

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

November 30, 2018

Mark Goodwin, P.E.
Mark Goodwin & Associates
PO Box 90606
Albuquerque, NM, 87199

**RE: Defined Fitness at Unser Crossing
Grading and Drainage Plan
Engineer's Stamp Date: 10/23/18
Hydrology File: K10D045**

Dear Mr. Goodwin:

PO Box 1293

Based upon the information provided in your resubmittal received 11/08/2018, the Grading Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

NM 87103

www.cabq.gov

1. The above referenced project is within the 1959 City Boundary and therefore Payment in Lieu is not available. I have attached the approved amended Drainage Ordinance. Please follow General Provisions § 14-5-2-6-H. The important section is in Green and Blue. As far as the drainage area which discharges behind the building, this can be handled in a gravel trench at the edge of the pavement. Please revise the Grading and Drainage Plan which follows the amended Drainage Ordinance and send me revised pdfs of the plans and hard copy. Once I receive these, I will do my review. If you capture all the required Stormwater Quality Volume, then I will issue you an approval letter.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

CITY of ALBUQUERQUE

TWENTY-THIRD COUNCIL

COUNCIL BILL NO. C/S 0-18-2 ENACTMENT NO. 0-2,Dlf,..1)2,0

SPONSORED BY: Trudy E. Jones

1 ORDINANCE

2 AMENDING CHAPTER 14, ARTICLE 5, PART 2, ROA 1994, THE DRAINAGE
3 ORDINANCE, TO IMPLEMENT BEST PRACTICES FOR THE MANAGEMENT OF
4 NEW RUNOFF ASSOCIATED WITH LAND DEVELOPMENT.

5 BE IT ORDAINED BY THE COUNCIL, THE GOVERNING BODY OF THE CITY OF
6 ALBUQUERQUE:

7 SECTION 1. Chapter 14, Article 5, Part 2, Section 3 "Statement of Purpose
8 and Intent" is amended to add subsection 'F' as follows:

9 "§ 14-5-2-3 STATEMENT OF PURPOSE AND INTENT.

10 It is the purpose of §§ 14-5-2-1 et seq. to promote the public health, safety,
11 and general welfare; to minimize public and private losses due to flooding;
12 and where practicable, to ensure that runoff from certain storm events is
13 mitigated to acceptable levels by provisions designed:

14

15 (F) As to stormwater quality to:

16 (1) Address construction and post-construction stormwater
17 quality management within the limits of New Mexico water law and
18 within flood control agency authorities and limitations.

19 (2) Work cooperatively with the MRGCD, AMAFCA, and the
20 County of Bernalillo and other co-permittees, to best manage the
21 discharge of storm runoff into co-permittee facilities, maximize
22 efficient use of stormwater quality facilities, and minimize impact on
23 downstream water quality and storm drainage facilities."

24 SECTION 2. Chapter 14, Article 5, Part 2, Section 4 "Definitions" is hereby
25 amended to delete the definitions for "CONSTRUCTION SITE WASTE(S)" and
26 "FIRST FLUSH"; and to add or change the following definitions; new

1 definitions are to be inserted alphabetically with existing definitions (all other
2 definitions to remain unless specifically repealed or amended herein):

3 u§ 14-5-2-4 DEFINITIONS.

4 *BMPs. Best Management Practices.* Those best management practices
5 described within the MS4 Permit.

6 *CONSTRUCTION GENERAL PERMIT.* The National Pollutant Discharge
7 Elimination System General Permit for Discharges from Construction
8 Activities, most current version.

9 *COOPERATOR / COOPERATIVE AGREEMENT.* Any arrangement,
10 organization, or joint functioning of the co-permittees, or in combination with
11 other governmental agencies, which works constructively with the City to
12 address mutual stormwater and/or stormwater quality issues.

13 *BOTH PERCENTILE STORM EVENT.* The runoff from a precipitation event
14 that is less than or equal to 80 percent of all rainfall events. The 80th
15 Percentile storm event applies to projects where developed land is being
16 redeveloped. The volume to be managed is stated in the Development Process
17 Manual.

18 *EROSION AND SEDIMENT CONTROL.* Treatment measures for the
19 prevention of damages due to soil movement and to deposition from the 2-
20 year, 24 hour design storm runoff.

21 *EROSION AND SEDIMENT CONTROL PLAN.* A plan prepared by a licensed
22 New Mexico Professional Engineer or Certified Professional in Erosion and
23 Sediment Control (CPESC) submitted to ensure that minimum design
24 standards are met to reduce potential pollutants that may result from
25 demolition and construction activities.

26 *GI/LID, GREEN INFRASTRUCTURE (GI), LOW IMPACT DEVELOPMENT*
27 *(LID).* Any array of products, technologies, and practices that preserve or use
28 natural systems, or engineered systems that mimic natural processes and
29 systems, to enhance overall environmental quality and more specifically that
30 provide treatment resulting in stormwater quality improvement, as specified in
31 the DPM.

32 *MANAGEMENT ON SITE.* To control, direct, and treat the stormwater
33 quality volume on the property, or if from an area of common development,

1 then at an alternate location designed for stormwater management or as
2 otherwise approved by the City Engineer. The control and treatment will be
3 for water quality and/or flood volume purposes prior to discharge of the
4 stormwater to the City's MS4. Nothing in this definition shall be construed to
5 require an action which is contrary to state law, or to written state agency
6 guidance regarding flood control or surface water capture, or which requires
7 acquisition or amendment of a water right to legally implement.

8 *NEW DEVELOPMENT.* The process of adding improvements to a parcel of
9 land, such as grading, subdivisions, drainage, access, roadway/street
10 improvements, impervious driving surfacing and utilities. This applies to
11 parcels of lands with little to no previous human-caused disturbances, or
12 otherwise in a natural condition.

13 *90TH PERCENTILE STORM EVENT.* The runoff from a precipitation event
14 that is less than or equal to ninety percent of all rainfall events. The 90th
15 percentile storm event applies to new development. The volume to be
16 managed is stated in the Development Process Manual.

17 *PAYMENT-IN-LIEU FOR PUBLIC OFF-SITE MITIGATION ("Payment in*
18 *Lieu").* A payment collected and used by the City, or collected by the City and
19 distributed to a cooperator for its use pursuant to an agreement with the City,
20 for purposes the maintenance, retrofit, or upgrade of public drainage
21 infrastructure for stormwater quality improvements, and made in lieu of
22 management on-site or private off-site mitigation.

23 *PRIVATE OFFSITE MITIGATION.* Approved management of the stormwater
24 quality volume or a portion of the stormwater quality volume at a private
25 offsite location. The private offsite location may be an existing facility or the
26 facility may be constructed or modified to manage the stormwater quality
27 volume.

28 *REDEVELOPMENT.* Improvements made to a parcel of land that was
29 previously developed (see "new development").

30 *STORMWATER QUALITY VOLUME.* See 80th Percentile and 90th Percentile
31 storm events."

32 SECTION 3. Chapter 14, Article 5, Part 2, Section 5 "Jurisdiction" is
33 amended as follows:

1 "§ 14-5-2-5 JURISDICTION.

2 Sections 14-5-2-1 et seq. shall apply to all lands within the city and, with
3 respect to planning and platting matters, it shall also apply to all lands within
4 its extraterritorial planning and platting jurisdiction."

5 SECTION 4. Chapter 14, Article 5, Part 2, Section 6 "General Provisions" is
6 amended as follows:

7 "§ 14-5-2-6 GENERAL PROVISIONS.

8 (A) The city is and shall remain an active participant in the National
9 Flood Insurance Program. The city endorses the program goal of flood
10 damage reduction through the regulation of development within flood hazard
11 areas and the preservation of floodways. Sections 14-5-2-1 et seq. are
12 intended to complement and supplement the Flood Hazard Ordinance set forth
13 in §§ 14-5-1-1 et seq. of this article and shall be administered in concert
14 therewith.

15 (B) All developed land within the city shall be provided with adequate
16 drainage control, flood control, stormwater control, and erosion control
17 facilities. The protection of life, health, and property shall be considered the
18 primary function in the planning, design, construction and maintenance of
19 drainage control, flood control, stormwater control, and erosion control
20 facilities. However, other concerns, not limited to the following, shall be
21 addressed: channel capacity, watershed characteristics, channel stability,
22 maintenance, transitions between treatment types, multiple use goals, and
23 appearance. The needs of the community in transportation, utility services,
24 recreation, and open space shall be considered in planning, design,
25 construction, and maintenance-particularly in the selection of channel
26 treatment measures. These needs shall always be considered subsidiary to
27 the primary functions of the drainage control, flood control, stormwater
28 control, and erosion control facilities.

29 (C) The design, construction and maintenance of dams, levees and
30 diversions that fall within the jurisdiction of the state engineer shall meet or
31 exceed standards established by the State Engineer.

32 (D) The design, construction and maintenance of flood control facilities
33 shall be coordinated with AMAFCA or other public agencies as appropriate.

1 (E) All facilities receiving water from public facilities and rights-of-way
2 shall be constructed within dedicated rights-of-way or recorded drainage
3 easements granted to and accepted by the proper public authority or a private
4 entity with an agreement for operations and maintenance.

5 (F) All facilities which receive only runoff from private property shall be
6 constructed on private property unless otherwise authorized by the City
7 Engineer. The use of individual on-lot ponding shall be governed by the
8 standards established by the City Engineer in the Development Process
9 Manual.

10 (G) Wherever flood control, drainage control, stormwater control, or
11 erosion control improvements are necessary within dedicated public open
12 space, such improvements shall be designed and constructed in a manner
13 reasonably consistent with the natural surroundings. All construction and
14 maintenance activities in dedicated open space shall be performed so as to
15 minimize the disruption and destruction of vegetation and adjacent land forms.
16 Where such disturbance or destruction is unavoidable, revegetation shall be
17 performed at the earliest practical time by those responsible for such
18 disturbance and/or destruction.

19 (H) All new development and redevelopment projects shall apply best
20 management practices to manage stormwater quality volume by management
21 on-site, or payment-in-lieu, or private offsite mitigation. The Best Management
22 Practices (BMPs) shall be appropriate for the specific circumstances. On-site
23 mitigation solutions shall be landscaped or otherwise utilize required
24 landscape areas within the site. The basis for requesting payment-in-lieu or
25 private offsite mitigation is to be clearly demonstrated on the drainage plan.
26 Management on site shall not be required where stormwater quality can be
27 effectively controlled through private off site mitigation, or through an
28 arrangement to utilize a cooperator's existing regional stormwater
29 management infrastructure or facilities that are available to control stormwater
30 quality, and where:

31 (i) the lot is too small to accommodate management on site while
32 also accommodating the full plan of development;

33 (ii) the soil is not stable;

(iii) the site use is inconsistent with the capture and reuse of stormwater;

(iv) other physical conditions exist where compliance with on-site stormwater quality control requirement leaves insufficient area;

(v) public or private off-site facilities provide an opportunity to effectively accomplish the mitigation requirements of this ordinance;

(vi) there is an opportunity to develop a project to replenish regional ground water supplies at an offsite location; or

(vii) a waiver to state water law or acquisition of water rights would be required in order to implement management on site.

(I) In new development and redevelopment cases where the stormwater quality volume cannot be met in total through either management on site or private off site mitigation, payment-in-lieu is required for the difference between the amount met and the total required. Determination of payment-in-lieu is described in the DPM; except that payment in lieu that would be otherwise owed is waived for both new development and redevelopment in Metropolitan Redevelopment Areas or within the City of Albuquerque Annexation Boundary of 1950-1959 (per Figure 4-1: Growth Through Annexation Over Time in Albuquerque of the Albuquerque/Bernalillo County Comprehensive Plan).

(J) Where practicable, Stormwater Control Measures shall be designed to manage the stormwater quality volume and control runoff generated by contributing surfaces.

(K) The City Engineer is responsible for establishing criteria, procedures and standards for design and construction of flood control, drainage control, stormwater control, stormwater quality control, and erosion control improvements within the city. The city standards for design and construction are published in the Development Process Manual (DPM) and the Standard Specifications for Public Works Construction (latest versions). The City Engineer shall provide for variance from normal criteria and standards when appropriate. When a variance is required or requested, the City Engineer shall document the justification for his/her decision and retain as public records such actions and justifications. Appeal of the City Engineer's variance

1 decisions is as provided in§ 14-5-2-15. The City Engineer is also the
2 designated flood control official for the city in accordance withthe
3 requirements of the Federal Insurance Administration.

4 (L) The introduction of groundwater cleanup flow to either natural or
5 constructed storm drainage and flood control facilities shall be prohibited
6 except as herein provided."

7 SECTION 5. Chapter 14, Article 5, Part 2, Section 7 "Surface Use of Streets
8 for Drainage and Flood Control Purposes" and Section 8 "Crossings" is
9 amended as follows:

10 "§ 14-5-2-7 SURFACE USE OF STREETS FOR DRAINAGE AND FLOOD
11 CONTROL PURPOSES.

12 (A) The surface of streets may be used for drainage and flood control
13 purposes, to the extent such use does not interfere with the safe
14 transportation of people andvehicles.

15 (B) The 100-year design storm runoff shall not exceed the top of curb or
16 the right-of-way in a sump condition, in any street nor enter private property
17 from a street, except in recorded drainage or flood control easements, rights-
18 of-way, or historic channels and watercourses where easements or rights-of-
19 way cannot be obtained.

20 (C) The 10-year design storm runoff shall not exceed a depth of 0.5 feet in
21 any arterial street and shall flow such that one driving lane in each direction is
22 free of flowing or standing water. The 10-year design storm runoff shall not
23 exceed a depth of 0.5 feet in any collector street. Arterial and collector streets
24 that are in the state highway system may require more stringent drainage
25 criteria.

26 (D) The product of depth times velocity shall not exceed 6.5 at any location
27 in any street in the event of a 10-year design storm (with velocity calculated as
28 the average velocity measured in feet per second and depth measured at the
29 gutter flow line in feet).

30 (E) The discharge of nuisance waters to public streets is prohibited.
31 Arterial and collector streets shall be protected from damages to the pavement
32 surface and from the safety hazards created by surface flow of nuisance
33 waters across them.

(F) All developed land within the city shall be served by at least one access that shall be an all-weather facility during a 100-year design storm, with all channel-crossing structures beneath the road-way being able to pass a 100-year design storm runoff event.

§ 14-5-2-8 CROSSINGS.

(A) Channel crossing structures shall be provided on all arterial and collector streets to safely pass the 100-year design storm runoff from major arroyos assuming a fully developed watershed.

(8) Streets other than arterial, collector and sole access may cross major arroyos and other water-courses by means of a "dip section" or "overflow section" provided depth times velocity (with velocity calculated as the average velocity measured in feet per second and depth measured in feet at the upstream edge of the roadway including sidewalk) does not exceed 6.5 for that portion of the 10-year storm runoff crossing on the street.

(C) Where feasible, temporary crossings shall be designed so they may be incorporated into the future permanent crossing structure and so that they meet street design standards established by the Traffic Engineer.

(D) Crossings of major arroyos by arterial and collector streets shall be at public expense. Crossings of arroyos by streets other than arterials and collectors shall be constructed at developer expense and shall meet street design standards established by the Traffic Engineer.

(E) Temporary crossings required for access, including those on arterials and collectors, shall be constructed at developer expense.

(F) The maintenance of facilities constructed at private expense on public property is the responsibility of the owner or owner's agent until permanent facilities are in place.

(G) The developer shall be responsible for maintaining or replacing temporary crossing structures for a period of six years or until a permanent structure is built, whichever comes first. The city shall maintain temporary crossings which are designed and built such that they may be directly incorporated into the ultimate facilities."

SECTION 6. Chapter 14, Article 5, Part 2, Section 10 "Multiple Use Rights-of-Way and Easements" is amended as follows:

1 u§ 14-5-2-10 MULTIPLE USE RIGHTS-OF-WAY AND EASEMENTS.

2 (A) Multiple use is encouraged for drainage rights-of-way and drainage
3 easements including, but not limited to, utility corridors, recreation trails, and
4 parks. Where multiple use is planned by the city, another public agency, or a
5 public utility, the city may require that dedication statements include language
6 which permits said specified multiple uses in addition to the primary drainage
7 function, flood control, stormwater or stormwater quality control, or erosion
8 control. However, land required to be dedicated for drainage related rights-of-
9 way shall be limited to those land areas necessary for drainage control, flood
10 control, stormwater quality control, and erosion control and necessary
11 appurtenances.

12 (B) Certain drainage rights-of-way may be credited for open space as may
13 be required by the IDO, except for any area which is exclusively used for the
14 drainage control, flood control, stormwater quality control, or erosion control
15 function.

16 SECTION 7. Chapter 14, Article 5, Part 2, Section 11 "Stormwater Control
17 Permitting for Erosion and Sediment Control, Inspection and Maintenance
18 Responsibility" is amended as follows:

19 "§ 14-5-2-11 CONSTRUCTION SITE RESPONSIBILITY BY PROPERTY OWNER.

20 (A) For projects that disturb one acre or more, or less than one acre but
21 are part of a larger common plan of development exceeding one acre, the
22 property owner is to provide the Construction General Permit (CGP) Electronic
23 Notice of Intent (eNOI) documentation that contains the property owner name
24 and contact information a minimum of 14 days prior to earth disturbance and
25 prior to obtaining Work Order or Building Permit approval. To be accepted,
26 the eNOI is to be properly filled out and certified. If the eNOI is a Low
27 Erosivity Waiver by the contractor, then an Erosion and Sediment Control
28 Permit per paragraph § 14-5-2-11(B) is to be approved by the City.

29 (B) For projects that are less than one acre and are not part of a larger
30 common plan of development, but meet the criteria as specified in section 14-
31 5-2-12(8)(6), an approved Erosion and Sediment Control Permit is required
32 prior to earth disturbance, Work Order approval and Building Permit approval.

1 (1) The Erosion and Sediment Control Permit or eNOI holder must
2 be either the owner of the property or an authorized agent of the owner in
3 order for the permit to legally cover the activities occurring at the site. If the
4 permit holder is other than the owner, evidence of delegation of authority
5 acceptable to the city shall be provided prior to issuance of a permit by the
6 city.

7 (2) A project will be approved for earth disturbance, work order,
8 or building permit only upon approval of plans and conditions by the City
9 Engineer.

10 (C) Construction site inspections and quality controls shall Include:

11 (1) Self-inspections by permittee. ~~At~~ a minimum a routine
12 compliance self-inspection is required to review the project for compliance
13 with the Construction General Permit once every 14 days and after any
14 precipitation even of 1/8 inch or greater until the site construction has been
15 completed and the site determined as stabilized by the City. Reports of these
16 inspections shall be kept by the person or entity authorized to direct the
17 construction activities on the site and shall be conducted during progress of
18 the work, during work suspensions, and until final acceptance of site
19 stabilization by the city. An owner's or his/her agent's failure to properly
20 maintain records shall subject that owner to the penalty provisions of this
21 ordinance.

22 (2) City Compliance Inspections. The city will conduct routine
23 compliance inspections of projects for compliance with the Construction
24 General Permit. The City will conduct routine compliance inspections of all
25 construction projects cumulatively disturbing one acre or more or as specified
26 in section 14-5-2-12(8)(6) for compliance with the Construction General
27 Permit Site inspections will be followed by any necessary compliance or
28 enforcement action to ensure corrective action has occurred. Corrective
29 action is to be completed within seven days or the owner is subject to
30 escalation per this ordinance. All projects will be inspected at completion for
31 confirmation of stabilization.

32 (a) Construction Site Compliance. If the City finds that the site
33 is not in compliance with the Construction General Permit and that stormwater

controls will not prevent sediment and waste from entering the City's drainage system and/or leaving the construction site the city may direct the owner or his/her agent by written order to come into compliance. If deficiencies are required to be mitigated, the owner or his/her agent shall be verbally notified with a follow-up written confirmation occurring later. It shall be the duty of the owner or his/her agent to immediately take all necessary steps to prevent such migration of sediment and waste off the premises or from entering receiving waters. Delivery of an order by the city to the owner or his/her agent shall be deemed to be notice thereof, and binding upon the owner. An owner's or his/her agent's failure to substantially comply with the order shall subject that owner to the penalty provisions of this ordinance.

(b) Maintenance of Control Measures. The property owner or the owner's agent carrying out the Construction General Permit requirements shall maintain all control measures, retaining walls, structures, plantings, and other protective devices. Should the applicant, or any other subsequent property owners fail to maintain the temporary control facilities, retaining walls, structures, plantings, and other protective devices, the city reserves the authority to enter affected property, provide needed maintenance, and to charge the owner for the work performed by the city or its contractors and to place a lien on the property to cover the costs of said actions. Such municipal lien shall be a statutory lien against the real property. This provision is in addition to the city's ability to assess penalties or pursue any other remedies as necessary to effectuate the purpose of this ordinance.

1. The maintenance of facilities constructed at private expense on public property is the responsibility of the owner or owner's agent until permanent facilities are in place.

2. The developer shall be responsible for maintaining or replacing temporary crossing structures for a period of six years or until a permanent structure is built, whichever comes first. The city shall maintain temporary crossings which are designed and built such that they may be directly incorporated into the ultimate facilities.

(3) The city will utilize sanctions and penalties to enforce upon violations of permit requirements. Progressive enforcement escalation

1 procedures will be used and strictly enforced for recalcitrant or repeat
2 offenders.

3 (D) Post-Construction Maintenance shall be performed as follows:

4 (1) Except as otherwise noted herein, all Public Stormwater Facilities
5 shall be maintained by the city or other public body. The maintenance of
6 multiple use facilities to which the general public is denied access shall be the
7 responsibility of the owners and shall be performed to City Engineer
8 standards. The City Engineer may allow private maintenance within public
9 right-of-way or easement provided that adequate guarantees and
10 indemnifications are supplied.

11 (2) Private Stormwater Facilities:

12 a) Maintenance of Drainage Facility - The Owner shall
13 maintain the Drainage Facility at the Owner's cost in accordance with this
14 Ordinance.

15 b) City Compliance Inspections - The City's post-construction
16 inspection program will begin routine compliance inspections of projects at
17 three (3) **years** after final acceptance of the **BMP's**. Notwithstanding, nothing
18 herein prevents the City from performing an unscheduled inspection when
19 reasonably necessary to implement the goals and requirements of this
20 ordinance.

21 c) City's Right of Entry- No owner, occupant or any other
22 person having charge, care or control of any building or premises shall fail or
23 neglect, after proper request is made, as herein provided, to promptly permit
24 entry by authorized City officials for the purpose of inspection and
25 investigation pursuant to this ordinance, or to provide maintenance or repair
26 of the Drainage Facilities as it deems appropriate without liability to the City.
27 In the event that the City is denied reasonable entry for purposes of inspection
28 on a voluntary basis, the authorized City official shall obtain a proper
29 inspection warrant or other remedy provided by law to secure entry. In the
30 event of an emergency, where immediate entry is necessary to protect life or
31 property, the City has the right to enter and perform inspections, maintenance
32 or repair of the Drainage Facilities as it deems appropriate, without liability to
33 the City.

1 d) Demand for Construction or Repair - The City may send
2 written notice ("Notice") to the Owner requiring maintenance, construction, or
3 repair to the Drainage Facility within thirty (30) days ("Deadline") of receipt of
4 the Notice, and the Owner, at their expense, must comply with the
5 requirements of the Notice by the Deadline provided.

6 e) Failure to Perform by Owner and Emergency Work by City -
7 If the Owner fails to comply with the terms of the Notice by the Deadline, or if
8 the City determines that an emergency condition exists, the City may perform
9 the work itself. The City may **assess** the Owner for the cost of the work and
10 for any other expenses or damages, which result from Owner's failure to
11 perform. The Owner shall pay the City the amount assessed. If the Owner
12 fails to pay the City within thirty (30) days after the City gives the Owner
13 written notice of the amount due, the City may impose a lien against Owner's
14 Property for the total resulting amount.

15 f) Liability of City for Repair after Notice or as a Result of
16 Emergency - The City shall not be liable to the Owner for any damages
17 resulting from the City's maintenance or repair following Notice to the Owner
18 as required in this Ordinance, or in an emergency, unless the damages are the
19 result of the reckless conduct or gross negligence of the City.

20 g) Indemnification - The City, its officials, agents and
21 employees are indemnified and shall be held harmless from all claims,
22 actions, suits and proceedings, whether known or unknown arising out of, or
23 resulting from the Owner's negligent maintenance, construction, repair or use
24 of the Drainage Facility. Such indemnification shall encompass actions are
25 brought by third parties against any non-City party when such actions related
26 to the aforementioned Drainage Facility. Furthermore, and notwithstanding
27 the provisions of Section 56-7-1 **NMSA** 1978 (if applicable), such
28 indemnification specifically extends to liability, for all claims, whether known
29 or unknown, damages, losses or expenses, including attorneys' fees, arising
30 out of: (1) the preparation or approval of maps, drawings, opinions, reports,
31 surveys, change orders, designs or specifications (except those created by
32 the City or its agents or employees); or (2) the giving of or the failure to give
33 directions or instructions by the City.

1 h) This ordinance is not intended to replace, supersede,
2 undermine or otherwise alter or replace any existing covenant or other written
3 agreement between the City and any property owner. To the extent that the
4 provisions herein conflict with the covenant or other agreement's language,
5 then the covenant language or other agreement's language shall apply."

6 SECTION 8. Chapter 14, Article 5, Part 2, Section 12 "General
7 Administration" is amended as follows:

8 "§ 14-5-2-12 GENERAL ADMINISTRATION.

9 (A) The design, construction and maintenance of all drainage control,
10 flood control, stormwater control, stormwater quality control, and erosion
11 control facilities within the city shall be performed In accordance with
12 procedures, criteria and standards formulated by the City Engineer and in
13 accordance with the policies established in §§ 14-5-2-1 et seq.

14 (B) All construction activities within the jurisdiction of the city shall
15 conform to the requirements of the City Engineer with respect to drainage
16 control, flood control, stormwater control, stormwater quality control, and
17 erosion control.

18 (1) Structures constituting less than 1,000 square feet, in planview,
19 are excluded.

20 (2) Construction, grading or paving on any lot within the jurisdiction
21 of the city shall not increase the damage potential to upstream, downstream or
22 adjacent properties or public facilities. Damages shall be defined as those
23 caused by flooding from the 100-year design storm and all smaller storms and
24 from erosion and sedimentation resulting from the 10-year design storm and
25 all smaller storms.

26 (3) During the period of May 1 through October 31, any grading
27 within or adjacent to a facility that conveys a minimum of 50 cfs or holds 2.0
28 acre-feet must provide for stormwater control, erosion control, and the safe
29 passage of the 10-year design storm runoff during the construction phase.

30 (4) Grading, cut, fill or importation of material in excess of 500 cubic
31 yards or grading of any area of one acre or more shall conform to drainage
32 control, flood control, stormwater control, and erosion control policies and to
33 standards, criteria and procedures established by the City Engineer with

1 respect to drainage, flood control, stormwater control, and erosion control. A
2 grading permit, issued by the City Engineer, shall be required for projects
3 involving more than 500 cubic yards of material or one acre or more in area.
4 Applications for development of areas known to have been sanitary landfills
5 shall be accompanied by a report which discusses potential health and soil
6 mechanics problems and their solutions. Such reports shall be prepared by a
7 New Mexico Professional Engineer competent in soil mechanics.

8 (5) Where practicable, active construction sites shall utilize non-
9 structural controls, such as phased construction, dust control, good
10 housekeeping practices, and spill prevention and response.

11 (6) Sites with less than one acre of total land disturbance and that
12 are not part of a larger common plan of development shall be required to
13 obtain an Erosion and Sediment Control Permit if:

14 (a) The site is identified as having a significant potential for
15 erosion, based on observation or site characteristics including very steep
16 topography;

17 (b) The site is known to contain contaminated soils; or

18 (c) The site is directly adjacent to receiving waters such as
19 directly connected storm drains, directly connected concrete arroyos or the
20 Rio Grande.

21 (d) The site contains a building to be demolished and the
22 building is 10,000 square feet or larger and was built or renovated prior to
23 January 1, 1980.

24 (7) Paving an area larger than 10,000 square feet other than right-of-
25 way shall require a paving permit. Applications for paving permits shall be
26 accompanied by a grading plan and Erosion and Sediment Control Plan if
27 deemed necessary by the City Engineer. Repaving of right-of-way is excluded.

28 (8) The City Engineer shall not issue a grading permit, paving
29 permit, Work Order, or Building Permit unless the proposed project is in
30 compliance with the policies of §§ 14-5-2-1 et seq.

31 (9) Permit Fees. Permit fees shall be established by the Mayor.

32 (C) The city may participate with the private sector, and other public
33 bodies and agencies operating within the jurisdiction of this policy in order to

1 accomplish the goals and implement the policies adopted in §§ 14-5-2-1 et
2 seq. This includes, but shall not be limited to, the development and approval
3 of master plans for flood control, drainage and stormwater control, and
4 stormwater quality control; participation in the construction of projects and
5 exercising control through the planning, platting, zoning, and permitting
6 processes. Projects involving city funding shall be prioritized, funded and
7 scheduled within the guidelines of the CIP and with CIP Projects.

8 (D) It shall be the responsibility of the City Engineer to produce, approve,
9 make and retain records of all drainage plans, drainage reports, design
10 analyses, design drawings, as-built drawings, and maintenance schedules
11 related to all drainage control, flood control, stormwater control, stormwater
12 quality control, and erosion control facilities constructed within city rights-of-
13 way or easements.

14 (E) The City Engineer shall not approve any plan or report pertaining to
15 proposed construction, or other development where the proposed activity or
16 change in the land affected would result in downstream capacity being
17 exceeded and for which stormwater control has not been addressed in
18 compliance with this ordinance and standards established by the City
19 Engineer in the Development Process Manual.

20 (1) Downstream capacity is determined based on the assumption of
21 fully developed watersheds. This assumption prevents "the first come, first
22 served" approach where downstream development unduly constrains
23 upstream development. Parameters used in the determination of downstream
24 capacity include, but are not limited to:

- 25 (a) Channel stability.
- 26 (b) Crossing structure hydraulic capacity.
- 27 (c) Reservoir capacity.
- 28 (d) Hydraulic capacity of street, storm sewer, or channel.
- 29 (e) Public health and safety.
- 30 (f) Maintenance constraints.

31 (2) Planned public storm drainage facilities are assumed as in place
32 in determining downstream capacity, provided that construction funds are

1 available and design has progressed to the point where capacity can be
2 ascertained.

3 (F) Temporary facilities are only allowed on a case-by-case basis as
4 determined by the City Engineer. The level of protection to be provided by
5 temporary facilities shall be determined by considering:

6 (1) The likelihood and consequences of a failure.

7 (2) Length of time until permanent facilities will be in place.

8 (3) The acceptance of maintenance responsibilities and legal
9 liabilities.

10 (G) Requests for approvals of development and/or platting proposals to
11 the City Engineer shall be accompanied by drainage control, flood control,
12 stormwater control, stormwater quality control, and erosion control
13 information and/or commitments. The particular nature, location and scope of
14 the proposed development defines the degree of detail. One or more of the
15 following levels of submittal may be required based on the following:

16 (1) Conceptual Grading and Drainage Plan. A graphic
17 representation of existing and proposed grading, drainage, flood control and
18 erosion control information. The information should be of sufficient detail to
19 determine project feasibility. The purposes of this plan are to check the
20 compatibility of the proposed development within grading, drainage, flood
21 hazard and erosion control constraints as dictated by on-site physical features
22 as well as adjacent properties, streets, alleys and channels. Modifications to
23 the Comprehensive Plan and the development of area plans, sector plans, site
24 development plans and landscaping plans on tracts of five acres or more are
25 appropriate applications of conceptual grading and drainage plans.

26 (2) Drainage Plan. A short detailed presentation required for
27 approval of small, simple development approvals. Drainage plans are
28 prepared with or on the detailed grading plan and address both on-site and
29 off-site drainage control, flood control, stormwater control, stormwater quality
30 control, and erosion control issues. Drainage plans are required for building
31 permits, site development plans and landscaping plans for developments
32 involving less than five acres.

33 (3) Drainage Report.

1 (a) A drainage report is a comprehensive analysis of the
2 drainage control, flood control, stormwater control, stormwater quality
3 control, and erosion control constraints on and impacts resulting from a
4 proposed platting, development or construction project.

5 (b) Drainage reports are required for subdivisions containing
6 more than ten lots or constituting five acres or more, platting or construction
7 within a designated flood hazard area and for any platting or development
8 adjacent to a major arroyo.

9 (4) Erosion and Sediment Control Plan. Erosion and Sediment
10 Control plans address all phases of each project from initial grading through
11 and including final occupancy. Phased projects require special attention. All
12 construction projects, both public and private, within the jurisdiction of §§ 14-
13 5-2-1 et seq., unless specifically excluded, require an approved Erosion and
14 Sediment Control plan prior to start of construction. An Erosion and Sediment
15 Control Plan is required for sites that meet the criteria specified in § 14-5-2-
16 11(A), § 14-5-2-11(B) and § 14-5-2-12(8)(6).

17 (H) The Albuquerque 100-year design storm is the 100-year storm as
18 defined by the National Oceanic Atmospheric Administration (NOAA) and by
19 the storm distributions for time and areas as developed by the City Engineer
20 and documented in the DPM. Design circumstances may require larger or
21 smaller storm volumes. The sources for the rainfall data are current NOAA
22 publications and the City Engineer. When the need for other design storms is
23 apparent, the City Engineer will provide requirements concerning appropriate
24 storms, frequencies and durations.

25 (I) The City Engineer shall, within 30 calendar days after the submission to
26 him/her of a request in writing for an approval under the Drainage Ordinance,
27 approve or deny the request and provide a copy of his/her decision to the
28 applicant. If the request is denied, the reasons for such denial shall be stated
29 in writing. Appeal of such decisions is as provided in § 14-5-2-15.

30 (J) Discharge of any groundwater cleanup flows to the city's storm
31 drainage and flood control system shall not normally be permitted, however,
32 when such discharge of groundwater cleanup flow is by special agreement
33 permitted, the entity responsible for such groundwater cleanup flow discharge

1 shall also be responsible for all costs of installing, operating and removing the
2 means of such discharges and shall provide public liability protection as
3 required. The discharger of such groundwater cleanup flows shall also be
4 responsible for payment of such permit fees, user fees, and effluent sampling
5 fees according to an agreement with the city. All discharges to public storm
6 drainage and flood control facilities shall comply with adopted local and
7 applicable state and federal water quality requirements."

8 SECTION 9. Subsection 'G' of Chapter 14, Article 5, Part 2, Section 13
9 "Administrative Procedures, Criteria and Standards" is amended as follows:

10 u§ 14-5-2-13 ADMINISTRATIVE PROCEDURES, CRITERIA AND
11 STANDARDS.

12
13 (G) Regulation relating to groundwater cleanup flows discharged to public
14 storm drainage and flood control facilities shall be exempted from the
15 provisions of this section. Requirements relating to groundwater cleanup
16 flows shall be established by the City Engineer on a case by case basis, based
17 on public health and safety needs, operational needs, and state and federal
18 regulatory compliance requirements current at time of promulgation. The
19 requirements and conditions shall include provisions for public liability
20 protection from groundwater cleanup flow discharges to the city's systems."

21 SECTION 10. Subsection '8' of Chapter 14, Article 5, Part 2, Section 14
22 uEnforcement" is amended as follows:

23 "§ 14-5-2-14 ENFORCEMENT.

24
25 (B) Where, after investigation, an order has been issued by the City
26 Engineer to the owner of the property on which a violation has occurred and
27 the order is not complied with within thirty (30) days for post-construction
28 violations and within seven (7) days for construction violations, or such longer
29 reasonable time as may be prescribed by the City Engineer, or if the
30 responsible party or violator cannot be found or determined, the violator shall
31 be subject to the penalty provisions set forth in § 1-1-99 of this code of
32 ordinances up to \$500 per day. Each day of violation is considered a separate
33 offense."

1 SECTION 11. SEVERABILITY CLAUSE. If any section, paragraph, word or
2 phrase of this ordinance is for any reason held to be invalid, or unenforceable
3 by any court of competent jurisdiction, such decision shall not affect the
4 validity of the remaining provisions of this ordinance. The Council hereby
5 declares that it would have passed this ordinance and each section,
6 paragraph, sentence, clause, word or phrase thereof irrespective of any
7 provision being declared unconstitutional or otherwise invalid.

8 SECTION 12. COMPILATION. Sections 1 through 10 of this ordinance shall
9 amend, be incorporated in and made part of the Revised Ordinances of
10 Albuquerque, New Mexico, 1994.

11 SECTION 13. RE-EVALUATION. The City shall coordinate with cooperators
12 and stakeholders within eighteen-months of adoption of this ordinance to
13 evaluate other alternatives to on-site mitigation that may be advanced through
14 by better utilization of existing or planned public drainage infrastructure.

15 SECTION 14. EFFECTIVE DATE. This ordinance shall take effect five days
16 following publication by title and general summary.

PASSED AND ADOPTED THIS 17th DAY OF September , 2018
BY A VOTE OF: 8 FOR 0 AGAINST.

Excused: Borrego


Ken Sanchez, President

City Council

APPROVED THIS 1 DAY OF 11, 2018

Bill No. C/S 0-18-2



Timothy M. Keller, Mayor

City of Albuquerque

AT afb

Katy Duhigg, City Clerk



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Defined Fitness at Unser Crossing **Building Permit #:** _____ **Hydrology File #:** K10D045
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Tract 7 Plat of Unser Crossing
City Address: Albuquerque, 87121 Central Blvd. and Unser Blvd.
Applicant: Defined Fitness Corporation **Contact:** Reta Jones
Address: 5850 Eubank Blvd, APO NM 87111 Suite B-62
Phone#: 275-0000 **Fax#:** _____ **E-mail:** reta@defined.com
Other Contact: Mark Goodman & Associates, PA **Contact:** Cory Pierce
Address: PO Box 90000 APO NM 87199
Phone#: 828-2200 **Fax#:** _____ **E-mail:** Cory@goodmanengineers.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL? ☒ Yes _____ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 10-25-18 **By:** Cory Pierce

COA STAFF

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

NARRATIVE DESCRIPTION

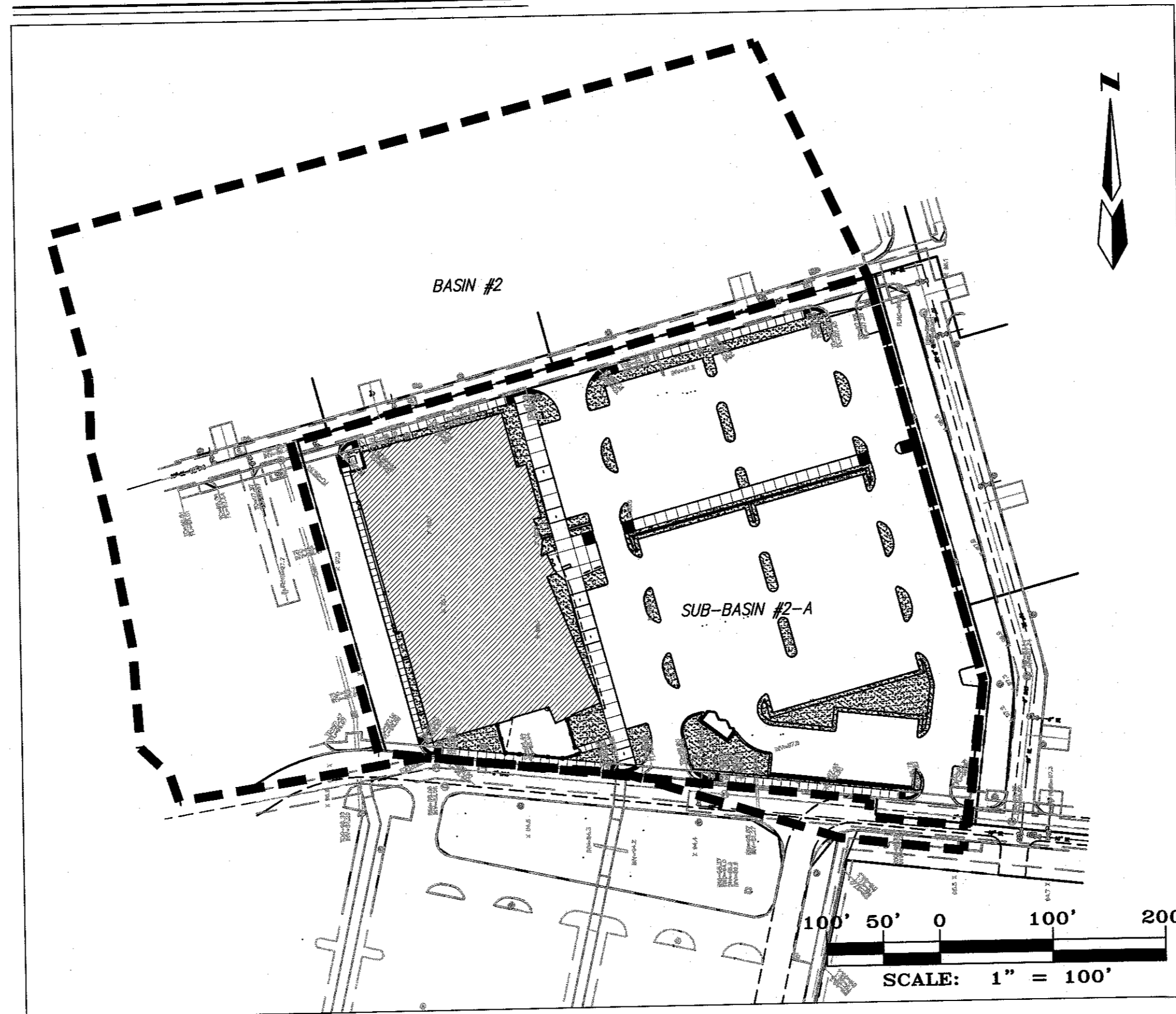
OVERALL HYDROLOGY PLAN:

THE PROJECT IS THE GRADING OF DEFINED FITNESS, A HEALTH CLUB THAT WAS PART OF AN OVERALL PLAN FOR UNSER CROSSING FOR LOWE'S HOME CENTERS, INC. PREPARED BY BOHANAN HUSTON IN 2008. THE OVERALL SITE IS BOUNDED BY CENTRAL AVENUE, UNSER BLVD, BRIDGE BLVD, AND 88TH ST. PUBLIC INFRASTRUCTURE WAS CONSTRUCTED FOR UNSER CROSSING INCLUDING A DETENTION POND SYSTEM, ROADWAYS, CURB AND GUTTER WITH PORTIONS OF SIDEWALK AROUND THE DEFINED FITNESS SITE THAT MANAGE OFFSITE FLOWS IN ACCORDANCE WITH THE 2008 UNSER CROSSING DRAINAGE MANAGEMENT PLAN.

A SMALL PORTION OF THE DEFINED FITNESS SITE DRAINS TO THE WEST TO EXISTING STORM DRAIN CONSTRUCTED AS PART OF THE UNSER CROSSING PUBLIC INFRASTRUCTURE, AND THE LARGER PORTION TO PROPOSED ONSITE STORM DRAIN THAT CONNECTS THE OFFSITE FLOW FROM THE NORTH TO THE EXISTING DETENTION POND IN ACCORDANCE WITH THE 2008 DRAINAGE MANAGEMENT PLAN. THE PROPOSED ON SITE STORM DRAIN REPLACES AN EXISTING EARTHEN CHANNEL THAT CONVEYS OFFSITE FLOW FROM THE NORTH TO THE SOUTH OF THE DEFINED FITNESS SITE, INTO EXISTING STORM DRAIN, ULTIMATELY INTO THE EXISTING DETENTION POND SYSTEM TO THE SOUTH.

THOUGH THE SITE PLAN IS MOSTLY UNCHANGED FROM THE 2008 UNSER CROSSING PLANS, THE GRADING AND INLETS ARE NOW DESIGNED TO CAPTURE FIRST FLUSH WHICH WAS NOT REQUIRED IN 2008. THE PROPOSED DESIGN RELOCATES THE INLETS INTO THE ISLAND LANDSCAPE AREAS TO BE UTILIZED AS FIRST FLUSH CAPTURE PONDS.

BASIN #2 AND SUB-BASIN #2-A



DRAINAGE REPORT

THE 2008 DRAINAGE MANAGEMENT PLAN PREPARED BY BOHANAN HUSTON (BRUCE STIDWORTHY, PE, STAMP DATE 10/30/08) EVALUATED DISCHARGE FOR THE BASIN ENCOMPASSING THE SITE. THE DEFINED FITNESS SITE IS A PORTION OF BASIN #2 OF THE 2008 DRAINAGE MANAGEMENT PLAN. DISCHARGE FROM BASIN #2 WAS EVALUATED AT 39.55 CFS PER THE 2008 DRAINAGE MANAGEMENT PLAN AND AS CONFIRMED UTILIZING THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS OUTLINED IN CHAPTER 22 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL WITH DEVELOPED LAND TREATMENTS OF 0% A, 5% B, 5% C, AND 90% D. THE PROPOSED DEFINED FITNESS SITE HAS LAND TREATMENT PROPORTIONS OF 0% A, 5% B, 6% C, AND 89% D; ESSENTIALLY THE SAME AS THE 2008 SITE. WITH DEVELOPMENT OF THE DEFINED FITNESS SITE, ASSUMING NO OTHER PORTION OF BASIN #2 IS DEVELOPED TO THE LAND TREATMENTS PRESCRIBED IN THE 2008 DRAINAGE PLAN, THE DISCHARGE Q FROM BASIN #2 IS ESTIMATED AT 27.87 CFS. WITH ROUTING AND RETENTION EFFECTS OF FIRST FLUSH CAPTURE AS PROPOSED FOR THE DEFINED FITNESS SITE, AND FIRST FLUSH CAPTURE FROM THE FUTURE DEVELOPMENT OF THE REMAINDER OF BASIN #2, THE DISCHARGE Q TO THE EXISTING POND IS ESTIMATED TO BE A LITTLE LESS THAN THE 39.55 CFS FOR WHICH THE EXISTING POND SYSTEM WAS DESIGNED TO.

CALCULATIONS FOR BASIN #2, BASIN #2 WITH DEFINED FITNESS ONLY, AND THE SUB-BASIN 2-A FOR THE DEFINED FITNESS:

Typical Lot Run Off Volume:		Runoff			
	Area (Ac)	A	B	C	D
Sub-Basin 2-A	4.748	0%	5%	5%	90%
Basin 2 (Developed per 2008 Report)	9.467	0%	5%	5%	90%
Basin 2 (Defined Fitness Development)	9.467	26%	26%	48%	48%
Inlet #3 (First Flush Basin #3)	1.006		1%	1%	98%

First Flush Basin #3	43814 (SF)
Flow by proportion to worst case curb opening	3.20 (C Wier Depth (FT))
	0.46
Width	2
Weir Coeff	2.6
Weir Discharge	3.24 (CFS)

Inlet Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Tuesday, Oct 2 2018

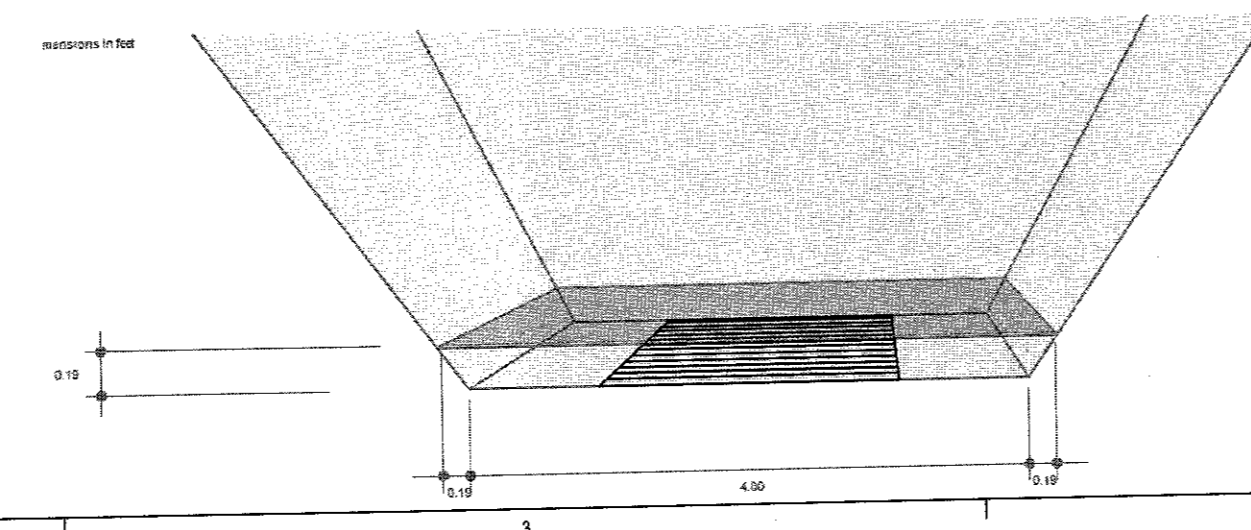
BASIN #3 INLET

Drop Grate Inlet
 Location = Sag
 Curb Length (ft) = -0-
 Throat Height (in) = -0-
 Grate Area (sqft) = 9.66
 Grate Width (ft) = 2.15
 Grate Length (ft) = 6.42

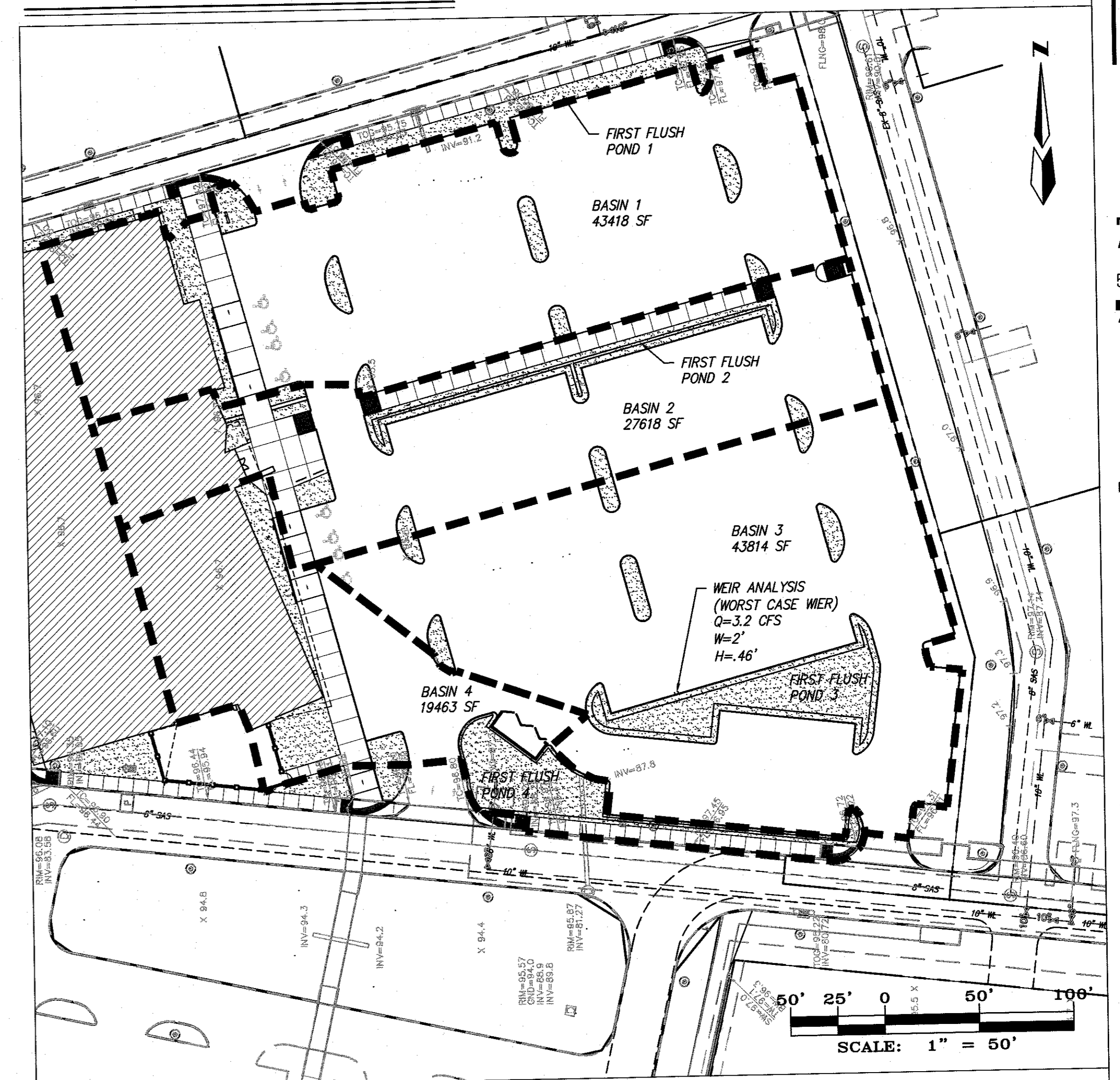
Gutter
 Slope, Sw (ft/ft) = 1.000
 Slope, Sx (ft/ft) = 1.000
 Local Depr (in) = 12.00
 Gutter Width (ft) = 4.00
 Gutter Slope (%) = -0-
 Gutter n-value = -0-

Calculations
 Compute by: Known Q
 Q (cfs) = 4.36

Highlighted
 Q Total (cfs) = 4.36
 Q Capt (cfs) = 4.36
 Q Bypass (cfs) = -0-
 Depth at Inlet (in) = 2.31
 Efficiency (%) = 100
 Gutter Spread (ft) = 4.39
 Gutter Vel (ft/s) = -0-
 Bypass Spread (ft) = -0-
 Bypass Depth (in) = -0-



FIRST FLUSH BASINS



FIRST FLUSH NOTES

FIRST FLUSH RUNOFF IS CAPTURED BY PONDS #1, #2, #3, AND #4 AT SUMP LOCATIONS WITH INTERIOR INLETS TO THE STORM DRAIN. AS RUNOFF FROM THE WEST PORTION OF THE ROOF AND WEST SIDEWALK DISCHARGE TO INLETS TO THE WEST ON THE ADJACENT PROPERTY (IN ACCORDANCE WITH THE 2008 DRAINAGE MANAGEMENT PLAN), IT IS NOT AVAILABLE FOR CAPTURE. OFFSITE FLOW FROM HIGHER EXISTING IMPERVIOUS ELEVATIONS IS NOT AVAILABLE FOR SITE CAPTURE BECAUSE IT IS DIVERTED BY THE STORM DRAIN TO THE EXISTING POND AS DESIGNED AND CONSTRUCTED IN 2008. THE ON-SITE FIRST FLUSH PONDS CAN NOT CAPTURE ALL THE REQUIRED FIRST FLUSH VOLUME DUE TO THE SITE BEING IN-FILL CONSTRUCTION TO INFRASTRUCTURE DESIGNED PRIOR TO FIRST FLUSH REQUIREMENTS. THE FIRST FLUSH PONDS YIELD 2208 CF TO A VARIANCE REQUEST FOR COA PAY IN LIEU POLICY. 2,208 CF OF THE REQUIRED FIRST FLUSH VOLUME OF 5,198 CF IS BEING ASK FOR A WAIVER. THE FEE IN LIEU PAYMENT AMOUNT = 2,208CF x \$8/CF = \$17,664.00

	SF	AC	SQ MI
Area of Construction			
Basin 2-B	205569	4.7192	0.007374

Proposed (SF)		Required First Flush
Impervious	Landscape	
183459	22110	First Flush depth: (inches) 0.34
		Required First Flush Volume based on Design: (CF) 5198

Proposed Design First Flush Capacity

POND 1	
Depth (FT):	0.34
Bottom (SF)	427
Top (SF)	2,452
Volume (CF)	489
POND 2	
Depth (FT):	0.57
Bottom (SF)	427
Top (SF)	2057
Volume (CF)	708
POND 3	
Depth (FT):	0.36
Bottom (SF)	2870
Top (SF)	4200
Volume (CF)	1273
POND 4	
Depth (FT):	0.19
Bottom (SF)	2576
Top (SF)	3351
Volume (CF)	563
First Flush Capture (Sum of the lesser of Capacity and Available)	2,990
Pay in Lieu Volume:	2208

Available First Flush

First Flush Basin to Ponds #1	
Area	43418
Available First Flush	1230
Area	27618
Available First Flush	783
Area	43814
Available First Flush	1241
Area	19463
Available First Flush	551

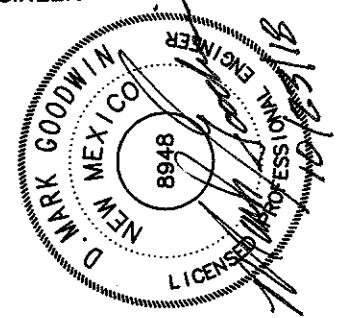
**DEKKER
PERICH
SABATINI**

7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG

ARCHITECT

ENGINEER



PROJECT

DEFINED FITNESS AT
UNSER CROSSINGS

REVISIONS



DRAWN BY DR,CP

REVIEWED BY

DATE 10/23/2018

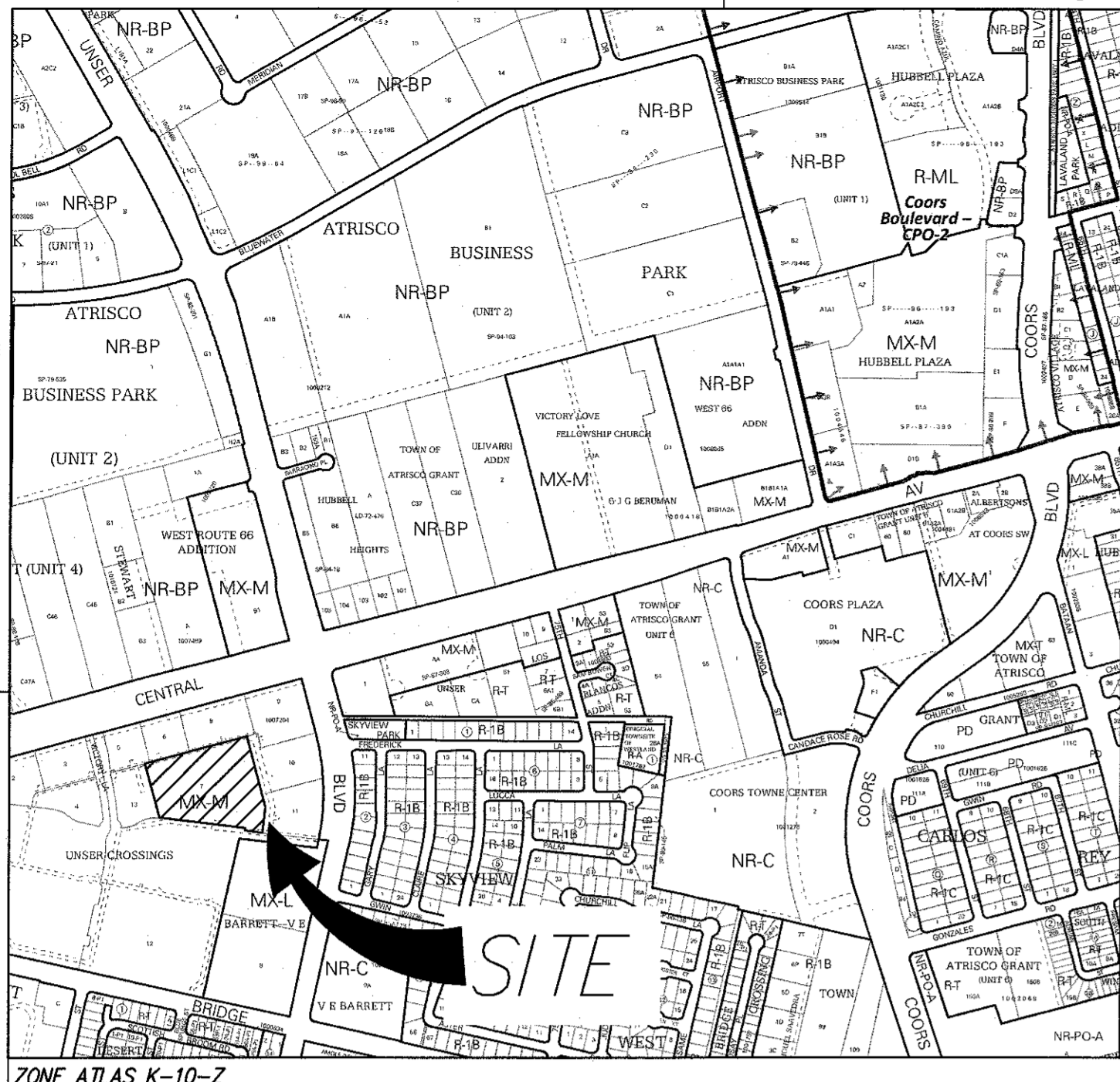
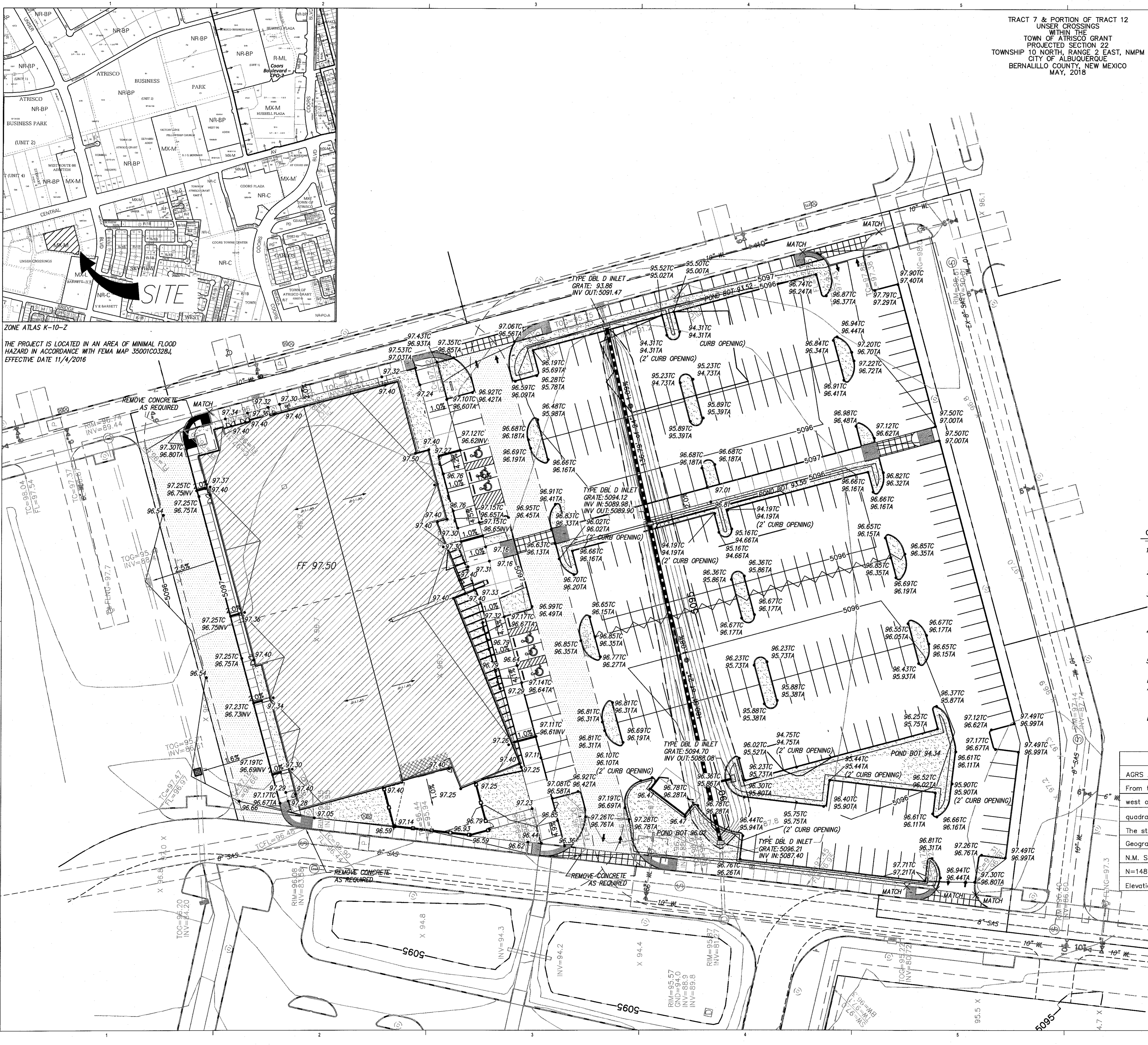
PROJECT NO.

DRAWING NAME

**GRADING AND
DRAINAGE PLAN**

SHEET NO.

C-2



THE PROJECT IS LOCATED IN AN AREA OF MINIMAL FLOOD HAZARD IN ACCORDANCE WITH FEMA MAP 35001C0328J, EFFECTIVE DATE 11/4/2016

TRACT 7 & PORTION OF TRACT 12
UNSER CROSSINGS
WITHIN THE
TOWN OF ATRISCO GRANT
PROJECTED SECTION 22
TOWNSHIP 10 NORTH, RANGE 2 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MAY, 2018

- LEGEND**
- 5565 — CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CURB — 6"
 - CONCRETE
 - WALL
 - TC= FL= TOP CURB / FLOW LINE
 - X 65.00 SPOT ELEVATION
 - SANITARY SEWER MANHOLE
 - SANITARY SEWER CLEANOUT
 - STORM DRAIN MANHOLE
 - CATCH BASIN/DROP INLET
 - CMP/PVC DRAIN PIPE
 - E ELECTRIC TRANSFORMER/PEDESTAL
 - 8" WATER VALVE/SIZE
 - FIRE HYDRANT
 - HOTBOX
 - PULLBOX
 - LIGHT POLE BASE
 - SIGN
 - TELEPHONE/FIBER OPTIC PEDESTAL
 - CABLE TV PEDESTAL
 - SIDE WALK CULVERT PER COA STD DETAIL 2236
 - TYPE DOUBLE D INLET PER STD DETAIL 2206

- GENERAL NOTES:**
1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
 2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
 3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
 4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
 5. NO WORK ALLOWED IN THE PUBLIC RIGHT OF WAY WITHOUT AN APPROVED WORK ORDER.
- NOTE:
- A. CONTRACTOR TO CONFIRM STORM DRAIN CONNECTION INVERTS PRIOR TO STORM DRAIN CONSTRUCTION AND NOTIFY ENGINEER.
 - B. FIRST FLUSH POND SLOPES TO BE SURFACED WITH 1" GRAVEL.

BENCHMARKS	
AGRS Aluminum Cap stamped "7-L10 2002"	
From the intersection of Coors Boulevard and Bridge Boulevard SW, travel west on Bridge Boulevard 0.6 miles to the station in the southeast quadrant of the intersection of Bridge Boulevard and Unser Boulevard. The station is set in the top of curb on the SSE return.	
Geographic Position, in feet (NAD83)	
N.M. State Plane Coordinates (Central Zone)	
N=1481743.359, E=1498883.801, G-G=0.999683498, DA=-00°16'18.49"	
Elevation, in feet (NAVD88) = 5088.067	

ARCHITECTURE / DESIGN / INSPIRATION

**DEKKER
PERICH
SABATINI**

7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109
505.761.9700 / DPSDESIGN.ORG
ARCHITECT

ENGINEER

PROJECT

DEFINED FITNESS AT
UNSER CROSSINGS

REVISIONS

△	
△	
△	
△	
△	
△	

DRAWN BY DR, CP
REVIEWED BY
DATE 10/23/2018
PROJECT NO.
DRAWING NAME
**GRADING AND
DRAINAGE PLAN**

SHEET NO.
C-1

SCALE: 1" = 30'

30' 15' 0' 30' 60'