Title: Second Reading, Public Hearing, discussion and possible adoption of Bill No. 2738, an Ordinance for approval of a Development Agreement by and between the City of Sparks, Jackling Aggregates, LLC and QK, LLC concerning the development of a parcel 386.87 acre in size located at 555 Highland Ranch Parkway, Washoe County, NV (PCN160050)

Petitioner/Presenter: QK, LLC/Armando Ornelas, Assistant Community Services Director

Recommendation: The Planning Commission recommends that the City Council adopt Bill No. 2738, an ordinance for approval of a Development Agreement by and between the City of Sparks, Jackling Aggregates, LLC and QK, LLC concerning the development of a parcel 386.87 acre in size located at 555 Highland Ranch Parkway.

Financial Impact: No direct financial cost. The fiscal impact analysis submitted by the applicant estimates this annexation and single-family development of 1,223 single family units and 13 acres of commercial uses on the site will produce a projected positive fiscal impact over the 20-year analysis period.

Business Impact (Per NRS 237):

A Business Impact Statement is not required because this is not a rule.

Agenda I tem Brief:

The proposed Development Agreement (the "Agreement") is for a parcel 386.87 acres in size located at 555 Highland Ranch Parkway. The parties to the Agreement are the City of Sparks, Jackling Aggregates, LLC (the property owner) and QK, LLC (the developer). The Agreement also constitutes the property owner's petition for inclusion in Impact Fee Service Area #1. The Agreement is coming forward for City Council consideration in conjunction with three related requests for: annexation of the subject property into the city of Sparks; certification of a Comprehensive Plan amendment to change the land use designation of the property from Open Space (OS), Employment Center (EC) and Commercial (C) to Intermediate Density Residential (IDR) and Commercial (C); and, rezoning of the subject parcel from A40 (Agriculture) to SF6 (Single Family Residential – 6,000 sq. ft. lots) and C2 (General Commercial). On April 5, 2018, the Sparks Planning Commission voted to forward recommendations of approval to the City Council for the rezoning, annexation and development agreement requests and approved the Comprehensive Plan amendment.

#### Background:

The property that is the subject of the proposed Development Agreement (the "Agreement") is 386.87 acres in size and located north of Highland Ranch Parkway just west of the intersection with Pyramid Highway. (Refer to Vicinity Map). The site is currently vacant except for a Truckee Meadows Water Authority (TMWA) water tank located along Highland Ranch Parkway. The subject property was formerly the site of an aggregate mining operation. The aggregate pit is not visible from either Highland Ranch Parkway or Pyramid Highway as it is situated in a bowl surrounded by ridges. The remaining quarry area and substantial portions of the site have been graded and are intended for development. There is a paved access road connecting Highland Ranch Parkway to the quarry site.

The applicant's property is part of approximately 2,000 acres that were brought into the Sparks Sphere of Influence in 2002 as a Cooperative Planning Area with Washoe County. An area plan, known as the West Pyramid Plan, was prepared for this acreage and certified by the City Council in July of 2008. The land use designations for the subject property on the 2016 Sparks Comprehensive Plan Land Use Map – Open Space, Employment Center, and Commercial – are equivalent to but replaced the land uses designated for the site in the West Pyramid Plan.

On March 13, 2017, the City Council directed staff to negotiate and prepare a development agreement pursuant to NRS 278.0201 for the subject property. The proposed Agreement is in response to the Council's direction and is intended to address the type and intensity of development on the site, along with the entitlements necessary to develop the property. The

Agreement also addresses the requirements and terms for the provision of infrastructure, including the property's possible inclusion in Impact Fee Service Area Number 1 (IFSA#1). Another purpose of the Agreement is to provide for the applicant to waive, as permitted by NRS 278.0201, certain statutory timeframes for the processing of applications so that the land use requests can be considered concurrently by the Planning Commission and the City Council. Finally, for the owners and developer, the Agreement is intended to provide for greater regulatory predictability during the project's build-out.

The Agreement is coming forward for City Council consideration in conjunction with three related requests for: annexation of the subject property into the city of Sparks; certification of a Comprehensive Plan amendment to change the land use designation of the site from Open Space (OS), Employment Center (EC) and Commercial (C) to Intermediate Density Residential (IDR) and Commercial (C); and, rezoning of the subject parcel from A40 (Agriculture) to SF6 (Single Family Residential – 6,000 sq. ft. lots) and C2 (General Commercial).

On April 5, 2018, the Planning Commission reviewed the applicant's four requests and recommended the City Council approve the annexation petition, certify the comprehensive plan amendment and approve the development agreement and rezoning requests. (Please refer to the Planning Commission Report of Action.)

On May 9, 2018, the Regional Planning Commission (RPC) held a public hearing and reviewed the requested Comprehensive Plan amendment. The RPC also reviewed the project that is proposed for the site, as described in the development agreement, as a project of regional significance. The RPC determined that both the Comprehensive Plan amendment and the proposed project conform with the Truckee Meadows Regional Plan.

#### Analysis:

The proposed Agreement is for a parcel 386.87 acres in size located at 555 Highland Ranch Parkway. The Agreement also constitutes the property owner's petition for inclusion in Impact Fee Service Area #1. The parties to the Agreement are the City of Sparks, Jackling Aggregates, LLC (the property owner) and QK, LLC (the developer).

As discussed in the Background section, this request is coming forward for City Council consideration in conjunction with three related requests for annexation, a Comprehensive Plan land use amendment and rezoning of the property. The purpose of bundling a development agreement with these other requests is to provide the public, third-party reviewing agencies, the Planning Commission, and City Council with an understanding of the development proposed for the subject property at the time these requests are considered. The Agreement is also intended to serve as the basis for satisfying the so-called concurrency requirement (Goal 3.5 and Policy 3.5.1) of the 2012 Truckee Meadows Regional Plan for infrastructure and public services that must be addressed with the land use applications. For these reasons, the Agreement supports the findings for approval for the other three requests.

Per SMC 20.05.09 (Development Agreements), the City Council may approve a development agreement if it is consistent with the Comprehensive Plan and otherwise consistent with Nevada or federal law. In particular, the Agreement is intended to serve as the basis for satisfying the concurrency requirement for the associated land use approvals. The Agreement must be approved by the Sparks City Council to take effect. It includes the following provisions:

- Section Two is intended to provide the developer a degree of regulatory predictability during the build-out of the project. It defines the rules and fees that apply to development of the project.
- Permitted uses and density are addressed in Section 3.1, which specifies that 1,200-1,800 residential units are permitted at a gross density of between 3.1 and 4.6 dwelling

units per acre. Single family detached and attached units are permitted in the portion of the property for which SF6 zoning is requested. All uses permitted in the C2 zoning district, including multi-family housing (by Conditional Use Permit), would be permitted in the portion of the property for which C2 zoning is requested.

 Required infrastructure improvements are addressed in Section 3.2. This includes the offsite infrastructure, at the developer's expense, necessary for the proposed project. The required off-site improvements include sanitary sewer upgrades and flood control and drainage improvements.

The Agreement requires the widening (to 4 travel lanes), prior to the issuance of any building permits for structures, of Highland Ranch Parkway from Pyramid Highway to the entrance to the project. Also required are the improvements to the intersection of Highland Ranch Parkway and Pyramid Highway recommended in the Traffic Study prepared by Solaegui Engineers, which has been reviewed by City staff and the Nevada Department of Transportation (NDOT). The intersection improvements must be completed prior to issuance of any certificate of occupancy for, or final inspection of, any dwelling unit in excess of 650 dwelling units.

- Section 3.2(d) also requires, per the determination of the City's Fire Chief, construction of a private, gated secondary fire apparatus access road prior to issuance of a certificate of occupancy for and/or final inspection of any dwelling unit in excess of 200 dwelling units. Section 3.2(d) also requires that the interior street providing primary access to the project be a four-lane, median-divided roadway from Highland Ranch Parkway to the first entrances of Villages 3 and 4, which are shown on the land plan exhibit to the development agreement. In addition, all dwelling units and commercial structures intended for or used for human occupancy must be equipped with fire suppression systems. Finally, emergency access points must be provided to all common areas. These access points shall be a minimum of sixteen (16) feet wide, gated, and posted with signs prohibiting parking.
- Section 3.11 constitutes the developer's and property owner's petition to include the subject property in IFSA#1 and their agreement not to withdraw the petition except as permitted by the Agreement.
- Section 3.4 of the Agreement limits the total area to be cleared, graded or disturbed to 225 (58.2%) of the 387 acres. The developer is required to convey, with each final subdivision map, the lands designated as open space to the entity responsible for maintenance of those lands (e.g., homeowner's association).
- Section Four permits the City Council to review the developer's compliance with the terms of the Agreement within 12 months of its effective date. It also requires the developer to report, every 24 months after that initial review, on the number of units approved and built, development densities, and status of the project.
- Section 6.1 specifies the duration of the Agreement, which is 15 years. The Agreement grants the developer the right to request one 5-year extension subject to certain conditions.

#### Consistency with Comprehensive Plan

The Planning Commission determined that the Agreement is consistent with the Comprehensive Plan in part because it serves as the petition for the subject property to be brought into IFSA#1. Inclusion of the subject property in IFSA#1 provides a plan and funding mechanism for the provision of sanitary sewer and storm drain improvements, a fire station, and regional trails to serve development on this site. In Section 3.2, the Development Agreement also obligates the developer to increase the capacity of Highland Ranch Parkway between the Pyramid Highway and the entrance to the subject property, and to construct improvements to the intersection of those two roadways necessary to maintain a Level of Service E.

The Agreement thus supports and is consistent with the following Comprehensive Plan goals and policies:

Policy MG5 When reviewing master plan amendments for sites over 5 acres, the City will evaluate or cause to be evaluated: a) the impacts on existing and planned facilities and infrastructure; b) the impacts on existing and planned public services; c) the proposed land use in relationship to existing land uses; and, d) the fiscal implications for public service providers of the proposed land use changes as documented in a fiscal impact analysis.

Policy CF1: When reviewing new development, the City will not approve an application unless the City services can be provided at acceptable service levels.

The Planning Commission viewed the proposed Agreement as supporting a finding that the City can provide municipal services to the subject property concurrent with its development. This enabled the Planning Commission to make certain findings, including those regarding concurrency and fiscal impact, in support of the applicant's annexation, Comprehensive Plan amendment, and rezoning requests.

#### Alternatives:

- 1. The City Council can adopt Bill 2738 for approval of the Development Agreement as presented.
- 2. The City Council can modify the Development Agreement subject to the consent of Jackling Aggregates, LLC and QK, LLC.
- 3. The City Council can reject the Development Agreement.

#### Recommended Motion:

I move to adopt Bill No. 2738, an Ordinance for approval of a Development Agreement by and between the City of Sparks, Jackling Aggregates, LLC and QK, LLC concerning the development of a parcel 386.87 acre in size located at 555 Highland Ranch Parkway, Washoe County, NV.

When Recorded Return to: Sparks City Clerk PO Box 857 Sparks, NV 89432

BILL NO. 2738	INTRODUCED BY COUNCIL
ORDINANCE NO	PCN16050 - THE QUARRY, 386.87 ACRES AT 555
	HIGHLAND RANCH PARKWAY

AN ORDINANCE BY THE CITY OF SPARKS TO APPROVE A DEVELOPMENT AGREEMENT WITH JACKLING AGGREGATES, LLC AND QK, LLC CONCERNING THE DEVELOPMENT OF A PARCEL 386.87 ACRES IN SIZE LOCATED AT 555 HIGHLAND RANCH PARKWAY, SPARKS, NEVADA AND OTHER MATTERS PROPERLY RELATED THERETO.

WHEREAS, Jackling Aggregates, LLC owns certain real property situated in the County of Washoe, State of Nevada more specifically described as Assessor's Parcel Number 083-011-15, more particularly described on <a href="Exhibit">Exhibit</a> A and depicted on <a href="Exhibit">Exhibit</a> attached hereto and incorporated by this reference (collectively, the "Property");

WHEREAS, the City is authorized, pursuant to Chapter 278 of the Nevada Revised Statutes and Title 20 of the Sparks Municipal Code, to enter into agreements concerning the development of land such as this Agreement with persons having a legal or equitable interest in real property;

WHEREAS, QK, LLC filed annexation, comprehensive plan and zoning applications with the City of Sparks to annex the Property into

the city of Sparks and change the comprehensive plan and zoning designations on the Property, more particularly described as City of Sparks Application Nos. PCN16-0050, AX16-0003, MPA17-0005, and RZ17-0006 (collectively, the "Applications");

WHEREAS, the City, Jackling Aggregates, LLC and QK, LLC (collectively, the "Parties") acknowledge that this Agreement will (i) promote the health, safety and general welfare of the City and its inhabitants, (ii) minimize uncertainty in planning for and securing orderly development of the Property and surrounding areas, (iii) ensure attainment of the maximum efficient utilization of resources within the City at the least economic cost to its citizens, and (iv) otherwise achieve the goals and purposes for which the laws governing development agreements were enacted;

WHEREAS, the Parties desire to enter this Agreement in order to provide for processing of the Applications and development of the Property; and

WHEREAS, NRS 278.0203 and SMC 20.05.09 allow the Sparks City Council to approve a development agreement by ordinance.

#### NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF SPARKS DOES ORDAIN:

- SECTION 1: The Development Agreement by and between the City of Sparks, Jackling Aggregates, LLC and QK, LLC is approved.
- **SECTION 2:** All ordinances or parts of ordinances in conflict herewith are hereby repealed.
- **SECTION 3:** The City Clerk is instructed and authorized to publish the title to this ordinance as provided by law and to record the approved Development Agreement as provided by law.
- **SECTION 4:** This ordinance shall become effective upon passage, approval, publication and recordation.
  - SECTION 5: The provisions of this ordinance shall be

liberally construed to effectively carry out its purposes in the interest of the public health, safety, welfare and convenience.

SECTION 6: If any subsection, phrase, sentence or portion of this section is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions.

**SECTION 7:** The City Council finds that this ordinance is not likely to impose a direct and significant economic burden upon a business or directly restrict the formation, operation or expansion of a business, or is otherwise exempt from Nevada Revised Statutes Chapter 237.

PASSED AND ADOPTED this	s, day of,
2018, by the following vote of	
AYES:	
NAYS:	
ABSENT:	
ABSTAIN:	
APPROVED this	day of,
2018 by:	
	CDVO VARIETY V
	GENO MARTINI, Mayor
ATTEST:	APPROVED AS TO FORM & LEGALITY:
Teresa Gardner, City Clerk	CHESTER H. ADAMS, City Attorney

#### Exhibit A

# The Quarry: Legal Description

All that certain real property situate within a portion of Section 9, Township 20 North, Range 20 East, Mount Diablo Meridian, County of Washoe, State of Nevada, described as follows:

Parcel 2 as shown on the Record of Survey to support a Boundary Line Adjustment (RS3818) filed within the Official Records of Washoe County, Nevada on June 30, 2000 as File No. 2460839 and being more particularly described as follows:

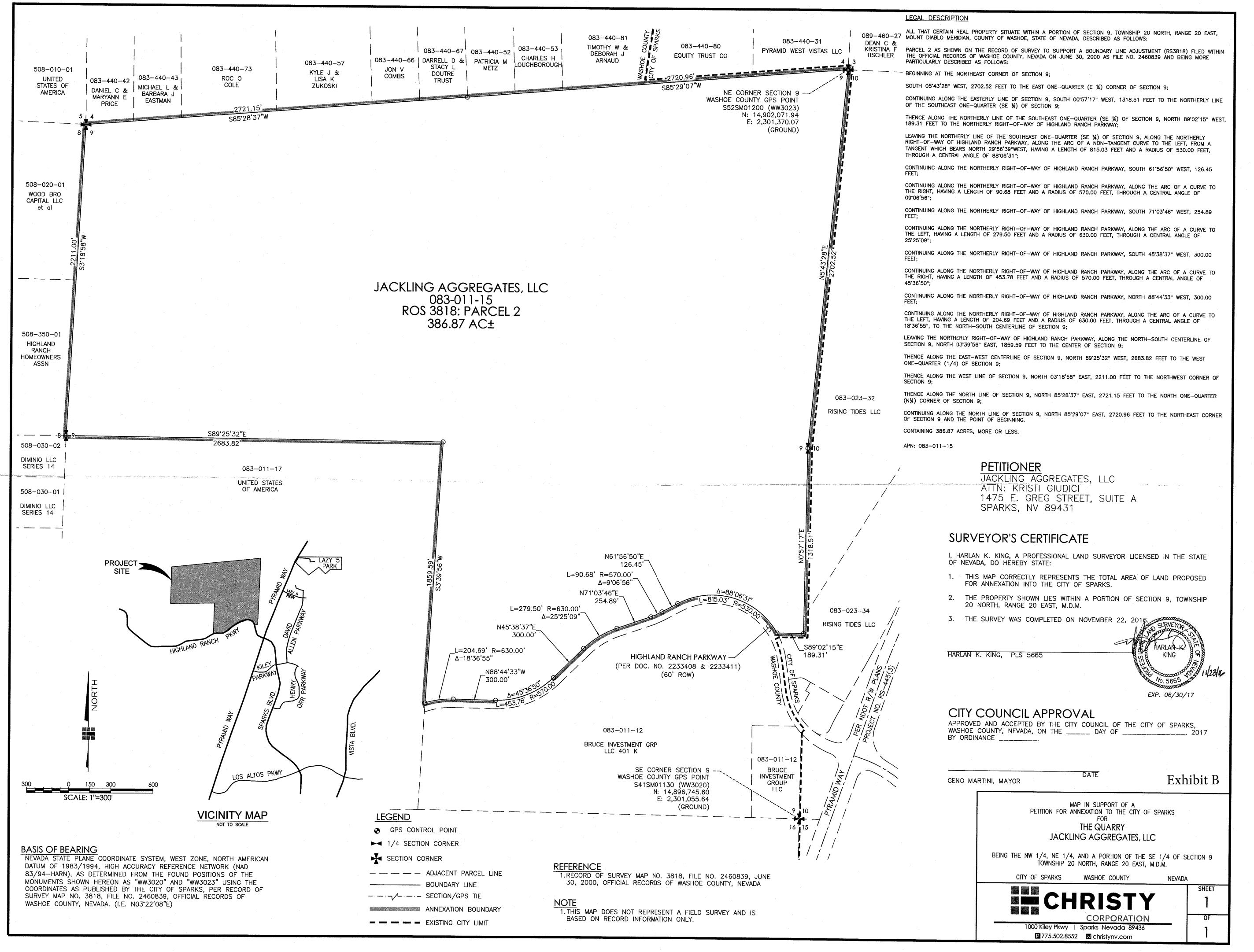
Beginning at the Northeast corner of Section 9;

South 05°43'28" West, 2702.52 feet to the East one- quarter (E  $\frac{1}{4}$ ) corner of Section 9; Continuing along the Easterly line of Section 9, South 00°57'17" West, 1318.51 feet to the Northerly line of the Southeast one-quarter (SE 1/4) of Section 9; Thence along the Northerly line of the Southeast one-quarter (SE 1/4) of Section 9, North 89°02'15" West, 189.31 feet to the Northerly right-of-way of Highland Ranch Parkway; Leaving the Northerly line of the Southeast one-quarter (SE 1/4) of Section 9, along the Northerly rightof-way of Highland Ranch Parkway, along the arc of a non-tangent curve to the left, from a tangent which bears North 29°56'39"West, having a length of 815.03 feet and a radius of 530.00 feet, through a central angle of 88°06'31"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, South 61°56'50" West, 126.45 feet; Continuing along the Northerly right-of-way of Highland Ranch Parkway, along the arc of a curve to the right, having a length of 90.68 feet and a radius of 570.00 feet, through a central angle of 09°06'56"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, South 71°03'46" West, 254.89 feet; Continuing along the Northerly rightof-way of Highland Ranch Parkway, along the arc of a curve to the left, having a length of 279.50 feet and a radius of 630.00 feet, through a central angle of 25°25'09"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, South 45°38'37" West, 300.00 feet; Continuing along the Northerly right-of-way of Highland Ranch Parkway, along the arc of a curve to the right, having a length of 453.78 feet and a radius of 570.00 feet, through a central angle of 45°36'50"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, North 88°44'33" West, 300.00 feet; Continuing along the Northerly right-of-way of Highland Ranch Parkway, along the arc of a curve to the left, having a length of 204.69 feet and a radius of 630.00 feet, through a central angle of 18°36'55", to the North-South centerline of Section 9; Leaving the Northerly right-of-way of Highland Ranch Parkway, along the North-South centerline of Section 9, North 03°39'56" East, 1859.59 feet to the center of Section 9; Thence along the East-West centerline of Section 9, North 89°25'32" West, 2683.82 feet to the West one-quarter (1/4) of Section 9; Thence along the West line of Section 9, North 03°18'58" East, 2211.00 feet to the Northwest corner of Section 9; Thence along the North line of Section 9, North 85°28'37" East, 2721.15 feet to the North one-quarter (N 1/4) corner of Section 9; Continuing along the North line of Section 9, North 85°29'07" East, 2720.96 feet to the Northeast corner of Section 9 and the Point of Beginning.

Containing 386.87 acres, more or less.

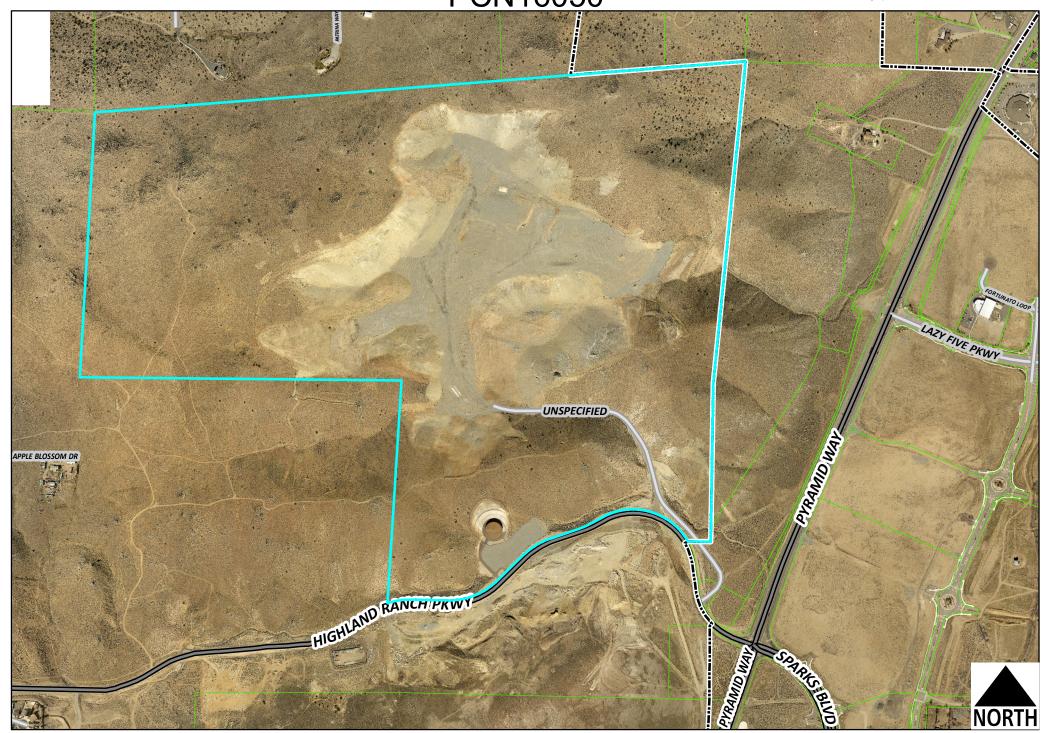
APN: 083-011-15

11/23/16



Vicinity Map PCN16050

Exhibit A



Recording Requested by and When Recorded Mail To:

Teresa Gardner, City Clerk City of Sparks 431 Prater Way P.O. Box 857 Sparks, Nevada 89432-0857

The	unders	igne	d hei	eby aff	ïrms	that th	is do	cument
subn	nitted fo	or re	cordi	ng does	not	contain	the p	personal
	mation 3.030.	of	any	person	or	persons	per	N.R.S.
Sign	ature of	Dec	laran	t or Age	nt		<u>-</u>	

THIS DEVELOPMENT AGREEMENT ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_\_, 2018, by and between the CITY OF SPARKS, a municipal corporation of the State of Nevada ("City"); Jackling Aggregates, LLC, a Nevada Limited Liability Corporation ("Owner"); and QK, LLC, a Nevada Limited Liability Corporation ("Master Developer"). The City and Owner and Master Developer are sometimes individually referred to as a "Party" and collectively as the "Parties."

#### RECITALS

- A. The City is authorized, pursuant to Chapter 278 of the Nevada Revised Statutes and Title 20 of the Sparks Municipal Code, to enter into development agreements such as this Agreement with persons having a legal or equitable interest in real property in order to establish long-range plans for the development of such property.
- B. Owner has authorized Master Developer to develop the Property legally described by "Exhibit A" (metes and bounds) attached hereto (the "Property").
- C. The Property currently consists of one (1) parcel that totals 386.87 acres, as shown in "Exhibit B" (graphic depiction) attached hereto.
- D. Master Developer proposes developing the Property with residential and commercial uses as allowed by the Code in effect on the date of this Agreement in the land uses identified in the master plan amendment and zone change amendment described in Case No. PCN160050 and the Land Plan attached as "Exhibit C."
- E. The Parties acknowledge that this Agreement will (i) promote the health, safety and general welfare of the City and its inhabitants, (ii) minimize uncertainty in planning for and securing orderly development of the Property and surrounding areas, (iii) ensure attainment

of the maximum efficient utilization of resources within the City at the least economic cost to its citizens, and (iv) otherwise achieve the goals and purposes for which the laws governing development agreements were enacted.

- F. As a result of the development of the Property, the City will receive needed housing, jobs, sales and other tax revenues and significant increases to its real estate property tax base that meet or exceed the cost of providing public services, facilities and infrastructure to the Property as described in the Fiscal Analysis attached as "Exhibit D." The City will additionally receive a greater degree of certainty with respect to the timing and orderly development of the Property and City infrastructure by a developer with significant economic resources and experience in the development process.
- G. The Master Developer understands and acknowledges that there are insufficient public facilities and infrastructure available at the Property in order to properly construct, populate, and serve the Property. Subject to the terms and conditions of this Agreement, the Master Developer agrees to provide the necessary improvements to public facilities and infrastructure on the Property and outside the Property as specifically provided for in the Infrastructure Plan attached as "Exhibit E."
- H. The Master Developer understands and acknowledges that the Property is currently outside a four-minute travel time for Fire Department response to fire, medical, and other emergency service calls and, due to the Property's location and characteristics, certain design requirements and development restrictions as stated in this Agreement are appropriate and necessary.
- I. The Master Developer understands and acknowledges that the development of the Property is constrained by the steep slopes naturally occurring thereon as depicted in the Slope Analysis, attached hereto and incorporated by reference as part of the Infrastructure Plan, "Exhibit E."
- J. The Master Developer desires to enter into a development agreement with City pursuant to NRS 278.0201 to obtain reasonable assurances that it may develop the Property in accordance with the terms, conditions and intent of this Agreement. The Master Developer's decision to enter into this Agreement and commence development of the Property is based on expectations of proceeding and the right to proceed with the Property in accordance with this Agreement and any other Applicable Rules.
- K. The Master Developer further acknowledges that this Agreement was made part of the record at the time of its approval by the City Council and that the Master Developer agrees without protest to the requirements, obligations, limitations, and conditions imposed by this Agreement.
- L. The City Council, having determined that the development of the Property in the manner proposed in Exhibits C, D, and E is beneficial to the City, that this Agreement is in conformance with the City's Comprehensive Plan, the Sparks Municipal Code, and state and federal law, and that all other substantive and procedural requirements for approval of

this Ag	reement have been satisfied, and after giving notice as required by relevant law, and
after in	troducing this agreement by ordinance at a public meeting on
	and after a subsequent public hearing to consider the substance of this Agreement
on	, found this Agreement to be in the public interest and lawful
in all re	espects, and approved the execution of this Agreement by the Mayor of the City of
<b>Sparks</b>	

NOW, THEREFORE, in consideration of the foregoing recitals, the promises and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

# SECTION ONE DEFINITIONS

For all purposes of this Agreement, except as otherwise expressly provided or unless the context otherwise requires, the following terms shall have the following meanings:

"Administrator" means the person holding the position of City Manager of the City of Sparks at any time or his designee.

"Agreement" means this development agreement and at any given time includes all addenda and exhibits incorporated by reference and all amendments which hereafter are duly entered into in accordance with the terms of this Agreement.

"Applicable Rules" means and refers to:

- (a) The provisions of the Code and all other uniformly-applied City rules, policies, regulations, ordinances, laws, general or specific, which were in effect on the Effective Date, including without limitation City ordinances, resolutions, or regulations governing the permitted uses of land, density and standards for design;
- (b) This Agreement; and
- (c) The term "Applicable Rules" does not include:
  - (i) Any ordinances, laws, policies, regulations or procedures adopted by a governmental entity other than City;
  - (ii) Any fee or monetary payment prescribed by City ordinance which is applied to any development or construction subject to the City's jurisdiction; or
  - (iii) Any applicable state or federal law or regulation.

"Building Codes" means the Building Codes and Fire Codes in effect at the time of issuance of a permit for a particular development activity.

"City" means the City of Sparks, together with its successors and assigns.

"City Council" means the Sparks City Council.

"Code" means the Sparks Municipal Code, including all ordinances, rules, regulations, standards, criteria, manuals, appendices, and other references adopted therein.

"Development Parcels" means legally subdivided parcels of land within the Project that are intended to be developed or further subdivided.

"Development Area" means the areas of the Property that the Master Developer expects or plans to develop, as shown in Exhibit B and Exhibit C to this Agreement.

"Effective Date" means the date, on or after the adoption by City of an ordinance approving the execution of this Agreement, and the subsequent execution of this Agreement by the Parties, on which this Agreement is recorded in the Office of the County Recorder of Washoe County. Each party agrees to cooperate as requested by the other party to cause the recordation of this Agreement without delay.

"Entitlement" means any land use approval, including without limitation, any master plan or other zoning approval, annexation, Subdivision Map, tentative map, final map, parcel map, special use permit, permitted land use, density of tentative or final mapped Development Parcels, building permit, grading permit, and other land use entitlements or permits, issued for the Project or any portion of the Property or in favor of Master Developer or its successor(s) in connection with the development of the Property.

"Entitlement Request" means a request by Master Developer or its authorized designee for any land use approval for development of the Project in accordance with this Agreement, including, without limitation, parcel map, tentative subdivision map or final subdivision map, and including the annexation, master plan amendment, and zoning amendment contemplated by this Agreement.

"Infrastructure Plan" means a collection of documents that fully describe the public and private infrastructure, on and off the Property, necessary to support the adopted Land Plan and the proposed method(s) of financing construction of the public infrastructure included therein, including, but not limited to, grading plans, drainage studies, sanitary sewer studies, traffic studies, and utility improvement plans.

"Land Plan" means a collection of documents that fully describe the physical characteristics of the Property and the permitted uses of the Property, including, but not limited to, a detailed description and depiction of the permitted uses and associated densities, intensities and locations within the Project; physical characteristics of the Property such as floodplain, slope and soil, Slope Analysis, the availability and accessibility of water that meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the Project, the availability and accessibility of utilities, the availability and accessibility of public services, the availability and accessibility of water and services for fire protection, prevention and containment, and the effect of the Project on existing public streets. attached to this Agreement as Exhibit C.

"Master Developer" means QK, LLC, a Nevada Limited Liability Corporation, and its successors and assigns as permitted by the terms of this Agreement.

"Nonconforming Entitlement Request" means a request by Master Developer or its authorized designee for any amendment to this Agreement, Land Plan amendment, master plan amendment, or zoning amendment, or an application for a Subdivision Map which, when evaluated in conjunction with all existing Entitlements and potential future development in the Project, proposes a total number of units which will result in the Project having less than the minimum or more than the maximum number of permitted units set forth in Section 3.1 at Project build out.

"Owner" means Jackling Aggregates, LLC, a Nevada Limited Liability Corporation, the entity that holds title to the real property described by Exhibit A, and its successors and assigns as permitted by the terms of this Agreement.

"Party," when used in the singular form, means either Owner, Master Developer, or City, and in the plural form of "Parties" means Master Developer, Owner, and City.

"Project" means the Property and any and all improvements provided for or constructed thereupon.

"Property" means that certain 386.87 gross acres of real property that are the subject of this Agreement as described in Exhibit A.

"Slope Analysis" means a slope or cell map that groups small areas of similar slope together, gridded at a maximum contour interval of 2 feet. The Slope Analysis shall depict the following slope categories and may depict additional subcategories within said categories: 0-15%, 16-25%, 26-30%, and 30% or greater.

"Subdivision Map" means any instrument under the Nevada Revised Statutes and the Code that legally subdivides property or gives the right to legally subdivide property.

"Term" means the temporal duration of this Agreement.

# SECTION TWO APPLICABLE RULES AND CONFLICTING LAWS

# 2.1 Reliance on the Applicable Rules

City and Master Developer agree that Master Developer will be permitted to carry out and complete the development of the Project in accordance with the terms of this Agreement, the Land Plan, the Infrastructure Plan, and the Applicable Rules. The terms of this Agreement shall supersede any conflicting provision of the Code except as provided in Section 2.2 below.

# 2.2 Application of Subsequently Enacted Rules by the City

The City shall not amend, alter or change any Applicable Rule as applied to the development of the Project, or apply a new fee, rule, regulation, resolution, policy or ordinance to the development of the Project, except as follows:

- (a) The development of the Project shall be subject to the Building Codes and Fire Codes in effect at the time of issuance of the permit for the particular development activity.
- (b) The application of a new uniformly applied rule, regulation, resolution, policy or ordinance to the development of the Project is permitted, provided that such action is necessary to protect the health, safety and welfare of City residents, does not reduce the permitted density or land use types, does not prevent the type of units or number of permitted units in the Project as set forth in this Agreement, and is consistent with the efficient development and preservation of the entire Project.
- (c) Nothing in this Agreement shall preclude the application to the Project of new or changed rules, regulations, policies, resolutions or ordinances specifically mandated and required by changes in state or federal laws or regulations necessary to protect the health, safety and welfare of City residents. In such event, the provisions of Sections 2.4 and 2.5 of this Agreement are applicable.
- (d) Should the City adopt or amend rules, regulations, policies, resolutions or ordinances and apply such rules to the development of the Project, other than pursuant to one of the above Sections 2.2(a), 2.2(b) or 2.2(c), the Master Developer shall have the option, in its sole discretion, of accepting or rejecting such new or amended rules by giving written notice of such acceptance or rejection within 90 days of the application of such new or amended rules to the Project. If accepted, City and the Master Developer shall subsequently execute an amendment to this Agreement evidencing the Master Developer's acceptance of the new or amended ordinance, rule, regulation or policy within a reasonable time. If rejected, the new or amended rules will not apply to the Project. Master Developer's failure to accept or reject new or amended rules within 90 days constitutes acceptance of the new or amended rules for that instance.

#### 2.3 Application of New Fees

Notwithstanding Section 2.2 above, City may increase existing cost-based processing fees, entitlement processing fees, Entitlement Request fees, inspection fees, plan review fees, facility fees, or sewer connection fees that uniformly apply to all or similarly situated development in City.

#### 2.4 Conflicting Federal or State Rules

In the event that any federal or state laws or regulations prevent or preclude compliance by City or Master Developer with one or more provisions of this Agreement or require changes to any

approval given by City, this Agreement shall remain in full force and effect as to those provisions not affected, and:

- (a) Notice of Conflict. A Party, upon learning of any such matter, will provide the other Parties with written notice of the conflicting laws or regulations and provide a copy of any such law, rule, regulation or policy together with a statement of how any such matter conflicts with the provisions of this Agreement; and
- (b) Modification Conferences. The Parties shall, within thirty (30) calendar days of the notice referred to in the preceding subsection, meet and confer in good faith and attempt to modify this Agreement to bring it into compliance with any such federal or state law, rule, regulation or policy.

# 2.5 City Council Hearings

In the event a Party believes that an amendment to this Agreement is necessary due to the effect of any federal or state law, rule, regulation or policy, the proposed amendment shall be scheduled for hearing before the City Council. The City Council shall determine the exact nature of the amendment necessitated by such federal or state law or regulation. Master Developer shall have the right to offer oral and written testimony at the hearing and may support or oppose such change. Any amendment ordered by the City Council pursuant to a hearing contemplated by this Section is subject to judicial review, but such review shall be filed within twenty-five (25) calendar days from the date of the hearing.

# SECTION THREE PLANNING AND DEVELOPMENT OF THE PROJECT

# 3.1 Permitted Uses and Density

Subject to all the terms and conditions of this Agreement, Master Developer agrees to build the Project described by Exhibit C subject to the design standards adopted in the Code and as follows:

- (a) Number of Units Permitted: 1200-1800 units
- (b) Permitted Residential Unit Types: Single Family Detached/Attached
- (c) Permitted Commercial Uses: Those uses permitted in the C2 zoning district by Title 20 of the Sparks Municipal Code will be permitted in the portion of the Property with the C2 zoning designation. All conditions and regulations applicable to C2 uses set forth in Title 20 of the Code apply to such uses upon the Property. If any part of the Property is developed for multi-family residential use, the multi-family dwelling units shall be counted toward the number of units permitted in the Project.
- (d) Gross Density: A minimum of 3.1 to a maximum of 4.6 du/acre
- (e) Minimum Reservation of Open Space: 100 Acres

# 3.2 Required Infrastructure Improvements

Subject to all the terms and conditions of this Agreement, Master Developer agrees to construct all infrastructure necessary to support the Project as described in Exhibit E. Master Developer further agrees to install, at Master Developer's expense, off-site infrastructure necessary to provide services to the Project, including without limitation:

- (a) Sanitary sewer conveyance upgrades that are necessary based on the increased flows resulting from the anticipated land use changes resulting in a residential unit count that would generate sewage volumes 200% to 300% greater than attributed to the site in the sewer model; and
- (b) Improvements to public streets, sidewalks, curbs, and gutters that are necessary based on the increased traffic resulting from the anticipated land use changes in the Project. This includes but is not limited to off-site improvements to Highland Ranch Parkway and to the intersection of Highland Ranch Parkway and Pyramid Highway as follows:
  - (i) Prior to issuance of any building permits for structures, the widening to four travel lanes of Highland Ranch Parkway from Pyramid Highway to the entrance to the Project.
  - (ii) Prior to or concurrently with submitting an application for a tentative map and/or for multi-family residential units exceeding, in aggregate, 650 dwelling units, the Master Developer shall submit an encroachment permit application to the Nevada Department of Transportation to complete all improvements to the intersection of Highland Ranch Parkway and Pyramid Highway recommended in the The Quarry Traffic Study dated September (25), 2017, with an addendum dated March 12, 2018, and prepared by Solaegui Engineers, incorporated by reference herein as part of the Infrastructure Plan attached hereto as Exhibit E. All improvements from the entrance to the Project to the intersection of Highland Ranch Parkway and Pyramid Highway shall be completed prior to issuance of any certificate of occupany for or final inspection of any dwelling unit in excess of 650 dwelling units in the Project.
- (c) Flood control and drainage improvements that are necessary based on the anticipated land use changes in the Project.
  - (i) If the Property is included in Impact Fee Service Area Number 1, the City will consider for inclusion in the Impact Fee Service Area Number 1 Capital Improvements Plan any flood control and drainage improvements that have regional impacts as illustrated by a hydrology study to be completed at Master Developer's expense. The Parties agree that nothing contained in this Agreement constitutes in any way a pre-approval or authorization of the Property's participation in Impact Fee Service Area Number 1 or a pre-

- approval or authorization for inclusion of any flood control or drainage improvements in the Impact Fee Service Area Number 1 Capital Improvements Plan.
- (ii) Master Developer shall design and construct all flood control and drainage improvements, whether onsite or off-site, required to comply with the Truckee Meadows Regional Drainage Manual and the approval of the Administrator. Design rainfall depths shall utilize the 24-hour point precipitation frequency estimates from the National Oceanic and Atmospheric Administration Atlas 14 (NOAA Atlas 14).
- (d) Public safety conditions and improvements that are necessary based on the anticipated land use changes in the Project, including, without limitation:
  - (i) Construction of a second fire apparatus access road. The primary median-divided access road to the Project shall serve as dual access for the development of Villages 1 and 2 and shall be extended to the first entrances of Villages 3 and 4. A private, gated secondary fire apparatus access road shall be required with the development of the remainder of the project. Construction of the secondary fire apparatus access road shall be completed prior to issuance of a certificate of occupancy for and/or final inspection of any dwelling unit in excess of 200 dwelling units in the Project. The secondary fire apparatus access road shall be a minimum of twenty (20) feet wide and emergency pull-out areas shall be constructed upon this secondary fire apparatus access road to the approval of the Fire Chief and the City Engineer. The Parties acknowledge and agree that nothing contained in this Agreement constitutes in any way a pre-approval or acceptance of dedication of any streets, gutters, curbs, or sidewalks on the Property.
  - (ii) Construction of all streets and the secondary fire apparatus access road shall comply with design requirements set forth in the City of Sparks Site Development Fire Prevention Policy Guide and shall be to the approval of the Fire Chief. The street providing primary access to the Project shall be a four lane, median-divided roadway from Highland Ranch Parkway to the first entrances of Villages 3 and 4.Emergency median cross-overs shall be constructed to the approval of the Fire Chief every 750 feet or more frequently. Fire hydrants shall be installed upon the primary access street at distances to be approved by the Fire Chief. Any cul-de-sac constructed within the Project shall have a radius of at least fifty (feet) and a diameter of at least one hundred (100) feet.
  - (iii) All dwelling units and commercial structures intended or used for human occupancy shall be equipped with fire suppression systems to the approval of the Fire Chief.

(iv) Emergency access points shall be provided to all common areas. These emergency access points shall be a minimum of sixteen (16) feet wide, shall be gated, and shall be posted with signs indicating that parking is prohibited to the approval of the Fire Chief. Design and location of the emergency access points shall be addressed with the appropriate tentative map submittals.

All infrastructure, whether onsite or off-site, shall be constructed in substantial conformance with:

- (a) Applicable construction standards;
- (b) Design standards required for dedication to the City of Sparks, if applicable; and
- (c) Approval of the Administrator.

# 3.3 Slope Analysis and Development Constraints

Master Developer acknowledges that the development of the Property is constrained by the steep slopes naturally occurring on the Property. In developing the Property, Master Developer shall satisfy all requirements of the Code governing slopes, hilltops, and ridges, including but not limited to Sparks Municipal Code Section 20.04.011. Specifically, Master Developer shall:

- (a) Obtain a conditional use permit prior to any clearing, grading, or other disturbance of the soils on the Property and prior to the approval of a tentative map as required by Sparks Municipal Code Section 20.04.011 and Appendices A7 and A8; and
- (b) Limit the total area of the Property to be cleared, graded, or otherwise disturbed to 225 acres. With the recordation of each final subdivision map, the Master Developer shall convey the lands designated as open space to the entity responsible for maintenance of the lands designated as open space.

#### 3.4 Fiscal Analysis Revision

Prior to submitting any Nonconforming Entitlement Request for consideration, Master Developer agrees to update the comprehensive Fiscal Analysis of the Project attached hereto as Exhibit D to include any new or amended elements of the Project contemplated by the associated Nonconforming Entitlement Request. Upon approval of the respective Nonconforming Entitlement Request, the updated Fiscal Analysis shall be incorporated into this Agreement as an addendum to Exhibit D. So long as the Project is being developed in accordance with the Land Plan, the Infrastructure Plan, and this Agreement, no revisions or update to the Fiscal Analysis shall be required, including in connection with an Entitlement Request.

#### 3.5 Entitlement Requests

(a) City shall reasonably cooperate with Master Developer to:

- (i) Expeditiously process all Entitlement Requests in connection with the Property that are in compliance with the Applicable Rules, Land Plan, and Infrastructure Plan; and
- (ii) Promptly consider the approval of Entitlement Requests, subject to reasonable conditions not otherwise in conflict with the Applicable Rules, Land Plan, or the Infrastructure Plan.
- (b) Annexation Required. The Parties acknowledge and agree that the Property must be annexed by the City of Sparks before the Project may be developed as described herein. Master Developer has submitted an Annexation Application in accordance herewith as Case No. PCN17-0050 (AX16-0003), and the terms and conditions of any approval of such application shall be deemed in conformance with and incorporated by reference as part of the Land Plan and Infrastructure Plan.
- (c) Master Plan Amendment. The Parties acknowledge and agree that the Property's existing and equivalent land use designation must be amended to allow for the development of the uses and densities provided for herein. Master Developer has submitted a Master Plan Amendment in accordance herewith as Case No. PCN17-0050 (MPA 17-0005) and the terms and conditions of any approval of such application shall be deemed in conformance with and incorporated by reference as part of the Land Plan and Infrastructure Plan.
- (d) Required Zoning Entitlement for Property. The Parties acknowledge and agree that the proper means to legally entitle the Property for eventual development is by rezoning the Property to allow for the development of the uses and densities provided for herein. Master Developer has submitted a proposed zone change in accordance herewith as Case No. PCN17-0050 (RZ17-0006), and the terms and conditions of any approval of such application shall be deemed in conformance with and incorporated by reference as part of the Land Plan and Infrastructure Plan.
- (e) Concurrent Processing of Initial Entitlement Requests. The Parties agree that the most efficient and expeditious manner in which to process the Entitlement Requests described in Section 3.04(b)-(d) is to consolidate final approval of all of the respective Entitlement Requests at a single meeting of the City Council. The City agrees to process the Entitlement Requests described in Section 3.5(b)-(d) concurrently in order to present them to the Sparks Planning Commission and the City Council as a single set. The Master Developer agrees to waive any statutory or Code requirements related to limitations of time for processing individual Entitlement Requests in order to facilitate final action on the entitlements described in Section 3.5(b)-(d) at single meetings of the Planning Commission and City Council. This waiver is intended to allow the Truckee Meadows Regional Planning Agency to review any master plan amendments or projects of regional significance associated with the development of the Project in the period before or between consideration by the Sparks Planning Commission and the City Council.

(f) Other Entitlement Requests. Except as provided herein, all other Entitlement Request applications shall be processed by City according to the Applicable Rules. The Parties acknowledge that the procedures for processing such Entitlement Request applications are governed by the Code. In addition, any additional application requirements delineated herein shall be supplemental and in addition to such Code requirements. The Parties acknowledge and agree that nothing contained in this Agreement constitutes in any way a pre-approval or authorization of any Entitlement Request.

#### 3.6 Modification or Amendment of the Agreement

This Agreement may not be modified or amended, except by the mutual written agreement of the Parties.

### 3.7 Deviation from Design Standards

Any request for variance or deviation from a particular requirement of the Code for a particular Development Parcel or lot shall be processed and considered according to the requirements of the Code in effect on the Effective Date, unless otherwise agreed to by Master Developer.

#### 3.8 Anti-Moratorium

The Parties agree that no moratorium or future ordinance, resolution or other land use rule or regulation imposing a limitation on the construction, rate, timing or sequencing of the development of property, including those that affect parcel or subdivision maps, building permits, occupancy permits or other entitlements to use or develop land that are issued or granted by City shall apply to the development of the Project or any portion thereof. Notwithstanding the foregoing, City may adopt ordinances, resolutions or rules or regulations that are necessary to:

- (a) Comply with any state or federal laws or regulations as provided by Section 2.4, above;
- (b) Alleviate or otherwise contain a legitimate, bona fide harmful and/or noxious use of the Property, in which event the ordinance shall contain the most minimal and least intrusive alternative possible, and shall not, in any event, be imposed arbitrarily; or
- (c) Maintain City's compliance with federal and state sewerage, storm water conveyance, storm water discharge, water system, and utility regulations.

# 3.9 Property Dedications to City

Except as provided herein, any real property (and fixtures thereupon) transferred or dedicated to City or any other public entity shall be free and clear of any mortgages, deeds of trust, liens or other encumbrances.

# 3.10 Inclusion of Additional Property

The City Council will consider the inclusion of additional property ("Additional Parcels") in the Project by formal amendment of this Agreement provided that:

- (a) Each Additional Parcel is contiguous to some portion of the Property or immediately across the street;
- (b) Development of each Additional Parcel must conform to this Agreement; and
- (c) Master Developer obtains the necessary annexation, zoning, and land use approvals and approval of all necessary technical studies for each Additional Parcel. In no event shall this Agreement be amended to include Additional Parcels without contemporaneously amending Exhibits A through E to reflect the proposed expansion of the Project.

The Parties agree that nothing contained in this Agreement constitutes in any way a pre-approval or authorization of the inclusion of Additional Parcels in the Project.

# 3.11 Impact Fee Service Area Number 1

By executing this Agreement, Master Developer and Owner hereby petition the City, to include the Property in Impact Fee Service Area Number 1 and agree not to withdraw this petition except as permitted by the termination provisions of this Agreement. The Parties agree that nothing contained in this Agreement constitutes in any way a pre-approval or authorization of the Property's participation in Impact Fee Service Area Number 1.

#### 3.12 Special Improvement District

City agrees to consider and, if appropriate, process and facilitate, with due diligence, any applications made by Master Developer for the creation of a special improvement district. The Parties agree that nothing contained in this Agreement constitutes in any way a pre-approval or authorization of any such special improvement district, and any application to create a special improvement district must be processed and approved in accordance with state law and the Applicable Rules.

# SECTION FOUR REVIEW OF DEVELOPMENT

#### 4.1 Frequency of Review

At City's request, Master Developer shall appear before the City Council to review the Master Developer's compliance with the terms of this Agreement pursuant to NRS 278.0205. The Parties agree that the first review shall occur no later than twelve (12) months after the Effective Date of this Agreement, and Master Developer shall provide an updated report every twenty-four (24)

months on the anniversary date of that first review thereafter, or as otherwise requested by City upon thirty (30) days' written notice to Master Developer. For any such review, Master Developer shall provide, and City shall review, a report submitted by Master Developer documenting the extent of Master Developer's and City's material compliance with the terms of this Agreement during the preceding reporting period. The report shall contain information regarding the progress of development within the Project, including, without limitation:

- (a) Data showing the total number of units built and approved on the date of the report;
- (b) Specific densities within each subdivision and within the Project as a whole; and
- (c) The status of development within the Project and the anticipated phases of development for the next calendar year.

In the event Master Developer fails to submit such a report within thirty (30) days following written notice from City that the deadline for such a report has passed, Master Developer shall be in default of this provision and City shall prepare such a report and conduct the required review in such form and manner as City may determine in its sole discretion. City shall charge Master Developer for its reasonable expenses, fees, and costs incurred in conducting such review and preparing such report. If at the time of review an issue not previously identified in writing is required to be addressed, the review may, at the request of either Party, be continued to afford reasonable time for response.

# 4.2 Opportunity to be Heard

The report required by this Section shall be considered solely by the City Council. Master Developer shall be permitted an opportunity to be heard orally and in writing before the City Council regarding performance of the Parties under this Agreement.

# 4.3 Action by the City Council

At the conclusion of the public hearing on the review, the City Council may take any action permitted by NRS 278.0205, NRS 278.02053, and/or this Agreement.

# SECTION FIVE DEFAULT

# 5.1 Material Default; Opportunity to Cure

In the event of any material default of any provision of this Agreement, the Party alleging such noncompliance shall deliver to the other by certified mail a ten (10) day notice of default and opportunity to cure. The time of notice shall be measured from the date of receipt of the certified mailing. The notice of noncompliance shall specify the nature of the alleged noncompliance and the manner in which it may be satisfactorily corrected, during which ten (10) day period the party alleged to be in noncompliance shall not be considered in default for the purposes of termination or institution of legal proceedings.

If the material default cannot reasonably be cured within the ten (10) day cure period, the defaulting Party may timely cure the material default for purposes of this Section if it commences the appropriate remedial action within the ten (10) day cure period and thereafter diligently prosecutes such action to completion within a period of time acceptable to the non-breaching Party. If no agreement between the Parties is reached regarding the appropriate timeframe for remedial action, the cure period shall not be longer than ninety (90) days from the date on which the ten (10) day notice of material default and opportunity to cure was received by the defaulting Party.

If the material default is corrected, then no default shall exist and the noticing Party shall take no further action. If the material default is not corrected within the relevant cure period, the defaulting Party is in default, and the Party alleging material default may elect any one or more of the following courses.

- (a) Amendment or Termination by City. After proper notice and the expiration of the above-referenced period for Master Developer to correct the alleged material default, the City may give notice of intent to amend or terminate this Agreement as authorized by NRS Chapter 278. Following any such notice of intent to amend or terminate, the matter shall be scheduled and noticed as required by law for consideration and review solely by the City Council. Following consideration of the evidence presented before the City Council and a finding that a material default has occurred by Master Developer and remains uncured, City may amend or terminate this Agreement. Termination shall not in any manner rescind, modify, or terminate any Entitlement held in the Project and/or in favor of Master Developer, as determined under the Applicable Rules, existing or received as of the date of the termination. Master Developer shall have twenty-five (25) days after receipt of written notice of termination to institute legal action pursuant to this Section to determine whether a material default existed and whether City was entitled to terminate this Agreement.
- (b) Termination by Master Developer. In the event City materially defaults under this Agreement, Master Developer shall have the right to terminate this Agreement after providing notice and an opportunity to cure as set forth in this Section. Master Developer shall have the option, in its discretion, to maintain this Agreement in effect, and seek to enforce all of City's obligations by pursuing an action for specific performance or other appropriate judicial remedy.

# 5.2 Force Majeure; Unavoidable Delay; Extension of Time

Neither Party hereunder shall be deemed to be in default, and performance shall be excused, where delays or defaults are caused by war, national disasters, terrorist attacks, insurrection, strikes, walkouts, riots, floods, earthquakes, fires, casualties, third-party lawsuits, or acts of God. If written notice of any such delay is given to one Party or the other within thirty (30) days after the commencement thereof, an automatic extension of time, unless otherwise objected to by the Party in receipt of the notice within thirty (30) days of such written notice, shall be granted coextensive with the period of the enforced delay, or longer as may be required by circumstances or as may be subsequently agreed to between City and Master Developer.

# 5.3 Limitation on Monetary Damages

The Parties agree that they would not have entered into this Agreement if either were to be liable for monetary damages based upon a breach of this Agreement or any other allegation or cause of action based upon or with respect to this Agreement. Accordingly, the Parties (or their permitted assigns) may pursue any course of action at law or in equity available for breach of contract, except that neither Party shall be liable to the other or to any other person or entity for any monetary damages based upon a breach of this Agreement or any other allegation or cause of action based upon or with respect to this Agreement.

#### 5.4 Venue

Jurisdiction for judicial review under this Agreement shall rest exclusively with the Second Judicial District Court, County of Washoe, State of Nevada or the United States District Court, District of Nevada. The Parties agree to mediate any and all disputes prior to filing of an action in court unless seeking injunctive relief.

#### 5.5 Waiver

Failure or delay in giving notice of default shall not constitute a waiver of any default. Except as otherwise expressly provided in this Agreement, any failure or delay by any Party in asserting any of its rights or remedies in respect of any default shall not operate as a waiver of any default or any such rights or remedies, or deprive such Party of its right to institute and maintain any actions or proceedings that it may deem necessary to protect, assert, or enforce any of its rights or remedies.

#### 5.6 Applicable Laws; Attorney Fees

This Agreement shall be construed and enforced in accordance with the laws of the State of Nevada. Each Party shall bear its own attorney fees and court costs in connection with any legal proceeding hereunder, and in no event shall any prevailing Party in such a legal proceeding be entitled to an award of attorney fees.

# SECTION SIX GENERAL PROVISIONS

# 6.1 Duration of Agreement

The Term of this Agreement shall commence upon the Effective Date and shall expire on the fifteenth (15) anniversary of the Effective Date, unless terminated earlier pursuant to the terms hereof. Master Developer shall have the right to request one extension of the Term of this Agreement for an additional five (5) years upon the following conditions:

- (a) Master Developer provides written notice of such extension to City at least one hundred-eighty (180) days prior to the expiration of the original Term of this Agreement;
- (b) Master Developer is not in default of this Agreement;
- (c) The City Council finds that an extension is in the best interests of the City; and
- (d) Master Developer and City enter into an amendment to this Agreement memorializing the extension of the Term.

# 6.2 Expiration of the Agreement

Expiration of the Agreement Term pursuant to Section 6.1 shall not in any manner rescind, modify, or terminate any Entitlement in the Project and/or in favor of Master Developer, as determined under the Applicable Rules, existing or received as of the date of the expiration, and future development of any other portion of the Project not holding such Entitlements shall be subject to all applicable Codes in effect at the time of development. The Parties agree that, in the event of such expiration, the Master Developer shall consent to the City reverting the land use and/or zoning designations on any undeveloped portion of the Property back to the respective land use and/or zoning designations applicable to such undeveloped portion of the Property on the Effective Date of this Agreement.

# 6.3 Assignment

The Parties acknowledge that the intent of this Agreement is that there is a master developer responsible for all of the obligations in this Agreement throughout the Term of this Agreement. At any time during the Term, Master Developer may sell, assign or transfer all or any portion of its rights, title and interests in the Property, Project (including rights to develop such property in accordance with this Agreement), and this Agreement to any person or entity for development, so long as Master Developer remains, or a successor master developer has assumed through a written assignment and assumption agreement provided to the City, and is obligated and responsible as master developer of the Project for:

- (a) Performance under this Agreement;
- (b) Completion of backbone infrastructure for the Project; and
- (c) Completion of common areas through dedication and acceptance by a common interest community or limited purpose association under NRS Chapter 116.

# 6.4 Indemnity; Hold Harmless

Except as expressly provided in this Agreement, the Master Developer shall hold City, its officers, agents, employees, and representatives harmless from liability for damage or claims for damage for personal injury including death and claims for property damage which may arise from the direct

or indirect operations of Master Developer or those of its contractors, subcontractors, agents, employees, or other persons acting on Master Developer's behalf that relate to the development of the Project. Master Developer agrees to and shall defend City and its officers, agents, employees, and representatives from actions for damages caused or alleged to have been caused by reason of Master Developer's activities in connection with the development of the Project other than any challenges to the validly of this Agreement or City's approval of related entitlements. Master Developer and City agree to equally pay all costs and attorney fees for a defense in any legal action filed in a court of competent jurisdiction by a third party alleging any such claims or challenging the validity of this Agreement. The provisions of this Section shall not apply to the extent such damage, liability, or claim is proximately caused by the intentional or negligent act of City, its officers, agents, employees, or representatives. This Section shall survive any termination of this Agreement.

# 6.5 Binding Effect of Agreement

Subject to this Agreement, the burdens of this Agreement bind, and the benefits of this Agreement inure to, the Parties' respective assigns and successors-in-interest and the Property that is the subject of this Agreement.

# 6.6 Relationship of Parties

It is understood that the contractual relationship between City and Master Developer is such that Master Developer is not an agent of City for any purpose and City is not an agent of Master Developer for any purpose.

#### 6.7 Counterparts

This Agreement may be executed at different times and in multiple counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any signature page of this Agreement may be detached from any counterpart without impairing the legal effect to any signatures thereon, and may be attached to another counterpart, identical in form thereto, but having attached to it one or more additional signature pages.

Delivery of a counterpart by facsimile or portable document format (pdf) through electronic mail transmission shall be as binding an execution and delivery of this Agreement by such Party as if the Party had delivered an actual physical original of this Agreement with an ink signature from such Party. Any Party delivering by facsimile or electronic mail transmission shall promptly thereafter deliver an executed counterpart original hereof to the other Party.

#### 6.8 Notices

All notices, demands and correspondence required or provided for under this Agreement shall be in writing. Delivery may be accomplished in person, by certified mail (postage prepaid return receipt requested), or via electronic mail transmission. Mail notices shall be addressed as follows:

To City: City of Sparks

Attention: City Manager

431 Prater Way

Sparks, Nevada 89431

To Owner: Jackling Aggregates, LLC

Attention: Kristi Giudici 1475 E. Greg Street, Suite A

Sparks, Nevada 89431

To Master Developer: QK, LLC

Attention: Blake Smith 1 East Liberty, Suite 444 Reno, Nevada 89501

Any Party may change its address by giving notice in writing to the others and thereafter notices, demands and other correspondence shall be addressed and transmitted to the new address.

Notices given in the manner described shall be deemed delivered on the day of personal delivery or the date delivery of mail is first attempted.

# 6.9 Entire Agreement

This Agreement constitutes the entire understanding and agreement of the Parties. This Agreement integrates all of the terms and conditions mentioned herein or incidental hereto and supersedes all negotiations or previous agreements between the Parties with respect to all or any part of the subject matter hereof.

#### 6.10 Waiver

All waivers of the provisions of this Agreement shall be in writing and signed by the appropriate officers of Master Developer or approved by the City Council, as the case may be.

#### 6.11 Recording; Amendments

Promptly after execution hereof, an executed original of this Agreement shall be recorded in the Official Records of Washoe County, Nevada. All amendments hereto must be in writing signed by the appropriate officers of City and Master Developer in a form suitable for recordation in the Official Records of Washoe County, Nevada. Upon completion of the performance of this Agreement, a statement evidencing said completion shall be signed by the appropriate officers of the City and Master Developer and shall be recorded in the Official Records of Washoe County, Nevada. A revocation or termination shall be signed by the appropriate officers of the City or Master Developer and shall be recorded in the Official Records of Washoe County, Nevada.

# 6.12 Headings; Exhibits; Cross References

The recitals, headings and captions used in this Agreement are for convenience and ease of reference only and shall not be used to construe, interpret, expand or limit the terms of this Agreement. All exhibits attached to this Agreement are incorporated herein by the references contained herein. Any term used in an exhibit hereto shall have the same meaning as in this Agreement unless otherwise defined in such exhibit. All references in this Agreement to sections and exhibits shall be to sections and exhibits to this Agreement, unless otherwise specified.

#### 6.13 Severability of Terms

If any term or other provision of this Agreement is held to be invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect, provided that the invalidity, illegality or unenforceability of such terms does not materially impair the Parties' ability to consummate the transactions contemplated hereby. If any term or other provision is invalid, illegal or incapable of being enforced, the Parties hereto shall, if possible, amend this Agreement so as to affect the original intention of the Parties.

# 6.14 Exercise of Discretion

Wherever a Party to this Agreement has discretion to make a decision, it shall be required that such discretion be exercised reasonably unless otherwise explicitly provided in the particular instance that such decision may be made in the Party's "sole" or "absolute" discretion or where otherwise allowed by applicable law.

#### 6.15 No Third-Party Beneficiary

This Agreement is intended to be for the exclusive benefit of the Parties hereto and their permitted assignees, if any. No third-party beneficiary to this Agreement is contemplated and none shall be construed or inferred from the terms hereof. In particular, no person purchasing or acquiring title to land within the Project, residing in the Project, or residing outside the Project shall, as a result of such purchase, acquisition or residence, have any right to enforce any obligation of Master Developer or City nor any right or cause of action for any alleged breach of any obligation hereunder by any Party hereto.

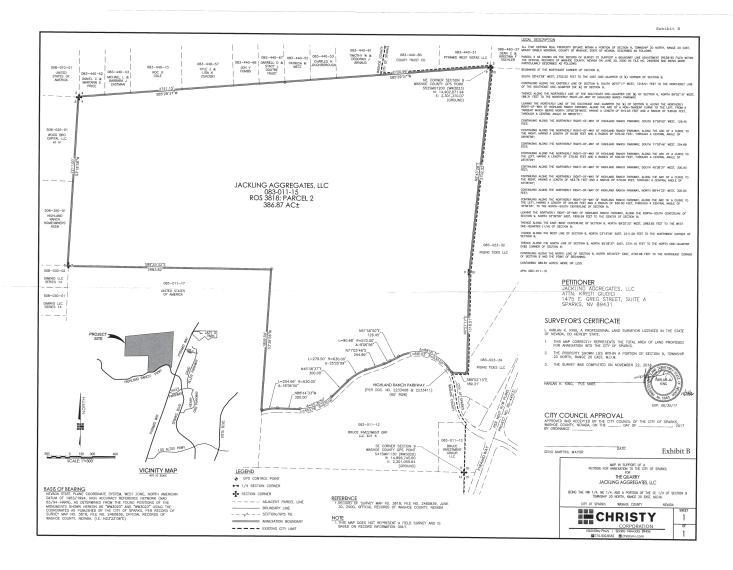
#### 6.16 Gender Neutral

In this Agreement (unless the context requires otherwise), the masculine, feminine and neutral genders and the singular and the plural include one another.

[Signatures on following pages]

IN WITNESS WHEREOF, this Agreement has been executed by the Parties on the day and year first above written.

CITY OF SPARKS, a muni corporation of the State of Nevada	cipal JACKLING AGGREGATES, LLC, Nevada Limited Liability Company
By: Geno Martini, Mayor	By:
ATTEST:	
By: Teresa Gardner, City Clerk	<b>QK, LLC</b> , a Nevada Limited Liabilit Company
APPROVED AS TO FORM	By:
By: Chester H. Adams, City Attorney	7
STATE OF	
COUNTY OF	) ss. )
This instrument was acknowledg	ed before me this day of, 2018
	Notary Public
STATE OF	
COUNTY OF	) ss. )
This instrument was acknowledg	ed before me this day of, 2018
	Notary Public





# CITY OF SPARKS, NV COMMUNITY SERVICES DEPARTMENT

To:

Mayor and City Council

From:

Marilie Smith, Administrative Secretary

Subject:

Report of Planning Commission Action

Date:

April 13, 2018

RE:

<u>PCN16-0050</u> – Consideration of and possible action, for a site 386.87 acres in size located at 555 Highland Ranch Parkway, Sparks, NV, of requests for:

• DA18-0001 - A Development Agreement between the City of Sparks and

Jackling Aggregates, LLC and QK, LLC; (For Possible Action)

• AX16-0003 – Voluntary annexation into the city of Sparks. Upon annexation the parcel shall convert from a Washoe County zoning designation of GR (General Rural) to a City of Sparks zoning designation of A40 (Agriculture); (For Possible Action)

• MPA17-0005 – A Comprehensive Plan land use change from Open Space (OS), Commercial (C) and Employment Center (EC) to Intermediate Density

Residential (IDR) and Commercial (C); (For Possible Action) and

• RZ17-0006 – Rezoning of the site from A40 (Agriculture) to SF6 (Single Family Residential –  $6{,}000$  square feet lots) and C2 (General Commercial) zoning. (For Possible Action)

Please see the attached excerpt from the April 5, 2018 Planning Commission meeting transcript.

1	(A break was taken.)
2	* * * *
3	CHAIRMAN VANDERWELL: Okay. I'm going to call
4	the Commission meeting for April 5th back to order.
5	And we are now going to discuss PCN16-0050, and
6	we're going to start with DA18-0001, to start out.
7	MR. ORNELAS: Chairman VanderWell and members
8	of the Planning Commission, I am Armando Ornelas, the
9	Community Services Director for the City. If it's okay
10	with the Chairman and the Planning Commission, I'd like
11	to introduce all four of the items that are part of this
12	PCN-0050.
13	CHAIRMAN VANDERWELL: Yes.
14 @	MR. ORNELAS: And then I and Chief Maples, Fire
15	Chief Maples will address the development agreement.
16	And Karen Melby, your Development Services Manager, will
17	address the annexation, Comprehensive Plan amendment,
18	and zoning request. And then we all be available for
19	questions.
20	CHAIRMAN VANDERWELL: Perfect. So I need to
21	open just for all of them, just open them one at a time?
22	MS. MCCORMICK: You can just read the top two
23	lines.
2 4	CHAIRMAN VANDERWELL: Okay.
25	MS. MCCORMICK: And the stated four requests.

CHAIRMAN VANDERWELL: Okay.

MR. ORNELAS: Okay. This case involves a property located at 555 Highland Ranch Parkway, which is located just up to the west on Melanie Parkway from the Pyramid Highway. It is outlined, the parcel, the single parcel is outlined in the blue (indistinct).

The property's, again, 387 acres in size. It's a former aggregate mining sect. You can see the impact of that on the sect in the (indistinct). It is largely not visible from either Highland Ranch Parkway or from Pyramid Highway. It's, essentially, once you go up, you're up here, and (indistinct). It is a big access road, as shown here from Mount Ridge Parkway.

And, again, this case, PCN16-0050, is comprised of four requests. The first one is DA18-001, which is the proposed development agreement between the City of Sparks, Jackling Aggregates, LLC, and QK, LLC.

In the instance of the development agreement, the Planning Commission's responsibility is to review it and to make a recommendation as to the City Council regarding whether the development agreement is consistent with the Comprehensive Plan or not. The agreement would have to be approved by the City Council for it to take effect.

The second part of the request is AX16-0003,

which is voluntary annexation into the City of Sparks. 1 Upon annexation, the parcel shall, will convert from a 2 Washoe County zoning designation of General Rural to a 3 City of Sparks zoning designation of A40, or 4 Agriculture. The Planning Commission is responsible for making a recommendation to the City Council on 7 annexation requests. The third part of this is MPA17-0005, which a 8 Comprehensive Plan land use change request to change its 9 designation from Open Space, Commercial, and Employment 10 Center to Intermediate Density Residential and 11 Commercial. In the case of the Comprehensive Plan 12 request, as we discussed in the past, the Comprehensive 1.3 Plan is the Planning Commission's domain, by and large. 14

And so it is your responsibility to approve or disapprove this request. And then the City Council will certify the change if you were to approve it.

And then the fourth part is RZ17-0006, which is

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a request to rezone the site from of A40, which is
Agricultural, to SF6, single-family residential
6,000-square-foot lots, and C2, which is General
Commercial. And the Planning Commission's role is to
make a recommendation on the rezoning to the City
Council.

So the reason for bundling the development

agreement with the other three requests, with the annexation, Comp Plan amendment, and the zoning request, is to provide through the Planning Commission, the City Council public and third-party reviewing agencies with an understanding of what's proposed for the site at the time that these requests were being contemplated.

As you may recall, for example, on the 67-acre parcel to the south, on Mount Ridge Parkway, the Planning Commission saw these, the annexation, as planned in the zoning request, really without any basis in terms of anything definitive in terms of what the project would be. And so there was also no ability to condition the approvals.

And so, in this instance, the development agreement is a mechanism for conditions to be attached to the approvals, as would be done, for example, with a plan development handbook. They're different animals, if you will. The development agreement is not intended to be as specific or to address all the details, for example, architectural design standards, that will be addressed in the handbook.

Nevertheless, the development agreement, you know, in this instance includes a land plan. It includes an infrastructure plan. And by addressing those, both uses and the infrastructure requirements,

enables the development agreement to serve as a mechanism for satisfying the so-called concurrency requirement in the regional plan, which calls for or requires infrastructure and public services be addressed at the time that land use entitlements are considered.

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So, in terms of what's in the agreement, the agreement's key terms are summarized on pages five and six of the agreement. Section 2 is intended to provide the developer a degree of regulatory predictability in the relation of the build-out of the project. This has a long, long build-out. And so it defines the rules and the fees that apply to development of the project.

Permitted uses and density are addressed in Section 3.1, which specifies that between 1,200 and 1,800 residential units are permitted, which placed a gross density of between 3.1 and 4.6 dwelling units per acre. It allows for single-family detached and attached units in the portion of the property for which SF6 zoning is requested. And then, in the 13 or so acres that where C2 zoning is proposed, all of the uses that are permitted in C2 zoning would be permitted.

The required infrastructure improvements are addressed in Section 3.2. This includes the off-site infrastructure, which is part of the developer's expense for the project. The required off-site improvements

include sanitary sewer upgrades and flood control and drainage improvements.

Also required are the widening of the Highland Ranch Parkway from the entrance to the project to the Pyramid Highway. So, essentially, from the intersection of Pyramid Highway to the entrance of the project, this lane would be required to be expanded to four lanes, four travel lanes prior to the issuance of any building permits for any structures.

And then the development agreement also includes provisions that require that this intersection have certain improvements made to it that are recommended in the traffic study, which is one of the attachments to the staff report that was prepared by Solaegui Engineers. That traffic analysis will be reviewed by both City engineering staff and the Nevada Department of Transportation. And both staff and the NDOT staff concur with those recommendations.

Those are the section improvements that must be completed prior to the issuance of any certificate of occupancy for, or final inspection of any dwelling unit in excess of 650 dwelling units. Stated more simply, prior to the 650 first certificate of occupancy or final inspection, those are permits that have to be made. That means that the developer is going to have to get

started in terms of getting approval from NDOT for those specific improvements well before they need that, right, so that they have that in time.

The idea, again, is to maintain at least a level of service E at that intersection.

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Section 3.2 of the agreement also requires, per the determination of the City's Fire Chief, the construction of a second fire apparatus access road prior to the issuance of that 650 first C of 0 or occupancy permit. And as written in the development agreement, the second fire apparatus access road must be open for public use, a condition which Chief Maples will elaborate on following my presentation, and which, I believe, the developer has some concerns about. And it's up to him to address, them to address their concerns about that.

In addition, the development agreement specifies that all dwelling units and commercial structures intended for or to be used for human occupancy must be equipped with fire suppression systems, i.e. (indistinct).

And then, also, in terms of requirements from the fire department that have been incorporated into the development agreement, construction of all streets must comply with the design requirements that are set forth

in the City's site development and fire prevention policy guide to the approval of Fire Chief.

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And then Section 3.11 constitutes the developer's and property owner's petition to include the subject property in Impact Fee Service Area Number 1 and, essentially, in the development agreement there is not -- withdraw the petition except as permitted in the agreement.

Section 3.4 of the development agreement limits the total area to be cleared, graded or disturbed to 225 of the 387 acres. So, as Karen will address in her presentation, the entirety of the site is being, or is close to being rezoned and to have its master plan land use designation changed to those that I mentioned. We don't have anything that would be zoned for this as open space or designated as such in our Comprehensive Plan.

However, this agreement is the basis for limiting that 225 of the 387 acres, which equates to about 58 percent of the site. So that means that over 40 percent of the site is supposed to be left as open space. And per the development agreement, the developer's required to convey with each final subdivision map the lands designated as open space to the entity responsible for maintenance of those lands, which would, in all likelihood, be the homeowners

1 association.

Section 4 permits the City Council to review the developer's compliance with the agreement at 12 months from the effective date. It also requires the developer to report every 24 months after that initial review on the number of units approved and built, development densities, and status of the project.

Section 6.1 specifies the duration of the agreement, which is 15 years. The agreement grants the developer the right to request one five-year extension subject to certain conditions.

So that's what's in the agreement, if you will, in terms of the primary terms.

Before I address the -- you know, how this development agreement is consistent with the Comprehensive Plan, which is, you know, what the Planning Commission proposed to plan on, and that are conditioned to the City Council, Chief Maples has a -- is going to address the provisions in the agreement that apply.

Thank you.

CHIEF MAPLES: Good evening, Commissioners.

For the record, my name is Chris Maples, and I'm the

Fire Chief for the City of Sparks. I think, this is the

first time I've had the opportunity to speak before you.

So I wanted to address you tonight and stress one of my concerns regarding the proposed development.

And that is, my primary concern is the limited access to this property. As currently proposed, the development only has a single dedicated public roadway in and out.

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The Fire Code gives me the authority to require a secondary means of access for fire department. Beyond that, I'd ask that this access road be open to the public to ensure two ways in and two ways out for both residents and emergency vehicles.

My concern with the fire access road is that it will not receive the same level of maintenance as a city street open for public use. For example, it won't be plowed when it snows.

Additionally, if we can get it and, most importantly, emergency access roads are not typically designed for two-way traffic. While a fire access road may provide a way for fire department vehicles to enter the development, it will not be suitable for the rapid evacuation of residents should the need arise due to some natural or unnatural disaster.

Given the density and topography of the proposed development, my professional opinion is that an additional public access route into and out of the development is not only prudent, but also provides a

much greater degree of safety for the residents.

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So to rectify this, I propose that the development agreement be amended to include a secondary access road that would be open to the public to use, rather than designed solely for access by emergency vehicles. And it's my understanding that the developer has asked for this requirement to be removed.

Now, I will say that subsequent to me preparing my statement, I (indistinct) contacted me and offered or suggested some possible alternatives to address my concerns about the limited access to the property. And it was very preliminary, so I'm not prepared to say whether or not those would be acceptable to me at this time, but I'm willing to consider them in the future.

CHAIRMAN VANDERWELL: Thank you.

MR. ORNELAS: Okay. So just to be clear, the development agreement, as presented to you, was for your consideration. It does include those requests of the Fire Department.

So moving on, in terms of the Planning

Commission's role with regard to the development

agreement's review, development agreement consistency

with the Comprehensive Plan, in staff's view, the

applicable Comprehensive Plan's goals and policies are

MG5, which really has to do with the review of master

plan amendments for sites over five acres and requires
the City to evaluate or cause to be evaluated impacts on
facilities and services, facilities and infrastructure,
the impacts on services, public services, and then the
proposed land use in relationship to existing land uses
and the fiscal implications.

And in Policy CF1, which says that when reviewing new development, the City will not approve an application unless the City services can be provided at acceptable service levels.

So what we intended to do in the development agreement is to provide the framework for assuring that this project can comply with those requirements of the Comprehensive Plan. So it is staff's view that for that reason, the development agreement itself is consistent with the Comprehensive Plan.

So that concludes my presentation on the development agreement. As I noted earlier, Ms. Melby's going to be going through the annexation, Comp Plan amendment and the zoning request, and then we'll all be available for guestions.

CHAIRMAN VANDERWELL: Thank you.

MS. MELBY: Good evening, Planning Commission.

I'm Karen Melby, Development Service.

So my first application I'm going to review

with you tonight is annexation. This is the annexation map. They are proposing or requesting or petitioning for to annex 387, approximately 387 acres.

The first, what I wanted to review is the annexation findings, the three findings. Finding A is in conformance to the requirements of NRS 268. This property is contiguous to the City limits and being requested by the property owner, which is in conformance with NRS 268.

The next finding, A2, which is conformance to the findings for annexation, and our Sparks Municipal Code actually consists of 10 findings. So I'm going to review those.

The first one is the location of the property.

The property is located north of Highland Ranch Parkway and is contiguous to the City on two sides, and it would be this to the south and then to the east. It is also actually contiguous a tiny bit on the north. Therefore, making that being consistent with the location.

The next one is the logical extension of City limits. This property, again, is contiguous to the City on two sides, and it is within the City Sphere of Influence. And existing utilities are in proximity to the property. Which fits a logical extension of the City limits.

The next one is need for expansion. There is a housing shortage in the region. So this property will increase the single-family housing supply.

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water and sewer service. Water service will be provided by the Truckee Meadows Water Authority, and sanitary sewer will be provided by the City of Sparks. Sanitary sewer service will be provided to the project via the northwest sanitary sewer interceptor located on the east side of the project, or actually the east side of McCarran and Highland. The developer will be responsible for the construction of all new sanitary sewer lines as well as an upgrade to the existing sanitary sewer line that will connect the project to the northwest connector.

The City sewer system, sanitary sewer model on the maximum unit count is -- maximum unit --

CHAIRMAN VANDERWELL: Okay. It's okay.

MS. MELBY: In the model, we did the model, the sanitary sewer model. We modeled it at the 1,800, even though at the fiscal impact they did it at 12.3. We did do the maximum number and also looked at the 13.4 acres of commercial. The result of the sanitary sewer model indicated that the developer will be required to construct half of the improvements to the existing

sanitary sewer system located between the project and the northwest interceptor to make it an acceptable levels of service.

This project, staff believes, complies with Policy MG7, Goal H, and Policy CF1, because annexation will provide additional land for housing development has been in the City Sphere of Influence since the year 2002, promotes Sparks' housing market, and a provision of the development agreement that the applicant is petitioning to be included in our IFSA Number 1, that impact service area, which with this development and will contribute to the construction of the fire station, storm drain, sewer, and parks improvements.

F is the efficient and cost-effective provision of services. The property served by the sanitary sewer, which would be extended from the east side of Pyramid Highway. And these capacity improvements will need to be added to these facilities.

The fire service would be from the Fire Station

Number 4 or through the automatic aid agreement with the

Truckee Meadows Fire District.

G, which is the fiscal impact analysis. The fiscal impact analysis provided estimated that this annexation and the single-family development of 1,223

single-family home units and 13 acres of commercial will 1 generate \$47.3 million in revenue to the General Fund 2 and \$33 million in General Fund expenditures, resulting 3 in an anticipated cumulative positive impact of 4 \$14.3 million over a 20-year analysis period. 5 As for the Road Fund, the fiscal impact 6 analysis estimates for a 20-year revenue of \$3.3 million for the Road Fund and \$14.9 million in expenditures. 8 This estimate results in anticipated deficiency of 9 \$11.5 million over 20 years due to the disconnect 10 between the limited sources of revenue available for the 11 Road Fund and the high cost of street maintenance and 12 This is not a unique situation throughout the 13 repair. City and especially for this development. 14 Combining the net positive for the General Fund 15 of \$14.3 million and the net of the Road Fund at \$11.5, 16 this produces a project positive fiscal impact of 17 approximately \$2.8 million over the 20-year analysis 18 period. 19 H, which is the Washoe County, the City did 20 email or did send a packet to Washoe County. And we 21 have not received any comments from Washoe County. 22 23 I is doe's it create any islands. annexation will not create any islands and is continuous 2.4

to City limits.

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J, other factors. Before any tentative maps

could be reviewed by the City, the applicant must

prepare and submit a slope analysis per the Sparks

Municipal Code 20.04.11, which is governs slopes,

hilltops and ridges, delineating the developable portion

of this property.

Addressing Finding A3, which is the conformance to the Comp Plan, as within the Sphere of Influence and the seven-year annexation program. The City of Sparks initially exerted planning jurisdiction by including this area in our Sphere of Influence in the year 2002. The City's annexation program did expire in 2015. However, NRS 268.670 allows for the City Council to consider annexing properties without an annexation program if it is contiguous to the City limits and the annexation is requested a hundred percent by the property owners. Both of these requirements are satisfied with this request for annexation.

The last finding is public notice. Again, this notice was published in the Reno Gazette-Journal on March 22nd, 2018. We noticed property owners within 750, for a total of 50 property owners.

Now I'd like to address the Comprehensive Plan use amendment. They're requesting this map. The existing is on the top, and the proposed is on the

So they're requesting to amend 4.3 acres of a 1 bottom. Commercial, which is the little half moon there of 2 Commercial, 85 acres of Employment Center, and 3 approximately 298 acres of Open Space. Two, as shown in 4 the lower graphic, two hundred and -- they are 5 requesting to add 13.4 acres of Commercial. And then 6 7 the balance of the property, which is 373 and a half acres, for Intermediate Density Residential. 8 though, in the development agreement does limit the 9 total area to be graded clear or disturbed to 225 acres 10 or is longest at 58 percent of the property. 11 There are four findings for the Comprehensive 12 The first one is the compliance with the regional 13 Plan. Staff feels that it complies with goals 1.1, 2.3, 14 3.5, because it is within our TMSA, the Sparks Municipal 15 Code, and also the development agreement restricts the 16 area that could be disturbed with the slope analysis as 17 previously discussed. It also will be included in the 18 IFSA Number 1, which will contribute to the construction 19 of the fire station, storm drain, sewer, and park 20 improvements, and along with the construction of 21

capacity improvements to the interception of Highland
Ranch Parkway and then also improvements from off

Highland Ranch Parkway from Pyramid Highway to the

25 entrance of the project.

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This project does not -- let's see. The project does trigger, I guess, would be the word, three of the criteria for regional significance. The first one is that the project is proposed to be more than 625 units at the range of 1,200 to 1,800 units.

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The traffic in the trigger for regional plan, or regional project is 6,250, and they're projecting 11,000, approximately 11,000 average daily trips.

The sewer generation standard is 17,500 gallons per day, and it's estimated that this project would generate 378,000 gallons per day.

Therefore, they have triggered three of the regional projects of significance, so that when this project is forwarded to regional planning, they will have to also look at a project of regional significance and compliance with this plan.

The next finding, which is CP2, CPA2, which is implementation of goals in the Comprehensive Plan, staff feels that this complies with Goal MG2, Policy MG5, Policy C1, Goal H2, and policies RC22 and RC23.

Because this will add lands of a mix of residential and commercial uses, and as discussed previously, the fiscal impact analysis projects a net positive fiscal impact. They will be included in the ISFA Number 1 development, will contribute contributions

to the improvements in the Spanish Springs area. It has a provision of additional lands for housing. And a slope analysis will be required per Sparks Municipal Code housing and the hillside section of the zoning code.

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Finding C3, which is compatibility with surrounding land uses. The subject property is located on the west side of Pyramid Highway north of Highland Ranch Parkway. The Kiley Ranch North Planned Development is on the east side of Pyramid Highway. It has 157 acres designated as Commercial, including the site of a proposed hospital. None of the commercial uses planned for the Kiley Ranch North Planned Development have been developed to date.

The areas to the north are large single-family properties. To the west are vacant lands with steep slopes. The subject property was finally lined for aggregate. The single-family homes and commercial, as proposed in this project, will be more compatible with the surrounding land uses than the previously mining operation.

The last Comprehensive Plan finding is public notice. This was published in the Reno Gazette-Journal on March 22nd. And the applicant had a neighborhood meeting on February 20, 2018. There were 13 people that

attended that meeting with comments and lots of questions.

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The next item is the rezoning request. When this property would be annexed into the City, it'll come in as A40, or Agricultural. That would be the entire 373.48 acres. The applicant is requesting to rezone the property to single-family 6,000, or SF6, and also commercial. The commercial would be right along the Highland Ranch Parkway.

The staff report has included a table which summarizes the permitted zoning uses by zoning district. I will not go into that tonight.

CHAIRMAN VANDERWELL: Thank you.

MS. MELBY: If the Comprehensive Plan amendment is not approved by the Planning Commission tonight, then rezoning cannot be approved.

There are three findings for zoning. The first one is the consistency with the Comprehensive Plan. As I previously discussed under Finding CP2, the staff believes that this finding can be made, but only if the Comprehensive Plan amendment is approved.

Zoning C2, which is consistent with the surrounding existing land uses. Again, as discussed on the Comprehensive Plan Finding 3, the rezoning is consistent with the commercial and residential

development designations in the Kiley Ranch North

Planned Development and also Washoe County to the north,

the large lots, residential lots to the north.

Finding Z3, which is public notice, the notice was published in the Reno Gazette-Journal on March 22nd, and we sent out 50 notices to property owners within 750 feet of the property.

Staff is recommending approval based on the findings as discussed under each of these requests.

I would like to make a reminder that you will have to make separate motions for each one of the four requests before you tonight.

That concludes our presentation. Armando,
Chief Maples and myself are available to answer
questions.

CHAIRMAN VANDERWELL: Thank you.

Yes, Chief Maples.

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CHIEF MAPLES: I just want to clarify one thing before you guys move on. Karen referenced an automatic aid agreement that I have with Truckee Meadows. That agreement was negotiated prior to the time that this development was contemplated. I've had no discussions with Chief Miller whether or not that automatic aid agreement would apply to this property.

CHAIRMAN VANDERWELL: Thank you for the

Appreciate that. clarification. 1. Thank you. Okay. 2 Would the applicant like to speak? 3 MR. MIKE RAILEY: Good evening. For the 4 record, Mike Railey with Rubicon Design Group 5 representing the project applicant. Scott Christy and 6 Blake Smith, the applicants, are with me tonight, along 7 with Paul Solaequi, the project traffic engineer. 8 I think, staff did a very thorough job and a 9 great job on the staff report, analyzing findings and 10 explaining the project. We're here to answer any 11 questions you might have tonight. 12 But before we get to that, I would like to 13 touch on Chief Maples' comments in regards to fire. 14 are currently considering and analyzing alternatives to 15 address the Chief's concerns, and we'll continue to work 16 with him to make sure that we can come to a common 17 ground on resolving the secondary access issue. 18 CHAIRMAN VANDERWELL: Terrific. Thank you. 19 Okay. So, I'm going to open each one of these 20 up for discussion. So I'm going to open for public 21 hearing DA18-0001. 22 And, so, call for anybody that wants to speak? 23 MS. MCCORMICK: Yes. 2.4 CHAIRMAN VANDERWELL: Okay. So, do we have any 2.5

requests to speak on DA -- okay. So. All right. 1 Mr. Cole, which part -- okay. Before I have 2 you come up here, which part of the application would 3 you like to talk about? Or just go ahead and come up, 4 and let's have you discuss the whole. 5 MR. ROC COLE: All over. 6 CHAIRMAN VANDERWELL: Yep, there you go. 7 Why don't you address the whole thing. 8 MR. ROC COLE: All of it pertains. 9 There you go. Go right CHAIRMAN VANDERWELL: 10 ahead. 11 MR. ROC COLE: My name is Roc Cole. I'm a 12 property owner adjacent to the north. And, you know, 13 when we bought our properties, we were told this is 14 Washoe County rural and would remain that. And now, all 1.5 of a sudden, it's becoming, I guess, to be houses. 16 Just 18 years ago, or whatever, when the quarry 17 applied for a permit there, we were told that this was a 18 protected ridgeline above our homes and that nothing 19 could, a road, a fence, a home, nothing could be built 20 on that ridgeline. And, and when I look at the map, 21 Village 5 and 6 is infringing on that ridgeline. 22 And if you look in that, in this right here at 23 page 21, Policy RC23 is required for new development to 24 preserve and protect amenities with many features. And

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the problem is the quarry is unique because it can
provide for an enclaved-type development pattern that
preserves the ridgelines and focuses development in
areas that were previously part of the aggregate quarry
or well-suited for development.

I didn't, I couldn't make the previous
community meeting, but I called Mike Railey, is it?

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MR. ROC COLE: And he assured me that all the building was down in flat, that nothing was going, it was too steep and nothing was going up on the hills.

But now that you look at their map, there is substantial development on that ridgeline.

CHAIRMAN VANDERWELL: Uh-huh (affirmative).

And I would think, with 390 acres to build on, they could remove that ridgeline building and keep it down in what they propose.

And I know I'm nobody, but I'm speaking for a lot of the residents there. And, by the way, that 750 feet barely covers two properties. You know, it doesn't reach out to everybody. I've made calls to people, and nobody was aware of this. And, like I said, we were promised in previous Commission meetings that that was a protected ridgeline.

That would be my first. The other one is traffic on Pyramid is already atrocious. I don't know

if any of you guys live out there, but it's ridiculous. 1 And this little improvement to Highland Ranch Parkway 2 does nothing for Pyramid. And this is a lot of housing, 3 a lot going in. And that concerns me. 4 And, I guess, that's pretty much it. I would 5 just appreciate if you could just make it, keep it off 6 7 the ridgeline and give us a little buffer zone between what was supposed to be rural, and now it's becoming 8 high-density. And it's on the property line. 9 Thank you so much for your consideration. 10 CHAIRMAN VANDERWELL: Thank you. 11 COMMISSIONER CAREY: Thanks for sticking 12 around. 13 CHAIRMAN VANDERWELL: Yes. Do we have any 14 other requests to speak? 15 Yes, sir. 16 MR. BRADLEY PAUL ELLEY: Thank you. 17 CHAIRMAN VANDERWELL: And then if you'll just 18 fill out a request to speak when you're done. We can 19 get it with the secretary when you're done. 20 MR. BRADLEY PAUL ELLEY: Okay. My name's 21 Bradley Paul Elley, and my house is also (indistinct) on 22 this project. And the problem is, I have the 20.5-acre 23 lot that's directly north, right next to the one that's 24 on the corner, the northeast corner. That's zoned 25

one-third acre residential. And the Lancing Group has over 200 acres that they're going to develop. They have a nice development out there. It's close to the high school. You can look down and see the high school from there. You can walk to the high school if you want to, ride a bike maybe. It is steep.

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But if you ever go out there, and you walk it, where you think -- if you could put the map up of their parcel. I can see it in front here. But the topography, I share, I think, Mr. Cole's concerns. My property goes to the ridgetop. And what they want to do, they want to put in a congested area right below my property, 6,000-square-foot lot properties. That's really dense.

And what will happen in the winter, if there's any kind of inversion going on, and they allow any kind of burning to go on, all of these 6,000-acre lot residences, all that foul odor is going to go up onto my property. So I get to smell all this by-product of progress on my rural lot.

So I'm not real happy about that. I don't object to them building something. I'm not trying to say don't let them annex. But I'm trying to say, be reasonable. When you go up there and you look at the lot, you'll notice on a good day you don't hear much

road noise. On a bad day, when the wind's blowing up 1 that, that -- if you look at the -- you can't see it 2 from there. But the lay of the land there is it's an 3 echo chamber for the freeway, which I call it the 4 freeway, or the death trap for all the people who get killed by the drunks coming back from Pyramid Lake. 6 So that's going to be more congested. You're 7 going to hear more traffic. They're going to put in, 8 they're going to have to put in some sort of stoplight 9 system or something there. So you're going to have that 10 freeway come to a stop right there, and I'll hear even 11 more motorcycles than I do now there. 12 But you also get, besides the noise that flows 13 up there in that echo chamber, you also get a very windy 14 area most days. Come up in a month when the wind's 15 blowing, you'll be up there, and when I originally got 16 this, I thought this would be a great place for a wind 17 turbine, because the wind blows a lot up there. It 18 blows everything --19 (The three-minute warning sounded.) 2.0 MR. BRADLEY PAUL ELLEY: Oh, is that my 21 three-minute? No. 22 CHAIRMAN VANDERWELL: That's your time. 23 MR. BRADLEY PAUL ELLEY: Oh, well, sorry. 24 CHAIRMAN VANDERWELL: Wrap it up. 25

MR. BRADLEY PAUL ELLEY: Well, I'll just say 1 thank you for your time. But, please, this congestion 2 right below my lot, it's not compatible with the area. 3 Thank you. 4 CHAIRMAN VANDERWELL: Thank you. And if you'll 5 see the -- if you'll fill out a form for us, we'd 6 7 greatly appreciate it. 8 Are there any other comments? Yes, sir. 9 MR. GREG ELLEY: Yeah, I didn't fill out a 10 11 form. CHAIRMAN VANDERWELL: That's quite all right. 12 You can go ahead and speak, and if you'll say your name 13 and your address. 14 MR. GREG ELLEY: Sure. 15 CHAIRMAN VANDERWELL: And then, yes, if you'll 16 please fill out one when you're done. 17 MR. GREG ELLEY: Yeah, my name is Greg Elley, 18 and I'm managing partner of Pyramid West Vistas, which 19 is 20 acres adjoined to the north here. And my concern 20 is I'm, basically, echoing what you just heard. The 2.1 density, 6,000 square feet a lot is, I just think that's 22 too small. And it's going to lead to too much traffic. 23 The traffic's bad already, the noise. 24 People have the right to build on their land. 25

Let's try and do it going from half, I think. And 1 that's, basically, it. I just think it's just too 2 dense, and it's just overwhelming. 3 So those are my concerns. Thank you. 4 CHAIRMAN VANDERWELL: Thank you. 5 Anyone else? 6 7 Yes, sir. And also, we'll ask that you fill 8 one out, too. Thank you. MR. REIF MCELROY: My name's Reif McElroy. 9 live at 7895 Patrina Way to the north of the property. 10 We have multiple residents over there that are on 11-11 and 12-acre parcels. And I'm just echoing what 12 everybody else is saying there. This is a high-density 13 project adjacent to what we all thought was, at one 14 time, and is still, rural areas, small ranchettes, 1.5 whatever you want to call them. This is going to impact 16 all those areas to the north and to the west. And it's 17 going to affect Highland as well. 18 The road improvement in Highland Ranch Parkway 19 to the entrance, as it was shown earlier, I feel, is 20 very inadequate. They should be improving Highland 2.1 Ranch Road all along that property line. Because 22 there's quite a bit of traffic on Highland Ranch Road 23 now coming down to Pyramid. That little bit of 2.4 improvement isn't going to do anything for all the other 2.5

1 traffic that's coming into this high-density density
2 point.

I also have an issue -- being an ex-fireman, sir -- with the fire danger. You can always see where the fire impacted that area 15 years ago. You got to have adequate services for that many houses. You should be building a fire station in that location as one of your commercial things. So that would be something I would think you'd be looking at.

I don't begrudge development. I am a builder. So I want them to do what they need to do. I am also concerned about the ridgeline and how it impacts our properties to the north and wanting to keep the houses down. The quarry pit isn't -- I've been up there on my horseback and quad. It's already re-cut right now at a very steep slope, but I'm sure they're going to redevelop it to fit all those houses a little differently. But I would like to see the houses stay off the ridgeline completely. And that way, you're keeping that density more intact to itself.

I'm, basically, just voicing what everybody else is saying. And you do need to give notice not 700 feet from the property. This is a huge development. You need to go much further out. You need to hit the Desert Springs area that's impacting us to the north.

You need to hit the Highland area up to the west. You 1 need to get better clarification. I found out about 2 this yesterday, and I'm here now. So I think that needs 3 to be improved. 4 Thank you. 5 CHAIRMAN VANDERWELL: Thank you. Appreciate 6 7 you being here. 8 Anyone else? Yes, sir. 9 MR. MIKE EASTMAN: Madam Chair, thank you for 10 your time. We have their objection to this. It's close 11 to my property, also. 12 CHAIRMAN VANDERWELL: Can you state your name 13 and your address, please. 14 MR. MIKE EASTMAN: Mike Eastman, 10 Mac Road. 15 CHAIRMAN VANDERWELL: Thank you. 16 MR. MIKE EASTMAN: I think, in a shortcut, 17 you've been had. I think, you have not been 18 well-explained what kind of property this, this quarry 19 is. If you look to the top of it, you'd probably first 20 say, yeah, the top is here. But, of course, they can 2.1 cut whatever they want to cut. It is a beautiful piece 22 of property. It overlooks all of Sparks and all of 23 Reno. Fantastic views up there. And, of course, people 2.4 are going to want to build up there. 2.5

But what it does is impact our city in a way that we don't, don't really like. I don't think, I don't think any of you, if you lived where we live, would like that. You're going to have an entire beautiful ridge completely covered with houses in a way that is going to require them to do a lot of chopping and cutting up the hillside. it's going to have to come down a little bit. It's going to have to be flattened and leveled and all those kinds of things.

And I would encourage all of you to go out there and take a look at the site, both as a -- I know we're dealing with a dutiful hard decision, that you really don't -- and it's very tall. I mean it's a very, very good size ridge.

So I don't want to repeat everything everybody else has said. But I don't think they did good, good thoughts on anybody to the north, only, again, sending notification out to 750 people. Everybody out there has 10-acre lots. So 10-acre lots, you don't get in past the real first row of people. You don't get all the rest of the people out there with 10-acre lots if they don't even know this is happening.

So I would encourage that to be done. First tell everybody else out there. And all those people are, I believe, under the same assumptions that Roc

mentioned earlier, that we are all under the assumption 1 that this was a protected ridge. And all of them 2 believe it's a protected ridge. And they're going to be 3 shocked when they have to come out their front door and see this giant row of houses. Maybe each individual 5 house is pretty. But a giant row of houses sitting on 6 the top of a ridge in the middle of Sparks is not 7 attractive, where you intentionally bought in this rural 8 area for that protected area. And we would certainly 9 like to see it stay that way. 10

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I think, all of us understand development has to go. I don't know that all of this Kiley Ranch and all this valley area that is being built, it looks like there are thousands of room, thousands of lots left for houses. It appears on any map. You just look at it. There's so much plans for that whole area out there, I can't imagine that they have to have this quarry and chop down one of the most beautiful areas in the city for views and for appreciation. We could do better with things like parks, trails, those kind of things, for public use lands.

I would like to re-hit on that one big area, is the traffic. I don't think -- again, I don't know where you all live. But if you live on North Pyramid, north of this Highland Park Ranch, that traffic is,

particularly in the mornings -- obviously, mornings and 1 evenings are worst -- it is just horrible. And it'll 2 take forever to get down there. If you add 1,800 more 3 homes and families that are trying to commute, sometimes two people each, all about the same time of day, it's 5 just going to be bogged down and no one's going to be 6 7 able to get anywhere. So I'd appreciate it if you would really, 8 really reconsider this and take a good look at where 9 this property is, take a look at the elevations, the 10 terrain out there, take a look at how --11 (The three-minute warning sounded.) 12 MR. MIKE EASTMAN: -- wonderful it can actually 13 be, and for some other purpose than up and by me with a 14 bunches of houses on top of it. 15 Thank you. 16 CHAIRMAN VANDERWELL: Thank you. 17 Are there any other requests? 18 Yes, ma'am. 19 MS. PATRICIA METZ: I didn't (indistinct.) 20 CHAIRMAN VANDERWELL: That's fine. If you'll 2.1 just state your name and your address. And then, when 22 you're done, if you'll fill out the form, that would be 23 wonderful. 24 MS. PATRICIA METZ: My name is Patricia Metz. 25

And I'm at seven 7335 Star Hill, which is the south part of this area where we all have these, the 10 acres at least, ranches. And mine is right up there against this proposed property, the top of my property. And I bought it in 2001. And I was under the impression that nobody would be ever building out there.

This time is that so-called berm between -- if there is one, between my place and others that are up this mountain that we have there. It looks like we're going to be touching right where the proposed building will be.

Also, at one time, with the pit, I'll call it, they were also in agreement to never even have any dust coming up. You know, that was their agreement with people on the north side of where the pit is, which would be where I live.

I'm also concerned about fire situations, that they would have to have very good coverage. That is very dense, what they're proposing. And lots of people would be up there over, over our mountain.

No, we did not plan to have houses right up on that ridge. If it goes through, I would really hope that they would handle it better to be in concern of the people that live to the north. There's all this acreage

of ranches. And most of the people that live in the 1 whole area don't even know they're there. 2 So I am concerned about this whole proposal 3 and, also, the traffic on Highland Parkway. I go up 4 that highway many times to go over to -- on the other 5 side of 395 even. And people drive pretty crazy on it. 6 7 And with more people going into that proposed construction, I think it would be pretty dangerous. 8 But, anyway, I think there's a lot of things to 9 look at. And it's not a simple matter. 10 So thank you for your time. 11 CHAIRMAN VANDERWELL: Thank you, and we 12 appreciate you staying. 13 With that, is there anyone else that Okay. 14 requests to speak? 15 Okay. All right. Then, we're going to take 16 each one of these separately. So I'm going to close the 17 public hearing, and I'm going bring back to discuss 18 DA18-001. 19 So do any of the Commissioners have questions, 20 comments regarding the development agreement? 2.1 Commissioner Carey. 22 COMMISSIONER CAREY: Thank you, Madam Chair. 23 Ouestion for staff regarding the development agreement. 2.4 Looking through Section 6.1, that requires the 25

1 maintenance of the open space on this property.

I think, one of the concerns that I have, and I appreciate Chief Maples being here, is wildfire. I think, we had some public comment expressed that, too. Given the topography of the site, I could see that wildfire being a serious issue.

My question about Section 6.1 requiring maintenance, does this section of the agreement require, you know, the HOA, or whoever is created for that, to maintain defensible space for the homes that are built?

MR. ORNELAS: The development agreement does not specifically address the issue of defensible space, Commissioner Carey. I mean I would refer the question, of course, to Chief Maples. But, typically, once the developable areas are truly defined, as you know, this is an exceptional land use plan -- scroll down.

This is a preliminary slope analysis. The section of the agreement that addresses slope analysis and development constraints, basically, requires an acknowledgment on the part of the developer that there are slope constraints. Ultimately, this slope analysis will have to be refined and the land plan updated to reflect the slope analysis.

That's a step towards, ultimately, the process of tentative and final maps where the areas that are --

expect to be designated open space and dedicated to the 1 HOA or whatever the entity is responsible for 2 maintaining, for the development agreement. We can 3 start to look at the issue of that through that 4 tentative map process. 5 There, it's my understanding, Chief Maples, 6 that the International Fire Code has defensible space 7 8 provisions. So, currently, in the City, we CHIEF MAPLE: 9 don't have any type of ordinance that regulates the 10 wildland urban interface. And the reason for that is, 11 historically, we haven't been developing out in these 12 areas. It's been more of an urban area. 1.3 I believe, with the Andrea, that was the first 14 one where we required the homeowners to, the homeowners 1.5 association to maintain a defensible space on their 1.6 17 property. So, like Armando said, this is all very 18 preliminary now. But I would assume that it 19 incorporates something like that into this. 2.0 COMMISSIONER CAREY: Thank you, Chief, 2.1 appreciate that, that answer. 22 My other question I had is concerning the 23 development agreement. One of the key provisions of 24 this development agreement is that it allows for the 25

property owner to petition to be included within IFSA 1 Number 1. And my question is, about that is, with the 2 proposed land, land uses on this site where it takes up 3 the entire site where we have -- you know, it's all single-family, it's all commercial, how do those, those 5 proposed acreages affect the calculations for our next 6 IFSA update? Would we just take the two, one, and five 7 acres that are developable, or would we take the entire 8 acreages and calculate that? 9 MR. ORNELAS: We will be looking at development 10 units for that purpose. So, as Mr. Martini explained to 11 you in some detail in his presentation, and he did go 12 into some detail, the -- you know, we'll be looking at 13 the number of residential units, and commercial space 14 will be taken into account as well. 15 And so it's not the acreage per se. It's the 16 development units that will be taken into account with 17 IFSA, IFSA Number 1. 18 The other point I would make, just as some 19 clarification, is that by virtue of this agreement, they 20 are petitioning. So this agreement, if approved by both 21 parties, by the City Council, is the petition. 22 COMMISSIONER CAREY: Appreciate the 23 clarifications. Thank you. 24

Thank you, Madam Chair.

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Any other questions? CHAIRMAN VANDERWELL: 1 Commissioner Fewins. 2 COMMISSIONER FEWINS: Commissioner Fewins. And 3 so under the development agreement, you talk about 4 widening to four travel lanes from Pyramid Highway to -on Highland Ranch to the -- on the map it was called the unknown road, as they name that. Are there any kind 7 of -- with that development agreement, when you have --8 say that this does go through, you have 1,800 homes 9 coming down, there's no kind of traffic facility there 10 at that unknown road and Highland Ranch Parkway 11 intersection. Would there, could there be anything in 12 that development agreement that will trigger something 13 for some kind of traffic control at that intersection? 14 And then, further, those people are probably 15 going to be taking a left through that, coming down 16 Highland Ranch. Is that a --17 MR. ORNELAS: I'm going to ask Amber Sosa to 18 address that question, if she would. 19 COMMISSIONER FEWINS: Okay. Thank you. 20 MS. SOSA: For the record, Amber Sosa, 21 Transportation Manager for the City of Sparks. 22 The traffic study provided for this for the 23 Highland Ranch Parkway, and the project access 24 intersection does provide for a three-lane traffic 25

1 | signal control intersection.

MR. ORNELAS: Okay. Thank you.

COMMISSIONER FEWINS: And we had some discussion about Highland Ranch. And maybe this is for -- we were talking about Highland Ranch being done all the way. I think, there was public comment about improving that all the way. Can you explain possibly where that may not be able to do the development agreement with improving the whole road on that, please?

MR. MARTINI: Good evening, Madam Chair, members of the Commission. John Martini, Community Services Director.

So, as we -- we've talked many times as we look at development-related issues. When we look to a development to make a substantial public improvement, we are bound by, basically, two factors. One is a nexus, meaning do you have a reason to require an approval, or an exact what it is -- it could be improvement of a road, addition of a signal, building a flood control channel, whatever the project we're looking at seems to require.

The second one is called proportionality. So we have a duty to, if we decide we have a nexus to require the developer to do something that's typically an off-site improvement, what is the proportional effect

of that development on the object we're looking at? So in this case, Highland Ranch Parkway.

Certainly, as the project's proposed today, and we've heard discussion about two forms of access -- and the Chief and I will be working with the developer to figure that out. As of right now, you're looking at a project that has one way in and one way out. So it will certainly be utilizing, as we sit tonight, all of the traffic in this project will utilize Highland Ranch Parkway to either come in or out of the project.

So you have a nexus, we do. As we looked at this project over the last 18 months working with the developer, that was clear. Amber Sosa and your City Engineer, Jon Erickson, in conjunction with Mr. Solaegui's work, looked at what the impacts are. You've got the numbers in your report. The development agreement requires a certain amount of upgrading of Highland Ranch.

That is the proportional share. That's where we went. It is all, from the project entrance to Pyramid Highway, the effects on the roadway going forward are completely attributable to this project.

Now, certainly there's going to be some growth to the west in Sun Valley that likely will be coming over. But it is probably de minimis in comparison to an

1 | 1,800-unit subdivision utilizing this road.

So, to answer your question, yes, we can. But it has to be proportional.

So to the question asked tonight, why not just pave the road all the way to Sun Valley, I guess, would be the case? We could. However, their proportional share -- let's say it cost \$100 to do that improvement. It's probably more like a couple of million bucks. Their share would be, say, \$400,000 of that \$2 million. The public has to come up with the rest.

As we sit here today, Highland Ranch Parkway is, you view that annexation, a portion of it will be owned now by the City of Sparks. The rest remains in Washoe County. The two entities would have to come together in conjunction with RTC to fund the project. So that can hang a developer up while public funding is being found. The easiest way to do this is to have them, conditioned through this development agreement, to make their proportional share of that upgrade to four lanes on Highland Ranch Parkway, subject to the conditions in the development agreement.

That's a very long-winded way to say, no, we can't just pay for the whole thing, or require them to pay for the whole thing.

COMMISSIONER FEWINS: Thank you.

CHAIRMAN VANDERWELL: Anybody else have any 1 questions? 2 Commissioner Read. 3 COMMISSIONER READ: I have a question. I have 4 a question for the applicant. 5 And, by the way, Commissioner Fewins and I did 6 7 have the opportunity to take a field, a rather bumpy field trip around the project site. So thank you, 8 Mr. Christy, for that opportunity and sharing your plans 9 for the property. 10 I had a question regarding the quarry area and 11 the fill. Can you describe the flood mitigation plans 12 at that site? 1.3 MR. MIKE RAILEY: I'm going to let somebody 14 that's much more intelligent than I am. 15 MR. SCOTT CHRISTY: Yeah, good evening. For 16 the record, Scott Christy with QK. 17 So, currently, there are some, some drainage 18 issues out there that exist today with this development. 19 We're not changing the drainage pattern at all. We will 20 be providing improvements that are going to improve the 21 situation. We're working with staff to potentially 22 improve the situation at the Highland Ranch/Pyramid 23 intersection to improve the culverts that are there 24 today, as well as drainage structures coming down 25

1	Highland Ranch parkway.
2	Did that answer your question?
3	COMMISSIONER READ: Vaguely.
4	MR. SCOTT CHRISTY: Well, what can I be more
5	specific about?
6	COMMISSIONER READ: You had, when we were
7	driving, you had mentioned some sediment basins and some
8	extra hydraulic measures, and.
9	MR. SCOTT CHRISTY: Yeah, that's all included
10	in what we would do on Highland Ranch Parkway. So there
11	is a sediment, sedimentation issue that's been around a
12	long time. We've actually been working in other areas
13	in the city to help mitigate that. In part, what we
14	would do is to add some sedimentation control. And
15	that's part of the problem I referenced there at
16	Highland Ranch/Pyramid intersection. With the
17	improvements and infrastructure being put in, we could
18	help mitigate that problem.
19	COMMISSIONER READ: Thank you.
20	CHAIRMAN VANDERWELL: Anybody else have any
21	questions?
22	Okay. I just have one question, Mr. Ornelas.
23	If you could address noticing before we move on with
24	this.
25	MR. ORNELAS: So we notice per the requirements

of state law, which are likely in our municipal code as 1 well. You know, we've often thought to ourselves, you 2 know, sometimes it would, practically speaking, make 3 sense to notice a larger area. We've had that 4 conversation with our legal counsel. And, you know, it 5 really raises the question of why did you do -- if you 7 don't comply, if you don't do notice to be in compliance with state law and our municipal code, any time in the 8 future when you deviate from that, you know, you're 9 going to have to justify why, and why this time and why 10 not some other time for some other project. 11 So on the advice of legal counsel, we complied 12 with state law with regard to noticing. 13 CHAIRMAN VANDERWELL: Can you explain what 14 state law says, so that -- because, I think, we have 15 residents here that -- so that they understand how 16 17 noticing happens. So, for example, where the MR. ORNELAS: Yeah. 18 Comprehensive Plant land use amendment, if you go to 19 that finding, CP4, the noticing was done. There's a 20 requirement for the immigrant meeting, which is the 2.1 applicant's responsibility. And then --22 MS. MELBY: Would you like me to address that? 23

MS. MELBY: Karen Melby, Development Service

MR. ORNELAS: Yes, if you would.

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Manager. The noticing for the neighborhood meeting is 1 750 feet by state law. So the applicant did notice 2 within 750 feet of the property. Annexations require 3 750 feet. And, also, the zone change, they're all 750 4 feet. And the applicant received the notice for the 6 neighborhood meeting from the City of Sparks. So it was 7 the same notice list that was used for the neighborhood 8 meeting was also used for the annexation request and 9 also the rezoning. 10 MR. ORNELAS: And so there's a -- and there's a 11 provision -- correct me if I'm wrong, Ms. Melby --12 CHAIRMAN VANDERWELL: Thank you. 13 MR. ORNELAS: -- that, you know, you go out a 14 certain distance for --15 MS. MELBY: Yeah. 16 MR. ORNELAS: -- for the greater of a certain 17 distance or a minimum number of property owners. 18 MS. MELBY: Which is 30. 19 MR. ORNELAS: It's 30. So. 20 CHAIRMAN VANDERWELL: Thank you. 2.1 MR. ORNELAS: In this case, for example, the 22 23 750 produced 50. CHAIRMAN VANDERWELL: Okay. I appreciate that 24

clarification. Thank you.

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1	Mr. Railey, can I have a question of you,
2	please? And I don't know if you can answer or not.
3	Were you at the public meeting, the neighborhood
4	meeting?
5	MR. MIKE RAILEY: Yes.
6	CHAIRMAN VANDERWELL: Okay. Can you synopsize
7	what the people that attended, what their feedback was?
8	MR. MIKE RAILEY: I think, it kind of mimics
9	what you heard here tonight in terms of density was a
10	concern. Also, one issue that wasn't brought up tonight
11	that was raised at the meeting was concern of a
12	potentially access to the north through, up into that
13	area. We addressed that and, you know, basically, this
14	is like how the project will be laid out. And there was
15	line issues and the density.
16	CHAIRMAN VANDERWELL: Okay. I appreciate that.
17	Thank you.
18	With that, we'll go ahead, and I will
19	COMMISSIONER FEWINS: Madam Chair.
20	CHAIRMAN VANDERWELL: Yes, Commissioner Fewins.
21	COMMISSIONER FEWINS: If I could have the Chief
22	come back up.
23	CHAIRMAN VANDERWELL: Sure.
24	COMMISSIONER FEWINS: And we're still talking
25	about the development?

CHAIRMAN VANDERWELL: Yes, we are.

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that access road that you're really talking about, you know, I was driving around the City of Sparks, and there's quite a few access roads currently in our city that are not -- can you just tell the differences between what those are per a public road and a fire access road, and why you think in this development, and I think you addressed it a little bit, but in your professional opinion, why that access road is not going to be good enough?

CHIEF MAPLES: So it's kind of what I talked about earlier.

COMMISSIONER FEWINS: Yes.

CHIEF MAPLES: Okay. It's not open all the time. Okay. So if there's an emergency, and there's only one way out, everybody funnels down the one road. If it's a public road, the secondary access that we're talking about, there's another, there's an alternative way out.

This is also a very large development with a large number of units. A lot of the access roads we have around here were for much smaller developments.

Okay. My concern would be sometimes they are not built to accommodate two-way traffic. They're not plowable,

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like I said. They're not regularly maintained.
                                                     This
 1
    area, you have some steep hillsides, that you're aware
 2
    of. You could have rock slides, and people out there
 3
    removing the rocks, and we have to access it, and then
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    that hinders our ability to get in and out. It's the
 5
    same thing.
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            COMMISSIONER FEWINS: Okay. Thank you.
            CHAIRMAN VANDERWELL: Okay. Any other
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    questions regarding the development agreement, comment?
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             Okay. I'm going to call on somebody if
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    somebody doesn't step up. So let's go. Come on.
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    you want to make a motion on the development agreement
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    for me?
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             COMMISSIONER CAREY: Madam Chair, I'd be happy
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    to --
             CHAIRMAN VANDERWELL: Commissioner Carey.
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             COMMISSIONER CAREY: -- wager some comments.
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    I'm not sure if I'm prepared to make a motion.
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             CHAIRMAN VANDERWELL: Okay. Go right ahead.
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             COMMISSIONER CAREY: Maybe my comments will
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    spur some more --
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             CHAIRMAN VANDERWELL: There you go.
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23
             COMMISSIONER CAREY: -- discussion.
             CHAIRMAN VANDERWELL: There you go.
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             COMMISSIONER CAREY: With respect to the
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proposed development agreement, I certainly appreciate 1 the work of staff. I think, there's a lot of good 2 things in this development agreement. And it will 3 provide some good, some good stuff to help out our 4 infrastructure needs out there. 5 I do have a lot of concerns with the proposed 6 7 land use changes. In my opinion -- I'm just one Commissioner up there. I don't believe that these 8 proposed changes are consistent with the 9 comprehensive -- or the proposed development agreement. 10 Got ahead of myself. 11 CHAIRMAN VANDERWELL: Yeah. 12 COMMISSIONER CAREY: The proposed development 13 agreement consistent with the Comprehensive Plan. 14 15 Center for many years now. I believe that that's an 16

agreement consistent with the Comprehensive Plan. This site has been designated as Business Park and Employment Center for many years now. I believe that that's an appropriate land use for this section. I think, from the land use point of view, I think there's more impacts from what the proposed land use is of this, in this development agreement are more impactful to the adjacent residences. I don't find that it's compatible.

So I won't be, I do not support this development agreement.

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CHAIRMAN VANDERWELL: Thank you, Commissioner Carey.

Madam Chair. COMMISSIONER FEWINS: 1 Commissioner Fewins. CHAIRMAN VANDERWELL: 2 COMMISSIONER FEWINS: Commissioner Fewins. 3 little bit more discussion on that. I am actually in 4 favor of the development agreement. I think, even though we do hear development is something that our city 6 is growing and it's something that it's doing. And 7 whether or not I -- I definitely hear concerns of 8 citizens that own 10-acres to the north. 9 development is happening. Our city's growing. This is 10 giving an ability for a housing shortage that we sound 11 like we desperately -- well, it doesn't sound like -- we 12 desperately are in need of. It's giving a vehicle for 13 funding for some capital improvements that are 14 definitely needed in this area. 1.5 And so, I think, you got to look at really 16 we're going to want our city to grow. This is an 17 ability to get an agreement with the developer to be 18 able to fund items that are in desperate need in our 19 20 city. So I'm in support of this and the development 21 agreement. I think, just the whole nexus of getting it, 22 or concurrency with the agreement, I think, is a great 23

plan. I think that staff's done a great job of doing

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that.

And, you know, we've had, we've definitely 1 looked at annexing in the past and have not been 2 favorable on it. Because, I think, developers did not 3 meet with staff and get really the plan going. And I 4 think that by them doing that and getting things going 5 down the road in the right direction at the same time is 6 7 a really good idea for our city. CHAIRMAN VANDERWELL: Thank you. 8 Anyone else have any comment? 9 Okay. Is anybody prepared to make a motion? 10 COMMISSIONER FEWINS: Commissioner Fewins. I'm 11 ready to make a motion. For the development agreement, 12 I move to find the proposed development agreement 13 associated with PCN16-0050 consistent with the Sparks 14 Comprehensive Plan and to move forward with 15 recommendation of approval to the City Council. 16 COMMISSIONER BROCK: Commissioner Brock. 17 Second. 18 CHAIRMAN VANDERWELL: Okay. I have a first and 19 a second. Is there any discussion? 20 Okay. I'm going to go ahead and make a 21 comment. I am going to support the development 22 agreement. I appreciate the time that staff has put 23 into it. And I do understand, when you live in 24 unincorporated Washoe County and then, all of a sudden, 2.5

we have land that then is concurrent to be annexed into 1 the City, that there are different rules in the City, 2. even though our unincorporated county. And, 3 unfortunately, that is how growth is happening. 4 we're growing. And we need to make sure that we grow 5 responsibly. 7 And I feel that with staff working with the developer, that they bring a plan in place. It is a 8 20-year build-out, so it's not something that when we 9 start doing this, that we're going to start seeing 10 sticks in the air tomorrow. So there are steps that 11 have to happen in order for this to come to fruition. 12 So with that, I'll call, all in favor? 13 (Commission members said "aye.") 14 CHAIRMAN VANDERWELL: Any opposed? 15 COMMISSIONER CAREY: 16 CHAIRMAN VANDERWELL: Okay. Motion carries. 17 Okay. Next, we'll move along to AX16-003, the 18 voluntary annexation. Commissioners, do we have any 19 20 comments, anything else? Commissioner Fewins. 21 COMMISSIONER FEWINS: Yeah, I do, one, on the 22 annexation. So we're talking about services. And, 23 mainly, and I think maybe Mr. Martinez best answered 24 this. And I asked this in the Study Session. And, you 25

know, were talking about we had the sewer study done, 1 and I think this was included in the sewer study posed. 2 Correct? Or am I correct? 3 MR. MARTINI: Yes, so the property was 4 initially included in the sewer study for its 5 Comprehensive Plan, which, as Commissioner Carey pointed 6 out earlier, was professional office. It has been 7 remodeled, including the proposed development densities. 8 Well, for, as requested, it is reflected in the 9 development agreement we just we just voted on. 10 So, yeah, it's included. As Armando pointed 11 out in his -- or Karen actually did. So the northwest 12 interceptor, the big line that runs all the way out to, 13 up past north of Long. So it has capacity to handle 14 this proposed development. There are some improvements 15 that the developer will be 100 percent responsible for 16 to upgrade between this property and the interceptor, 17 which lies on the kind of eastern boundary of the Kiley 18 North development. 19 So that's a cost completely borne by the 20 developer to upgrade those existing lines that don't 21 have that capacity. 22 COMMISSIONER FEWINS: So the line, but, I 23 guess, the line has capacity? 24

MR. MARTINI:

2.5

The interceptor does.

COMMISSIONER FEWINS: The interceptor does. 1 MR. MARTINI: Which is included in Impact Fee 2 Service Area 1. 3 COMMISSIONER FEWINS: Yeah. What about where 4 it comes down to the river, the facility? 5 MR. MARTINI: We're getting all the way to the 6 river, actually, all the way to TMWRF. 7 COMMISSIONER FEWINS: So the facility itself 8 9 has capacity to --MR. MARTINI: So when we speak to TMWRF --10 COMMISSIONER FEWINS: Yes. 11 MR. MARTINI: -- TMWRF has a permitting 12 capacity that is both, it has a hydraulic capacity 13 rating of about 44 million gallons a year. As the 14 Commission knows, we also have wasteload allocation 15 requirements on the river. Which the big three are 16 limited nitrogen, the phosphorus, and total dissolved 17 solids. 18 As you all well know, our nitrogen discharged 19 to the river has been creeping up. So your Sparks 20 staff, in conjunction with the staff at Reno, since 21 we've worked jointly when operating the plant, we're 22 working on the next upgrade and some work right now. 2.3 COMMISSIONER FEWINS: Okay. 24 MR. MARTINI: So Sparks does have some remedial 25

capacity, as been showed in the build-out of the sewer. 1 Because you remember the results of the mall. We do 2 need additional capacity in the future at TMWRF. In the 3 near term, we're going to need to make some improvements 4 to cut down on the nitrogen and TDS that we're putting 5 into the river to allow for additional development. 7 So the way that is play out is, when we have arrived at that next black box, if you will, where the 8 plant is, that will be loaded into the capital 9 improvements plan for TMWA. Once approved by our City 10 Council, then those costs are loaded into our rate 11 studies for connection fees. I suspect we'll see a 12 connection fee study coming your way here shortly. 13 Mr. Hummel's working on one right now. 14 To answer your question, Commissions Fewins, if 15 you need to create some more capacity on a chemical 16 basis, there is a plan moving forward and a 17 (indistinct). 18 COMMISSIONER FEWINS: Okay. Can we talk 19 about -- Commissioner Fewins again -- storm drain in 20 this closed basin? 21 MR. MARTINI: And it's not a closed basin. 22 COMMISSIONER FEWINS: I guess, with one, one 23 24 river out. That's right, one river out. 2.5 MR. MARTINI:

COMMISSIONER FEWINS: Well, there's been a lot of talk about in north Reno on certain areas of flood.

What are some things that we will not have that problem, you think, in this area?

2.5

MR. MARTINI: So, as you well know, since I was just here meeting last, talking about an active service area, it includes some \$18 million in flood control projects, most of which have already been completed within Impact Fee Service Area 1.

With their petition tonight, so to cut it short, all their stormwater that this generates will come down Highland Ranch Parkway in one form or another. They'll certainly have some retention basins on site to cut the flows down. It will then cross Pyramid Highway and get into, directly into the Sun Valley diversion channel, which is a capital improvement item inside Kiley Ranch, flow behind the Kiley Ranch dam, and then enter into the rest of our flood control structures that we built south of Kiley Ranch dam, all the way down to the river.

And as the Commission knows, we are just about a month and a half away from completing the north Truckee drain improvements through the industrial area. So all of the water from Highland Ranch Parkway will actually go out that brand-new twin 14-by-10 culvert

1	that we built, one way or another.										
2	COMMISSIONER FEWINS: Okay. Thank you.										
3	CHAIRMAN VANDERWELL: Thank you.										
4	Anybody else have any questions, comments?										
5	Okay. No. I'll entertain a motion on the										
6	annexation.										
7	MS. MCCORMICK: Madam Chair?										
8	CHAIRMAN VANDERWELL: Yes.										
9	MS. MCCORMICK: Assistant City Attorney Alyson										
10	McCormick. If you could open the item for public										
11	hearing.										
12	CHAIRMAN VANDERWELL: Yes. I apologize. Okay.										
13	This is a public hearing. And I will open this item.										
14	So if anybody would like to speak on it, you're welcome										
15	to come up and speak.										
16	Okay. Seeing none, I'll close the public										
17	hearing and bring it back to the Commission. Questions,										
18	comments?										
19	COMMISSIONER READ: Madam Chair, I'll move										
20	to										
21	CHAIRMAN VANDERWELL: Commissioner Read, thank										
22	you.										
23	COMMISSIONER READ: Before I was called on. I										
24	move to forward a recommendation of approval to City										
25	Council for the annexation request AX16-003 associated										

with PCN16-0050, based on findings Al through A4 and the 1 facts supporting these findings as set forth in the 2 staff report. 3 CHAIRMAN VANDERWELL: We need a second. 4 COMMISSIONER FEWINS: Commissioner Fewins 5 seconds. 7 CHAIRMAN VANDERWELL: Okay. I have a first and 8 a second. Any discussion? Commissioner Carey? 9 COMMISSIONER CAREY: Quick comment, if I may. 10 CHAIRMAN VANDERWELL: Yes. 11 COMMISSIONER CAREY: Although I don't agree 12 with the proposed land uses, I do concur with staff's 13 recommendation. I find that this is a logical extension 14 of the City limits. I believe, it is also contiquous. 15 I see no need to disagree with the recommendation of 16 17 staff on this one. Thank you. CHAIRMAN VANDERWELL: Appreciate that 18 Okay. All in favor? 19 (Commission members said "aye.") 20 CHAIRMAN VANDERWELL: Any opposed? 21 Okay. The motion carries. 22 Next, we'll discuss the comprehensive land use 23 amendment request, which is MK17-0005, public hearing 24 And I will open it. Would anybody like to come 2.5

1	up and speak on that?									
2	Okay. With that, I'll close the public hearing									
3	and bring it back to the Commission. Any Commissioners									
4	have any comments?									
5	Commissioner Carey.									
6	COMMISSIONER CAREY: Couple questions for									
7	staff, if I may. With the proposed Comprehensive Plan									
8	amendment, do we have any idea of what the fiscal impact									
9	to the City would be from changing the land use from									
10	Business Park, Employment Center, to single-family and									
11	Commercial?									
12	MS. MELBY: The fiscal impact analysis that we									
13	discussed earlier had a net benefit, if I remember the									
14	numbers correctly									
15	CHAIRMAN VANDERWELL: It's 2.8.									
16	MS. MELBY: of 2.8 acres.									
17	CHAIRMAN VANDERWELL: \$2.8 million.									
18	MS. MELBY: \$2.8 million.									
19	CHAIRMAN VANDERWELL: Yes.									
20	MS. MELBY: Yes.									
21	CHAIRMAN VANDERWELL: Yeah, it was.									
22	MR. ORNELAS: Arkansas Ornelas, Assistant									
23	Community Services Director. I think, to more directly									
24	address your question, Commissioner Carey, the fiscal									
25	impact analysis did not ask for repairs and, if you									

will, of the instant uses to the proposed uses. The fiscal impact instances for the proposed use and zoning classification.

You know, I would say that with this, something along the lines of a planned development, where you add in particular specific uses that's been, you know, designated and contemplated, it would be, you know, it would have been probably something that we would have amended. In this case, we did not do that.

COMMISSIONER CAREY: Sometimes it's definitely the opinion of staff that this side is not suitable for business park, more suitable for --

MR. ORNELAS: Yeah, I mean I would have to agree with the applicant's contention that given the compatibility of the site, that the employment center types of uses at the designation that is on there contemplates aren't really viable.

You know, I would point to the much more developable and for purposes of employment center are on the east side of the Pyramid Highway in Kiley Ranch North and Stonebrook. I think, those are appropriate locations for that type of use. I think, the market hasn't been there to date. But I think that that's a more realistic expectation from that side of the highway.

1	You know, certainly it's nothing that we can,										
2	any of us can for certain. But I appreciate the										
3	question. But I would, I would agree with the										
4	applicant's contention, again, that this is not a										
5	particularly suitable site for (indistinct).										
6	COMMISSIONER CAREY: Okay. I think, I know how										
7	this is going to go. All of it's just in there. Thank										
8	you.										
9	CHAIRMAN VANDERWELL: Commissioners, any other										
10	Commissioners have any questions?										
11	Okay. I'll entertain a motion.										
12	COMMISSIONER PETERSEN: Madam Chairman, I can										
13	make a motion on this one.										
14	CHAIRMAN VANDERWELL: Commissioner Petersen,										
15	thank you.										
16	MS. MCCORMICK: Madam Chair, did you public										
17	hearing on this one?										
18	CHAIRMAN VANDERWELL: I did.										
19	MS. MCCORMICK: Thank you.										
20	CHAIRMAN VANDERWELL: Thank you. You're										
21	training me good. So, thank you. That's okay. We all										
22	are.										
23	COMMISSIONER PETERSEN: Commissioner Petersen.										
2 4	I move to approve the Comprehensive Plan land use										
25	amendment MPA17-0005 associated with PCN16-0050 based on										

the findings CP1 through CP4 and the facts supporting 1 these findings as set forth in the staff report. 2 CHAIRMAN VANDERWELL: Can I get a second? 3 COMMISSIONER READ: Commissioner Read. Second. 4 CHAIRMAN VANDERWELL: Thank you. I have a 5 first and second. Any discussion? 6 7 Commissioner Carey. COMMISSIONER CAREY: Thank you, Madam Chair. 8 I'll try to keep this brief. 9 I will not be supporting the motion. I 10 disagree with the proposed land use change. I think 11 that this site has been designated as an employment 12 center for a long time. I agree with that. Past, past 13 master plan amendments, I would agree with that as well. 14 I believe that, if we're going to really get 15 serious about meeting our employment goals of the 16 Comprehensive Plan, we need to stick with our master 17 plan. We need jobs in the Spanish Springs valley. 18 I think, if we're going to solve the traffic 19 issues on Pyramid Highway, on Vista, on Sparks 20 Boulevard, we really need to get serious about keeping 21 with our master plan and having offices in Sparks. 22 I certainly appreciate staff's opinion of that 23 this will help meet the housing goals. We have 24 immediate need for housing. There's no doubt about 25

that. But in the opinion, humble opinion of this 1 Commissioner, I believe that we need to advance our 2 employment goals that have been on the books for 30 3 years. 4 And I will not be supporting the motion. Thank 5 you very much. 6 7 CHAIRMAN VANDERWELL: Okay. With that, I'll 8 call for the vote. All in favor? (Commission members said "aye.") 9 CHAIRMAN VANDERWELL: Opposed? 1.0 COMMISSIONER CAREY: Nay. 11 CHAIRMAN VANDERWELL: Okay. Thank you. Motion 12 carries. 13 Next, we'll move along to the rezoning request 14 RZ17-0006. I will open the public hearing. Is there 15 anybody that requests, requests to speak? 16 Yes. And if you'll please state your name and 17 your address again, please. Thank you. 18 MR. BRADLEY PAUL ELLEY: Bradley Paul Elley 19 20 again. CHAIRMAN VANDERWELL: Thank you. 21 MR. BRADLEY PAUL ELLEY: I've been a property 22 23 owner in Spanish Springs, and my family has, since 1974 when Mr. York sold us the lots that Mr. Harvey 24 Whittemore had the City of Sparks, basically, put in an 25

enclave of his property. So we had to drive a quarter 1 mile out to get to the new road. 2 So I say that because I don't know what is 3 compatible with a development of 6,000-square-foot lots with adjoining one-third acre and 40-acre and 20-acre lots. Can anyone please explain that to me? Why is 7 that compatible? Do you have any idea how small that 8 is? And modern zoning normally doesn't allow that, 9 except for senior housing, okay, in my understanding. 10 But you don't seem concerned about that at all. 11 So, again, my office is getting gored. Thank 12 13 you. CHAIRMAN VANDERWELL: Thank you. 14 Anybody else wish to speak? 15 With that, I'll close the public hearing and 16 bring it back to the Commission. Any questions, 17 comments? 18 COMMISSIONER FEWINS: Yeah, I have a question 19 20 of Karen. MS. MELBY: Yes. 2.1 COMMISSIONER FEWINS: Karen, I think, a couple 22 years ago you did a very thorough study on the air, 23 airplanes that tried to fly with this property. Did you 24 find that it was loud out there on the approaches and 2.5

1	leaving of the airplanes?
2	MS. MELBY: No. The planes that flew over the
3	site when I was doing the noise study, before they
4	opened the Granite, that Granite opened their pit there,
5	was very hardly picked up on the noise meter.
6	COMMISSIONER FEWINS: Thank you.
7	MS. MELBY: M-hm (affirmative).
8	CHAIRMAN VANDERWELL: Any other questions?
9	I have a question for clarification, please,
10	for the gentleman that spoke before, to discuss as far
11	as density. And then a follow-up with that is our code
12	regarding ridgeline development and slope development.
13	MS. MELBY: Okay.
14	CHAIRMAN VANDERWELL: Thank you.
15	MS. MELBY: Your first question is in regard to
16	the property?
17	CHAIRMAN VANDERWELL: The property, the
18	proposed property density and why we're why we're
19	proposing it, that it's allowed.
20	COMMISSIONER CAREY: I think, compatibility.
21	CHAIRMAN VANDERWELL: The compatibility, yes.
22	MS. MELBY: The compatibility.
23	CHAIRMAN VANDERWELL: Thank you.
24	MS. MELBY: Well, the Kiley Ranch project to
25	the east of this will have actually even smaller than

6,000-square-foot lots. Some of the villages have like 1 4,500-square-foot lots. Typical, a 6,000-square-foot 2 lot is our typical lot size for residential within the 3 City of Sparks. So 6,000-square-foot lot is pretty typical, and that is our most common zoning district 5 within the City of Sparks if you look at a zoning map. 6 It is the most common. And, also, most common, I think, in most of our planned development handbooks, also. So that's why we feel that it's -- it's the 9 typical lot size within the City of Sparks. 10 CHAIRMAN VANDERWELL: Thank you. The next, 11 ridgeline development? 12 MS. MELBY: When we do the slope analysis, 13 we'll have to look at the steep slopes in that area. 14 We had in the Sparks Municipal Code an identified 15 ridgeline. And I did look at that map when I was 16 preparing the staff report. And that is not an 17 identifiéd ridgeline in the code. 1.8 CHAIRMAN VANDERWELL: Okay. Thank you. 19 Appreciate the clarification. 20 Anyone else, questions, comments? 21 Okay. We're going to draw straws here in a 22 minute, you guys. 2.3 24 COMMISSIONER READ: Madam Chair, I'll make a motion. 25

1										
1	CHAIRMAN VANDERWELL: Commissioner Read, thank									
2	you.									
3	COMMISSIONER READ: I move to forward a									
4	recommendation of approval to City Council for the									
5	rezoning request RZ17-0006 associated with PCN16-0050									
6	based on findings Z1 through Z3 and the facts supporting									
7	these findings as set forth in the staff report.									
8	CHAIRMAN VANDERWELL: Can I get a second,									
9	please?									
10_	COMMISSIONER FEWINS: Yeah, Commissioner Fewins									
11	seconds.									
12	CHAIRMAN VANDERWELL: Okay. I have a first and									
13	a second. Any discussion?									
14	Commissioner Carey.									
15	COMMISSIONER CAREY: Thank you, Madam Chair. I									
16	will be supporting the motion to approve. I know									
17	disagree with the land use change. However, now that									
18	our Comprehensive Plan has been changed, I find that									
19	this rezone is compatible with it. I can meet all the									
20	required findings.									
21	CHAIRMAN VANDERWELL: Thank you.									
22	With that, all in favor?									
23	(Commission members said "aye.")									
24	CHAIRMAN VANDERWELL: Any opposed?									
25	Okay. Thank you. Motion carries.									

## Exhibit A

## The Quarry: Legal Description

All that certain real property situate within a portion of Section 9, Township 20 North, Range 20 East, Mount Diablo Meridian, County of Washoe, State of Nevada, described as follows:

Parcel 2 as shown on the Record of Survey to support a Boundary Line Adjustment (RS3818) filed within the Official Records of Washoe County, Nevada on June 30, 2000 as File No. 2460839 and being more particularly described as follows:

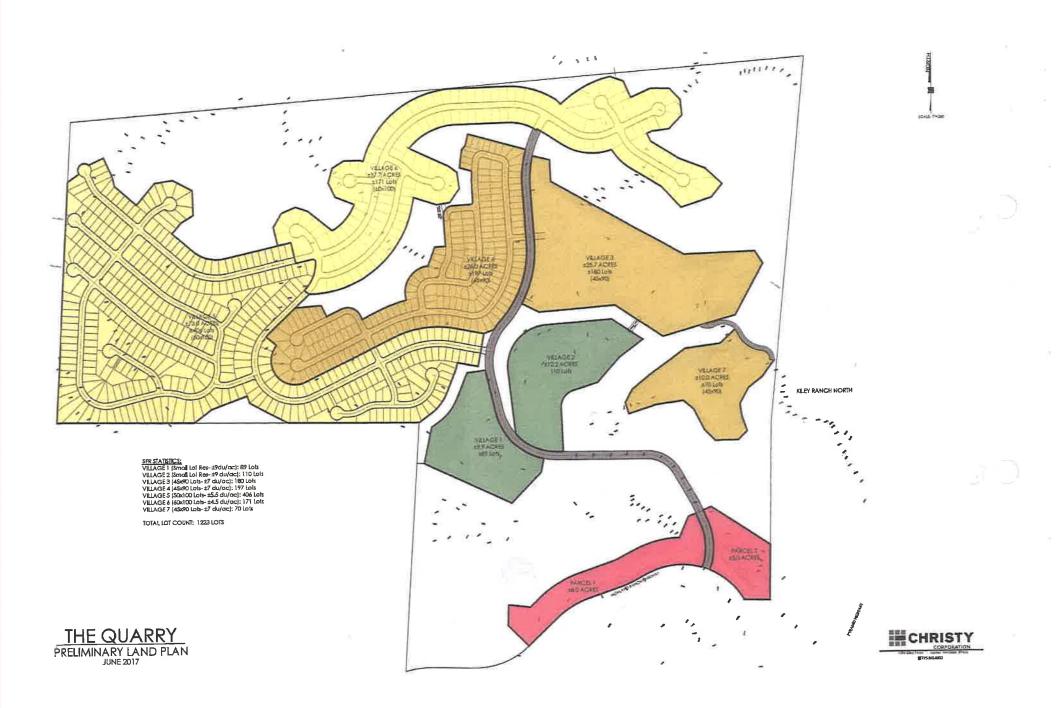
Beginning at the Northeast corner of Section 9;

South 05°43'28" West, 2702.52 feet to the East one- quarter (E  $\frac{1}{4}$ ) corner of Section 9; Continuing along the Easterly line of Section 9, South 00°57'17" West, 1318.51 feet to the Northerly line of the Southeast one-quarter (SE 1/4) of Section 9; Thence along the Northerly line of the Southeast one-quarter (SE 1/4) of Section 9, North 89°02'15" West, 189.31 feet to the Northerly right-of-way of Highland Ranch Parkway; Leaving the Northerly line of the Southeast one-quarter (SE 1/4) of Section 9, along the Northerly rightof-way of Highland Ranch Parkway, along the arc of a non-tangent curve to the left, from a tangent which bears North 29°56'39"West, having a length of 815.03 feet and a radius of 530.00 feet, through a central angle of 88°06'31"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, South 61°56'50" West, 126.45 feet; Continuing along the Northerly right-of-way of Highland Ranch Parkway, along the arc of a curve to the right, having a length of 90.68 feet and a radius of 570.00 feet, through a central angle of 09°06'56"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, South 71°03'46" West, 254.89 feet; Continuing along the Northerly rightof-way of Highland Ranch Parkway, along the arc of a curve to the left, having a length of 279.50 feet and a radius of 630.00 feet, through a central angle of 25°25'09"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, South 45°38'37" West, 300.00 feet; Continuing along the Northerly right-of-way of Highland Ranch Parkway, along the arc of a curve to the right, having a length of 453.78 feet and a radius of 570.00 feet, through a central angle of 45°36'50"; Continuing along the Northerly right-of-way of Highland Ranch Parkway, North 88°44'33" West, 300.00 feet; Continuing along the Northerly right-of-way of Highland Ranch Parkway, along the arc of a curve to the left, having a length of 204.69 feet and a radius of 630.00 feet, through a central angle of 18°36'55", to the North-South centerline of Section 9; Leaving the Northerly right-of-way of Highland Ranch Parkway, along the North-South centerline of Section 9, North 03°39'56" East, 1859.59 feet to the center of Section 9; Thence along the East-West centerline of Section 9, North 89°25'32" West, 2683.82 feet to the West one-quarter (1/4) of Section 9; Thence along the West line of Section 9, North 03°18'58" East, 2211.00 feet to the Northwest corner of Section 9; Thence along the North line of Section 9, North 85°28'37" East, 2721.15 feet to the North one-quarter (N 1/4) corner of Section 9; Continuing along the North line of Section 9, North 85°29'07" East, 2720.96 feet to the Northeast corner of Section 9 and the Point of Beginning.

Containing 386.87 acres, more or less.

APN: 083-011-15

11/23/16





June 13, 2018

Mr. Blake Smith S3 Development Company, LLC 1 East Liberty Street Suite 444 Reno, NV 89501

Re: Update of Fiscal Impact Analysis of Proposed Quarry Development

Dear Mr. Smith:

Per your request, I updated the fiscal impact analysis of The Quarry project originally conducted in December 2017. It is my understanding the project is proposed to widen a portion of a street included in the December analysis as a 2-lane street, to a 4-lane street. This update includes the addition of 2-lanes to a 3,500 linear foot portion of the street, for a total of 84,000 square feet of additional streets constructed by the Developer and dedicated to the City of Sparks for maintenance.

This update impacts both the General and Road Funds. In the General Fund, road square feet are used to estimate costs associated with Community Services expenditures in the Public Safety and Public Works functions. The Road Fund provides road repair and maintenance services for all City of Sparks streets and will also be impacted by the increase in the size of project streets. Costs for both Funds will increase with the addition of 84,000 square feet of streets to the 1.01 million square feet already considered in the December 2017 report. No other changes to the December 2017 report are considered.

Table 1 below shows the estimated impacts of The Quarry project on the City of Sparks General Fund from the original December 2017 report and the June 2018 update. The table shows General Fund surplus, over the 20-year analysis period, is expected to decrease from \$14.3 million in the original report to \$14.1 million in the June 2018 given the additional 84,000 square feet of streets.

550 West Plumb Lane, Suite B459 Reno, NV 89509 (775) 232-7203 www.ekayconsultants.com **Table 1. Comparison of General Fund Impacts** 

Table 1. Comparison of General Fund Impacts									
	I	December 2017	Report				<b>June 2018 Up</b>	date	
			Annual	Cumulative				Annual	Cumulative
	<b>Total Project</b>	<b>Total Project</b>	Revenue	Revenue		Total Project	<b>Total Project</b>	Revenue	Revenue
Year	Revenue	Costs	Surplus	Surplus	Year	Revenue	Costs	Surplus	Surplus
2018	\$ 54,948	\$ -	\$ 54,948	\$ 54,948	2018	\$ 54,948	\$ -	\$ 54,948	\$ 54,948
2019	214,704	127,082	87,622	142,570	2019	214,704	131,793	82,911	137,859
2020	657,964	471,101	186,863	329,433	2020	657,964	475,953	182,011	319,870
2021	1,116,366	770,640	345,726	675,159	2021	1,116,366	775,638	340,728	660,599
2022	1,599,636	1,080,582	519,054	1,194,213	2022	1,599,636	1,085,729	513,907	1,174,505
2023	2,069,269	1,428,133	641,136	1,835,349	2023	2,069,269	1,433,435	635,834	1,810,339
2024	2,432,609	1,714,223	718,386	2,553,735	2024	2,432,609	1,719,684	712,925	2,523,264
2025	2,505,588	1,764,183	741,404	3,295,139	2025	2,505,588	1,769,808	735,780	3,259,044
2026	2,580,755	1,815,642	765,114	4,060,253	2026	2,580,755	1,821,435	759,320	4,018,364
2027	2,658,178	1,868,644	789,534	4,849,787	2027	2,658,178	1,874,611	783,567	4,801,931
2028	2,737,923	1,923,236	814,687	5,664,474	2028	2,737,923	1,929,383	808,541	5,610,471
2029	2,820,061	1,979,466	840,595	6,505,069	2029	2,820,061	1,985,797	834,264	6,444,735
2030	2,904,663	2,037,383	867,279	7,372,348	2030	2,904,663	2,043,904	860,759	7,305,494
2031	2,991,803	2,097,038	894,765	8,267,113	2031	2,991,803	2,103,754	888,048	8,193,542
2032	3,081,557	2,158,482	923,075	9,190,188	2032	3,081,557	2,165,400	916,157	9,109,699
2033	3,174,003	2,221,770	952,234	10,142,422	2033	3,174,003	2,228,895	945,109	10,054,808
2034	3,269,224	2,286,956	982,268	11,124,690	2034	3,269,224	2,294,295	974,929	11,029,737
2035	3,367,300	2,354,097	1,013,203	12,137,893	2035	3,367,300	2,361,657	1,005,644	12,035,381
2036	3,468,319	2,423,253	1,045,066	13,182,959	2036	3,468,319	2,431,039	1,037,280	13,072,661
2037	3,572,369	2,494,484	1,077,885	14,260,844	2037	3,572,369	2,502,503	1,069,865	14,142,526
Total	\$ 47,277,239	\$ 33,016,396	\$ 14,260,844		Total	\$ 47,277,239	\$ 33,134,713	\$ 14,142,526	

**Table 2. Comparison of Road Fund Impacts** 

December 2017 Report					June 2018 Update				
			Annual	Cumulative				Annual	Cumulative
	<b>Total Project</b>	Total Project	Revenue	Revenue		Total Project	<b>Total Project</b>	Revenue	Revenue
Year	Revenue	Costs	Surplus	Surplus	Year	Revenue	Costs	Surplus	Surplus
2018	\$ -	\$ -	\$ -	\$ -	2018	\$ -	\$ -	\$ -	\$ -
2019	-	522	(522)	(522)	2019	-	784	(784)	(784)
2020	31,718	819,813	(788,094)	(788,616)	2020	31,718	888,285	(856,567)	(857,351)
2021	65,076	820,247	(755,171)	(1,543,787)	2021	65,076	888,737	(823,661)	(1,681,012)
2022	98,507	821,873	(723,366)	(2,267,154)	2022	98,507	890,382	(791,875)	(2,472,887)
2023	137,239	824,087	(686,848)	(2,954,002)	2023	137,239	892,614	(755,375)	(3,228,261)
2024	176,048	825,709	(649,661)	(3,603,663)	2024	176,048	894,255	(718,207)	(3,946,468)
2025	181,329	825,862	(644,533)	(4,248,196)	2025	181,329	894,428	(713,098)	(4,659,567)
2026	186,769	826,019	(639,250)	(4,887,446)	2026	186,769	894,604	(707,834)	(5,367,401)
2027	192,372	826,179	(633,806)	(5,521,252)	2027	192,372	894,783	(702,411)	(6,069,812)
2028	198,143	826,341	(628,198)	(6,149,450)	2028	198,143	894,967	(696,823)	(6,766,635)
2029	204,088	826,507	(622,420)	(6,771,870)	2029	204,088	895,154	(691,066)	(7,457,701)
2030	210,210	826,677	(616,466)	(7,388,336)	2030	210,210	895,344	(685,134)	(8,142,835)
2031	216,517	826,850	(610,333)	(7,998,669)	2031	216,517	895,539	(679,022)	(8,821,857)
2032	223,012	827,026	(604,014)	(8,602,683)	2032	223,012	895,737	(672,725)	(9,494,582)
2033	229,703	827,206	(597,503)	(9,200,185)	2033	229,703	895,939	(666,237)	(10,160,819)
2034	236,594	827,389	(590,795)	(9,790,981)	2034	236,594	896,146	(659,552)	(10,820,371)
2035	243,691	827,576	(583,884)	(10,374,865)	2035	243,691	896,356	(652,665)	(11,473,036)
2036	251,002	827,767	(576,764)	(10,951,630)	2036	251,002	896,571	(645,569)	(12,118,605)
2037	258,532	827,961	(569,429)	(11,521,059)	2037	258,532	896,790	(638,258)	(12,756,862)
Total	\$ 3,340,551	\$ 14,861,610	\$ (11,521,059)		Total	\$ 3,340,551	\$ 16,097,414	\$ (12,756,862)	



Table 2 shows the comparison of the impacts of The Quarry on the City's Road Fund over the 20-year analysis period. The December 2017 report found a deficit for the Road Fund of \$11.5 million over the 20-year analysis period. Adding the 84,000 square feet of streets (June 2018 update) increases the deficit for the Fund to \$12.8 million.

This analysis shows that The Quarry project is still expected to have a **positive fiscal impact** on the City of Sparks, as the projected General Fund surplus is expected to exceed the estimated deficit in the Road Fund, even with the addition of 84,000 square feet of streets. This includes a \$965,000 contingency amount for the City's General Fund, which is not an actual cost for the City.

Updated Appendices 1-9 of the fiscal impact analysis are attached. Of these only Appendix 6 and 9 were updated from the December 2017 report. No methodology or other inputs (other than increase in project streets) changes were made in the June 2018 update. Please see the December 2017 report for methodology, assumptions, and other information.

Please contact me with any questions or concerns.

Sincerely, Rugema Loremore

Eugenia Larmore, PhD, MBA, CMA, CVA, MAFF

			APPENDIX I BUILDOUT ASSUMP	ΓIONS		
<u>YEAR</u>	USE TYPE	SQUARE FEET <u>BUILT</u>	# OF UNITS BUILT	ADDED LAND VALUE	ADDED IMPROVEMENTS <u>VALUE</u>	CONSTRUCTION MATERIALS COST
2018	Village 1	-	- \$	2,018,250	\$ -	\$ -
	Village 2	-	-	2,466,750	-	-
	Village 3	-	-	-	-	-
	Village 4 Village 5	-	-	3,950,100 5,535,000	-	-
	Village 6	-	-	5,555,000	-	-
	Village 7	-	-	_	_	_
	Gen. Commercial	-	-	1,271,044	-	-
	Open Space	<u> </u>	<u> </u>	1,081,066		
Subtotal		-	-	16,322,211	-	-
2019	Village 1	85,500	45	1,973,400	9,418,500	4,709,250
	Village 2	110,000	55	2,466,750	11,511,500	5,755,750
	Village 3	-	-	-	-	-
	Village 4	151,800	66	3,950,100	18,433,800	9,216,900
	Village 5	205,000	82	5,467,500	25,830,000	12,915,000
	Village 6	-	-	-	-	-
	Village 7 Gen. Commercial	- 87,120	-	794,403	10,756,687	5,378,344
	Open Space	67,120	-	794,403	10,730,087	3,378,344 -
Subtotal		639,420	248	14,652,153	75,950,487	37,975,244
2020	Village 1	83,600	44	_	9,209,200	4,604,600
	Village 2	110,000	55	-	11,511,500	5,755,750
	Village 3	-	-	-	-	-
	Village 4	151,800	66	3,890,250	18,433,800	9,216,900
	Village 5	202,500	81	5,467,500	25,515,000	12,757,500
	Village 6	-	-	6,437,100	-	-
	Village 7	-	-	-	-	-
	Gen. Commercial Open Space	54,450	-	-	6,722,930	3,361,465
Subtotal		602,350	246	15,794,850	71,392,430	35,696,215
2021	Village 1	_	_	_	_	_
2021	Village 2	-	-	_	-	-
	Village 3	-	-	5,386,500	-	-
	Village 4	149,500	65	-	18,154,500	9,077,250
	Village 5	202,500	81	5,467,500	25,515,000	12,757,500
	Village 6	232,200	86	6,362,250	30,039,800	15,019,900
	Village 7	-	=	-	-	-
	Gen. Commercial	-	-	-	-	-
Cubtatal	Open Space	584,200	232	17.216.250	72 700 200	36,854,650
Subtotal		584,200	232	17,216,250	73,709,300	30,854,050
2022	Village 1	-	-	-	-	-
	Village 2	-	-	-	-	-
	Village 3	207,000	90	5,386,500	25,137,000	12,568,500
	Village 4	202,500	81	- 5 467 500	25 515 000	12.757.500
	Village 5 Village 6	229,500	85	5,467,500	25,515,000 29,690,500	12,757,500 14,845,250
	Village 7	-	-	6,037,500	27,070,300	14,043,230
	Gen. Commercial	-	-	-	-	-
	Open Space	<u></u>	<u> </u>			
Subtotal		639,000	256	16,891,500	80,342,500	40,171,250
2023	Village 1	-	-	-	-	-
	Village 2	-	-	-	-	40
	Village 3	207,000	90	-	25,137,000	12,568,500
	Village 4	202.500	- 01	-	25 515 000	10 757 500
	Village 5 Village 6	202,500	81	-	25,515,000	12,757,500
	Village 6 Village 7	203,000	70	-	28,175,000	14,087,500
	village /	203,000	70	-	20,173,000	14,007,500
	Gen. Commercial	-	-	_	-	_
	Gen. Commercial Open Space	-	-	-	-	-

APPENDIX 1

	APPENDIX 1 BUILDOUT ASSUMPTIONS										
<u>YEAR</u>	USE <u>TYPE</u>	SQUARE FEET <u>BUILT</u>	# OF UNITS BUILT	ADDED LAND <u>VALUE</u>	ADDED IMPROVEMENTS <u>VALUE</u>	CONSTRUCTION MATERIALS COST					
TOTAL		3,077,470	1,223	\$ 80,876,963	\$ 380,221,717	\$ 190,110,858					

#### APPENDIX 1, ASSUMPTIONS:

1. The following land and building costs represent the Developer's best estimate in 2017. Analysis adds land value in the year before construction and improvement value in the year of construction.

a) Residential:

			Total	Projected Sales	Land Value/	Improv. Value/
	# of Acres	# of Units	Square Feet	Price/Unit	<u>Unit</u>	<u>Unit</u>
Village 1	9.90	89	169,100	\$ 299,000	\$ 44,850	\$ 209,300
Village 2	12.20	110	220,000	299,000	44,850	209,300
Village 3	25.70	180	414,000	399,000	59,850	279,300
Village 4	28.00	197	453,100	399,000	59,850	279,300
Village 5	73.00	406	1,015,000	450,000	67,500	315,000
Village 6	37.70	171	461,700	499,000	74,850	349,300
Village 7	10.00	70	203,000	575,000	86,250	402,500
	196.50	1.223	2,935,900			

Source: Number of acres, units, square footage, and projected sales price from Developer. Land and improvement value based on values for homes sold at similar prices in City of Sparks in 2016 and 2017. Source: Washoe County Assessor's website.

b) Commercial:

		Total	Improvemen	ts	Land Value/
	# of Acres	Square Feet	Cost/Sq. Ft.		<u>Acre</u>
General Comm.	13.0	141,570	\$	23.5 \$	158,881

Source: Number of acres and square footage from Developer. Land and improvement value from comparable uses (LU400) around the project.

Source: Washoe County Assessor's website.

c) Open Space:

Open Space, estimated at 177.4 acres is expected to be valued using value per acre of \$ 6,095

for similar uses (LU 100) surrounding the project. Source: Washoe County Assessor's Office.

Existing value of the project cannot be used as it is valued as a quarry.

2. Construction Materials Cost is estimated at 50% of Building Cost. Source: Discussions with contractors.

# APPENDIX 2 CITY OF SPARKS ESTIMATED NUMBER OF RESIDENTS AND EMPLOYEES

<u>YEAR</u>	USE TYPE	# OF UNITS BUILT	CUMUL. # OF OCCUPIED <u>UNITS</u>	SQUARE FEET CONSTRUCTED	CUMUL. NO. OF <u>RESIDENTS</u>	CUMUL. NO. OF EMPLOYEES	% OF SPARKS POPULATION
2018	Village 1	-	-	-	-	-	0.00%
	Village 2	-	-	-	-	-	0.00%
	Village 3	-	-	-	-	-	0.00%
	Village 4	-	-	-	-	-	0.00%
	Village 5	-	-	-	-	-	0.00%
	Village 6	-	-	-	-	-	0.00%
	Village 7	-	-	-	-	-	0.00%
	Gen. Commercial Open Space	-	-	-			0.00% 0.00%
Subtotal	Орен Зрасе	-	-	-	-	-	0.00% 0.00%
2019	Village 1	45		85,500			0.00%
2019	Village 2	55	-	110,000	-	-	0.00%
	Village 3	-	_	-		_	0.00%
	Village 4	66	_	151,800	_	_	0.00%
	Village 5	82	_	205,000	_	_	0.00%
	Village 6	-	_	-	-	-	0.00%
	Village 7	-	-	-	-	-	0.00%
	Gen. Commercial	-	-	87,120	-	104	0.00%
	Open Space			<del>_</del>			0.00%
Subtotal		248	-	639,420	-	104	0.00%
2020	Village 1	44	43	83,600	121	-	0.13%
	Village 2	55	53	110,000	148	-	0.16%
	Village 3	-	-	-	-	-	0.00%
	Village 4	66	64	151,800	178	-	0.19%
	Village 5	81	79	202,500	221	-	0.24%
	Village 6	-	-	-	-	-	0.00%
	Village 7	-	-	-	-	-	0.00%
	Gen. Commercial	-	-	54,450	-	169	0.00%
	Open Space			<del></del>		<del>-</del>	0.00%
Subtotal		246	239	602,350	668	169	0.71%
2021	Village 1	-	86	-	240	-	0.26%
	Village 2	-	106	-	296	-	0.32%
	Village 3	-	-	-	-	-	0.00%
	Village 4	65	127	149,500	355	-	0.38%
	Village 5	81	157	202,500	439	-	0.47%
	Village 6	86	-	232,200	-	-	0.00%
	Village 7	-	-	-	-	-	0.00%
	Gen. Commercial	-	-	-	-	169	0.00%
	Open Space						0.00%
Subtotal		232	477	584,200	1,330	169	1.42%
2022	Village 1	_	86	_	240	_	0.26%
	Village 2	_	106	_	296	_	0.32%
	Village 3	90	-	207,000	-	_	0.00%
	Village 4	-	190		530	_	0.57%
	Village 5	81	235	202,500	657	_	0.70%
	Village 6	85	83	229,500	232	_	0.25%
	Village 7	-	-	-	-	-	0.00%
	Gen. Commercial	-	-	-	-	169	0.00%
	Open Space						0.00%
Subtotal		256	701	639,000	1,955	169	2.09%
2023	Village 1	_	86	-	240	_	0.26%
-	Village 2	-	106	-	296	-	0.32%
	Village 3	90	87	207,000	242	-	0.26%
	Village 4	-	190	-	530	-	0.57%
	Village 5	81	314	202,500	875	-	0.94%
	Village 6	-	165	-	460	-	0.49%
	Village 7	70	-	203,000	-	-	0.00%
	Gen. Commercial	-	-	-	-	169	0.00%
	Open Space	-	-	-	-	-	0.00%

APPENDIX 2 CITY OF SPARKS ESTIMATED NUMBER OF RESIDENTS AND EMPLOYEES									
2024	Village 1	-	86	-	240	-	0.26%		
	Village 2	-	106	-	296	-	0.32%		
	Village 3	-	174	-	485	-	0.52%		
	Village 4	-	190	-	530	-	0.57%		
	Village 5	-	392	-	1,093	-	1.17%		
	Village 6	-	165	-	460	-	0.49%		
	Village 7	-	68	-	188	-	0.20%		
	Gen. Commercial	-	-	-	-	169	0.00%		
	Open Space	-	-	-	-	-	0.00%		
Subtotal	-	-	1,180	-	3,293	169	3.52%		
TOTAL		1,223		3,077,470					

### APPENDIX 2, ASSUMPTIONS:

- 1. Number of residential units and square feet of buildings from Appendix 1.
- Occupied single-family units are estimated using a vacancy rate of 3.5% to account for household movement and other timing issues. Households are
  assumed to be occupied a year after construction. Source: Center for Regional Studies, University of Nevada, Reno, based on data from the American
  Community Survey.
- 3. Residents are estimated using a ratio of 2.79 residents per occupied household/unit for owner-occupied units Source: "Average Household Size of Occupied Units by Tenure." 2016 American Community Survey 1-Year Estimates, US Census Bureau. Data for Sparks, Nevada.
- 4. Employee estimates from the Center for Regional Studies, UNR (CRS). Employees added in the year of construction.

	Project Square		Employee
Use Type	Feet	Sq.Ft./Employee	Estimate
en Commercial	141,570	837	169

- 5. Impacts: Analysis estimates costs and revenues associated with the development using estimated number of new development residents only.

  The analysis assumes employees of the development will be existing residents of the region, residents of other regions, or residents of the development.
- 6. City of Sparks FY 2016-17 population is estimated at 93,581 Source: City of Sparks Budget, FY 2017-18. This is used to estimate the percent of existing population generated by the project.

<u>YEAR</u>	USE TYPE	ADDED TAX. LAND <u>VALUE (\$)</u>	ADDED TAX. IMPROVEMENT VALUE (\$)	CUMULATIVE TOTAL TAX. <u>VALUE (\$)</u>	CUMULATIVE ASSESSED VALUE (\$)	GENERAL FUND <u>REVENUE</u>	AB 104 REVENUE
2018	Village 1	\$ 2,018,250	\$ -	\$ 2,018,250	\$ 706,388	\$ 6,780	\$ 14
	Village 2	2,466,750	· -	2,466,750	863,363	8,287	18
	Village 3	-	-	-	-	-	-
	Village 4	3,950,100	-	3,950,100	1,382,535	13,270	28
	Village 5	5,535,000	-	5,535,000	1,937,250	18,594	39
	Village 6	-	-	-	-	-	-
	Village 7	-	-	-	-	-	-
	Gen. Commercial	1,271,044	-	1,271,044	444,866	4,270	9
Subtotal	Open Space	1,081,066 16,322,211	<u> </u>	1,081,066 16,322,211	378,373 <b>5,712,774</b>	3,632 <b>54,831</b>	8 116
Justolii		10,022,211		10,022,211	5,712,771	24,051	110
2019	Village 1	1,973,400	9,418,500	4,052,198	1,418,269	13,613	29
	Village 2	2,466,750	11,511,500	5,007,503	1,752,626	16,822	36
	Village 3	-	-	-	-	-	-
	Village 4	3,950,100	18,433,800	8,018,703	2,806,546	26,937	57
	Village 5	5,467,500	25,830,000	11,168,550	3,908,993	37,519	80
	Village 6	-	-	-	-	-	-
	Village 7	-	-	-	-	-	-
	Gen. Commercial	794,403	10,756,687	2,103,578	736,252	7,067	15
	Open Space	14 (50 152		1,113,498	389,724	3,741	8
Subtotal		14,652,153	75,950,487	31,464,030	11,012,410	105,697	224
2020	Village 1	-	9,209,200	13,874,818	4,856,186	46,610	99
	Village 2	-	11,511,500	17,014,573	5,955,100	57,157	121
	Village 3	-	-	-	-	-	_
	Village 4	3,890,250	18,433,800	31,136,328	10,897,715	104,596	222
	Village 5	5,467,500	25,515,000	43,576,007	15,251,602	146,385	311
	Village 6	6,437,100	-	6,437,100	2,252,985	21,624	46
	Village 7	-	-	-	-	-	-
	Gen. Commercial	-	6,722,930	13,246,074	4,636,126	44,498	94
	Open Space			1,146,903	401,416	3,853	8
Subtotal		15,794,850	71,392,430	126,431,802	44,251,131	424,722	902
2021	Village 1	-	-	23,776,539	8,321,789	79,873	170
	Village 2	-	-	29,381,855	10,283,649	98,702	210
	Village 3	5,386,500	-	5,386,500	1,885,275	18,095	38
	Village 4	-	18,154,500	51,057,232	17,870,031	171,517	364
	Village 5	5,467,500	25,515,000	76,631,237	26,820,933	257,427	546
	Village 6	6,362,250	30,039,800	12,992,463	4,547,362	43,646	93
	Village 7	=	-	-	-	-	-
	Gen. Commercial	=	-	20,568,073	7,198,826	69,094	147
	Open Space			1,181,310	413,459	3,968	8
Subtotal		17,216,250	73,709,300	220,975,209	77,341,323	742,322	1,576
2022	Village 1	_	-	24,489,835	8,571,442	82,269	175
	Village 2	-	-	30,263,310	10,592,159	101,664	216
	Village 3	5,386,500	25,137,000	10,934,595	3,827,108	36,733	78
	Village 4	-	-	71,288,084	24,950,829	239,478	508
	Village 5	5,467,500	25,515,000	110,678,124	38,737,343	371,801	789
	Village 6	· · · · -	29,690,500	44,323,231	15,513,131	148,895	316
	Village 7	6,037,500	· · · · · · · · · · · · · · · · · · ·	6,037,500	2,113,125	20,282	43
	Gen. Commercial	-	-	21,185,116	7,414,790	71,167	151
	Open Space		<del></del>	1,216,750	425,862	4,087	9
Subtotal		16,891,500	80,342,500	320,416,544	112,145,790	1,076,375	2,285
2023	Village 1	-	-	25,224,530	8,828,586	84,737	180
	Village 2	-	-	31,171,210	10,909,923	104,713	222
	Village 3	-	25,137,000	37,153,743	13,003,810	124,811	265
	Village 4	-	-	73,426,726	25,699,354	246,662	524
	Village 5	-	25,515,000	140,278,918	49,097,621	471,239	1,000
	Village 6	-	- · · · · · · · · · · · · · · · · · · ·	76,234,143	26,681,950	256,093	544
	Village 7	-	28,175,000	6,218,625	2,176,519	20,890	44
	Gen. Commercial	-	- · · · · · · · · · · · · · · · · · · ·	21,820,669	7,637,234	73,302	156
	Open Space	=		1,253,252	438,638	4,210	9

YEAR	USE TYPE	ADDED TAX. LAND VALUE (\$)	ADDED TAX. IMPROVEMENT VALUE (\$)	CUMULATIVE TOTAL TAX. VALUE (\$)	CUMULATIVE ASSESSED VALUE (\$)	GENERAL FUND REVENUE	AB 104 REVENUE
<u>YEAR</u>	IYPE	VALUE (\$)	VALUE (\$)	VALUE (\$)	VALUE (\$)	REVENUE	REVENUE
2024	Village 1	-	-	25,981,266	9,093,443	87,279	185
	Village 2	-	-	32,106,346	11,237,221	107,855	229
	Village 3	-	-	64,159,465	22,455,813	215,531	458
	Village 4	-	-	75,629,528	26,470,335	254,062	539
	Village 5	-	-	170,767,735	59,768,707	573,660	1,218
	Village 6	-	-	78,521,167	27,482,408	263,776	560
	Village 7	-	_	35,425,434	12,398,902	119,005	253
	Gen. Commercial	-	_	22,475,289	7,866,351	75,501	160
	Open Space			1,290,850	451,797	4,336	Ģ
Subtotal		-	-	506,357,080	177,224,978	1,701,005	3,611
2025	Village 1	-	-	26,760,704	9,366,246	89,897	191
	Village 2	-	-	33,069,536	11,574,338	111,090	236
	Village 3	-	-	66,084,249	23,129,487	221,997	471
	Village 4	_	_	77,898,414	27,264,445	261,684	555
	Village 5	_	_	175,890,767	61,561,768	590,870	1,254
	Village 6			80,876,802	28,306,881	271,689	577
	Village 7	-	-		, ,		260
	Gen. Commercial	-	-	36,488,197	12,770,869	122,575	
		-	-	23,149,548	8,102,342	77,766	165
Subtotal	Open Space	<u>-</u>	<u> </u>	1,329,575 <b>521,547,792</b>	465,351 182,541,727	4,466 1,752,035	3,719
oubtotai		-	-	521,547,792	102,541,727	1,752,035	3,713
2026	Village 1	-	-	27,563,525	9,647,234	92,594	197
	Village 2	-	-	34,061,622	11,921,568	114,423	243
	Village 3	-	-	68,066,777	23,823,372	228,657	485
	Village 4	-	_	80,235,366	28,082,378	269,535	572
	Village 5	_	_	181,167,490	63,408,622	608,596	1,292
	Village 6	_	_	83,303,106	29,156,087	279,840	594
	Village 7			37,582,843	13,153,995	126,252	268
	Gen. Commercial	_	_	23,844,034	8,345,412	80,099	170
	Open Space	-	-	1,369,462	479,312	4,600	1(
Subtotal		-	-	537,194,226	188,017,979	1,804,597	3,831
2027	Village 1	_		28,390,431	9,936,651	95,372	202
2021	Village 2	_	<u>-</u>	35,083,471	12,279,215	117,856	250
	Village 3	-	-				
		-	-	70,108,780	24,538,073	235,516	500
	Village 4	-	-	82,642,427	28,924,850	277,621	589
	Village 5	-	-	186,602,515	65,310,880	626,854	1,331
	Village 6	-	-	85,802,199	30,030,770	288,235	612
	Village 7	-	-	38,710,328	13,548,615	130,040	276
	Gen. Commercial	-	-	24,559,355	8,595,774	82,502	175
	Open Space		<u> </u>	1,410,546	493,691	4,738	10
Subtotal		•	-	553,310,053	193,658,519	1,858,734	3,946
2028	Village 1	-	-	29,242,144	10,234,750	98,233	209
	Village 2	-	-	36,135,975	12,647,591	121,392	258
	Village 3	-	-	72,212,043	25,274,215	242,582	515
	Village 4	-	-	85,121,700	29,792,595	285,949	607
	Village 5	-	-	192,200,590	67,270,207	645,659	1,37
	Village 6	-	-	88,376,265	30,931,693	296,882	630
	Village 7	_	_	39,871,638	13,955,073	133,941	284
	Gen. Commercial		_	25,296,136	8,853,648	84,977	180
	Open Space	-	-	1,452,863	508,502	4,881	100
Subtotal	1 1		-	569,909,355	199,468,274	1,914,496	4,064
029	Village 1			30,119,408	10,541,793	101,180	215
.02)	Village 2	-	-	37,220,055	13,027,019	125,033	265
	-	-	-				
	Village 3	-	-	74,378,405	26,032,442	249,859	530
	Village 4	-	-	87,675,351	30,686,373	294,528	62:
	Village 5	-	-	197,966,608	69,288,313	665,029	1,412
	Village 6	-	-	91,027,553	31,859,644	305,789	649
	Village 7	-	-	41,067,787	14,373,725	137,959	293
	Gen. Commercial	-	-	26,055,020	9,119,257	87,527	186
	Open Space		<u> </u>	1,496,448	523,757	5,027	11

YEAR	USE TYPE	ADDED TAX. LAND VALUE (\$)	ADDED TAX. IMPROVEMENT VALUE (\$)	CUMULATIVE TOTAL TAX. VALUE (\$)	CUMULATIVE ASSESSED VALUE (\$)	GENERAL FUND REVENUE	AB 104 REVENUE
ILAK	HIL	VALUE (\$)	VALUE (\$)	VALUE (\$)	VALUE (\$)	REVERTOE	REVENCE
2030	Village 1	-	-	31,022,990	10,858,047	104,216	221
	Village 2	-	-	38,336,656	13,417,830	128,784	273
	Village 3	-	-	76,609,757	26,813,415	257,355	540
	Village 4	-	-	90,305,612	31,606,964	303,364	644
	Village 5	-	-	203,905,606	71,366,962	684,980	1,454
	Village 6	_	_	93,758,380	32,815,433	314,963	669
	Village 7	_	_	42,299,821	14,804,937	142,098	302
	Gen. Commercial	_	_	26,836,671	9,392,835	90,152	19
	Open Space	-	-	1,541,342	539,470	5,178	13
Subtotal	1 1		-	604,616,834	211,615,892	2,031,089	4,311
2031	Village 1			31,953,680	11,183,788	107,342	228
2031		-	-				
	Village 2	-	-	39,486,756	13,820,365	132,648	283
	Village 3	-	-	78,908,049	27,617,817	265,076	563
	Village 4	-	-	93,014,780	32,555,173	312,465	663
	Village 5	-	-	210,022,774	73,507,971	705,530	1,498
	Village 6	-	-	96,571,131	33,799,896	324,411	689
	Village 7	-	-	43,568,815	15,249,085	146,361	311
	Gen. Commercial	-	-	27,641,771	9,674,620	92,857	197
	Open Space	-	-	1,587,582	555,654	5,333	11
Subtotal		-	-	622,755,339	217,964,369	2,092,022	4,441
2032	Village 1			32,912,291	11,519,302	110,562	235
2032		-	-				
	Village 2	-	-	40,671,359	14,234,975	136,627	290
	Village 3	-	-	81,275,291	28,446,352	273,028	580
	Village 4	-	-	95,805,224	33,531,828	321,838	683
	Village 5	-	-	216,323,458	75,713,210	726,695	1,543
	Village 6	-	-	99,468,265	34,813,893	334,144	709
	Village 7	-	-	44,875,880	15,706,558	150,752	320
	Gen. Commercial	_	-	28,471,024	9,964,858	95,643	203
	Open Space			1,635,210	572,323	5,493	12
Subtotal			-	641,438,000	224,503,300	2,154,783	4,574
2033	Village 1	-	-	33,899,659	11,864,881	113,879	242
	Village 2	_	-	41,891,499	14,662,025	140,726	299
	Village 3	_	_	83,713,550	29,299,742	281,219	597
	Village 4	_	_	98,679,380	34,537,783	331,494	704
	-						1,589
	Village 5	-	-	222,813,161	77,984,606	748,496	
	Village 6	=	-	102,452,313	35,858,310	344,168	731
	Village 7	-	-	46,222,156	16,177,755	155,274	330
	Gen. Commercial	-	-	29,325,155	10,263,804	98,512	209
	Open Space		- <del></del>	1,684,266	589,493	5,658	12
Subtotal		•	-	660,681,140	231,238,399	2,219,426	4,711
2034	Village 1	-	-	34,916,649	12,220,827	117,295	249
	Village 2	-	-	43,148,244	15,101,885	144,948	308
	Village 3	-	-	86,224,956	30,178,735	289,655	615
	Village 4	_	_	101,639,762	35,573,917	341,438	725
	Village 5	_	_	229,497,556	80,324,145	770,951	1,637
	Village 6	_	_	105,525,883	36,934,059	354,493	752
	Village 7	-	-				339
	•	-	-	47,608,821	16,663,087	159,932	
	Gen. Commercial Open Space	-	-	30,204,909 1,734,794	10,571,718 607,178	101,467 5,828	215 12
Subtotal	Open Space			680,501,574	238,175,551	2,286,009	4,853
2035	Village 1	-	-	35,964,149	12,587,452	120,814	256
	Village 2	-	-	44,442,692	15,554,942	149,296	317
	Village 3	-	-	88,811,705	31,084,097	298,345	633
	Village 4	-	-	104,688,955	36,641,134	351,682	74′
	Village 5	_	_	236,382,483	82,733,869	794,080	1,680
	Village 6		_	108,691,659	38,042,081	365,128	775
	Village 7	-	-	49,037,085		164,730	350
		-	-		17,162,980		
	Gen. Commercial	-	-	31,111,056	10,888,870	104,511	222
	Open Space		<u> </u>	1,786,838	625,393	6,003	13
Subtotal		-	-	700,916,621	245,320,817	2,354,589	4,998

<u>YEAR</u>	USE TYPE	ADDED TAX. LAND <u>VALUE (\$)</u>	ADDED TAX. IMPROVEMENT VALUE (\$)	CUMULATIVE TOTAL TAX. VALUE (\$)	CUMULATIVE ASSESSED VALUE (\$)	GENERAL FUND <u>REVENUE</u>	AB 104 REVENUE
2036	Village 1	-	-	37,043,073	12,965,076	124,439	264
	Village 2	-	-	45,775,972	16,021,590	153,775	326
	Village 3	-	-	91,476,056	32,016,620	307,296	652
	Village 4	-	-	107,829,623	37,740,368	362,232	769
	Village 5	-	-	243,473,957	85,215,885	817,902	1,736
	Village 6	-	-	111,952,409	39,183,343	376,082	798
	Village 7	-	-	50,508,198	17,677,869	169,672	360
	Gen. Commercial	-	-	32,044,388	11,215,536	107,647	229
	Open Space		=	1,840,443	644,155	6,183	13
Subtotal		-	-	721,944,120	252,680,442	2,425,227	5,148
2037	Village 1	-	-	38,154,365	13,354,028	128,172	272
	Village 2	-	-	47,149,252	16,502,238	158,388	336
	Village 3	-	-	94,220,338	32,977,118	316,514	672
	Village 4	-	-	111,064,512	38,872,579	373,099	792
	Village 5	-	-	250,778,176	87,772,362	842,439	1,788
	Village 6	-	-	115,310,981	40,358,843	387,364	822
	Village 7	-	=	52,023,444	18,208,205	174,762	371
	Gen. Commercial	-	-	33,005,720	11,552,002	110,876	235
	Open Space			1,895,656	663,480	6,368	14
Subtotal		-	-	743,602,443	260,260,855	2,497,984	5,302
mom. T							
TOTAL		\$ 80,876,963	\$ 380,221,717			\$ 32,854,535	\$ 69,741

### **APPENDIX 3, ASSUMPTIONS:**

- 1. As the project is not currently located in the City of Sparks, all property tax revenue generated by the project will be net new to the City.
- 2. Taxable value of land and improvements is estimated in Appendix 1.
- 3. Land and improvement taxable values are inflated by 3.0% annually, the maximum allowed increase for owner-occupied properties. This may be conservative for commercial uses in the project, which can increase up to 8% per year.
- 4. Property tax calculation: Taxable Value X 35% = Assessed Value; Assessed Value/100 X Tax Rate = Property Tax Revenue.

  Analysis assumes improvements will generate property tax revenue in the year after improvements are made to account for work-in-progress.

  Land values will generate property tax in the year as developed.
- 5. City of Sparks General Fund operating tax rate is assumed to remain constant at FY 2017-18 rate of \$ 0.9598 per \$100 of value. Source: City of Sparks Budget, FY 2017-18.
- 6. City of Sparks is expected to receive
- **7.49%** of property tax revenue generated by the AB 104 property tax rate of
- \$ 0.0272 Source: Nevada Department of Taxation. "Local Gov't Tax Act Distribution." Three-year average FY 2014-15, FY 2015-16, and 2016-17.

<u>YEAR</u>	USE <u>TYPE</u>	CONSTR. MATERIALS <u>COST</u>	HOUSEHOLD EXPENDITURES	TOTAL TAXABLE <u>SALES</u>	CCRT SALES TAX <u>REVENUE</u>	AB 104 SALES TAX <u>REVENUE</u>
2018	Village 1	\$ -	\$ - :	\$ - 5	- 5	-
2010	Village 2	-	-	<del>-</del>	-	- -
	Village 3	-	-	-	-	-
	Village 4	-	-	-	-	-
	Village 5	-	-	-	-	-
	Village 6 Village 7	-	-	-	-	-
	Gen. Commercial	-	-	-	-	-
	Open Space		<u> </u>			
Subtotal		-	-	-	-	-
2019	Village 1	4,709,250	-	4,709,250	12,624	866
	Village 2	5,755,750	-	5,755,750	15,429	1,059
	Village 3	-	-	-	-	-
	Village 4	9,216,900	-	9,216,900	24,707	1,696
	Village 5	12,915,000	-	12,915,000	34,620	2,376
	Village 6 Village 7	-	-	-	-	-
	Gen. Commercial	5,378,344	-	5,378,344	14,417	990
	Open Space	5,576,544	-	-	-	-
Subtotal		37,975,244	-	37,975,244	101,796	6,987
2020	Village 1	4,604,600	801,371	5,405,971	14,491	995
2020	Village 2	5,755,750	979,454	6,735,204	18,054	1,239
	Village 3	-	-	-	-	-
	Village 4	9,216,900	1,330,032	10,546,932	28,272	1,940
	Village 5	12,757,500	1,844,332	14,601,832	39,141	2,686
	Village 6	-	-	-	-	-
	Village 7	2 261 465	-	2 261 465	- 0.011	-
	Gen. Commercial Open Space	3,361,465	-	3,361,465	9,011	618
Subtotal		35,696,215	4,955,188	40,651,403	108,970	7,479
2021	Village 1	_	1,632,482	1,632,482	4,376	300
	Village 2	-	2,017,674	2,017,674	5,409	371
	Village 3	-	-	-	-	-
	Village 4	9,077,250	2,739,865	11,817,115	31,677	2,174
	Village 5	12,757,500	3,776,157	16,533,657	44,320	3,042
	Village 6	15,019,900	-	15,019,900	40,262	2,763
	Village 7 Gen. Commercial	-	-	-	-	-
	Open Space	- -	-	-	<del>-</del> -	-
Subtotal	- <b>r</b> · · · · <b>r</b> · · · ·	36,854,650	10,166,178	47,020,828	126,043	8,651
2022	Village 1		1,681,456	1,681,456	4,507	309
2022	Village 2	-	2,078,205	2,078,205	5,571	382
	Village 3	12,568,500	2,070,203	12,568,500	33,691	2,312
	Village 4	-	4,211,712	4,211,712	11,290	775
	Village 5	12,757,500	5,822,231	18,579,731	49,805	3,418
	Village 6	14,845,250	2,257,208	17,102,458	45,845	3,147
	Village 7	-	-	-	-	-
	Gen. Commercial Open Space	-	-	-	-	- -
Subtotal	Open Space	40,171,250	16,050,813	56,222,063	150,708	10,344
2023	Ville 1		1,731,900	1 721 000	4 642	319
2023	Village 1 Village 2	-	1,731,900 2,140,551	1,731,900 2,140,551	4,643 5,738	319
	Village 3	12,568,500	1,981,857	14,550,357	39,003	2,677
	Village 4	-	4,338,064	4,338,064	11,629	798
	Village 5	12,757,500	7,987,672	20,745,172	55,609	3,817
	Village 6	-	4,622,815	4,622,815	12,392	851
	Village 7	14,087,500	-	14,087,500	37,763	2,592
	Gen. Commercial	-	-	-	-	-
Culture 1	Open Space	20 /12 500		(2.21 (.25)	1// 88/	- 44.44=
Subtotal		39,413,500	22,802,858	62,216,358	166,776	11,447

<u>YEAR</u>	USE <u>TYPE</u>	CONSTR. MATERIALS <u>COST</u>	HOUSEHOLD EXPENDITURES	TOTAL TAXABLE <u>SALES</u>	CCRT SALES TAX <u>REVENUE</u>	AB 104 SALES TAX <u>REVENUE</u>
2024	Village 1		1,783,857	1,783,857	4,782	328
2024	Village 2	-	2,204,767	2,204,767	5,910	406
	Village 3	-	4,082,625	4,082,625	10,944	751
	Village 4	-	4,468,206	4,468,206	11,977	822
	Village 5	-	10,277,799	10,277,799	27,551	1,891
	Village 6	_	4,761,500	4,761,500	12,764	876
	Village 7		2,006,944	2,006,944	5,380	369
	Gen. Commercial	_	2,000,744	2,000,744	5,360	-
	Open Space			<u> </u>	<u> </u>	<u> </u>
Subtotal			29,585,697	29,585,697	79,307	5,443
2025	Village 1	_	1,837,373	1,837,373	4,925	338
	Village 2	-	2,270,910	2,270,910	6,087	418
	Village 3	-	4,205,103	4,205,103	11,272	774
	Village 4	-	4,602,252	4,602,252	12,337	847
	Village 5	-	10,586,133	10,586,133	28,377	1,948
	Village 6	-	4,904,344	4,904,344	13,147	902
	Village 7	-	2,067,153	2,067,153	5,541	380
	Gen. Commercial	-	-	· · · · ·	· -	-
	Open Space		- <u>-</u> -	<u> </u>		
Subtotal		•	30,473,268	30,473,268	81,686	5,607
2026	Village 1	-	1,892,494	1,892,494	5,073	348
	Village 2	-	2,339,038	2,339,038	6,270	430
	Village 3	-	4,331,256	4,331,256	11,610	797
	Village 4	-	4,740,320	4,740,320	12,707	872
	Village 5	-	10,903,716	10,903,716	29,228	2,006
	Village 6	=	5,051,475	5,051,475	13,541	929
	Village 7	-	2,129,167	2,129,167	5,707	392
	Gen. Commercial	-	-	, , , , <u>-</u>	-	-
	Open Space			<del>-</del> -	<u> </u>	<u>-</u>
Subtotal		-	31,387,466	31,387,466	84,137	5,775
2027	Village 1	-	1,949,269	1,949,269	5,225	359
	Village 2	-	2,409,209	2,409,209	6,458	443
	Village 3	-	4,461,194	4,461,194	11,959	821
	Village 4	-	4,882,529	4,882,529	13,088	898
	Village 5	-	11,230,828	11,230,828	30,105	2,066
	Village 6	-	5,203,019	5,203,019	13,947	957
	Village 7	-	2,193,042	2,193,042	5,879	403
	Gen. Commercial	-	-	-	-	-
	Open Space	<del></del>		<u> </u>		
Subtotal		•	32,329,090	32,329,090	86,661	5,948
2028	Village 1	-	2,007,747	2,007,747	5,382	369
	Village 2	-	2,481,485	2,481,485	6,652	457
	Village 3	-	4,595,030	4,595,030	12,317	845
	Village 4	-	5,029,005	5,029,005	13,481	925
	Village 5	-	11,567,753	11,567,753	31,008	2,128
	Village 6	-	5,359,110	5,359,110	14,366	986
	Village 7	-	2,258,833	2,258,833	6,055	416
	Gen. Commercial	-	-	-	-	-
Subtotal	Open Space	<u>-</u> _	33,298,963	33,298,963	89,261	6,126
2029	Village 1	-	2,067,979	2,067,979	5,543	380
	Village 2	-	2,555,930	2,555,930	6,851	470
	Village 3	-	4,732,881	4,732,881	12,687	871
	Village 4	-	5,179,875	5,179,875	13,885	953
	Village 5	-	11,914,785	11,914,785	31,939	2,192
	Village 6	-	5,519,883	5,519,883	14,797	1,016
	Village 7	-	2,326,598	2,326,598	6,237	428
	Gen. Commercial Open Space	-	-	-	- -	-
Subtotal	- r r *****		34,297,932	34,297,932	91,939	6,310
~ u~ voini			01,201,002	0.1,271,702	71,707	0,010

<u>YEAR</u>	USE <u>TYPE</u>	CONSTR. MATERIALS COST	HOUSEHOLD EXPENDITURES	TOTAL TAXABLE <u>SALES</u>	CCRT SALES TAX <u>REVENUE</u>	AB 104 SALES TAX <u>REVENUE</u>
2030	Village 1	-	2,130,019	2,130,019	5,710	392
	Village 2	-	2,632,607	2,632,607	7,057	484
	Village 3	-	4,874,867	4,874,867	13,068	897
	Village 4	-	5,335,271	5,335,271	14,302	982
	Village 5	-	12,272,229	12,272,229	32,897	2,258
	Village 6	-	5,685,479	5,685,479	15,240	1,046
	Village 7	-	2,396,396	2,396,396	6,424	441
	Gen. Commercial Open Space	-	-	-	-	-
Subtotal	Орен Брасс	-	35,326,870	35,326,870	94,697	6,499
2031	Village 1	_	2,193,919	2,193,919	5,881	404
2031	Village 2	-	2,711,586	2,711,586	7,269	499
	Village 3	-	5,021,113	5,021,113	13,460	924
	Village 4	-	5,495,330	5,495,330	14,731	1,011
	Village 5	-	12,640,396	12,640,396	33,884	2,326
	Village 6	_	5,856,044	5,856,044	15,698	1,077
	Village 7	_	2,468,288	2,468,288	6,616	454
	Gen. Commercial	_	2,406,266	2,400,200	0,010	-
	Open Space		<del></del>	<u>-</u>	<u> </u>	<u> </u>
Subtotal		-	36,386,676	36,386,676	97,538	6,694
2032	Village 1	-	2,259,737	2,259,737	6,057	416
	Village 2	_	2,792,933	2,792,933	7,487	514
	Village 3	_	5,171,747	5,171,747	13,863	952
	Village 4	_	5,660,189	5,660,189	15,173	1,041
	Village 5	_	13,019,608	13,019,608	34,900	2,395
	Village 6	_	6,031,725	6,031,725	16,169	1,110
	Village 7	_	2,542,337	2,542,337	6,815	468
	Gen. Commercial	_	_,,	-,- :-, :	-	-
	Open Space			<del></del>	<u> </u>	<u> </u>
Subtotal		-	37,478,276	37,478,276	100,464	6,895
2033	Village 1	-	2,327,529	2,327,529	6,239	428
	Village 2	-	2,876,721	2,876,721	7,711	529
	Village 3	=	5,326,899	5,326,899	14,279	980
	Village 4	-	5,829,995	5,829,995	15,628	1,073
	Village 5	-	13,410,196	13,410,196	35,947	2,467
	Village 6	-	6,212,677	6,212,677	16,654	1,143
	Village 7	-	2,618,607	2,618,607	7,019	482
	Gen. Commercial	-	-	-	-	-
	Open Space			<u> </u>	<u> </u>	-
Subtotal		•	38,602,624	38,602,624	103,478	7,102
2034	Village 1	-	2,397,355	2,397,355	6,426	441
	Village 2	-	2,963,023	2,963,023	7,943	545
	Village 3	-	5,486,706	5,486,706	14,708	1,009
	Village 4	=	6,004,895	6,004,895	16,097	1,105
	Village 5	-	13,812,502	13,812,502	37,026	2,541
	Village 6	-	6,399,057	6,399,057	17,153	1,177
	Village 7	-	2,697,165	2,697,165	7,230	496
	Gen. Commercial	-	-	-	-	-
Subtotal	Open Space		39,760,703	39,760,703	106,582	7,315
Subtotal		_	37,700,703	37,100,103	100,302	7,515
2035	Village 1	-	2,469,276	2,469,276	6,619	454
	Village 2	-	3,051,914	3,051,914	8,181	561
	Village 3	-	5,651,307	5,651,307	15,149	1,040
	Village 4	-	6,185,042	6,185,042	16,580	1,138
	Village 5	-	14,226,877	14,226,877	38,136	2,617
	Village 6	-	6,591,029	6,591,029	17,668	1,213
	Village 7	-	2,778,080	2,778,080	7,447	511
	Gen. Commercial	-	-	=	-	-
G	Open Space					
Subtotal		<u>-</u>	40,953,524	40,953,524	109,779	7,535

<u>YEAR</u>	USE TYPE	CONSTR. MATERIALS <u>COST</u>	HOUSEHOLD EXPENDITURES	TOTAL TAXABLE <u>SALES</u>	CCRT SALES TAX <u>REVENUE</u>	AB 104 SALES TAX <u>REVENUE</u>
2036	Village 1	-	2,543,354	2,543,354	6,818	468
	Village 2	-	3,143,471	3,143,471	8,426	578
	Village 3	-	5,820,846	5,820,846	15,603	1,071
	Village 4	-	6,370,593	6,370,593	17,077	1,172
	Village 5	-	14,653,683	14,653,683	39,280	2,696
	Village 6	-	6,788,760	6,788,760	18,198	1,249
	Village 7	-	2,861,423	2,861,423	7,670	526
	Gen. Commercial	-	-	-	-	-
	Open Space		<u> </u>	<u>-</u>	<u> </u>	<u> </u>
Subtotal		-	42,182,130	42,182,130	113,073	7,761
2037	Village 1	-	2,619,654	2,619,654	7,022	482
	Village 2	-	3,237,775	3,237,775	8,679	596
	Village 3	-	5,995,472	5,995,472	16,071	1,103
	Village 4	-	6,561,711	6,561,711	17,589	1,207
	Village 5	-	15,093,294	15,093,294	40,459	2,777
	Village 6	-	6,992,423	6,992,423	18,744	1,286
	Village 7	-	2,947,265	2,947,265	7,900	542
	Gen. Commercial	-	-	-	-	-
	Open Space		<u> </u>	<u> </u>	<u> </u>	-
Subtotal		-	43,447,594	43,447,594	116,465	7,994
TOTAL		\$ 190,110,858	\$ 559,485,851 \$	749,596,709	2,009,359 \$	3 137,912

#### APPENDIX 4, ASSUMPTIONS:

1. Construction Materials Cost is estimated in Appendix 1.

2. Household Taxable Sales-estimated based on the number of occupied households, estimated household income, and expenditure information. Household incomes and percent of income spent on taxable items are estimated as follows, based on projected sales price for each village shown in Appendix 1:

% Spent on Taxable

	House	ehold Income	Items
Village 1	\$	61,316	27.5%
Village 2	\$	61,316	27.5%
Village 3	\$	79,390	24.1%
Village 4	\$	79,390	24.1%
Village 5	\$	88,608	24.1%
Village 6	\$	97,465	24.1%
Village 7	\$	111,201	21.7%

Affordability calculator created by EEC and Center for Regional Studies, UNR. Percent of household income spent on taxable items from Consumer Expenditure Survey, 2016, Bureau of Labor Statistics, data by corresponding household income range. Estimates are inflated 3% annually.

3. Relevant tax rates for the City of Sparks are as follows:

0.500% Basic City County Relief Tax (BCCRT)
1.750% Supplemental City County Relief Tax (SCCRT)
0.250% Fair Share (AB 104)

Distribution of BCCRT and SCCRT sales tax revenue to the City of Sparks is calculated

12.13% of all Washoe County CCRT revenue.

Source: Distribution based on average percentage share of Washoe County C-Tax distribution from FY 2014-15 to FY 2016-17. Data from Nevada

Department of Taxation. "Consolidated Tax Distribution: Revenue Summary by County."

Distribution of AB 104 sales tax revenue to the City of Sparks is calculated at 7.49% of all Washoe County AB 104 revenue.

Source: Distribution based on average percentage share of Washoe County AB104 distribution from FY 2014-15 to FY 2016-17. Data from Nevada Department of Taxation. "Local Government Tax Act Distribution."

4. A State administrative fee of

1.75%

of all sales tax revenue is subtracted for State uses. Source: AB 552.

Fiscal Impact Analysis-City of Sparks

## APPENDIX 5 CITY OF SPARKS ESTIMATED PERMIT AND IMPACT FEE REVENUE

		ESTIMATED		BUILDING	PLAN	CURRENT	FIRE INSPEC./	REGIONAL	SEWER	RESIDENTIAI	_	IMPAC'	Γ FEE SERVIC	E AREA #1	
	USE	BUILDING	PRINCIPAL		REVIEW		PLAN REVIEW		CONNECT.		SANITARY		REGIONAL	FIRE	
YEAR	TYPE	VALUATION	AMOUNT	REVENUE	REVENUE	REVENUE	REVENUE	REVENUE	REVENUE	REVENUE	SEWER	CONTROL	PARKS/REC	STATION	TOTAL
	· <u></u> -														
2018	Village 1	\$ -	\$ 72,262	\$ 69,083	\$ 28,905	\$ 6,300	\$ 31,795	\$ 176,488	\$ 264,388	\$ 45,000	\$ 13,365	\$ 26,685	\$ 35,010	\$ 15,300	\$ 90,360
	Village 2	-	88,321	84,435	35,328	7,700	38,861	215,708	323,140	55,000	16,335	32,615	42,790	18,700	110,440
	Village 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Village 4	-	131,857	126,055	52,743	9,240	58,017	258,849	387,768	,	19,602	39,138	51,348	22,440	132,528
	Village 5	-	180,216	172,286	72,086	11,480	79,295	321,601	481,773	82,000	24,354	48,626	63,796	27,880	164,656
	Village 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Village 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gen. Commercial	-	41,221	39,407	30,915	21,146	18,137	610,816	-	-	24,306	46,783	-	29,621	100,711
	Open Space														
Subtot	al	-	513,876	491,265	219,978	55,866	226,105	1,583,462	1,457,069	248,000	97,962	193,847	192,944	113,941	598,695
2019	Village 1	9,418,500	70,657	67,548	28,263	6,160	31,089	172,566	258,512	44,000	13,068	26,092	34,232	14,960	88,352
2017	Village 2	11,511,500	88,321	84,435	35,328	7,700	38,861	215,708	323,140		16,335	32,615	42,790	18,700	110,440
	Village 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Village 4	18,433,800	131,857	126,055	52,743	9,240	58,017	258,849	387,768		19.602	39,138	51,348	22,440	132,528
	Village 5	25,830,000	178,018	170,185	71,207	11,340	78,328	317,679	475,898		24,057	48,033	63,018	27,540	162,648
	Village 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Village 7	-	-	-	-	-	-	-	_	-	-	-	-	_	-
	Gen. Commercial	10,756,687	26,497	25,332	19,873	13,593	11,659	381,760	-	-	15,192	29,240	-	18,513	62,944
	Open Space														
Subtot	al	75,950,487	495,349	473,554	207,414	48,033	217,954	1,346,562	1,445,319	246,000	88,254	175,118	191,388	102,153	556,912
2020	Village 1	9,209,200	_	_	_	_	-	_	_	_	_	_	_	_	_
	Village 2	11,511,500	-	-	-	-	-	-	_	-	-	-	-	_	-
	Village 3	-	-	-	-	-	-	-	_	-	-	-	-	_	-
	Village 4	18,433,800	129,859	124,145	51,944	9,100	57,138	254,927	381,893	65,000	19,305	38,545	50,570	22,100	130,520
	Village 5	25,515,000	178,018	170,185	71,207	11,340	78,328	317,679	475,898	81,000	24,057	48,033	63,018	27,540	162,648
	Village 6	-	205,525	196,482	82,210	12,040	90,431	337,289	505,274	86,000	25,542	50,998	66,908	29,240	172,688
	Village 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gen. Commercial	6,722,930	-	-	-	-	-	-	-	-	-	-	-	-	-
	Open Space														
Subtot	al	71,392,430	513,402	490,812	205,361	32,480	225,897	909,895	1,363,065	232,000	68,904	137,576	180,496	78,880	465,856
2021	Village 1	_	_	-	_	-	-	-	_	_	-	_	-	_	-
	Village 2	-	-	-	-	-	-	-	_	-	-	-	-	_	-
	Village 3	-	179,805	171,893	71,922	12,600	79,114	352,976	528,775	90,000	26,730	53,370	70,020	30,600	180,720
	Village 4	18,154,500	-	-	-	-	-	-	-	-	-	-	-	-	-
	Village 5	25,515,000	178,018	170,185	71,207	11,340	78,328	317,679	475,898	81,000	24,057	48,033	63,018	27,540	162,648
	Village 6	30,039,800	203,136	194,198	81,254	11,900	89,380	333,367	499,399	85,000	25,245	50,405	66,130	28,900	170,680
	Village 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gen. Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Open Space									<del>-</del>					
Subtot	al	73,709,300	560,958	536,276	224,383	35,840	246,822	1,004,022	1,504,072	256,000	76,032	151,808	199,168	87,040	514,048

The Quarry Fiscal Impact Analysis-City of Sparks

#### APPENDIX 5 CITY OF SPARKS ESTIMATED PERMIT AND IMPACT FEE REVENUE

		ESTIMATED		BUILDING	PLAN	CURRENT	FIRE INSPEC./	REGIONAL	SEWER	RESIDENTIAL		IMPAC	Γ FEE SERVIC	E AREA #1	
	USE	BUILDING	PRINCIPAL	PERMIT	REVIEW	PLANNING	PLAN REVIEW	ROAD	CONNECT.	PARK TAX	SANITARY	FLOOD	REGIONAL	FIRE	
YEAR	TYPE	<b>VALUATION</b>	<b>AMOUNT</b>	REVENUE	REVENUE	<b>REVENUE</b>	REVENUE	REVENUE	REVENUE	REVENUE	<b>SEWER</b>	<b>CONTROL</b>	PARKS/REC	<b>STATION</b>	<b>TOTAL</b>
2022	Village 1	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	Village 2	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	Village 3	25,137,000	179,805	171,893	71,922	12,600	79,114	352,976	528,775	90,000	26,730	53,370	70,020	30,600	180,720
	Village 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Village 5	25,515,000	178,018	170,185	71,207	11,340	78,328	317,679	475,898	81,000	24,057	48,033	63,018	27,540	162,648
	Village 6	29,690,500	-	´-	-	-	-	-	-	-	-	´-	-	-	-
	Village 7	-	188,143	179,864	75,257	9,800	82,783	274,537	411,270	70,000	20,790	41,510	54,460	23,800	140,560
	Gen. Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Open Space	-	-	-	_	-	-	-	_	-	-	-	-	-	-
Subtot	al	80,342,500	545,965	521,942	218,386	33,740	240,225	945,192	1,415,942	241,000	71,577	142,913	187,498	81,940	483,928
2023	Village 1									_					
2023	Village 2	_													
	Village 3	25,137,000	-	-	_	-	-	_	_	_	_	-	_	-	_
	Village 4	23,137,000													
	Village 5	25,515,000			_			_	_	_	_		_		_
	Village 6	23,313,000		_	_	_		_	_	_	_	_	_		_
	Village 7	28,175,000	_		_	_		_	_	_	_	_	_		_
	Gen. Commercial	20,173,000		_	_	_		_	_	_	_	_	_		
	Open Space	-	-		_	_ _	-	-		-	_ _	-	-	_ _	- -
Subtot		78,827,000													_
	<u> </u>						<u> </u>			<u> </u>					
TOTA	L	\$ 380,221,717	\$ 2,629,550	\$ 2,513,850	\$ 1.075.521	\$ 205,959	\$ 1.157.002	\$ 5,789,133	\$ 7,185,467	\$ 1,223,000	\$ 402,729	\$ 801,262	\$ 951,494	\$ 463,954	\$ 2,619,439

#### **APPENDIX 5, ASSUMPTIONS:**

- 1. Building valuation is estimated in Appendix 1. It should be noted that permit fees associated with some residential uses are likely underestimated as construction values provided by the Client and used to estimate permit revenues for the project are lower than those provided by the 2012 International Building Code.
- 2. Principal amount for the calculation of building permit and plan check fee revenue is estimated at follows, principal amount and resulting fees are estimated in the year prior to construction:
  - 993.75 for the first \$100,000.01 of Building Permit Valuation, plus
- **5.60** for each additional \$1,000 thereafter through a value of \$500,000.
- **5,608.75** for the first \$1,000,000.01 of Building Permit Valuation, plus
- \$ **3.65** for each additional \$1,000 thereafter.
- Source: "City of Sparks Permit Fees." Revised October 9, 2017. As the number of commercial buildings is unknown, analysis conservatively assumes one building permit per year.
- 3. Building Permit fee revenue is estimated at

95.60% 75.00%

of principal amount.

- Building Plan Review fee revenue is estimated at

- of principal amount, except for single family repeats, which are estimated at of the principal amount. of the principal amount, except for single family repeats, which are estimated a \$ 140.00 per building. 51.30%
- Current Planning Plan Review fee revenue is estimated at Fire Prevention Inspection fee revenue is estimated at
- 22.00% of the principal amount.
- Fire Prevention Plan review fee revenue is estimated at
- 22.00% of the principal amount.
- Analysis conservatively assumes all single family homes are repeat units. Source: "City of Sparks Permit Fees." Revised October 9, 2017. Revenue for mechanical, plumbing, and electrical permit fees is not estimated as the construction detail required for these estimates are unknown.
- 4. Regional Road Impact fee (RRIF) revenue is estimated at:
  - Single Family
- 3,921.96 per dwelling unit.
- **7,011.20** per 1,000 square feet of gross floor area.
- Source: "Regional Road Impact Fee (RRIF)." Regional Transportation Commission. 5th Edition, March 20, 2017. Data for North Service Area.
- 5. Sewer Connection fee revenue is estimated at \$ 5,875.28 per residential unit. Source: "City of Sparks Permit Fees." Revised October 9, 2017. Connection fees for commercial uses are not estimated as fixture information is not available.

June 2018 Ekay Economic Consultants, Inc.

The Quarry

Fiscal Impact Analysis-City of Sparks

### APPENDIX 5 CITY OF SPARKS ESTIMATED PERMIT AND IMPACT FEE REVENUE

		ESTIMATED		BUILDING	PLAN	CURRENT 1	FIRE INSPEC./	REGIONAL	SEWER	RESIDENTIAL	4	IMPAC'	Γ FEE SERVIC	E AREA #1	
	USE	BUILDING	PRINCIPAL	PERMIT	REVIEW	PLANNING I	PLAN REVIEW	ROAD	CONNECT.	PARK TAX	SANITARY	FLOOD	REGIONAL	FIRE	
<b>YEAR</b>	<b>TYPE</b>	VALUATION	<b>AMOUNT</b>	REVENUE	REVENUE	REVENUE	REVENUE	REVENUE	REVENUE	REVENUE	<b>SEWER</b>	<b>CONTROL</b>	PARKS/REC	<b>STATION</b>	<b>TOTAL</b>

6. Residential construction tax for neighborhood parks revenue is estimated at the lesser of 1% of building permit valuation or \$1,000 per residential unit. Given an estimated Added Improvements Value shown in Appendix 1, 1% of building per valuation will result in the following values per unit:

 Village 1
 \$ 2,093

 Village 2
 \$ 2,093

 Village 3
 \$ 2,793

 Village 4
 \$ 2,793

 Village 5
 \$ 3,150

 Village 6
 \$ 3,493

Village 7 \$ 4,025 The alternative of \$1,000 per unit is the lesser of the two options and is used in this calculation of residential tax revenue. Source: Sparks Municipal Code 15.12.0040.

7. The Project is located adjacent to the Impact Fees Service Area Number 1. Should the rpoject be added to the Area, the following fees will apply to the project:

Unit of Measure	5	Sanitary Sewer	•	Flood Control	1	Regional arks/Rec		re Station
Single Family Dwelling	\$	297.00		593.00		778.00		340.00
Commercial 1,000 Sq.Ft.		279.00		537.00	э \$	-	э \$	340.00

Source: "City of Sparks Permit Fees." Revised October 9, 2017.

## APPENDIX 6 CITY OF SPARKS COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS

	Base Year FY 16-17	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	1ST 10-YEAR SUBTOTAL
GENERAL FUND					<u> </u>		<u></u> -					
REVENUE												
Taxes Ad Valorem	A	¢ 54.021	¢ 105 607	¢ 424.722	¢ 742.222	ф. 1.07 <i>с</i> 275	¢ 1206.650	¢ 1.701.005	¢ 1.752.025 ¢	1 004 507	¢ 1.959.724	\$ 10.00Z.079
Subtotal	Appendix 3	\$ 54,831 <b>\$ 54,831</b>	\$ 105,697 <b>\$ 105,697</b>	\$ 424,722 <b>\$ 424,722</b>	\$ 742,322 <b>\$ 742,322</b>	\$ 1,076,375 <b>\$ 1,076,375</b>	\$ 1,386,658 <b>\$ 1,386,658</b>	\$ 1,701,005 <b>\$ 1,701,005</b>	\$ 1,752,035 <b>\$</b> <b>\$ 1,752,035 \$</b>		\$ 1,858,734 <b>\$ 1,858,734</b>	\$ 10,906,978 \$ 10,906,978
Licenses and Permits												
Business Licenses <sup>3</sup>	\$ 5,878,303	\$ -	\$ -	\$ 45,831	\$ 94,031	\$ 142,337	\$ 198,304	\$ 254,380	\$ 262,011 \$	269,872	\$ 277,968	\$ 1,544,734
Liquor Licenses <sup>3</sup>	252,674	-	-	1,970	4,042	6,118	8,524	10,934	11,262	11,600	11,948	66,399
City Gaming Licenses <sup>2</sup>	554,193	-	-	-	-	-	-	-	-	-	-	-
Franchise Fees <sup>3</sup>	4,416,852	-	-	34,437	70,653	106,950	149,002	191,137	196,871	202,777	208,860	1,160,685
Nonbusiness Licenses and Permits <sup>3</sup>	53,249	<del></del>	<del></del>	415	852	1,289	1,796	2,304	2,373	2,445	2,518	13,993
Subtotal	\$ 11,155,271	\$ -	\$ -	\$ 82,653	\$ 169,578	\$ 256,695	\$ 357,626	\$ 458,755	\$ 472,518 \$	486,693	\$ 501,294	\$ 2,785,811
Intergovernmental Revenue												
Consolidated Tax-CCRT Revenue <sup>4</sup>	Appendix 4	\$ -	\$ 101,796	\$ 108,970	\$ 126,043	\$ 150,708	\$ 166,776	\$ 79,307	\$ 81,686 \$	84,137	\$ 86,661	\$ 986,084
Consolidated Tax-Other Revenue <sup>5</sup>	\$ 3,643,715	-	-	28,409	58,286	88,229	122,920	157,679	162,410	167,282	172,301	957,516
State Distributive Fund-Sales Tax <sup>4</sup>	Appendix 4	-	6,987	7,479	8,651	10,344	11,447	5,443	5,607	5,775	5,948	67,680
State Distributive Fund-Other <sup>6</sup>	Appendix 3	116	224	902	1,576	2,285	2,943	3,611	3,719	3,831	3,946	23,152
County Gaming Licenses <sup>2</sup>	389,292	-	-	-	-	-	-	-	-	-	-	-
Other Intergovernmental Revenue	551,354	<del></del>	. <del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>		<del></del>	
Subtotal		\$ 116	\$ 109,007	\$ 145,759	\$ 194,556	\$ 251,566	\$ 304,087	\$ 246,040	\$ 253,422 \$	261,024	\$ 268,855	\$ 2,034,432
Charges for Services												
Building and Zoning Fees <sup>7</sup>	\$ 27,305	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$	-	\$ -	\$ -
Other <sup>8</sup>	2,646,746											
Subtotal	\$ 2,674,051	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$	-	\$ -	\$ -
Fines and Forfeits												
Fines <sup>3</sup>	\$ 619,500	\$ -	\$ -	\$ 4,830	\$ 9,910	\$ 15,001	\$ 20,899	\$ 26,808	\$ 27,613 \$	28,441	\$ 29,294	\$ 162,796
	Ψ 012,300	Ψ	Ψ	Ψ 7,030	Ψ ,,,,10	Ψ 15,001	Ψ 20,077	Ψ 20,000	Ψ 21,013 Ψ	20,771	Ψ 27,274	Ψ 102,770
Miscellaneous												
Miscellaneous <sup>7</sup>	\$ 153,669	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$	-	\$ -	\$ -
REVENUE TOTAL												

## APPENDIX 6 CITY OF SPARKS COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS

EXPENDITURES	<b>Base Year FY 16-17</b>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	1ST 10-YEAR SUBTOTAL
<b>General Government</b>												
Legislative <sup>9</sup> Mayor <sup>9</sup> Management Services <sup>9</sup> Legal <sup>9</sup> Financial Services <sup>9</sup> Community Services <sup>9</sup>	\$ 438,791 109,556 5,966,619 1,617,935 3,044,757 1,032,879	\$ - - - -	\$ 919 230 12,501 3,390 6,379 2,164	\$ 3,320 829 45,145 12,242 23,037 7,815	\$ 5,410 1,351 73,570 19,950 37,543 12,736	\$ 7,573 \$ 1,891 102,982 27,925 52,552 17,827	9,999 \$ 2,496 135,962 36,868 69,381 23,536	11,996 \$ 2,995 163,113 44,231 83,237 28,237	12,345 \$ 3,082 167,868 45,520 85,663 29,060	12,705 \$ 3,172 172,765 46,848 88,162 29,907	13,076 3,265 177,808 48,215 90,735 30,780	\$ 77,344 19,311 1,051,714 285,187 536,688 182,062
<b>General Government Total</b>	\$ 12,210,537	\$ -	\$ 25,582	\$ 92,387	\$ 150,559	\$ 210,751 \$	278,244 \$	333,808 \$	343,537 \$	353,559 \$	363,881	\$ 2,152,307
Judicial												
Judicial <sup>10</sup>	\$ 2,123,457	\$ -	\$ -	\$ 16,556	\$ 33,967	\$ 51,417 \$	71,634 \$	91,891 \$	94,648 \$	97,487 \$	100,412	\$ 558,014
Judicial Total		\$ -	\$ -	\$ 16,556	\$ 33,967	\$ 51,417 \$	71,634 \$	91,891 \$	94,648 \$	97,487 \$	100,412	\$ 558,014
Public Safety												
Police Police <sup>11</sup>	Appendix 7	\$ -	\$ 4,825	\$ 179,654	\$ 320,617	\$ 461,896 \$	625,547 \$	789,526 \$	812,079 \$	835,308 \$	859,234	\$ 4,888,686
<u>Fire</u> Fire <sup>12</sup>	Appendix 8	\$ -	\$ 49,622	\$ 100,199	\$ 148,226	\$ 203,841 \$	259,571 \$	267,359 \$	275,379 \$	283,641 \$	292,150	\$ 1,879,988
Community Services Community Services <sup>13</sup>	\$ 1,277,098	\$ -	\$ 21,931	\$ 22,589	\$ 23,267	\$ 23,965 \$	24,683 \$	25,424 \$	26,187 \$	26,972 \$	27,781	\$ 222,799
Public Safety Total		\$ -	\$ 76,378	\$ 302,442	\$ 492,109	\$ 689,701 \$	909,802 \$	1,082,309 \$	1,113,645 \$ 1	1,145,921 \$	1,179,165	\$ 6,991,473
Public Works												
Community Services <sup>14</sup>	\$ 1,480,919	\$ -	\$ 25,431	\$ 26,194	\$ 26,980	\$ 27,789 \$	28,623 \$	29,482 \$	30,366 \$	31,277 \$	32,215	\$ 258,357
Public Works Total		\$ -	\$ 25,431	\$ 26,194	\$ 26,980	\$ 27,789 \$	28,623 \$	29,482 \$	30,366 \$	31,277 \$	32,215	\$ 258,357
Culture and Recreation												
Community Services <sup>10</sup>	\$ 2,883,027	\$ -	\$ -	\$ 22,478	\$ 46,118	\$ 69,810 \$	97,258 \$	124,761 \$	128,504 \$	132,359 \$	136,330	\$ 757,618
Culture and Recreation Total		\$ -	\$ -	\$ 22,478	\$ 46,118	\$ 69,810 \$	97,258 \$	124,761 \$	128,504 \$	132,359 \$	136,330	\$ 757,618

				(	COMPAI	RISC	ON OF ES		CITY OF MATED R	ARKS ENUE TO I	EST	IMATED (	COS	гs						
Community Support		ase Year <u>Y 16-17</u>	<u>2018</u>		<u>2019</u>		<u>2020</u>		<u>2021</u>	2022		<u>2023</u>		<u>2024</u>		<u>2025</u>	<u>2026</u>	2027		T 10-YEAR UBTOTAL
Management Services <sup>9</sup>	\$	268,707	\$ -	\$	563	\$	2,033	\$	3,313	\$ 4,638	\$	6,123	\$	7,346	\$	7,560	\$ 7,780	\$ 8,008	\$	47,364
<b>Community Support Total</b>			\$ -	\$	563	\$	2,033	\$	3,313	\$ 4,638	\$	6,123	\$	7,346	\$	7,560	\$ 7,780	\$ 8,008	\$	47,364
EXPENDITURES SUBTOTAL			\$ -	\$	127,954	\$	462,090	\$	753,046	\$ 1,054,106	\$	1,391,685	\$	1,669,597	\$	1,718,260	\$ 1,768,384	\$ 1,820,011	\$	10,765,132
CONTINGENCY		3%	\$ -	\$	3,839	\$	13,863	\$	22,591	\$ 31,623	\$	41,751	\$	50,088	\$	51,548	\$ 53,052	\$ 54,600	\$	322,954
EXPENDITURES TOTAL			\$ -	\$	131,793	\$	475,953	\$	775,638	\$ 1,085,729	\$	1,433,435	\$	1,719,684	\$	1,769,808	\$ 1,821,435	\$ 1,874,611	\$	11,088,086
GENERAL FUND SURPLUS/(DEFIC	CIT)		\$ 54,948	\$	82,911	\$	182,011	\$	340,728	\$ 513,907	\$	635,834	\$	712,925	\$	735,780	\$ 759,320	\$ 783,567	\$	4,801,931
ROAD FUND																				
REVENUE																				
<u>Licenses and Permits</u> Licenses and Permits <sup>2,12</sup>	\$	1,609,563	\$ -	\$	-	\$	12,549	\$	25,747	\$ 38,974	\$	54,298	\$	69,653	\$	71,742	\$ 73,895	\$ 76,112	\$	422,970
Subtotal			\$ -	\$	-	\$	12,549	\$	25,747	\$ 38,974	\$	54,298	\$	69,653	\$	71,742	\$ 73,895	\$ 76,112	\$	422,970
Intergovernmental Revenues County Gasoline Tax <sup>3</sup> State Gasoline Tax <sup>5</sup>	\$	665,250 1,793,365	\$ -	\$	-	\$	5,187 13,982	\$	10,642 28,687	\$ 16,108 43,425	\$	22,442 60,499	\$	28,788 77,607	\$	29,652 79,935	\$ 30,541 82,333	\$ 31,458 84,803	\$	174,818 471,271
Subtotal		2,458,615	\$ -	\$	-	\$	19,169	\$	39,329	\$ 59,533	\$	82,941	\$	106,395	\$	109,587	\$ 112,875	\$ 116,261	\$	646,089
Miscellaneous Interest Earned'	\$	5,000	\$ 	\$		\$		\$		\$ 	\$	<u>-</u>	\$ <b>\$</b>		<u>\$</u>		\$ 	\$ 	<u>\$</u>	
Subtotal			\$ -	\$	-	\$	-	<u>\$</u>	-	\$ -	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-
REVENUE TOTAL			\$ -	\$	-	\$	31,718	\$	65,076	\$ 98,507	\$	137,239	\$	176,048	\$	181,329	\$ 186,769	\$ 192,372	\$	1,069,059
EXPENDITURES																				
Public Works <sup>16</sup>	Ap	ppendix 9	\$ -	\$	784	\$	888,285	\$	888,737	\$ 890,382	\$	892,614	\$	894,255	\$	894,428	\$ 894,604	\$ 894,783	\$	7,138,871
EXPENDITURES SUBTOTAL			\$ -	\$	784	\$	888,285	\$	888,737	\$ 890,382	\$	892,614	\$	894,255	\$	894,428	\$ 894,604	\$ 894,783	\$	7,138,871
CONTINGENCY		0%	\$ -	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-
EXPENDITURES TOTAL			\$ -	\$	784	\$	888,285	\$	888,737	\$ 890,382	\$	892,614	\$	894,255	\$	894,428	\$ 894,604	\$ 894,783	\$	7,138,871
ROAD FUND SURPLUS/(DEFICIT)			\$ -	\$	(784)	\$	(856,567)	\$	(823,661)	\$ (791,875)	\$	(755,375)	\$	(718,207)	\$	(713,098)	\$ (707,834)	\$ (702,411)	\$	(6,069,812)

APPENDIX 6

APPENDIX 6	
CITY OF SPARKS	
COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS	

			COMPARISO	ON OF ESTIM	ATED REVE	NUE TO EST	IMATED CO	STS				
	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>	10-YEAR SUBTOTAL	20-YEAR TOTAL
GENERAL FUND												
REVENUE												
<u>Taxes</u> Ad Valorem'	\$1,914,496	\$ 1,971,931	\$2,031,089	\$ 2,092,022	\$ 2,154,783	\$2,219,426	\$ 2,286,009	\$2,354,589	\$ 2,425,227	\$ 2,497,984	\$21,947,557	\$ 32,854,535
Subtotal	\$1,914,496	\$ 1,971,931	\$2,031,089	\$ 2,092,022	\$ 2,154,783	\$2,219,426	\$ 2,286,009	\$2,354,589	\$ 2,425,227	\$ 2,497,984	\$21,947,557	\$ 32,854,535
Licenses and Permits  Business Licenses <sup>3</sup> Liquor Licenses <sup>3</sup> City Gaming Licenses <sup>2</sup> Franchise Fees <sup>3</sup> Nonbusiness Licenses and Permits <sup>3</sup>	\$ 286,307 12,307 - 215,126 2,594	\$ 294,896 12,676 - 221,580 2,671	\$ 303,743 13,056 - 228,227 2,751	\$ 312,855 13,448 - 235,074 2,834	\$ 322,241 13,851 - 242,126 2,919	\$ 331,908 14,267 - 249,390 3,007	\$ 341,865 14,695 - 256,872 3,097	\$ 352,121 15,136 - 264,578 3,190	\$ 362,685 15,590 - 272,515 3,285	\$ 373,565 16,057 - 280,690 3,384	\$ 3,282,187 141,082 - 2,466,177 29,732	\$ 4,826,921 207,481 - 3,626,862 43,725
Subtotal	\$ 516,333	\$ 531,823	\$ 547,778	\$ 564,211	\$ 581,137	\$ 598,571	\$ 616,528	\$ 635,024	\$ 654,075	\$ 673,697	\$ 5,919,178	\$ 8,704,989
Intergovernmental Revenue  Consolidated Tax-CCRT Revenue <sup>4</sup> Consolidated Tax-Other Revenue <sup>5</sup> State Distributive Fund-Sales Tax <sup>4</sup> State Distributive Fund-Other <sup>6</sup> County Gaming Licenses <sup>2</sup> Other Intergovernmental Revenue <sup>7</sup>	\$ 89,261 177,470 6,126 4,064	\$ 91,939 182,794 6,310 4,186	\$ 94,697 188,278 6,499 4,311	\$ 97,538 193,926 6,694 4,441 -	\$ 100,464 199,744 6,895 4,574	\$ 103,478 205,736 7,102 4,711	\$ 106,582 211,908 7,315 4,853	\$ 109,779 218,265 7,535 4,998	\$ 113,073 224,813 7,761 5,148	\$ 116,465 231,558 7,994 5,302	\$ 1,023,275 2,034,491 70,232 46,588	\$ 2,009,359 2,992,007 137,912 69,741
Subtotal	\$ 276,921	\$ 285,228	\$ 293,785	\$ 302,599	\$ 311,677	\$ 321,027	\$ 330,658	\$ 340,578	\$ 350,795	\$ 361,319	\$ 3,174,586	\$ 5,209,018
Charges for Services Building and Zoning Fees <sup>7</sup> Other <sup>8</sup>	\$ - 	\$ - 	\$ - 	\$ - -	\$ - 	\$ - -						
Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$
Fines and Forfeits Fines <sup>3</sup> Miscellaneous	\$ 30,173	\$ 31,078	\$ 32,011	\$ 32,971	\$ 33,960	\$ 34,979	\$ 36,028	\$ 37,109	\$ 38,222	\$ 39,369	\$ 345,902	\$ 508,697
Miscellaneous <sup>7</sup>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

# APPENDIX 6 CITY OF SPARKS COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS

<u>EXPENDITURES</u>		<u>2028</u>		2029		<u>2030</u>	<u>2031</u>	2032		2033		<u>2034</u>		<u>2035</u>	<u>2036</u>	2037		0-YEAR JBTOTAL	:	20-YEAR TOTAL
General Government																				
Legislative <sup>9</sup> Mayor <sup>9</sup> Management Services <sup>9</sup> Legal <sup>9</sup> Financial Services <sup>9</sup> Community Services <sup>9</sup>	\$	13,458 3,360 183,004 49,624 93,386 31,680	\$	13,852 3,458 188,354 51,075 96,117 32,606	\$	14,257 3,560 193,866 52,570 98,930 33,560	\$ 14,675 3,664 199,543 54,109 101,826 34,543	\$ 15,105 3,771 205,390 55,694 104,810 35,555	\$	15,547 3,882 211,413 57,328 107,883 36,598	\$	16,004 3,996 217,616 59,010 111,049 37,671	\$	16,474 4,113 224,005 60,742 114,309 38,777	\$ 16,958 4,234 230,586 62,527 117,668 39,917	\$ 17,456 4,358 237,365 64,365 121,127 41,090		153,785 38,396 2,091,141 567,043 1,067,106 361,997	\$	231,129 57,707 3,142,855 852,231 1,603,794 544,058
General Government Total	\$	374,512	\$	385,463	\$	396,742	\$ 408,359	\$ 420,325	\$	432,650	\$	445,345	\$	458,421	\$ 471,889	\$ 485,761	\$	4,279,467	\$	6,431,774
<b>Judicial</b> Judicial <sup>10</sup>		103,424		ŕ		109,723	113,015							127,199		\$		1,185,645		1,743,659
Judicial Total	\$	103,424	\$	106,527	\$	109,723	\$ 113,015	\$ 116,405	\$	119,897	\$	123,494	\$	127,199	\$ 131,015	\$ 134,945	\$	1,185,645	\$	1,743,659
Public Safety																				
Police Police <sup>11</sup>	\$	883,878	\$	909,261	\$	935,406	\$ 962,334	\$ 990,071	\$1	,018,640	\$ 1	1,048,066	\$1	1,078,375	\$ 1,109,593	\$ 1,141,747	\$1	0,077,372	\$	14,966,058
Fire Fire 12	\$	300,914	\$	309,942	\$	319,240	\$ 328,817	\$ 338,682	\$	348,842	\$	359,308	\$	370,087	\$ 381,189	\$ 392,625	\$	3,449,647	\$	5,329,635
Community Services Community Services <sup>13</sup>	\$	28,615	\$	29,473	\$	30,358	\$ 31,268	\$ 32,206	\$	33,173	\$	34,168	\$	35,193	\$ 36,249	\$ 37,336	\$	328,038	\$	550,837
Public Safety Total	<b>\$</b> 1	,213,407	\$ :	1,248,676	<b>\$</b> 1	1,285,003	\$ 1,322,420	\$ 1,360,959	\$1	,400,655	<b>\$</b> 1	1,441,541	\$1	1,483,654	\$ 1,527,031	\$ 1,571,709	\$1	3,855,057	\$	20,846,529
Public Works																				
Community Services <sup>14</sup>	\$	33,182	\$	34,177	\$	35,203	\$ 36,259	\$ 37,346	\$	38,467	\$	39,621	\$	40,809	\$ 42,034	\$ 43,295	\$	380,392	\$	638,749
Public Works Total	\$	33,182	\$	34,177	\$	35,203	\$ 36,259	\$ 37,346	\$	38,467	\$	39,621	\$	40,809	\$ 42,034	\$ 43,295	\$	380,392	\$	638,749
Culture and Recreation																				
Community Services <sup>10</sup>	\$	140,420	\$	144,632	\$	148,971	\$ 153,441	\$ 158,044	\$	162,785	\$	167,669	\$	172,699	\$ 177,880	\$ 183,216	\$	1,609,756	\$	2,367,374
Culture and Recreation Total	\$	140,420	\$	144,632	\$	148,971	\$ 153,441	\$ 158,044	\$	162,785	\$	167,669	\$	172,699	\$ 177,880	\$ 183,216	\$	1,609,756	\$	2,367,374

				സ	MPARIS	ON (	C OF ESTIM	ITY	Y OF SPAI	RK		IM.	ATED CO	STS	2						
		2028	2029		2030	0111	2031	111	2032	101	2033	1111	2034	JI.	2035		2036	2037		0-YEAR JBTOTAL	20-YEAR TOTAL
Community Support					2000		2001						<u> </u>				2000	2007	<u> </u>	2101112	101111
Management Services <sup>9</sup>	\$	8,242	\$ 8,483	\$	8,731	\$	8,986	\$	9,250	\$	9,521	\$	9,800	\$	10,088	\$	10,384	\$ 10,690	\$	94,175	\$ 141,539
Community Support Total	\$	8,242	\$ 8,483	\$	8,731	\$	8,986	\$	9,250	\$	9,521	\$	9,800	\$	10,088	\$	10,384	\$ 10,690	\$	94,175	\$ 141,539
EXPENDITURES SUBTOTAL	\$1	,873,187	\$ 1,927,958	\$1	,984,373	\$	2,042,480	\$	2,102,330	\$2	2,163,976	\$ 2	2,227,471	\$2	2,292,870	\$ 2	2,360,232	\$ 2,429,615	\$2	21,404,492	\$ 32,169,625
CONTINGENCY	\$	56,196	\$ 57,839	\$	59,531	\$	61,274	\$	63,070	\$	64,919	\$	66,824	\$	68,786	\$	70,807	\$ 72,888	\$	642,135	\$ 965,089
EXPENDITURES TOTAL	\$1	,929,383	\$ 1,985,797	\$2	2,043,904	\$	2,103,754	\$	2,165,400	\$2	2,228,895	\$ 2	2,294,295	\$2	2,361,657	\$ 2	2,431,039	\$ 2,502,503	\$2	2,046,627	\$ 33,134,713
GENERAL FUND SURPLUS/(DEFICI	1 \$	808,541	\$ 834,264	\$	860,759	\$	888,048	\$	916,157	\$	945,109	\$	974,929	\$1	1,005,644	\$	1,037,280	\$ 1,069,865	\$	9,340,595	\$ 14,142,526
ROAD FUND																					
REVENUE																					
Licenses and Permits Licenses and Permits <sup>3,13</sup>	\$	78,395	\$ 80,747	\$	83,169	\$	85,664	\$	88,234	\$	90,881	\$	93,608	\$	96,416	\$	99,308	\$ 102,288	\$	898,710	\$ 1,321,680
Subtotal	\$	78,395	\$ 80,747	\$	83,169	\$	85,664	\$	88,234	\$	90,881	\$	93,608	\$	96,416	\$	99,308	\$ 102,288	\$	898,710	\$ 1,321,680
Intergovernmental Revenues County Gasoline Tax <sup>3</sup> State Gasoline Tax <sup>5</sup>	\$	32,401 87,347	\$ 33,374 89,968	\$	34,375 92,667	\$	35,406 95,447	\$	36,468 98,310	\$	37,562 101,259	\$	38,689 104,297	\$	39,850 107,426	\$	41,045 110,649	\$ 42,277 113,968	\$	371,446 1,001,337	\$ 546,265 1,472,607
Subtotal	\$		\$ 123,341	\$		\$	130,852	\$		\$		\$		\$		\$		\$ 	_	1,372,783	\$ 2,018,872
Miscellaneous Interest Earned'	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$ _
Subtotal	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$ -
REVENUE TOTAL	\$	198,143	\$ 204,088	\$	210,210	\$	216,517	\$	223,012	\$	229,703	\$	236,594	\$	243,691	\$	251,002	\$ 258,532	\$	2,271,493	\$ 3,340,551
EXPENDITURES																					
Public Works <sup>16</sup>	\$	894,967	\$ 895,154	\$	895,344	\$	895,539	\$	895,737	\$	895,939	\$	896,146	\$	896,356	\$	896,571	\$ 896,790	\$	8,958,543	\$ 16,097,414
EXPENDITURES SUBTOTAL	\$	894,967	\$ 895,154	\$	895,344	\$	895,539	\$	895,737	\$	895,939	\$	896,146	\$	896,356	\$	896,571	\$ 896,790	\$	8,958,543	\$ 16,097,414
CONTINGENCY	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$ -
EXPENDITURES TOTAL	\$	894,967	\$ 895,154	\$	895,344	\$	895,539	\$	895,737	\$	895,939	\$	896,146	\$	896,356	\$	896,571	\$ 896,790	\$	8,958,543	\$ 16,097,414
ROAD FUND SURPLUS/(DEFICIT)	\$	(696,823)	\$ (691,065)	\$	(685,133)	\$	(679,022)	\$	(672,724)	\$	(666,236)	\$	(659,552)	\$	(652,664)	\$	(645,568)	\$ (638,258)	\$ (	(6,687,050)	\$ (12,756,862)

APPENDIX 6

#### APPENDIX 6

#### CITY OF SPARKS

#### COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS

#### APPENDIX 6, ASSUMPTIONS:

Unless otherwise indicated, the analysis uses Estimated Current Year Ending 6/30/2017 (Fiscal Year 2016-2017) revenue and expenditure data from the City of Sparks Budget, FY 2017-18.

- 1 See Appendix 3 for calculations.
- 2 The analysis is conservative in not estimating the increase in some Sparks business-related revenues resulting from new residents of the development, though this increase is expected to occur.
- 3 ACM: Revenues are calculated based on estimated FY 2016-17 City of Sparks estimated per capita revenues inflated 3% annually and applied to the estimated annual population of the Project. Per capita revenue is calculated by dividing FY 2016-17 revenue for each source by City of Sparks FY 2016-17 population of 93,581 Source: City of Sparks Budget FY 2017-18.
- 4 See Appendix 4 for calculations.
- 5 In addition to CCRT revenue, Consolidated tax for the City includes revenue from Real Property Transfer Tax, GST (MVPT), Cigarette and Liquor taxes. A per capita methodology as explained in footnote 3 is applied to estimate this revenue. Total Washoe County revenues from liquor, cigarette and GST (analysis conservatively does not include RPTT as it is not a recurring revenue) sources totaled

  \$ 30,048,968 in FY 2016-2017. City of Sparks is estimated to receive estimated at

  \$ 3,643,715 and the ACM is applied to this amount.
  - Source: Nevada Department of Taxation. "Consolidated Tax Distribution." City of Sparks portion of C-tax revenue is based on a three-year average data for FY 2014-15 to FY 2016-17.
- 6 In addition to sales tax revenue, AB 104 revenue for the City includes revenue from property, gaming, and RPTT taxes and interest. Analysis is conservative in not estimating gaming, RPTT, and interest revenue. Property tax revenue is estimated in Appendix 3.
- 7 Though the project may generate revenue for the City from these sources, the amount is difficult to estimate and/or expected to be minimal.
- 8 Charges for services for the City include inter-department and inter-fund transfers, which, though impacted, may be difficult to estimate. Some charges for services revenue, such as false alarms may be generated by the project, but again are difficult to estimate.
- 9 Administrative service (indirect) costs assumed to be impacted by the project are calculated at Source: Average percent indirect costs of direct costs for FY 2016-17. Source: City of Sparks Budget, FY 2017-18.
- 10 ACM: Expenditures are calculated based on estimated FY 2016-17 City of Sparks budget per capita costs inflated

  3% annually and applied to estimated annual population of the Project. Per capita costs are calculated by dividing FY 2016-17 costs for each source by City of Sparks FY 2016-17 population of

  93,581 Source: City of Sparks Budget FY 2017-18.
- 11 See Appendix 7 for calculations and assumptions.
- 12 See Appendix 8 for calculations and assumptions.
- 13 Expenditures for the Public Safety source include traffic signals, signs and other public safety items. Costs associated with these services are estimated by dividing total expenditures for this source of \$ 1,277,098\$ by the total square feet of City of Sparks streets of \$67,541,767\$ and applying to the number of square feet added by the development of \$1,093,280\$ inflated 3% annually. Source: Expenditures from City of Sparks budget FY 2017-18, City of Sparks streets inventory from City of Sparks Community Services Department.
- 14 Expenditures for the Public Works source include Public Works administrative and facility maintenance costs. Costs associated with these services are estimated by dividing total expenditures for this source of \$ 1,480,919\$ by the total square feet of City of Sparks streets of 67,541,767 and applying to the number of square feet added by the development of 1,093,280 inflated 3% annually. Source: Expenditures from City of Sparks budget FY 2017-18, City of Sparks streets inventory from City of Sparks Community Services Department.
- 15 Analysis uses FY 2017-18 amount (instead of FY 2016-17) as it includes the shift of franchise revenues from the Road Fund to the Park & Recreation Project Fund.
- 16 See Appendix 9 for calculation and assumptions.

### APPENDIX 7 CITY OF SPARKS POLICE DEPARTMENT COST PROJECTIONS

YEAR	CUMUL. NEW RESIDENTIAL POPULATION	OFFICERS REQUIRED RESIDENTIAL	OFFICERS REQUIRED COMMERCIAL	OFFICERS REQUIRED TOTAL	CIVILIANS REQUIRED	SALARY/ BENEFITS	SERVICES/ SUPPLIES	ANNUALIZED VEHICLE COSTS	TOTAL COST
2018	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -
2019	-	-	0.04	0.04	0.01	4,662	163	-	4,825
2020	668	1.00	0.06	1.06	0.35	137,076	4,804	37,775	179,654
2021	1,330	2.00	0.06	2.06	0.69	273,265	9,577	37,775	320,617
2022	1,955	2.93	0.06	2.99	1.00	409,761	14,360	37,775	461,896
2023	2,644	3.97	0.06	4.03	1.34	567,871	19,901	37,775	625,547
2024	3,293	4.94	0.06	5.00	1.67	726,298	25,454	37,775	789,526
2025	3,293	4.94	0.06	5.00	1.67	748,087	26,217	37,775	812,079
2026	3,293	4.94	0.06	5.00	1.67	770,530	27,004	37,775	835,308
2027	3,293	4.94	0.06	5.00	1.67	793,646	27,814	37,775	859,234
2028	3,293	4.94	0.06	5.00	1.67	817,455	28,648	37,775	883,878
2029	3,293	4.94	0.06	5.00	1.67	841,979	29,508	37,775	909,261
2030	3,293	4.94	0.06	5.00	1.67	867,238	30,393	37,775	935,406
2031	3,293	4.94	0.06	5.00	1.67	893,255	31,305	37,775	962,334
2032	3,293	4.94	0.06	5.00	1.67	920,053	32,244	37,775	990,071
2033	3,293	4.94	0.06	5.00	1.67	947,654	33,211	37,775	1,018,640
2034	3,293	4.94	0.06	5.00	1.67	976,084	34,208	37,775	1,048,066
2035	3,293	4.94	0.06	5.00	1.67	1,005,367	35,234	37,775	1,078,375
2036	3,293	4.94	0.06	5.00	1.67	1,035,528	36,291	37,775	1,109,593
2037	3,293	4.94	0.06	5.00	1.67	1,066,593	37,380	37,775	1,141,747
TOTAL						\$ 13,802,400	\$ 483,715	\$ 679,942	\$ 14,966,058

#### **APPENDIX 7, ASSUMPTIONS:**

1. Population estimates are shown in Appendix 2 of the report.

3. For General Commercial use, the analysis estimates the number of calls for service generated by the project by using average data for similar projects:

			Cro/sq.rt.		
	<b>Annual CFS</b>	Building Sq.Ft.	(000s)	Project Sq.Ft.	Project CFS
Home Depot	52	102,489	0.51		
Costco	102	148,346	0.69		
Kohl's	92	87,888	1.05		
Average			0.75	141,570	105.79

 $Source: CFS\ from\ City\ of\ Sparks\ Police\ Department.\ Comparable\ project\ square\ footage\ from\ Washoe\ County\ Assessor.$ 

However, many visitors to the commercial portion of the project will be existing residents of the project, calls for service for these residents are estimated above, or existing City of Sparks residents, already generating calls for service for the City. Only non-Sparks residents coming to the project will generate new calls for service for the City. The analysis conservatively assumes 50% of the above General Commercial calls for service will be net new calls for service for the City.

According to a calculation of the number of calls for service handled annually by a police officer, based on the number of hours worked, break time,

According to a calculation of the number of calls for service handled annually by a police officer, based on the number of hours worked, break time vacation time, and other components, an officer is estimated to handle an average of 875 calls for service per year. This results in an estimated

**0.06** officer positions for the commercial portion of the project.

Source: City of Sparks Police Department and data from City of Reno Police Department for similar studies.

<sup>2.</sup> For the residential portion of the analysis, uniformed officer positions are estimated at 1.5 positions per 1,000 population. For non-uniformed positions, a ratio of 0.5 positions for every three uniformed positions, is used. Source: City of Sparks Police Department.

### APPENDIX 7 CITY OF SPARKS POLICE DEPARTMENT COST PROJECTIONS

4. The following City of Sparks salary information is used to estimate operating costs, inflated 3% annually.

			Salary	Kai	nge
FY 2017-18	Low		<u>High</u>		Average
Police Officer	\$ 51,730	\$	67,371	\$	59,550
Sergeant	73,112		87,734		80,423
Crime Analyst	55,245		70,512		62,878
Records Technician	45,510		57,990		51,750
Police Office Assistant	34,070		43,368		38,719
GT/IT Support Specialist	44,866		57,179		51,022
Dispatcher	43,368		55,245		49,306
Weighted Average Officers	\$ 54,402	\$	69,917	\$	62,160
<b>Weighted Average Civilians</b>	\$ 40,351	\$	51,396	\$	45,873
calculated at	57.1%	of sa	ılaries.		

Source: "Online Jobs Page." City of Sparks Human Resources.

 $Services/Supplies\ costs\ calculated\ at \\ {\bf 3.5\%} \qquad \quad of\ salaries\ and\ benefits.$ 

 $Source: Three-year\ average\ FY\ 2015-16\ through\ FY\ 2017-18\ from\ City\ of\ Sparks\ Budget\ FY\ 2017-18.$ 

6. One police vehicle is added for every 3 uniformed positions. The 2017 cost of a fully-equipped vehicle is \$70,000 inflated 3% annually. Life of

vehicle is 5 years and the analysis includes vehicle replacement costs with no salvage value. Source: City of Sparks Police Department.

<sup>5.</sup> Benefits costs are calculated at

### APPENDIX 8 CITY OF SPARKS FIRE DEPARTMENT COST PROJECTIONS

<u>YEAR</u>	CUMUL. # OF <u>UNITS</u>	RESIDENTIAL <u>CFS*</u>	COMMERCIAL <u>CFS</u>	TOTAL <u>CFS*</u>	]	ESTIMATED COST/CFS	TOTAL EXPENSES
2018	0	0.00	0.00	0.00	\$	1,473	\$ -
2019	248	29.89	2.81	32.70		1,518	49,622
2020	494	59.54	4.56	64.10		1,563	100,199
2021	726	87.51	4.56	92.07		1,610	148,226
2022	982	118.36	4.56	122.92		1,658	203,841
2023	1,223	147.41	4.56	151.97		1,708	259,571
2024	1,223	147.41	4.56	151.97		1,759	267,359
2025	1,223	147.41	4.56	151.97		1,812	275,379
2026	1,223	147.41	4.56	151.97		1,866	283,641
2027	1,223	147.41	4.56	151.97		1,922	292,150
2028	1,223	147.41	4.56	151.97		1,980	300,914
2029	1,223	147.41	4.56	151.97		2,039	309,942
2030	1,223	147.41	4.56	151.97		2,101	319,240
2031	1,223	147.41	4.56	151.97		2,164	328,817
2032	1,223	147.41	4.56	151.97		2,229	338,682
2033	1,223	147.41	4.56	151.97		2,295	348,842
2034	1,223	147.41	4.56	151.97		2,364	359,308
2035	1,223	147.41	4.56	151.97		2,435	370,087
2036	1,223	147.41	4.56	151.97		2,508	381,189
2037	1,223	147.41	4.56	151.97		2,584	392,625
ГОТАL							\$ 5,329,635

\*CFS-calls for service.

#### **APPENDIX 8, ASSUMPTIONS:**

1. Number of residential units from Appendix 1. Analysis includes all units, not just occupied units, for Fire Department impacts.

3. Calls for service for the General Commercial portion are estimated using cfs data for comparable projects:

	Annual CFS	Building Sq.Ft.	CFS/Sq.Ft. (000s)	Project Sq.Ft.	Project CFS
Costco	10	148,346	0.07		
Kohl's	5.4	87,888	0.06		
Average			0.06	141,570	9.12

Source: City of Sparks Fire Department. Data is a five year average of calls for service for FY 2011-12 to FY 2015-16. However, many visitors to the commercial portion of the project will be existing residents of the project, calls for service for these residents are estimated above, or existingCity of Sparks residents, already generating calls for service for the City. Only non-Sparks residents coming to the project will generate new calls for service for the City. The analysis conservatively assumes 50% of the above General Commercial calls for service will be net new calls for service for the City.

Residential calls for service are estimated using average cfs per unit data for single-family residential properties between FY 2011-12 and FY 2015-16, estimated at 0.12 cfs. Source: City of Sparks Fire Department and Washoe County Assessor's Office parcel data for number of single-family units.

<sup>4.</sup> Costs to provide services to the development are estimated at sestimated using total fire expenditures between FY 2011-12 and FY 2015-16 divided by total calls for service during this period. This includes costs for Administration, Emergency Services, and Training and Safety. Estimated costs are inflated 3% annually.

Fiscal Impact Analysis-City of Sparks

### APPENDIX 9 CITY OF SPARKS STREET MAINTENANCE COST PROJECTIONS

				N	MAINTENANC	Œ						
	ADDED SQUARE	ADDED LINEAR	SEWER CLEANING	CATCH BASIN	STREET SWEEP	STREET STRIPING	TOTAL	SLURRY/ CRACK	3 INCH OVERLAY	ROAD REHAB	TOTAL ANNUALIZED	TOTAL MAINT.
YEAR	FEET	FEET	COST	COST	COST	COST	COST	SEAL COST	COST	COST	COST	COST
2018	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	358,780	10,470	-	-	784	-	784	-	-	-	-	784
2020	-	-	1,307	14	800	545	2,665	-	-	-	885,620	888,285
2021	174,080	5,120	1,333	14	1,214	556	3,117	-	-	-	885,620	888,737
2022	270,912	7,968	2,025	21	1,872	844	4,762	-	-	-	885,620	890,382
2023	289,508	7,782	3,121	33	2,540	1,300	6,994	-	-	-	885,620	892,614
2024	-	-	4,235	44	2,591	1,765	8,635	149,496	-	-	885,620	894,255
2025	-	-	4,320	45	2,643	1,800	8,808	-	-	-	885,620	894,428
2026	-	-	4,406	46	2,696	1,836	8,984	75,466	-	-	885,620	894,604
2027	-	-	4,495	47	2,749	1,873	9,164	119,793	-	-	885,620	894,783
2028	-	-	4,584	48	2,804	1,910	9,347	130,576	-	-	885,620	894,967
2029	-	-	4,676	49	2,861	1,948	9,534	-	1,782,607	-	885,620	895,154
2030	-	-	4,770	50	2,918	1,987	9,724	-	-	-	885,620	895,344
2031	-	-	4,865	51	2,976	2,027	9,919	-	899,863	-	885,620	895,539
2032	-	-	4,962	52	3,036	2,068	10,117	-	1,428,421	-	885,620	895,737
2033	-	-	5,062	53	3,096	2,109	10,320	-	1,557,000	-	885,620	895,939
2034	-	-	5,163	54	3,158	2,151	10,526	182,235	-	-	885,620	896,146
2035	-	-	5,266	55	3,221	2,194	10,737	-	-	-	885,620	896,356
2036	-	-	5,371	56	3,286	2,238	10,951	91,993	-	-	885,620	896,571
2037	-	-	5,479	57	3,352	2,283	11,170	146,027	-	11,148,918	885,620	896,790
TOTAL	1,093,280	31,340	\$ 75,441	\$ 787	\$ 48,597	\$ 31,434	\$ 156,258	\$ 895,587	\$ 5,667,891	\$ 11,148,918	\$ 15,941,156	\$ 16,097,414

### APPENDIX 9, ASSUMPTIONS:

1. The development is projected to construct approximately the year shown above.

31,340 linear feet or

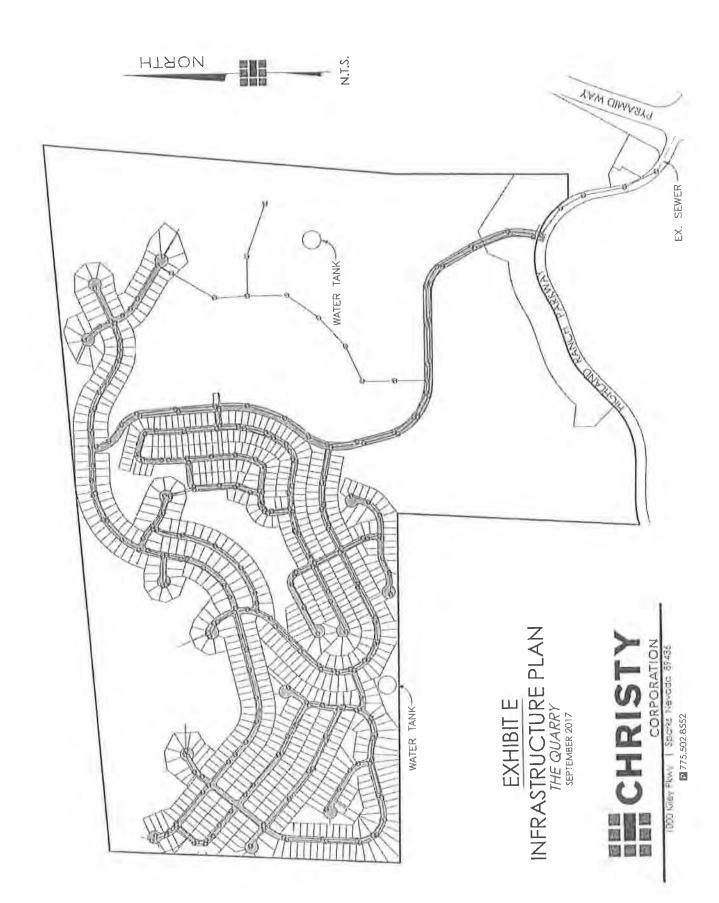
1,093,280 square feet of streets to be dedicated to the City for maintenance in

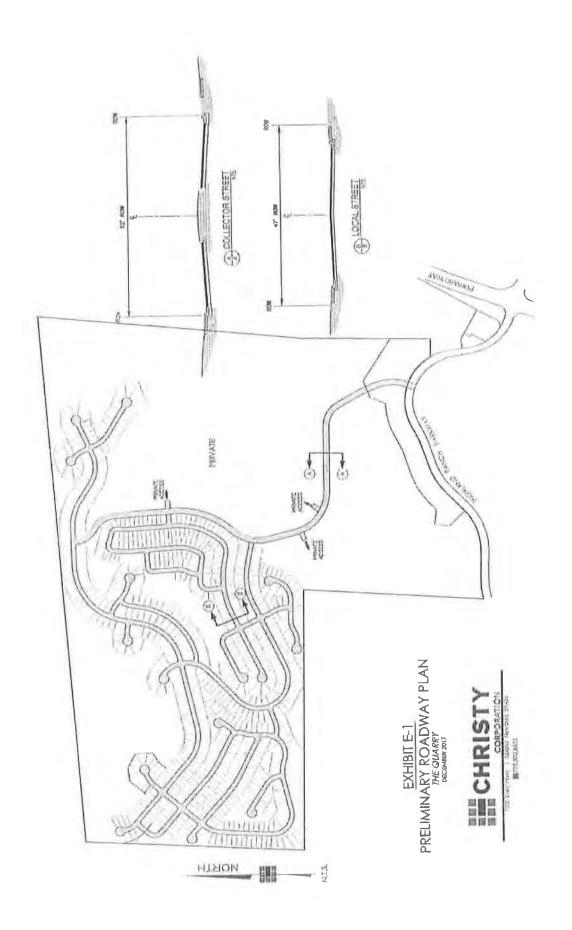
### APPENDIX 9 CITY OF SPARKS STREET MAINTENANCE COST PROJECTIONS

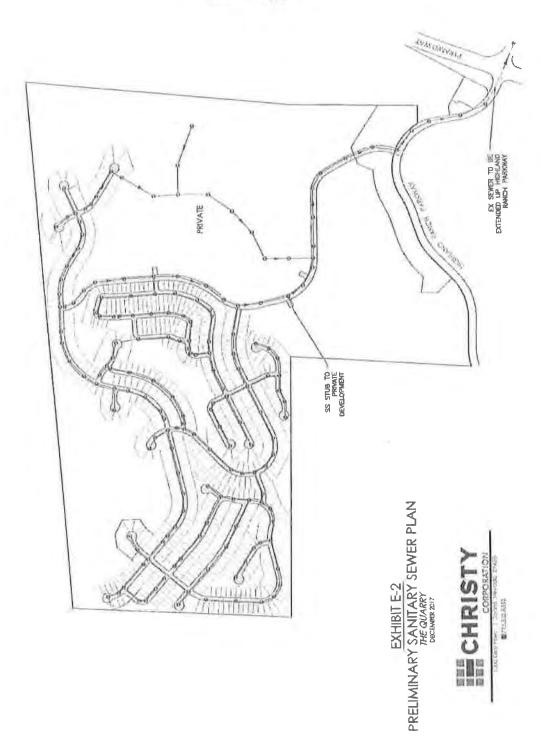
2. The following street maintenance costs are used to estimate the impact of the development's streets on the City:

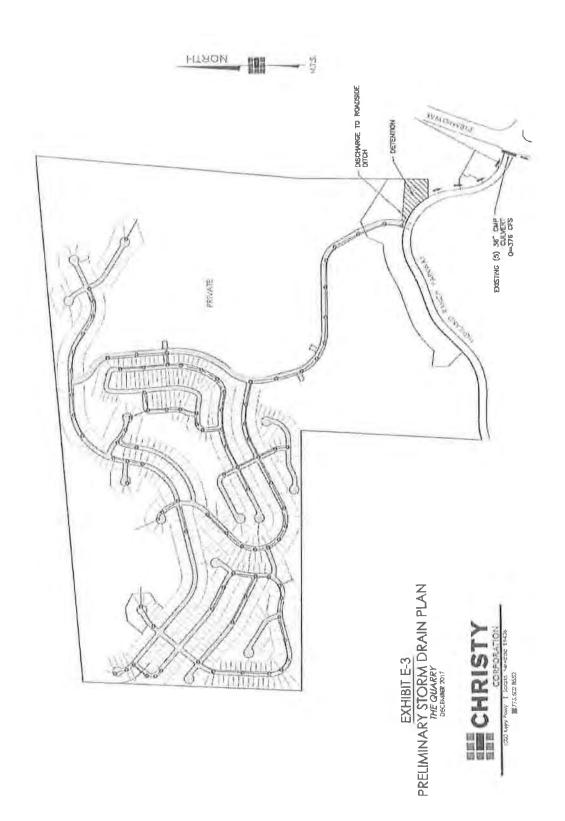
Item	Frequency	Cost		
Slurry/Crack Seal	Year 5 and 15	\$0.37	per square foot	
3 Inch Overlay	10 years	\$4.00	per square foot	
Road Rehabilitation	20 years	\$7.00	per square foot	
Sewer Cleaning	1.5 years	\$0.18	per linear foot	Note: 2/3 of the cost is added annually
Catch Basin Cleaning	1.75 years	\$11.56	per mile	Note: 3/5 of the cost is added annually
Street Sweeping	30 days	\$32.30	per mile	Note: cost is multiplied by 12 annually
Striping	1 year	\$0.05	per linear foot	

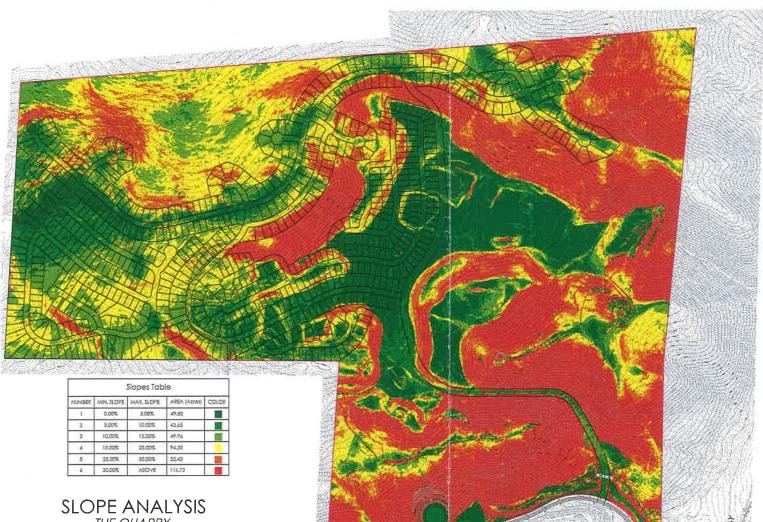
Costs are inflated 2% annually. Source: City of Sparks Community Services Department. Estimated repair (extraordinary maintenance) costs are annualized by taking the total estimated costs over the 20-year period and dividing by 20 years.











SLOPE ANALYSIS THE QUARRY DECEMBER 2017





Jon E.



March 12, 2018

RECEIVED-CITY OF SPARKS

MAR 1 2 2018

COMMUNITY SERVICES ADMINISTRATION

Karen Melby, AICP City of Sparks Community Services Planning Division 431 Prater Way Sparks, Nevada 89431

RE: The Quarry (NDOT Pre-Permit No. 207543-18)

Dear Karen:

This letter addendum is in response to comments submitted to you by the Nevada Department of Transportation in a letter dated February 22, 2018 regarding the above captioned traffic study. A copy of the letter is attached. The comments generally focus on 1) determining the dwelling unit threshold that would maintain LOS E operation at the Pyramid Highway/Sparks Boulevard/ Highland Ranch Parkway intersection without capacity improvements and 2) providing intersection capacity improvement recommendations necessary to maintain LOS E operation for buildout of the full 1,800 single family dwelling units proposed for the development.

In response to comment 1, a total of 650 dwelling units can be constructed while maintaining LOS E operation at the Pyramid Highway/Sparks Boulevard/Highland Ranch Parkway intersection. The AM and PM peak hour capacity analysis worksheets are attached.

In response to comment 2, the improvements discussed in the original traffic study will provide LOS E or better operation at the Pyramid Highway/Sparks Boulevard/Highland Ranch Parkway intersection with the construction of 1,800 dwelling units. These improvements include dual left turn lanes, two through lanes, and one free right turn lane at the east and west approaches and dual left turn lanes at the south approach. The AM and PM peak hour capacity analysis worksheets are attached.

We trust that this information will meet your requirements. Please call if you have any questions or comments.

Enclosures Letters/Sparks/The Quarry Addendum



### STATE OF NEVADA DEPARTMENT OF TRANSPORTATION

District II 310 Galletti Way Sparks, Nevada 89431 (775) 834-8300 FAX (775) 834-8319

February 22, 2018

BRIAN SANDOVAL Governor RUDY MALFABON, P.E., Director

City of Sparks
Department of Planning/Comm. Devlop.
1675 E Prater Way #107
Sparks, NV 89434

Attention: Ms. Karen Melby, Planner

DA18-0001/AX16-0003/ MPA17-00005/RZ17-0006 Jackling Aggregates, LLC/QK, LLC The Quarry Development

Dear Ms. Melby:

The Nevada Department of Transportation (NDOT), District II has reviewed the following administrative review requests:

- (1) DA17-0001 A request for a Development Agreement between the City of Sparks and Jackling Aggregates, LLC and QK, LLC; and
- (2) AX16-0003 A request for voluntary annexation into the City of Sparks. Upon annexation the parcel shall convert from Washoe County Designation GR (General Rural) to City of Sparks A40 (Agriculture); and
- (3) MPA 17-0005 A request to change the land use designations from Open Space (OS), Commercial (C) and Employment Center (EC) to Intermediate Density Residential (1DR) and Commercial (C); and
- (4) RZ17-0006 A request to rezone the site from A40 (Agriculture) to SR 6 (Single Family Residential 6,000 square feet lots) and C2 (General Commercial) zoning.

The Quarry Development traffic impact study was provided by the applicant to support the proposed requests. The Quarry Development is proposed to be annexed into the City of Sparks. The project is located northwest of Highland Ranch Parkway and Pyramid Highway (State Route 445) intersection.

- The project is proposed to contain 1,223 single-family detached homes and a 13-acre mini storage facility. The Kiley Ranch land use assumptions consist of two convenience stores with gas pumps, three fast-food restaurants totaling 10,500 square feet, 30,000 square feet of retail buildings and two automotive service buildings totaling 16,000 square feet, a 4-bay car wash and 8 acres of additional mini-storage.
- ➤ The Quarry land use will generate approximately 10,974 daily trips, 900 a.m. and 1,046 p.m. peak hour trips. Based on the land use assumptions used in the study, the Kiley Ranch development will generate 15,936 daily trips, 1,003 a.m. and 1,092 p.m. peak hour trips.

- > NDOT officially report Annual Average Daily Traffic (AADT) just north of Highland Ranch Parkway is 36,000 vehicles per day.
- > The City's adopted level of service (LOS) standard for Pyramid Highway is a LOS E (arterial with moderate access control).
- > NDOT reviewed the traffic impact study submitted on October 10, 2017. A technical review was completed on October 16, 2017 addressing concerns with the technical analyses and the project regional impacts.

### NDOT District II has the following comments, specifically for the MPA 17-000- map amendment request:

- 1. The Quarry Development is classified as a project of regional significance as defined by NRS 278.026 5. (d)(6) and should be evaluated to determine if the project impacts any current programmed significant projects.
- 2. Based on the submitted traffic impact study, NDOT is requesting an addendum. The study revision should include proposed project phasing and its direct traffic impact to the level of service (LOS) at the intersection of Pyramid Highway and Highland Ranch Parkway.
  - > On page 17 through 20 of the traffic study, the LOS for the intersection degrades from an existing LOS D to a LOS F (existing plus project). No traffic failure threshold is presented in the report.
  - > The addendum should denote the threshold (number of units) that may trigger the LOS F condition to the intersection.
  - > For the intersection, please provide recommendations for capacity improvement necessary to maintain LOS E.
- 3. The Quarry Development constitutes a new community development not previously account in the RTC Long Range Transportation Plan. The project should provide short term intersection improvements that will mitigate its traffic impact at the Pyramid Highway and Highland Ranch Parkway intersection.
  - NDOT does not have any capacity projects anticipated at this location in the near future. Additionally, the RTC Washoe Long Range Transportation Plan does not appear to have any programmed improvement for this intersection until the year 2027+.
  - > The project should provide the necessary 10-year improvements that will maintain LOS E for the intersection.

### Other comments specific to the future development/ permitting process:

- 4. An occupancy permit is required for facilities within the NDOT Right-of-Way. Please see the *Terms and Conditions Relating to Right of Way Occupancy Permits* booklet available online at nevadadot.com. Contact the Permit Office at (775) 834-8330 for more information regarding an occupancy permit.
- 5. The applicant is encouraged to coordinate with the NDOT District Permit Office early for any required standards occupancy permit. NDOT's permit processing time may vary based on project complexity; however, the processing time is approximately 45 working days. This does not include any revision time needed to make necessary changes in the design.

- An effective strategy to minimize delay is taking advantage of the District Permit Office's pre-permit process. Preliminary plans and associated engineering documents may be submitted in advance for NDOT review and comment. This service does not require a processing fee. Please contact the Permit Coordinator, Paula Diem, at (775) 834-8330 for any questions or comments regarding the pre-permit process.
- 6. For any non-permanent activities or temporary traffic control such as placement of cones, static signs, and portable electronic signs within NDOT right-of-way will require a temporary permit. Please submit temporary permit applications at least 4 weeks prior to the scheduled activity or work. Contact the Permit Office, (775) 834-8300 for more information.
- 7. The state defers to municipal government for land use development decisions. Public involvement for project related improvements within the NDOT right-of-way should be considered during the municipal land use development public involvement process. Significant public improvements within the NDOT right-of-way developed after the municipal land use development public involvement process may require additional public involvement. It is the responsibility of the permit applicant to perform such additional public involvement. We would encourage such public involvement to be part of a municipal land use development process.

Thank you for the opportunity to review this community development proposal. NDOT reserves the right to incorporate further changes and/or comments as the design review advances. I look forward to working with you and your team, and completing a successful project. If you have any further questions or comments, please contact the Senior Traffic Engineer, Richard Oujevolk, at (775)834-8300.

Sincerely,

DocuSigned by:

02/23/2018

Thor A. Dyson, PE

District Engineer

TAD:rmo

cc:

Jae Pullen, Engineering Services Richard Oujevolk, Traffic Office Paula Diem, Permit Office NDOT Planning NDOT Engineering NDOT Traffic Ops RTC Washoe Karen Melby, City of Sparks

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Offset, s	0	Reference Point	End	Green	14.0	3.0	50.0	5.0			1	1924 7.5	7 11	X 3 1	1
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	4.0		4.0		1 4			No.
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	1.0	0.0	1.0	N. CHAR	5	6	10 78 6	0
Timer Results				EBL	10	EBT	WBI	L d	WBT	NBL		NBT	SBL		SBT
Assigned Phase	е			7		4	3		8	5		2	1		6
Case Number		Street, assessment		2.0	ACH DIE	4.0	2.0	19	4.0	2.0	000	3.0	2.0		3.0
Phase Duration	1, S			21.0		33.0	10.0		22.0	19.0	) :	55.0	22.0		58.0
Change Period	(Y+R	c), S		0.0		5.0	5.0		5.0	5.0	Ray Mark	5.0	0.0		5.0
Max Allow Hea	dway (	MAH), s		3.1		3.1	3.0		3.1	2.9		0.0	2.9		0.0
Queue Clearan		Management of the Control of the Con	10.00	21.8	W E	30.0	2.8		13.9	13.5	5		19.0	ST KIT	1000
Green Extension	- Allerton			0.0		0.0	0.0		0.7	0.0		0.0	0.4		0.0
Phase Call Pro	The second second			1.00		1.00	1.00		1.00	1.00	)		1.00		MESTINE.
Max Out Proba				1.00		1.00	1.00		1.00	1.00			0.94		A.V
Movement Gro	oup Re	sults			EB	O TOWN		WE			NB			SB	
Approach Move				L	T	R	L	Т	R	L	T	R	L	T	R
Assigned Move		A CONTRACTOR		7	4	14	3	8		5	2	12	1	6	16
Adjusted Flow	-	/ ). veh/h		297	550		25	193		174	559	20	511	1396	373
The second secon	_	ow Rate (s), veh/h/	In	1781	1712	EXE ST	1730	1870	0	1781	1781	1556	1730	1781	1538
Queue Service	-			19.8	28.0		0.8	11.9		11.5	13.0	0.9	17.0	43.2	21.4
		ce Time (gc), s		19.8	28.0	17.70	0.8	11.9	-	11.5	13.0	0.9	17.0	43.2	21.4
Green Ratio (		18 8 11 2		0.18	0.23		0.04	0.14		0.12	0.42	0.42	0.18	0.44	0.44
Capacity (c)		Displant State		312	399	21(8)	144	265		208	1484	648	634	1573	679
Volume-to-Cap		atio (X)	and the second state of	0.952	1.377		0.173	-	-	0.837	0.377	0.030	0.806	0.887	0.549
	-	t/In ( 95 th percentile	)	447.8	1234. 9	_	16.5	255.	The second second	263.3	229.3	14.7	306.6	647.7	314
Back of Oueue	(0)	veh/ln ( 95 th percent	ile)	17.6	48.6	Spalar-Diffe	0.7	10.	1	10.4	9.0	0.6	12.1	25.5	12.4
THE RESERVE OF THE PARTY OF THE		(RQ) (95 th percen		0.00	0.00	ALSO THE	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay			illo)	49.0	46.0	- WYAS	55.5	49.3		51.9	24.2	20.7	47.0	30.8	24.7
Incremental De		and the contract of the contra	150 m 10	37.9	184.8	nges:	0.2	8.6	_	23.5	0.7	0.1	7.0	7.8	3.2
Initial Queue D			MG THE COM	0.0	0.0	F0786-335	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
THE RESERVE OF THE PERSON NAMED IN			100	86.9	230.8	No.	55.7	57.9	-	75.4	24.9	20.8	53.9	38.6	27.9
Control Delay			THE STATE	F	F	THE LEG	55.7 E	E	Nation Co.	E	C	C	D	D	C
I Level of Service			390 114	180.		F	57.		MESERA	36.		D	40.3		D
		INLUS	Semme 1	100.	T05 IE		9.5	1000	CENTER!	30.			E 40.		
Approach Dela Intersection De	The second						3.5		-	1	THE PERSON NAMED IN	The second second	State of the last	The Party of the P	the state of the s
Approach Dela Intersection De	elay, s/v			lan Line	FR		75.5	\/\/F			NR	Section 1		SB	
Approach Dela	elay, s/v esults	reh / LOS		2.4	EB	В	2.7	WE 5 T	3 C	2.3	NB 5	В	1.99	SB 5	В

	HCS	7′ 11	nalized	d Inte	rsect	ion R	esul	its	Su	nary					
								310			Water J.	W. Walter	OF ME	ara lastica	
General Information											rmatio	n		in desires J I I I I I	
Agency	Solaegui Engineers						_		ation, I	-	0.25		-		
Analyst	MSH		Analysi	s Date	Mar 8,	2018			а Туре		Other		∆ →		
Jurisdiction	City of Sparks		Time P	eriod	PM Pe	ak Hour		PHF			0.92		\$ - ·	**	
Urban Street			Analysi	s Year	Existin (650 L	g + Proj ots)	ject	Ana	lysis F	eriod	1> 7:0	0		ካተተረ	
Intersection	Pyramid & Sparks		File Na	me	PySp1	7pw650	).xus						31	41494	16
Project Description		WINDS THE	s in the second	name and the	of anytherin	- /	15000	Matter			THE LEVEL OF	10 TO 10 10 K	Description of the	0 00 00	
Demand Information				EB		CAR TO	W	B			NB		AND RESIDEN	SB	DEPOS
Demand Information	PLACE CONTRACTOR AND AND ADDRESS OF THE PARTY OF THE PART	FAMILY CE	100000000000000000000000000000000000000	T	R	L	T	_	R		T	I R		T	R
Approach Movement		NUL TO	050		210	32	34	_	antice 4	366	1325	20	252	667	221
Demand (v), veh/h	SEATURE TO A SEATURE OF		356	299	210	32	34	0	210.50	300	1323	20	232	007	221
Signal Information		011-5	PRESIDENCE IN COLUMN 1	1	-	11	T		-						Da E
Cycle, s 130.0	Reference Phase	2	1	IR.	540	1	N -2	2	$\exists$	13			V	-	→
Offset, s 0	Reference Point	End		100	1000				45.0			1	2	1	- X ^
Uncoordinated No	Simult. Gap E/W	On	Green Yellow	12.0	10.0	46.0	6.0 4.0		15.0 0.0	21.0	- K			7	-
Force Mode Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	1.0	$\overline{}$	0.0	1.0		) [		7	8
						11.04									
Timer Results			EBL		EBT	WBI		WE	ВТ	NBL		NBT	SBL		SBT
Assigned Phase			7		4	3		8		5		2	1		6
Case Number		Jan in the	2.0		4.0	2.0		4.	0	2.0		3.0	2.0		3.0
Phase Duration, s			26.0		41.0	11.0		26	.0	27.0		31.0	17.0		51.0
Change Period, (Y+R	c), s	14.1	0.0	OF A	5.0	5.0		5.	0	0.0	35 0	5.0	5.0		5.0
Max Allow Headway (			3.1		3.1	3.0		3.	1	2.9		0.0	2.9		0.0
Queue Clearance Tim		The state of	28.0		38.0	3.3		23	.0	29.0	19 63		12.1		
Green Extension Time			0.0		0.0	0.0		0.	0	0.0		0.0	0.0		0.0
Phase Call Probability			1.00		1.00	1.00	)	1.0	00	1.00			1.00	E 5 (6)	
Max Out Probability			1.00		1.00	1.00		1.0	00	1.00		e vite e e	1.00		diam'r.
Movement Group Re	culte			EB		Ton de la	WE				NB	(4) (1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		SB	THE ALC
Approach Movement	Suits	DESCRIPTION OF THE PARTY OF THE	1	Т	R		T	1011/04	R	NULL STREET	Т	R	L	T	R
the state of the s	is a material and the second	G 100 100 20	7	4	14	3	8	C20 157	100 Fr	5	2	12	76 (19)	6	16
Assigned Movement	STATE OF THE PARTY OF THE	CDSITS	387	499	200	35	375	-	STOA	398	1440	22	274	725	197
Adjusted Flow Rate (		NEW TOWN		1745	ESCOUNTS	1730	187	_	S-54-63	1781	1781	1557	1730	1781	1534
Adjusted Saturation F		in	1781	36.0	NAME OF THE OWNER, OWNE	1.3	21.0	_	SHIP	27.0	50.2	1.0	10.1	21.5	12.4
Queue Service Time (			26.0		Bart Ligaria	1.3	21.0	_	N/ASSZ/	27.0	50.2	1.0	10.1	21.5	12.4
Cycle Queue Clearan	ce time (ge), s	21/19/10	0.20	36.0 0.28	and the same	0.05	0.16	_	C. Control	0.21	0.43	0.43	0.09	0.35	0.35
Green Ratio (g/C)		J. S. S. S. S.	-	-	Total Inc.	.160	302		00000	370	1534	671	319	1260	543
Capacity (c), veh/h		1 1 15	356	483	6 Sept.	_	-	_	No.	-			0-	0.575	0.362
Volume-to-Capacity R			1.086	1.032	-	0.218	1.24	_	3155,704	1.075	0.939	0.032	0.858		-
Back of Queue (Q), f	The second secon		684.2	770.1	1400 1	25.1	793.		os el	675.9	772.9	17.4	224.7	357.3	207.7
Back of Queue (Q), v		and the second second second	26.9	30.3	Mary Action	1.0	31.3	_	N.7454	26.6	30.4	0.7	8.8	14.1	8.2
Queue Storage Ratio	And the second s	itile)	0.00	0.00	STATE OF	0.00	0.0	-		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay ( d 1 ),		District Control	52.0	47.0	EAST STORY	59.7	54. 133	_	20019	51.5 68.3	35.4 12.4	21.4	58.2	34.1	1.9
Incremental Delay ( d	- Contribution of the Cont	25/1/4/2	72.7	49.5		0.3	0.0	-	place (A)	0.0	0.0	0.0	0.0	0.0	0.0
Initial Queue Delay (			0.0	_	Taran de	-	188	-	ALC: N	119.8	47.8	21.4	77.5	36.0	33.0
Control Delay (d), sh			124.7	96.5	1015-95	60.0	-		10			21.4 C	-	-	C C
Level of Service (LOS			F 100	F	C C	E 177	F	_		F 62.0	D		E 45.0	D	D
Approach Delay, s/vel	The state of the s	E V 4	108.	0	F	177. 8.1		127	F. S	62.9	ACE SET	E	45.0 E	1	U
Intersection Delay, s/v	ren / LUS	第DV 等	Sec. Su	12.30%	<b>新拉斯斯</b>	O. I	100	6 8	Name of	151475			35-6613	The state of	
Multimodal Results				EB			W	Ayeatye	MARIN.		NB	a Dala	Panel of	SB	2 (LL)
Pedestrian LOS Score	e / LOS		2.45		В	2.6	6	(	С	2.85	5	С	2.00		В
Bicycle LOS Score / L	The second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a section section in the second section in the section is a section section in the section section in the section section is a section s	NO ALEXANDE	1.95		В	0.4	-	OVOY	A	2.02	_	В	1.4	7	Α

		HCS	7 1	nalize	d Inte	rsect	ion R	esu	lts	Sur	nary	STATE OF THE PARTY			THE RESERVE	
				- Helen			N V						The State		4 4 4 4 4 4	Walter Co.
General Inform	ation							-	_			rmatio	n	i iii	Jijii	È
Agency		Solaegui Engineers		-		-		-	_	ration,		0.25		- 100		
Analyst		MSH		Analysi		Mar 8,			_	еа Туре	)	Other		#3	4	±.
Jurisdiction		City of Sparks		Time P			ak Hour	_	PH			0.92			MI	
Urban Street				Analysi	s Year	Existin (1800	g + Proj Lots)	ject	Ana	alysis F	Period	1> 7:0	0	ă.	<u>ነ</u> ካ ተተለ	
Intersection		Pyramid & Sparks		File Na	me									31	4 1 4 7 7	Tr.
Project Descript	tion	w/Improvements								neconore:	-		Section 2.5		ALC: NO.	III. JK vit
			10							<b>THE N</b>		AID			C.D.	W.
Demand Inform				TOS.	EB		The state	W	-	Menan.		NB	T B		SB	D
Approach Move	-		-	L	T	R	L	1	_	R	L	T 514	R	L.	1284	R 474
Demand (v), v	eh/h		AND RELEASE	364	431	1	23	22	29	CAUSEON	251	514	18	470	1204	4/4
Signal Informa	tion	distributed by the state of	SHAW		CONTRACT.	TIII	171	TO SECOND		1940 P	CHICAGO III					Action in
	120.0	Reference Phase	2	1	21	STP		175	W.	13	_	- 1		D	/	
Cycle, s Offset, s	0	Reference Point	End		3		Tr			1		-	A)	2	2	100
Uncoordinated	No	Simult. Gap E/W	On	Green	16.0	3.0	47.0	10		5.0	19.0 4.0	K		2000	2	-
		Simult. Gap N/S	On	Yellow Red	1.0	0.0	1.0	4.0		0.0	1.0	-	1: -3	6	1	. 8
Force Mode	Fixed	Simult, Gap N/S	Oil	Ned	DEMONST	10.0	THE COLUMN	SALE.		AND S		Same.	D. A. 12	THE PARTY		War and
Timer Results				EBL		EBT	WBI	Roll 8	N	VBT	NBL		NBT	SBL		SBT
Assigned Phase			ALC: U	7	323 1315	4	3			8	5		2	1		6
Case Number		AND ADD THE STATE OF THE	1.00	2.0	too est	4.0	2.0	253	_	1.0	2.0	ed Rd	3.0	2.0	78 E.S	3.0
Phase Duration	75/18/15(0)	MANAGER SAN SAN SAN		20.0	384 1362	29.0	15.0			4.0	21.0		52.0	24.0		55.0
Change Period	- Alleran	110	E A TO I TO	0.0	2018	5.0	5.0	Mary V	_	5.0	5.0	_	5.0	0.0	Por Her	5.0
Max Allow Hea				3.1	CONTRACTOR AND ADDRESS OF THE PARTY AND ADDRES	3.0	3.0		_	3.0	2.9		0.0	2.9		0.0
Queue Clearan			SULVE III	14.9	(30 SS)	16.5	2.8		-	9.6	10.9			18.6	RU ME	
Green Extension				0.5	APPRICATE STATE	1.2	0.0	_	_	1.3	0.3		0.0	0.6	5 140 135	0.0
Phase Call Pro			407, 74	1.00	eta ma	1.00	1.00	_	_	.00	1.00			1.00	THE SE	
Max Out Proba	Dark Contract Contrac		MIGORE	0.21		0.08	0.00	-	-	.03	0.10			0.17		The Party of the P
Wax Out Floba	Dility	<b>治。</b> 超到7期至31	15 3							7	17 17	100	SALVE		14	E 18.
Movement Gro	oup Res	sults	100	1	EB			W	В			NB	of all		SB	
Approach Move				L	T	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ement		5.60	7	4		3	8			5	2	12	1	6	16
Adjusted Flow	Rate ( v	/), veh/h		396	468		25	24	9		273	559	20	511	1396	407
Adjusted Satur	ation FI	ow Rate (s), veh/h/	ln .	1730	1781		1730	178	31		1730	1781	1556	1730	1781	1556
Queue Service	Time (	g s), S		12.9	14.5		0.8	7.6	6		8.9	13.6	0.9	16.6	45.1	24.8
Cycle Queue C	learand	ce Time (gc), s		12.9	14.5		0.8	7.6	6		8.9	13.6	0.9	16.6	45.1	24.8
Green Ratio (	g/C )			0.17	0.20		0.08	0.1	6		0.13	0.39	0.39	0.20	0.42	0.42
Capacity (c),	veh/h			577	712	1000	288	56	4		461	1395	609	692	1484	648
Volume-to-Cap	acity Ra	atio (X)		0.686	0.658		0.087	0.44	41		0.592	0.401	0.032	0.738	0.941	0.627
Back of Queue	(Q), f	t/In (95 th percentile	)	245.4	272.2	200	15.6	150	).4	N - 1	172.5	239.4	15.5	292.6	705.2	363.6
Back of Queue	(Q), v	eh/ln ( 95 th percent	tile)	9.7	10.7		0.6	5.	_	1	6.8	9.4	0.6	11.5	27.8	14.3
Queue Storage	Ratio	(RQ) (95 th percen	itile)	0.00	0.00		0.00	0.0	00	当時	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay		Marketing with the same of the		47.0	44.2		50.8	45.	.7		48.9	26.3	22.5	45.1	33.6	27.6
Incremental De			1	2.8	1,8	1	0.0	0.2	2	EXV	1.4	0.9	0.1	3.7	12.9	4.5
Initial Queue D	elay ( d	/ з), s/veh		0.0	0.0		0.0	0.	0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	(d), s/v	<i>r</i> eh		49.9	46.0		50.8	45	.9	1850	50.3	27.2	22.6	48.7	46.5	32.2
Level of Service				D	D		D	D			D	С	С	D	D	С
Approach Dela			100	47.8	3	D	46.4	4	58	D	34.	5	С	44.	5	D
Intersection De	elay, s/v	eh / LOS	Probe	STEWNER!	con the con-	4	3.3	- Fates	200	UNITED MAN	CHEST AND		et stress	D		372000
Multimodal Re	esults	in the second second		i interes	EB	1 - 21		W	/B	ACD SUPPLE		NB	A. LUS		SB	
Pedestrian LO		e/LOS		2.60	-	С	2.7	-		С	2.5		С	2.4	7	В
				-	3	Α	0.6	_	_	Α	1.19		Α	2.40		В

		HCS	7 ( )	nalized	d Inte	ersect	ion Re	esul	ts Su	nary					
ATTACK SALE	344	是推出		17/0					THE STATE OF				V 63	513	11/2
General Inform	ation							1	ntersect	ion Info	rmatio	1	210	124115 J I I I I I	
Agency		Solaegui Engineers						10	Duration,	h	0.25		-		
Analyst		MSH		Analysi	s Date	Mar 8,	2018	1	Area Type	9	Other		2-1		A STATE OF
Jurisdiction		City of Sparks		Time P		PM Pe	ak Hour	F	PHF		0.92			.4	
Urban Street		ony or opanie		Analysi		Existin	g + Proj		Analysis I	Period	1> 7:0	0	. →		
Intersection		Pyramid & Sparks	-	File Na	me	(1800	Lots)	_			-		1	ጎጎተተሶ ተመቀጥኮ	*
Project Descript		w/Improvements											1		
Project Descript	Design 1	Williprovements		Total Control		86 21 31	Vacint 6	19.5		T. STORY		19 50 1	E. Paris		E G
Demand Inform	nation			NO SECUL	EB	1 1 2 1 1		WE		1.6	NB			SB	
Approach Move					Т	R	L	T	R	L	T	R	L	T	R
Demand (v), v		What I have		404	378		32	479	9	607	1325	20	252	667	302
Clausellaforma	Han				1	14/100	111	Marille .	STATE FOR	USIN MA	THE STATE OF	235			10.
Signal Informa		Defenses Dhase	1 2	1	3	The same	1	1	0-3	-	- 1		D	/	
Cycle, s	130.0	Reference Phase	2		3	1 M	11	9		1	1 1-3	. 4	2	3	
Offset, s	0	Reference Point	End	Green	15.0	14.0	40.0	6.0	13.0				3 0	15.00	+
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	0.0	4.0	4.0	0.0	4.0		1 5			
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	1.0	0.0	1.0	n Grisa	6		5 B ( )	No.
Timer Results	Suran			EBL	K D	EBT	WBL		WBT	NBL		NBT	SBL	15 60	SBT
Assigned Phase	e			7		4	3		8	5		2	1		6
Case Number	Maria (Int		· (0.11)	2.0		4.0	2.0		4.0	2.0		3.0	2.0	3403	3.0
Phase Duration	i, S			24.0		40.0	11.0		27.0	34.0		59.0	20.0	_	45.0
Change Period	(Y+R	c), S		0.0	100	5.0	5.0	17.	5.0	0.0	Ind A Vi	5.0	5.0		5.0
Max Allow Head				3.1		3.0	3.0		3.0	2.9		0.0	2.9		0.0
Queue Clearan			1	17.4	18/12	14.4	3.3		20.5	24.6			11.9	THE ST	OF E
Green Extension	_			0.7		2.1	0.0		0.5	1.2		0.0	0.2		0.0
Phase Call Pro	NAME AND ADDRESS OF THE OWNER, OF TAXABLE PARTY.		TOTAL ST	1.00	Part Si	1.00	1.00		1.00	1.00	)	W. SPAIR	1.00		
Max Out Proba				0.08		0.00	1.00		1.00	0.02	2		0.83	3	
Movement Gro	un Pos	eulte.	12000	West State	EB	en e sout		WB			NB			SB	line.
		suits.		1	T	R		Т	R	L	T	R	L	Т	R
Approach Move	_	STREET, STREET		7	4		3	8	THE STATE OF	5	2	12	100	6	16
Assigned Move				439	411	The state of the	35	521		660	1440	22	274	725	263
Adjusted Flow I		AND DESCRIPTION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUM	n	1730	1781		1730	1781		1730	1781	1556	1730	1781	155
Depart Property of the Property of the Party		ow Rate (s), veh/h/			12.4		1.3	18.5		22.6	51.6	1.1	9.9	23.0	18.4
Queue Service	-	NAME OF TAXABLE PARTY.	No.	15.4	-	D BOOM STREET	1.3	18.5	-	22.6	51.6	1.1	9.9	23.0	18.4
		ce Time (g c), s	THE REAL	15.4	12.4		_	0.17		0.26	0.42	0.42	0.12	0.31	0.3
Green Ratio (g			No.	0.18	0.27	OF REAL PROPERTY.	0.05	-	-	905	1479	646	399	1096	478
Capacity (c),	and the part of the contract of	THE PROPERTY OF		639	959	A DE LO	160	603		-	0.974	0.034	0.686	0.662	0.55
Volume-to-Cap				0.688	0.429	_	0.218	0.86		0.729		-	198.3	386.5	296
Dispersion Commission	11/10/11/20	t/In ( 95 th percentile		282.9			25.1	355.		371.6	823.8	18	-	15.2	11.
NAME OF TAXABLE PARTY.		eh/ln (95 th percent		11.1	9.2	(State of	1.0	14.0		14.6	32.4	0.7	7.8	0.00	0.0
The second secon	The second second	(RQ) (95 th percer	itile)	0.00	0.00	-	0.00	0.00	-	0.00	0.00	0.00	0.00		-
Uniform Delay			Section 1	49.5	39.2	a description	59.7	52.5		43.8	37.3	22.5	55.2	39.1	37.
Incremental De				2.6	0.1		0.3	11.9		2.6	17.9	0.1	4.1	3.1	4.5
Initial Queue D	-			0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (			1200	52.1	39.4	40000	60.0	64.4		46.4	55.2	22.6	59.3	42.3	42.
Level of Servic				D	D		E	E		D	E	С	E	D	D
Approach Dela	y, s/veh	I/LOS		45.9	9	D	64.3	2	/E.	52.	1	D	45.	9	D
Intersection De	elay, s/v	eh / LOS		R. S.	91 -62 Vin	5	8.0	D. W. Co	and the same	TO STORY	£2000	6 3011	D	0.504(5)	N/F
					EB			WE	3		NB	1200	11392	SB	MA
Multimodal Re	2511175			The second second second			The Person Name of Street, or other Designation of Street, or	A 10 THE R. P. LEWIS CO., LANSING, MICH.	THE RESERVE TO SERVE THE PARTY OF THE PARTY	-	-		6		
Multimodal Re Pedestrian LOS		2/LOS		2.5	9	С	2.6	9	С	3.0	0	С	2.4	8	В

# THE QUARRY TRAFFIC STUDY

SEPTEMBER, 2017



Prepared by: Solaegui Engineers, Ltd. 715 H Street Sparks, Nevada 89431 (775) 358-1004

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# THE QUARRY TRAFFIC STUDY

# **EXECUTIVE SUMMARY**

The Quarry will be located in the City of Sparks, Nevada. The project site is located north of Highland Ranch Parkway and west of Pyramid Highway. This study also includes analysis of Kiley Ranch land uses located west of Pyramid Highway between Highland Ranch Parkway and Lazy 5 Parkway. The purpose of this study is to address the project's impact upon the adjacent street network. The Highland Ranch Parkway/Pyramid Highway, Highland Ranch Parkway/Project Access, and Highland Ranch Parkway/Frontage Road intersections have been identified for AM and PM peak hour capacity analysis for the existing, existing plus project, existing plus project plus Kiley Ranch, 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios. The Pyramid Highway intersections with Los Altos Parkway and Lazy 5 Parkway have been identified for trip distribution and assignment analysis only. Pyramid Highway and Highland Ranch Parkway in the vicinity of the site have been identifies for roadway capacity analysis for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios.

The Quarry will include the construction of 1,223 single family detached homes and a 13 acre ministorage facility. The Kiley Ranch land uses will consist of two convenience stores with gas pumps for a total of 8,000 square feet, three fast food restaurants with drive-through lanes totaling 10,500 square feet, two sit-down restaurants totaling 10,000 square feet, 30,000 square feet of retail buildings, two automotive service buildings totaling 16,000 square feet, a car wash with 4 bays, and an 8 acre mini-storage facility. The Quarry is anticipated to generate 10,974 average weekday trips with 900 trips occurring during the AM peak hour and 1,046 trips occurring during the PM peak hour. Kiley Ranch is anticipated to generate 15,936 average weekday trips with 1,003 trips occurring during the AM peak hour and 1,092 trips occurring during the PM peak hour.

Traffic generated by The Quarry will have some impact the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping or traffic control improvements comply with City of Sparks and Nevada Department of Transportation requirements.

It is recommended that Highland Ranch Parkway be widened to four lanes from Pyramid Highway to the Project Access.

It is recommended that the Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard intersection be improved to include dual left turn lanes, two through lanes, and one right turn lane at the east and west approaches and dual left turn lanes at the south approach. The dual left turn pocket at the west approach should contain 545 feet of storage/deceleration length and the dual left turn pocket at the south approach should contain 740 feet of storage/deceleration length.

It is recommended that the Highland Ranch Parkway/Project Access intersection be improved as three-leg traffic signal controlled intersection with one left turn lane and one through lane at the west approach, one through lane and one right turn lane at the east approach, and dual left turn lanes and one right turn lane at the north approach. The left turn pocket at the west approach should contain 370 feet of storage/deceleration length and the dual left turn pocket at the north approach should contain 365 feet of storage/deceleration length.

# INTRODUCTION

#### STUDY AREA

The Quarry will be located in the City of Sparks, Nevada. The project site is located north of Highland Ranch Parkway and west of Pyramid Highway. Figure 1 shows the location of the project site. This study also includes analysis of Kiley Ranch land uses located west of Pyramid Highway between Highland Ranch Parkway and Lazy 5 Parkway. The purpose of this study is to address the project's impact upon the adjacent street network. The Highland Ranch Parkway/Pyramid Highway, Highland Ranch Parkway/Project Access, and Highland Ranch Parkway/Frontage Road intersections have been identified for AM and PM peak hour capacity analysis for the existing, existing plus project, existing plus project plus Kiley Ranch, 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios. The Pyramid Highway intersections with Los Altos Parkway and Lazy 5 Parkway have been identified for trip distribution and assignment analysis only. Pyramid Highway and Highland Ranch Parkway in the vicinity of the site have been identified for roadway capacity analysis for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios.

#### EXISTING AND PROPOSED LAND USES

The project site encompasses an old gravel pit and undeveloped land. Adjacent properties generally include undeveloped land with some scattered dwelling units to the north and west. The Quarry will include the construction of 1,223 single family homes and a 13 acre mini-storage facility. The Kiley Ranch land uses will consist of two convenience stores with gas pumps totaling 8,000 square feet, three fast food restaurants with drive-through lanes totaling 10,500 square feet, two sit-down restaurants totaling 10,000 square feet, 30,000 square feet of retail buildings, two automotive service buildings totaling 16,000 square feet, a 4-bay car wash, and an 8 acre mini-storage facility.

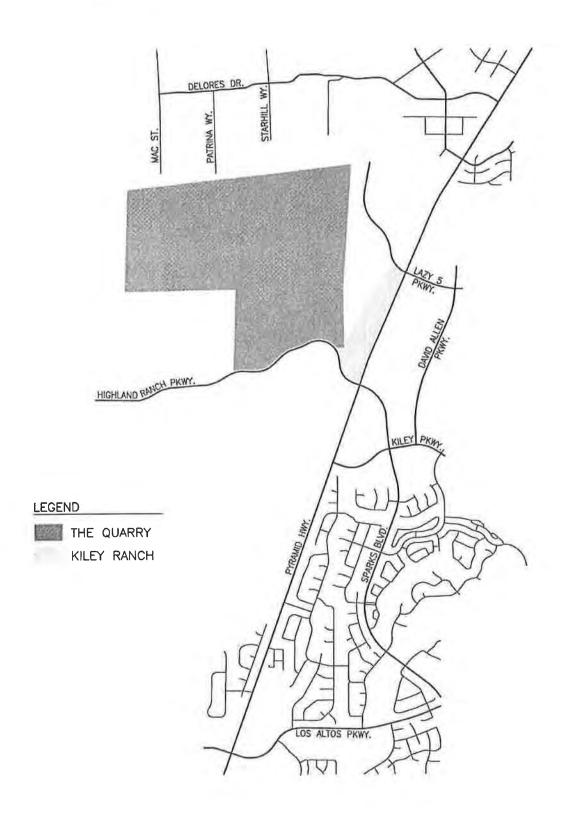
# EXISTING AND PROPOSED ROADWAYS AND INTERSECTIONS

Pyramid Highway is a four-lane roadway with two through lanes in each direction in the vicinity of the site. The speed limit is posted for 55 miles per hour in the vicinity of the site. Roadway improvements include bicycle lanes, striped edge lines, and paved shoulders on both sides of the roadway. A striped centerline exists south of Highland Ranch Parkway and a raised center median exists north of Highland Ranch Parkway.

Highland Ranch Parkway is a two-lane roadway with one through lane in each direction west of Pyramid Highway. The speed limit is posted for 45 miles per hour with a 35 mile per hour advisory speed limit near the project site. Roadway improvements include striped edge and center lines and paved and graded shoulders.

Sparks Boulevard is a four-lane roadway with two through lanes in each direction east of Pyramid Highway. The speed limit is posted for 40 miles per hour. Roadway improvements include curb, gutter, sidewalk, and bike lanes on both sides of the street and a raised center median with left turn pockets at major intersections.





THE QUARRY

VICINITY MAP FIGURE 1 The Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard intersection is a signalized four-leg intersection with protected phasing for all left turn movements. The north approach contains dual left turn lanes, two through lanes, and one right turn lane. The south approach contains one left turn lane, two through lanes, and one right turn lane. The east approach contains dual left turn lanes, one through lane, and one free right turn lane with a northbound acceleration lane. The west approach contains one left turn lane and one shared through-right turn lane with a southbound acceleration lane. Pedestrian crosswalks exist at all approaches.

The Highland Ranch Parkway/Project Access intersection is an unsignalized three-leg intersection with stop control at the north approach. The intersection contains one shared left turn-through lane at the west approach, one shared through-right turn lane at the east approach, and one shared left turn-right turn lane at the north approach. The north approach served a gravel pit but is now gated.

The Highland Ranch Parkway/Frontage Road intersection does not currently exist but is anticipated to be a typical three-leg intersection with full turning movements allowed. The Highland Ranch Parkway/Frontage Road intersection will provide access to Kiley Ranch.

# TRIP GENERATION

In order to assess the magnitude of traffic impacts of the proposed project on the key intersections, trip generation rates and peak hours had to be determined. Trip generation rates were obtained from the Ninth Edition of *ITE Trip Generation* (2012). Trip generation was calculated for the peak hours occurring between 7:00 and 9:00 AM and 4:00 and 6:00 PM which correspond to the peak hours of adjacent street traffic. The Quarry will include the construction of 1,223 single family homes and 13 acres of mini-storage. ITE Land Uses 151: Mini-Warehouse and 210: Single Family Detached Housing was used to calculate trips generated by The Quarry. Table 1 shows a summary of the average daily traffic (ADT) volumes and peak hour volumes generated by The Quarry.

Т	TABLI HE QUARRY TRII		RATION				
		AM	PEAK I	HOUR	PM	PEAK 1	HOUR
LAND USE	ADT	IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family (1,223 DU) Mini-Warehouse (13 AC) Total	10,513 461 10,974	217 <u>15</u> 232	649 <u>19</u> 668	866 <u>34</u> 900	630 <u>23</u> 653	370 <u>23</u> 393	1,000 <u>46</u> 1,046

Kiley Ranch will consist of two convenience stores with gas pumps for a total of 8,000 square feet, three fast food restaurants with drive-through lanes totaling 10,500 square feet, two sit-down restaurants totaling 10,000 square feet, 30,000 square feet of retail buildings, two automotive service buildings totaling 16,000 square feet, a car wash with 4 bays, and an 8 acre mini-storage facility. ITE Land Uses 151: Mini-Warehouse, 820: Shopping Center, 843: Automobile Parts Sales, 848: Tire Store, 853: Convenience Market with Gasoline Pumps, 932: High-Turnover (Sit-Down) Restaurant, 934: Fast Food Restaurant with Drive-Thru, and 947: Self-Service Car Wash were used to calculate trips generated by Kiley Ranch.

Table 2 shows a summary of the average daily traffic (ADT) volumes and AM and PM peak hour traffic volumes generated by Kiley Ranch.

KILEY	TABLI RANCH TRI		RATION				
		AM	PEAK I	IOUR	PM	PEAK I	HOUR
LAND USE	ADT	IN	OUT	TOTAL	IN	OUT	TOTAL
Convenience Market w/Gas (8,000 SF)	6,765	164	163	327	204	203	407
Fast Food w/Drive-Thru (10,500 SF)	5,209	243	234	477	178	165	343
Sit-Down Restaurant (10,000 SF)	1,272	59	49	108	59	40	99
Shopping Center (30,000 SF)	1,281	18	11	29	53	58	111
Auto Parts Sales (8,000 SF)	495	9	9	18	24	24	48
Tire Store (8,000 SF)	199	14	9	23	14	19	33
Car Wash (4 Bays)	432	0	0	0	11	11	22
Mini-Storage (8 AC)	283	9	12	<u>21</u>	<u>15</u>	14	29
Total	15,936	516	487	1,003	558	534	1,092

#### TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of project trips to the key intersections was estimated based on existing and future peak hour traffic patterns and the locations of attractions and productions in the area. Separate trip distribution schemes were developed for The Quarry and Kiley Ranch. The trip generation volumes were subsequently assigned to the key intersections based on the trip distribution. Figure 2 shows the trip distribution and assignment for The Quarry. Figure 3 shows the trip distribution and assignment for Kiley Ranch. Access to Kiley Ranch will be provided from Highland Ranch Parkway and Lazy 5 Parkway via the Frontage Road and from Pyramid Highway via two right-in/right-out only driveways.

# EXISTING AND PROJECTED TRAFFIC VOLUMES

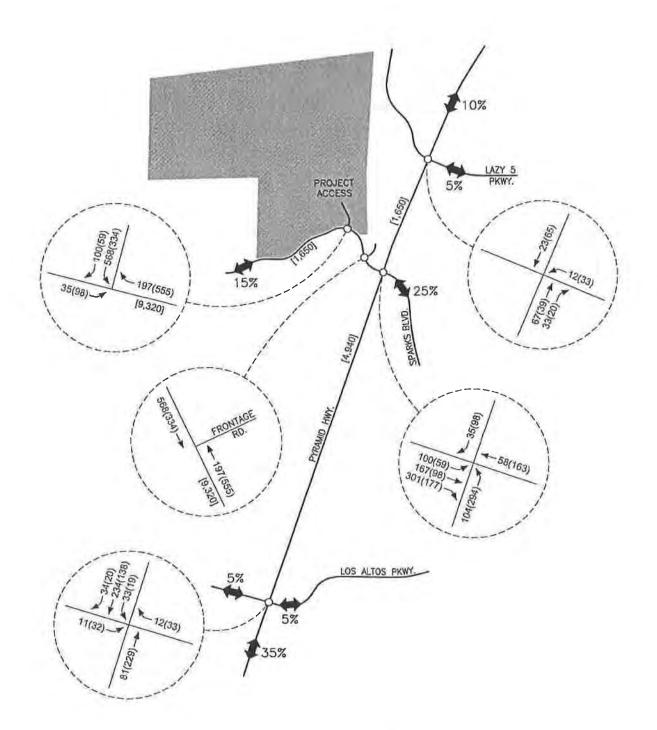
Figure 4 shows the existing traffic volumes at the key intersections during the AM and PM peak hours. The existing traffic volumes were obtained from weekday counts conducted in September of 2017. Figure 5 shows the existing plus project traffic volumes during the AM and PM peak hours. Figure 6 shows the existing plus project plus Kiley Ranch traffic volumes at the key intersections. Figure 7 shows the 2035 base traffic volumes. The 2035 base average daily traffic volumes were obtained directly from RTC's traffic forecasting model and the peak hour volumes were then estimated based on the average daily traffic volumes. Peak hour factors and directional splits obtained from actual hourly traffic data on Pyramid Highway, Sparks Boulevard, and Highland Ranch Parkway were applied to the average daily traffic volumes in order to obtain peak hour directional link volumes at each leg of the intersection. Peak hour intersection turning movements were then estimated based on manually balancing entering and departing volumes at the intersection. Figure 8 shows the 2035 base plus project traffic volumes at the key intersections during the AM and PM peak hours. Figure 9 shows the 2035 base plus project plus Kiley Ranch traffic volumes at the key intersections during the AM and PM peak hours.

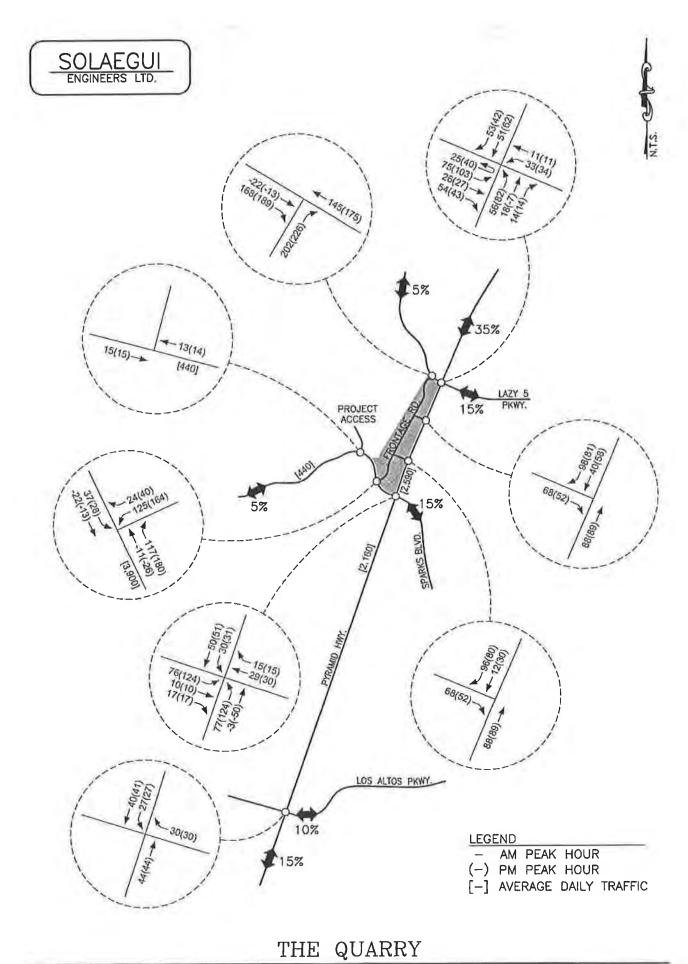




LEGEND

- AM PEAK HOUR
- (-) PM PEAK HOUR
- [-] AVERAGE DAILY TRAFFIC





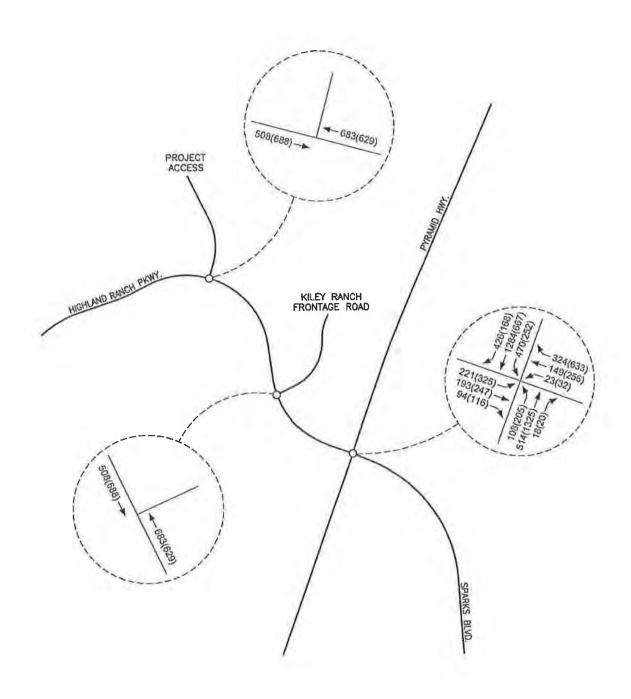
KILEY RANCH TRIP DISTRIBUTION & ASSIGNMENT FIGURE 3

LEGEND

- AM PEAK HOUR

(-) PM PEAK HOUR

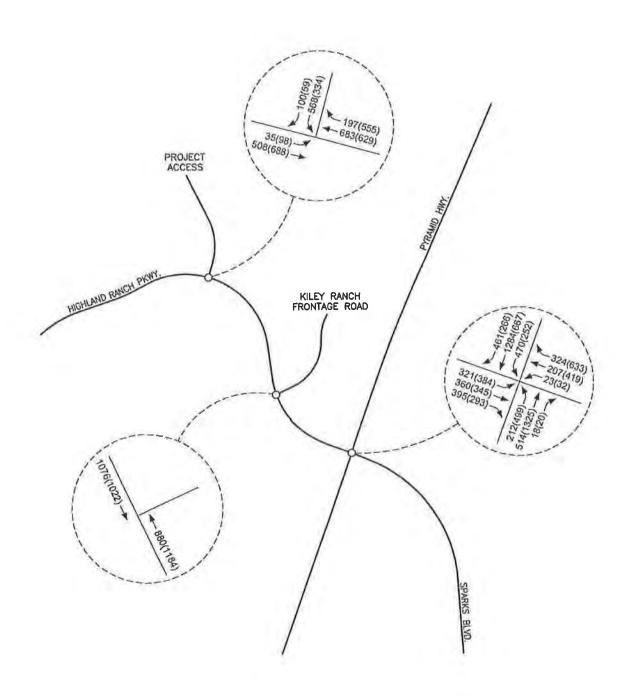




LEGEND

- AM PEAK HOUR
(-) PM PEAK HOUR





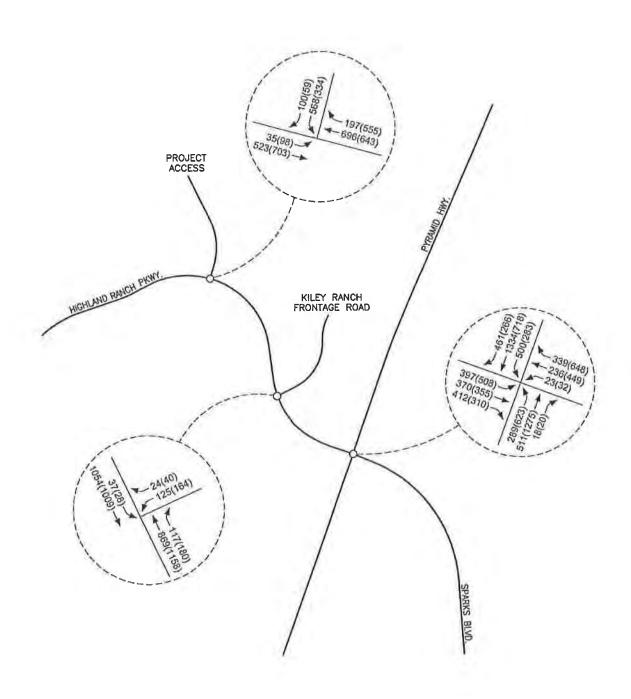


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LEGEND

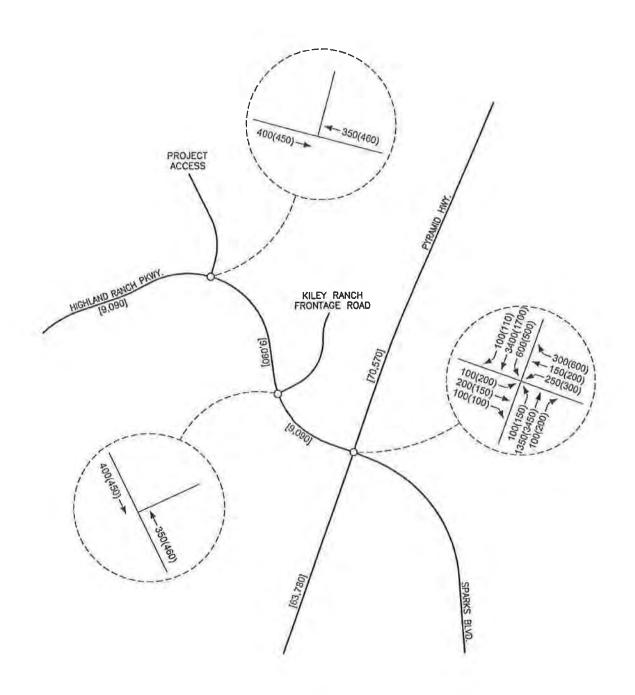
- AM PEAK HOUR

(-) PM PEAK HOUR



# LEGEND

- AM PEAK HOUR
- (-) PM PEAK HOUR [-] AVERAGE DAILY TRAFFIC

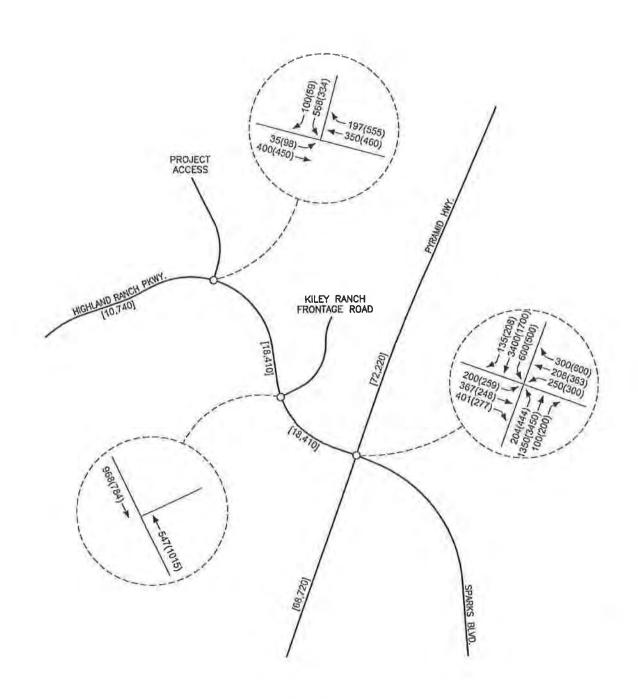




**LEGEND** 

AM PEAK HOUR

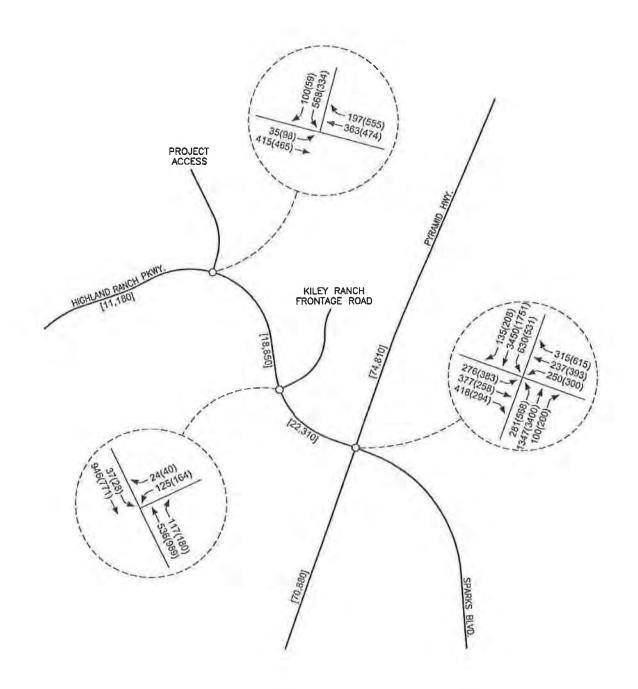
- (-) PM PEAK HOUR [-] AVERAGE DAILY TRAFFIC





# **LEGEND**

- AM PEAK HOUR
- (-) PM PEAK HOUR
- [-] AVERAGE DAILY TRAFFIC



## ROADWAY CAPACITY ANALYSIS

Pyramid Highway and Highland Ranch Parkway in the vicinity of the site were identified for roadway capacity analysis. Roadway capacity is based on average daily level of service thresholds established by the Regional Transportation Commission. The 2040 Regional Transportation Plan indicates that LOS standards used for assessing the need for street and highway improvements at a planning level are LOS D for all regional roadway facilities projected to carry less than 27,000 ADT and LOS E for all regional roadway facilities projected to carry 27,000 or more ADT. The LOS standard is LOS D for Highland Ranch Parkway and LOS E for Pyramid Highway based on the 2035 base traffic volumes. The 2040 Regional Transportation Plan indicates that Pyramid Highway is classified as an arterial with high access control and Highland Ranch Parkway is classified as an arterial with moderate access control. Table 3 shows the average daily level of service thresholds for high and moderate access control arterials.

LEVEL OF SERV	TABLE ICE CRITERIA	3 FOR ROADWAY S	SEGMENTS	
	A	VERAGE DAILY	TRAFFIC VOLUN	Æ
FACILITY/LANES	LOS C	LOS D	LOS E	LOS F
Arterial with High Access Control 4 Lanes 6 Lanes 8 Lanes	≤36,100 ≤54,700 ≤73,200	36,101-38,400 54,701-57,600 73,201-76,800	38,401-40,600 57,601-60,900 76,801-81,300	>40,600 >60,900 >81,300
Arterial with Moderate Access Control 2 Lanes 4 Lanes 6 Lanes	≤14,800 ≤32,200 ≤49,600	14,801-17,500 32,201-35,200 49,601-52,900	17,501-18,600 35,201-36,900 52,901-55,400	>18,600 >36,900 >55,400

Pyramid Highway and Highland Ranch Parkway were subsequently reviewed for capacity based on the 2035 average daily traffic volumes presented on Figures 7-9 and the level of service thresholds presented above. Table 4 shows a summary of the roadway segment level of service results for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch traffic volumes.

TABI ROADWAY SEGMENT LEV		ICE RE	SULTS			
	2035 H	BASE	2035 H + PRO		2035 F + PRO + KII	JECT
ROADWAY SEGMENT	ADT	LOS	ADT	LOS	ADT	LOS
Pyramid Highway north of Highland Ranch 4-Lane High Access Control Arterial (Existing) 6-Lane High Access Control Arterial 8-Lane High Access Control Arterial (Needed)	70,570 70,570 70,570	F F C	72,220 72,220 72,220	F F C	74,810 74,810 74,810	F F D

TABLE 4 (CON ROADWAY SEGMENT LEVEL		ICE RE	SULTS			
	2035 E	BASE	2035 E + PRO		2035 F + PRO + KII	JECT
ROADWAY SEGMENT	ADT	LOS	ADT	LOS	ADT	LOS
Pyramid Highway south of Highland Ranch 4-Lane High Access Control Arterial (Existing) 6-Lane High Access Control Arterial 8-Lane High Access Control Arterial (Needed)	63,780 63,780 63,780	F F C	68,720 68,720 68,720	F F C	70,880 70,880 70,800	F F C
Highland Ranch between Pyramid and Frontage Road 2-Lane Moderate Access Control Arterial (Existing) 4-Lane Moderate Access Control Arterial (Needed)	9,090	С	18,410 18,410	E C	22,310 22,310	F C
Highland Ranch between Frontage Road & Project Access 2-Lane Moderate Access Control Arterial (Existing) 4-Lane Moderate Access Control Arterial (Needed)	9,090	С	18,410 18,410	E C	18,850 18,850	F C
Highland Ranch west of Project Access 2-Lane Moderate Access Control Arterial (Existing)	9,090	С	10,740	С	11,180	С

As shown in Table 4, the existing four-lane segment of Pyramid Highway north and south of Highland Ranch Parkway operates at LOS F for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch traffic volumes. This roadway segment will need to be widened to eight lanes in order to maintain policy LOS E or better operation based on the high access control arterial level of service thresholds. However, RTC's 2040 Regional Transportation Plan indicates that the US-395 Connector is planned to be constructed to Pyramid Highway in the 2027-2040 timeframe. The Pyramid Highway/US-395 Connection Project indicates that a six-lane "high speed" high access control arterial is the preferred alternative for the Pyramid Highway/US-395 Connector north and south of Sparks Boulevard. Capacity thresholds for a high speed high access control arterial are not available but it is anticipated that the proposed six-lane section for this new roadway will provide LOS E or better operation for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios.

The existing two-lane segment of Highland Ranch Parkway from Pyramid Highway to the Project Access operates at LOS C for the 2035 base traffic volumes, LOS E for the 2035 base plus project traffic volumes, and LOS F for the 2035 base plus project plus Kiley Ranch traffic volumes and the existing two-lane segment west of the Project Access operates at LOS C for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch traffic volumes. This segment of Highland Ranch Parkway will therefore need to be widened to four lanes in order to maintain policy LOS D or better operation for the 2035 base plus project and 2035 base plus project plus Kiley Ranch scenarios. No capacity improvements are planned for Highland Ranch Parkway in RTC's 2040 Regional Transportation Plan. It is recommended that Highland Ranch Parkway be widened to four lanes from Pyramid Highway to the Project Access in order to serve project traffic volumes.

# INTERSECTION CAPACITY ANALYSIS

The key intersections were analyzed for capacity based on procedures presented in the *Highway Capacity Manual (6th Edition)*, prepared by the Transportation Research Board, for unsignalized and signalized intersections using the latest version of the Highway Capacity Software.

The result of capacity analysis is a level of service (LOS) rating for each signalized intersection, roundabout, all-way stop controlled intersection, or minor movement at a two-way stop controlled intersection. Level of service is a qualitative measure of traffic operating conditions where a letter grade "A" through "F", corresponding to progressively worsening traffic operation, is assigned to the intersection or minor movement.

The *Highway Capacity Manual* defines level of service for two-way stop controlled intersections in terms of computed or measured control delay for each minor movement. Level of service is not defined for the two-way stop controlled intersection as a whole but is assigned to all-way stop controlled intersections and roundabouts. The level of service criteria for unsignalized intersections is shown in Table 5.

LEVEL OF SERVICE CRITE	TABLE 5 ERIA FOR UNSIGNALIZED INTERSECTIONS
LEVEL OF SERVICE	DELAY RANGE (SEC/VEH)
A	≤10
В	>10 and ≤15
С	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

Level of service for signalized intersections is stated in terms of the average control delay per vehicle for a peak 15 minute analysis period. The level of service criteria for signalized intersections is shown in Table 6.

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS							
LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)						
A	≤10						
В	>10 and ≤20						
С	>20 and ≤35						
D	>35 and ≤55						
Е	>55 and ≤80						
F	>80						

Table 7 shows a summary of the level of service and delay results for the existing, existing plus project, existing plus project plus Kiley Ranch, 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios. The capacity worksheets are included in the Appendix.

INI	ERSEC	CTION	LE <b>VE</b> I		BLE 7 ERVICE	AND	DELAY	RESU	JLTS				
	EXIS	TING	EXISTING + PROJECT		EXISTING + PROJECT + KILEY		2035 BASE			BASE + JECT	PROJ	BASE + DJECT + LILEY	
INTERSECTION	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Pyramid/Highland Ranch Signal w/Exist. Lanes Signal w/Added Lanes Interchange w/Signal NB Ramps SB Ramps	D40 N/A N/A N/A	D54 N/A N/A N/A	F136 D43 N/A N/A	F137 D49 N/A N/A	F165 D46 N/A N/A	F189 D50 N/A N/A	F193 C34 B16 C23	F327 D52 C21 B19	F321 D38 B17 C23	F359 E58 C22.0 B19	F349 D42 B17 C23	F376 E66 C24 B20	
Highland Ranch/Access Signal	N/A	N/A	C23	B19	C24	B20	N/A	N/A	B18	B19	B18	B19	
Highland Ranch/Frontage Stop at North Leg EB Left SB Left SB Right	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	B11 F353 B12	B13 F999 B14	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	A9 F61 B10	B12 F392 B13	

# Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard Intersection

The Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard intersection was initially analyzed as a signalized four-leg intersection with the existing approach lanes for all scenarios. The intersection currently operates at LOS D with a delay of 40 seconds per vehicle during the AM peak hour and 54 seconds per vehicle during the PM peak hour. For the existing plus project traffic volumes the intersection operates at LOS F with a delay of 136 seconds per vehicle during the AM peak hour and 137 seconds per vehicle during the PM peak hour. For the existing plus project plus Kiley Ranch traffic volumes the intersection operates at LOS F with a delay of 165 seconds per vehicle during the AM peak hour and 189 seconds per vehicle during the PM peak hour. The intersection will continue to operate at LOS F with high delays for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch traffic volumes.

The signalized Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard intersection was subsequently re-analyzed for capacity with additional approach lanes. For the existing plus project and existing plus project plus Kiley Ranch traffic volumes the intersection operates at LOS D during the AM and PM peak hours with dual left turn lanes, two through lanes, and one free right turn lane at the east and west approaches and dual left turn lanes at the south approach. For the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch traffic volumes the intersection operates at LOS E or better during the AM and PM peak hours with dual left turn lanes, four through lanes, and one right turn lane at the north and south approaches and dual left turn lanes, two through lanes, and one free right turn lane at the east and west approaches.

Four through lanes at the north and south Pyramid Highway approaches is consistent with the roadway capacity results that require an eight-lane high access control arterial for all 2035 scenarios. However, as previously discussed, the Pyramid Highway/US-395 Connection Project indicates that a six-lane "high speed" high access control arterial is the preferred alternative for the Pyramid Highway/US-395 Connector north and south of Sparks Boulevard. The Pyramid Highway/US-395 Connection Project and RTC's 2040 Regional Transportation Plan also indicate that a gradeseparated interchange is planned for construction at the Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard intersection in the 2027-2040 timeframe. The Pyramid Highway/ Highland Ranch Parkway/Sparks Boulevard intersection therefore re-analyzed for capacity as two separate signalized ramp intersections. The northbound and southbound ramp intersections operate at LOS C or better during the AM and PM peak hours for the 2035 base, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios. The northbound ramp intersection was analyzed with dual left turn lanes and two through lanes at the west approach, two through lanes and one right turn lane the east approach, and dual left turn lanes and one right turn lane at the south approach. The southbound ramp intersection was analyzed with dual left turn lanes and two through lanes at the east approach, two through lanes and one right turn lane the west approach, and dual left turn lanes and one right turn lane at the north approach.

Storage and deceleration requirements were reviewed for the needed dual left turn lanes at the west and south approaches based on the existing plus project plus Kiley Ranch traffic volumes. 325 feet of storage length is required for each left turn lane at the west approach and 375 feet is required for each left turn lane at the south approach based on the Poisson method for signalized intersections with a 95th percentile confidence level and 130 second cycle length. For desirable conditions 220 feet of deceleration length is needed for the left turn pocket at the west approach based on the 45 mile per hour speed limit on Highland Ranch Parkway and 365 feet of deceleration length is needed for the left turn pocket at the south approach based on the 55 mile per hour speed limit on Pyramid Highway.

It is recommended that the Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard intersection be improved to include dual left turn lanes, two through lanes, and one right turn lane at the east and west approaches and dual left turn lanes at the south approach in order to serve project buildout traffic volumes. The dual left turn pocket at the west approach should contain 545 feet of storage/deceleration length and the dual left turn pocket at the south approach should contain 740 feet of storage/deceleration length.

# Highland Ranch Parkway/Project Access Intersection

The Highland Ranch Parkway/Project Access intersection was analyzed as a signalized three-leg intersection for the existing plus project, existing plus project plus Kiley Ranch, 2035 base plus project, and 2035 base plus project plus Kiley Ranch scenarios. The intersection meets traffic signal warrant 3 per the latest edition of the *Manual on Uniform Traffic Control Devices* (MUTCD). For the existing plus project traffic volumes the intersection operates at LOS C during the AM peak hour and LOS B during the AM Peak hour. For the existing plus project plus Kiley Ranch traffic volumes the intersection continues to operate at LOS C during the AM peak hour and LOS B during the AM peak hour with slight increases in delay.

For the 2035 base plus project traffic volumes the intersection operates at LOS B during the AM and PM peak hours. For the 2035 base plus project plus Kiley Ranch traffic volumes the intersection continues to operate at LOS B during the AM and PM peak hours. The intersection was analyzed with one left turn lane and one through lane at the west approach, one through lane and one right turn lane at the east approach, and dual left turn lanes and one right turn lane at the north approach for all scenarios.

Traffic signal spacing requirements were reviewed for the Highland Ranch Parkway/Project Access intersection. RTC's access management standards indicate that traffic signals on arterials with moderate access control (Highland Ranch Parkway) shall be spaced a minimum of 1,590 feet apart. The centerline spacing on Highland Ranch Parkway between Pyramid Highway and the Project Access is  $\pm 1,500$  which very nearly meets the signal spacing standard.

Storage and deceleration requirements were reviewed for the needed left turn lanes at the west and north approaches. Approximately 150 feet of storage length is required for the left turn lane at the west approach and 250 feet is required for each left turn lane at the north approach based on the Poisson method for signalized intersections with a 95th percentile confidence level and 90 second cycle length. For desirable conditions 220 feet of deceleration length is needed for the left turn pocket at the west approach based on the 45 mile per hour speed limit on Highland Ranch Parkway and 115 feet of deceleration length is needed for the left turn pocket at the north approach based on an assumed speed limit of 35 miles per hour.

It is recommended that the Highland Ranch Parkway/Project Access intersection be improved as three-leg traffic signal controlled intersection with one left turn lane and one through lane at the west approach, one through lane and one right turn lane at the east approach, and dual left turn lanes and one right turn lane at the north approach. The left turn pocket at the west approach should contain 370 feet of storage/deceleration length and the dual left turn pocket at the north approach should contain 365 feet of storage/deceleration length.

#### Highland Ranch Parkway/Frontage Road Intersection

The Highland Ranch Parkway/Frontage Road intersection was analyzed as an unsignalized three-leg intersection with stop sign control at the north approach for the existing plus project plus Kiley Ranch and 2035 base plus project plus Kiley Ranch scenarios. For the existing plus project plus Kiley Ranch traffic volumes the southbound left turn movement operates at LOS F during the AM and PM peak hours. For the 2035 base plus project plus Kiley Ranch traffic volumes the southbound left turn movement continues to operate at LOS F during the AM and PM peak hours. The intersection was analyzed with one left turn lane and two through lane at the west approach, two through lanes and one right turn lane at the east approach, and one left turn lane and one right turn lane at the north approach for all scenarios. Traffic signal warrant and signal spacing requirements were subsequently reviewed at the intersection. Peak hour traffic signal warrant 3 per the latest edition of the *Manual on Uniform Traffic Control Devices* (MUTCD) is met at the intersection for the existing plus project plus Kiley Ranch traffic volumes. However, the intersection does not meet RTC's 1,590 feet signal spacing requirement. The left turn movements at the intersection may ultimately need to be restricted.

#### RECOMMENDATIONS

Traffic generated by The Quarry will have some impact the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping or traffic control improvements comply with City of Sparks and Nevada Department of Transportation requirements.

It is recommended that Highland Ranch Parkway be widened to four lanes from Pyramid Highway to the Project Access.

It is recommended that the Pyramid Highway/Highland Ranch Parkway/Sparks Boulevard intersection be improved to include dual left turn lanes, two through lanes, and one right turn lane at the east and west approaches and dual left turn lanes at the south approach. The dual left turn pocket at the west approach should contain 545 feet of storage/deceleration length and the dual left turn pocket at the south approach should contain 740 feet of storage/deceleration length.

It is recommended that the Highland Ranch Parkway/Project Access intersection be improved as three-leg traffic signal controlled intersection with one left turn lane and one through lane at the west approach, one through lane and one right turn lane at the east approach, and dual left turn lanes and one right turn lane at the north approach. The left turn pocket at the west approach should contain 370 feet of storage/deceleration length and the dual left turn pocket at the north approach should contain 365 feet of storage/deceleration length.

# **APPENDIX**

Project: New Project
Alternative: Alternative 1

Open Date: 9/13/2017 Analysis Date: 9/13/2017

	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffi		
ITE Land Use	_Enter	_Exit_	Total	Enter	_Exit_	Total	Enter	_Exit_	Total
210 SFHOUSE 1 1223 Dwelling Units	5257	5256	10513	217	649	866	630	370	1000
Unadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0
Volume Added to Adjacent Streets	0	0	0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Project: New Project
Alternative: Alternative 1

Open Date: 9/14/2017 Analysis Date: 9/14/2017

	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffi		
ITE Land Use	Enter	<u>Exit</u>	_Total_	Enter	<u>Exit</u>	<u>Total</u>	<u>Enter</u>	Exit	<u>Total</u>
151 MWAREHOUSE 1 13 Acres	231	230	461	15	19	34	23	23	46
Unadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0
Volume Added to Adjacent Streets	0	0	0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Project: New Project Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffi		
ITE Land Use	Enter	_Exit_	_Total_	Enter	_Exit_	Total	Enter	Exit	Total
853 CONVMARKETGAS 1 8 Gross Floor Area 1000 SF	3383	3382	6765	164	163	327	204	203	407
Unadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	103	103	206	135	134	269
Volume Added to Adjacent Streets	0	0	0	-103	-103	-206	-135	-134	-269

Total AM Peak Hour Internal Capture = 0 Percent

Project: New Project Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffic		
ITE_ Land Use	<u>Enter</u> 2605	Exit Total		Enter Exit Total		Enter Exit		<u>Total</u>	
934 FASTFOODDT 1		2604	5209	243	234	477	178	165	343
10.5 Gross Floor Area 1000 SF									
Unadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0 115	0 234	0 89	0 82	0 171
Pass-By Trips	0	0	0	119					
Volume Added to Adjacent Streets	0	0	0	-119	-115	-234	-89	-82	-171

Total AM Peak Hour Internal Capture = 0 Percent

Project: New Project Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traff		
ITE Land Use	Enter_	Exit	_Total_	Enter	_Exit_	<u>Total</u>	<u>Enter</u>	<u>Exit</u>	Total
932 RESTAURANTHT 1 10 Gross Floor Area 1000 SF	636	636	1272	59	49	108	-59	40	99
Unadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0
Volume Added to Adjacent Streets	0	0	0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Project: New Project Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffic		
ITE Land Use	Enter	Enter Exit To		Enter	_Exit_	_Total_	<u>Enter</u>	_Exit_	_Tota
820 CENTERSHOPPING 1 30 Gross Leasable Area 1000 SF	641	640	1281	18	11	29	53	58	111
Jnadjusted Volume	0	0	0	0	0	0	0	0	0
nternal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Project: New Project
Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

		Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffic		
ITE	Land Use	Enter	_Exit	_Total_	Enter	_Exit_	_Total_	<u>Enter</u>	Exit	Total
843	SALESAUTOPARTS 1  8 Gross Floor Area 1000 SF	248	247	495	9	9	18	24	24	48
Unad	justed Volume	0	0	0	0	0	0	0	0	0
	al Capture Trips	0	0	0	0	0	0	0	0	0
	·By Trips	0	0	0	0	0	0	0	0	0
	ne Added to Adjacent Streets	0	0	0	0	0	0	0	0	0
volun	tie Added to Adjacent Streets	U	J	•		•	_		_	

Total AM Peak Hour Internal Capture = 0 Percent

# **Trip Generation Summary - Alternative 1**

Project: New Project
Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

	Avera	ige Daily	Trips		Peak Ho nt Street			Peak Ho nt Street	
ITE Land Use	Enter	_Exit_	<u>Total</u>	Enter	_Exit_	_Total	Enter	_Exit_	_Total
848 STORETIRE 1 8 Gross Floor Area 1000 SF	100	99	199	14	9	23	14	19	33
Unadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0
Volume Added to Adjacent Streets	0	0	0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Total PM Peak Hour Internal Capture = 0 Percent

# **Trip Generation Summary - Alternative 1**

Project: New Project
Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

	Avera	ge Daily	Trips		Peak Ho ent Stree			Peak Ho nt Streel	
ITE_Land Use	Enter	_Exit	<u>Total</u>	_Enter_	_Exit	Total	Enter	Exit	_Total
947 CARWASH 1 4 Wash Stalls	216	216	432				11	11	22
Unadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0
Volume Added to Adjacent Streets	0	0	0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Total PM Peak Hour Internal Capture = 0 Percent

# **Trip Generation Summary - Alternative 1**

Project: New Project
Alternative: Alternative 1

Open Date: 9/19/2017 Analysis Date: 9/19/2017

	Avera	ge Daily	Trips		Peak Ho			Peak Ho nt Street	
ITE Land Use	Enter	_Exit_	Total	Enter	_Exit_	Total	Enter	Exit	Total
151 MWAREHOUSE 1 8 Acres	142	141	283	9	12	21	15	14	29
Jnadjusted Volume	0	0	0	0	0	0	0	0	0
Internal Capture Trips	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0
Volume Added to Adjacent Streets	0	0	0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Total PM Peak Hour Internal Capture = 0 Percent

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Phase Duration	1. S			26.0		40.0	11.0		25.0	27.0	)	62.0	17.0		52.0
	e Period, ( Y+R c), s			0.0		5.0	5.0		5.0	0.0		5.0	5.0		5.0
				3.1		3.0	3.0	13/12	3.0	2.9		0.0	2.9		0.0
	llow Headway ( MAH ), s e Clearance Time ( g s ), s			27.7		26.8	3.3		21.2	16.7			12.1		
Green Extension				0.0		0.9	0.0		0.0	0.3		0.0	0.0		0.0
Phase Call Pro				1.00		1.00	1.00		1.00	1.00	)		1.00	2	
Max Out Proba				1.00	-	0.07	1.00	_	1.00	0.00			1.00		
	STATE OF	AS PASSED IN	May 18	Sales III	E TAN			NI STATE	1	State of the	1 47	Mit All	WEST	13:14	51
Movement Gr	oup Res	sults			EB			WB			NB			SB	1
Approach Mov	ement			L	T	R	L	T	R	L	T	R	L	Т	R
Assigned Move	ement			7	4	14	3	8		5.	2	12	1	6	16
Adjusted Flow	Rate (v	/), veh/h		353	367		35	278		223	1440	22	274	725	139
Adjusted Satur	ation FI	ow Rate (s), veh/h/	/In	1781	1772		1730	1870		1781	1781	1557	1730	1781	1535
Queue Service	Time (	gs), s		25.7	24.8		1.3	19.2		14.7	49.6	1.0	10.1	21.2	8.3
Cycle Queue C	Clearanc	ce Time (gc), s		25.7	24.8		1.3	19.2		14.7	49.6	1.0	10.1	21.2	8.3
Green Ratio (	g/C)			0.20	0.27		0.05	0.15		0.21	0.44	0.44	0.09	0.36	0.36
Capacity (c),	veh/h			356	477		160	288		370	1561	683	319	1287	555
Volume-to-Cap	acity R	atio (X)		0.992	0.770		0.218	0.967		0.602	0.922	0.032	0.858	0.563	-
Back of Queue	(Q), f	t/ln ( 95 th percentile	∍)	567.9	439.5		25.1	458.9	)	269.9	752	17.2	224.7	352.9	140.9
Back of Queue	(Q), v	reh/ln ( 95 th percen	tile)	22.4	17.3		1.0	18.1	-	10.6	29.6	0.7	8.8	13.9	5.5
		(RQ) (95 th percer		0.00	0.00		0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay				51.9	43.8		59.7	54.7		46.6	34.4	20.8	58.2	33.3	29.1
Incremental D	-	And the second s		45.3	6.8		0.3	43.7		2.0	10.5	0.1	19.3	1.8	1.1
Initial Queue D	elay ( a	/ 3 ), s/veh		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay				97.1	50.6		60.0	98,4		48.6	44.9	20.9	77.5	35.1	30.2
Level of Service	-			F	D		E	F		D	D	C	E	D	C
Approach Dela		THE RESERVE AND ADDRESS OF THE PARTY OF THE		73.	4	E	94.	1	F	45.	1	D	44.	7	D
Intersection D	elay, s/v		all Dog at	1	EIRINA	5	4.2	urstantin		1	200	O TANK	D	VC I COLUE	S (14/2)
	CHO TO	5 6 3 3	3130	100	FIRE	7 7 5	March Control			Section in	NID	10-6	Territoria .	SB	
Maria and D					ED			1/1/12			TALL				
Multimodal R	esults	11.00		3.0	EB	С	3.1	WB	С	3.4	NB	C	2.3		В

THE PERSON NAMED OF THE PE	DATIGETO	HUS	1015.	ialize	a inte	ersect	ion K	esui	เร วน	mm	NEW POW	E FOTON	Service.	ST 2 173	STERRING
	No.		P (1)-12	DOS.	-	1996	lune to	A CONTRACTOR	ntarea	ction Info	rmatio	n	The second	el aleste lite	T.
General Inform	ation	la la sul Faultaneau					×		Duration		0.25	-		1111	
Agency		Solaegui Engineers		Assalvas	a Chala	In- 11	2 2047		_		Other		1	45 July 194	<b>56</b>
Analyst		MSH	-	and the second		Sep 13			Area Ty	pe	0.92		7		
Jurisdiction		City of Sparks		Time P	-	-	ak Hou	-	PHF	Destant	-	0		7	
Urban Street				Analys		-	g + Proj		Analysi	Period	1> 7:0	iu .	1		
Intersection		Pyramid & Sparks		File Na	me	PySp1	7aw.xus	S						1111	
Project Descript	tion	WANTED STATES OF THE	100000	DISTRICT.	E.M.	No.	untoito	A STATE OF	100 S	North College	SAMES.	WARNING.	NAME OF	A CHILL	NAME OF TAXABLE
Demand Inform	nation	MARK STOLES	Market .	Contract of the last of the la	EB	412.5	ENSOURCE	WE		Syman	NB	Name of Street		SB	<b>BORDON</b>
Approach Move	The Control of the Co			L	Ť	R	L	T	R	L	T	R	L	T	R
Demand (v), v				321	360	395	23	207	7	212	514	18	470	1284	461
Demand (*), *	3	医脂肪 医乳肉	317 331	NH FINAL	FIN IB	NE STEEL	38 D at	THE STATE OF		No. of the last	Array 1	1	1885		ADIV 5
Signal Informa	tion				1	T. J.	11	1			_ 1				
Cycle, s	120.0	Reference Phase	2	1	R	100	100	N P	VE	3		M .	P	-	V .
Offset, s	0	Reference Point	End	Green	14.0	3.0	50.0	5.0	11.		)			-	
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	4.0	0.0		- 19	1		1	+
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	1.0	0.0			1		. 1	, h
TOTAL STATE	CO HIN	ETTO CONTRACTOR OF		10.33	THE R	100	W 20.50	1000		1	1340		100	500	12 10
Timer Results	01			EBL		EBT	WBI		WBT	NB		NBT	SBL		SBT
Assigned Phas	e			7		4	3		8	5		2	1		6
Case Number				2.0		4.0	2.0		4.0	2.0		3.0	2.0		3.0
Phase Duration	1. S			21.0		33.0	10.0		22.0	19.0	)	55.0	22.0	Maria II	58.0
		e) s		0.0		5.0	5.0		5.0	5.0		5.0	0.0		5.0
The second secon	Period, (Y+R s), s v Headway (MAH), s			3.1	_	3.2	3.0		3.2	2.9		0.0	2.9		0.0
Queue Clearan			-	23.0		30.0	2.8		16.1	16.0	)		19.0		
Green Extension		- Water Petro		0.0		0.0	0.0	-	0.3	0.0	-	0.0	0.4		0,0
Phase Call Pro			-	1.00	-	1.00	1.00		1.00	1.00			1.00		-
Max Out Proba	and the same of the same			1.00		1.00	1.00		1.00	1.0	-		0.94		
Wax Out 1 100a	A SHARE	E E Translation and	SUPPLIES	WANTED STREET	WHEN S	CHIEF ST	NEW COLUMN	1000			TO SERVICE	B 100	115/110	E STATE	0
Movement Gro	oup Re	sults			EB	-		WB			NB			SB	
Approach Move				L	Т	R	E L	T	R	L	T	R	L	Т	R
Assigned Move				7	4	14	3	8		5	2	12	1	6	16
Adjusted Flow		/), veh/h		349	793		25	225		230	559	20	511	1396	392
		low Rate (s), veh/h/	ln .	1781	1692		1730	1870		1781	1781	1556	1730	1781	1538
Queue Service				21.0	28.0		0.8	14.1		14.0	13.0	0.9	17.0	43.2	22.9
	-	ce Time (gc), s		21.0	28.0		0.8	14.1		14.0	13.0	0.9	17.0	43.2	22.9
Green Ratio (g			-	0.18	0.23		0.04	0.14		0.12	0.42	0.42	0.18	0.44	0.44
Capacity (c)				312	395		144	265		208	1484	648	634	1573	679
Volume-to-Cap		atio (X)		1.119	2.010		0.173	0.849	9	1.109	0.377	0.030	0.806	0.887	0.578
and the second s		t/In ( 95 th percentile	:)	630.4	2486. 8		16,5	319.4	4	450.5	229.3	14.7	306.6	647.7	333
Back of Queue	(Q), v	eh/ln ( 95 th percent	tile)	24.8	97.9		0.7	12.6		17.7	9.0	0.6	12.1	25.5	13.1
Company of the Party of the Par		(RQ) (95 th percer		0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d1),	s/veh		49.5	46.0		55.5	50.2		53.0	24.2	20.7	47.0	30.8	25.1
Incremental De				87.1	463.2		0.2	21.1		94.6	0.7	0.1	7.0	7.8	3.6
Initial Queue D	elay ( c	d з ), s/veh		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay				136.6	509.2		55.7	71.3	3	147.6	A STATE OF THE PARTY OF THE PAR	20.8	53.9	38.6	28.7
Level of Service	-			F	F		E	E		F	C	C	D	D	C
Approach Dela				395.	4	F	69.	8	E	59.	8	Е	40.3	3	D
Intersection De	471					13	35.6						F		
Su Carlon	distribution (Co.	Astronomic State Commence	312 18	15 M	1434	5 500	Eis.	11/10	W. F. L.		teals (		(3)	A STATE OF	3/2
Multimodal Re					EB			WE			NB		1	SB	
Pedestrian LO	S Score	e/LOS		3.0		С	3.2	2	С	2.9		C	2.3		В
Bicycle LOS S	core / L	.OS		2.4		В	0.8		Α	1.5	2	Α	2.4		В

	3782	Control of the Contro		and the same	Bear M.	1100	Charp	MORPH.	PER	SE SE	1	PER	Property of	514000	STATE OF THE PARTY	STATE OF THE PARTY OF
General Inform	ation							- 10	nters	ection In		-	1			
Agency		Solaegui Engineers						I	uratio	n, h	0.2			-		Mer.
Analyst		MSH		Analysi	s Date	Sep 13	, 2017	-	rea T	уре	The state of the state of	ner				100
Jurisdiction		City of Sparks		Time P	eriod	PM Pe	ak Hour	F	HF		0.9			-		· ;=
Urban Street				Analysi	s Year	Existin	g + Proj	ect /	nalys	is Period	1 1>	7:00	0	- <b>E</b>		
Intersection		Pyramid & Sparks		File Na	me	PySp1	7pw.xus								1111	
Project Descript	ion	and the second	ON A THE O	CONTRACT NO.		MADWES	in a line	NEW PROPERTY.	200 EV	TO THE	50000	TANK!	STREET/AT	A CONTRACTOR	41477	1
Demand Inform	nation	SAME TO SERVICE UNITED	Name of the last	STAIRCH.	EB		PETALUNI	WB	1000		1	NB			SB	- Constant
Approach Move				L	T	R	L	T	I	L		T	R	L	T	R
Demand (v), ve				384	345	293	32	419		49	9 13	325	20	252	667	266
	The state of	The second second	No.	200	2000	184,41	1 400	4/3	00	The fell		1	11757	100	1000	10/200
Signal Informa	tion				1		71	- 4			-	l	-	4-	_	
Cycle, s	130.0	Reference Phase	2		23	717	17	1	F	H		,		K	-	V
Offset, s	0	Reference Point	End	Green	12.0	10.0	47.0	6.0	1	5.0 20	0.0		1			
Uncoordinated	No	Simult, Gap E/W	On	Yellow	4.0	0.0	4.0	4.0		0 4.		K	1		1	-
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	11.0	11.0	0	0   1.	0 <u>i</u>		1	6	7	- Y
10/18/2015 X	10 St. 12	The state of the	New York	505080	01316			15/3				63		4	3000	
Timer Results				EBL		EBT	WBL		WBT	N	BL	1	VBT	SBL		SBT
Assigned Phase	e			7		4	3		8		5		2	1		6
Case Number				2.0		4.0	2.0		4.0	2	.0		3.0	2.0		3.0
Phase Duration	. s			26.0		40.0	11.0		25.0	27	7.0	6	32.0	17.0		52.0
Change Period	-	c), s		0,0		5.0	5.0		5.0	0	.0		5.0	5.0		5.0
Max Allow Head	And in case of the last			3.1		3.1	3.0		3.1	2	9		0.0	2.9		0,0
Queue Clearan				28.0		37.0	3.3		22.0	2	9.0			12.1		
Green Extensio				0.0		0.0	0.0		0.0	0	.0	114	0.0	0.0		0.0
Phase Call Pro				1.00		1.00	1.00		1.00	1	00			1.00	)	
Max Out Proba	AND DESCRIPTION OF THE PARTY.			1.00		1.00	1.00	)	1.00	1	00			1.00	)	
STAN CAN			14 15 15 15	THE REAL PROPERTY.	<b>WHAVE</b>	100	STATE OF	1/10-14	100	15	4				Water B	
Movement Gro	oup Res	sults			EB			WB				1B			SB	-
Approach Move	ement			L	T	R	L	T	F		_	Г	R	L	T	R
Assigned Move	ment			7	4	14	3	8		5	_	2	12	1	6	16
Adjusted Flow	Rate (v	), veh/h		417	.666	L	35	455		542	14	40	22	274	725	246
Adjusted Satura	ation Fl	ow Rate (s), veh/h/	In	1781	1716		1730	1870		178	_	81	1557	1730	1781	153
Queue Service	Time (	g s), S		26.0	35.0		1.3	20.0	_	27.	-	9.6	1.0	10.1	21.2	15.8
Cycle Queue C	learand	ce Time (gc), s		26.0	35.0		1.3	20.0		27.	-	9.6	1.0	10.1	21.2	15.8
Green Ratio (g	7/C)			0.20	0.27		0.05	0.15		0.2		44	0.44	0.09	0.36	0.36
Capacity (c),	veh/h			356	462		160	288		37	-	61	683	319	1287	555
Volume-to-Cap		atio (X)		1.172	1.442		0.218	1.583	-	1.46	-	922	0.032	0.858	0.563	-
		t/in ( 95 th percentile	)	808.1	1603. 7		25.1	1231		133		52	17.2	224.7	352.9	253,
Back of Queue	(Q), v	reh/ln (95 th percen	tile)	31.8	63.1		1.0	48.5		52.		9.6	0.7	8.8	13.9	10.0
		(RQ) (95 th percer		0.00	0.00		0.00	0.00		0.0	COLUMN TWO IN	.00	0.00	0.00	0.00	0.0
Uniform Delay		THE RESERVE OF THE PARTY OF THE		52.0	47.5		59.7	55.0		51.	5 34	4.4	20.8	58.2	33.3	31.
Incremental De				103.1	211.0		0.3	278.	3	224	.1 10	0.5	0.1	19.3	1.8	2.6
Initial Queue D	-	***		0.0	0.0		0.0	0.0	1	0.0	0 0	0.0	0.0	0.0	0.0	0.0
Control Delay				155.1	258.5		60.0	333.	3	275	.6 4	4.9	20.9	77.5	35.1	34.
Level of Service				F	F		E	F		F		D	C	E	D	C
Approach Dela				218.	7	F	313	.9	F	1	07.1	1	F	44.	2	D
Intersection De	elay, s/v	eh/LOS	THE PERSON NAMED IN	al Suprem	-	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	37.0	getenzo	NAME OF TAXABLE PARTY.	PIED VIII.	SIMIN	1010	те до по	F	District of	90.67
Multimodal Re			17:00	T	EB	Self-	VII. 3 -4	WE	F. Control	1	E	VB	120	( market	SB	No. of the last
Pedestrian LO	the same of the same of	e/IOS		3.0	-	С	3.1	-	С		3.4	T	С	2.3	3	В
Annual Control of the	core / L	NAME AND ADDRESS OF THE OWNER, WHEN PERSONS ADDRESS OF THE OWNER, WHEN PERSONS ADDRESS OF THE OWNER, WHEN THE	_	2.3		В	0.6	_	A		2.1	1	В	1.5	-	В

HCS7<sup>™</sup> Streets Version 7,3

1 1 1 1 1	71.29	MIN CONTRACTOR	3			5000			100		508	المسال	Mag Ag		100
General Inform	nation	Harris and the same of the sam						In	tersecti	on Info	rmation	1	7	John Lie	
Agency		Solaegui Engineers						D	uration,	h	0.25			* * * *	AST.
Analyst		MSH		Analysi	s Date	Sep 13	, 2017	Ar	еа Туре	9	Other				
Jurisdiction		City of Sparks	-	Time P	- Branching		ak Hour	P	4F		0.92		* <del>*</del> *	Ţ.	$\Xi$
Jrban Street	-	Oity or oparito				0.400	roject +		nalysis f	eriod	1> 7:00	)	7	1 (1/(3))	
Ulball Sueet						Kiley				1			7	ጎተተረ	
Intersection		Pyramid & Sparks		File Na	me	PySp1	7awo.xu	IS				-	- 10	11441	1
Project Descrip	otion	STREET, TO THE	DOM/ST			10100	GEVAS	SOE ST	TWO CON	(3/4/8)	-10000	175.50	THE PARTY	Markins	4000
Demand Infor	mation	and the same of th	20/100		EB			WB		-	NB			SB	
Approach Mov				L	T	R	L	Т	R	L	T	R	L	T	R
and the second second second second	The second second			397	370	412	23	236		289	511	18	500	1334	461
Demand ( v ), v	ven/n	Constant Street	CRAIN.	E C AL	HINA	EBG55				SEAR S	Will	(Dayre)	1700	THE REAL PROPERTY.	200
Signal Inform	ation				1	W.	171			1	1		4	_	
Cycle, s	120.0	Reference Phase	2		19		17		R	3	,		1	-	V
Offset, s	0	Reference Point	End	Green	14.0	3.0	50.0	5.0	11.0	17.0		1			
Uncoordinated	No	Simult, Gap E/W	On		4.0	0.0	4.0	4.0	0.0	4.0	-	1	_	1	
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	1.0	0.0	1.0	1		6	7	900
	0.964		11. 11.	T. F. F.	(A) 152	FDT	TV (D)		MOT	NDI	Name of Street	NBT	SBL		SBT
Timer Results				EBL		EBT	WBL 3	-	WBT 8	NBL 5	-	2	1	-	6
Assigned Phas	se		-	7		4	2.0	-	4.0	2.0	-	3.0	2.0		3.0
Case Number			_	2.0	-	4.0	10.0		22.0	19.0		55.0	22.0	_	58.0
Phase Duratio				21.0		33.0	5.0		5.0	5.0		5.0	0,0		5.0
	e Períod, ( Y+R c), s low Headway ( MAH ), s			0.0		5.0	3.0	-	3.2	2.9		0.0	2.9	_	0.0
	llow Headway ( MAH ), s			3.1	-	3.2	2.8	-	18.4	16.0	_	0.0	20.3		410
Queue Cleara			_	23.0	_	30.0	0.0	-	0.0	0.0		0.0	0.3	_	0.0
Green Extensi				0.0		1.00	1.00		1.00	1.00		0.0	1.00	_	0,0
Phase Call Pro	-		-	1.00	-	1.00	1.00	_	1.00	1.00	_		1.00	_	
Max Out Prob	ability	Ma 10 10 10 10 10 10	EVO265	1.00	Name of	1.00	1,00	15320	1.00	100	11000		2/03/	100	30 V
Movement G	roup Re	sults	-		EB	- 17		WB			NB			SB	
Approach Mov	vement			L	T	R	L	T	R	L	T	R	L	T	R
Assigned Mov				7	4	14	3	8		5	2	12	1	6	16
Adjusted Flow	Rate (	/), veh/h		432	823		25	257	1 3	314	555	20	543	1450	392
Control of the Contro		low Rate (s), veh/h/	ln .	1781	1691		1730	1870		1781	1781	1556	1730	1781	153
Queue Servic	e Time (	g s), S		21.0	28.0		8.0	16.4		14.0	12.9	0.9	18.3	46.0	22.9
A Company of the Comp		ce Time (g c), s		21.0	28.0		8.0	16.4		14.0	12.9	0.9	18.3	46.0	22.
Green Ratio (	g/C)			0.18	0.23		0.04	0.14		0.12	0.42	0.42	0.18	0.44	0.4
Capacity (c),	veh/h			312	395		144	265		208	1484	648	634	1573	679
Volume-to-Ca				1.384	2.086	_	0.173	0.968	-	1.512	0.374	-	0.857	0.922	0.57
Back of Queu	e (Q), f	t/ln ( 95 th percentile	)	1000.	2636.		16.5	412.5		824.2	227.7	14.7	334.9	697.9	333
Busit 01 2011	0/01:	oh/ln / 05 th percen	tile\	39.4	103.8		0.7	16,2		32.4	9.0	0.6	13.2	27.5	13.
				0.00	0.00		0.00	0.00	1	0.00	0.00	0.00	0.00	0.00	0.0
Back of Queu	Ollszi pr		mej	49.5	46.0		55.5	51.2		53.0	24.2	20.7	47.5	31.6	25.
Back of Queu Queue Storag	ue Storage Ratio ( RQ ) ( 95 th percentile) orm Delay ( d 1), s/veh			191.7	497.2		0.2	46.1	1	253.5	0.7	0.1	10.7	10.4	3.6
Back of Queu Queue Storag Uniform Delay	y (d1),	mental Delay ( d 2 ), s/veh		0.0	0.0	1	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0
Back of Queu Queue Storag Uniform Delay Incremental D	y ( d 1 ), Delay ( d	and the second s	77		-		55.7	97.3		306.5	24.9	20.8	58.2	42.0	28.
Back of Queu Queue Storag Uniform Delay Incremental D Initial Queue	y ( d + ), Delay ( d Delay ( d	d 3 ), s/veh	-	al accessors	543.2				1			-	-	1	C
Back of Queu Queue Storag Uniform Delay Incremental Delay Initial Queue Control Delay	y ( d 1 ), Delay ( d Delay ( d r ( d ), s/	d 3), s/veh veh		241.2	543.2 F	-	E	F		F	C	C	E	D	
Back of Queu Queue Storag Uniform Delay Incremental D Initial Queue Control Delay Level of Servi	y ( d 1 ), 1 Delay ( d Delay ( d r ( d ), s/v ice (LOS	d 3 ), s/veh veh s)		241.2 F	F	F	- Branchiston	-	F	F 124.	1	F	43.5		D
Back of Queu Queue Storag Uniform Delay Incremental Delay Initial Queue Control Delay Level of Servi Approach Del	y ( d 1 ), 1 Delay ( d Delay ( d 1 ( d ), s/v ice (LOS lay, s/vel	d 3), s/veh veh s) h / LOS		241.2	F	F	E	-	F	-	1	-	-		-
Back of Queu Queue Storag Uniform Delay Incremental E Initial Queue Control Delay Level of Servi Approach Del Intersection E	y (d1), olelay (d Delay (d Delay (d), s/v ice (LOS lay, s/vel	d 3), s/veh veh s) h / LOS	Re	241.2 F 439	F	F	93.	6	ON OVE	-	3	-	43.	5	-
Back of Queu Queue Storag Uniform Delay Incremental Delay Initial Queue Control Delay Level of Servi Approach Del Intersection Delay	y (d1), solelay (d Delay (d), solelay (d), solelay, solel	d 3), s/veh veh s) h / LOS veh / LOS	. Re	241.2 F 439	F	F	93.	6   WB	ON OVE	-	3   NB	-	43.	SB	-

CHARLES ON CONTRACT	S SEE DE	THE RESERVE TO STATE OF THE PARTY OF THE PAR	ANNERS	ıalized	10 (12)	AT EAST	STATE OF	WELLEN	THE REAL PROPERTY.	VALUE OF STREET	MARK.	1570	15050	Mary Wall	
General Inform	ation			PANISHES N	usconia.	CALL STREET	141	In	tersect	ion Info	rmatio	1	1	ط ۱ ماه دار ام	
-	-	Solaegul Engineers					-		uration,	-	0.25			11111	
Agency		MSH	-	Analysi	e Date	Sep 13	2017	Cate Street, Street,	rea Type		Other		A 100		
Analyst	_	City of Sparks	-	Time P	The second second		ak Hour		HF		0.92	(10)	2	nja -	-
Jurisdiction		City of Sparks	-	-			roject +		nalysis	Period	1> 7:0	0			
Urban Street				Analysi		Kiley			(lalysis)	Ciloa	1.0		-	hite	
Intersection		Pyramid & Sparks		File Na	me	PySpi	7pwo.xu	IS					3	4 1 AT P	· r
Project Descrip	tion	CONTRACTOR OF THE PARTY OF THE	(Letterson)	NORWALISTO.	THE REAL PROPERTY.	THE REAL PROPERTY.	oral least to the	07/6	SANSKIE .	7 700 21	CONTENTS.	DISCO PAGE	AND RESIDENCE	NUCCOSTO I	CONTROL OF THE PERSON
C. SIGNORENCE	100	REAL PROPERTY OF THE PARTY OF T	444		ED.	1	HOMOSON	WB	2000	The same of	NB	The Park	THE PERSON	SB	- Carrier
Demand Inform	-				EB	R	1	T	I R	L	T	R	L	T	R
Approach Move			-	L	T	-	L 22	449	-	623	1275	20	283	718	266
Demand (v), v	eh/h	HOUSENESS THE THE SE	SHOW	508	355	310	32	449	-	023	12/3	20	203	0000000	200
01-11-6	Alexander	Jeff I will interest		Per Street of	panepan	A COLUMN	11	The same of	The same	104	TI	-			and the last
Signal Informa	and the second second	Defenses Diene	2	1	21		1000	10	-3	-	-		t	/	_
Cycle, s	130.0	Reference Phase	End		5	916	17		- N	-3		1	2	3	Y
Offset, s	0			Green		10.0	47.0	6.0	15.0	20.0	K	1		2	+
Uncoordinated	No	Simult. Gap E/W	On	Yellow		10.0	1.0	1.0	0.0	1.0	- 3	1 .		,	
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	10.0	1.1.0	11.0	10.0	VACUUS.	(2007 H)	CONTRACTOR OF THE PARTY OF THE	ONE	770	The New
100 100	-3/1250	Alle Called	Think in	COL	25	CDT	WBI	No page	WBT	NBL	-	NBT	SBL	-	SBT
Timer Results				EBL		EBT	3	-	8	5	-	2	1		6
Assigned Phas	е			7	-	4	-	-	4.0	2.0		3.0	2.0	-	3.0
Case Number				2.0		4.0	2.0			27.0		32.0	17.0	_	52.0
Phase Duration	-			26.0	_	40.0	11.0	-	25.0	-	-	COLUMN TO SERVICE STATE OF THE PARTY OF THE	-	-	5.0
	e Period, ( Y+R o), s low Headway ( MAH ), s			0.0		5.0	5.0		5.0	0.0	_	5.0	5.0	-	
	llow Headway ( <i>MAH</i> ), s			3.1	-	3.1	3.0		3.1	2.9	-	0.0	2.9		0.0
	low Headway ( <i>MAH</i> ), s Clearance Time ( <i>g s</i> ), s			28.0		37.0	3.3	_	22.0	29.0		-	13.5		0.0
Green Extension	on Time	(ge), s		0.0		0.0	0.0		0.0	0.0	_	0.0	0.0	_	0.0
Phase Call Pro	bability			1.00	-	1.00	1.00		1.00	1.00			1.00		
Max Out Proba	bility			1.00		1.00	1.00		1.00	1.00	1	-	1.00	-	THE REAL PROPERTY.
(1) 10 PER Y					MILES.	a de la	SWITTEN.	145	- III	District of	AID	W.	The same	SB	Mary J.
Movement Gr		sults		-	EB		-	WB	1 5		NB	-		T	R
Approach Mov				-	. T	R	L	T	R	L	T 2	R	L	6	16
Assigned Move				7	4	14	3	8	-	5		12	1	-	246
Adjusted Flow				552	696		35	488	-	677	1386	22	308	780	153
Colonia de la Co	-	ow Rate (s), veh/h/	in	1781	1713	-	1730	1870	-	1781	1781	1557	1730	1781	Acres de la constante de la co
Queue Service		and the second second second second		26.0	35.0		1.3	20.0		27.0	46.5	1.0	11.5	23.3	15.8
		ce Time (gc), s		26.0	35.0		1.3	20.0		27.0	46.5	1.0	11.5	23.3	15.8
Green Ratio (				0.20	0.27		0.05	0.15	-	0.21	0.44	0.44	0.09	0.36	0.30
Capacity ( $c$ ),				356	461		160	288		370	1561	683	319	1287	555
Volume-to-Cap				1.550	1.508		0.218	-	-	1.830	0.888	0.032	0.963	0.606	0.44
Back of Queue	(Q), f	t/In ( 95 th percentile	)	1453.	1756.		25.1	1392		2013.	698.7	17.2	276	382.1	253
				1	2		4.0	F4.5	-	6	27 5	0.7	10.9	15.0	10.0
-		eh/ln (95 th percen		57.2	69.1		1.0	54.8	-	79.3	27.5	0.7	-	0.00	0.0
Queue Storag	-	( RQ ) ( 95 th percer	itile)	0.00	0.00		0.00	0.00	-	0.00	0.00	0.00	0.00	-	31.
The state of the s				52.0	47.5	-	59.7	55.0	-	51.5	33.6	20.8	58.8	33.9	_
Uniform Delay				261,0			0.3	327.8	-	384.1	7.9	0.1	40.2	2.1	2.6
Incremental D	mental Delay ( d 2 ), s/veh   Queue Delay ( d 3 ), s/veh			0.0	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0,0	0.0
Incremental D	ol Delay ( d ), s/veh			313.0	CARLES AND ADDRESS OF THE PARTY NAMED IN		60.0	382.8	-	435.6	41.4	20,9	99.0	36.1	34.
Incremental D Initial Queue E Control Delay	(d), s/v	of Service (LOS)			F	1/	E	F	1	F	D	C	F	D	C
Incremental D Initial Queue D Control Delay Level of Service	( <i>d</i> ), s/v ce (LOS	)		F	beingin.	-									D
Incremental D Initial Queue D Control Delay Level of Service Approach Delay	( d ), s/v ce (LOS ay, s/veh	) n/LOS		298.	beingin.	F	361.	.3	F	169.	3	F	50.2	4	
Incremental D Initial Queue E Control Delay Level of Service	( d ), s/v ce (LOS ay, s/veh	) n/LOS		-	beingin.		361. 9.1	.3	F	169.			F 50.2	2	
Incremental D Initial Queue D Control Delay Level of Servic Approach Dela Intersection D	(d), s/vee (LOS ay, s/veh elay, s/v	) n/LOS	1000	-	6		2		F	169.					
Incremental D Initial Queue E Control Delay Level of Service Approach Delay	(d), s/v ce (LOS ay, s/veh elay, s/v esults	) n / LOS reh / LOS		-	6   EB		2	WB	F C	3.4	NB			SB	В

200			11-11	- 1- 0	40	25	(B)	DY GOOD	MA EN	E BE	2650	1,510		مل المواداة ا	
General Inforn	nation							_		ion Info	-	1		i i i i i i	
Agency		Solaegui Engineers		,				company and	uration,		0.25		- 20		
Analyst		MSH			-	Sep 13			rea Typ	е	Other		ž		
Jurisdiction		City of Sparks		Time P	CONTRACTOR STATE	-	ak Hour		HF		0.95				-
Urban Street				Analysi	_	-			nalysis	Period	1> 7:00	J	3		
Intersection		Pyramid & Sparks		File Na	me	PySp3	5ax.xus						1	1110	
Project Descrip	otion	MANAGEMENT AND A	- War 170	NATIONAL DESCRIPTION OF THE PERSON OF THE PE	EDUCATION OF THE PARTY OF THE P	(0)/AXII/2	000000	A suite S		W. 1999	N SONE	20	Card S	e Par	STATE OF
Demand Infor	mation	Barry Contractor	Contraction of	CONTRACT OF	EB	A STATE OF		WB	The same of	1	NB	The Late of the La		SB	
Approach Move				L	T	R	L	T	R	L	T	R	,L	T	R
Demand (v),				100	200	100	250	150		100	1350	100	600	3400	100
	CA CAPA		- 1000	DE	-51		- NICO	2	E Walter	New York	17 - 12		No. of the last		
Signal Informa	ation				71	white .	71	2	1	-	- (		4-	_	
Cycle, s	120.0	Reference Phase	2		17	1	17		6	3	,	' ,			V .
Offset, s	0	Reference Point	End	Green	5.0	15.0	63.0	9.0	3.0	10.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	0.0	0.0	4.0	- 5	1		/	-
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	10.0	1.0	0.0	10.0	11.0				7	-
C. W. Janes	1					78.13	SAN PARTY	No.		AUDI	1000	UDT	CDI	Name of Street	SBT
Timer Results				EBL		EBT	WBL	-	WBT	NBL		VBT	SBL		-
Assigned Phas	se			7		4	3	_	8	5	-	2	1	_	6
Case Number				9.0		4.0	2.0		4.0	2.0	_	3.0	2.0	_	3.0
Phase Duratio	272. 227. 227. 227. 227. 227. 227. 227.					15.0	12.0		18.0	10.0		58.0	25.0	_	5.0
to the land of the	Period, (Y+Rc), s				-	5.0	5.0	-	5.0	5.0	-	5.0	0.0	-	_
A PROPERTY OF THE PARTY OF THE	low Headway ( <i>MAH</i> ), s				_	3.1	3.0		3.1	2.9		0.0	2.9		0,0
Queue Clearai				9,0		12.0	9.0	-	11.9	7.0	-	0.0	23.2		0.0
Green Extensi				0.0		0.0	0.0		0.1	0.0		0.0	1.00	_	0,0
Phase Call Pro	and the second named in			1.00		1.00	1.00		1.00	1.00	-	-	1.00	-	
Max Out Prob	ability		10 TOWN	1.00		1.00	1.00	NATIONAL PROPERTY.	1,00	1.00	2000	SAN THE	1.00	THE PERSON NAMED IN	200
Movement Gr	oun Re	eults		PRODUCE	EB	Vacar-2, as	The same of	WB		1	NB			SB	
Approach Mov		Suito		L	T	R	L	Т	R	L	Т	R	L	T	R
Assigned Mov				7	4	14	3	8		5	2	12	1	6	16
Adjusted Flow		v), veh/h		1 105	289	1	263	158		105	1421	105	632	3579	79
		low Rate (s), veh/h	/In	1781	1759		1730	1870		1781	1781	1558	1730	1781	1543
Queue Service				7.0	10.0		7.0	9,9		5.0	37.8	4.1	21.2	78.0	2.3
and the second s		ce Time ( g c ), s		7.0	10.0		7.0	9.9		5.0	37.8	4.1	21.2	78.0	2.3
Green Ratio (				0.08	0.08		0.06	0.11		0.04	0.52	0.52	0.21	0.65	0.65
Capacity (c),				134	147		202	203		74	1870	818	721	2315	1003
Volume-to-Ca		tatio (X)		0.788	1.975		1.304	0.779	3	1.418	0.760	0.129	0.876	1.546	0.079
Back of Queue	e (Q), 1	ft/In (95 th percentile	2)	183	940.6		334.3	234.4	1	323.5	534.5	64.3	-	4134.4	
Back of Queu	e (Q),	veh/ln (95 th percen	tile)	7.2	37.0		13.2	9.2		12.7	21.0	2.5	14.9	162.8	1.2
Queue Storag	e Ratio	( RQ ) ( 95 th percer	ntile)	0.00	0.00		0.00	0.00		0.00	0,00	0.00	0.00	0.00	0,00
Uniform Delay	(d1),	s/veh		54.6	55.0		56.5	52.1		57.5	22.5	14.5	46.0	21.0	7.7
Incremental D	elay ( d	2), s/veh		24.3	462.3		168.0	16.0		250.1	3.0	0.3	11.4	247.9	0.2
Initial Queue I	Delay (	d з ), <b>s/ve</b> h		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	Queue Delay ( d 3 ), s/veh I Delay ( d ), s/veh				517.3	3	224.5	68.1		307.6	25.5	14.8	57.4	268.9	7.9
Level of Servi		and the same of th		E	F		F	E	_	F	C	В	E	F	A
Approach Del				400	4	F	165.	9	F	43.	)	D	233	U	F
Intersection D	elay, s/	veh / LOS	DESCRIPTION OF	17/3	epioque	19	92.6	THE PERSON		a de la composition della comp	H HOUSE	TOPS P	F	1000	130000
Maritime e del F	Pagulto			The same of	EB	THE PARTY	T THE PARTY NAMED IN	WB	The Land	The same	NB	Contract of	The same	SB	- ABI
Multimodal R		0/108	_	3.0		C	3.1	-	С	2.5		С	2.3		В
	JO 300F	C / LUU		1,0		U	0.1		U	Lic		-	-		-

		HCS	7 Siե	ıalize	d Inte	ersect	ion R	esul	ts Su	mm <sub>k.</sub>	1	a service of		CHETHINA	
				71/10	-979	2 10 17	州。	CONTRACT OF THE PARTY OF THE PA	177.01	0.50(20)		10.00	10000	4 1.00	
General Inform	ation							_	and the second second	ction Inf	-	n	1 1		
Agency		Solaegui Engineers			-			-	Duratio		0.25		-		
Analyst		MSH		National Control		Sep 1		-	Area Ty	pe	Other			1-1-6	-
Jurisdiction		City of Sparks		Time P		-	ak Hou		PHF		0.95		3		- 5
Urban Street				Analys	is Year	2035 E	Base	1	Analysi	s Period	1> 7:0	00	X BE	105.75	
Intersection		Pyramid & Sparks	and the second	File Na	me	PySp3	35px.xus	3						ጎተተሰ	
Project Descript	tion	HIT IS THE REAL PROPERTY.	deriver of	SIGNI DO	100	#16 Ch	www.towito	90000	mired sa	and the state of	SERVICE STATES	NORTH	1	41441	WAST.
Demand Inform	nation	NATIONAL PARTY		1	EB		A Charles	WE	1000	CONTRACTOR OF THE PARTY OF THE	NB	NAME OF THE PERSON NAME OF THE P	T	SB	2000000
Approach Move	ment			L	T	R	L	T	R	L,	T	R	L	T	R
Demand (v), v				200	150	100	300	200		150	3450	200	500	1700	110
	100000	A STATE OF THE PARTY	al April 1	ENTERS.	NO. OF LANS	1101820	1808	SWEET ST	A THE	NAME OF TAXABLE PARTY.	100	1200	THE REAL PROPERTY.	War of	POS
Signal Informa	tion	CONTRACTOR OF THE PARTY OF THE			1		11		T			3.11			
Cycle, s	130.0	Reference Phase	2	1	75	15/0		273	25	2		× .	V	-	-
Offset, s	0	Reference Point	End	10	100	100			1.0	16.0		1	- 2	3	N.
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		10.0	54.0	0,0	0.0		-	. /		7	+
Force Mode	_	Simult. Gap N/S	On	Red	1.0	0.0	1.0	0.0	0.0					1	8
Will the said		and the second	1,275	3016			12 1000				AND T		THE RE		THE V
Timer Results				EBL		EBT	WBI	-	WBT	NB	-	NBT	SBI		SBT
Assigned Phase	е			7		4	3		8	5		2	1		6
Case Number				2.0		4.0	2.0	-	4.0	2.0	-	3.0	2.0	-	3.0
Phase Duration	Period, (Y+Rc), s			22.0		21.0	23.0	)	22.0	27.0	-	69.0	17.0		59.0
Change Period,	Period, (Y+Rc), s			0.0		5.0	5.0		5.0	0.0		5.0	5.0		5.0
Max Allow Head	v Headway ( <i>MAH</i> ), s			3.1		3.1	3.0		3.1	2.9	CHILI	0.0	2.9		0.0
Queue Clearan	v Headway ( <i>MAH</i> ), s learance Time ( <i>g s</i> ), s			16.5		18.0	13.3	3	16.3	12.0			14.0	)	
Green Extensio	n Time	(ge), s		0.2		0.0	0.3		0,1	0.2		0.0	0.0		0.0
Phase Call Pro	bability			1.00	)	1.00	1.00		1.00	1.0	)		1.00	)	31.4.1.1
Max Out Proba				0.10	)	1.00	0.19	)	1.00	0.0	)		1.00	)	
		ALL HALL TO	1992	SHEET		1		NATE OF THE PARTY			AID	2.00		CD	4 5
Movement Gro		suits			EB	7 5	-	WB	1 0	1	NB	D	-	SB	R
Approach Move				L	T	R	L	T	R	L	T 2	R	L 1	6	16
Assigned Move				7	4	14	3	8	-	5	-	12	-	-	-
Adjusted Flow I				211	237		316	211	-	158	3632	211	526	1789	89
The same of the sa	Name and Address of the Owner,	ow Rate ( s ), veh/h/	ln	1781	1743		1730	1870		1781	1781	1558	1730	1781	1537
Queue Service				14.5	16.0		11.3	14.3	-	10.0	64.0	10.3	12.0	54.0	4.7
Cycle Queue C	learanc	ce Time $(g_c)$ , s		14.5	16.0	-	11.3	14.3	-	10.0	64.0	10.3	12.0	54.0	4.7
Green Ratio (g	/C)			0,17	0.12		0.14	0.13	-	0.21	0.49	0.49	0.09	0.42	0.42
Capacity (c), v	/eh/h			301	214		479	245	_	370	1753	767	319	1479	638
Volume-to-Cap				0.698	1.104	-	0.659	0.86	-	0.427	-	0.275	1.648	-	0.140
Back of Queue	(Q), f	t/ln ( 95 th percentile	)	285	484.1		218.8	329.4	1	195.4	5829.	168	757.9	1533.8	78
Back of Queue	(Q), v	eh/ln ( 95 th percent	tile)	11.2	19.1		8.6	13.0		7.7	229.5	6.6	29.8	60.4	3,1
	-	(RQ) (95 th percen		0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay		the second secon		50.9	57.0		53.1	55,3	_	44.8	33.0	19.4	59.0	38.0	23.6
Incremental De				5.9	92.2	-	2.7	24.4	-	0.3	484.1	0.9	305.4	100.9	0.5
Initial Queue D				0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (				56.8	149.2		55.8	79.7		45.1	517.1	20.3	364.4	138.9	24.0
Level of Service	-			E	F		E	E	T	D	F	C	F	F	С
Approach Dela	and the second			105.	-	F	65.3	1	E	472	-	F	184.	1	F
Intersection De	-						7.1						F		
		as I have been been	100		171.02	232	mels	William.	- 11	Serve.	No. of Concession,	10-10-	of allest		011
Multimodal Re					EB			WB		-	NB	-		SB	
Pedestrian LOS		***		3.0		С	3.1	-	С	3.4		С	2.3		В
Bicycle LOS So	core / L	OS		1.2		Α	0.7		A	3.8		D	2.5		В

112 7 6 412	E-8 9 10	Service of the servic	100	ME THE	W. Finis	1	1	TE VI	HUG	nmy	530	Witness Co.	12 18 1	P. C.	Stall V
General Inform	ation	We the state of the state of	1000000	Craw Con	A Calculation			I	ntersec	tion Info	rmatio	n	10	1241	
	lation	Solaegui Engineers							Ouration		0.25		_	11177	
Agency	-	MSH	_	Analysi	e Date	Sep 13	3 2017		rea Typ		Other		4		
Analyst		City of Sparks		Time P	the state of the s	-	ak Hour	-	HF		0.95				= 3
Jurisdiction		City of Sparks		Analysi		2035	de la companya della companya della companya de la companya della	the second second	Analysis	Period	1> 7:0	0	7		
Urban Street				100		Projec	t		ii icaiy olo	1 51154	V		7	1117	
Intersection		Pyramid & Sparks		File Na	me	PySpa	5aw.xus				-	-	- 00	4 144.4	r.
Project Descrip	tion		morrome	CHOCKING.	once:	WINDOW		S.T. Contract	weed and the	NAMES AND	MAJORINA	NEWS NO.	HE STATE OF	- alegani	STATE OF
74.74.73	THE REAL PROPERTY.	Bloken and and	- 11	Section 2	CD.	CAN !		WB	3 1 V	SINGSTA	NB	2000	-	SB	BUYER
Demand Infor				-	EB	T 0	1	T	R	L	T	R	L	T	R
Approach Move			-	L	T	R	L	-		204	1350	100	600	3400	135
Demand (v), v	reh/h	NAME OF TAXABLE PARTY.	1500 m	200	367	401	250	208	Sales and	204	1330	100	600	2400	SIRIN
Ci	Alexander of the last of the l	mound of the later	7/2 (1)	NAME OF TAXABLE PARTY.	(63)(62)	THE	71	A STATE OF	SCHOOL ST	THE REAL PROPERTY.					BEN TAN
Signal Informa	The Personal Property lies, Name of Street, or other Persons or other Pers	Deference Dhase	2	-	2	2Us		1	VI.	La	-		D	/	_
Cycle, s	120.0	Reference Phase	End	-	7		Tr		7	7		-1	2	1	Y
Offset, s	0			Green		15.0	55.0	6.0	4.0	14.0	- 1				+
Uncoordinated	-	Simult. Gap E/W	On On	Yellow Red	1.0	0.0	1.0	1.0	0.0	1.0	-	) . "		,	
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	17.0	THE STREET	10.0	ZaCata S	Sections:	100	1.13		
		S. M. Margaritan	100	EBL	4	EBT	WBI	COLUMN TO	WBT	NBI		NBT	SBL	1 5	SBT
Timer Results				7	-	4	3	-	8	5		2	1		6
Assigned Phas	ie			2.0	-	4.0	2.0		4.0	2.0	-	3.0	2.0		3.0
Case Number	5.60		-	15.0	-	23.0	11.0	-	19.0	11.0	-	30.0	26.0	100	75.0
Phase Duration	On the Control of the		_	_	-	5.0	5.0	-	5.0	5.0		5.0	0.0		5.0
	Period, (Y+Rc), s ow Headway (MAH), s			0.0			3.0	-	3.2	2.9		0.0	2.9	-	0.0
	ow Headway ( <i>MAH</i> ), s			3.1		3.2	8.0	-	16.0	8.0	_	0.0	23.0	_	0,0
Queue Clearar	_			16.1	-	20.0	0.0	-	0,0	0.0	-	0.0	0.6	_	0.0
Green Extension			_	0.0		0.0	- Annual Contract		1.00	1.00	_	0,0	1.00		0.0
Phase Call Pro				1.00	-	1.00	1.00	_	1.00	1.00	-	-	0.96		
Max Out Proba	ability	AND DESCRIPTION OF THE PARTY OF	2009	1.00		1.00	1,00	DANIE OF THE PARTY	1.00	1.00	Carlo Con	Service .	0.00		(INSI)
Movement Gr	oup Po	culte		1	EB	COLUMN	STATE OF THE PARTY OF	WB	ACCESSED AND ADDRESS.	Town	NB	CA VIII CO	The same of	SB	-
Approach Mov	ASSESSMENT OF THE PARTY NAMED IN	suits	_	L	T	R	L	Т	R	L	T	R	L	T	R
Assigned Mov	_			7	4	14	3	8	+	5	2	12	1	6	16
Adjusted Flow	The second second	v) veh/h		211	782		263	219		215	1421	105	632	3579	116
		low Rate (s), veh/h/	In	1781	1687		1730	1870		1781	1781	1557	1730	1781	1542
Queue Service		and after all processes to the later and the		14.1	18.0		6.0	14.0		6.0	43.2	4.7	21.0	70.0	4.1
		ce Time (gc), s	-	14.1	18.0		6.0	14.0	_	6.0	43.2	4.7	21.0	70.0	4.1
The second secon		ce mine (ge), s	_	0.12	0.15		0.05	0.12		0.05	0.46	0.46	0.22	0.58	0.58
Green Ratio (			_	223	253	-	173	218	_	89	1632	714	750	2077	899
Capacity ( c ), Volume-to-Cap		atio (X)	_	0.945	3,091		1.521	1.003	_	2.411	0,871	-	0.843	1.723	0.129
The second secon		f/In ( 95 th percentile	1	353	2920.	_	385.3	390.6	_	782.3	637.2	76.4	366.1	4786.8	-
Dack of Queue	<del>,</del> ( (4 ), 1	our ( ao ar barcantha	,	000	4		500.0	300.		1	05.307 12	783	\$40.50	0.93.9	0000
Back of Queue	e ( Q ). v	veh/in ( 95 th percent	ile)	13.9	115.0		15.2	15.4	1	30.8	25.1	3.0	14.4	188.5	2.4
		(RQ) (95 th percen		0.00	0.00		0.00	0.00		0.00	0.00	0.00	0,00	0.00	0.00
Uniform Delay	-			52.1	51.0		57.0	53.0		57.0	29.3	18.9	45.0	25.0	11.3
Incremental D				44.7	951.5		261.9	61.8		667.8	6.7	0.4	8.2	327.3	0.3
Initial Queue D				0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay				96.8	1002. 5		318.9	114.8	В	724.8	36.0	19.3	53.2	352.3	11.6
Level of Servi				F	F		F	F		F	D	В	D	F	В
Approach Dela	ay, s/vel	h/LOS		810.	4	F	226.	2	F	119	.9	F	299	.5	F
Intersection D	elay, s/v	reh / LOS				32	20.6	-	TAVIES.	-	ORGANIA.		F	toverson	TOTAL PROPERTY.
277169	38456		W. C.	Name of	EB	EUS	The same	WE		Service of the last	NB	al minus	100000	SB	-
	esuits			1	CD		1	VVE			IND	-	-		-
Multimodal R Pedestrian LC		1100		3.0	. 1	C	3.1		C	2.9	1	C	2.3	1	В

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HCS7™ Streets Version 7.3

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THE CONTRACT OF	5217.54	nus	r Olyi	nalize	a mile	13561	MODELLI IV	-Sun	Sour	ililiai y	IIWERN	A 100	SIRGI	8778	1000
STORING ORES	Alan		0.000			9000		Ir	tersec	ion Info	rmatio	The same	1	(2.41 F [][][][]	1
General Inform	lation	Calanaul Engineers			_			-	uration,		0.25	-		11111	
Agency		Solaegui Engineers		Analysi	n Data	Sep 13	2017		rea Typ		Other		Ž.		
Analyst		MSH City of Sparks	-	Time P			ak Hour		HF		0.95		<b>V</b> E	4	7
Jurisdiction	_	City of Sparks	-	Analysi		2035 E	_		nalysis	Period	1> 7:0	0			
Urban Street						Projec	t	-1	ilaly 010	1 01104				httr	
Intersection		Pyramid & Sparks		File Na	me	PySp3	5pw.xus	3					1	41444	
Project Descrip	tion		modernia.		emedie		imoor	91000	SEARCE STATE	HOUSE		STUTE	10000000	TEN WHI	organia.
Demand Inform	nation	DVI dell'	1200	10000	EB		1	WB	100	AND CARRIED	NB	-	The same of	SB	ZBOTTSHOO
Approach Move	_			L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), v				259	248	277	300	363		444	3450	200	500	1700	208
Domaina (17)	25500		Carl	The Party	TOPE !	N. HOLE		100	3/3/5	Salar -	The same	11.5	No. of Contract of		1000
Signal Informa				1	1		1	23		5-	- (		tz	-	
Cycle, s	130.0	Reference Phase	2	1	15	YI	17	4	6	× 3		1			4
Offset, s	0	Reference Point	End	Green	12.0	10.0	54.0	22.0		16.0					-
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	0.0	4.0	0.0	0.0	4.0	- '	1 4	-	1	
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	0.0	0.0	1.0	DESCRIPTION OF THE PERSON OF T	150000	- COLON	7 10	-
Timer Results	11/15	The state of the s	200	EBL	Party N	EBT	WBI		WBT	NBL		NBT	SBL		SBT
Assigned Phas				7		4	3		8	5		2	1		6
Case Number				2.0		4.0	2.0		4.0	2.0		3.0	2.0		3.0
Phase Duration	1. 5			22.0	_	21.0	23.0		22.0	27.0		39.0	17.0	1	59.0
And the second second	nge Period, (Y+Rc), s			0.0		5.0	5.0		5.0	0.0		5.0	5.0		5.0
	Allow Headway ( MAH ), s			3.1		3.1	3.0		3.1	2.9		0.0	2.9		0,0
Queue Clearar				21.5		18.0	13.3		19.0	29.0			14.0		
Green Extension				0.0		0.0	0.3		0.0	0.0		0.0	0.0		0.0
Phase Call Pro	bability			1.00		1.00	1.00		1.00	1.00	and the same		1.00		
Max Out Proba	bility			1.00		1.00	0.19		1.00	1.00		THE REAL PROPERTY.	1.00	305	
	W DENE	- 14-	1000	1	EB		100	WB	1000	Participa	NB	200	17.121	SB	SAFE
Movement Gr Approach Mov		suits		L	T	R	L	Т	R	L	T	R	L	T	R
Assigned Move				7	4	14	3	8	1	5	2	12	1	6	16
Adjusted Flow		() veh/h	-	273	526		316	382		467	3632	211	526	1789	193
AND STATE OF THE PARTY OF THE P		ow Rate (s), veh/h/	ln	1781	1684		1730	1870		1781	1781	1558	1730	1781	1537
Queue Service		the state of the s		19.5	16.0		11.3	17.0		27.0	64.0	10.3	12.0	54.0	10.9
		ce Time (gc), s		19.5	16.0		11.3	17.0		27.0	64.0	10.3	12.0	54.0	10.9
Green Ratio (				0.17	0.12		0.14	0.13		0.21	0.49	0.49	0.09	0.42	0.42
Capacity (c),				301	207		479	245		370	1753	767	319	1479	638
Volume-to-Car		atio (X)		0.904	2.540		0.659	1.562	-	1.263	2.071	0.275	1.648	1.210	0.302
Back of Queue	(Q), f	t/In ( 95 th percentile	)	417.7	1881		218.8	1037.		972.1	5829. 9	168	757.9	1533.8	182.1
Dock of Owner	101.	veh/ln ( 95 th percent	ilel	16.4	74.1		8.6	40.8	1	38.3	229.5	6.6	29.8	60.4	7.2
		(RQ) (95 th percen	-	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay				53.0	57.0		53.1	56.5		51.5	33.0	19.4	59.0	38.0	25.4
Incremental D	-			28.1	706.9		2.7	272.0		138.5	484.1	0.9	305.4	100.9	1.2
Initial Queue D	ACCRECATE VALUE OF THE PARTY OF	AND DESCRIPTION OF THE PARTY OF		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0,0	0.0
Control Delay	-	***		81.1	763.9		55.8	328.5		190.0	517.1	20.3	364.4	138.9	26.6
Level of Service	Account to the last of	THE RESERVE THE PARTY OF THE PA		F	F		E	F	1	F	F	C	F	F	C
Approach Dela				530.	9	F	205.	1	F	457.	4	F	177.	6	F
Intersection D	elay, s/v	eh / LOS	ana and and and	January .	C Section	35	8.9			_	53.00	CARTARA	F	200	
No. of Contract of		A TABLE OF THE	"I lex	The same	EB	200/6	BULL	WB		The same	NB	Legal B	SAME!	SB	
Multimodal R	and the second	1108		3.0	and the same	С	3.1		С	3.4	-	С	2.3		В
Dade - Ld 1 A	strian LOS Score / LOS			3.0		0	0.1		~	0.4		0	2.0		_

STREET PERSONAL	S ENGIN	поз		alize	esonatois	1366		CSUI	NOTE OF		IIII y	POST S		TO STATE OF	NAME OF TAXABLE PARTY.	O. M. M.
Consul Inform	ntlen	A Company of the State of the S		San San	1000		Line States	<b>DISEASE</b>	nter	secti	on Info	rmatio		J. STOCKHOOL	4 1.4- 1 1-	
General Inform	200	losts and Frantisco	-		-	_		-		tion,	-	0.25	_		11111	1
Agency	-	Solaegui Engineers	-	Annhai	o Dato	Sep 13	2 2017	-	-	Туре	-	Other		1		
Analyst		MSH						-	PHF	_	-	0.95	_	7-1		-
Jurisdiction		City of Sparks		Time P		-	ak Hour			-	Pariod	1> 7:00	1			
Urban Street				Analysi		Projec	t + Kiley		Anaiy	ysis r	Period	1 - 7.00		1	1110	
Intersection		Pyramid & Sparks		File Na	me	PySp3	Sawo.xu	JS		_				3.6	41446	1
Project Descrip	tion						-	nonime.			contraction of	No.	N CHI TATTI	-	WHIDSHIE	estatores:
	J-01574		150	PART OF STREET		2270	3111 215	14.0	14,710		No. of Lot	NB	1	WHITE CO.	SB	100
Demand Inforr	-			-	EB	1 -		WE	3	-	1	_	R	1	T	R
Approach Move				L	T	R	L	T	-	R	L	T	-	L		
Demand (v), v	eh/h	OPT LOS DE MONTOS DE LOS DELOS DE LOS DEL LOS DE LOS DEL LOS DE LOS DEL LOS DE LOS DEL LOS DE LOS DE LOS DE LOS DEL LOS DE LOS DELLOS DE LOS DELOS DELOS DE LOS DELOS DE LOS DELOS DELOS DELOS DELOS DELOS DELOS DEL	HONES OF THE PARTY OF	276	377	418	250	23	/	moon	281	1347	100	630	3450	135
The state of the state of	No.	100000000000000000000000000000000000000	34 14	A CONTRACTOR	NAME OF TAXABLE PARTY.		10	States	100	4	GEOGRAPH OF		Manager	1	Tale Street	the Market
Signal Informa		In the plant	- 6	-	75	217	11	77	0	7	1 3	- \		D	/	
Cycle, s	120.0	Reference Phase	2	-	1		17	N .	-	3	-		1	12	- 2	Y
Offset, s	0	Reference Point	End	Green	SALES OF THE PERSON NAMED IN	13.0	55.0	5.0		6.0	13.0	_				-
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	4.0		0.0	4.0	_	1 21	_	/	
Force Mode	Fixed	Simult, Gap N/S	On	Red	1.0	0.0	11.0	11.0	1	0.0	11.0	NAME OF STREET	NO CONTRACT	THE PARTY	-	NEW PROPERTY.
Sant Maria	1- 5-129	All Printers of the Land	11722	PERMUTA	CORPORT OF STREET	BANGE C	MARIE	Her	AA/D	SERVICE A	NIDI	No. of Lot,	NBT	SBL		SBT
Timer Results				EBL		EBT	WBI	-	WB	51	NBL	-	-	1	-	6
Assigned Phas	е			7	_	4	3	_	8		5	-	2			
Case Number				2.0	_	4.0	2.0	_	4.0	-	2.0		3.0	2.0	-	3.0
Phase Duration	1, S			16.0		24.0	10.0	-	18.	_	13.0	The second second	0.0	26.0		73.0
Change Period	, (Y+R	c), S		0.0		5.0	5.0	_	5.0	_	5.0		5.0	0.0		5.0
Max Allow Hea	dway ( /	MAH), s		3.1		3.2	3.0	_	3.2	-	2.9	-	0.0	2.9		0.0
Queue Clearan	ice Time	e (gs), s	- 61	18.0		21.0	7.0	-	15.	_	10.0	_		24.3		
Green Extension	on Time	(g ⊕), s		0.0		0.0	0.0		0.0	-	0.0	-	0.0	0.4	-	0.0
Phase Call Pro	bability			1.00	)	1.00	1.00	)	1.0	10	1.00	-		1.00		
Max Out Proba	bility			1.00	)	1.00	1.00	)	1.0	10	1.00			1.00	)	_
<b>建筑是是</b>	366	STATE SUPPLY	100	All sub	5.7	Jan.	7.	3100	4 10	1003		DINEME	Seattle.	The same	C.D.	
Movement Gre	oup Res	sults			EB		_	WB	-			NB		-	SB	-
Approach Mov	ement	law		L	T	R	L	T		R	L	T	R	L	T	R
Assigned Move	ement			7	4	14	3	8			5	2	12	1	6	16
Adjusted Flow	Rate ( v	/), veh/h		291	811		263	249	6		296	1418	105	663	3632	116
Adjusted Satur	ation FI	ow Rate (s), veh/h/	ln	1781	1686		1730	1870	0		1781	1781	1557	1730	1781	1541
Queue Service	Time (	g s), S		16.0	19.0		5.0	13.0	_		8.0	43,0	4.7	22.3	68.0	4.2
Cycle Queue C	Clearanc	ce Time (gc), s		16.0	19.0		5,0	13.0	-		8.0	43.0	4.7	22.3	68.0	4.2
Green Ratio (	g/C)			0.13	0.16	150	0.04	0.11	-		0.07	0.46	0.46	0.22	0.57	0.57
Capacity (c),	veh/h			238	267		144	203	-		119	1632	714	750	2018	873
Volume-to-Cap	acity R	atio (X)		1.223	3.036		1.826	1.23	1		2.491	0.869	0.147	0.885	1.800	0.133
Back of Queue	(Q), fl	t/In ( 95 th percentile	)	616.1	3013.		437.6	546.	8		1059.	634.3	76.4	394.9	5086.2	63.2
				-	1				1		9		B.154	26.5	000.0	0.00
I construct the second of the second of the second		veh/ln ( 95 th percent	-	24.3	118.6		17.2	21.5	_		41.7	25.0	3.0	15.5	200.2	2.5
		( RQ ) ( 95 th percen	itile)	0.00	0.00		0.00	0.00	_		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d1), 8	s/veh		52.0	50.5		57.5	53.6	-		56.0	29.3	18.9	45.5	26.0	12.2
Incremental De	elay ( d	2), s/veh		132.0	926.2		397.4	-	-		695.3	6.6	0.4	11.8	361.8	0.3
Initial Queue D	elay ( o	13), s/veh		0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0,0	0.0
Control Delay	(d), s/	/eh		184.0	976.7		454.9	-	9		751.3	35.8	19.3	57.4	387.8	12.5
Level of Service	e (LOS	)		F	F		F	F			F	D	В	E	F	В
Approach Dela	ay, s/veh	1/LOS		767.	6	F	\$ 327.	.4	F		151.	2	F	328	3	F
Intersection De	elay, s/v	reh / LOS		1		34	48.8							F		-
THE RESERVE AND ADDRESS OF THE PARTY OF THE			TO BE		11/8,14	C. C.	No.	Back	St.	- 74	133	- 686	Service	DIE OIL	Water.	ALATE.
Multimodal R	esults				EB			WE				NB	-		SB	
Pedestrian LO	S Score	e/LOS		3.0		C	3.1		C	>	2.9		C	2.3		В
Bicycle LOS S	core / L	OS		2.3	6	В	1.2	2	A	1	2.0		В	4.1	1	D

and a supplied to the supplied	down too	HUS	/ SIS	. alized	a inte	rsect	IOII K	esuit	Soun	IIIII Gir y		E-STATE OF	50000	6564	SOL
General Inform	otles		1000	3 30.00	1211 3	No. Vin	-UF OF	In	tersect	ion Info	rmatio	T COLUMN		4 J. 4 I b J I I I I I	1.
Service of the servic		Calculated Fundament			_		-	_	uration,		0.25			11117	
Agency		Solaegui Engineers		Analysi	n Date	Sep 13	2017	-	rea Typ		Other		1 Miles		
Analyst	_	MSH City of Sparks		Time P	-	The second second	ak Hour	No.	HF		0.95	-	\$ E		-
Jurisdiction		Gity of Spairs		Analysi		2035 E			nalysis	Period	1> 7:0	0	1		
Urban Street						Project	+ Kiley		ialysis	r enou	1-7,0			1117	F
Intersection		Pyramid & Sparks		File Na	me	[PySp3	5pwo.xu	IS		-			1 3	4 1 4 7 7	-
Project Descrip	tion	No visitoria de la compansión de la comp	morroda	ORDINATE DE	DEFENT	CAUTE IS	Number 1975	9250	0.07/2/200	STATE OF THE PARTY	NO CONTRACT	200300	100000	The same of	BURKE
Demand Inforr	nation			The state of the s	EB	- PECE	The Market	WB		1000000	NB			SB	in the last
Approach Move	-			L	T	R	1	T	IR	L	T	R	L	T	R
Demand ( v ), v				383	258	294	300	393		568	3400	200	531	1751	208
Demand (V), v	CIVII		US US S	000	200	Contract of	STEE		and the same	and the last	1	1000	155	100 A 100	1000
Signal Informa	tion				1	1	11	1		-				_	
Cycle, s	130.0	Reference Phase	2		. No	TYTY	1	1 1		2	,		P	-	V
Offset, s	0	Reference Point	End	Green	12.0	10.0	54.0	22.0	1.0	16.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	0.0	0.0	4.0	-	1		1	+
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	0.0	0.0	1.0	1	6	14	7	name and
			7 1 1	elfer his		3000	MALE	3 (13	10	1000			1992		143
Timer Results				EBL		EBT	WBI	- 1	WBT	NBL	. 3	NBT	SBL	. 3	SBT
Assigned Phas	е			7		4	3		8	5		2	1		6
Case Number				2.0		4.0	2.0		4.0	2.0	-	3.0	2.0		3.0
Phase Duration	1, S			22.0		21.0	23.0	-	22.0	27.0		39.0	17.0		59.0
Change Period	, (Y+R	c), s		0.0		5.0	5.0	The second second	5.0	0.0		5.0	5.0	_	5.0
Max Allow Hea	dway ( /	MAH), s		3.1		3.1	3.0	-	3.1	2.9	-	0,0	2.9		0.0
Queue Clearar	ice Time	e (gs), s		24.0		18.0	13.3		19.0	29.0			14,0	_	-
Green Extension	on Time	(ge),s		0.0		0.0	0.3	-	0,0	0.0	_	0.0	0.0		0.0
Phase Call Pro	bability			1.00		1.00	1.00		1.00	1.00			1.00		
Max Out Proba	bility		-	1.00		1.00	0.19	1	1.00	1.00		with the last	1.00	******	200
DESCRIPTION OF	- N			The same	EB			WB		1	NB		-	SB	
Movement Gr		suits	-	L	T	R	L	Т	R	L	T	R	T	T	R
Approach Mov				7	4	14	3	8	- 1	5	2	12	1	6	16
Assigned Move	-	·	_	403	555	14	316	414	-	598	3579	211	559	1843	193
Adjusted Flow			In	1781	1682	-	1730	1870	-	1781	1781	1558	1730	1781	1537
Comments of the Comments of th		ow Rate (s), veh/h/	10	22.0	16.0	-	11,3	17.0	-	27.0	64.0	10.3	12.0	54.0	10.9
Queue Service	-		_	-	-		11.3	17.0	-	27.0	64.0	10.3	12.0	54.0	10.9
	-	e Time ( <i>g c</i> ), s	_	0.17	16.0 0.12		0.14	0.13	-	0.21	0.49	0.49	0.09	0.42	0.42
Green Ratio (				301	207		479	245	-	370	1753	767	319	1479	638
Capacity ( c ), Volume-to-Cap		atio ( X )		1.337	2.680		0.659	1.691	-	1.616	2.041	0.275	1.750	1.246	0.30
		/In ( 95 th percentile	)	933.4	2015.		- Contractor of	1191.4		1613.	5687.	168	837.4		-
back of Queue	( ( ( ), 11	Ant ( 95 th percentile	,	550.4	8		210.0			3	7	100	22.11		
Back of Queue	(Q), v	eh/ln (95 th percent	tile)	36.7	79.4	1	8.6	46.9		63.5	223.9	6.6	33.0	65.6	7.2
		(RQ) (95 th percen		0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay				54.0	57.0		53.1	56.5		51.5	33.0	19.4	59.0	38.0	25.4
Incremental De				172.6	769.8		2.7	328.2		289.5	470.6	0.9	350.4	116.6	1.2
Initial Queue D		44.07		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	-			226.6	826.8		55.8	384.7		341.0	503.6	20.3	409.4	154.6	26.6
Level of Service	a management of			F	F		E	F		F	F	С	F	F	C
Approach Dela				574.	2	F	242.	3	F	458.	3	F	199	.9	F
Intersection De						37	5.6			1		Same product	F		Tarres on
	1350		1300	14 French	Bullynn		-191 17	2 1000	3/3/3	SMALL		10-190	No.	00	Link
A PAIL OF	Itimodal Results														
Multimodal R Pedestrian LO	o la facilita con constituen di			3.0	EB	C	3.1	WB	С	3.4	NB	C	2.3	SB	В

MESIME WHITE		ncs	/ 315	ıalize	u me	rsect		#SUIL	5 Juli	IIIIG. y	NO COLOR	W. 22.50	1956	Water S	15.54
General Inform	ntion			100	200	No.		lin	tersect	on Info	rmatio	n.	1	ا مادياد ا	A I
	ation	Solaegui Engineers			_		_	_	uration,	_	0.25				
Agency		MSH	-	Analysi	e Date	Sep 18	2017	-	rea Type		Other		4		
Analyst		The state of the s		Time P	_		ak Hour		HF		0.95			4.	_
Jurisdiction		City of Sparks		Analysi		2035 B			nalysis l	Period	1> 7:0	20			
Urban Street		Dunamid/Charks ND	Dama	File Na		NB35a		1/1	lalysis	CHOG	1		-	K K .#	
Intersection Project Descrip	tion	Pyramid/Sparks NB	Kamp	rile Na	ine	Ирора	x.xus				-	_	-	4144	11
Project Descrip	uon	C NICHTON	NEW TAN		11.00	Charles and Charles	Elen-	16 8650	1000		DI HE	34.56	200	100	3,310
Demand Inform	nation	4,000,000			EB			WB			NB			SB	
Approach Move	ement			L	Т	R	L	T	R	L	T	R	L	Т	R
Demand (v), v	eh/h		The same of the sa	100	800	-		400	300	100	The same of	100		CONTRACT OF THE PARTY OF THE PA	NO. THOU
			15/10	STATE OF	1200	<b>CONTR</b>	A STATE OF	BERNA		1	THE REAL PROPERTY.	THE REAL PROPERTY.	House	THE REAL PROPERTY.	SPHERE'S
Signal Informa		Reference Phase	2	1	3	- 8	=					1			
Cycle, s	80.0		_			7	191	9				1	16.0	1	
Offset, s	0	Reference Point	End	Green	15.0	30.0	20.0	0.0	0.0	0.0	-		_		
Uncoordinated	No	Simult. Gap E/W	On On	Yellow Red	1.0	1.0	1.0	0.0	0.0	0.0				7	Y
Force Mode	Fixed	Simult. Gap N/S	Oil	Tived .	11.0	OSSESSED OF	NAME OF THE PERSON NAME OF THE P	THE STATE OF	AND STREET		77.77	6100	ALIVE OF		FFEE
Timer Results		The second second	SECTION.	EBL		EBT	WBL		WBT	NBL		NBT	SBL		SBT
Assigned Phas	e			5		2			6			8			
Case Number				2.0		4.0			7.3			9.0			
Phase Duration	), S			20.0		55.0			35.0			25.0			-
Change Period	_	c), s		5.0		5.0			5.0			5.0			
Max Allow Hea	Action to the last of the last			3.1		0.0			0.0			3.2			
Queue Clearan	-			4.0								6.3			
Green Extension		and the same of th		0.1		0.0			0.0			0.4			
Phase Call Pro		(8-71-		1.00								1.00			
Max Out Proba	-			0.00								0.00			
11-5 21			3893	17 20 - 10	1 1 13		133	1	370.00	EME	200	The same	5000		151
Movement Gro		sults			EB			WB			NB	-		SB	1 5
Approach Move				L	Т	R	L	T	R	L	T	R	L	Т	R
Assigned Move				5	2			6	16	3		18			-
Adjusted Flow	Rate (v	/), veh/h		105	842			421	316	105	-	105			-
		ow Rate (s), veh/h/	'In	1730	1781			1781	1585	1730		1585	-	-	+
Queue Service	Company of the last	AT THE RESERVE OF THE		2.0	9.3		-	6.7	12.4	1.9	-	4.3	-		+-
		be Time $(g_c)$ , s		2.0	9.3			6.7	12.4	1.9	-	4.3	-	-	+
Green Ratio (g	Acres (Contractor)		-	0.19	0.62	-	-	0.38	0.38	0.25		0.25			-
Capacity (c),				649	2226			1335	594	865	_	396	-		-
Volume-to-Cap	-	AND DESCRIPTION OF THE PARTY OF		0.162	0.378	-	-	0.315	0.531	0.122		0.266	-	-	-
		t/In (95 th percentile	-	37.2	138.5	-	-	122.9	213.3	33.7 1.3		70.4	-		-
		eh/in (95 th percent		1.5	5,5	-		4.8 0.00	0.00	0.00		0.00	-		-
Name and Address of the Owner, where the Owner, where		(RQ) (95 th percen	ine)	0.00	7.4			17.7	19.5	23.2		24.1	-		-
Uniform Delay Incremental De	-			0.0	0.5		-	0.6	3,4	0.0		0.1			1
Initial Queue D				0.0	0.0	-		0.0	0.0	0.0		0.0			1
Control Delay				27.3	7.9			18.3	22.9	23.2		24.2			
Level of Service	-			С	A	TET		В	С	С		С			
Approach Dela				10.0		В	20.3	3	С	23.7	7	С	0.0		
Intersection De		***************************************					5.5						В		
				0.14	FIRST	11/1/18	100	OTHER DESIGNATION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLU	A COLUMN	DIE!	SECTION 2	48663	1 60	W. 6	
Multimodal Ro				-	EB			WB	_	-	NB	_		SB	
Pedestrian LO	S Score	os Os		1,9		B A	2.4	-	B A	2,9	-,	C F	3.0	-	С

		HCS	7 Sis	alize	d Inte	ersect	ion Re	esult	s Sur	ımı. y			estantes v	BUANA	en en en en
Charles Care	12 30		5007	September 1	(B) 1/2	TEN S	A STATE	1	7-2 0		BELD.	WILL TO	13.14	1244	1
General Inform	411.5							-	tersecti	_	4	n			
Agency		Solaegui Engineers						-	uration,	-	0.25		-		51265
Analyst	0	MSH		Analysi	s Date	Sep 18	, 2017	-	rea Type	)	Other		수 그 그 - - -		
Jurisdiction		City of Sparks		Time P	eriod	PM Pe	ak Hour	PI	HF		0.95				
Urban Street				Analysi	is Year	2035 B	Base	A	nalysis F	Period	1> 7:0	00	1		123
Intersection		Pyramid/Sparks NB	Ramp	File Na	me	NB35p	x.xus							<u> ጎ</u> ጎ ሰ	
Project Descrip	lion								-	water a final		al Paris	1	4144	11.0
	SEAM	All Control of the		11113	EB		15 100	WB	1 . 10 . (2)	SEPTIME.	NB		of Etc.	SB	C COLL
Demand Inform				-		I n		T	R	L	T	R	1	Т	R
Approach Move				L	T	R	-	-	600	150	-	200	-	-	13
Demand (v), v	eh/h	I AR SARE THAT		200	650	NAME OF TAXABLE PARTY.	Source	500	500	150	CONTRACT OF THE PARTY OF THE PA	200	HIVE 934	MANUAL STREET	
Signal Informa	tion	The same of the sa	NAME OF TAXABLE PARTY.	National States	CONTRACTOR OF THE PARTY OF THE	R	1	T	The same						127
Cycle, s	80.0	Reference Phase	2	1	1	-	1 37	3	4				<b>→</b>		
Offset, s	0	Reference Point	End	Green	15.0	30.0	20.0	0.0	0.0	0.0	-		PK.		
Uncoordinated	No	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0	0.0	0.0		7 1	_		N
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0		1		1	
1 27 3			WE ST		man.	J. P. L.	100	July 1	500,20		1	000	C. Tare		COT.
<b>Timer Results</b>				EBL		EBT	WBL		WBT	NBI	-	NBT	SBL	-	SBT
Assigned Phas	е			5		2		1	6		_	8		-	_
Case Number				2.0		4.0	1500	-	7.3			9.0		_	
Phase Duration	1, S			20.0		55.0		_	35.0			25.0			
Change Period	(Y+R	c), S		5.0		5.0			5.0			5.0			
Max Allow Hea	dway (	MAH), s		3.1		0.0			0.0			3.3			
Queue Clearan	ce Time	e (gs), s		6.2								11.2			
Green Extension	n Time	(ge), s		0.3		0.0			0.0			0.6			
Phase Call Pro	bability			1.00	)							1.00			
Max Out Proba	bility			0.00				-	COLUMN TO SERVICE	ACTION IN	-	0.02	-		990 OR
	Barre Barre	aulto	4000		EB	20.35		WB	divise)	i Secial	NB	Male	Table 1	SB	SOUTH
Movement Gro		suits		L	T	R	L	Т	R	L	Т	R	L	Т	R
Approach Move			_	5	2			6	16	3	-	18			
Assigned Move		N make the		211	684	-	-	526	500	158	-	211			1-
Adjusted Flow		A CONTRACTOR OF THE PARTY OF TH	/les	1730	1781	-		1781	1585	1730	-	1585	-		-
The second secon		ow Rate (s), veh/h/	0113	4.2	7.1	-	-	8.7	23.0	2.9		9.2			1
Queue Service			_	4.2	7.1			8.7	23.0	2.9		9.2			1
		ce Time (gc), s		0.19	0.62	-	-	0.38	0.38	0.25		0.25			
Green Ratio (				649	2226	-	-	1335	594	865	-	396	-		1
Capacity (c).		-M- / WY		0.325	0.307			0.394		0.183		0.531			-
Volume-to-Cap		Comment of the Commen		76.9	105.9			159.5	388.6	51.4		153.8	-		1
THE RESIDENCE OF THE PARTY OF T		I/In (95 th percentile	**	-	4.2	-		6.3	15.3	2.0		6.1	-		1
	-	eh/ln (95 th percen		3.0	0.00	-	-	0.00	0.00	0.00	-	0.00		-	-
	_	(RQ) (95 th percer	ine)	0.00	7.0	-	-	18.3	22.8	23.6		25,9		1	1
Uniform Delay Incremental De				0.1	0.4	-	-	0.9	13.5	0.0		0.7			
Initial Queue D	-			0.0	0.0	1	-	0.0	0.0	0.0		0.0			
		and the same of th	_	28.2	7.3	1		19.2	36.3	23.6		26.7			
Control Delay Level of Service			-	C C	A	1	-	B	D	C		C			1
Approach Dela		The second secon		12.		В	27.5		C	25.	4 1	C	0.0		
Intersection De				12.0		-	1.2						С		
anoración De	1000	OSIONA VINCENSI	The same	100	- 18	17/10	Palls II	H	PERM	18:70	15/3	10 10	1	1	1-13
Multimodal R	esults				EB			WB			NB			SB	
Pedestrian LO		LOS		1.9	)	В	2.4		В	3.0	)	Č	3.0		C
Bicycle LOS S	-			1.2	2	Α	1.3		Α	1		F			

		HCS	7 Sis.	ıalize	d Inte	ersect	tion Re	esult	s Sun	ım <sub>եւ</sub> y			esone o	an account	investor type
To a state of the state of	The state of				12:3			SEL.	1000	Hang	7.70	10000	MINE OF	TOTAL D	
General Inform	nation								tersect			n	1	4 4 .	
Agency		Solaegui Engineers		-					uration,		0.25		-		A STATE OF
Analyst		MSH		Analys	is Date	Sep 18	8, 2017	A	rea Type	3	Other			1550	•
Jurisdiction		City of Sparks		Time P	eriod	AM Pe	eak Hour	·   P	HF		0.95		2	- 4	
Urban Street				Analys	is Year	2035 Project		A	nalysis i	<sup>2</sup> eriod	1> 7:0	0	1.4	ነነሰ	
Intersection		Pyramid/Sparks NB	Ramp	File Na	me	NB35a	aw.xus						1	4147	11
Project Descrip	tion													-	mental sur
The state of the s			URY!		PAN	100		A.C. ST	h, 5.50	SAME.	AUD	The state of	1020/112	CD	1511
Demand Infor	and the second of the last				EB	1		WB	1 -	1	NB	-	-	SB	1 0
Approach Move				L	Т	R	L	T	R	L	Т	R	L	T	R
Demand (v),	/eh/h		in tanks	200	967	NAME OF TAXABLE PARTY.	100000000000000000000000000000000000000	458	300	204	1000000	100	THE COUNTY	TO SERVICE AND ADDRESS OF THE PARTY OF THE P	DOTATION.
Signal Informa	ation		644	110 61	CHINA	R	MICHEL STATE	MARKEN	ADMINISTRA	1		S. E. S. C.	ALCOHOL:	Manager	and the second
the state of the s	_	Reference Phase	2		-3	- 4	7	1	1					- 1	
Cycle, s	0,08	Reference Point	End			1	11	1				1	2	3	
Offset, s	-	Simult. Gap E/W	On	Green		30.0	20.0	0.0	0.0	0.0			_		100
Uncoordinated	No	The second secon	-	Yellow Red	1.0	1.0	1.0	0.0	0.0	0.0		5		.9.	Y
Force Mode	Fixed	Simult, Gap N/S	On	Keu	11.0 Mysalii	MANAGE	TANK THE	10.0	10.0	10.0	ENVIO	GATING	Vinta A	7/2 0	ALTERNATION OF THE PARTY OF THE
Timer Results			off.	EBL	and the same of	EBT	WBL	1	WBT	NBL		NBT	SBL		SBT
Assigned Phas				5		2			6			8			
Case Number				2.0		4.0	1		7.3			9.0			
Phase Duration	1 6		_	20.0		55.0		_	35.0		-	25.0			
Change Period		a) e	-	5.0	-	5.0	-		5.0			5.0			
Max Allow Hea	the second			3.1	-	0.0		_	0.0		-	3.2			
Queue Clearar				6.2		0.0	-		-		_	6.3			
Green Extensi			-	0.3		0.0			0.0			0.6			
Phase Call Pro	CONTRACTOR OF THE PARTY OF			1.00				-		-		1.00	-		
Max Out Proba				0.00								0.00			
EVALUE OF A	MANUEL	CONTROL OF THE PARTY OF THE PAR	0,000	TO SE	WHITE SAME	ELL'S	A STATE	THE STATE OF	AL THE	E SIVE	William C	Salestile	W 318	- VILLE	april 1
Movement Gr	oup Re	sults			EB	e German		WB			NB			SB	-
Approach Mov	ement			L	T	R	L	T	R	L	T.	R	L	Т	R
Assigned Mov	ement			5	2	7		6	16	3		18			1
Adjusted Flow	Rate (	/), veh/h		211	1018			482	316	215		105			
Adjusted Satu	ation Fl	low Rate (s), veh/h/	In	1730	1781			1781	1585	1730		1585			
Queue Service	Time (	g s), S		4.2	12.0			7.8	12.4	4.0		4.3			
Cycle Queue (	Clearand	ce Time (gc), s		4.2	12.0			7.8	12.4	4.0		4.3			
Green Ratio (	g/C)			0.19	0.62			0.38	0.38	0.25		0.25			
Capacity (c),	veh/h			649	2226			1335	594	865		396			
Volume-to-Cap	acity R	atio (X)		0.325	0.457			0.361	0.531	0.248		0.266			-
Back of Queue	(Q), f	t/In ( 95 th percentile	)	76.9	179.6			143.6	The second	71.2		70.4			100
Back of Queue	(Q), v	/eh/In ( 95 th percent	tile)	3.0	7.1			5.7	8.4	2.8		2.8			
Queue Storag	e Ratio	( RQ ) ( 95 th percen	itile)	0.00	0.00			0.00	0.00	0.00		0.00			-
Uniform Delay				28.1	7.9			18,1	19.5	24.0		24.1			-
Incremental D	elay ( d	2), s/veh		0.1	0.7			0.8	3.4	0.1		0.1			
Initial Queue D				0.0	0.0			0.0	0.0	0.0		0.0			-
Control Delay	(d), s/	veh		28.2	8.6			18.8	22.9	24.0		24.2			-
Level of Service	-			C	A			В	С	С		C			
Approach Dela		THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I		11.9	9	В	20.4	1	С	24.		С	0.0	1	
Intersection D	elay, s/v	reh / LOS	Section in the last	annan m		1	6.5	monaya.	NETHER BOOK	-	DESCRIPTION	STATE OF THE PARTY NAMED IN	В	27 - 5	TO P TOP
18 - VSCVII.	E TENE	Charles In the Control of the Contro	JAN ST	10150	ME (IN)		GELLIN.	VAID	11 /1 3	R. T.	NID	-	SEPTIME.	SB	- N. S. S.
Multimodal R	esults		-	1.9	EB	В	2.4	WB	В	2.9	NB	C	3.0	-	С
Pedestrian LC	00	1100													

CONTROL CONTRO		HCS	/ 31 <sub>5</sub> .	alize	a inte	ersect	ion Re	sun	S Juli	IIIIa. y	CONTRACT	ALC: UNK	10015	42. 1	0.000
A. H. A. A. C. F. A.	No. Call	<b>但有限的。例如</b> 是14	Division	1955	Section 1		12 50	September 1	tersecti	on Info	rmatio	2	CONTRACT.	الطعاداة	b V
General Inforn	nation							-			0.25	11	100	7.	90
Agency		Solaegui Engineers				10 40	0047	ALCOHOLD STUDIO	uration,	alkend or	-	-			
Analyst		MSH		Analys		Sep 18		-	rea Type HF	,	Other 0.95		==	1	-
Jurisdiction		City of Sparks		Time P	the same of	-	ak Hour		пг nalysis I	Pariod	1> 7:0	10	4		
Urban Street				Analys		Projec	t	A	naiysis i	Period	177.0	10	-	<u>ነነ</u> በ	
Intersection		Pyramid/Sparks NB	Ramp	File Na	me	NB35p	w.xus						- 30	4147	F.F
Project Descrip	tion	A STATE OF THE PARTY OF THE PAR	-		NAME OF THE OWNER, OWNE	nenomental in	-	summer:	SAN DESCRIPTION OF THE PERSON	NO MARKET	1000	-		CHARGO!	Name of Street
7 . 11	NAME OF STREET		J. S. II	-	EB	3.	1	WB	100	The same of	NB	The same of the sa	2500/2	SB	
Demand Infor			_	L	T	T R:	L	T	R	L	T	I R	L	T	R
Approach Move			_	259	748	I R	-	663	600	444	-	200	-	-	+
Demand (v), v	/en/n	No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other pa	E STATE	259	140	STE THE		003	000	Const	10000	-200	STATE OF THE PARTY.	1	NO.
Signal Informa	ation	200100000000000000000000000000000000000		NAME OF TAXABLE PARTY.	-	5	Name and Address of the Owner, where	T	and and a					1	
Cycle, s	80.0	Reference Phase	2	1	-3	-	1 50	1				1	+		
Offset, s	0	Reference Point	End	Green	15.0	30.0	20.0	0.0	0.0	0.0	-	1	Z .	3	
Uncoordinated	No	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0	0.0	0.0		7	-		K.
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0		5	. 6	7	T
	17-49	<b>是</b> 对1995年次日	1		W. W.	HEE	200		4		E SA	BA	1115	No.	E
Timer Results				EBL		EBT	WBL		WBT	NBL		NBT	SBL	-	SBT
Assigned Phas	e			5		2			6			8			
Case Number				2.0		4.0			7.3			9.0			
Phase Duration	n, s			20.0		55.0			35.0			25.0			
Change Period	i, (Y+R	c), S		5.0		5.0			5.0			5.0			
Max Allow Hea	idway (	MAH), s		3,1		0.0			0.0			3.2			
Queue Clearar	nce Time	e (g s), s		7.6								11.4			
Green Extensi	on Time	(g₀),s		0.4	_	0.0			0.0	-	_	1.2		-	
Phase Call Pro	bability			1.00								1.00		-	
Max Out Proba	ability			0.01		-		-	-	20000000		0.06	- 10 m	-	2500 B
Movement Gr	oun Po	culte	-#	AUTO CAN	EB	2000	2000000	WB	SHEET WA	BOATE W	NB		No. IVE	SB	NAME OF TAXABLE PARTY.
Approach Mov		suits		t	T	R	LI	T	I R	L	Т	R	L	Т	R
Assigned Mov			_	5	2	1.3		6	16	3		18			
Adjusted Flow		() veh/h		273	787	-		698	500	467		211			No.
		ow Rate (s), veh/h/	lin	1730	1781			1781	1585	1730		1585			
Queue Service	and delication in the last	A STATE OF THE PARTY OF THE PAR		5.6	8.5			12.2	23.0	9.4		9.2			
		ce Time (gc), s		5.6	8.5			12.2	23.0	9.4		9.2			
Green Ratio (		19 0		0.19	0.62			0.38	0.38	0.25		0.25			
Capacity (c),				649	2226			1335	594	865		396			
Volume-to-Cap	_	atio (X)		0.420	0.354			0.523	0.841	0.540		0.531			
		t/In (95 th percentile	)	101.8	126.7			218.2	388.6	169.5		153.8			
		eh/ln (95 th percent		4.0	5.0			8.6	15.3	6.7		6.1			
		( RQ ) ( 95 th percen		0.00	0.00			0.00	0.00	0.00		0.00			1_
Uniform Delay	(d1),	s/veh		28.7	7.2			19,4	22.8	26.0		25.9			-
Incremental D	elay ( d	2), s/veh		0.2	0.4			1.5	13.5	0.4		0.7			-
Initial Queue [	Delay ( c	/ з ), s/veh		0.0	0.0			0.0	0.0	0.0		0.0			
Control Delay	(d), s/	/eh		28.8	7.7			20.9	36,3	26.4		26.7			-
Level of Service	ce (LOS	)		C	A			C	D	С		C			
Approach Dela				13.	1	В	27.3		C	26.	5	С	0.0		
Intersection D	elay, s/v	AND SUPPLIES AND ADDRESS OF THE PARTY OF THE			The same of	2	2.0	SECONO	CHECKER		01775	No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other party of the Concession, Name of Street, or other pa	С		NAME OF TAXABLE PARTY.
No. 11			4(2,00	Mela Co	ED		September 1	MAD	545	1923	ND	-	State !	SB	Vistalia
Multimodal R			-	140	EB	D	24	WB	P	3.0	NB	С	3.0	-	С
Pedestrian LC	-	OS		1.9	_	B A	2.4		A	3,0	-	F	3.0	-	U

MODEL WANTE	elong promise	HCS	7 Sis.	ialize	d Inte	ersect	ion Re	esuit	s Sun	nmه، y	ZEROLUGA	CONTRACTOR OF THE PARTY OF THE	DEATH AND ADDRESS OF THE PARTY	001200150	
NOT THE DE	The state of					11115	and illi	SPENSE!	tersect	ion Info	ematio	2		اعلمله	i C
General Inforn	nation										-	п			
Agency		Solaegui Engineers		-		,		the same of the same	uration,		0.25		-		-12
Analyst		MSH		Analys	-	-			еа Турс	3	Other		=		<u>.                                    </u>
Jurisdiction		City of Sparks		Time P	-	-	ak Hour	and the second	HF		0.95				
Urban Street				Analys		Projec	t + Kiley		nalysis l	Period	1> 7:0	10		<u>ጎጎ</u> ሰ	
Intersection		Pyramid/Sparks NB	Ramp	File Na	me	NB35a	aww.xus						3	4144	E.F
Project Descrip	tion			Total State	est to the later	SCHOOL STATE	conservation to	Susenia	or mark transmitted	CONTRACTOR OF THE PARTY OF THE		ometrico de	- CONTRACTOR	200000	- CONSIDER
	The state of	AV	O WAY		<b>MARGINE</b>	-		E LUIS	100		AUD	-	50005	SB	
Demand Inform				-	EB	1	-	WB	1 0	1	NB	T D	1	T	R
Approach Move				L	T	R	L	T	R	L	-	R	L	1	15
Demand (v), v	/eh/h	THE PARTY OF THE P	ECHOLES IN	276	1007	No. of Lot	TATE CONTRACTOR	487	315	281	No. of Concession,	100	27/100	DENIES.	CONCRE
Signal Informa	tion			NAME OF TAXABLE	1155000	OF STREET	Name of Street	The same	STATE OF THE PARTY OF	SHOT WAS	SILVEN SI	E-STATE OF	HIDROGEN	SOLU-	and the same
Contract of the Contract of th	80.0	Reference Phase	2		-21	4	=	1	1					171	
Cycle, s Offset, s	0	Reference Point	End				11	1	- P- C	-		1	2	1	-
Uncoordinated		Simult, Gap E/W	On	Green		30.0	20.0	0.0	0.0	0.0	-	,			
	Fixed		On	Yellow Red	1.0	1.0	1.0	0.0	0.0	0.0				7	7
Force Mode	rixed	Simult. Gap N/S	OII	Mana	WE DOE	27700	\$100 S	ASSET	WEEK!	W SEL	(185) G	11911	13777	1000	NV T
Timer Results	and the	SCHOOL STATE	Allen Sa	EBL	-	EBT	WBL		WBT	NBL		NBT	SBI		SBT
Assigned Phas	-		-	5		2			6			8			
Case Number				2.0		4.0			7.3			9.0			
Phase Duration	n s			20.0		55.0			35.0			25.0			
Change Period	-	c) s	_	5.0		5.0		-	5.0			5.0			
Max Allow Hea	And in case of the last of the		-	3.1	-	0.0	-	-	0.0			3.2			
Queue Clearar				8.0		0.0						7.6			
Green Extensi	77 6 77	market the second		0.4		0.0			0.0			0.8			
Phase Call Pro				1.00	-							1.00	-		
Max Out Proba				0.02	-							0.00			
Wax Out 1 1000	SERENCES OF	The base of the later	September 1	Will state of	Ma day	WO DA	Application of the last of the	STATE OF	SIRCE ST	24: W-	13/10	OF VICE	100	Sant's	A PARTY
Movement Gr	oup Re	sults			EB			WB			NB			SB	
Approach Mov	ement			L	Т	R	L	Т	R	L	T	R	L	T	R
Assigned Move	-			5	2			6	16	3		18			
Adjusted Flow	Rate (	/), veh/h		291	1060			513	332	296		105			
		ow Rate (s), veh/h/	In	1730	1781	100		1781	1585	1730		1585			
Queue Service	-			6,0	12.7			8.4	13.2	5.6		4.3	-9		
		ce Time (gc), s		6.0	12.7			8.4	13.2	5.6		4.3			
Green Ratio (	g/C)			0.19	0.62			0,38	0.38	0.25		0.25			
Capacity (c),	-			649	2226			1335	594	865		396			
Volume-to-Car		atio (X)		0.448	0.476			0.384	0.558	0.342		0.266			
		t/In (95 th percentile	)	109	190.1			154.6	224.7	100.6		70.4			
		eh/ln ( 95 th percent		4.3	7.5			6.1	8.8	4.0		2.8			
		(RQ) (95 th percen		0.00	0.00			0.00	0.00	0.00		0.00			
Uniform Delay		the second second second second second second		28.8	8.0		1	18.3	19.8	24.6		24.1			
Incremental D				0.2	0.7			0.8	3.7	0.1		0.1			
Initial Queue D	Delay ( d	<i>t</i> ₃), s/veh		0.0	0.0			0.0	0.0	0.0		0,0			
Control Delay	(d), s/v	/eh		29.0	8.7			19.1	23.5	24.7		24.2			
Level of Service	ce (LOS	)		С	Α			В	С	С		C			1
Approach Dela	ay, s/veł	1/LOS		13.	1	В	20.8	3	С	24.6	3	C	0.0		
Intersection D	elay, s/v	eh / LOS				1	7.4				-	CONTRACTOR OF THE PARTY OF	В	200 0200	THE REAL PROPERTY.
Wat day		Marie Company	100		5115	Train 1	THE REAL PROPERTY.	260	350.73	and a		200	Albania.	WE KILL	Mala.
Multimodal R				-	EB	-	2.4	WB	В	2.9	NB	С		SB	-
Pedestrian LO				1.9		В							3.0	1	C

Marie I and India	manus mo	HCS	7 Sາ <sub>ວ</sub> ຸ	alize	d Inte	rsect	tion Re	esult	s Sun	nmد. y	erestative e		A SECURITY OF	NAME AND ADDRESS OF THE PARTY O	and the same of
	医阴道		100	16 15 15 17	STATE OF	17 ,	1	In la	tersect	ion Info	rmatio	n	AND DESCRIPTION OF THE PERSON	4 2.4-1	P. P.
General Inform	nation	12						-	-		-		1		
Agency		Solaegui Engineers				la	0.0047		uration,		0.25	-	- E		
Analyst		MSH				-	8, 2017		rea Type		Other				<u>_</u>
Jurisdiction		City of Sparks		Time P	-	-	eak Hour		HF	2 - 1 - 1	0.95	10			
Urban Street				Analys		Projec	Base + t + Kiley		nalysis l	Period	1> 7:0	00	-	<u>ጎጎ</u> ሰ	
Intersection		Pyramid/Sparks NB	Ramp	File Na	me	NB35	sux.wwq						1	4144	100
Project Descrip	tion										ominata	_	_	name and	- Augusta
The Man	men par			Tegatil.	17 (6)	VOLG.		15.00	To live the	10	ALC:	A F		OD	
Demand Inform					EB	-		WB	-	-	NB	1 5		SB	1 5
Approach Move				L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), v	eh/h		CONTRACTOR OF THE PARTY OF THE	383	789	-		693	615	568	Town State of the last of the	200		-	-
Signal Informa	ation	CONTRACTOR OF	220	HILL	ASI, W.		STATE			ME COM		III III III III III III III III III II		-	
Cycle, s	80.0	Reference Phase	2	1	-71	-	٦.,		1		+		<b>→</b>		
Offset, s	0	Reference Point	End		4	1000	1000	0.0	0.0	0.0	-	.1	- 3	3	-
Uncoordinated	-	Simult. Gap E/W	On	Green Yellow		4.0	20.0	0.0	0.0	0.0		7	-		K
Force Mode	Fixed		On	Red	1.0	1.0	1.0	10.0	0.0	0.0		3	9	7	1
TOTOG WIOOS	II IXCO	Tennan Sup (mo	NAME OF THE OWNER, OF THE OWNER,		No.	Tion's	193151	1300	4.83	53.5	THE PARTY NAMED IN	KANT O	70.70	3 5	300
Timer Results				EBL		EBT	WBL		WBT	NBL		NBT	SBI		SBT
Assigned Phas				5		2			6			8			
Case Number				2.0		4.0			7.3			9.0			
Phase Duration	1. S			20.0		55.0			35.0			25.0			
Change Period		c). s		5.0		5.0			5.0			5.0			
Max Allow Hea				3.1		0.0			0.0		TIE	3.2			
Queue Clearar	-			10.6			1					14.5			
Green Extension				0.5		0.0			0.0			1.2			
Phase Call Pro				1.00								1.00			
Max Out Proba	-			0.36								0.37			
William Berger	1		1999	250		55550	100	STATE OF THE PERSON.		100	ALC: U		108,20	D.D.	Jary)
Movement Gr	-	sults			EB			WB			NB	1 5	-	SB	To
Approach Mov				L	T	R	L	T	R	L	T	R	L	T	R
Assigned Move	ement			5	2			6	16	3		18	-		-
Adjusted Flow	_	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.		403	831			729	516	598		211			-
		ow Rate (s), veh/h/	In	1730	1781			1781	1585	1730		1585	-	-	-
Queue Service				8.6	9.1		-	12.9	24.1	12.5		9.2		-	+
		ce Time (gc), s		8.6	9.1			12.9	24.1	12.5	-	9.2	-		-
Green Ratio (				0.19	0.62			0.38	0.38	0.25		0.25	-	-	-
Capacity (c),	ACCRECATE VALUE OF THE PARTY.			649	2226	-		1335	_	865		396	-		-
Volume-to-Cap	The second second			0.622	0.373			0.546	-	0.691		0.531			+
		t/In ( 95 th percentile		161.3	136			228.2	-	224.6		153.8	-	-	+
		eh/ln (95 th percent		6.4	5.4			9.0	16,2	8.8		6.1			-
Name and Address of the Owner, when the Owner, which the	And in case of the last of the	( RQ ) ( 95 th percen	tile)	0.00	0.00			0.00	0.00	0.00		0.00	-	-	-
Uniform Delay				29.9	7.3			19.7	23.2	27.2		25.9		-	-
Incremental De	-			1.4	0,5			1.6	15.7	2.0	-	0.7	-	-	-
Initial Queue D				0.0	0.0		-	0.0	0.0	0.0		0.0	-	-	-
Control Delay				31.3	7.8	-	-	21.3	38.9	29.2		26.7	-	-	+
Level of Service				C	A	-	100	C	D	C		C	- 0.7		
Approach Dela				15.	5	В	28.6		С	28.5	)	C	0.0	1	
Intersection De	elay, s/v	eh / LOS	THE WEST	TO STATE	000.000	2	3.6		100	1000000	No.	NINGS OF	C	Marie To	Percu
Multimedal	nouth-	The state of the	100	1200	EB		THE STATE OF	WB	21213	TAPE	NB	20010	ASSESS OF	SB	
Multimodal R Pedestrian LO		/108	_	4:0	- 1	В	2.4		В	3.0	_	С	3.0	-	C
	U UUUI E	1 100		1.9		В			В	0.0		F	0.1		

SOUTH WATER AND STREET	VIN'S	SELECTION OF THE PARTY OF THE P	Contraction of	2000	10 S 10 S	rsect	F-53-74	VEC/87	HOLDING.	245	0.00	10000	3-9-13		250	NA TE
Charles and Inform	Miles.	A CALCULATION	11 654	21	18 July 2	1-1-1	See all	11	ntors	ection	n Info	rmatio	1	1 1.	1 -1 -1 - 1	is to
General Inform	lation	Calanaud Engineers		_	_			-	Durati		Time	0.25			بايال	
Agency		Solaegui Engineers		Amalua	n Data	Sep 18	2017		Area 1			Other		1		
Analyst		MSH		-	is Date		ak Hou	100	PHF	ype	-	0.95		- 7	de	377 E
Jurisdiction		City of Sparks		Time P				-	-	de De	ried	1> 7:0	0	- 3-88	4.4	
Urban Street						2035 E		11	Analy	sis Pe	rioa.	1 > 7.0	0			DE E
Intersection		Pyramid/Sparks SB	Ramp	File Na	ime	SB35a	x.xus		to a married	A TANK	-				144	
Project Descrip	tion	THE RESERVE OF THE PERSON	CHI.	VIDEORO	NO FINANCE	MACHINE	THEORY IS	STATE OF THE PARTY.	COCKET S	UNDUGE	127	INCOMENTS.	ROWERS		W2 (54)	E STATE OF
Demand Inform	nation		MERCE	SEPHEN.	EB	No.	The same	WE	3	00000		NB	Carteton	THE WAY IN	SB	800000
Approach Move				L	T	R	L	T		R	L	T	R	L	T	R
Demand (v), v					300	100	250	250	)					600		100
Demand ( V ), V	Lane of	13 Dec 10 20 30	100	MIN NO.		NAME OF	BU FIELD	1000	BUSIN		SAVA	17 THE		1 Km5/2	County	07.5
Signal Informa	tion					1	125									1
Cycle, s	80.0	Reference Phase	2		5	<b>→</b> *			- }			1	-	<b>.</b>		KX
Offset, s	0	Reference Point	End	Green	150	30.0	20.0	0.0	10	.0	0.0	-		3 4	-	
Uncoordinated	No	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0		.0	0.0			-		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	11.0	10.0		.0	0.0		5	4	4	
Electric Control	BER	THE THE RES	0505	227/16	MEN	7/514	1141					136	111	10.00		(18)
Timer Results				EBL		EBT	WBI	L	WBT		NBL		NBT	SBL		SBT
Assigned Phas	e					2	1		6							4
Case Number						7.3	2.0		4.0							9.0
Phase Duration	1. 5					35.0	20.0	)	55.0							25.0
Change Period	The second second	c), s				5.0	5.0		5.0							5.0
Max Allow Hea						0.0	3.1		0.0							3.2
Queue Clearan							7.4	Tal La								15.4
Green Extension				-		0.0	0.4		0.0		-					1.0
Phase Call Pro			-				1.00						***			1.00
Max Out Proba							0.01	-		$\neg$						0.50
Wax Gut 1 1000	District of	Was a galactic	Page Min	DESCRIPTION OF	EDC 03	C. STATE	STORY.	(5-5W)	2000	17000	19	E LOL	11年	EU-800	THE .	1000
Movement Gre	oup Res	sults			EB			WB				NB			SB	
Approach Move	ement			L	T	R	L	T	F		L	Т	R	L	T	R
Assigned Move	ement				2	12	1	6						7		14
Adjusted Flow		/), veh/h			316	105	263	263						632		105
Adjusted Satur	ation Fl	ow Rate (s), veh/h/	In		1781	1585	1730	1781						1730		1585
Queue Service					4.9	3.6	5.4	2.4	1					13.4		4.3
		ce Time (gc), s	*111	Ī	4.9	3.6	5.4	2.4						13.4		4.3
Green Ratio (	_				0.38	0.38	0.19	0.62						0.25		0.25
Capacity (c),	Control of the local division in which the local division in the l				1335	594	649	2226	3					865		396
Volume-to-Cap		atio (X)			0.236	0.177	0.406	0.118	В					0.730		0.266
		t/In (95 th percentile	)		88.8	60.4	97.9	35.5	5					239.5		70.4
		reh/ln (95 th percent	_		3,5	2.4	3.9	1.4						9.4		2.8
		(RQ) (95 th percen	-		0.00	0.00	0.00	0.00						0.00		0.00
Uniform Delay		STATE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.			17.1	16.7	28.6	6.1	_					27.5		24.1
Incremental De				-	0.4	0.7	0.2	0.1	_					2.8		0.1
Initial Queue D		the same of the sa			0.0	0.0	0.0	0.0						0,0		0.0
Control Delay	-				17.6	17.4	28.7	6.2						30.3		24.2
Level of Service					В	В	C	A	1					C		C
Approach Dela				17.5	-	В	17.	-	В		0.0			29.4		C
Intersection De							2.7							С		300
50	SINGS.	Market States	TUNK	7-10	19-513	TW-16		100	11.500	S.V.	1.00	15	CO.	2 3.4	ALC: U	西州上
Multimodal Re	esults	A STATE OF THE PARTY OF THE PAR			EB			WB	3			NB			SB	
Pedestrian LO		LOS		2.4		В	1.9		В		3.0		С	2,9		С
Bicycle LOS S	core / L	os		0.8		Α	0.9		Α	1						F

General Inform	31 1 3 1 F 1 F 1		- 1	-				250 110	11 -11/6	NA SERVE	1 10	1	The second	E 300	10-15
		Salard Salardian	2000	11/16	Hack		D. File	Strong S	ntersect	ion Info	rmatio	2	1	l electe li	A Is
		0.1			-			-		_	0.25	-		jiti	
Agency	-	Solaegui Engineers				In			Duration,		-				
Analyst		MSH		-	_	Sep 18		-	Area Typ	9	Other			1.	:
Jurisdiction		City of Sparks		Time P		-	ak Hou		PHF		0.95				:
Urban Street				-		2035 E	-	- 1	Analysis	Period	1> 7:0	0	- 5		3/1
Intersection		Pyramid/Sparks SB	Ramp	File Na	me	SB35p	x.xus								
Project Descripti	ion		earman to	NAME OF TAXABLE PARTY.			Committee	Manual I	ATTICKED IN	annineo	American	SHARW	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	4147	P.C.
Demand Inform	ation		100		EB	The same	The same	WE	3	The same of	NB	SHELL	- Contraction	SB	
- Saltenia in the Salte	10.10	-		L	T	R	L	T	R	L	T	R		T	R
Approach Move	-		-		350	100	300	350		-	-	-	500		110
Demand (v), ve	en/n	STORAGE STREET	Name of	Service .	330	100	300	330	Division of the last	amma	ORIGINA	150,00	900	1630	ACCES.
Signal Informat	tion	POR STERNING STREET, CO.	30.110		- AMERICAN STREET		126	T	1	7					人
Cycle, s	70.0	Reference Phase	2	1	8	- T	7				×		↔ .		KX
Offset, s	Ö	Reference Point	End	Grand	4E A	20.0	20.0	0.0	0.0	0.0	-	-14	3 /	3	-
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow	4.0	20.0	4.0	0.0		0.0			4		
	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	10.0		0.0			- 6	*	1
A CONTRACTOR OF THE PARTY OF TH	O COLUMN				75	6763		475	45 400		3.003	= 11		123	-
Timer Results	and the same of			EBL		EBT	WBI		WBT	NBL		NBT	SBL		SBT
Assigned Phase						2	1		6						4
Case Number						7.3	2.0		4.0						9.0
Phase Duration,	S				-	25.0	20.0		45.0	7					25.0
Change Period,		c). S			_	5.0	5.0		5.0						5.0
Max Allow Head					-	0.0	3.1		0.0						3.2
Queue Clearand			-			-	7.5	3							11.0
Green Extension						0.0	0.5	_	0.0						1.2
Phase Call Prob		(90)10				-	1.00	_			TOTAL		1		1.00
Max Out Probab	-			-			0.02	-							0.04
Wax Out Flobat	and the same of the same of	Wast Wast		SERVICES.	SCHOOL SECTION	CONT.		142/0	STATE OF	1000		13/1 2	Sec. 15.	PER S	1
Movement Gro	up Res	sults			EB			WB			NB			SB	
Approach Move	_			L	Т	R	L	T	R	L	T	R	L	Т	R
Assigned Move					2	12	1	6					7		14
Adjusted Flow F		), veh/h			368	105	316	368					526		116
		ow Rate (s), veh/h/	'In		1781	1585	1730	1781					1730		158
Queue Service					5.8	3.6	5.5	3.5					9.0		3.9
Cycle Queue Cl					5.8	3.6	5.5	3.5					9.0		3.9
Green Ratio ( g		2 1012 10 2/1°			0.29	0.29	0.21	0.57					0.29		0.29
Capacity (c), v					1017	453	741	2035	-				988		453
Volume-to-Capa		atio (X)			0.362	100000000		0.18	-				0.533		0.25
	-	/In (95 th percentile	1		107.5	62.4	97.3	51.4					154.6		62.
		eh/ln ( 95 th percent			4.2	2.5	3.8	2.0	_	-			6.1		2.4
Annual State of the last of th		RQ) (95 th percen	-	-	0.00	0.00	0.00	0.00	_	-			0.00		0.0
Uniform Delay (			idio)	-	19.9	19.1	23.8	7.2	_				21.1		19.3
	-		-	-	1.0	1.2	0.1	0.2					0.3		0.1
Incremental De	THE RESERVE OF THE PERSON NAMED IN			-	0.0	0.0	0.0	0.0		-	-		0.0		0.0
Initial Queue De			_		20.9	20.3	23.9	7.4		-			21.4		19.4
Control Delay (				-	20.9 C	C C	C C	A	1	-			C		В
11	_			20.6	-	C		-	В	0.0	-		21.0		C
Level of Service	y, siven		-	20.8	,		15.0		U	0.0		-	B		
Approach Delay	lair - t	ah / I OC		10		- 11	8.7						14		
	lay, s/ve	eh / LOS	8.0	STATE OF THE PARTY.	VO.	17 9 5 5	PAST A	337/2013			5000	10000	12 1 1 1 1 1 1		24
Approach Delay Intersection De	Tolk!	eh / LOS	37,900		ED	ALTE	100	WE			NB	100.4		SB	13 100
Approach Delay	sults		37, 90	2.4	EB	В	1.9	WE	В	3.0	NB	C	2.9	SB	С

ALCOHOL: THE	State of	AND THE STATE OF T	THE REAL PROPERTY.	400 HARRY	PAGE SAN	Part His	ORD CO	PRO	BUNK B	nm	12	1516	Security .	1000	AND S
General Inform	ation	A CONTRACTOR OF THE PARTY OF TH	The state of	NE CONTRACT	-	of the same	DOM: N	1	ntersec	tion Info	ormatio	n		JUL	1-1-
	BUOII	Solaegui Engineers		-	-			-	Ouration		0.25	-		بايال	
Agency	_	The Print of the Paris of the P		Analys	ia Data	Sep 18	2017		rea Typ	No.	Other	-	- 1		
Analyst	-	MSH		-		-	A STATE OF THE PARTY.	-	HF	G	0.95			1	
Jurisdiction		City of Sparks		Time P			ak Hou			0		^	-8-		
Urban Street						2035 E Projec	t		Analysis	Period	1> 7:0	U	-		
Intersection		Pyramid/Sparks SB	Ramp	File Na	me	SB35a	w.xus						100	1144	1.0
Project Descript	ion								-		-		1		-
			Man I	100	CHAPTE.	63,140	100	DREE!		100	No. of the	17111 54		SWI	
Demand Inform	nation				EB		-	WB		1	NB			SB	-
Approach Move	ment			L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), v	eh/h				567	401	250	412				-	600		135
5.60.00		BE LINE AND				able to		2016			W DA	13/25		1000	The state of
Signal Informa	tion			1	-	4	18 21				1	_			_
Cycle, s	80.0	Reference Phase	2	1	15	₹							♥,	. ,	
Offset, s	0	Reference Point	End	Green	15.0	30.0	20.0	0.0	0.0	0.0				777	
Uncoordinated	No	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0	0.0	0.0			4		
Force Mode	Fixed	Simult. Gap N/S	On	Red	11.0	1.0	1.0	0.0	10.0	0.0		3	6	7	- 1
A Maria	COLUMN TO A STATE OF THE PARTY		1	1197	15/1 /10	Marine S	-13	173	17-16	and the		100	4000		N. A.
Timer Results	Consult of			EBL		EBT	WBI	L	WBT	NBI	_   1	NBT	SBL		SBT
Assigned Phase	9					2	1		6					IX.	4
Case Number						7.3	2.0		4.0						9.0
Phase Duration	S					35.0	20.0		55.0						25.0
Change Period	_	2.1 c	_	1	_	5.0	5.0	-	5.0		-		1	-	5.0
THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I		The state of the s			_	0.0	3.1		0.0				-	1	3.2
Max Allow Head						0,0			0.0		_		-	-	15.4
Queue Clearan			_		-	0.0	7.4		0.0	-		_	-	+	1.0
Green Extensio				-	-	0.0	0.4	-	0.0	-		_	-	-	-
Phase Call Prol	-						1.00			-	_	_	-	_	1.00
Max Out Proba	bility	MANUFACTURE PROPERTY OF THE	Total Control		-	-	0.01	CHES HOLD	165-165-176	STATE OF THE PARTY OF	-	SCHILD!	-	NAME OF TAXABLE PARTY.	0.52
HOSIN SEEDING		Personal designation of the last of the la		EN SE	-	100	1	MAID	137 13.	No.	NB	-	Parales in	SB	
Movement Gro		suits		1	EB	l m		WB	In	-	T	R	1. 1	Т	R
Approach Move				L	T	R	L	T	R	L	1	- N	L		14
Assigned Move				-	2	12	1	6	-		-	-	7	-	-
Adjusted Flow I			-1-1-	_	597	422	263	434					632		142
Commence of the last and a females of	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IN COLUMN TO THE PERSON NAMED IN COLUM	low Rate ( s ), veh/h/	ln		1781	1585	1730	1781					1730		1585
Queue Service					10.1	18.1	5.4	4.2					13.4		5.9
Cycle Queue C	learan	ce Time ( $g_c$ ), s			10.1	18.1	5.4	4.2					13.4		5.9
Green Ratio (g	(C)				0.38	0.38	0.19	0.62					0.25		0.25
Capacity (c), v	reh/h				1335	594	649	2226					865		396
Volume-to-Cap	acity R	atio (X)			0.447	0.710	0.406	0.195					0.730		0.35
	-	ft/In (95 th percentile	)		185.8	299.7	97.9	61.7					239.5		97.8
And the second second	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	veh/ln ( 95 th percent			7.3	11.8	3.9	2.4					9.4		3.8
Design the Control of		(RQ) (95 th percen			0.00	0.00	0.00	0.00				V	0.00		0.00
Uniform Delay	_				18.8	21.3	28.6	6.4					27.5		24.7
Incremental De	-		_		1.1	7.0	0.2	0.2		100		V.	2.8	-	0.2
Initial Queue D					0.0	0.0	0.0	0.0					0.0		0.0
Control Delay (				1	19.9	28,3	28.7	6.6			1		30.3	-	24.9
Level of Service	Acres de la companya del la companya de la companya	A substitute of the commence o	_	-	B	C	C	A	+	-			C		C
				22	-	-	15.0	-	В	0.0		-	29.3		C
Approach Dela		the state of the s		23.4	,	C	10,000	ų	D	0.0			-		-
Intersection De	iay, s/v	en / LOS	10 THE	MATERIA DE	DEFENSE	2.	2.9	CONTRACTOR OF	1972	GEORGE STATE	September 1	UES S	C		157980
Multimodal Re	and a	national district	N. S.	NAME OF TAXABLE PARTY.	CD	N. T.	THE STATE	WB	3026	7	NB	Ne .	Y	SB	12 200
	suits			-	EB			-					-	98	C
Pedestrian LOS		- (1.00		2.4		В	1.9	1	В	3.0	1	C	2.9		

		HCS	7 Sısı	ıalize	d Inte	rsect	ion R	esul	ts Su	ımmaı	y		coglotte	omb gr	
	ES 6.39	The state of the s	MIE -	- 7 11	19.		SPITTED.	No. of Lot	ntores	ction Inf	ormatio	n	1 7.	1 400 1	b. L.
General Inforn	nation	Ta	_					-	-		-		- 100	JLL	
Agency		Solaegui Engineers	1			1-		-	Duratio		0.25	-	- 1		
Analyst		MSH		-	is Date	-	-		Area Ty	pe	Other				
Jurisdiction		City of Sparks		Time F			ak Hou	-	PHF		0.95	12	-13		
Urban Street				Analys	is Year	2035 E Projec		1	Analys	s Period	1> 7:0	10			
Intersection		Pyramid/Sparks SB	Ramp	File Na	ame	SB35p	w.xus						1 7	1147	101
Project Descrip	tion							-		and the last of th	and the last of	-	1	TO COLOR	200
			NAME OF	34110	EB	15 04	1051	WE			NB		HIND ES	SB	No. of Concession, Name of Street, or other Persons, Name of Street, or other Persons, Name of Street, Name of
Demand Infor				-	T	1 6	L	T	IR	L	T	R	L	T	R
Approach Move				L	_	R	-	-		-	1	- IX	500	-	208
Demand (v), v	eh/h	The second second second	2005	Trans.	507	277	300	807	110000		NUMBER	(CEROLE	500	1117	200
Signal Informa	ation			The same of the sa	to expense	-	IJ G	-		-	STORE				1
Cycle, s	80.0	Reference Phase	2	1	5-	-					K		-		XX
Offset, s	0	Reference Point	End	1	1	74	60.5	1				.1	7 3	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green		30.0	20.0	0.0					-		
Force Mode	Fixed	Simult. Gap L/V	On	Yellow	1.0	1.0	11.0	0.0			-	5	6	7	h
T UICE WIDGE	- IXeu	John Cap (Vo		7 3/5 4	MA OF H	192 C.	THE TE	T Carl	The last	JUNEVAN	The latest	- 14	TO BY	TO	1500
Timer Results	of the late of the	Marie Carlo Hayles		EBI		EBT	WBI		WBT	NB	L	NBT	SBL		SBT
Assigned Phas	_					2	1		6	1					4
Case Number						7.3	2.0		4.0						9.0
Phase Duration				-		35.0	20.0		55.0						25.0
Change Period		-1 c				5.0	5.0		5.0						5.0
Max Allow Hea	A Particular Company		-	-	-	0.0	3.1		0.0						3.2
			-	-	-	U,U	8.5		0.0	-		-	1		12.8
Queue Clearar				-	-	0.0	0.4	_	0.0	-	-		1		1.3
Green Extension				-	-	U.U	1.00	-	0.0	1		-	1	-	1.00
Phase Call Pro				-	-	-	0.05	_		1		_	1	-	0.15
Max Out Proba	ionity	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		Person	COST COL	PERM	0.05		70000	1000000	PARTIES AND	100	1000	N/S	0.10
Movement Gr	oup Re	STATE OF THE PERSON NAMED IN			EB			WB		T	NB			SB	
Approach Mov				L.	T	R	L	Т	R	L	T.	R	L	T	R
Assigned Move					2	12	1	6					7		14
Adjusted Flow		v), veh/h			534	292	316	849					526		219
10000		ow Rate (s), veh/h/	ln		1781	1585	1730	1781					1730		1585
Queue Service	Michigan Assessment Asses	AND RESIDENCE OF THE PARTY OF T	-	1	8.8	11.3	6.5	9.4					10.8		9,6
	-	ce Time ( g a ), s			8.8	11.3	6,5	9.4	_				10.8		9.6
Green Ratio (		100000000000000000000000000000000000000			0.38	0.38	0.19	0.62					0.25		0.25
Capacity (c),					1335	594	649	2226	_				865		396
Volume-to-Car		atio (X)		1	0.400		0.487	0.38	-	1			0.609		0.553
		t/In (95 th percentile	)		162.1	196.4	119.6	139.					196		162.4
The state of the s	-	eh/ln (95 th percent	-	1	6.4	7.7	4.7	5.5					7.7		6.4
	-	(RQ) (95 th percen			0.00	0.00	0.00	0.00	_				0.00		0.00
Uniform Delay					18.4	19.1	29.1	7.4	_				26.5		26.1
Incremental Delay		THE RESERVE OF THE PARTY OF THE			0.9	2.9	0.2	0.5					0.9		1.0
Initial Queue D	-				0.0	0.0	0.0	0.0	_	1			0.0		0.0
Control Delay		and the same of th			19.3	22.0	29.3	7.9					27.4		27,1
Level of Service					В	C	С	A		1			С		C
Approach Dela				20.	-	С	13.7	Andrew Street	В	0.0	)		27.3		C
Intersection De							9.4						В		
			Sel les	ASSES !	36.75	2010	A STATE OF THE PARTY OF THE PAR	(U) (A	18/00	100	200	998	12.19	A A	1910
Multimodal R	esults				EB			WE			NB			SB	
Pedestrian LO	S Score	e/LOS		2.4		В	1.9		В	3.0	0	С	2.9		С
Bicycle LOS S	core / L	OS		1.2	2	Α	1.4		Α						F

	TO THE OWNER OF THE OWNER.	HCS	7 Siyi	ialize	d Inte	rsect	ion R	esul	ts Sun	1Mar j	NAMESTAL	PENDER	175411120111		Winds
	12.50	<b>以上,在第四</b> 次程	39. 7/7		See W	Marie	A VENC	30000		an Info	ESCO.	HAMPS	SOME NAME OF	Lucie I	A CONTRACT
General Inforr	nation								ntersect			<u>n</u>	- 100	JŲ,	
Agency	De la companya de la	Solaegui Engineers					200		Duration,		0.25		-		
Analyst		MSH				Sep 18			Area Type	9	Other				
Jurisdiction		City of Sparks		Time P	-	_	ak Hour	_	PHF		0.95				5
Urban Street				Analys	is Year	Committee of the last	+ Kiley		Analysis I	Period	1> 7:0	0	I I		
Intersection		Pyramid/Sparks SB	Ramp	File Na	me	SB35a	ww.xus						20	1 1 4 7	2.0
Project Descrip	otion	printer of solar live	-	THE SHARE		NAME OF TAXABLE PARTY.	ACCUSED	NET-ENI	- Property	simentois		THE REAL PROPERTY.	The same of the sa	MINISTER .	esnetou
Demand Infor	10 15 C		1532	100	EB		and the same	WB	1000000	<b>CONTRACT</b>	NB	- 4	NAME OF TAXABLE PARTY.	SB	Wildeline.
				L	T	R	L	T	R	L	T	R	L	T	R
Approach Mov				L		-	250	518		-	-	1	630	-	135
Demand (v),	veh/h	Day Control of Signature	2555000	MARKET NO.	653	418	200	010	BINDNESS S	10 10 10	BULLIST	No stall	030	1000	100
Signal Inform	ation		and the same of	-	Note thank	The same of	TIT	California Company	-	STATE OF THE PARTY OF	the same of				1
Cycle, s	80.0	Reference Phase	2	1	2	- ·		1			×	_	<b>=</b>		K.A.
Offset, s	0	Reference Point	End	0	36.5	20.7	00.0	0.0	0.0	0.0	11	4	M 2	1	4
Uncoordinated	-	Simult. Gap E/W	On	Green Yellow		30.0 4.0	20.0	0.0	0.0	0.0			-		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	11.0	10.0	0.0	0.0		3		1	- 9
AND THE PERSON	Service of	SASSA MARKET STORY	NAME OF TAXABLE PARTY.	WF ATER		SEAM		STATE OF		84/11/		No.	THEFT	15.50	230
Timer Results				EBL		EBT	WBI		WBT	NBI		NBT	SBL		SBT
Assigned Phas	se					2	1		6						4
Case Number						7.3	2.0		4.0						9.0
Phase Duratio	n, s					35.0	20.0		55,0						25.0
Change Period	-	c), s				5.0	5.0		5.0						5.0
Max Allow Hea						0.0	3.1		0.0	-					3.2
Queue Cleara							7.4								16.2
Green Extensi						0.0	0.4		0.0			-114-			0,9
Phase Call Pro				1			1.00	)							1.00
Max Out Proba							0.01						1	177	0.76
	-	THE PERSON NAMED IN	(5)	COLONE AL	DE 51	None Pa	17A5517		NEVER I		10-10-10		1/50005	1100	William.
Movement Gr	oup Re	sults			EB			WB			NB		-	SB	7
Approach Mov	ement			L	T	R	L	T	R	L	Т	R	L	T	R
Assigned Mov	ement		- Clark		2	12	1	6					7		14
Adjusted Flow	Rate (	v), veh/h			687	440	263	545					663		142
Adjusted Satu	ration F	low Rate ( $s$ ), veh/h/	In		1781	1585	1730	1781					1730		1585
Queue Service	e Time (	g s), S			12.0	19.2	5.4	5.4		1			14.2		5,9
Cycle Queue	Clearan	ce Time ( $g_c$ ), s			12.0	19.2	5.4	5.4					14.2		5.9
Green Ratio (	g/C)				0.38	0.38	0.19	0.62	_				0.25		0.25
Capacity (c),	veh/h				1335	594	649	2226	-				865		396
Volume-to-Cap	pacity R	atio (X)			0.515	AND DESCRIPTION OF REAL PROPERTY.	0.406	0.245	-				0.767		0.359
Back of Queue	e (Q), t	ft/In (95 th percentile	)		214.8	317.6	97.9	80.2					254.7		97.8
		veh/ln ( 95 th percent			8.5	12.5	3.9	3.2					10.0		3.8
Queue Storag	e Ratio	( RQ ) ( 95 th percen	tile)		0.00	0.00	0.00	0.00					0.00		0.00
Uniform Delay	(d1),	s/veh			19.4	21.6	28.6	6.6					27.8		24.7
Incremental D	elay ( d	2 ), s/veh			1.4	8,1	0.2	0.3					3.8		0.2
Initial Queue I	Delay (	d 3), s/veh			0.0	0.0	0.0	0.0					0.0		0,0
Control Delay	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN				20.8	29.7	28.7	6.9					31.6		24.9
Level of Servi	Accessed to the Parket of the	above to the same of the same			C	С	С	A					С		C
Approach Del	CONTRACTOR OF THE PARTY OF THE			24.3	3	С	14.0		В	0.0	1		30.4		С
Intersection D	elay, s/\	reh / LOS	not the same		OTO SALES	23	3.1	manne	11,-1 (10)	The same of		S/NORTH	C	and the same	NAME OF TAXABLE PARTY.
BASS AS A	Constant		N 192 3	Paradi	ED	IRN II-7		WB	E. 503	Parada	NB	ALTE AND	100	SB	el sui de
84. dlf 1-1 P				4	EB		N .	VVIS		R	IND		1	OD	
Multimodal R Pedestrian LC	-	. / 1 0 0		2.4		В	1.9	. 1	В	3.0	1	C	2.9		C

		HCS	7 Sis.	alize	d Inte	rsect	ion R	esul	ts Sı	ımm⊾.	y				nuine sin
				100	10 10	3 300	1 - 1 - 1	0500	ntorco	ction In	formati	on.	State Name	ا ماه داد ا	4-1
General Inform	nation	Ta									-	OH	- 8	JUU	100
Agency		Solaegui Engineers						_	Duratio		0.25		- 66		THE PARTY
Analyst		MSH			is Date	-	-		Area Ty	/pe	Othe	Г	- 1	3	: :
Jurisdiction		City of Sparks		Time F			ak Hou	-	PHF		0.95		- 3		
Urban Street				Analys	is Year	2035 E Projec	Base + t + Kiley		Analysi	s Period	1> 7:	00			
Intersection		Pyramid/Sparks SB	Ramp	File Na	ime	SB35p	ww.xus	2					3.5	s taken	1.0
Project Descrip	tion		NAME OF TAXABLE PARTY.	overage.	CHICAGO III	-	O STATE OF THE PARTY OF THE PAR	D'AND	now Vert		950000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2 2 2	07557	83/10/3/15
Demand Infor	mation	Charles and the	Hulka	The same of	EB	Deco-	TERCHINE.	WE		alange Statis	NB	A STORY	The same	SB	SECTION AND ADDRESS OF
Approach Mov					IT	R	L	T	R	L	T	IR	L	T	R
Demand (v),	-			-	641	294	300	961	_	1	-		531		208
Demand (V),	Tellin I	770 TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3	AU PHO	DE LOS	( CON	1000	050	SECTION 1	150	and a	1000	NAME OF STREET	70	19701
Signal Informa	ation				6	4	126		T			_			L
Cycle, s	80.0	Reference Phase	2		W.	=						-	₹.		K 3
Offset, s	0	Reference Point	End	Green	150	30.0	20.0	0.0	0.0	0.0	1	-	3	-	-
Uncoordinated	No	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0	0.				+		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	11.0	0.0	0.			5	4	7	
	FINE	a live and the liv	5/11	5.11				5/18/	Wat le		The same	103	171-751/10	= 1	The state
Timer Results				EBI		EBT	WBI	L	WBT	N	3L	NBT	SBL		SBT
Assigned Phas	e					2	1		6						4
Case Number						7.3	2.0		4.0						9.0
Phase Duration	1, s					35.0	20.0	)	55.0						25.0
Change Period	I, (Y+R	c), S				5.0	5.0		5.0		- 1				5.0
Max Allow Hea	dway (	MAH), s				0.0	3.1		0.0						3.2
Queue Clearar	nce Time	e ( g s ), s					8.5								13.6
Green Extensi						0.0	0.4		0.0						1,3
Phase Call Pro	bability						1.00	)					1		1.00
Max Out Proba	bility						0.05	5							0.23
C. 31		A SECTION A	300			1921	1	WB	- 497	September 1	NB		Name of Street	SB	
Movement Gr	-	suits		L	EB	R	L	T	R	L	T	R	LI	T	R
Approach Mov				-	2	12	1	6	11	-	-	- IX	7	-	14
Assigned Mov				-				40.00	-	-	-	-	559	-	219
Adjusted Flow				-	675	309	316	1012	_		+	1	-		
		low Rate (s), veh/h/	ın	-	1781	1585	1730	1781	-	-	-	-	1730	-	1585
Queue Service				-	11.7	12.1	6.5	11.9	_	-	-	-	11.6	_	9.6
The second secon	_	ce Time (gc), s			11.7	12.1	6.5	11.9	-		+	-	11.6		9.6
Green Ratio (			-	-	0.38	0.38	0.19	0.62	-	-	-	-	0.25	-	396
Capacity (c),	-			-	1335	594	649	2226	-	-	-	-	865	-	-
Volume-to-Cap				-	0.505	-	0.487	0.454	-	-	-	-	0.646		0.553
		t/In ( 95 th percentile		-	210.9	208.9	119.6	177.8	-	-	-	-	208.9		162.4
		/eh/ln (95 th percent			8.3	8.2	4.7	7.0	_	-	-	-	8.2	-	6.4
The second secon	-	( RQ ) ( 95 th percen	tile)	-	0.00	0.00	0.00	0.00	-	-	-	-	0.00	-	0.00
Uniform Delay	-			-	19.3	19.4	29.1	7.9	-	-	-	-	26.8		26.1
Incremental D				-	1.4	3.2	0.2	0.7		-	-	-	1.3		1.0
Initial Queue I				-	0.0	0.0	0.0	0.0	-	-		1	0.0	-	0.0
Control Delay	-			-	20.6	22.7	29.3	8.5	-	-	1	+-	28.2	-	27.1
Level of Service	_			04	C	C	C 12.6	A	D	-	0		C 27.0	-	C
Approach Dela	-			21.	3	C	13.5	0	В	0	.0	-1	27.9		С
Intersection D	eiay, s/v	THE RESIDENCE OF THE PARTY OF T	THE R	December 1		13	9.6	3500	17/37/	market and	11 7 00	Will Y	B	1	117
Multimodal R	esults		miles.	1	EB	ED .	1	WB	E S	7	NB		1	SB	
Pedestrian LO		e / LOS		2.4		В	1.9		В	3	.0	С	2.9		С
Bicycle LOS S				1.3		A	1.6	-	В				1		F

		HCS7 S			d Inte	ersect	ion R	esul	ts Sum	my		STATE OF THE PARTY.	. Secretarion	and the same of	umanoune
MAL AND VALUE	5150 (H		10 -1130	3 =	100		W.L.	STREET		an Infa	Was a Alice		400	ا جاه ولو ا	
General Inform	nation							-	ntersecti			on	- 100	JU	
Agency		Solaegui Engineers						-	Duration,		0.25				MIE.
Analyst		MSH				Sep 13			Area Type		Other				
Jurisdiction				Time P		AM Pe			PHF		0.92		-	***	
Urban Street				Analys		-			Analysis F	eriod	1> 7:0	00	- 1		
Intersection		Highland Ranch & A	Access	File Na	me	HrPa1	7aw.xus	3							
Project Descrip	tion	and the second second	WENDER	Harmon V2 (C)	CATALINE I	and the same of	NORWEGO	ne dise	12420920	2 550	MIZARINA	NAME OF		4 1 4 7	M.C
Demand Inform	nation		COSC III		EB		April 100	WE		THE REAL PROPERTY.	NB	MISORS	100000	SB	District Const
Approach Move	ement			L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), v	and the same of the same of			35	508			683	197				568		100
S ASSESSED FOR		The second second	24	100	STATE OF THE PARTY.	Water Street				185	ME	AT PL	WIS		TAC SEC.
Signal Informa	Name and Address of the Owner, where	ln ( n)		1	3	1	25		1						<b>A</b>
Cycle, s	85.0	Reference Phase	2	-	-	>		4.		1		1	→ ,	- 1	4
Offset, s	0	Reference Point	End	Green	10.0	40.0	20.0	0.0	0.0	0.0			K.		77
Uncoordinated		Simult. Gap E/W	On	Yellow		4.0	4.0	10.0	0.0	0.0	_	/			
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0	NAME OF THE OWNER,	3	4	1	A
	1			EDI	1 12	CDT	WBI		WBT	NBL	NAME OF TAXABLE PARTY.	NBT	SBL	NA S	SBT
Timer Results			_	EBL	-	EBT	VVD	-	6	INDL	-	INDI	JOL	-	4
Assigned Phas	e			5	-	2	_	-		_	+	-	-	+	9,0
Case Number			_	2.0	-	4.0	-	-	7.3	-	_		-	-	25.0
Phase Duration				15.0		60.0		-	45.0				-	+	5.0
Change Period				5.0	-	5.0	_	-	5.0		-		-	-	
Max Allow Hea				3.1	-	3.1		-	3.1	-	-	_	-	-	3.2
Queue Clearar				3,6		14.6	_	-	31.6					-	16.1
Green Extension	-	(ge), S		0.0	_	3.2		-	2.5				-	-	0.8
Phase Call Pro				1.00	Contract of the last	1.00			1.00		_		1	_	1.00
Max Out Proba	bility		PERMIT	0.00		0.01	escuentes	NAME OF TAXABLE PARTY.	0.32	ENGS/HIS	CONNECTED BY	livel rush	NAME OF TAXABLE PARTY.	-	0.70
Movement Gre	oun Pos	monte.	Luks	<b>MILICURO</b>	EB	THE PERSONNEL	STATE OF THE PARTY OF	WB	A SHARE	Mary Sant	NB	SIGHT.	SERE!	SB	
Approach Mov	-	Juita		L	T	R	L	T	R	L	T	R	L	T	R
Assigned Move	Andrew Street			5	2	1	-	6	16	-			7	-	14
Adjusted Flow		() woh/h		38	552	-		742	171	-		-	617		109
		ow Rate ( s ), veh/h/	lo.	-	1870	-	-	1870	-				1730		1585
Queue Service				1.6	12.6	-		29.6	-		-		14.1		4.8
		e Time (ga), s	_	1.6	12.6			29.6	-	-	_	-	14.1	-	4.8
		e Time ( g c ), s		0.12	0.65	-		0.47	_			-	0.24	-	0.24
Green Ratio ( c )				210	1210	-		880	-	-	-		814		373
	-	otio / V\	-	0.182	-			0.843	-		-	-	0.759		0.291
Volume-to-Cap		the same of the sa	A .	31.9	189.5		-	489.4	The state of the last of the l		-		255.4		80.4
	_	/In ( 95 th percentile	-	1.3	7.5	1	-	19.3					10.1		3.2
Annual Property and Property an		eh/ln ( 95 th percent	-	0.00	0.00		-	0.00	mark mark mark				0.00	_	0.00
Uniform Delay			me)	33.8	7.5		-	19.8	-				30.3	-	26.7
Incremental De	-		-	0.2	0.1		-	7.1	0.1				3.7		0.2
Initial Queue D	-			0.0	0.0		-	0.0	0.0			1	0.0		0.0
Control Delay				34.0	7.6			26.9	-				34.0		26.8
Level of Service				C	A		-	C	B		-		C	-	C
Approach Dela	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN			9.3	-	A	24.		C	0.0		-	32.9		C
Intersection De	Marine State Section 201	Marie Control of the		0.0			3.2			Uiu			C		
	TO SE	E THE THE THE	APPENDE.	Stoppes.	35.03	17/1/192	TO THE	10	10-1000	W - 1	The Contract of	1000	MAN S	190	BY BUT
Multimodal Re	esults			1	EB			WB			NB			SB	
Pedestrian LO	S Score	/LOS		0.7		Α	2.4		В	2.8	b, II	C	2.3		В
Bicycle LOS S	core / L	os		1.5		Α	2.0		В				1		F

	DESCRIPTION OF THE PERSON OF T	HUS	1 212	ialize	a inte	ersec	lion K	esun	ts Sum	ıma, y	0040000	79005	DIR/WHEEDOCK	H10040	day a
General inform	nation	STATE OF THE STATE	1 .00	-91		10000	- 10	MESSES.	ntersecti	on Info	rmatic	nn	N. Carlotte	el Jarle I	No. in Contract of
	lation	Solaegui Engineers			-			_	Duration,		0.25			JŲ	
Agency		MSH		Analye	is Date	San 1	3, 2017	-	rea Type	_	Other		7		
Analyst Jurisdiction		INION	-	Time F			eak Hou		HF	-	0.92	-	- ; <b>.</b>	17	٦.,
Urban Street		-	-	_	is Year	-	ng + Pro	And in case of the last	∖nalysis f	Parind	1> 7:0	20	1		
Intersection		Highland Ranch &	Accore	File Na		-	7pw.xu:		vilaly sis i	CHOO	11- 7.0				Marie .
Project Descrip	tion	Highland Kanch &	Access	File No	ame	Inirai	r pw.xu	5			-		- 3	4 1 4 4	100
Troject Descrip	SEAS.	DAY STATE	700	X (5)	0.00	TO BU				100-1-20	India.	889	200	The Co	Satural .
Demand Inform	mation				EB			WB			NB			SB	
Approach Move	ement			L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), v	/eh/h	THE PERSON NAMED IN COLUMN 1	-	98	688	-		629	555		C. CONTROL	-	334	-	59
Class I la Const	10000		W. Collins	7	WHEN T	\$15000E	T T	STREET, STREET,		9300	ON SHARE	SECTION .	5//,5	-	
Signal Informa	-	Reference Phase	2	1	27	6	= = =								
Cycle, s	85.0	Reference Point	End			7						+	7 4	3	4
Offset, s Uncoordinated	0 Yes	Simult. Gap E/W	On	Green		40.0	20.0	0.0	0.0	0.0			1		
Force Mode	Fixed		On	Yellow	1.0	1.0	1.0	0.0	0.0	0.0				,	-
Force Widde	FIXEO	Simult. Gap 14/5	DI STATE OF THE PARTY OF THE PA	1 Keu	I GUEST	11.0	North N	10.0	OR PERSON	DI STATE	The state of	USS NO	3179	370	3. E.L.
Timer Results	SA TELESCOPE	All All Sections in		EBI		EBT	WB	L	WBT	NBL		NBT	SBL		SBT
Assigned Phas				5		2			6						4
Case Number				2.0		4.0			7.3						9.0
Phase Duration	1, S			15.0	)	60.0			45.0						25.0
Change Period	, ( Y+R	c), s		5.0		5.0			5.0						5.0
Max Allow Hea	dway (	MAH), s		3.1		3.1			3.1						3.2
Queue Clearan	ice Time	e (gs), s		6.8		22.0	İ		27.9						9.6
Green Extension	on Time	(ge), s		0.0		4.6			4.0						8.0
Phase Call Pro	bability			1.00		1.00	1		1.00						1.00
Max Out Proba	bility		-	0.87	7	0.13	_		0,29	- Contractor		-			0.01
			10 bert	TO STATE OF	ED S	Ties I	<b>PRODUCT</b>	NA/P	The state of		MD	00300	Managhan	SB	-11
Movement Gr	The second second	suits			EB	-	-	WB		, 1	NB	l p	1	T	R
Approach Mov				L	T	R	L	T	R	L	Т	R	L   7	-	14
Assigned Move				5	2	-	-	6	16	_			-	_	64
Adjusted Flow		The state of the s	nu.	107	748			684	495	-	_	-	363	_	1000
Adjusted Satur Queue Service		ow Rate (s), veh/h/	in	1781	1870		-	1870 25.9	1585	-		-	1730 7.6	-	1585
				4.8	20.0		-	25.9	20.4	-			7.6	-	2.7
Green Ratio (g	77.7.7	se Time ( $g_c$ ), s		0.12	0.65	-	-	0.47	0.47			-	0.24		0.24
Capacity ( c ),				210	1210			880	746				814	_	373
Volume-to-Cap		atio (X)		0.508	0.618		-	0.777	The state of the state of				0.446	-	0.172
	-	/In (95 th percentile	Ŋ	94	280.1			420.4	-				139.3		46
		eh/In (95 th percent		3.7.	11.0			16.6	11.5				5.5		1.8
The second secon		RQ) (95 th percen	ALMAN A CONTRACTOR	0.00	0.00			0.00	0.00				0.00		0.00
Uniform Delay				35.2	8.8			18.8	17.3				27.8		25.9
Incremental De				0.8	0.7			4.0	1.8				0.1		0.1
Initial Queue D	elay ( d	з), s/veh		0,0	0.0			0.0	0,0				0.0		0.0
Control Delay	(d), s/v	eh		36.0	9.5			22.8	19.1				27.9		26.0
Level of Servic	THE RESERVE AND ADDRESS OF THE PARTY OF THE	and the second s		D	Α			C	В		-		С		С
Approach Dela		THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN		12.8	3	В	21.	3	C	0.0			27.6		С
Intersection De	elay, s/v	eh / LOS	and the same	No.	-	19	9.4	( Table 1	AND DESCRIPTION			D) Walley	В	SKOOLE	e compens
Market	The state of	A STATE OF THE STA	W.7.W.	PARE	ED	7 3 3	SUI 1987	AAID	13,700	JOE S	MD	House	12000	CD	1000
Multimodal Re		1100		0.7	EB	À	2.4	WB	-	2.0	NB	С	2.3	SB	В
Pedestrian LOS		the same of the sa		1.9		A B	2.4		В	2.9		U	2.3	-	F
Bicycle LOS Se	COIG / L	00		1.9		D	2.4		D				1		- 10

AND TAXABLE STATES	NEW YORK	HCS	7 Sis	ialize	d Inte	ersec	tion Re	esu	lts Sum	maiy	PONTER	e rec		essic	Television in
	11250		100	and the	11 1111	S. 1812	The state of	1157	Intersecti	on Info		OF SHELL	ALC: NO.	l alaeta k	1
General Inforn	nation	la i de d			_			-			-	on	- 1	JU	
Agency		Solaegui Engineers		-		1-		Aug Section	Duration,	des the street his	0.25	-	- 100		
Analyst		MSH		Commence where	ALCOHOL: SALES	Sep 1		-	Area Type		Other		- 35		
Jurisdiction				Time F	-	-	eak Hour		PHF		0.92	-	_ = = = = = = = = = = = = = = = = = = =	""	
Urban Street				Analys	is Year	+ Kile			Analysis F	Period	1> 7:0	00			
Intersection		Highland Ranch & A	Access	File Na	ame	НгРа1	7awo.xu	s					10	147	10
Project Descrip	tion		AND DOTAL		umaus kars	-	NAME OF TAXABLE PARTY.			were a succession	TATE DE LA COLUMN	-	20050	no de Comme	THE REAL PROPERTY.
The state of		A STATE OF THE A		Table 1	1000		ENSURE	200	No. of the Land	NAME OF TAXABLE PARTY.	ALID.	1125	A STATE OF	CD	a USA
Demand Inform	2.77				EB	-		W			NB	1 -	1	SB	1 -
Approach Move					T	R	L	Т	_	L	T	R	L	T	R
Demand (v), v	THE RESERVE THE PERSON NAMED IN	Mr. Televisian Co. Line of the	4250	35	523		Lane a	69	6 197	10000	SERVICE	-	568	No.	100
Signal Informa	0.050mm	NATIONAL SECTION		ARTHUR .	The sale	No.	776	and the	The same	CHARLES .	Disputing.	-		mercen	
Cycle, s	85.0	Reference Phase	2	1	-3	₩ €	- K 7	1	1				_		
Offset, s	0	Reference Point	End			1	3	Vision.		THE STREET		9	1		. 4
Uncoordinated	Yes	Simult. Gap E/W	On	Green		40.0	20.0	0.0		0.0			A		
	-	the second second second second second	On	Yellow	1.0	1.0	4.0	0.0		0.0			4		0.5
Force Mode	Fixed	Simult. Gap N/S	On	Red	11.0	1.0	11.0	10.0	10.0	10.0	Charles in	V5/0.003	N WAREN	TENT	SALLINE.
Timer Results				EBI	amorpage	EBT	WBL		WBT	NBL		NBT	SBL	-	SBT
Assigned Phas			-	5	-	2	13.00	-	6						4
Case Number				2.0	-	4.0		-	7.3						9.0
Phase Duration				15.0	-	60.0	-	+	45.0	_	$\rightarrow$			1	25.0
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		5.0	*****	5.0	-	-	5.0		1		-	+	5.0
Change Period				-		Dark Trees	-	+	3.1		-		-	-	3.2
Max Allow Hea				3.1	_	3.1	-	-			_	_	-	-	16.1
Queue Clearan			-	3.6	-	15.1		-	32.6				-	-	
Green Extension		(g <sub>e</sub> ), s	-	0.0		3.3	-	-	2.4	-		-	-	-	0.8
Phase Call Pro	Name and Address of			1.00	-	1.00		_	1.00				-	-	1.00
Max Out Proba	bility	MINA MARION ONDE	SANCOS	0.00	DESCRIPTION OF THE PARTY OF THE	0.01	SINVENTIA	DECCO.	0.40	-	SECURIOR SECURIOR	ATTY E	BOOK STORY	100	0.70
Movement Gro	oup Res	suits	Trans.	DESCRIPTION OF THE PERSON	EB	EACHERON	-	WB	1	TIS COLUMN	NB		The same	SB	- All
Approach Move				L	T	R	L	Т	R	L	T	R	LI	Т	R
Assigned Move				5	2			6	16				7		14
Adjusted Flow		/\ veh/h	-	38	568	1		757		_		_	617		109
		ow Rate (s), veh/h/	in.	1781	1870	-	-	1870				-	1730	-	1585
Queue Service		the state of the s		1.6	13.1	-	-	30.6					14.1		4.8
Name and Address of the Owner, where the Owner, which is the Owner, which is the Owner, where the Owner, which is the Owner,		g ; ), s ce Time ( g c ), s		1.6	13.1		-	30.6				-	14.1		4.8
Green Ratio (	_	e Time (ye), s		0.12	0.65	-		0.47		-	-	-	0.24	-	0.24
Capacity (c),	-			210	1210	-	-	880			-	-	814	-	373
Volume-to-Cap	and the same of the same of	atio ( Y )	_	0.182	-			0.86	-	-		-	0.759		0.291
	-	t/In ( 95 th percentile	1	31.9	196.1	-	-	509.					255.4		80.4
		eh/ln ( 95 th percent	_	1.3	7.7	-		20.0			-		10.1	-	3.2
	and the or the last of the	(RQ) (95 th percent		0.00	0.00	-	-	0.00					0.00	-	0.00
Uniform Delay	-		uie)	33.8	7.6	-		20.0	-	-			30.3		26.7
Incremental De		The same of the sa		0.2	0.1			8.2		-	-	-	3.7		0.2
Initial Queue D	-			0.0	0.0	-		0.0	-	-		-	0.0		0.0
Control Delay	-			34.0	7.7	-		28.2	-		-	-	34.0		26.8
Level of Service	-			C	A			C	B B		-		C		C
Approach Dela			-	9.4	-	A	25.5		C	0.0	1	1	32.9	1	C
Intersection De	and the same of th	THE RESERVE THE PARTY OF THE PA		3,4			3.5			0.0		****	C 32.3	-1-	
The state of the s	A CONTRACTOR	The state of the s	1/3/4/3	linera in	1 10 1	STATE OF THE PARTY.	TAKEN.	WIS	134419	10000	1000	100	FIET.	12.5	FAIL DE
Multimodal Re	esults				EB	12	1	WE	3		NB		1	SB	
Pedestrian LO	S Score	LOS		0.7		Α	2.4		В	2.8		C	2.3		В
Bicycle LOS S	core / L	ns		1.5	-	A	2.0		В			-	1		F

CONTRACTOR OF THE PARTY OF THE	25 77	ПСЭ	i oly	ITAIIZE	u me	ersec	LIOII NE	75U	ts Sum	illiaij		20053	- TO 100	2757	ME NO
General Infor	mation	THE PASS ASSESSMENT	Special Con-	1 11	1 5 1	1 8	1000	Belle	ntersecti	on Info	rmatio	n	1	al Just L	1.4
	mation	Calanaul Engineers						_	Duration,	-	0.25			JLL	450
Agency		Solaegui Engineers		Analus	ic Dete	Icon 1	3, 2017		Area Type	_	Other	_	A		
Analyst		1		Santa Bridge	the second second	-		-	PHF		0.92	-	- :	111	~_
Jurisdiction		NDOT		Time F	-		eak Hour			lariad	1> 7:0	10	- 3		200
Urban Street					is Year	+ Kile	-		Analysis F	renou	11-7.0	10	- <b>"</b>		
Intersection		Highland Ranch & A	Access	File Na	ame	HrPa1	7pwo.xu	S			146		7	4 2 454	1. 1.
Project Descri	ption	NAME OF TAXABLE PARTY.	No.				1907 (1977)	Mine	San Park	1 200		- 1 - 4	and the same of	000000	Single-
Demand Infor	mation		-	The same of	EB	25/5/5-20	1	WE	3		NB			SB	also direct
Approach Mov	0101010100			L	T	R	L	T	R	L	T	R	L	T	R
Demand (v),				98	703			64				1	334		59
	63 AVE		11-1	SWEE	Wales of	1990		SEL SE			10-33	1860	16 359 750	2 10	
Signal Inform					2	8	7 7								人
Cycle, s	85.0	Reference Phase	2	1	3	-5		1		1		-	→ ,		
Offset, s	0	Reference Point	End	Green	10.0	40.0	20,0	0.0	0.0	0.0			K		
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0	0.0	0.0		7	-		, 1
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	11.0	0.0	0.0	0.0	100000000000000000000000000000000000000	3	6	-7	a de la companya de l
Timer Results	Litture	White was the William	1111	EBI	250	EBT	WBL		WBT	NBI		NBT	SBL	OR SHADO	SBT
Assigned Pha	-		-	5	-	2	VVDL	-	6	IVO	-	MEAT	Out		4
				2.0	-	4.0	-	-	7.3			_	-		9.0
Case Number	-		_		_	and the same	-	-	-	_	-	_		-	25.0
Phase Duratio		10	_	15.0 5.0		60.0 5.0	-	+	45.0 5.0	_		-	-	-	5.0
Change Period					_	3.1		+	3.1	-	-	-	-	-	3.2
Max Allow Hea				3.1		not a season of the latest of		+	-	-	-		-	-	9.6
Queue Cleara				6.8		22.7		-	28.8	-		-	-	+	0.8
Green Extensi		- Contract		0.0		4.6	-	-	4.0		-		-	-	
Phase Call Pr	-			1,00	-	1.00		-	1,00	_	-		-	-	1.00
Max Out Prob	ability	STATE OF STATE AND STATE	10300	0.87		0.15	CONTRACTOR OF THE PARTY OF THE	1000	0.34	SIME	Total Tax	15-3	140	SIGN	0.01
Movement Gr	roup Re	sults	NICKE OF STREET	THE REAL PROPERTY.	EB	The same of the sa		WB		and the same of	NB			SB	THE OWNER OF THE OWNER
Approach Mov	vement			L	T	R	L	T	R	L	T	R	L	Т	R
Assigned Mov				5	2			6	16				7		14
Adjusted Flow	-	/), veh/h		107	764			699	495				363		64
11000 - 1000		low Rate (s), veh/h/	In	1781	1870			1870	1585				1730		1585
Queue Service				4.8	20.7			26.8	20.4				7.6		2.7
		ce Time (gc), s		4.8	20.7			26.8					7.6		2.7
Green Ratio (		14 17		0.12	0.65	1	1	0.47	0.47				0.24		0.24
Capacity (c),				210	1210			880	-				814		373
Volume-to-Ca	the second second second	atio (X)		0.508	100000	-		0.79	4 0.663				0.446		0.172
		Vin (95 th percentile	)	94	289.5	-	- C	436.	-				139.3		46
the same of the sa	-	eh/ln (95 th percent	***	3.7	11.4			17.2					5.5		1.8
THE RESERVE OF THE PERSON NAMED IN		(RQ) (95 th percen		0.00	0.00			0.00					0.00		0.00
Uniform Delay	-	the same of the sa	-	35.2	9.0			19.0					27.8		25.9
Incremental D	-			0.8	0.8			4.7	-				0.1		0.1
Initial Queue [				0.0	0.0			0.0					0.0		0.0
Control Delay				36.0	9.8			23.7	and the latest designation of the latest des				27.9		26.0
Level of Servi				D	A			C	В				C		С
Approach Del				13.0	-	В	21.8	_	С	0.0			27.6		C
Intersection D		100 17					9.7						В		
HEAD TO BE		SP SEEDING A	200	South	705.7	Chica		4	350	200	100	27 1	157-15	5750	
Multimodal R					EB		-	WE			NB	-	1	SB	-
Pedestrian LC				0.7		Α	2.4		В	2.9		C	2.3		В
Bicycle LOS S	Score / L	OS		1.9		В	2.5		В				1		F

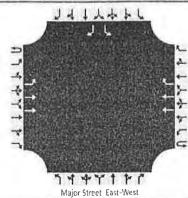
WASHING AND THE	ente poste	nco	/ Sig	IIdiiZe	u me	ersec	LIUII K	esui	ts Sum	illiary	- 3V (+-)	HAMMER	S TO THE		Direction of the last of the l
General Infor	mation		5950000	5,117	V 500	per Jell	No. of Lot, Line	A COLUMN	ntersecti	on Info	ormatio	n n	37	d of de I	b is
	mation	Solaegui Engineers							Duration,		0.25			jţţ	
Agency		MSH Engineers		Analys	ic Data	Son 1	3, 2017	-	Area Type		Other		- 3	爱习	
Analyst		INISH		Time P		-	ak Hou	-	PHF		0.92			10	
Jurisdiction						-			Analysis F	Dariad	-	0	- 1		
Urban Street					is Year	Projec	alkine in the second		Analysis r	renoa	1> 7:0				
Intersection		Highland Ranch & A	Access	File Na	ame	HrPa3	35aw.xus	3				_	- 30	4 1 44	1 1
Project Descri	ption	And the part of the last of the last	ntterome	NAME OF TAXABLE PARTY.	CONTRACTOR NO.	-	NAME OF TAXABLE PARTY.	AVESTER	THE STREET	enctions	NAME OF TAXABLE PARTY.	TATALA MARK	N 1933034	BEIN!	Service of the last of the las
Demand Info	mation	State of Partin	SHELLIN	parama	EB	NAME OF STREET	To Take	WB	- CONTRACT	72400	NB		TO STATE OF	SB	MUNICIPAL STREET
				-	T	TR	L	T	R	L	T	R	L	Т	R
Approach Mov				35	400	IX	-	350		-	1	1	568		100
Demand (v),	ven/n	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	TATE AND A	33	400	1	Acres 1	350	197	STATE OF	Contract of the last	SERVING .	300	05105	100
Signal Inform	ation		STEEL ST	The same	(COURSES	1		1000		1					1
Cycle, s	70.0	Reference Phase	2	1	-3	-> "	30 40	1	1	1			→	19	
Offset, s	0	Reference Point	End	1		05.5	00.5	100	0.0	0.0	-	1	2	3	4
Uncoordinated		Simult. Gap E/W	On	Green Yellow	10.0	25.0	20.0	0.0	0.0	0.0	-	K	1		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	11.0	11.0	0.0	10.0	0.0	_	5	6		
TOIGO WIOGE	MOVE CO	The state of the s	SWEET	DISOUS.	Total P	WS TO	SEPTIME TO	Malen	The state of the s	W.S.	THE WAY	1000	Water Fla	THE Y	70.414
Timer Result	S	Tange & Control of the Control of th	14	EBI	-	EBT	WBI	A STATE OF	WBT	NBI		NBT	SBL		SBT
Assigned Pha				5		2			6						4
Case Number	_			2.0		4.0			7.3						9.0
Phase Duration	_			15.0		45.0			30.0						25.0
Change Perio		c). s		5.0	-	5.0			5.0						5.0
Max Allow He				3.1		3.1			3.1				-		3.2
Queue Cleara	-		-	3.3		11.1	1		13.5				1		12.9
Green Extens			-	0.0	-	1.8		-	1.7		-1-		1		1.2
Phase Call Pr	And in concession to the last of	A STATE OF THE PARTY OF THE PAR		1.00		1.00	-		1.00	-					1.00
Max Out Prob				0.00		0.02			0.05	-			1		0.14
Max Out Floo	ability	Marine Comment	<b>ENN</b>	1000	Harrison	0.02	80E8V-W	125 003	0.00	W- 16	50	Service S	STANTAL		E 17/50
Movement G	roup Re	sults			EB			WB			NB			SB	
Approach Mo	vement			L	T	R	L	T	R	L	T	R	L	Т	R
Assigned Mov	ement			5	2			6	16		1		7		14
Adjusted Flow		/), veh/h		38	435			380	171		V		617		109
Adjusted Satu	ration F	ow Rate (s), veh/h/	ln .	1781	1870			1870	1585				1730		1585
Queue Servic		Annual Printers and Publishers and Publishers		1.3	9.1			11.5	5.4				10.9		3.7
		ce Time (gc), s		1.3	9.1			11.5	5.4				10.9		3.7
Green Ratio (		15, 57		0.14	0.57			0.36	0.36				0.29		0.29
Capacity (c)	-			254	1069			668	566				988		453
Volume-to-Ca		atio (X)		0.150	Property sales			0.570	and the second section in Figure				0.625		0.240
	-	t/ln (95 th percentile	)	24.4	137.1	-		206.8	-				190.9		58
		eh/ln (95 th percent		1.0	5.4	1	1	8.1	3.3				7.5		2.3
and the second section is not to be a second	-	(RQ) (95 th percen		0.00	0.00			0.00	0.00				0.00		0.00
Uniform Delay	and the second second		100	26.3	8.4			18.2					21.7		19.2
Incremental D	-			0.1	0.1			0.7	0.1				0.9		0.1
Initial Queue				0.0	0.0			0.0	0.0				0.0		0.0
Control Delay				26.4	8.5			18.9	16.3				22.7		19.3
Level of Servi				C	A			В	В				C		В
Approach Del				9.9	-	Α	18.1	-	В	0.0			22.2		С
Intersection D					-		7.6						В		
Section 1989	THE PARTY	ENT LE PROPERTY	19/10/50	all Marie	1004	or loans		JEN TE	1	11 305	THE REAL PROPERTY.	726	136 - 3	500	1 J-14
Multimodal F	Results				EB			WB	-		NB		1	SB	
Pedestrian LC	OS Score	LOS		0.7	4	Α	2.4		В	2.8		C	2.3		В
AND THE RESERVE	Score / L	OS		1.3		A	1.4		Α						F

the second second	n name of	HCS	7 Sig	nalize	d Inte	rsec	tion R	esult	s Sum	mary	NAME AND ADDRESS OF THE PARTY O	PUSSE	DESCRIPTION OF THE PARTY NAMED IN COLUMN TWO IS NOT THE PARTY NAMED IN COLUMN TWO IS		and the same
	REYOU	The state of the s	15			5.54	ELL	SECTION AND ADDRESS OF THE PARTY OF THE PART	ntersecti	on Info	em etio	1 25	AND DESCRIPTIONS	1441	N. Contract
General Inform	nation											ı	- 6	JUL	
Agency		Solaegui Engineers						-	uration,		0.25			+ 3	
Analyst		MSH			is Date			-	rea Type		Other				
Jurisdiction				Time F		1	eak Hou		HF		0.92		- 3		
Urban Street				Analys	is Year	2035 Projec		A	nalysis F	eriod	1> 7:0	0			
Intersection		Highland Ranch & A	ccess	File Na	me	HrPa3	5pw.xus	3					100	4 1 4 7	1. 1
Project Descrip	tion		SWINSTERN STREET	NUMBER OF STREET	Description in the	CONTRACTOR SHAPE	vocason.		VS (EXCEPTION	n income	H2075000		and the latest states and	NAME OF TAXABLE PARTY.	ON TAXABLE STATES
Demand Inform	mation				EB	24 - 15	Special Services	WB	STATE OF	-	NB		1	SB	
Approach Move				L	T	R	L	T	IR	L	T	R	L	T	I R
and the same of th	-		_	98	450	1	-	460	555	-	-	-	334		59
Demand (v), v	ren/n	1 (1/2 - 1/2 m/2 mm)		30	450	COLUMN TO A STATE OF	10000	400	300	9.500		200	304	1115	STATE OF
Signal Informa	ation					8	777								人
Cycle, s	70.0	Reference Phase	2		1	-> "		1		1		-	<b>→</b>		K N
Offset, s	0	Reference Point	End	Green	100	25.0	20.0	0.0	0.0	0.0		-	E .	7	-
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow		14.0	4.0	0.0	0.0	0.0		*	4	1	
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0		5	-6	7	
The said the	1					Vall B	10 20			11				wall	41 193
Timer Results				EBL		EBT	WBI	-	WBT	NBL	. 1	NBT	SBL		SBT
Assigned Phas	e			5		2			6					-	4
Case Number				2.0		4.0			7.3						9.0
Phase Duration	า, ธ			15.0		45.0			30.0				-		25.0
Change Period	I, ( Y+R	c), S		5.0		5.0			5.0						5.0
Max Allow Hea	dway (	MAH), s		3.1		3.1			3.1						3.2
Queue Clearar	nce Time	e (gs), s		5.8		12.6			18.4						7.9
Green Extension	on Time	(ge), s		0.1		2.6			2.0		1101				8.0
Phase Call Pro	bability			1.00	)	1.00			1.00						1.00
Max Out Proba	bility			0.25	i	0.11			0.44						0.00
ALCOHOL: USA	PART PART	A LOCAL TO			ED	1-	NAME OF TAXABLE PARTY.	WB	24 189	4 77	NB	1 - 1	A STATE OF	SB	3.0
Movement Gr		suits		L	EB	R	L	T	R	L	T	R	LI	T	I R
Approach Mov				-		K		-	16	-	-	13	7	1	14
Assigned Move		\ 1.11		5	2		-	6		-		-	363	-	64
Adjusted Flow				107	489	-	-	500	386	-		-	-	-	-
		ow Rate (s), veh/h/	in	1781	1870	-	-	1870	1585			-	1730	_	1585
Queue Service				3.8	10.6	-	-	16.4	14.5	_		-	5.9		2.1
March Street, Square		ce Time ( $g_{c}$ ), s		3.8	10.6			16.4	14.5		-		5.9	_	2.1
Green Ratio (				0.14	0.57		-	0.36	0.36	_			0.29		0.29
Capacity (c),		The Way		254	1069			668	566				988		453
Volume-to-Cap	-			0.419	The same of the same of		_	0.749	0.682				0.367		0.142
The Control of the Co	-	t/In ( 95 th percentile		71.5	160	-	-	293.8	and the same of				100.4		33.2
		veh/ln ( 95 th percent		2.8	6.3		-	11.6	9.0				4.0		1.3
The second secon	_	( RQ ) ( 95 th percen	tile)	0.00	0.00	-		0.00	0.00			-	0.00	-	0.00
Uniform Delay				27,3	8.7			19.7	19.1			-	20.0		18.6
Incremental De				0.4	0.1		-	4.2	2.8				0.1		0.1
Initial Queue D				0.0	0.0	-	-	0,0	0.0	-		-	0.0		0.0
Control Delay	-			27.8	8.8		-	23.9	21.9	-			20.0		18.7
Level of Service				C	A	D	200	C	C	0.0			70.9	-1	В
Approach Dela	of the second named in			12.2	4	В	23.0	,	С	0.0		-	19,8 B		В
Intersection De	aay, s/v	en/LUS	111-10	Agents.	37 50	1	8.9			OS SAID	VATE E	10-11	10/1760	1	/ASSET/U
Multimodal R	esults	COMPANIE OF THE PARTY OF THE PA		The same of	EB		- Constitution	WB			NB	Lawrence Co.	1	SB	Control of the last
Pedestrian LO		e/LOS		0.7		Α	2.4	-	В	3.0	-	C	2.3		В
Pedesinan LO							-275							4	

MA -EL LOW A	0790400	HCS	7 Sig	nalize	d Inte	ersec	tion R	lesult	ts Sun	mais	WINDS NO.	No.		MINISTER STATES	NAME OF
		To the like it of	1000	37.57.5		0 000-00			Bulleton.	A Layer		STATE OF	NAME OF TAXABLE PARTY.	J 1 34 1	AN GIVE
General Inform	mation								ntersect	And in February 1		n	- 6	J ( (	
Agency		Solaegul Engineers		y		-		-	ouration,		0.25		-		
Analyst		MSH			is Date	_			rea Type	)	Other		- 1		
Jurisdiction				Time F			eak Hou		HF		0.92		3		
Urban Street				Analys	is Year		Base + ct + Kiley		nalysis I	Period	1> 7:0	0	: <b>E</b>		
Intersection		Highland Ranch & A	Access	File Na	ame	HrPa3	35awo.x	us					30	4144	7.7
Project Descrip	otion														
The State of	E 175 17	A REVEL TO	# 1	B-N.	100		State .	Wiles!	100	1500	134110	and party	FEIL SEE	E 1/37	With
Demand Infor	mation				EB			WB			NB			SB	
Approach Mov	ement			L	Т	R	L	T	R	L	T	R	L	T	R
Demand (v),	veh/h			35	415			363	197				568		100
		The Party of the P	111		11-1-17	VIII.	40,000	No/IE	7 100			Silvery Co.		LOC	
Signal Inform				1	-71	1 8	7 7 7			1					
Cycle, s	70.0	Reference Phase	2	1	=3	->							→ ,		
Offset, s	0	Reference Point	End	Green	10.0	25.0	20.0	0.0	0.0	0.0			K		
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0	0.0	0.0		7	-		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1,0	1.0	1.0	0.0	0.0	0.0		5	. 6	7	
	6.000		3 3 5		1		FOR		322	1-11	18/1/2	-1	= 77/1/1/		STORY.
Timer Results	3			EBI		EBT	WB	L	WBT	NBL		NBT	SBL		SBT
Assigned Phas	se			5		2			6						4
Case Number				2.0		4.0			7.3						9.0
Phase Duratio	n, s			15.0	)   .	45.0	6.		30.0						25.0
Change Period	I, (Y+R	c), S		5.0	OT OT	5.0			5.0		1012		1		5.0
Max Allow Hea		Name and Address of the Owner, where the Owner, which is the Own		3.1		3.1			3.1						3.2
Queue Cleara				3.3	e i fin	11.5			14.0						12.9
Green Extensi				0.0		1.8			1.7						1.2
Phase Call Pro				1.00	)	1.00	ì		1.00				1		1.00
Max Out Proba				0.00	)	0.03			0.07						0.14
COLUMN TO A STATE OF THE PARTY	To the second	N. S. C.	Contract of	100	197559	151	45.00	WE THE	THE BUILD	10-10-1	1		7.3	Sept.	
Movement Gr	oup Re	sults			EB			WB			NB			SB	
Approach Mov	ement			L	T	R	L	T	R	L	T	R	L	T	R
Assigned Mov	ement			5	2			6	16				7		14
Adjusted Flow	Rate (	/), veh/h		38	451			395	171				617		109
Adjusted Satu	ration FI	ow Rate (s), veh/h/l	ln .	1781	1870			1870	1585				1730		1585
Queue Service	Time (	g s ), S		1.3	9.5			12.0	5.4				10.9		3.7
Cycle Queue (	Clearand	ce Time (gc), s		1.3	9.5			12.0	5.4				10.9		3.7
Green Ratio (				0.14	0.57			0.36	0.36				0.29		0.29
Capacity (c).	veh/h			254	1069			668	566				988		453
Volume-to-Cap	the state of the same	atio (X)		0.150	-			0.591	0.301				0.625		0.240
		t/In ( 95 th percentile)	)	24.4	144			215.6	82.7			3	190.9		58
		eh/ln (95 th percent		1.0	5.7			8.5	3.3				7.5		2,3
		(RQ) (95 th percen	_	0.00	0.00			0.00	0.00				0.00		0.00
Uniform Delay		AND RESIDENCE OF THE PARTY OF T		26.3	8.5			18.3	16.2				21.7		19.2
Incremental D	and the last of th	A SECRETARIA DE LA CONTRACTORIO DE		0.1	0.1			1.0	0.1	1			0.9		0.1
Initial Queue D				0.0	0.0			0.0	0.0				0.0		0.0
Control Delay				26.4	8.6			19.3	16.3				22.7		19.3
Level of Service				C	A			В	В			7	C		В
Approach Dela				10.0	-	Α	18.4	1	В	0.0			22.2		C
Intersection De	-	a district the same of		10.0	-		7.6		-	5,0			B		
The state of the s	2000	10 m 10 m 10 m	500 M	Giller	38 60	<b>Invinional</b>	WEIGH	H W	STATE	450	BRIDA	1000	TAX DAYS	200	With you
The same of the same	penite	SOURCE STATE OF THE STATE OF TH	N-112		EB	The Land	1	WB	-		NB	-6263	1	SB	weath Clar
Multimodal R	Caulta						E .	-	-		ALC: NO		A		
Multimodal R Pedestrian LO		LOS		0.7		A	2.4		В	2.8		C	2.3		В

or Transit Construction of the Construction of		HCS	7 Sig	nalize	d Inte	ersec	tion F	Resul	ts Sun	mary	-	PATRICIA NO.		-	and the same of th
Walle Waller		E PLEASE CONTRACTOR	Contract of		100	1808	1000			200	1-1901			3/-	
General Inform	nation	-	-					-	ntersect			n		ا طورتر ا پاپال	
Agency		Solaegui Engineers		-	)) <del></del>			- inmagagia	Duration,		0.25		- 100		Eller.
Analyst		MSH		Analys	is Date	Sep 1	3, 2017		rea Type	9	Other				
Jurisdiction				Time F	Period	PM P	eak Hou		HF		0.92		*		
Urban Street				Analys	is Year		Base +		Analysis f	Period	1> 7:0	00	Z. EE		
Intersection		Highland Ranch & A	Access	File Na	ame	HrPa3	Spwo.x	us					7	1147	rrr
Project Descrip	tion														
300	100		15/20	3010	This is	1413	V2:15	3000		6/18		3/15-11	1 1 1 1 1	1300	and king
<b>Demand Inform</b>	nation				EB			WB			NB			SB	
Approach Move	ement			L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), v	eh/h			98	465			474	555				334		59
Signal Informa	tion			1	2017/03		BERNE			0172	100	1000	L. Carl	(6000)	2004200
		Reference Phase	2		-3	1 4	三万 7	- 1							
Cycle, s	70.0		-			1		1				- (	7	- 4	
Offset, s	0	Reference Point	End	Green		25.0	20.0	0.0	0.0	0.0			_		
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow		4.0	4.0	0.0	0.0	0.0			•		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	11.0	0.0	0.0	0.0	m Mass	ing and as	4	SSS TOP	American Contract
Timer Results	SIP			EBI		EBT	WB	L	WBT	NBL		NBT	SBL	-	SBT
Assigned Phas			-	5		2	1	-	6				1		4
Case Number	u .			2.0	1	4.0	-	-	7.3				-	-	9.0
Phase Duration			_	15.0		45.0		-	30.0		_		-	+	25.0
		A.a.	_	5.0	-	5.0	-		5.0		-	-	-	-	5.0
Change Period	_		_				-	-			-		-	-	
Max Allow Head			_	3.1	-	3.1		-	3.1		-	-	-	+	3.2
Queue Clearan			_	5.8	_	13.1	-	-	19.1	_	-	-	-	-	7.9
Green Extension	_			0.1		2.7	1		1.9				-		8.0
Phase Call Pro	-			1.00		1.00		-	1.00				-	-	1.00
Max Out Proba	bility	3 A 2 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A	TOTAL PROPERTY.	0.25		0.14	indicate the same	_	0.53	100000	22.500	1150	No.		0.00
Movement Gro	oup Re	sults	THE PARTY OF THE P	N E STATE OF	EB		THE TAX	WB		-	NB		Your and	SB	allen II
Approach Move				L	T	R	L	T	R	L	T	R	L	T	R
Assigned Move	-			5	2	1		6	16				7		14
Adjusted Flow I		/ \ veh/h		107	505		-	515	386				363		64
The Control of the Co		low Rate (s), veh/h/l	ln .	1781	1870	-		1870	1585	-			1730		1585
Queue Service		the second secon		3.8	11.1	_		17.1	14.5				5.9		2.1
		ce Time ( <i>g c</i> ), s		3.8	11.1			17.1	14.5		-		5,9		2.1
Green Ratio (g			-	0.14	0.57	-	-	0.36	0.36				0.29		0.29
Capacity (c),		-		254	1069			668	566	-	-		988	_	453
Volume-to-Cap	-	atio ( X )		0.419	0.473	-	-	0.771	0.682				0.367	-	0.142
		t/in ( 95 th percentile)		71.5	Contract Contract	-	-	307.9	-				100.4	-	33.2
				-	167.3	-	-	-	-		-			-	-
A second section of the latest section of th		veh/ln (95 th percent		2.8	6.6		-	12.1	9.0	-			4.0		1.3
The second secon	-	(RQ) (95 th percent	uie)	0.00	0.00		-	0.00	0.00		-	-	0.00		0.00
Uniform Delay	-	ARREST OF A STATE OF THE PARTY		27.3	8.8			20.0	19.1			-	20.0	-	18.6
Incremental De				0.4	0.1			5.0	2.8				0.1		0.1
Initial Queue D	many the second point			0.0	0.0	-	-	0.0	0.0			-	0.0		0.0
Control Delay (			-	27.8	8.9			25.0	21.9	-			20.0		18.7
Level of Service				С	A			C	C				C	-	В
Approach Dela				12.2	2	В	23.	7	C	0.0			19.8		В
Intersection De	lay, s/v	eh / LOS	West Marine	10000	Page 1	15	9.2	District of		No. of Street, or other teams, and the street,	N. Palance	210	В	STORAGE	nounesee
Multimodal Re	sulte	SHOP TO SHAPE TO SHAPE	Pare		EB	المالم	PER	WB	100 m	1500	NB	200	The state of	SB	14/1
Pedestrian LOS	-	1108	-	0.7	1	Λ	2.4	-	В	3.0	-	C	2.3	1	В
Bicycle LOS So		THE RESERVE OF THE PERSON NAMED IN		<u> </u>		A	2.0	-	В	3.0	-	0	2.3	-	F
Dicycle LUS St	JUIC / L	0.0		1,5		Α	2.0		D		1		B		Г

General Information		Site Information	
Analyst	MSH	Intersection	Highland Ranch & Frontage
Agency/Co.	Solaegui Engineers	Jurisdiction	City of Sparks
Date Performed	9/15/2017	East/West Street	Highland Ranch Parkway
Analysis Year	2017	North/South Street	Frontage Road
Time Analyzed	AM Ex. + Project + Other	. Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description			



Vehicle Volu	imes and	Ad	ustments
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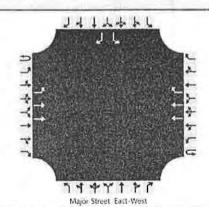
Approach		Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	Т	R	U	L	Т	R	U	L	T	R	
Priority	1U	1	2	3	4U	4	5	6	-	7	8	9		10	11	12	
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1	
Configuration		L	T				T	R						L		R	
Volume, V (veh/h)		37	1054				869	117						125		24	
Percent Heavy Vehicles (%)		2												2		2	
Proportion Time Blocked																	
Percent Grade (%)															0		
Right Turn Channelized		1	No			1	No			١	10			١	lo		
Median Type/Storage				Undi	ivided												

# Critical and Follow-up Headways

Base Critical Headway (sec)							
Critical Headway (sec)							
Base Follow-Up Headway (sec)							
Follow-Up Headway (sec)							

Flow Rate, v (veh/h)	40					136	26
Capacity, c (veh/h)	646	- 1				91	538
v/c Ratio	0.06					1,49	0,05
95% Queue Length, Q <sub>95</sub> (veh)	0.2					10.5	0,2
Control Delay (s/veh)	10,9					352.5	12.0
Level of Service, LOS	В					F	В
Approach Delay (s/veh)	0.4					297.8	
Approach LOS			1			F	

General Information		Site Information	
Analyst	MSH	Intersection	Highland Ranch & Frontage
Agency/Co.	Solaegui Engineers	Jurisdiction	City of Sparks
Date Performed	9/15/2017	East/West Street	Highland Ranch Parkway
Analysis Year	2017	North/South Street	Frontage Road
Time Analyzed	PM Ex. + Project + Other	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description			3



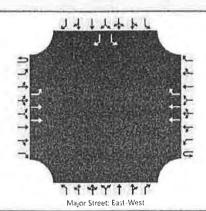
**Vehicle Volumes and Adjustments** 

Approach		Eastl	oound			West	bound		Northbound					South	bound	
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	Т				T	R	7					L		R
Volume, V (veh/h)		28	1009				1158	180						164		40
Percent Heavy Vehicles (%)		2						( = )						2		2
Proportion Time Blocked																
Percent Grade (%)								203127						(	)	
Right Turn Channelized		1	No				Vo			N	lo		No			
Median Type/Storage				Und	ivided								and the same			-
Critical and Follow-up	Headwa	ys							-							
Base Critical Headway (sec)																N.
			-	7.	1	1	-							1		

Delay, Queue Length, and L	evel of S	ervice							
Follow-Up Headway (sec)									
Base Follow-Up Headway (sec)									
Critical Headway (sec)									
Base Critical Headway (sec)							-		

selay, duene songin, and						
Flow Rate, v (veh/h)	30				178	43
Capacity, c (veh/h)	461	111			60	424
v/c Ratio	0.07				2.97	0,10
95% Queue Length, Q <sub>95</sub> (veh)	0.2				18,4	0.3
Control Delay (s/veh)	13,4				1036.1	14,4
Level of Service, LOS	В		1		F	В
Approach Delay (s/veh)	0.4				837.3	
Approach LOS					F	

General Information		Site Information	
Analyst	MSH	Intersection	Highland Ranch & Frontage
Agency/Co.	Solaegui Engineers	Jurisdiction	City of Sparks
Date Performed	9/15/2017	East/West Street	Highland Ranch Parkway
Analysis Year	2035	North/South Street	Frontage Road
Time Analyzed	AM Base + Project + Other	Peak Hour Factor	0.95
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description			



Vehicle	Volumes	and Ad	ustments
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Approach	Eastbound					West	bound		Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	Ľ	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T				T	R						L		R
Volume, V (veh/h)		37	946				536	117						125		24
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)														(	)	
Right Turn Channelized		١	No			ľ	Vo.			١	10			N	lo	
Median Type/Storage				Undi	vided							-				

### Critical and Follow-up Headways

95% Queue Length, Q<sub>95</sub> (veh)

Control Delay (s/veh)

Level of Service, LOS

Approach LOS

Approach Delay (s/veh)

Critical and Follow-up riea	laways					
Base Critical Headway (sec)						
Critical Headway (sec)						
Base Follow-Up Headway (sec)						
Follow-Up Headway (sec)						
Delay, Queue Length, and	Level of Serv	/ice				
Flow Rate, v (veh/h)	39				132	25
Capacity, c (veh/h)	903				186	715
v/c Patio	0.04				0.71	0.03

0.1

9.2

0.3

4.4

61.2

F

53,0

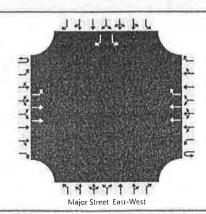
F

0.1

10,2

8

General Information		Site Information					
Analyst	MSH	Intersection	Highland Ranch & Frontage				
Agency/Co.	Solaegui Engineers	Jurisdiction	City of Sparks				
Date Performed	9/15/2017	East/West Street	Highland Ranch Parkway				
Analysis Year	2035	North/South Street	Frontage Road				
Time Analyzed	PM Base + Project + Other	Peak Hour Factor	0.95				
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25				
Project Description							



Vehicle	Volumes	and Ad	justments
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Approach	Eastbound			Westbound				Northbound				Southbound				
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1	10	0	0	0		1	0	1
Configuration		L	T				Т	R						L	7	R
Volume, V (veh/h)		28	771				989	180						164		40
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)															)	
Right Turn Channelized		No			No			No				No				
Median Type/Storage	Undivided															

# **Critical and Follow-up Headways**

Base Critical Headway (sec)								
Critical Headway (sec)								
Base Follow-Up Headway (sec)								
Follow-Up Headway (sec)								

# Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)	29					173	42
Capacity, c (veh/h)	562					106	501
v/c Ratio	0.05					1,63	80,0
95% Queue Length, Q <sub>95</sub> (veh)	0.2				777	13.2	0.3
Control Delay (s/veh)	11,7					392.3	12.8
Level of Service, LOS	В					F	В
Approach Delay (s/veh)	pproach Delay (s/veh) 0,4					318.2	
Approach LOS						F	