Public Works and Development
Lima Plaza Campus – Arapahoe Room
6954 S. Lima St., Centennial, CO 80112

REGULAR MEETING OF THE ARAPAHOE COUNTY PLANNING COMMISSION TUESDAY, FEBRUARY 2, 2016 @ 6:30 P.M.

GENERAL BUSINESS ITEMS

APPROVAL OF THE MINUTES FROM JANUARY 5, 2016	VOTE: Approved

REGULAR ITEMS

ITEM 1:	Z15-003, Denver Jewish Senior Living / Preliminary Development Plan (PDP) – Continued from January 19, 2016		
LOCATION:	2451 and 2453 S. Wabash Street; west and adjacent to Denver Jewish Day School	VOTE:	
ACREAGE:	2.304 acres	4	IN FAVOR
EXISTING ZONING:	Agricultural-2 (A-2)	2	OPPOSED
PROPOSED USE:	Senior Housing Planned Unit Development (SH-PUD)	1	ABSENT
APPLICANT:	Buccaneer Development, Inc.	0	ABSTAIN
CASE MANAGERS:	Planner, Molly Orkild-Larson; Engineer, Sarah White		
REQUEST:	Assisted Living and Memory Care Facility for residents 55 years and older.	☐ CONTINUED TO:	
MOTION SUMMARY:	Approval with staff findings and changes in conditions. BOCC action required.		
ITEM 2:	U15-001, QUINCY SOLAR GARDENS [SUNSHARE] / USE BY SPECIAL REVIEW (USR)		
LOCATION:	2.3 miles east of Quincy and Watkins Rd	VOTE:	
ACREAGE:	20 Acres	5	IN FAVOR
EXISTING ZONING:	A-1	1	OPPOSED
PROPOSED USE:	A-1	1	ABSENT
APPLICANT:	Jon Sullivan, Sunshare	0	ABSTAIN
CASE MANAGERS:	Planner: Sherman Feher; Engineer, Spencer Smith		
REQUEST:	Request for Use by Special Review for a solar garden.	☐ CONTINUED TO:	
MOTION SUMMARY:	Approval with staff findings and changes in conditions. BOCC action required.	Date: _____	

ANNOUNCEMENTS:

- **The next regular Planning Commission meeting is scheduled for February 16, 2016.**
- **Planning Commission agendas, Board of County Commissioner agendas, and other important Arapahoe County information may be viewed online at *www.arapahoegov.com* or you may contact the Planning Division at 720-874-6650.**

PLANNING COMMISSION MEMBERS:

Mark Brummel - Absent	**Richard Rader - Present**	**Paul Rosenberg, Chair Pro-Tem - Present**
Diane Chaffin - Present	**Jane Rieck - Present**	**Richard Sall - Present**
Brian Weiss, Chair - Present		

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MINUTES OF THE REGULAR MEETING OF THE ARAPAHOE COUNTY PLANNING COMMISSION TUESDAY, JANUARY 5, 2016

ATTENDANCE	A regular meeting of the Arapahoe County Planning Commission was called and held in accordance with the statutes of the State of Colorado and the Arapahoe County Land Development Code. The following Planning Commission members confirmed their continued qualification to serve: Brian Weiss, Chair; Paul Rosenberg, Chair Pro-Tem; Mark Brummel; Richard Rader; Richard Sall, Diane Chaffin. Also present were: Robert Hill, Senior Asst. County Attorney; Chuck Haskins, Engineering Services Division Manager; Spencer Smith, Engineer; Bill Skinner, Senior Planner; Jason Reynolds, Current Planning Program Manager; Jan Yeckes, Planning Division Manager, and members of the public.
CALL TO ORDER	Chair Weiss called the meeting to order at 6:30 p.m. and noted a quorum of the Board was present.
DISCLOSURE MATTERS	There were no Planning Commission (PC) member conflicts with the matters before them.
GENERAL BUSINESS ITEMS:	
APPROVAL OF THE MINUTES	**The motion was made by Mr. Rosenberg and duly seconded by Mr. Sall to accept the minutes from the December 1, 2015 Planning Commission meeting, as presented.** **The motion passed 5-0-1; Mr. Weiss, Abstain.**
BUSINESS ITEMS	
Item 1:	**Case No. L15-004, Cherry Creek Academy – Jayson Reynolds, Current Planning Program Manager** Mr. Reynolds presented a PowerPoint, a copy of which was retained for the record. He reported a public charter school in the Cherry Creek school district planned to expand their parking lot into the existing playground area, relocate the playground to the north side of the athletic field, perform some drainage improvements, and convert the athletic field to artificial turf. He explained, under state statute, schools must advise local jurisdictions of their plans and the PC may comment on the

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Written minutes are a summary of the meeting and provided as a courtesy only.

	proposal. Mr. Reynolds reported no meeting notice was required; however, staff mailed letters to all addresses abutting the school property on E. Fair Lane, as well as, to several nearby Homeowner's Associations (HOAs). He stated staff had received no responses from either neighbors or the HOAs. Mr. Reynolds asked the PC to recommend additional landscaping along the north side of the relocated playground, to potentially mitigate noise and stray objects. The applicant agreed to the condition. Representatives of Cherry Creek Academy were present to address any questions. No members of the public attended the meeting. **It was moved by Mr. Brummel and duly seconded by Ms. Chaffin to recommend approval of Case No. L15-004, Cherry Creek Academy, with staff recommendations, as presented.** **The vote was:** **Mr. Weiss, Yes; Mr. Rosenberg, Yes; Ms. Chaffin, Yes; Mr. Rader, Yes, Mr. Sall, Yes; Mr. Brummel, Yes.**
REGULAR ITEMS	
Item 1:	**Case No. P15-007, Copperleaf #12 / Final Development Plan (FDP)** Bill Skinner, Senior Planner, introduced the case and summarized the proposal. He stated KB Homes was proposing 124 paired home units at a density of about 10 units per acre. He reported the project would be similar to the Parkside Villas project in the Four Square Mile area. He said no members of the public contacted staff during the project. Mr. Skinner reported, as part of the project, the master developer would install a sidewalk connection south to E. Radcliff Parkway to provide connectivity to the elementary school. The PC asked about a connection north to E. Quincy Avenue and after discussions, the applicant agreed to provide that connection as well. The applicant also provided an overview of the project, saying it would provide 4 acres of common open space (30% of the site). The project would contain one east-west public street with on-street

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	parking; the rest of the streets would be private. The applicant shared some conceptual building architecture, noting it was still pending approval by the architectural review committee. The PC asked about the State's water comments. Staff explained the applicant was in the process of securing a will-serve letter from East Cherry Creek Valley, which would be required, before the plat was approved. It was noted, in the past, the State found will-serve letters from districts to be satisfactory. Commissioners Rosenberg, Rader, and Chaffin asked questions about the distribution and amount of visitor parking on the property. The applicant pointed out they were exceeding the County's minimum requirement as they would be providing 0.5 visitor parking spaces per unit, rather than 0.25 spaces per unit. Staff indicated more visitor parking was available on the north side of the project; however, even the south side met the minimum parking requirement. Commissioner Chaffin asked about including more ADA visitor parking. The applicant indicated they were providing some ADA spots, even though none were required for this type of development. The PC expressed concern that commercial wasn't developing in Copperleaf, as promised. The developer responded they need more rooftops to attract the commercial. Commissioner Rader suggested adding more visitor parking adjacent to the detention pond. The applicant indicated that would be difficult to accomplish given utilities in the area. Mr. Weiss opened the public hearing. There were no public comments. The public hearing was closed. **It was moved by Mr. Brummel and duly seconded by Mr. Sall to recommend Case No. P15-007, Copperleaf #12 / FDP,**

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	favorably to the Board of County Commissioners, based on the findings and conditions of the staff report and with an additional condition requiring construction of the off-site sidewalk north to Quincy, as discussed. **The vote was:** **Mr. Weiss, Yes; Mr. Rosenberg, No; Ms. Chaffin, Yes; Mr. Rader, No, Mr. Sall, Yes; Mr. Brummel, Yes.**
APPROVAL OF 2016 MEETING DATES	There were discussions regarding 2016 PC meeting dates. It was noted March 1st was the Democratic Caucus and October 24th was Rosh Hashanah. It was recommended the PC meet on March 8th as an alternative date in March. It was noted the Election of Board Officers would be conducted after February 9, 2016, once the Board of County Commissioners reappointed certain PC Members. There were discussions regarding bylaws, quorums, and board vacancies. Ms. Yeckes stated there would be time for more detailed discussions, during a review of the PC bylaws, at a future meeting. There were additional discussions related to the County's ability to limit annexations, such as the large one the City of Aurora was contemplating.
APPROVAL OF 2016 AGENDA POSTING LOCATIONS	**The motion was made and duly seconded to approve the posting location for PC meeting agendas.** **The motion passed 5-0-1; Mr. Rosenberg, Abstain.**
APPRECIATION LUNCHEON	The annual PC appreciation dinner was discussed. It was noted, typically, the dinner was held prior to a PC meeting in the early part of the new year. The PC stated they preferred having the dinner on a meeting night and suggested A Perfect Landing restaurant as a possible venue.
ADJOURNMENT	There being no further business to come before the Planning Commission, the meeting was adjourned.

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ARAPAHOE COUNTY PLANNING COMMISSION
PUBLIC HEARING
FEBRUARY 2, 2016
6:30 P.M.

SUBJECT: Z15-003 – DENVER JEWISH SENIOR LIVING PRELIMINARY DEVELOPMENT PLAN

MOLLY ORKILD-LARSON, SENIOR PLANNER **JANUARY 25, 2016**

CONTINUANCE FROM JANUARY 19, 2016

The Denver Jewish Senior Living Preliminary Development Plan was heard by the Planning Commission (PC) on January 19, 2016. During this hearing, the applicant requested a continuance in order to address comments and concerns regarding the facility's building height and parking. The PC continued the hearing to February 2, 2016.

The applicant has provided staff with additional material to address the concerns regarding building height and parking for the proposed facility and justification for their findings.

Building Height

During the hearing there was much discussion regarding the proposed height of the assisted living/memory care building. After further review of industry standards for this type of facility and receiving feedback from another senior care designer/architect (Rosemann & Associates), the applicant believes the proposed 47' height is appropriate for this type of use as required by the marketplace.

The applicant indicates that the site's context mitigates potential impacts on nearby uses. The proposed location of the facility is buffered from other residential development by a school to the north and east, a golf course to the east, undeveloped land used for stormwater detention and Cherry Creek trail corridor to the north, south, and west. In addition, there are other residential developments in the surrounding area that have similar approved maximum building heights including: Hunter's Run Final Development Plan (FDP) - 45', Highline Glen FDP – 45', and Cherry Creek Country Club House – 55'.

The applicant also states that the 4SQM Subarea Plan doesn't specify any particular height limitations but rather encourages "new residential zone districts...be crafted to address issues such as density of development, building mass, scale and building height to encourage compatibility with adjacent properties..." The applicant believes their application accomplishes this strategy.

Parking

The Land Development Code (LDC) parking requirement for a nursing home, or similar extended-care facility, is one parking space per two employees plus one parking space per two beds, which would require this development to have 62 parking spaces (108 beds and 16 employees per shift).

The applicant believes the amount of parking needed for assisted living/memory facilities is less than what the County requires. The applicant's architect, H+L Architects, provided staff with Comparable Parking Ratios study that documents the parking of other assisted living/memory care facilities in the surrounding area. The letter provided the number of each facility's units and parking spaces, along with the number of parking space used during peak weekday and weekends. The research indicates the average parking ratio of used spaces is 0.32, or approximately one parking space per three beds.

To address the concerns heard at the January 19th hearing, the applicant proposes the following solution that they believe is appropriate for this development and its' site constraints. Based on the Comparable Parking Ratio study, the applicant has requested, as per Section 12-1207.C of the LDC, to reduce the required amount of parking for the application. The Planning Division Manager has the ability to reduce the parking, if justified, up to 10%. The Planning Division Manager has reviewed the letter requesting a 10% parking reduction and has approved this request bringing the parking requirement down to 56 spaces. To adhere to this adjusted parking requirement, the applicant proposes 28 on-site parking spaces and will enter into a joint parking agreement with Denver Jewish Day School for 28 spaces instead of 7 to 10 spaces on the school property.

The STANTON Solution

January 25, 2016

Molly Orkild-Larson, Senior Planner
Arapahoe County
6924 S. Lima St.
Centennial, CO 80112

RE: Denver Jewish Senior Living Preliminary Development Plan Planning Commission Items

Dear Ms. Orkild-Larson:

Based on the discussion at the January 19 Planning Commission hearing, there were two discussion items we believe require additional clarification and or adjustment: parking & building height.

Parking

There were several comments regarding our proposed parking ratio and plan. Based on that discussion, we have requested and received support from the Denver Jewish Day School (see attached January 21, 2016 letter from the DJDS) to increase the number of spaces to be included in the joint parking agreement that will be required in the FDP phase of the project. This would increase our original request from 33 parking spaces to 56 (with some spaces being met though the joint parking agreement). We have submitted a request for a parking reduction for the Denver Jewish Senior Living application per Chapter 12-1207 General Provisions, paragraph C.

Building Height

There was considerable discussion regarding building height. We appreciate the concerns regarding precedence for the Four Square Mile Area; however, after careful review, the team has determined that the 47' building height is critical to the success of the development and to the needs of its future residents. Both industry standards and the actual site context support this request.

Industry Standards -In addition to the input from the project architect, H+L Architecture, we obtained a second opinion after the public hearing from another leading architect within the senior care design community industry (Rosemann & Associates). Based on feedback from both respected architects in the industry and a review of similar projects currently under development, 47' is appropriate for an assisted living/memory care community as required by the marketplace. Bank financing, operator criteria and consumer preferences are critical factors in the success of the development; therefore it is important to adhere to industry appropriate standards related to the criteria within the PDP. Attached is a page from the Rosemann designed Village at Belmar Construction Plans showing an industry appropriate elevation. It is important to note that the 47' includes the rooftop equipment.

2373 Central Park Blvd, Suite 100
Denver, CO 80238
www.thestantonsolution.com

The STANTON Solution

Site Context – The Four Square Mile Sub Area Plan does not specify any particular building height limitations. The Four Square Mile Sub Area Plan cites that "new residential zone districts...be crafted to address issues such as density of development, building mass, scale and building height to encourage compatibility with adjacent developed properties" (Four Square Mile Area Sub-Area Plan, Page 2).

The site sits in a unique situation with a school and golf course to the east, current and future detention to the west, the Highline Canal Trail to the south and Wabash St./townhomes to the north. In addition, the area around the Denver Jewish Senior Living site has a number of approved and built developments of similar height:

Hunter's Run Apartments	FDP Approval for 45'
Highline Glen	FDP Approval for 45'
Cherry Creek Country Club	FDP Approval for 55' (structure at 49.5/chimney at 55')
Denver Jewish Day School	PDP Approval for 45', FDP Approval for 35'

Therefore, our request is consistent with already approved structures in our immediate vicinity. As shown in our building section example rooftop equipment for assisted living/memory care (which is different than for traditional multifamily) is requiring 5' making the actual roofline more likely to be approximately 42' – 44'. Our request of 47' is a reduction from the 55' building height requested as part of our initial submittal. The Denver Jewish Day School is the closest neighbor to the proposed senior living community. DJDS supports and is party to this application including the requested building height.

Thank you for this opportunity to clarify both the parking and height requirement.

Sincerely,

Susan Stanton

Susan Stanton
Principal

Atttachments:

Industry Appropriate Building Section - Village at Belmar
Denver Jewish Day School - DJSL Revised Parking Letter

2373 Central Park Blvd, Suite 100
Denver, CO 80238
www.thestantonsolution.com

The STANTON Solution

January 25, 2016

Jason Reynolds, Planning Manager
Arapahoe County
6924 S. Lima St.
Centennial, CO 80112

Dear Jason:

We respectfully request a parking reduction for the Denver Jewish Senior Living application per Chapter 12-1207 General Provisions, paragraph C. The Arapahoe County Code does not specifically address the assisted living/memory care use being requested. While the final details typically addressed in the Final Development Plan phase are not part of this submittal, Buccaneer and its team developed a site plan and proforma to establish our requests as part of the SH-PUD. We are using the PUD form as it is intended to alter criteria within the code specific to the site. For purposes of this analysis, the plan assumes 102 units and 108 beds. In addition, it assumes a 1:7 staffing ratio totaling 15.4 employees. There are two categories within the code that discuss senior housing:

Group Homes (.33 spaces per bedroom plus 1 space per caregiver/employee)	Requires 51 Spaces
*Nursing Home (1 space per 2 bedrooms and 1 space per 2 employees)	Requires 62 spaces per staff

*Staff has indicated that the nursing home criteria is the applicable requirement. Based our own research, we believe the nursing home requirement of 62 spaces is excessive as it pertains to the proposed use of assisted living/memory care. Our research indicates that the proposed assisted living/memory care facility is more likely to actually utilize 33 parking spaces. H+L, a respected healthcare and senior living architectural firm, conducted a site survey of nine comparable operating facilities in the metro Denver region (See Parking Ratio Study). The average actual parked ratio was .32 spaces per unit as studied via field observation/site visits conducted during peak hours and weekends. Therefore, our original proposal was for.32 spaces/unit with .25 spaces/unit be provided on site with an additional .07 spaces met through a formal joint parking agreement with the school.

In order to address the comments and concerns heard at the January 19 Planning Commission Hearing, we have worked to find a solution that addresses the concerns voiced and is appropriate to the project and site constraints. We, therefore, request that the Planning Division manager reduce our parking requirement of 62 spaces by 10%, as allowed in the code, to 56 parking spaces. Our preliminary sketch plan indicates we can accommodate 28 spaces on site without requesting a variance to the 35% open space requirement. The Denver Jewish Day School has agreed via letter to enter into a joint parking agreement to allow the Denver Jewish Senior Living to utilize an additional 28 spaces. Thank you for your consideration of this request.

Sincerely,

Susan Stanton

Susan Stanton
Principal

2373 Central Park Blvd, Suite 100
Denver, CO 80238
www.thestantonsolution.com

DENVER JEWISH DAY SCHOOL

Extraordinary Education. Timeless Traditions. Inspired Lives.

2450 South Wabash Street
Denver, Colorado 80231-3816
PHONE: 303-369-0663
FAX: 303-369-0664
denverjds.org

Head of School/CEO
Avi Halzel, MAEd

Principal, Lower Division
Elana K. Shapiro

Principal, Upper Division
Bryan M. Hay

School Rabbi, Dean of Judaic Studies
Rabbi Mark Asher Goodman

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Jason Williamson

President PTO
Carla Kutnick

Rabbinic Council Representative, Ex-Officio
Rabbi Jeffrey Kaye

The mission of our Jewish community day school is to educate Jewish students through an integrated secular and Jewish studies program to thrive in college and beyond and act ethically and purposefully in the world.

January 21, 2016

Molly Orkild-Larson
Senior Planner
Arapahoe County
6924 South Lima Street
Centennial CO 80112

December 16, 2015

Ms. Molly Orkild Larson,

On behalf of the Denver Jewish Day School, we understand that the developer of the Denver Jewish Senior Living Project may require a joint parking agreement to utilize parking available on the school site. The developer has estimated that up to 28 spaces may be required to meet the parking count found during the developer/architect site survey conducted by H+L architecture. On behalf of the school we agree to enter into an agreement with the developer related to joint parking on the DJDS site.

We understand the County will be looking for a more formal agreement during the FDP phase of the project entitlements.

Thank you for your consideration.

Avi Halzel
Head of School/CEO

Denver JDS Founded 1975 Celebrating 40 years

Denver Jewish Senior Living

Comparable Parking Ratios

HL ARCHITECTURE

Based on the design of many assisted living facilities across the country, we have observed that many of the municipalities have differing parking requirements. Our recent research of various City and County parking regulations have resulted in many jurisdictions moving to a smaller parking ratio of .25 spaces for this occupancy. Due to that fact that the residents of these Assisted Living facilities do not drive, other municipalities are moving in that direction by variance or through a TOD designation.

To further assist Arapahoe County in evaluating our proposal, we have conducted site visits during peak hours and weekends at comparable facilities. Many of these sites were visited multiple times.

Facility Name & Address	Number of units	Number of spaces provided	Spaces/unit	Number of spaces used – observed	Spaces/unit utilization
Brookdale Highline 1640 S. Quebec Way	96	34	.35	16	.16
Brookdale DTC 4901 S. Monaco Street	96	40	.41	20	.21
Brookdale Aurora 1860 S. Potomac	76	62	.71	30	.48
New Dawn 2000 S. Blackhawk	48	25	.52	18	.37
Peakview Centennial 6021 S. Liverpool	85	60	.70	38	.44
MorningStar @ Jordan 14301 E. Arapahoe Road	88	58	.68	33	.37
Villagio of Aurora	138	81	.58	N/A	N/A
Spectrum Highpoint 6383 E. Girard Place	97	69	.71	41	.42
Anthem Chelsea Place 14055 E. Quincy	60	26	.43	8	.13
Averages			.56		.32

Based on the examples of comparable parking regulations as well as the parking lot survey, we still support our initial application of .25 spaces per unit based on other codes, however, could understand if the County would like for us to find an additional .07 space through a joint agreement with the Denver Jewish Day School to provide a backup of 7 to 10 spaces for peak days and unforeseen circumstances. The exact count we expect would be determined at FDP phase when the number of units is more defined.

Denver
1755 Blake Street, Suite 400
Denver CO 80202

Colorado Springs
219 East Colorado Avenue
Colorado Springs CO 80903

Molly Orkild-Larson

From: Rich Laws <rlaws@liveberkeley.com>
Sent: Monday, February 01, 2016 3:37 PM
To: Molly Orkild-Larson
Subject: Proposed Jewish Day School
Attachments: 4292_001.pdf; 4293_001.pdf; senior living photo 3.jpg; senior living photo 2.jpg; senior living photo 1.jpg

Molly did you receive this? I've added a couple of photos of assisted living with lower building heights.

Dear Molly,

As you are aware, I attended the planning commission meeting on January 19th. After the meeting, I spent some time gathering additional homeowner feedback from CCCC residents. I have attached a letter that discusses the issues and requests that planning commission either deny the proposed PDP, or continue it until such time that these issues can be resolved. In my discussions with neighbors, most generally approve of the use as well as the higher density. The parking and more importantly, the building height are big concerns. In reading the notes for tomorrow's meeting, if the planning commissioners agree, it seems as though the required amount of parking can be established by way of agreement with the school, so the one remaining issue is building height.

Although the applicant did have one very preliminary meeting with the neighborhood last June, very few attended and most did not understand the exceptions to the comprehensive plan that the applicant is requesting. Nor did they understand that the height requested would be significantly higher than the school. As shown by the number of those supporting the letter, I don't believe that it is fair for the applicant to state that he has the full support of the residents of CCCC. In fact, we should have another 10 or so signatures from those living in the patio homes closet to the club by tomorrow afternoon which would bring the number of those opposing the requested height to 3 times the number that the applicant says approve.

I have also attached a few example of jurisdictions dealing with the issue of height for assisted living. I am quite confident that a 3-story building could be built that fits their needs under 38'. As you can see, Littleton developers were requesting 41' in order to build a 4 story building. Although the developer says that both his Architect and another leading expert agree with these height requirements, several other experts that I have contact disagree. Most have said 40' for 3 stories would be more than enough.

I realize that given the fact that the building has not been designed, they want to keep as much flexibility as possible by having the PDP heights at the maximum they could possibly need. However, once established by the PDP, it will be difficult to reduce at a later stage in the process.

Finally, I think it important to reiterate that the school was limited to a 35' height, the homes on the east side of CCCC were limited, as were several other developments in the 4 square mile area. Although some multifamily projects were allowed exceptions due to grading requirements, this is a flat site that does not require such an exception.

I respectfully request that you share this with the planning commission prior to tomorrow's meeting.

Regards,

Rich Laws

January 29, 2016

Re: Jewish Day School Senior Living Proposal

Dear Neighbors,

Two weeks ago we attended an Arapahoe County Planning commission meeting to listen to comments on the proposed Denver Jewish Senior Living Preliminary Plan. If you are not aware of the plan, we included links to the Arapahoe County Planning commission meeting notes to this memo. **The proposed project is located between the parking lot on the west side of the Jewish Day School and Wabash Street.**

The planning commission voted to delay any action on the proposal until the next meeting on February 2nd due to two primary objections raised by the Four Square Mile Homeowner Group and other concerned neighbors. Those objections were primarily focused on building height and parking.

Although we are generally in favor of the proposed use, we are opposed to the plan as submitted for the following reasons:

1. **The proposed plan is too dense for the site**. The Arapahoe County Comprehensive Plan designates that property for multifamily residential with density from 12 to 25 units per acre. The applicant is proposing 102 units on 2.3 acres which equates to 44 units per acre. Although assisted living may be a desirable use, we believe the comprehensive plan would have to be amended to allow for such use, before any plans should be approved.

2. **The proposed building height is too high**. Multifamily residential has a building height restriction of 35'. The applicant, after originally proposing 55', has reduced it to 47' due to concerns raised by the 4 square mile group. The applicant showed a view study that they had performed from several points within CCCC, but all were from the golf course level, not at deck or second story heights. The Jewish Day School is at 35' so the proposed building would be 12' higher than the school and would impact western views from the course, west backing homes, the clubhouse patio, as well as many other view corridors throughout the community. Although they are only proposing a 3 story building, they are asking for 47' which several of the planners believe is unnecessary. The homes on the east side of CCCC were height restricted to 35' to maintain views for the townhomes along the highline canal, so the county has set the president of protecting view corridors. This was the most significant concern expressed at the meeting.

3. **The proposed plan does not have enough parking**. In order to get the unit count up while still fulfilling the county requirement for 35% open space on the site, the parking has been planned for only 28 spaces. The county requirement for this use is 62 spaces. Because it is assisted living and fewer people drive, the need for parking is less than traditional multifamily, but most felt that 28 was too

few. With a minimum of 15 staff member on site for each shift, that leaves very little remaining parking for visitors to the facility. The Jewish Day School has offered to take some overflow parking but that agreement has not been finalized. Without adequate parking, visitors would be forced to use the Wabash trailhead or find somewhere further away to park.

4. **The applicant has not been forthcoming with CCCC residents**. They did hold one meeting in the clubhouse last June with 12 people in attendance. However, the rezoning, building heights, and parking were not discussed in detail. We believe most people generally approve of the use, but the current proposal is very dense and disregards both height restrictions and parking requirements.

Although senior living may be an appropriate use for the site, as proposed, the developer is requesting several significant exceptions:

- **The comprehensive plan allows a maximum of 25 units per acre and the developer is requesting 44**
- **Multifamily height is restricted to 35' and the developer is requesting 47'**
- **The county required parking is 62 and the developer is proposing 28 (with overflow at the school).**

Our hope is that you will join us in signing this memo expressing your concern over these issues to the Planning Commissioners, or appear in person to express your concerns:

Tuesday February 2, 2016 at 6:30 pm.
Public Works and Development
Lima Plaza Campus – Arapahoe Room
6954 S. Lima St., Centennial, CO 80112

If you want more information we have a pdf of the entire planning staff packet that we can email to you, or you can find it on the Arapahoe county website:

January 19th Meeting:
https://www.arapahoegov.com/AgendaCenter/ViewFile/Agenda/723?html=true

February 2nd Meeting:
https://www.arapahoegov.com/AgendaCenter/ViewFile/Agenda/732?html=true

Best Regards,

Rich and Sandy Laws
8931 E. Wesley Ave.
303-229-4779
rlaws@liveberkeley.com

We the undersigned agree to the concerns expressed above and encourage the Planning Commissioners to either deny the proposed plan or continue it until these issues can be resolved.

Name	Address	Contact
Rich & Sandy LAOS	8931 E Wesley Ave	303-229-4779
Josh + Kristi Riddle	9004 E Wesley Ave	303-917-9991
Sandy Evans	9228 E. Wesley	3-929-0309
[illegible] Kellogg	9146 E Wesley Ave	3/898 8559
Kim Cleveland	9176 E. Wesley Ave	(3)671 8129
Chris Clark	9304 E. Atlantic Pl.	720-732-9359
JAMIE HINDS	9207 E. WESLEY AVE.	970-376-8915
Evelyn Shafer	9227 E. Wesley Ave	303-745-3120
Alessandro Eichstaedt	8900 E Vassar Ave	720.476.9343
Marc Gomez	8940 E. Vassar Ave	303-810-1212
L L [illegible]	8990 S. Vassar Ave	303-369-1134
Mary & Darrell Wieatland	9042 E. Vassar Ave	303-807-6311
Steve Bennett	9276 E Vassar Ave	303-913-2808
Raquel Stott	2705 S. Boston Ct.	202 3210 7726
William Atkins	2434 S. Boston St	303-513-8901
Nate Perry	9105 E. wesley	720-838-8338
Bill Ellington	2432 So. Yosemite St	303 745-7805
Sue Ann McCollum	2432 S. Yosemite St.	303-745-7805
Darrell K. [illegible]	9042 E. VASSAR Ave	303-618-6035

We the undersigned agree to the concerns expressed above and encourage the Planning Commissioners to either deny the proposed plan or continue it until these issues can be resolved.

Name	Address	Contact
LARRY COHEN	9064 E. WESLEY AVE	303-912-7004
David CANO	8902 E. Wesley Ave	303-520-8737
[illegible]	9049 E HARVARD AVE	303-858-2566

File #: Ordinance 45-2014, **Version:** 4

Agenda Date: 11/18/2014

Subject:
Ordinance on first reading approving the amended general planned development plan for Safeway Oakbrook Shopping Center

Presented By: Glen Van Nimwegen, AICP Community Development Director

POLICY QUESTION:

Does city council support the amended general planned development plan for the Safeway Oakbrook Shopping Center?

BACKGROUND:

The applicant, George Swintz of Bonaventure, L.L.C., is requesting an amendment to Lot 5, Block 1 in the Safeway Oakbrook General Planned Development Plan (GPDP) located at the northwest corner of County Line Road and East Phillips Avenue. The amendment allows an assisted living facility to be developed on a remaining lot on the east side of the existing shopping center.

The 17-acre Oakbrook Shopping Center was developed in the 1980's. Initially, the center included a row of inline shops anchored by a Safeway grocery store and four restaurant pad sites adjacent to County Line Road. Two lots at the northeastern portion of the property were planned for retail and office uses, but were not developed. Today, the retail space and restaurants are occupied and a furniture store is in the former grocery store space. A portion of the northeast area of the center is now utilized for employee parking for Courtesy Ford and the remaining lot, which is the property of this application, is vacant.

STAFF ANALYSIS:

Project Description:

The GPDP amendment proposes to develop an assisted living facility on the remaining vacant lot within the northeastern portion of the shopping center. The facility will have 128 apartment units in a four-story building, 98,650 square feet in size. The primary entrance to the building faces County Line Road. Parking on the property would be redesigned and expanded to serve the new facility. The primary vehicular access to the site is on County Line Road with a secondary access from East Phillips Avenue. Loading will occur on the northeast side of the site from an existing drive lane that runs along the northern boundary of the center, behind the inline shops. Adjacent uses include a parking lot to the north and the Oakbrook residential subdivision across East Phillips Avenue, to the east. Site plan details such as pedestrian connections, landscaping, and architecture, are evaluated during site development plan application.

Proposed GPDP Modifications:

The assisted living facility, as proposed, requires the following modifications to Lot 5, Block 1 of the GPDP:

- The addition of "assisted living facility" as a permitted use
- An increase to the maximum allowable building height
- An increase to the maximum allowable gross square footage

The following chart compares the current zoning regulations per the GPDP for this lot to the proposal for the assisted living facility:

Safeway Oakbrook GPDP Zoning for Lot 5, Block 1		
	Existing GPDP zoning regulations	Proposed Amendment
Allowable uses	All uses permitted in B-2 zoning (with some restrictions)	Assisted Living Facility, in addition to existing uses
Gross Floor area	55,800 sq. ft.	98,650 sq. ft.
Building Footprint	40,800 sq. ft.	28,354 sq. ft.
Maximum Building Height	30-ft. for commercial 36-ft. for office	41'.1"-ft.
Parking Requirements	1 space per 300 sq. ft. for office 1 space per 200 sq. ft. for retail	Per city code
Open Space	23.8 percent	No change
Setbacks	30-ft. from Phillips 25-ft. from County Line 0'-ft. from west property line	80-ft. from Phillips No change to other setbacks

4 story Bldg.

Change in Use

The property has been vacant for over 30 years. Designated for commercial and office uses on the existing GPDP, the property has failed to attract a user. According to the applicant's real estate broker who has marketed the site for over 15 years, the focus of retail within the trade area moved to properties immediately adjacent to C-470 interchanges and the frontage along the north and south corridors of Broadway and University after construction of the highway. The broker further states that although the property could accommodate a "junior anchor," retailers typically prefer to cluster in the same area as other complimentary and competitive users. These uses have found opportunities to serve the neighborhood and the regional retail market in more strategic locations than the Oakbrook Shopping Center location (see attached letter from Bryan D. Slaughter, Sullivan Hayes Brokerage).

Building Height and Gross Square Floor Area

The maximum height for the property under the existing GPDP is 30 feet for commercial use and 36 feet for office use. The GPDP's Statement of Development Objectives states that the height restrictions are in place to "help in blending the development with adjacent residential use." The proposed four-story structure measures 41'1" tall per the height calculation method in the zoning code, exceeding the maximum allowable height for the site by approximately five feet. The city code definition for structure height and the method used for measuring it is attached with an illustration.

Regarding gross square floor area, the existing GPDP limits the property to 55,800 sq. ft. The applicant's request for a 98,650 sq. ft. building is an increase of 77 percent. The Statement of Development Objectives in the existing GPDP states that development adjacent to the Oakbrook residential subdivision "is designed to be in scale with the neighborhood" and that the small scale of the building size "is very sympathetic to the neighborhood in both scale and density."

The applicant's Letter of Intent (attached) states that the request for the additional five-foot structure height is imperative due to the nature of the business: a minimum of 104 to 110 units is needed to cover the cost of the site, construction, staffing levels and quantity of higher paid employees. In addition, the number of units as proposed supports an amenity package and services required for higher service levels for residents of the facility. Due to the size and configuration of the site, it is not possible to achieve the number of units the applicant requests without constructing a four-story building.

The applicant has received comments and a petition from residents of the Oakbrook Subdivision on the east side of East Phillips Avenue concerning the impact of the additional height on mountain views (see attached letter from neighbor, neighborhood petition and the applicant's neighborhood meeting notes). Mountain views are seen primarily from the properties that back up to East Phillips Avenue and from East Phillips Avenue itself, which is the entrance to the subdivision from County Line Road. The applicant has made the following adjustments to lower the height of the building:

- Use of a flat roof from a pitched roof, which lowers the height by three feet.
- Use of individual HVAC units in the exterior walls of the structure which reduces the floor to floor height of the building and avoids placing large rooftop units on the roof.
- Reduction in parapet height to the minimal height to retain rain water on the roof.

Traffic Study

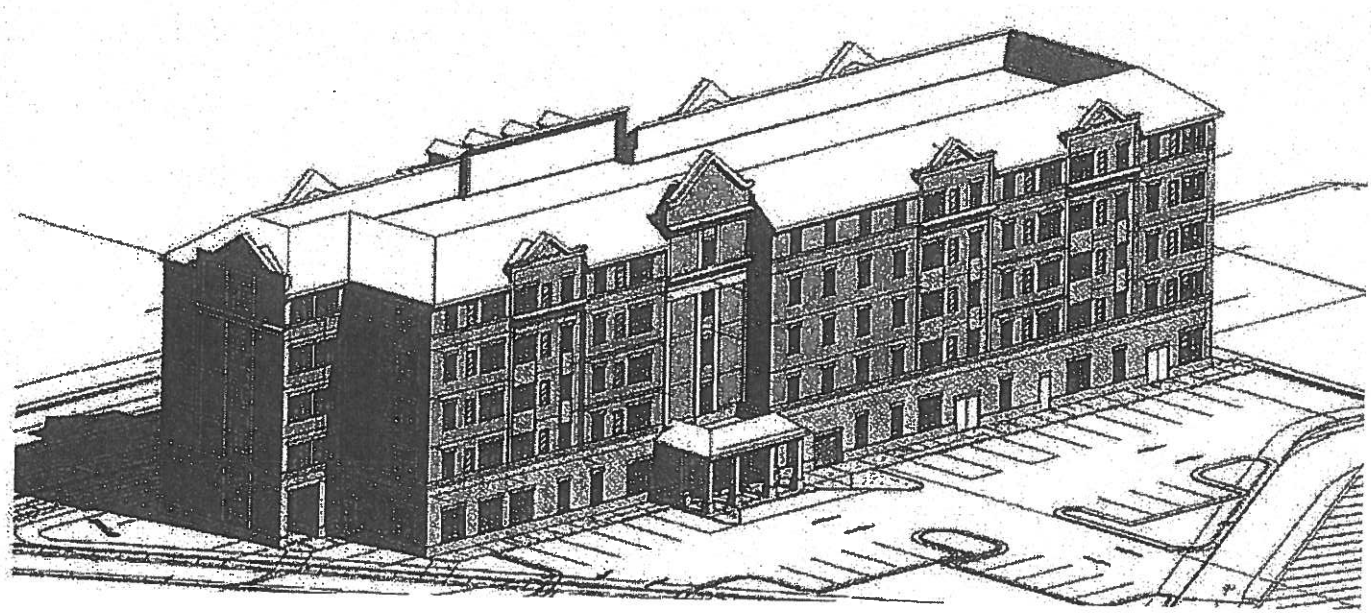
The traffic study submitted by the applicant evaluates the trip generation potential for the proposed assisted living facility and compares it to the trip generation potential for the property under the current allowable uses for the site within the shopping center. It estimates this development to generate approximately 322 trips entering and exiting the site on a typical weekday. Of these, approximately 17 will occur during the morning peak hour and 27 will occur in the evening peak hour. The study concludes that the assisted living center would generate an overall 81.5 percent trips less than a commercial use.

Consistency with the Comprehensive Plan:

Daily Herald

Business | updated: 10/12/2015 3:42 PM

Plans for assisted living building revived in Des Plaines



A rendering shows the five-story, 65,308-square-foot assisted living building proposed on Lee Street south of downtown Des Plaines. The city council could approve the project as soon as Oct. 19.

Courtesy of City of Des Plaines

55 ft + 5 ft = 60 ft
5-STORY Bldg + Parapet
~~= 60 ft~~.

Christopher Placek

A proposal for a five-story, 68-unit assisted living and memory care building south of downtown Des Plaines is being revived.

The proposed 65,308-square-foot building at 959-997 Lee St. received approval from the city council in 2012. But according to property owner Edward Soske, financing for the project dried up and the approval expired.

Now, he's seeking reapproval of a conditional use permit and height variation that would pave the way for demolition of existing one-story buildings on site and construction of the new building to begin.

The city council will take up the matter Monday, Oct. 19.

The building would be run 24 hours a day by Revere Healthcare, Ltd., with 51 assisted living units and 17 memory care units. It would have a first-floor kitchen and dining room, gift shop, administrative and health professional offices, and a chapel, according to city documents.

A maximum of 21 employees would work during the morning shift.

The project includes a 28-space parking lot, which meets the requirements of the city zoning ordinance.

Soske says he's planning to relocate his Presstech printing business to a property he owns in Arlington Heights. The site is also occupied by an auto repair shop and former hot dog stand.

Soske said he thinks the assisted living building will be a better fit in the neighborhood. A 9-story senior housing apartment building sits to the north of Soske's property.

"Lee Street is a much prettier street with a nice assisted living facility than an industrial printing shop," he said. "The project will create tax revenue, jobs and make Des Plaines a nice place to live."

The zoning board has recommended approval of a variation for a 55-foot building height, and 60-foot height to the top of a parapet. City code calls for a maximum height of 45 feet at that location.

Soske said if the project is approved by the city council, construction could begin in April and be complete within 12 months.

Article Comments (0)

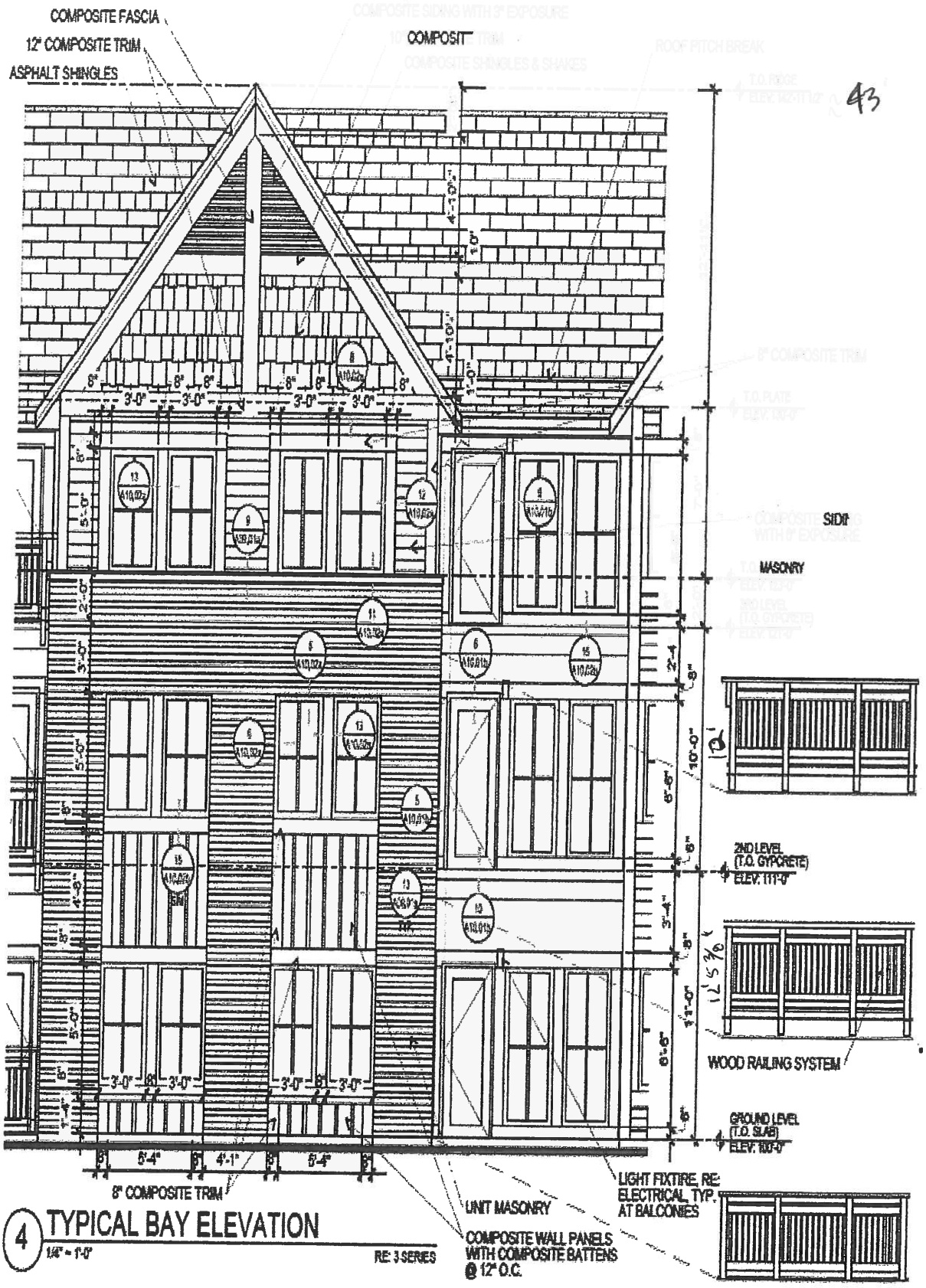
5-story Bldg.

ZONING CODE

Sec. 4.11. Table of Dimensional Regulations
City of Waltham
(See Sec. 4.12 for footnotes)

[Amended 8-4-1997 by Ord. No. 28403; 3-3- 1999 by Ord. No. 28735; 6-26-2000 by Ord. No. 29025; 5-28-2002 by Ord. No. 29513; 12-23-2002 by Ord. No. 29628; 6-13-2005 by Ord. No. 30180; 6-26-2006 by Ord. No. 30450]

District	Minimum Building Setback(s) (23)			Maximum Building Height (18) (21) (23) (feet)	Maximum Stories (23)	FAR by Right (17)	FAR by Special Permit (17) (22) (23)	Maximum Lot Coverage (percentage) (2) (23)	Minimum Open Space (percent) (9), (17)	Lot Area (Square feet)	Maximum Dwelling Units per acre (12)	Lot Frontage (feet) (10)	Minimum Lot Area Per Dwelling Unit (square feet)	Minimum Open Space per Dwelling Unit (square feet)	Minimum Lot Width (feet)
	Front (feet)	Side (feet)	Rear (feet)												
RA-1	40	20	40	35	2.5	–	–	20	–	20,000	–	100	–	–	–
RA-2	40	20	40	35(11)	2.5	–	–	20	–	15,000	–	80	–	–	–
RA-3	25	15	30	35(11)	2.5	–	–	25	–	9,600	–	70	–	–	–
Assisted Living Facilities	40	40	40	35	3	–	–	–	–	40,000	–	100	1,000	500	100
RA-4	25	15	30	35	2.5	–	–	25	–	7,000	–	60	–	–	–
Assisted Living Facilities	40	40	40	35	3	–	–	–	–	40,000	–	100	1,000	500	100
RB	15	10	30	40	3.0	–	–	30	–			60	–	–	–
Single- Family										6,000	–		–	–	–
Two-Family										6,000	–		–	–	–
Assisted Living Facilities	40	40	40	35	3	–	–	–	–	40,000	–	100	1,000	500	100
RC	10	10(3)	20(4)	40	3.0	.20	.60	30	15			50	–	–	–
Single- Family										6,000	–		–	–	–
Two-Family										6,000	–		–	–	–
Multifamily										6,000	6		–	–	–
Assisted Living Facilities	40	40	40	35	3	–	–	–	–	40,000	–	100	1,000	500	100
RD	75	45	60	50	4.0	.20	.80	30	15	5 acres	6	50	–	–	–
HR1															
Except assisted Living	10	10	20	74	6	1.8	–	75	–	10,000	59	50	–	–	–
Assisted Living	40	40	40	74	6	1.0	1.5			40,000	–	100	1,000	500	100



43

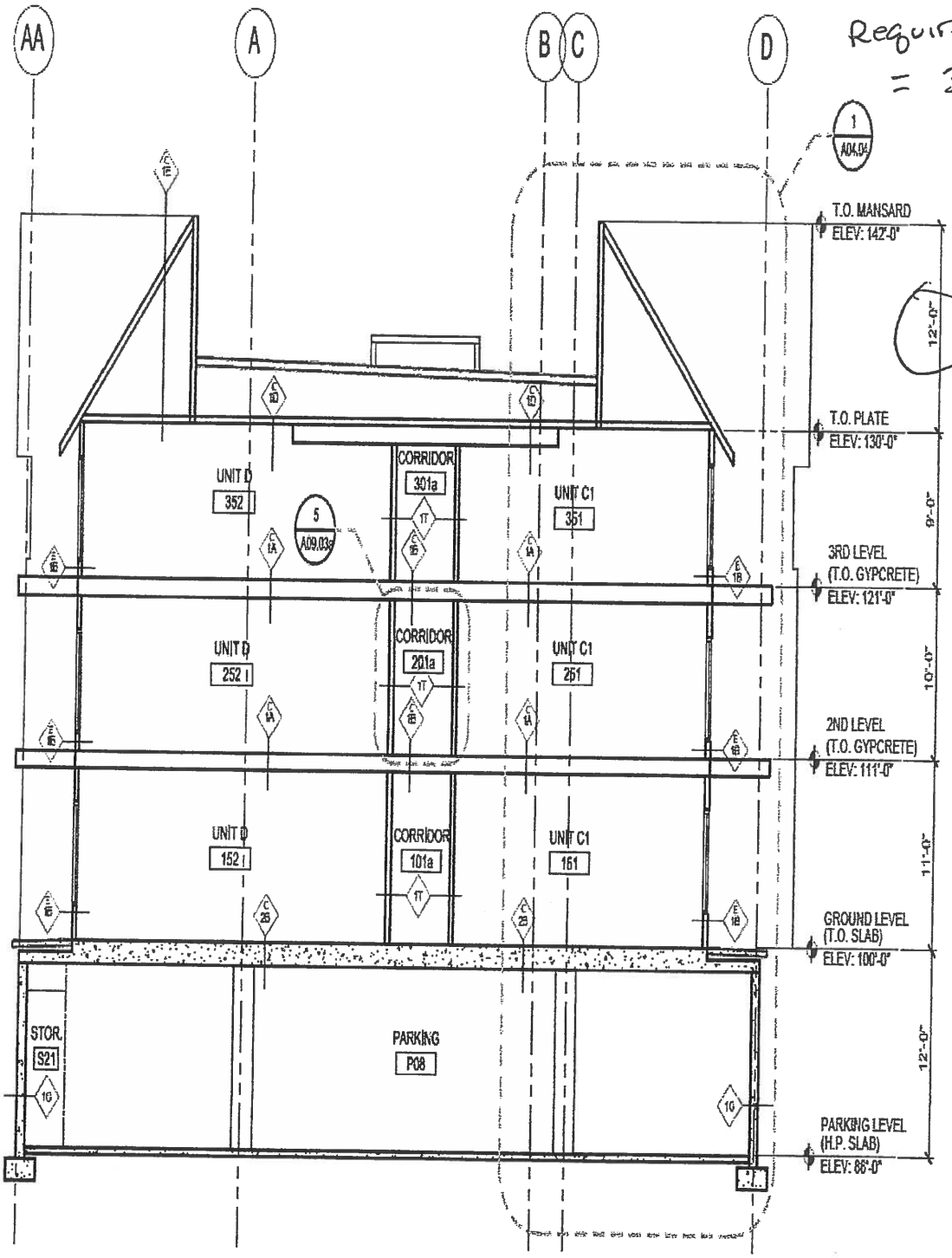
4 TYPICAL BAY ELEVATION

1/4" = 1'-0"

RE: 3 SERIES

Overall Height = 42'

Required height. = 35' - 37'



only Need 5-7 ft.

4 BUILDING SECTION

1/8" = 1'-0"

RE: A01 SERIES

February 2, 2016

Dear Members of the Arapahoe County Planning Commission:

We live within the Cherry Creek Country Club ("CCCC") and the area purportedly represented by the "Four Square Mile Homeowner Group."

We support the Buccaneer Development application to establish a senior memory facility.

We are unconcerned about the height request, as we expect it will have no meaningful impact on the view corridor.

We are also unconcerned about the density request. For the proposed use (as in, a memory care facility) we believe there is more than ample parking in the site plan. That, coupled with the opportunity for additional parking on the Denver Jewish Day School site seems to address sufficiently any parking concerns.

Presently, the piece of land in question is unimproved. Although it is maintained, it is not particularly attractive visually. We drive past the piece of land numerous times in a week. It would be a significant improvement to have a meaningful use on the property that positively affects our CCCC neighborhood as well as provides a compatible use for the school.

Sincerely,

Michelle Brunschwig (LC) Randy Brunschwig (LC)

Michelle Brunschwig and Randy Brunschwig
9041 E Wesley Drive
Denver, CO 80231

February 2, 2016

Dear Members of the Arapahoe County Planning Commission:

We live within the Cherry Creek Country Club ("CCCC") and the area purportedly represented by the "Four Square Mile Homeowner Group.[1]"

We support the Buccaneer Development application to establish a senior memory facility.

We are unconcerned about the height request, as we expect it will have minimal – if no – impact on the view corridor. Among other things, we would expect that the sloping grade from the neighborhood would negate most of the impact. And, when we both gazed out of our second story, western-facing window just this morning it appeared that our view would not be hindered in any meaningful way.

We are also unconcerned about the density request. For the proposed use (as in, a memory care facility) we believe there is more than ample parking in the site plan. That, coupled with the opportunity for additional parking on the Denver Jewish Day School site seems to address sufficiently any parking concerns. (We note that by appearances and by demographics of the school – with most students under the age of 16 - most parking goes unused almost all of the time.)

Presently, the piece of land in question is unimproved and, while maintained, it is frankly not aesthetically pleasing. We drive past the piece of land countless times in a week (and Lisa does so at least twice a day from our home to her office in the Tech Center). We would be thrilled to see a vibrant use on the property that only positively affects our CCCC neighborhood as well as provides a compatible use for the school.

Sincerely,

Lisa R. Cohn Richard Cohn

Lisa R. Cohn and Richard Cohn
8991 E Wesley Ave
Denver, CO 80231

[1] This is not, to our knowledge, a formal group and it is not the official homeowners association of the CCCC neighborhood. Had we known that a group had formed to oppose the application we are confident that we could have rallied sufficient meaningful support from residents of the CCCC neighborhood.

BUCCANEER
DEVELOPMENT, INC.

February 2, 2016

Molly Orkild-Larson, AICP
Senior Planner
Planning Division
Arapahoe County Public Works and Development
6924 S. Lima St
Centennial, CO 80112

Re: SUBJECT: Z15-003 – DENVER JEWISH SENIOR LIVING PRELIMINARY DEVELOPMENT PLAN

It has come to our attention through the County that Mr. Rich Laws a resident of CCCC who attended and spoke at the 1/19/16 P & Z Hearing in opposition to the project due to height and parking has on 1/29/16, sent a letter to his CCCC neighbors asking them to oppose the project. The letter is attached.

In reviewing Mr. Laws letter we feel it is important to respond and clarify the facts of the statements made by Mr. Law. The following are his statements and our response:

1) The proposed plan is too dense of the site.

Response: If we were building a traditional multifamily apartment community, then the 44 units to the acre would be a very dense project and out of line with the Comp Plan. That is the reason why we are asking for the Senior Housing zoning designation is that these developments have significantly smaller units that are basically ½ the size of a typical apartment unit (see attached CCCC homeowner presentation boards) as well as very few of the senior residents driving and parking a vehicle. The Senior Housing designation specifically takes into account our type of project. In addition, P & Z has articulated no issues with the density.

2) The building height it too high.

Response: There are two past FDP approvals for 45' high buildings that exist immediately south of our project site. The CCCC Club House was approved at 55'. The apartments typically do not require rooftop mechanical. This roof top HVAC equipment is expected to be about 5 ft. and would be screened and consolidated. The mechanical equipment only takes up approximately 15% of the total roof area. Therefore, the actual building height would be closer to 42'.

5690 DTC Blvd. Suite 285 W Greenwood Village, Colorado 80111 Phone: 303-531-7900 Fax: 303-531-7901

Response: The Rose Foundation Study identified that to develop this site for a use appropriate next to the school that a shared parking agreement would be needed. We have reached such an agreement.

4) The Applicant has not been forthcoming with the CCCC residents.

Response: Our open house invitation was sent to all residents in the CCCC as well as the adjacent neighbors exceeding the County requirements which are to notice adjacent property owners. We hosted the meeting at the Club to make attendance easy. There were four detailed story boards (attached). The project engineer, two developer representatives, 2 project architects and I were present to answer questions and walk participants through the project presentation boards. The PDP Application is for zoning not for a specific final development plan which is when the project design is developed and presented at the neighborhood meetings. In addition, we met twice with 4SM to solicit their input and we reduced the initial building height from 55' down to 47' that based on comments by the 4SM Board at our meeting with them, that 47' was acceptable.

In addition, Mr. Laws has provided to the County design plans from another unrelated senior housing project located in Littleton. Mr. Laws incorrectly represented that the other project is a 4-story structure when, in fact, it is 3-storys with one level of underground parking below the building. Mr. Laws also indicated on the Littleton projects Building Section Plan (attached) that the "required height" of the building should be 35' to 37' when, in fact, the top of the roof line is at 42'.

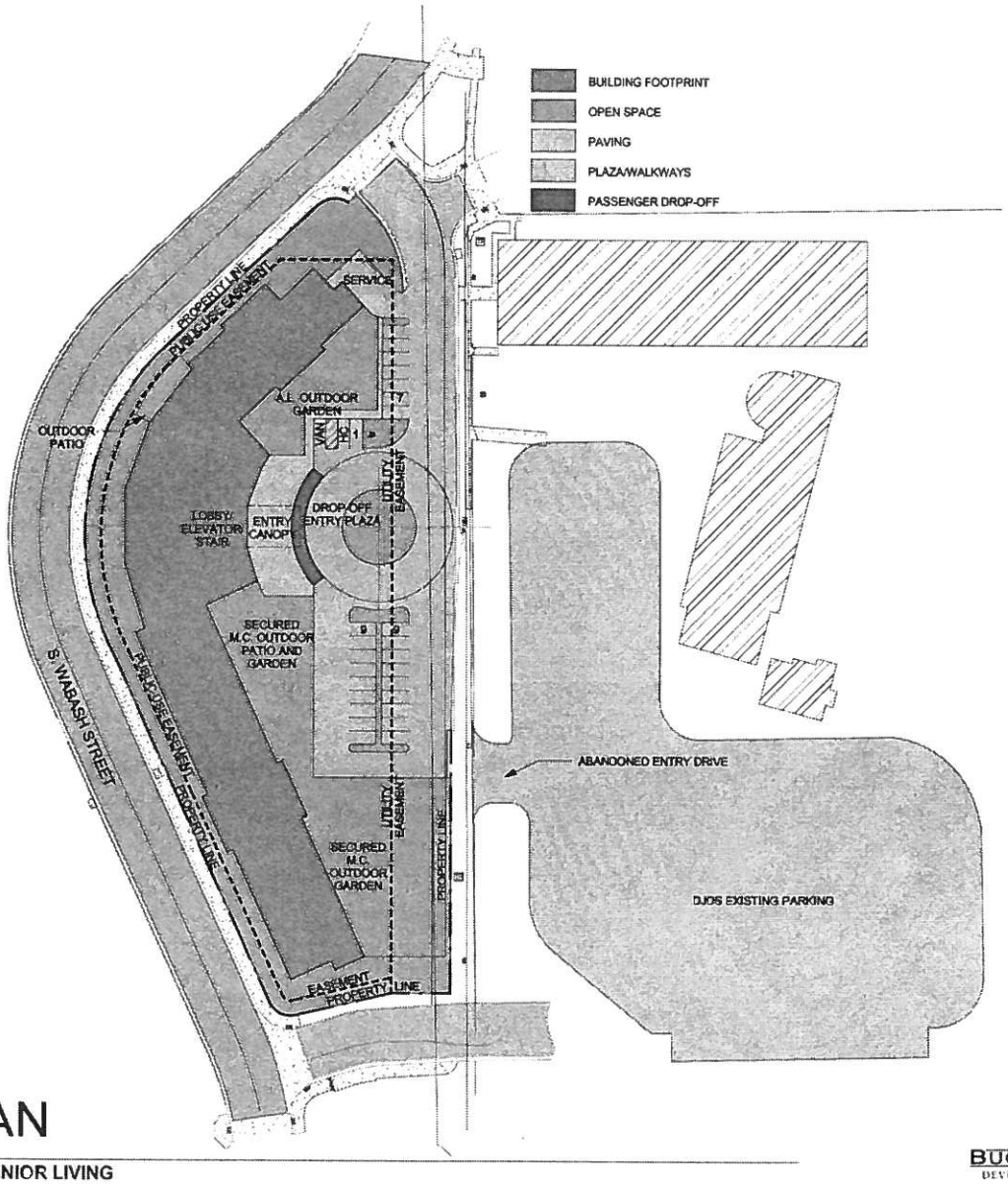
We believe it is important for the County to review the facts of these issues in order to make an informed decision on the project proposed by the Applicant.

Thank you,

Sincerely,

Jonathan D. Griffis
Principal

cc: Susan Stanton-The Stanton Solution



SITE PLAN

DENVER JEWISH SENIOR LIVING

BUCCANEER DEVELOPMENT, INC.

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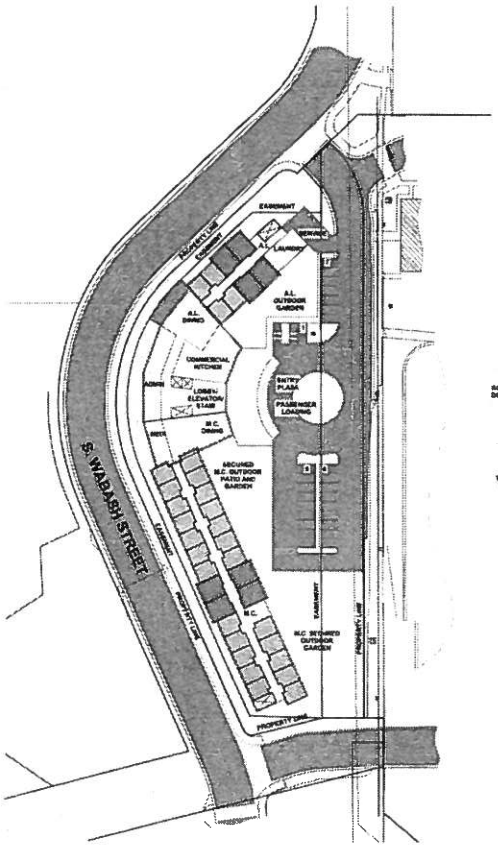
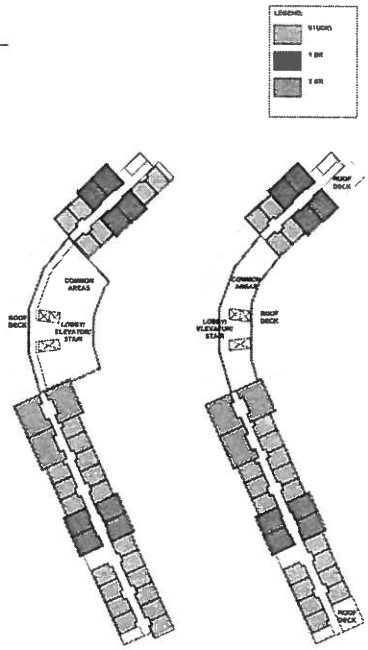




UNIT COUNT:		
MEMORY CARE:		
FIRST FLOOR:	**STUDIO**	**24**
	1 BR	**4**
TOTAL M.C.:		**28**
ASSISTED LIVING:		
FIRST FLOOR:	**STUDIO**	**4**
	1 BR	**4**
		8
SECOND FLOOR:	**STUDIO**	**24**
	1 BR	**8**
	2 BR	**3**
		35
THIRD FLOOR:	**STUDIO**	**20**
	1 BR	**8**
	2 BR	**3**
		31
TOTAL A.L.:	**74 UNITS**	
BUILDING TOTAL:	**102 UNITS**	

FIRST FLOOR PLAN

SECOND FLOOR PLAN

THIRD FLOOR PLAN

FLOOR PLANS

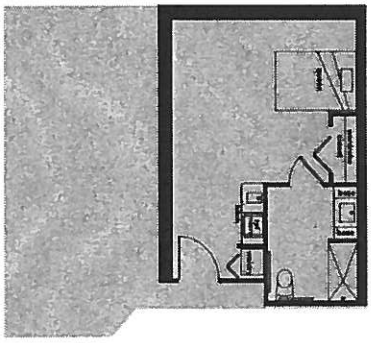
DENVER JEWISH SENIOR LIVING

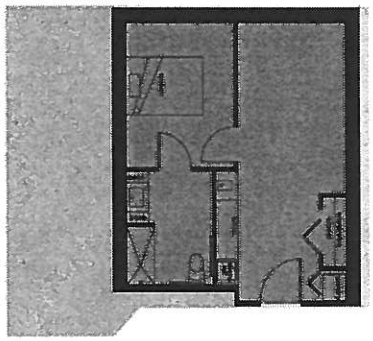
BUCCANEER DEVELOPMENT, INC

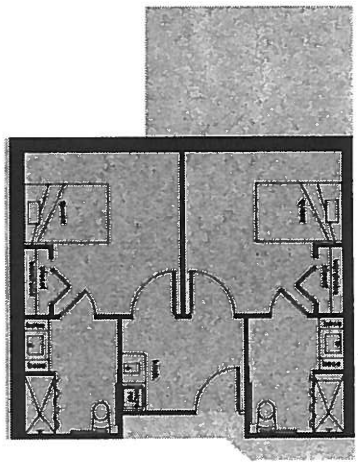
A typical market rate apartment is generally larger than memory care/assisted living units as illustrated below.

Market Rate Apartments

Proposed Units







STUDIO APARTMENT

Market Rate 1BR:
670 SF

Proposed Studio:
379 SF

1 BEDROOM APARTMENT

Market Rate 1BR:
670 SF

Proposed 1BR:
533 SF

2 BEDROOM APARTMENT

Market Rate 2BR:
860 SF

Proposed 2BR:
608 SF

TYPICAL AL UNIT SIZE VS. APARTMENTS

DENVER JEWISH SENIOR LIVING

BUCCANEER
DEVELOPMENT, INC

DEVELOPMENT CRITERIA	
SITE INFORMATION	**PROPOSED**
Gross Site Area	2.304 Acres (100,362 SF)
Minimum Open Space	35%
Maximum Lot Coverage (% of lot area)	65%
ZONING	
Zone District	PUD
Permitted Uses	Senior Living PUD
Maximum Number of Senior Living Units	102 Units
Maximum Density	44.5 Units/Acre
BUILDING INFORMATION	
Building Setbacks (measured from Property Line):	
North	38 FT
South	20 FT
East	41 FT
West	11 FT
Maximum Building Height	55 FT
PARKING	
Parking Ratio	0.25 space per unit
Staffing Ratio	1:7 average at peak
Parking Spaces Planned	26 total (15 staff, 11 guest)

DEVELOPMENT STANDARDS

DENVER JEWISH SENIOR LIVING

BUCCANEER DEVELOPMENT, INC.

STAFFING

- Senior Living Communities such as this have 1 staff person per 7 residents at full staff (same shift) which equates to 15 staff per shift.

PARKING

- The Building Code for Denver and Aurora requires .25 parking spaces per unit for senior living communities. The site is planning for 26 parking units which equates to .25 spaces/unit.
  - None of the residents drive or have cars requiring any parking.
  - 15 parking spaces will be allocated to employee parking.
  - 11 parking spaces will be allocated to visitor parking.

TRAFFIC

- Residents do not drive.
- Significantly less traffic than approved office building or apartment use.
- The Denver Jewish Day School hours: 8:00 am and end about 3:00 PM.
  - The proposed development and school PM peak hour will not occur at the same time.
  - The proposed development and school use different access points.
  - South Wabash is a low volume street with plenty of gaps in the traffic volume during peak hours.
  - We are not anticipating any significant transportation impact on school traffic operations.
  - AM peak hour trip generation by the proposed development is only 15 vehicles which equates to just one vehicle every four minutes.

ITE Code	Land Use	Quantity	Units	Daily Trips	AM Trips			PM Trips		
					In	Out	Total	In	Out	Total
254	Assisted Living	108	Beds	288	10	5	15	11	13	24

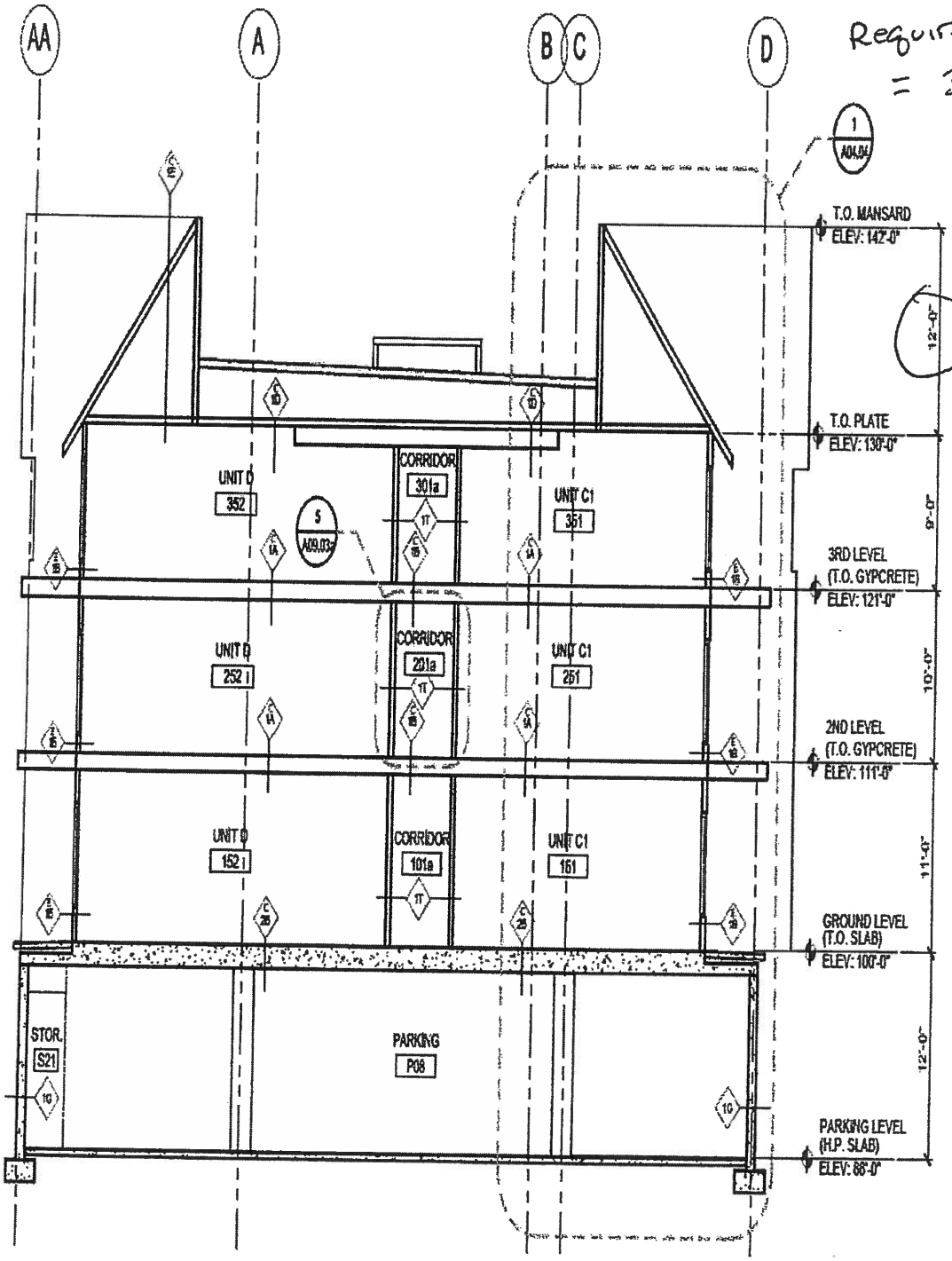
VEHICULAR ANALYSIS

DENVER JEWISH SENIOR LIVING

BUCCANEER DEVELOPMENT, INC.

Overall Height = 42'

Required height. = 35' - 37'

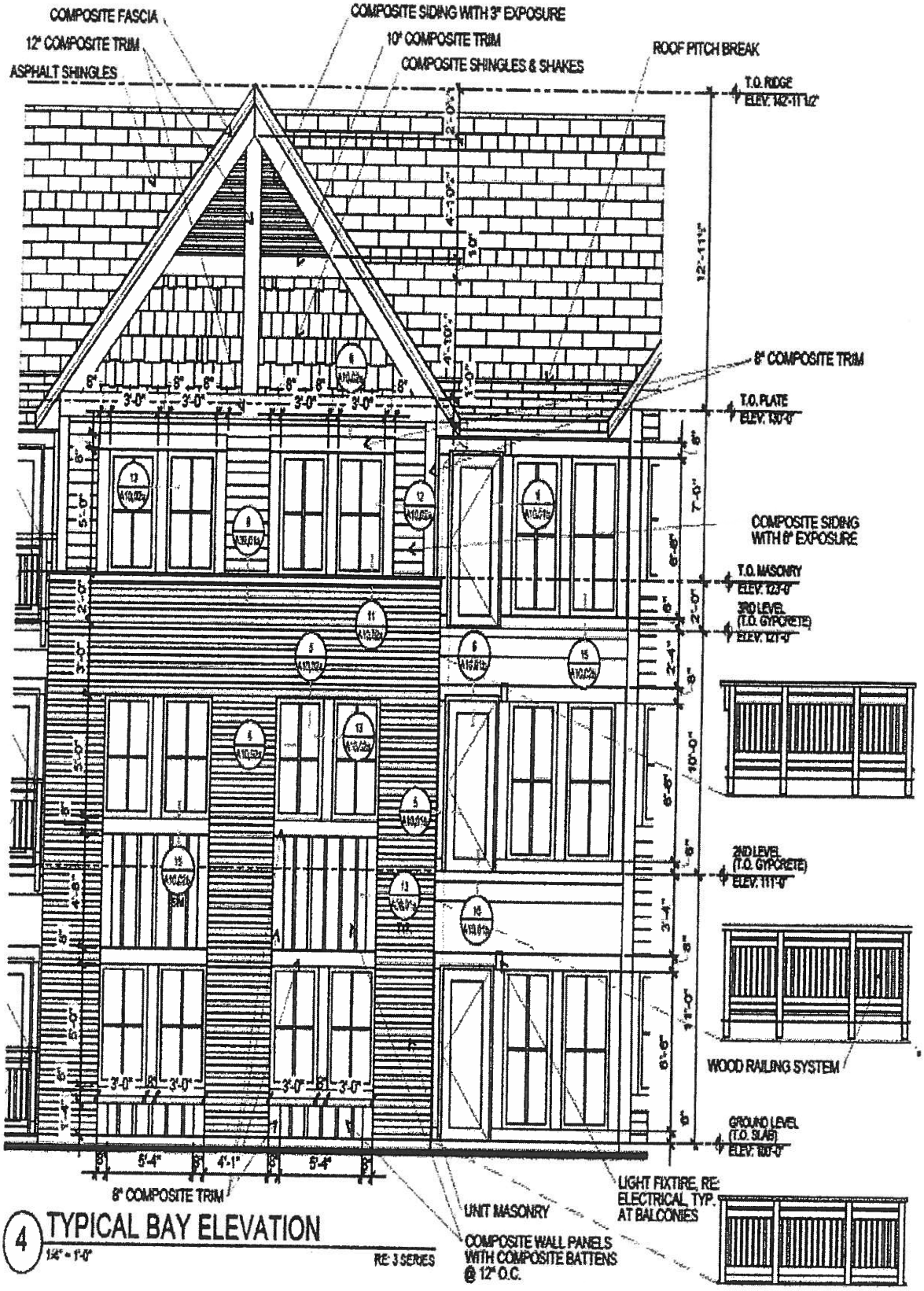


only need 5-7 ft.

4 BUILDING SECTION

1/8" = 1'-0"

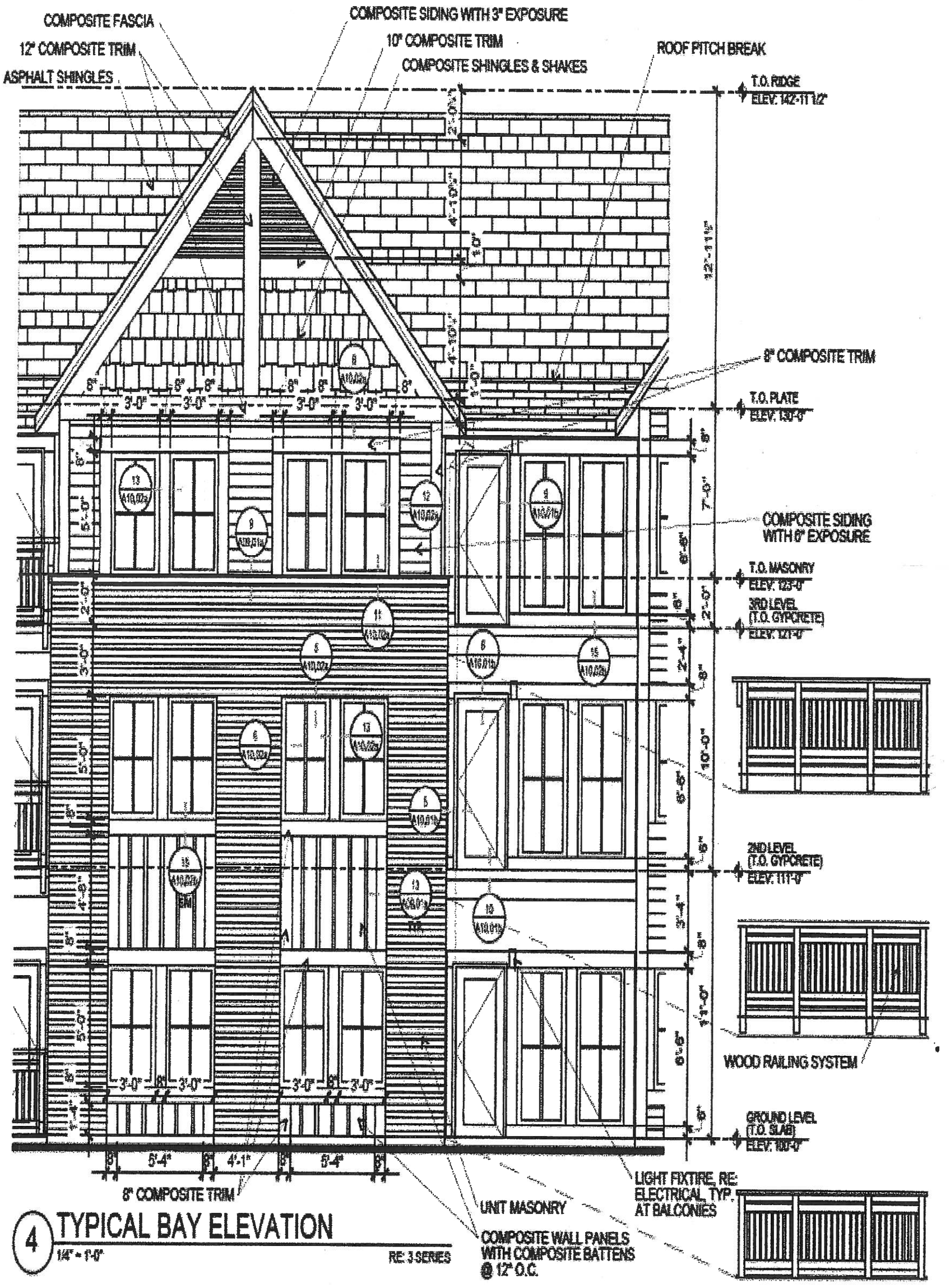
RE: A01 SERIES



4 TYPICAL BAY ELEVATION

1/4" = 1'-0"

RE: 3 SERIES



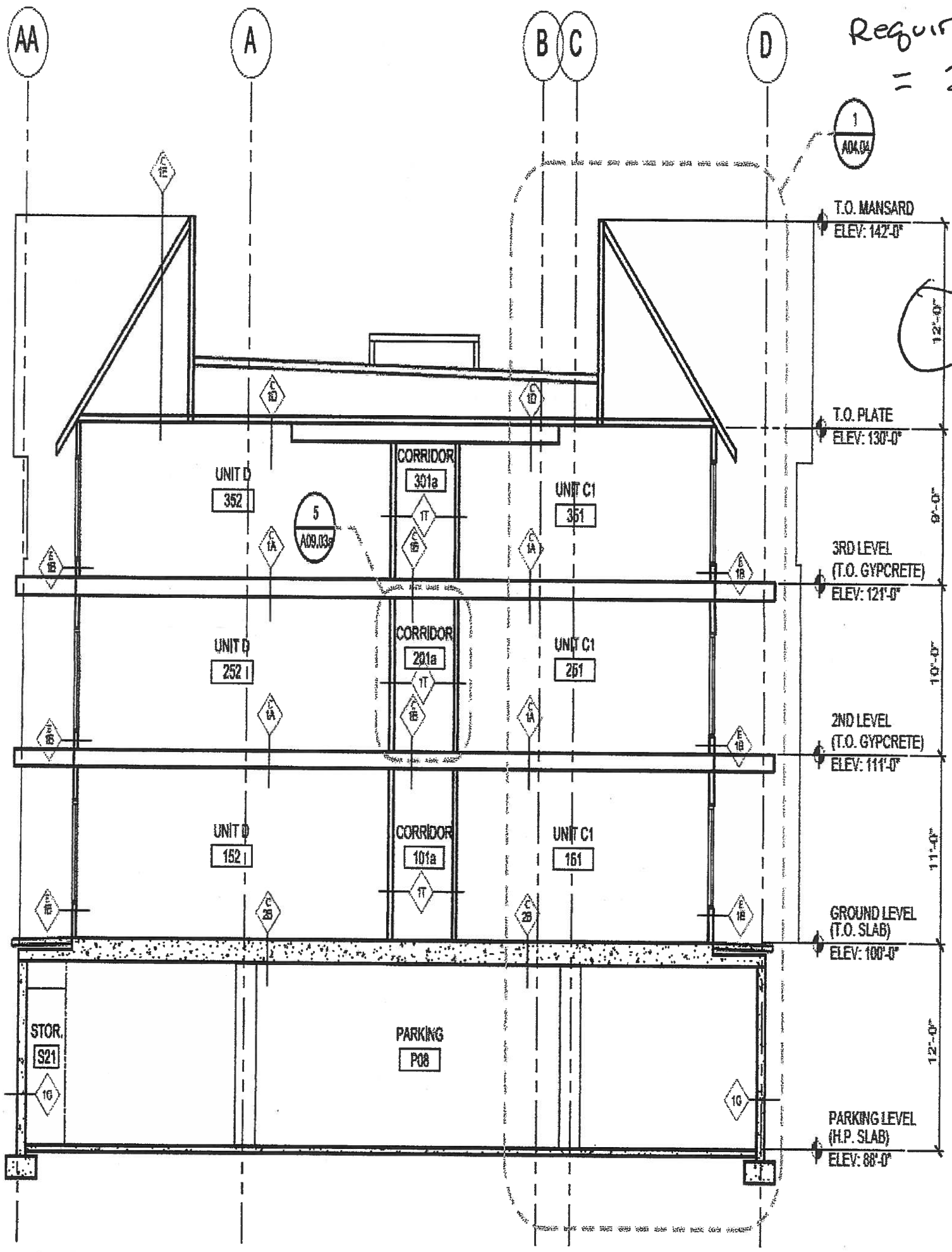
4 TYPICAL BAY ELEVATION

1/4" = 1'-0"

RE: 3 SERIES

OVERALL Hergl
= 42'

Required hei
= 35' - 3



only Need 5-

4 BUILDING SECTION

1/8" = 1'-0"

RE: A01 SERIES

ARAPAHOE COUNTY
COLORADO'S FIRST

REGULAR MEETING OF THE ARAPAHOE COUNTY PLANNING COMMISSION
TUESDAY, FEBRUARY 2, 2016 AT 6:30 P.M.
LIMA PLAZA - ARAPAHOE ROOM - 6954 S LIMA ST, CENTENNIAL CO 80112

CASE NO. Z15-003, DENVER JEWISH SENIOR LIVING / PRELIMINARY DEVELOPMENT PLAN (CONTINUED FROM 01-19-2016)

No.	NAME	ADDRESS	Are you IN FAVOR of approval or OPPOSED?	Do you wish to address the Board on this matter? Yes or No?
1	Rich Laws	8931 E Wesley Ave	~~[illegible]~~ opposed As planned	Yes
2	Ali Halzel	5003 S Helena St.	in favor	Yes
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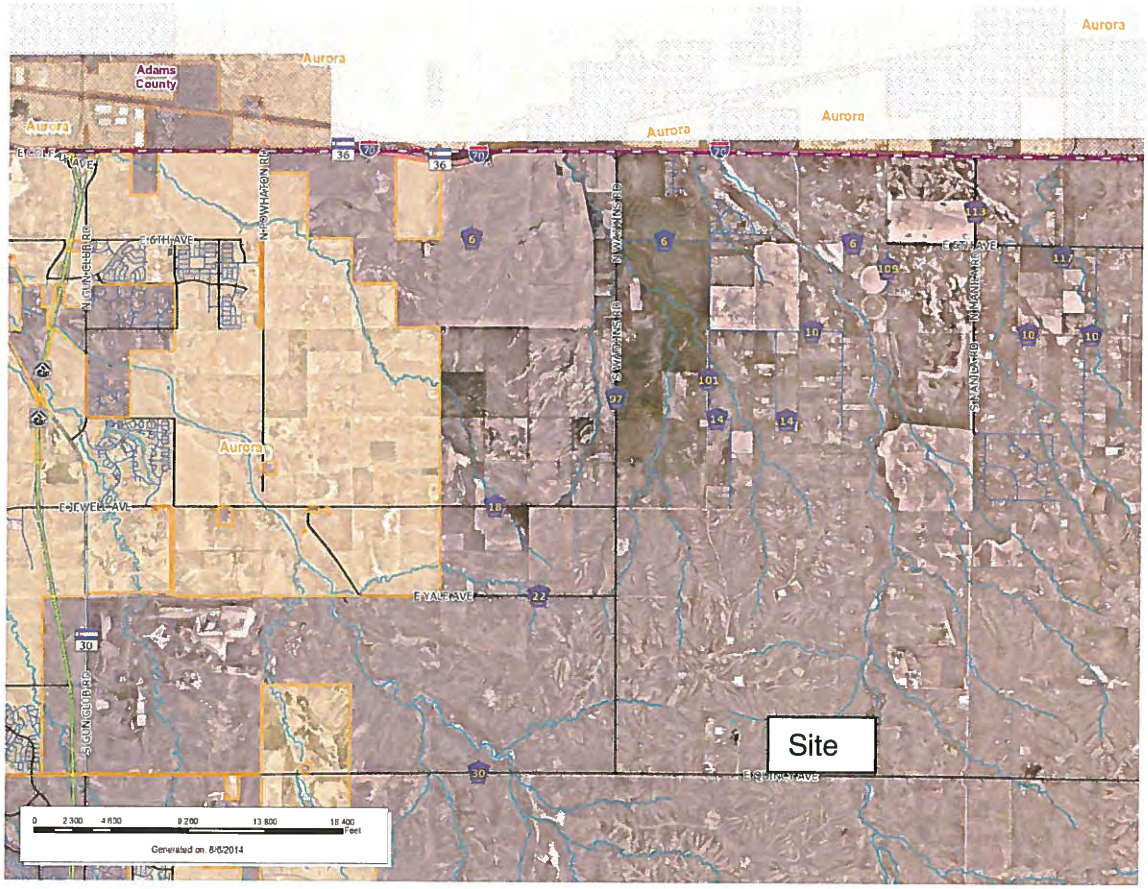
ARAPAHOE COUNTY PLANNING COMMISSIONERS
PUBLIC HEARING
February 2, 2016
6:30 PM

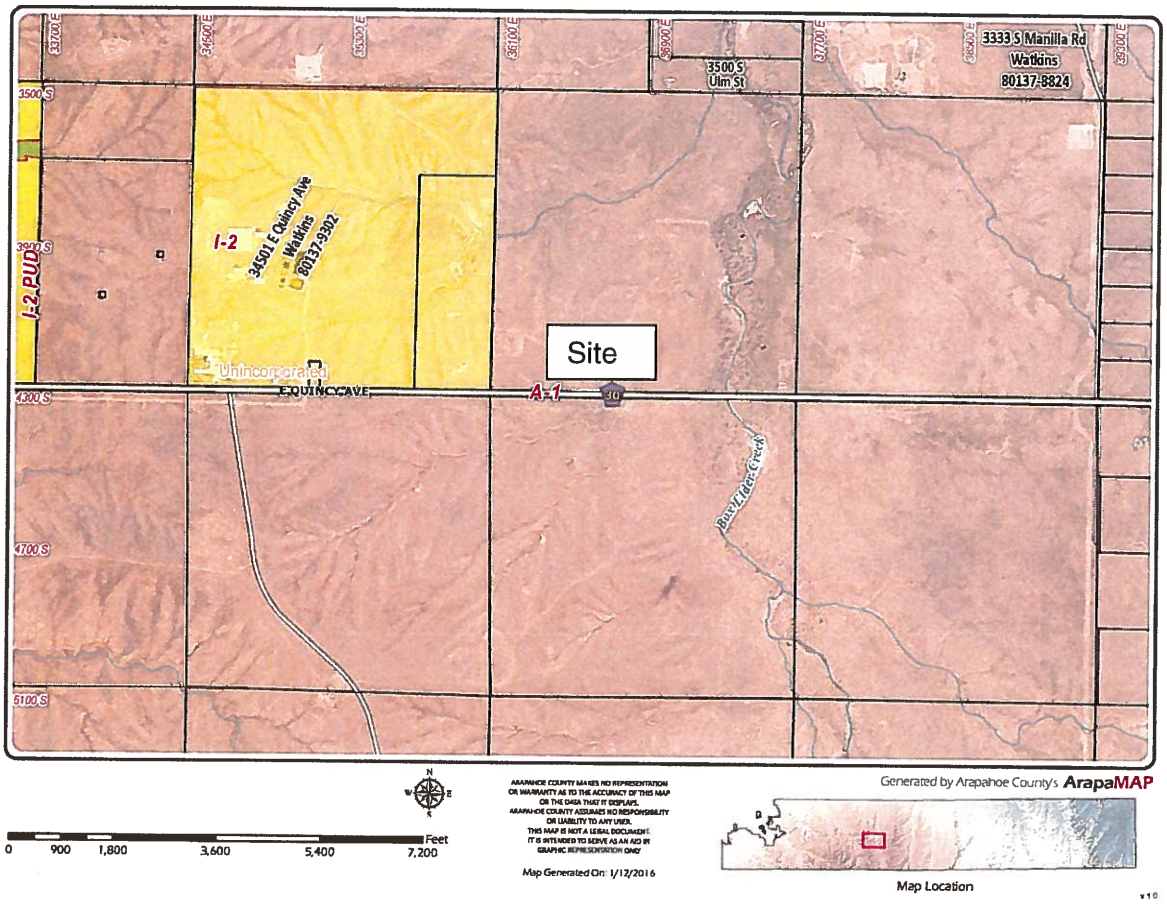
SUBJECT: U15-001 - USE BY SPECIAL REVIEW : QUINCY SOLAR GARDEN
J. SHERMAN FEHER, SENIOR PLANNER **January 19, 2016**

VICINITY: This proposal is in Commissioner's District #3. The site is located approximately 2.3 miles east of the intersection of Watkins Road and Quincy Avenue.



Vicinity Map

Zoning: The zoning in this area is generally A-1 zone(Agricultural) with an I-2 zone (Heavy Industrial) nearby.



Zoning Map

ADJACENT SUBDIVISIONS, ZONING, AND LAND USES:

North - No subdivisions; A-1; Agriculture

South - No subdivisions; A-1; Agriculture

East - No subdivisions; A-1; Agriculture and Floodplain

West - No subdivisions; I-2; Agriculture and Business/Industrial Park

Looking WNW
over Site

Looking Northeast
over Site

PROPOSAL:

The applicant, Sunshare LLC., with authorization from the property owner, Stephen Tebo, are requesting approval for a Use by Special Review (USR) for a solar garden power plant, known as the Quincy Solar Garden. Sunshare LLC seeks to construct an approximate 2 MW solar photovoltaic power plant consisting of approximately 6,000 to 7,000 modules on 20 acres.

RECOMMENDATIONS AND FINDINGS:

Staff: Staff recommends that the Use by Special Review application be APPROVED, subject to the findings and conditions of approval outlined herein.

I. BACKGROUND

The existing zoning is A-1(Agricultural). Arapahoe County has a 1041 Permit process for Major Facilities of a Public Utility. Because there are some electrical and other utility-like facilities which are owned by private companies, a Use by Special Review process was approved by the BOCC that required similar submittal requirements and approval criteria for these facilities.

II. DISCUSSION

Comprehensive Plan:

The proposed Use by Special Review application is in conformance with the Arapahoe County Comprehensive Plan, in that it provides for development of power energy facilities within the "Tier 3 (Rural)" Land Use Area.

Other related policies and strategies related to this case include Policy PFS 1.6: Consider Power Energy Needs to Support Growth and Development of the Region and Strategy NCR 4.2(a): Support Energy Conservation Programs and Education. The County will support programs and education to reduce energy consumption, solar energy research and other clean energy programs,.....

Use by Special Review:

Submittal Requirements:
The applicant has complied with all of the submittal requirements outlined in the USR provisions of the Land Development Code, Sections 13-903 and 13-904.

Referral Comments:

The following are referral comments, as well as the applicant's response to the comments (in italics).

County Engineer	-	Comments on GESC, grading, and access profile. *Applicant has addressed comments.*
Mapping	-	Comment regarding acreage size difference. *Applicant has corrected the discrepancy.*

Sheriff's Department	-	No comments
Zoning Administrator	-	Comments on landscaping. *Applicant plans on using berms for landscaping buffer, but does not intend to have landscaping plants, because plants would not provide adequate buffer from road because of topography.*
Assessor		No response
Army Corps of Engineers		Comments regarding 404 Permits and floodplains. *No wetlands were determined to be on site.*
Arapahoe County Weed Control		A noxious weed control plan is necessary for this project. *This will be a condition of approval.*
CDOT		No response
Colorado Parks and Wildlife		No response, although applicant has worked with CPW. Issue of most concern is burrowing owls.
REAP		REAP is supportive of this application.
Bennett Fire District		No response
Deer Trail Conservation District		No response
Tri-County Health		Comments on renewable energy, wastewater service, and solid waste. *The applicant will provide portable sanitation service. The applicant will also provide covered dumpsters during construction.*
Xcel		No response
Urban Drainage		No comments
East End Advisory Committee		Janet Cook: Great project; Arnold Hollingsworth: good project; and Carl Kroh: no comments; Mary Garin, M.J. Carter, and Ken Crismon did not respond.

Approval Criteria

The Use by Special Review (USR) approval criteria for a Major Electrical, Natural Gas, and Petroleum-Derivative Facilities of a Private Company shall comply with all of the regular approval criteria for a USR in the Land Development Code, Section 13-900, as well as the criteria set forth in the 1041 Regulations, Part V, Sections A and C, along with Appendix A. All of these criteria shall be used in determining whether such Use by Special Review should be approved.

1. Ordinance Review and Additional Background Information

Section 13.901 of the Land Development Code, Use by Special Review, of the zoning regulations states that the, "Use By Special Review" process and procedure.... Provides (for) Board of County Commissioner review and approval of certain uses, which, although permitted within specific zoning districts, may contradict the purpose of these Regulations..... providing for the public peace, health, safety and welfare."

a. Recognize the limitations of existing and planned infrastructure, by thoroughly examining the availability and capability of water, sewer, drainage, and transportation systems to serve present and future land uses.

Permanent water and sewer capability is not necessary for this project. Temporary wastewater facilities will be provided during construction. The applicant will need to obtain an access permit from the County Public Works and Development Department. This will be a condition of approval.

b. Assure compatibility between the proposed development, surrounding land uses, and the natural environment.

The proposed solar farm is generally compatible with the surrounding agricultural uses. There are potential impacts to wildlife and wildlife habitat. These impacts on wildlife and wildlife habitat are likely to be minimal. A condition of approval will address this issue by requiring compliance with the Colorado Department of Parks and Wildlife regulations.

c. Allow for the efficient and adequate provision of public services. Applicable public services include, but are not limited to, police, fire, school, park, and libraries.

Public services appear to be minimal; schools, parks, and libraries are not applicable to this application. Emergency medical services may be needed, mostly during the construction phase. The Sheriff's Department had no submit comments.

d. Enhance convenience for the present and future residents of Arapahoe County by ensuring that appropriate supporting activities, such as employment, housing, leisure-time, and retail centers are in close proximity to one another.

This project enhances convenience for present and future residents by providing renewable electric energy to the XCEL grid.

e. Ensure that public health and safety is adequately protected against natural and man-made hazards which include, but are not limited to, traffic noise, water pollution, airport hazards, and flooding.

Most natural and man-made hazards appear to be unlikely; public health and safety appear to be adequately protected.

f. Provide for accessibility within the proposed development, and between the development and existing adjacent uses. Adequate on-site interior traffic circulation, public transit, pedestrian avenues, parking and thoroughfare connections are all factors to be examined when determining the accessibility of a site.

Accessibility will be directly from Quincy Avenue. The applicant will need to obtain an access permit from the County Public Works and Development Department.

g. Minimize disruption to existing physiographic features, including vegetation, streams, lakes, soil types and other relevant topographical elements.

Disruption to the existing physiographic features resulting from the proposed solar garden site will be minimized by minimal surface grading and good design and construction practices. There are no lakes or streams on the proposed site.

h. Ensure that the amenities provided adequately enhance the quality of life in the area, by creating a comfortable and aesthetically enjoyable environment through conventions such as, the preservation of mountain views, the creation of landscaped open areas, and the establishment of recreational activities.

The solar garden will have some visual impact, but it should not significantly disrupt mountain views.

i. Enhance the usable open spaces in Arapahoe County, and provide sufficient unobstructed open space and recreational area to accommodate a project's residents and employees.

Open space is not applicable to this project.

2. Additional Approval Criteria

In addition to the regular approval criteria for a USR found in Section 13-901 of the Land Development Code, the criteria set forth in Part V, Sections A and C,

along with Appendix A in the 1041 Regulations are used to determine if the Use by Special Review should be approved.

A permit may be approved if the proposed activity complies with the following general criteria and any additional applicable criteria in Section V. C. In determining whether the proposed activity complies with the criteria, the Planning Commission and Board of County Commissioners may take into consideration, the construction, operation and cumulative impacts of the proposed activity.

A. General Approval Criteria [See applicant's response to approval criteria in application report. Staff response to approval criteria in italics below]

1. Documentation that prior to site disturbance associated with the Proposed Project, the applicant can and will obtain all necessary property rights, permits and approvals. The Board may, at its discretion, defer making a final decision on the application until outstanding property rights, permits and approvals are obtained.

   The applicant can and will obtain all necessary property rights, permits and approvals prior to construction. The applicant plans on leasing the property for the solar garden. The applicant has permission from the owner to process this application.

2. The Proposed Project considers the relevant provisions of the regional water quality plans.

   There are apparently no regional water quality plans for this area.

3. The applicant has the necessary expertise and financial capability to develop and operate the Proposed Project consistent with all requirements and conditions.

   The applicant has provided the Planning Division with some general information that indicates that they have developed similar projects in Colorado.

4. The Proposed Project is technically and financially feasible.

   The Proposed Project appears to be technically and financially feasible.

5. The Proposed Project is not subject to significant risk from natural hazards.

   The Proposed Project does not appear to be subject to a significant risk from natural hazards.

6. The Proposed Project is in general conformity with the applicable comprehensive plans.

The Proposed Project is in general conformity with the Arapahoe County Comprehensive Plan which allows for Power Energy Facilities in "Tier 3 (Rural)" designated areas of the County.

7. The Proposed Project will not have a significant adverse effect on the capability of local government to provide services or exceed the capacity of service delivery systems.

   This Proposed Project is anticipated to have minimal impacts on provision of services from Arapahoe County and other special districts.

8. The Proposed Project will not create an undue financial burden on existing or future residents of the County.

   This Proposed Project will be privately financed and will have minimal demand for public services in Arapahoe County.

9. The Proposed Project will not significantly degrade any substantial sector of the local economy.

   The Proposed Project will not significantly degrade the agricultural sector in this area with only 20 acres removed from agricultural use.

10. The Proposed Project will not unduly degrade the quality or quantity of recreational opportunities and experience.

    The Proposed Project will not reduce or limit the quality or quantity of recreational opportunities and experience in the area.

11. The planning, design and operation of the Proposed Project will reflect principals of resource conservation, energy efficiency and recycling or reuse.

    The Proposed Project is designed to minimize adverse impacts to resources.

12. The Proposed Project will not significantly degrade the environment. Appendix "A" includes the considerations that will be used to determine whether there will be significant degradation of the environment. For purposes of this section, the term environment shall include:
    a. Air quality.
    b. Visual quality.
    c. Surface water quality.
    d. Groundwater quality.
    e. Wetlands, flood plains, streambed meander limits, recharge areas, and riparian areas.
    f. Terrestrial and aquatic animal life.

g. Terrestrial and aquatic plant life.
h. Soils and geologic conditions.

The applicant has sited and designed the Project to minimize environmental impacts. There do not appear to be any Federal and State Threatened and Endangered Species or State Species of Concern on the subject site with the possible exception of the burrowing owl. If during construction any of these species is found then the applicant in collaboration with Colorado Parks and Wildlife will need to mitigate and minimize any potential impact to these species.

13. The Proposed Project will not cause a nuisance.

The Proposed Project will possibly cause minor nuisances during construction but will not cause undue nuisances after construction.

14. The Proposed Project will not significantly degrade areas of paleontological, historic, or archaeological importance.

The applicant has determined that the Proposed Project does not appear to be near any cultural and historic resources. The applicant will follow the state protocol to avoid or minimize the impact to any areas of paleontological, historic, or archaeological importance in the Project area.

15. The Proposed Project will not result in unreasonable risk of releases of hazardous materials. In making this determination as to such risk, the Board's consideration shall include:

a. Plans for compliance with Federal and State handling, storage, disposal and transportation requirements.

The applicant will comply with Federal and State hazardous materials regulations.

b. Use of waste minimization techniques.

The applicant will strive to use waste minimization techniques.

c. Adequacy of spill prevention and response plans. The applicant intends to comply with all local, state, and federal laws and regulations related to hazardous materials, including spill prevention and response plans.

The applicant intends to comply with all regulations related to hazardous material.

16. The benefits accruing to the County and its citizens from the proposed activity outweigh the losses of any resources within the County, or the losses of opportunities to develop such resources.

    The applicant feels that this Proposed Project enhances the productive use of resources within the County through the use of renewable energy.

17. The Proposed Project is the best alternative available based on consideration of need, existing technology, cost, impact and these regulations.

    The Proposed Project appears to be a good alternative based on consideration of need, existing technology, cost, impact and these regulations.

18. The Proposed Project will not unduly degrade the quality or quantity of agricultural activities.

    The Proposed Project is likely to degrade the quality or quantity of agricultural activities to a limited extent by removing 20 acres from available agricultural land, but the Proposed Project will not unduly degrade the quality and quantity of total agricultural activities in Arapahoe County.

19. Cultural Resources. The Proposed Project will not significantly interfere with the preservation of cultural resources, including historical structures and sites, agricultural resources, the rural lifestyle and the opportunity for solitude in the natural environment.

    The applicant has determined that the Proposed Project appears to not be near any cultural and historic resources. If any cultural or historic resources are found during construction of this Proposed Project, the applicant will work with the State and County to avoid or minimize the impact to any areas of paleontological, historic, or archaeological importance in the Project area.

    With the exception of some slight disruption of solitude in the natural environment during construction, the Proposed Project will not significantly disrupt the solitude of the natural environment.

20. Land Use. The Proposed Project will not cause significant degradation of land-use patterns in the area around the Proposed Project.

    The Proposed Project will not likely cause significant degradation of land-use patterns in the area.

21. Compliance with Regulations and Fees. The applicant has complied with all applicable provisions of these regulations and has paid all applicable fees.

The applicant has sought to comply with all applicable Use by Special Review regulations and because of State regulations for solar power projects, the applicant does not have to pay the full Planning and Engineering fees.

B. Additional Criteria Applicable to Major Facilities of a Public Utility (Private Company)

In addition to the general criteria set forth in Section V, Part A of the 1041 Permit Regulations, above, the following additional criteria shall apply to major facilities of a public utility (private company):

1. Areas around major facilities of a public utility (private company) shall be administered so as to minimize disruption of the service provided by the public utility (private company).

   Areas around the solar garden will be administered so as to minimize disruption of the service provided by the applicant.

2. Areas around major facilities of a public utility (private company) shall be administered so as to preserve desirable existing community and rural patterns.

   Once the solar garden is constructed, the Proposed Project will be administered so as to preserve desirable existing community and rural patterns.

3. Where feasible, major facilities of a public utility (private company) shall be located so as to avoid direct conflict with adopted local comprehensive, State and regional master plans.

   The Proposed Project appears to avoid direct conflict with adopted local comprehensive, State, and regional master plans.

4. Where feasible, major facilities of a public utility (private company) shall be located so as to minimize dedication of new right-of-way and construction of additional infrastructure (e.g., gas pipelines, roads, and distribution lines.)

   The Proposed Project is located so as to minimize dedication of new right-of-way and construction of additional infrastructure.

III. STAFF FINDINGS: USE BY SPECIAL REVIEW

Staff has visited the site and reviewed the plans, supporting documentation and referral comments, as well as citizen input in response to this application. Based upon review of the Comprehensive Plan, development regulations, and analysis of referral comments, our findings include:

1. The proposed Use by Special Review application is in conformance with the Arapahoe County Comprehensive Plan, in that it provides for development of public facilities and services within the "Rural" Land Use Area.
2. The proposed Use by Special Review application appears to be consistent with the Use by Special Review Section of the Arapahoe County Land Development Code.
3. This application appears to meet all of the approval criteria for this Use by Special Review, provided all of the conditions of approval are met.
4. There are a few Engineering conditions that need to be done prior to the signing of the USR mylar and before any construction takes place.
5. If the Proposed Project is discovered to impact any cultural and historic resources, the applicant will need to avoid or minimize the impact to any areas of paleontological, historic, or archaeological importance.
6. If the Proposed Project is discovered to impact any Federal and State Threatened and Endangered Species or State Species of Concern within the area of the solar garden, the applicant will need to mitigate and minimize any potential impact to these species.

IV. RECOMMENDATION FOR USE BY SPECIAL REVIEW:

Considering the findings and other information provided herein, staff recommends approval of Case Number, U15-001, the Quincy Solar Garden, Use By Special Review, subject to the following conditions:

1. The applicant will modify the plans as requested by the Public Works & Development Department, prior to the signing of the mylars and before the commencement of any construction activities relating to this project.
2. The applicant agrees to address all Engineering Services Division comments and concerns, as identified within their reports, prior to signed mylars. The applicant will need to obtain an access permit.
3. The applicant will strive to avoid any areas of paleontological, historic, or archaeological importance. If avoidance is not possible, further testing will be conducted, with landowner's permission, to determine the site's eligibility for historic status and a treatment plan will be developed that will be followed to protect eligible sites. The applicant will notify the County of any plans or activities to deal with historic, paleontological or archaeological sites that cannot be avoided by the construction of the solar garden.

4. The applicant will strive to avoid any Federal and/or State Threatened and Endangered Species, as well as State Species of Concern, that exist in areas where the solar garden will be constructed. If any Federal and/or State Threatened and Endangered Species or any State Species of Concern, is found to exist in areas where the solar garden will be constructed, then the applicant will collaborate with Colorado Parks and Wildlife and Arapahoe County to mitigate and minimize any potential impact to these species.
5. The applicant will need to provide the County with a noxious weed control plan for the site.

This favorable recommendation is based, in part, upon the findings that:

- The proposal is in conformance with the Arapahoe County Comprehensive Plan.
- The proposal is in conformance with Arapahoe County Land Development Code, specifically the Use by Special Review Regulations.
-

V. DRAFT MOTION FOR USE BY SPECIAL REVIEW:

A. Approval Motion: In the case of U15-001 – Quincy Solar Garden, Use by Special Review, we have read the staff report and received testimony at the public hearing. We find ourselves in agreement with staff findings for the Use by Special Review application including all plans and attachments as set forth in the staff report dated January 19, 2016, and vote to recommend approval to the Board of County Commissioners, subject to the following conditions:

1. The applicant will modify the plans as requested by the Public Works & Development Department, prior to the signing of the mylars and before the commencement of any construction activities relating to this project.
2. The applicant agrees to address all Engineering Services Division comments and concerns, as identified within their reports, prior to signed mylars. The applicant will need to obtain an access permit.
3. The applicant will strive to avoid any areas of paleontological, historic, or archaeological importance. If avoidance is not possible, further testing will be conducted, with landowner's permission, to determine the site's eligibility for historic status and a treatment plan will be developed that will be followed to protect eligible sites. The applicant will notify the County of any plans or activities to deal with historic, paleontological or archaeological sites that cannot be avoided by the construction of the solar garden.
4. The applicant will strive to avoid any Federal and/or State Threatened and Endangered Species or any State Species of Concern, that exist in areas where the solar garden will be

constructed. If any Federal and/or State Threatened and Endangered Species, as well as State Species of Concern, is found to exist in areas where the solar garden will be constructed, then the applicant will collaborate with Colorado Parks and Wildlife and Arapahoe County to mitigate and minimize any potential impact to these species.

5. The applicant will provide the County with a noxious weed control plan for the site.

Staff provides the following Draft Motions listed below as general guidance in preparing <u>an alternative motion</u> if the Planning Commission reaches a different determination:

<u>Recommend Denial</u>

In the case of U15-001, Quincy Solar Garden Use by Special Review, we have read the staff report. We do not find ourselves in agreement with staff findings and recommend denial of this application based on the following findings:

1. *State new findings in support of denial as part of the motion.*

<u>Continue to Date Certain</u>:

In the case of U15-001, Quincy Solar Garden Use by Special Review, I move to continue the hearing to [*date certain*], 6:30 p.m., to obtain additional information and to further consider the information presented.

Attachments

Application, USR Report with USR Exhibit
Referral Comments
Engineering Staff Report

Arapahoe County
Colorado's First

Public Works and Development
Planning Division
6924 S. Lima St.
Centennial, CO 80112
Phone: 720-874-6650 Fax: 720-874-6611
www.arapahoegov.com

Land Development Application for: Administrative Amendments, Technical Amendments, Commercial Mobile Radio Service, and Administrative Oil & Gas Use by Special Review

Land development application materials received after 2pm shall be date stamped, as received, the following business day.

APPLICANT/REPRESENTATIVE: SunShare/Jon Sullivan	ADDRESS: 1441 18th Street, Suite 400 Denver, CO 80202 PHONE: 303-296-0919 FAX: EMAIL: jon@mysunshare.com	SIGNATURE: NAME: Jon Sullivan TITLE: Director of Project Development
OWNER(S) OF RECORD: Stephen D. Tebo	ADDRESS: PO Box T Boulder, CO 80306 PHONE: 303-447-8326 FAX: EMAIL: Jdixon@teboproperties.com	SIGNATURE: (See Statement of Authorization) NAME: Stephen D Tebo TITLE: Owner of Record
ENGINEERING FIRM: Enertia Consulting Group, LLC	ADDRESS: 1529 Market Street, Suite 200 Denver, CO 80202 PHONE: 720-473-3131 FAX: EMAIL: sean.ohearn@enertiacg.com	CONTACT PERSON: Sean O'Hearn

Pre-Submittal Case Number: Q 15-062 Pre-Submittal Planner: Sherman Feher Pre-Submittal Engineer: Spencer M. Smith

Parcel ID no. (AIN no.)	031584418 (2069-00-0-00-013)
Address:	N/A (No Legal Address)
Subdivision Name & Filing:	N/A

	EXISTING	PROPOSED
Zoning:	AG 1 A-1	AG 1
Case/Project/Subdivision Name:	N/A	Quincy Solar Garden
Site Area (Acres):	630.02	40.00
Floor Area Ratio (FAR):	N/A	N/A
Density (Dwelling Units/Acre):	N/A	N/A
Building Square Footage:	N/A	N/A
Disturbed Area (Acres):	N/A	27
Related Case Numbers: (Final/Preliminary Development Plan and/or Plat)	Q15-062 7-2-15	

CASE TYPE 1041 USR

	Administrative Replat		Administrative Amendment to a Final Development Plan	X	~~Administrative Amendment to a~~ Use by Special Review Solar 1041		Technical Amendment
	Administrative Amendment to a Administrative Site Plan		Administrative Amendment to a Location & Extent		Administrative Site Plan		
	Administrative Oil & Gas Use by Special Review		Administrative Amendment to a Preliminary Development Plan		Plat Correction		
	Commercial Mobile Radio Service (CMRS)		Administrative Amendment to a Planned Sign Program		Subdivision Exemption		

THIS SECTION FOR OFFICE USE ONLY

Case No:		Planning Manager:	SF	Engineering Manager:	Spencer
Planning Fee:	Y N $	Engineering Fee:	Y N $		

This application shall be submitted with all applicable application fees. Submittal of this application does not establish a vested property right in accordance with C.R.S. 24-68-105(1). Processing and review of this application may require the submittal of additional information, subsequent reviews, and/or meetings, as outlined in the Arapahoe County Land Development Code.

RECEIVED
AUG 16 2015
ARAPAHOE COUNTY
PLANNING DIVISION

AF
8/20/15

Letter of Intent

SunShare
THE POWER TO CHOOSE

Planning

Arapahoe County
Public Works and Development
6924 S. Lima Street
Centennial, CO 80112

RE: Use by Special Review (USR) based on 1041 Guidelines
Enclosed:
Letter of Intent

RECEIVED
AUG 1 2 2015
ARAPAHOE COUNTY
PLANNING DIVISION

Dear Arapahoe County Public Works and Development:

SunShare is developing a 40 acre solar garden project as part of Xcel's Energy Community Solar Gardens program. SunShare has recently developed similar solar projects in Arapahoe County, Denver County, Adams County, Jefferson County, and El Paso County. The Arapahoe County location on East Quincy Ave was selected due to its proximity to Xcel's distribution infrastructure, flat land grade, and access to the sun (no shading obstructions). SunShare is excited to bring more clean and renewable energy to Arapahoe County and look forward to working with the community to make the project a success.

SunShare is currently in the planning and development stages of a 40 acre solar garden on East Quincy Ave, east of E-470, in unincorporated territory. The project will lease 40 acres of property owned by Tebo Properties. The parcel number is PIN: 031584418, AIN: 2069-00-0-00-013. Full legal description of the property is attached with this submittal. Historically the 632 acre parcel has been used to graze livestock in addition to having an oil and gas well pad. We are leasing 40 acres of the larger parcel in order to build our solar garden project.

The approximately 16,000 solar modules will mounted on single axis trackers. This means the solar panels will be facing east in the morning, be flat at noon, and be facing west in the afternoon- following the path of the sun. The maximum height of the solar equipment will be approximately 8'. The entire project will be surrounded by an 8' chain link fence. No grading of the land is expected.

Construction will likely begin Q4 2015 and will last approximately 16-20 weeks. Construction crews will be a combination of general labor workers, certified electricians, and an on-site general contractor. There will be a security guard on watch during certain phases of construction. Once complete there will be no full time personnel on site. There will be a small maintenance crew (1-4 people) visiting on a quarterly basis.

We have provided a vicinity map, site plan, and example aesthetic to help understand our project proposal. SunShare will work hard to make the project a success with Arapahoe County. Please let us know if there is anything we can do to expedite the approval process.

RECEIVED

Sincerely,

Jon Sullivan
Director of Project Development
jon@mysunshare.com
(303)718-3291

January 5th, 2016

Mr. Sherman Feher, Planner
Arapahoe County Public Works and Development
6924 South Lima Street
Centennial, CO 80112

RE: Point-by-Point Response Letter to Phase II Agency Referral Comments for Use by Special Review U15-001 (Quincy Solar Garden)

Dear Mr. Feher:

Please find below Quincy Solar Garden LLC's (Applicant's) responses to each of the agency referral comments received regarding the application for a Use by Special Review Permit for the proposed Quincy Solar Garden (Project).

1. **Arapahoe County Assessor (Beverly Reynolds): No Comments**

2. **Arapahoe County Engineering (Spencer Smith): With Comments**

All Engineering Comments are addressed by separate enclosed engineer's letter

3. **Arapahoe County Mapping (Pat Hubert): With Comments**

Comment: Why is there an acreage difference (20ac vs. 40ac) between the lease area and the legal descriptions?

Response: Applicant had originally planned a larger lease area before the utility provided approval for a smaller project size. The acreage discrepancy has been corrected on the submitted Use by Special Review Plan.

4. **Arapahoe County Planning (Russell Johnson): With Comments**

1441 18th Street, Suite 400 | Denver, CO 80202
303.296.0919 | info@mysunshare.com | www.mysunshare.com

Comment: A noxious weed management plan is necessary for this project.

Response: Applicant will develop a noxious weed management plan for the Project for implementation prior to construction. The plan will conform to Arapahoe County noxious weed management requirements.

5. Arapahoe County Sheriff (Glenn Thompson): No Comments

6. Arapahoe County Zoning (Tammy King): With Comments
Comment: No landscaping shown per 13.904N of LDC

Response: The submitted Use by Special Review Plan shows the general location and typical details of the proposed landscaping features, such as earthen berms and fencing, which are proposed for the Project.

7. Colorado Parks and Wildlife (Travis Harris): No Comments

8. Bennett Fire District (Caleb Connor): No Comments

9. REAP I-70 (Matt Reay / Jack Keever): With Comments
Comment (Jack Keever): The REAP Board of Directors has adopted a policy of supporting the orderly development of energy industries. REAP supports this application to establish a Community Solar Garden approximately 2.3 miles east of the intersection of East Quincy Ave. and South Watkins Road.

Response: Acknowledged, with thanks.

10. Tri-County Health Dept. (Sheila Lynch): With Comments
Comment (Laurel Broten, MPH): Alternative energy supplies generally do not contribute to air and water pollution and can have a positive impact on the environment. TCHD commends the applicant for bringing forward a proposal that promotes the use of renewable energy.

Response: Acknowledged, with thanks.

1441 18th Street, Suite 400 | Denver, CO 80202
303.296.0919 | info@mysunshare.com | www.mysunshare.com

Comment (Laurel Broten, MPH): The application describes a construction period of sixteen to twenty weeks. However, the application does not indicate whether there are existing wastewater facilities available to workers during construction or whether the facilities will need to be provided. TCHD has no objection to the use of portable toilets during the construction phase, provided the units are properly cleaned and maintained. While TCHD cannot require the use of hand sinks, we recommend that the applicant provide those for the workers, as it will reduce the potential for the transmission of disease.

Response: There is no wastewater service available at the site. There is also no municipal water service available at the site. Applicant will require the use of portable toilet facilities with portable (no municipal water required) hand washing sinks through the construction phase.

Comment (Laurel Broten, MPH): Rodents, such as mice and rates, carry diseases which can be spread to humans through contact with rodents, rodent feces, urine or saliva, or through rodent bites. As rodents are attracted to trash, TCHD strongly recommends that all trash dumpsters on site during construction are equipped with a closeable lid and with regular collection and disposal at an approved landfill.

Response: Applicant will make best efforts to follow TCHD's recommendations regarding trash disposal. The majority of trash generated onsite will be construction-related and a closeable lid may not be applicable for all disposal streams.

11. **Deer Trail Conservation District (Sheryl Walles): No Comments**

12. **CDOT / State Hwy. Dept. Region 1 (Rick Solomon): No Comments**

13. **XCEL Energy (Donna George): No Comments**

14. **US Army Corp. of Engineers (Kiel Downing): With Comments**

1441 18th Street, Suite 400 | Denver, CO 80202
303.296.0919 | info@mysunshare.com | www.mysunshare.com

Comment: USACE's standard comment letter indicated that if wetlands were observed onsite, the USACE should be provided with a Pre-Construction Notification to determine if a USACE permit is necessary.

Response: The proposed Project site was surveyed by a licensed environmental surveyor conducting a Phase I ESA. According to the report, no wetland conditions were observed onsite.

15. Urban Drainage (David Mallory): No Comments

16. East End Advisory Committee (various): With Comments
Comment (Janet Cook): Great Project.

Response: Acknowledged, with thanks.

Comment (Arnold Hollingsworth): This application looks good and has merit for both them and the community; I feel it should be granted.

Response: Acknowledged, with thanks.

Please advise if there are any further comments or issues to be addressed regarding this application.

Sincerely,

Luke Rickard
Project Developer, SunShare

1441 18th Street, Suite 400 | Denver, CO 80202
303.296.0919 | info@mysunshare.com | www.mysunshare.com

Planning Commission Summary Report

Date: January 21, 2016 SMS

To: Arapahoe County Planning Commission

Through: Sherman Feher
Planning Division, Case Planner

Through: Chuck Haskins, PE
Engineering Services Division, Manager

From: Spencer M. Smith, PE
Engineering Services Division, Case Engineer

Case name: U15-001 – Quincy Solar Garden - USR

Purpose and Recommendation
The purpose of this report is to communicate the Engineering Staff findings, comments, and recommendations regarding the land use application identified above.

Engineering Staff has reviewed the land use application and has the following findings:

1. The site will access E. Quincy Ave. at an existing field access that will be improved to meet County criteria. A ROW access permit will need to be obtained for the access prior to construction.

   The applicant has been in contact with and received approval from the applicable parties to cross the existing Bronco pipeline with the proposed site access.

   The existing ROW on E. Quincy Ave. along this project frontage is 110'. The ultimate ROW width for E. Quincy Ave. is 114' per the County's 2035 Transportation Plan. The County has requested that the property owner dedicate the additional 2' of ROW along the property frontage with this USR.

2. The applicant presented two waiver requests to the County's Technical Review Committee (TRC) on October 21, 2015. The first waiver request was in regards to the stormwater detention requirement (Arapahoe County Stormwater Management Manual (AC SWMM), Section 13.1.5). Arapahoe County criteria requires stormwater detention for a project adding more than 5,000 square feet of impervious area. This project will be adding approximately 6,900 square feet. Given the project's rural location, proximity to Box Elder Creek and the minimal amount of stormwater runoff generated from the additional 1,900 square feet of impervious area, the TRC was in favor of granting the waiver.

   The second waiver request was in regards to the water quality capture volume requirement (AC SWMM, Section 14.4.2). County criteria requires water quality capture volume be provided for any project that has a total imperviousness for any given acre of the site greater than 10%. The proposed project exceeds this criteria by 5% where the access road is located (approximately 15% imperviousness). TRC was in favor of granting this waiver, but would still require that the site provide a water quality

enhancement. A grass buffer along the east side of the property will provide for sediment removal prior to entering Box Elder Creek to the east. Rather than disturb the existing ground and vegetation to install a new grass buffer, the TRC prefers that the existing vegetation serve as the grass buffer. During construction, if the County inspector determines that the existing vegetation is not sufficient, the applicant may be required to enhance the area.

Both of these waivers are consistent with what was approved for Sunshare's Jewell Avenue Solar Garden project (Arapahoe County Case # U14-003).

Engineering Staff is recommending the land use application(s) favorably subject to the following conditions:

1. Applicant addresses all Arapahoe County Engineering Services Division comments.
2. Applicant obtains all necessary approvals from the Bennett Fire District and permits (ROW Access, GESC) from the County.

Arapahoe County
Colorado's First

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DEC 0 2 2015
ARAPAHOE COUNTY
PLANNING DIVISION

Public Works and Development
6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division

Phase II Referral Routing

Case Number / Case Name:	**U15-001, Quincy Solar Garden [Sunshare] / Use by Special Review**
Planner:	**Sherman Feher**
Engineer:	**Spencer Smith**
Date:	**11/23/2015**
Date to be returned:	**12/23/2015**

	Arapahoe County Agencies				
☒	Assessor / Arapahoe County	Beverly Reynolds		**Citizen's Organizations**	
☐	Attorney / Arapahoe County	Robert Hill	☐	CCNA-Cherry Creek Neighborhoods Ass.	
☐	Building / Arapahoe County	Steve Byer	☐	CECON-(Within Centennial)	
☒	Engineering / Arapahoe County	Spencer Smith	☐	Four Square mile Neighborhood	
☒	Mapping / Arapahoe County	Pat Hubert	☐	South Metro Chamber of Commerce	
☐	Oil & Gas / Arapahoe County	Diane Kocis		**Conservation District**	
☐	Open Space / Arapahoe County	Shannon Carter	☒	Deer Trail Conservation District	Sheryl Wailes
☒	Planning / Arapahoe County	Sherman Feher	☐	West Arapahoe Conservation District	Tasha Chevarria
☒	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson		**Transportation**	
☐	Weed Control / Arapahoe County	Russell Johnson	☒	CDOT / State Highway Dept- Region 1	Rick Solomon
☒	Zoning / Arapahoe County	Tammy King	☐	E-470 Authority	Peggy Davenport
	Referral Agencies		☐	RTD	Chris Quinn
☐	Architectural Review Committee		☐		
☐	Airport or Military Base			**Utilities: Gas, Electric & Phone**	
☐	CGS Colorado Geological Survey-Soils		☐	Centurylink/Phone	Charles Place
☐	City / Town		☐	Conoco Phillips / Gas Pipeline	
☒	Colorado Parks and Wildlife	Travis Harris	☒	XCEL	Donna George
☐	County		☐	IREA	
☐	DRCOG			**Water / Sanitation / Stormwater / Wetlands**	
☒	Bennett Fire District	Caleb Connor	☐	ACWWA	
☐	Metro District		☒	U.S. Army Corp. of Engineer	Kiel Downing
☐	Post Office Growth Coordinator	J. Hernandez	☐	CCBWQA	
☒	Reap I-70 Regional Economic Advancement Partnership	Matt Reay Jack Keever	☐	Colorado Division of Water Resources	Joanne Williams
☐	Recreation District / Park District (External)		☐	SEMSWA	Paul Danley
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☐	Special District		☒	Urban Drainage	David Mallory
☒	Tri-County	Sheila Lynch	☒	Other / 5 Sets East End Adv. Committee	Kroh
☐	HOA/Homeowners Associations				

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	COMMENTS:	SIGNATURE
☒	Have NO Comments to make on the case as submitted	Carl Kroh
☐	Have the following comments to make related to the case:	

Arapahoe County
Colorado's First

Public Works and Development
6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division

Phase II Referral Routing

Case Number / Case Name:	**U15-001, Quincy Solar Garden [Sunshare] / Use by Special Review**
Planner:	**Sherman Feher**
Engineer:	**Spencer Smith**
Date:	**11/23/2015**
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☐	Architectural Review Committee		☐		
☐	Airport or Military Base			**Utilities: Gas, Electric & Phone**	
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☐	City / Town		☐	Conoco Phillips / Gas Pipeline	
☒	Colorado Parks and Wildlife	Travis Harris	☒	XCEL	Donna George
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☒	Tri-County	Sheila Lynch	☒	Other / 5 Sets East End Adv. Committee	
☐	HOA/Homeowners Associations				

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	COMMENTS:	SIGNATURE
☒	Have NO Comments to make on the case as submitted	11/30/15
☐	Have the following comments to make related to the case:	

Sherman Feher

From: Arnold Hollingsworth <ajguitar2@yahoo.com>
Sent: Wednesday, December 02, 2015 9:33 AM
To: Sherman Feher
Subject: case number/name U15-001, Quincy Solar Garden (sunshare) / USR

Sherman, this application looks good and has merit both for them and the community I feel it should be granted. Arnold Hollingsworth east end advisory committee. ajguitar2@yahoo.com

U15-001

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
DENVER REGULATORY OFFICE, 9307 SOUTH WADSWORTH BOULEVARD
LITTLETON, COLORADO 80128-6901

RE: Section 404 of the Clean Water Act Initial Comments

To whom it concerns:

In accordance with Section 404 of the Clean Water Act, the Corps of Engineers regulates the discharge of dredged or fill material, and any excavation associated with a dredged or fill project, either temporary or permanent, into waters of the United States (WOUS). You should notify this office if the project proposed falls within these regulated activities because the project may require a Department of the Army Section 404 permit.

A WOUS may include ephemeral and/or perennial streams, wetlands, lakes, ponds, drainage ditches and irrigation ditches. A wetland delineation must be conducted, and verified by the Corps of Engineers, using the methods outlined in the *Corps of Engineers Wetlands Delineation Manual (*Environmental Laboratory 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual:* (using applicable Regional Supplement) to determine wetlands based on the presence of three wetland indicators: hydrophytic vegetation, hydric soils, and wetland hydrology. Wetland delineations must be conducted in the field by a qualified environmental consultant and any aquatic resource boundaries must be identified accordingly. Once the aquatic resources have been identified, only this office can determine if they are WOUS. Please note that development of the upland areas, avoiding stream and wetland resources, does not require authorization from this office.

Nationwide Permits (NWP) authorize common types of fill activities in WOUS that will result in a minimal adverse effect to the environment. Descriptions of the 52 types of nationwide permit activities and their general conditions can be found on our website: http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/Colorado.aspx. Some fill activities require notifying the Corps before starting work. Also, some types/sizes of work may require additional information or mitigation.

Regional General Permits (RGP) authorize specific types of fill activities in WOUS that will result in a minimal adverse effect to the environment. Descriptions of the 4 types of regional general permit activities and their general conditions can be found on our website: http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/Colorado/RegionalGeneralPermits.aspx. These fill activities require notifying the Corps before starting work, and possibly other local or state agencies. Also, some types/sizes of work may require additional information or mitigation. Please note several of the RGP's are applicant and location specific.

Individual permits may authorize fill activities that are not covered under the NWP or Regional General Permits (RGP's). This permit will be processed through the public interest review procedures, including public notice and receipt of comments. An alternative analysis (AA) must be provided with this permit action. The AA must contain an evaluation of environmental impacts for a range of alternatives. These alternatives should include the preferred action, no action alternative, and other action alternatives that would be the identified project purpose. Other action alternatives should include other practicable (with regards to cost, logistics, and technology) that meet the overall project purpose. The alternatives could include offsite alternatives and alternative designs. When evaluating individual permit applications, the Corps can only issue a permit for the least environmentally damaging practicable alternative (LEDPA). In some cases, the LEDPA may not be the applicant's preferred action. The individual permit application form and form instructions can be found on our website: http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/ObtainaPermit.aspx.

If the activity requires a Department of the Army permit as a result of any impacts to WOUS or any earth disturbances within that resource, a federal action will occur. For the Corps to make a permit decision, the applicant must provide enough information to demonstrate compliance with Section 106 of the National Historic Preservation Act (NHPA) and Section 7 of the Endangered Species Act (ESA).

The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to WOUS to the maximum extent practicable at the project site. Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. Any loss of an aquatic site may require mitigation. Mitigation requirements will be determined during the Department of the Army permitting review.

If the information that was submitted could impact WOUS, which are jurisdictional resources, this office should be notified. If a section 404 permit is required, work in an aquatic site should be identified by the proponent of the project and be shown on a map identifying the Quarter Section, Township, Range and County, Latitude and Longitude, Decimal Degrees (example 39.55555; -104.55555) and the dimensions of work in each aquatic site.

If there are any questions, please call the Denver Regulatory Office at **303-979-4120.**

Sincerely,

Kiel Downing
Chief, Denver Regulatory Office

Enclosures:
-PCN Requirements

Pre-Construction Notification (PCN) Requirements

(Nationwide Permit General Condition No. 31
from the February 21, 2012 Federal Register)

US Army Corps of Engineers,
Omaha District, Denver Regulatory Office
9307 South Wadsworth Blvd,
Littleton, CO 80128
Phone: (303) 979-4120
Website: http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/Colorado.aspx

Contents of Pre-Construction Notification:

The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

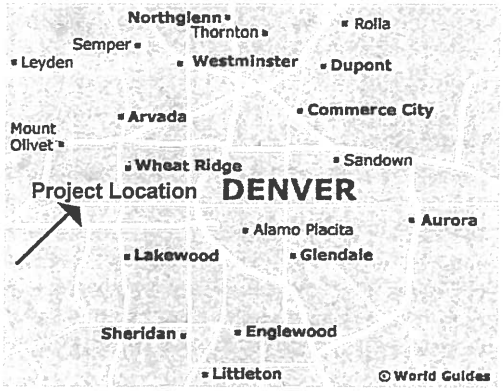
(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

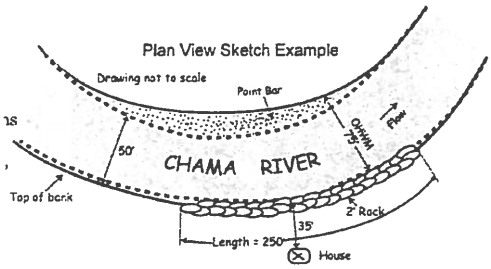
(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(8) Attach map and sketches- examples shown here.

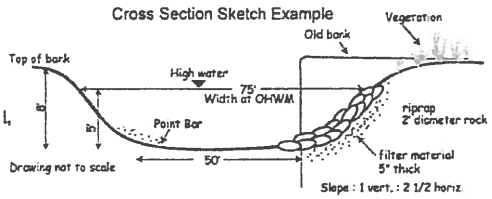
Location Map: Photocopy from road or topo map; indicate site location, any landmarks, etc.



Plan View Sketch: "Bird's-eye view"; include all features- distances, length and width; dimensions of features and stream/wetlands.



Cross Section Sketch: "Cut away view"; include heights, widths of structures, channel, wetland, bank slopes, etc.



Tri-County Health Department

December 23, 2015

Sherman Feher
Arapahoe County Planning Division
6924 S Lima St
Centennial CO 80112

RE: Quincy Solar Garden [Sunshare]
Case No. U15-001
TCHD No. 3736

Dear Mr. Feher:

Thank you for the opportunity to review and comment on the Use by Special Review application for Quincy Solar Garden located 2.3 miles east of the intersection of E Quincy Ave. and S Watkins Rd. Tri-County Health Department (TCHD) staff has reviewed the application for compliance with applicable environmental and public health regulations and principles of healthy community design. After reviewing the application, TCHD has the following comments:

Renewable Energy
Alternative energy supplies generally do not contribute to air and water pollution and can have a positive impact on the environment. TCHD commends the applicant for bringing forward a proposal that promotes the use of renewable energy.

Wastewater Service for Construction Trailers
The application describes a construction period of sixteen to twenty weeks. However, the application does not indicate whether there are existing wastewater facilities available to workers during construction or whether the facilities will need to be provided. TCHD has no objection to the use of portable toilets during the construction phase, provided the units are properly cleaned and maintained. While TCHD cannot require the use of hand sinks, we recommend that the applicant provide those for the workers, as it will reduce the potential for the transmission of disease.

Solid Waste
Rodents, such as mice and rats, carry diseases which can be spread to humans through contact with rodents, rodent feces, urine, or saliva, or through rodent bites. As rodents are attracted to trash, TCHD strongly recommends that all trash dumpsters on site during construction are equipped with a closeable lid and with regular collection and disposal at an approved landfill.

Please feel free to contact me at (720) 200-1585 or lbroten@tchd.org if you have any questions about TCHD's comments.

Sincerely,

Laurel Broten, MPH
Land Use and Built Environment Specialist
Tri-County Health Department

CC: Sheila Lynch, Brad Turpin, Steve Chevalier, TCHD

Sherman Feher

From: jack keever <jakreap@aol.com>
Sent: Thursday, December 03, 2015 8:18 AM
To: Sherman Feher
Cc: Gary.Duke@guarantybankco.com; tom.henley@xcelenergy.com
Subject: U15-001, Quincy Solar Garden (Sunshare)

Dear Sherman;

The Reap Board Of Directors has adopted a policy of supporting the orderly development of energy industries. Reap supports this application to establish a Community Solar Garden approximately 2.3 miles east of the intersection of East Quincy Avenue and South Watkins Road.

Thank you for referring this application to Reap.

Sincerely,

Jack Keever

Arapahoe County
Colorado's First

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DEC 1 0 2015
ARAPAHOE COUNTY PLANNING DIVISION

Public Works and Development
6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
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Planning Division

Phase II Referral Routing

Case Number / Case Name:	**U15-001, Quincy Solar Garden [Sunshare] / Use by Special Review**
Planner:	**Sherman Feher**
Engineer:	**Spencer Smith**
Date:	**11/23/2015**
Date to be returned:	**12/23/2015**

	Arapahoe County Agencies				
☒	Assessor / Arapahoe County	Beverly Reynolds		**Citizen's Organizations**	
☐	Attorney / Arapahoe County	Robert Hill	☐	CCNA-Cherry Creek Neighborhoods Ass.	
☐	Building / Arapahoe County	Steve Byer	☐	CECON-(Within Centennial)	
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☒	Tri-County	Sheila Lynch	☒	Other / 5 Sets East End Adv. Committee	Janet Cook
☐	HOA/Homeowners Associations				

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	COMMENTS:	SIGNATURE
☐	Have NO Comments to make on the case as submitted	
☒	Have the following comments to make related to the case:	
	Great Project	Janet Cook

Arapahoe County
Colorado's First

Public Works and Development
6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division

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☐	Architectural Review Committee		☐		
☐	Airport or Military Base			**Utilities: Gas, Electric & Phone**	
☐	CGS Colorado Geological Survey-Soils		☐	Centurylink/Phone	Charles Place
☐	City / Town		☐	Conoco Phillips / Gas Pipeline	
☒	Colorado Parks and Wildlife	Travis Harris	☒	XCEL	Donna George
☐	County		☐	IREA	
☐	DRCOG			**Water / Sanitation / Stormwater / Wetlands**	
☒	Bennett Fire District	Caleb Connor	☐	ACWWA	
☐	Metro District		☒	U.S. Army Corp. of Engineer	Kiel Downing
☐	Post Office Growth Coordinator	J. Hernandez	☐	CCBWQA	
☒	Reap I-70 Regional Economic Advancement Partnership	Matt Reay Jack Keever	☐	Colorado Division of Water Resources	Joanne Williams
☐	Recreation District / Park District (External)		☐	SEMSWA	Paul Danley
☐	School District		☐	ECCVW&S	Chris Douglass
☐	Special District		☒	Urban Drainage	David Mallory
☒	Tri-County	Sheila Lynch	☒	Other / 5 Sets East End Adv. Committee	
☐	HOA/Homeowners Associations				

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

	COMMENTS:	SIGNATURE
☐	Have NO Comments to make on the case as submitted	
☒	Have the following comments to make related to the case:	No Landscaping shown per
	13.904 N of LDC	

Arapahoe County
Colorado's First

Public Works and Development
6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division

Phase II Referral Routing

Case Number / Case Name:	**U15-001, Quincy Solar Garden [Sunshare] / Use by Special Review**
Planner:	**Sherman Feher**
Engineer:	**Spencer Smith**
Date:	**11/23/2015**
Date to be returned:	**12/23/2015**

	Arapahoe County Agencies				
☒	Assessor / Arapahoe County	Beverly Reynolds		**Citizen's Organizations**	
☐	Attorney / Arapahoe County	Robert Hill	☐	CCNA-Cherry Creek Neighborhoods Ass.	
☐	Building / Arapahoe County	Steve Byer	☐	CECON-(Within Centennial)	
☒	Engineering / Arapahoe County	Spencer Smith	☐	Four Square mile Neighborhood	
☒	Mapping / Arapahoe County	Pat Hubert	☐	South Metro Chamber of Commerce	
☐	Oil & Gas / Arapahoe County	Diane Kocis		**Conservation District**	
☐	Open Space / Arapahoe County	Shannon Carter	☒	Deer Trail Conservation District	Sheryl Wailes
☒	Planning / Arapahoe County	Sherman Feher	☐	West Arapahoe Conservation District	Tasha Chevarria
☒	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson		**Transportation**	
☐	Weed Control / Arapahoe County	Russell Johnson	☒	CDOT / State Highway Dept- Region 1	Rick Solomon
☒	Zoning / Arapahoe County	Tammy King	☐	E-470 Authority	Peggy Davenport
	Referral Agencies		☐	RTD	Chris Quinn
☐	Architectural Review Committee		☐		
☐	Airport or Military Base			**Utilities: Gas, Electric & Phone**	
☐	CGS Colorado Geological Survey-Soils		☐	Centurylink/Phone	Charles Place
☐	City / Town		☐	Conoco Phillips / Gas Pipeline	
☒	Colorado Parks and Wildlife	Travis Harris	☒	XCEL	Donna George
☐	County		☐	IREA	
☐	DRCOG			**Water / Sanitation / Stormwater / Wetlands**	
☒	Bennett Fire District	Caleb Connor	☐	ACWWA	
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☐	Post Office Growth Coordinator	J. Hernandez	☐	CCBWQA	
☒	Reap I-70 Regional Economic Advancement Partnership	Matt Reay Jack Keever	☐	Colorado Division of Water Resources	Joanne Williams
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☒	Tri-County	Sheila Lynch	☒	Other / 5 Sets East End Adv. Committee	
☐	HOA/Homeowners Associations				

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	COMMENTS:	SIGNATURE
☐	Have NO Comments to make on the case as submitted	Patrick Hubert 12-14-15
☒	Have the following comments to make related to the case:	
	- WHY IS THERE AN ACREAGE DIFFERENCE (20 AC. VS. 40 AC) BETWEEN THE LEASE AREA AND THE LEGAL DESCRIPTION?	

PHASE I INTERNAL ROUTING FORM

From: Planning

To: Planning, Engineering, Mapping, Zoning, Building, Oil & Gas, Weed

Case Planner: Sherman
Case Engineer: Spencer

Planning Case No: U15-001
Engineering Case No:

Case Name: Quincy Solar Garden /Sunshare USR
PPI# /Location: 2069-00-0-00-013

Date submitted: 08-19-2015
(If submitted before 2 p.m.)

Date assigned & entered in ACCELA:08-20-2015
(3rd working day from submittal, after review for completeness)

DRC Meeting Date: 09-27-2015
(Wednesday, at least 5 working days from assignment)

Internal review-Due date to Planner: ~~09-04-2015~~ 09/09/2015
(10 working days from assignment)

Phase II: Yes No

Comment:

A noxious weed management plan is necessary for this project.

Russell Johnson
Arapahoe Count Weed Control Specialist

USE BY SPECIAL REVIEW: U15-001 – LETTER OF INTENT - QUINCY SOLAR GARDEN

January 5th, 2016

Mr. Sherman Feher, Planner
Arapahoe County Public Works and Development
6924 South Lima Street
Centennial, CO 80112

RE: Use by Special Review (USR) based on 1401 Guidelines for a Community Solar Garden

Enclosed:

- 1041 Part C Application Submittal Requirement Checklist
- Point-by-Point Response Letter
- Site Development & GESC Plans
- Engineering/Environmental Studies and Supporting Documents

Dear Mr. Feher:

This letter is intended to provide Arapahoe County Public Works and Development with anticipated project scope and information related to the proposed Quincy Solar Garden located approximately 2.3 miles east of the intersection of East Quincy Avenue and South Watkins Road. Based on this information, Quincy Solar Garden LLC, a wholly-owned subsidiary of SunShare LLC ("Applicant") respectfully requests the granting of a Use by Special Review Permit under Arapahoe County 1401 Regulations Part C. We provide with this letter a summary of the project's main considerations and address all 1041, Part C Application Submittal Requirements and Approval Criteria point by point with verifying documentation as needed.

Sincerely,

Luke Rickard

Luke Rickard
Project Developer, SunShare

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303.296.0919 | info@mysunshare.com | www.mysunshare.com

I. Project Summary

Applicant and Xcel Energy are contractually partnering to provide up to 2 MWdc of new solar garden capacity in Arapahoe County per House Bill 10-1342, commonly known as the Colorado Community Solar Gardens Act. However, electric capacity may increase based on technological efficiencies gained in solar equipment but will not change the aesthetic of the project. SunShare is also developing similar projects in Douglas County, Adams County, and Jefferson County. The Arapahoe County location was selected due to its proximity to Xcel's transmission infrastructure, relatively flat land grade, and access to the sun (no shading obstructions). Applicant is excited to bring clean and renewable energy to Arapahoe County and looks forward to working with the community to make the project a success. There will be tax revenue to the County; additionally, the construction phase will bring positive economic traffic to local businesses such as restaurants, gas stations, and construction supply.

Applicant is currently in the planning and development stages of a solar garden approximately 2.3 miles east of the intersection of East Quincy Avenue and South Watkins Road in unincorporated Arapahoe County. The solar garden will be installed north of Quincy Ave, and south of Xcel distribution lines, east of an existing gas well. The project will lease 20 acres of property owned by Stephen D. Tebo. The parcel number is PIN: 031584418, AIN: 2069-00-0-00-013. Full legal description of the property is included in the site development plan with this submittal.

Historically this land has been undeveloped or used for grazing; it is zoned A-1. It is surrounded by oil and gas infrastructure including pipelines, wells, and pump jacks. The property is also close to electric distribution and transmission lines, which is why we selected this site for this project. Proximity to electrical infrastructure is important for utility grid interconnection and for the compatibility of the solar garden use with surrounding uses.

The approximately 7,000 solar modules will mounted on single axis trackers. This means the solar panels will be facing east in the morning, be flat at noon, and be facing west in the afternoon- following the path of the sun. The approximate maximum height of the solar collection equipment above finish

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grade will be 8′ at full tilt. The entire project will be surrounded by a 6-8′ chain link fence.

Construction will likely begin Q1 2016 and will last approximately 16 to 20 weeks. Construction crews will be a combination of general laborers and certified and journeymen electricians under an on-site general contractor. There will be a security guard on watch during certain phases of construction. Once complete, there will be no full time personnel on site. There will be a small maintenance crew (1-4 people) visiting on a monthly/quarterly basis.

The Project lease area is 20 acres and includes: solar panels mounted on steel I-beams; concrete pad mounted transformer and inverter; an access drive with emergency turnaround cul-de-sac; and perimeter fence with gate. Access driveway and gate will conform to Bennett Fire Protection District and other applicable local emergency services requirements. There will be minor, surgical "cut/fill" grading in specific areas of the land in order to equalize finish grade for technology performance reasons, but the overall path of surface drainage across the property will remain. Any large shrubs within the project site boundaries will be removed prior to construction; the existing prairie grass vegetation will be mowed but not removed to prepare the site for construction except in those areas where cut/fill grading is planned.

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II. Approval Criteria

A. General Approval Criteria

1. Prior to Construction

Prior to beginning construction Applicant will obtain:

- Fully executed and recorded lease agreement
- Clear title to the land
- Executed and recorded utility and access easements
- Surface use agreements from the mineral owner and mineral lessee(s)
- Utility agreements to interconnect our solar facility (Interconnection Agreement)
- Grading Erosion and Sediment Control (GESC) Permit (if required)

These items are part of SunShare's standard practice for each and every project.

2. Regional Water Quality

Applicant is taking measures to ensure that the proposed construction and operation activities do not negatively impact water quality in the area or in draining to Box Elder Creek to the east. These include limiting area grading activities as much as possible, maintaining or restoring native vegetation within the project boundaries, and keeping existing water flow characteristics on the parcel intact.

Applicant met with the Arapahoe County Public Works Technical Review Committee (TRC) on October 28, 2015 to discuss Applicant's variance request for waiver of the Stormwater Detention Requirement (AC SWMM 13.1.5 (SDR)) and variance request for waiver of the Water Quality Capture Volume Requirement (AC SWMM 14.4.2 (WQCVR)). Both requests for waiver were considered and supported by the TRC. The SDR waiver request was supported by the TRC's consideration that the construction of a detention pond and outlet structure would result in more earthwork, ground disturbance, and potential sources of sediment transport than the presented design. The WQCVR waiver request was supported by the TRC's finding that simple over-seeding and mulching of the existing vegetation between the solar array fields and the eastern project boundary would create a grass buffer sufficient to remove sediment from site runoff. SunShare will fulfill

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these findings and requirements utilizing these or additional best practices identified by Arapahoe County staff.

3. Necessary Expertise & Financial Capability: N/A – Applicable to Major Permit Review only

4. Technical and Financial Feasibility of Project: N/A – Applicable to Major Permit Review only

5. Natural Hazard Risk

Applicant does not consider the project to be at significant risk to the following natural hazards: hurricane, earthquake, landslide, avalanche and forest fire. The following natural hazards have some potential to affect the project: flood, tornado, hail and grass fire.

The project has been designed to be outside of the designated 100-year floodplain for the adjacent Box Elder Creek. Given that the operational life of the project is not expected to exceed 30 years, Applicant considers the risk to the project from flood to not be significant. Additional measures that can be taken to protect the project from flood include the installation of the solar modules at least four feet six inches (4′ 6″) from finish grade and locating all electrical equipment such as combiner boxes, inverter stations and transformers on the western side of the project uphill from the creek.

Although tornados could possibly occur at the project site, Applicant does not believe the risk to be significant. The project is located well away from densely populated areas; should a tornado occur, collateral damage to the surrounding area is considered to be negligible. Solar PV technology is designed and manufactured to be resistant to all but the most severe hailstorms. Grass fires in the surrounding area could potentially enter the project boundary and damage the solar equipment; however, Applicant does not believe this risk to be significant enough to affect project viability.

Applicant will design the Project to meet or exceed all applicable local and national codes and standards. This means that the project systems and equipment will be designed to withstand the required snow loads, wind loads, seismic conditions, and all other applicable requirements or

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conditions. Should a natural event's impact exceed design criteria or emergency services' control and damage the equipment, Applicant has insurance coverage that will allow for the equipment to be replaced.

6. Compatibility with Comprehensive Plan

The Comprehensive Plan provides for "power energy facilities" in rural designated areas of the County. Our project is consistent with the Comprehensive Plan. See the following section C.3 for more detail in this regard.

7. Impact to Local Government Services

Applicant believes that the proposed use will not affect the ability of the local government to provide any or all of its services, and that it will not exceed the response capacity of the local emergency services.

8. Undue Financial Burden: N/A – Applicable to Major Permit Review only

9. Degradation of Local Economy: N/A – Applicable to Major Permit Review only

10. Impact to Recreational Opportunities

Applicant does not anticipate any impact to recreational opportunities in the area. The proposed project is not close to any open space, public parks, or other recreational areas. Our project is in a rural undeveloped area and will be quiet and have a low profile. Only monthly/quarterly maintenance visits are expected during commercial operation.

11. Resource Conservation

The proposed use fits very closely with the spirit and goals of resource conservation initiatives. By producing clean renewable energy from the sun for more than 20 years with minimal maintenance, the project essentially reduces dependence on conventional fuels such as coal or natural gas; both resources which cannot be replenished. The generation of clean power onto the distribution grid and closer to the point of consumption than traditional power generation sources can aid the utility during peak consumption hours

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without the need to turn to additional conventional fuel-fired power sources during these times.

12. Degradation of Environment

Applicant believes that the proposed use will not result in any significant measurable degradation of the natural environment, especially when compared to conventional power fuel sources such as coal or natural gas.

- Air Quality: The daily operation of the solar facility will not produce any noxious emissions that could affect air quality. During construction, Applicant and Applicant's contractor will employ best-practice measures to control airborne dust. Grading activities will be performed during the wetter months if possible, to reduce the likelihood of airborne dust generation. The use of a limited number of gasoline- or diesel-powered machines during construction is not expected to have a significant impact to air quality during the brief construction period.
- Visual Quality: The presence of the solar facility will be noticeable from Quincy Ave. For westbound travelers, the solar facility will be mostly screened by the trees lining Box Elder Creek until travelers are directly across from the facility. For eastbound travelers, the facility will be briefly visible. Applicant will make efforts to retain or restore the existing vegetation onsite around and between the solar arrays, as well as within the graded areas. The solar arrays will be arranged symmetrically and mostly following the existing land contours. The height above grade of the solar modules at maximum tilt is not expected to exceed eight feet; thus the solar arrays will be shorter in height than the existing oil and gas infrastructure, or the industrial warehouse buildings also featured in the area. The visual character of that stretch of Quincy Ave. is dominated by a significant power transmission corridor featuring large high tension electric power transmission and distribution lines, and features an electrical substation behind a chain link fence. Applicant does not believe that the Project will cause significant degradation to the visual quality of the area in excess of that already caused by the existing electrical utilities in the area.
- Surface Water Quality: Applicant will take all necessary steps to protect surface water quality. Key to this is the retention of the

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existing vegetation across the majority of the project area and the installation of a grass buffer between the array fields and Box Elder Creek. Arapahoe County Public Works TRC has approved Applicant's plan to preserve surface water quality. Once these measures have been installed and established, no degradation of surface water quality is expected.

- Ground Water Quality: A geotechnical exploration of the Project site was conducted with test drilling depths up to 19 feet. No groundwater was encountered at any of the test drilling sites. Embedment depths for the structural supports to the solar arrays are not expected to exceed 10 feet. Applicant does not expect any degradation of ground water or underground aquifers due to the presence of the project in the area.
- Wetland, Floodplain, Streambed, Recharge Areas, Riparian Areas: Applicant commissioned a Phase I Environmental Assessment (ESA) and an ecological survey for the Project site. No wetlands were observed onsite. The Box Elder Creek 100 year floodplain boundary is outside of the proposed Project boundary. No streambed or recharge areas were identified within the Project boundary. Riparian habitat was observed along Box Elder Creek to the east of the project and outside of the Project boundary. Applicant does not anticipate any significant degradation to these environmental zones due to the proposed use.
- Terrestrial and Aquatic Animal Life: An active prairie dog colony was observed on the project site. The Colorado Dept. of Parks and Wildlife recommends the humane removal of prairie dogs immediately prior to development. The Project is not expected to negatively impact the prairie dog colony outside of the project boundaries and Applicant will take measures to protect the electrical equipment from damage during the operational period. The ecological survey did raise the possibility of Preble's meadow jumping mouse habitat within the project boundary; however further observation and review by the US Fish and Wildlife Service determined no habitat present or concerns for the wildlife. No additional endangered species or their habitat were observed within the Project boundary. The Project is not considered to pose a threat to aquatic animal life.
- Terrestrial and Aquatic Plant Life: Applicant will be retaining the existing vegetation onsite as much as possible. No protected plant

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species were observed onsite. The Project does not pose a risk to aquatic plant life.

- Soils and Geologic Conditions: Applicant conducted a geotechnical exploration of the site. The soils are suitable for the proposed use. Applicant will minimize the extent of area grading activities for the solar array locations to the necessary minimum. No degradation of the soils or geology currently at the site is expected due to the proposed use.

13. Cause of Nuisance

Applicant does not anticipate this use causing a nuisance. The operating technology is mostly silent and is emissions free. The construction period will be short and will generate only sporadic delivery traffic. Off-site impacts will be kept to a minimum during construction. There will be no permanent staff onsite during operations; maintenance activities are expected to be limited to monthly/quarterly visits with a single light vehicle.

14. Archaeological/Paleontological/Historical

Applicant does not believe that the use will significantly degrade any areas of paleontological, archaeological or historic importance. See attached letter from the Colorado Historic Society stating that no records of such nature were associated with the proposed project location.

15. Hazardous Chemical Risk

Applicant does not anticipate that the project represents any unreasonable risk regarding the release of known hazardous materials either during construction or during operation, as these are generally not a feature of the project during either period.

- No chemicals are needed for construction of the facility or for its operation.
- Construction operations will minimize waste. There will be temporary dumpsters onsite during construction for construction waste. Temporary sanitary facilities will also be located onsite during construction. Any fuel spillage during construction will be contained and cleaned, and the spoils will be removed from the site and disposed of properly.
- Should liquid-immersed transformers be required for this project, Applicant will make best efforts to secure transformers that use non-

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toxic and biodegradable oils or fluids. All transformer equipment will be new and free from defects and will meet all applicable codes and testing standards. All applicable requirements set forth in 40 CFR 110 and 112 will be adhered to.

After the operational life of the facility is over, Applicant will decommission the facility. This will involve the safe removal of all structural steel and aluminum, conductors, inverters, transformers, concrete and fencing. Applicant will restore the site to as close to its original condition as is feasible after decommissioning. Applicant anticipates that the structural and electrical conductor components could be recycled; there could also be a secondary market for used solar collection equipment where Applicant would seek to sell the solar modules.

16. Benefits & Losses: N/A – Applicable to Major Permit Review Only

17. Project as Best Alternative

Colorado State law has mandated that investor-owned utilities source 30% of their energy supply from renewable energy. The community solar garden program has been set up by the Colorado legislature and provides another avenue for utilities to move toward compliance with this mandate. Applicant and the utility will work together to deploy this renewable energy technology for the benefit of the local community and the utility's customers.

The proposed use will support the State's need to diversify fuel sources for power generation, and can potentially benefit the utility and electric grid reliability by providing clean power closer to the point of consumption. The proposed solar technology is tried, tested and proven; and installation costs have fallen significantly over the past decade. Solar PV is one of the most cost-effective methods of deploying renewable energy given the available solar resource in the area.

The proposed use has limited short-term impact to the surrounding area during construction, almost no impact to the surrounding area or other uses during operation, and very little long-term impact after decommissioning as the land can easily be returned to its previous state after use. The Arapahoe

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County Comprehensive Plan allows for installation of energy project on rural land and in this zoning.

18. Impact to Agricultural Activities

There are currently limited agricultural activities taking place on the subject land parcel, mostly intermittent grazing. The land is not high-yield agricultural land. Any agricultural activities taking place on the parcel currently can resume outside of the project fence line after project completion and during facility operation. Applicant may continue an agricultural use within the site, such as honeybee or sheep grazing, during the operational term of the facility. After facility decommissioning and equipment removal, agricultural activities could resume on the project site if desired.

19. Cultural Resource Preservation

Applicant does not believe that the project will significantly interfere with the preservation of cultural resources such as historical structures or sites or archaeological resources. The Colorado Historical Society found no record of any such cultural resources in the area. The impact of the project to agricultural resources, the rural lifestyle, and the opportunity for solitude in the natural environment will be negligible due to the solar technology's quiet, automated operation and opportunity for complete removal at the end of the operational term.

20. Impact to Land Use Patterns

The Project will not significantly degrade the land-use pattern of the surrounding areas in any way. There will be a solar easement on the surrounding land parcel designed to prevent future shading of the solar arrays by future development, but with the setbacks requested by County planning staff the risk of such shading is remote in any case. Current land use patterns in the area surrounding the Project may continue unaffected by the presence of the Project at the proposed location.

21. Compliance with Regulations and Fees

Applicant warrants that all applicable Federal, State and County regulations will be complied with and that all necessary fees will be paid.

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B. Additional Criteria: N/A (Water/Sewer Projects Only)

C. Additional Criteria Applicable to Major Facilities of a Public Utility (Private Company/Use By Special Review)

1. Impact to Service from Area Uses

No negative impact to the utility service is expected due to the Project's presence in the area. Applicant will work closely with the utility for the detailed design and planning of the Project. Interconnection of the facility to the electrical distribution grid will be performed under the supervision of authorized utility personnel and in accordance with the utility-approved design and procedures. The electrical equipment installed at the facility will be designed to minimize negative impacts to the utility's service in the area. Should a service disruption due to equipment malfunction occur, the utility or facility operator will have the ability to disconnect the facility from the distribution grid until such time that functionality is restored and the facility can be reconnected.

2. Preservation of Desirable Existing Community and Rural Patterns

Applicant believes that the surrounding areas to the Project could easily be administered in such a way as to preserve desirable existing community and rural patters without significant impact to either the operational facility or to the community in the surrounding area. Other than the industrial park to the west, no existing community uses in the immediate area have been identified; future community use outside of the project fence line should reasonably be able to occur without significant negative impact to the project. Similarly rural land use patterns in the area could continue outside of the project fence line without significant impact to the operational facility. The project is not expected to negatively affect the existing oil/gas operations in the immediate area in any way.

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3. Conflict with Local Comprehensive, State and Regional Master Plans

The Project is located within the area designated as "Rural Area – Tier III" within the Arapahoe County Comprehensive Plan. The purpose of the Tier III is to promote "conservation of agriculture and open lands" (III-3). There is also an expressed preference for cluster development, with development "grouped together on a portion of the parcel, while a larger portion of the parcel is conserved for agriculture or open land" (III-3). Our proposed use meets these requirements exactly, being located on the southern end of the parcel, close to the existing oil and gas developments. As shown by the proposed plan sets, the remainder of the parcel (all areas outside of the fence line) will remain open to the existing agricultural use, which is intermittent grazing. These activities will not interfere with facility operation in any way. Furthermore, Applicant is pursuing plans to co-locate livestock grazing at the project site during operations, thus continuing an agricultural use within the fenced 20 acres and preserving the agricultural character of the designated area.

According to the Comprehensive Plan, non-residential uses in the Rural Area will be discouraged "unless they are agriculture-related or are public facilities and services" (III-3). Public Facilities are defined in the Comprehensive Plan as "...utility lines, power substations, power energy facilities..." (III-12). Applicant believes that the proposed use meets the definition of power energy facilities, as a facility that produces electric power. The proposed use is also similar in character to utility lines and power substations, both of which are in close proximity to the proposed Project. This site was chosen for its proximity to a substation. Our conversations with the utility indicate that the substation is close to capacity and that future solar developments in the area after this one will be severely limited. Additionally, the Plan states that "Public Facilities should be accessible by the population served" (III-12). While electrical code regulations will not allow the free ingress of the public into an energy facility in the same way that power substation access is restricted to the public, a Solar Garden meets the spirit of that requirement by directly benefitting the subscribers to the garden, many of which could be drawn from the local area. Lastly, the Plan states that "Groundwater supply and availability will be a significant factor" (III-3) in limiting development density in the Tier III area. The proposed use will not impact groundwater

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quality in any way, and will not draw from groundwater resources during operation.

Applicant does not believe that the proposed use is in conflict with the County Comprehensive Plan. Rather, the proposed use meets many of the criteria for development in the Tier III area. Applicant is not aware of any conflict with any State or Regional Master Plans. The Project will comply with all applicable zoning/use regulations and County requirements.

4. Right-of-Way and Infrastructure

The Project will comply with all applicable ROW requirements. Impact to traffic along Quincy Ave. during normal operations is expected to be minimal, and light during construction. Estimated traffic generation by the project is summarized in the following table as provided in the engineer's traffic impact letter provided with this application.

Project Phase (Time Period)	Vehicle Type	Estimated Gross Vehicle Weight	Number of Vehicles Per Day	Maximum and Average Vehicle Trips Per Day
Site Preparation (approx. 4-6 weeks)	Equipment Hauling Trucks	30,000-65,000 lbs	0-2	0-4
	Passenger Vehicles	2,000-10,000 lbs	2-5	4-10
	Fuel Delivery	20,000-30,000 lbs	1	2
				Max – 16/Ave - 6
Material and Equipment Delivery (approx. 4 weeks)	Conex Container and Delivery Trucks	30,000-50,000 lbs	5-15	10-30
	Equipment Hauling Trucks	20,000-40,000 lbs	0-4	0-8
				Max – 38/Ave - 10
Solar Garden Installation (4-5 months)	Passenger Vehicles	2,000 to 10,000 lbs	5-15	20-30
	Fuel Truck	20,000 to 30,000 lbs	1	2
	Material Delivery Truck	20,000 to 30,000 lbs	1	2
				Max – 34/Ave - 24
Operations (ongoing once operational)	Utility Vehicle	2,000 to 10,000 lbs	1 per month or less	
				Max - 2/Ave - 0

The Project will not place a significant burden on transportation, community services, sanitary sewer, water or electric utility infrastructure.

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III. Submittal Requirements

A. Application Fee

Applicant has paid all necessary fees for the 1041 Permit Review. No notification from County staff regarding payment of consultants' fees related to this review has been received at time of writing. The County should be advised that total permitting and review fees for solar projects 2 MWdc or less in capacity are limited to $1,000 per Project, per C.R.S. 30-28-113 (1) (b) (II).

B. Information Describing the Applicant

Applicant will be the Owner of the Project. Applicant is a privately held limited-liability corporation registered in Colorado. Applicant's parent company, SunShare LLC, is a privately held limited liability company with roots in Denver and Colorado Springs. SunShare has a demonstrated history of success in developing similar projects in the Colorado Front Range area and has offices in Minneapolis, MN. SunShare currently has around 50 employees engaged in the development, financing, construction, subscription management and operation of Community Solar Gardens in both Colorado and Minnesota.

Applicant:
Quincy Solar Garden LLC
1441 18th Street, Suite 400
Denver, CO 80202
Contact: Luke Rickard
Phone: 303.296.0919
Fax: 720.606.2869
Email: lrickard@mysunshare.com

Applicant is leasing the land for this project from the land owner, Stephen D. Tebo. The land owner's address is:
3111 28th Street
Boulder, CO 80301

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303.296.0919 | info@mysunshare.com | www.mysunshare.com

Individuals who will play a role in the development and management are listed below along with a summary of their experience. Applicant has not yet selected a prime contractor for this project.

Luke Rickard, Solar Project Developer, SunShare: Mr. Rickard has a decade of experience in the renewable energy industry, and has planned and executed solar and traditional energy projects both at the utility and distributed generation level.

Jon Sullivan, Director of Project Development, SunShare: Mr. Sullivan is a NABCEP-certified solar installer with more than a decade of renewable energy experience as an installer and instructor. Mr. Sullivan holds an MBA in Energy Development from Daniels College at Denver University.

J. Sean O'Hearn, PE, PG: Managing Partner, Enertia Consulting Group: Mr. O'Hearn is the Engineer of Record (EOR) for the permitting and planning documents and studies for this Project. He has decades of engineering experience in energy development and construction projects in Colorado and elsewhere.

SunShare has brought more than 10 MW of similar Community Solar Garden projects to construction and operation in Colorado in the past few years. This was achieved through a mixture of balance sheet and investor financing. We anticipate similar success in the development, financing and operation of this Project.

C. Information Describing the Project

The Project will be a photovoltaic solar generation facility that utilizes single-axis tracking technology to maximize solar production. Detailed plans and specifications appropriate for the conceptual level of project design at this time have been provided in the USR review plan set.

Applicant considered other land sites in the County before selecting this one. This site was selected for its relatively flat land grade, proximity to utility infrastructure, and distance from other developments potentially incompatible with this use. Applicant evaluated various design solutions before selecting the design presented in the USR review plan set. Applicant expects to begin construction permitting applications in the first quarter of 2016 and complete construction some time in the third quarter of 2016.

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Operation would be for twenty years from date of completion, with the possibility of fixed-term extensions to the operation period subject to technology viability.

The Project will provide the residents and businesses of Arapahoe County with the opportunity to source locally-produced clean renewable energy. The need for additional renewable energy generation sources has been clearly established by state policy and utility programs. Applicant will develop and install this Project under Xcel Energy's Solar Community program.

The Project is the definition of resource conservation. Just by operating, this project will aid in the conservation of natural fuel resources such as fuel and natural gas. Distributed generation of power also allows utilities to conserve the generation of electricity. In addition, the use of the project will place no burden on local water sources, thus conserving those for future uses and generations. Lastly, Applicant will conserve as much of the existing vegetation on the project site as possible and will re-seed with a native grass and wildflower mix to conserve as much of the natural animal habitat as possible. Upon de-commissioning, the solar generation equipment will be entirely removed and the land returned to its original state. Applicant will evaluate and pursue any opportunities for recycling or "grey market" use of facility components (commodity materials, solar PV modules etc.) as may be available on the market at the time of decommissioning.

D. Property Rights, Permits and Other Approvals

Prior to beginning construction Applicant will obtain:

- Fully executed and recorded lease agreement
- Clear title to the land
- Executed and recorded utility and access easements
- Surface use and/or Right-of-Way crossing agreements from the mineral owner and mineral lessee(s)
- Utility agreements to interconnect our solar facility (Interconnection Agreement)
- Grading Erosion and Sediment Control (GESC) Permit
- Arapahoe County Use By Special Review Permit
- All required Arapahoe County Structural, Electrical, and Construction Permits

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Applicant has executed a lease agreement with the landowner. There are no Federal or State permits required for this Project.

Applicant has included with this application copies of communications with the Army Corps of Engineers, US Fish & Wildlife, and the CO Historical Society.

The project will not require any water for daily operation. Water used for module cleaning must be de-ionized and will be sourced from outside the project area. Any water required during construction will be sourced from water trucks. Applicant does not anticipate at this time that construction water will be necessary.

E. Regional Water Quality Management Plan

Applicant met with the Arapahoe County Public Works Technical Review Committee (TRC) on October 28, 2015 to discuss Applicant's variance request for waiver of the Stormwater Detention Requirement (AC SWMM 13.1.5 (SDR)) and variance request for waiver of the Water Quality Capture Volume Requirement (AC SWMM 14.4.2 (WQCVR)). Both requests for waiver were considered and supported by the TRC. The SDR waiver request was supported by the TRC's consideration that the construction of a detention pond and outlet structure would result in more earthwork, ground disturbance, and potential sources of sediment transport than the presented design. The WQCVR waiver request was supported by the TRC's finding that simple over-seeding and mulching of the existing vegetation between the solar array fields and the eastern project boundary would create a grass buffer sufficient to remove sediment from site runoff. SunShare will fulfill these findings and requirements utilizing these or additional best practices identified by Arapahoe County staff.

F. Financial Feasibility of the Project

N/A: only applicable to Major Permit Review

G. Land Use

The current use pattern on the subject parcel and surrounding parcels is intermittent to medium-frequency agricultural, with some oil and gas

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exploration and production. The Project will not significantly degrade the land use pattern of the surrounding areas in any way. There will be a solar easement on the surrounding land parcel designed to prevent future shading of the solar arrays by future development, but with the setbacks requested by County planning staff the risk of such shading is remote in any case. Current land use patterns in the area surrounding the Project may continue unaffected by the presence of the Project at the proposed location.

There are currently limited agricultural activities taking place on the subject land parcel, mostly intermittent grazing. The land is not high-yield agricultural land. Any agricultural activities taking place on the parcel currently can resume outside of the project fence line after project completion and during facility operation. Applicant may continue an agricultural use within the site, such as honeybee or sheep grazing, during the operational term of the facility. After facility decommissioning and equipment removal, agricultural activities could resume on the project site if desired.

The Project is located within the area designated as "Rural Area – Tier III" within the Arapahoe County Comprehensive Plan. The purpose of the Tier III is to promote "conservation of agriculture and open lands" (III-3). There is also an expressed preference for cluster development, with development "grouped together on a portion of the parcel, while a larger portion of the parcel is conserved for agriculture or open land" (III-3). Our proposed use meets these requirements exactly, being located on the southern end of the parcel, close to the existing oil and gas developments. As shown by the proposed plan sets, the remainder of the parcel (all areas outside of the fence line) will remain open to the existing agricultural use, which is intermittent grazing. These activities will not interfere with facility operation in any way. Furthermore, Applicant is pursuing plans to co-locate livestock grazing at the project site during operations, thus continuing an agricultural use within the fenced 20 acres and preserving the agricultural character of the designated area.

According to the Comprehensive Plan, non-residential uses in the Rural Area will be discouraged "unless they are agriculture-related or are public facilities and services" (III-3). Public Facilities are defined in the Comprehensive Plan as "...utility lines, power substations, power energy facilities..." (III-12).

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Applicant believes that the proposed use meets the definition of power energy facilities, as a facility that produces electric power. The proposed use is also similar in character to utility lines and power substations, both of which are in close proximity to the proposed Project. This site was chosen for its proximity to a substation. Our conversations with the utility indicate that the substation is close to capacity and that future solar developments in the area after this one will be severely limited. Additionally, the Plan states that "Public Facilities should be accessible by the population served" (III-12). While electrical code regulations will not allow the free ingress of the public into an energy facility in the same way that power substation access is restricted to the public, a Solar Garden meets the spirit of that requirement by directly benefitting the subscribers to the garden, many of which could be drawn from the local area. Lastly, the Plan states that "Groundwater supply and availability will be a significant factor" (III-3) in limiting development density in the Tier III area. The proposed use will not impact groundwater quality in any way, and will not draw from groundwater resources during operation.

Applicant does not believe that the proposed use is in conflict with the County Comprehensive Plan. Rather, the proposed use meets many of the criteria for development in the Tier III area. Applicant is not aware of any conflict with any State or Regional Master Plans. The Project will comply with all applicable zoning/use regulations and County requirements.

H. Local Government Services

Applicant believes that the proposed use will not affect the ability of the local government to provide any or all of its services, and consequently that it will not exceed the response capacity of the local emergency services. The unoccupied nature of the facility during normal operation will place no significant burden on such services as roads, schools, water/wastewater treatment, water supply, emergency services, transportation, infrastructure, housing or law enforcement.

Bennett Fire District (BFD) has jurisdiction over the project area. Fire ignition at these facilities is rare and is fairly simple to manage with very few easily combustible materials and no combustible fuels present onsite. BFD has granted permits for these facilities in the past and Applicant does not anticipate fire response for the Project to be outside of BFD's capabilities to

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respond to. BFD will also provide emergency medical services to the project site, should they be needed.

I. Financial Burden on County Residents

N/A: only applicable to Major Permit Review

J. Local Economy

N/A: only applicable to Major Permit Review

K. Recreational Opportunities

N/A: only applicable to Major Permit Review

L. Environmental Impact Analysis

1. Air Quality

The daily operation of the solar facility will not produce any noxious emissions that could affect air quality. During construction, Applicant and Applicant's contractor will employ best-practice measures to control airborne dust. Grading activities will be performed during the wetter months if possible, to reduce the likelihood of airborne dust generation. The use of a limited number of gasoline- or diesel-powered machines during construction is not expected to have a significant impact to air quality during the brief construction period. Given the environmentally-friendly nature of the development and the limited duration and scope of construction, maps of ambient air quality are not deemed necessary for this Project.

2. Visual Quality

The presence of the solar facility will be noticeable from Quincy Ave. For westbound travelers, the solar facility will be mostly screened by the trees lining Box Elder Creek until travelers are directly across from the facility. For eastbound travelers, the facility will be briefly visible. Applicant will make efforts to retain or restore the existing vegetation onsite around and between the solar arrays, as well as within the graded areas. The solar arrays will be arranged symmetrically and mostly following the existing land contours. The height above grade of the solar modules at maximum tilt is not expected to exceed eight feet; thus the solar arrays will be shorter in height than the existing oil and gas infrastructure, or the industrial

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warehouse buildings also featured in the area. The visual character of that stretch of Quincy Ave. is dominated by a significant power transmission corridor featuring large high tension electric power transmission and distribution lines, and features an electrical substation behind a chain link fence. Applicant does not believe that the Project will cause any degradation to the visual quality of the area in excess of that already caused by the existing electrical utilities in the area.

3. Surface Water Quality

Applicant will take all necessary steps to protect surface water quality. Key to this is the retention of the existing vegetation across the majority of the project area and the installation of a grass buffer between the array fields and Box Elder Creek. Arapahoe County Public Works TRC has approved Applicant's plan to preserve surface water quality. Once these measures have been installed and established, no degradation of surface water quality is expected.

4. Groundwater Quality and Quantity

A geotechnical exploration of the Project site was conducted with test drilling depths up to 19 feet. No groundwater was encountered at any of the test drilling sites. Embedment depths for the structural supports to the solar arrays are not expected to exceed 10 feet. Applicant does not expect any degradation of ground water or underground aquifers due to the presence of the project in the area.

5. Wetlands and Riparian Areas

Applicant commissioned a Phase I Environmental Assessment (ESA) and an ecological survey for the Project site. No wetlands were observed onsite. The Box Elder Creek 100 year floodplain boundary is outside of the proposed Project boundary. No streambed or recharge areas were identified within the Project boundary. Riparian habitat was observed along Box Elder Creek to the east of the project and outside of the Project boundary. Applicant does not anticipate any significant degradation to these environmental zones due to the proposed use.

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6. Terrestrial and Aquatic Animals and Habitat

An active prairie dog colony was observed on the project site. The Colorado Dept. of Parks and Wildlife recommends the humane removal of prairie dogs immediately prior to development. The Project is not expected to negatively impact the prairie dog colony outside of the project boundaries and Applicant will take measures to protect the electrical equipment from damage during the operational period. The ecological survey did raise the possibility of Preble's meadow jumping mouse habitat within the project boundary; however further observation and review by the US Fish and Wildlife Service determined no habitat present or concerns for the wildlife. No additional endangered species or their habitat were observed within the Project boundary. The Project is not considered to pose a threat to aquatic animal life.

7. Terrestrial and Aquatic Plant Life

Applicant will be retaining the existing vegetation onsite as much as possible. No protected plant species were observed onsite. The Project does not pose a risk to aquatic plant life.

8. Soils, Geologic Conditions and Natural Hazards

Applicant conducted a geotechnical exploration of the site. The soils are suitable for the proposed use. Applicant will minimize the extent of area grading activities for the solar array locations to the necessary minimum. No degradation of the soils or geology currently at the site is expected due to the proposed use.

Applicant does not consider the project to be at significant risk to the following natural hazards: hurricane, earthquake, landslide, avalanche and forest fire. The following natural hazards have some potential to affect the project: flood, tornado, hail and grass fire.

The project has been designed to be outside of the designated 100-year floodplain for the adjacent Box Elder Creek. Given that the operational life of the project is not expected to exceed 30 years, Applicant considers the risk to the project from flood to not be significant. Additional measures that can be taken to protect the project from flood include the installation of the solar modules at least four feet six inches (4' 6") from finish grade and locating all

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electrical equipment such as combiner boxes, inverter stations and transformers on the western side of the project uphill from the creek.

Although tornados could possibly occur at the project site, Applicant does not believe the risk to be significant. The project is located well away from densely populated areas; should a tornado occur, collateral damage to the surrounding area is considered to be negligible. Solar PV technology is designed and manufactured to be resistant to all but the most severe hailstorms. Grass fires in the surrounding area could potentially enter the project boundary and damage the solar equipment; however, Applicant does not believe this risk to be significant enough to affect project viability.

Applicant will design the Project to meet or exceed all applicable local and national codes and standards. This means that the project systems and equipment will be designed to withstand the required snow loads, wind loads, seismic conditions, and all other applicable requirements or conditions. Should a natural event's impact exceed design criteria or emergency services' control and damage the equipment, Applicant has insurance coverage that will allow for the equipment to be replaced.

M. Nuisances

Applicant does not anticipate this use causing a nuisance. Nuisances described in the 1401 regulations include noise, glare, dust, fumes, vibration and odor.

The operating technology is mostly silent and is emissions free. If feasible, efforts will be made to mitigate the visual impact of the project. The construction period will be short and will generate only sporadic delivery traffic. Off-site impacts will be kept to a minimum during construction. There will be no permanent staff onsite during operations; maintenance activities are expected to be limited to monthly/quarterly visits with a single light vehicle. The solar modules are designed and manufactured with anti-reflective coatings to absorb as much sunlight as possible and minimize glare. Any glare that could occur is unlikely to cause a nuisance given the remote location of the project.

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N. Areas of Paleontological, Historic or Archaeological Importance

Applicant does not believe that the use will significantly degrade any areas of paleontological, archaeological or historic importance. See attached letter from the Colorado Historic Society stating that no records of such nature were associated with the proposed project location.

O. Hazardous Materials Description

Applicant does not anticipate that the project represents any unreasonable risk regarding the release of known hazardous materials either during construction or during operation, as these are generally not a feature of the project during either period.

- No chemicals are needed for construction of the facility or for its operation.
- Construction operations will minimize waste. There will be temporary dumpsters onsite during construction for construction waste. Temporary sanitary facilities will also be located onsite during construction. Any fuel spillage during construction will be contained and cleaned, and the spoils will be removed from the site and disposed of properly.
- Should liquid-immersed transformers be required for this project, Applicant will make best efforts to secure transformers that use non-toxic and biodegradable oils or fluids. All transformer equipment will be new and free from defects and will meet all applicable codes and testing standards. All applicable requirements set forth in 40 CFR 110 and 112 will be adhered to.

After the operational life of the facility is over, Applicant will decommission the facility. This will involve the safe removal of all structural steel and aluminum, conductors, inverters, transformers, concrete and fencing. Applicant will restore the site to as close to its original condition as is feasible after decommissioning. Applicant anticipates that the structural and electrical conductor components could be recycled; there could also be a secondary market for used solar collection equipment where Applicant would seek to sell the solar modules.

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P. Balance Between Benefits and Losses

N/A: only applicable to Major Permit Review

Q. Monitoring and Mitigation Plan

Applicant will utilize all industry best practices to mitigate dust and other offsite impacts during construction and will comply with the provisions and conditions of all use and construction permits. Monitoring of this mitigation during construction will be accomplished by Applicant's Prime Contractor and by Arapahoe County inspection staff.

No mitigation is anticipated to be necessary for the operational phase of the project. The project will be monitored remotely for production verification and system performance diagnostics.

R. Transportation Impacts

Transportation impact due to the project is expected to be low during the construction phase and negligible during operation. Further analysis is provided in the Traffic Report attached to this application and summarized above under the discussion of the Approval Criteria.

S. Benefit/Cost Analysis

N/A: only applicable to Major Permit Review

T. Engineering Studies

Engineering and environmental studies have been submitted for consideration along with this application as listed below:

- Site Development Plan (USR Permit Exhibit)
- Grading, Erosion and Sediment Control (GESC) Plan
- Engineer's GESC Report
- Engineer's Drainage Letter
- Engineer's Traffic Impact Letter
- Phase I Environmental Study
- Ecological Survey
- Geotechnical Study results

Additional documents submitted along with this application that support the engineering study findings and the environmental studies are as follows:

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- Arapahoe County Engineering Technical Review Committee Letter
- Fish & Wildlife Service Response Letter
- Colorado Historical Society Record Search Results
- US Army Corps of Engineers Response Letter (Former Lowry Bombing and Gunning Range)

U. Referrals to Outside Agencies and Response to Referral Comments

All required referral packet contents and envelopes were provided along with this application. If comments were provided, Applicant's responses can be found in the enclosed Point-by-Point Response Letter. The following agencies received referrals:

- Arapahoe County Assessor (Beverly Reynolds): no comments
- Arapahoe County Engineering (Spencer Smith): with comments
- Arapahoe County Mapping (Pat Hubert): with comments
- Arapahoe County Planning (Russell Johnson): with comments
- Arapahoe County Sheriff (Glenn Thompson): no comments
- Arapahoe County Zoning (Tammy King): with comments
- Colorado Parks and Wildlife (Travis Harris): no comments
- Bennett Fire District (Caleb O'Connor): no comments
- REAP I-70 (Matt Reay / Jack Keever): with comments
- Tri-County Health Dept. (Sheila Lynch): with comments
- Deer Trail Conservation District (Sheryl Walles): no comments
- CDOT / State Hwy. Dept. Region 1 (Rick Solomon): no comments
- XCEL Energy (Donna George): no comments
- US Army Corp. of Engineers (Kiel Downing): with comments
- Urban Drainage (David Mallory): no comments
- East End Adv. Committee (various): with comments

IV. Additional Submittal Requirements Applicable to Major Facilities of a Public Utility (Private Company/Use By Special Review)

A. Map and Description of areas around the proposed major facilities of a public utility

Two maps of the surrounding area are provided on the USR Plan Set included with this application. The project location is surrounded by oil and

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gas infrastructure including pipelines, wells, and pump jacks. The property is also close to electric distribution and transmission lines, which is why we selected this site for this project. Proximity to electrical infrastructure is important for utility grid interconnection and for the compatibility of the solar garden use with surrounding uses. Surrounding uses appear to be intermittent to medium-frequency agricultural use and oil/gas exploration.

B. Description of how facilities will affect existing community patterns

The Project will not significantly degrade the land use pattern of the surrounding areas in any way. There will be a solar easement on the surrounding land parcel designed to prevent future shading of the solar arrays by future development, but with the setbacks requested by County planning staff the risk of such shading is remote in any case. Current land use patterns in the area surrounding the Project may continue unaffected by the presence of the Project at the proposed location.

C. Description of applicable adopted comprehensive plans and whether facilities comply with those provisions

The Project is located within the area designated as "Rural Area – Tier III" within the Arapahoe County Comprehensive Plan. The purpose of the Tier III is to promote "conservation of agriculture and open lands" (III-3). There is also an expressed preference for cluster development, with development "grouped together on a portion of the parcel, while a larger portion of the parcel is conserved for agriculture or open land" (III-3). Our proposed use meets these requirements exactly, being located on the southern end of the parcel, close to the existing oil and gas developments. As shown by the proposed plan sets, the remainder of the parcel (all areas outside of the fence line) will remain open to the existing agricultural use, which is intermittent grazing. These activities will not interfere with facility operation in any way. Furthermore, Applicant is pursuing plans to co-locate livestock grazing at the project site during operations, thus continuing an agricultural use within the fenced 20 acres and preserving the agricultural character of the designated area.

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According to the Comprehensive Plan, non-residential uses in the Rural Area will be discouraged "unless they are agriculture-related or are public facilities and services" (III-3). Public Facilities are defined in the Comprehensive Plan as "...utility lines, power substations, power energy facilities..." (III-12). Applicant believes that the proposed use meets the definition of power energy facilities, as a facility that produces electric power. The proposed use is also similar in character to utility lines and power substations, both of which are in close proximity to the proposed Project. This site was chosen for its proximity to a substation. Our conversations with the utility indicate that the substation is close to capacity and that future solar developments in the area after this one will be severely limited. Additionally, the Plan states that "Public Facilities should be accessible by the population served" (III-12). While electrical code regulations will not allow the free ingress of the public into an energy facility in the same way that power substation access is restricted to the public, a Solar Garden meets the spirit of that requirement by directly benefitting the subscribers to the garden, many of which could be drawn from the local area. Lastly, the Plan states that "Groundwater supply and availability will be a significant factor" (III-3) in limiting development density in the Tier III area. The proposed use will not impact groundwater quality in any way, and will not draw from groundwater resources during operation.

Applicant does not believe that the proposed use is in conflict with the County Comprehensive Plan. Rather, the proposed use meets many of the criteria for development in the Tier III area. Applicant is not aware of any conflict with any State or Regional Master Plans. The Project will comply with all applicable zoning/use regulations and County requirements.

D. Projections/forecasts of need for electricity or natural gas and the basis for the projections and forecasts

The State of Colorado legislature has enacted numerous statutes over the past decade or more that cite the need for more power to be produced from renewable energy sources. This project will produce power under the Community Solar Gardens program enacted by HB 10-1342 and will provide power directly to consumers.

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E. Expected effect and impact on nearby property owners and on current land uses, compared with alternate locations

Applicant expects very little effect on nearby property owners as the Project is many acres removed from neighboring property boundaries. The associated impact with this limited effect is considered to be negligible. Current land uses can continue outside of the Project's fenced boundary without interruption or interference from the Project. Alternate locations considered were closer to populated areas or, in some cases, further from utility distribution architecture. We believe that this location presents less impact to surrounding areas and their uses than potential alternative locations in Arapahoe County.

F. Provide a Water Supply Plan

No water is required for daily facility operations. Water during construction, if needed, will be supplied by truck. Any water for PV module washing during operation will be de-ionized water supplied by truck. Module washing activities are expected to be very infrequent.

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GENERAL ECOLOGICAL RESOURCES SURVEY

50 Acres within Section 4,
Township 5 South, Range 64 West
Arapahoe County, Colorado 80127

PREPARED FOR:

SUNSHARE
Simply smart solar.

1774 Platte Street
Denver, Colorado 80202

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Littleton, Colorado 80120
(303) 730 3452 (phone)
(303) 730-3461 (fax)
www.westernenvironment.com

GENERAL ECOLOGICAL RESOURCES SURVEY

50 Acres within Section 4,
Township 5 South, Range 64 West
Arapahoe County, Colorado 80127

Western Environment and Ecology, Inc.
Project Number: 642-010-02

PREPARED FOR:

SUNSHARE
Simply smart solar.

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July 29th, 2015

Prepared by:

Austin Curry
Staff Scientist

Reviewed by:

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President

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1.0 INTRODUCTION

Western Environment and Ecology, Inc. (Western Environment) was retained by Mr. Luke Rickard, Director of Project Development for SunShare, to conduct a general survey of ecological resources, including threatened and endangered species, wetlands, and other significant habitats, on approximately 50 acres within unincorporated Arapahoe County, Colorado. Mr. Rickard indicated that this study was in response to potential development of the site.

The objectives of this study were to (1) establish presence/absence and potential habitat of any federal or state threatened and endangered species on the property, (2) identify any wetlands or other ecologically sensitive areas on and adjacent to the property, and (3) make practical recommendations based on the results of the study.

Prairie dog colony

2.0 STUDY AREA

The project site consists of 50 acres within Section 4, Township 5 South, Range 64 West, within unincorporated Arapahoe County, Colorado (Figure 1). The subject area is located 2.5 miles east of the intersection of East Quincy Avenue and South Watkins Road. The Aurora City Limits are located one mile to the west of the proposed SunShare Project. Box Elder Creek is located approximately 900 feet to the east.

The site was vacant at the time of the investigation. The vegetation coverage of the site was dominated by grazed native and introduced grasses, such as smooth brome (*Bromus inermis*). Additionally, native and non-native weeds including; Prickly Pear Cactus (*Opuntia*), Canada thistle (*Cirsium arvense*), Mullein (*Verbascum thapsus*) and Yucca (*Yucca glauca*) were observed throughout the site. No woody vegetation was present on the property. The site is generally flat, with a gentle slope east toward Box Elder Creek.

The site occurs at an elevation of approximately 5,790 feet above sea level (USGS Watkins 7.5 Minute Quadrangle, 1994). Review if the FEMA Flood Insurance Maps (attached) indicate the project is not within a recognized flood zone (Figure 2). The US Resource Conservation Service classifies the site soils as Nunn Loam and Loamy Alluvial Land. The area geology includes alluvial sands overlying the Tertiary Age Upper Dawson Arkose (Ogden Tweto, 1979).

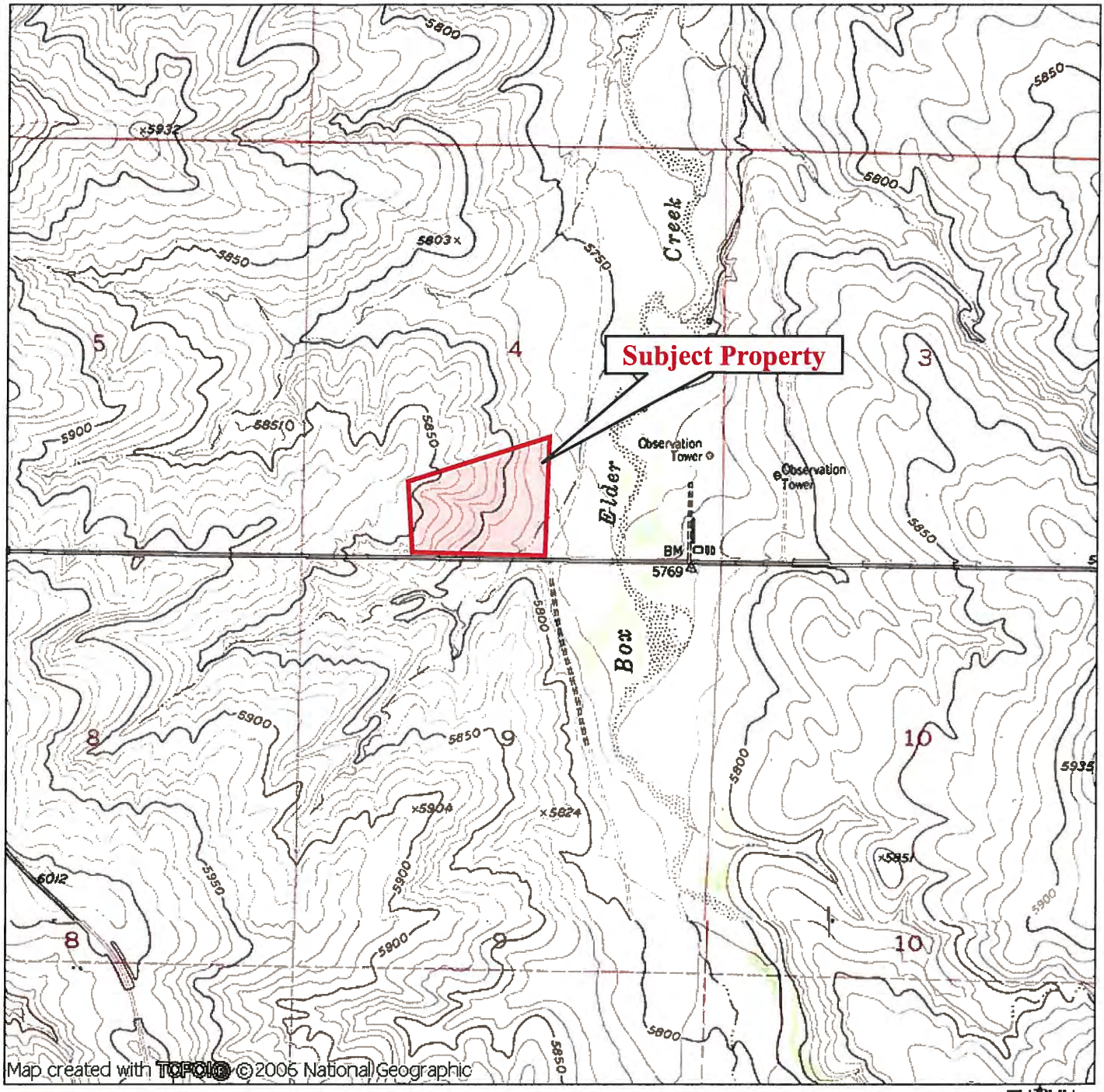

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Figure 1 - Location Map
50.0 Acres of Section 4,
Township 5 South, Range 64 West,
Arapahoe County, Colorado

Scale in feet

0 1000

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Littleton, Colorado 80120

Figure 2 - Site Map
50.0 Acres of Section 4,
Township 5 South, Range 64 West,
Arapahoe County, Colorado

3.0 METHODS

Species that are federally or state listed as threatened or endangered, including federally proposed and candidate species, occurring or having historically occurred in Arapahoe County were considered for this study (Table 1). The county classification was determined by following the Colorado Field Office of the U.S. Fish and Wildlife Service's county checklist (USFWS, 2011). The list was narrowed based on habitat requirements of the species relative to existing habitats on the project.

The property was surveyed on July 24th, 2015. Information was collected on topography, ecosystems, and species of flora and fauna found on and adjacent to the property. Photographs were taken, and emphasis was placed on potential habitat of threatened and endangered species, and the presence of wetlands.

View of the culvert south of the property

Table 1. Common name, scientific name, and status of federal and state threatened and endangered species that could occur or historically occurred in the Colorado Piedmont (CDOW, 2008; USFWS, 2008).

Common Name	Scientific Name	Status[1]
Birds		
Bald eagle	*Haliaeetus leucocephalus*	ST
Whooping crane	*Grus americana tabida*	FE, SE
Least Tern	*Sterna antillarum*	FE, SE
Mountain plover	*Charadrius montanus*	FPT, SC
Piping plover	*Charadrius melodus*	FT, ST
Mexican spotted owl	*Strix occidentalis lucida*	FT, ST
Plains Sharp-Tailed Grouse	*Tympanuchus phasianellus jamesii*	SE
Western burrowing owl	*Athene cunicularia*	ST
Lesser Prairie Chicken	*Tympanuchus pallidicinctus*	ST
Ferruginous Hawk	*Buteo regalis*	SC
Mammals		
Black-footed ferret	*Mustela nigripes*	FE, SE
Preble's meadow jumping mouse	*Zapus hudsonius preblei*	FT, ST
Canada Lynx	*Lynx canadensis*	FT, SE
Kit Fox	*Vulpes macrotis*	SE
Black-tailed prairie dog	*Cynomys ludovicianus*	SC
Amphibians		
Boreal Toad	*Bufo boreas boreas*	SE
Northern Leopard Frog	*Rana pipiens*	SC
Plants		
Ute ladies'-tresses	*Spiranthes diluvialis*	FT
Colorado butterfly plant	*Gaura neomexicana coloradensis*	FT
Insects		
Pawnee montane skipper	*Hesperia leonardus montana*	FT

[1]Status Codes: FE = Federally Endangered, FT = Federally Threatened, FPT = Federally Proposed as Threatened, FC = Federal Candidate, SE = State Endangered, ST = State Threatened, SC = State Concerned

4.0 RESULTS AND DISCUSSION

4.1 Wetlands

No perennial waters, wetlands or obvious wetland habitat was observed on the project. An intermittent drainage was present in the southeastern corner of the property, however, no wetland vegetation was observed associated with the drainage. Vegetation on the site was limited to short heavily grazed grasses and weeds, such as Prickly Pear Cactus (*Opuntia*), Canada thistle (*Cirsium arvense*), Mullein (*Verbascum thapsus*) and Yucca (*Yucca glauca*). These are predominantly upland or facultive upland plants. Site soils are primarily sandy alluvium. No near surface (18") water was observed on or adjacent to the site.

The U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill materials into Waters of the U.S. under the authority of Section 404 of the Clean Water Act. Waters of the U.S. include ephemeral, intermittent and perennial streams, their surface connected wetlands and adjacent wetlands, certain lakes, ponds, drainage ditches and irrigation ditches that have a nexus to interstate commerce.

Western Environment evaluated, to the best of our ability based upon site conditions at the time of the survey, the three components of a jurisdictional wetland as defined in the US Army Corp of Engineers, (ACOE) Wetland Delineation Manual (1987). These components are: 1) Vegetation, 2) Soil and 3) Hydrology. The ACOE Manual defines *Nonwetlands* as "including upland areas that are neither deepwater aquatic habitats, wetlands, nor other special aquatic sites. They are seldom or never inundated, or if frequently inundated, they have saturated soils for only brief periods during the growing season, and, if vegetated, they normally support a prevalence of vegetation typically adapted for life only in aerobic soil conditions."

While Box Elder Creek, adjacent to the east, is considered Waters of the U.S., it is the opinion of Western Environment that the proposed development, as shown n Figure 2, does not impact waters subject to Corps regulations under Section 404 of the Clean Water Act.

4.2 Wildlife Species Eliminated from Consideration as Occurring on the Project

The following threatened and endangered species that have historically been thought to occur in Arapahoe County were immediately ruled out of serious consideration for this project based on available habitat: Mexican spotted owl, whooping crane, least tern, Canada lynx, kit fox, black-footed ferret, boreal toad, and Colorado butterfly plant.

The Mexican spotted owl was eliminated because it requires forests that are not present on the project. The whooping crane was also eliminated due to rarity in Colorado, and no known nesting or feeding habitat exists on or adjacent to the property. Less than 20 sightings of whooping cranes along the eastern plains and mountainous regions of Colorado have been recorded since 1931 (Andrews and Righter, 1992). The least tern inhabits sandy shorelines of reservoirs, lakes, and rivers with bare sandy shorelines. This shore bird is a casual to very rare spring and fall migrant on the northeastern plains of Colorado, and is unlikely to occur on the subject project.

The Canada lynx is a rare forest-dwelling species of northern latitudes that feeds primarily on snowshoe hares. No lynx habitat or its prey exist on the subject site. The kit fox is only know to occur on Colorado's desert slopes ranging from Montrose to Grand Junction. The black-footed ferret, which was eradicated from the Colorado Piedmont, has only been recently reintroduced in small numbers in northern Larimer and Weld Counties. These are experimental populations under study by the US Fish and Wildlife Service.

Colorado's only alpine species of toad, the boreal toad, has been found in spruce-fir forests and alpine meadows at elevations between 7,000 and 12,000 feet. The toad also requires lakes, marshes, ponds, or bogs with shallow water for breeding. These habitats do not exist on the property.

The Colorado butterfly plant has only been found in northern Larimer County in recent years and is generally associated with streams that do not exist onsite (Colorado Native Plant Society 1997).

4.3 Species Included in Survey

Western Burrowing Owl (*Athene cunicularia*)

State Threatened

Western burrowing owl, photo acquired on www.corbis.com.

The burrowing owl is found primarily in eastern Colorado as a summer resident. Two aspects of the biology of the western burrowing owl appear to influence both its regional and local abundance: 1) it prefers areas of short vegetation, and 2) it rarely, if ever, digs its own burrows. This migratory species is most often seen in Colorado during the summer months. Historically, burrowing owls were common wherever there were prairie dog colonies in northeastern Colorado. **During the inspection, an active prairie dog colony was observed on the property (Figure 2). This migratory species is most often seen in Colorado during the summer months. No burrowing owls were seen site at the time of this survey. However, Colorado Division of Wildlife (CDOW) requests that a burrowing owl survey be performed if construction is planned in active or abandoned prairie dog colonies during the owl's nesting season (March 1st to November 1st). If burrowing owls are observed on the site, the CDOW recommends that no disturbance take place within 150 feet of an active nest.**

Bald Eagle (*Haliaeetus leucocephalus*)

State Threatened

The bald eagle was removed from the Federal Endangered and Threatened Species List on July 9th, 2007. No bald eagles or bald eagle nests were observed on the property. Western Environment reviewed the Natural Diversity Information Source (NDIS) and identified an active bald eagle nest approximately 6.15 miles northwest of the project. There is no permanent water or large trees on the property, therefore, it is unlikely that any bald eagles use the site. However, cottonwood trees occur adjacent to the Box Elder Creek, and could, as all trees can, provide

roosting site for eagles migrating between food sources. In winter, bald eagles are transient and use areas that provide feeding and roosting opportunities.

Mountain Plover (*Charadrius montanus*)

State Concerned Species

Typical habitat characteristics of the mountain plover are a mixture of short vegetation, bare ground, and a flat topography at both breeding and wintering locations. This small shorebird breeds in Colorado, and in parts of its breeding range the species commonly shows a preference for prairie dog towns and sites that are heavily grazed by domestic livestock. Prairie dog grazing promotes the short grasses that the plover prefers, and their digging creates areas of bare soil important for plover nesting. Plovers breed in Eastern Colorado from approximately April 1st through August 1st. Mountain plovers were proposed for federal listing as threatened on February 16th, 1999 (USFWS, 1999b), however the U.S. Fish and Wildlife Service withdrew the proposal on September 8th, 2003. The Mountain plover is a migratory bird and protected under the Migratory Bird Treaty Act. Harassment or destruction of the species or its nest is a federal offense. **Therefore, to ensure avoidance of the species, development within grazed sites or prairie dog colonies should not begin without a pre-construction inspection during plover breeding months from April to November.**

Piping Plover *(Charadrius melodus)*

Federally Threatened, State Threatened

This small shorebird can be found on very sparsely vegetated beaches, mudflats and sandy areas near water on shores and islands. Piping Plovers usually arrive in Colorado in late April or early May, and leave when the nesting cycle is completed, or by late August. Nesting populations have been documented in eastern Colorado along the South Platte and Arkansas River drainages. Food sources for Piping Plovers include insects, crustaceans and other small aquatic animals. Plovers feed along beaches, especially in areas where waves have washed up debris (CDOW, 1994). **Due to the lack of sandbars or mud-flats in the vicinity of the project, Piping Plover are unlikely to occur.**

Plains Sharp-Tailed Grouse *(Tympanuchus phasianellus jamesii)*

State Endangered

The Plains Sharp-Tailed Grouse historically occurred on Colorado's eastern grasslands. Grouse habitat is characterized by rolling hills with Gambles oak, sage brush, service berries and grassy glades. This grouse is a resident from Alaska east to the Hudson Bay, and south to northern New Mexico. Currently, Colorado populations occur in Douglas County, northern and eastern Weld County, and Logan County east of Sterling. **No known populations of the Plains Sharp-Tailed Grouse are known to occur in proximity to the subject project (CDOW, 2011).**

Lesser Prairie Chicken (*Tympanuchus pallidicinctus*)

State Threatened

Historically, this bird occupied the grasslands of Texas, Oklahoma, New Mexico, Kansas and southeastern Colorado. It prefers sandy grassland areas abundant in midgrasses, sandsage and yucca. The majority of Colorado breeding pairs occur in the southeastern portion of the state in Baca, Prowers, Kiowa and Cheyenne Counties, and for the most part, on the Comanche National Grasslands near Campo. **No known populations of the Lesser Prairie Chicken are known to occur in proximity to the subject project (CDOW, 2011).**

Ferruginous Hawk (*Buteo regalis*)

State Concerned

This hawk is known to occur throughout eastern Colorado and in northwestern Colorado. In Colorado, the species is a common winter resident, but is considered an uncommon summer resident on the eastern plains (Andrews and Righter, 1992). Areas that could be potential nesting sites include large trees, rock outcrops, manmade structures such as windmills and power poles, or the ground. **At the time of the survey no nests were observed on or adjacent to the property.** These birds often can be seen associated with prairie dog colonies, which they utilize for foraging. This hawk, as are all birds of prey, is federally protected under the Migratory Bird Species Act.

Preble's Meadow Jumping Mouse

(Zapus hudsonius preblei)

Federally Threatened, State Threatened

Preble's meadow jumping mouse

Typical Preble's habitat has been described as "well-developed plains riparian vegetation with relatively undisturbed grassland and a water source in close proximity," and "dense herbaceous vegetation consisting of a variety of grasses, forbs and thick shrubs" (Armstrong et al., 1997). Although any vegetation could offer cover and hibernacula for Preble's, the species is mostly known from habitat containing shrub cover, such as willow or narrow-leaf cottonwood.

Preble's are known to regularly range outward into adjacent uplands to feed and hibernate. For this reason, the U.S. Fish and Wildlife Service generally requires a 300 foot development buffer from the edge of the 100 year flood plain. **Riparian habitat suitable to Preble's was observed along Box Elder Creek east of the project. Western Environment reviewed flood insurance maps from the Federal Emergency Management Agency (attached), which show the 100 year flood plane of Box Elder Creek borders the eastern boundary of the project (Figure 2). The US Fish and Wildlife Service recommends a 300 foot buffer between the 100 year flood plane and any development. As indicated on Figure 2, this impacts the proposed development.**

Black-tailed Prairie Dog (*Cynomys ludovicianus*)

Former Candidate for Federal Listing, State Concerned

The U.S. Fish and Wildlife Service was petitioned to list the black-tailed prairie dog as a threatened species in July of 1998. The agency determined on February 3rd, 2000, that listing the species was warranted, but it was precluded because other species were in greater need of

protection (USFWS, 2000). The black-tailed prairie dog was added to the candidate list, and the species' status was reviewed annually. On August 12th, 2004 the USFWS determined that the black-tailed prairie dog no longer meets the Endangered Species Act definition as threatened, and was removed as a candidate for federal listing. **Active prairie dog colonies currently occupy the site (Figure 2). The Colorado Department of Parks and Wildlife recommends "humane removal" of prairie dogs immediately prior to development. Removal strategies may include trapping and relocation, or donation to the U.S. Fish and Wildlife Service black-footed ferret recovery program or an approved raptor rehabilitation program as a food source. Additional options include the extermination of the prairie dogs by an approved pest control firm.**

Ute Ladies'-Tresses Orchid (*Spiranthes diluvialis*)
Federally Threatened

This orchid usually occurs in "...old stream channels, alluvial terraces, wet meadows, and other sites where the soil is saturated to within 18" of the surface at least temporarily during the growing seasons" (USFWS, 1992). The eastern Colorado populations of species are located in mesic riparian meadows in relict tall grass prairie areas near Boulder Creek, South Boulder Creek, and Saint Vrain Creek in Boulder County, Colorado, and in mesic meadows in the riparian woodland understory along Clear Creek in Jefferson County, Colorado (USFWS 50 CFR Part 17). One population was historically identified in Weld County east of Greeley near Crow Creek in 1856, but is now considered extirpated. Soil conditions and vegetation composition of known *Spiranthes* sites suggest that wetlands regulated by the

Ute Ladies'-Tresses Orchid

Corps under the Clean Water Act qualify as potential *Spiranthes* habitat. Orchid surveys are required in Boulder and Jefferson Counties, and in the 100-year flood plains and perennial tributaries of the South Platte River, Fountain Creek, and the Yampa Rivers if construction is expected to impact these areas (USFWS 1992). Generally, these surveys must be completed during blooming season (July 20 to August 31). It should be noted that the survey is only required in areas where proposed construction activities are to occur in potential *Spiranthes* habitat, and only when a Federal permit (for instance a permit to place fill materials into a Waters of the U.S. under Section 404 of the Clean Water Act) or Federal funding is utilized for an activity in those habitats. If a Federal permit or funding is needed for an activity on the project, the agency responsible for issuing the permit or providing the funds would consult the Service to determine how the action may affect the species or its designated critical habitat. The Service would then work with the agency and/or landowner to modify the project and minimize impacts. **No perennial waters occur on the property, nor is *Spiranthes* designated Critical Habitat. It is the opinion of Western Environment that *Spiranthes* does not inhabit the project.**

Pawnee montane skipper (*Hesperia leonardus montana*)

Federally Threatened

This butterfly occurs in dry, open Ponderosa pine woodlands at an elevation range of 6,000 to 7,000 feet within the Pikes Peak Granite formation. Assessment of the skipper indicates that the insect's habitat is centered near Deckers, Colorado, with their range estimated to be 37.9 square miles (USFWS, 1998). The adult butterflies emerge from their pupae in late July for feeding and mating. The females then deposit their eggs on the leaves of blue grama grass, the larval food supply. Little is known about the larval and pupal stages of the species. Recent surveys of the skipper suggest that their populations may be at an all time high (recorded) after the Hayman Fire of 2002 (Colorado Natural Heritage Program, January 2005). This is likely due to the necessity of fire to remove trees, and promote herbaceous grass growth including blue grama and gayfeather on the forest floor. **The subject project does not occur in known Pawnee montane skipper habitat.**

Other Wildlife

During the site visit, a desert horned lizard (*Phrynosoma platyrhinos*) and several cottontail rabbits (*Sylvilagus*) were observed on the subject property.

5.0 CONCLUSIONS AND RECOMMENDATIONS

At the time of the survey, no threatened or endangered species or their obvious habitat were seen on the subject site. Additionally, no wetlands or Waters of the U.S. subject to regulation under Section 404 of the Clean Water Act occur on the project.

- The U.S. Fish and Wildlife Service considers Preble's Meadow Jumping Mouse habitat to occur within approximately 300 feet from the edge of a 100 flood plain. However, based upon the poor quality of the over-grazed upland habitat, Western Environment does not consider the project to be Preble's habitat. Therefore, we recommend requesting a "Finding of No Effect" letter from the U.S. Fish and Wildlife Service, indicating that development of this property would not adversely affect Preble's.
- Due the presence of active prairie dog colonies on and adjacent to the site, Western Environment recommends that Mountain Plover *(Charadrius montanus)* and Western Burrowing Owl (*Athene cunicularia hypugaea*) surveys be conducted immediately prior to project development.
- The CDPW recommends that prairie dogs be "humanely removed" prior to development. This may include relocation, donation, or euthanasia by licenced pest control firms. (Note: Western Burrowing Owl and Mountain Plover surveys must be performed prior to any activities)

No ecological issues were identified with the site.

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U.S. Fish and Wildlife Service

National Wetlands Inventory

Jul 22, 2015

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

HISTORY COLORADO
Office of Archaeology and Historic Preservation
1200 Broadway, Denver, Colorado 80203

Mr. Preston Hartman
SunShare, LLC
1441 18th Street, Suite 400,
Denver, CO 80202

July 27, 2014

Re: Quincy Solar Garden
File Search No. 18948

At your request, the Office of Archaeology and Historic Preservation has conducted a search of the Colorado Inventory of Cultural Resources located in the following area:

PM	T	R	S
6th	5S	64W	4

0 sites and 0 surveys were located in the designated area(s).

If information on sites in the project area was found, detailed information follows the summary. If no sites or districts were found, but surveys are known to have been conducted in the project area, survey information follows the summary. We do not have complete information on surveys conducted in Colorado, and our site files cannot be considered complete because most of the state has not been surveyed for cultural resources. There is the possibility that as yet unidentified cultural resources exist within the proposed impact area.

Therefore, in the event there is Federal or State involvement, we recommend that a professional survey be conducted to identify any cultural resources in the project area, which are eligible to be listed in the National Register of Historic Places. We look forward to consulting with you regarding the effect of the proposed project on any eligible cultural resource in accordance with the Advisory Council on Historic Preservation Procedures and the Preservation and Protection of Historic and Cultural Resources (36 CFR 800). Please provide this office with the results of the cultural resource survey for our review of professional adequacy and compliance with regulations.

If you have any questions, please contact the Office of Archaeology and Historic Preservation at (303) 866-3395 or 3392.
Thank you for your interest in Colorado's cultural heritage.

Richard Wilshusen
Deputy State Historic Preservation Officer for Archaeology
State Archaeologist

Kevin Black
Assistant State Archaeologist

*Information regarding significant archaeological resources is excluded from the Freedom of Information Act. Therefore, legal locations of these resources must not be included in documents for public distribution.

18948_s/18948_sy

WESTERN ENVIRONMENT AND ECOLOGY, INC

CPA 8102
2015-0-0917 En. Austin Curry

August 3rd, 2015

U.S. FISH AND WILDLIFE SERVICE
☒ NO CONCERNS
☐ CONCUR NOT LIKELY TO ADVERSELY AFFECT
☐ NO COMMENT
AUG 2 5 2015
DRUE L. DEBERRY, ACTING COLORADO FIELD SUPERVISOR — DATE

Drue DeBerry
U.S. Fish and Wildlife Service
Ecological Services
Colorado Field Office
P.O. Box 25486, DFC (MS 65412)
Denver, Colorado 80225-0486

Subject: **Preble's Meadow Jumping Mouse Habitat Exclusion**, 50 acres within Section 4, Township 5 South, Range 64 West, within unincorporated Arapahoe County, Colorado. Western Environment and Ecology, Inc. Project Number: 642-010-02

Dear Mr. DeBerry,

Western Environment and Ecology, Inc. (Western Environment), on behalf SunShare, completed a Preble's habitat assessment of the above mentioned property on July 24th, 2015. The assessment was completed in response to the potential development of the property for a solar garden (see attached site plans). This project encompasses approximately 50 acres within Section 4, Township 5 South, Range 64 West, within unincorporated Arapahoe County, Colorado (Figure 1). The subject area is located 2.5 miles east of the intersection of East Quincy Avenue and South Watkins Road. Box Elder Creek, which contained flowing water, was located approximately 900 feet to the east. At the time of the survey the property was vacant. The project occurs outside of the USFWS Denver Metropolitan area Block Clearance Zone (BCZ). Review of the Federal Emergency Management Agency (FEMA) Flood Insurance Maps show the eastern boundary of the subject site exists within approximately 300 feet of the Box Elder Creek 100-year flood plain (Figure 2).

The vegetation present on the site was dominated by short native and introduced grasses indicative of over grazing, including; cheatgrass (*Bromus tectorum*) and mat grama (*Bouteloua simplex*). Additionally, native and non-native weeds including; Canada thistle (*Cirsium arvense*), mullein (*Verbascum thapsus*), as well as upland vegetation, such as prickly pear cactus (*Opuntia*) and yucca (*Yucca glauca*) were observed throughout the site (see attached photos). No woody vegetation was present on the property.

The Box Elder Creek, located east of the property contained riparian habitat. Typical Preble's habitat, as described by Armstrong et al. (1997, p. 77), is "well-developed plains riparian vegetation with relatively undisturbed grasslands and a water source in close proximity." Armstrong also indicated a preference for "dense herbaceous vegetation consisting of a variety of grasses, forbs and thick shrubs." The wetland vegetation along the Box Elder Creek included non-native and introduced grasses with sparse coyote willows (*Salix exigua*) and large cottonwood trees (*Populus*).

It is the opinion of Western Environment that, while the project is adjacent to the Box Elder Creek, without woody vegetation cover, such as trees or low shrubs, the site does not contain Preble's habitat.

Based on habitat information and the attached photos, Western Environment seeks concurrence from the Service that the subject project, as shown on the attached figure, will have "No Significant Impact on Preble's Habitat." I look forward to receiving your response.

Sincerely,
Western Environment and Ecology, Inc.

Austin Curry
Staff Scientist
austin@westernenvironment.com

cc: Luke Rickard, SunShare

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Phase I Environmental Site Assessment

50 Acres in Section 4, Township 5 South, Range 64 West
Arapahoe County, Colorado 80127

Prepared For:

SUNSHARE
Simply smart solar.

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Denver, Colorado 80202

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APPENDICES

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APPENDIX B	Aerial Photography Documentation
APPENDIX C	Environmental Inquiry Request/Supporting Documentation
APPENDIX D	Western Environment and Ecology, Inc, Statement of Qualifications

2.0 SITE DESCRIPTION

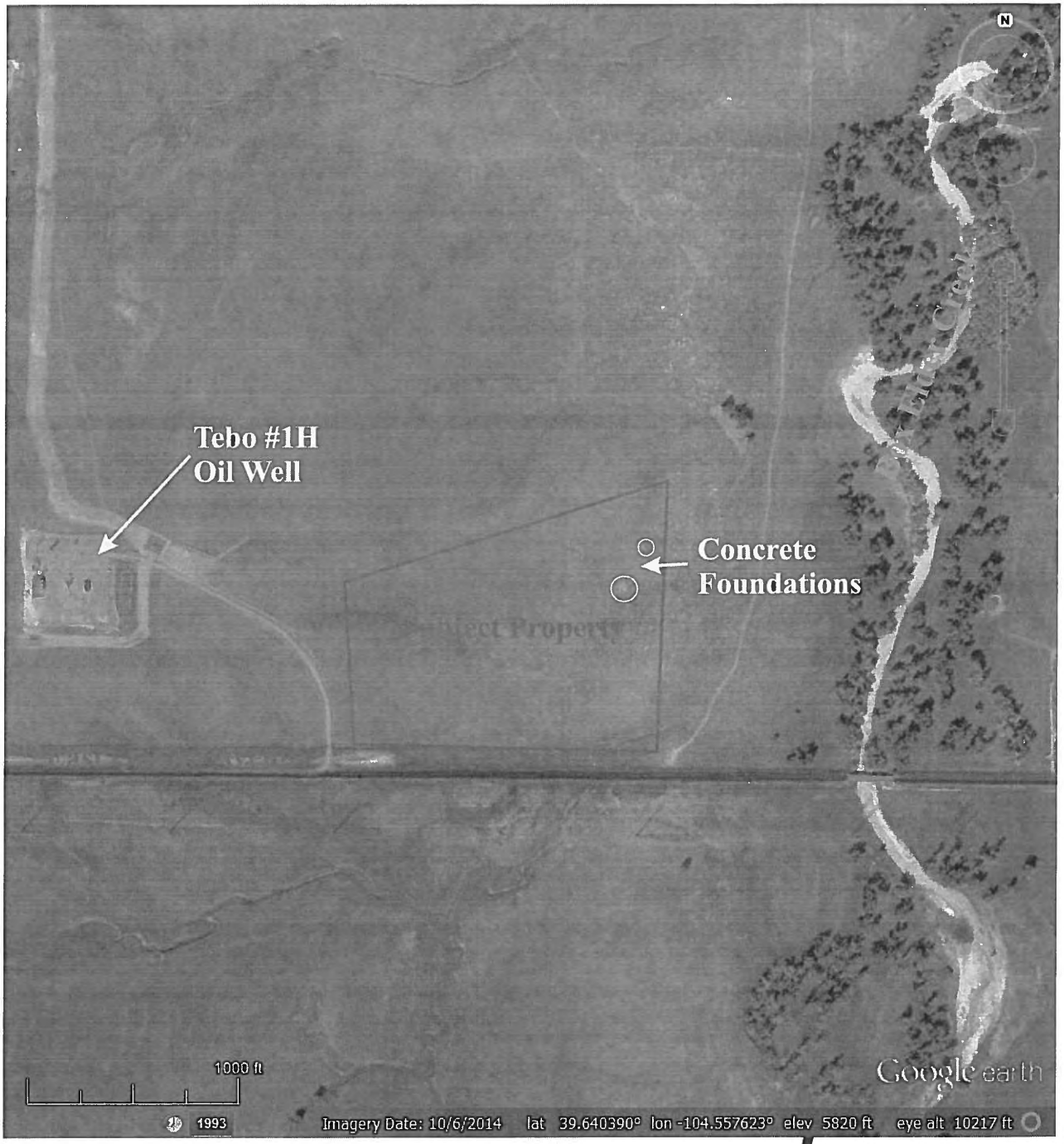
This Phase I Environmental Site Assessment was conducted for a 50.0 acre site located in unincorporated Arapahoe County, Colorado (Figure 1). The subject property is located within Section 4, Township 5 South, Range 64 West (Figure 2). The property is zoned Agricultural-1 and is currently undeveloped.

The subject area is located approximately 2.5 miles east of the intersection of East Quincy Avenue and South Watkins Road. The City Limits of Aurora is one mile to the west of the proposed SunShare Project. Box Elder Creek is located approximately 900 feet to the east. High tension power lines are present to the south across Quincy Avenue. Three phase power lines border the project to the north.

The site occurs at an elevation of approximately 5,790 feet above sea level (USGS Watkins 7.5 Minute Quadrangle, 1994). Review if the FEMA Flood Insurance Maps (attached) indicate the project is not within a recognized flood zone. The US Resource Conservation Service classifies the site soils as Nunn Loam and Loamy Alluvial Land. The area geology includes alluvial sands overlying the Tertiary Age Upper Dawson Arkose (Ogden Tweto, 1979)]

Records from the Colorado Oil and Gas Conservation Commission identifed a producing oil well located approximately 1,000 feet west of the property. The well, Tebo 4 #1H, is operated by the Conoco Phillips Company. Well logs show that Tebo 4 #1H was drilled to a depth of 9,800 feet on December 26th, 2013. All inspections of the facility, including the most recent inspection performed on July 23rd, 2014, have recorded no violations associated with the site.

Records from the Colorado Division of Water Resources indicated that a permitted water well is located on a property to the west of the proposed project. The lithology log from the well (Permit # 200285) identified clay and tan loam from the surface to 19 feet in depth. Yellow and green clay was found from 19 to 33 feet, where gray shale and sandstone was encountered. A static groundwater level was present at 160 feet below the surface.



Scale in feet

0 1000

Western environment and ecology, inc.
2217 West Powers Avenue
Littleton, Colorado 80120

Figure 2 - Site Map
50.0 Acres of Section 4,
Township 5 South, Range 64 West,
Adams County, Colorado

3.1 Results

No results were located within the minimum search distance. However, industrial activity, and water storage ponds were observed approximately one mile west of the property. This parcel of land, owned by East Quincy Holding LLC, has been divided into several industrial buildings leased to multiple companies addressed at 34501 East Quincy Avenue. Known tenants include Autoliv, Conoco-Phillips, Darma Technologies Inc, and Pure Cycle Corporation. Autoliv, which is no longer using the site, manufactured air bags and air bag explosives. Conoco-Phillips, now closed, used the site for office and administration. Darma Technologies Inc. is a computer consultant. Pure Cycle Corporation is a water supply company, treating water and supplying hydraulic fracturing fluid to Conoco-Phillips.

3.1.2 The Former Lowery Bombing and Gunnery Range

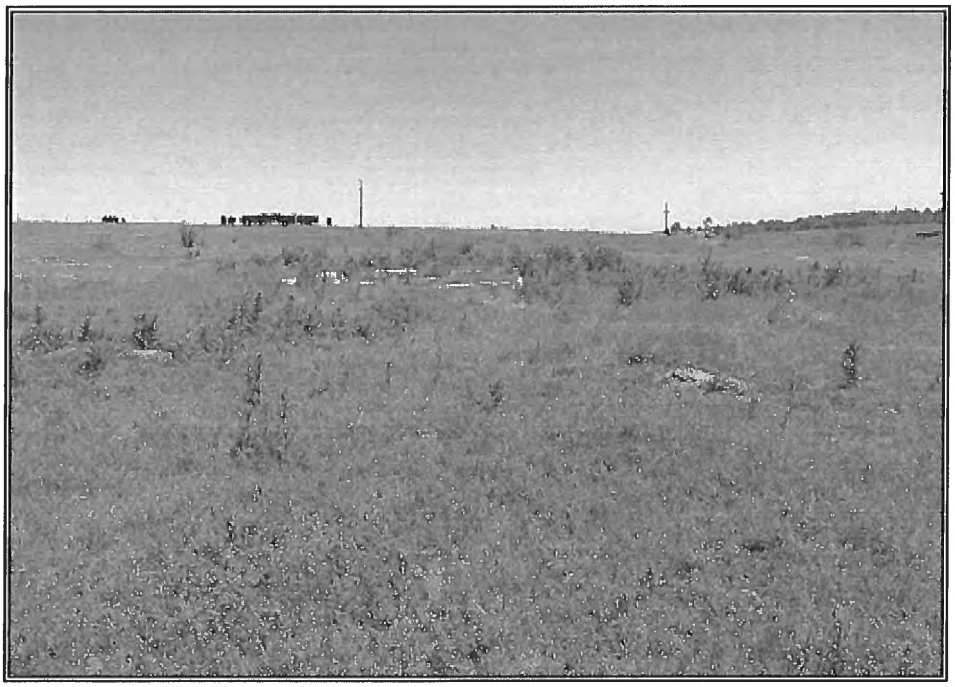
The project site is located within Former Lowry Bombing and Gunnery Range (FLBGR). The FLBGR encompasses approximately 92 square miles. This site was opened in 1942 as an Army Airfield, and was used during and after World War II to conduct armament and bombing training. From 1942 to 1963 the Air Force, Army, Navy and Air National Guard used the range for various training exercises. These activities resulted in the FLBGR containing large amounts of exploded and unexploded munitions. In 1991, the FLBGR was established as a Formerly Used Defense Site (FUDS). The primary federal agency responsible for FUDS sites is the Department of Defense, working through the U.S. Army Corps of Engineers (Corps). The regional Corps district, as well as the geographic FUDS district project manager, provide construction support services to identify and remove potential hazards associated with development. The FLBGR is located in the Corps, Omaha District office.

When notified of a forthcoming change in land use the Corps, in conjunction with the Colorado Department of Public Health and the Environment (CDPHE) will perform a hazard evaluation for the property. Following this evaluation, a decision will be made concerning the status of the land use change with regard to the risk of the property owner encountering unexploded ordinances (UXO) during the course of excavation. In the event that a perceived risk is present, one or more options will be offered to the landowner. These options include anomaly avoidance, UXO investigation and clearance consistent with the approved project schedule, or recommendation to the landowner to initiate his/her own UXO investigation and clearance with

4.0 SITE INSPECTION / INTERVIEWS

The purpose of a site inspection is to obtain information indicating the likelihood of identifying recognized environmental condition (REC's) in connection with the property. During a site visit to the site on June 19th, 2015, Western Environment personnel visually and physically observed the property to the extent not obstructed by bodies of water, vegetation, adjacent buildings, or other obstacles and debris.

At the time of the inspection the subject property was used for cattle grazing. East Quincy Avenue bordered the site on the south. The adjacent properties were also vacant. High tension power lines were present along East Quincy Avenue to the south of the subject property. Three phase power lines were located to the north. An oil well and ancillary equipment were observed to the west (Figure 2).



View to north showing foundations and prairie dog borrows.

5.0 CONCLUSIONS

Western Environment and Ecology, Inc. performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of 50.0 acres within Section 4 Township 5 South, Range 64 West Arapahoe County, Colorado. Any exceptions to, or deletions from, this practice are described in Section 5.1 of this report. **This assessment has revealed no evidence of recognized environmental conditions (REC) in connection with the subject property except:**

- **The US Army Corps of Engineers should be consulted regarding clearing the site of potential unexploded military ordinance.**

5.1 Deviations/Data Gaps

No Sanborn Fire Maps or City Directories were available for review. Also, no environmental issues request made due to time constraints and the lack of available data. It is the opinion of Western Environment that this lack of information does not constitute a Data Failure as defined by ASTM E-1527-13, Section 8.3.2.3.

APPENDIX A

Reference List

Summary

Flood Zones Hazard Map Federal Emergency Management Agency (FEMA)

	< 1/4	1/4 - 1/2	1/2 - 1
National Priorities List (NPL)			
CERCLIS List			
CERCLIS NFRAP			
RCRA CORRACTS Facilities			
RCRA non-CORRACTS TSD Facilities			
Emergency Response Notification System (ERNS)			
US Toxic Release Inventory			1
US RCRA Generators (CESQG, SQG, LQG)			1
US ACRES (Brownfields)			
US NPDES			
CO Underground Storage Tanks			
CO Superfund - National Priorities List			
CO Uranium Mill Tailings Sites			
CO Solid Waste Sites			

National Priorities List (NPL)

This database returned no results for your area.

The Superfund Program, administered under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is an EPA Program to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. The NPL (National Priorities List) is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. The boundaries of an NPL site are not tied to the boundaries of the property on which a facility is located. The release may be contained with a single property's boundaries or may extend across property boundaries onto other properties. The boundaries can, and often do change as further information on the extent and degree of contamination is obtained.

CERCLIS NFRAP

This database returned no results for your area.

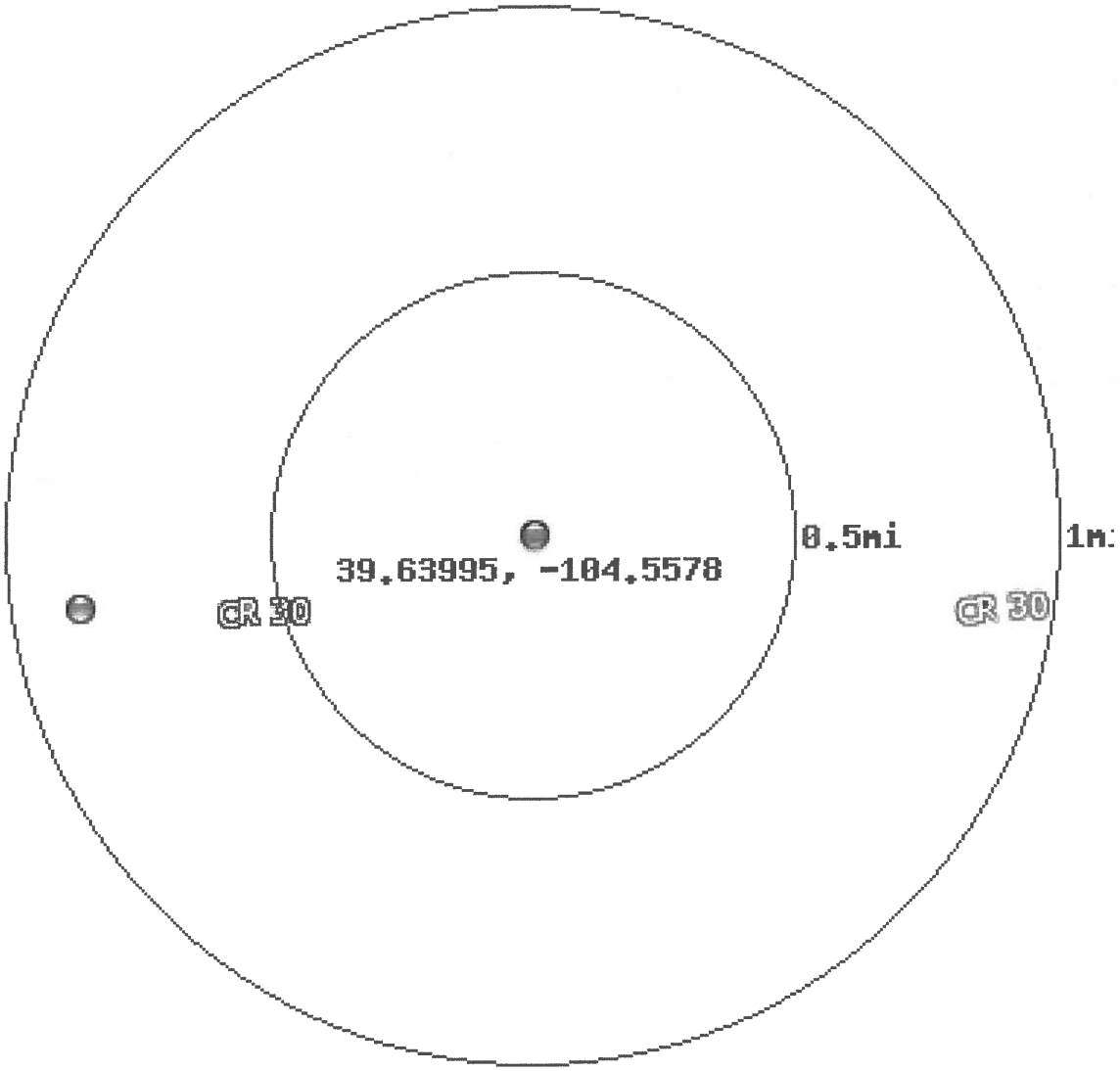
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" NFRAP have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the site being placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.
EPA has removed these NFRAP sites from CERCLIS to lift unintended barriers to the redevelopment of these properties. This policy change is part of EPA"s Brownfields Redevelopment Program to help cities, states, private investors and affected citizens promote economic redevelopment of unproductive urban sites.

RCRA non-CORRACTS TSD Facilities

This database returned no results for your area.

The United States Environmental Protection Agency (EPA) regulates hazardous waste under the Resource Conservation and Recovery Act (RCRA). The EPA"s RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilites database is a compilation by the EPA of facilities that report generation, storage, transportation, treatment, or disposal of hazardous waste. RCRA Permitted Treatment, Storage, Disposal Facilities (RCRA-TSD) are facilities which treat, store and/or dispose of hazardous waste.

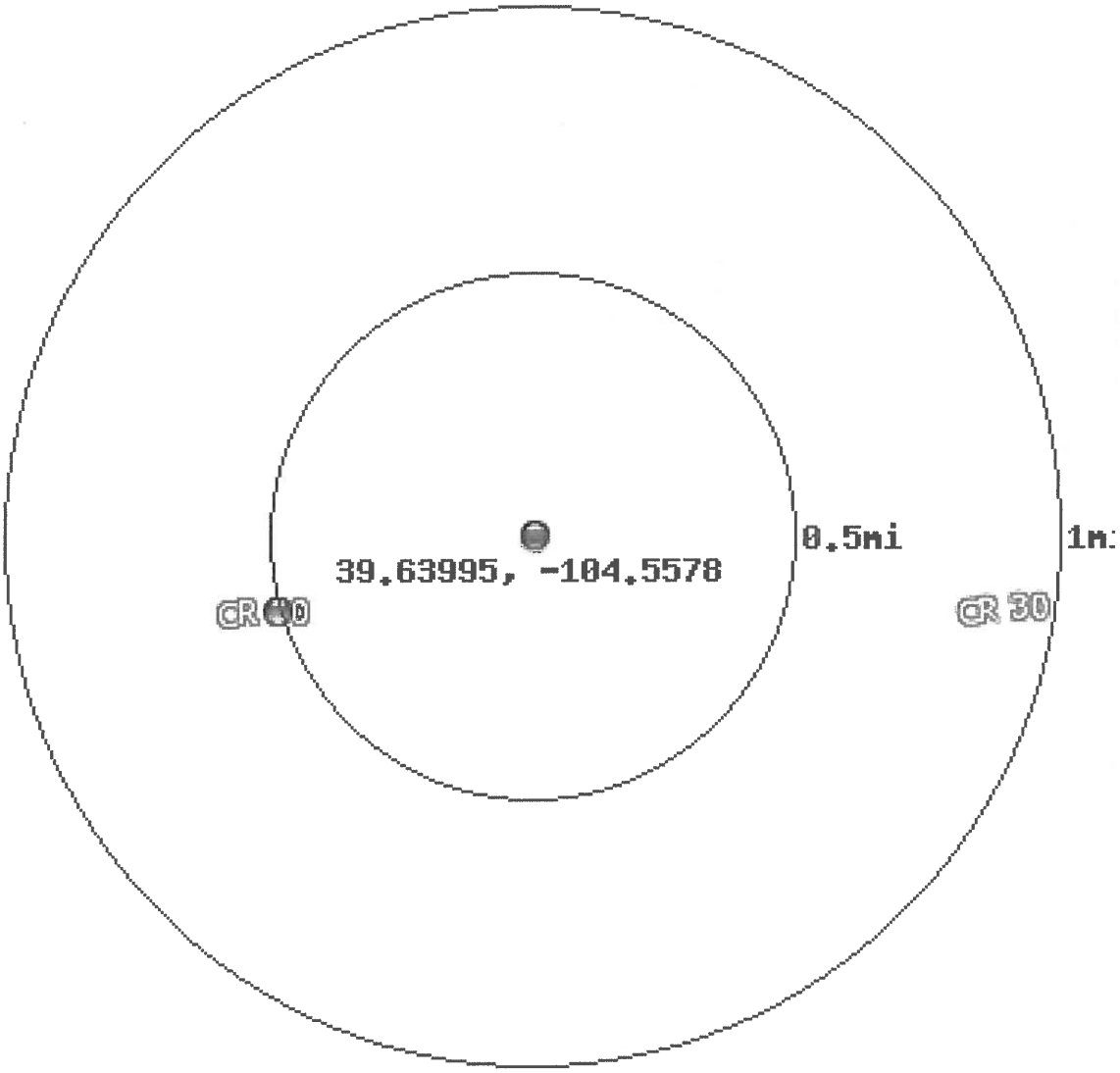
US Toxic Release Inventory



This database returned 1 results for your area.

The Toxics Release Inventory (TRI) is a publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. TRI reporters for all reporting years are provided in the file.

US RCRA Generators (CESQG, SQG, LQG)



This database returned 1 results for your area.

The United States Environmental Protection Agency (EPA) regulates hazardous waste under the Resource Conservation and Recovery Act (RCRA). EPA maintains a database of facilities, which generate hazardous waste or treat, store, and/or dispose of hazardous wastes.

Conditionally Exempt Small Quantity Generators (CESQG) generate 100 kilograms or less per month of hazardous waste, or 1 kilogram or less per month of acutely hazardous waste.

Small Quantity Generators (SQG) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Large Quantity Generators (LQG) generate 1,000 kilograms per month or more of hazardous waste, or more than 1 kilogram per month of acutely hazardous waste.

US ACRES (Brownfields)

This database returned no results for your area.

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. The Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an online database for Brownfields Grantees to electronically submit data directly to The United States Environmental Protection Agency (EPA)

CO Underground Storage Tanks

This database returned no results for your area.

Underground Storage Tanks (UST) containing hazardous or petroleum substances are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The Colorado Department of Labor and Employment/Division of Oil and
Public Safety maintains a list of registered aboveground and underground storage tanks.

CO Uranium Mill Tailings Sites

This database returned no results for your area.

There were nine uranium mill tailings sites in Colorado designated for cleanup under the federal Uranium Mill Tailings Radiation Control Act. These nine sites, know commonly as UMTRA sites, were remediated jointly by the State of Colorado and the U.S. Department of Energy during the late 1980's and early 1990's. Mill tailings were removed from 8 of the mill sites and relocated in engineered disposal cells. A disposal cell is designed to encapsulate the material, reduce radon emanation, and prevent the movement of water through the material. At one site, Maybell, CO, the tailings were stabilized in-place at the mill site. After remediation of the tailings was completed, the State and DOE began to investigate the residual impacts to groundwater at the mill sites. The groundwater phase of the UMTRA program is on-going.

APPENDIX B

Aerial Photography Documentation

APPENDIX C

Environmental Issues Inquiry and Supporting Documentation

Western Environment and Ecology, Inc.
Owner Questionnaire for a Phase I Environmental Site Assessment, ASTM 1527-13

3. Specialized knowledge or experience of the person seeking to qualify for the LLP

As the owner of the subject property, do you have any specialized knowledge or experience related to the subject property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or adjoining property so that you would have specialized knowledge of the chemicals, processes, etc., used by this type of business?

no specialized Knowledge

If yes, please describe this specialized knowledge or experience:

4. Relationship of the purchase price to the fair market value of the subject property if it were not contaminated.

Has the purchase price of this property been lowered below fair market value because of any contamination or some type of environmental issue? NOT aware of a reduction

If yes, please describe the reasons for the lower purchase price:

5. Commonly known or reasonably ascertainable information about the property.

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as the owner:

A. Do you know the past uses of the property? (if "Yes", what?)

no

B. Do you know of chemicals that are present or once were present at the property? no

Western Environment and Ecology, Inc.
Owner Questionnaire for a Phase I Environmental Site Assessment, ASTM 1527-13

8. Are you aware or have you ever been notified that another property around yours has caused or had an environmental impact to your property.

not aware

If yes, please describe which property and a brief description of the issue: _____

9. Are there any prior environmental reports (Phase 1 Environmental Site Assessments) concerning the subject property or related addresses? not aware

If yes, can you provide copies of these reports or know where there are copies of these reports? _____

Additional Information

How long have you owned the subject property? approx 10 YEARS

Description of current activity on the subject property? Ag

Do you have any knowledge of past ownership or activity on the subject property that would be of environmental concern? no Knowledge

What is the reason the Phase I is being conducted? _____

List all parties who will rely on the Phase I ESA report:

Completed by:

Signature: _____

Printed Name: JAMES DIXON

Date: 6/19/15

Answers are to the best Knowledge of James Dixon

Western Environment and Ecology, Inc.
User Questionnaire for a Phase I Environmental Site Assessment, ASTM 1527-13

Subject Property Address or Description:
50 Acres within Section 4, Township 5 South, Range 64 West, Arapahoe County, Colorado

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, The user of a Phase I Environmental Site Assessment must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

1. Environmental cleanup liens that are filed or recorded against the site:

Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law? ____No_____

If yes, please describe the lien and provide supporting documentation:

_____

_____

_____

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry:

Are you aware of any AULs, such as engineering controls, land use restrictions, or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law? ___No_____

If yes, please describe the AUL and provide supporting documentation:

_____

_____

_____

C. Do you know of any petroleum based products that are present or were once present on the subject property (in 5-gal or greater size containers, barrels, or tanks)? No

D. Do you know of any spills or other chemical releases that have taken place at the property? No

E. Do you know of any environmental cleanups that have taken place at the property? No

If yes, please describe the information:

_____

_____

_____

_____

_____

6. Do you know of any special permits need for the operation of the business or businesses that have occupied the subject property?

- **Waste water discharge permit?** No
- **Air emissions permit?** No
- **Any other type of permits?** No

7. The degree of obviousness of the presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.

As the potential user of the subject property, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

None known

If yes, please describe the information:

_____

_____

_____

Additional Notes:

_____

_____

_____

_____

_____

FORM NO. GWS - 32 11 / 90

PUMP INSTALLATION AND TEST REPORT

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER

For Office Use Only

RECEIVED APR 1 0 1997 WATER RESOURCES STATE ENGINEER COLO.

GWS32-94-05

1. **WELL PERMIT NUMBER** 200285

2. OWNER NAME(S) UNIVERSITY OF DENVER
Mailing Address 2050 E ILIFF AVE
City, St. Zip DENVER, CO 80210
Phone 871-2809

3. WELL LOCATION AS DRILLED: SE 1/4 SE 1/4, Sec. 5 Twp. 5S, Range 64W
DISTANCES FROM SECTION LINES:
283 ft. from SOUTH (north or south) Sec. line. and 535 ft. from EAST (east or west) Sec. line.
SUBDIVISION: _____ LOT ____ BLOCK ____ FILING(UNIT) ____
STREET ADDRESS AT WELL LOCATION: _____

4. PUMP DATA: Type SUBMERSIBLE Installation Completed 3/12/97
Pump Manufacturer GOULDS Pump Model No. 7GS10412
Design GPM 7 at RPM 3450, HP 1, Volts 130 Full Load Amps 9.80
Pump Intake Depth 260 Feet, Drop/Column Pipe Size 1.00 Inches, Kind PVC
ADDITIONAL INFORMATION FOR PUMPS GREATER THAN 50 GPM:
TURBINE DRIVER TYPE: ☐ Electric ☐ Engine ☐ Other _____
Design Head _____ feet, Number of Stages _____, Shaft Size _____ Inches

5. OTHER EQUIPMENT:
Airline Installed ☐ Yes ☒ No, Orifice Depth ft. _____, Monitor Tube Installed ☐ Yes ☒ No, Depth ft. _____
Flow Meter Mfg. INST BY CUST Meter Serial No. _____
Meter Readout ☐ Gallons, ☐ Thousand Gallons, ☐ Acre feet, ☐ Beginning Reading _____

6. TEST DATA: ☐ Check box if Test data is submitted on Supplemental Form.

Total Well Depth	300	Date	3/12/97
Static Level	160	Time	
Date Measured	3/12/97	Rate (GPM)	8
		Pumping Lvl.	215

7. DISINFECTION: Type HTH Amt. Used 2 CUPS

8. Water Quality analysis available. ☐ Yes ☒ No

9. Remarks _____

10. I have read the statements made herein and know the contents therof, and that they are true to my knowledge. [Persuant to Section 24-4-104 (13)(a) C.R.S., the making of false statements herein constitutes perjury in the second degree and is punishable as a class 1 misdemeanor.]

CONTRACTOR Norden Pump Service, Inc. Phone (303) 688-3794 Lic. No. 861
Mailing Address P.O. Box 268 Castle Rock, CO 80104

Name/Title (Please type or print)	Signature	Date
Ralph Norden, President	Ralph Norden	4/7/97

Form No. GWS-25

OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

8

WELL PERMIT NUMBER 200285 - ____ - __

DIV. 1 CNTY. 3 WD 1 DES. BASIN MD

Lot: Block: Filing: Subdiv:

APPLICANT

UNIVERSITY OF DENVER
2050 E ILIFF AVE
DENVER CO 80210-

(303)871-2809

APPROVED WELL LOCATION
ARAPAHOE COUNTY

SE 1/4 SE 1/4 Section 5
Twp 5 S RANGE 64 W 6th P.M.

DISTANCES FROM SECTION LINES
283 Ft. from South Section Line
535 Ft. from East Section Line

PERMIT TO CONSTRUCT A WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
3) Approved pursuant to CRS 37-92-602(3)(b)(I) and the policy of the State Engineer dated 4/9/85 for appropriation of ground water tributary to the South Platte River system.
4) The use of ground water from this well is limited to drinking and sanitary facilities as described in CRS 37-92-602(1)(c), for a commercial business, described as a research center. Water from this well shall not be used for lawn or landscape irrigation or for any other purpose outside the business building structure.
5) Plain casing shall be installed and properly grouted to a minimum depth of 200 feet to prevent diversion of water above this depth. The total depth of this well shall not exceed 910 feet, which corresponds to the base of the Denver aquifer.
6) The maximum pumping rate shall not exceed 15 GPM.
7) The maximum annual amount of ground water to be withdrawn shall not exceed 1/3 acre-foot (108,600 gallons).
8) Approved as the only well on a site of 40 acres described as SE1/4 of the SE1/4 Section 5, Township 5 South, Range 64 West, Sixth Principal Meridian.
9) The return flow from the use of the well must be through an individual waste water disposal system of the non-evaporative type where the water is returned to the same stream system in which the well is located. The maximum consumptive use of ground water shall not exceed 10 percent.
10) A totalizing flow meter must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (recorded at least annually) and submitted to the Division Engineer upon request.
11) This well shall be constructed not more than 200 feet from the location specified on this permit.

Note: To insure a maximum productive life of this well, perforated casing should be set through the entire producing interval of the approved zone or aquifer indicated above. RAN 12-26-96

APPROVED
RAN

Hal D. Simpson
State Engineer

RA Nielsen
By

Receipt No. 0408576A DATE ISSUED DEC 26 1996 EXPIRATION DATE DEC 26 1998

GENERAL PURPOSE APPLICATION - GENERAL INSTRUCTIONS

This form (GWS-45) should be used for the following well uses: commercial, industrial, agricultural irrigation, municipal, feed lots, central water supply systems, recreation, snowmaking, geothermal, recovery wells and any other uses not otherwise noted in the following list:

RESIDENTIAL use wells - Use Application Forms GWS-44, GWS-49 or GWS-50
LIVESTOCK watering on a farm, ranch, range, or pasture (not feedlots) - Use Forms GWS-44 or GWS-50
MONITORING/OBSERVATION wells - Use Application Form GWS-46
GRAVEL PITS - Use Application Form GWS-27
REGISTRATION of an existing well - Use Form GWS-12 (must have been in use prior to May 8, 1972)

FEES This application must be submitted with the required $60 non-refundable filing fee.
Checks should be payable to COLORADO DIVISION OF WATER RESOURCES.

Applications are evaluated in chronological order. Please allow approximately six weeks for processing.

Applications must be completed clearly, and legibly, in BLACK INK or typed. ALL ITEMS in the application must be completed. Incomplete applications may be returned to the applicant for more information. Do not change or alter the application in any way.

THE LOCATION of the well in item 4 must be correctly and accurately described. The county, quarter/quarter, section, township and range location of the well, principal meridian and location of the well in feet from section lines must be provided.
NOTE: Distances are not necessarily the same distances as the distances from (your) property lines.

For additional assistance in describing the location of your well, review the publication entitled "How to Determine Well Locations" which was provided with your packet, or can be requested from any Colorado Division of Water Resources office.

Indicate in item 5 or provide as an attachment a complete LEGAL DESCRIPTION of the tract on which the well will be located. Indicate the total number of acres and the owner of that land.

Check the applicable box(es) in item 6 indicating the GENERAL USE of the well AND provide a detailed description of use of the well as an attachment to the application.

If the well is to withdraw water from the DAWSON, DENVER, ARAPAHOE, LARAMIE-FOX HILLS OR DAKOTA AQUIFERS, documentation of claimed landownership or consent of the landowner may be required. Please contact the Division of Water Resources for further information. A copy of the Statewide Nontributary Ground Water Rules are available upon request for $3.

Indicate in item 8, or provide as an attachment a complete LEGAL DESCRIPTION of the land area on which water from the well will be used. Indicate the total number of acres described and the owner of that land. If agricultural irrigation is a proposed use, provide an accurate map of the land area with proposed irrigated areas drafted or accurately drawn. Section numbers and section lines must be indicated on the map.

Completely describe all OTHER WATER RIGHTS, including wells and surface water rights, used on the described land area. Describe the total land areas irrigated by other wells or water rights. Applicable well permit, well registration or water court case numbers must be indicated. This information may be provided in an attachment.

An ORIGINAL signature must be on each application. The applicant's authorized agent may sign the application if a letter signed by the applicant is submitted with the application authorizing them to act as agent for the purpose of obtaining a well permit.

IF YOU HAVE ANY QUESTIONS regarding any item in the well permit application form, please call the Division of Water Resources Ground Water Information Desk at (303) 866-3587, Ground Water Management District or the nearest Division of Water Resources Field Office located in Greeley (970-352-8712), Pueblo (719-542-3368), Alamosa (719-589-6683), Montrose (970-249-6622), Glenwood Springs (970-945-5665), Steamboat Springs (970-879-0272) or Durango (970-247-1845).

DETAILED INSTRUCTIONS ARE AVAILABLE UPON REQUEST

COLORADO DIVISION OF WATER RESOURCES, 1313 SHERMAN STREET, ROOM 821, DENVER CO 80203
PHONE: (303) 866-3587 (Information), (303) 866-3581 (Main), (303) 866-3447 (Well and Water Rights Records); (303) 866-3589 (Fax)

RECEIVED
DEC 1 8 1996
WATER RESOURCES
STATE ENGINEER
COLO.

interoffice
MEMORANDUM

to: Colorado Division Of Water Resources
cc:
from: Dave Mann
re: Well Permit Applications
date: November 6, 1996

We are applying for two Commercial Exempt well permits as our water usage will be very limited on both wells. Essentially there will be only 2 sinks and a bathroom on each well with a maximum total of 4 personnel for both wells. There will be no outside irrigation on either well. Also enclosed is a page of the lease agreement with OEA Inc and The University of Denver stating we are able to install water wells. If there are any questions please give me a call.

Sincerely

David Mann
(303)871-2809

From the desk of...

Dave Mann
Denver Research Institute
2050 E. Iliff Avenue
Denver, CO 80210

tel: (303) 871-2809
fax: (303) 871-2716

RECEIVED

DEC 1 8 1996

STATE ENGINEER COLO.

The printed portions of this form have been approved by the Colorado Real Estate Commission. (CBS 3-7-96)

THIS FORM HAS IMPORTANT LEGAL CONSEQUENCES AND THE PARTIES SHOULD CONSULT LEGAL AND TAX OR OTHER COUNSEL BEFORE SIGNING.

VACANT LAND/FARM AND RANCH CONTRACT TO BUY AND SELL REAL ESTATE

September 20, 19 96

1. PARTIES AND PROPERTY. OEA, Inc., a Delaware corporation, buyer(s) [Buyer], ~~(as joint tenants/tenants in common)~~ agrees to buy, and the undersigned seller(s) [Seller], agrees to sell, on the terms and conditions set forth in this contract, the following described real estate in the County of Arapahoe, Colorado, to wit:

See Exhibit A, attached hereto and incorporated herein

known as No. _____ (Street Address, City, State, Zip), together with all interest of Seller in vacated streets and alleys adjacent thereto, all easements and other appurtenances thereto, all improvements thereon and all attached fixtures thereon, except as herein excluded (collectively the Property).

2. INCLUSIONS/EXCLUSIONS. The purchase price includes the following items (a) if attached to the Property on the date of this contract: lighting, heating, plumbing, ventilating, and air conditioning fixtures, TV antennas, water softeners, smoke/fire/burglar alarms, security devices, inside telephone wiring and connecting blocks/jacks, plants, mirrors, floor coverings, intercom systems, built-in kitchen appliances, sprinkler systems and controls, built-in vacuum systems (including accessories), and garage door openers including n/a remote controls; (b) if on the Property whether attached or not on the date of this contract: storm windows, storm doors, window and porch shades, awnings, blinds, screens, curtain rods, drapery rods, fireplace inserts, fireplace screens, fireplace grates, heating stoves, storage sheds, all keys and (c) n/a

(d) Water Rights. Purchase price to include the following water rights: None

(e) Growing Crops. With respect to the growing crops Seller and Buyer agree as follows: None

The above-described included items (Inclusions) are to be conveyed to Buyer by Seller by bill of sale, special warranty deed or other applicable legal instrument(s) at the closing, free and clear of all taxes, liens and encumbrances, except as provided in Section 12. The following attached fixtures are excluded from this sale: N/A

3. PURCHASE PRICE AND TERMS. The purchase price shall be $ 215,000.00, payable in U.S. dollars by Buyer as follows: (Complete the applicable terms below.)

~~(a) Earnest Money.~~

~~$ _____ in the form of _____, as earnest money deposit and part payment of the purchase price, payable to and held by _____, broker, in its trust account on behalf of both Seller and Buyer. Broker is authorized to deliver the earnest money deposit to the closing agent, if any, at or before closing. The balance of $ _____ (purchase price less earnest money) shall be paid as follows:~~

(b) Cash at Closing.

$ 215,000, plus closing costs, to be paid by Buyer at closing in funds which comply with all applicable Colorado laws, which include cash, electronic transfer funds, certified check, savings and loan teller's check, and cashier's check (Good Funds). Subject to the provisions of Section 4, if the existing loan balance at the time of closing shall [illegible]

RECEIVED
DEC 1 8 1996
STATE ENGINEER
COLO.

Best Copy Available

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the day and year first-above written.

LESSOR:

OEA, Inc.

By: Paul J Martin

Its: Vice President / Treasurer

LESSEE:

Denver University (Colorado Seminary)

By: Craig Woodey

Its: Vice Chancellor for Business & Finance

STATE OF Colorado)
) ss.
COUNTY OF Denver)

The foregoing instrument was acknowledged before me this 15th day of October, 1996, by Paul J. Martin as Vice President of OEA Inc.

Witness my hand and official seal.

My commission expires: 1-21-98

SACHA BROWN
NOTARY PUBLIC
STATE OF COLORADO

Sacha Brown
Notary Public

APPENDIX D

WESTERN ENVIRONMENT AND ECOLOGY, INC.

Statement of Qualifications

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental professional as defined in 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

GREG D. SHERMAN, P.G.
President

PROFESSIONAL CAPABILITIES:

Mr. Sherman has more than 39 years of professional experience. He is currently President of **WESTERN ENVIRONMENT AND ECOLOGY, INC.** Prior to his current position, he was the Principal Geologist with SEACOR in its Lakewood, Colorado office and Project Director with Roy F. Weston also in Lakewood.

Duties performed in these capacities involved responsibility for CERCLA RI/FS studies and RCRA investigations. His professional assignments include project management and technical direction of the design and installation of the 2,000-foot long the 881 Hillside Groundwater Interception trench at the Rocky Flats Nuclear Weapons Plant in Jefferson County, Colorado. Mr. Sherman was Field Operations Manager for the installation of 75 groundwater extraction wells and vapor extraction and sparging points. This work was completed on the Stanford Research Park Superfund site in Palo Alto, California. Recently, he has concentrated on VOC remediation system design and installation utilizing on-site re-injection of treated groundwater and enhanced oxygenation systems. Mr. Sherman was lead investigator for the City of Wheat Ridge regarding the characterization of the Jay Street Park. This project, which was submitted to the Colorado Voluntary Clean-Up Program, received a grant from the Colorado Department of Public Health and Environment for innovative use of a Brownsfields site. Mr. Sherman and Western Environment and Ecology, Inc. was selected by the Cities of Aurora and Lakewood as their approved USEPA Brownsfields contractor.

Mr. Sherman is past Chairman of the Rocky Mountain Section of the Association of Engineering Geologists. He has served as Chairman of Executive Enterprises Seminars on Sampling and Data Analysis. He has extensive experience in geotechnical and geological investigations, groundwater studies, UST testing and evaluation, construction materials testing and mineral resource evaluation.

Mr. Sherman is recognized in the region as one of the leading experts in underground storage tank management and mine subsidence. He has placed special emphasis on the application of geophysical techniques to environmental and geotechnical investigations. Clients for these projects range from Federal, state and local governments to private industry and commercial developments. The project types included petroleum distribution facilities, nuclear power plants, highways and streets, dams and reservoirs, transmission lines, sewage treatment plants and sewage systems, hazardous and industrial waste disposal areas, and mining facilities, as well as residential and commercial developments. Mr. Sherman has performed geotechnical and geological investigations in Alaska, Arizona, California, Colorado, Idaho, Illinois, Montana, New Mexico, New York, Nevada, North Dakota, South Dakota, Texas, Utah and Wyoming. Additionally, he has international evaluation experience in the Middle East and Mexico.

PUBLICATIONS/PRESENTATIONS

Sherman Greg D.,"Mine Subsidence Assessment, Boulder-Weld Coal Field, Using British National Coal Board Methods" The Mountain Geologist, Volume 46, Number 1 January 2009.

Sherman Greg D. and Brian R. Partington., "Abandoned Mine Subsidence Prediction Using

British National Coal Board Methods, Boulder/Weld Coal Field, Denver, Colorado" Proceedings for the International Association of Engineering Geologists, 2006 Meeting Nottingham, United Kingdom. September 2006.

Sherman, Greg D., "Sampling and Data Analysis"; Executive Enterprises Seminar, Chairman, May 1992.

Sherman, Greg D., "Statistical Design of Sampling Plans"; Executive Enterprises Seminar, June 1990.

Sherman, Greg D., "Impact of the EPA UST Regulations"; Tri-State Petroleum Marketer, December 1988.

Sherman, Greg D., "Variables Effecting Volumetric Leak Detection Methods for Underground Storage Tanks"; Paper given to the Colorado Section, American Society of Civil Engineers, 1988.

Sherman, Greg D., "The Impact of Underground Storage Tank Regulations on Industry"; Extended Abstracts, American Institute of Chemical Engineers, National Meeting, 1988.

Sherman, Greg D., "Assessment of Subsidence Damage to Existing Structures in Louisville, Lafayette, Colorado"; Proceedings of the Colorado Governor's Conference on Subsidence, 1985.

Sherman, Greg D., "Geology and Mining History of the Boulder/Weld Coal Field"; Paper given at Denver Coal Club Meeting, 1985.

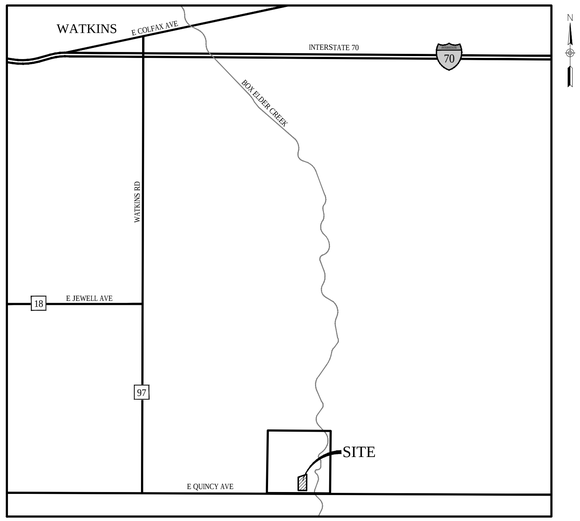
Sherman, Greg D., "The New Mexico Gold Belt Regional Structural Implications"; Proceedings of the Western Mining Association, 1982 Convention.

Sherman, Greg D., "Colorado Front Range Uranium Deposits, A Possible Origin": in review.

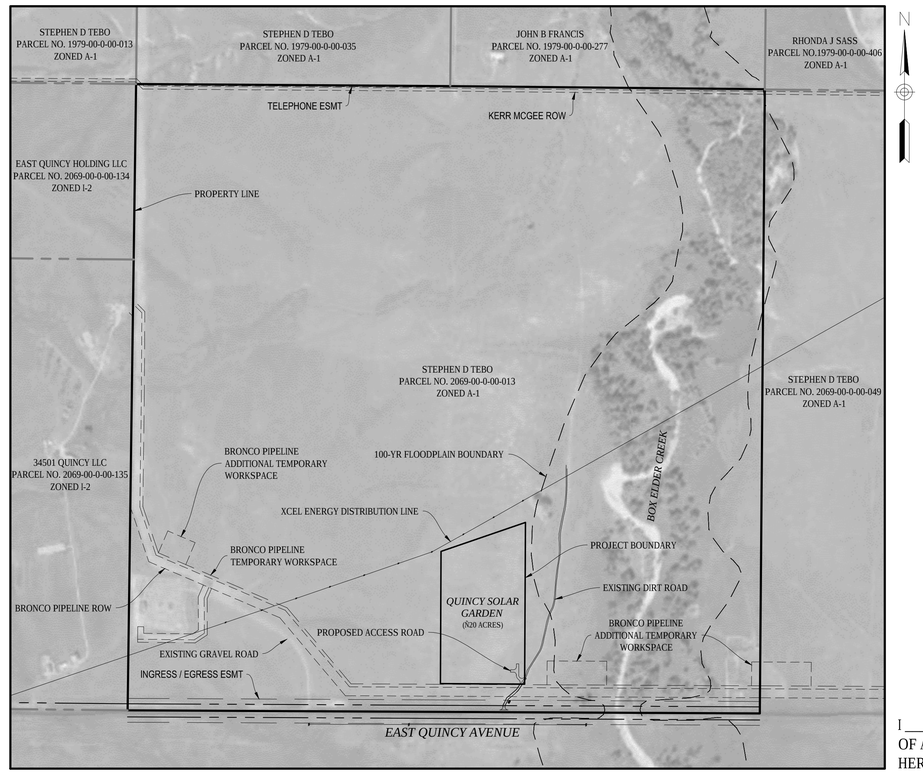
Sherman, Greg D., "Origin of Monoclinal Folding Near Livermore, Colorado"; The Mountain Geologist, April 1976

QUINCY SOLAR GARDEN
USE BY SPECIAL REVIEW

LOCATED IN SECTION 4, TOWNSHIP 5 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF ARAPAHOE, STATE OF COLORADO



VICINITY MAP
SCALE 1" = 6000'



OVERALL SITE AREA
SCALE 1" = 600'

SITE DATA

PROJECT AREA: ±20 ACRES
72-CELL POLYCRYSTALLINE PHOTOVOLTAIC MODULES (APPROX. 6,000-7,000)
CENTRAL STRING INVERTER ARCHITECTURE
MODULE MOUNTING: HORIZONTAL SINGLE-AXIS TRACKERS

SHEET INDEX

1 COVER SHEET
2 SITE PLAN
3 TYPICAL DETAILS

BOARD OF COUNTY COMMISSIONERS APPROVAL

APPROVED BY THE ARAPAHOE COUNTY BOARD OF COMMISSIONERS,
THIS_____ DAY OF _____ A.D., 20_____.

CHAIR: _____

ATTEST: _____

PLANNING COMMISSION RECOMMENDATION

RECOMMENDED BY THE ARAPAHOE COUNTY PLANNING COMMISSION,
THIS _____ DAY OF _____ A.D., 20___.

CHAIR: _____

CERTIFICATE OF OWNERSHIP

I _____ HEREBY AFFIRM THAT I AM THE OWNER OR AUTHORIZED AGENT OF ALL INDIVIDUALS HAVING OWNERSHIP INTEREST IN THE PROPERTY DESCRIBED HEREIN, KNOWN AS QUINCY SOLAR GARDEN (CASE NO: U15-001)

OWNER OF RECORD OR AUTHORIZED AGENT

STATE OF _____}
S.S.
COUNTY OF _____}

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 2016 BY _____
(NAME)

AS _____ OF _____ AN AUTHORIZED SIGNATORY.
(TITLE)

BY _____WITNESS MY HAND AND SEAL

_____ MY COMMISSION EXPIRES_____
(NOTARY PUBLIC)

_____
CITY STATE ZIP CODE

STANDARD NOTES:

THE OWNER(S), DEVELOPER(S) AND/OR SUBDIVIDERS(S) OF THE USE BY SPECIAL REVIEW KNOWN AS THE QUINCY SOLAR GARDEN, THEIR RESPECTIVE SUCCESSORS, HEIRS AND/OR ASSIGNS AGREE TO THE FOLLOWING NOTES:

EMERGENCY ACCESS NOTE
EMERGENCY ACCESS IS GRANTED HEREWITH OVER AND ACROSS ALL AREAS FOR POLICE, FIRE AND EMERGENCY VEHICLES.

DRIVES, PARKING AREAS, AND UTILITY EASEMENTS MAINTENANCE
THE OWNERS OF THIS PLAN OR PLAT, THEIR SUCCESSORS, AND/OR ASSIGNS IN INTEREST, THE ADJACENT PROPERTY OWNER(S), HOMEOWNERS ASSOCIATION OR OTHER ENTITY OTHER THAN ARAPAHOE COUNTY, IS RESPONSIBLE FOR MAINTENANCE AND UPKEEP OF ANY AND ALL DRIVES, PARKING AREAS, AND EASEMENTS, I.E.: CROSS-ACCESS EASEMENTS, DRAINAGE EASEMENTS, ETC.

LANDSCAPE MAINTENANCE
THE OWNERS OF THIS PLAN OR PLAT, THEIR SUCCESSORS AND/OR ASSIGNS IN INTEREST, THE ADJACENT PROPERTY OWNER(S), HOMEOWNER'S ASSOCIATION OR OTHER ENTITY OTHER THAN ARAPAHOE COUNTY IS RESPONSIBLE FOR MAINTENANCE AND UPKEEP OF PERIMETER FENCING, LANDSCAPED AREAS AND SIDEWALKS BETWEEN THE FENCE LINE/PROPERTY LINE AND ANY PAVED ROADWAYS.

THE OWNERS OF THIS SUBDIVISION, THEIR SUCCESSORS AND/OR ASSIGNS IN INTEREST, OR SOME OTHER ENTITY OTHER THAN ARAPAHOE COUNTY, AGREE TO THE RESPONSIBILITY OF MAINTAINING ALL OTHER OPEN SPACE AREAS ASSOCIATED WITH THIS DEVELOPMENT.

SIGHT TRIANGLE MAINTENANCE
THE OWNERS OF PRIVATE PROPERTY CONTAINING A TRAFFIC SIGHT TRIANGLE ARE PROHIBITED FROM ERECTING OR GROWING ANY OBSTRUCTIONS OVER THREE FEET IN HEIGHT ABOVE THE ELEVATION OF THE LOWEST POINT ON THE CROWN OF THE ADJACENT ROADWAY WITHIN SAID TRIANGLE.

PUBLIC IMPROVEMENTS NOTE
AFTER USE BY SPECIAL REVIEW APPROVAL, ISSUANCE OF INDIVIDUAL BUILDING PERMITS WILL BE SUBJECT TO THE FOLLOWING STIPULATIONS AND/OR CONDITIONS PRECEDENT, WHICH OWNER AGREES TO IN CONJUNCTION WITH APPROVAL OF THE USE BY SPECIAL REVIEW. SUCH BUILDING PERMITS WILL BE ISSUED ONLY AFTER THE OWNERS GUARANTEE PUBLIC IMPROVEMENTS IN A FORM ACCEPTABLE TO THE BOARD OF COUNTY COMMISSIONERS PURSUANT TO STATE STATUTE.

DRAINAGE MAINTENANCE
THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL DRAINAGE FACILITIES INSTALLED PURSUANT TO THE SUBDIVISION AGREEMENT. REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO MAINTAINING THE SPECIFIED STORM WATER DETENTION/ RETENTION VOLUMES, MAINTAINING OUTLET STRUCTURES, FLOW RESTRICTION DEVICES AND FACILITIES NEEDED TO CONVEY FLOW TO SAID BASINS. ARAPAHOE COUNTY SHALL HAVE THE RIGHT TO ENTER PROPERTIES TO INSPECT SAID FACILITIES AT ANY TIME. IF THESE FACILITIES ARE NOT PROPERLY MAINTAINED, THE COUNTY MAY PROVIDE NECESSARY MAINTENANCE AND ASSESS THE MAINTENANCE COST TO THE OWNER OF THE PROPERTY.

DRAINAGE LIABILITY
IT IS THE POLICY OF ARAPAHOE COUNTY THAT IT DOES NOT AND WILL NOT ASSUME LIABILITY FOR THE DRAINAGE FACILITIES DESIGNED AND/OR CERTIFIED BY ENERTIA CONSULTING GROUP. ARAPAHOE COUNTY REVIEWS DRAINAGE PLANS PURSUANT TO COLORADO REVISED STATUTES TITLE 30, ARTICLE 28, BUT CANNOT, ON BEHALF OF QUINCY SOLAR GARDEN GUARANTEE THAT FINAL DRAINAGE DESIGN REVIEW WILL ABSOLVE QUINCY SOLAR GARDEN AND/OR THEIR SUCCESSORS AND/OR ASSIGNS OF FUTURE LIABILITY FOR IMPROPER DESIGN. IT IS THE POLICY OF ARAPAHOE COUNTY THAT APPROVAL OF THE FINAL PLAT AND/OR FINAL DEVELOPMENT PLAN DOES NOT IMPLY APPROVAL OF ENERTIA CONSULTING GROUP'S DRAINAGE DESIGN.

STORMWATER MAINTENANCE
THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL PERMANENT BEST MANAGEMENT PRACTICES (BMP/S) AND STORMWATER FACILITIES INSTALLED PURSUANT TO THE SUBDIVISION AGREEMENTS AND THE OPERATIONS AND MAINTENANCE (O AND M) GUIDE IN THE CASE OF PERMANENT BMP/S. REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO, MAINTAINING THE SPECIFIED BMP/S CONTAINED IN THE O AND M MANUAL RECORDED AT RECEPTION NUMBER N/A, AND THE STORMWATER FACILITIES SHOWN IN THE APPROVED PHASE III DRAINAGE REPORT AND SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS.

THE OWNERS OF THIS SUBDIVISION, THEIR SUCCESSORS AND/OR ASSIGNS IN INTEREST, OR SOME ENTITY OTHER THAN ARAPAHOE COUNTY, AGREE TO THE RESPONSIBILITY OF MAINTAINING ALL PERMANENT BMP/S AND/OR STORMWATER FACILITIES ASSOCIATED WITH THIS DEVELOPMENT. IF THE PERMANENT BMP/S AND STORMWATER FACILITIES ARE NOT PROPERLY MAINTAINED, THE COUNTY MAY PROVIDE NECESSARY MAINTENANCE AND ASSESS THE MAINTENANCE COST TO THE OWNER OF THE PROPERTY.

CASE NUMBER: U15-001

APPLICANT
QUINCY SOLAR GARDEN LLC
1441 18TH STREET, SUITE 400
DENVER, COLORADO 80202
CONTACT: LUKE RICKARD
(970) 819-2252

ENGINEER
ENERTIA CONSULTING GROUP, LLC
1529 MARKET STREET, SUITE 200
DENVER, COLORADO 80202
CONTACT: SEAN O'HEARN, PE, PG
(303) 473-3131

SURVEYOR
PRECISION SURVEY
9145 EAST KENYON AVENUE, SUITE 101
DENVER, COLORADO 80237
CONTACT: CHRIS JULIANA, PLS
(303) 753-9799

LEGAL DESCRIPTION:

A PARCEL OF LAND LOCATED IN THE SOUTH HALF OF SECTION 4, TOWNSHIP 5 SOUTH, RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ARAPAHOE, STATE OF COLORADO, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BASIS OF BEARING OF THIS DESCRIPTION IS ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 4, ASSUMED TO BEAR S00¼47'08"W A DISTANCE OF 2613.39 FEET FROM A 2.5" ALUMINUM CAP L.S. #30127 FOUND AT THE NORTHWEST CORNER OF SAID SECTION 4 TO A 2.5" ALUMINUM CAP L.S. #27605 FOUND AT THE WEST QUARTER CORNER OF SAID SECTION 4;

BEGINNING AT A POINT WHICH BEARS S63¼15'18"E A DISTANCE OF 2902.96 FEET FROM SAID WEST QUARTER CORNER;

THENCE N71¼07'42" A DISTANCE OF 748.27 FEET; THENCE S00¼16'47"W A DISTANCE OF 1,355.25 FEET; THENCE N89¼43'13"W A DISTANCE OF 706.85 FEET; THENCE N00¼16'47"E A DISTANCE OF 1,109.77 FEET TO THE POINT OF BEGINNING; WHENCE SAID NORTHWEST CORNER OF SECTION 4 BEARS N33¼06'53"W A DISTANCE OF 4679.61 FEET.

SAID PARCEL CONTAINS 871,204 SQUARE FEET OF LAND OR 20.000 ACRES, MORE OR LESS.

FOR BURIED UTILITY INFORMATION
THREE (3) BUSINESS DAYS BEFORE YOU DIG
CALL 811
(OR 1-800-922-1987)
UTILITY NOTIFICATION CENTER OF COLORADO (UNCC)
WWW.UNCC.ORG

NO.	DATE	REVISION			
DSGN	BPC	DR	BPC	CHK	JSO	APVD	JSO

ENERTIA CONSULTING GROUP
1529 MARKET STREET, SUITE 200
DENVER, COLORADO 80202

sunShare THE POWER TO CHOOSE

QUINCY SOLAR GARDEN
ARAPAHOE COUNTY, COLORADO

COVER SHEET

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 SCALE

DATE	JANUARY 05, 2015
FILE	1 CVR
DWG	CVR
SHEET	1 OF 3

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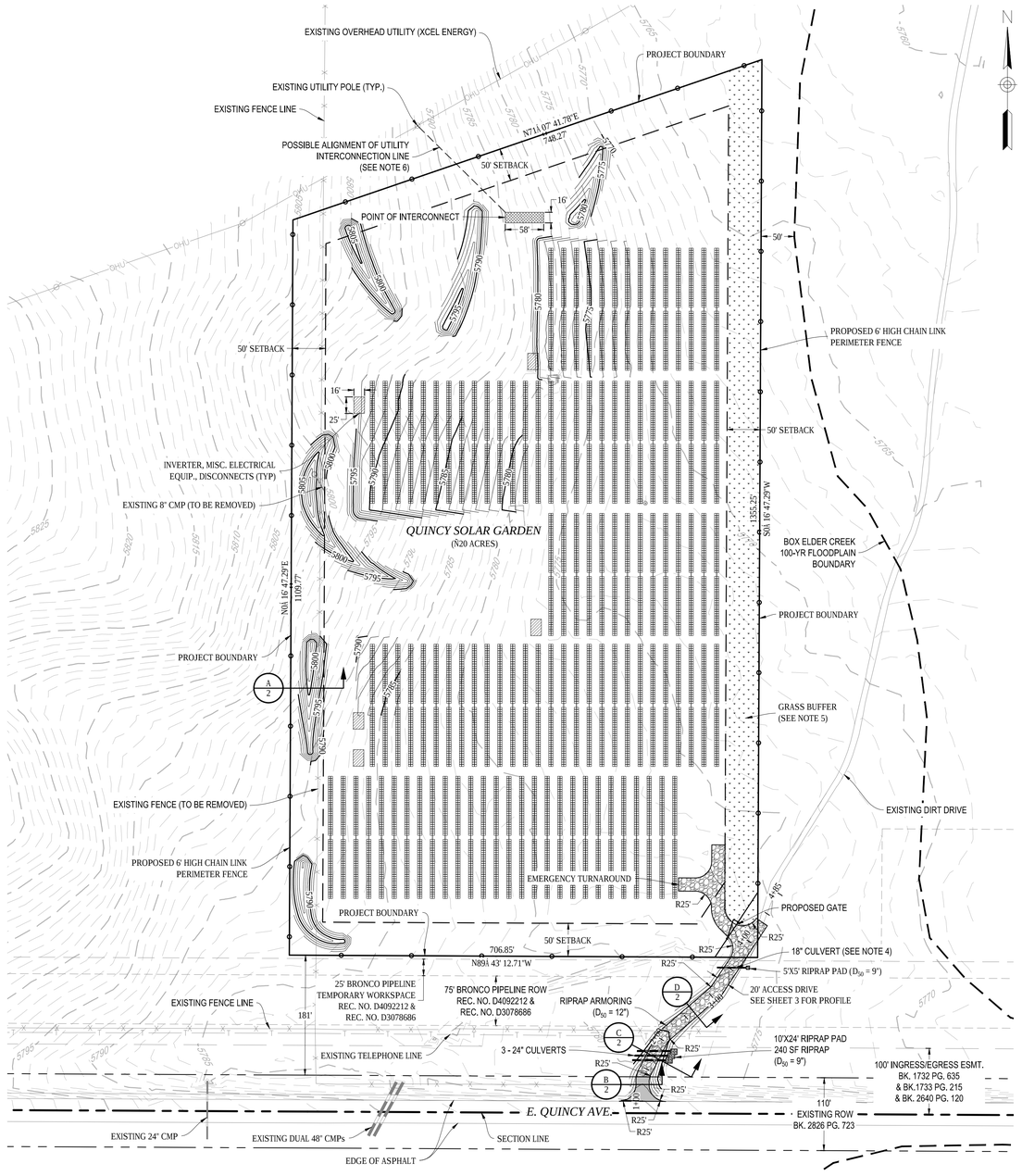
QUINCY SOLAR GARDEN
USE BY SPECIAL REVIEW

LOCATED IN SECTION 4, TOWNSHIP 5 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF ARAPAHOE, STATE OF COLORADO

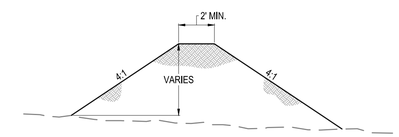


LEGEND

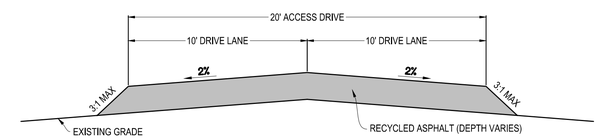
- SECTION LINE
- ROW LINE
- PROJECT BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- SETBACK LINE
- PROPOSED CHAIN LINK PERIMETER FENCE
- PV ARRAY
- PROPOSED ACCESS DRIVE (TYPICAL)
- PROPOSED ACCESS DRIVE (RECYCLED ASPHALT)
- INVERTER PAD
- POINT OF INTERCONNECT
- GRASS BUFFER

OTHER SPECIFIC NOTES

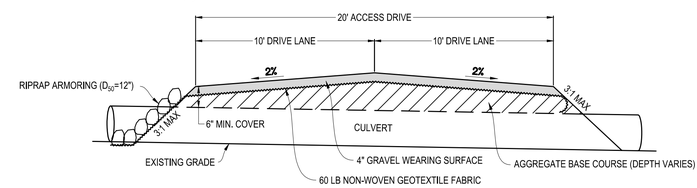
1. GENERATION FACILITY LAYOUT IS CONCEPTUAL AT THIS TIME. FINAL EQUIPMENT SELECTION AND LOCATIONS, INCLUDING PV ARRAYS, INVERTERS, TRANSFORMERS, AND INTERCONNECTION EQUIPMENT MAY BE SUBJECT TO CHANGE DUE TO DESIGN OR UTILITY INTERCONNECTION REQUIREMENTS OR OTHER FACTORS. FINAL LOCATIONS FOR EQUIPMENT AND ALL OTHER FACILITY COMPONENTS MAY BE ANYWHERE WITHIN THE SOLAR SITING ENVELOPE AS DELINEATED BY THE 50' SETBACK LINE.
2. TREES ARE NOT OBSERVED WITHIN THE PV ARRAY AREAS. IF NECESSARY, TREES AND SHRUBS ARE TO BE REMOVED TO ALLOW FOR THE INSTALLATION OF THE ARRAYS AND TO ELIMINATE SHADING.
3. ENERTIA CONSULTING GROUP, LLC ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN LOCATED BASED ON THE ALTA SURVEY. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
4. ALL CULVERT PLACEMENT TO BE FIELD LOCATED. A MINIMUM OF 6' OF COVER SHALL BE PROVIDED OVER THE CULVERT.
5. THE GRASS BUFFER MAY UTILIZE THE EXISTING VEGETATION AND OVER-SEED OR ENHANCE THE AREA WITH ADDITIONAL SEEDING & MULCHING. THIS DECISION SHALL BE MADE BY THE COUNTY INSPECTOR.
6. EXACT ALIGNMENT OF THE UTILITY INTERCONNECTION LINE IS UNKNOWN AT THIS TIME. THE LINE MAY BE ABOVE OR BELOW GROUND DEPENDING ON THE UTILITY DESIGN REQUIREMENTS.
7. THE SURFACE OF THE SITE SHALL BE NATIVE GRASS UNLESS OTHERWISE NOTED.
8. EXISTING NORTH-SOUTH FENCE TO REMAIN INTACT OUTSIDE PROJECT PERIMETER FENCE AND TO BE REMOVED INSIDE PERIMETER FENCE.
9. EXISTING UNDERGROUND UTILITIES THAT THE ACCESS DRIVEWAY CROSSES TO BE FIELD LOCATED PRIOR TO ACCESS DRIVEWAY CONSTRUCTION.



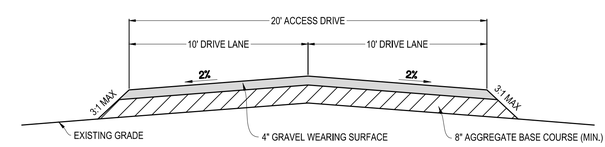
A TYPICAL BERM SECTION
NTS



B RECYCLED ASPHALT ACCESS DRIVE (STA: 1+00 TO 1+37) SECTION
NTS



C ACCESS DRIVE WITH RIPRAP ARMORING (STA: 1+37 TO 2+37) SECTION
NTS



D TYPICAL ACCESS DRIVE (STA: 2+37 TO EMERGENCY TURNAROUND) SECTION
NTS

0' 50 100 200
SCALE: 1"=100'

FOR BURIED UTILITY INFORMATION THREE (3) BUSINESS DAYS BEFORE YOU DIG CALL 811 (800-922-1987) UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) www.UNCC.org

CASE NUMBER: U15-001

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DSGN	BPC	DR	BPC	CHK	JSO	APVD	JSO

ENERTIA CONSULTING GROUP
1529 MARKET STREET, SUITE 200
DENVER, COLORADO 80202

SunShare THE POWER TO CHOOSE

QUINCY SOLAR GARDEN
ARAPAHOE COUNTY, COLORADO

SITE PLAN

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 SCALE

DATE	JANUARY 05, 2015
FILE	2 SP
DWG	SP
SHEET	2 OF 3

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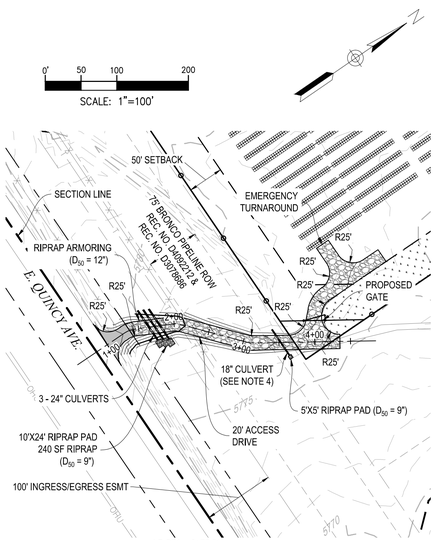
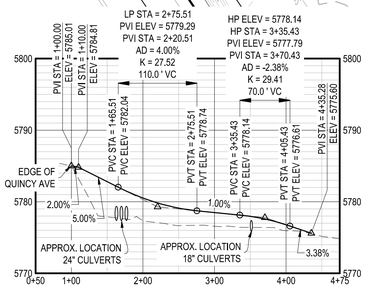
QUINCY SOLAR GARDEN
USE BY SPECIAL REVIEW

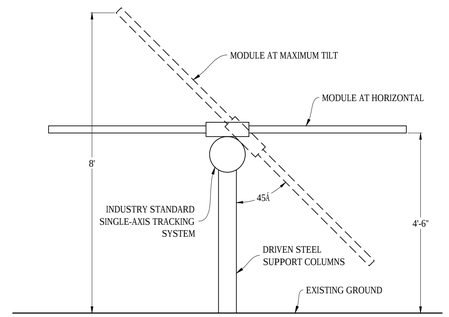
LOCATED IN SECTION 4, TOWNSHIP 5 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF ARAPAHOE, STATE OF COLORADO





PROFILE: ACCESS DRIVE STA: 0+50 TO 4+75

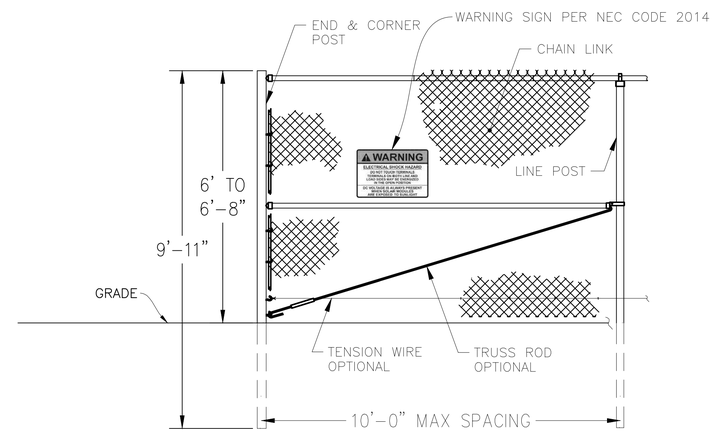
HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 10



NOTE: FINAL DIMENSIONS SUBJECT TO FINAL DESIGN.

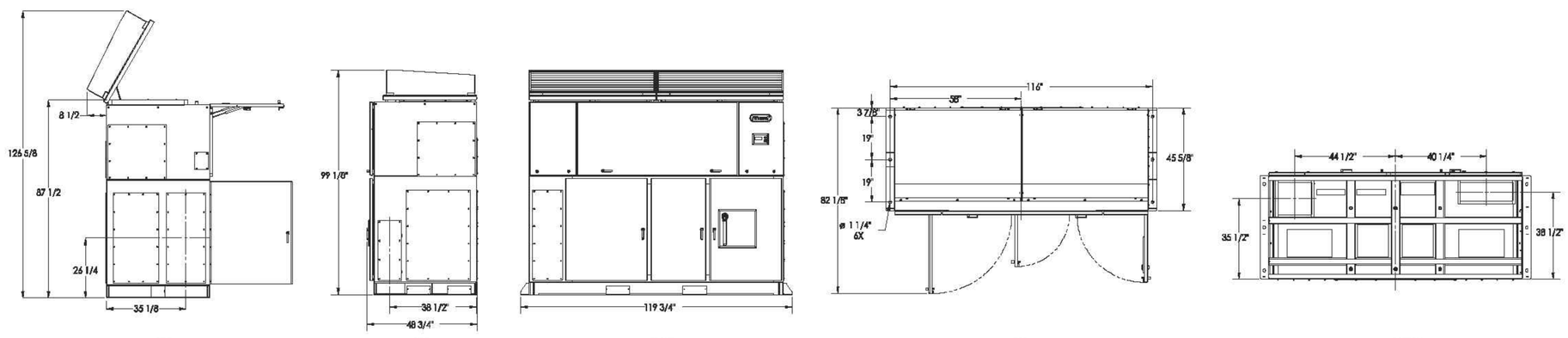
TYPICAL PV ARRAY RACKING SYSTEM

NOT TO SCALE



CHAIN LINK FENCE (TYP)

NOT TO SCALE



SIDE SIDE FRONT TOP BOTTOM

TYPICAL INVERTER PAD PLAN AND ELEVATION

NOT TO SCALE

CASE NUMBER: U15-001

NO.	DATE	REVISION			
DSGN	BPC	DR	BPC	CHK	JSO	APVD	JSO

ENERTIA CONSULTING GROUP
1529 MARKET STREET, SUITE 200
DENVER, COLORADO 80202

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QUINCY SOLAR GARDEN
ARAPAHOE COUNTY, COLORADO

TYPICAL DETAILS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 SCALE

DATE	JANUARY 05, 2015
FILE	3 DTL
DWG	DTL
SHEET	3 OF 3

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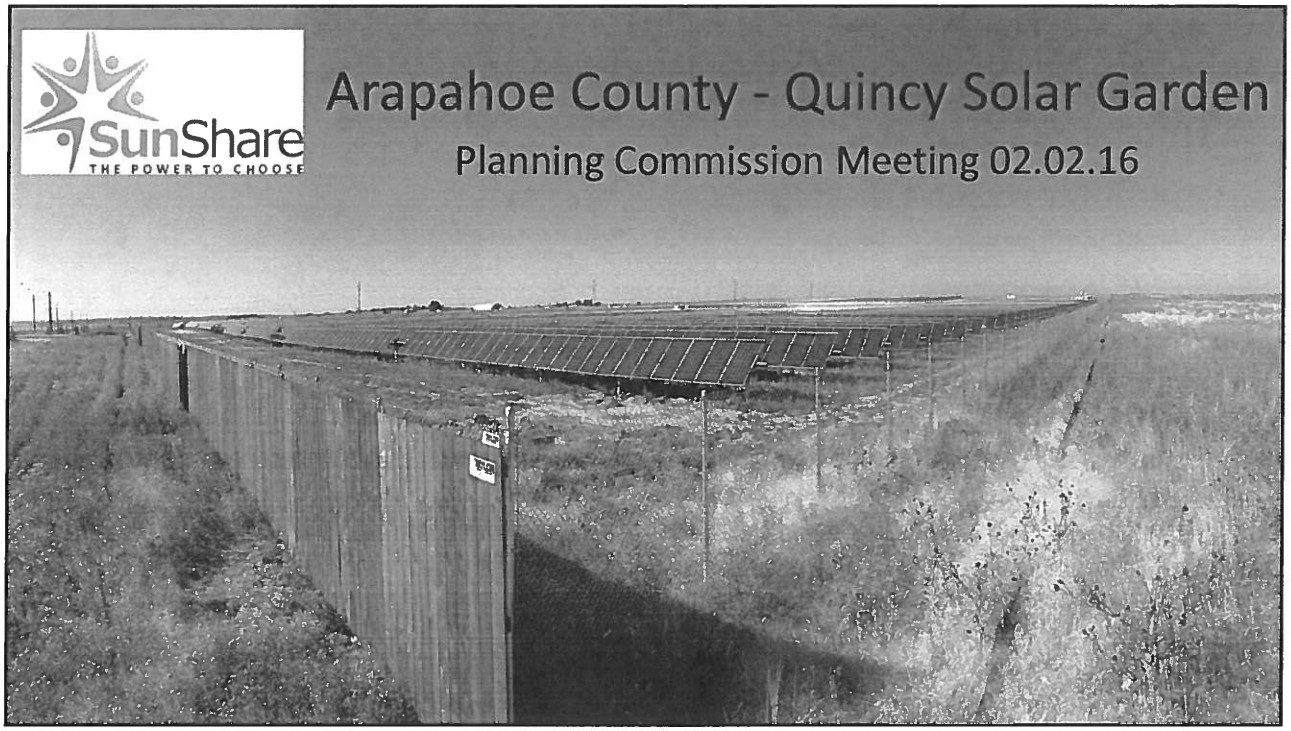
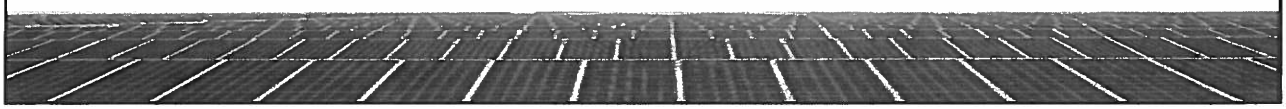


Thank You Arapahoe County Planning Staff!

- Sherman Feher - Senior Planner
- Spencer Smith – County Engineer
- Front desk support and support from other departments.
- Planning Committee
- Board of County Commissioners
- On Behalf of:
  - Jon Sullivan, Director of Project Development
  - Luke Rickard, Project Manager
  - Sean O'hearn, P.E. – Enertia Consulting Group – Civil Engineering and Land Development Consultant



SunShare Company Overview

- Founded in 2011
- Currently we have 55 employees
  - 30 in Colorado
  - 25 in Minnesota
- Solar gardens or farms deliver energy to subscribers across the community. Solar garden shares produce energy (kWh) that credit the energy bills of the subscribers
  - This is a 3 way contract between SunShare, Xcel Energy, and the Subscriber

Solar Garden Subscribers & Benefits

- Residents
  - 5% of last garden and future gardens is dedicated to low-income communities.
  - 15% of last garden went to dozens of local residents
- Business and Government
  - Previous subscribers include:
    - Kent Denver School (40%)
    - East Cherry Creek Valley Water District (40%)
- New subscriptions sales under way:
  - Local residents
  - School Districts & Government
  - Other Commercial/Industrial
- Community Benefits:
  - Savings on utility costs for residents, government and businesses
  - Economic stimulation
  - Clean & renewable energy source

Steps we've taken to plan project:

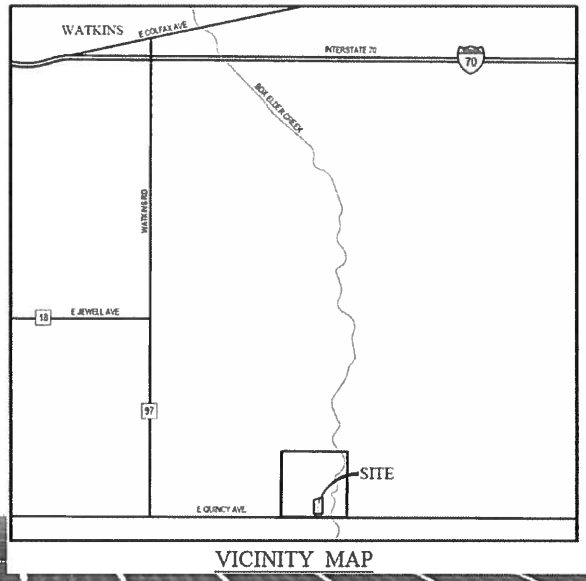
- Xcel feasibility study complete + 16 MW of awards to develop.
- Land is under lease from Stephen Tebo
- Archeological & Historical Society approval
- Army Corps of Engineers approval
- Colorado Parks and Wildlife approval
- Fire Code (NFPA),Electric Code (NEC), and Building Code (IBC) compliance (preliminary design only)

Steps we've taken to plan project (cont'd):

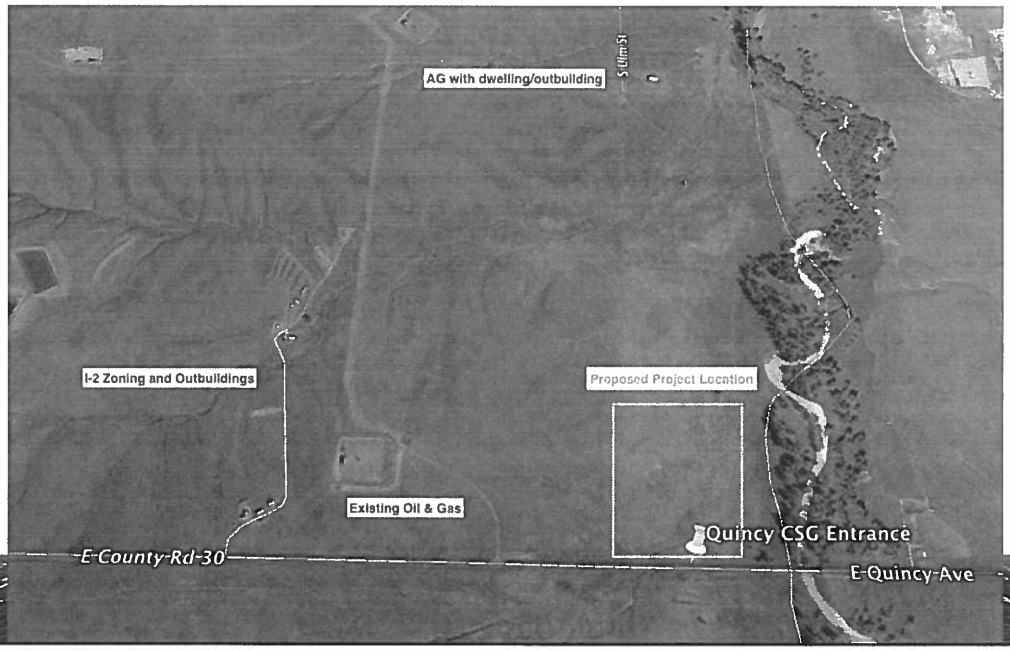
- Engagement of pipeline ROW holder for crossing agreement
- Arapahoe County Engineering Svcs. Dept. design conformance
- All required notifications have been made
- SunShare's development plan complies with County engineering, 1401 guidelines and Comprehensive Plan requirements

Land Parcel Location

- South of Watkins, CO
- 37055 E. County Road 30
- Surrounded by mostly vacant & undeveloped land
  - I-2 zoned parcel to the west with some outbuildings
  - AG zoned parcel to north with a single dwelling/outbuilding
  - Existing oil/gas extraction operations already present on subject parcel

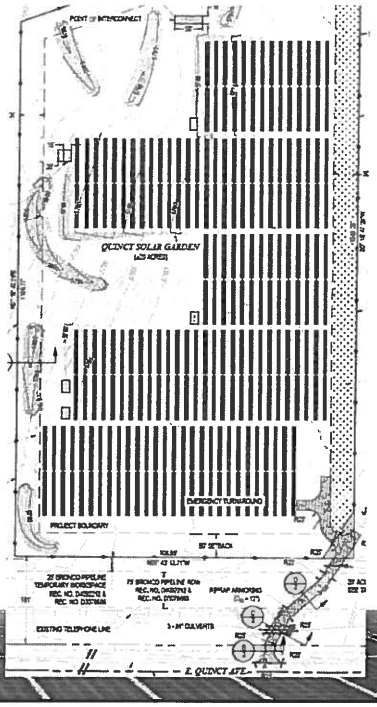


SURROUNDING USES



Site Development Plan

- Site plan maximizes the use of the most suitable land
- Minimized cut/fill grading activities for operational reasons only
- Use of existing access from E. Quincy Ave.
- Compliance with Arapahoe County design and engineering best practices
- Interconnection to existing 3-phase distribution architecture already present

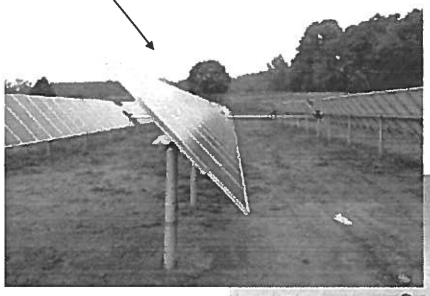


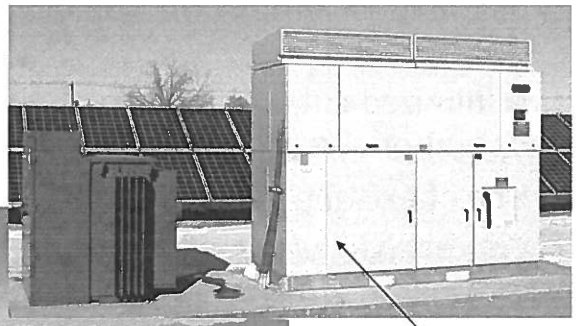
Project Timelines

- Install Timeline:
  - Break ground in Q1 2016 (est.)
  - Construction ~12weeks
- Operation Timeline:
  - 20 years for initial operation term
  - Possible extensions could be granted by utility

Equipment

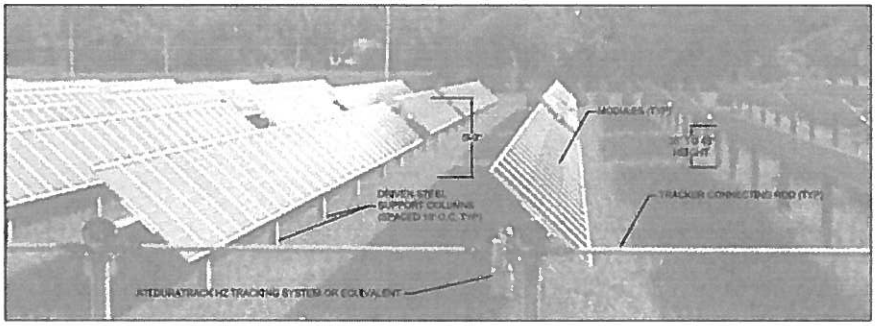
Single Axis Trackers





Inverter & Transformer

Approximate row spacing & height



TYPICAL PV ARRAY RACKING SYSTEM

NOT TO SCALE

SOLAR GARDEN CROSS SECTION

SCALE: 1" = 10'

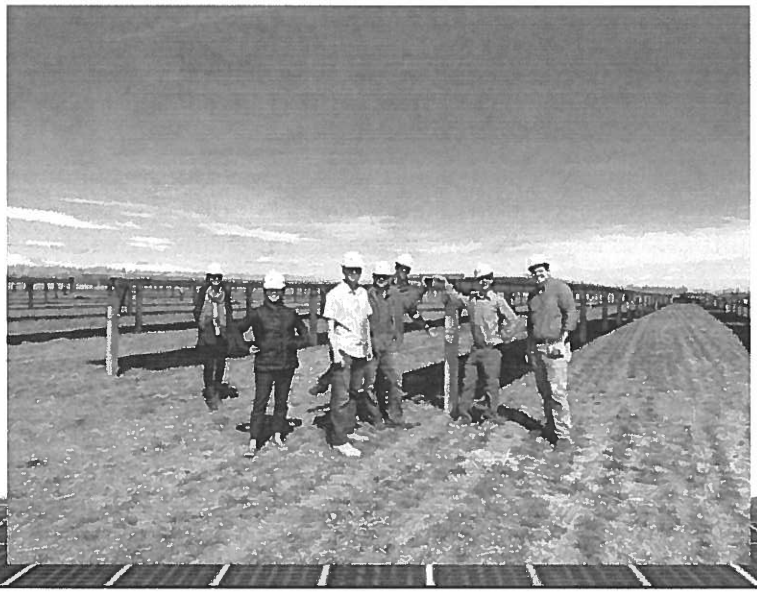
CONDITIONS OF APPROVAL

1. Plan Modification – we believe we have already made all required modifications and await notification of further requirements
2. Engineering Services – we believe we have already addressed all Engineering Services requests and await notification of further comments
3. Historic Importance – no records of paleontological or historical importance for this site were found. Should such conditions be uncovered during construction, we will notify the relevant authorities and develop a plan for mitigation or avoidance
4. Threatened or Endangered Species – no such plant or animal species were identified during our studies of the site. Should they be encountered, we will develop a plan to mitigate and minimize any potential impacts
5. Noxious weed control plan – we will develop and provide to the County a noxious weed control plan for the site prior to beginning construction activities

Final Thoughts

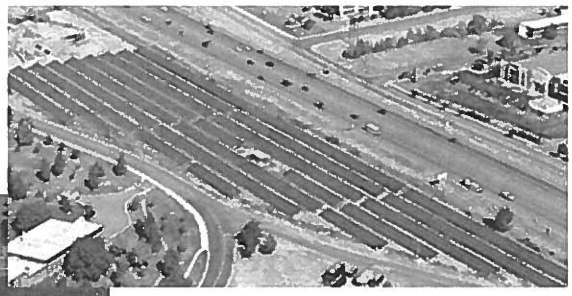
- SunShare requests a Use by Special Review Permit for the construction and operation of a Community Solar Garden
- SunShare looks forward to working with Arapahoe County on another successful project!
- Thank you for your time & consideration

Questions?



Industry Standard

- Denver Federal Center
  - Max height 12'
  - Borders 6th Ave (highway)
  - No screening fence or landscaping.



ARAPAHOE COUNTY
COLORADO'S FIRST

REGULAR MEETING OF THE ARAPAHOE COUNTY PLANNING COMMISSION
TUESDAY, FEBRUARY 2, 2016 AT 6:30 P.M.
LIMA PLAZA - ARAPAHOE ROOM - 6954 S LIMA ST, CENTENNIAL CO 80112

CASE NO. U15-001, QUINCY SOLAR GARDEN [SUNSHARE] / USE BY SPECIAL REVIEW

No.	NAME	ADDRESS	Are you IN FAVOR of approval or OPPOSED?	Do you wish to address the Board on this matter? Yes or No?
1	Luke Rickard	1441 18th St. Denver 80202	In Favor	Yes
2	Jon Sullivan	" "	In favor of course	Maybe
3	~~Richard Lewis~~	~~8931 E Wesley Ave 80231~~		
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