DRAINAGE LETTER REPORT

for

WOODMEN HILLS RECREATION CENTER GYMNASIUM
TRACT 7, WOODMEN HILLS FILING NO. 11

Prepared for:

Hammers Construction Inc.
1411 Woolsey Heights
Colorado Springs, CO 80915

September 29, 2020

Prepared by:

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JPS Project No. 092002
PCD File No. PPR-20__

WOODMEN HILLS RECREATION CENTER GYMNASIUM
TRACT 7, WOODMEN HILLS FILING NO. 11
DRAINAGE REPORT STATEMENTS

1. Engineer's Statement:

The attached drainage plan and report were prepared under my direction and supervision and are correct to the best of my knowledge and belief. Said drainage report has been prepared according to the criteria established by the County for drainage reports and said report is in conformity with the master plan for the drainage basin. I accept responsibility for liability caused by negligent acts, errors or omissions on my part in preparing this report:

_____
John P. Schwab Colorado P.E. No. 29891

2. Developer's Statement:

I, the developer, have read and will comply with all the requirements specified in this drainage report and plan.

By:

_____ _____
Printed Name: Date
Title:

3. El Paso County Statement:

Filed in accordance with the requirements of the El Paso County Land Development Code, Drainage Criteria Manual, Volumes 1 and 2, and Engineering Criteria Manual as amended.

_____
Jennifer Irvine, P.E. Date
County Engineer / ECM Administrator

Conditions:

I. INTRODUCTION

A. Property Location and Description

The Woodmen Hills Metropolitan District (Owner) is proposing to construct a new Gymnasium Building at the Woodmen Hills Recreation Center site on the 5.19-acre site described as Tract 7, Woodmen Hills Filing No. 11 (El Paso County Assessor's No. 42311-14-001). The property is currently developed with an existing recreation center building (constructed in 2003) and asphalt parking area. The property is located at the southeast corner of Meridian Ranch Boulevard and Camargo Road, and the existing building is addressed as 9205 Meridian Ranch Boulevard. The property is zoned Planned Unit Development (PUD), and the proposed building and site improvements are consistent with the established recreation center use of the site.

The existing recreation center site is surrounded by developed residential lots on all sides. Meridian Ranch Boulevard is a fully improved public street adjoining the southwest boundary of the site, and Camargo Road is a fully improved public street adjoining the northwest boundary of the property. The northeast and southeast boundaries of the site adjoin developed residential lots.

The project consists of a proposed 9,956 square-foot gymnasium building on the west side of the existing recreation center building, with associated parking and site improvements. The project will include parking lot improvements to provide expanded parking along the northeast and southeast sides of the existing parking lot. Access will continue to be provided by the existing driveway entrance onto Meridian Ranch Boulevard at the southwest corner of the site.

B. Scope

In support of the El Paso County Site Development Plan submittal for this project, this report is intended to meet the requirements of a site-specific "Letter Type" drainage report in accordance with El Paso County drainage criteria. This report will provide a summary of site drainage issues impacting the proposed development. The report will analyze impacts from upstream drainage patterns, site-specific developed drainage patterns, and impacts on downstream facilities. This report is based on the guidelines and criteria presented in the City of Colorado Springs and El Paso County "Drainage Criteria Manual."

C. References

City of Colorado Springs & El Paso County "Drainage Criteria Manual," revised October 12, 1994, Volumes 1 and 2.

URS, "Final Drainage and Erosion Control Report, Woodmen Hills Filing No. 11," November, 2002.

URS, "Woodmen Hills Filing No. 11, Recreation Center Site Plan, Drainage Letter and Erosion Control Plan," July 12. 2002.

II. EXISTING / PROPOSED DRAINAGE CONDITIONS

As shown on the enclosed Drainage Plan (Figure D1), the parcel has been delineated as a single on-site drainage basin flowing southwesterly across the site to Meridian Ranch Boulevard. On-site soils are comprised of Columbine gravelly sandy loam, and these soils are classified as hydrologic soils group A.

Drainage planning for this lot has been addressed in the "Final Drainage and Erosion Control Report, Woodmen Hills Filing No. 11" by URS dated November, 2002. The subject property, Tract 7, was identified as Basin B5 in the subdivision drainage report, and drainage from this lot has been planned to sheet flow in a southwesterly direction into Meridian Ranch Boulevard.

The subdivision drainage report by URS identified developed peak flows of $Q_5 = 5.2$ cfs and $Q_{100} = 16.5$ cfs for Basin B5, and described drainage from this recreation center tract as flowing to the existing storm sewer system in Meridian Ranch Boulevard, which drains into the Bennett Ranch Regional Detention Pond along the west side of Eastonville Road. The subdivision drainage report identifies the total developed flow entering the regional detention pond as $Q_5 = 523$ cfs and $Q_{100} = 1{,}664$ cfs, so the developed flow contribution from this recreation center site is minimal.

Surface runoff from the developed site will continue to follow established drainage patterns towards the southwest property boundary. The proposed building pad will be graded with protective slopes to provide positive drainage away from the face of the building, and grated landscape inlets will be provided with an 8"-12" private storm sewer system to convey flows from the north side of the new gymnasium building around the east side of the building. The proposed parking lot improvements will maintain the established drainage patterns sheet flowing southwesterly across the parking lot to Meridian Ranch Boulevard.

Developed peak flows at Design Point #B5 are calculated as $Q_5 = 6.1$ cfs and $Q_{100} = 14.8$ cfs, and these calculations are generally consistent with the anticipated developed flows in the subdivision drainage report. Stormwater quality mitigation and detention will be provided by routing developed flows through the existing regional detention pond downstream of the property.

Hydrologic calculations for the parcel are detailed in the attached tables (Appendix A), and peak flows are identified on Figure D1. The contractor will need to implement standard best management practices for erosion control during construction.

III. DRAINAGE PLANNING FOUR STEP PROCESS

El Paso County Drainage Criteria require drainage planning to include a Four Step Process for receiving water protection that focuses on reducing runoff volumes, treating the water quality capture volume (WQCV), stabilizing drainageways, and implementing long-term source controls.

As stated in DCM Volume 2, the Four Step Process is applicable to all new and re-development projects with construction activities that disturb 1 acre or greater or that disturb less than 1 acre but are part of a larger common plan of development. The Four Step Process has been implemented as follows in the planning of this project:

Step 1: Employ Runoff Reduction Practices

- Minimize Impacts: The proposed gymnasium building and parking lot expansion are improvements to a previously developed recreation center site, so this infill project will have minimal drainage impacts in comparison to new development of a vacant site.

Step 2: Stabilize Drainageways

- There are no drainageways directly adjacent to this project site.

Step 3: Provide Water Quality Capture Volume (WQCV)

- The developed site will drain through an existing downstream Regional Detention Pond, which has been designed to provide water quality mitigation for this site.

Step 4: Consider Need for Industrial and Commercial BMPs

- No outside storage or industrial uses are proposed for this site.

IV. DRAINAGE BASIN FEES

This site is located within the Bennett Ranch Drainage Basin. No public drainage improvements are required for development of this site. Required drainage fees have been paid during the previous subdivision platting process, so there are no applicable drainage fees required with the Site Development Plan.

V. SUMMARY

The developed drainage patterns associated with the proposed Woodmen Hills Recreation Center Gymnasium Building project will remain consistent with established drainage conditions and the overall drainage plan for this subdivision. Developed flows from the site will continue to flow southwesterly to Meridian Ranch Boulevard and the existing downstream storm sewer system, which conveys developed flows to the existing Bennett Ranch Regional Detention Pond. The proposed Site Development Plan remains consistent with the anticipated developed flows identified in the subdivision drainage report.

The existing regional detention pond will continue to provide drainage detention and water quality to meet the County's drainage and stormwater quality requirements for this site. Proper establishment and maintenance of positive drainage, in conjunction with proper erosion control practices, will ensure that this developed site has no significant adverse impact on downstream or surrounding areas.

APPENDIX A

DRAINAGE CALCULATIONS & FIGURES

Table 6-6. Runoff Coefficients for Rational Method
(Source: UDFCD 2001)

Land Use or Surface Characteristics	Percent Impervious	Runoff Coefficients											
		2-year		5-year		10-year		25-year		50-year		100-year	
		HSG A&B	HSG C&D	HSG A&B	HSG C&D	HSG A&B	HSG C&D	HSG A&B	HSG C&D	HSG A&B	HSG C&D	HSG A&B	HSG C&D
Business													
Commercial Areas	95	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.87	0.87	0.88	0.88	0.89
Neighborhood Areas	70	0.45	0.49	0.49	0.53	0.53	0.57	0.58	0.62	0.60	0.65	0.62	0.68
Residential													
1/8 Acre or less	65	0.41	0.45	0.45	0.49	0.49	0.54	0.54	0.59	0.57	0.62	0.59	0.65
1/4 Acre	40	0.23	0.28	0.30	0.35	0.36	0.42	0.42	0.50	0.46	0.54	0.50	0.58
1/3 Acre	30	0.18	0.22	0.25	0.30	0.32	0.38	0.39	0.47	0.43	0.52	0.47	0.57
1/2 Acre	25	0.15	0.20	0.22	0.28	0.30	0.36	0.37	0.46	0.41	0.51	0.46	0.56
1 Acre	20	0.12	0.17	0.20	0.26	0.27	0.34	0.35	0.44	0.40	0.50	0.44	0.55
Industrial													
Light Areas	80	0.57	0.60	0.59	0.63	0.63	0.66	0.66	0.70	0.68	0.72	0.70	0.74
Heavy Areas	90	0.71	0.73	0.73	0.75	0.75	0.77	0.78	0.80	0.80	0.82	0.81	0.83
Parks and Cemeteries	7	0.05	0.09	0.12	0.19	0.20	0.29	0.30	0.40	0.34	0.46	0.39	0.52
Playgrounds	13	0.07	0.13	0.16	0.23	0.24	0.31	0.32	0.42	0.37	0.48	0.41	0.54
Railroad Yard Areas	40	0.23	0.28	0.30	0.35	0.36	0.42	0.42	0.50	0.46	0.54	0.50	0.58
Undeveloped Areas													
Historic Flow Analysis-- Greenbelts, Agriculture	2	0.03	0.05	0.09	0.16	0.17	0.26	0.26	0.38	0.31	0.45	0.36	0.51
Pasture/Meadow	0	0.02	0.04	0.08	0.15	0.15	0.25	0.25	0.37	0.30	0.44	0.35	0.50
Forest	0	0.02	0.04	0.08	0.15	0.15	0.25	0.25	0.37	0.30	0.44	0.35	0.50
Exposed Rock	100	0.89	0.89	0.90	0.90	0.92	0.92	0.94	0.94	0.95	0.95	0.96	0.96
Offsite Flow Analysis (when landuse is undefined)	45	0.26	0.31	0.32	0.37	0.38	0.44	0.44	0.51	0.48	0.55	0.51	0.59
Streets													
Paved	100	0.89	0.89	0.90	0.90	0.92	0.92	0.94	0.94	0.95	0.95	0.96	0.96
Gravel	80	0.57	0.60	0.59	0.63	0.63	0.66	0.66	0.70	0.68	0.72	0.70	0.74
Drive and Walks	100	0.89	0.89	0.90	0.90	0.92	0.92	0.94	0.94	0.95	0.95	0.96	0.96
Roofs	90	0.71	0.73	0.73	0.75	0.75	0.77	0.78	0.80	0.80	0.82	0.81	0.83
Lawns	0	0.02	0.04	0.08	0.15	0.15	0.25	0.25	0.37	0.30	0.44	0.35	0.50

3.2 Time of Concentration

One of the basic assumptions underlying the Rational Method is that runoff is a function of the average rainfall rate during the time required for water to flow from the hydraulically most remote part of the drainage area under consideration to the design point. However, in practice, the time of concentration can be an empirical value that results in reasonable and acceptable peak flow calculations.

For urban areas, the time of concentration (t_c) consists of an initial time or overland flow time (t_i) plus the travel time (t_t) in the storm sewer, paved gutter, roadside drainage ditch, or drainage channel. For non-urban areas, the time of concentration consists of an overland flow time (t_i) plus the time of travel in a concentrated form, such as a swale or drainageway. The travel portion (t_t) of the time of concentration can be estimated from the hydraulic properties of the storm sewer, gutter, swale, ditch, or drainageway. Initial time, on the other hand, will vary with surface slope, depression storage, surface cover, antecedent rainfall, and infiltration capacity of the soil, as well as distance of surface flow. The time of concentration is represented by Equation 6-7 for both urban and non-urban areas.

$$t_c = t_i + t_t \qquad \text{(Eq. 6-7)}$$

Where:

t_c = time of concentration (min)

t_i = overland (initial) flow time (min)

t_t = travel time in the ditch, channel, gutter, storm sewer, etc. (min)

3.2.1 Overland (Initial) Flow Time

The overland flow time, t_i, may be calculated using Equation 6-8.

$$t_i = \frac{0.395(1.1 - C_5)\sqrt{L}}{S^{0.33}} \qquad \text{(Eq. 6-8)}$$

Where:

t_i = overland (initial) flow time (min)
C_5 = runoff coefficient for 5-year frequency (see Table 6-6)
L = length of overland flow (300 ft <u>maximum</u> for non-urban land uses, 100 ft <u>maximum</u> for urban land uses)
S = average basin slope (ft/ft)

Note that in some urban watersheds, the overland flow time may be very small because flows quickly concentrate and channelize.

3.2.2 Travel Time

For catchments with overland and channelized flow, the time of concentration needs to be considered in combination with the travel time, t_t, which is calculated using the hydraulic properties of the swale, ditch, or channel. For preliminary work, the overland travel time, t_t, can be estimated with the help of Figure 6-25 or Equation 6-9 (Guo 1999).

$$V = C_v S_w^{0.5} \qquad \text{(Eq. 6-9)}$$

Where:

V = velocity (ft/s)

C_v = conveyance coefficient (from Table 6-7)

S_w = watercourse slope (ft/ft)

Table 6-7. Conveyance Coefficient, C_v

Type of Land Surface	C_v
Heavy meadow	2.5
Tillage/field	5
Riprap (not buried)*	6.5
Short pasture and lawns	7
Nearly bare ground	10
Grassed waterway	15
Paved areas and shallow paved swales	20

* For buried riprap, select C_v value based on type of vegetative cover.

The travel time is calculated by dividing the flow distance (in feet) by the velocity calculated using Equation 6-9 and converting units to minutes.

The time of concentration (t_c) is then the sum of the overland flow time (t_i) and the travel time (t_t) per Equation 6-7.

3.2.3 First Design Point Time of Concentration in Urban Catchments

Using this procedure, the time of concentration at the first design point (typically the first inlet in the system) in an urbanized catchment should not exceed the time of concentration calculated using Equation 6-10. The first design point is defined as the point where runoff first enters the storm sewer system.

$$t_c = \frac{L}{180} + 10 \qquad \text{(Eq. 6-10)}$$

Where:

t_c = maximum time of concentration at the first design point in an urban watershed (min)

L = waterway length (ft)

Equation 6-10 was developed using the rainfall-runoff data collected in the Denver region and, in essence, represents regional "calibration" of the Rational Method. Normally, Equation 6-10 will result in a lesser time of concentration at the first design point and will govern in an urbanized watershed. For subsequent design points, the time of concentration is calculated by accumulating the travel times in downstream drainageway reaches.

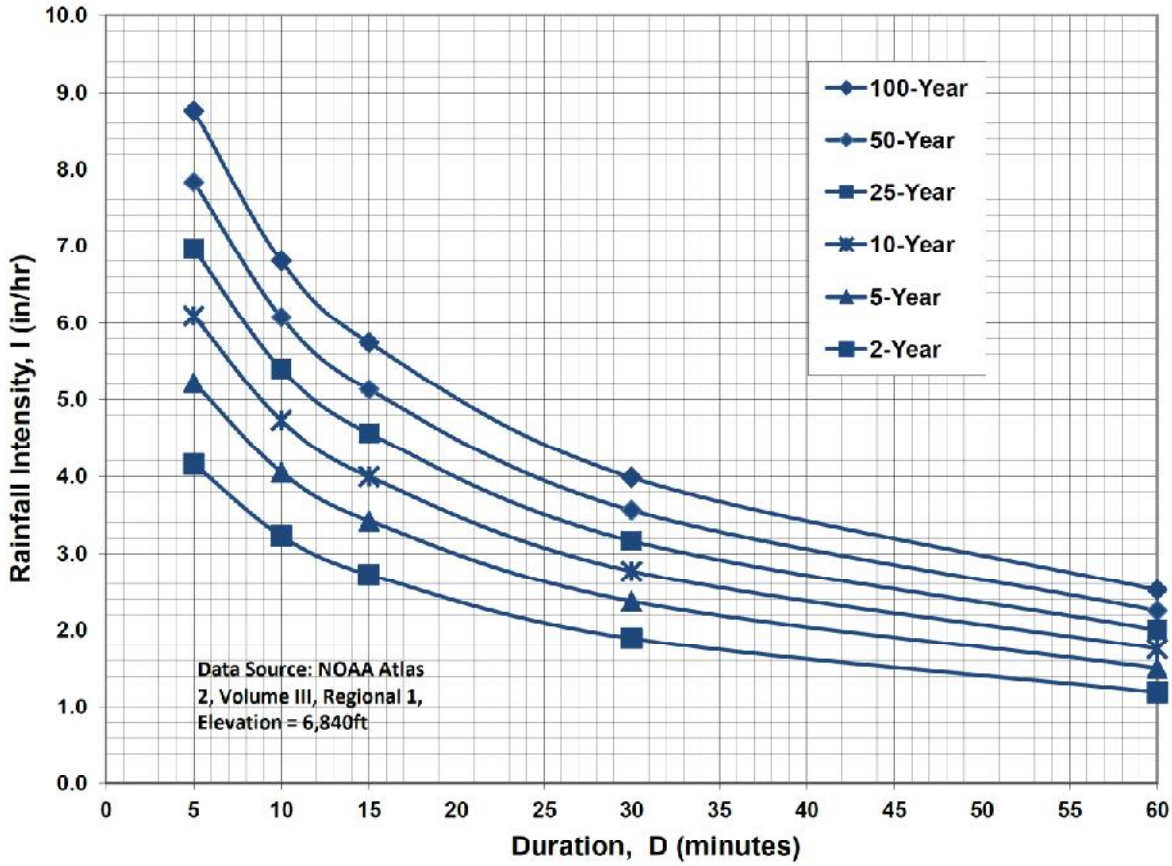
3.2.4 Minimum Time of Concentration

If the calculations result in a t_c of less than 10 minutes for undeveloped conditions, it is recommended that a minimum value of 10 minutes be used. The minimum t_c for urbanized areas is 5 minutes.

3.2.5 Post-Development Time of Concentration

As Equation 6-8 indicates, the time of concentration is a function of the 5-year runoff coefficient for a drainage basin. Typically, higher levels of imperviousness (higher 5-year runoff coefficients) correspond to shorter times of concentration, and lower levels of imperviousness correspond to longer times of

Figure 6-5. Colorado Springs Rainfall Intensity Duration Frequency



IDF Equations

$I_{100} = -2.52 \ln(D) + 12.735$

$I_{50} = -2.25 \ln(D) + 11.375$

$I_{25} = -2.00 \ln(D) + 10.111$

$I_{10} = -1.75 \ln(D) + 8.847$

$I_{5} = -1.50 \ln(D) + 7.583$

$I_{2} = -1.19 \ln(D) + 6.035$

Note: Values calculated by equations may not precisely duplicate values read from figure.

WOODMEN HILLS RECREATION CENTER
COMPOSITE RUNOFF COEFFICIENTS

EXISTING CONDITIONS

5-YEAR C VALUES

BASIN	TOTAL AREA (AC)	(AC)	SUB-AREA 1 DEVELOPMENT/ COVER	C	AREA (AC)	SUB-AREA 2 DEVELOPMENT/ COVER	C	(AC)	SUB-AREA 3 DEVELOPMENT/ COVER	C	WEIGHTED C VALUE
B5	5.19	1.43	BUILDINGS/IMPERVIOUS	0.9	3.76	LANDSCAPED	0.08				0.306

100-YEAR C VALUES

BASIN	TOTAL AREA (AC)	(AC)	SUB-AREA 1 DEVELOPMENT/ COVER	C	AREA (AC)	SUB-AREA 2 DEVELOPMENT/ COVER	C	(AC)	SUB-AREA 3 DEVELOPMENT/ COVER	C	WEIGHTED C VALUE
B5	5.19	1.43	BUILDINGS/IMPERVIOUS	0.96	3.76	LANDSCAPED	0.35				0.518

IMPERVIOUS AREAS

BASIN	TOTAL AREA (AC)	(AC)	SUB-AREA 1 DEVELOPMENT/ COVER	PERCENT IMPERVIOUS	AREA (AC)	SUB-AREA 2 DEVELOPMENT/ COVER	PERCENT IMPERVIOUS	(AC)	SUB-AREA 3 DEVELOPMENT/ COVER	PERCENT IMPERVIOUS	WEIGHTED % IMP
B5	5.19	1.43	BUILDINGS/IMPERVIOUS	100	3.76	LANDSCAPED	0				27.553

DEVELOPED CONDITIONS

5-YEAR C VALUES

BASIN	TOTAL AREA (AC)	(AC)	SUB-AREA 1 DEVELOPMENT/ COVER	C	AREA (AC)	SUB-AREA 2 DEVELOPMENT/ COVER	C	(AC)	SUB-AREA 3 DEVELOPMENT/ COVER	C	WEIGHTED C VALUE
B5	5.19	2.12	BUILDINGS/IMPERVIOUS	0.9	3.07	LANDSCAPED	0.08				0.415

100-YEAR C VALUES

BASIN	TOTAL AREA (AC)	(AC)	SUB-AREA 1 DEVELOPMENT/ COVER	C	AREA (AC)	SUB-AREA 2 DEVELOPMENT/ COVER	C	(AC)	SUB-AREA 3 DEVELOPMENT/ COVER	C	WEIGHTED C VALUE
B5	5.19	2.12	BUILDINGS/IMPERVIOUS	0.96	3.07	LANDSCAPED	0.35				0.599

IMPERVIOUS AREAS

BASIN	TOTAL AREA (AC)	(AC)	SUB-AREA 1 DEVELOPMENT/ COVER	PERCENT IMPERVIOUS	AREA (AC)	SUB-AREA 2 DEVELOPMENT/ COVER	PERCENT IMPERVIOUS	(AC)	SUB-AREA 3 DEVELOPMENT/ COVER	PERCENT IMPERVIOUS	WEIGHTED % IMP
B5	5.19	2.12	BUILDINGS/IMPERVIOUS	100	3.07	LANDSCAPED	0				40.848

WOODMEN HILLS RECREATION CENTER
RATIONAL METHOD

EXISTING CONDITIONS

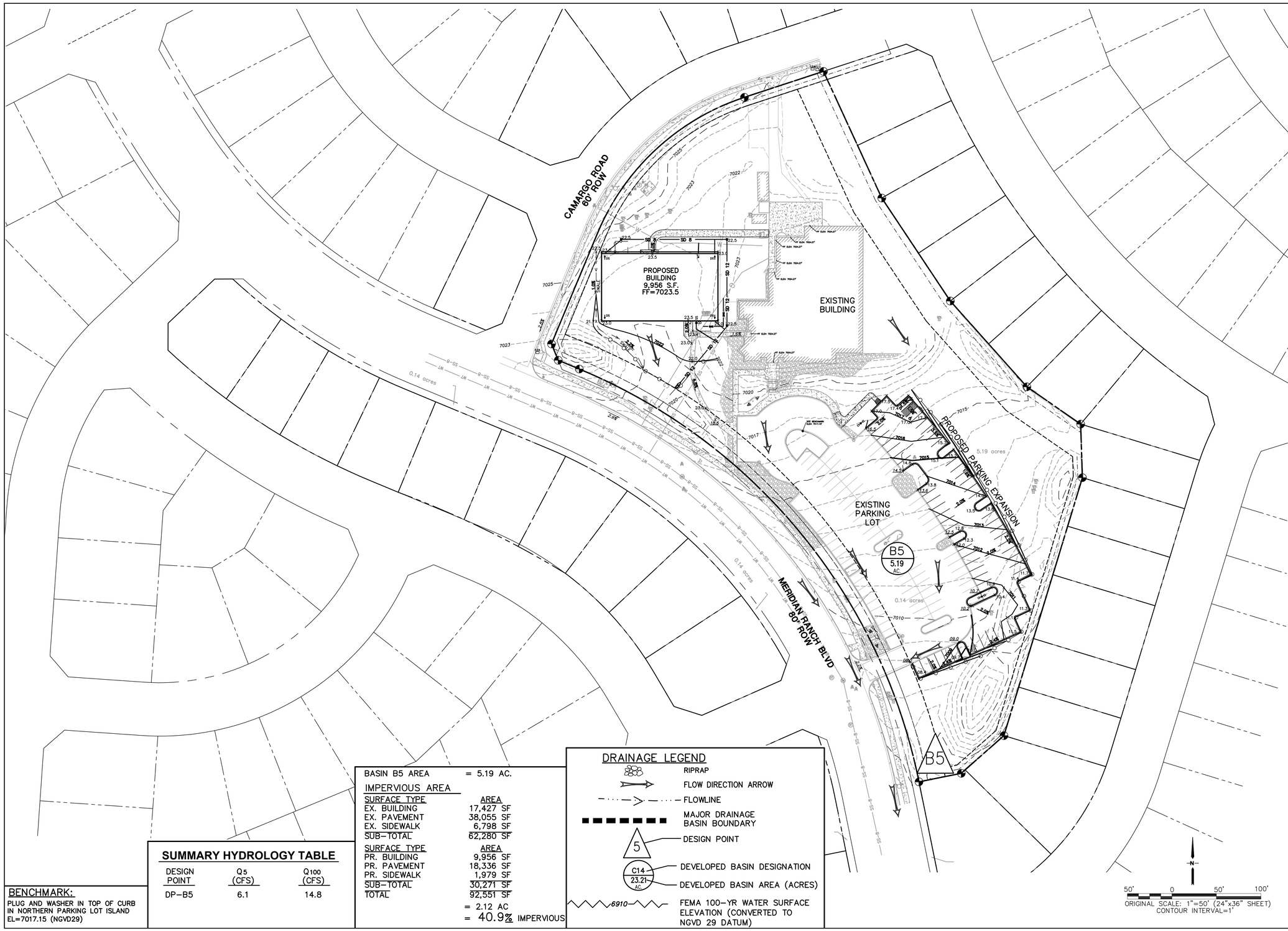
					Overland Flow			Channel flow											
			C					CHANNEL	CONVEYANCE		SCS [2]		TOTAL	TOTAL	INTENSITY [5]		PEAK FLOW	
BASIN	DESIGN POINT	AREA (AC)	5-YEAR	100-YEAR	LENGTH (FT)	SLOPE (FT/FT)	Tco [1] (MIN)	LENGTH (FT)	COEFFICIENT C	SLOPE (FT/FT)	VELOCITY (FT/S)	Tt [3] (MIN)	Tc [4] (MIN)	Tc [4] (MIN)	5-YR (IN/HR)	100-YR (IN/HR)	Q5 [6] (CFS)	Q100 [6] (CFS)
B5	B5	5.19	0.306	0.518	300	0.010	25.2	550	20	0.033	3.63	2.5	27.7	27.7	2.60	4.37	4.13	11.74

DEVELOPED FLOWS

					Overland Flow			Channel flow											
			C					CHANNEL	CONVEYANCE		SCS [2]		TOTAL	TOTAL	INTENSITY [5]		PEAK FLOW	
BASIN	DESIGN POINT	AREA (AC)	5-YEAR	100-YEAR	LENGTH (FT)	SLOPE (FT/FT)	Tco [1] (MIN)	LENGTH (FT)	COEFFICIENT C	SLOPE (FT/FT)	VELOCITY (FT/S)	Tt [3] (MIN)	Tc [4] (MIN)	Tc [4] (MIN)	5-YR (IN/HR)	100-YR (IN/HR)	Q5 [6] (CFS)	Q100 [6] (CFS)
B5	B5	5.19	0.415	0.599	300	0.010	21.7	460	20	0.033	3.63	2.1	23.8	23.8	2.83	4.74	6.09	14.75

1) OVERLAND FLOW Tco = (0.395*(1.1-RUNOFF COEFFICIENT)*(OVERLAND FLOW LENGTH^(0.5)/(SLOPE^(0.333))
2) SCS VELOCITY = C * ((SLOPE(FT/FT)^0.5)
C = 2.5 FOR HEAVY MEADOW
C = 5 FOR TILLAGE/FIELD
C = 7 FOR SHORT PASTURE AND LAWNS
C = 10 FOR NEARLY BARE GROUND
C = 15 FOR GRASSED WATERWAY
C = 20 FOR PAVED AREAS AND SHALLOW PAVED SWALES

3) MANNING'S CHANNEL TRAVEL TIME = L/V (WHEN CHANNEL VELOCITY IS KNOWN)
4) Tc = Tco + Tt
*** IF TOTAL TIME OF CONCENTRATION IS LESS THAN 5 MINUTES, THEN 5 MINUTES IS USED
5) INTENSITY BASED ON I-D-F EQUATIONS IN CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL
$I_5 = -1.5 * \ln(Tc) + 7.583$
$I_{100} = -2.52 * \ln(Tc) + 12.735$
6) Q = CiA



ORIGINAL SCALE: 1"=50' (24"x36" SHEET)
CONTOUR INTERVAL=1'

BENCHMARK:

PLUG AND WASHER IN TOP OF CURB IN NORTHERN PARKING LOT ISLAND
EL=7017.15 (NGVD29)

SUMMARY HYDROLOGY TABLE

DESIGN POINT	Q5 (CFS)	Q100 (CFS)
DP-B5	6.1	14.8

BASIN B5 AREA = 5.19 AC.

IMPERVIOUS AREA

SURFACE TYPE	AREA
EX. BUILDING	17,427 SF
EX. PAVEMENT	38,055 SF
EX. SIDEWALK	6,798 SF
SUB-TOTAL	62,280 SF
SURFACE TYPE	AREA
PR. BUILDING	9,956 SF
PR. PAVEMENT	18,336 SF
PR. SIDEWALK	1,979 SF
SUB-TOTAL	30,271 SF
TOTAL	92,551 SF

= 2.12 AC
= 40.9% IMPERVIOUS

DRAINAGE LEGEND

- RIPRAP
- FLOW DIRECTION ARROW
- FLOWLINE
- MAJOR DRAINAGE BASIN BOUNDARY
- 5 — DESIGN POINT
- C14 / 23.21 AC. — DEVELOPED BASIN DESIGNATION / DEVELOPED BASIN AREA (ACRES)
- 6910 — FEMA 100-YR WATER SURFACE ELEVATION (CONVERTED TO NGVD 29 DATUM)

WOODMEN HILLS RECREATION CENTER GYMNASIUM
TRACT 7, WOODMEN HILLS FILING NO. 11

DEVELOPED DRAINAGE PLAN

JPS ENGINEERING
19 E. Willamette Ave.
Colorado Springs, CO
80903
PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

No.	REVISION	BY	DATE

HORZ. SCALE: 1"=50'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RIDGELINE	CHECKED: JPS
CREATED: 9/11/20	LAST MODIFIED: 9/29/20
PROJECT NO. 092002	MODIFIED BY: BJJ
SHEET: D1	

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