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Rashelle Hobbs, Recorder, Salt Lake County, Utah
Return To: WEST JORDAN CITY,
8000 SOUTH REDWOOD ROAD WEST JORDAN, UT 84088



THE CITY OF WEST JORDAN, UTAH
A Municipal Corporation

ORDINANCE NO. 24-13

**AN ORDINANCE FOR APPROXIMATELY 53.4 ACRES OF PROPERTIES LOCATED AT
APPROXIMATELY 6835 WEST NEW BINGHAM HIGHWAY,
IDENTIFIED AS JONES LANDING NORTH PROJECT; AND**

**APPROVAL OF A MASTER DEVELOPMENT AGREEMENT FOR SAID DEVELOPMENT,
SUBJECT TO THE APPROVAL OF A GENERAL PLAN LAND USE MAP AMENDMENT,
REZONE, AND OTHER CONDITIONS PRECEDENT**

WHEREAS, the City of West Jordan (“City”) adopted the Comprehensive General Plan (“General Plan”) in 2023, as amended, which provides for a general plan land use map (“General Plan Land Use Map”), which is periodically updated; and the City adopted the West Jordan City Code (“City Code”) in 2009, as amended, which provides for development agreements, and which provides for a zoning map for the City (“Zoning Map”), which is periodically updated; and

WHEREAS, an application was made by Gardner West Jordan, L.C., a Utah Limited Liability Company (“Applicant”) for approximately 53.4 acres of property located at approximately 6835 West New Bingham Highway (“Property” or “Jones Landing North Project”) for, in part, a request for a Master Development Agreement (which includes a Master Development Plan), subject to a General Plan Future Land Use Map amendment, rezone, and other conditions precedent (“Application”, “MDA”, and “General Plan Land Use Map Amendment and Rezone”); and

WHEREAS, on February 20, 2024, the Application was considered by the West Jordan Planning Commission (“Planning Commission”), which held a public hearing and made a *positive* recommendation to the West Jordan City Council (“City Council”) concerning the Jones Landing North Project, including the MDA; and

WHEREAS, a public hearing was held before the City Council on March 27, 2024 concerning the Jones Landing North Project, including the MDA; and

WHEREAS, the Applicant has agreed to and has executed the MDA that will govern the development of the Property, should the City Council, in its sole legislative discretion, choose to adopt the MDA and the General Plan Land Use Map Amendment and Rezone, and should all the conditions precedent in the MDA be fulfilled; and

WHEREAS, the City Council has reviewed and desires to approve the MDA, subject to the conditions precedent therein; and

WHEREAS, in its sole legislative discretion, the City Council now finds it to be in the best interest of the public health, safety, and welfare of the residents of the City to adopt the MDA, subject to the City Council, in its sole legislative discretion, choosing to adopt the General Plan Land Use Map Amendment and Rezone, and subject to all the conditions precedent in the MDA being fulfilled.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WEST JORDAN, UTAH AS FOLLOWS:

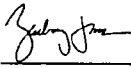
Section 1. Approval of MDA. The MDA (in "Attachment 1") is approved and the Mayor is authorized to execute said MDA. The approval of the MDA is subject to the conditions precedent set forth in the MDA, including but not limited to the City Council, in its sole legislative discretion, subsequently choosing to adopt, by Ordinance, the General Plan Land Use Map Amendment and Rezone. The Applicant and Owner were required to sign and execute the MDA before these Ordinances were presented to the City Council.

Section 2. Severability. If any provision of this Ordinance is declared to be invalid by a court of competent jurisdiction, the remainder shall not be affected thereby.

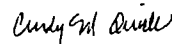

Section 3. Effective Date. This Ordinance shall become effective immediately upon posting or publication as provided by law and upon (i) the Mayor signing the Ordinance, (ii) the City Council duly overriding the veto of the Mayor as provided by law, or (iii) the Mayor failing to sign or veto the Ordinance within fifteen (15) days after the City Council presents the Ordinance to the Mayor.

PASSED BY THE CITY COUNCIL OF THE CITY OF WEST JORDAN, UTAH, THIS 28TH DAY OF MARCH 2024.

CITY OF WEST JORDAN

By: 
Zach Jacob
Council Chair

ATTEST:

 
Cindy M. Quick, MMC
Council Office Clerk

Voting by the City Council	"YES"	"NO"
Council Chair Zach Jacob	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Council Vice-Chair Chad Lamb	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Council Member Kelvin Green	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Council Member Pamela Bloom	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Council Member Kent Shelton	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Council Member Kayleen Whitelock	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Council Member Bob Bedore	<input checked="" type="checkbox"/>	<input type="checkbox"/>

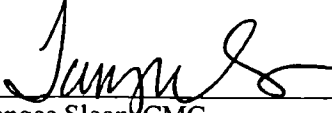
PRESENTED TO THE MAYOR BY THE CITY COUNCIL ON MARCH 28, 2024.

Mayor's Action: _____ Approve _____ Veto

By: 
Mayor Dirk Burton

4.2.2024
Date

ATTEST:


Tangee Sloan, CMC
City Recorder

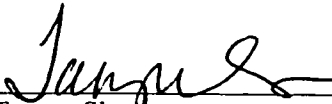


STATEMENT OF APPROVAL OF PASSAGE (check one)

The Mayor approved and signed Ordinance No. 24-13.

_____ The Mayor vetoed Ordinance No. 24-13 on _____ and the City Council timely overrode the veto of the Mayor by a vote of _____ to _____.

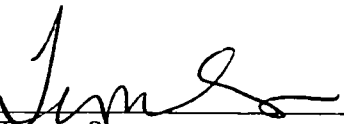
_____ Ordinance No. 24-13 became effective by operation of law without the Mayor's approval or disapproval.


Tangee Sloan
City Recorder



CERTIFICATE OF PUBLICATION

I, Tangee Sloan, certify that I am the City Recorder of the City of West Jordan, Utah, and that a short summary of the foregoing ordinance was published on the Utah Public Notice Website on the 3rd day of April, 2024. The fully executed copy of the ordinance is retained in the Office of the City Recorder pursuant to Utah Code Annotated, 10-3-711.


Tangee Sloan
City Recorder



**Attachment 1 to
ORDINANCE NO. 24-13**

**AN ORDINANCE FOR APPROXIMATELY 53.4 ACRES OF PROPERTIES LOCATED AT
APPROXIMATELY 6835 WEST NEW BINGHAM HIGHWAY,
IDENTIFIED AS JONES LANDING NORTH PROJECT; AND**

**APPROVAL OF A MASTER DEVELOPMENT AGREEMENT FOR SAID DEVELOPMENT,
SUBJECT TO THE APPROVAL OF A GENERAL PLAN LAND USE MAP AMENDMENT,
REZONE, AND OTHER CONDITIONS PRECEDENT**

**MASTER DEVELOPMENT AGREEMENT
For the Jones Landing North Project
(See the following pages)**

***Recording Requested By and
When Recorded Return to:***

City of West Jordan
Attention: City Recorder
8000 South Redwood Road
West Jordan, Utah 84088

For Recording Purposes, Do Not Write Above This Line

**MASTER DEVELOPMENT AGREEMENT
For the Jones Landing North Project**

The City of West Jordan, a Utah municipal corporation (the “**City**”) and Gardner West Jordan, L.C., a Utah Limited Liability Company (“**Master Developer**”), enter into this Master Development Agreement (this “**Agreement**”) as of the date Master Developer and the City’s mayor, on behalf of the City, mutually sign this Agreement, and agree as set forth below. The City and the Master Developer are jointly referred to as the “**Parties**”. Each party may be referred to as a “**Party**”. The current property owner of the “**Property**” (see definition in Recital 1 below) is M H Jones Family, LLC, a Utah Limited Liability Company, and V & M Jones Family, LLC, a Utah limited liability company, as tenants in common (collectively, “**Property Owner**”), who acknowledges and consents to this Agreement and agrees to be bound to all the terms of this Agreement (as set forth in Section F.1 and the OWNER ACKNOWLEDGEMENT AND CONSENT below).

RECITALS

1. Master Developer has entered into an agreement or agreements for the purchase of approximately 53.4 acres of certain real property, located at approximately 6835 West New Bingham Highway and identified as Assessor’s Parcel Number 26101000070000, formerly numbered as 26101000060000 (the “**Property**”). See the Application and Legal Description of the Property attached as **Exhibit E** and the Concept Site Plans (showing the location of the Property) attached as **Exhibit F**. The development identified in this Agreement, together with the Exhibits, is referred to herein as the “**Project**” or the “**Development**”.

2. The Property currently has a future land use map designation of Light Industrial and Future Park and is proposed to be redesignated as Southwest Quadrant on the future land use map. The Property is currently located in an A-20 Zone (Agriculture, 20-acre minimum lots Zone) and M-1 Zone (Light Manufacturing Zone) (collectively “**Current Zone**”) and is proposed to be rezoned to the SWQ-MU Zone District (Southwest Quadrant Mixed Use) (“**New Zone**” and “**Rezone**”). See the “Current Future Land Use Map” attached as **Exhibit A**, the “Proposed Future Land Use Map” attached as **Exhibit B**, the “Current Zoning Map” attached as **Exhibit C**, and the “Proposed Zoning Map” attached as **Exhibit D**. See Section D.1 below regarding a portion of the Property being located in an Overlay Zone, which Overlay Zone shall continue to be in effect.

3. Master Developer has sufficient resources to develop the Project in its entirety. Master Developer acknowledges and agrees that the City currently has limited utility infrastructure available for the Project and agrees to be bound by these limitations, as set forth in Sections D.2 through D.4 inclusive of the Terms below.

4. This Project is a mixed-use development with residential apartments, commercial, parks, and other types of uses to be constructed on the Property within the New Zone.

5. Master Developer may develop the Property in multiple phases (each a "Phase") and has contracted with the Property Owner to purchase, or has the right to require the Property Owner to contribute to a Project Entity (defined below), and develop the Property in a manner that is consistent with this Agreement.

6. The Property will be developed in accordance with the development plan(s), subdivision plat(s), and/or site plan(s) approved by the City, the City Code, and as further refined by this Agreement.

7. The following Exhibits are attached hereto and incorporated herein by reference:

Exhibit A – Current Future Land Use Map

Exhibit B – Proposed Future Land Use Map

Exhibit C – Current Zoning Map

Exhibit D – Proposed Zoning Map

Exhibit E – Application and Legal Description of the Property

Exhibit F – Concept Site Plans

8. The Parties acknowledge that the development and improvement of the Property pursuant to this Agreement will add value for the Master Developer and will provide certainty useful to all Parties in ongoing and future dealings and relations among the Parties.

NOW THEREFORE, based upon the foregoing recitals and in consideration of the mutual covenants and promises contained set forth herein, the Parties agree as follows:

TERMS

A. Recitals; Definitions. The Recitals and Exhibits are incorporated herein by this reference. Any capitalized term used but not otherwise defined in this Agreement shall have the meaning ascribed to such term in the City's Land Use Regulations. In consideration for the increase in density allowed by the Rezone and this Agreement, Master Developer agrees to the remaining terms of this Agreement.

B. Condition(s) Precedent. As a condition precedent to the obligations of the Parties:

1. Approval of this Agreement. The rights and authority of Master Developer to develop the Property pursuant to the terms of this Agreement are contingent upon and shall only come into being if the City Council of West Jordan ("City Council" or "Council"), in its sole legislative discretion, approves,

by Ordinance, this Agreement.

2. Approval of Rezone. The rights and authority of Master Developer to develop the Property pursuant to the terms of this Agreement are contingent upon and shall only come into being if the City Council, in its sole legislative discretion, approves, by Ordinance, the Rezone.

3. Closing on the Property Transactions. After the approval of the Agreement and the Rezone by the City Council, the rights and authority of Master Developer to develop the Property pursuant to the terms of this Agreement are contingent upon and shall only come into being as either: (1) Master Developer closes on each Phase of the purchase of the Property from the Property Owner; or (2) Property Owner contributes a Phase to the applicable Project Entity (“Closing”).

C. Governing Regulations; and Conflicting Provisions. The Property, if developed, shall be developed in accordance and consistent with the “**Governing Regulations**”, in the following hierarchy of levels of documents: (i) first (highest level), the provisions of this Agreement, including the Preliminary Development Plan (as updated by any Final Development Plan subsequently approved by the City) and all the other Exhibits and the Rezone, and (ii) second, the requirements and benefits provided for in relation to the Current Zone under the City’s Land Use Regulations. Any conflicting provisions shall be resolved in favor of the higher level of document.

D. Development Obligations.

1. Development Plans, Subdivision Plats, Site Plans, and Overlay Zone. In addition to the Master Developer complying with the provisions of the Governing Regulations, development of the Property by the Master Developer shall be in accordance with any City-approved development plans, subdivision plats, site plans, this Agreement and the Rezone. The approval of development plans, subdivision plats, and site plans shall not be unreasonably withheld, conditioned, or delayed by the City. After the approval of the Agreement and the Rezone by the City Council, if the City denies any development application, the City shall provide a written determination advising Master Developer of the reasons for the denial, including specifying the reasons the City believes that such application is not consistent with this Agreement, the Rezone, and the Governing Regulations. A portion of the Property is located within the Drinking Water Source Protection Overlay Zone, which Overlay Zone shall continue to be in effect; and Master Developer shall comply with all applicable regulations, standards, and requirements regarding this Overlay Zone.

2. Maximum Equivalent Residential Units for the Project. The maximum equivalent residential units (“ERU’s”) for the Project are as follows:

- Apartment Units = 336 Units or approximately 250 ERU's
- Clubhouse / Amenities = 7 ERU's
- Industrial Warehouse (350,000s.f.) = 75 ERU's
- Flex Warehouse (100,000s.f.) = 15 ERU's
- Gas Station = 10 ERU's
- **Total Project ERU's = 357 (204 ERU’s more than what is allowed in the Current Zone)**

Master Developer shall have the right to allocate the ERUs among the Phases in Master Developer's discretion, subject to the maximum amounts set forth above. Consistent with what is required for other developments obtaining an increase in density and in consideration for such increase in density, Master Developer shall reimburse the City for the costs associated with studies prepared by City-retained consultants for culinary water and sanitary sewer master plans, capital facilities plans, impact fee analyses, etc.

3. Limited City Utility Infrastructure. Master Developer acknowledges and agrees that the City currently has limited utility infrastructure available for the Project and agrees to be bound by these limitations.

4. Parks Space and Amenities. Master Developer shall share access with land owned by the City's water tank site. Master Developer shall build the road and car parking area to the adjacent park and will be able to use the road as an access for the Development. The parking stalls provided shall be counted towards the park parking requirement. Once completed, the park and that portion of the access road lying within the Property shall be dedicated to the City, to be owned and maintained by the City as a City park and access road. The details of the park will be agreed upon between the Parties as part of the site plan approval but shall comply with all relevant City regulations and standards. Transmission lines and existing easements shall be preserved and honored within the park. Master Developer shall coordinate with City engineering, parks, planning, and other relevant City staff regarding Master Developer's site plan to ensure preservation of the easements.

5. Applicability of Building Design Elements. In accordance with Utah Code Ann. Section 10-9a-534(3)(d, h), and other applicable and successor provisions, and at the request of the Master Developer, and in consideration for the increase in density, as well as the other benefits regarding the requested residential types allowed by the Rezone and Concept Site Plans, all applicable Building Design Elements of the City shall apply to the Property and to the dwellings, structures, and buildings constructed thereon.

E. Development Rights; and Reserved Legislative Powers.

1. Development Rights. Master Developer shall have the vested right to develop and construct, in one or more Phases, the Project in accordance with the terms and conditions of this Agreement, the Rezone, and the existing City Code.

2. Reserved Legislative Powers. The Master Developer acknowledges that the City is restricted in its authority to limit its police power by contract and that the limitations, reservations and exceptions set forth herein are intended to reserve to the City all police powers that cannot be so limited. Notwithstanding the retained power of the City to enact such legislation under the police powers, such legislation shall only be applied to modify the vested rights described in Section E.1 based on a good faith application of the policies, facts, and circumstances meeting the compelling, countervailing public interest exception to the vested rights doctrine in the State of Utah. Any such proposed change, including the imposition of any moratoria, affecting the vested rights of the Master Developer granted under this

Agreement shall be binding upon Master Developer only if: (a) such change is of general application to all development activity in the City; and (b) Master Developer receives, unless in good faith the City declares an emergency posing an imminent danger to the safety of its citizens, not less than ninety (90) days prior written notice and an opportunity to be heard with respect to the proposed change and its applicability to the Project and the rights granted hereunder.

F. Term of this Agreement; Agreement Runs With the Land. Subject to Section B above, the obligations of the Parties under this Agreement shall take effect as of the date of Master Developer and the City's mayor, on behalf of the City, mutually sign this Agreement, shall run with the land, and shall continue in full force and effect until all obligations hereunder have been fully performed and all rights hereunder fully exercised. Subject to Master Developer's extension right set forth below, this Agreement shall not extend beyond a period of ten (10) years from its date of recordation in the office of the Salt Lake County Recorder. So long as Master Developer is not in default under this Agreement, Master Developer shall have the right, upon written notice to the City prior to the expiration of the initial ten (10) year term, to extend the term for an additional five (5) years. If Master Developer has not commenced development of a portion of the Property consistent with this Agreement prior to its termination, the undeveloped portion of the Property may not be developed until one of the following occurs: (i) a new written agreement has been negotiated and executed by the Parties or successors in interest, governing development of the Property; or (ii) Master Developer or its successor in interest applies to the City for zoning and the City Council, in its sole legislative discretion approves either the requested or different zoning.

1. Agreement Runs with the Land. This Agreement shall be recorded against the Project as described in the Exhibit E. The agreements, benefits, burdens, rights, and responsibilities contained herein, including all vested rights and obligations of Master Developer, shall be deemed to run with the land and shall be binding on and shall inure to the benefit of the successors in ownership of the Project, or portion thereof, as applicable, with respect to that portion of the Project owned by such successors in ownership. This Agreement, and the Development Application, shall also apply to the Property Owner and to any other current owners of real property, if any, in the Project, and their assigns, who are bound to all the terms of this Agreement. Nothing in this Agreement shall apply to residents or property owners who purchase developed lots or units within the Project.

G. General Provisions.

1. Notices. All Notices, filings, consents, approvals, and other communication provided for herein or given in connection herewith shall be validly given, filed, made, delivered or served if in writing and delivered personally or sent by registered or certified U.S. Postal Service mail, return receipt requested, postage prepaid to the addresses noted below or to such other addresses as either party may from time to time designate in writing and deliver in like manner. Any such change of address shall be given at least 10 days before the date on which the change is to become effective:

If to City: ATTN: City Recorder
 City of West Jordan
 8000 South Redwood Road
 West Jordan City, UT 84088

If to Master Developer: ATTN: Ben Seastrand
 Gardner West Jordan, L.C.
 201 S. Main Street, Suite 2000
 Salt Lake City, UT 84111

2. Mailing Effective. Notices given by mail shall be deemed delivered seventy-two (72) hours following deposit with the U.S. Postal Service in the manner set forth above.

3. No Waiver. Any party's failure to enforce any provision of this Agreement shall not constitute a waiver of the right to enforce any other provision. The provisions may be waived only in writing by the Party intended to be benefited by the provisions, and a waiver by a Party of a breach hereunder by the other Party shall not be construed as a waiver of any succeeding breach of the same or other provisions.

4. Headings. The descriptive headings of the paragraphs of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any provision of this Agreement.

5. Authority. The Parties represent to one another that they have full power and authority to enter into this Agreement, and that all necessary actions have been taken to give full force and effect to this Agreement. Master Developer represents and warrants it is fully formed and validly existing under the laws of the State of Utah, and that it is duly qualified to do business in the State of Utah and is in good standing under applicable state laws. The Parties warrant to one another that the individuals executing this Agreement on behalf of their respective parties are authorized and empowered to bind the Parties on whose behalf each individual is signing. If any party to this Agreement is a trust, before signature of this Agreement, all trustees of any trust who are acting on behalf of the trust as a party to this Agreement or subsequent agreements must produce proof to the City's satisfaction that the signatory signing this Agreement is indeed the legally authorized trustee of the trust. The Master Developer represents to the City that by entering into this Agreement, and Property Owner's execution of the consent, all persons and entities having a legal or equitable interest in the Property necessary to subject the Property to the terms of this Agreement as of the Effective Date are parties hereto.

6. Entire Agreement. This Agreement, including Exhibits to this Agreement and all other documents referred to in this Agreement, contains the entire agreement of the Parties with respect to the subject matter hereof and supersede any prior promises, representations, warranties, inducements or understandings between the Parties which are not contained in such agreements, regulatory approvals and related conditions.

7. Amendment. This Agreement may be amended in whole or in part with respect to all or any portion of the Property by the mutual written consent of the Parties to this Agreement. Any such amendment of this Agreement shall be recorded in the official records of the Salt Lake County Recorder's Office. Moreover, any amendment to this Agreement not recorded in the Salt Lake County Recorder's Office shall be void *ab initio*.

8. Severability. If any provision of this Agreement is declared void or unenforceable, such provision shall be severed from this Agreement. This Agreement shall otherwise remain in full force and effect provided the fundamental purpose of this Agreement and Master Developer's ability to complete the development of the Property is not defeated by such severance.

9. Governing Law. The laws of the State of Utah shall govern the interpretation and enforcement of the Agreement. The Parties agree that the venue for any action commenced in connection with this Agreement shall be proper only in a court of competent jurisdiction located in Salt Lake County, Utah. The Parties hereby expressly waive any right to object to such choice of law or venue.

10. Default.

a. If Master Developer or the City fail to perform their respective obligations hereunder or to comply with the terms hereof, the party believing that a default has occurred shall provide notice to the other party as provided herein. If the City believes that the default has been committed by a third party, then the City shall also provide a courtesy copy of the notice to Master Developer. The Notice of Default shall:

(1) Specify the claimed event of default by identifying with particularity specific provisions of this Agreement, and any applicable law, rule, or regulation that the Party is claimed to be in default;

(2) Identify why the default is claimed to be material; and

(3) If a party chooses, in its discretion, propose a method and time for curing the default which shall be of no less than sixty (60) days duration.

b. Upon the issuance of a Notice of Default, the Parties shall meet within ten (10) business days and confer in an attempt to resolve the issues that are the subject matter of the Notice of Default.

11. Remedies. If, after meeting and conferring, the Parties are not able to resolve an alleged default, then, following the expiration of applicable cure periods, the Parties shall have their rights and remedies available at law and in equity, including, but not limited to injunctive relief, specific performance and termination.

12. [Reserved].

13. Extended Cure Period. If any default cannot be reasonably cured within sixty (60) days then such cure period may be extended as needed, by written agreement of the Parties for good cause shown, so long as the defaulting party is pursuing a cure with reasonable diligence.

14. Cumulative Rights. The rights and remedies set forth herein shall be cumulative.

15. Force Majeure. All time period imposed or permitted pursuant to this Agreement shall automatically be extended and tolled for: (a) period of any and all generally applicable moratoria imposed by the City or other governmental authorities in any respect that materially affects the development of the Project; or (b) by events reasonably beyond the control of Master Developer including, without limitation, inclement weather, war, strikes, unavailability of materials at commercially reasonable prices, and acts of God, but which does not include financial condition of the Master Developer or its successors.

16. Attorney's Fee and Costs. If any party brings legal action either because of a breach of the Agreement or to enforce a provision of the Agreement, the prevailing party shall be entitled to reasonable attorney's fees and court costs, including on any appeal.

17. Binding Effect. The benefits and burdens of this Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective heirs, legal representatives, successors in interest and assigns.

18. No Third-Party Rights. The obligations of the signatories of this Agreement and the City, set forth in this Agreement shall not create any rights in or obligations to any other persons or parties except to the extent otherwise provided herein.

19. Assignment. Master Developer shall not assign, delegate, or transfer its interest in this Agreement without prior written approval by the City; provided, however, Master Developer may freely assign its interest in this Agreement, in whole or in part with respect to a Phase (in each case, without approval from the City) to either of the following (each, a "Project Entity") (i) an entity that is owned or controlled by Master Developer or its affiliates or subsidiaries or (ii) any joint venture partner of Master Developer or its affiliates or subsidiaries, so long as Master Developer gives written notice of such assignment to the City and the successor party agrees to assume Master Developer's obligations set forth in this Agreement. Except as set forth in the preceding sentence, any attempt to assign, delegate, or transfer without the City's prior written approval will be void *ab initio*, and Master Developer will remain liable for the performance of each and every obligation of Master Developer in this Agreement. If an assignment, delegation, or transfer is held not to be void, the parties intend that this Agreement will be binding on the assignee, delegatee, or transferee, as applicable. Any such request for assignment may be made by letter addressed to the City as provided herein, and the prior written consent of the City may be evidenced by letter from the City to Master Developer or its successors or assigns. The assignment of one or more Phases of the Project shall require the assignee to sign a form of assignment and assumption of this Agreement, agreeing to be bound by the terms of the Land Use Regulations and this Agreement from and after the date of such assignment. Upon any assignment to a Project Entity, Master Developer shall be

released from any future obligations as to those obligations which are assigned but shall remain responsible for the performance of any obligations that were not assigned. Additionally, notwithstanding the foregoing or anything to the contrary herein, Master Developer shall have the right, without the consent of the City, to collaterally assign this Agreement to Master Developer's lender for the Project or any Phase of the Project.

20. No Agency Created. Nothing contained in the Agreement shall create any partnership, joint venture, or agency relationship between the Parties.

21. Indemnification. Master Developer shall, at all times, protect, indemnify, save harmless, and defend City and its agents, employees, officers, and elected officials from and against any and all out-of-pocket claims, demands, judgments, expense, and all other out-of-pocket damages of every kind and nature made, rendered, or incurred by the City, including the City's employees, which arise out of any act or failure to act, work or other activity related in any way to the failure to completely adhere to the Governing Regulations related to the development of a Phase, by Master Developer, Master Developer's agents, employees, subcontractors, or suppliers in the performance and execution of the work/development contemplated by this Agreement ("Any Claims"). Nothing in this provision shall be deemed to limit or impair Master Developer's rights or claims for contribution, indemnification, or relief against City's contractors, subcontractors, or suppliers. Notwithstanding the foregoing or anything to the contrary herein, Master Developer shall not be required to indemnify, hold harmless, or defend City from any claims or liabilities caused by, or resulting from, any actions or failures to act by City or its agents, employees, officers, or contractors.

22. Referendum. In the event of a referendum or similar ballot measure for the approval of this Agreement or the Rezone ("Referendum"), and if the City in its sole discretion, but only at the written request of Master Developer, subsequent to the approval of this Agreement, elects to defend against the Referendum, the Master Developer shall reimburse City's out-of-pocket fees (including reasonable out-of-pocket attorney's fees), out-of-pocket court costs, and any related out-of-pocket costs of defending against the Referendum; provided, in no event shall the Master Developer have any obligation to reimburse such costs unless Master Developer requests in writing that the City defend against the Referendum. The Master Developer's obligation to reimburse the City during any defense of a Referendum shall be reimbursed within ten (10) days of the City providing written notice to Master Developer of the City's receipt of a periodic or final invoice, a judgment, a settlement, or other obligation by the City. Master Developer's obligation to indemnify against the out-of-pocket costs of defense shall exist regardless of the outcome of the Referendum or decisions to modify or withdraw the approval.

23. Non-Liability of Officials or Employees. No officer, representative, agent, or employee of the City, or the Master Developer, shall be personally liable to the other Party, or any successor-in-interest or assignee of such other Party, in the event of any default or breach by either Party or for any amount which may become due to such other Party, or its successors or assignees, for any obligation arising out of the terms of this Agreement.

24. Representation Regarding Ethical Standards. The Master Developer represents that it has not knowingly influenced, and hereby promises that it will not knowingly influence, a current or former City officer or employee to breach any of the ethical standards set forth in the City Ethics Ordinance codified in Title 1, Chapter 11 (including Article A) of the West Jordan City Code.

25. Public Information. The Parties understand and agree that all documents related to this agreement will be public documents, as provided in UTAH CODE ANN. § 63G-2-101, *et seq.*


26. Counterparts. This Agreement may be executed in multiple counterparts which shall constitute one and the same document.

27. Tax Benefits. The City acknowledges that Master Developer may seek and qualify for certain tax benefits by reason of conveying, dedicating, gifting, granting or transferring portions of the Project to the City or to a charitable organization for open space. Master Developer shall have the sole responsibility to claim and qualify for any tax benefits sought by Master Developer by reason of the foregoing. The City shall reasonably cooperate with Master Developer to the maximum extent allowable under law to allow Master Developer to take advantage of any such tax benefits.

28. Estoppel Certificate. Upon twenty (20) days' prior written request by Master Developer, the City will execute an estoppel certificate to any third party certifying that Master Developer at that time is not in default of the terms of this MDA.


IN WITNESS WHEREOF, the Parties have executed this Agreement, having been approved by the City of West Jordan pursuant to the Ordinance authorizing such execution, and by a duly authorized representative of Master Developer.

CITY OF WEST JORDAN,
a Utah municipal corporation

By: 
Dirk Burton, Mayor



ATTEST:


City Recorder

[Acknowledgment on the next page.]

ACKNOWLEDGMENT

STATE OF UTAH)
: ss.
County of Salt Lake)

On this 10th day of April, 2024, before the undersigned notary public in and for the said state, personally appeared Dirk Burton, known or identified to me to be the Mayor of the City of West Jordan, and Tangee Sloan, the City Recorder of the City of West Jordan, and the persons who executed the foregoing instrument on behalf of said City and acknowledged to me that said City executed the same.

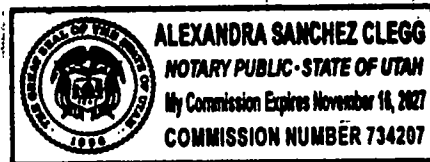
IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first above written.

Alexandra Sanchez Clegg

Notary Public for Utah

APPROVED AS TO FORM

America Jo [Signature]
City Attorney's Office 4/10/2024

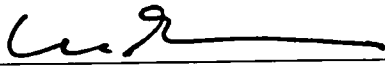


[Additional signatures on the following pages.]

Gardner West Jordan, L.C.,
a Utah Limited Liability Company
("MASTER DEVELOPER")

By: KC Gardner Company, L.C., a Utah limited liability
company

Its: Manager

By (Sign): 

Print Name: Christian Gardner

Its (Title): Manager

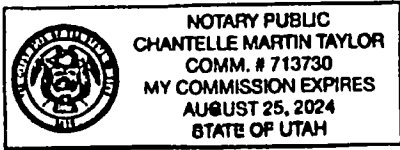
[Acknowledgments on the next page.]

ACKNOWLEDGMENTS

STATE OF UTAH)
 : ss.
County of Salt Lake)

On this 11th day of March, 2024, before the undersigned notary public in and for the said state, personally appeared Christian Gardner known or identified to me to be the Manager of **KC Gardner Company, L.C.**, a Utah limited liability company, the Manager of **Gardner West Jordan, L.C.**, a Utah limited liability company, and the person who executed the foregoing instrument and acknowledged to me that said company executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first above written.

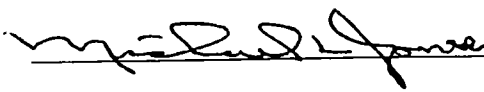


Chantelle Martin Taylor
NOTARY PUBLIC

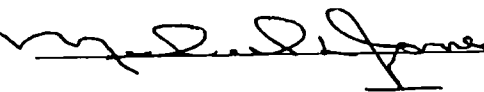
OWNER ACKNOWLEDGEMENT AND CONSENT

M H Jones Family, LLC and V & M Jones Family, LLC, as tenants in common, are the Property Owner of the Property referenced in the agreement entitled "MASTER DEVELOPMENT AGREEMENT For the Jones Landing North Project", the Agreement to which this OWNER ACKNOWLEDGEMENT AND CONSENT is a part. By its signatures below, each Property Owner: (i) acknowledges that it has reviewed the terms and provisions of the Agreement (including the Exhibits and all material referenced in the Agreement), (ii) has had opportunity, if so desired, to review the Agreement with legal counsel, (iii) acknowledges that Master Developer is authorized to enter into this Agreement, and (iv) acknowledges that pursuant to Section F.1 above of the Agreement, the Agreement shall also apply to all other current owners of real property in the Project, if any, who are likewise bound to all the terms of the Agreement.

M H Jones Family, LLC,
a Utah Limited Liability Company

By (Sign): 
Print Name: MICHAEL L. JONES
Its (Title): MANAGER

V & M Jones Family, LLC,
a Utah Limited Liability Company

By (Sign): 
Print Name: MICHAEL L. JONES
Its (Title): MANAGER

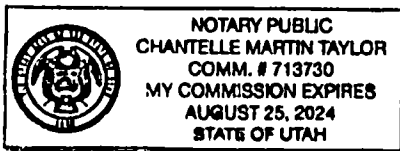
[Acknowledgments on the next page.]

ACKNOWLEDGMENTS

STATE OF UTAH)
: ss.
County of Salt Lake)

On this 11th day of March, 2024, before the undersigned notary public in and for the said state, personally appeared Michael L Jones, known or identified to me to be the manager of **M H Jones Family, LLC**, a Utah limited liability company, and the person who executed the foregoing instrument and acknowledged to me that said company executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first above written.

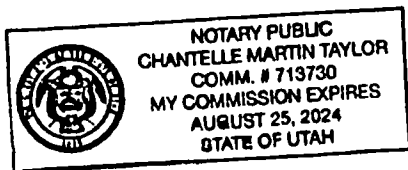


Chantelle Martin Taylor
NOTARY PUBLIC

STATE OF UTAH)
: ss.
County of Salt Lake)

On this 11th day of March, 2024, before the undersigned notary public in and for the said state, personally appeared Michael L Jones known or identified to me to be the manager of **V & M Jones Family, LLC**, a Utah limited liability company, and the person who executed the foregoing instrument and acknowledged to me that said company executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first above written.



Chantelle Martin Taylor
NOTARY PUBLIC

Exhibit A – Current Future Land Use Map

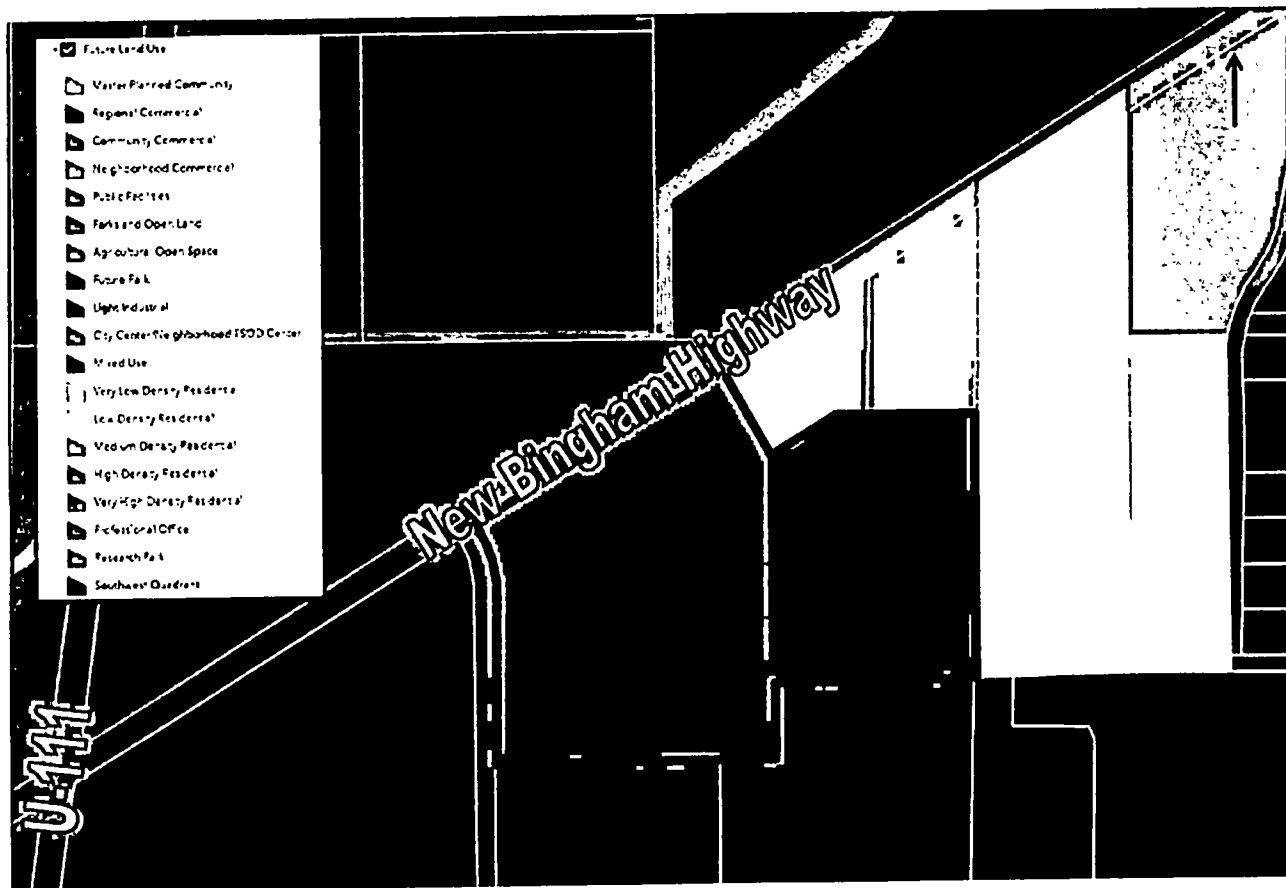


Exhibit B – Proposed Future Land Use Map

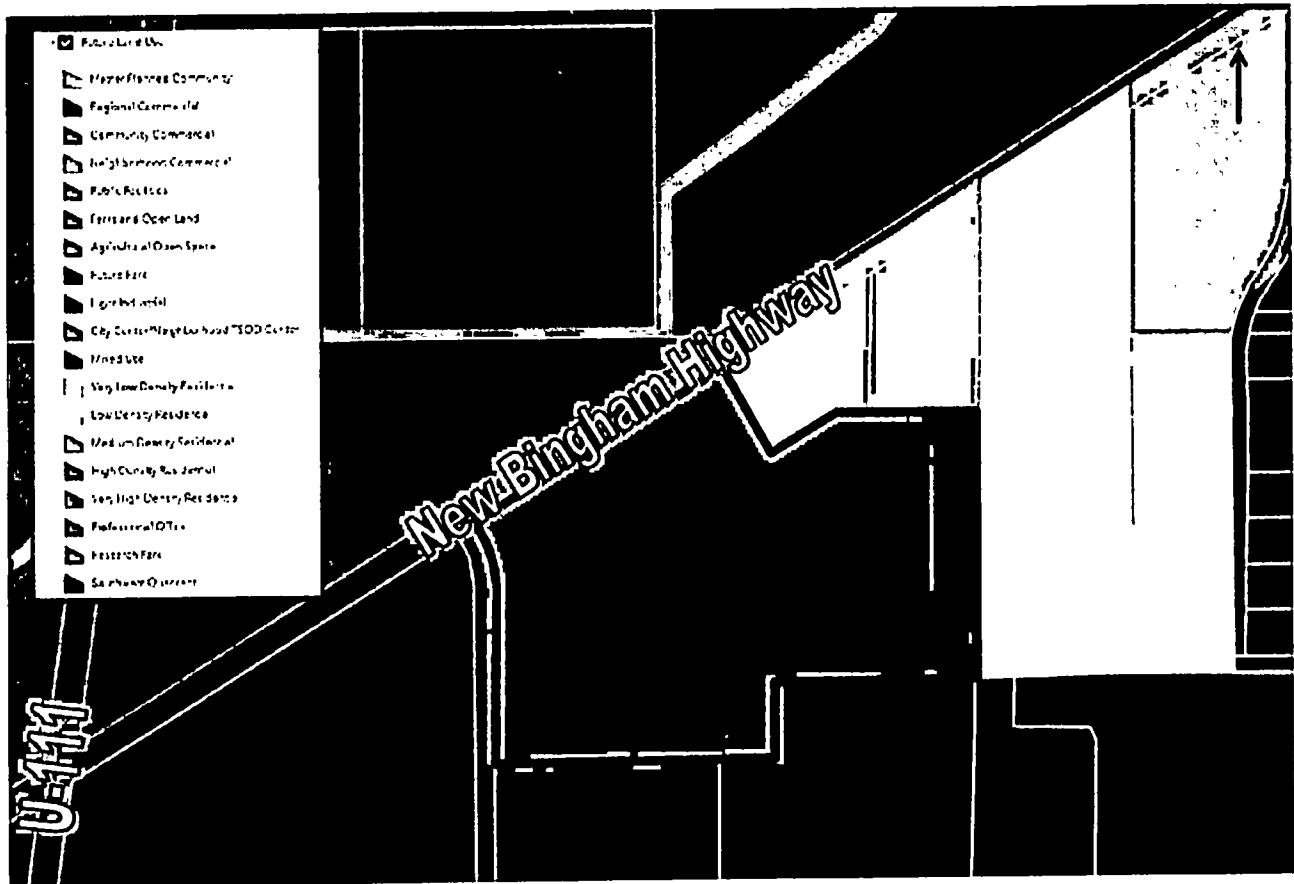


Exhibit C – Current Zoning Map

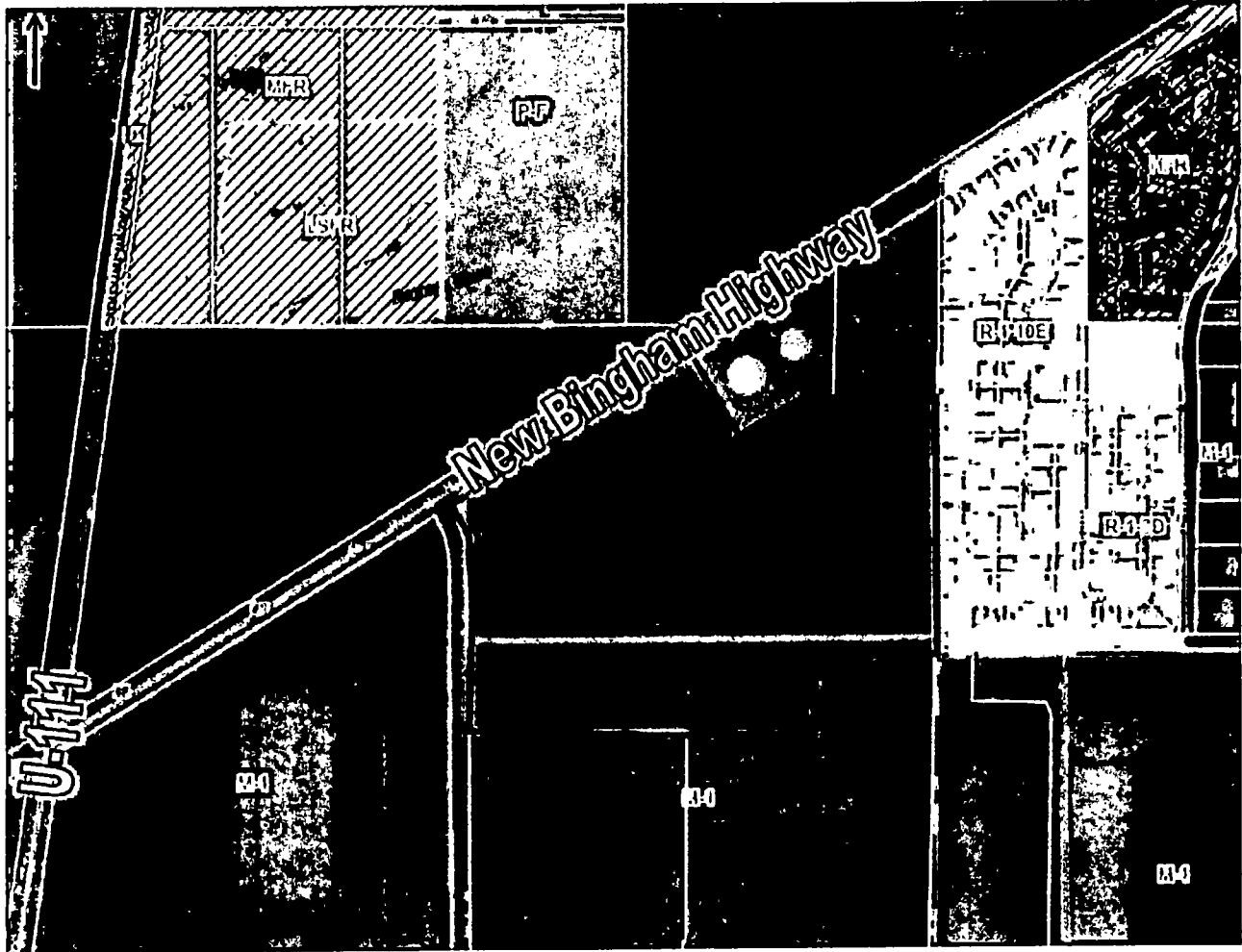


Exhibit D – Proposed Zoning Map

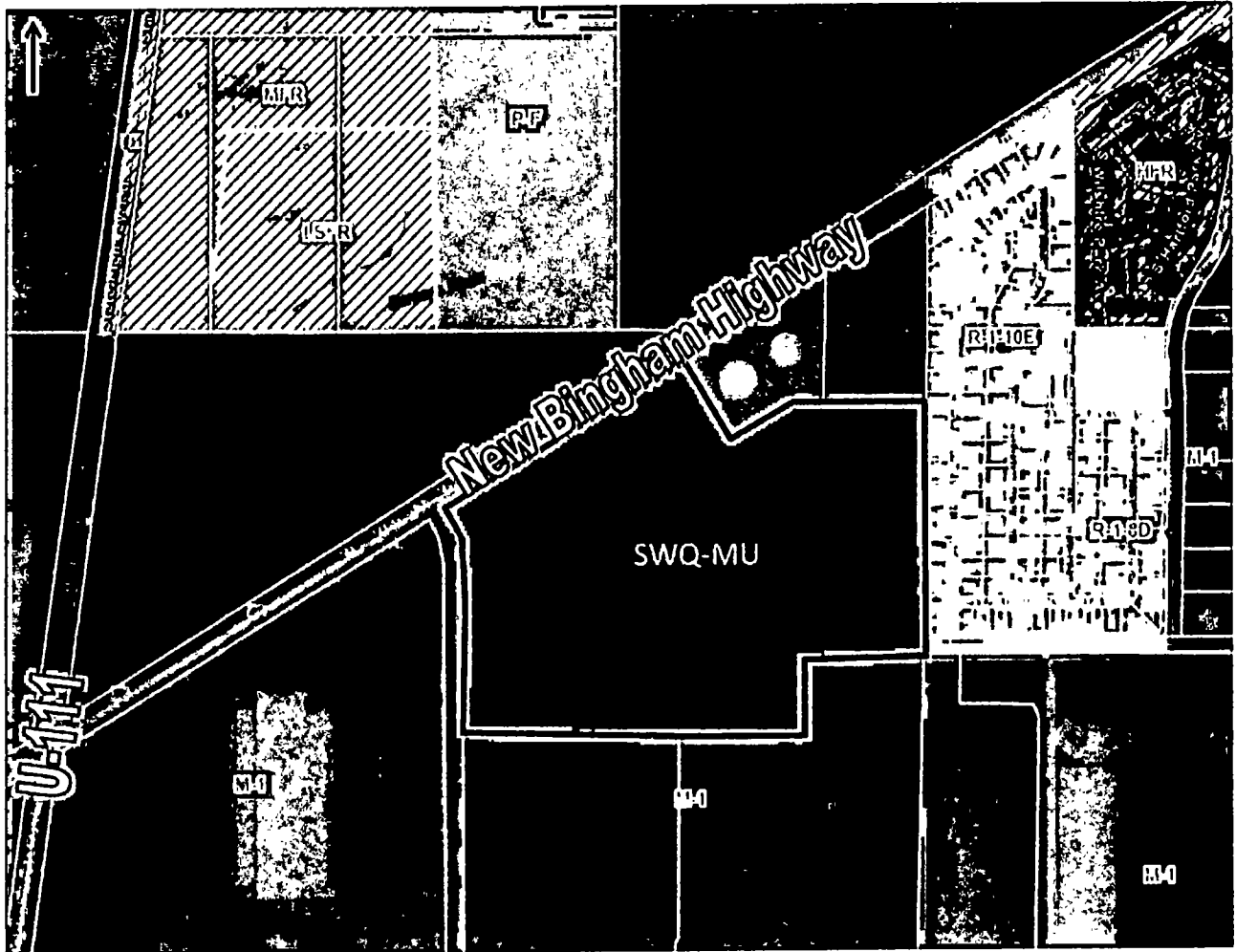


Exhibit E – Application and Legal Description of the Property

MH Jones Southeast Parcel

A parcel of land situate in north half of Section 10, Township 3 South, Range 2 West, Salt Lake Base and Meridian, more particularly described as follows:

Beginning at the intersection of the southerly right-of-way line of New Bingham Highway (U-48) and the easterly right-of-way line of 6900 West Street, said point being South 01°06'59" West 758.22 feet along the quarter section line and West 729.29 feet from the North Quarter Corner of Section 10, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence North 58°17'58" East 1,188.42 feet along said southerly right-of-way line to the northwest corner of West Jordan NBH Zone 4 Tanks and Pond Subdivision;

thence South 31°42'02" East 401.65 feet along the west line to the southwest corner of said West Jordan NBH Zone 4 Tanks and Pond Subdivision;

thence North 58°17'58" East 315.55 feet along the south line of said West Jordan NBH Zone 4 Tanks and Pond Subdivision;

thence South 89°42'36" East 571.31 feet along the south line of said West Jordan NBH Zone 4 Tanks and Pond Subdivision to the 40 acre line;

thence South 01°05'42" West 1,084.30 feet;

thence North 88°54'18" West 96.22 feet along the 40 acre line;

thence North 89°42'10" West 570.94 feet;

thence Westerly 43.35 feet along the arc of a 54.50 foot radius curve to the left (center bears South 00°17'50" West and the chord bears South 67°30'39" West 42.22 feet with a central angle of 45°34'23");

thence Westerly 127.56 feet along the arc of a 80.50 foot radius curve to the right (center bears North 45°16'33" West and the chord bears North 89°52'44" West 114.63 feet with a central angle of 90°47'37");

thence Northwesterly 44.59 feet along the arc of a 56.50 foot radius curve to the left (center bears South 45°31'04" West and the chord bears North 67°05'33" West 43.44 feet with a central angle of 45°13'14");

thence North 89°42'10" West 13.73 feet;

thence North 66°39'53" West 49.83 feet;

thence North 89°42'10" West 120.58 feet;

thence South 00°26'48" West 348.86 feet;

thence West 923.72 feet to the easterly right-of-way line of 6900 West Street;

thence along said easterly right-of-way line the following two (2) courses:

(1) North 690.62 feet;

(2) Northwesterly 283.69 feet along the arc of a 531.50 foot radius curve to the left (center bears West and the chord bears North 15°17'27" West 280.33 feet with a central angle of 30°34'53") to the point of beginning.

Contains 2,325,156 Square Feet or 53.378 Acres



Planning Division (801) 569-5060
 Engineering Department (801) 569-5070
 Building & Safety Division (801) 569-5050
 Fire Marshal (801) 260-7300

City of West Jordan
 8000 South Redwood Road
 West Jordan, Utah 84088

DEVELOPMENT PLAN INFORMATION

GENERAL

The purpose of the attached documents is to provide information necessary to plan for, apply for and submit the necessary information to obtain approval for a Development Plan in the City of West Jordan.

By providing the required information it will enable the timely completion of your project. Not providing the necessary information will require the return of the application and submitted documents to you and will unnecessarily delay progress and final approval.

This document is meant to act as a guide for individual projects and may require additional information be provided, depending upon the nature of the project.

CONTENTS

The following documents are provided to help you through the process, from application to approval.

- City of West Jordan Application
- Property Owner Affidavit
- Development Plan Process
- Development Plan Checklist

WHAT IS A COMPLETE APPLICATION

A complete application will include all of the documents listed above, including items listed in the checklists. Partial submittals will not be accepted.

SUBMITTAL MEETING

A submittal meeting is *required* to allow staff to check your application for completeness. Please contact the Planning Office at 801 569-5060 to schedule your submittal meeting.

GETTING HELP

Once your application has been submitted, a Project Team will be assigned to the project. The Planner is your point of contact and you can contact them for project status inquires or to the Project Team for information about their various specialties.

2022



Development Application
 8000 South Redwood Road, 2nd Floor, South
 801-569-5060
 WJPlanning@westjordan.utah.gov

Property:

Subwell/Parcel #: 26101000060000 Acreage: _____ Lots: 1 Zoning: _____

Project Name: JONES LANDING

Project Location: MH JONES FAMILY PROPERTY, SOUTH OF N. BINGHAM HWY SOUTH/NEST OF WATER TANKS

Type of Application: Concept Preliminary Final

- Agreement
- Conditional Use Permit
- Design Review Committee
- Development Plan
- General Land Use Amendment
- Site Plan
- Site Plan Amended
- Subdivision Major
- Subdivision Minor
- Subdivision Amended
- Temporary Use Permit
- Zono Change
- Planned Community

Other: _____

Applicant: BEN SEASTRAND Company: GARDNER GROUP

Address: 201 S. MAIN ST

City: SALT LAKE CITY State: UT Zip: 84111

Phone: 801-870-4120 Cell: 801-870-4120

Email: ben.seastrand@gardnergroup.com

Consultant: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Cell: _____

Email: _____

** Property Owner(s):

(1) Name: MIKE JONES

Address: 1168 LE ROSIER CT

City: WEST JORDAN State: UT Zip: 84082

Phone: 301-571-2554 Cell: 208-431-5710

Email: mike.mlj@gmail.com

(2) Name: _____

Address: _____

City: _____ State: _____ Zip: _____


Phone: _____ Cell: _____

Email: _____

** Applicant must identify as a "Property Owner", all holders of any legal title to the Property, if necessary, attach additional page(s) to this Application to identify additional Property Owners.

By signing below, the Applicant hereby represents, and affirms the following:

1. Definitions.
 - a. "Application": Application includes (i) this Application form, (ii) the Property Owner(s) Affidavit, and (iii) all information (whether written or verbal) provided by the Applicant, by the Consultant, by the Property Owner(s), or by any other person or entity engaged by the Applicant or the Property Owner(s) in furtherance of the Application ("Supporting Parties").
 - b. "Property Owner(s)": Holders of any legal title to the Property.
2. Information is True and Correct. The information described on this Application form and contained in the Property Owner's Affidavit, is true and correct. The Applicant will use its best efforts to ensure all contents of the Application are accurate and current.
3. Property Owner(s) Consent to this Application. All Property Owner(s) (i) have reviewed and expressly approve of the contents of this Application form, and (ii) consent to the Applicant pursuing approval of the Application.
4. City's Right to Contact Property Owner(s). The City has the right to contact the Property Owner(s) directly, in writing or through other means, to verify any information contained in the Application.
5. Contact with Property Owner(s) is not interference. Contact by the City as outlined in '4.' above is and shall not be considered interference with the Applicant's business dealings.
6. Incorrect or Untrue Information Voids this Application. If any information provided as part of the Application is untrue or incorrect, at the option of the City (i) this Application shall be considered void *ab initio*, (ii) the City shall have no obligation to process the Application, (iii) any commitments allegedly made by the City or flowing from the Application, including also the alleged grant of any development rights by the City, shall be considered void *ab initio* and unenforceable, and (iv) the Applicant shall indemnify and hold the City harmless for any costs or claims resulting from false or incorrect representations (A) of or from the Applicant, and/or (B) of or from the Property Owner(s), the Consultant, and/or the Supporting Parties of which the Applicant has or had knowledge.
7. Notice to the City of a Changed Event. The Applicant has an affirmative duty to (i) notify the City in writing of a Changed Event, (ii) fully inform the City of the nature and details of a Changed Event, and (iii) provide such notice and information within two (2) business days of a Changed Event. A Changed Event is any action or occurrence, (i) that occurs subsequent to the date the Applicant executes this Application form, and (ii) which alters the legal relationship of the Applicant and the Property Owner(s) to an extent that either (A) the Applicant no longer has authorization from the Property Owner(s) to pursue the Application, or (B) results in any representation or information in this Application or the Property Owner's Affidavit to be, in whole or in part, untrue, incorrect, or inaccurate.

Applicant Signature:  Date: 8-21-23
 (Completed Notary Block for Applicant's signature must be attached to this Application form)

<u>OFFICE USE ONLY</u>			
MUNIS # _____	Date Received _____	Date of Meeting _____	
ODA _____	Planner: _____	Engineer: _____	Firm: _____

Notary Block for Applicant's Signature

STATE OF UTAH)
): ss.
County of Salt Lake)

On this 21st day of AUGUST, 2023, before the undersigned notary public in and for the said state, personally appeared BEN SEASTRAND (name of person), known or identified to me to be a/the Applicant (position of responsibility) of Jones Landing (name of company or entity), and the person who executed the foregoing instrument and acknowledged to me that said company or entity executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first above written.



[Handwritten Signature]

Notary Public for Utah

PROPERTY OWNER AFFIDAVIT

STATE OF UTAH)
COUNTY OF Salt Lake) ss

I, Micah L. James, being duly sworn, by my signature represent, affirm and attest as follows:

1. **Definitions.** The following definitions apply in this Affidavit:
- a. "Application": Application includes (i) the document entitled *West Jordan City Development Services Application* ("Application Form"), (ii) this Property Owner Affidavit ("Affidavit") and any other Property Owner Affidavit(s), and (iii) all information (whether written or verbal) provided by the Applicant, by the Consultant, by the Property Owner(s), or by any other person or entity engaged by the Applicant or the Property Owner(s) in furtherance of the Application ("Supporting Parties").
 - b. "Applicant": The individual and/or entity named as such on the Application Form.
 - c. "Property Owner": Holder of any legal title to the Property.
 - d. "Property": That parcel identified as sidwell/parcell# 26-10-100-0018 located at approximately 4500 S 6400 W (approximate street address).

2. **Property Owner.** To the best of my knowledge (check one):
- I am the **SOLE** Property Owner.
 - or-
 - There is/are (an) additional Property Owner(s), whose name(s) follow:
- _____ (include additional pages with names if necessary)

3. **Reviewed the Application.** I have reviewed the Application Form dated 8-21-23, submitted to the West Jordan City by Ben Searstrand (name of Applicant as appears on the signature line of the Application form) for the project entitled, "Jones Landing" (name of Project as appears on the Application form)

which Application requests approval by the City of West Jordan for the following:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Agreement | <input type="checkbox"/> Site Plan | <input type="checkbox"/> Temporary Use Permit |
| <input type="checkbox"/> Conditional Use Permit | <input type="checkbox"/> Site Plan Amended | <input type="checkbox"/> Zone Change |
| <input type="checkbox"/> Design Review Committee | <input type="checkbox"/> Subdivision Major | <input type="checkbox"/> Planned Community |
| <input type="checkbox"/> Development Plan | <input type="checkbox"/> Subdivision Minor | |
| <input type="checkbox"/> General Land Use Amendment | <input type="checkbox"/> Subdivision Amended | |
| <input type="checkbox"/> Other: _____ | | |

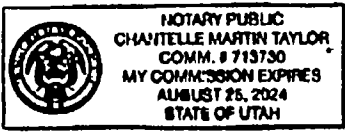
- 4. Information is True and Correct. The information contained in this Affidavit and the Application form, is true and correct. The Property Owner will use its best effort to ensure all contents of this Affidavit and the Application form are accurate and current.
- 5. Property Owner's Consent to the Application. The Property Owner (i) has reviewed and expressly approves the contents of the Application Form, and (ii) consents to the Applicant pursuing approval of the Application.
- 6. City's Right to Contact Property Owner. The City has the right and may contact the Property Owner directly, in writing or through other means, to verify any information contained in the Application.
- 7. Contact with Property Owner is not Interference. Contact by the City as outlined in "6." above is and shall not be considered interference with the Property Owner's business dealings with the Applicant.
- 8. Incorrect or Untrue Information Voids the Application. If any information provided as part of the Application or this Affidavit is untrue or incorrect, at the option of the City (i) the Application shall be considered void *ab initio*, (ii) the City shall have no obligation to process the Application, (iii) any commitments allegedly made by the City or flowing from the Applicant, including also the alleged grant of any development rights by the City, shall be considered void *ab initio* and unenforceable, and (iv) the Property Owner shall indemnify and hold the City harmless for any costs or claims from the Property Owner resulting from false or incorrect representations (A) of or from the Property Owner, and/or (B) resulting from the Application being voided.
- 8. Notice to the City of a Changed Event. The Property Owner has an affirmative duty to (i) notify the City in writing of a Changed Event, (ii) fully inform the City of the nature and details of a Changed Event, and (iii) provide such notice and information within two (2) business days of a Changed Event. A Changed Event is any action or occurrence, (i) that occurs subsequent to the date the Applicant executed the Application Form, and (ii) which alters the legal relationship of the Applicant and the Property Owner to an extent that either (A) the Applicant no longer has authorization from the Property Owner to pursue the Application in whole or in part, or (B) results in any representation or information of which the Property Owner is aware or becomes aware in the Application or this Affidavit to be, in whole or in part, untrue, incorrect, or inaccurate.

My signature below attests that I consent to the statements and information provided in the Application and attached plans and exhibits for the requested process(s) as checked above, and that all information presented by me is true and correct to the best of my knowledge.

[Signature]
(Property Owner Signature)

[Printed Name]
(Printed Name)

Subscribed and sworn to me this 22nd day of August, 2023.

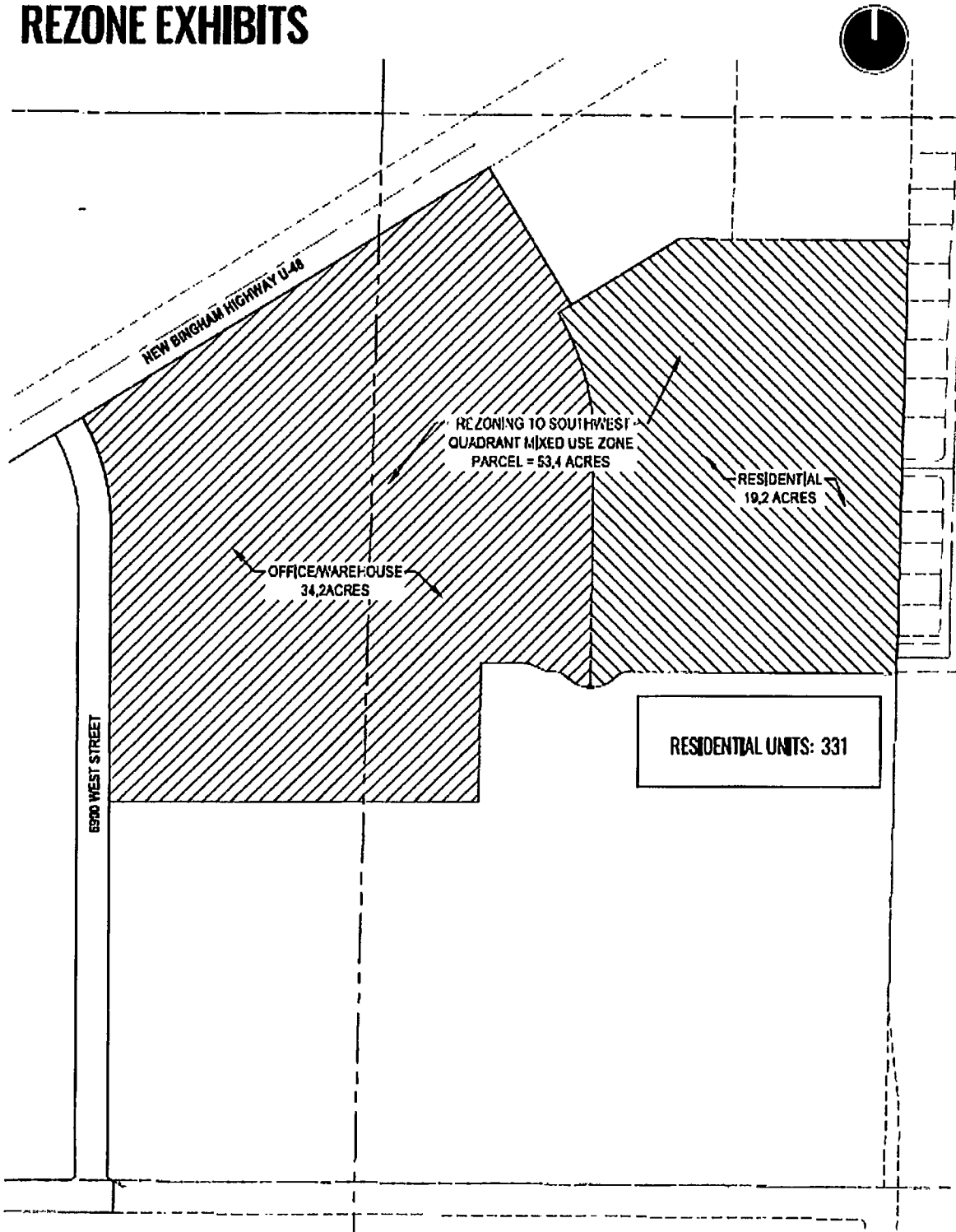


[Signature]
(Notary)
Residing in Utah (County) Utah (State)

My commission expires: 08-25-2024

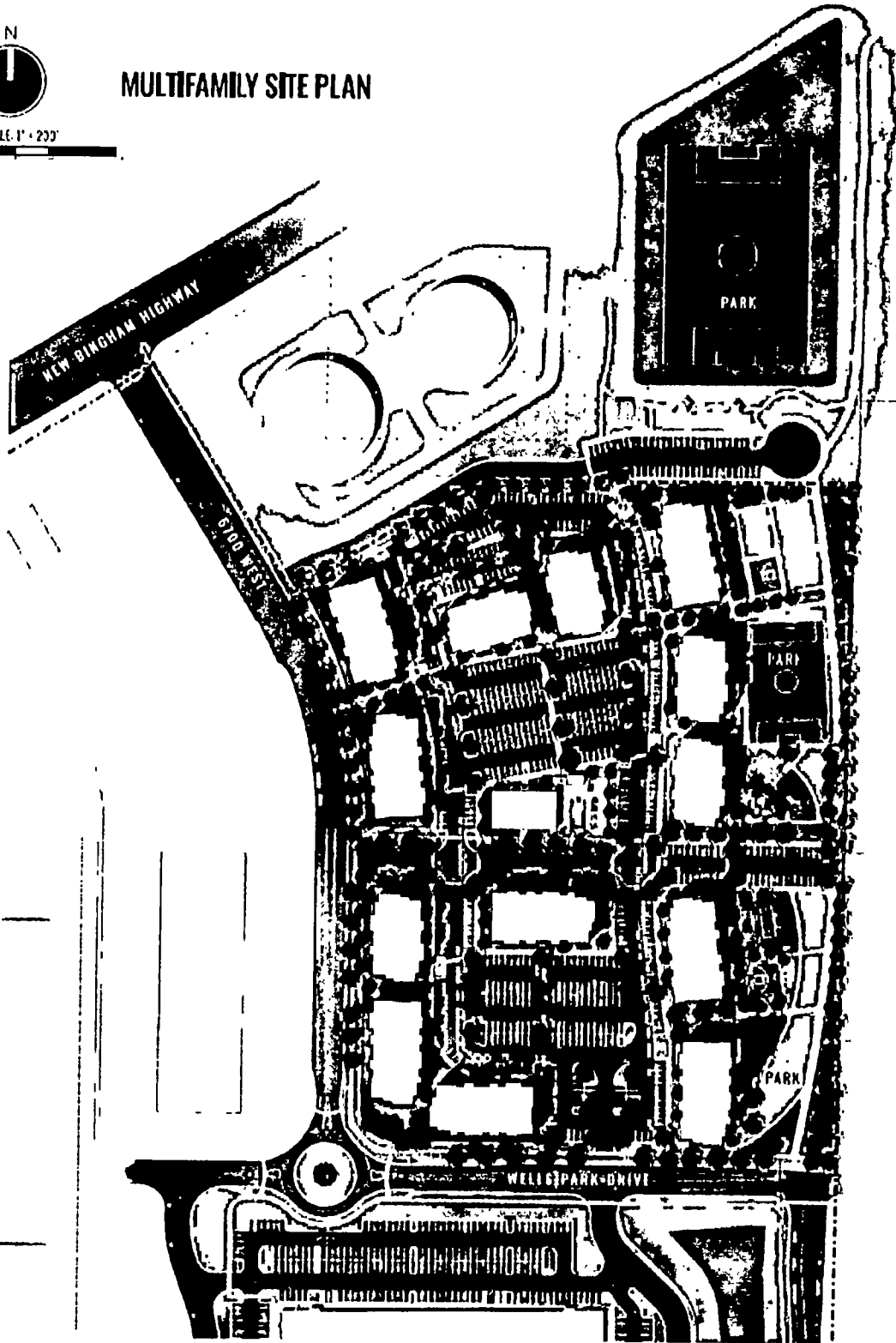
Exhibit F – Concept Site Plans

REZONE EXHIBITS





MULTIFAMILY SITE PLAN



MASTER DEVELOPMENT PLAN

SOUTHWEST QUADRANT REZONE

PLANNING SUBMITTAL | 09 FEBRUARY 2024

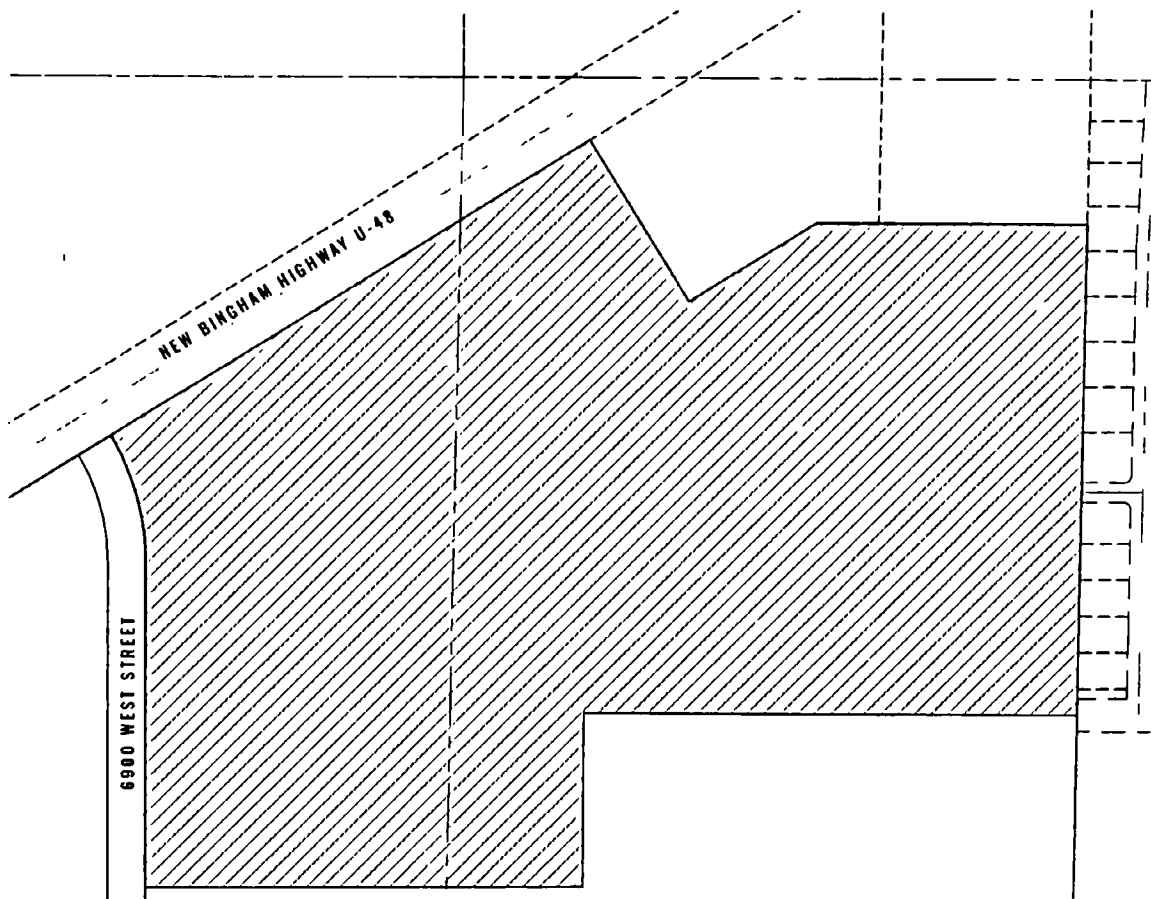
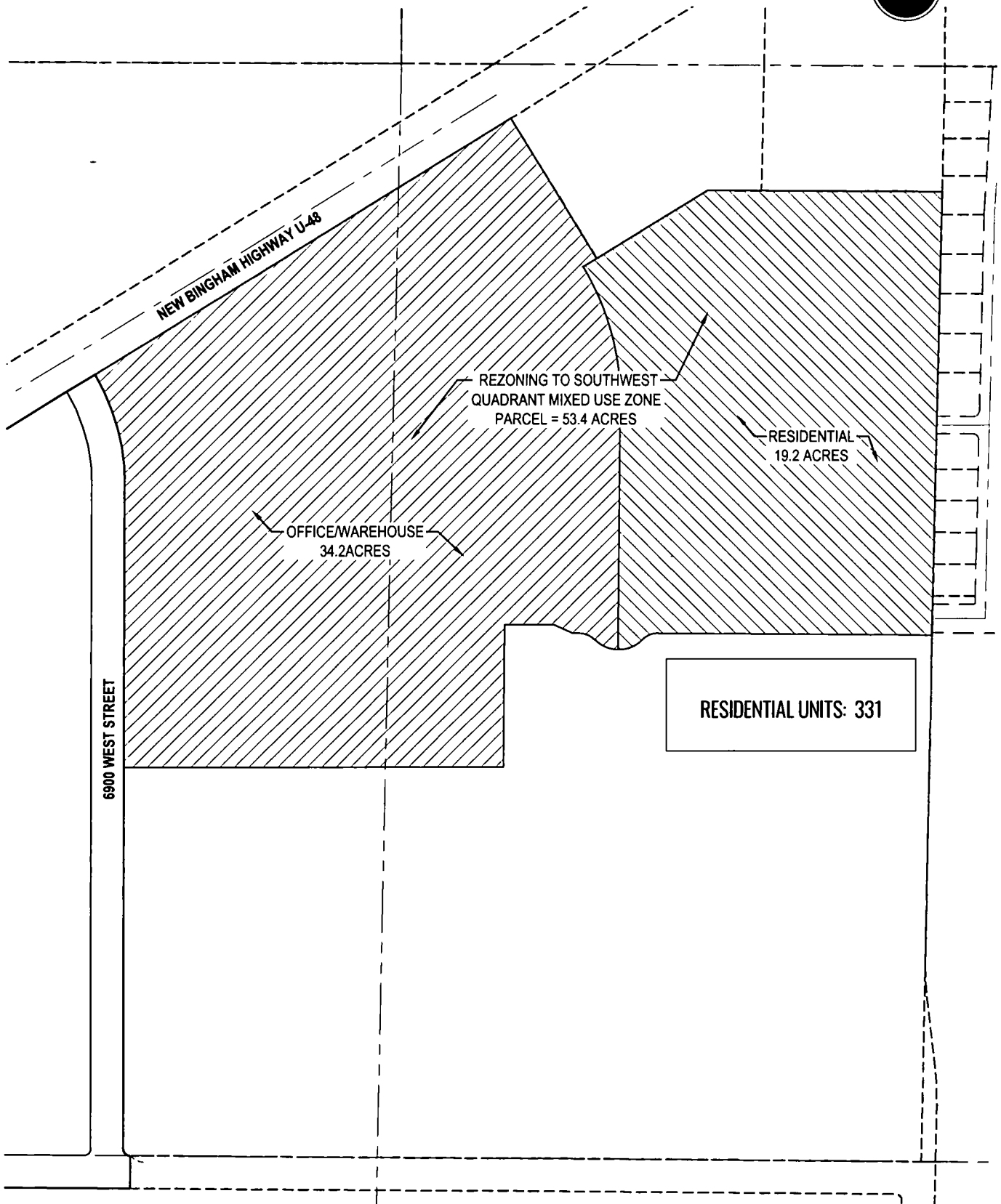


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Development Phasing Plan	26
Conceptual Plan for Public Improvements	27
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Utility Plan	29
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Geotechnical Study	31
Master Development Agreement	

REZONE EXHIBITS



SOUTHWEST QUADRANT REZONE | 01

COMMERCIAL DESIGN STANDARDS

SETBACKS.

All buildings in this zone, including accessory buildings, are required to comply with the setback provisions in SWQ zone.

DEVELOPMENT STANDARDS.

The base zoning or underlying zoning shall be applicable, unless modified or replaced as follows:

- A. Buildings must comply with the architectural standards found in M1 Zone.
- B. Public roads that are on the city's master transportation plan must be improved to the level of standard designated on that plan (major arterial, minor arterial, major collector, minor collector, etc.).
- C. Public roads within projects must comply, at a minimum, with the city's construction standard.
- D. Front parking lots and driveway entrances shall be asphalt or concrete in accordance with city standards. Vehicle Storage/Parking needs to be on impervious surfaces (concrete/asphalt) Parking shall be provided in accordance with M1 Zone An alternative parking plan may be approved by the Zoning Administrator (if it is a minor variation) based upon information provided by the applicant relative to trip generation, hours of operation, shared parking, peak demands, and other applicable information
- E. Outdoor storage areas do not need to comply with city landscaping requirements if they comply with M1 Zone

LANDSCAPING AND SCREENING.

Development within this overlay zone by its nature and intensity may not be compatible with other uses or zones Proper screening techniques should be used to mitigate potential negative impacts to surrounding land uses. The following shall be applicable:

- A. Walls or fences or landscaping set backs/buffers as defined in M1 Zone shall be required adjacent to residential zones.

BUILDING FACADE ARCHITECTURAL STANDARDS.





A. Buildings shall maintain a contemporary appearance.

1. Architecture of industrial buildings where size predominates over artistic detailing shall feature clean lines and elements, vertical and horizontal articulation, or modulation (stepping portions of the facade), and use of textures and materials to reduce the apparent scale of large building walls.
2. Professional office buildings shall meet the commercial design standards found in M1 Zone.
3. Where more than one structure is built in a complex or unit, structures shall have a similar style or theme, including colors, materials, and design elements.
4. Pedestrian-scaled architectural details are not required except for facades directly facing residential zones and/or main entryways to the project.
5. The main pedestrian or customer entrance shall be clearly identifiable and consist of a sheltering element such as a porch, stoop, awning, arcade, or portico.
6. Buildings shall include facade articulation/modulation (stepping portions of the facade) and horizontal and vertical divisions (textures or materials) to avoid large, featureless and/or panelized surfaces on buildings. Large uninterrupted expanses of a building wall without facade modulation or divisions are prohibited.

B. Architectural features should be simple with careful attention given to concentrate details and fenestration along main street elevations and at building entries

C. It is recognized that the function and use of particularly large buildings and buildings used for manufacturing and warehousing purposes will dictate the style and general appearance of the structure. In these cases, strict adherence to the provisions of this chapter may not be advisable or possible. In such cases where the exterior style, color, or materials are critical to the function and use of the building, the Zoning Administrator (if it is a minor variation) may approve building elevations that generally comply with these architectural standards but contain some modifications that accommodate the business-critical function and use.

RESIDENTIAL DESIGN STANDARDS

MIXED USE DESIGN GUIDELINES

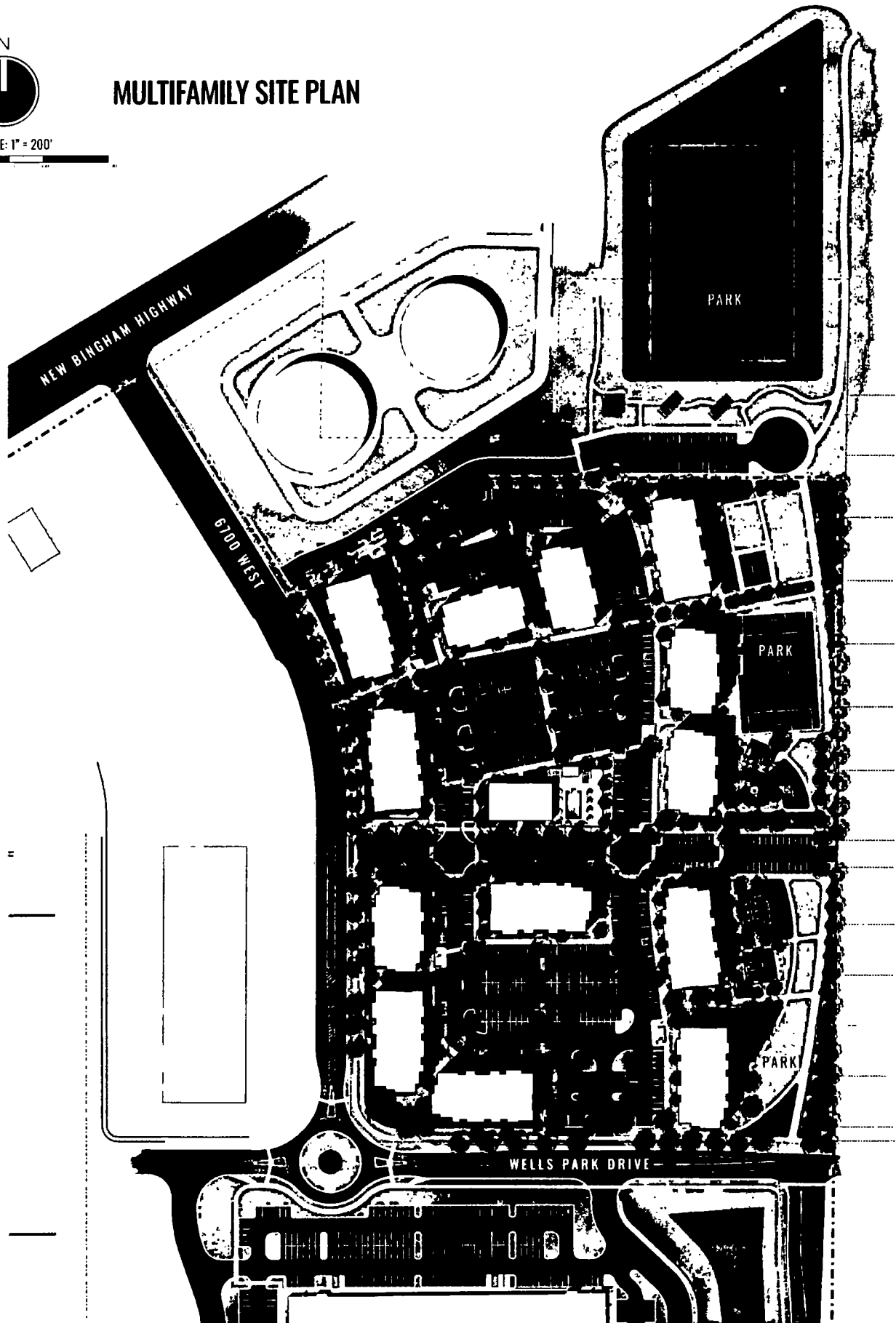
The site-specific design guidelines listed below will be established and exemplified in more detail in the MDA specific to the Mixed-Use/Multi-Family site shown on page 07.

1. A unified pattern of development;
2. Building placement guidelines;
3. Parking and circulation guidelines;
4. Screening and fencing guidelines,
5. Site lighting guidelines;
6. Refuse/recycling collection guidelines,
7. Signage guidelines,
8. Parking requirements for different use types; and
9. Architecture guidelines, with building material concepts.



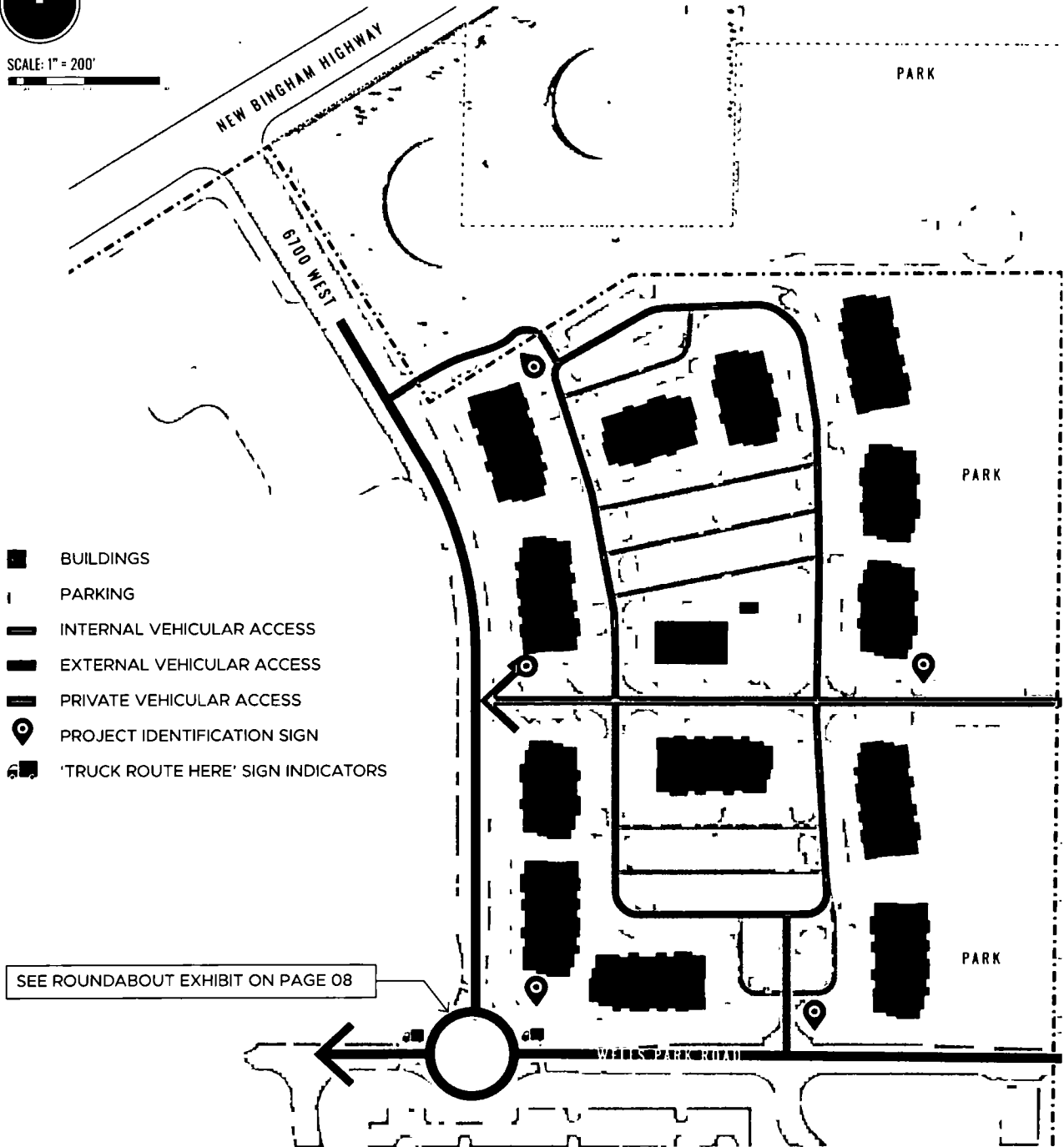
MULTIFAMILY SITE PLAN

SCALE: 1" = 200'





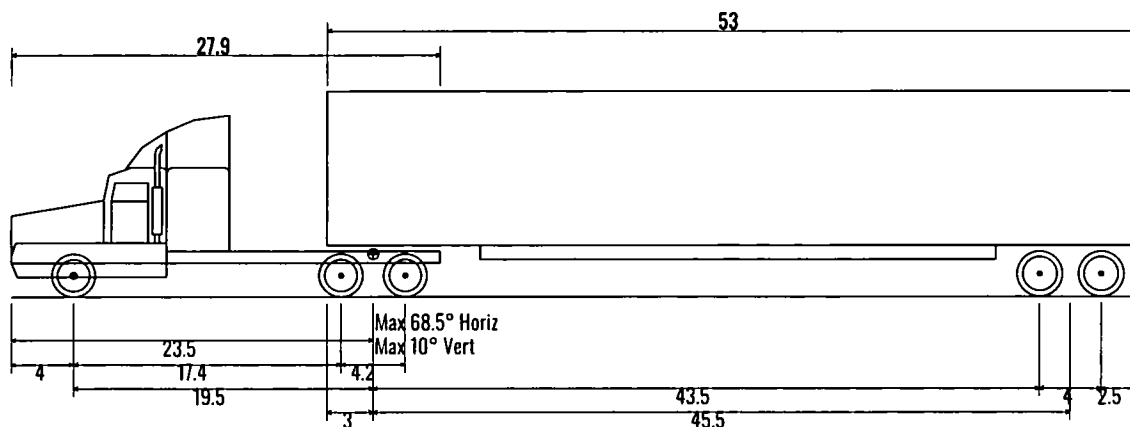
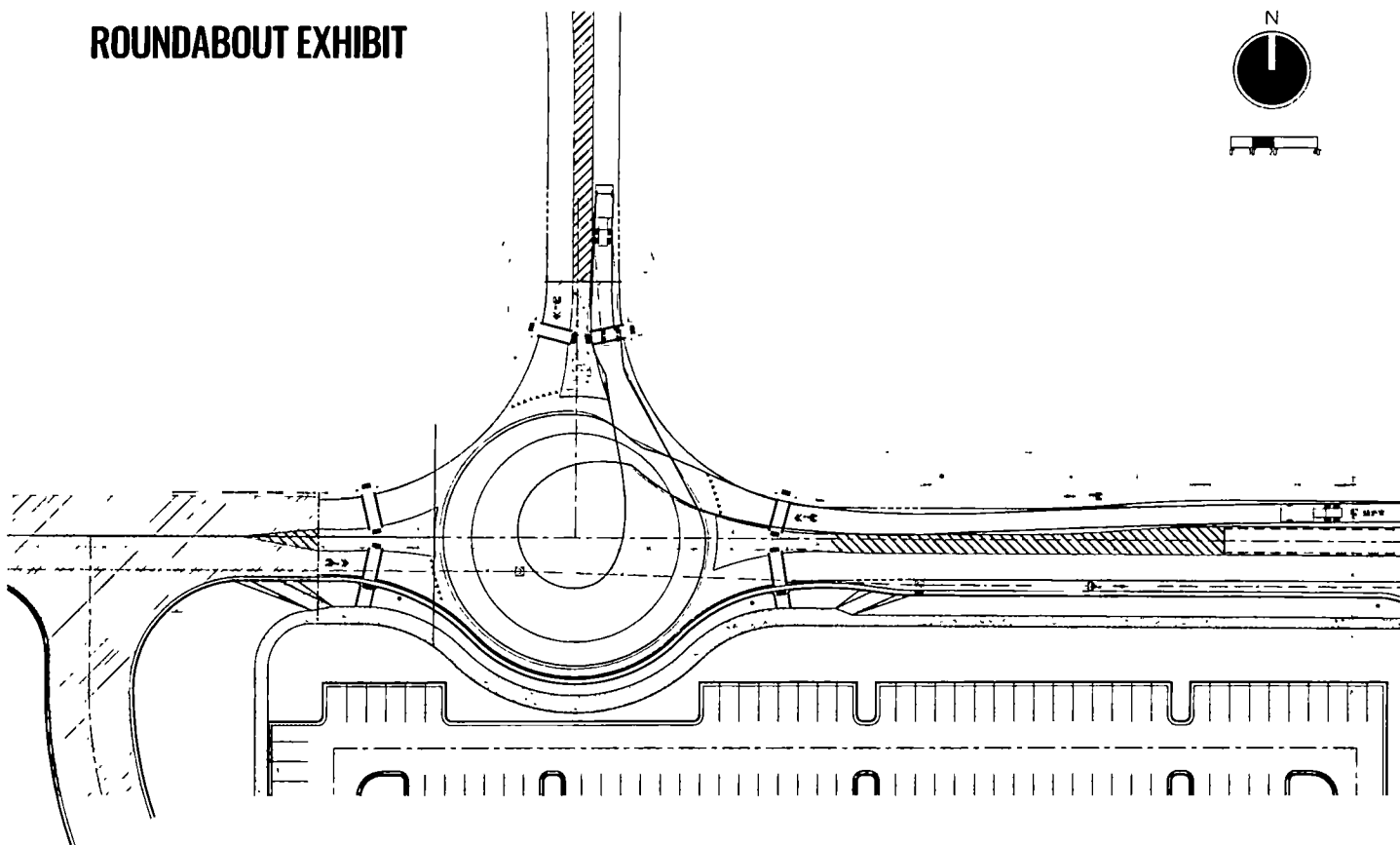
SCALE: 1" = 200'



01 VEHICLE CIRCULATION / SIGNAGE DIAGRAM

A unified pattern of development is evident, emphasizing efficient circulation patterns and aesthetics and way-finding.

ROUNDBABOUT EXHIBIT

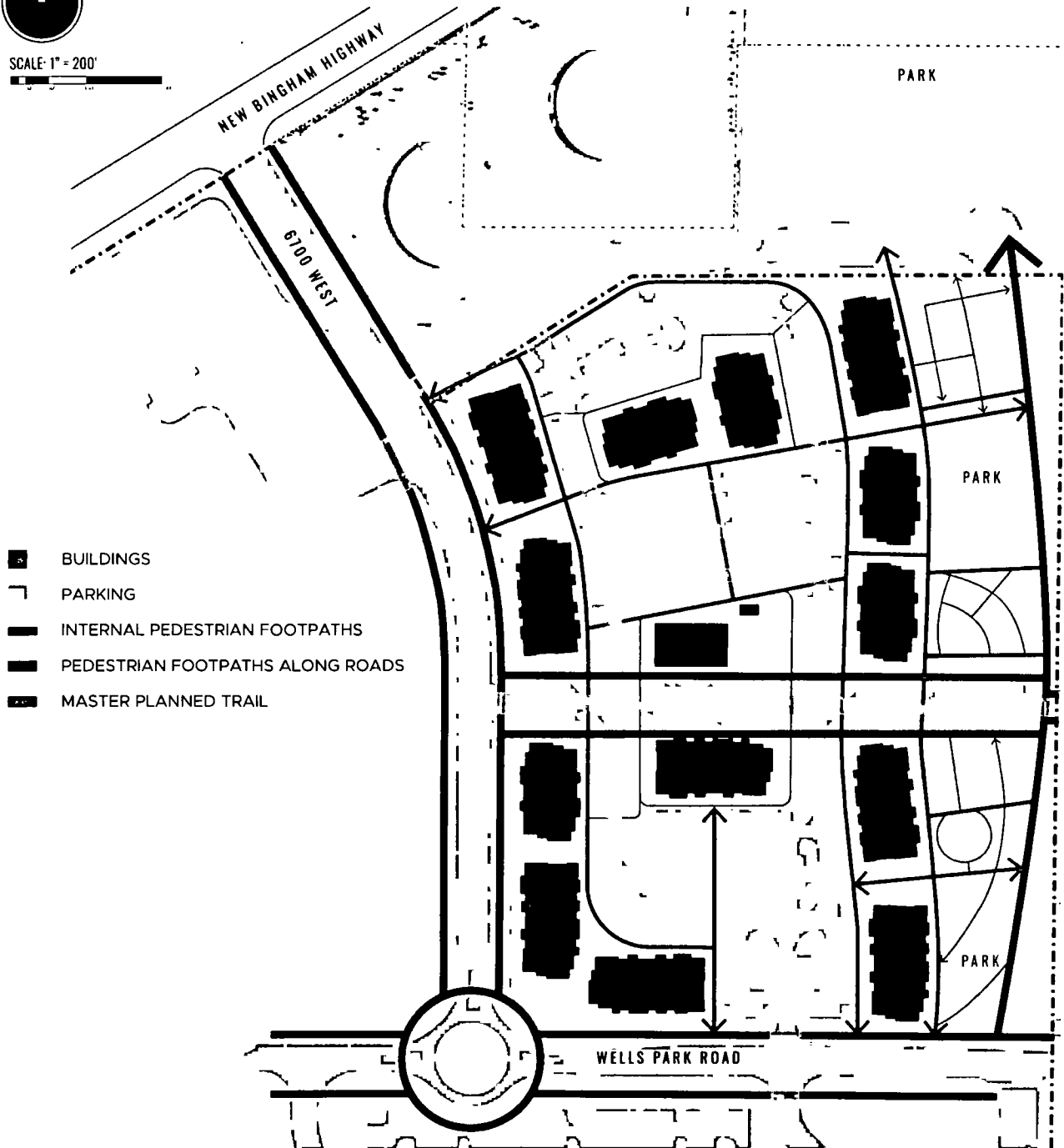


WB-67 INTERSTATE SEMI-TRAILER

Overall length	73 501'
Overall width	8.5'
Overall body height	13.5'
Minimum body ground clearance	1.334'
Maximum track width	8.5'
Lock-to-lock time	6.0 seconds
Maximum steering angle (virtual)	28 40°

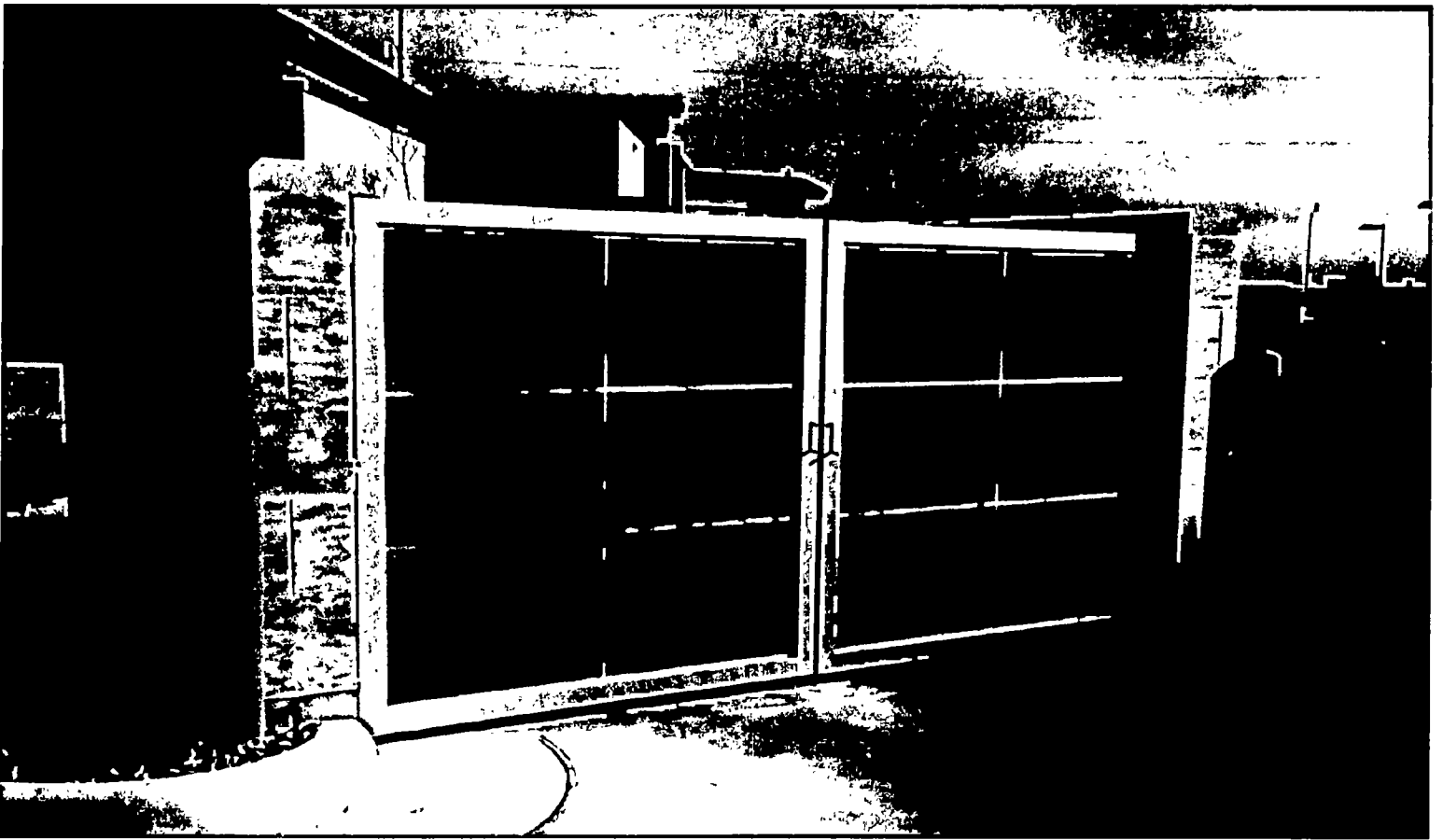


SCALE: 1" = 200'



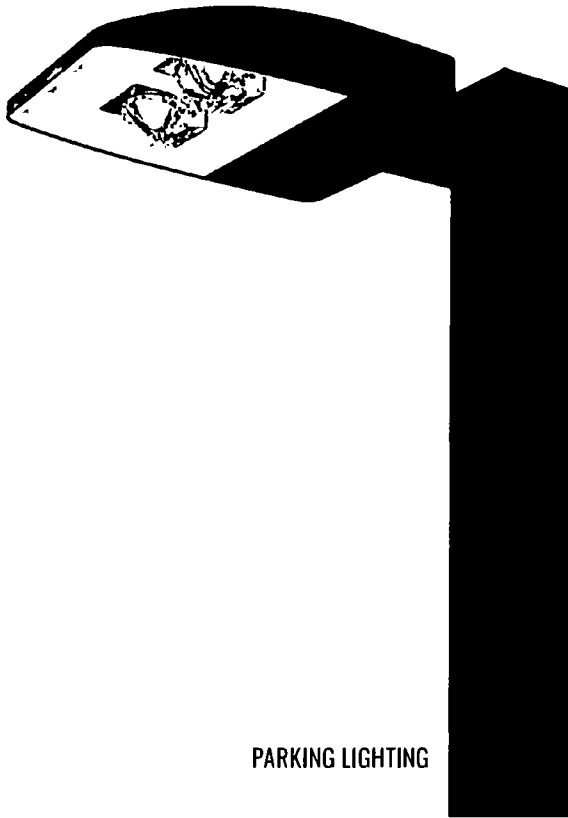
02 BUILDING PLACEMENT / PEDESTRIAN FOOTPATH DIAGRAM

Buildings should be placed at a minimum of 30' from the street edge. Where possible, buildings align with internal pedestrian footpaths. Parking is located behind buildings to minimize the view of parking lots from the streets. Building setbacks are 22' from front and rear property lines. Side yard setbacks minimum 5' with a combined of 13'. Corner setbacks are 15'.



04 SCREENING

Screening is required for trash and equipment and should include finishes and textures from the adjacent buildings. Metal doors should be finished to match metal accents on buildings.



PARKING LIGHTING

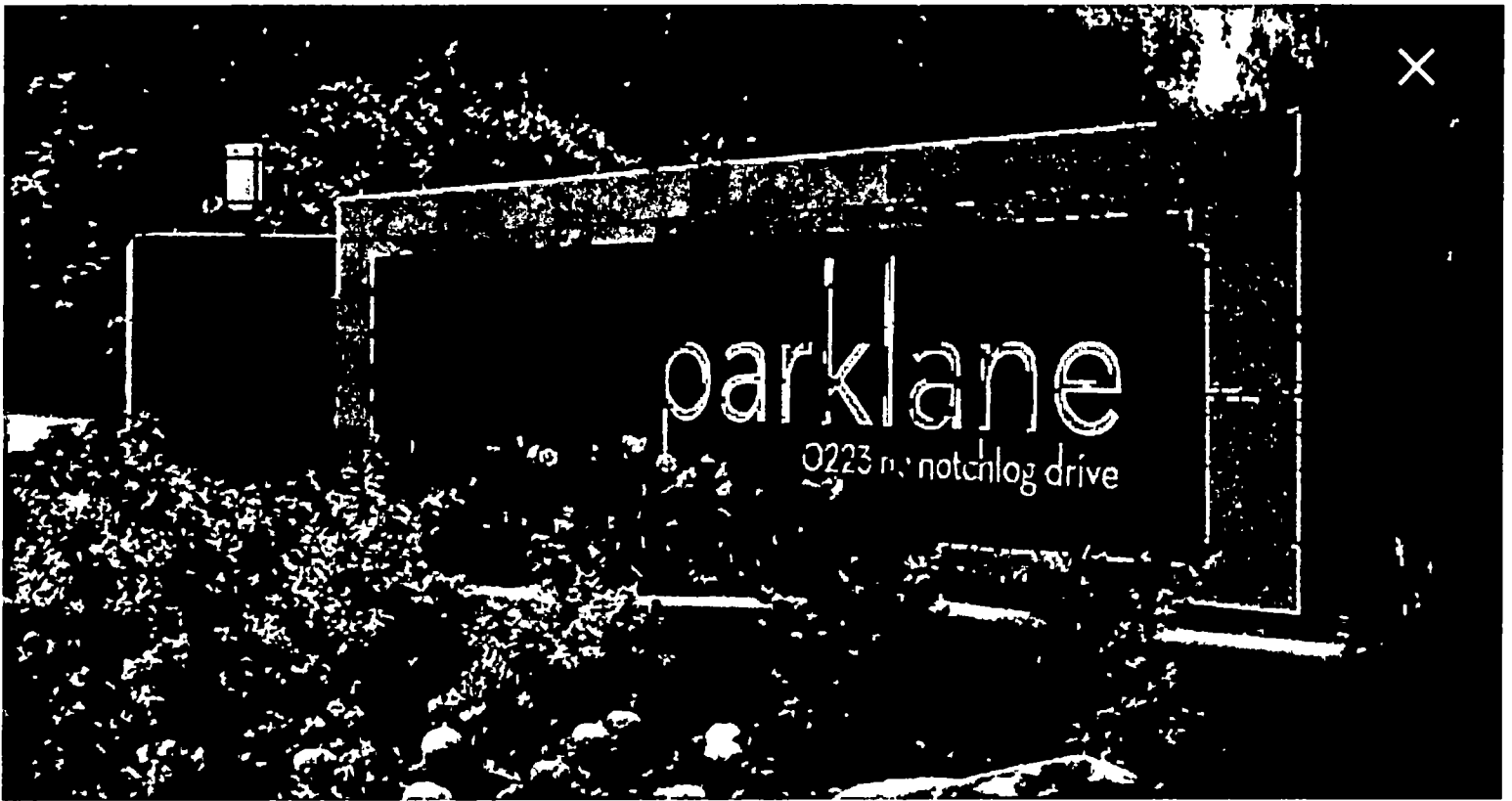


PATHWAY LIGHTING

05 SITE LIGHTING

LED parking lot lights shall be provided to meet parking lot lighting requirements. Fixtures should have full cut-off baffles to prevent glare and light pollution. Pedestrian paths will have light bollards to provide adequate lighting for pedestrian circulation within the site.

*City owned lights will be as per City Standards.



** Example Image: site signage should include colors and finishes from the building materials palette.*



07 SIGN DESIGN

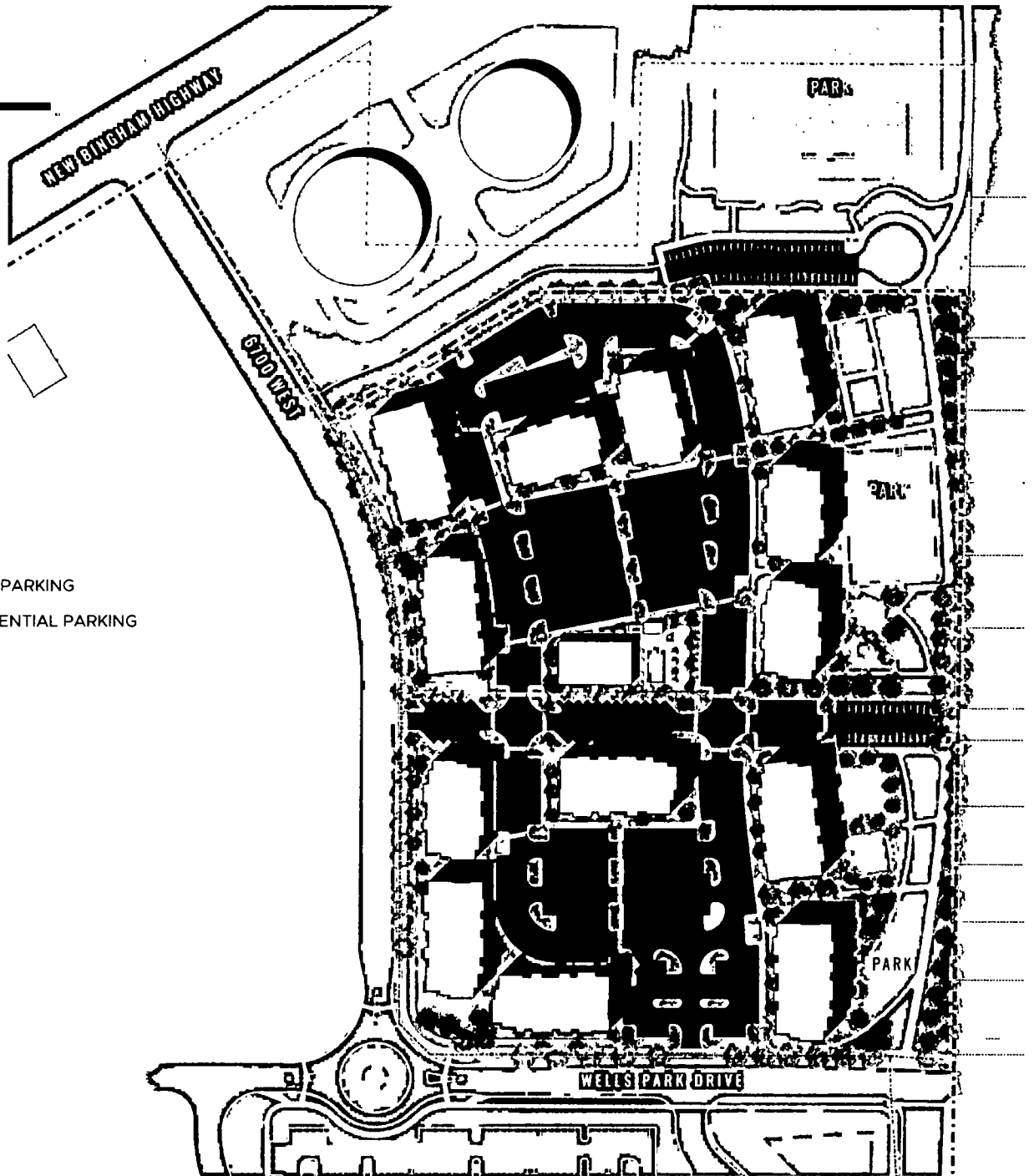
Cohesive sign design for continuity and wayfinding; sign design for buildings and pedestrian pathways should incorporate elements of continuity with the surrounding architecture and landscape. Signage should be discreetly illuminated for night-time navigation.



SCALE: 1" = 200'



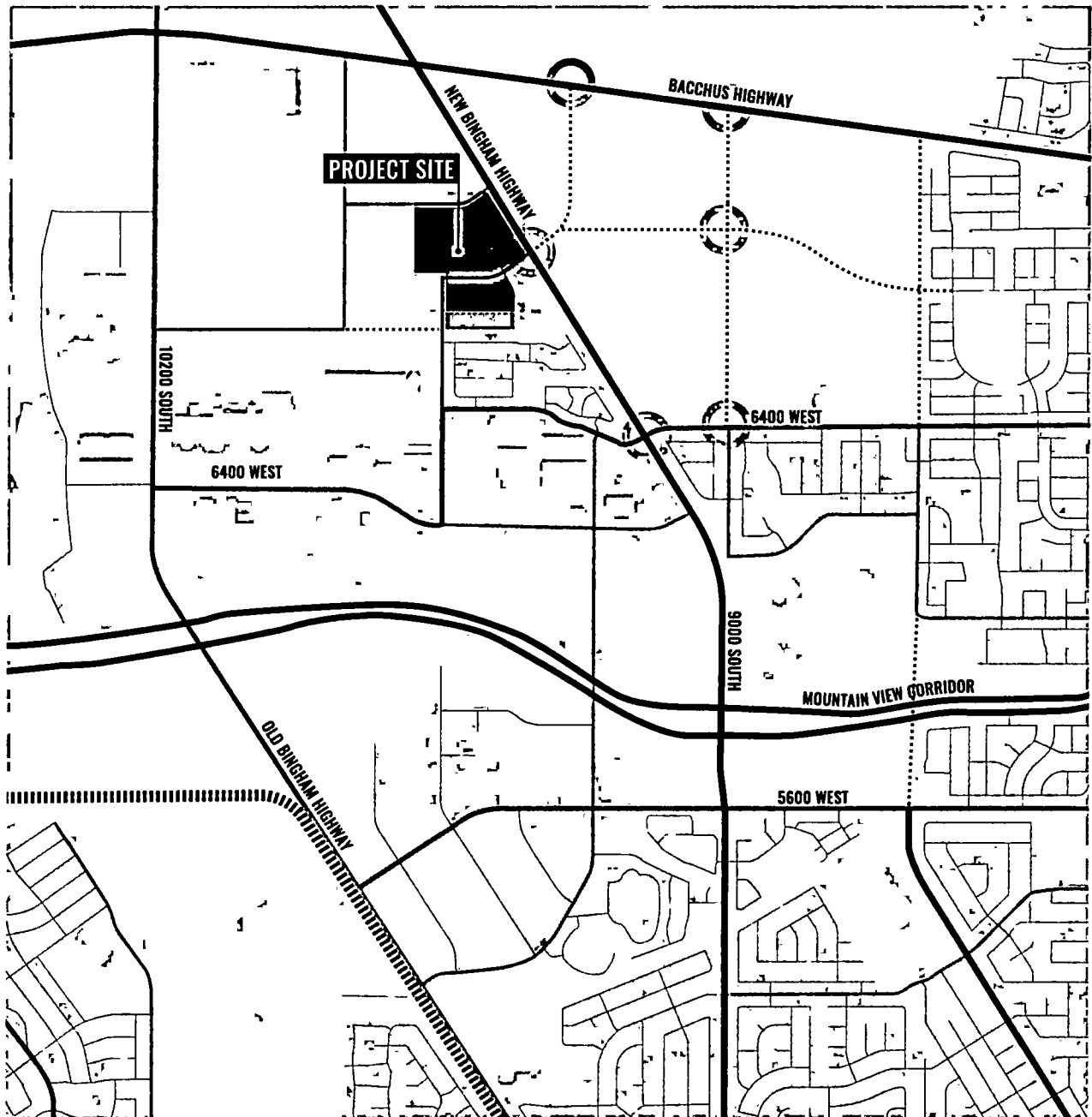
-  PARK PARKING
-  RESIDENTIAL PARKING



08 PARKING

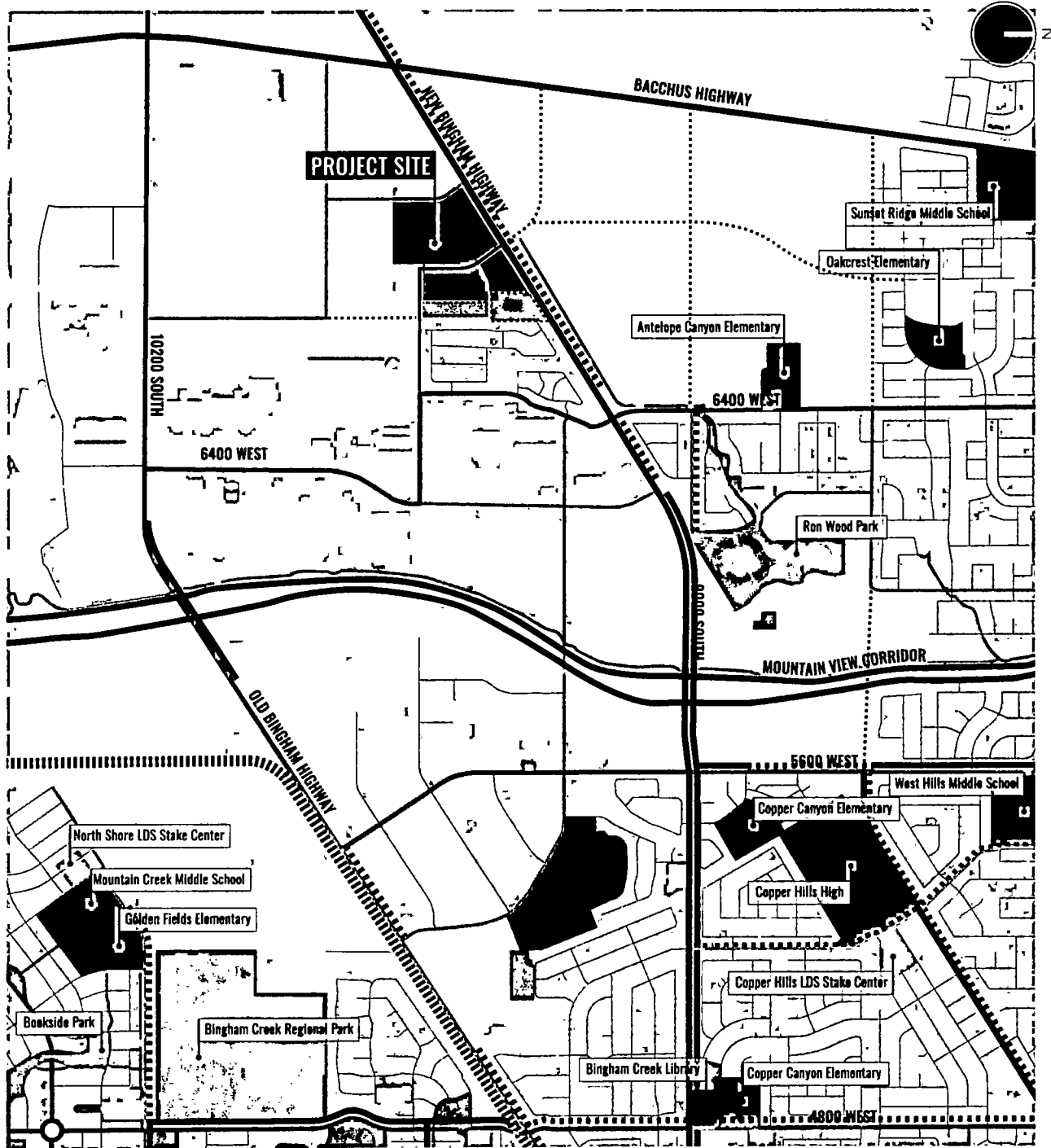
Parking should be provided at 1.4 stalls per residential unit, including 1 visitor stalls per 8 units. 70 stalls to be for the exclusive use of the adjacent park area.

CONNECTIVITY ANALYSIS



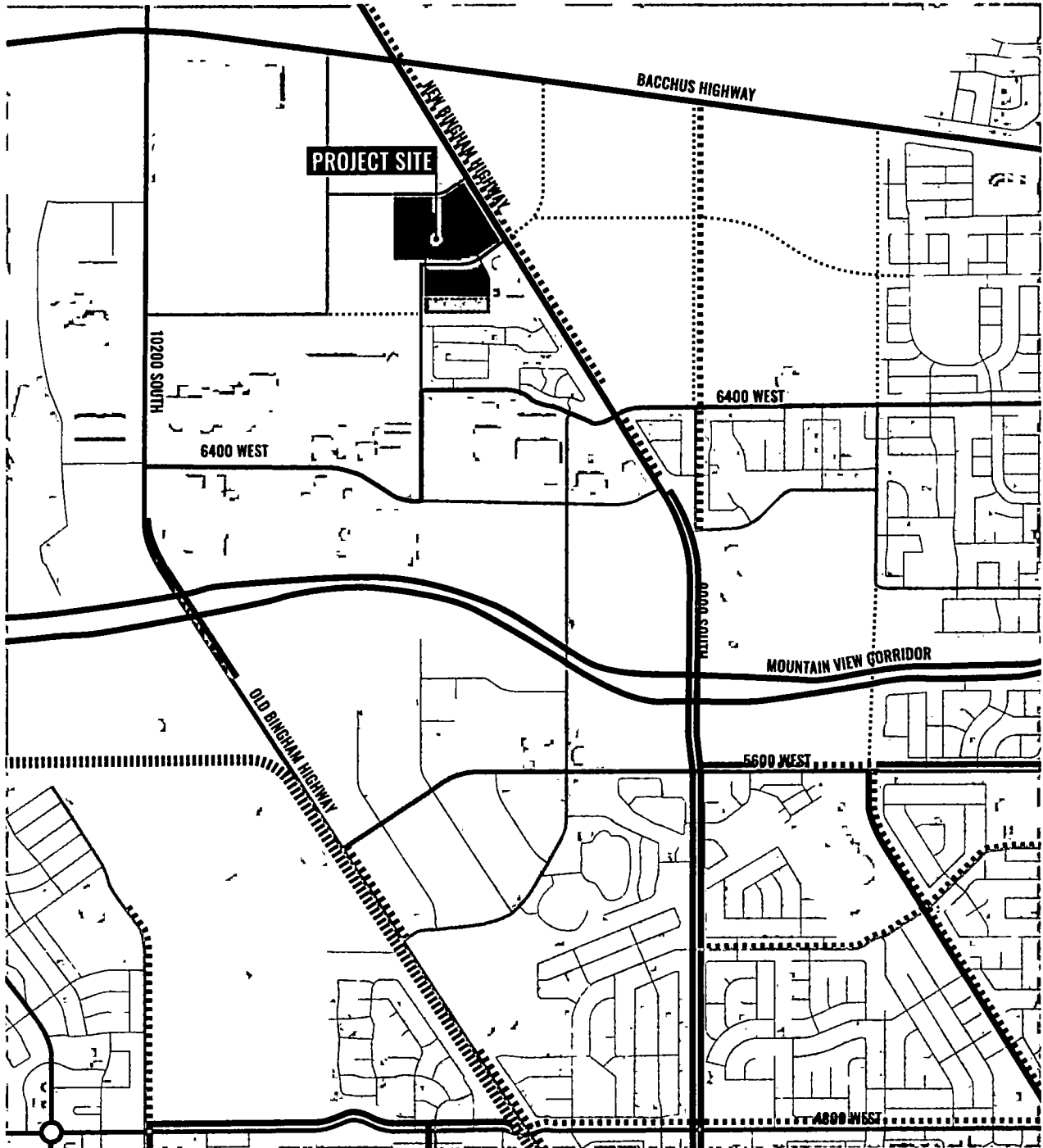
ROADS AND STREETS

- | | | | |
|--|--|--|--------------------------------|
| | High traffic road | | Project site |
| | Medium traffic road | | Proposed park |
| | Low traffic road | | Future signalized intersection |
| | Residential / access roads | | |
| | Proposed road — not part of this project | | |
| | Railroad tracks | | |
| | Future road — part of this project | | |



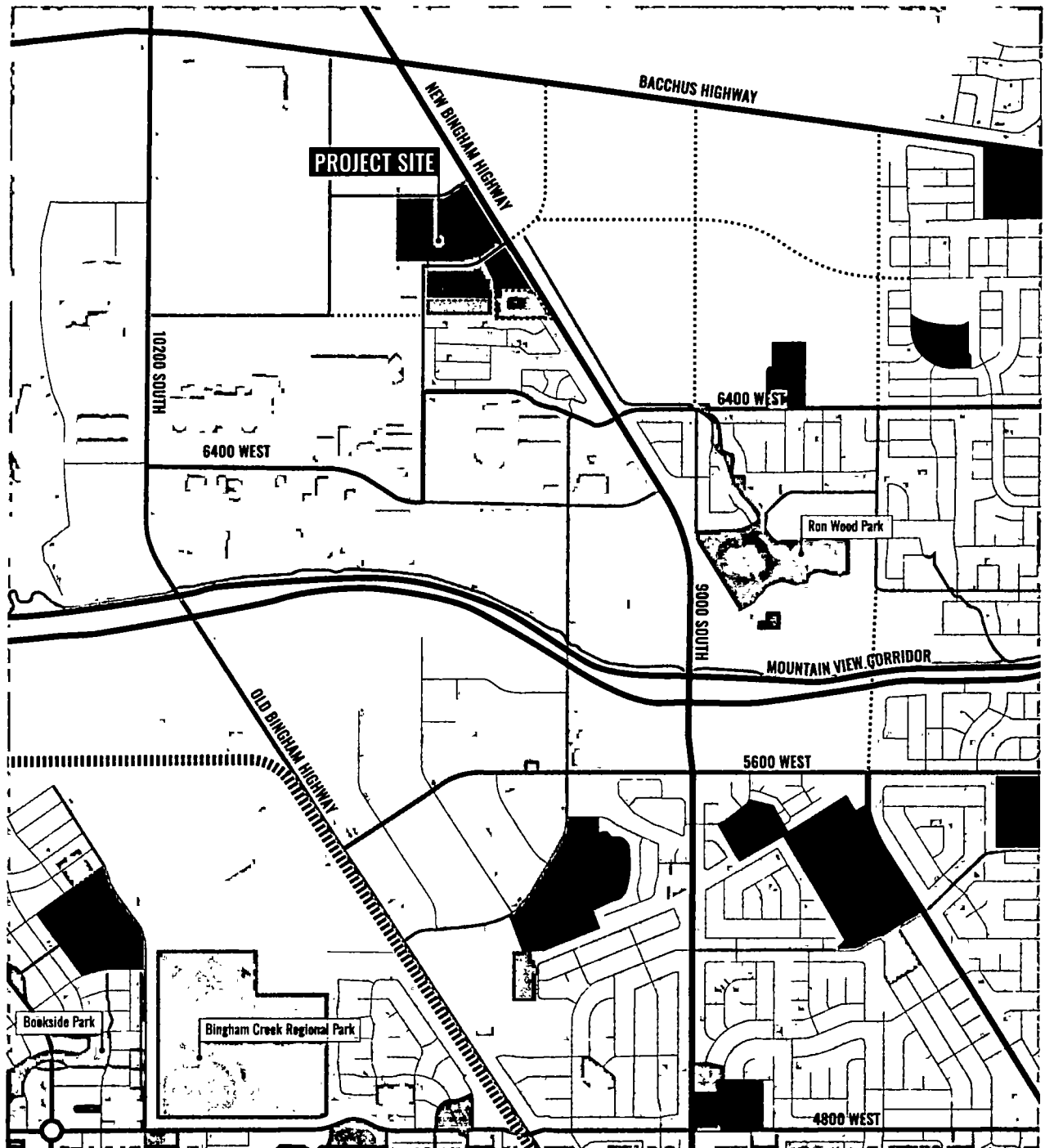
LOCATIONS

- | | | | | | |
|--|--|--|----------------------------|--|----------------------|
| | High traffic road | | Project site | | Dedicated bike lanes |
| | Medium traffic road | | School | | Bike-friendly lanes |
| | Low traffic road | | Church | | Mixed-use trail |
| | Residential / access roads | | Park | | |
| | Proposed road — not part of this project | | Proposed park | | |
| | Railroad tracks | | Public building / facility | | |
| | Future road — part of this project | | | | |



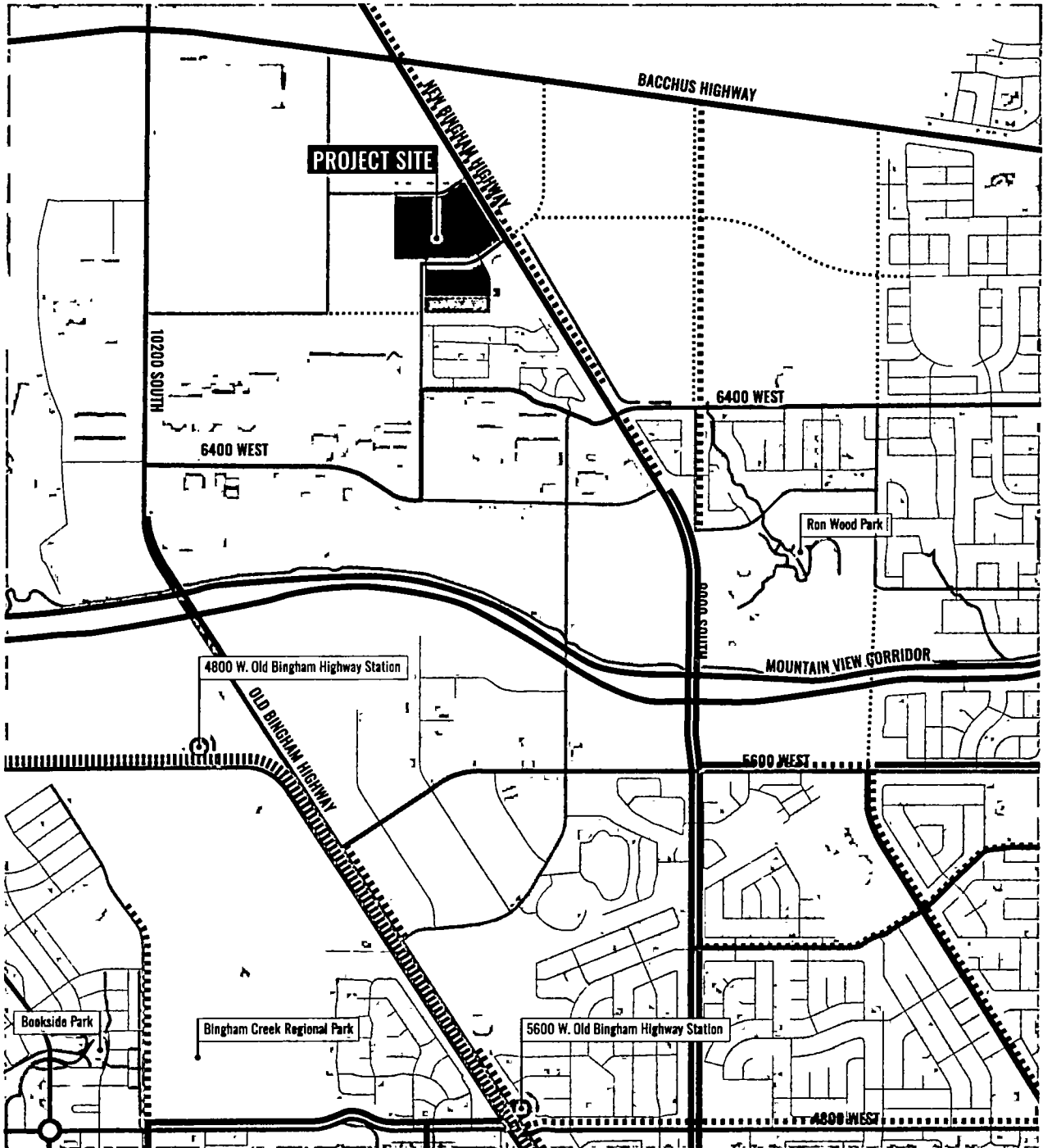
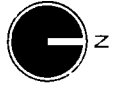
BIKE ROUTES

- | | | | |
|--|--|--|----------------------|
| | High traffic road | | Project site |
| | Medium traffic road | | Proposed park |
| | Low traffic road | | Dedicated bike lanes |
| | Residential / access roads | | Bike-friendly lanes |
| | Proposed road — not part of this project | | |
| | Railroad tracks | | |
| | Future road — part of this project | | |


















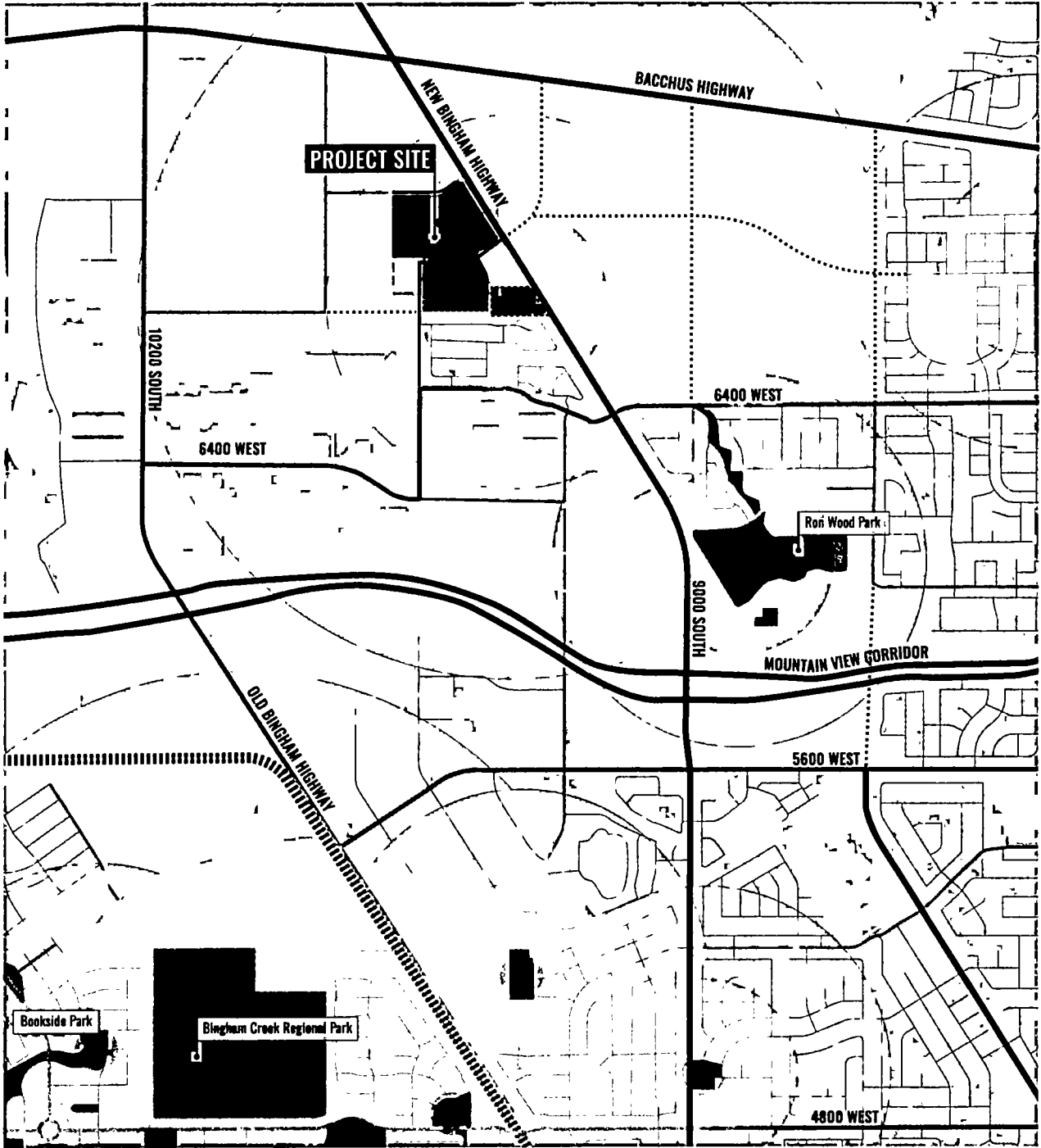
TRAILS

- | | | | | | |
|--|--|--|----------------------------|--|-----------------|
| | High traffic road | | Project site | | Mixed-use trail |
| | Medium traffic road | | School | | |
| | Low traffic road | | Church | | |
| | Residential / access roads | | Park | | |
| | Proposed road — not part of this project | | Proposed park | | |
| | Railroad tracks | | Public building / facility | | |
| | Future road — part of this project | | | | |



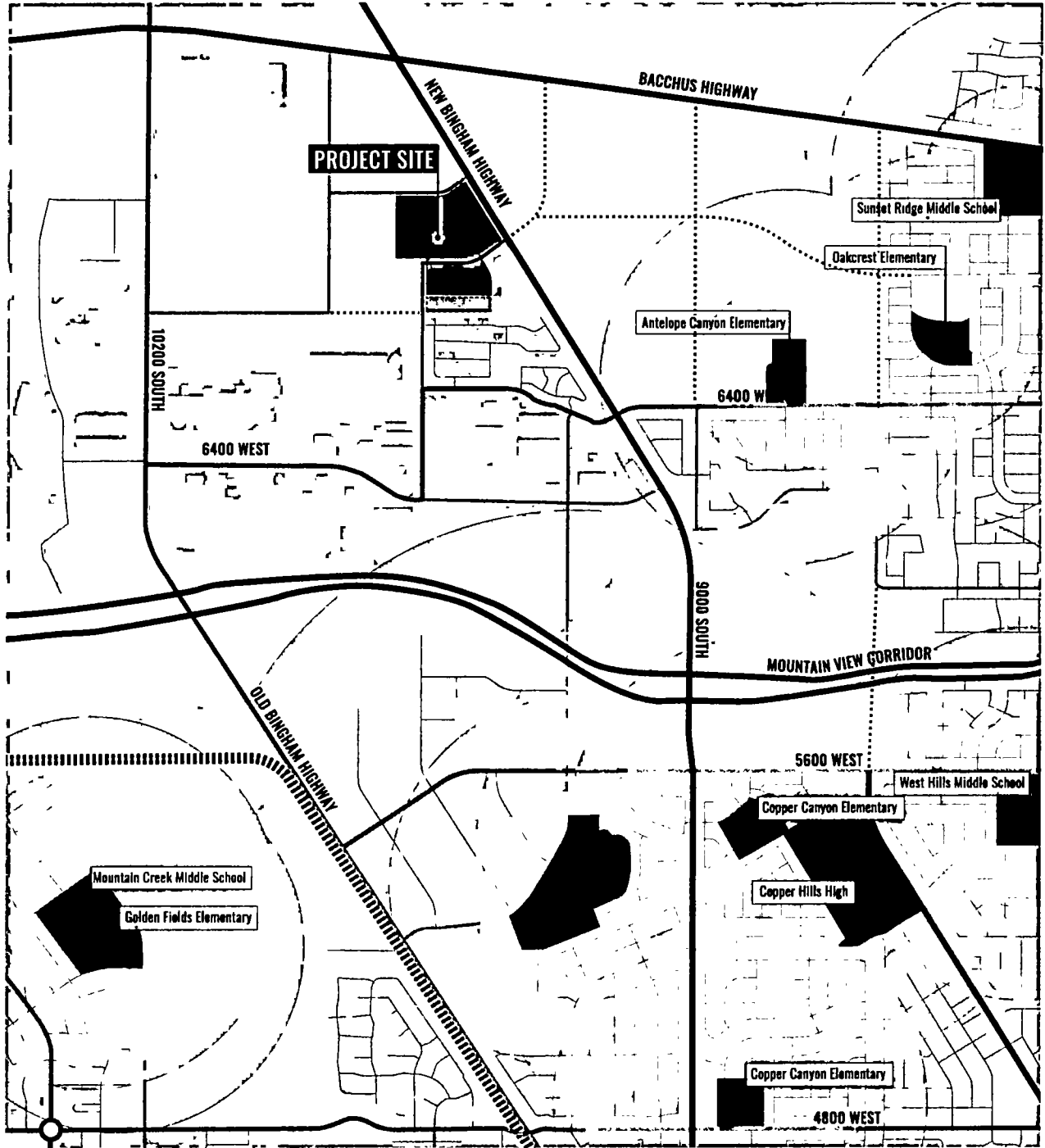
ALTERNATIVE TRANSIT CONNECTIVITY

- | | | |
|--|---|--|
|  High traffic road |  Project site |  Dedicated bike lanes |
|  Medium traffic road |  Proposed park |  Bike-friendly lanes |
|  Low traffic road |  Train station |  Mixed-use trail |
|  Residential / access roads |  Pedestrian only trail | |
|  Proposed road — not part of this project |  Bus line | |
|  Railroad tracks | | |
|  Future road — part of this project | | |



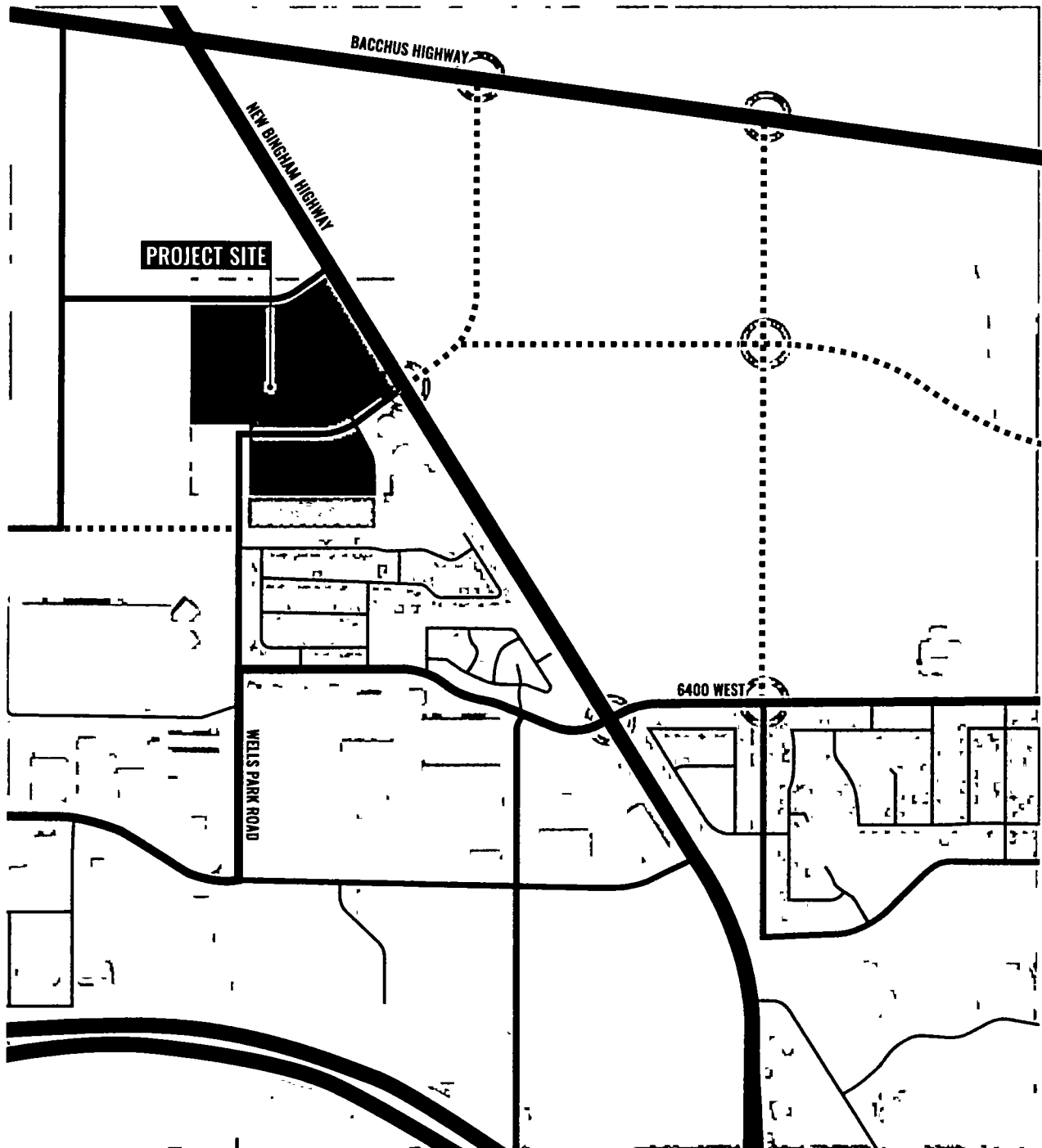
RADIUS OF INFLUENCE: PARKS

- | | | | |
|--|--|--|----------------|
| | High traffic road | | Project site |
| | Medium traffic road | | Park |
| | Low traffic road | | Proposed park |
| | Residential / access roads | | 25 mile radius |
| | Proposed road — not part of this project | | 5 miles radius |
| | Railroad tracks | | 1 mile radius |
| | Future road — part of this project | | |



RADIUS OF INFLUENCE: SCHOOLS

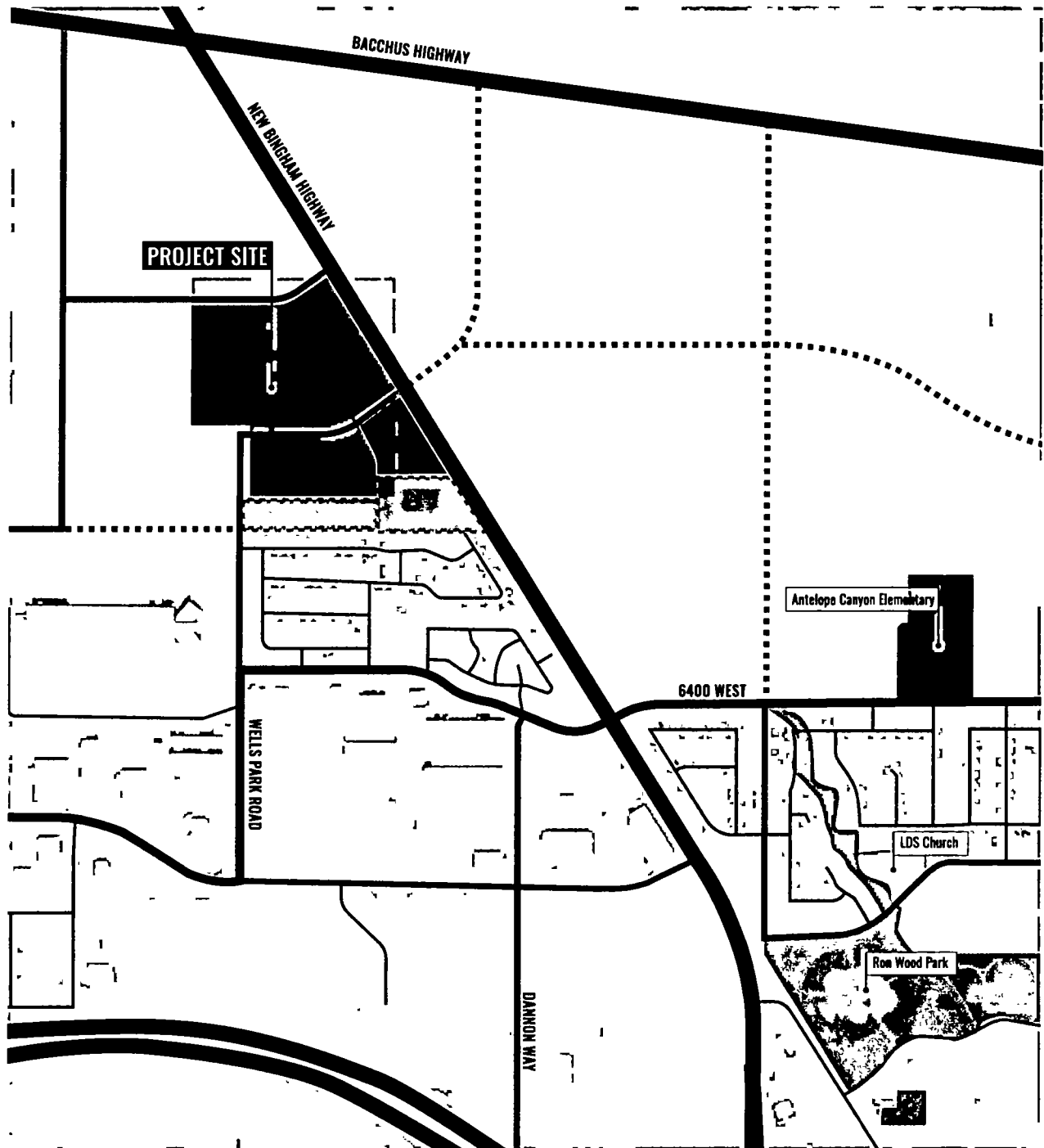
- | | | | |
|--|--|--|-----------------|
| | High traffic road | | Project site |
| | Medium traffic road | | Park |
| | Low traffic road | | Proposed park |
| | Residential / access roads | | Schools |
| | Proposed road — not part of this project | | 25 mile radius |
| | Railroad tracks | | .5 miles radius |
| | Future road — part of this project | | 1 mile radius |



ROADS AND STREETS - ENLARGED AREA

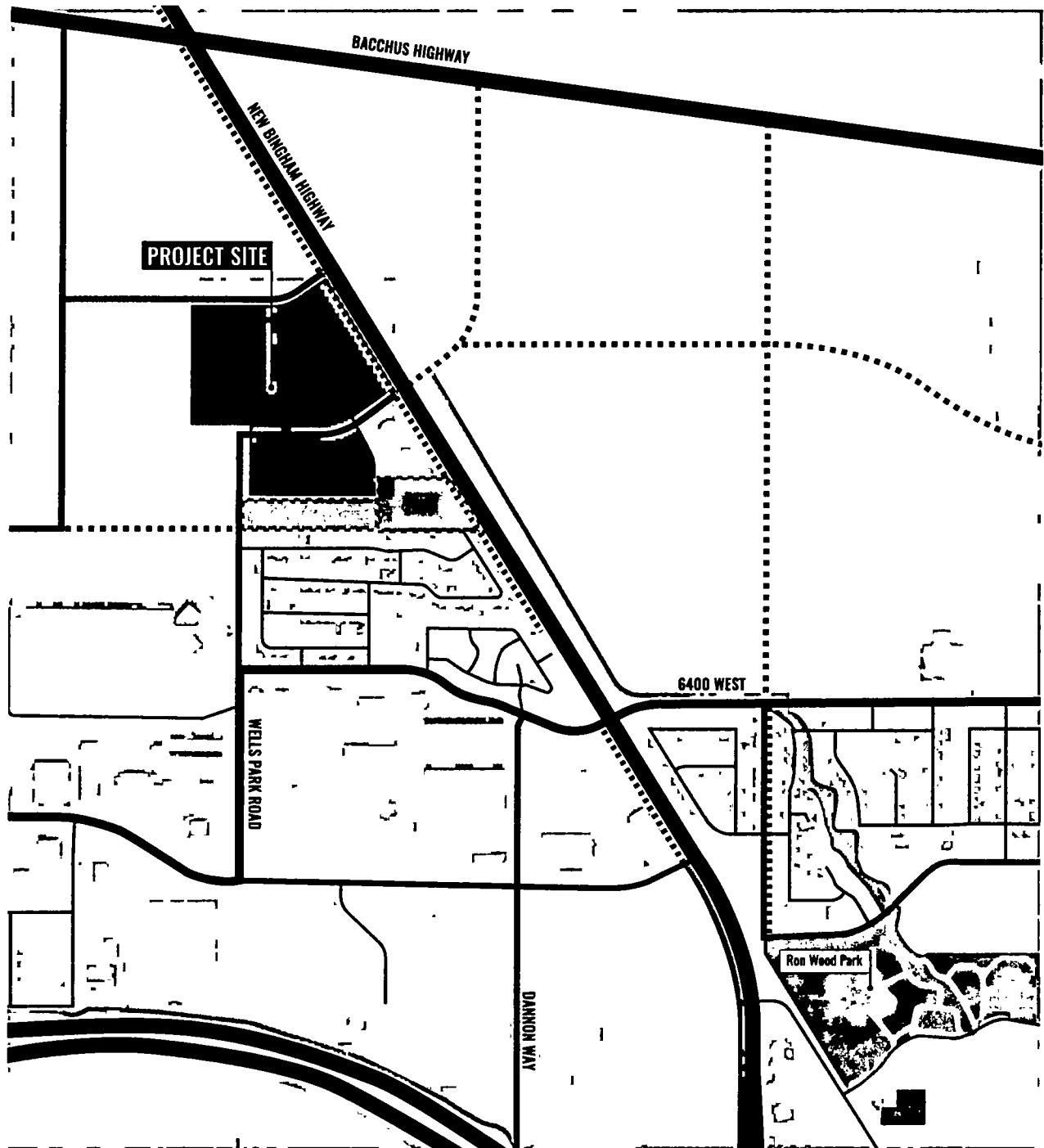
- High traffic road
- Medium traffic road
- Low traffic road
- Residential / access roads
- Proposed road
- Railroad tracks
- Future road — part of this project

- Project site
- Proposed park
- Future signalized intersection



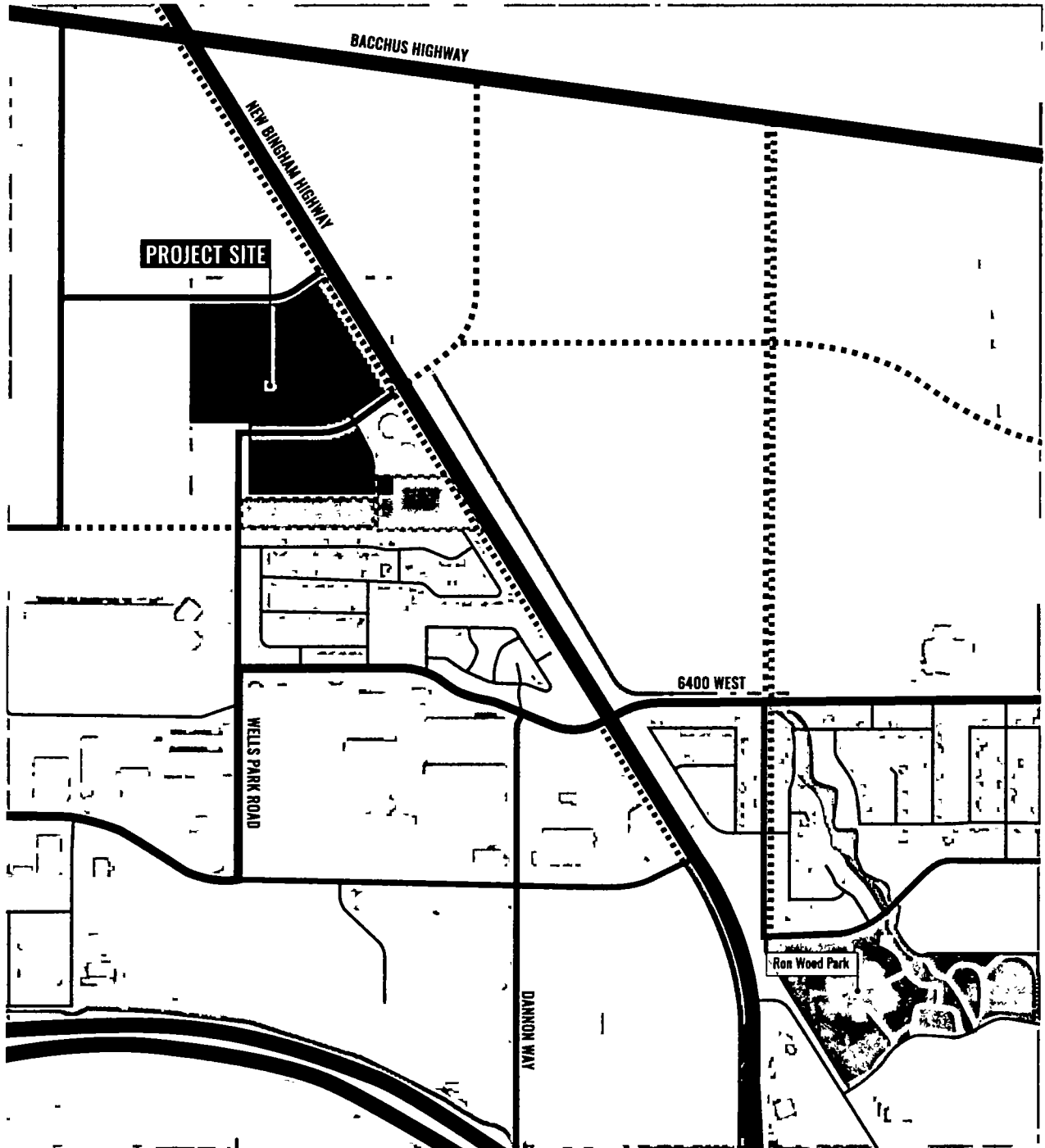
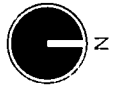
LOCATIONS - ENLARGED AREA

- | | | | | | |
|--|--|--|----------------------------|--|----------------------|
| | High traffic road | | Project site | | Dedicated bike lanes |
| | Medium traffic road | | School | | Bike-friendly lanes |
| | Low traffic road | | Church | | Mixed-use trail |
| | Residential / access roads | | Park | | |
| | Proposed road — not part of this project | | Proposed park | | |
| | Railroad tracks | | Public building / facility | | |
| | Future road — part of this project | | | | |



BIKE ROUTES - ENLARGED AREA

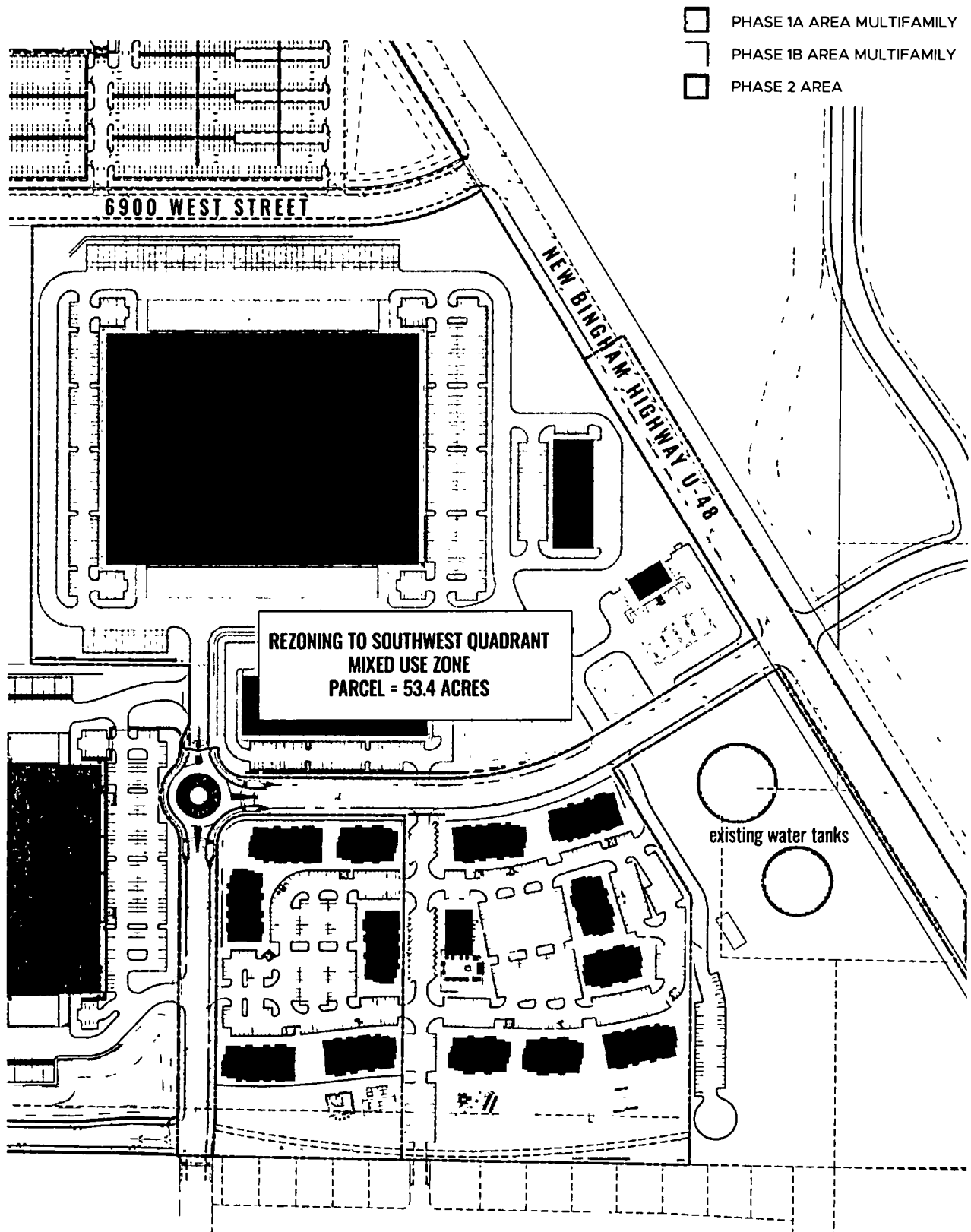
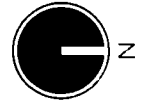
- | | | | |
|--|--|--|----------------------|
| | High traffic road | | Project site |
| | Medium traffic road | | Park |
| | Low traffic road | | Proposed park |
| | Residential / access roads | | Dedicated bike lanes |
| | Proposed road — not part of this project | | Bike-friendly lanes |
| | Railroad tracks | | |
| | Future road — part of this project | | |



ALTERNATIVE TRANSIT CONNECTIVITY - ENLARGED AREA

- | | | | | | |
|--|--|--|-----------------------|--|----------------------|
| | High traffic road | | Project site | | Dedicated bike lanes |
| | Medium traffic road | | Park | | Bike-friendly lanes |
| | Low traffic road | | Proposed park | | Mixed-use trail |
| | Residential / access roads | | Train station | | |
| | Proposed road — not part of this project | | Pedestrian only trail | | |
| | Railroad tracks | | Bus line | | |
| | Future road — part of this project | | | | |

FISCAL IMPACTS



CURRENT & FUTURE TAX SUMMARY

Based on current use and potential rezoning, the table below outlines the property tax generated in a current and stabilized year

TAX REVENUES	CURRENT TAXES - ANNUAL	FUTURE TAXES – ANNUAL*
TAXING ENTITY		
Salt Lake County	\$48,313	\$106,689
Multicounty Assessing & Collecting Levy	\$497	\$1,097
County Assessing & Collecting Levy	\$5,298	\$11,700
Jordan School District	\$197,623	\$436,410
West Jordan City	\$48,876	\$107,933
South Salt Lake Valley Mosquito	\$298	\$658
Jordan Valley Water Conservancy	\$10,563	\$23,327
Central Utah Water Conservancy	\$13,246	\$29,250
Salt Lake County Library	\$12,782	\$28,226
TOTAL	\$337,496	\$745,290

*Assumes construction of the following

- 325,000 sq ft. – warehouse
- 70,000 sq ft. – flex
- 4,500 sq ft. – gas station

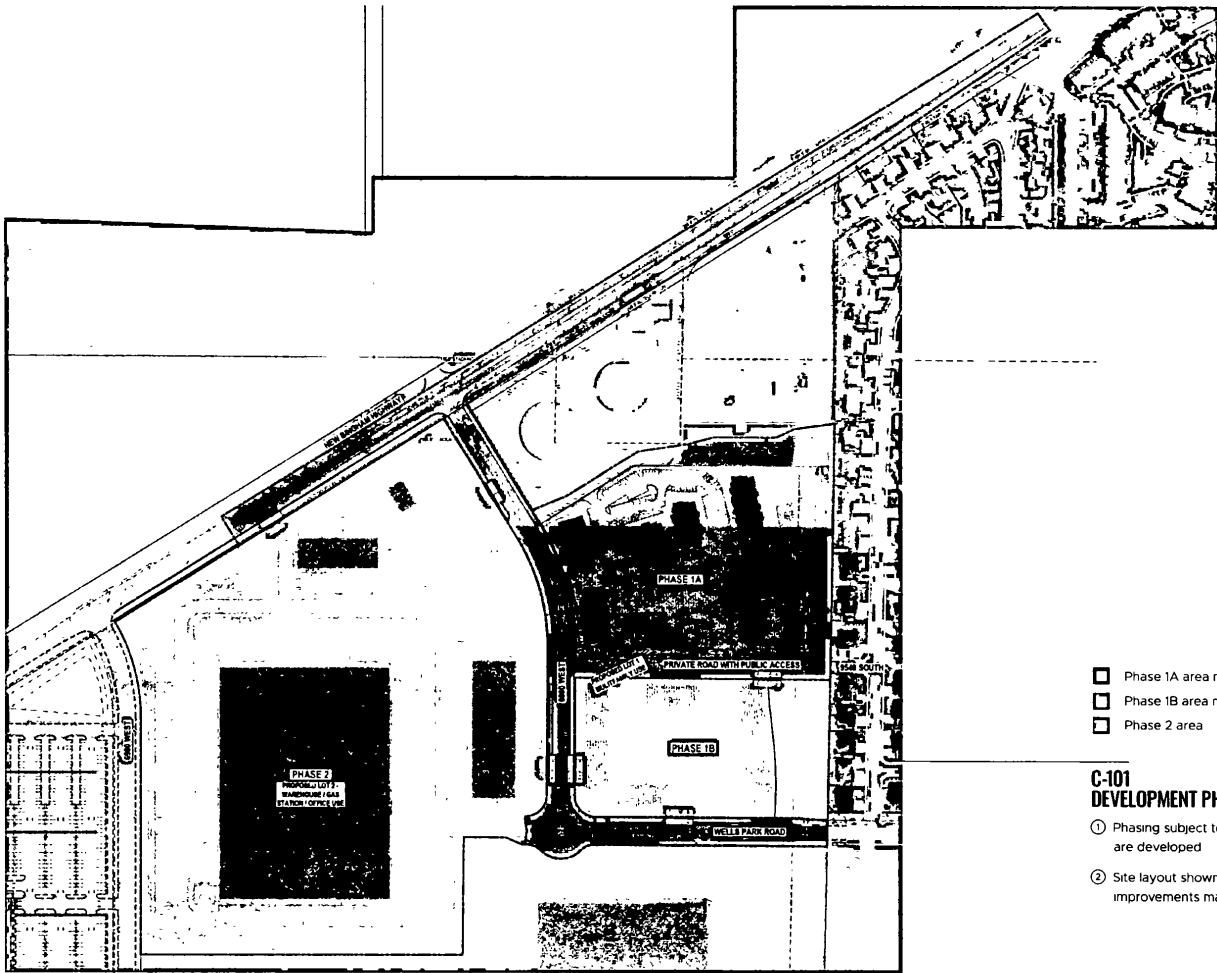
FISCAL IMPACTS – TO WEST JORDAN ONLY

REVENUE SOURCE	ANNUAL AMOUNT
Municipal Energy Fees	\$36,000
Property Tax	\$108,000
Total	\$144,000

Additional Impacts

AS PROPOSED	
Potential New Jobs*	650

*Assumes employees per square foot ranging from 500-800, dependent upon use

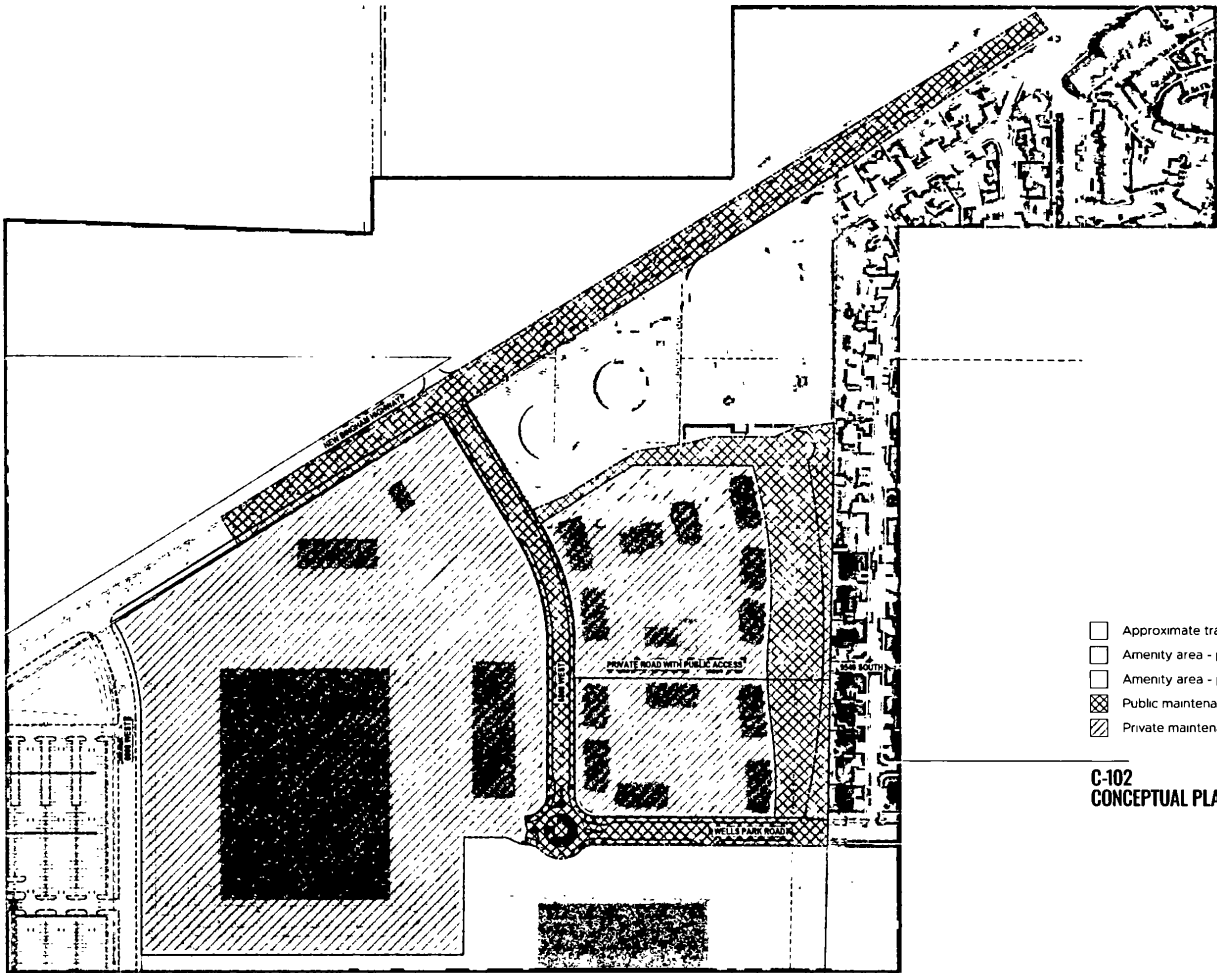


- Phase 1A area multifamily
- Phase 1B area multifamily
- Phase 2 area

**C-101
DEVELOPMENT PHASING PLAN**

- ① Phasing subject to changes as final site plan packages are developed
- ② Site layout shown for reference only Final site improvements may vary

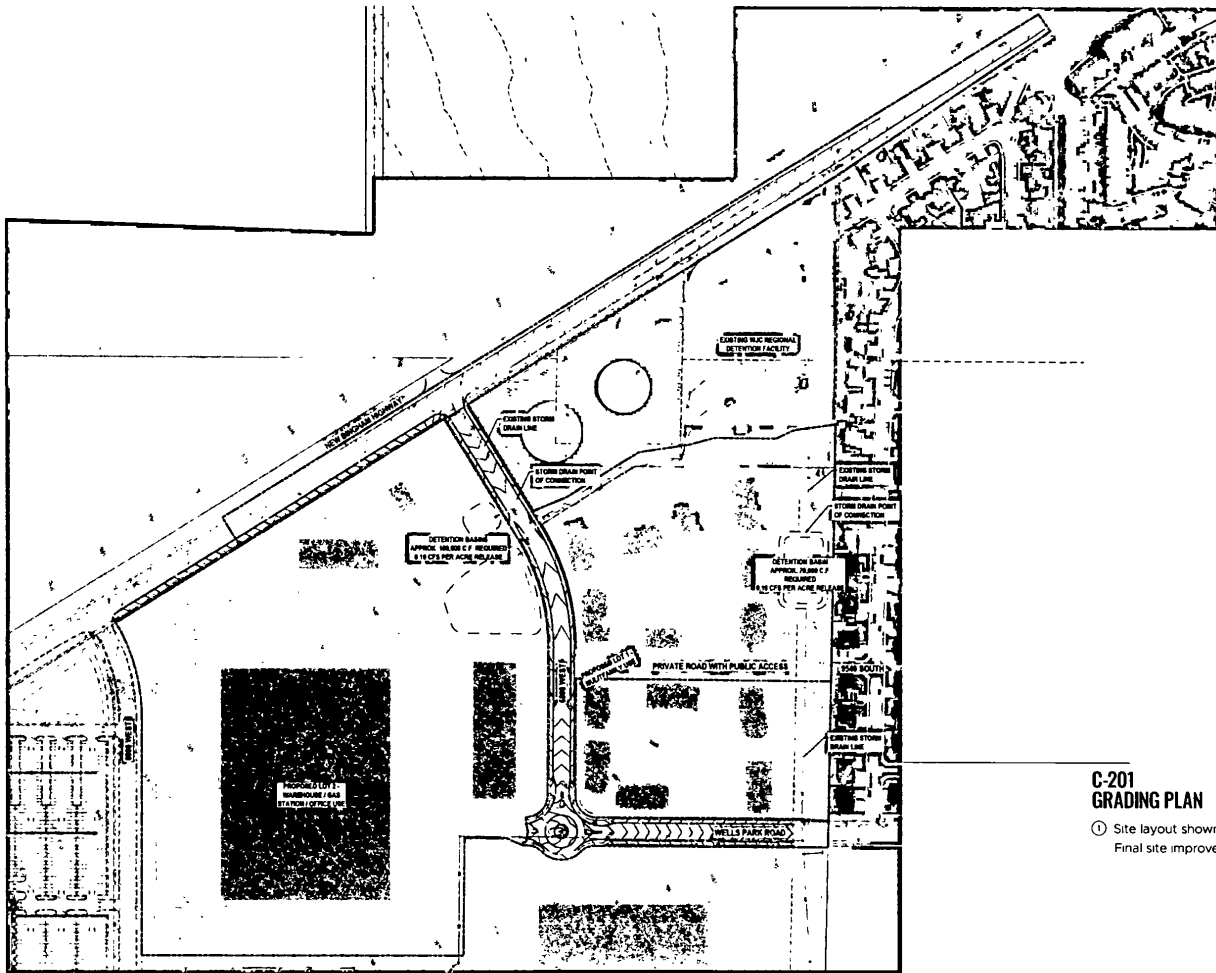
SOUTHWEST QUADRANT REZONE | 26



- Approximate trail location
- Amenity area - phase IA
- Amenity area - phase IB
- Public maintenance area
- Private maintenance area

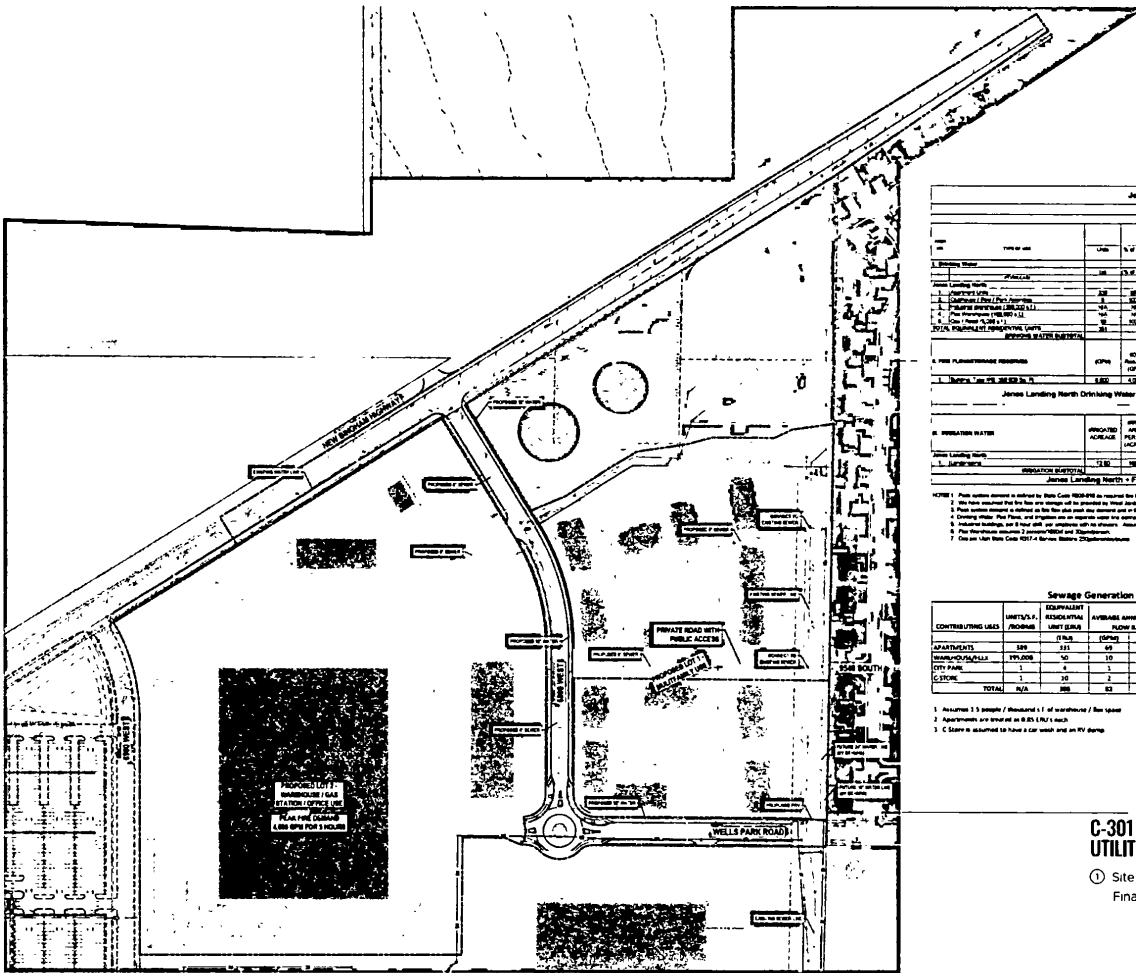
C-102
CONCEPTUAL PLAN FOR PUBLIC IMPROVEMENTS

SOUTHWEST QUADRANT REZONE | 27



**C-201
GRADING PLAN**

① Site layout shown for reference only
Final site improvements may vary



James Landing North Water Demand

WATER DEMAND SUMMARY

ASSUMED CLASSIFICATION - 0.001 FT ABOVE GROUND

ITEM	TYPE	CLASS	S.F. OF FLOOR	S.F. OF CEILING	MAX. GPM DEMAND		TOTAL FLOOR AREA		TOTAL CEILING AREA		TOTAL DEMAND		TOTAL DEMAND	TOTAL DEMAND
					PER FLOOR	PER CEILING	FLOOR	CEILING	FLOOR	CEILING	FLOOR	CEILING		
James Landing North	OFFICE	0.001	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1. Classroom (200 sq ft)	CLASS	0.001	200	200	200	200	200	200	200	200	200	200	200	200
2. Faculty Office (100 sq ft)	OFFICE	0.001	100	100	100	100	100	100	100	100	100	100	100	100
3. Class Room (1,000 sq ft)	CLASS	0.001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
4. TOTAL FLOOR/CEILING DEMAND														
5. TOTAL FLOOR/CEILING DEMAND														
6. OPERATING WATER														
7. JAMES LANDING NORTH DRINKING WATER - HIGHEST FLOOR FLOOR TOTAL														
8. OPERATING WATER														
9. JAMES LANDING NORTH														
10. JAMES LANDING NORTH - HIGHEST FLOOR FLOOR TOTAL														

NOTES: 1. Peak water demand is defined by State Code 100.040 to be based on the floor area and ceiling area. 2. We have assumed that the floor area demand will be provided by their water line. 3. Peak water demand is defined as the flow rate and the demand rate at the same time. 4. Operating water, fire flow, and irrigation are an separate water use and not included in the above. 5. Irrigation demand, per 2 hour shift, not included with the above. Assumes 1.5 inch/100 sq ft and 100 gpm. 6. The fire flow demand, 2 inch/100 sq ft and 100 gpm. 7. Do not use State Code 100.040 for fire flow demand.

Sewage Generation

CONTRIBUTING USES	UNIT(S)	EQUIVALENT	AVERAGE DAILY FLOW RATE	PEAK DAILY FLOW RATE	MINIMUM DAILY FLOW RATE
APARTMENTS	120	1.5	180	270	90
RETAIL/RECREATION	10,000	1.0	10,000	15,000	5,000
OFFICE	1	1	1	1	1
TOTAL	121	1.5	181	271	91

1. Assumes 1.5 people / finished 1 ft of wall/area / floor space.
2. Apartments are treated as 0.25 E.U./1 each.
3. E.U. is assumed to have a 100 gallon and 100 gpm.

**C-301
UTILITY PLAN**

① Site layout shown for reference only
Final site improvements may vary

ENVIRONMENTAL MITIGATION PLAN

Our phase 1 report on this site shows that additional environmental mitigation is not required.



**REPORT
GEOTECHNICAL STUDY
PROPOSED JONES LANDING DEVELOPMENT
NEAR 6800 NEW BINGHAM HIGHWAY
WEST JORDAN, UTAH**

Submitted To:

Gardner Company
201 South Main Street, Suite 2000
Salt Lake City, Utah 84101

Submitted By:

GSH Geotechnical, Inc.
473 West 4800 South
Salt Lake City, Utah 84123

September 14, 2020

Job No. 0297-009-20

September 14, 2020
Job No. 0297-009-20

Mr. Ben Seastrand
Gardner Company
201 South Main Street, Suite 2000
Salt Lake City, Utah 84101

Mr. Seastrand:

Re: Report
Geotechnical Study
Proposed Jones Landing Development
Near 6800 New Bingham Highway
West Jordan, Utah

1. INTRODUCTION

1.1 GENERAL

This report presents the results of our geotechnical study performed at the site of the proposed Jones Landing Development to be located near 6800 New Bingham Highway in West Jordan, Utah. The general location of the site with respect to existing roadways, as of 2020, is presented on Figure 1, Vicinity Map. A more detailed layout of the site showing proposed facilities, existing roadways, and borings drilled in conjunction with this study is presented on Figure 2, Site Plan.

1.2 OBJECTIVES AND SCOPE

The objectives and scope of the study were planned in discussions between Mr. Ben Seastrand of Gardner Company and Mr. Amos Allard of GSH Geotechnical, Inc. (GSH).

In general, the objectives of this study were to:

1. Define and evaluate the subsurface soil and groundwater conditions across the site.
2. Provide appropriate foundation, earthwork, pavement, and geoseismic recommendations to be utilized in the design and construction of the proposed facilities.

GSH Geotechnical, Inc.
473 West 4800 South
Salt Lake City, Utah 84123
Tel: 801.685.9190 Fax: 801.685.2990
www.gshgeo.com

In accomplishing these objectives, our scope has included the following:

1. A field program consisting of the drilling, logging, and sampling of 90 exploration borings.
2. A laboratory testing program.
3. An office program consisting of the correlation of available data, engineering analysis, and the preparation of this summary report.

1.3 AUTHORIZATION

Authorization was provided by returning a signed copy of the Professional Services Agreement No. 20-0715 dated July 8, 2020.

1.4 PROFESSIONAL STATEMENTS

Supporting data upon which our recommendations are based are presented in subsequent sections of this report. Recommendations presented herein are governed by the physical properties of the soils encountered in the exploration borings, projected groundwater conditions, and the layout and design data discussed in Section 2, Proposed Construction. If subsurface conditions other than those described in this report are encountered and/or if design and layout changes are implemented, GSH must be informed so that our recommendations can be reviewed and amended, if necessary.

Our professional services have been performed, our findings developed, and our recommendations prepared in accordance with generally accepted engineering principles and practices in this area at this time.

2. PROPOSED CONSTRUCTION

The project is to consist of the construction of 4 warehouse structures and associated pavements. The structures are anticipated to be 350,000 to 400,000 square feet, 1-extended level, concrete tilt-up construction, and supported upon conventional spread and continuous wall footings.

Maximum real column and wall loads are anticipated to be on the order of 180 to 250 kips and 5 to 10 kips per lineal foot, respectively. Real loads are defined as the total of all dead plus frequently applied (reduced) live loads.

Paved parking areas and heavy-duty drive lanes are planned around the structure. Projected traffic in the parking areas is anticipated to consist of a light volume of automobiles and light trucks, occasional medium-weight trucks, and no heavy-weight trucks. Projected traffic in the heavy-duty drive lanes is anticipated to consist of a moderate volume of automobiles, light trucks, and medium-weight trucks with numerous heavyweight trucks.

Site development will require some earthwork in the form of minor cutting and filling. At this time, we anticipate that maximum site grading cuts and fills, excluding utilities, will be on the order of 5 to 10 feet.

3. SITE INVESTIGATIONS

3.1 GENERAL

Subsurface conditions in unexplored locations or at other times may vary from those encountered at specific boring locations. If such variations are noted during construction or if project development plans are changed, GSH must review the changes and amend our recommendations, if necessary.

Boring locations were established by estimating distances and angles from site landmarks. If increased accuracy is desired by the client, we recommend that the boring locations and elevations be surveyed.

3.2 FIELD PROGRAM

To define and evaluate the subsurface soil and groundwater conditions across the site, 90 borings were drilled within the accessible areas. These borings were completed to depths ranging from 0.0 (surface refusal) to 21.0 feet with truck-mounted and track-mounted drill rigs equipped with hollow-stem augers. Auger refusal within very dense granular soils terminated the majority of borings, excluding several borings in the area between B-25 through B-37. The approximate locations of the borings are presented on Figure 2. Additionally, refraction microtremor (ReMi) testing was completed at this site.

The field portion of our study was under the direct control and continual supervision of an experienced member of our geotechnical staff. During the course of the drilling operations, a continuous log of the subsurface conditions encountered was maintained. In addition, samples of the typical soils encountered were obtained for subsequent laboratory testing and examination. The soils were classified in the field based upon visual and textural examination. These classifications were supplemented by subsequent inspection and testing in our laboratory. Graphical representation of the subsurface conditions encountered is presented on Figures 3A through 3CL, Boring Logs. Soils were classified in accordance with the nomenclature described on Figure 4, Key to Boring Log (USCS).

A 3.25- and 3.0-inch outside diameter, 2.42-inch inside diameter (Dames & Moore), a 2.0-inch outside diameter, 1.38-inch inside diameter drive samplers (SPT) were utilized at select locations and depths. The blow counts recorded on the boring logs were those required to drive the sampler 12 inches with a 140-pound hammer dropping 30 inches.

Following completion of excavation operations, 1.25-inch diameter slotted PVC pipe was installed in several borings throughout the entire site, to provide a means of monitoring the groundwater fluctuations. The borings were backfilled with auger cuttings.

3.3 LABORATORY TESTING

3.3.1 General

To provide data necessary for our engineering analysis, a laboratory testing program was performed. This program included moisture, density, partial gradation, Atterberg limits, consolidation, and chemical tests. The following paragraphs describe the tests and summarize the test data.

3.3.2 Moisture and Density Tests

To provide index parameters and to correlate other test data, moisture and density tests were performed on selected samples. The results of these tests are presented on the boring logs, Figures 3A through 3CL.

3.3.3 Partial Gradation Tests

To aid in classifying the granular soils, partial gradation tests were performed. Results of the tests are tabulated below and presented on the boring logs, Figures 3A through 3CL.

Boring No.	Depth (feet)	Percent Passing No. 200 Sieve	Moisture Content Percent	Soil Classification
B-1	5.0	27.8	1.8	SM
B-7	2.5	36.4	5.8	SM
B-12	2.5	23.2	4.6	GM
B-13	2.5	15.4	2.5	GM
B-17	10.0	63.8	16.8	CL
B-23	10.0	15.1	6.0	SM
B-29	5.0	11.8	3.5	SP/SM
B-45	2.5	4.3	0.4	SP
B-46	2.5	12.1	0.8	SM
B-49	5.0	79.7	18.1	CL
B-50	12.5	69.0	8.8	ML
B-59	1.5	31.4	6.2	GM
B-81	7.5	27.0	8.2	GM
B-87	3.0	70.1	7.8	ML

3.3.4 Atterberg Limits Test

To aid in classifying the soils, an Atterberg limits test was performed on a sample of the fine-grained cohesive soils. Results of the test are tabulated below and presented on the boring logs, Figures 3A through 3CL:

Boring No.	Depth (feet)	Liquid Limit (percent)	Plastic Limit (percent)	Plasticity Index (percent)	Soil Classification
B-18	5.0	29	22	9	CL

3.3.5 Consolidation Tests

To provide data necessary for our settlement analysis, consolidation testing was performed on 4 representative samples of the natural fine-grained clay soils encountered at the site. The results of these tests indicate that the samples tested were moderately over-consolidated and will exhibit moderate strength and compressibility characteristics under the anticipated loading. Detailed results of the tests are maintained within our files and can be transmitted to you, upon your request.

3.3.6 Chemical Tests

To determine if the site soils will react detrimentally with concrete, chemical tests were performed on a representative sample of the near-surface soil encountered at the site. The results of the chemical tests are tabulated below:

Boring No.	Depth (feet)	Soil Classification	pH	Total Water-Soluble Sulfate (mg/kg-dry)
B-33	5.0	CL	8.66	12.9

4. SITE CONDITIONS

4.1 SURFACE

The site is located near 6800 West New Bingham Highway in West Jordan, Utah. The site is currently vacant/undeveloped brush/grass land previously used for agricultural purposes. A small canal travels from the northeast to southwest through the site. The topography of the site is relatively flat, grading down to the northeast with a total relief of approximately 30 feet. Site vegetation consists of various weeds and brush/grass land.

The site is bounded to the north by New Bingham Highway followed by similar vacant/undeveloped brush land; to the east by single-family residential structures; and to the south and west by similar vacant/undeveloped brush land.

4.2 SUBSURFACE SOIL

The following paragraphs provide generalized descriptions of the subsurface profiles and soil conditions encountered within the borings conducted during this study. As previously noted, soil conditions may vary in unexplored locations.

The borings were drilled to depths ranging from 0.0 (surface refusal) to 21.0 feet. The soil conditions encountered in each of the borings, to the depths penetrated, were generally similar across the boring locations.

- Approximately 2 to 8 inches of topsoil was encountered in each boring. Topsoil thickness is frequently erratic and thicker zones of topsoil should be anticipated.
- Natural soils were encountered at or below the ground surface in each boring. The natural soils consisted primarily of sand with varying clay, silt, and gravel content, gravel with silt and sand content, silt with varying sand, gravel, and cobble content, and in localized areas, clay with varying silt, sand, and gravel content.
- Materials causing auger refusal were encountered within the very dense natural soils throughout the site. Refusal depths ranged from 0.0 (surface refusal) to approximately 11.0 feet. Several deeper borings between B-25 and B-37 were drilled without encountering refusal to depths of up to approximately 21.0 feet.

The natural granular and silt soils were loose to very dense, dry to moist, and brown, tan, gray, and red in color. The natural sand soils are anticipated to exhibit moderately high strength and moderately low compressibility characteristics under the anticipated load range.

The natural clay soils were very stiff to hard, dry to slightly moist, brown and tan in color, and moderately over-consolidated. The natural clay soils are anticipated to exhibit moderate strength and compressibility characteristics under the anticipated loading.

For a more descriptive interpretation of subsurface conditions, please refer to Figures 3A through 3CL, Boring Logs. The lines designating the interface between soil types on the boring logs generally represent approximate boundaries. In situ, the transition between soil types may be gradual.

4.3 GROUNDWATER

Groundwater was not encountered to the depths explored in the borings completed at the site and is not anticipated to affect mass grading or construction operations.

Groundwater levels vary with changes in season and rainfall, construction activity, irrigation, snow melt, surface water run-off, and other site-specific factors.

5. DISCUSSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

The proposed structures may be supported upon conventional spread and continuous wall foundations supported upon suitable natural soils, structural fill extending to suitable natural soils, and/or ground improvement methods such as rammed-aggregate piers.

The most significant geotechnical aspects at the site are:

1. The potential to encounter non-engineered fills at the site.
2. The shallow depth to auger refusal in several borings throughout the site.
3. The potential to encounter collapsible soils.

Potentially collapsible soils were not encountered in the borings located at this site; however, potentially collapsible soils have been encountered in the areas adjacent to this site. Potentially collapsible soils will be sporadic with respect to thickness and lateral extent across the site. Under no circumstances should foundations, floor slabs, and exterior rigid pavements be established over these collapsible soils. Footings must be placed on the suitable natural granular soils or granular structural fill extending to natural granular soils.

In flexible pavement areas, the in situ, potentially collapsible soils (if encountered) may remain if free of any deleterious materials and if properly prepared, as discussed later in this report. Even with this partial subgrade preparation underlying flexible pavements, some settlement and differential settlement may occur over deep sequences unless the potentially collapsible soils are completely removed. Before the placement of flexible pavements, the subgrade must be properly prepared as discussed later in this report.

Another significant aspect for site development, if potentially collapsible soils are identified upon site visits conducted by GSH, is that a mixture of sand and gravel containing at least 20 percent fines (that is, either silt or clay particles) is required to be utilized as granular structural fills. The purpose of the relatively high percentage of fines is to render the compacted material less permeable; thus, reducing the possibility of deep infiltration of surface water into the underlying potentially collapsible soil sequence.

Potentially collapsible soils, although unlikely, may be present at this site to varying depths. Therefore, a geotechnical engineer from GSH must observe every foundation and floor slab excavation to identify that all collapsible/unsuitable soils have been removed.

Prior to proceeding with construction, removal of any existing debris, surface vegetation, root systems, topsoil, non-engineered fills (if encountered), potentially collapsible soils (if encountered), and any deleterious materials from beneath an area extending out at least 5 feet from

the perimeter of the proposed structure footprint and 3 feet beyond rigid pavements and exterior flatwork areas will be required. All existing utility locations should be reviewed to assess their impact on the proposed construction and abandoned and/or relocated as appropriate.

Due to the developed nature of this site and the surrounding area, non-engineered fills may exist in unexplored areas of the site. Based on our experience, non-engineered fills are frequently erratic in composition and consistency. All surficial loose/disturbed soils and non-engineered fills must be removed below all footings, floor slabs, and rigid pavements. The in situ, non-engineered fills may remain below flexible pavements if free of any deleterious materials, of limited thickness, and if properly prepared, as discussed later in this report.

On-site granular soils may be re-utilized as structural site grading fill if they meet the criteria for such, as stated later in this report.

The dense natural soils encountered at the refusal depths may require significant effort to excavate and should be considered in the design and bidding process; however, if large excavation equipment is utilized, achieving design grades is not anticipated to be a significant issue.

Detailed discussions pertaining to earthwork, foundations, pavements, and the geoseismic setting of the site are presented in the following sections.

5.2 EARTHWORK

5.2.1 Site Preparation

Initial site preparation will consist of the removal of any existing debris, non-engineered fills (if encountered), potentially collapsible soils (if encountered), surface vegetation, root systems, topsoil, and any deleterious materials from beneath an area extending out at least 5 feet from the perimeter of the proposed structure footprint and 3 feet beyond rigid pavements and exterior flatwork areas. All existing utility locations should be reviewed to assess their impact on the proposed construction and abandoned and/or relocated as appropriate.

In situ, non-engineered fills (if encountered) may remain below flexible pavements if free of debris and deleterious materials, less than 3 feet in thickness, and if properly prepared. Proper preparation below pavements will consist of the scarification of the upper 12 inches below asphalt concrete (flexible pavement), followed by moisture preparation and re-compaction to the requirements of structural fill. Even with proper preparation, pavements established overlying non-engineered fills may encounter some long-term movements unless the non-engineered fills are completely removed.

Similarly (only if potentially collapsible soils are identified by a GSH representative), below exterior flatwork such as sidewalks and driveways, a minimum of 18 inches of potentially collapsible soils must be removed and either replaced with new structural fill or recompacted to the requirements for structural fill. The replacement structural fill must consist of a sand and gravel

mixture containing at least 20 percent fines (that is, either silt or clay particles). The purpose of the relatively high percentage of fines is to render the compacted material less permeable; thus, reducing the possibility of deep infiltration of surface water into the underlying potentially collapsible soil sequence. Even with the recommended minimum removal and replacement, some long-term movement of the slabs and pavements overlying deep sequences of potentially collapsible soils may still occur over time. If this is unacceptable, all potentially collapsible soils must be removed and replaced with compacted structural fill.

It must be noted that from a handling and compaction standpoint, soils containing high amounts of fines (silts and clays) are inherently more difficult to rework and are very sensitive to changes in moisture content, requiring very close moisture control during placement and compaction. This will be very difficult, if not impossible, during wet and cold periods of the year. Additionally, the on-site soils are likely above optimum moisture content for compacting at present and would require some drying prior to re-compacting.

Subsequent to stripping and prior to the placement of floor slabs, foundations, structural site grading fills, exterior flatwork, and pavements, the exposed subgrade must be proof rolled by passing moderate-weight rubber tire-mounted construction equipment over the surface at least twice. If excessively soft or otherwise unsuitable soils are encountered beneath footings, they must be completely removed. If removal depth required is greater than 2 feet below footings, GSH must be notified to provide further recommendations. In pavement, floor slab, and outside flatwork areas, unsuitable natural soils should be removed to a maximum depth of 2 feet and replaced with compacted granular structural fill.

Subgrade preparation as described must be completed prior to placing overlying structural site grading fills.

GSH must be notified prior to the placement of structural site grading fills, floor slabs, footings, and pavements to verify that all potentially collapsible soils (if encountered), loose/disturbed soils and non-engineered fills have been completely removed and/or properly prepared.

5.2.2 Temporary Excavations

Temporary excavations up to 8 feet deep in fine-grained cohesive soils, above or below the water table, may be constructed with sideslopes no steeper than one-half horizontal to one vertical (0.5H:1.0V). Excavations deeper than 8 feet are not anticipated at the site.

For granular (cohesionless) soils, construction excavations above the water table, not exceeding 4 feet, should be no steeper than one-half horizontal to one vertical (0.5H:1.0V). For excavations up to 8 feet, in granular soils and above the water table, the slopes should be no steeper than one horizontal to one vertical (1H:1V). Excavations encountering saturated cohesionless soils will be very difficult and will require very flat sideslopes and/or shoring, bracing, and dewatering.

Due to the relatively shallow excavation refusal depths, difficult excavation should be anticipated within deeper excavations such as those for construction of utilities; however, if large excavation equipment is utilized, achieving design grades is not anticipated to be a significant issue.

All excavations must be inspected periodically by qualified personnel. If any signs of instability or excessive sloughing are noted, immediate remedial action must be initiated.

5.2.3 Structural Fill

Structural fill is defined as all fill which will ultimately be subjected to structural loadings, such as imposed by footings, floor slabs, pavements, etc. Structural fill will be required as backfill over foundations and utilities, as site grading fill, and as replacement fill below footings. All structural fill must be free of surface vegetation, root systems, rubbish, topsoil, frozen soil, and other deleterious materials.

Structural site grading fill is defined as structural fill placed over relatively large open areas to raise the overall grade. For structural site grading fill, the maximum particle size shall not exceed 4 inches; although, occasional larger particles, not exceeding 8 inches in diameter, may be incorporated if placed randomly in a manner such that “honeycombing” does not occur and the desired degree of compaction can be achieved. The maximum particle size within structural fill placed within confined areas shall be restricted to 2 inches.

On-site soils may be re-utilized as structural site grading fill if they do not contain construction debris or deleterious material and meet the requirements of structural fill. Fine-grained soils will require very close moisture control and may be very difficult, if not impossible, to properly place and compact during wet and cold periods of the year.

Imported structural fill below foundations and floor slabs shall consist of a well graded sand and gravel mixture with less than 30 percent retained on the three-quarter-inch sieve and less than 20 percent passing the No. 200 Sieve (clays and silts).

To stabilize soft subgrade conditions (if encountered) or where structural fill is required to be placed closer than 2.0 feet above the water table at the time of construction, a mixture of coarse angular gravels and cobbles and/or 1.5- to 2.0-inch gravel (stabilizing fill) should be utilized. It may also help to utilize a stabilization fabric, such as Mirafi 600X or equivalent, placed on the natural ground if 1.5- to 2.0-inch gravel is used as stabilizing fill.

5.2.4 Fill Placement and Compaction

All structural fill shall be placed in lifts not exceeding 8 inches in loose thickness. Structural fills shall be compacted in accordance with the percent of the maximum dry density as determined by the AASHTO¹ T180 (ASTM² D1557) compaction criteria in accordance with the following table:

Location	Total Fill Thickness (feet)	Minimum Percentage of Maximum Dry Density
Beneath an area extending at least 5 feet beyond the perimeter of the structure	0 to 10	95
Site grading fills outside area defined above	0 to 5	90
Site grading fills outside area defined above	5 to 10	95
Utility trenches within structural areas	--	96
Road base	--	96

Structural fills greater than 10 feet thick are not anticipated at the site.

Subsequent to stripping and prior to the placement of structural site grading fill, the subgrade shall be prepared as discussed in Section 5.2.1, Site Preparation, of this report. In confined areas, subgrade preparation should consist of the removal of all loose or disturbed soils.

Coarse angular gravel and cobble mixtures (stabilizing fill), if utilized, shall be end dumped, spread to a maximum loose lift thickness of 15 inches, and compacted by dropping a backhoe bucket onto the surface continuously at least twice. As an alternative, the stabilizing fill may be compacted by passing moderately heavy construction equipment or large self-propelled compaction equipment at least twice. Subsequent fill material placed over the coarse gravels and cobbles shall be adequately compacted so that the “fines” are “worked into” the voids in the underlying coarser gravels and cobbles. Where soil fill materials are to be placed directly over more than about 18 inches of clean gravel, a separation geofabric, such as Mirafi 140N or equivalent, is recommended to be placed between the gravel and subsequent soil fills.

Non-structural fill may be placed in lifts not exceeding 12 inches in loose thickness and compacted by passing construction, spreading, or hauling equipment over the surface at least twice.

¹ American Association of State Highway and Transportation Officials
² American Society for Testing and Materials

5.2.5 Utility Trenches

All utility trench backfill material below structurally loaded facilities (footings, floor slabs, flatwork, pavements, etc.) shall be placed at the same density requirements established for structural fill. If the surface of the backfill becomes disturbed during the course of construction, the backfill shall be proof rolled and/or properly compacted prior to the construction of any exterior flatwork over a backfilled trench. Proof rolling shall be performed by passing moderately loaded rubber tire-mounted construction equipment uniformly over the surface at least twice. If excessively loose or soft areas are encountered during proof rolling, they shall be removed to a maximum depth of 2 feet below design finish grade and replaced with structural fill.

Many utility companies and City-County governments are now requiring that Type A-1a or A-1b (AASHTO Designation – granular soils with limited fines) soils be used as backfill over utilities. These organizations are also requiring that in public roadways, the backfill over major utilities be compacted over the full depth of fill to at least 96 percent of the maximum dry density as determined by the AASHTO T180 (ASTM D1557) method of compaction. GSH recommends that as the major utilities continue onto the site that these compaction specifications are followed.

Fine-grained soils, such as silts and clays, are not recommended for utility trench backfill in structural areas.

Due to the relatively shallow excavation refusal depths, difficult excavation should be anticipated within deeper excavations such as those for construction of utilities; however, if large excavation equipment is utilized, achieving design grades is not anticipated to be a significant issue.

5.3 GROUNDWATER

Groundwater was not encountered to the depths explored in the borings completed at the site and is not anticipated to affect mass grading or construction operations.

The groundwater measurements presented are conditions at the time of the field exploration and may not be representative of other times or locations. Groundwater levels may vary seasonally and with precipitation, as well as other factors including irrigation. Evaluation of these factors is beyond the scope of this study. Groundwater levels may, therefore, be at shallower or deeper depths than those measured during this study, including during construction and over the life of the structure.

The extent and nature of any dewatering required during construction will be dependent on the actual groundwater conditions prevalent at the time of construction and the effectiveness of construction drainage to prevent run-off into open excavations.

5.4 SPREAD AND CONTINUOUS WALL FOUNDATIONS

5.4.1 Design Data

The results of our analysis indicate that the proposed structures may be supported upon conventional spread and continuous wall foundations established upon suitable natural soils and/or structural fill extending to suitable natural soils. Under no circumstances shall foundations be established over non-engineered fills, potentially collapsible soils, loose or disturbed soils, topsoil, surface vegetation, root systems, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. For design, the following parameters are provided:

Minimum Recommended Depth of Embedment for Frost Protection	- 30 inches
Minimum Recommended Depth of Embedment for Non-frost Conditions	- 15 inches
Recommended Minimum Width for Continuous Wall Footings	- 18 inches
Minimum Recommended Width for Isolated Spread Footings	- 24 inches
Recommended Net Bearing Capacity for Real Load Conditions	- 3,000 pounds per square foot
Bearing Capacity Increase for Seismic Loading	- 50 percent

The term “net bearing capacity” refers to the allowable pressure imposed by the portion of the structure located above lowest adjacent final grade. Therefore, the weight of the footing and backfill to lowest adjacent final grade need not be considered. Real loads are defined as the total of all dead plus frequently applied live loads. Total load includes all dead and live loads, including seismic and wind.

5.4.2 Installation

Under no circumstances shall the footings be installed upon potentially collapsible soils, non-engineered fills, loose or disturbed soils, topsoil, surface vegetation, root systems, rubbish, construction debris, or other deleterious materials. If unsuitable soils are encountered, they must be removed and replaced with compacted granular fill. If granular soils become loose or disturbed, they must be recompacted prior to pouring the concrete.

The width of structural replacement fill below footings should be equal to the width of the footing plus one foot for each foot of fill thickness.

5.4.3 Settlements

Based on column loadings, soil bearing capacities, and the foundation recommendations as discussed above, we expect primary total settlement beneath individual foundations to be less than one inch.

The amount of differential settlement is difficult to predict because the subsurface and foundation loading conditions can vary considerably across the site. However, we anticipate differential settlement between adjacent foundations could vary from 0.5 to 0.75 inch. The final deflected shape of the structure will be dependent on actual foundation locations and loading.

5.5 LATERAL RESISTANCE

Lateral loads imposed upon foundations due to wind or seismic forces may be resisted by the development of passive earth pressures and friction between the base of the footings and the supporting soils. In determining frictional resistance, a coefficient of friction of 0.35 may be utilized for the footing interface with the in situ natural clay soils and 0.40 for footing interface with natural granular soils or granular structural fill. Passive resistance provided by properly placed and compacted granular structural fill above the water table may be considered equivalent to a fluid with a density of 300 pounds per cubic foot. Below the water table, this granular soil should be considered equivalent to a fluid with a density of 150 pounds per cubic foot.

A combination of passive earth resistance and friction may be utilized provided that the friction component of the total is divided by 1.5.

5.6 FLOOR SLABS

Floor slabs may be established upon suitable natural subgrade soils or structural fill extending to suitable natural soils. Under no circumstances shall floor slabs be established directly over non-engineered fills, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.

To facilitate curing of the concrete and to provide a capillary moisture break, it is recommended that floor slabs be directly underlain by at least 4 inches of "free-draining" fill, such as "pea" gravel or three-quarters to one-inch minus clean gap-graded gravel.

Settlement of lightly loaded floor slabs designed according to previous recommendations (average uniform pressure of 200 pounds per square foot or less) is anticipated to be less than one-quarter of an inch.

5.7 PAVEMENTS

The natural clay soils, encountered in isolated areas of the site, will exhibit poor pavement support characteristics when saturated. All pavement areas must be prepared as previously discussed (see Section 5.2.1, Site Preparation). Under no circumstances shall pavements be established over unprepared non-engineered fills, unprepared potentially collapsible soils, loose or disturbed soils, topsoil, surface vegetation, root systems, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. With the subgrade soils and the projected traffic as discussed in Section 2, Proposed Construction, the following pavement sections are recommended:

Parking Areas

(Light Volume of Automobiles and Light Trucks,
 Occasional Medium-Weight Trucks,
 and No Heavyweight Trucks)
 [2 equivalent 18-kip axle loads per day]

Flexible Pavements: (Asphalt Concrete)

3.0 inches	Asphalt concrete
8.0 inches	Aggregate base
Over	Properly prepared fills, natural subgrade soils, and/or structural site grading fill extending to properly prepared fills and/or natural subgrade soils

Rigid Pavements: (Non-reinforced Concrete)

5.0 inches	Portland cement concrete (non-reinforced)
5.0 inches	Aggregate base
Over	Properly prepared natural subgrade soils and/or structural site grading fill extending to properly prepared natural subgrade soils

Heavy-duty Drive Lanes

(Moderate Volume of Automobiles and Light Trucks,
 Moderate Volume of Medium-Weight Trucks,
 And Numerous Heavyweight Trucks)
 [Up to 275 equivalent 18-kip axle loads per day]

Flexible Pavements:
 (Asphalt Concrete)

5.5 inches	Asphalt concrete
9.0 inches	Aggregate base
13.0 inches*	Aggregate subbase
Over	Properly prepared fills, natural subgrade soils, and/or structural site grading fill extending to properly prepared fills, or natural subgrade soils

Rigid Pavements:
 (Non-reinforced Concrete)

8.5 inches	Portland cement concrete (non-reinforced)
6.0 inches	Aggregate base
18.0 inches*	Aggregate subbase
Over	Properly prepared natural subgrade soils and/or structural site grading fill extending to properly prepared natural subgrade soils

* Subbase may consist of granular site grading fills with a minimum California Bearing Ratio (CBR) of 30 percent.

For dumpster pads, we recommend a pavement section consisting of 7.0 inches of Portland cement concrete, 12.0 inches of aggregate base, over properly prepared natural subgrade or site grading structural fills. Dumpster pads should not be constructed overlying non-engineered fills under any circumstances.

These above rigid pavement sections are for non-reinforced Portland cement concrete. Concrete should be designed in accordance with the American Concrete Institute (ACI) and joint details should conform to the Portland Cement Association (PCA) guidelines. The concrete should have a minimum 28-day unconfined compressive strength of 4,000 pounds per square inch and contain 6 percent \pm 1 percent air-entrainment.

The crushed stone should conform to applicable sections of the current Utah Department of Transportation (UDOT) Standard Specifications. All asphalt material and paving operations should meet applicable specifications of the Asphalt Institute and UDOT. A GSH technician shall observe placement and perform density testing of the base course material and asphalt.

Please note that the recommended pavement section is based on estimated post-construction traffic loading. If the pavement is to be constructed and utilized by construction traffic, the above pavement section may prove insufficient for heavy truck traffic, such as concrete trucks or tractor-trailers used for construction delivery. Unexpected distress, reduced pavement life, and/or premature failure of the pavement section could result if subjected to heavy construction traffic and the owner should be made aware of this risk. If the estimated traffic loading stated herein is not correct, GSH must review actual pavement loading conditions to determine if revisions to these recommendations are warranted.

5.8 CEMENT TYPES

The laboratory tests indicate that the natural soils tested contain a negligible amount of water-soluble sulfates. Based on our test results, concrete in contact with the on-site soil will have a low potential for sulfate reaction (ACI 318, Table 4.3.1). Therefore, all concrete which will be in contact with the site soils may be prepared using Type I or IA cement.

5.9 GEOSEISMIC SETTING

5.9.1 General

Utah municipalities have adopted the International Building Code (IBC) 2018. The IBC 2018 code refers to ASCE 7-16 Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE 7-16) determines the seismic hazard for a site based upon mapping of bedrock accelerations prepared by the United States Geologic Survey (USGS) and the soil site class. The USGS values are presented on maps incorporated into the IBC code and are also available based on latitude and longitude coordinates (grid points). GSH concurrently conducted refraction microtremor (ReMi) testing to obtain the shear-wave velocities for the site. Results of the ReMi tests were used to determine the observed site class. A graphical representation of the measured shear-wave velocities is presented on Figure 5, Shear-Wave Velocity Profile.

5.9.2 Faulting

Based on our review of available literature, no active faults pass through or immediately adjacent to the site. The nearest active mapped fault consists of the Oquirrh Fault Zone, located about 8.1 miles to the west-southwest of the site.

5.9.3 Site Class

For dynamic structural analysis, the Site Class C – Very Dense Soil and Soft Rock Soil Profile as defined in Chapter 20 of ASCE 7-16 (per Section 1613.3.2, Site Class Definitions, of IBC 2018) can be utilized.

5.9.4 Ground Motions

The IBC 2018 code is based on USGS mapping, which provides values of short and long period accelerations for average bedrock values for the Western United States and must be corrected for local soil conditions. The following table summarizes the peak ground and short and long period accelerations for the MCE event and incorporates the appropriate soil amplification factor for a Site Class C – Very Dense Soil and Soft Rock Soil Profile. Based on the site latitude and longitude (40.2358 degrees north and 111.6613 degrees west, respectively) and Risk Category I, the values for this site are tabulated below:

Spectral Acceleration Value, T	Bedrock Boundary [mapped values] (% g)	Site Coefficient	Site Class C [adjusted for site class effects] (% g)	Design Values* (% g)
0.2 Seconds (Short Period Acceleration)	$S_S = 90.9$	$F_a = 1.200$	$S_{MS} = 109.1$	$S_{DS} = 72.7$
1.0 Second (Long Period Acceleration)	$S_1 = 32.6$	$F_v = 1.500$	$S_{M1} = 48.9$	$S_{D1} = 32.6$

* IBC 2018/ASCE 7-16 may require a site-specific study based on the project structural engineer’s evaluation and recommendations. If needed, GSH can provide additional information and analysis including a complete site-specific study in accordance with chapter 21 of ASCE 7-16.

5.9.5 Liquefaction

The site is located in an area that has been identified by the Utah Geological Survey (UGS) as being a “very low” liquefaction potential zone. Liquefaction is defined as the condition when saturated, loose, granular soils lose their support capabilities because of excessive pore water pressure, which develops during a seismic event. Clayey soils, even if saturated, will generally not liquefy during a major seismic event.

Due to the density of the granular soils and the lack of groundwater, liquefaction is not anticipated to occur within the soils encountered at this site.

5.10 SITE VISITS

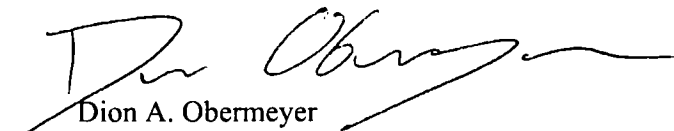
GSH must verify that all topsoil/disturbed soils and any other unsuitable soils have been removed, that non-engineered fills (if encountered) and potentially collapsible soils (if encountered) have been removed and/or properly prepared, and that suitable soils have been encountered prior to placing site grading fills, footings, slabs, and pavements. Additionally, GSH must observe fill placement and verify in-place moisture content and density of fill materials placed at the site.

5.11 CLOSURE

If you have any questions or would like to discuss these items further, please feel free to contact us at (801) 685-9190.

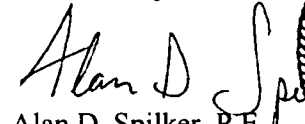
Respectfully submitted,

GSH Geotechnical, Inc.

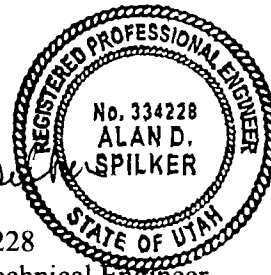


Dion A. Obermeyer
Staff Geologist

Reviewed by:



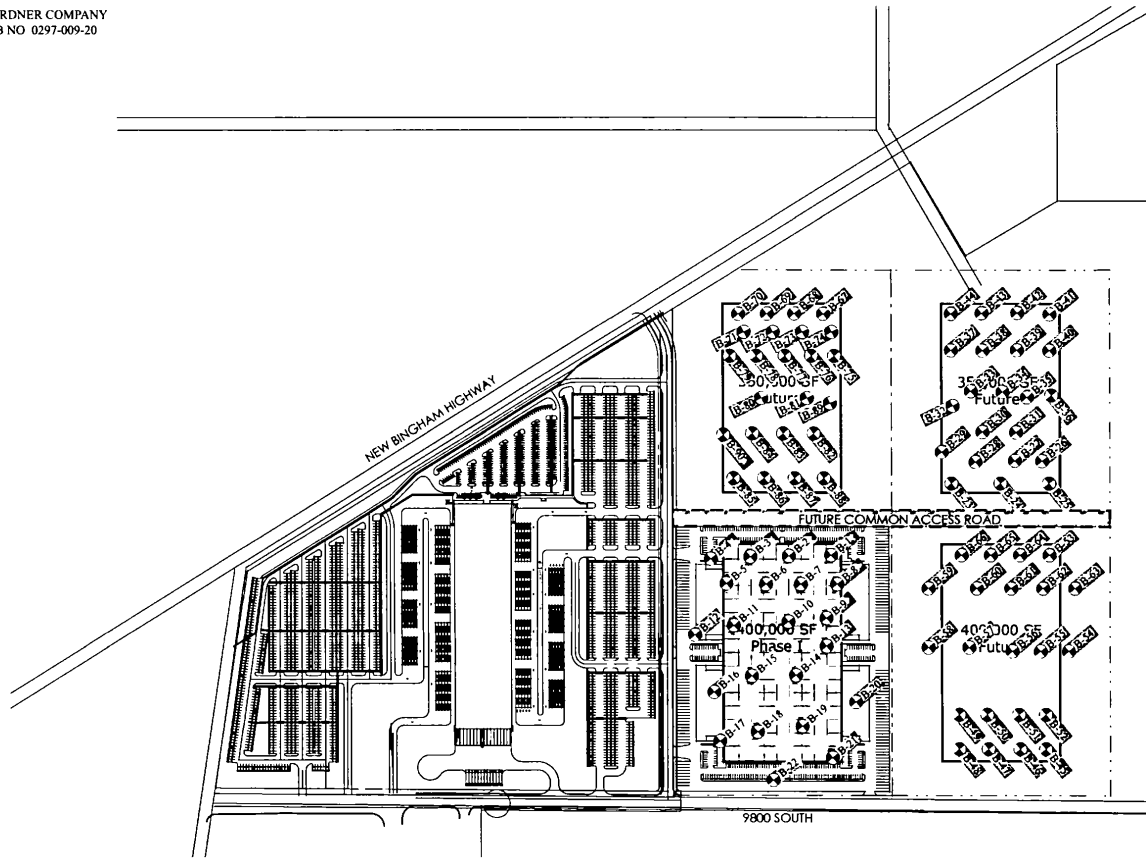
Alan D. Spilker, P.E.
State of Utah No. 334228
President/Senior Geotechnical Engineer



DAO/ADS:jlh

- Encl. Figure 1, Vicinity Map
- Figure 2, Site Plan
- Figures 3A through 3CL, Log of Borings
- Figure 4, Key to Boring Log (USCS)
- Figure 5, Shear-Wave Velocity Profile

Addressee (email)



REFERENCE:
ADAPTED FROM DRAWING ENTITLED
"JONES LANDING, SP-01" BY BABCOCK DESIGN
DATED 01 JULY 2020

APPROXIMATE SCALE IN FEET
250 0 250 500

FIGURE 2
SITE PLAN





BORING LOG

BORING: B-1

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	FINE TO COARSE SANDY SILT brown		19	X						dry loose
	SM	SILTY FINE SAND with fine and coarse gravel and cobbles; brown									slightly moist very dense
			5	50/5"	X	1.8	27.8				
	SP/ SM	FINE AND COARSE GRAVELLY FINE TO COARSE SAND with some cobbles; brown		84							slightly moist very dense
		Refusal at 11.0' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 11.0'.									
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3A



GSH

BORING LOG

Page: 1 of 1

BORING: B-2

CLIENT: Gardner Company

PROJECT NUMBER: 0297-009-20

PROJECT: Proposed Jones Landing Development

DATE STARTED: 8/12/20

DATE FINISHED: 8/12/20

LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah

GSH FIELD REP.: HB

DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger

HAMMER: Automatic

WEIGHT: 140 lbs

DROP: 30"

GROUNDWATER DEPTH: Not Encountered (8/12/20)

ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand and cobbles; major roots (topsoil) to 4"; tan									dry very dense
				50/4"							
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3B



BORING LOG

BORING: B-3

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand; major roots (topsoil) to 4"; tan		33							dry dense
		Refusal at 3.0' on very dense natural soils No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3C



BORING LOG

BORING: B-4

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	ML	FINE TO MEDIUM SANDY SILT with fine gravel; brown	0	14	X						dry loose
	GM	SILTY FINE AND MEDIUM GRAVEL with fine sand and cobbles; brown	5	16							dry medium dense
		Refusal at 6.0' on very dense natural soils. No groundwater encountered at time of drilling	10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3D



BORING LOG

BORING: B-5

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	ML	FINE SANDY SILT with fine gravel; major roots (topsoil) to 4"; brown	0								
				61		3.0					
	GP	FINE AND COARSE GRAVEL with fine to coarse sand; brown/gray/red	5	50/5"							dry-slightly moist very dense
		Refusal at 6.0' on very dense natural soils No groundwater encountered at time of drilling.									
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3E



BORING LOG

BORING: B-6

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SP/ SM	SILTY FINE TO COARSE SAND with fine and medium gravel, major roots (topsoil) to 4"; brown		34							dry dense
	GP	FINE SANDY FINE AND MEDIUM GRAVEL with silt, brown	5	41							dry dense
		Refusal at 6.5' on very dense natural soils. No groundwater encountered at time of drilling	10 15 20 25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3F



BORING LOG

BORING: B-7

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE SAND with fine and medium gravel; brown		58		5.8		36.4			slightly moist very dense
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3G



GSH

BORING LOG

Page: 1 of 1

BORING: B-8

CLIENT: Gardner Company	PROJECT NUMBER: 0297-009-20
PROJECT: Proposed Jones Landing Development	DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah	GSH FIELD REP.: HB
DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger	HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
GROUNDWATER DEPTH: Not Encountered (8/12/20)	ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE SAND with fine and coarse gravel; major roots (topsoil) to 4"; brown		45							dry dense
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3H



BORING LOG

BORING: B-9

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND MEDIUM GRAVEL with fine to coarse sand, major roots (topsoil) to 3"; brown									dry dense
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.	5	42							
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3I



BORING LOG

BORING: B-10

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	GP	FINE SANDY FINE AND COARSE GRAVEL with cobbles; major roots (topsoil) to 2", brown	0								dry very dense
		Refusal at 2.0' on very dense natural soils. No groundwater encountered at time of drilling.	50/3"	II							
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3J



GSH

BORING LOG

Page: 1 of 1

BORING: B-11

CLIENT: Gardner Company	PROJECT NUMBER: 0297-009-20
PROJECT: Proposed Jones Landing Development	DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah	GSH FIELD REP.: HB
DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger	HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
GROUNDWATER DEPTH: Not Encountered (8/12/20)	ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE TO COARSE SAND with fine and coarse gravel and cobbles; major roots (topsoil) to 3"; brown		52							dry very dense
		Refusal at 2.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3K



BORING LOG

BORING: B-12

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND MEDIUM GRAVEL with fine to coarse sand; major roots (topsoil) to 3"; brown		57		4.6		23.3			dry very dense
				74							
		Refusal at 5.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3L



BORING LOG

BORING: B-13

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	CL	FINE SANDY CLAY with some fine gravel, major roots (topsoil) to 2", brown	0		▲						dry loose
				19	▲						
	GM	SILTY FINE AND MEDIUM GRAVEL with fine to coarse sand; brown				2.5	15.4				dry dense
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3M



BORING LOG

BORING: B-14

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SP/ SM	FINE GRAVELLY FINE TO COARSE SAND with silt, major roots (topsoil) to 2"; brown		38							dry dense
			5	36	▲						
		Refusal at 6.0' on very dense natural soils No groundwater encountered at time of drilling.									
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3N



BORING LOG

BORING: B-15

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE TO COARSE SAND with fine and coarse gravel and cobbles; brown		12							dry loose
				41							dense
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 30





BORING LOG

BORING: B-16

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/12/20 DATE FINISHED: 8/12/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/12/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	FINE SANDY SILT with fine gravel; major roots (topsoil) to 3"; brown									dry loose
				36							dense
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3P



BORING LOG

BORING: B-17

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP	FINE SANDY FINE AND MEDIUM GRAVEL with silt; major roots (topsoil) to 3"; brown			▲						dry loose
	SP/SM	FINE SAND with fine and medium gravel and silt; brown	5	46							dry dense
	CL	FINE SANDY CLAY with some fine gravel; reddish-brown	10	13		16.8	68.3				slightly moist medium dense
		grades silty clay with trace sand; brown	15	12							
	SM/SC	SILTY/CLAYEY FINE TO COARSE SAND with fine and coarse gravel; brown	20	38	X						slightly moist medium dense
		End of Exploration at 21.0'. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 21.0'	25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3Q



BORING LOG

BORING: B-18

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE TO MEDIUM SAND with some fine gravel; major roots (topsoil) to 4", brown		44							
	CL	SANDY CLAY with some fine gravel; brown	5	17				29	7		dry medium dense
	SP/ SM	SILTY FINE SAND with fine and coarse gravel; brown	10	50/2"							dry very dense
		Refusal at 11.0' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 11.0'.	15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3R



BORING LOG

BORING: B-19

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE SAND with fine and coarse gravel and some cobbles; major roots (topsoil) to 2"; brown		41							dry dense
		Refusal at 3.5' on very dense natural soils No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3S



BORING LOG

BORING: B-20

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE SAND with fine gravel, major roots (topsoil) to 2"; brown									dry very dense
				57							
	SP	FINE SAND with fine and coarse gravel and silt; brown									dry very dense
			5	63							
		Refusal at 5.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3T



BORING LOG

Page: 1 of 1

BORING: B-21

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/11/20 DATE FINISHED: 8/11/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/11/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP	FINE AND COARSE GRAVEL with fine sand and cobbles; major roots (topsoil) to 2"; brown		50							dry very dense
		Refusal at 2.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3U



BORING LOG

BORING: B-22

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE SANDY FINE AND MEDIUM GRAVEL with silt; brown									dry dense
	SM	SILTY FINE TO COARSE SAND with fine and coarse gravel; brown		56							dry very dense
		Refusal at 4.5' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3V



BORING LOG

BORING: B-23

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	SP/ SM	FINE GRAVELLY FINE SAND with silt; major roots (topsoil) to 8", brown	0								dry medium dense
				30							
			5								
				31							
	SM	SILTY FINE SAND with fine gravel, brown	10	86		6.0		15	1		slightly moist very dense
			15	97							
		End of Exploration at 16.0'. No groundwater encountered at time of drilling Installed 1.25" diameter slotted PVC pipe to 16.0'.									
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3W



BORING LOG

BORING: B-24

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 7/10/14 DATE FINISHED: 7/10/14
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: ZM
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (7/10/14) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	GP/ GM	FINE AND COARSE GRAVEL with some silt and fine sand, tan	0								dry dense
				52							
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3X



BORING LOG

BORING: B-25

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 7/10/14 DATE FINISHED: 7/10/14
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: ZM
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (7/10/14) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	GP/ GM	FINE TO MEDIUM SANDY FINE AND COARSE GRAVEL with some silt; tan	0								dry dense
			5	61							very dense
	SP/ SM	FINE AND COARSE GRAVELLY FINE TO MEDIUM SAND with silt; brown									dry very dense
			10	60							
			15	94							
			20	50/3"							slightly moist
		End of Exploration at 21.0'. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 21 0'									
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3Y



BORING LOG

BORING: B-26

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 7/10/14 DATE FINISHED: 7/10/14
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: ZM
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (7/10/14) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SP	FINE AND COARSE GRAVELLY FINE TO MEDIUM SAND brown									dry dense
		Refusal at 6 0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3Z



BORING LOG

BORING: B-27

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 7/10/14 DATE FINISHED: 7/10/14
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: ZM
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (7/10/14) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								dry very dense
	GP/ GM	FINE TO MEDIUM SANDY FINE AND COARSE GRAVEL with silt; tan		84							
			5								
				44							
			10								
				38							
		End of Exploration at 13.0'. No groundwater encountered at time of drilling Installed 1.25" diameter slotted PVC pipe to 13.0'.	15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AA



BORING LOG

BORING: B-28

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 7/10/14 DATE FINISHED: 7/10/14
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: ZM
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (7/10/14) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP	FINE SANDY FINE AND COARSE GRAVEL with trace silt, tan									dry dense
		Refusal at 5.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AB



BORING LOG

BORING: B-29

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 7/10/14 DATE FINISHED: 7/10/14
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: ZM
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (7/10/14) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with some silt; tan									dry very dense
			5	93		3.5	11.8				
			10	83							
			15								
		End of Exploration at 16.0'. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 16.0'.									
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AC



BORING LOG

BORING: B-30

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	CL	FINE TO MEDIUM SANDY CLAY with trace gravel; brown	0								slightly moist very stiff
				19							
			5								
				20							
	SM/ SC	SILTY/CLAYEY FINE SAND with gravel; brown	10								slightly moist very dense
				65							
		End of Exploration at 13.0'. No groundwater encountered at time of drilling Installed 1.25" diameter slotted PVC pipe to 13.0'.	15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AD



BORING LOG

BORING: B-31

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	FINE SANDY SILT with fine and medium gravel; tan									dry dense
		Refusal at 5.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AE



GSH

BORING LOG

Page: 1 of 1

BORING: B-32

CLIENT: Gardner Company	PROJECT NUMBER: 0297-009-20
PROJECT: Proposed Jones Landing Development	DATE STARTED: 8/14/20 DATE FINISHED: 8/14/20
LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah	GSH FIELD REP.: NW
DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger	HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
GROUNDWATER DEPTH: Not Encountered (8/14/20)	ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								dry very stiff
	CL	SILTY CLAY with some fine and medium gravel; tan									
			5	33							
		grades with some fine sand and trace gravel; brown									slightly moist hard
			10	47	XX						
	GP/ GC	FINE AND COARSE GRAVEL with some fine to coarse sand and clay; tan									dry very dense
			15	50/							
		End of Exploration at 16.0'. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 16.0'.									
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AF



BORING LOG

BORING: B-33

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	CL	FINE TO MEDIUM SANDY CLAY with trace gravel; brown									dry very dense
			5	27	X						
		End of Exploration at 6.0'. No groundwater encountered at time of drilling.									
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AG



BORING LOG

BORING: B-34

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	CL	FINE SANDY CLAY with silt; brown									dry hard
			5	43							
		grades with some gravel	10	48	X						
			15	43							
	GP/ GM	FINE AND COARSE GRAVEL with some silt and fine sand; brown									slightly moist very dense
		End of Exploration at 17.0'. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 17.0'.	20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AH



BORING LOG

BORING: B-35

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE SAND with trace fine gravel; brown									dry dense
		End of Exploration at 2.5'. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AI



BORING LOG

BORING: B-36

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/13/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	SILTY FINE AND COARSE GRAVEL with some fine to medium sand; tan									dry very dense
			5	65							
		End of Exploration at 6.0'. No groundwater encountered at time of drilling.									
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AJ



BORING LOG

BORING: B-37

Page: 1 of 1

CLIENT: Gardner Company	PROJECT NUMBER: 0297-009-20
PROJECT: Proposed Jones Landing Development	DATE STARTED: 8/13/20 DATE FINISHED: 8/13/20
LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah	GSH FIELD REP.: NW
DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger	HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
GROUNDWATER DEPTH: Not Encountered (8/13/20)	ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								dry very dense
	GM	SILTY FINE AND COARSE GRAVEL with trace fine sand; brown									
		End of Exploration at 5.0'. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AK



BORING LOG

BORING: B-38

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								slightly moist hard
	CL	SILTY CLAY with some fine and medium gravel; tan									
			5	44							
	GP/ GM	FINE AND COARSE GRAVEL with some silt and fine sand; tan									dry medium dense
			10	50/5"							
		Refusal at 11.0' on very dense natural soils. No groundwater encountered at time of drilling Installed 1.25" diameter slotted PVC pipe to 11.0'.									
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AL



BORING LOG

BORING: B-39

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	CL	SILTY CLAY with some fine sand; tan									dry very hard
			5	50/5"		14.3	114				
			10	50/5"		17.0	111				
	GP/ GC	FINE AND COARSE GRAVEL with trace clay; brown									dry very dense
		Refusal at 12.5' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 12.5'.	15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AM



BORING LOG

BORING: B-40

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GC	SILTY FINE AND COARSE GRAVEL with some fine to coarse sand and clay; brown									dry dense
		Refusal at 6.0' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 6.0'.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AN



BORING LOG

BORING: B-41

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								dry very stiff
	CL	SILTY CLAY with some fine gravel and trace fine sand; brown									
		grades with fine sand; tan	5	26	X						
		grades with fine and medium gravel; brown/tan	10	24							slightly moist
			15	78	X						hard
		Refusal at 16.0' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 16.0'.	20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AO



BORING LOG

BORING: B-42

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	CL	SILTY CLAY with trace fine sand; brown									slightly moist very stiff
			5	20	✕	14.2	100				
	GP	FINE AND MEDIUM GRAVEL with some silt; brown									slightly moist very dense
	CL	SILTY CLAY with fine sand; brown									slightly moist very stiff
			10	25							
		Refusal at 11.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AP



BORING LOG

BORING: B-43

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								dry stiff
	CL	SILTY CLAY with trace fine sand; tan									
		grades with fine sand; tan/brown	5	14							
		grades with some fine sand; tan	10	52	X						slightly moist hard
			15	26	X						very stiff
	GP/ GC	FINE AND COARSE GRAVEL with silty clay and trace fine sand; tan									slightly moist very dense
			20	50/5"							
		Refusal at 21.0' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 21.0'.	25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AQ



BORING LOG

BORING: B-44

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	CLAYEY SILT with trace fine sand; brown	0								dry medium stiff
		Refusal at 6.0' on very dense natural soils. No groundwater encountered at time of drilling.	6.0								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AR



BORING LOG

BORING: B-45

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SP	FINE TO COARSE SAND with fine and coarse gravel and trace silt; brown									dry dense
						0.4		4.3			
	GP	FINE AND COARSE GRAVEL with fine to coarse sand and cobbles; brown									slightly moist very dense
		End of Exploration at 4.0'. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AS



GSH

BORING LOG

Page: 1 of 1

BORING: B-46

CLIENT: Gardner Company

PROJECT NUMBER: 0297-009-20

PROJECT: Proposed Jones Landing Development

DATE STARTED: 8/18/20

DATE FINISHED: 8/18/20

LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah

GSH FIELD REP.: HB

DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger

HAMMER: Automatic

WEIGHT: 140 lbs

DROP: 30"

GROUNDWATER DEPTH: Not Encountered (8/18/20)

ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE TO MEDIUM SAND with medium and coarse gravel; brown									dry loose
	GP	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with cobbles; brown Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.				0.8		0.1			slightly moist very dense
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AT



GSH

BORING LOG

Page: 1 of 1

BORING: B-47

CLIENT: Gardner Company

PROJECT NUMBER: 0297-009-20

PROJECT: Proposed Jones Landing Development

DATE STARTED: 8/18/20

DATE FINISHED: 8/18/20

LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah

GSH FIELD REP.: HB

DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger

HAMMER: Automatic

WEIGHT: 140 lbs

DROP: 30"

GROUNDWATER DEPTH: Not Encountered (8/18/20)

ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE AND COARSE GRAVEL with cobbles; brown									dry dense
		Refusal at 1.0' on very dense national soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AU



BORING LOG

BORING: B-48

Page: 1 of 0

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE AND COARSE GRAVEL with cobbles and silt; brown Refusal at surface on very dense national soils. No groundwater encountered at time of drilling.									dry dense
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AV



BORING LOG

BORING: B-49

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	SILT with fine to medium sand and some gravel; brown									dry loose
				14							
	CL	FINE TO MEDIUM SANDY CLAY with silt, and some gravel; brown	5	30	X	18.1		79.7			slightly moist medium dense
	SP/ SM	FINE TO COARSE SAND with gravel and silt; brown	10	77							slightly moist very dense
	GP	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with cobbles; brown									slightly moist very dense
		Refusal at 11.0' on very dense natural soils. No groundwater encountered at time of drilling									
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AW



BORING LOG

BORING: B-50

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	CLAYEY SILT with sand and some fine gravel; brown		17							dry medium dense
	SP/ SM	FINE TO COARSE SAND with some gravel and silt; brown		42	X						dry dense
	ML ML	FINE SANDY SILT brown		6		8.8	69.0				slightly moist loose
		End of Exploration at 13.0'. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 13.0'.	15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AX



BORING LOG

BORING: B-51

Page: 1 of 0

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP	FINE AND COARSE GRAVEL with cobbles and silt; brown Refusal at surface on very dense natural soils. No groundwater encountered at time of drilling.									dry very dense
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AY



BORING LOG

BORING: B-52

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE AND COARSE GRAVEL with silt and fine to coarse sand, brown									dry loose
	SP/ SM	FINE TO COARSE SAND with fine and coarse gravel and silt; brown	5	60							dry very dense
	GP	FINE AND COARSE GRAVEL with fine to coarse sand and cobbles; brown		54							slightly moist very dense
		Refusal at 8.0' on very dense natural soils. No groundwater encountered at time of drilling.	10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3AZ



BORING LOG

BORING: B-53

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE SANDY FINE AND COARSE GRAVEL with silt; brown									slightly moist medium dense
		Refusal at 1.0' on gravel. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BA



BORING LOG

BORING: B-54

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SM	SILTY FINE TO MEDIUM SAND with fine gravel and cobbles, brown		42	▲	7.5	88				slightly moist medium dense
	CL	SILTY CLAY with some fine sand; brown	5	46	▲	3.6	91				slightly moist very stiff
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and clay; brown	10	27	▲	6.9	109				moist medium dense
			15	72	▲	4.5	125				dense
		End of Exploration at 16.0'. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 16.0'.	20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BB



BORING LOG

BORING: B-55

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface									
	GP/ GM	FINE TO MEDIUM SANDY FINE AND COARSE GRAVEL with silt and cobbles; brown Refusal at 0.5' on very dense natural soils. No groundwater encountered at time of drilling.	0								slightly moist very dense
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BC



GSH

BORING LOG

Page: 1 of 1

BORING: B-56

CLIENT: Gardner Company	PROJECT NUMBER: 0297-009-20
PROJECT: Proposed Jones Landing Development	DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah	GSH FIELD REP.: JC
DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger	HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
GROUNDWATER DEPTH: Not Encountered (8/19/20)	ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and cobbles; brown Refusal at 1.0' on very dense natural soils. No groundwater encountered at time of drilling.									slightly moist very dense
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BD



BORING LOG

Page: 1 of 1

BORING: B-57

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SP	FINE TO COARSE SAND with silt and cobbles; brown									slightly moist very dense
		Refusal at 1.5' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BE



GSH

BORING LOG

Page: 1 of 1

BORING: B-58

CLIENT: Gardner Company

PROJECT NUMBER: 0297-009-20

PROJECT: Proposed Jones Landing Development

DATE STARTED: 8/19/20

DATE FINISHED: 8/19/20

LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah

GSH FIELD REP.: JC

DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger

HAMMER: Automatic

WEIGHT: 140 lbs

DROP: 30"

GROUNDWATER DEPTH: Not Encountered (8/19/20)

ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and some cobbles; brown									slightly moist very dense
		Refusal at 1 0' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BF



BORING LOG

BORING: B-59

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand and some cobbles; brown				6.2		31.4			slightly moist very dense
		Refusal at 2.0' on very dense natural soils. No groundwater encountered at time of drilling									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BG



BORING LOG

BORING: B-60

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and some cobbles; brown									slightly moist very dense
		Refusal at 1.5' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BH



BORING LOG

BORING: B-61

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL brown									slightly moist very dense
		Refusal at 1.5' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BI



BORING LOG

BORING: B-62

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and some cobbles; brown									slightly moist dense
		Refusal at 1.5' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BJ



BORING LOG

BORING: B-63

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and some cobbles; brown									slightly moist dense
		Refusal at 1.5' on very dense natural soils No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BK



BORING LOG

BORING: B-64

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								slightly moist medium dense
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt, brown		42		1.8	125				
		grades light brown									
			5	44		3.9	109				moist
		Refusal at 7.0' on very dense natural soils. No groundwater encountered at time of drilling.	10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BL



BORING LOG

BORING: B-65

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and some cobbles; brown									slightly moist medium dense
		Refusal at 2.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BM



BORING LOG

BORING: B-66

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt and some cobbles; brown									slightly moist medium dense
		Refusal at 2.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BN



BORING LOG

BORING: B-67

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE AND COARSE GRAVEL with fine to medium sand and silt; brown									dry dense
		Refusal at 2.5' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BO



BORING LOG

BORING: B-68

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE AND COARSE GRAVEL with silt and fine to coarse sand and silt; brown									dry very dense
		Refusal at 2.5' on very dense natural soils. No groundwater encountered at time of drilling.		50							
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BP



BORING LOG

BORING: B-69

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								dry very dense
	GM	SILTY FINE AND COARSE GRAVEL with silt and fine to coarse sand; brown		73							
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BQ



BORING LOG

Page: 1 of 1

BORING: B-70

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE AND COARSE GRAVEL with silt and fine to coarse sand; brown									dry very dense
			5	76							
		Refusal at 6.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BR



BORING LOG

BORING: B-71

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with silt and fine to coarse sand, brown									dry very dense
		Refusal at 5.5' on very dense natural soils. No groundwater encountered at time of drilling.	5	50							
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BS



BORING LOG

BORING: B-72

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand, some silt, and clay; brown									dry very dense
		Refusal at 5.5' on very dense natural soils. No groundwater encountered at time of drilling.	5	27							
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BT



BORING LOG

BORING: B-73

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand and clay; brown									dry very dense
		Refusal at 2.5' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BU



BORING LOG

BORING: B-74

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand; brown									dry very dense
		Refusal at 2.5' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BV



BORING LOG

BORING: B-75

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	CL	SILTY CLAY with some fine and coarse gravel; brown									slightly moist stiff
			5	15	✕						
	GP/ GM	FINE AND MEDIUM GRAVEL with silt and some fine sand; tan									dry very dense
			10	90							
		Refusal at 11.0' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 11.0'.									
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BW



BORING LOG

BORING: B-76

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	CL	SILTY CLAY with some fine and coarse gravel; brown									slightly moist stiff
			5	16							
		Refusal at 8.0' on very dense natural soils No groundwater encountered at time of drilling.	10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BX



BORING LOG

BORING: B-77

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with trace fine to coarse sand; tan		84							dry very dense
		Refusal at 3.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BY



BORING LOG

BORING: B-78

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand; brown									dry very dense
		Refusal at 4.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3BZ



BORING LOG

BORING: B-79

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: HB
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand; brown									dry very dense
		Refusal at 4.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CA



BORING LOG

BORING: B-80

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand, brown									dry very dense
		Refusal at 4.0' on very dense natural soils. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CB



BORING LOG

BORING: B-81

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	CL	FINE SANDY CLAY brown									dry dense
			5	31		14.5	114				
	GM	SILTY FINE AND COARSE GRAVEL with fine to coarse sand; brown									dry very dense
				48		8.2	27.0				
		Refusal at 8.5' on very dense natural soils. No groundwater encountered at time of drilling.	10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CC



BORING LOG

BORING: B-82

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	CLAYEY SILT with fine sand and some fine gravel; brown									dry dense
			5	30	X						
	CL	SILTY CLAY with fine sand; brown									dry very stiff
			10	17							
	GP/ GM	FINE AND COARSE GRAVEL with fine to coarse sand and silt; brown									dry very dense
			15								
		Refusal at 16.0' on very dense natural soils. No groundwater encountered at time of drilling. Installed 1.25" diameter slotted PVC pipe to 16.0'.									
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CD



BORING LOG

BORING: B-83

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	CLAYEY SILT with fine sand and fine and coarse gravel, brown									dry medium dense
		End of Exploration at 5.0'. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CE



BORING LOG

BORING: B-84

Page: 1 of 1

CLIENT: Gardner Company	PROJECT NUMBER: 0297-009-20
PROJECT: Proposed Jones Landing Development	DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah	GSH FIELD REP.: NW
DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger	HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
GROUNDWATER DEPTH: Not Encountered (8/19/20)	ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	CLAYEY SILT with gravel, brown									sl dense-very dense
		End of Exploration at 5.0'. No groundwater encountered at time of drilling.	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CF



BORING LOG

BORING: B-85

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE SANDY FINE AND COARSE GRAVEL with silt, cobbles, and some boulders; brown									slightly moist medium dense
		Refusal at 1.5' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CG



GSH

BORING LOG

Page: 1 of 1

BORING: B-86

CLIENT: Gardner Company	PROJECT NUMBER: 0297-009-20
PROJECT: Proposed Jones Landing Development	DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah	GSH FIELD REP.: JC
DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger	HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
GROUNDWATER DEPTH: Not Encountered (8/19/20)	ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt, cobbles, and layers of fine sandy silt up to 6" thick; brown									slightly moist medium dense
		Refusal at 2.0' on very dense natural soils No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CH



BORING LOG

BORING: B-87

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE SANDY FINE AND COARSE GRAVEL with silt, brown									slightly moist medium dense
	ML	FINE SANDY SILT with clay; brown				7.8		70.1			slightly moist medium stiff
	SP	FINE TO COARSE SANDY FINE AND COARSE GRAVEL brown	5								moist medium dense
		Refusal at 5.0' on very dense natural soils. No groundwater encountered at time of drilling									
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CI



BORING LOG

BORING: B-88

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/19/20 DATE FINISHED: 8/19/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: JC
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/19/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	SP	FINE TO COARSE SANDY FINE AND COARSE GRAVEL with silt; brown									slightly moist medium dense
		Refusal at 1.5' on gravel. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CJ



BORING LOG

BORING: B-89

Page: 1 of 1

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	ML	SILT with some clay and fine gravel; brown									dry medium dense
		Refusal at 5.0' on very dense natural soils. No groundwater encountered at time of drilling	5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CK



GSH

BORING LOG

Page: 1 of 1

BORING: B-90

CLIENT: Gardner Company PROJECT NUMBER: 0297-009-20
 PROJECT: Proposed Jones Landing Development DATE STARTED: 8/18/20 DATE FINISHED: 8/18/20
 LOCATION: Near 6800 New Bingham Highway, West Jordan, Utah GSH FIELD REP.: NW
 DRILLING METHOD/EQUIPMENT: 3-3/4" ID Hollow-Stem Auger HAMMER: Automatic WEIGHT: 140 lbs DROP: 30"
 GROUNDWATER DEPTH: Not Encountered (8/18/20) ELEVATION: ---

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0								
	GP/ GM	FINE AND COARSE GRAVEL with fine to coarse sand; brown									dry dense-very dense
		Refusal at 2.0' on very dense natural soils. No groundwater encountered at time of drilling.									
			5								
			10								
			15								
			20								
			25								

See Subsurface Conditions section in the report for additional information.

FIGURE 3CL

CLIENT: Gardner Company
 PROJECT: Proposed Jones Landing Development
 PROJECT NUMBER: 0297-009-20

KEY TO BORING LOG

WATER LEVEL	U S C S	DESCRIPTION	DEPTH (FT.)	BLOW COUNT	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

COLUMN DESCRIPTIONS

- ① **Water Level:** Depth to measured groundwater table. See symbol below.
- ② **USCS:** (Unified Soil Classification System) Description of soils encountered; typical symbols are explained below.
- ③ **Description:** Description of material encountered; may include color, moisture, grain size, density/consistency.
- ④ **Depth (ft.):** Depth in feet below the ground surface.
- ⑤ **Blow Count:** Number of blows to advance sampler 12" beyond first 6", using a 140-lb hammer with 30" drop.
- ⑥ **Sample Symbol:** Type of soil sample collected at depth interval shown; sampler symbols are explained below.
- ⑦ **Moisture (%):** Water content of soil sample measured in laboratory; expressed as percentage of dryweight of
- ⑧ **Dry Density (pcf):** The density of a soil measured in laboratory; expressed in pounds per cubic foot.
- ⑨ **% Passing 200:** Fines content of soils sample passing a No. 200 sieve; expressed as a percentage.

- ⑩ **Liquid Limit (%):** Water content at which a soil changes from plastic to liquid behavior.
- ⑪ **Plasticity Index (%):** Range of water content at which a soil exhibits plastic properties.
- ⑫ **Remarks:** Comments and observations regarding drilling or sampling made by driller or field personnel. May include other field and laboratory test results using the following abbreviations:

CEMENTATION	MODIFIERS	MOISTURE CONTENT (FIELD TEST)
Weakly: Crumbles or breaks with handling or slight finger pressure.	Trace <5%	Dry: Absence of moisture, dusty, dry to the touch
Moderately: Crumbles or breaks with considerable finger pressure	Some 5-12%	Moist: Damp but no visible water
Strongly: Will not crumble or break with finger pressure	With > 12%	Saturated: Visible water, usually soil below water table

Descriptions and stratum lines are interpretive, field descriptions may have been modified to reflect lab test results. Descriptions on the logs apply only at the specific boring locations and at the time the borings were advanced, they are not warranted to be representative of subsurface conditions at other locations or times.

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)	MAJOR DIVISIONS		USCS SYMBOLS	TYPICAL DESCRIPTIONS	STRATIFICATION:
	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	SANDS More than 50% of coarse fraction passing through No. 4 sieve			DESCRIPTION THICKNESS
COARSE-GRAINED SOILS More than 50% of material is larger than No. 200 sieve size	CLEAN GRAVELS (little or no fines)	GRAVELS WITH FINES (appreciable amount of fines)	GW	Well-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines	Seam up to 1/8"
			GP	Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines	Layer 1/8" to 12"
	CLEAN SANDS (little or no fines)	SANDS WITH FINES (appreciable amount of fines)	GM	Silty Gravels, Gravel-Sand-Silt Mixtures	Occasional: One or less per 6" of thickness
			GC	Clayey Gravels, Gravel-Sand-Clay Mixtures	Numerous; More than one per 6" of thickness
			SW	Well-Graded Sands, Gravelly Sands, Little or No Fines	
			SP	Poorly-Graded Sands, Gravelly Sands, Little or No Fines	
FINE-GRAINED SOILS More than 50% of material is smaller than No. 200 sieve size	SILTS AND CLAYS Liquid Limit less than 50%	SANDS WITH FINES (appreciable amount of fines)	ML	Inorganic Silts and Very Fine Sands, Rock Flour, Silty or Clayey Fine Sands or Clayey Silts with Slight Plasticity	
			CL	Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays	
			OL	Organic Silts and Organic Silty Clays of Low Plasticity	
	SILTS AND CLAYS Liquid Limit greater than 50%	SANDS WITH FINES (appreciable amount of fines)	MH	Inorganic Silts, Micaceous or Diatomaceous Fine Sand or Silty Soils	
			CH	Inorganic Clays of High Plasticity, Fat Clays	
			OH	Organic Silts and Organic Clays of Medium to High Plasticity	
HIGHLY ORGANIC SOILS			PT	Peat, Humus, Swamp Soils with High Organic Contents	

TYPICAL SAMPLER GRAPHIC SYMBOLS

- Bulk/Bag Sample
- Standard Penetration Split Spoon Sampler
- Rock Core
- No Recovery
- 3.25" OD, 2.42" ID D&M Sampler
- 3.0" OD, 2.42" ID D&M Sampler
- California Sampler
- Thin Wall

WATER SYMBOL

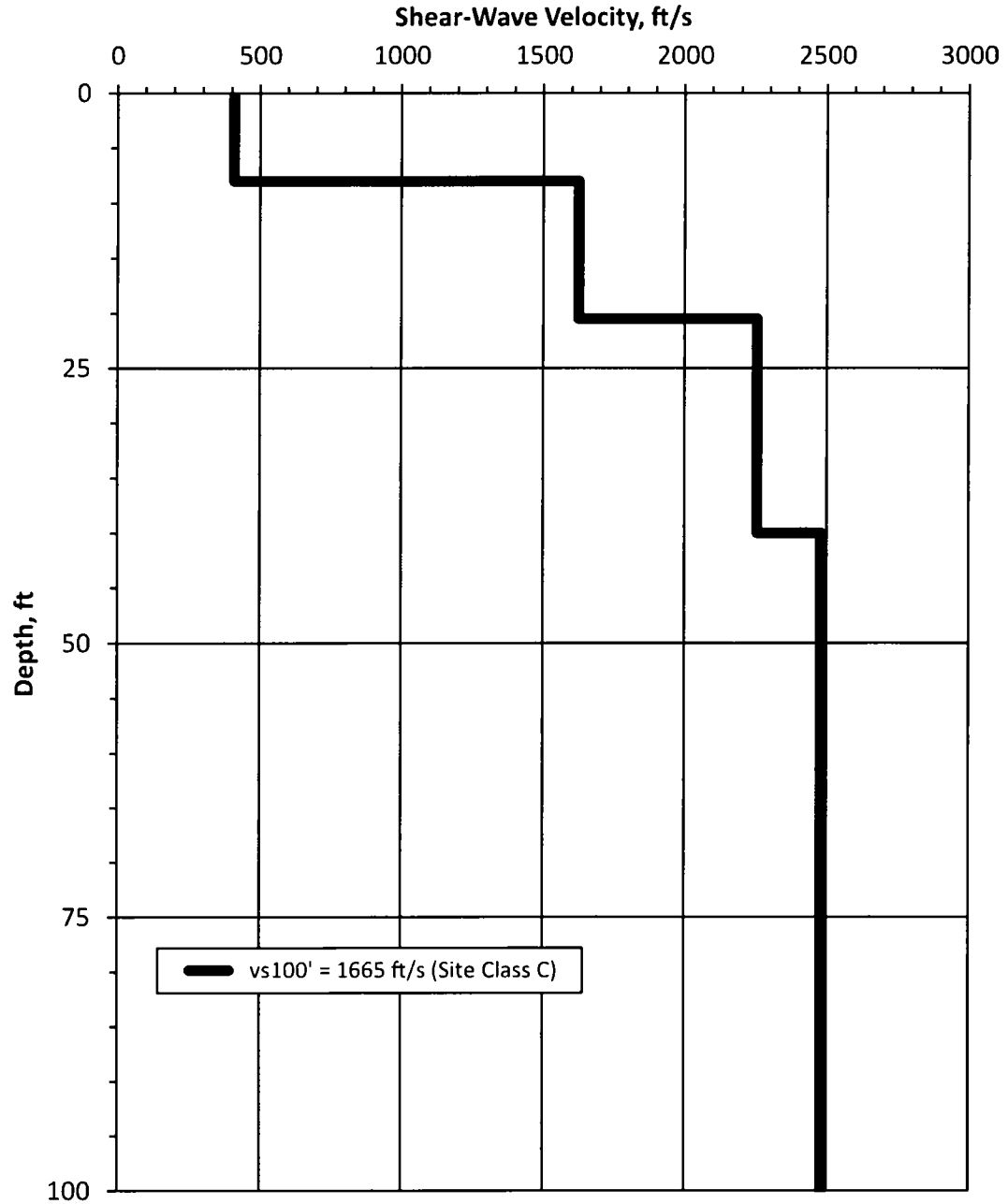
- Water Level

Note: Dual Symbols are used to indicate borderline soil classifications.

FIGURE 4



SHEAR -WAVE VELOCITY PROFILE



PROJECT NO.: 0297-009-20



FIGURE NO.: 5