

**Bisbee and Herbicides: A Timeline (1950-2017)**  
(last edited 10 April 2018)

***Preface (6 April 2018)***

*In April 1983, following several weeks of public debate, the Bisbee City Council rejected a specific proposal for herbicide use, voting instead to prohibit all use of herbicides by the City. Although challenged numerous times, the Council repeatedly affirmed the prohibition, which became in effect a de facto ban that, recognized by the general public and attested by City officials, continued in practice for some thirty-four years (except for possible routine herbicide use on roadbeds by contractors and, as persistent rumors would have it, ongoing surreptitious use by City personnel in parks and other public areas).*

*One Council re-affirmation occurred in 2000 when, following presentation of the majority report of the volunteer Bisbee Vegetation Management Committee, the Mayor and Council again rejected herbicide use on City properties. Just as the use of herbicides on roadbeds to control Bermudagrass (a common practice in the road construction industry) was not mentioned in 1983 or subsequent Council discussions of herbicides, it was not mentioned in the charge given the VM committee. As a result, though management of roadside vegetation was addressed in the committee's majority report (the recommendations of which, calling for "least-toxic" management, became the City's unofficial guidelines for the next decade or so), vegetation within roadbeds was not.*

*That issue surfaced in 2015, after Bermudagrass appeared in some of the first roads paved under the "road improvement project" voters had approved the previous November. In response to the unexpected Bermudagrass issue, the Mayor and Council on advice from the Public Works department and the volunteer Streets and Infrastructure Committee began consideration of an ordinance allowing use of glyphosate on roadbeds and along the edges of streets. The ordinance was specifically intended to supercede the ban, which did not enjoy ordinance status, having been established only by repeated majority votes of the Council, continual practice by Public Works, and general recognition by the public.*

*This chronology was compiled by citizens opposed to the proposed ordinance. It chronicles relevant data to the end of 2017, at which time the glyphosate ordinance issue had not been resolved.*

*The City's ostensible thirty-four year honoring of the ban ended in the spring of 2017 when, without public notice, the City applied the phenoxy herbicide 2,4-D to portions of Vista Park, an action it repeated the following spring as this preface was being written.*

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## Bisbee and Herbicides: A Timeline (1950-2017)

- 1950 Glyphosate, an organophosphorous (phosphonate) compound (N-phosphonomethylglycine), synthesized
- 1971 Glyphosate (first marketed for cleaning pipe) noted as a potential broad-spectrum herbicide that works by blocking an enzyme (EPSPS) “shikimic” pathway in plants
- 1974 Glyphosate registered as an herbicide by EPA
- 23 Feb 1983 In response to citizen complaints about use of Roundup in the Tombstone Waterway, Acting City Administrator Nellie Hodges says that use of “Roundup. . .can be localized to remove only the vegetation we wish to remove,” and that “The areas in which this product is being used are dangerous for children to be in even if the City was not using herbicides.”
- 6 Mar 1983 Acting City Administrator Nellie Hodges is quoted in local media saying that the City had used Roundup in the waterway once and that it should be effective for five years. She noted that Roundup was given EPA approval in 1974 and that City employees use “an ugly facemask” to prevent the herbicide from temporarily irritating their eyes, though a Monsanto report she cited indicated that the herbicide has a lower irritation level than many common household shampoos and detergents. Cochise County sanitarian Arnold Nanez is reported in the article as saying that Roundup may get into wells along the waterway, but that “those wells should not be used for drinking anyway.”
- 15 Mar 1983 Citizens object to City use of herbicides in the Tombstone Waterway. Acting City Administrator Nellie Hodges noted that the waterway should not be used for recreation and that garbage in the ditch presents more of a health hazard than spraying of herbicide. Sierra Club representative Michael Gregory submitted questions and background data for the City to consider before using herbicides, including data contradicting Monsanto claims of safety, and noted that tests by Monsanto indicating safety of Roundup cannot be trusted.
- 5 Apr 1983 Citizen present 280-signature petition to work session of the Council opposing use of herbicides by the City. Monsanto representative Robert Rakich, invited by the Council, said that Roundup presents no danger if it is sprayed only on weeds and not directly into the Tombstone Waterway water, but that even if particles of the herbicide fall in the water the concentration would be so low as to present no danger. Michael Gregory, representing the Sierra Club, presented scientific studies indicating potential hazards of Roundup in water and elsewhere, and noted that

results of tests showing safety of tests on Roundup had not been made public by Monsanto; Rakich replied that the company must protect its trade secrets.

- 19 Apr 1983 Bisbee City Council, Item #6: “Council consideration on the use of Herbicides to eliminate unwanted foliage within the City limits. MOTION: To not use any herbicides in the City limits.” Passed unanimously (7-0).
- 1 Nov 1983 Following a series of public meetings, including discussion of clearing vegetation from the Tombstone Canyon Floodway (aka “the ditch”) and Roundup label restrictions against allowing it in or near waters, Bisbee City Council took action on Old Business Item #3, “Use of Herbicides and/or Pesticides in City and City Cemetery,” voting 3-2 to “discontinue all use of herbicides and pesticides in the city of Bisbee.”
- 4 Mar 1985 Toxicology Branch of the EPA Hazard Evaluation Division issues its “consensus review” of previous two-year study of tumors in mice leads to recommendation to classify glyphosate as Group C carcinogen (“possibly carcinogenic to humans”); Monsanto objections lead to 10-year controversy
- \_\_\_\_\_ 1986 EPA FIFRA Scientific Advisory Panel (SAP) recommends that glyphosate classification be lowered to Group D (“not classifiable as to human carcinogenicity”)
- 16 Feb 1986 EPA issues “Reregistration Eligibility Decision (RED)” on glyphosate isopropylamine salt
- 8 Apr 1991 City Councilmember Dave Cartun, in asking Cemetery Committee if it would approve use of Round-up in the cemetery, says “Round-up is entirely safe. I could drink a glass of Round-up and not be harmed.”
- Jun 1986 EPA issues “Registration Standard” for glyphosate
- 26 Jun 1991 EPA lowers glyphosate classification to Group E (“evidence of non-carcinogenicity to humans”)
- 30 Oct 1991 EPA’s Second Health Effects Division Carcinogenicity Peer Review concurs that glyphosate should be classified as Group E
- \_\_\_\_\_ 1991 EPA completes reregistration of glyphosate required under 1978 amendments to Federal Fungicide, Insecticide and Rodenticide Act (FIFRA).
- 16 Oct 1998 Public Works Director Ray Sparkman informs Council that PW is currently cleaning debris and vegetation from “Tombstone Canyon Flood Control

Waterway” (aka, “Tombstone Drainage Channel,” aka “the ditch”)

- 1 Dec 1998 Council votes 6-1 (Cline opposed) not to use herbicides for vegetation in the Tombstone Canyon ditch as proposed by Public Works Director Ray Sparkman, but to adopt instead guidelines suggested by former BLM wildlife biologist Jack Whetstone and endorsed by several Old Bisbee residents identifying themselves as “Lovers of the Green,” who re-submitted a petition requesting that in order to preserve habitat “the city and DOC prisoners be more sparing on the stripping” of the ditch.
- The guidelines contain six points: 1) Cleaning growth from the ditch should be done in the late fall or early winter; 2) Trees should be completely removed, not just cut down with stumps left; 3) native trees such as walnut, ash and sycamore should be left growing on the banks; 4) alternate sections should be cleaned in rotation; 5) human litter and trash as well as vegetation should be removed; 6) after serious cleaning effort, maintenance schedule should be reduced to an as-needed basis.
- 5 Oct 1999 Proposal introduced to Council to use herbicides to control “unwanted” vegetation in traffic islands, Mule Gulch Floodway (aka “the ditch”), Evergreen Cemetery, etc.
- 8 Oct 1999 City official Ray Sparkman is cited in *Bisbee Review* article saying the City staff spends “23,000 hours on weed control each year.”
- 12 Oct 1999 Following citizen objections to herbicide use, Council votes to form citizen committee to examine problem and make recommendations.
- \_\_\_\_\_ 2000 Monsanto US copyright on Roundup expires
- 18 Apr 2000 Bisbee Vegetation Management Committee majority presents its report (including approximately 100pp of supporting exhibits) recommending Integrated Pest Management (IPM) and no herbicide use to the Council. Council takes no action except to accept the report.
- 18 Apr 2002 City Manager Robert Yandow announces that City will soon begin clearing debris and vegetation from the ditch.
- 24 Apr 2002 Citizens object to Council that the plan announced by Public Works to begin clearing the ditch before monsoons is contrary to the “Whetstone Guidelines” adopted 1 Dec 1998 which call for clearing to be done in fall or early winter “so as not to interfere with the normal growing season” for flora and fauna.
- 18 Mar 2003 Public Works Director Russ McConnell proposes to start clearing vegetation from

the ditch before summer rains.

- 18 Mar 2003 City Council item #10 under New Business: "Discussion and Possible Approval of the Plan and Procedure for Removing Intrusive Vegetation from the Mule Gulch Channel." Mayor Dan Beauchamp notes that the herbicide Garlon 4 was used by The Nature Conservancy to control blackberry, that the City plan was not to broadcast but to target individual woody plants in the gulch, and that "herbicides degrade rapidly in water." After citizen objections to the plan, and requests that the City adhere to the "Whetstone Guidelines" that had been filed with the City a year ago, motion by Councilmember Ted White to table was passed unanimously.
- \_\_\_ Nov 2003 Monsanto toxicologist Donna Farmer emails Monsanto CEO Sekhar Natarajan that the company "cannot say that Roundup is not a carcinogen" because "we have not done the necessary testing of the formulation to make that statement. We can make that statement about glyphosate and infer that there is no reason to believe that Roundup would cause cancer."
- \_\_\_ Jan 2005 Anneclaire De Roos, Aaron Blair et al, "Cancer Incidence among Glyphosate-Exposed Applicators in the Agricultural Health Study," *Environmental Health Perspectives* 113(1) Jan 2005::49-5 (published on line 4 Nov 2004): concludes that a "prospective cohort study" of some 57,000 pesticide applicators and other farm-related workers in North Carolina and Iowa, % of whom reported using glyphosate, found that "Glyphosate exposure was not associated with cancer evidence overall or with most of the cancer subtypes. . . [though there was] a suggested association with multiple myeloma."
- 17 Apr 2007 City Council meeting.  
Under City Manager's Report it was noted that "Mr. Pauken will report on. . . Prohibition of the use of herbicides and pesticides on city-owned properties."
- 18 Jun 2007 Citizen complaint in local media that City is not following the Vegetation Management Plan, so weeds are growing in the cemetery, traffic islands and parks and desired ornamental plants are dying.
- 19 June 2007 City Council meeting. Present: Mayor Ron Oertle, Anna Cline, Luche Giacomino, Edward " Maynard" Kreps, W. J. " Jack" Porter, Raymond Rodgers, Bennie Scott.  
The Minutes state that, under Item #15, "Discussion and Possible Approval of Allowing Public Works to Use Commonly Used Herbicides in the Vista Park to Control Weeds and Promote Turf Growth," Russ McConnell, Public Works Director requested "on behalf of the Parks & Recreation Committee. . . Council approval to authorize the use of commonly used, over the counter

herbicides to promote turf growth in the Vista Park.”

Porter said he understood from Ms. [sic] Cummings [sic] presentation to Council that Vista Park would be turned over, reseeded, and herbicide would be used once during the reseeding process. Mr. McConnell said this was the original plan but after discussion with the City Manager the funding for total renovation of Vista Park was not available.

Giacomino asked for the percentage of grass and weed at Vista Park. McConnell replied that a turf specialist from Turquoise Valley assessed that Vista Park was about 90% weeds. Scott said that Douglas parks were cared for with herbicides and fertilizer.

Oertle mentioned that CCAH maintained the parks a few years back and if this was a possible solution. Mr. McConnell replied that CCAH did not weed Vista Park or the cemetery.

McConnell indicated that Ms. [sic] Maggie McGrail expressed that she did not agree with herbicide or chemical use on any of the parks, but had no alternate solution.

The following individuals expressed opposition to the use of herbicides at Vista Park: Rodney Woodville, Larry Lacterman, Nick Night, Joy Stewart, Michael Gregory, Ben Susman, Roy Goodman, Kiyomi Foxe, Betsy Breault, Candace Quibel [sic], Susan Wille, Jill Thomas, SAM, Nancy Pertenza [sic].

Some of the individuals gave presentations on the hazards and affects of herbicide use and suggested alternatives, including (1) a volunteer group to occasionally pull weeds; (2) public participation on how the park should be used; (3) controlling the problem by cutting weeds at the proper time, not allow weeds to go to seed, and use plenty of water; (4) since grass is not natural to our environment, focus on a plan to work with our habitat (5) consider the Vegetation Management report and recommendations provided to the City by the Vegetation Management Committee in 1999/2000, especially the first recommendation of the report, continuation of the existing ban on herbicide use, and the forty-four recommendations which specify practical measures; (6) have the Parks Department and the Parks & Recreation Committee evaluate current park management and implement a plan.

Councilmember Kreps commented that Vista Park was an absolute catastrophe. He said the park had high water use trees that were dying because of the lack of water and suggested implementation of a long term plan for the park.

Giacomino and Rodgers acknowledged receipt of telephone calls from the public opposing the use of herbicide at Vista Park.

Kreps moved that Public Works not be permitted to Apply Commonly Used Over-the-Counter Herbicides to the Vista Park to Promote Turf Growth. Porter asked that staff implement the final report of the Vegetation Management Committee and the Water Wise Study as he did not believe either report was being utilized by city government. He stated that he hoped the motion would be amended. Kreps said the motion did not need to be amended, but the issue needed

to be confronted. Porter seconded the motion. City Manager Pauken stated that for the record, this issue was well understood and that the Parks & Recreation Committee had also provided recommendations that were recently brought to Council. Oertle restated the motion which was that Public Works not be permitted to Apply Commonly Used Over-the- Counter Herbicides to the Vista Park to Promote Turf Growth. Motion passed unanimously on a roll-call vote.

- 17 July 2007 City Council meeting. Present: Mayor Ron Oertle, Anna Cline, Luche Giacomino, Edward " Maynard" Kreps, W. J. " Jack" Porter, Raymond Rodgers, Bennie Scott.  
The Minutes state that during Call to the Public, Susan Wille presented information she had gathered on the use of herbicides, specifically Roundup, in City Park. She stated that she appreciated the willingness of the Council Members to honor the concerns of their constituents.
- 2008 France’s highest court finds Monsanto lied about Roundup being biodegradable
- 2009 SIC established under Mayor Jack Porter
- Feb 2011 After completing work it was established for (by Mayor Jack Porter, who had campaigned on need for streets improvement), the “original” Streets and Infrastructure Committee (SIC, Kim Zittner chair, Doug Dunn, co-chair) reconvened to conduct “PARA” study of Bisbee streets and infrastructure needs.
- Jun 2011 Last recorded meeting of original SIC (though “non-quorum meetings” of various members may have been held as late as 2014)
- 13 Feb 2012 French high court rules Monsanto guilty of poisoning a French farmer  
<https://www.reuters.com/article-us-france-pesticides-monsanto/monsanto-court-case-stirs-french-pesticide-debate-isUSTRE81COVQ20120213>
- 2 Oct 2012 After discussion, including explanation by City Attorney John MacKinnon that the City would use “only the least toxic chemicals available and in minimum amounts” and that the City parks and 100' around the municipal swimming pool would be excluded from herbicide treatments; and that the Public Works manager would be tasked with choice and application procedures of herbicides; and Councilmember Bennie Scott said “I don’t think that one day of Roundup will kill half of Bisbee”; in the first of two required votes, Council votes unanimously to approve an ordinance allowing use of “pesticides and herbicides necessary to preserve public infrastructure or the health and safety of the community where no reasonable alternatives are readily available under the circumstances.”
- 14 Oct 2012 Public Works Director Andy Haratyk tells public forum that the City has been

observing the 1983 “ban”, but does not have funding for enough personnel to address all the current vegetation problems, including woody plant root growth damaging retaining walls in ditch. He noted that “we have experimented with a combination of vinegar, salt and dish detergent on weeds, it is effective, but it takes sometimes up to two sprays”; he went on note that “all herbicides at some point are sort of a scorched earth policy.” According to an 18 April 2012 article in the *Bisbee Observer*, “He added he is really only interested in spraying an herbicide on asphalt surfaces that have been damaged by weeds or Bermuda Grass and the gutter pan and the cracks in our gutters and curves.”

- 16 Oct 2012 City Council meeting. Present: Ken Budge, Anna Cline, Luche Giacomino, Rob Page, Bennie Scott.  
Citizens present 267-signature petition requesting that Council honor the 1983 motion against use of herbicides; KBRP Director Ryan Bruce announces \$2000 raised so far in a fundraising effort to offset costs of City using manual methods instead of herbicides for vegetation management. Council votes (4-1, Giacomino opposed, Burke absent) to table proposed ordinance allowing use of “pesticides and herbicides.”
- 18 Dec 2012 Council passes Ordinance 0-12-19 establishing the Sustainability Commission.
- 27 Jan 2014 Meeting of The Community Sustainability Commission (TCSC)
- 10 Feb 2014 TCSC meeting canceled
- 24 Mar 2014 TCSC meeting
- 28 Apr 2014 TCSC meeting
- 19 May 2014 TCSC meeting
- 28 July 2014 TCSC meeting
- 18 Aug 2014 TCSC meeting
- 25 Aug 2014 PRC meeting. Action Agenda: Present: Kay Lynn Cummins (chair), Carole Beauchamp, Lawrence Cummins, Cado Daly, Luche Giacomino, Shirley Doughty (Council Liaison), Lorena Valdez (Staff Liaison, absent), Andy Haratyk (Staff Liaison absent). No herbicide action noted.
- 17 Nov 2014 Special meeting of TCSC; Action Agenda indicates no actions taken
- Nov 2014 City votes (58% in favor) to increase sales tax by one cent to pay for seven-year



“road improvement project”

- 22 Dec 2014 TCSC meeting canceled due to lack of quorum
- 26 Jan 2015 TCSC meeting
- 9 Feb 2015 TCSC meeting canceled due to lack of quorum
- Mar 2015 IARC designates glyphosate a “probable human carcinogen”
- 2 Mar 2015 PRC special meeting. Action Agenda: Present: Kay Lynn Cummins (chair), Carole Beauchamp, Lawrence Cummins, Luche Giacomino, Shirley Doughty (Council Liaison), Lorena Valdez (Staff Liaison); absent: Cado Daly, Andy Haratyk (Staff Liaison absent) New Business Item #2: Discussion and possible approval of irrigation system maintenance, update on the Vista replanting and update on he pool, TABLED.
- 23 Mar 2015 TCSC meeting held, but noted on City website as canceled
- 22 Apr 2015 PRC meeting Agenda: New Business Item #2: Discussion and possible approval of Irrigation system maintenance, update on the Vista replanting and update on he pool. No Action Agenda, audio or video available.
- 27 Apr 2015 TCSC meeting canceled due to lack of quorum
- May 2015 No information on City website about possible TCSC meeting
- 5 May 2015 Council approves request of City Manager Jestin Johnson that the City purchase \$138,000 of used paving equipment from Eagle Asphalt of Huachuca City, which is going out of business
- 20 May 2015 City buys used paving equipment from Eagle Asphalt, LLC., for \$138,000
- \_\_\_\_\_ 2015 City begins “Improvement Program” with repaving of Evergreen Cemetery roads
- 22 Jun 2015 TCSC meeting canceled due to lack of quorum
- 24 Jun 2015 First meeting of “new” Streets and Infrastructure Committee (SIC) convened to begin oversight of tax-funded road improvement project.” Present: Ramiro Ross and Lawrence Phillips (members of original SIC established in 2009 under Mayor Jack Porter and participants in the “PARA” study started in 2011), Stephen Dey, Joe Mauzy, Harold Pace, David Smith, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison); Ross elected chair, Phillips, co-

chair.

Committee members, all of whose terms begin with this meeting, introduced themselves.

Phillips noted that the original SIC had completed it's work, but when the PARA study opportunity came up, they reconvened to do that study.

Public Works Operations Manager Haratyk reports that paving equipment has been purchased since paving with the City's own equipment will be considerably cheaper than contracting to have the resurfacing done; that no "maintenance" (i.e., chipsealing) has been done any of the roads paved in the last 6-22 years; that most of the roads classified as "poor" in PARA-study are now "failed"; that the current plan calls for first resurfacing those that are not failed in order to prevent their becoming so; and that a "demo" paving has been done on one of the cemetery streets.

Phillips notes that while the Mayor and Council adopted the MAG (Maricopa Association of Governments) standards and the City would "like to do" that standard for asphalt roads, the Block Grant standard is used for chipseal roads (cf Saginaw and Bakerville). Haratyk noted that 3 layers of chipseal is equivalent to 3" of asphalt.

Haratyk explained that 50,000' of streets were to be resurfaced in the seven years of the improvement project; that the roads in Briggs, Galena and San Jose areas were to get most immediate attention (and noted that the "World War II streets" in San Jose were last chipsealed 21 years ago); that Warren roads had received the most attention in the past 10 years.

During Member and Staff Comments, alternative surfacing methods were discussed; Phillips noted that neighbors had surfaced the McClaren extension by using a clay-caliche mixture with proper compacting and it has withstood a number of rains; Ross brought up use of "millings" and noted that Aspen St., where they had been used, had lasted 6 years; Haratyk explained that while millings were not illegal, ADOT strongly recommended against their use; another member [Von Grundlach?] noted that in Texas a liquid emulsifer was being used that when mixed with other materials gave the equivalent of concrete.

Ross recommended that the audio record of SIC meeting audio files be transcribed as minutes by the City and Haratyk said he would see to it. Phillips noted that non-quorum work sessions of the committee could be held and then discussion items brought back to full committee for decision-making.

8 Jul 2015 Joint Work Session of SIC, Evergreen Cemetery Committee and Parks and Recreation Committee, discussion of Open Meeting Laws [sic]

22 Jul 2015 SIC meeting: no audio or video file available.

Present: Lawrence Phillips (co-chair), Stephen Dey, Joe Mauzy, David Smith, Peter Von Gundlach, Andy Haratyk (Staff Liaison); Absent: Ramiro Ross (chair), Harold Pace, Joan Hansen (Council Liaison).

No mention of herbicides or vegetation management in Agenda, Minutes, or Action Agenda, which include under New Business Item #2, "Discussion and review of Current Street Repair Plan" and Item #4, "Discussion of Retaining Walls."

27 Jul 2015 TCSC meeting, Earl Doane approved as chair of TCSC

17 Aug 2015 TCSC meeting

18 Aug 2015 SIC meeting. Present (according to audio file and minutes): Ramiro Ross (chair), Stephen Dey, Joe Mauzy, Lawrence Phillips, Peter Von Gundlach, Andy Haratyk (Staff Liaison); Absent: Harold Pace, David Smith, Joan Hansen (Council Liaison; Action Agenda indicates Smith was present).

Under New Business Item #1, "Coordinate. . .with utility company repairs," Public Works Operations Coordinator Haratyk explained that in part of San Jose, instead of planned chipsealing they would pave with 3" asphalt, and dig 3-4" down and 24" wide at edges of roads ("the weakest part" of the paving, which is why weeds and grass is coming up) to lay AB, which will also allow them to "dig up all that Bermuda grass since I can't spray it."

Haratyk went on to explain that "Whenever you have a concrete curb and asphalt [e.g., at the dumpster by St. Patrick's] water gets between them and grass comes up."

21 Sep 2015 TCSC meeting canceled due to lack of quorum

29 Sep 2015 SIC meeting. No audio files available; video is corrupted: shows only beginning of meeting, ends just before discussion of encroachment items listed on the Agenda and Action Agenda under New Business as, Item #2a. "Control Grass and Weed Pavement Encroachment - NO ACTION" and Item #2b. Review Applicable Ordinance - NO ACTION"; Minutes do not mention either item.

Present: Ramiro Ross (chair), Stephen Dey, Joe Mauzy, Lawrence Phillips, David Smith, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison); Absent: Harold Pace.

Minutes of 8 August 2015 meeting were approved.

On existing fragment of the video, Hansen suggests that "since people are saying 'I don't see what's being done'" that a short presentation should be made to the Council; Ross noted that SIC has not been able to get story in the newspaper, and it is very disappointing that "there are no people here" despite the meetings being on TV, properly noticed, agendas on line, etc."If we don't bring it to the Council, nobody else hears about it."

8 Oct 2015 TCSC meeting

- 21 Oct 2015 Councilmember Joan Hansen says in an email to Stephen Dey that she has “received the minutes of a council meeting in 1983 where the use of herbicides and pesticides was banned in the City of Bisbee,” that “There is no ordinance covering this subject,” and that a council work session “to discuss growth of weeds and grass impacting the streets” is being planned for 28 Oct and the herbicide subject can be discussed there too.
- 21 Oct 2015 Stephen Dey says in response to email from Joan Hansen that he is “researching organic and natural weed control products”
- 27 Oct 2015 TCSC meeting canceled due to lack of quorum
- 28 Oct 2015 Work Session of Council. Present: Mayor Ron Oertle, Anna Cline, Douglas Dunn, Eugene Conners, Sharon Doughty, Joan Hansen, Serena Sullivan.  
The Action Agenda says the only item was “Discussion Regarding Increased Complaints Calls Regarding Control of Weeds, Unightly Properties, Potential Fire Hazards, Junk Cars, and Trash.” and goes on to note: “NO ACTION REQUIRED” AND “Adjournment: ACTION APPROVED.”
- 29 Oct 2015 SIC meeting. Present: Ramiro Ross (chair), Stephen Dey, Joe Mauzy, Lawrence Phillips, David Smith, Peter Von Grundlach, Joan Hansen (Council Liaison), Dave Sporhase (guest); Absent: Harold Pace, Andy Haratyk (Staff Liaison).  
Agenda and Action Agenda include under Old Business Item #4. a. “Control Grass and Weed Pavement no action Encroachment - NO ACTION” and b. “Review Applicable Ordinance - NO ACTION “Street Maintenance - Vegetation Encroachment - NO ACTION.” Minutes of 18 Aug 15 and 29 Sep 15 with correction of latter to “grass and weed encroachment.”  
Minutes for meetings of 25 [sic] August 2015 and 29 September 2015 were approved.  
In regard to “Street Maintenance Vegetation Encroachment,” Ross displayed photos of streets with encroachment by weeds and grasses, including Minder (chipseal with vegetation coming up on edges) and McClaren (after two weeks).  
Hansen explained that there are no ordinances, but only a 1983 Council decision, and noted that the Mayor can “put this [SIC proposal to allow use of ‘herbicides or an eco-friendly’ method] on as an agenda item [to reverse] the previous decision.” Smith added that the proposal would indicate use was to be only on roads and shoulders.  
The Minutes say, “Council Liaison Joan Hansen reported that a search was conducted to determine if any city ordinance prohibited the use of herbicides for vegetation encroachment upon city streets, pavements, and substructures. No such ordinance was in existence. There were only references to minutes or discussions. After review of 2 colored (9x12) pictures, showing grass and weeds breaking

through some recently laid asphalt, the committee recommends the use of some eco-friendly herbicides to treat the grounds and edges of the roadway before laying any asphalt paving. This item to be referred to city council by the staff liaison and city council liaison.”

In discussion on the audio file but not in the Minutes, Dey noted that they [the SIC] don't want to use the word "Roundup". Hansen stated that if "eco-friendly doesn't work," then we should allow limited use of herbicides; and noted that it's too late to get it on agenda for next meeting, but can get it on for the next meeting.

Von Grundlach explained that these roads represent two different situations: Minder was chipsealed and "people who are ideologically opposed to herbicides" could clean the road edges themselves, if they that opposed to herbicides they can do it themselves; McClaren is a different problem: it is on a slope, the texture of the asphalt had allowed it slide down the grade making thinner places where the grass could more easily penetrate, and the problem might be solved in the future by applying the asphalt in layers and compacted more rigorously rather than all at once.

Phillips stated that "Higgins Hill. . .was done two weeks ago and grass is coming up in the middle of the street." Von Gundlach reiterated that the problem is on slopes, and that Public Works Director Klimek had said they will re-evaluate construction process and figure out how to deal with the problem.

Ross said that Haratyk [excused from this meeting] feels he needs to get as much of the project done as possible before the cold weather sets in.

Dey, noting that "unless you kill the roots" it will come back, proposed that the SIC should recommend that we use the standards allowed by government for paths and roads on organic farms, and said that "believe it or not, organic standards allow Roundup; if I use Roundup on my organic farm, wait a year, then I can grow on that area."

Phillips wondered what can we use on "Paradise Trees. . .Cancer Trees, which in the past had been used in mine reclamation areas. Von Gundlach said "I sprayed Roundup on my property on both sides of McClaren; where I used it no grass is coming up."

Ross said it was important to emphasize that we haven't used herbicides yet. Dave Sporhase, road crew employee and guest at the meeting, noted that road crews have been using diesel oil instead of herbicides and that they intend to use eco-friendly method.

Under New Business, Maintenance, Ross explained the difference between "paving" and "maintenance": "Street maintenance" means resurfacing existing asphalt with same thin coat of asphalt using the same proportion of oils that were in the original asphalt so the new and existing bind together. It was noted Bakerville, Saginaw and Arizona St have been identified for this. Ross noted that making roads last for 20 years depends on regular "maintenance".

After the meeting was adjourned, Dey mentioned that "2,4-D is actually a

plant-growth hormone [and that] 2,4,5-T is also a plant-water-regulating hormone [and that] in their pure state they're harmless; I used it all the time in my botany classes." He went on to note that "The only reason Agent Orange was as dangerous as it is because when they make that [sulfur?] by-product. . .dioxin [is formed and that it took] a lot of money to remove so they just sprayed it wholesale in Vietnam. . .in southern Oregon. . . . a lot of my friends were. . . I saw the damage that was done by that stuff. and yes, in 1983 there were a lot of scary things going on. . . ."

- \_\_ Nov 2015 European Food Safety Authority (EFSA) assessment report concludes that glyphosate is "unlikely to be genotoxic or to pose a carcinogenic threat to humans"
- 1 Nov 2015 Email from Public Works Director Tom Klimek to Assistant Professor Mónica Ramirez-Andreotta (Univ. Arizona Department of Soil, Water and Environmental Science) unsuccessfully seeking "Bio-degradable Non-carcinogenic herbicides. . .that can be sprayed on Public Streets/Curbs/Gutters & Shoulders, which can kill weeds without having a detrimental impact on the environment"
- 3 Nov 2015 City Council meeting. Present: Mayor Ron Oertle, Anna Cline, Douglas Dunn, Eugene Conners, Sharon Doughty, Joan Hansen, Serena Sullivan.  
Minutes of 20 Oct 2015 Work Session were approved. No mention of Work Session of 28 Oct 2015.
- 16 Nov 2015 TCSC meeting: Earl Doane (chair), Keith Bogue, Ryan Bruce, Todd Bogatay, Serena Sullivan, Staff Liaison Joe Ward present.  
Discussion about inviting Public Works Operations Manager Andy Haratyk to TCSC meeting.
- 30 Nov 2015 SIC meeting: Present: Ramiro Ross (chair), Stephen Dey, Joe Mauzy, Lawrence Phillips, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison), Mayor Ron Oertle.  
Ross mentioned that one concern the SIC must always keep in mind is "Health, Safety, and Welfare."  
Under "Old Business, Report on Vegetation Encroachment Into Pavements and Streets" and the subheading concerning "Continued Research on Applicable Ordinance and Discussion," the minutes note that "The research to determine whether there is an ECCO [sic] friendly herbicide to use on streets and pavements is continued;" that "no ordinances have been found to prohibit herbicides use on streets and roadsides: so that the "issue on use of herbicides on streets and roadsides is still open for discussion."  
The video records that Hansen said, "The only thing I was able to find was in the minutes back in November 1985." The video records that SIC member

Phillips noted that if there are no ordinances, it's up to the Mayor and Council and that "if we hit them [i.e., the public] with dollars and cents. . . ."

Hansen reported that Public Works Director Tom Klimek got in touch with U of A but has had no response yet. Dey said "I've got to get on the computer and start to do some research," and Hansen reported that "I went through that whole manual on organic farming, and there were two products, and I didn't know if they were able to be used for transportation."

The minutes say that Oertle said, "One issue for the use of Round-up was addressed by Mayor Oertle in which the use of Round-up was disapproved by Council in the year 2006 [sic]." In the video file Dey noted that "We won't get ahead on this if we use the word 'Roundup.'"

The minutes note that "The Public Works Liaison will apply to use a salt and dish detergent on a test site"; the video of the meeting records that Haratyk said "the problem in our streets is Bermudagrass. . . . they [members of the public opposed to herbicide use] don't want it on the streets because of the waterways." Ross questioned use of the word "they" and Hansen said "I have talked to several people, and they will fight it" [ie, proposal to use herbicides].

Oertle said, "It came up in 2006 [sic]. . . and there was quite a crowd here; there was a recommendation from Parks and Recreation to use Roundup and the Council voted 6-1 unanimously to reject it. . . . It was a hot button issue." [NB: the minutes of 2006 Council meetings do not record any discussion of herbicides.]

Haratyk said "Councilman [sic] Giacomino said, 'I use it at home, I've gotten six phone calls, five against and one for;' she goes 'I support it, I use it, but everyone of my of my constituents, all six of you said No,' so she voted No. The Sustainability Committee [sic] even had a problem with me. I said 'either we do this or you get your check books out,' and I got a blank look."

Hansen said "Maybe that's who we have to have research it." Haratyk replied, "I think it is; and I think when we do this, when we talk about this, let's not talk about. . .let's not talk about. . .and we know it works. . . ." Dey interjected, "Are we wasting a \$1/2 million here and we'll have to go back in 5-10 years and repave a road that's supposed to last 20 years because. . . ." and Haratyk continued, "If we're going to fight a battle, let's fight a battle we can possibly win. Let's talk about vinegar [dish detergent]. . . . Let's talk about that, it's completely organic. . . . If we want to win a battle with these guys. . . vinegar, salt and dish detergent. . . Let's pick something innocuous. It works, we've got test sites on it at the City yard at the County and we know it works, there's lots of research out there on the stuff, and let's not. . ."

Dey interjected, "There's actually commercial products out there that are just basically that, you can buy it by the 55-gallon drum." Haratyk said "That's right, we can buy the product ourselves and mix it. But let's talk about that as a product to use because we might have a chance with that stuff. . .and the other thing about it is, I can go out and spray it on a windy day, I'm not going to give anybody cancer. . . . OSHA won't have to mitigate anything. . . . Let's bring this

forth as a completely organic way to do this. . .”

Dey said, “That stuff will not [kill?..] Bermudagrass.” Haratyk said, “Oh yes it will.” Dey: “It will kill the roots of Bermudagrass?” Haratyk said “We’ve used it. We’ve got test sites out at the yard.”

Oertle said, “In 2006 [sic], I did vote and I objected strenuously to the use of Roundup at that time; however, if you look at those minutes or those tapes you will understand. . .” Haratyk interjected, “I was here. . . . it was a good fight.”

Oertle said “What I’d like you to do, because I don’t fully understand it myself. . . the Bermudagrass under the pavement. . . . just how that works.”

Haratyk said, “Alright. Bermudagrass is a nighttime germinator; Bermuda’s grass doesn’t germinate and grow in the light of day. Bermudagrass is a grass that grows when the soil temperature reaches a certain point. That’s when Bermudagrass grows. So this is the irony of it: you go to a road, you scrape it off, you put hot asphalt on it and that Bermudagrass finds its way right through it. . . . because it brings the soil temperature up. When you look at the Vista Park, and people [ask], ‘You’re watering the grass, aren’t you watering it early?’ I am watering it early because I want to get moisture on the soil because as soon as the soil comes to the right temperature that grass will grow. If you miss that point, you’ll never get your Bermudagrass up as thickly as you want it. But Bermudagrass is a nighttime germinator, it doesn’t grow in the sunlight, it grows and germinates according to the temperature in the soil. So, it loves warm soil.”

Ross said, “We have a good argument here, to use an acceptable. . .that has been used on test sites, a combination of vinegar, salt and dish detergent. But the question remains that, will it be effective against Bermudagrass. You haven’t made that determination.”

Haratyk responded, “Well, we have, because in 2006, Bill Bagby and Hector and myself picked out areas at the City garage that are in the County and we did weed abatement, we did test spots where we used this product and we had pretty good luck with it. . . .”

Haratyk went on, “It’s more expensive than Roundup when you get it all mixed, it’s a bit more expensive, but it’s safe. And remember. . .but this is one of the issues we’re going to have: once you start putting salt in the soil, that’s a scorched earth policy. . . .”

Dey said “There’s other things we’ve got to research. They’ve got one that’s molasses based and corn gluten. . .for some reason what corn gluten does, it kills root hairs. . .”

Haratyk said, “what the dish detergent does, is it breaks down the skin on the grass. . .and that’s how the salt and vinegar work. . . .” Dey said, “Yes, and that would work on Bermuda too, that’s why we have to do more research, there’s so many new things out there. . . .”

In response to “Completed Asphalt Paved Street Concerns” brought forth about “applicable materials standards, adequacy of compaction equipment, crew size and crew qualifications, asphalt design mix, temperature controls, and



compaction tests,” it was decided that “Concerns brought forth will be reviewed and recommendations for remedies will be exercised accordingly. (A) pavement core will be taken (B) new pavements will be evaluated using the same data entry criteria used to establish pavements [sic] condition for the original 2009 pavements need plan”

- 14 Dec 2015 TCSC meeting canceled due to lack of quorum
- 21 Dec 2015 SIC meeting. Action Agenda indicates the meeting was canceled, but Minutes indicate it was held. Present: Ramiro Ross (chair), Stephen Dey, Lawrence Phillips, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison); absent: Mauzy, Pace; minutes indicate that Council Liaison Hansen was both present and absent.  
Agenda included “Update Report on Vegetation Encroachment on Pavement.”  
No mention in the Minutes of vinegar-salt-dish detergent alternative proposed by staff at previous (30 Nov 2015) meeting.
- 2016 USGS study finds glyphosate in waterways in 38 states and in a majority of rivers, streams, ditches and wastewater treatment plant effluent tested, and in 70% of all rainfall samples
- 4 Jan 2016 TCSC meeting canceled
- 27 Jan 2016 SIC meeting: cancelled due to lack of quorum; Agenda includes under Old Business Item#3, Update Report on Vegetation Encroachment Control on Pavements”
- 24 Feb 2016 SIC meeting. Present: Lawrence Phillips (co-chair), Stephen Dey, Joe Mauzy, Peter Von Gundlach, Andy Haratyk (Staff Liaison); Absent: Luche Giacomino, Ramiro Ross (chair), David Smith, Joan Hansen (Council Liaison),  
Agenda and Action Agenda include under Old Business Item#3, Update Report on Vegetation Encroachment Control on Pavements- NO ACTION” (not mentioned in Minutes).  
Public Works Operations Manager Haratyk reported that “vegetation control” had been “turned over to Sustainability [Committee, and that] Joan [Hansen] is handling that for us. . . . I don’t know what meetings they have had since that.”
- 24 Mar 2016 SIC meeting canceled
- \_\_ Apr 2016 EPA releases on Internet its conclusion that glyphosate is not a carcinogen; post is taken down three days later

- 25 Apr 2015 TCSC meeting canceled
- 28 Apr 2016 SIC meeting: Present: Lawrence Phillips (co-chair), Stephen Dey, Luche Giacomino, David Smith, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison); Absent: Joe Mauzy, Ramiro Ross (chair).  
 Minutes for the 24 February 2016 meeting were approved.  
 Minutes say “No report on vegetation encroachment control”; Agenda and Action Agenda include under Old Business Item #3, “Update Report on Vegetation Control from Sustainability - NO ACTION.”  
 Hansen reported that the Sustainability Commission has not met and will not meet for several months.  
 Phillips reported that the new section of Hwy 80 by Youngblood’s (between Bisbee and Tombstone) has Bermuda coming up not just on the edges but in the road, in the safety lane etc “you can see all that green coming through there. . . . Haratyk added, “and they sprayed it.”  
 Haratyk reported that “I did find out that we don’t have an ordinance, we have an agreement that we won’t.” Hansen added, “That’s right”; Dey added, “Right”.  
 Haratyk said, “I put Weed and Seed in Vista Park, I stuck my neck out.”  
 Phillips said ‘You can’t help but monitor that situation with the vegetation situation. . . . maybe put photographs and some pictures in the paper, say ‘This is your brand new street. . .this is your brand new street after the rains. . . . we need to do something’; Dey added, “This is your brand new street, it cost you this much, how often do you want to pay for this.” Hansen said “I used Roundup. . . .”  
 Haratyk said, “The last time we voted on this. . .I talked to Luche Giacomino and she made it very clear to people she said ‘You know, I use Roundup’ and she said ‘I’m going to continue to use Roundup, but I only got 5 phone calls, it was four against and one for, and that’s what my constituents wanted me to vote for and that’s what I did, but she made it very clear, she said this is what I do and what I’m going to do’; and we gave them two meetings, and we said to them at the meetings ‘Please let your Councilpeople know how you feel about this, and the majority [received only] eight to ten [calls].” Dey added, “It’s legal to use in organic gardening except on your food products.”
- May 2016 Joint FAO/WHO Meeting on Pesticide Residues concludes that “glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet”
- 26 May 2016 SIC meeting. Present: Ramiro Ross (chair), Stephen Dey, Luche Giacomino (listed as absent in Agenda, Action Agenda and Minutes, present on audio file), Joe Mauzy, David Smith, Peter Von Gundlach, Joan Hansen (Cocunil Liaison), Andy Haratyk Staff Liaison)..

Minutes for 28 April 2016 meeting were approved.

No mention of herbicides or vegetation management in Agenda, Action Agenda, Minutes or audio file.

- 23 Jun 2016 SIC meeting: website says canceled due to lack of quorum, but SIC had voted to skip Jun, Jul and Aug.
- 25 Jul 2016 TCSC meeting canceled
- 28 Jul 2016 SIC meeting canceled due to lack of quorum
- 25 Aug 2016 SIC meeting canceled due to lack of quorum
- 12 Sep 2016 EPA issues “Glyphosate Issue Paper” reiterating its Group E status
- 29 Sep 2016 SIC meeting. Present: Stephen Dey, Luche “Audrey” Giacomino, Joe Mauzy, Larry Phillips, David Smith, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison); Absent: Ramiro Ross (chair).  
Minutes for the 26 May 2016 meeting were approved.  
Action Agenda shows no action on Old Business Item #3, “Update on Vegetation Encroachment Control on Pavement”; Minutes do not mention the item.
- 24 Oct 2016 TCSC meeting. Action Agenda not available on line. Agenda does not mention vegetation control or herbicides.
- 27 Oct 2016 SIC meeting. Audio file corrupted, Old Business item #1, “Financial Review Handout” missing; file opens at end of Old Business, “Paved Streets Report” and beginning of “Paving Streets Schedule” items.  
Present: Ramiro Ross (chair), Stephen Dey, Luche “Audrey” Giacomino, Joe Mauzy, Larry Phillips, David Smith; Absent: Peter Von Gundlach, Andy Haratyk (Staff Liaison), Joan Hanson (Council Liaison).  
Minutes for the 29 September 2016 meeting were approved.  
During discussion of New Business, “Committee’s Future,” it was noted by Phillips that the original charge to the Committee (established under Mayor Jack Porter) has been fulfilled and a reorganization and redirection from the Mayor and Council would be appropriate, including “caretaking of infrastructure,” which would include “looking into the herbicide issue.” According to the minutes “Smith stated that any Mayor would like to keep this a viable committee.  
Although such a proposal is not found on the audio or video records of the meeting, the Minutes state under the “Future and Function of the Committee” item that Dey “proposed that a plan be developed for vegetation control for recently paved streets where grass and weeds and other vegetation is already growing through and encroaching on the roadways. The plan would also be

applicable for older paved streets and in preparation for new paving. The plan would include what, where, when and how to apply the vegetation control giving consideration to imposed restrictions and local controls. The committee will attempt to have a February 2017 presentation for City Council approval prior to an April 2017 application/implementation of the plan.”

22 Nov 2016 SIC meeting. Present: Ramiro Ross (chair), Stephen Dey, Luche “Audrey” Giacomino, Joe Mauzy, Lawrence Phillips (present according to Action Agenda, absent in Minutes), Peter Von Gundlach, David Smith (not listed in Minutes), Joan Hanson (Council Liaison, present according to Action Agenda, absent in Minutes), Andy Haratyk (Staff Liaison).

Action Agenda shows No Action taken on New Business Item#2, “Vegetation Plan - Continue Discussion.”

Mayor-elect Smith announces his resignation from SIC effective 1 Dec 2016. According to the Minutes, he “expressed wishes that the committee in place continue and gave the committee responsibility for a vegetation control plan and advice [sic] the Sustainability Committee.”

According to the audio file, Smith said that “what I would like to charge this committee with is to take full responsibility for this vegetation plan situation. . .and I would like to have a work session hopefully in February for the Mayor and Council about vegetation and an actual concrete plan and what is to be used and how it needs to be used. . .and I’m certainly prepared to take the heat.”

Dey said, “Knowing that, I can go ahead and prepare my plan.”

Smith then asked that the SIC reach out to and help rehabilitate the largely “dysfunctional” TCSC so they can work together to develop the plan.

The Minutes say, “The vegetation control plan was discussed briefly. The Streets and Infrastructure Committee would contact the Sustainability Committee on a joint meeting. The City Manager will be invited to the meeting and meet on his availability. One consideration for any proposed vegetation control and growth season should be in the plan.”

The audio files indicates that the committee reaffirmed that Dey was going to “Lead the charge,” to draft the initial report and presentation.” Dey noted that “Roundup” is needed only for weeds growing through the asphalt, and that weeds along the edges of the road can be dug up by hand.

In “Member Comments,” the Minutes note that “Larry Phillips cautions committee to stay a-political.”

1 Dec 2016 Mayor-elect David Smith resigns from SIC

29 Dec 2016 SIC meeting: Noticed Agenda Item #3, “Discuss and Review Status of Vegetation Control Plan - Continue Discussion”: No Action

SIC chair Ramiro Ross noted that a recent statement by City Manager

Marsh

that the city paving project was ahead of schedule was not correct. He stated that a lot of deterioration of new streets has been caused by weeds and that Stephen Dey had been designated by SIC to develop the Vegetation Control Plan. Dey stated that something was needed “that will kill roots when applied to leaves” and that the least toxic herbicide he had found for the job was glyphosate, to be applied in 2.5-3% concentration, and that less could be used if a “sticking agent” were added to the solution. . . . He went on to explain that “if you’re going to sell it [the plan] to the public, you want to shy away from [mentioning] Monsanto,” and that it is better to use the term “glyphosate” rather than “Roundup,” and “leave the name Monsanto” out of the discussion. “If you say ‘Roundup’ they [the public] are going to think Monsanto. . . . People are scared of that company and they have a right to be.”

He said that “I have a list here” of other products that aren’t acceptable for one reason or another,” “too toxic or have to be watered-in [impractical for roots growing under the asphalt], or some other reason. Luche Giacomino said that she used Clorox effectively on weeds in her yard; Dey responded that you have to use Clorox over and over, and noted that “it [glyphosate] doesn’t affect anything except what I spray it on.”

Ross said that in making the presentation about the plan to the Council and public “you [Dey] have to present yourself. . . as an authority on what you’re saying,” to which Dey responded, “That won’t be a problem.” He noted that at the Council work session he would be able to adjust his presentation to people’s concerns because the Call to the Public comes first on the agenda, so “we’ll get to hear all their complaints and what they’re afraid of” before his presentation.

Dey explained that on some roads built from the ground up, like Arizona St., the roadbed is built of “washed soil. . . sterile dirt” (purchased), to eliminate organic matter. He explained that there are two kinds of herbicidal treatment, “pre-emptive” and “spot”. In pre-emptive treatment, if you see grass growing in cracks and within 24" along the edges, the whole road surface and road “edges within 24 inches” are sprayed, you come back in two months and if anything is growing, spray it again; then, if nothing is growing after rainy season, you pave.

In spot treatment, cracks are sprayed and it takes about a week for the grass to turn yellow, about a month to see if it’s growing back; if not, then we can go in and patch the cracks. If the City does a “reasonable and responsible” job, he said, “that is better than individual citizens going out and spraying whatever the hell they want.”

He noted that if the City passes an ordinance against herbicides that aren’t also banned by the State, it may run into the same kind of problem as with the plastic bag ban and be sued by the State, but if the citizens do it by initiative the State pre-emption issue may be avoided. But, he said, “I can guarantee you that on a State contract, they will require. . . weed eradication and suppression.”

He went on to reiterate that at present there is no ordinance, we can go out and spray whatever we want when we want. “They [City Council] made a

resolution, but they didn't actually go back and pass an ordinance."

TCSC chair Todd Bogatay mentioned that there is a lot of fear due to history of herbicides; one of the members [unidentified on the audio file] noted that he was one of them, having been in Vietnam. Dey stated that "I understand people's fears and all that, but we're talking about wasting taxpayer money"; he noted that he was not happy about having to use glyphosate either, but "everything else is actually more toxic."

SIC chair Ross stated that whoever is going to object to the herbicide plan, rather than complaining should contribute by taking their shovels to the weeds along the road edges or propose alternatives to the use of herbicide.

Regarding timing, Dey explained that spraying might not happen until as late as May, but before the summer rains and that the work session and presentation might be as early as Feb.

Discussion followed on TCSC and its plan, and relation to the SIC plan. Bogatay noted that "change upsets people," and referred to the plans for a hotel/convention center in Old Bisbee that had been stopped because "all the hippies came in and said, "Not in our city," and that a proposal for a visitor center in City Park was similarly stopped by people saying, "Not in our city, not in our park."

Dey stated that similarly "the anti-herbicide people are a small percentage," but that "doesn't mean they can't get their way, because they are very vocal, and know a lot of people." Other members agreed.

Bogatay referred to a plan considered by the TCSC to build bicycle paths, an idea supported by some, "violently opposed" by others, and said that "if you want to bring people to town" you might want to give them a way to ride around and see it from the hills.

26 Jan 2017 SIC meeting. Present: Ramiro Ross (chair), Stephen Dey, Audrey "Luche" Giacomino, Joe Mauzy, Lawrence Phillips, Peter Von Gundlach, Andy Haratyk (Staff Liaison); Absent: Joan Hansen (Council Liaison).

Minutes indicate that approval of Minutes for meetings of 2 Nov 2016 and 29 Dec 2016 was tabled.

Minutes and Action Agenda indicate No action on Old Business item #1: "Discuss and Review Status of Vegetation Control Plan" and that discussion continued.

30 Jan 2017 TCSC meeting canceled due to lack of quorum

31 Jan 2017 Mayor Smith alerts TCSC to the "vegetation growing through the pavement" problem, that he has "tasked the Streets and Infrastructure Committee with the responsibility to research this issue and bring recommendations to the Council in early March," that "preliminary discussions of that committee involve the use of 'Round Up' on the road and shoulder surface (only) prior to paving," and requests

the TCSC to ‘liaison with this committee and provide your input and suggestions’ via Councilior Hanson. . .Council Liaison to both groups.”

- 23 Feb 2017 SIC meeting: Control Plan on the agenda but meeting canceled due to lack of quorum
- Mar 2017 California Office of Environmental Health Hazard Assessment (OEHHA) votes to designate glyphosate a “known human carcinogen” requiring labeling of products sold in the state (in effect as of Jun 2017)
- 14 Mar 2017 Unsealed California court documents in a suit against Monsanto (Hedlund v Monsanto) by 84 individual plaintiffs claiming Roundup caused or contributed to their cancers, indicate that an unpublished US National Cancer Institute Agricultural Health Study (not considered by IARC in its classification of glyphosate), showed no evidence linking glyphosate to cancer in thousands of North Carolina and Iowa farmers
- 15 Mar 2017 The European Chemical Agency (ECA) concludes that glyphosate is not carcinogenic to humans
- 16 Mar 2017 Amid objections that EPA did not follow its own 2005 *Cancer Guidelines* and did not consider potentially relevant data about isopropylamine (the most common form of glyphosate herbicides), the EPA SAP in a heated split decision concludes that glyphosate is “not likely” to cause cancer in humans
- 23 Mar 2017 SIC meeting. Present: Ramiro Ross, (chair), Stephen Dey, Audrey “Luche” Giacomino, Larry Phillips, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison).  
During Call to the Public, Helise Dubnick (new member of the TCSC who hadn’t attended a meeting yet) was invited to participate in the discussion of vegetation control.  
Minutes of the 22 November 2017, 29 December 2017 and 26 January 2017 meetings were approved.  
During “Discussion and further review of the status of vegetation control plan” (Action Agenda indicates “continue discussion”), Dubnick asked for information about the Control Plan in relation to the new streets in San Jose where she lives.  
SIC members (unidentifiable on the audio file of the meeting) noted that the objective of the Vegetation Control Plan [aka “the herbicide plan”] is said to be to make streets “sustainable. . .for 20 years” and “if we do not do vegetation control we can definitely see deterioration and our investment is for naught,” and “we’re going to lose the roads in a couple of years,” and “If we do not act now, before the summer rains, we stand to lose 50% of our investment.”

Haratyk noted that “we don’t have the manpower to go in and patch” all the cracks and fissures the Bermuda can grow in.”

After noting that there were changes to the previous draft of the plan, Dey explained that a diluted premix solution would avoid hazmat requirements and even so is “possibly stronger than needed,” though a spill during mixing might have to be reported.

Dubnick said that she had read that Roundup *is* toxic, and that there were viable alternatives, including a “labor-intensive” method that *does* get at the roots, and noted that there is no green growing up in the old streets and that the green she has seen is not in the middle of the roads.

Haratyk explained that the standard 3" asphalt road is laid down at a temperature of 210° and that this acts as an incubator for Bermuda seed caught underneath the asphalt; and that standard road-building procedure is to spray herbicide on the roadbed before laying the surface but that, in order to honor the herbicide ban, this was not done on the new roads. He also noted that spot-treating problem growth would use a hundred times less herbicide than spraying whole roadbeds.

A member said that “everyone [ie, all governments] in the state uses herbicide [in road-building]” and “for the money you can’t do any better. All these alternatives people keep throwing at us fall by the way. . .when we do what we have to do. . . . If we can do it before the rains. . .we won’t have to do it again.”

Haratyk explained that with the first road that was done under the new program, at the cemetery, “we said ‘this was a bad idea’ because we can’t spray,” and Hansen added, “because of the . . .resolution. . .binding. . . .” Haratyk noted that “The way I look at a binding resolution. . .as City workers, our responsibility is to honor it,” though “it can be undone at a single meeting”. . . . ADOT was shocked when they saw Arizona Street—there is no warranty.”

Discussion turned to the recommendation to be presented to the Mayor and Council, which Hansen noted needed to “be very specific [that] this is for the roads only.” Dey noted that glyphosate “does not get into the environment” and that though they are both amino acids, glycinic compounds like glyphosate act differently in plants than the phenolic acids in 2,4,5-T and 2,4,-D [the main ingredients in Agent Orange].

Haratyk said that he had done two test plots on pavement by Morning Café, one with off-the-shelf Roundup, one with a 50% dilution, the latter of which required spraying 2-3 times more than the undiluted test plot. Someone else noted that farmers are permitted to use 4% solution for Bermuda.

Haratyk reiterated that treating only cracks will allow much less herbicide to be used than spraying the whole roadbeds before the asphalt is laid, and that “most of our roads are going over an existing road base” and that we cannot build new roads without a great deal more money. He noted that “on many of the roads there was no Bermuda growing until we laid the asphalt: we broomed,”and then we laid down “the incubator”; some places we dug out 4-5" of soil, at some we



laid new soil, and Bermuda came up.

Ross noted that Bermuda is “breaking up the streets,” that on Bisbee Road it is coming up through the cracks, even through two layers of paving, macadam and chipseal. Haratyk explained that we “can’t chipseal where grass is growing. . . . [and] can’t dig it out,” that chipseal oil will not kill the grass, and that if we can kill the grass and then chipseal Bisbee Road, we can make it good for another 5-6 years and avoid a \$1 million dollar replacement.

Ross stated that “There were no mistakes made at the beginning.” Dey stated that “The one good thing about glyphosate is it only kills what it touches, and it has to be growing” and that “glyphosate breaks down in sunlight between 17 and 100 days.”

The Minutes say that “Power point presentation was not presented,” the Action Agenda says it was “tabled”. In discussion of the presentation, which was being prepared by Dey, it was noted [by Haratyk?] that the Parks and Recreation Committee “would like to get behind this and . . . add their support to it, ‘ and that “they have some concerns about herbicides,” and further noted that “Ron Oertle signed a resolution that said they couldn’t use Roundup in the parks.” Hansen reported that “I didn’t talk to anybody in Sustainability.”

Dey noted that “The longer we wait the more damage we do to the roads,” and that glyphosate “requires warm temperatures and that the plant be actually growing.”

- 18 Apr 2017 On the “Bisbee Mayor” Facebook page, Sar Sturz posted photos of Bermuda growing along the edges of a Bisbee street and asked, Can something be done by the contractor to fix this?” TCSC member Eric Doane commented “City has a major herbicide policy.” Mayor Smith commented, “I have a report coming from the Streets Committee the first meeting in June to recommend a herbicide for roadbed and shoulders prior to paving.” Eric C. Fahrner commented, “What about situations like this after paving?” to which the Mayor commented, “Spray away to mitigate future issues.”
- 24 Apr 2017 TCSC meeting; Present: Todd Bogatay (chair), Earl Doane, Helise Dubnick,, Peter Gaffer, James Richmann, Emilie Vardaman, Joan Hansen (Council Liaison), Joe Ward (Staff Liaison); Absent: Sharon Rock.  
No mention of vegetation management of herbicides in Action Agenda.
- 8 May 2017 Joint Work Session of the SIC, TCSC and PRC (Parks and Recreation Committee).  
Meeting was noticed online but the Agenda was not posted; the only item on the hardcopy Agenda was “Review and Discuss Power Point on Road Surface,” noted as “NO ACTION REQUIRED” on the Action Agenda [ie., the subject of the meeting was not available to the public prior to the meeting].  
SIC: Present: Ramiro Ross (chair), Stephen Dey, Audrey “Luche”

Giacomino, Lawrence Phillips, Peter Von Gundlach, Joan Hansen (Council Liaison), Andy Haratyk (Staff Liaison).

TCSC: Present: Todd Bogatay (chair), Earl Doane, Helise Dubnick, Peter Gaffer, James Richmann, Emilie Vardaman, Joan Hansen (Council Liaison), Joe Ward (Staff Liaison), Sharon Rock listed as present but was absent.

PRC: Present: Audrey "Luche" Giacomino, Andy Haratyk (Staff Liaison, listed as Absent on Action Agenda); Absent: Cado Daily (Chair), Kay Lynn Cummins (Vice-Chair), Gabe Lindstrom (Council Liaison), Kenan Walsh.

In the power point presentation, Dey said, "Properly paved and maintained surfaces can remain crack-free for a couple of decades. Any cracks that form must be filled immediately because not to do so allows water to get underneath; once the water gets underneath the base to get soft, and that's when cracks and potholes and everything starts to develop. . . . But. . . in a little over a year we're starting to see. . . Bermudagrass encroachment. . . . if we don't stop it . . . by the end of this year the roads will be destroyed."

He went on to say that "One of the bad things about Bermuda grass is that it doesn't need light, but heat to propagate. And it propagates by rhizomes and seeds. The rhizomes will start to grow as soon as the ground temperature rises above 55 and will grow without light until they find a way to the surface and form blades. These will then send out new rhizomes along the surface forming roots . . . the seeds will grow in soil but on the road surfaces. . . if they're swept, so that is not an issue here, just the roots themselves"

"Other than manual release methods, the only other methods of vegetation management that we know of to this date are chemical, either synthetic or natural. . . . I do understand that introducing chemicals into the environment is a scary proposition to the public. . . . The City has been able to maintain itself as an herbicide-free city since the 1980s. So if we're going to make use of them [synthetic herbicides], great care and caution must be used. But as we've stated earlier, by not doing anything we'll be effectively wasting millions of taxpayers' dollars and this to us is entirely unacceptable."

"We do not want to allow harmful substances into the environment if we can afford it. . . . the only completely effective solution that we've been able to find is a low concentration of glyphosate. . . about 2%. . . with an organic sticker-binder which allows for better contact to the plant making it more effective and then when it dried. . . it can't get into our waterways . . . and a dye."

Glyphosate if it's allowed to remain in the sunlight is usually gone within 7-10 days; if it's buried in the soil out of the sunlight then it could last for like 120 days so that's why you want it to remain on the soil. . . . it's the only chemical we've been able to find that completely kill the plant down to the roots and completely kill the root system by being applied to the leaves only. . . . Of all the chemicals that I reviewed, glyphosate is not only effective, but in the proper solution and properly applied has an extremely low toxicity index. The side effects that have been attributed to glyphosate seem to occur only when it is

repetitively ingested or repetitively breathed as fine mist. None of these situations will be occurring in our situation.”

In the question and answer session following the power point presentation, Smith said, “There is a misunderstanding. The Council several years ago voted on a proclamation that they would not use herbicides, it’s not an ordinance. . . . and so, what I have done, because we want to be able to save these roads, not throw our money away, is I’ve gone to this Committee and asked them to research [and] to bring back to the Council a viable alternative so that we can save the roads without having an impact and then that proclamation would be changed, so a proclamation is not the same as a law, it’s guidance.”

Hansen said, “It started out as a resolution in 1987 [sic].” Haratyk said, “And we’ve honored that, Public Works has honored that with weed killer as well as putting any other chemicals in our parks, so we’ve. . . looked at that agreement and honored it, so while we have the right to go out and spray, we’re not, and we wouldn’t even let ADOT spray under the road that they laid out in front and there is no warranty on that asphalt.”

Bogatay asked, “Have you tested it?” Dey said, “Well, I know it works. . . . The only herbicide you’re allowed to use on an organic farm and still consider it an organic farm is glyphosate. The federal government, the USDA, says you’re allowed to use it in the pathways, the walkways and the roadways.”

Dey said, “Bleach is more toxic than glyphosate. . . . The truth about glyphosate is that it was created by Monsanto as a replacement for things like Agent Orange. . . . According to the product information labels and the MSDSs, and I went in and studied one by one by the State of New Jersey and some others, not just the manufacturers, and they claim that once it’s dried it’s safe for animals and once it’s dried the animals can lick it shouldn’t make the animals sick.”

Smith said, “This is coming before the Council next week.”

Richman asked, “To the best of your knowledge, are any other cities or towns using the product you recommend?” Haratyk said, “ADOT uses Roundup when they do any kind of weed control.”

In response to a question about the allowable width of spray zone at the edge of the roads, Haratyk said, “We’ve never been allowed. . . we’ve not allowed ourselves to use it at all. . . when we see Bermudagrass . . . we’ll experiment with this all over town. . . . we’ll spray underneath first. . . . One thing about this weed killer is the grass has to be healthy, you can’t spray yellow grass. . . . if we can pretreat it, and it works, then we don’t have to come back and continually spray it. . . . I have to tell you guys that I actually fought this at first because I don’t want to have to put any of our guys in a hazmat situation. . . . Ross: “I cautioned the people in my committee, let us not use the word Roundup. . . . be careful in your recommendation that you don’t limit Public Works’ ability [to be] flexible.”

Haratyk explained “we’ve done about twelve miles, we have another 25-30 miles to go. . . . before I get to the next 25-30 miles I need to get ahead of this because wherever Bermudagrass is coming up we’re already behind, so. . .

.wherever you see that Bermudagrass coming up in new pavement, in the next year, 2, 3 years, that's where your next potholes will be. So at this point, all we're going to do is try to treat it and move forward on it. . . . we're trying to get ahead of this and right now we're behind and that's why the committee is bringing this forward. Some of those areas in the next 5-7 years will have to be dug out and completely repaved. Now that's not what we've done as a city in the past: we pave, we wait 50 years and we pave again. But we don't want to wait until we have 50 years and a jillion potholes, we're trying to get ahead of it a little bit. So what we're really looking at is we know we're going to have a problem around those spots and we know it, the good news is that they're neighborhood roads in one respect , they're not main thoroughfares, most cities don't pave neighborhood roads they just do main roads; we did ours exactly opposite, we went to the neighborhood roads first, so we're going to have to get back to them and fix them in the next couple of years."

Dey said, "The Roundup variety surfactants are oil-based surfactants which is what makes it toxic. . . . if you just add water and dishwashing detergent, that's a good surfactant."

Phillips said, "If we can get this done. . . all future paving will be done using the proper technique for weed prevention first, not after. . . .Once we get this, all future paving will be done in the proper manner and we can deal with the existing problem now a lot easier. . . everything comes down to time. . . and money."

Someone from TCSC asked, "Are you saying in the future when we do the roads we will do the complete pre-treatment before laydown?" Haratyk answered. "What we said is that we're going to treat the grass that we see, so right now, if there's grass there we'll [berm? burn?] it, we'll scrape it a little bit, but if it's coming up through existing roads there's not much we can do, so I'm not suggesting that I forecast spray 15' road-widths, it's really expensive to do, it's just not cost-effective, no, what we talked about is if you build a new road, what you would do is you would scrape the ground, you would spray if from edge to edge, but remember, we're not building a lot of new roads, we're just resurfacing existing roads, and we're not even going to know some of this is happening, unfortunately, until after we pave it and heat up the ground. There'll be many places we'll go where there won't be a speck of grass anywhere in sight and we'll pave the road and the grass will come up because we've nurtured it up, so that stuff we'll have to treat a little more topically."

Dey noted that "It's an invasive weed that shouldn't be here anyway."

15 May 2017 TCSC Special Meeting. Present: Todd Bogatay (chair), Earl Doane, Helise Dubnick, Peter Gaffer, Emilie Vardaman, Joan Hansen (Council Liaison), Joe Ward (Staff Liaison), Andy Haratyk (Public Works Director); Absent: James Richmann, Sharon Rock.

Only item on Agenda: "Discussion and review of the City's herbicide

policy, with possible vote to recommend that the Mayor and City Council amend this policy.”

Special Action Agenda states: “After discussion and presentation by Public Works Director Andy Haratyk, Earl Doane proposed: Develop a letter to the City Council to provide for the use 2.5-3% Glyphosate with colored dye for local applications on city roads and streets, not to exceed 12 inches from the road edges for the control of destructive plant growth.” Dubnick seconded the motion, which passed unanimously.

According to the audio file, during discussion Bogatay asked. “Have they tested it, is it known to be effective?” to which Haratyk replied: “Yes, we used it on two test spots. . .so we know it works,” one by Mornings Café and one on Congdon. He went on to explain that “One application will not do it. . . . There will have to be repeated applications. . . . three to five applications,” and noted that on the test plot by Mornings Café the owner has “been spraying for a month and he finally got it dead.”

In response to several attempts by Dubnick and Vardaman to ask if concerns about the binder should be included in the recommendation, Haratyk insisted that they shouldn’t, that “that wasn’t the chemical that causes damage. . . . The binder is not what we are voting on. What we are voting on is the chemical that kills the plant. . . . We never talked about the binder, we talked about one chemical, that’s all. . . . The binder is not the problem.” He added, “If you guys are not clear on this, do not vote on this and go back for another meeting. . . . If we are going to add things to the proposal of what the SIC wants, you better table this and go back and start over so that you are clear. . . . I do not want this to appear that we are railroading it through or forcing you to make a decision.”

After the vote on the motion, Bogatay said that “The strongest argument [in the Stephen Dey presentation at the joint meeting of 8 May] seems to be the cost of paving the roads”; Vardaman agreed, saying “That’s the only reason I decided to go for it.”

Doane said, “I have faith that the City personnel and staff will follow the guidelines that we’re advocating and if not then we can turn around and re-address it and maybe file a complaint or come after them for not following it. . . . and they said that the stuff goes inert after, what was it, a few weeks?” to which someone [not clear on the audio file] said “it was hours, 24-48 hours.” Doane added, “I think they said if it went down in the ground it would be four days, then it would be slower to go inert, but it eventually goes inert. . . . That gives me a lot of confidence. . . .” Dubnick said, “That helped certainly, and also that they said that is the only chemical that. . .you can use if you have an organic garden. . . .”

16 May 2017 Todd Bogatay, Chair of the Community Sustainability Commission, informs the Council that the TCSC “met yesterday following a request from the Streets and Infrastructure Committee to consider the use of glyphosate as proposed in a presentation made by Stephen Dey. . . . to stop the growth of Bermuda grass and

other weeds from growing in asphalt and concrete cracks in the city streets causing the paving to break up.

The Commission recommends the application of glyphosate and a dye to show where it is, be made in the streets where weeds are growing and along the edge of the streets, but not further than 12" and that the chemical be 2.5% or less of the carrying liquid (water)."

25 May 2017 SIC meeting canceled

25 May 2017 At 6:58pm, Bisbee Deputy City Clerk Nina Williams sent an email to Lorena Valdez, Public Works Administrative Assistant, with Amended Agenda for SIC Special Session of 31 May 2017, adding Old Business Item #2:"Discussion and possible approval to review a potential amendment to the City's herbicide policy, with possible vote to recommend that the Mayor and City Council amend this policy."

31 May 2017 Agenda and Action Agenda of the SIC meeting, includes under Old Business, Item #1, "Refine the language, graphics and structure of the vegetation control power point to be presented to Mayor and Council for approval on Jun 20 [sic], 2017. NO ACTION"; Amended Special Session Agenda (but not the original posted Agenda) adds Item #2, "Discussion and possible approval to review a potential amendment of the City's herbicide policy, with possible vote to recommend that the Mayor and City Council amend this policy." [Minutes not available as of 4 Oct 2017.]

Present: Ramiro Ross (chair), Frank Cabello, Stephen Dey, Audrey 'Luche' Giacomino, Lawrence Phillips, Peter Von Gundlach, Joan Hansen (Council Liaison); Absent: Andy Haratyk (Staff Liaison).

Ross noted that Item #2 was not in his original agenda, but was inserted "by I don't know who." Nonetheless, after a decision to change some of the photos in the power point presentation, and considerable word-smithing (noting that the SIC had not previously developed a recommendation as such), the committee voted to recommend the language of the TCSC recommendation letter of 16 May 2017 with a few additions, after review by Staff Liaison and City Clerk.

1 Jun 2017 Ramiro Ross, chair of the Streets and Infrastructure Committee, informs the Council, that the SIC "met on May 31, 2017 following a request from the Mayor to consider the use of glyphosate as proposed in a presentation made by Stephen Dey," and that "The Committee recommends that applications of glyphosate with a dye to show where it is, be made in the streets where weeds are growing and along the edge of the streets, but not further than 12" and that the chemical be 2.5% or less of the carrying liquid (water)."

- 2 Jun 2017 On the “Bisbee Mayor” Facebook page, Mayor Smith wrote, “we now have a recommendation [from SIC and TCSC] that should keep us from wasting millions of taxpayer dollars while realistically maintaining our roadways present and future. The proposed Ordinance allows for the application of a (safest and most short lived) herbicide on GREEN growing grass and within 12" of the roadway.”  
 In response to a comment regarding the 1983 Council decision not to use herbicides, the Mayor replied, “It is not binding as it was not an Ordinance or even a Resolution.”
- 3 Jun 2017 In an email, TCSC member Emilie Vardaman wrote, “The Sustainability Commission never discussed vinegar. . . I have used the heavy duty stuff. It is very expensive and only available online as far as I know. . . . However, even THAT stuff didn’t kill my Bermuda grass! It does a good number on my weeds.” Cado Daly, chair of the Parks and Recreation Committee replied in an email later that day that despite having expressed interest in the subject of the meeting, only one member of the PRC (which member was also a member of the SIC) attended the 8 May 2017 Joint SIC/SC/PRC meeting because the other PRC members were not notified in sufficient time.
- 6 Jun 2017 Council Work Session posted as “Discussion Regarding the Use of Herbicides on the Roadways” and in the “Discussion” box stating that “A Joint Work Session was held on May 8, 2017 between Streets & Infrastructure Committee, Parks and Recreation Committee and the Community Sustainability Commission regarding the use of herbicides on the roadways [sic] they recommend that this issue move forward to the Mayor and City Council.”  
 Present: Mayor David Smith, Anna Cline, Frank Davis, Doug Dunn, Bill Higgins; Absent: Gabe Lindstrom.  
 According to the Minutes, Mayor Smith “explained that how this came about it was. . .that we had been laying down road ways and we are having Bermuda grass growing up through the road way in several different locations. . . . He requested the Community Sustainability Commission to meet with the Streets and Infrastructure [Committee] to discuss this further. . . . [he further explained] that there was a misconception[:] there was no ban there never has been a ban the fact was that the City had not been using it a prior council discussed at length the use of it and a study was done, but there wasn’t even a resolution passed on that. It sat there and died for lack of further action.”  
 The Minutes continue, saying, “Ross Ramiro [sic], Chair for Streets and Infrastructure Committee, said that Mr. Dey had gone into [sic] great extent to make a very comprehensive approach to what a solution was. Based upon what they had gone through they were going to recommend to Mayor and Council that they go ahead and approve the application of glyphosate.”  
 In the narrative to a slide show presentation supporting the recommendation, Stephen Dey explained that the Streets and Infrastructure Committee had been asked to act as watchdogs and to assure that the sales tax

money was spent wisely and for its intended purposes.

According to the Minutes, Dey went on to explain that “in little over a year they were starting to see a serious problem and it was causing a rapid and expensive deterioration of our road surfaces which was Bermuda grass. This was a serious and rapidly growing problem they weren’t expecting it. It had been discussed since February with the Streets and Infrastructure on what to do about it. The Streets and Infrastructure Committee saw this as an unacceptable and actually preventable waste of tax payer’s dollars. . . . [and that the SIC decided that] “in order to provide an effective solution they [sic] needed to be based on the following criteria; [sic] effectiveness, environmental impact, and the cost.”

The Minutes say Dey went on to explain that “by not doing anything at this time they will be effectively wasting millions of tax payer’s dollars . . . [and that] “There were not many chemicals that are effective on Bermuda grass which you literally have to kill the roots. We are restricted on what we could do. Some contain chemicals that have residual effects like Round-Up and some of them contain chemicals that are damaging to asphalt. Furthermore the chemical applied had to be completely effective to the plant.

They [sic] did research on a number of products natural and synthetic and they didn’t work. The only chemical that will completely kill the plant root that he knew of was glyphosate. The toxicity was quiet [sic] low in glyphosate when applied properly. The side effects that have been attributed to exposure of glyphosate seem to occur when it was repetitively ingested.”

The audio file of the work session indicates that Dey said in addition that, “glyphosate was chosen because it has “little or no toxicity to humans, pets or wildlife. . . . extremely low toxicity,” that the WHO designation of glyphosate as probable human carcinogen has been challenged as invalid, and that d-limonene is not a viable alternative because it will damage asphalt.

The Minutes say following the power point presentation Dey responded to several questions from the Mayor about alternatives to glyphosate; Dey said “that vinegar was effective at killing the tops of the plants but he didn’t believe it killed roots. . . . that Clorox was more carcinogenic.”

Several citizens spoke in opposition to using synthetic herbicides.

6 Jun 2017 City Council meeting. Present: Mayor David Smith, Anna Cline, Frank Davis, Doug Dunn, Bill Higgins, Gabe Lindstrom.

Smith explained that there is at present no ordinance against use of herbicides, only a series of decisions against use at specific times in the past. He explained that over \$1 million has been spent on the roads, that the problem is urgent, that the Bermuda must be taken care of in the near future to avoid costly damage to the streets it is growing through. As recorded in the Minutes, he went on to explain “that. . . an ordinance could be presented next meeting which was the 20<sup>th</sup>, it couldn’t be passed on the 20<sup>th</sup> it had to be read twice it would potentially be passed by July 5<sup>th</sup>.”

During Call to the Public several citizens (some of whom said they had



been involved with the issue since the 1980s) spoke against proposed use of herbicides and proposed ordinance, objecting that the problem was caused by faulty road-building, that glyphosate is carcinogenic, and that alternative methods should be used. They questioned absence from City website of minutes of SIC and other committees for meetings at which the herbicide proposal was discussed (thereby effectively preventing or obstructing public participation in drawing up the proposal); questioned adequacy of paving where Bermuda has come up; noted that the City's 34-year observance and Council's repeated rejections of use constitute a de facto ban; and advocated keeping the existing ban.

One citizen questioned the relatively recent imposition of a 3-minute limit to comments in the Call to the Public, to which Smith responded that the limit is in accordance with the Open Meeting Law. (A check with the State Ombudsperson indicates that Call to the Public is not required by the law.)

Hansen stated that the proposed ordinance was "not an attempt at all to try to introduce herbicides or pesticides in Bisbee" and that "Mr. Dey had done a world of research in coming up with this product and it had been tested on a couple of sites to see if it works and it does work and putting the dye in would let people know where it had been applied."

Following a discussion among Councilmembers concerning possible deferring of action on the Mayor's request for a vote to direct staff to draw up an ordinance to allow use of glyphosate to control Bermuda in the roads in accordance with stipulations recommended by SIC and TCSC, City Attorney Britt Hansen made an intervention explaining that the ordinance approval process is itself fairly lengthy, requiring two positive votes at two monthly meetings, in addition to the month for staff to draw up the draft ordinance. Councilmember Higgins then moved to direct staff to draw up for Council approval an ordinance regarding use of herbicides on the roadways as proposed by the Mayor; Council voted unanimously to approve the motion.

7 Jun 2017 Citizens inform Mayor and Council that contrary to Stephen Dey's assertion at the 6 Jun 2107 Work Session, a major d-limonene supplier says its product will not damage asphalt and offers to supply list of communities that use their product.

Citizens inform Mayor and Council that according to scientific studies, the rainy season is the worst possible time to apply herbicides for control of Bermuda

[[https://cals.arizona.edu/yavapai/anr/hort/byg/archive/controllingBermuda grass.html](https://cals.arizona.edu/yavapai/anr/hort/byg/archive/controllingBermuda%20grass.html) and <http://ipm/ucanr.edu/PMG/PESTNOTES/pn7453.html>]

Citizens inform Mayor and Council of EPA Inspector General investigation into possible collusion of head of EPA pesticide division with Monsanto to prevent investigation of glyphosate toxicity

12 Jun 2017 In response to Mayor Smith’s request for response to citizen concerns about City meetings (e.g., 8 May 2017) concerning herbicide policy (1) having been improperly noticed under the state Open Meetings Law (OML), and (2) the topic having been discussed in SIC for several months without Agendas or Action Agendas mentioning the word “herbicide” until 31 May 2017, and (3) Action Agendas containing almost no information about what actually was discussed at the meetings, thus depriving citizens of proper opportunity to know about and participate in possible changes to herbicide policy, City Attorney Britt Hanson informs the Mayor by email that, in regard to Council meetings, work sessions, and the proposed herbicide ordinance, “the public has. . .had, and will have, plenty of time to hear the case for/against herbicides and participate in. . .public hearings before any final decision is made.”

He goes on to note that “the original agenda for this meeting [of the SIC on 31 May 2017] before it was amended, did not contain this agenda item [“Discussion and potential amendment to the City’s herbicide policy”] nor any other reference to ‘herbicide’”; and that “[a]s for the May 8<sup>th</sup> joint work session. . .there was public notice of it on the website, but apparently the agenda item was not attached. . .[though] the hardcopy postings contained this agenda item: Review and Discuss a Power Point on Road Surface and Vegetation Control Sustainability Policy. . . This does not contain the word ‘herbicide’, although apparently that was the subject matter of the discussion. . . Thus, in retrospect, it would have been better to use ‘herbicide’. . .”

Focusing not on the general public’s right to know but on an apparently adversarial situation, he went on: “But again, those who feel strongly about the City’s use of herbicides have had, and will continue to have, plenty of opportunity to voice their opposition to its use before the Council makes any final decision. Accordingly it would serve little purpose at this point to take corrective action such as referring the matter back to the Streets and Infrastructure Committee for reconsideration with a public notice that the discussion will involve herbicides.”

12 Jun 2017 In an email to Stephen Dey, Councilmember Joan Hansen wrote, “I’ve been doing some research on alternatives and found two that I had not heard of before. . . . Boiling water poured in the cracks and rubbing alcohol applied the same way. . . . I also found that vinegar kills the weeds but not the roots.” Dey replied later that day, “I would like the Mayor to know that it is NOT a good idea to start spraying until after the rains promote the growth and all the grass is growing. That is the standard procedure.”

13 Jun 2017 In an email to Councilmember Joan Hansen, Stephen Dey wrote, “I have no doubt that the agricultural application methods of glyphosate on GMO crops is allowing it into the food stream. It was after that type of farming was started that we began seeing the health risks. . . . I still have not been able to find research showing any clusters of increased cancer rates or other disease areas where it is used in low

volume as spot weed killer in municipalities, etc.”

14 Jun 2017 In a series of emails to a concerned citizen, Stephen Dey states that “it [salt] would have to completely soak the soil around the roots [under the asphalt] to kill them. I do not see that happen by pouring it on top of asphalt. I do not believe enough of it will get through to the soil and soak. The runoff due to rain has the possibility of salt damage in the runoff. . . . Vinegar and salt will also kill beneficial bacteria. Surprisingly the glyphosate at application levels applied properly does not affect soil bacteria.”

He goes on to say that “Glyphosate is rather quickly biodegraded into harmless elements and natural compounds. None of which has proven to be toxic. The glyphosate itself poses threats but as soon as it is absorbed into the plant it is bio chemically reacted with other chemicals in our metabolic stream [corrected in another email a few minutes later to “in a PLANT’S metabolic stream”] and used to build an enzyme which bio degrades as the plant dies. it [sic] is also non toxic. . . . But too much salt like too much exposure to glyphosate can cause problems.”

\_\_ Jun 2017 Citizens inform Mayor and Council that the City of San Francisco is using “Dragonweed Flamers” to control Bermuda (steam equipment having been found impractical for their purposes)

22 Jun 2017 SIC meeting canceled

22 Jun 2017 In an email to Councilmember Joan Hansen and Public Works Director Andy Haratyk, Stephen Dey wrote, “ ”My hypothesis is, if nothing is done to stop growth when it is the proper time this season, we miss the window of opportunity to avert disaster. If nothing is done the roads will be irreversibly damaged by the end of the year. . . . Do we really want to do nothing just to see if this is true?. . . . It is shocking to see a town council kowtow to a bunch of loudmouthed bullies that do not represent the general public. All they want is to be able to go around and say how they saved Bisbee from the unproven dangers of glyphosate. . . . If they [the Council] elect to do nothing to stop it [the Bermuda] we are stealing money from the public and wasting it. . . . We need to fight back hard and not just lay down! It’s everyone’s sales taxes that pay for the roads NOT JUST THE ACTIVISTS!”

27 Jun 2017 Mayor Smith, on the “Bisbee Mayor” Facebook page, wrote, “Roadway Herbicide Game plan. The Ordinance will come before the Council for the first reading on July 18<sup>th</sup> and the second reading on August 1<sup>st</sup>. If it passes , it will take effect on September 1<sup>st</sup>. This provides about 3 months from the date it was presented to the public to the date of enactment, for an alternative to be brought forward.”

Eric C. Fahrner commented, “what is to prevent the city from using

herbicides to tackle the destructive Bermuda grass right away?” Smith replied, “Nothin.”

29 Jun 2017 Mayor Smith guest editorial in *Bisbee Observer* cites “well-researched” SIC recommendation to use glyphosate, states that Bermuda may shorten life of the affected asphalt roads from 20 years to ten, and chip-sealed roads from 10 to 5, specifies that it is newly-laid, not resurfaced roads, that are the problem, asserts that the roads were laid according to standards.

30 Jun 2017 Council member Hansen and Public Works manager Haratyk hold meeting with citizens to initiate “experimental plots” to test alternative methods for controlling Bermuda in asphalt pavements. Haratyk notes on camera

(<https://www.youtube.com/watch?v=V2kmg76KLkDY&t=312> and <https://vimeo.com/223914911>)

that the problem is not urgent, that a valid test will require a full seasonal cycle; that glyphosate will require multiple applications (not a single application as had been previously suggested); that not miles of roads but only a few blocks had the Bermuda problem; that the problem generally is not across the width of a road but only on the 12" or so at the edges.

30 Jun 2017 Following the “experimental plots meeting, an email from Michael Gregory to Councilmember Joan Hansen requested an accounting of the “extensive research” into alternatives the Mayor, Councilwoman Hansen, Public Works Director Haratyk and SIC member Stephen Dey claimed the City had done: “I urge you in the interest of efficiency, thoroughness, potentially viable results, and fair play, to promptly, in all good faith, to make public: (1) a list or lists of people, offices, websites, etc. the City has contacted and dates when those contacts were made; as well as (2) a list of alternative substances, methods, etc. the City has investigated and the reasons those alternatives were rejected.”

In response, Dey reproduced online ten herbicide MSDSs he looked at before deciding to recommend glyphosate.

30 Jun 2017 In an exchange of emails between SIC member Stephen Dey and TCSC member Earl Doane (cc'd to Council member Joan Hansen and Public Works Director Andy Haratyk), Dey notes that in some (unspecified) newly paved roads beneath areas where the aboveground Bermuda “has browned and dried from dormancy the root mass is pushing the areas up about an inch or so; when it starts growing again it will completely push the pavement up and out and create a pothole probably before the end of monsoon. The glyphosate will stop the growth within hours of application. It will take several weeks to completely die but can do no more damage treated. It is IMPERATIVE we begin as soon as the grass is

growing well. Otherwise it will do no good as severe damage will already have been done!”

Doane replies that if there is no “prohibition against using herbicides on the books,” or if Council votes down the use of glyphosate, Then there will be no restrictions against using it. Especially at 2:00 AM, Or by a non city employee or affiliate. There might be some blowback. For awhile.”

- 1 Jul 2017 Citizens inform Mayor and Council of article by Anthony Samsel and Stephanie Seneff, “Glyphosate has a large number of tumorigenic effects on biological systems” (*Journal of Biological Physics and Chemistry* 15 [2015]:121-159)
- <https://www.sott.net/article/312956-Glyphosate-destroys-the-gut-and-triggers-autoimmune-disease>
- 2 Jul 2017 Citizens inform Mayor and Council of article (*Frontiers in Environmental Science* (28 Apr 2016) documenting a variety of non-cancer toxicity issues with glyphosate and Roundup, including endocrine disruption, hepatorenal effects, neurotoxicity, cardiac irregularities, kidney and liver damage, teratogenicity, tumorigenicity
- <http://journal.frontiersin.org/article/10.3389/fenvs.2016.00028/full>
- 5 Jul 2017 In an email, to Councilmember Joan Hansen, Stephen Dey states that in researching alternatives to glyphosate, “I used Arbico Organics as a starting place for the organic solutions. . . . I then did searches on line, using searches for natural weed controls, Bermuda grass control etc. Once I had compiled a list of products and solutions. .I then went over the products looking at the claims and what they were effective on etc. . . . I really tried to get to the point that at least someone would say that they found it to be COMPLETELY effective on Bermuda grass in our unique situation, no one could. No printed information could find said so either. . . . Again, because MY research did not come up with any info proving a particular product will work DOES NOT mean it won’t work. Only testing will tell.”
- 6 Jul 2017 In a email to local media, Stephen Dey states that “We (the City). . . . will still spray as if there were an Ordinance” even if the Council does not pass one and regardless of citizen objections. . . . We can not please everyone.”
- 7 Jul 2017 Citizens inform Mayor and Council of the 6 Jul 2017 Dey email. In response, Mayor Smith says that “we will not proceed to spraying without a public council session”
- 14 Jul 2017 Stephen Dey says that in his previous comments [cf. 30 Jun] that citrus oil

products were unsuitable alternatives because they would damage the asphalt, he was “not sure at the time of the statement if strong citrus oil would dissolve the asphalt or not. I was recommending caution with these things. In lower concentrations it may not hurt a thing.”

- 20 Jul 2017 Citizens suggest to the City that audio files of board and committee meetings be posted on the City website, as Mayor and Council meetings are.
- 23 Jul 2017 On the “Bisbee Community” Facebook page, Betty Lindstrom said, “Someone told me there were only ‘a handful of people’ who were opposed to glyphosate. I don’t think he’s correct but let’s see if we can get some names pro and con. If you DO NOT want glyphosate used by the city write ‘No glyphosate’ by your name. If you think it is a good option for the city write ‘OK to use it’ next to your name.”  
Within a few days, over 100 people had responded, an overwhelming percentage saying “No glyphosate.”
- 24 Jul 2017 TCSC meeting. Present: Earl Doane, Helise Dubnick, Peter Gaffer, James Richmann, Emilie Vardaman, Evie Wood, Joan Hansen, Council Liaison, Joe Ward, Staff Liaison; Absent: Todd Bogatay (chair).  
No mention of herbicides or vegetation management in Action Agenda.
- 25 Jul 2017 Citizens begin fundraising to buy a steam machine to test its viability.
- 27 Jul 2017 Mayor Smith posts statement on “Bisbee Mayor Facebook” page saying that the herbicide issue has polarized the community, with “one side. . . fervently against the use and citing scientific studies establishing the dangers,” the other side “producing scientific studies showing relative safety,” and because he feels that “due to the ongoing and escalating rhetoric and actions, both ‘sides’ have lost credibility,” he has asked for assistance from University of Arizona Toxicology Department and an environmental engineer, and has tabled the proposed ordinance “pending further EXPERT study.” He went on to state that “no member of any city committee is authorized or empowered to speak for the city on this (or any other) issue.” The post was taken down a few hours later.
- Jul 2017 Attorneys in class action suit by cancer victims against Monsanto release “Monsanto Papers,” unsealed court documents showing that Monsanto for many years concealed adverse health effects of glyphosate and Roundup
- Aug 2017 Carey Gillam, *Whitewash: The Story of a Weed Killer and the Corruption of Science* (Washington, DC: Island Press, 2017).
- 9 Aug 2017 In an email to Colleen Crowlie, Stephen Dey says that voters “spoke at the ballot box in 2016 and will again in 2018.”

- 1 Sep 2017 Agenda for 5 Sep Council meeting posted, includes 24 Aug 2017 application of Theodore Ruff for TCSC membership with sections on Education and Experience and other background information on the application form illegible.
- 5 Sep 2017 Council approves appointment of Theodore Ruff to TCSC.
- 19 Sep 2017 In response to citizen enquiry about pavement core tests the SIC said at 30 Nov 2015 would be done on the newly paved roads, Public Works Director Andy Haratyk replied “The tests have not been done.”
- 25 Sep 2017 Following citizen complaints, SIC minutes are added to City website.
- 28 Sep 2017. SIC meeting. Present: Ramiro Ross (chair), Audrey “Luche” Giacomino, Lawrence Phillips, Peter Von Gundlach; Andy Haratyk (Staff Liaison); Absent: Stephen Dey, Frank Cabello, Michael Normand, Joan Hansen (Council Liaison).  
 Old Business, item #3: Vegetation Encroachment Control Update.  
 During Call to the Public, Michael Gregory asked why there was no follow-up to quality control tests the SIC had recommended at the meeting of 30 Nov 2015, and pointed out that the Minutes of the meeting of 27 Oct 2016 state under the “Future and Function of the Committee” item that Stephen Dey “proposed that a plan be developed for vegetation control for recently paved streets where grass and weeds and other vegetation is already growing through and encroaching on the roadways,” but that the audio and video files do not show him or anyone making such a proposal.  
 In response to the testing question, Haratyk explained that those tests were never done, but that equivalent tests had been made for most of those originally recommended (but not core samples or compaction tests). Ross explained that the “evaluation of pavements” was not being done according to the 2009 criteria which were for old roads, but according to criteria more appropriate to the new pavements. Haratyk added that the 2009 criteria were in preparation for laying chipseal, but the City is now laying asphalt, not chipsealing.  
 Phillips added that “when we switched operation from IGA with the county [for chipsealing] and went to paving our own, we did change our method of operation,” noting that at the beginning members of the committee were in the field every doing quality control, but as the crew has gotten into the procedures the committee has not had to be there as much.  
 In regard to the second question, Ross explained that the statement in the minutes was not in a proposal presented by Dey at that meeting but was a consolidation of things that had been said at several past meetings: “We did it [the proposal] as we went along” because we had to make sure that what Steve Dey was going to [present] was going to be appropriate to the objective we were trying to get. He was building his presentation.” He noted that the plan as reported in the minutes “did not really gel until May” at the joint work session with TCSC..

Haratyk confirmed that Ross was correct in saying that there was supposed to be a report on the presentation at this month's Council meeting and went on to explain that when Dey gave his presentation to SIC they decided it was not ready to send to Council. He said that since then, "the public came to us and asked us to wait, we agreed to wait, and we" set up test plots near Mornings Café.

He explained that "Where our real problem is, is at the edge of roads. We didn't really have grass coming up in our old roads, so it's not coming up in the new roads. It's only coming up where it already existed, where we couldn't get it out." He went on to explain that when residents ask that pavement be laid on the rights of way up to their driveways, that "You're going to have grass coming up through this asphalt, we're not treating it, if there's a grass problem here you're going to have to spray, we don't spray."

Haratyk went on to say, "We're not necessarily having a huge grass problem in the middle of our roadways. Bisbee Rd. has a grass problem; Hwy 92 has a grass problem. . ." "And Hwy 80," Gregory interjected." Haratyk continued, "but those are edge of road problems. . .on those roads where the asphalt meets the gutter pan."

Haratyk went on to explain that the "test plots" by Mornings Café were made by scraping the ground, laying a little AB down and compacted it, and laying down 2-2 ½ " asphalt and compacting that. "I needed a test site that would be closer to what we were testing and that would be edge of road or those places where we put new road, say to connect to someone's driveway. . . . And that's where our issue lies with most of the grass coming up."

In regard to the Dey proposal the Minutes said had been made at the October 2016 meeting, Haratyk suggested that maybe the statement about Dey's proposal was somehow put in the wrong Minutes, because there had been a meeting where Dey stood up at the podium and then sat at the table while they critiqued his presentation. Ross said that it was not at the October meeting.

Gregory said in the audio and video files he had reviewed, neither Dey nor anyone else is recorded as having made that proposal; he suggested that maybe it was on one of the meetings for which there are no audio or video files, for which meetings the public has no idea what happened.

Haratyk noted that "there's been a problem with the recording system and they think they've got all that worked out." Discussion ensued about IT software and the City's progress or lack thereof in acquiring technology to make transcripts of meetings.

Ross said that "we've been lagging on minutes on the premise that we have audio, we have video, "so why do we need a written piece of paper when we have the new information technology available?" He noted that "the voice portion is forwarded to staff" but there is no stenographic center to transfer voice to paper, and when in response to his question of when improved audio and video records would be available, "'We have no money' is the answer I'm getting."

Gregory noted that the written records should be available even though



audio and video records are available, because the public is often interested in seeing quickly what happened, that minutes can be far more informative than an action agenda, and that while scanning meeting minutes may take only a few minutes, reviewing an audio or video file can take an hour or more.

Ross asked “Where do we go from here” based on what you brought up?” He noted that “we [committee, staff and Council [liaisons?]] got very severely criticized because we weren’t doing things right.” Gregory suggested that one thing that could be done is to make the Minutes much more detailed, since the real work the SIC does is in discussions like the current one, or that members have among themselves, or in the “two-on-one” meetings committee members have with staff between regular meetings ‘because that’s where the real information the public needs is, because the public wants to know how you came up with this decision. . . . You tell them what the decision was, but they don’t see how it got there.”

Phillips added, “No one here at this table is qualified to write minutes” and suggested that a volunteer from “the concerned people that you seem to represent” might help. Gregory responded “I don’t represent anyone but myself. I’m just a member of the public.”

Haratyk said that the City “has gone to bid for new municipal software that . . . does exactly what you’re talking about: it transcribes it out.” He went on to note that “I had five committees last week that we’re trying to get abbreviated notes out. . . . We’re going to have to pay for it because that’s going to be cheaper than putting more people on staff.”

Minutes of the meeting of 31 May 2017 were read and approved as read.

Under “Old Business, item #3: Vegetation Encroachment Control Update,” Von Gundlach reported that after listening to a Chuck Alton program with Mayor Smith, he invited Alton to his house to see the grass invasion on the streets (for instance on Yuma Trail) because he felt that the information regarding the herbicides was biased, “being presented as though it was a problem due to Andy’s lack of technical knowledge, which was not true.” He explained that what he had shown Alton was that his street had “no invasive grasses in it” and that he had “applied glyphosate a year ago, about four times in a month, and from that time on there has been no repetition of grass invading and just below my house. . . the grass is growing right through it” and at the other end of McClaren “the grass is growing right through the street.” Von Gundlach went on to say that “I feel the glyphosate issue has been blown out of proportion because based on my own experience an intense application immediately after the application of the asphalt seems to have solved the problem for me. . . . So it’s a matter of personal responsibility as far as I’m concerned, people taking care of the problem in front of their house.”

Phillips said “because of the controversy over vegetation control. . . I have decided that this committee is apolitical, but “my personal opinion is that the public is not going to accept what we want to do” if the public does not want

vegetation control, and we have considered everything. . . hashed it out. . . if the public will not accept this they must accept that. . . twenty year roads will last only 7-10 years.” He noted that “the construction procedures were done right. . . . done as best we can with what we have.”

Gregory noted that he did not disagree with almost everything Phillips had said, but he would add “that what the public wants is not either-or, they want both: good roads and no herbicides [and from everything he had heard and read] alternatives do exist that are viable, that do not cause cancer. There are a lot of alternatives, especially if what you’re mostly concerned about is the edges of the roads.”

Phillips responded, “If somebody knows something we don’t know, tell us about it, but back it up with numbers, and facts, and science-based on the physical laws of nature not some voodoo boogie-woogie jive.” Gregory responded that he agreed, and noted that Andy has been getting a lot of information from people. He reported that in northern Europe they are using a method that applies sugar and hot water to kill weeds. He noted that it will not work on Bermuda but it is one example of a new technology. He cited use of steam as another least-toxic alternative both for pre-treatment and post-asphalt.

Haratyk explained that unlike the method Von Gundlach reported, which kills the weeds “permanently, that is they’re not coming back after they were sprayed,” the other alternatives he’s been getting means that “every year I have to go out and spray again. . . and . . . we just don’t have the wherewithal to go out and treat 40 miles of roads. . . . I can’t in one year actually go out and treat all those road edges year after year. . . . the resources to go out every year for the rest of my career at the City, it just won’t happen. . . . That’s why I acquiesce to the reality that. . . if I can’t spray a glyphosate product, and if I have to spray more than a couple of times in the next couple of years that it really just isn’t worth it. The expense to go year after year or the manpower to go out year after year to cover all these roads just isn’t going to happen. So I was willing to walk away from this and say, ‘Look, I can’t pre-spray, I understand that, I’m going to put these streets down, we are going to have an edge-of-road problem. . . . and I did look at the steam, which is really promising, but the equipment to do it and the time it takes. . . . that’s where I got in trouble. . . . I can honestly tell you. . . if I stop paving roads I can start treating weeds, but with four guys I couldn’t do both. And I made it very clear: I told everybody here, ‘I will never put an employee in harm’s way when it comes to weedkillers’. . . . I had read your stuff. . . .”

Giacomino said that she had a weedkiller that kills the weeds permanently: “and it is just plain old table salt and apple cider vinegar.” Haratyk, said, “I’m with you. . . . There are some issues with salt and asphalt because salt dries asphalt out. . . . it’s the natural salt that causes the alligating and those little white lines that you’ll see in the asphalt.” He noted that “the other thing Luche did, and the interestingly enough the City of LA is doing it, they’re spraying bleach, they’re spraying it right on the city streets; they’re doing it for other things

but they found it's killing the weeds too, so what we had to decide was, out of the least harmful to our employees, what's the next least harmful to the environment, and this got us into such a bind. . . .”

Haratyk went on to explain, “the Council never said we want to start spraying; they tasked us with finding out if there was an alternative. . .so all the committee was trying to do was find out what the best alternative was. . . . As a group, the City and the committee, we are not pushing, we have never pushed the spraying of Roundup as our only alternative.”

Haratyk went on to say, “If I can get our 45 miles of roads paved in 5 years, and we're going to be really close to that, in that five years I don't believe we will have totally lost anything due to grass; we will have spot areas that will be damaged and that we'll have to go back to. At that point (and this is something that's dogged us every since I've worked at the City), we've never been in a position where we can move forward with a maintenance plan, all we've ever done is crisis. . . . After we finish, we can go back and do maintenance, which will be the grass. I'll be freed up in about two years to really start looking at this weed control issue because what we'll really know at end of these five years is how bad it really was, and there's going to be a few areas where it's going to be really bad, but the majority of it's not going to be very bad; there's going to be some really isolated areas. . . . and now we're just at maintenance, now I can really talk to you about, to everybody about, ‘Look, we found something we really want to spray, and I have to do it once every other year, and I'll have the time to actually make that maintenance schedule. Brushing roads and sweeping them. . .goes a long way to keep grass out of your edge of road and your gutter pan, so once we actually get to a point where I can sweep the roads every week or brush them every couple of weeks, that will also help our situation, but first I have to get these roads paved.”

Gregory said he didn't have a problem with that, but noted that one of the major concerns he shared with others is this “need to spray once and never again, Nothing does that. . . . Almost anything you use requires maintenance. You've got to go back, you've got to do repeats even if you're using glyphosate. . . . It's a maintenance issue. . . . We're not looking at extermination, we're not looking at extinction, we're looking at maintenance.”

“Haratyk said, “I agree with you. Since there is nothing to spray one time kill all, I've got to do maintenance, but we've got to get to the point where we can afford to do the roads, then go back and do maintenance. We're close, we're half way there.”

Under “New Business,” Ross reminded the committee that “we do not speak for the City. . . . Nobody on this committee speaks for the City. . . . we speak through the liaisons to the Mayor and City Council. . . . we make recommendations but we do not enforce policy.”

5 Oct 2017      Personal communication with Bisbee Deputy City Clerk Nina Williams indicates that Old Business Item #2 of the Amended Agenda of the 31 May 2017 SIC

Special Session was added by Mayor Smith.

- 15 Oct 2017 French high court rules that Monsanto lied about safety of Roundup  
<http://news.bbc.co.uk/2/hi/europe/8308903.stm>
- 10 Oct 2017 Citizens inform Mayor and Council of article on non-alcoholic fatty liver disease from exposure to ultra-low dose of Roundup  
[https://www.nature.com/articles/sep39328?WT.feed\\_name=subjects\\_molecular-biology](https://www.nature.com/articles/sep39328?WT.feed_name=subjects_molecular-biology)
- 11 Oct 2017 Overnight fire from undetermined source guts Bisbee City Hall, destroying many records
- 25 Nov 2017 Citizens inform Mayor and Council of USGS report on glyphosate found in many US waters:  
<https://toxics.usgs.gov/highlights/glyphosate02.html>
- 27 Nov 2017 EU Commission votes to extend for five years the license for glyphosate use:  
<https://www.comondreams.org/news/2017/11/27/historical-mistake-green-groups-decry-eus-glyphosate-license-extension>
- 28 Nov 2017 Beyond Pesticides, “Monsanto’s Roundup Causes Antibiotic Resistance — A Fact That’s Not Considered by Regulators”:  
<https://www.alternet.org/environment/monsantos-roundup-causes-antibiotic-resistance-fact-thats-not-considered-regulators>
- 18 Dec 2017 EPA release draft risk assessment for glyphosate indicating that the herbicide is not likely to cause cancer in humans.  
<https://www.epa.gov/ingredients-used-pesticide-products/draft-human-health-and-ecological-risk-assessments-glyphosate>