Property is legally described in Exhibit A attached hereto and incorporated herein by this reference; and

B. WHEREAS, Developer desires to plat and develop on the Property a subdivision to be known as [Insert proposed subdivision name]; and

C. WHEREAS, the development of this Property will substantially increase the volume of water runoff and will decrease the quality of the stormwater runoff from the Property, and, therefore, it is in the best interest of public health, safety and welfare for the County to condition approval of this subdivision on Developer's promise to construct adequate drainage, water runoff control facilities, and stormwater quality structural Best Management Practices ("BMPs") for the subdivision; and

D. WHEREAS, Chapter 8, Section 8.4.5 of the El Paso County Land Development Code, as periodically amended, promulgated pursuant to Section 30-28-133(1), Colorado Revised Statutes (C.R.S.), requires the County to condition approval of all subdivisions on a developer's promise to so construct adequate drainage, water runoff control facilities, and BMPs in subdivisions; and

E. WHEREAS, the Drainage Criteria Manual, Volume 2, as amended by Appendix I of the El Paso County Engineering Criteria Manual (ECM), as each may be periodically amended, promulgated pursuant to the County's Colorado Discharge Permit System General Permit (MS4 Permit) as required by Phase II of the National Pollutant Discharge Elimination System (NPDES), which MS4 Permit requires that the County take measures to protect the quality of stormwater from sediment and other contaminants, requires subdividers, developers, landowners, and owners of facilities located in the

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County's rights-of-way or easements to provide adequate permanent stormwater quality BMPs with new development or significant redevelopment; and

F. WHEREAS, Section 2.9 of the El Paso County Drainage Criteria Manual provides for a developer's promise to maintain a subdivision's drainage facilities in the event the County does not assume such responsibility; and

G. WHEREAS, developers in El Paso County have historically chosen water runoff detention basins as a means to provide adequate drainage and water runoff control in subdivisions, which basins, while effective, are less expensive for developers to construct than other methods of providing drainage and water runoff control; and

H. WHEREAS, Developer desires to construct for the subdivision [insert number of basins/BMPs] detention basin/stormwater quality BMP(s) ("detention basin/BMP(s)") as the means for providing adequate drainage and stormwater runoff control and to meet requirements of the County's MS4 Permit, and to provide for operating, cleaning, maintaining and repairing such detention basin/BMP(s); and

I. WHEREAS, Developer desires to construct the detention basin/BMP(s) on property that will be platted as [Insert Lot or Tract identifier(s)], as indicated on the final plat of the subdivision, and as set forth on Exhibit B attached hereto; and

J. WHEREAS, Developer shall be charged with the duty of constructing the detention basin/BMP(s) and the Association shall be charged in the Subdivision's Covenants with the duties of operating, maintaining and repairing all common areas and common structures within the Subdivision, including the detention basin/BMP(s) on the Property described in Exhibit B; and

K. WHEREAS, it is the County's experience that subdivision developers and homeowners' associations historically have not properly cleaned and otherwise not properly maintained and repaired these detention basins/BMPs, and that these detention basins/BMPs, when not so properly cleaned, maintained, and repaired, threaten the public health, safety and welfare; and

L. WHEREAS, the County, in order to protect the public health, safety and welfare, has historically expended valuable and limited public resources to so properly clean, maintain, and repair these detention basins/BMPs when developers and homeowners' associations have failed in their responsibilities, and therefore, the County desires the means to recover its costs incurred in the event the burden falls on the County to so clean, maintain and repair the detention basin/BMP(s) serving this Subdivision due to the Developer's or the Association's failure to meet its obligations to do the same; and

M. WHEREAS, the County conditions approval of this Subdivision on the Developer's promise to so construct the detention basin/BMP(s), and further conditions approval on the Association's promise to reimburse the County in the event the burden

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falls upon the County to so clean, maintain and/or repair the detention basin/BMP(s) serving this Subdivision; and

N. WHEREAS, the County could condition subdivision approval on the Developer's promise to construct a different and more expensive drainage, water runoff control system and BMPs than those proposed herein, which more expensive system would not create the possibility of the burden of cleaning, maintenance and repair expenses falling on the County; however, the County is willing to forego such right upon the performance of Developer's and the Association's promises contained herein; and

O. WHEREAS, the County, in order to secure performance of the promises contained herein, conditions approval of this Subdivision upon the Developer's grant herein of a perpetual Easement over a portion of the Property for the purpose of allowing the County to periodically access, inspect, and, when so necessary, to clean, maintain and/or repair the detention basin/BMP(s); and

P. WHEREAS, given that the Association could potentially avoid liability hereunder by dissolving and reforming as a different entity, and given the difficulties inherent in collecting an unsecured promise, the County, in order to secure performance of the promises contained herein, conditions approval of this Subdivision upon the Developer's creation, by and through this Agreement, of a covenant running with the land upon each and every lot in the Subdivision.

Agreement

NOW, THEREFORE, in consideration of the mutual Promises contained herein, the sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Incorporation of Recitals: The Parties incorporate the Recitals above into this Agreement.

2. Covenants Running with the Land and Pro Rata Liability upon Individual Lot Owners: Developer and the Association agree that this entire Agreement and the performance thereof shall become a covenant running with the land, which land is legally described in Exhibit A attached hereto, and that this entire Agreement and the performance thereof shall be binding upon themselves, their respective successors and assigns, including individual lot owners within the Subdivision.

However, any liability imposed under this Agreement against an individual lot owner shall not be joint and several with the Developer and the Association, but shall be pro rated on a per-lot basis as determined by the following formula and illustration: each individual lot owner(s) shall be liable for no more than the total monetary amount of liability multiplied by a fraction in which the numerator is the number of lots in the

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Subdivision owned by a particular lot owner, and the denominator is the total number of lots in the Subdivision. As to any lot(s) owned by more than one person or entity, the liability among co-owners shall be joint and several for the pro rata obligation of that lot. The application of this Paragraph is best illustrated by the following example. Assume the following parameters: total liability is \$10,000; total number of lots in the Subdivision is 100; Lot 1 is owned by persons A and B; person B also owns Lot 2. Liability is as follows: the Developer, \$10,000; the Association, \$10,000; Lot 1 is \$100.00, joint and several as to A and B, Lot 2 is \$100.00 owed solely by B. Thus person A's total liability is \$100.00 and person B's is \$200.00. Applying the principle that the County cannot collect more than it is owed, and assuming that the County cannot collect anything from the Developer and the Association, if the County collected the whole \$200.00 from B, then it could not collect the \$100.00 from A. Likewise, if the County collected the \$100.00 from A, then it could only collect \$100.00 from B.

3. Construction: Developer shall construct on that portion of the Property described in Exhibit B attached hereto and incorporated herein by this reference, [insert number of basins/BMPs] detention basin/BMP(s). Developer shall not commence construction of the detention basin/BMP(s) until the El Paso County Development Services Department (DSD) has approved in writing the plans and specifications for the detention basin/BMP(s) and this Agreement has been signed by all Parties and returned to the DSD. Developer shall complete construction of the detention basin/BMP(s) in substantial compliance with the County-approved plans and specifications for the detention basin/BMP(s). Failure to meet these requirements shall be a material breach of this Agreement, and shall entitle the County to pursue any remedies available to it at law or in equity to enforce the same. Construction of the detention basin/BMP(s) shall be substantially completed within one (1) year (defined as 365 days), which one year period will commence to run on the date the approved plat of this Subdivision is recorded in the records of the El Paso County Clerk and Recorder. Rough grading of the detention basin/BMP(s) must be completed and inspected by the El Paso County Development Services Department prior to commencing road construction.

In the event construction is not substantially completed within the one (1) year period, then the County may exercise its discretion to complete the project, and shall have the right to seek reimbursement from the Developer and the Association and their respective successors and assigns, including individual lot owners in the Subdivision, for its actual costs and expenses incurred in the process of completing construction. The term actual costs and expenses shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tool and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the event the County initiates any litigation or engages the services of legal counsel in order to enforce the Provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same. The scope of

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liability therefor of the Developer, the Association, and the individual lot owners shall be as set forth in Paragraph Two (2) above.

4. Maintenance: The Developer and the Association agree for themselves, their respective successors and assigns, including individual lot owners within the Subdivision, that they will regularly and routinely inspect, clean and maintain the detention basin/BMP(s), and otherwise keep the same in good repair, all at their own cost and expense. No trees or shrubs that will impair the structural integrity of the detention basin/BMP(s) shall be planted or allowed to grow on the detention basin/BMP(s).

5. Creation of Easement: Developer and the Association hereby grant the County a non-exclusive perpetual easement upon and across that portion of the Property described in Exhibit B. The purpose of the easement is to allow the County to access, inspect, clean, repair and maintain the detention basin/BMP(s); however, the creation of the easement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

6. County's Rights and Obligations: Any time the County determines, in the sole exercise of its discretion, that the detention basin/BMP(s) is not properly cleaned, maintained and/or otherwise kept in good repair, the County shall give reasonable notice to the Developer, the Association and their respective successors and assigns, including the individual lot owners within the Subdivision, that the detention basin/BMP(s) needs to be cleaned, maintained and/or otherwise repaired. The notice shall provide a reasonable time to correct the problem(s). Should the responsible parties fail to correct the specified problem(s), the County may enter upon the Property to so correct the specified problem(s). Notice shall be effective to the above by the County's deposit of the same into the regular United States mail, postage pre-paid. Notwithstanding the foregoing, this Agreement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

7. Reimbursement of County's Costs / Covenant Running With the Land: The Developer and the Association agree and covenant, for themselves, their respective successors and assigns, including individual lot owners within the Subdivision, that they will reimburse the County for its costs and expenses incurred in the process of completing construction of, cleaning, maintaining, and/or repairing the detention basin/BMP(s) pursuant to the provisions of this Agreement; however, the obligation and liability of the Developer hereunder shall only continue until such time as the Developer transfers the entire management and operation of the Association to the individual lot owners within the Subdivision. Notwithstanding the previous sentence, the Association and the individual lot owners within the Subdivision shall always remain obligated and liable hereunder, and as per the provisions of Paragraph Two (2) above.

The term "actual costs and expenses" shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tools and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the

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event the County initiates any litigation or engages the services of legal counsel in order to enforce the provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney's fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same. The scope of liability therefor of the Developer, the Association, and the individual lot owners shall be as set forth in Paragraph Two (2) above.

8. Contingencies of Subdivision Approval: Developer's and the Association's execution of this Agreement is a condition of subdivision approval. Additional conditions of this Agreement include, but are not limited to, the following:

- a. The County's receipt of a copy of the Articles of Incorporation for the Association, as filed with the Colorado Secretary of State; receipt of the Certificate of Incorporation or other comparable proof for the same from the Colorado Secretary of State; a copy of the Bylaws of the Association; a copy of the organizational minutes or other appropriate document of the Association, properly executed and attested, establishing that the Association has adopted this Agreement as an obligation of the Association; and
- b. A copy of the Covenants of the Subdivision establishing that the Association is obligated to inspect, clean, maintain, and repair the detention basin/BMP(s); that the Association has adopted this Agreement as an obligation of the Association; and that a funding mechanism is in place whereby individual lot owners within the Subdivision pay a regular fee to the Association for, among other matters, the inspection, cleaning, maintenance, and repair of the detention basin/BMP(s); and
- c. A copy of the Covenants of the Subdivision establishing that this Agreement is incorporated into the Covenants, and that such Agreement touches and concerns each and every lot within the Subdivision.

The County shall have the right, in the sole exercise of its discretion, to approve or disapprove any documentation submitted to it under the conditions of this Paragraph, including but not limited to, any separate agreement or amendment, if applicable, identifying any specific maintenance responsibilities not addressed herein. The County's rejection of any documentation submitted hereunder shall mean that the appropriate condition of this Agreement has not been fulfilled.

9. Distribution to Lot Purchasers: Upon the initial sale of any lot within the Subdivision, prior to closing on such sale, the Developer shall give a copy of this Agreement to the potential Buyer.

10. Agreement Monitored by El Paso County Development Services Department and/or El Paso County Department of Transportation: Any and all actions

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and decisions to be made hereunder by the County shall be made by the Director of the El Paso County Development Services Department and/or the Director of the El Paso County Department of Transportation. Accordingly, any and all documents, submissions, plan approvals, inspections, etc. shall be submitted to and shall be made by the Director of the Development Services Department and/or the Director of the El Paso County Department of Transportation.

11. Indemnification and Hold Harmless: To the extent authorized by law, Developer and the Association agree, for themselves, their respective successors and assigns, including the individual lot owners in the Subdivision, that they will indemnify, defend, and hold the County harmless from any and all loss, costs, damage, injury, liability, claim, lien, demand, action and causes of action whatsoever, whether at law or in equity, arising from or related to their respective intentional or negligent acts, errors or omissions or that of their agents, officers, servants, employees, invitees and licensees in the construction, operation, inspection, cleaning (including analyzing and disposing of any solid or hazardous wastes as defined by State and/or Federal environmental laws and regulations), maintenance, and repair of the detention basin/BMP(s), and such obligation arising under this Paragraph shall be joint and several. Nothing in this Paragraph shall be deemed to waive or otherwise limit the defense available to the County pursuant to the Colorado Governmental Immunity Act, Sections 24-10-101, *et seq.* C.R.S., or as otherwise provided by law. However, the obligation and liability of the Developer hereunder shall only continue until such time as the Developer transfers the entire management and operation of the Association to the individual lot owners within the Subdivision.

12. Severability: In the event any Court of competent jurisdiction declares any part of this Agreement to be unenforceable, such declaration shall not affect the enforceability of the remaining parts of this Agreement.

13. Third Parties: This Agreement does not and shall not be deemed to confer upon or grant to any third party any right to claim damages or to bring any lawsuit, action or other proceeding against either the County, the Developer, the Association, or their respective successors and assigns, including any individual lot owners in the Subdivision, because of any breach hereof or because of any terms, covenants, agreements or conditions contained herein.

14. Solid Waste or Hazardous Materials: Should any refuse from the detention basin/BMP(s) be suspected or identified as solid waste or petroleum products, hazardous substances or hazardous materials (collectively referred to herein as “hazardous materials”), the Developer and the Association shall take all necessary and proper steps to characterize the solid waste or hazardous materials and properly dispose of it in accordance with applicable State and/or Federal environmental laws and regulations, including, but not limited to, the following: Solid Wastes Disposal Sites and Facilities Acts, §§ 30-20-100.5 – 30-20-119, C.R.S., Colorado Regulations Pertaining to Solid Waste Disposal Sites and Facilities, 6 C.C.R. 1007-2, *et seq.*, Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992k, and Federal Solid Waste Regulations 40 CFR Ch. I. The

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County shall not be responsible or liable for identifying, characterizing, cleaning up, or disposing of such solid waste or hazardous materials . Notwithstanding the previous sentence, should any refuse cleaned up and disposed of by the County be determined to be solid waste or hazardous materials, the Developer and the Association, but not the County, shall be responsible and liable as the owner, generator, and/or transporter of said solid waste or hazardous materials.

15. Applicable Law and Venue: The laws, rules, and regulations of the State of Colorado and El Paso County shall be applicable in the enforcement, interpretation, and execution of this Agreement, except that Federal law may be applicable regarding solid waste or hazardous materials. Venue shall be in the El Paso County District Court.

IN WITNESS WHEREOF, the Parties affix their signatures below.

Executed this _____ day of _____, 20____, by:

[Insert Developer's company name]

By:

[Insert name], [Insert title(President/Manager)]

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by [Insert name], [Insert title(President/Manager)], [Insert Developer's company name].

Witness my hand and official seal.

My commission expires: _____

Notary Public

Executed this _____ day of _____, 20____, by:

[Insert first part of HOA name] HOMEOWNERS ASSOCIATION, a Colorado nonprofit corporation.

By:

[Insert name], President

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The foregoing instrument was acknowledged before me this _____ day of _____,

20___, by [Insert name], President, [Insert first part of HOA name] HOMEOWNERS ASSOCIATION, a Colorado nonprofit corporation.

Witness my hand and official seal.

My commission expires: _____

Notary Public

Executed this _____ day of _____, 20___, by:

BOARD OF COUNTY COMMISSIONERS
OF EL PASO COUNTY, COLORADO

By: _____

_____, Chair

Attest:

County Clerk and Recorder

The foregoing instrument was acknowledged before me this _____ day of _____, 20___, by _____, Chair of the Board of County Commissioners of El Paso County, Colorado, as Attested to by _____, County Clerk and Recorder.

Witness my hand and official seal.

My commission expires: _____

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Notary Public

Approved as to Content and Form:

Assistant County Attorney

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**PRIVATE DETENTION BASIN /
STORMWATER QUALITY BEST MANAGEMENT PRACTICE
MAINTENANCE AGREEMENT AND EASEMENT**

This PRIVATE DETENTION BASIN / STORMWATER QUALITY BEST MANAGEMENT PRACTICE MAINTENANCE AGREEMENT AND EASEMENT (Agreement) is made by and between EL PASO COUNTY by and through THE BOARD OF COUNTY COMMISSIONERS OF EL PASO COUNTY, COLORADO (Board or County) and [Insert Lot Owner/Developer's name] (Owner or Developer). The above may occasionally be referred to herein singularly as "Party" and collectively as "Parties."

Recitals

A. WHEREAS, Developer is the owner of certain real estate (the Property or Subdivision) in El Paso County, Colorado, which Property is legally described in Exhibit A attached hereto and incorporated herein by this reference; and

B. WHEREAS, Developer desires to plat and develop on the Property a subdivision/land use to be known as [Insert proposed subdivision/land use name]; and

C. WHEREAS, the development of this Property will substantially increase the volume of water runoff and will decrease the quality of the stormwater runoff from the Property, and, therefore, it is in the best interest of public health, safety and welfare for the County to condition approval of this subdivision/land use on Developer's promise to construct adequate drainage, water runoff control facilities, and stormwater quality structural Best Management Practices ("BMPs") for the subdivision/land use; and

D. WHEREAS, Chapter 8, Section 8.4.5 of the El Paso County Land Development Code, as periodically amended, promulgated pursuant to Section 30-28-133(1), Colorado Revised Statutes (C.R.S.), requires the County to condition approval of all subdivisions on a developer's promise to so construct adequate drainage, water runoff control facilities, and BMPs in subdivisions; and

E. WHEREAS, the Drainage Criteria Manual, Volume 2, as amended by Appendix I of the El Paso County Engineering Criteria Manual (ECM), as each may be periodically amended, promulgated pursuant to the County's Colorado Discharge Permit System General Permit (MS4 Permit) as required by Phase II of the National Pollutant Discharge Elimination System (NPDES), which MS4 Permit requires that the County take measures to protect the quality of stormwater from sediment and other contaminants, requires subdividers, developers, landowners, and owners of facilities located in the County's rights-of-way or easements to provide adequate permanent stormwater quality BMPs with new development or significant redevelopment; and

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F. WHEREAS, Section 2.9 of the El Paso County Drainage Criteria Manual provides for a developer's promise to maintain a subdivision's drainage facilities in the event the County does not assume such responsibility; and

G. WHEREAS, developers in El Paso County have historically chosen water runoff detention basins as a means to provide adequate drainage and water runoff control in subdivisions, which basins, while effective, are less expensive for developers to construct than other methods of providing drainage and water runoff control; and

H. WHEREAS, Developer desires to construct for the subdivision/land use [insert number of basins/BMPs] detention basin/stormwater quality BMP(s) ("detention basin/BMP(s)") as the means for providing adequate drainage and stormwater runoff control and to meet requirements of the County's MS4 Permit, and to operate, clean, maintain and repair such detention basin/BMP(s); and

I. WHEREAS, Developer desires to construct the detention basin/BMP(s) on property that is or will be platted as [Insert Lot or Tract identifier(s)], as indicated on the final plat of the subdivision, and as set forth on Exhibit B attached hereto; and

J. WHEREAS, Developer shall be charged with the duties of constructing, operating, maintaining and repairing the detention basin/BMP(s) on the Property described in Exhibit B; and

K. WHEREAS, it is the County's experience that subdivision developers and property owners historically have not properly cleaned and otherwise not properly maintained and repaired these detention basins/BMPs, and that these detention basins/BMPs, when not so properly cleaned, maintained, and repaired, threaten the public health, safety and welfare; and

L. WHEREAS, the County, in order to protect the public health, safety and welfare, has historically expended valuable and limited public resources to so properly clean, maintain, and repair these detention basins/BMPs when developers and property owners have failed in their responsibilities, and therefore, the County desires the means to recover its costs incurred in the event the burden falls on the County to so clean, maintain and repair the detention basin/BMP(s) serving this subdivision/land use due to the Developer/Owner's failure to meet its obligations to do the same; and

M. WHEREAS, the County conditions approval of this subdivision/land use on the Developer's promise to so construct the detention basin/BMP(s), and conditions approval on the Owner's promise to reimburse the County in the event the burden falls upon the County to so clean, maintain and/or repair the detention basin/BMP(s) serving this Subdivision; and

N. WHEREAS, the County could condition subdivision/land use approval on the Developer's promise to construct a different and more expensive drainage, water

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runoff control system and BMPs than those proposed herein, which more expensive system would not create the possibility of the burden of cleaning, maintenance and repair expenses falling on the County; however, the County is willing to forego such right upon the performance of Developer/Owner's promises contained herein; and

O. WHEREAS, the County, in order to secure performance of the promises contained herein, conditions approval of this subdivision/land use upon the Developer's grant herein of a perpetual Easement over a portion of the Property for the purpose of allowing the County to periodically access, inspect, and, when so necessary, to clean, maintain and/or repair the detention basin/BMP(s); and

Agreement

NOW, THEREFORE, in consideration of the mutual Promises contained herein, the sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Incorporation of Recitals: The Parties incorporate the Recitals above into this Agreement.

2. Covenants Running with the Land: Developer/Owner agrees that this entire Agreement and the performance thereof shall become a covenant running with the land, which land is legally described in Exhibit A attached hereto, and that this entire Agreement and the performance thereof shall be binding upon itself, its successors and assigns.

3. Construction: Developer shall construct on that portion of the Property described in Exhibit B attached hereto and incorporated herein by this reference, [insert number of basins/BMPs] detention basin/BMP(s). Developer shall not commence construction of the detention basin/BMP(s) until the El Paso County Development Services Department (DSD) has approved in writing the plans and specifications for the detention basin/BMP(s) and this Agreement has been signed by all Parties and returned to the DSD. Developer shall complete construction of the detention basin/BMP(s) in substantial compliance with the County-approved plans and specifications for the detention basin/BMP(s). Failure to meet these requirements shall be a material breach of this Agreement, and shall entitle the County to pursue any remedies available to it at law or in equity to enforce the same. Construction of the detention basin/BMP(s) shall be substantially completed within one (1) year (defined as 365 days), which one year period will commence to run on the date the approved plat of this Subdivision is recorded in the records of the El Paso County Clerk and Recorder. In cases where a subdivision is not required, the one year period will commence to run on the date the Erosion and Stormwater Quality Control Permit (ESQCP) is issued. Rough grading of the detention basin/BMP(s) must be completed and inspected by the El Paso County Development Services Department prior to commencing road construction.

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In the event construction is not substantially completed within the one (1) year period, then the County may exercise its discretion to complete the project, and shall have the right to seek reimbursement from the Developer/Owner and its successors and assigns, for its actual costs and expenses incurred in the process of completing construction. The term actual costs and expenses shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tool and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the event the County initiates any litigation or engages the services of legal counsel in order to enforce the Provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same.

4. Maintenance: The Developer/Owner agrees for itself and its successors and assigns, that it will regularly and routinely inspect, clean and maintain the detention basin/BMP(s), and otherwise keep the same in good repair, all at its own cost and expense. No trees or shrubs that will impair the structural integrity of the detention basin/BMP(s) shall be planted or allowed to grow on the detention basin/BMP(s).

5. Creation of Easement: Developer/Owner hereby grants the County a non-exclusive perpetual easement upon and across that portion of the Property described in [Exhibit B](#). The purpose of the easement is to allow the County to access, inspect, clean, repair and maintain the detention basin/BMP(s); however, the creation of the easement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

6. County's Rights and Obligations: Any time the County determines, in the sole exercise of its discretion, that the detention basin/BMP(s) is not properly cleaned, maintained and/or otherwise kept in good repair, the County shall give reasonable notice to the Developer/Owner and its successors and assigns, that the detention basin/BMP(s) needs to be cleaned, maintained and/or otherwise repaired. The notice shall provide a reasonable time to correct the problem(s). Should the responsible parties fail to correct the specified problem(s), the County may enter upon the Property to so correct the specified problem(s). Notice shall be effective to the above by the County's deposit of the same into the regular United States mail, postage pre-paid. Notwithstanding the foregoing, this Agreement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

7. Reimbursement of County's Costs / Covenant Running With the Land: The Developer/Owner agrees and covenants, for itself, its successors and assigns, that it will reimburse the County for its costs and expenses incurred in the process of completing construction of, cleaning, maintaining, and/or repairing the detention basin/BMP(s) pursuant to the provisions of this Agreement.

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The term “actual costs and expenses” shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tools and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the event the County initiates any litigation or engages the services of legal counsel in order to enforce the provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney’s fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same.

8. Contingencies of Land Use/Land Disturbance Approval: Developer/Owner’s execution of this Agreement is a condition of land use/land disturbance approval.

The County shall have the right, in the sole exercise of its discretion, to approve or disapprove any documentation submitted to it under the conditions of this Paragraph, including but not limited to, any separate agreement or amendment, if applicable, identifying any specific maintenance responsibilities not addressed herein. The County’s rejection of any documentation submitted hereunder shall mean that the appropriate condition of this Agreement has not been fulfilled.

9. Agreement Monitored by El Paso County Development Services Department and/or El Paso County Department of Transportation: Any and all actions and decisions to be made hereunder by the County shall be made by the Director of the El Paso County Development Services Department and/or the Director of the El Paso County Department of Transportation. Accordingly, any and all documents, submissions, plan approvals, inspections, etc. shall be submitted to and shall be made by the Director of the Development Services Department and/or the Director of the El Paso County Department of Transportation.

10. Indemnification and Hold Harmless: To the extent authorized by law, Developer/Owner agrees, for itself, its successors and assigns, that it will indemnify, defend, and hold the County harmless from any and all loss, costs, damage, injury, liability, claim, lien, demand, action and causes of action whatsoever, whether at law or in equity, arising from or related to its intentional or negligent acts, errors or omissions or that of its agents, officers, servants, employees, invitees and licensees in the construction, operation, inspection, cleaning (including analyzing and disposing of any solid or hazardous wastes as defined by State and/or Federal environmental laws and regulations), maintenance, and repair of the detention basin/BMP(s), and such obligation arising under this Paragraph shall be joint and several. Nothing in this Paragraph shall be deemed to waive or otherwise limit the defense available to the County pursuant to the Colorado Governmental Immunity Act, Sections 24-10-101, *et seq.* C.R.S., or as otherwise provided by law.

11. Severability: In the event any Court of competent jurisdiction declares any part of this Agreement to be unenforceable, such declaration shall not affect the enforceability of the remaining parts of this Agreement.

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12. Third Parties: This Agreement does not and shall not be deemed to confer upon or grant to any third party any right to claim damages or to bring any lawsuit, action or other proceeding against either the County, the Developer/Owner, or their respective successors and assigns, because of any breach hereof or because of any terms, covenants, agreements or conditions contained herein.

13. Solid Waste or Hazardous Materials: Should any refuse from the detention basin/BMP(s) be suspected or identified as solid waste or petroleum products, hazardous substances or hazardous materials (collectively referred to herein as “hazardous materials”), the Developer/Owner shall take all necessary and proper steps to characterize the solid waste or hazardous materials and properly dispose of it in accordance with applicable State and/or Federal environmental laws and regulations, including, but not limited to, the following: Solid Wastes Disposal Sites and Facilities Acts, §§ 30-20-100.5 – 30-20-119, C.R.S., Colorado Regulations Pertaining to Solid Waste Disposal Sites and Facilities, 6 C.C.R. 1007-2, *et seq.*, Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992k, and Federal Solid Waste Regulations 40 CFR Ch. I. The County shall not be responsible or liable for identifying, characterizing, cleaning up, or disposing of such solid waste or hazardous materials. Notwithstanding the previous sentence, should any refuse cleaned up and disposed of by the County be determined to be solid waste or hazardous materials, the Developer/Owner, but not the County, shall be responsible and liable as the owner, generator, and/or transporter of said solid waste or hazardous materials.

14. Applicable Law and Venue: The laws, rules, and regulations of the State of Colorado and El Paso County shall be applicable in the enforcement, interpretation, and execution of this Agreement, except that Federal law may be applicable regarding solid waste or hazardous materials. Venue shall be in the El Paso County District Court.

IN WITNESS WHEREOF, the Parties affix their signatures below.

Executed this _____ day of _____, 20____, by:

[Insert Developer’s company name]

By:

[Insert name], [Insert title(President/Manager)]

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by [Insert name], [Insert title(President/Manager)], [Insert Developer’s company name].

Witness my hand and official seal.

My commission expires: _____

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Notary Public

Executed this _____ day of _____, 20____, by:

BOARD OF COUNTY COMMISSIONERS
OF EL PASO COUNTY, COLORADO

By: _____

_____, Chair

Attest:

County Clerk and Recorder

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____, Chair of the Board of County Commissioners of El Paso County, Colorado, as Attested to by _____, County Clerk and Recorder.

Witness my hand and official seal.

My commission expires: _____

Notary Public

Approved as to Content and Form:

Assistant County Attorney

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**PRIVATE DETENTION BASIN /
STORMWATER QUALITY BEST MANAGEMENT PRACTICE
MAINTENANCE AGREEMENT AND EASEMENT**

This PRIVATE DETENTION BASIN / STORMWATER QUALITY BEST MANAGEMENT PRACTICE MAINTENANCE AGREEMENT AND EASEMENT (Agreement) is made by and between EL PASO COUNTY by and through THE BOARD OF COUNTY COMMISSIONERS OF EL PASO COUNTY, COLORADO (Board or County) and [Insert Developer's company name] (Developer) and [Insert first part of Metro District name] METROPOLITAN DISTRICT (Metro District), a quasi-municipal corporation and political subdivision of the State of Colorado. The above may occasionally be referred to herein singularly as "Party" and collectively as "Parties."

Recitals

A. WHEREAS, the District provides various municipal services to certain real property in El Paso County, Colorado referred to as [Insert development name]; and

B. WHEREAS, Developer is the owner of certain real estate (the Property or Subdivision) in El Paso County, Colorado, which Property is legally described in Exhibit A attached hereto and incorporated herein by this reference; and

C. WHEREAS, Developer desires to plat and develop on the Property a subdivision to be known as [Insert proposed subdivision name]; and

D. WHEREAS, the development of this Property will substantially increase the volume of water runoff and will decrease the quality of the stormwater runoff from the Property, and, therefore, it is in the best interest of public health, safety and welfare for the County to condition approval of this subdivision on Developer's promise to construct adequate drainage, water runoff control facilities, and stormwater quality structural Best Management Practices ("BMPs") for the subdivision; and

E. WHEREAS, Chapter 8, Section 8.4.5 of the El Paso County Land Development Code, as periodically amended, promulgated pursuant to Section 30-28-133(1), Colorado Revised Statutes (C.R.S.), requires the County to condition approval of all subdivisions on a developer's promise to so construct adequate drainage, water runoff control facilities, and BMPs in subdivisions; and

F. WHEREAS, the Drainage Criteria Manual, Volume 2, as amended by Appendix I of the El Paso County Engineering Criteria Manual (ECM), as each may be periodically amended, promulgated pursuant to the County's Colorado Discharge Permit System General Permit (MS4 Permit) as required by Phase II of the National Pollutant

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Discharge Elimination System (NPDES), which MS4 Permit requires that the County take measures to protect the quality of stormwater from sediment and other contaminants, requires subdividers, developers, landowners, and owners of facilities located in the County's rights-of-way or easements to provide adequate permanent stormwater quality BMPs with new development or significant redevelopment; and

G. WHEREAS, Section 2.9 of the El Paso County Drainage Criteria Manual provides for a developer's promise to maintain a subdivision's drainage facilities in the event the County does not assume such responsibility; and

H. WHEREAS, developers in El Paso County have historically chosen water runoff detention basins as a means to provide adequate drainage and water runoff control in subdivisions, which basins, while effective, are less expensive for developers to construct than other methods of providing drainage and water runoff control; and

I. WHEREAS, Developer desires to construct for the subdivision **[insert number of basins/BMPs]** detention basin/stormwater quality BMP(s) ("detention basin/BMP(s)") as the means for providing adequate drainage and stormwater runoff control and to meet requirements of the County's MS4 Permit, and to provide for operating, cleaning, maintaining and repairing such detention basin/BMP(s); and

J. WHEREAS, Developer desires to construct the detention basin/BMP(s) on property that is or will be platted as **[Insert Lot or Tract identifier(s)]**, as indicated on the **final plat of the subdivision**, and as set forth on Exhibit B attached hereto; and

K. WHEREAS, Developer shall be charged with the duty of constructing the detention basin/BMP(s) and the Metro District shall be charged with the duties of operating, maintaining and repairing the detention basin/BMP(s) on the Property described in Exhibit B; and

L. WHEREAS, it is the County's experience that subdivision developers and property owners historically have not properly cleaned and otherwise not properly maintained and repaired these detention basins/BMPs, and that these detention basins/BMPs, when not so properly cleaned, maintained, and repaired, threaten the public health, safety and welfare; and

M. WHEREAS, the County, in order to protect the public health, safety and welfare, has historically expended valuable and limited public resources to so properly clean, maintain, and repair these detention basins/BMPs when developers and property owners have failed in their responsibilities, and therefore, the County desires the means to recover its costs incurred in the event the burden falls on the County to so clean, maintain and repair the detention basin/BMP(s) serving this Subdivision due to the Developer's or the Metro District's failure to meet its obligations to do the same; and

N. WHEREAS, the County conditions approval of this Subdivision on the Developer's promise to so construct the detention basin/BMP(s), and further conditions

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approval on the Metro District's promise to reimburse the County in the event the burden falls upon the County to so clean, maintain and/or repair the detention basin/BMP(s) serving this Subdivision; and

O. WHEREAS, the County could condition subdivision approval on the Developer's promise to construct a different and more expensive drainage, water runoff control system and BMPs than those proposed herein, which more expensive system would not create the possibility of the burden of cleaning, maintenance and repair expenses falling on the County; however, the County is willing to forego such right upon the performance of Developer's and the Metro District's promises contained herein; and

P. WHEREAS, the County, in order to secure performance of the promises contained herein, conditions approval of this Subdivision upon the Developer's grant herein of a perpetual Easement over a portion of the Property for the purpose of allowing the County to periodically access, inspect, and, when so necessary, to clean, maintain and/or repair the detention basin/BMP(s); and

Q. WHEREAS, Pursuant to Colorado Constitution, Article XIV, Section 18(2) and Section 29-1-203, Colorado Revised Statutes, governmental entities may cooperate and contract with each other to provide any function, services, or facilities lawfully authorized to each.

Agreement

NOW, THEREFORE, in consideration of the mutual Promises contained herein, the sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Incorporation of Recitals: The Parties incorporate the Recitals above into this Agreement.

2. Covenants Running with the Land: Developer and the Metro District agree that this entire Agreement and the performance thereof shall become a covenant running with the land, which land is legally described in Exhibit A attached hereto, and that this entire Agreement and the performance thereof shall be binding upon themselves, their respective successors and assigns.

3. Construction: Developer shall construct on that portion of the Property described in Exhibit B attached hereto and incorporated herein by this reference, [insert number of basins/BMPs] detention basin/BMP(s). Developer shall not commence construction of the detention basin/BMP(s) until the El Paso County Development Services Department (DSD) has approved in writing the plans and specifications for the detention basin/BMP(s) and this Agreement has been signed by all Parties and returned to

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the DSD. Developer shall complete construction of the detention basin/BMP(s) in substantial compliance with the County-approved plans and specifications for the detention basin/BMP(s). Failure to meet these requirements shall be a material breach of this Agreement, and shall entitle the County to pursue any remedies available to it at law or in equity to enforce the same. Construction of the detention basin/BMP(s) shall be substantially completed within one (1) year (defined as 365 days), which one year period will commence to run on the date the approved plat of this Subdivision is recorded in the records of the El Paso County Clerk and Recorder. Rough grading of the detention basin/BMP(s) must be completed and inspected by the El Paso County Development Services Department prior to commencing road construction.

In the event construction is not substantially completed within the one (1) year period, then the County may exercise its discretion to complete the project, and shall have the right to seek reimbursement from the Developer and its respective successors and assigns, for its actual costs and expenses incurred in the process of completing construction. The term actual costs and expenses shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tool and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the event the County initiates any litigation or engages the services of legal counsel in order to enforce the Provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same.

4. Maintenance: The Metro District agrees for itself and its successors and assigns, that it will regularly and routinely inspect, clean and maintain the detention basin/BMP(s), and otherwise keep the same in good repair, all at its own cost and expense. No trees or shrubs that will impair the structural integrity of the detention basin/BMP(s) shall be planted or allowed to grow on the detention basin/BMP(s).

5. Creation of Easement: Developer hereby grants the County and the Metro District a non-exclusive perpetual easement upon and across that portion of the Property described in [Exhibit B](#). The purpose of the easement is to allow the County and the Metro District to access, inspect, clean, repair and maintain the detention basin/BMP(s); however, the creation of the easement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

6. County's Rights and Obligations: Any time the County determines, in the sole exercise of its discretion, that the detention basin/BMP(s) is not properly cleaned, maintained and/or otherwise kept in good repair, the County shall give reasonable notice to the Developer, the Metro District and their respective successors and assigns, that the detention basin/BMP(s) needs to be cleaned, maintained and/or otherwise repaired. The notice shall provide a reasonable time to correct the problem(s). Should the responsible parties fail to correct the specified problem(s), the County may enter upon the Property to so correct the specified problem(s). Notice shall be effective to the above by the County's deposit of the same into the regular United States mail, postage pre-paid.

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Notwithstanding the foregoing, this Agreement does not expressly or implicitly impose on the County a duty to so inspect, clean, repair or maintain the detention basin/BMP(s).

7. Reimbursement of County's Costs / Covenant Running With the Land: The Developer and the Metro District agree and covenant, for themselves, their respective successors and assigns, that they will reimburse the County for its costs and expenses incurred in the process of completing construction of, cleaning, maintaining, and/or repairing the detention basin/BMP(s) pursuant to the provisions of this Agreement.

The term "actual costs and expenses" shall be liberally construed in favor of the County, and shall include, but shall not be limited to, labor costs, tools and equipment costs, supply costs, and engineering and design costs, regardless of whether the County uses its own personnel, tools, equipment and supplies, etc. to correct the matter. In the event the County initiates any litigation or engages the services of legal counsel in order to enforce the provisions arising herein, the County shall be entitled to its damages and costs, including reasonable attorney's fees, regardless of whether the County contracts with outside legal counsel or utilizes in-house legal counsel for the same.

8. Contingencies of Subdivision Approval: Developer's and the Metro District's execution of this Agreement is a condition of subdivision approval. Additional conditions of this Agreement include, but are not limited to, the following:

- a. Conveyance of [Insert Lot, Tract or easement identifier(s)], as indicated on the final plat of the subdivision, from Developer to the Metro District (which will include a reservation of easement in favor of the County for purposes of accessing, inspecting, cleaning, maintaining, and repairing the detention basin/BMP(s)), and recording of the Deed for the same; and
- b. A copy of the Covenants of the Subdivision, if applicable, establishing that the Metro District is obligated to inspect, clean, maintain, and repair the detention basin/BMP(s).

The County shall have the right, in the sole exercise of its discretion, to approve or disapprove any documentation submitted to it under the conditions of this Paragraph, including but not limited to, any separate agreement or amendment, if applicable, identifying any specific maintenance responsibilities not addressed herein. The County's rejection of any documentation submitted hereunder shall mean that the appropriate condition of this Agreement has not been fulfilled.

9. Agreement Monitored by El Paso County Development Services Department and/or El Paso County Department of Transportation: Any and all actions and decisions to be made hereunder by the County shall be made by the Director of the El Paso County Development Services Department and/or the Director of the El Paso County Department of Transportation. Accordingly, any and all documents, submissions,

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plan approvals, inspections, etc. shall be submitted to and shall be made by the Director of the Development Services Department and/or the Director of the El Paso County Department of Transportation.

10. Indemnification and Hold Harmless: To the extent authorized by law, Developer and the Metro District agree, for themselves, their respective successors and assigns, that they will indemnify, defend, and hold the County harmless from any and all loss, costs, damage, injury, liability, claim, lien, demand, action and causes of action whatsoever, whether at law or in equity, arising from or related to their respective intentional or negligent acts, errors or omissions or that of their agents, officers, servants, employees, invitees and licensees in the construction, operation, inspection, cleaning (including analyzing and disposing of any solid or hazardous wastes as defined by State and/or Federal environmental laws and regulations), maintenance, and repair of the detention basin/BMP(s), and such obligation arising under this Paragraph shall be joint and several. Nothing in this Paragraph shall be deemed to waive or otherwise limit the defense available to the County pursuant to the Colorado Governmental Immunity Act, Sections 24-10-101, *et seq.* C.R.S., or as otherwise provided by law.

11. Severability: In the event any Court of competent jurisdiction declares any part of this Agreement to be unenforceable, such declaration shall not affect the enforceability of the remaining parts of this Agreement.

12. Third Parties: This Agreement does not and shall not be deemed to confer upon or grant to any third party any right to claim damages or to bring any lawsuit, action or other proceeding against either the County, the Developer, the Metro District, or their respective successors and assigns, because of any breach hereof or because of any terms, covenants, agreements or conditions contained herein.

13. Solid Waste or Hazardous Materials: Should any refuse from the detention basin/BMP(s) be suspected or identified as solid waste or petroleum products, hazardous substances or hazardous materials (collectively referred to herein as “hazardous materials”), the Developer and the Metro District shall take all necessary and proper steps to characterize the solid waste or hazardous materials and properly dispose of it in accordance with applicable State and/or Federal environmental laws and regulations, including, but not limited to, the following: Solid Wastes Disposal Sites and Facilities Acts, §§ 30-20-100.5 – 30-20-119, C.R.S., Colorado Regulations Pertaining to Solid Waste Disposal Sites and Facilities, 6 C.C.R. 1007-2, *et seq.*, Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992k, and Federal Solid Waste Regulations 40 CFR Ch. I. The County shall not be responsible or liable for identifying, characterizing, cleaning up, or disposing of such solid waste or hazardous materials. Notwithstanding the previous sentence, should any refuse cleaned up and disposed of by the County be determined to be solid waste or hazardous materials, the Developer and the Metro District, but not the County, shall be responsible and liable as the owner, generator, and/or transporter of said solid waste or hazardous materials.

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14. Applicable Law and Venue: The laws, rules, and regulations of the State of Colorado and El Paso County shall be applicable in the enforcement, interpretation, and execution of this Agreement, except that Federal law may be applicable regarding solid waste or hazardous materials. Venue shall be in the El Paso County District Court.

15. Limitation on Developer's Obligation and Liability: The obligation and liability of the Developer hereunder shall only continue until such time as the Final Plat as described in Paragraph Three (3) of the Recitals set forth above is recorded and the Developer completes the construction of the detention basin/BMP(s) and transfers all applicable maintenance and operation responsibilities to the Metro District. By execution of this agreement, the Metro District agrees to accept all responsibilities and to perform all duties assigned to it, including those of the Developer, as specified herein, upon transfer of [Insert Lot, Tract or easement identifier(s)] from Developer to the Metro District.

IN WITNESS WHEREOF, the Parties affix their signatures below.

Executed this _____ day of _____, 20____, by:

[Insert Developer's company name]

By:

[Insert name], [Insert title(President/Manager)]

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by [Insert name], [Insert title(President/Manager)], [Insert Developer's company name].

Witness my hand and official seal.

My commission expires: _____

Notary Public

Executed this _____ day of _____, 20____, by:

[Insert first part of Metro District name] METROPOLITAN DISTRICT

By:

[Insert name], President

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Attest:

By: _____
[Insert name], [Insert title]

The foregoing instrument was acknowledged before me this _____ day of _____,

20____, by [Insert name], President, and [Insert name], [Insert title], [Insert first part of Metro District name] METROPOLITAN DISTRICT

Witness my hand and official seal.

My commission expires: _____

Notary Public

Executed this _____ day of _____, 20____, by:

BOARD OF COUNTY COMMISSIONERS
OF EL PASO COUNTY, COLORADO

By: _____

_____, Chair

Attest:

County Clerk and Recorder

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____, Chair of the Board of County Commissioners of El Paso County, Colorado, as Attested to by _____, County Clerk and Recorder.

Witness my hand and official seal.

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My commission expires: _____

Notary Public

Approved as to Content and Form:

Assistant County Attorney

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Appendix I

In Section I.4.2.F, delete the paragraph and replace with the following:

Submitted and signed Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement, if any Permanent Best management Practices are to be located on site

In Section I.6.2, include the following bullet in the third paragraph:

- The individuals involved repeatedly fail to comply with required corrective measures.

In Table I-3, in the Permit Revocation row, delete the description and include the following:

The County may revoke the ESQCP or BESQCP if the requirements of the SWMP are not implemented. Revocation of the permit has the same effect as a Stop Work Order, except that the owner will need to resubmit an adequate SWMP, a Grading Plan, if required, a new ESQCP application and ESQCP Fee.

In Table I-3, in the Typical Applications column for Permit Revocation, delete the description and include the following:

1. Used when the site has failed to comply with the Stop Work Order.
2. Used when the current plan has been judged to be inadequate, and the owner and/or contractor have failed to take the necessary measures to improve the plan.
3. Used when the owner and/or contractor repeatedly failed to comply with required corrective measures.

In Section I.7.2.A, Step3, delete the first sentence and replace with the following:

All sites defined as “New Development and Significant Redevelopment” and all stormwater quantity detention, as listed above in the Section I.7.1.B shall address stormwater quality by providing the WQCV

In Section I.7.2.D, Box 12, delete the paragraph and replace with the following:

In low density (rural) subdivisions, a method for permanent sediment control must be provided. If a detention pond is used, the forebay is to be sized according to the criteria for Extended Detention Basins. If a detention pond/Extended Detention Pond is not required, a sediment basin as described in DCM2, page 3-32 may be used. It should be sized to collect 1,800 cubic feet per acre of disturbed area.

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Drainage area above a sediment basin can be reduced by vegetated swales, buffers, or contour berms.

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Appendix J

In Table J-1, remove the row “Marshal Stability”

In Table J-3, remove the row “Marshall”

In Section J.3.2.A, delete “every 250 feet” and replace with “every 500 linear feet”.

In Section J.3.2.B, delete the paragraph and replace with the following:

The slump, air content, and unit weight tests for the delivered product shall be carried out on the first load or until compliance for the daily placement and all tests shall be taken at the end of the concrete chute, or, if a “pump truck” is used, at the end of the pump, and thereafter in conformance with Table J-2.

In Section J.3.2.D, the first sentence, change “maintain” to “maintained”.

Delete Section J.4.5 and replace with the following:

J.4.5 Hot Mix Asphalt (HMA) Testing and Inspection

Hot Mix Asphalt (HMA) materials shall be tested according to the latest edition of the Pikes Peak Region Asphalt Paving Specifications. The Pikes Peak Region Asphalt Paving Specifications can be obtained online at <http://adm.elpasoco.com/NR/ronlyres/A8D006F3-BB2B-4FC1-AD65-32180CF4F2E6/0/PikesPeakRegionAsphaltPavingSpecs1106.pdf>

In Section J.4.6.A, the first sentence, change “maintain” to “maintained”.

In Section J.4.6.D, delete the second sentence and replace with the following:

Cylinders shall be tested as follows: 1 at 7 days, 2 at 28 days, and 1 for backup, as required by the ECM Administrator.

Delete Section J.4.7 and replace with the following:

J.4.7 Asphalt Tack Coat Testing and Inspection

Asphalt tack coat materials shall be tested according to the latest edition of the Pikes Peak Region Asphalt Paving Specifications. The Pikes Peak Region Asphalt Paving Specifications can be obtained online at: <http://adm.elpasoco.com/NR/ronlyres/A8D006F3-BB2B-4FC1-AD65-32180CF4F2E6/0/PikesPeakRegionAsphaltPavingSpecs1106.pdf>

Delete Section J.4.4.C and replace with the following

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C. Unconfined Compressive Strength, Gradation, and Atterberg Limits Material Test

At least one sample of cement treated aggregate base course for each 1,000 tons of material placed shall be tested to determine gradation and Atterberg Limits. Six field prepared proctor mold samples shall be taken for each 500 tons placed and tested at 7 and 28 days to determine unconfined compressive strength.

Section J.4 shall include the following:

J.4.8 Cement Stabilized Subgrade Testing and Inspection

A. Verification of Materials Properties

The contractor or permit holder shall provide verification of material properties of the approved mix design.

B. Thickness of Stabilized Zone

Stabilized zone thickness shall be verified by the use of phenolphthalein and shall be performed at intervals of approximately 500 feet in each lane. When the measurement of the thickness is deficient by more than 1 inch from the plan thickness, two additional locations shall be measured randomly within the deficient area and used in determining the average thickness. When the average thickness is deficient by more than 1 inch, the entire area shall be reprocessed to meet the design parameters or the roadway design section must be re-evaluated.

C. Unconfined Compressive Strength, Gradation, and Atterberg Limits Material Test

At least one sample of cement stabilized subgrade for each 1,000 tons of material stabilized shall be tested to determine gradation and Atterberg Limits. The stabilized subgrade must develop a laboratory compressive strength that meets the design compressive strength. Samples shall be molded from stabilized soil within 1.5 hours of final mixing with the material compacted per ASTM D 558 or ASTM D 698, as specified in subgrade stabilization design, at the field moisture content.

D. Field Moisture Density Tests

During placement and compaction, compaction curves will be required for each material used in accordance with AASHTO T 134. Field moisture-density test shall be taken of each lift of material at random locations at approximate intervals of 500 feet in each travel lane. At least 20 percent of the tests shall be taken within 12 inches of manholes, valves, and curbs.

E. Review and Approval of Tests

The results of laboratory tests and field density tests shall be submitted to and reviewed by the ECM Administrator. Should testing indicate unsatisfactory work, necessary adjustments will be made to the pavement section to comply with original design

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strength requirements. If all tests are acceptable; compaction will be approved for the placement of the paving course.

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Appendix M

Remove all references to Appendix M and refer to Appendix E