Pima County Regional
FLOOD CONTROL
DISTRICT

PIMA COUNTY
REGIONAL FLOOD CONTROL DISTRICT
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TUCSON, ARIZONA 85701-1797

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June 26, 2009

Stephanie Routh, CFM
Map IX – Mainland - Dewberry
7204 North 16th Street, Suite 108
Phoenix, Arizona 85020

Re: Pima County Regional Flood Control District
Review of Preliminary FIS and FIRM data

Dear Ms. Routh:

The Pima County Regional Flood Control District (District) has reviewed the Preliminary Flood Insurance Study (FIS), Flood Insurance Rate Maps (FIRMs) and associated digital data. Our review was directed primarily towards the unincorporated areas of Pima County. The following comments are provided:

Flood Insurance Study Review Comments:
The following are review comments on the Preliminary Flood Insurance Study (FIS):

1. There are times engineers have to retrieve the existing effective river model to prepare a map revision. Therefore Table 4, "Letters of Map Correction", should include the LOMR Case numbers to assist individuals tracking down the effective model.
2. The Rillito Creek had a peak discharge of 39,000 cfs at La Cholla Boulevard and 27,900 cfs at Dodge Road on July 31, 2006. The discharge measurements came from the USGS. Please update Table 5 - Flooding History.
3. On page 21 and page 22 of the FIS states the Julian Wash would have an overflow separated from the main channel. This is old language that should be replaced. LOMR Case # 99-09-1084P included hydrology reducing the discharge based in part on large detention basins upstream. The 100-year discharge is now contained in the channel through the entire length of the detailed study.
4. The FIS report does not mention the Lower Santa Cruz River Levee which starts near the Linda Vista Road alignment and extends downstream to Sanders Road alignment. It is a soil cement levee constructed by the Pima County Flood Control District and provides flood protection for a large portion of the town of Marana.
5. The FIS does not mention the soil cement levee on the Big Wash upstream of Tangerine Road in Section 2.4 (flood protection measures).

6. On page 29 the Julian Wash is defined has having shallow flows missing on the constructed channel. This is not the case due to the Kolb Road Detention Basin. See LOMR 99-09-1084P.
7. On Page 31 the paragraph starting "Banks have been stabilized south of Tangerine Road...." should be removed. This is old language. The area is now protected by the Lower Santa Cruz Levee (See LOMR 02-09-1039P).

Preliminary FIRM Index Review Comments:

Map Repositories:

The contact information on the Preliminary FIRM index panel for South Tucson was incorrect. The mailing address left out "South" in the zip code line. It should be:

City of South Tucson
Planning and Zoning Department
1601 South Sixth Street
South Tucson, Arizona 85713

Panel Numbers

The D-FIRM panel number sequencing has significantly changed because previous non-printed FIRM panels were indexed. The Preliminary FIRMs has indexed those panels and the panel numbering sequence has been modified. Because the non index panels where near the beginning of the panel numbers, over 99% of the printed panel numbers have changed. The historic reference to pervious panels will be compromised if the preliminary panels become effective as they are currently numbered.

Historic panels with the same number as the Preliminary FIRMS will be separated by over 14 miles. Such are change will:

a. Make if more difficult for homeowners to prove historic conforming improvements which could impact flood insurance premiums.
b. Increase difficulties in finding historic documentation from FEMA's Map Services Center web links.
c. Create confusion with recorded subdivision plats which reference the FIRM panels.

There is a solution to restore the historic FIRM panel numbering sequence. Preliminary FIRM panels 0025, 0050, 0075, 0100, 0125, 0150, 0175, 0200, 0225, 0250, 0275, and 0300 are all non-printed FIRM panels. The first panels in Pima County are on the Barry Goldwater Gunnery Range. The extension of those panels into the adjacent counties, are also on the gunnery range. It is unlikely FEMA will map the floodplains in this area. Placing a gap by skipping the numbering sequence of the first two unprinted panels would restore the historic numbering sequence.

Map Nomenclature

In the review of the FIRM panels errors were found with names of some of the watercourses. Any watercourse name correction listed in the review comments below should be cross-checked to the names on the index.

FIRM Panel Review Comments

Preliminary FIRM Panel Number 0495L

Map Nomenclature:

1. Evertt Street in T11SR14ESec4 SW corner should be spelled Everett. The third "e" is omitted.

Preliminary FIRM Panel Number 0575L

Map Nomenclature issues with this panel are:

1. Alder Wash should be named Alder Canyon Wash.

Preliminary FIRM Panel Number 0695L

Floodplain delineation issues with this FIRM panel include:

1. On the Gibson Arroyo between Cross Sections AQ (on panel 0713) and AW, the floodway is outside (north of) the channel and a large portion of the channel bed is a Shaded Zone X. The Pima County Flood Control District can provide topography to assist FEMA with map corrections.

Preliminary FIRM Panel Number 0713L

Floodplain delineation issues with this FIRM panel include:

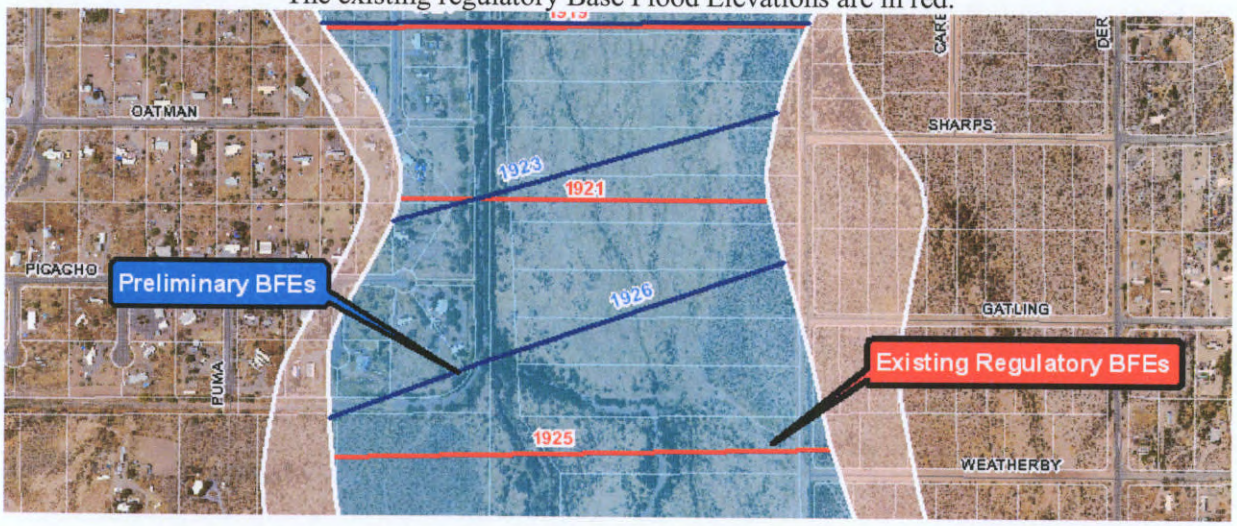
1. Between Cross Sections C and H, the floodway for the Gibson Arroyo is outside (west) of the channel. The District has topography to assist FEMA with the map corrections.

Preliminary FIRM Panel Number 1005

Floodplain delineation issues with this FIRM panel include:

1. In sections 21, 21, 28 and 29, the alignment of the water surface elevations has changed dramatically (see Figure 1 below). Please justify this realignment or have the new BFE lines parallel the existing FIRM data. If FEMA developed a new hydraulic model to reorient and modify the base flood elevations, The District would need a copy of that model for floodplain management purposes.

Figure 1 - The Preliminary Base Flood Elevations are in blue.
The existing regulatory Base Flood Elevations are in red.



Floodplain labeling issues on this panel are:

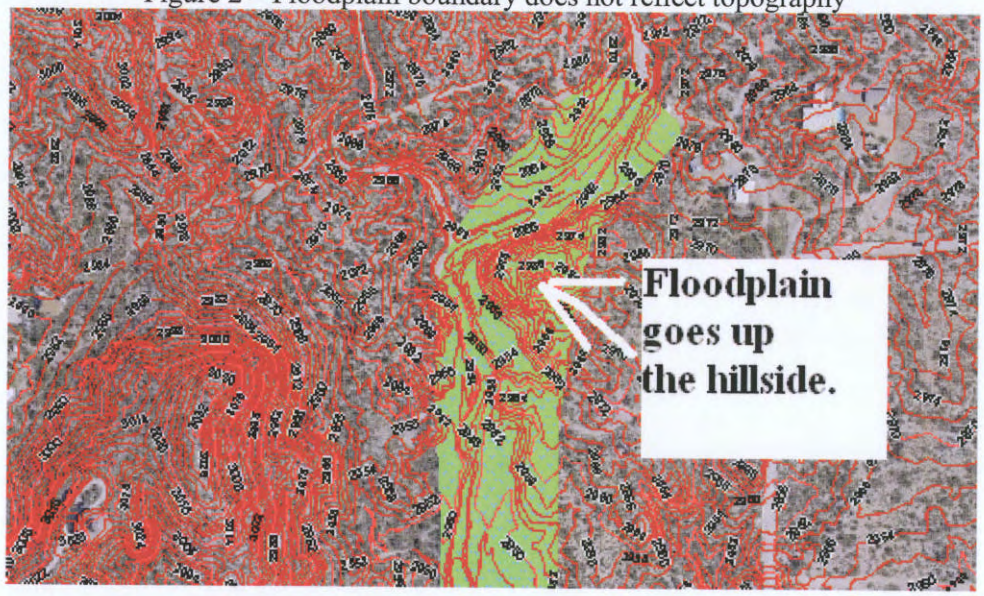
1. Cross Sections B-F at the northwest corner of the panel are inconsistent. The base flood elevations downstream of the lettered cross sections have higher water surface elevations than the data for the cross sections. Was there a gap in the processing for the elevation datum conversions?

Preliminary FIRM panel number 1060L

Map Nomenclature issues with this panel are:

1. In section 21 the floodplain climbs up a hill. See Figure 2 below.

Figure 2 – Floodplain boundary does not reflect topography



Preliminary FIRM Panel Number 1095

Map Nomenclature issues with this panel are:

1. Remove the words Canyon and Springs Section 32.

Preliminary FIRM panel number 1610L

Floodplain delineation issues with this FIRM panel include:

1. In Sections 23 and 26, the BFE lines do not intersect natural grade and they are not perpendicular to flow or profile baseline. With this alignment the BFEs and would not intersect ground elevations for several miles to the west.

Map Nomenclature issues with this panel are:

1. There are several street name corrections in Sections 2 and 3.

Preliminary FIRM panel number 1620L

Map Nomenclature issues with this panel are:

1. Trans Line Road in Section 27 should be Trico Road.

Preliminary FIRM panel number 1655L

Floodplain delineation issues with this FIRM panel include:

1. The A-Zone along eastern edge of the Yuma Mine Wash in Section 9 does not include the main channel.
2. In Section 24 there is an A-Zone in the Countryside subdivision that crosses a large detention basin instead of showing the entire basin is in a floodplain. The correct floodplain is shown in Figure 2 below. The corrected Shape file is in the attached CD.

Figure – 2 - The Floodplain should be shifted to be within the detention basin and drainage channels.

3. The A Zone along the southern edge of the Section 24 does not include part of braided channel system in two locations. A corrected Shape file is in the attached CD.

Map Nomenclature issues with this panel are:

1. In Section 24 the arrow for Wild Eagle Av points to the wrong street.
2. In Section 25 Chamomile Wy spelled incorrectly.
3. In Section 35 the arrow for Highcountry Av points to the wrong street.
4. In Section 34 Cortaro Rd miss-spelled.
5. In Section 34 Gentlewinds Tr does not exist.
6. In Section 11 Tucson Mountain Dr, not Tucson Mountain Rd.
7. In Section 11 add "CT" to Cowpoke street name.
8. In Section 12 change "Idle Hour Wash" to "West Idle Hour Wash".
9. In Section 12 change "Idle Hour Wash Tributary 1" to "East Idle Hour Wash".

Preliminary FIRM panel number 1660L

Floodplain delineation issues with this FIRM panel include:

1. The floodplain expanded beyond limits from LOMR 06-09-B818P, adding 8-9 houses into the floodplain in Section 29. A Shape file is included on the attached CD with the correct floodplain location.
2. A Shaded Zone X boundary expanded east in Section 5 just east of Thornydale Road.
3. The Floodplain boundary shifted approximately 30 feet and does not include the channel in area between Avenida Pina and Camino de la Tierra in section 5.

Map Nomenclature issues with this panel are:

1. The Arrow for Treasure Mountain Dr points to wrong street in Section 21.
2. Legends Pl does not exist in Section 28.
3. Shadow Terrace Dr does not exist in Section 28.
4. "Camino de la" should be "Camino de la Tierra" in Section 32.
5. "Camino de la Tierra" text below symbol for cross-section T should be deleted in Section 32.
6. "El Camino del Tierra" text in southeast corner of Section 32 should be deleted.
7. Galaxy Pl does not exist in the NW ¼ of Section 5.
8. The text for Starview Dr appears to be on the wrong street in Section 5. It needs to be shifted east.
9. "Los Altas Rd" should be "Los Altos Rd." in Section 3.
10. "Monterey Rd" should be "Montebella Rd" in Seciton 3.
11. Nodnal Dr does not exist in Section 9.
12. Lavery Dr. does not exist in Seciton 10.
13. "North Fountains Av" should be "Fountains Av" in Section 10.

Preliminary FIRM panel number 1665L

Floodplain delineation issues with this FIRM panel include:

1. The floodplain boundary shifted approximately 40 feet in the southeast portion of Section 12. The ground surface elevation is greater than 10 feet higher on southeast edge of floodplain than northwest edge of floodplain. A corrected Shape file is in the attached CD.
2. The floodplain boundary does not include portion of main channel in Section 21.
3. The floodplain boundary shifted approximately 75 feet north, which puts the floodplain 35 to 40 feet up a hillside in some places, and adds one home on hillside into floodplain in the NW ¼ of Section 22. A corrected Shape file is in the attached CD.

Map Nomenclature issues with this panel are:

1. "Idle Hour Wash" should be "West Idle Hour Wash" in the SE ¼ of Section 11.
2. "Idle Hour Wash Tributary 1" should be "East Idle Hour Wash" in the SW ¼ of Section 12.
3. "Idle Hour Wash Tributary 2" should be changed to "West Idle Hour Wash Tributary 1" due to corrections above in the NW ¼ of Section 14.
4. "Idle Hour Wash Overflow Channel" should be "West Idle Hour Wash Overflow Channel" in the W ½ of Section 14.
5. "Hawk Pl" should be "Harris Hawk Pl" in Section 13.
6. "Idle Hour Wash" should be "West Idle Hour Wash" in the NW ¼ of Section 22.
7. "Camino del Cerro Extension Rd" should be "Camino del Cerro Rd" in Section 22.
8. "Avenida Dos Vista" should be "Avenida Dos Vistas" in Section 22.
9. "Chaos Canyon" should be "Chaos Canyon Ln" in Section 35.
10. Delete "Canfield Rd", does not exist. Remove the name in Section 36.

Preliminary FIRM panel number 1666L

Floodplain delineation issues with this FIRM panel include:

1. The floodplain boundary does not cover canyon bottom in Section 19.
2. The floodplain correctly compressed on northwest bank, but does not expanded on southeast bank to encompass canyon bottom in the SE ¼ of Section 19.

Map Nomenclature issues with this panel are:

1. "Camino Via Pintoresco" should be "Camino Pintoresco" in Section 19.

Preliminary FIRM panel number 1667L

Floodplain delineation issues with this FIRM panel include:

1. The floodplain shifted west on the Nanina Wash south of the Sunset Road alignment and does not include constructed channel in Section 16. The shift puts the floodplain onto adjacent to structures. The floodplain should be shifted approximately 45 east to be contained in channel. A corrected Shape file is in the attached CD.
2. The Floodplain boundaries on both sides of Nanini Wash constructed channel expand beyond channel and onto higher elevations on the west boundary placing 5

houses into the floodplain in Section 9. A corrected Shape file is in the attached CD.

Floodplain labeling issues on this panel are:

1. In Section 15, The Base Flood Elevations 2274 and 2275 for Rollercoaster Wash is in the same locations as the previous FIRM Panel, but the elevations are 3 feet higher than the old values. The conversion factor from NGVD-29 to NAVD-88 is only 2.21 feet. It appears these elevations are incorrect.
2. Near the center of Section 15, there are two 2275 BFE lines, the upper of which was 1 foot higher on the old FIRM Panel. The upper BFE line does not currently have an elevation associated with it in the digital data. Are corrections needed?

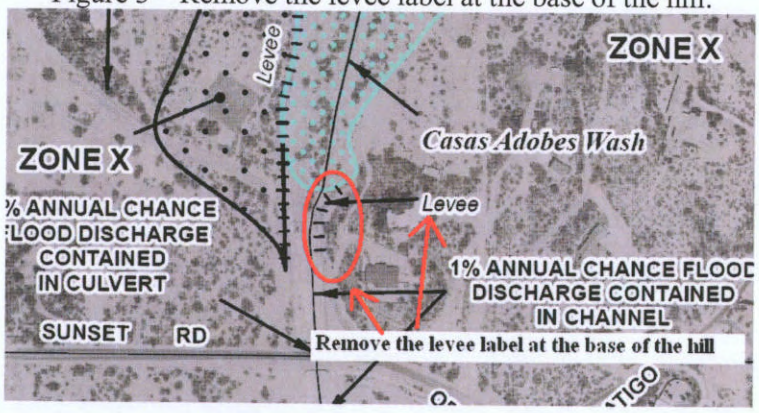
Map Nomenclature issues with this panel are:

1. "Kanin Av" should be "Kain Av" in Section 16.
2. "Kimberly Pl" should be "Kimberley Pl" in Section 16.
3. "Casa Sernas Dr" should be "Casa Serenas Dr" in Section 16.
4. "Brightsided Dr" should be "Brightside Dr" in Section 22.
5. "Letic Ln" should be "Leticia Ln" in Section 22.
6. "Furrey Ln" should be "Furreys Ln" in section 22.
7. "Amy Pl" should be "Amy Dr" in Section 22,
8. "O'betka Av" should be "Obetka Av" in Section 22.

Other issues with this panel are:

1. The levee shown on southeastern corner of A Zone in Section 10 is not a levee. It is along the base of a hill. During the Provision Accreditation of Levee process, the District requested the levee designation be removed from this location. See Figure 3 below.

Figure 3 – Remove the levee label at the base of the hill.



Preliminary FIRM panel number 1668L

Floodplain labeling issues on this panel are:

1. The 2400 BFE line should be in same location as cross-section C, which has the same elevation (Section 32).

Map Nomenclature issues with this panel are:

1. "Dolomite Dr" should be "Robert Daru Dr" in Section 30.
2. "Currite Lp" should be "Cuprite Lp"in Section 30.
3. "North Crooked Tr" should be "Crooked Tr" in Section 31.
4. "Horse Ferry Rd" should be "Corte Lindo Cielo" in Section 31.
5. Delete "Rafael Rd", does not exist in Section 32.
6. "West Speedway Wash" should be "Speedway Wash" in Section 32.

Preliminary FIRM panel number 1680L

Floodplain delineation issues with this FIRM panel include:

1. The floodplain boundaries for the Pima Wash slipped with the Preliminary D-FIRM data. A Shape file is included on the attached CD with the correct floodplain location.
2. The floodplain boundary does not encompass entire channel in the SE ¼ of Section 30.
3. In Section 30, the 2949 foot BFE line should be in same location as cross-section AM, which has the same elevation.
4. In the NE ¼ of Section 30, the floodplain boundary shifted up the slope. The ground elevations on west edge of floodplain are 15-20 feet higher than east edge.
5. In the SE ¼ of Section 12, the northern floodplain boundary should be shifted north, and a small portion of channel is not included in the floodplain. The enclosed CD contains corrected Shape files.
6. In the NW ¼ of Section 12, Cross-section X should be where 2464 BFE line is and 2464 BFE line should be shifted north about 40 feet. Cross-section X has shifted 40 feet south from old cross-section location.

Map Nomenclature issues with this panel are:

1. In Section 31, "Juana de Bendero" should be "Bendero de Juana".
2. In Section 1, "Orange Rd" should be "Oracle Rd".

3. Delete "Roberta Dr" in Section 12.
4. "Isidoro Padre Camino" should be "Camino Padre Isidoro"

Preliminary FIRM panel number 1685L

Floodplain delineation issues with this FIRM panel include:

1. In the NW ¼ of Section 3, the floodplain shifted approximately 20 feet east out of channel, putting 1-2 houses in the floodplain. Floodplain should be shifted 40 feet west from the current location.
2. In the NW ¼ of Section 3 the floodplain shifted approximately 20 feet southeast out of channel, putting 2 houses in the floodplain. Floodplain should be shifted 30 feet northwest from current location.
3. In the SE ¼ of Section 8 the District recommends shifting floodplain east. The ground surface elevations along the west floodplain boundary are over 10 feet higher than elevation on eastern floodplain boundary.

Map Nomenclature issues with this panel are:

1. In the NW ¼ of Section 3 delete "Mar de Pierdas".
2. In Section 3 "Finger Rock Wash Tributary" should be "Pontatoc Canyon Wash".
3. In Section 3 Beatrice Ci" should be "Donna Beatrix Ci".
4. In Section 8 "Campbell Avenue Wash" should be "Campbell Wash".
5. In Section 8 "Pierda Seca" should be "Piedra Seca".
6. In Section 10 "Via Arcadia" should be "Via Acacia".
7. In Section 10 "Cadena de Montana" should be "Cadena de Montanas".
8. In Section 10 "Pinnacle Ridge Pl" should be "Pinnacle Ridge Dr".

Preliminary FIRM panel number 1686L

Floodplain delineation issues with this FIRM panel include:

1. Cross-section G on the Pima Wash is shifted approximately 45 feet north.
2. Cross-section N on Pima Wash is shifted 25 feet north.
3. Floodplain boundary in the N ½ of Section 13 has shifted out of canyon bottom and up west bank, adding two houses to the floodplain. Correction Shape files are in the attached CD.
4. Near the center of Section 13, the floodplain shifted south of mouth of tributary channel and onto a house on high ground. Correction Shape files are in the attached CD.

Map Nomenclature issues with this panel are:

1. In Section 11 "Escondido Pl" should be "Escondido Ln".
2. In Section 15, "Hudson Dr" should be "Hudson Pl".
3. In Section 22, "Pomona Rd" should be "Pomona Av".

Preliminary FIRM panel number 1687L

Floodplain delineation issues with this FIRM panel include:

1. In the SE ¼ of Section 12 the floodplain shifted approximately 25 south, taking main channel out of the floodplain in places. As a result one house added to floodplain. Correction Shape files is in the attached CD.

2. In the NW ¼ of Section 7, the floodplain shifted approximately 25 feet south and up a bluff. Correction Shape files are in the attached CD.
3. In the NE ¼ of Section 13 the floodplain shifted approximately 25 feet south. Correction Shape files are in the attached CD.
4. The Campbell Wash Floodplain limits shifted from LOMR Case # 09-09-0529X. Correction Shape files are in the attached CD.

Map Nomenclature issues with this panel are:

1. In Section 20, "Campbell Avenue Wash" should be "Campbell Wash".
2. In Section 20, "Cambell Te" should be "Campbell Te".

Preliminary FIRM panel number 1693L

Floodplain delineation issues with this FIRM panel include:

1. On the Rillito Creek, the 2375 BFE line is upstream of cross-section AU, which has a WSEL of 2375.1 ft. Is there a data error?

Preliminary FIRM panel number 1694L

Floodplain delineation issues with this FIRM panel include:

1. Cross-section A at the confluence of Tanque Verde Creek and Pantano Wash appears to be problematic. Cross-section A for the Tanque Verde is 2433.2 ft NGVD29 in the current FIS, and it is directly in line with cross-section A for Pantano Wash. However the current FIS lists the WSEL for cross-section A for the Pantano Wash as 2432.3 ft. NGVD29. The Preliminary DFIRM data has combined Cross section A going across both water courses as 2434.56 ft NAVD88. That elevation is the correct conversion for the Pantano Wash but not the Tanque Verde Creek. The District recommends placing gutter line between the Tanque Verde and Pantano floodplains to establish a better water surface profile for each watercourse.

Map Nomenclature issues with this panel are:

1. In Section 26 "El Esp Erante" should be "El Esperante".

Preliminary FIRM panel number 1695L

Floodplain delineation issues with this FIRM panel include:

1. In the SE ¼ of Section 8 the floodplain shifted out of canyon bottom.
2. In the SE ¼ of Section 8, the floodplain shifted up canyon wall/bluff.
3. In Section 15 and 22 the floodplain shifted up the slopes of hillside on both the Finger Rock Wash and Valley View Wash. In some location the channel bed is dry.
4. In the NE ¼ of Section 20, the floodplain shifted approximately 70 feet proceeding upslope and impacting one residence on top pf a bluff.

Map Nomenclature issues with this panel are:

1. In Section 17 "Campbell Avenue Wash" should be "Campbell Wash".
2. In Section 21 Camino Sumo text is on the wrong street. It should be relocated to the north-south street to the east.

3. In Section 22 "Lecha Dr" should be "Flecha Dr".

Preliminary FIRM panel number 1705L

Map Nomenclature issues with this panel are:

1. There are overlapping labels near the west end of cross section BC in Section 6.
2. The "North Resort Drive" road name should be shown.

Preliminary FIRM panel number 1713L

Floodplain delineation issues with this FIRM panel include:

1. GIS data was emailed to Ed Curtis (FEMA Region IX) and Stephanie Routh (Dewberry) on June 17, 2009, to correct the southern portions of the Shape file for Tanuri Wash. The Shape files are on the attached CD.

Preliminary FIRM panel number 2245L

Floodplain delineation issues with this FIRM panel include:

1. The floodplain shapes for the lower end of the Tanurie wash LOMRs 05-09-0847P, 06-09-B069X and 07-09-1858P slipped on the Preliminary D-FIRM data. Correction Shape files were transmitted to Stephanie Routh and Ed Curtis on June 23, 2009.

Preliminary FIRM panel 2655

Floodplain delineation issues with this FIRM panel include:

1. In several areas the existing regulatory floodplain data is more accurate than the Preliminary D-FIRMs. See Figures 4, 5 and 6. Corrected Shape files are contained in the attached CD.

Figure – 4 – The A-zone floodplain does not fit in detention basin.

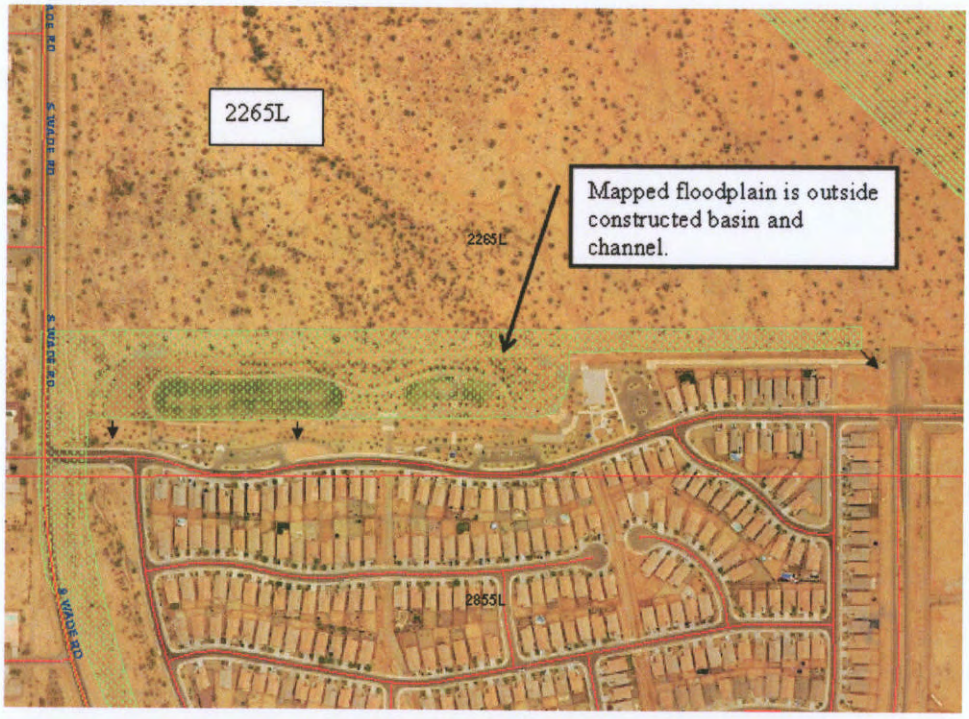


Figure – 5 - Preliminary floodplain does not fit drainage infrastructure

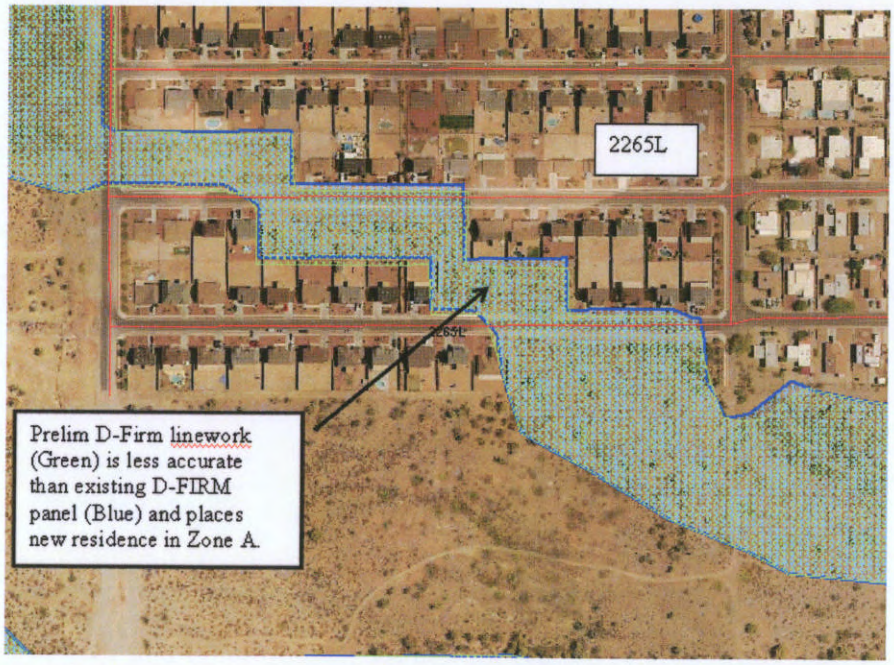
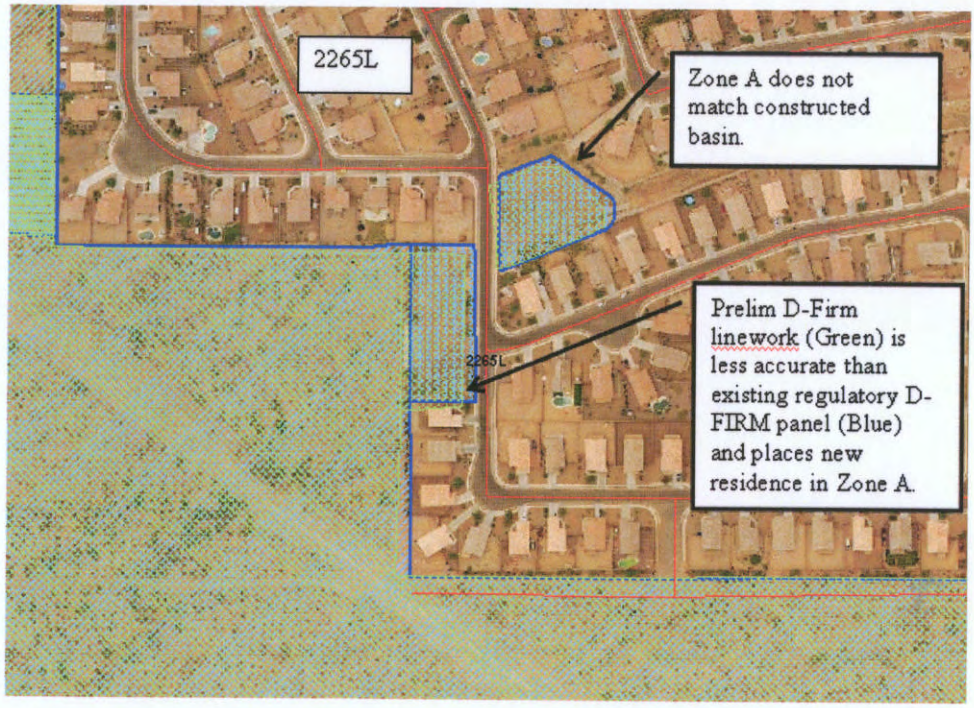


Figure – 6 - Preliminary floodplain does not fit in drainage basins and impacts residential structures.



Preliminary FIRM panel 2270

Floodplain delineation issues with this FIRM panel include:

1. In Section 9 the D-Zone floodplain boundary should not extend north of Drexel Road.
2. The Preliminary D-FIRM AE Zone in the extreme south east portion of panel 2270L, and the northeast portion of panel 2860L (Section 15, T15S 13E) is offset from the existing regulatory floodplain and adds several residences to the AE flood hazard area. Corrective shape file data is in the attached CD.

Preliminary FIRM panel 2291

Map Nomenclature issues with this panel are:

1. In Section 4, "Morely Av" should be "Sunbelt Blvd".

Preliminary FIRM panel 2293

Map Nomenclature issues with this panel are:

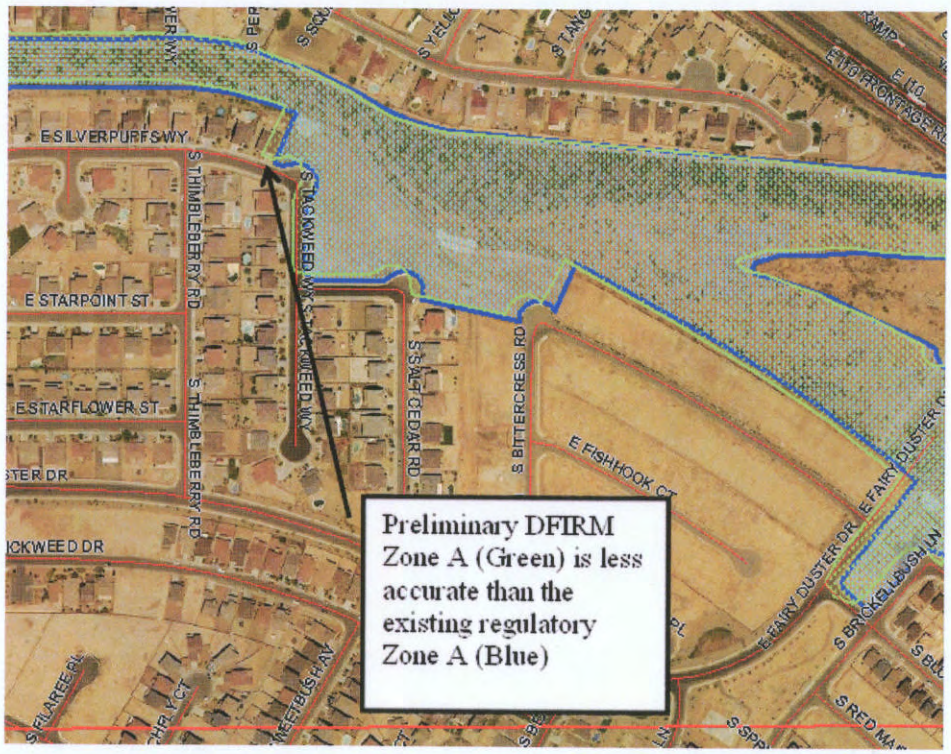
1. In Section 10, "Hay St" should be "Ray St".

Preliminary FIRM panel 2295

Floodplain delineation issues with this FIRM panel include:

1. The Preliminary Zone A floodplain in the southern portion of panel 2295L has slipped west of the existing regulatory data. See Figure 7. Corrective shape files are contained in the attached CD.

Figure – 7 – The Preliminary D-FIRM data is shifted to the west.



Preliminary FIRM panel 2855

Floodplain delineation issues with this FIRM panel include:

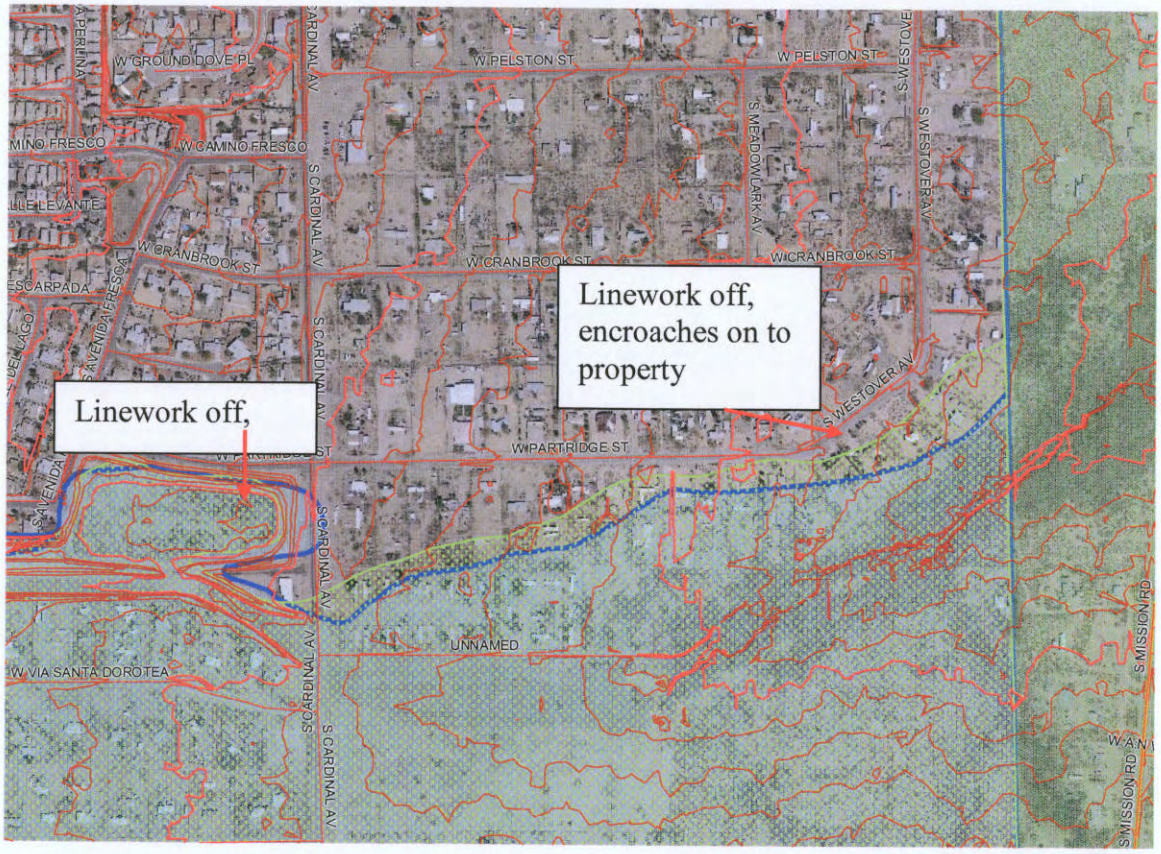
1. The A-Zone floodplains in the Star Valley subdivision do not fit the drainage infrastructure. Corrective shape files were transmitted to Ed Curtis (FEMA Region IX) and Stephanie Routh (Dewberry) on May 29, 2009. The Floodplain shape files are included on the data disc enclosed with this letter. The corrective shapes are in Sections 15, 21, and 22."

Preliminary FIRM panel number 2860

Floodplain delineation issues with this FIRM panel include:

1. The A-Zones have been extended north past the existing regulatory limits and do not fit the upstream detention basin. See Figure 8 Corrective Shape files for this A-Zone were prepared to match the previous A-zone limits and improve detention basin limits and are included in the attached CD.

Figure – 8 – The floodplain limits shifted on the Preliminary D-FIRM Data



2. The Levee line work for the Mission West Floodwall places structures in floodplain. Figure 9 show the levee location crosses residential structures. An ESRI Line file was prepared for the levee. Shape files for the A-Zone and Shaded X were also generated and are on the attached CD. Figure 10 shows the corrected locations of the flood zones.

Figure – 9 – The floodwall line work encroaches onto residential structures.

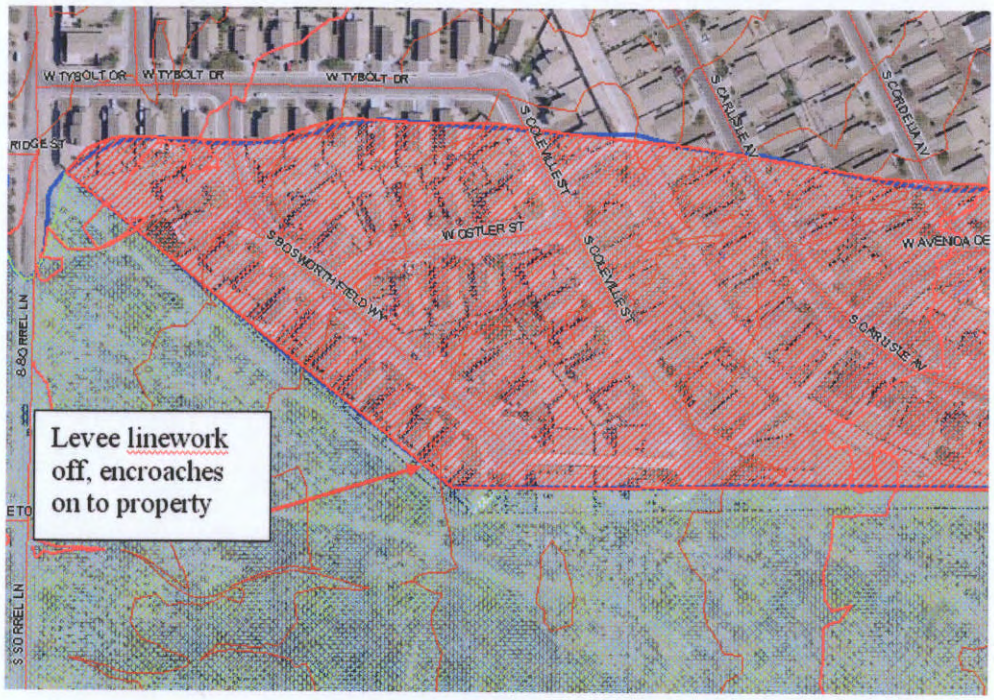
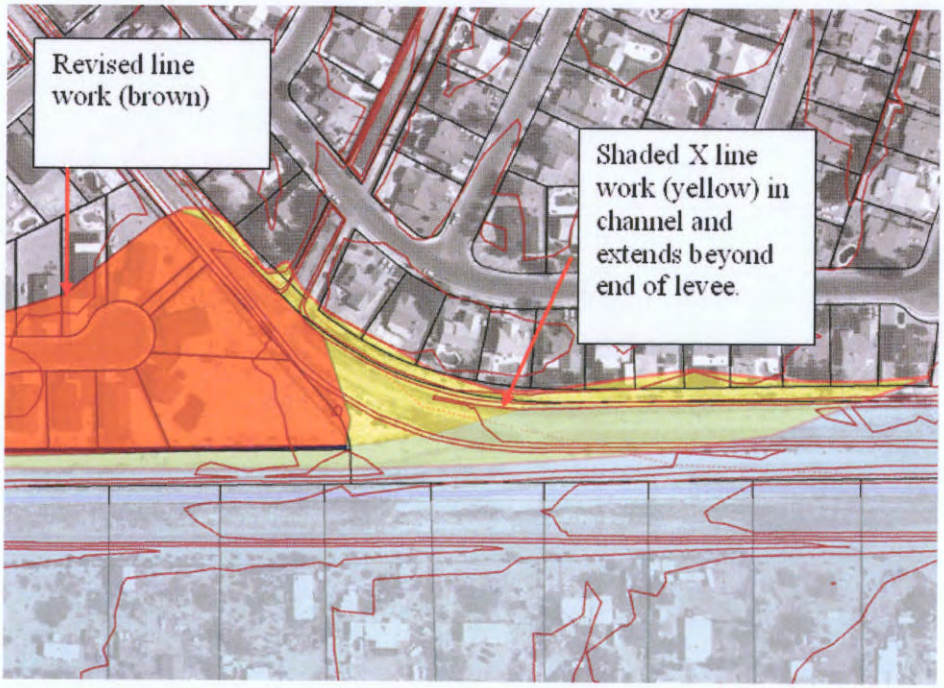


Figure – 10 – The some of the corrective line work around the Mission West.



Preliminary FIRM panel number 2900.

Map Nomenclature issues with this panel are:

1. In Section 5 Summit point Drive should be Summit Peak Road.

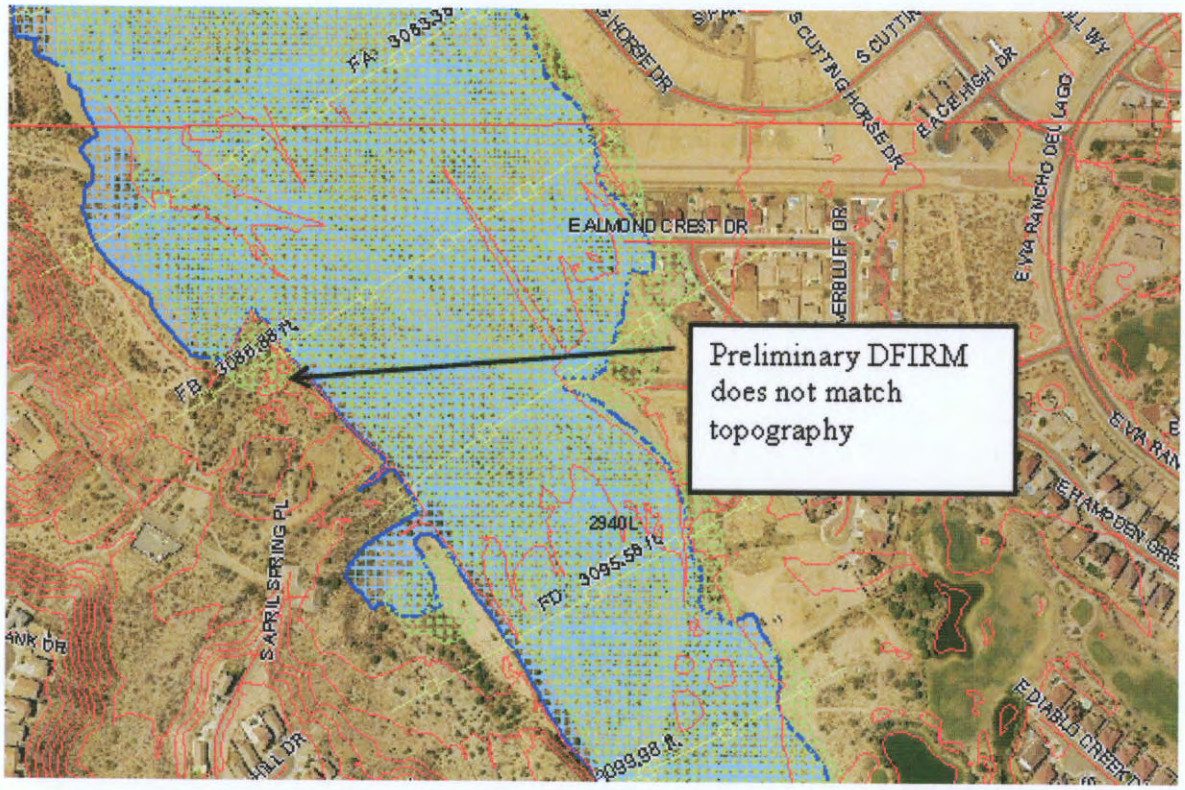
2. In Section 34 Nogales Old Vail Connection Road should be Old Vail Connection Road.

Preliminary FIRM panel number 2930L

Floodplain delineation issues with this FIRM panel include:

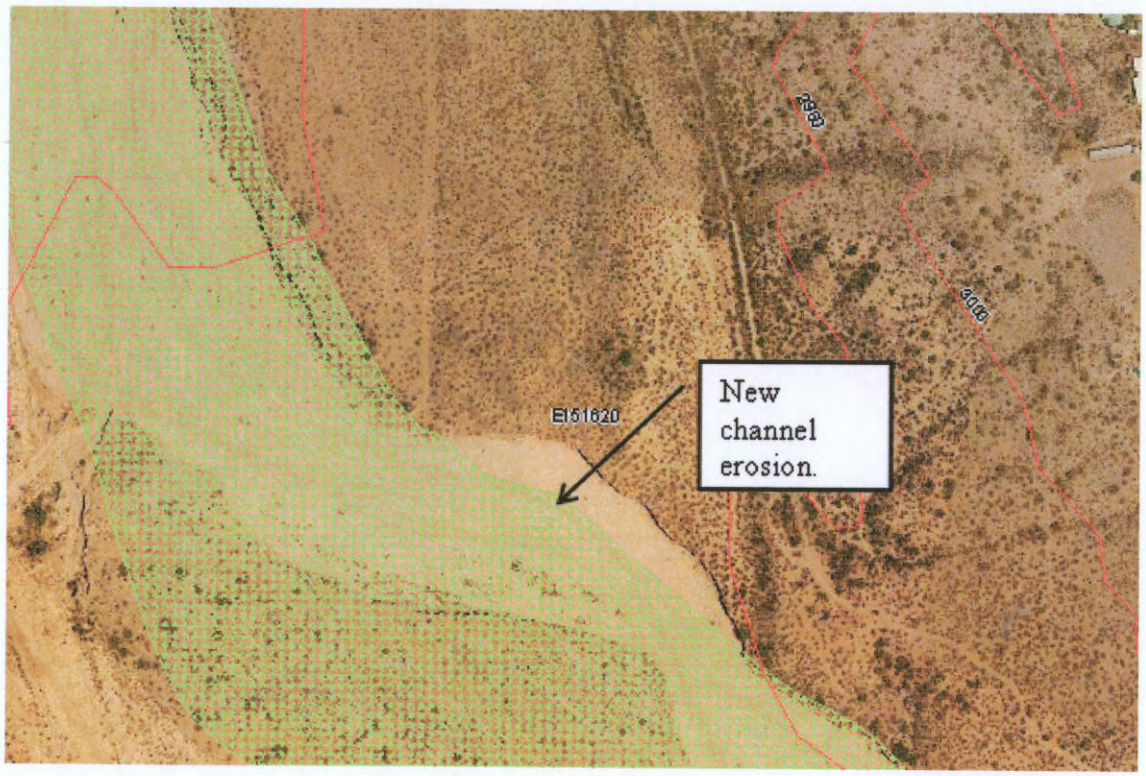
1. The Preliminary FIRM floodplain and floodway boundaries for the Pantano Wash are offset from actual topographic conditions south of Vail Ranch Road within Sections 4, 9, and 10 T16S R16E, on panels 2930L and 2940L. See Figure 11. Shape files of existing regulatory floodplain and floodway are included in the attached CD and should replace the Preliminary data between Cross Sections ES and FO.

Figure – 11 – The floodplain limits shifted on the Preliminary D-FIRM Data



2. The July 31, 2006, flood on the Pantano Wash caused the channel to meander outside of the mapped floodplain. See Figure 12. In some locations the channel has moved laterally over 100-feet in some areas within panel 2930L. These newly eroded meanders have been digitized and included as an unnumbered Zone A on the attached CD. New meander erosion occurs along cross sections DT, between DU and DV, and along cross section EA in Sections 20 and 29.

Figure – 12 – Erosion has occurred on the Pantano Wash outside the mapped floodplain.



Preliminary FIRM panel number 2940L

Floodplain delineation issues with this FIRM panel include:

1. The Preliminary floodplain and floodway boundaries for the Pantano wash appear to have slipped from the existing data. See Note 1 on the review comments for panel 2930L.

Preliminary FIRM panel number 2935.

Map Nomenclature issues with this panel are:

1. In Section 30 Ranch Road should be X9 Ranch Road.

Preliminary FIRM panel number 3945L

Map Nomenclature issues with this panel are:

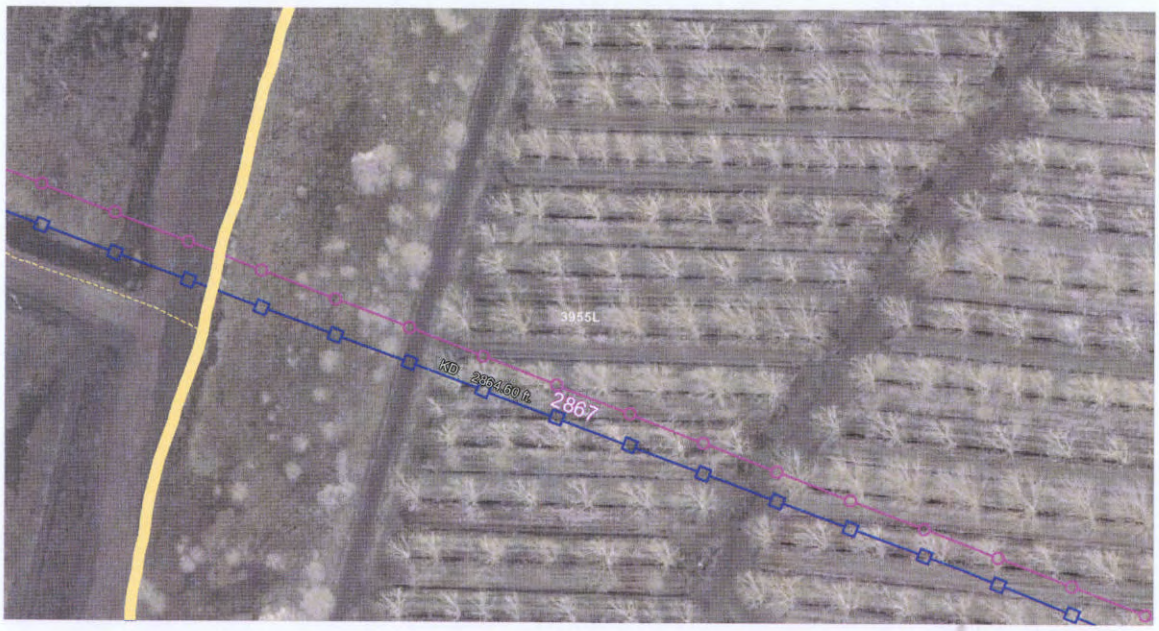
1. In Section 4, Estcotta Dr. should be West Cotta Dr. and Baltussrol Dr. should Baltusrol Dr.

Preliminary FIRM panel number 3955L

Floodplain labeling issues on this panel are:

1. Forty feet downstream on cross-section KD the WSE is 2867. Cross Section KD has a WSE 2864.60'. There seems to be a bust between BFE and the Cross Section data in the attribute table. See Figure 13.

Figure – 13 – Downstream cross section should not have a higher water surface elevation.



2. The Shaded Zone X between cross-sections KK and KO on the right overbank existed in the previous FIRM and is out on the DFIRM, is it a mistake? See Figure 14 for the location.

Figure – 14 – Shaded X- Zone is missing.

Map Nomenclature issues with this panel are:

1. In Sections 24 and 25, Camino de la Canada should be Camino de la Canoa.
2. In Section 23, Santa Ana should be Abrego Dr.

3. In Section 14 , Los Areos should be Los Arcos.

Preliminary FIRM panel number 4050L

Map Nomenclature issues with this panel are:

1. In Section 6, Shellenberg Canyoner Wash should be Shellenberger Canyon Wash.
2. In Section 23, Spring Mud Canyon Wash should be Mud Spring Canyon Wash.

Preliminary FIRM panel number 4300L

Map Nomenclature issues with this panel are:

1. In Section 35, Arroyo Seca Wash should be Arroyo Seco Wash.
2. In Section 15, Guijas Wash should be Las Guijas Wash.

Preliminary FIRM panel number 4325L

Map Nomenclature issues with this panel are:

1. In T20R10 Section29, Guijas Wash should be Las Guijas Wash.

Preliminary FIRM panel number 4350L

Map Nomenclature issues with this panel are:

1. In Section 1, Sarduna Dam should be Sardina Dam.

Preliminary FIRM panel number 4355L

Map Nomenclature issues with this panel are:

1. In Section36, Maria Dr. should be Santa Maria Dr.

Preliminary FIRM panel number 4360L

Map Nomenclature issues with this panel are:

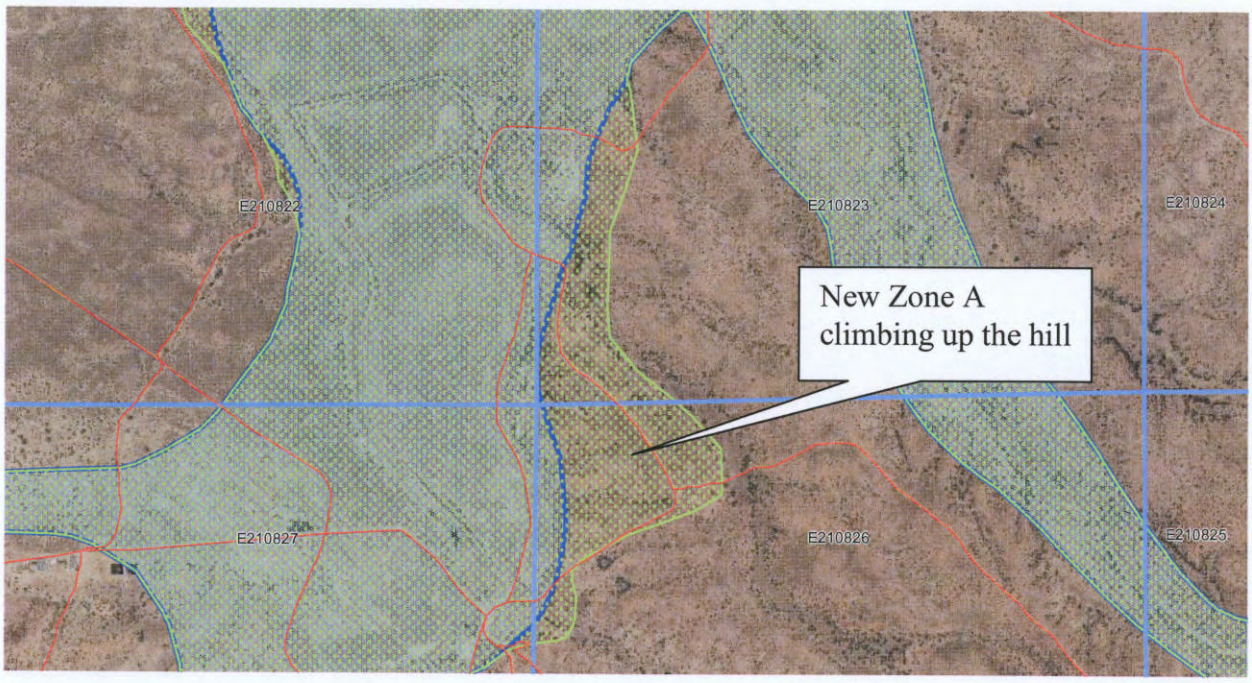
1. In Section 31, Tumacori Dr. should be Tumacacori.

Preliminary FIRM panel number 4600L

Floodplain delineation issues with this FIRM panel include:

1. In Section 23 and 28 a new Zone A is climbing up the hill. See Figure 15 for location.

Figure – 15 – Preliminary Floodplain has extended up the slope of a hill.



Map Nomenclature issues with this panel are:

1. In Section 17, Baily Wash should be Bailey Wash.
2. In Section 22, Arroyo Del Sambe Wash should be Arroyo Del Sasabe Wash.

Preliminary FIRM panel number 4700L

Map Nomenclature issues with this panel are:

1. In Section 27, Arroyo Del Sambe Wash should be Arroyo Del Sasabe Wash.

SOMA Review Comments

The follwinig tables summerize the District's review on the SOMA infomation associated with the Preliminary D-FIRMs.

1. LOMCs Incorporated

Case No.	Action Request
99-09-684P	Remove from "LOMCs Incorporated" as this was superseded by LOMR 08-09-1756X, effective 09/29/2008 (Pima Wash)
99-09-783P	Remove from County SOMA letter - property in Oro Valley
99-09-434P	The LOMR crossed more than one panel. Add Panel "04019C2210K" to Old Panel column
00-09-482P	The LOMR crossed more than one panel. Add Panel "04019C2825K" to Old Panel column
00-09-823P	Remove Panel "04019C2291L" from New Panel column (within City of Tucson jurisdiction)

1. LOMCs Incorporated

Case No.	Action Request
00-09-793P	Verify the wash names in the Project Identifier for the County - only wash in County this LOMR affects is Tanque Verde
00-09-880P	1) The LOMR crossed more than one panel. Add Panel "04019C1618K" to Old Panel column 2) Change Panel Nos. in New Panel column to 04019C1668L (from 1618L) and 2260L (from 2210L) 3) Add Panel "04019C2255L" in New Panel column
01-09-057P	The LOMR crossed more than one panel. Add Panel "04019C1617K" to Old Panel column
01-09-282P	The LOMR crossed more than one panel. Add Panel "04019C2220K" to Old Panel column
02-09-746X	The LOMR crossed more than one panel. Add Panel "04019C1636K" to Old Panel column
04-09-0465X	The LOMR crossed more than one panel. Add the following panels to Old Panel column: "04019C(-) 1610K, 1616K, 1617K, 1636K, 1637K, 1639K, 1643K, 1644K, 1663K"
04-09-1576P	Remove from County SOMA letter - property in Oro Valley
06-09-B020P	1) Change LOMR Case No. suffix to "X" from "P" 2) Change Panel No. in Old Panel column to 04019C2245K (from 2225K)
06-09-B019P	1) Change LOMR Case No. suffix to "X" from "P" 2) Change Panel No. in Old Panel column to 04019C2225K (from 2245K)
05-09-0185P	The LOMR crossed more than one panel. Add Panel "04019C2855K" to Old Panel column
07-09-1167P	The LOMR crossed more than one panel. Add Panel "04019C1030K" to Old Panel column
08-09-1560P	Revise the spelling of the wash to "Camino Real Wash" (remove the "r" from "Carmino")
98-09-1060P	Remove from County SOMA letter - property in Tucson

2. LOMCs Not Incorporated

Case No.	Action Request
199106790FIA	Add address "3936 E. La Espalda" to Project Identifier column
92-09-179B	Add Panel "0400731620C" to Old Panel column
92-09-213B	Add Panel "0400731645C" to Old Panel column
94-09-324A	Revise address to "4649 & 4655 N. Flecha Dr."
94-09-582A	Revise address to "4205 N. Camino Cardenal"
95-09-401A	Remove from County SOMA letter - property in Oro Valley

2. LOMCs Not Incorporated

Case No.	Action Request
95-09-561A	Add addresses "2620, 2650, 2661, 2670, 2681, 2690 & 2691 E. Miraval Pl." to Project Identifier column
98-09-087A	Add Addresses "2709, 2717, 2725, 2733, 2741, 2749, 2757, 2764, 2765, 2772, 2773, 2780, 2781, 2788, 2789, 2797, 2805, 2813, 2821, 2829, 2837, 2845, & 2853 S. Greenside Pl." to Project Identifier column
99-09-333A	1) Revise address to "13745 N. Como Dr." 2) Change Panel No. in New Panel column to 04019C1060L (from 1075L)
01-09-288A	Change address to "6955 N. Bobcat Ridge Trail" in Project Identifier column
02-09-067A	Add addresses "4000, 4009, 4017, 4020, 4025, & 4033 N. Flaming Sky Pl." to Project Identifier column
02-09-500A	Change address to "4231 W. Elvado Rd." in Project Identifier column
02-09-821A	Change Panel No. in New Panel column to 04019C1060L (from 1075L)
03-09-0213A	Change Panel No. in New Panel column to 04019C1060L (from 1075L)
03-09-1102A	Add addresses "6129, 6137, 6161, 6169 & 6177 N. Via Jaspeada" to Project Identifier column
03-09-1154A	Change Panel No. in New Panel column to 04019C2265L (from 2275L)
04-09-0222A	Change Panel No. in New Panel column to 04019C2265L (from 2275L)
04-09-1649A	Add addresses "501 & 507 W. Royal Troon Pl." to Project Identifier column
06-09-BA74A	Add addresses "2280, 2285, 2290 & 2295 N. Roanna Ct." to Project Identifier column
08-09-0687A	Change Panel No. in New Panel column to 04019C1705L (from 1715L)
08-09-1604A	Change Panel No. in New Panel column to 04019C1655L (from 1665L)
09-09-0670A	LOMA does not need to be revalidated as property is located within a subdivision that has an approved LOMR removing it from the floodplain (LOMR 06-09-B665P, effective 06/26/2006 to be Incorporated)
08-09-0672A	1) Add "05/06/2008" in the Date Issued column 2) Add "04019C1715L" in the New Panel column

3. LOMCs Superseded

Case No.	Action Request
95-09-092A	Remove from County SOMA letter – property in Oro Valley
98-09-148A	Remove from County SOMA letter – property in Tucson
98-09-373A	Remove from County SOMA letter – property in Tucson
99-09-157A	Remove from County SOMA letter – property in Tucson
99-09-453A	Remove from County SOMA letter – property in Oro Valley
00-09-256A	Remove from County SOMA letter – property in Tucson
01-09-469A	Remove from County SOMA letter – property in Oro Valley
01-09-601A	Remove from County SOMA letter – property in Marana
02-09-1061A	Remove from County SOMA letter – property in Oro Valley
06-09-B233A	Revise address to "5555 N. Via Arroyo Amistoso" in Project Identifier column
06-09-B514A	Remove from County SOMA letter – property in Marana

4. LOMCs to be Redetermined

Case No.	Action Request
96-09-960A	Remove from County SOMA letter - property in Oro Valley
00-09-346P	The LOMR crossed more than one panel. Add Panel "04019C1605K" to Old Panel column
99-09-1084P	The LOMR crossed more than one panel. Add the following panels to Old Panel column: "04019C(-) 2243K, 2245K, 2265K, 2855K"
99-09-1302P	The LOMR crossed more than one panel. Add the following panels to Old Panel column: "04019C(-) 1665K, 2257K, 2280K, 2285K"
02-09-1197P	Change Panel No. in Old Panel column to 04019C1025K (from 1020K)
03-09-0698P	Remove from County SOMA letter - property in Marana
02-09-1039P	1) Change Panel No. in Old Panel column to 04019C0995K (from 0980K) 2) Remove Panels "04019C1030L & 1040L" from New Panel column (not located within unincorporated County)
04-09-1711A	Remove from County SOMA letter - property in Oro Valley
04-09-0697P	Remove from County SOMA letter - property in Marana
03-09-1071P	1) The LOMR crossed more than one panel. Add panels "04019C0955K & 0960K" to Old Panel column 2) Remove Panel "04019C0420L" from New Panel column (not located within unincorporated County)
07-09-0082A	1) Incorrect LOMA Case No. for address in Project Identifier column - 6044 E. Country Club Vista Dr. is LOMA 07-09-0086A, not LOMA 07-09-0082A

4. LOMCs to be Redetermined

Case No.	Action Request
	2) See the comments on Preliminary FIRM panel 1713L. Pima County has submitted a shape file for the Tanuri Wash that shows this structure is out of the floodplain. If the shape file is used, this LOMA will not need to be revalidated.
07-09-1896A	County does not have information on this LOMA. Send a copy of the LOMA paperwork for our review/update and our historical records.
08-09-0198A	County does not have information on this LOMA. Send a copy of the LOMA paperwork for our review/update and our historical records.
00-09-572A	1) County does not have information on this LOMA. Send a copy of the LOMA paperwork for our review/update and our historical records. 2) This LOMA case number will be superseded as property has a LOMA dated 07/14/2006 removing the structure from the floodplain
03-09-0430A	Change the suffix "A" to "P" as this is a LOMR, not a LOMA, that has been incorporated into the new maps

Items to Include on the SOMA letter

Case No.	Action Request
09-09-1246A	Not on SOMA - Needs to be listed under "LOMCs Not Incorporated (Revalidated) - LOMA made effective 05/28/2009 removing structure from the floodplain (Old Panel 1630K, New Panel 1680L)
99-09-1084P	Listed under "LOMCs To Be Redetermined" - needs to be listed under "LOMCs Incorporated". Item 3 in the FIS review comments in this letter addresses this issue.
98-09-442P	Not on SOMA - Needs to be listed under "LOMCs Incorporated" - LOMR is partially located within Pima County, shared jurisdiction with Sahuarita
99-09-684P	Listed under "LOMCs Not Incorporated" - needs to be listed under "LOMCs Superseded" as this LOMR was superseded by LOMR 08-09-1756X, effective 09/29/2008

Digital Data Review Comments

The digital data for the Preliminary D-FIRMs is missing one important element. Shaded X Zones have 4 definitions. These are:

1. Areas of the 0.2% chance (500-yr) flood
2. Areas of the 1% chance flood with average depths less than one foot
3. Areas of inundation from drainage area less than one square mile
4. Areas protected by levees

Yet the shape attribute table has only two attributes: Areas of the 0.2% chance (500-yr) flood and Areas protected by levees. There are numerous regions in Pima County where there are large areas of the 1% chance flood with average depths less than one foot. This includes some of the alluvial fans and shallow urban flooding in the city of Tucson. The District regulates the shaded X-Zones as they relate to their actual flood hazard. We request the shape file attribute table be updated to reflect the actual Shaded X flood hazard.

Levees

As part of the levee certification process the District has submitted LOMRs for the Canada Del Oro Wash (Case #08-09-1811P) and the Pegler Wash (Case #09-09-0020P). Both of the LOMRs are in the final review processes with FEMA's consultants. The District will push for expeditious reviews and approvals of these LOMRs so that the data will be incorporated onto the final D-Firms.

On April 22, 2009, the District mailed information to Ray Lenaburg, Risk Analysis Branch Chief, FEMA Region IX demonstrating there were no backside drainage issues with the Riverside Crossing Levee (Inventory ID 61). The Preliminary FIRM panel 1667L indicates the area behind the levee is protected by a Provisionally Accredited Levee. What additional data is needed to obtain full accreditation for this levee?

Final Digital Data

The District maintains extensive GIS data applications. We request the final digital data for the D-FIRMs be delivered to the District at least 30 days prior to the effective date so that we have sufficient time to re-apply or re-write the GIS applications that will incorporate the data. We recognize Preliminary data may not be used for flood insurance or regulatory purposes until the data becomes effective.

Additional Supporting Information

The District is willing to provide additional information if request in support of the comments listed above. Please direct all comments and questions to Terry Hendricks at (520) 243-1800.

Sincerely

William Zimmerman, Manager, Planning and Development Diviosn

Enclosures

cc: Suzanne Shields, Director and Chief Engineer
Ed Curtis, Senior Engineer, FEMA Region IX
Brian Cosson, CFM, State NFIP Coordinator