

## APPLICATION TYPE (CHECK ONE):

Tel: (954) 921-3471
Fax: (954) 921-3347

This application must be completed in full and submitted with all documents
to be placed on a Board or Committee's agenda.

The applicant is responsible
for obtaining the appropriate checklist for each type of application

Applicant (s) or their authorized legal agent must be present at all Board or Committee meetings.

At least one set of the submitted plans for each application must be signed and sealed (ie. Architect or Engineer).

Documents and forms can be accessed on the City's website at
http:/lswwwhollywoodfl.org/Do cumentCenter/HomeNiew/21


Folio Numbers): See Qtached 14 Folio Numbers Zoning Classification: Rmpl8 Land Use Classificationites Multifamily Existing Property Use: Vacant $\qquad$ Sq FUNumber of Units: 12 units Is the request the result of a violation notice? () Yes (NNW If yes, attach a copy of violation. Has this property been presented to the City before? If yes, check al that apply and provide File Numbers) and Resolution (s): HC , 2D -DP. -19


Explanation of Request Ina F technical Advisoriptreven of a new 13 unit 3 story tounhome perfect.

$\qquad$


Will Project be Phased? ( ) Yes (M) No
If Phased, Estimated Completion of Each Phase


 Name of Consultant/Representative/Tenanj (circle one) Weeth.B. Rover. Architect. com

 Date of Purchase: $8 / 2 / 20$ Is there an option to purchase the Property? Yes ( ) No ( $\checkmark$ If Yes, Attach Copy of the Contract. List Anyone Else Who Should Receive Notice of the Hearing Address:

Email Address
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## PLANNING DIVISION



File No. (internal use only):

## GENERAL APPLICATION

2600 Hollywood Boulevard Room 315 Hollywood, FL 33022

## CERTIFICATION OF COMPLIANCE WITH APPLICABLE REGULATIONS

The applicant/owner(s) signature certifies that he/she has been made aware of the criteria, regulations and guidelines applicable to the request. This information can be obtained in Room 315 of City Hall or on our website at www.hollywoodfl.org. The owners) further certifies that when required by applicable law, including but not limited to the City's Zoning and Land Development Regulations, they will post the site with a sign provided by the Office of Planning and Development Services. The owners) will photograph the sign the day of posting and submit photographs to the Office of Planning and Development Services as required by applicable law. Failure to post the sign will result in violation of State and Municipal Notification Requirements and Laws.
(I)(We) certify that (I) (we) understand and will comply with the provisions and regulations of the City's Zoning and Land Development Regulations, Design Guidelines, Design Guidelines for Historic Properties and City's Comprehensive Plan as they apply to this project. (I)(We) further certify that the above statements and drawings made on any paper or plans submitted herewith are true to the best of (my)(our) knowledge. (l)(We) understand that the application and attachments become part of the official public records of the City and are not returnable.

Date: $\qquad$


Date: $\qquad$
Date:


Date:


Signature of Tenant: $\qquad$ Date: $\qquad$

PRINT NAME: $\qquad$ Date: $\qquad$

## Current Owner Power of Attorney



Sworn to and subscribed before me
this 13 day of August. 2021


State of Florida

My Commission Expires: $1 / 5 / 25$ (Check One) $\times$ Personally known to me; OR $\qquad$ Produced Identification $\qquad$

## TOWN HOMES AT

2855 PIERCE STREET HOLLYWOOD FL 33020

PROJECT INFO:
3 STORY 13 UNITS TOWNHOME RESIDENTIAL MULTI-FAILY BUILDING

LEGAL DESCRIPTION:

THE WEST 80 FEET OF THE SOUTH 90 FEET OF LOT 6, AND THE EAST 80 FEET OF THE SOUTH 90 FEET OF LOT 7, BLOCK 38, HOLLYWOOD LITTLE RANCHES, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE 26, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.AND THE WEST 5 FEET OF THE NORTH 90 OF LOT 5; LOT 6, LESS THE WEST 80 FEET OF THE SOUTH 90 FEET THEREOF; LOT 7, LESS THE EAST 80 FEET OF THE SOUTH 90 FEET THEREOF; AND THE EAST 5 FEET OF THE NORTH 90 FEET OF LOT 8, BLOCK 38, HOLLYWOOD LITTLE RANCHES, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE 26, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.AND AN EASEMENT FOR THE PARKING AND ACCESS OVER THE FOLLOWING DESCRIBED LAND CREATED AND EVIDENCED BY THAT CERTAIN GRANT OF EASEMENT RECORDED IN O.R. BOOK 39650, PAGE 1227, AND BY THE DECLARATION OF COVENANTS, RESTRICTIONS AND EASEMENT FOR KING'S WAY MASTER ASSOCIATION, INC., RECORDED IN O.R. BOOK 39650, PAGE 661, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA: THE WEST 80 FEET OF THE SOUTH 90 FEET OF LOT 6, AND THE EAST 80 FEET OF THE SOUTH 90 FEET OF LOT 7, BLOCK 38, HOLLYWOOD LITTLE RANCHES, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE 26, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

August 23rd, 2021

TECHNICAL ADVISORY COMMITTEE<br>City of Hollywood<br>2600 Hollywood Blvd<br>Hollywood, Florida 33020<br>Housing Programs Inc.<br>2855 Pierce Street<br>Hollywood, FL 33020<br>FILE NUMBER:20-DP-49

## SUBJECT: Final TAC review for a 13-unit residential development (Pierce Street Affordable Townhomes)

## (Response in bold letters)

## A. APPLICATION SUBMITTAL

Carmen Diaz, Associate Planner (cdiaz@hollywoodfl.org) 954-921-3471

1. Applicant shall meet with staff before resubmitting for Preliminary TAC.

This will be done as requested.

1. General Application
a. Application shall include all owners. There are two different owners for this project. Both of them shall be on the application.
Owner to address this matter as to why only one owner listed.
b. Provide all folio numbers that are part of the project.

All folio numbers are listed as requested on sheet T-1.0.
2. Ownership \& Encumbrance Report (O\&E):
a. O\&E is Insufficient, unable to complete review of O\&E.
b. O\&E report shall provide a list and copy of all recorded and unrecorded encumbrances (with O.R. or plat book(s) or page number(s) provided) lying within/on the property boundaries (i.e. easements, rights of way, non-vehicular access lines, etc.)
O\&E UPDATED AS REQUESTED.
c. Names of all current owners shall be on the O\&E.

## Owner to address this matter as to why only one owner listed.

d. Names of all outstanding mortgage holders or a no lien affidavit. This is noted as requested.
e. Listing and copy of any type of encumbrances abutting the property boundary necessary for legal access to the property (if none, state so). This is noted as requested.
f. There is an existing covenant restriction which states that the subject land shall be recreational. Applicant will need to amend this declaration of covenant restriction to continue with the project.
Declaration of covenant restriction attached.
3. Alta Survey:
a. Alta survey shall provide net size and gross size of property.
b. Alta survey shall include the front lot facing Pierce Street.
c. The square footage the Alta Survey shows, does not match the Site Plan data.
d. Alta survey mentioned Old Republic National Title Insurance however the O\&E report does not mention the same. Revise accordingly.
e. Work with the Engineering Division to ensure the survey includes the appropriate elements such as all easements and dedications are indicated.

All the above items are corrected on the Survey.
4. Cover Sheet:
a. Indicate current and future meeting dates as they happen (not submittal dates) on Cover Sheet. Indicate specific Board/Committee (i.e., TAC, PDB, etc.) For future Board/Committee dates not known, leave blank until staff has advised of next meeting date.
This is noted on the cover sheet ( $\mathrm{T}-1.0$ ) as requested.
2. Site Plan:
a. Legal description on Site Plan shall match Alta survey and O\&E exactly.
b. Land use designation shall be Medium Residential (MRES).
c. Lot area on Site Plan does not match Alta survey. Please revise accordingly.
d. Provide the site data on the Site Plan sheet.
e. Provide the required and provided minimum and average unit size.

All the above request has been updated as requested.
f. Provide the square footage per floor air-conditioned and non-air-conditioned areas separately.
This is noted on the sheets (A-1, A-2 and A-3) as requested.
g. Clearly distinguish pervious vs impervious areas in square footage and percentage. See sheet SP-1 under site info for pervious vs impervious areas.
h. Indicate curbing "D" or "F" for all vehicular impact points instead of wheel stops. This is noted on the sheet SP-1 as requested.
i. Provide method of mail delivery.

There will be mailboxes in one location at curb side for each unit.
j. How do residents access dumpster area? How do garbage truck access the dumpster area? You may need to provide the dumpster area closer to the driveway and create a walkway for residents.
There are proposed walkways to each dumpster from the East and West locations of the buildings. Dumpster enclosure will be provided as noted. Garbage truck access the dumpster from building \#2905 driveway for the one on the West side, and the East dumpster is access from building \#2837 driveway.
k. Will recycling containers be in the same area as dumpster area?

Recycling containers will be in the same location.
I. Include note on Site Plan indicating that all changes to the design will require planning review and may be subject to Board approval.
Recycling containers will be in the same location.
m. Site plan shall illustrate planned right of way/swale improvements, including sidewalk, curb cuts, street trees, etc.
This is done as requested.
n. Provide renderings for the next submittal.

## A color rendering is attached.

5. Complete and submit to Broward County School Board an impact fee application prior to submitting for Board consideration. Website:
https://www.browardschools.com/cms/lib/FL01803656/Centricity/Domain/13479/Public SchoollmpactAp plication.pdf
This is done as requested.
6. Provide plat determination letter from the County. Should platting be necessary, prior to Final TAC submittal County Plat comments are required. Plat shall be submitted for recordation prior to submitting for Planning and Development Board. Include several copies of plat documents in future submittals.
This is done as requested.
7. A public participation outreach meeting shall be required for Land Use, Rezoning, Special Exception, and Site Plan requests. Applicants shall conduct at least one public participation outreach meeting and provide mailed written notice to all property owners and certified/registered civic and neighborhood association(s) within 500 feet of the proposed project. Fifteen days prior to the meeting, the applicant shall mail such notice and post a sign on the property, including the date, time, and place of the public participation outreach meeting. Such meeting shall occur prior to the applicable Board or City Commission meetings and the Applicant shall include in its application packet a letter certifying the date(s), time(s), location(s), a copy of the sig-in sheet, presentation material and general summary of the discussion, including comments expressed during the meeting(s).

## This was done as requested.

8. Additional comments may be forthcoming.

## Noted.

9. Provide written responses to all comments with next submittal.

## Attached as noted.

B. ZONING

Carmen Diaz, Associate Planner (cdiaz@hollywoodfl.org) 954-921-3471

1. Indicate the location of the future electric vehicle charging station on Site Plan.

See sheet SP-1 where EVU is noted.
2. Provide a pedestrian connection between the buildings and the sidewalk.

Attached as noted.
3. New construction of, and a major renovation to a structure shall include a minimum of
ten green building practices.
This will be done as requested.
4. Provide a roof plan with next submittal.

See attached plan as requested.
5. Identify locations of existing and proposed fire-hydrants on site or the closest off-site locations.
This is noted on sheet SP-1.
6. Work with the City's Landscape Reviewer to ensure that all landscape requirements are met. There are a number of existing trees on site. Coordinate appropriate mitigation strategy
This will be done; see attached landscape plans.
c. ARCHITECTURE AND URBAN DESIGN

Carmen Diaz, Associate Planner (cdiaz@hollywoodfl.org) 954-921-3471

1. Provide side elevations for the two unit and nine-unit buildings.

Side elevations are noted on sheets A-5 and A-6.
2. Provide a main front elevation from Pierce Street.

This is noted on sheet A-6.
3. Provide roof height on the elevations.

This is noted on elevations as requested.
4. Variation of materials shall be introduced into the design. Elevations note a "stucco finish" for most of thewalls. Incorporate a stone cladding, wood veneer, or other similar material on the facade. Solely utilizingstucco, either smooth or scored, is insufficient.
Variation of materials added as requested.
5. Floor plans shall provide more dimensions

Noted as requested.
6. Provide color samples and materials with future submittals.

See attached color samples.
D. SIGNAGE

Carmen Diaz, Associate Planner (cdiaz@hollywoodfl.org) 954-921-3471

1. Include note on Site Plan, all signage shall be in compliance with the Zoning and Land DevelopmentRegulations.

This is noted on sheet SP-0 where signs for the building is noted.
2. All signs, which are electrically illuminated by neon or other means, shall require a separate electricalpermit and inspection. Separate permits are required for each sign. This will be noted.
E. LIGHTING

Carmen Diaz, Associate Planner (cdiaz@hollywoodfl.org) 954-921-3471

1. Include note on Site Plan stating the maximum foot-candle level at all property lines (maximum 0.5allowed). Noted on site plan as requested.

## F. GREEN BUILDING \& ENVIRONMENTAL SUSTAINABILITY

Elaine Franklin, Environmental Sustainability Coordinator (efranklin@hollywoodfl.org) 954-9213201

1. Indicate on the site plan where the infrastructure necessary for future installation of electric vehicle- charging equipment will be located. (See 151.154, Ordinance O-2016-02) Consider placing it in space \#41 adjacent to a handicapped space so that the future charger will be accessible from both types of spaces.
Noted on site plan as requested.
2. Provide a shared covered bicycle storage area or covered outdoor space with a securing structure at each unit to protect bikes from the elements and theft.
Bikes area will be provided, and a covered area will be taken in consideration.
3. Consider retaining rainwater on site for irrigation and non-potable water uses.

This will be taken in consideration.
4. Consider installing the pavers with proper drainage below to increase stormwater infiltration and recharge our groundwater.
This will be taken in consideration.
5. All external lighting should be fully shielded and meet the requirements of the International Dark Sky Association.
This will be done as requested
6. Recycle materials from demolition and construction to the greatest extent possible. These materials constitute part of Florida's 2020 recycling goal.
This will be taken in consideration.
7. Consider moving the $3^{\text {rd }}$ floor master bathrooms in the long building to stack over the $2^{\text {nd }}$ floor bathrooms to reduce plumbing and water use. The WIC could be swapped to the other side and an entrance to the bathroom could be where the wall adjacent to the tub is.
This will be taken in consideration.
8. In the duplexes consider reconfiguring the bathrooms a bit to allow access to the WIC separately from the bathroom so that tenants don't have to walk through the bathroom to reach the WIC.
This will be taken in consideration.

## G. ENGINEERING

Azita Behmardi, City Engineer (abehmardi@hollywoodfl.org) 954-921-3251
Clarissa Ip, Engineering Support Services Manager (cip@hollywoodfl.org) 954-921-3915
Jose Garcia, Engineer, (igarcia@hollywoodfl.org) 954-921-3900
Rick Mitinger, Transportation Engineer (rmitinger@hollywoodfl.org) 954-921-3990

1. Provide parking stall width for parking 14-25.

This is done as requested.
2. Show on plans for existing sidewalk on Pierce Street to be replaced with new 5' wide sidewalk.
This is done as requested.
3. Indicate location for mail services and trash receptacles.

This is noted on sheet SP-1
4. Provide plat determination letter from the Broward County Planning Council.

This is attached as requested.
5. Show location of existing water and sewer lines and any connection to the city system on civil plans. For water and sanitary sewer connection in the rights-of-way, show any pavement restoration and details required for connections within City rights-of-way. Full width pavement resurfacing will be required.
This is noted on sheet C-5 Civil plan.
6. Prior to Building Permit submittal, address request submittal to Planning and Urban Design Division will be required.

## Noted.

7. Park impact fees requirements will be required to be satisfied at the time of City building permit.
This will be done as requested.
8. Permits and approval from outside agencies are required prior to City building permit issuance.
Noted.
9. More comments may follow upon review of the requested information.

## Noted.

H. LANDSCAPING

Guillermo Salazar, Landscape Reviewer (gsalazar@hollywoodfl.org) 954-921-3900

1. Provide official tree survey signed and sealed by surveyor not older than 6 months for existing trees on site including swale trees on a separate table include: location, species, estimated ht./spread, and /DBH diameter of trunks in inches as per provided survey no trees were shown and there are existing trees onsite on the site perimeter and street.
New survey is attached as requested.
2. Provide a Tree disposition plan and landscape plan on separate sheets by a registered professional licensed Landscape Architect in the State of Florida that compliments the building architecture and uses, provides for shade, beautifies the site, accentuates site features, and serves as a buffer where appropriate. --Providetabular data chart on plan that identifies City of Hollywood landscape requirements and how they are being met for Perimeter landscape, Species diversity requirements, Interior landscape for at grade parking lots and vehicular use areas, open space, view triangle, overhead and underground utilities, Center line, monument line, lot dimensions, and adjacent street names and shall comply with all planning and development board and historic preservation board individual requirements when applicable. Landscape plan should comply with all the requirements according to City of Hollywood Landscape manual, chapter 155.52, Article 9 LDR. Landscape plan set to include and clarify what is been provided as per city code requirements for landscape for project type. Landscape plans submitted shall clearly define which trees have been provided as required in terms of amount of inches of DBH for trees proposed to be removed andtrees required to be planted per landscape code per zoning district. All trees and palms provided should meet City of Hollywood minimum height or DBH requirements at planting. If any trees are to be remain in close proximity to building construction activities to be clearly shown on plans with tree protection barrierswith standard CRZ protection of a minimum of one (1) foot of radius per inch of tree trunk diameter.

## See landscape plan attached sheet L-2.

3. Provide irrigation plans for an automatic underground irrigation system for the project. Irrigation plans shall be prepared, signed and sealed by a registered professional licensed to do such design under State ofFlorida Statute 481.303(6)(c) or as otherwise prescribed under Florida Statutes.

## See irrigation plan attached sheet L-3.

4. According to Chapter 155.52 of the Code of Ordinances and the City of Hollywood Landscape Manual. Shade trees to be installed at a minimum size of 2" DBH/ 12' height. Existing trees meeting this criteria may be used as credit toward total requirement. Palm trees count toward tree requirements on a 3:1 basis, meaning 3 palms equal 1 broadleaf tree. The following palm species should be used for mitigation or code: Royal Palm, Phoenix sylvestris/Medjool/canariensis, Bismarkia, and Coconut. Minimum height requirements for all palms at planting is $8^{\prime}$ of CT .
Noted.
5. No tree removals without a tree removal sub- permit. Supplemental arborist report might be required as needed to approve any tree removal permit. Applicant to submit a complete Broward County Uniform Building Application and separate application for tree removal and planting sub-permit. Submit approved and signed total final landscape installation estimate from Landscape contractor/installer for two separatesub-permits in separate to comply with existing pending city code tree planting and removal.
This will be done as required.
6. Additional comments may be forthcoming at Building permit submittal. Noted.
I. UTILITIES

Alicia Verea-Feria, Engineer (averea-feria@hollywoodfl.org) 954-921-3302

1. Submit civil engineering plans indicating existing and proposed water, sewer and drainage for initial review.
This is noted on sheet C-5 Civil plan.
2. Show Water and Sewer demand calculations on proposed utilities plans.

See attached Civil plans.
3. Clarify how the existing sewer is serviced for this property.

The property is vacant.
4. Include the City's latest applicable standard water and sewer details. The details can be requested fromMike Zaske via email at mzaske@hollywoodfl.org.
This is noted in the civil plans.
5. This site resides within FEMA Flood Zone AH5 and AE6. The Finished Floor Elevations (FFE) must conform with section 154.50 of the City's Code of Ordinances where the minimum FFE for residential shall be, at a minimum, 1-foot above the Base Flood Elevation (BFE) = 5' NAVD 88 + 1' = 6' NAVD 88.
6. Per Preliminary Flood Maps 12/31/2019, the proposed BFE for Zone AE will be $6^{\prime}$ NAVD88.

FFE will need tobe elevated to 7' NAVD88 to remain in compliance and reduce flood insurance premium impact.
This is noted in the civil plans.
7. Indicate FFE for all enclosed areas on ground floor. This is noted in the civil plans.
8. Update the survey with the correct Flood Zone information. Flood panel should be 568 H , not
569. Community number is 125113, not 125112. Include both Flood Zones AH5 and AE5. Show thedelineation on the plan view.
Noted.
9. Show perimeter cross sections across all property limits including transition areas meeting adjacentproperty grades.
This is noted in the civil plans (sheet C-2).
10. Ensure all stormwater is retained onsite.

This is noted in the civil plans.
11. Indicate how roof drainage will be collected and connected to the on-site drainage system.
This is noted in the civil plans (sheet C-2 and C-3).
12. Provide preliminary drainage calculations.

See attached drainage calculations.
13. Permit approval from outside agencies will be required.

Noted.
14. Landscape plans to be submitted should coordinate with civil plans to accommodate for drainagefeatures.
This was done, see landscape plans.
15. Additional comments may follow upon further review of requested items.

Noted.
J. BUILDING

Russell Long, Assistant Building Official (rlong@hollywoodfl.org) 954-921-3490

1. No comments received.

Noted.
к. FIRE

Fire review for TAC is limited to fire department access and minimum fire flow requirements for water supply for firefighting purposes. A complete architectural review will be completed during formal application of architectural plans to the building department.
2. Since these are proposed townhomes, Fire will not be involved in the plan review of the structure themselves. However, Fire will be involved in the plan review proves and field inspections of fire alarm stated on page SP-0.
3. Fire will also be involved in the plan review process and field inspections if the Florida Building Code requiresa fire sprinkler system.
Noted.
L. PUBLIC WORKS

Charles Lassiter, Assistant Public Works Director (classiter@hollywoodfl.org) 954-967-4207

1. No comments received.

## Noted.

## m. PARKS, RECREATION AND CULTURAL ARTS

David Vazquez, Assistant Director (dvazquez@hollywoodfl.org) 954-921-3404

1. Application is substantially compliant.

Noted.
N. COMMUNITY DEVELOPMENT

Liliana Beltran, Housing inspector (lbeltran@hollywoodfl.org) 954-921-2923

1. The following Civic Associations are located within 500 feet project site:
a. North Central Civic Association. Patricia Antrincan, President, ann2can@bellsouth.net Meetingsare on the $4^{\text {th }}$ Tuesday of each month at 7:00 pm at Fred Lippmann Multi-Purpose Center, 2030 Polk Street, room 11.

Refer to Planning comments to ensure compliance with Public Participation requirements.
This was done.

## o. ECONOMIC DEVELOPMENT

Raelin Storey, Director (rstorey@hollywoodfl.org) 954-924-2922

1. Application is substantially compliant.

Noted.
P. POLICE DEPARTMENT

Christine Adamcik, Police (cadamcik@hollywoodfl.org)
954-967-4371Steven Bolger, Police
(sbolger@hollywoodfl.org) 954-967-4500 Doreen
Avitabile, Police (davitable@hollywoodfl.org) 954-967-
4371

1. ${ }^{* * *}$ Note: Application is substantially compliant.

Noted.

Note: Crime Prevention Recommendations: The following are the reviews and recommendations for the CPTED review of the blueprints for " 2855 Pierce St. - Hollywood, Florida" - Preliminary

Note: Blueprint Crime Prevention Observations/Recommendations per ACPI (American Crime Prevention Institute) reference the addressed premises.

## CPTED Strategies

Examples of clear border definition may include fences, shrubbery of signs in exterior areas.
2. External Lighting

Parking lots, vehicle roadways, pedestrian walkways and building entryways should have "adequate" levels of illumination. The American Crime Prevention Institute recommends the following levels of external illumination:
a. -Parking Lots 3-5 foot candles
b. -Walking Surfaces 3 foot candles
c. -Recreational Areas

2-3 foot candles

## KallerArchitecture

d.
-Building Entryways
5-foot candles
e.
f.
j.

These levels may be subject to reduction in specific circumstances where after hours use isrestricted.

The lighting fixture identification system should enable anyone to easily report a malfunctioning fixture.
g. Exterior lighting should be controlled by automatic devices (preferably by photocell).
h. Exterior lighting fixture lenses should be fabricated from polycarbonate, breakresistant materials.
i. Plant materials, particularly tree foliage, should not interfere with or obscure exterior lighting.

Light fixtures below 10 ' in grade should be designed to make access to internal parts difficult (i.e.security screws, locked access panels).

## All comments are noted and will be considered in the overall project.

## Landscaping

3. Make sure all landscaping is trimmed and well maintained.
4. Make sure that landscaping does not obstruct the natural surveillance (visibility) of the area.
5. Plant height appropriate shrubbery along walkways as to not obstruct visibility or allow individuals to hidebehind.
6. Plants/Shrubbery should not be more than 2 ft in height.
7. Tree canopies should not be lower than 6 ft in height.

Noted.

## Building(s) Perimeter Doors

8. Exterior doors not used as designated entry points, should be locked to prevent entry from the exterior.
9. Ideally, exterior doors should be equipped with electronic propped door alarms, which annunciate eitherlocally and/or at the security office.

Internal Circulation and Control
10. There should not be recessed areas in corridors that could be used for hiding or loitering.
11. Convex mirrors should be used in corners and in stairwells.
12. Stairwells should have closed area at first level, to prevent someone from hiding beneath stairs.
13. Parking area should be well lit.
14. Parking lot should be accessible to residents only.
15. Hallways/walkways should be well lit.

Corridors
16. Corridors should be well-lighted with no dark areas.
17. Increased light, reflective paint colors, and graphics on hallway wall surfaces should be used to increase theperception of openness and constant movement.

## Fencing

18. (If used) Wrought iron fencing provides for natural surveillance within and onto the property. Ex. Parking lot and to establish a defined border definition of the entire property.
All comments are noted and will be considered in the overall project.
19. Sturdy fencing should enclose locations where gas and electric utilities enter buildings.
20. Locations where gas and electric utilities enter buildings should be well lighted.
21. Electrical service disconnects and gas valves should be equipped with locking devices.
22. Fire command center should be kept locked and free off clutter.

All comments are noted and will be done in the overall project.
Signage

1. Have adequate signage posted.

Noted.

## Q. DOWNTOWN AND BEACH CRA

Jorge Camejo, Executive Director (jcamejo@hollywoodfl.org)
954-924-2980 Susan Goldberg, Deputy Director
(sgoldberg@hollywoodfl.org) 954-924-2980

1. Not applicable.

Noted.
R. PARKING

Hal King, Parking Administrator (hking@hollywoodfl.org) 954-921-3549

1. Application is substantially compliant.

Noted.
s. ADDITIONAL COMMENTS

Carmen Diaz, Associate Planner (cdiaz@hollywoodfl.org) 954-921-3471

1. Applicant shall meet with staff before resubmitting for Preliminary TAC. Noted.

## KallerArchitecture

May 4, 2021
City of Hollywood
Department of Planning \& Urban Development
2600 Hollywood Boulevard
Hollywood, Florida 33020
Re: Community Meeting 2855 Pierce Street
Hollywood, Florida
Architect's Project \#20109

## To Whom It May Concern:

Our Office had a Virtual Community Meeting on Wednesday, November 2, 2020 at 6:00 PM regarding the above referenced Project. We completed a presentation showing the Project and Rendering on the computer and then went into a time of questions and answers. There were a few questions concerning the Project as follows:

- The first question the neighbors wanted to know about was rainwater retention. It was relayed that all water retention will be on Site and water will not affect the neighboring homes.
- The second question was about the view from their windows, whether they will see concrete wall or landscape. The Neighbors view will be lush landscape with trees and shrubs along with the building.
- The neighbors also wanted to know if the Units were for sale or rent. These Units will be for sale.

To the best of our knowledge all questions were addressed and satisfied during the meeting.
Please feel free to contact our office with any questions you may have.
Sincerely,
Kaller Architecture
Joseph B. Kaller, AIA, LEED AP BD+C
President

## monume countr <br> Planning Council

April 13, 2021

Joseph B. Kaller, AIA, LEED AP BD+C, President
Via Email Only
Kaller Architecture
2417 Hollywood Boulevard
Hollywood, Florida 33020
Dear Mr. Kaller:
Re: Platting requirements for a parcel legally described as the West 5 feet of the North 90 feet of Lot 5 , all of Lots 6 and 7, and the East 5 feet of the North 90 feet of Lot 8, Block 38, "Hollywood Little Ranches," according to the Plat thereof, as recorded in Plat Book 1, Page 26, of the Public Records of Broward County, Florida. This parcel is generally located on the north side of Pierce Street, between North 28 Avenue and Interstate 95, in the City of Hollywood.

This letter is in response to your correspondence regarding the Broward County Land Use Plan's platting requirements for a proposed multi-family residential development on the above referenced parcel.

Planning Council staff has determined that replatting would not be required by Policy 2.13 .1 of the Broward County Land Use Plan for the proposed development, subject to compliance with any applicable Broward County Trafficways Plan requirement.

As per the criteria of Policy 2.13.1, replatting is required for the issuance of building permits when constructing a non-residential or multi-family development, unless all of the following conditions are met:
a. The lot or parcel is smaller than 10 acres and is unrelated to any adjacent development;
b. The lot or parcel has been specifically delineated in a recorded plat;
c. All land within the lot or parcel which is necessary to comply with the County Trafficways Plan has been conveyed to the public by deed or easement; and
d. The proposed development is in compliance with the applicable land development regulations.

## Joseph B. Kaller

April 13, 2021

## Page Two

The subject parcel is less than 10 acres (approximately 0.96 acres) and meets the specifically delineated requirement. This platting interpretation is subject to the municipality finding that the proposed development is unrelated to any adjacent development, as noted in "a." above.

Planning Council staff notes that when a specifically delineated parcel (i.e. Lots 6 and 7) is combined with land which has been included in a plat recorded before June 4, 1953, but not specifically delineated (i.e. the West 5 feet of the North 90 feet of Lot 5 and the East 5 feet of the North 90 feet of Lot 8), Policy 2.13.1 of the Broward County Land Use Plan does not require replatting if the specifically delineated portion of the parcel constitutes the majority of the enlarged parcel; in this case the specifically delineated portion constitutes a majority of the enlarged parcel.

Some jurisdictions may be more restrictive and require platting in more situations than the Broward County Land Use Plan. The City of Hollywood's platting requirements should be investigated.

The contents of this letter are not a judgment as to whether this development proposal complies with the Broward County Trafficways Plan, permitted uses and densities, local zoning, the land development regulations of the municipality or the development review requirements of the Broward County Land Use Plan, including concurrency requirements.

If you have any additional questions concerning the Broward County Land Use Plan's platting requirements, please contact Julie M. Bernal at your convenience.

Respectfully,

BBB:JMB

cc/email: Dr. Wazir Ishmael, City Manager<br>City of Hollywood

Shiv Newaldass, Director, Development Services
City of Hollywood

# The School Board of Broward County, Florida PRELIMINARY SCHOOL CAPACITY AVAILABILITY DETERMINATION SITE PLAN <br> SBBC-2964-2020 <br> Municipality Number: TBD <br> Pierce Street Townhomes 

October 30, 2020


Growth Management
Facility Planning and Real Estate Department
600 SE 3rd Avenue, 8th Floor
Fort Lauderdale, Florida 33301
Tel: (754) 321-2177 Fax: (754) 321-2179
www.browardschools.com

PRELIMINARY SCHOOL CAPACITY AVAILABILITY DETERMINATION
SITE PLAN

| गROJECT INFORMATION | NUMBER \& TYPE OF PROPOSED UNITS | OTHER PROPOSED USES | STUDENT IMPACT |  |
| :---: | :---: | :---: | :---: | :---: |
| Date: October 30, 2020 | Single-Family: |  | Elementary: | 2 |
| Name: Pierce Street Townhomes | Townhouse: 13 |  |  |  |
| SBBC Project Number: SBBC-2964-2020 | Garden Apartments: |  | Middle: | 1 |
| County Project Number: N/A | Mid-Rise: |  |  |  |
| Municipality Project Number: TBD | High-Rise: |  | High: | 1 |
| Owner/Developer: Housing Programs Inc. | Mobile Home: |  |  |  |
| Jurisdiction: Hollywood | Total: 13 |  | Total: | 4 |

SHORT RANGE - 5-YEAR IMPACT

| Currently Assigned Schools | Gross Capacity | $\begin{gathered} \text { LOS * } \\ \text { Capacity } \end{gathered}$ | Benchmark* <br> Enrollment | Over/Under LOS | Flassroom Equivalent Needed to Meet LOS | $\begin{gathered} \text { \% of LOS*** } \\ \text { Capacity } \end{gathered}$ | Cumulative Reserved Seats |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oakridge | 721 | 721 | 510 | -211 | -10 | 70.7\% | 3 |
| Olsen | 1,125 | 1,238 | 657 | -581 | -26 | 53.1\% | 15 |
| South Broward | 2,289 | 2,518 | 2,354 | -164 | -8 | 93.5\% | 20 |


| Currently Assigned Schools | Adjusted Benchmark | Over/Under LOS-Adj. Benchmark Enrollment | \% LOS Cap. Adj. Benchmark | Projected Enrollment |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 20/21 | 21/22 | 22/23 | 23/24 | 24/25 |
| Oakridge | 513 | -208 | 71.2\% | 491 | 503 | 514 | 516 | 508 |
| Olsen | 672 | -566 | 54.3\% | 667 | 678 | 682 | 691 | 689 |
| South Broward | 2,374 | -144 | 94.3\% | 2,338 | 2,272 | 2,286 | 2,300 | 2,314 |

Students generated are based on the student generation rates contained in the currently adopted Broward County Land Development Code. Information contained herein is current as of the date of review. A traditional cohort survival methodology is used to project school-by-school District traditional school enrollment out over the next five years, and a proportional share of charter school enrollment is used to project future charter school enrollment by school level Districtwide. For more information: http://www.broward.k12.fl.us/dsa/EnrollmentProj.shtml. The annual benchmark enrollment is taken on the Monday following Labor Day and is used to apply individual charter school enrollment impacts against school facility review processes.

CHARTER SCHOOL INFORMATION

| Charter Schools within 2-mile radius | 2019-20 Contract Permanent Capacity | 2019-20 Benchmark Enrollment | Over/(Under) | Projected Enrollment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 20/21 | 21/22 | 22/23 |
| Alpha International Academy | 384 | 86 | -298 | 86 | 86 | 86 |
| Avant Garde Academy | 750 | 884 | 134 | 884 | 884 | 884 |
| Avant Garde K-8 Broward | 1.050 | 1.014 | -36 | 1.014 | 1.014 | 1.014 |
| Ben Gamla Charter | 625 | 509 | -116 | 509 | 509 | 509 |
| Hollywood Academy 6_8 | 400 | 469 | 69 | 469 | 469 | 469 |
| Hollywood Academy K_5 | 1.100 | 1.100 | 0 | 1.100 | 1.100 | 1.100 |

## PLANNED AND FUNDED CAPACITY ADDITIONS IN THE ADOPTED DISTRICT EDUCATIONAL FACILITIES PLAN

| School(s) | Description of Improvements |
| :--- | :--- |
| Oakridge | There are no scheduled classroom additions in the Adopted DEFP that would increase the reflected FISH capacity <br> of the school. |
| Olsen | There are no capacity additions scheduled in the ADEFP that will increase the reflected FISH capacity of the <br> school. |
| South Broward | There are no scheduled classroom additions in the Adopted DEFP that would increase the reflected FISH capacity <br> of the school. |

## Comments

The application proposes 13 (three or more bedroom) townhouse units, which will generate 4 (2 elementary 1 middle and 1 high school) students.
Please be advised that this application was reviewed utilizing 2019/20 school year data because the current school year (2020/21) data will not be available until updates are made utilizing the Benchmark Day Enrollment Count. The school Concurrency Service Areas (CSA) serving the project site in the 2019/20 school year include Oakridge Elementary, Olsen Middle, and South Broward High Schools. Based on the Public School Concurrency Planning Document (PSCPD), the impacted schools are operating below the adopted Level of Service (LOS), which is established as the higher of: 100\% gross capacity or 110\% permanent Florida Inventory of School Houses (FISH) capacity. Incorporating the cumulative students anticipated from this project and approved and vested developments anticipated to be built within the next three years (2019/20-2021/22), these schools are projected to operate below the adopted LOS through the 2021/22 school year. It should be noted that FISH capacity for the impacted schools reflect compliance with the class size constitutional amendment.

Additionally in the 2019/20 school year, the charter schools located within a two-mile radius of the site and their associated data are depicted above. Students returning attending or anticipated to attend charter schools are factored into the five-year student enrollment projections for District schools. Enrollment projections are adjusted for all elementary, middle and high schools impacted by a charter school until the charter school reaches full enrollment status.

To ensure maximum utilization of the impacted CSAs, the Board may utilize other options such as school boundary changes to accommodate students generated from developments in the County.

Capital Improvements scheduled in the currently Adopted District Educational Facilities Plan (DEFP), Fiscal Years 2020/21 to 2024/25 regarding pertinent impacted schools are depicted above.

Therefore, this application is determined to satisfy public school concurrency on the basis that adequate school capacity is anticipated to be available to support the residential development as currently proposed by the applicant. This preliminary determination shall be valid for 180 days for a maximum of 13 (three or more bedroom bedroom) townhouse units and conditioned upon final approval by the applicable governmental body. As such, this preliminary determination will expire on April 27,2021 . This preliminary school concurrency determination shall be deemed to be void unless prior to the referenced expiration of the Preliminary School Capacity Availability Determination (SCAD), notification of final approval to the District has been provided and/or an extension of this Preliminary SCAD has been requested in writing and granted by the School District. Upon the District's receipt of sufficient evidence of final approval which shall specify at the minimum the number, type and bedroom mix for the approved residential units, the District will issue and provide a final SCAD letter for the approved units, which shall ratify and commence the vesting period for the approved residential project.

Please be advised that if a change is proposed to the development, which increases the number of students generated by the project, the additional students will not be considered vested for public school concurrency

Reviewed By:

10/30/2020
Date

Lisa Wight
Signature

Lisa Wight
Name
Planner
Title

## TOWN HOMES AT

## 2855 PIERCE STREET HOLLYWOOD FL 33020



PIERCR STREET LOOKING NORTHEAST


PIERCR STREET LOOKING EAST


PIERCR STREET LOOKING SOUTH


PIERCR STREET LOOKING NORTH

## TOWN HOMES AT

2855 PIERCE STREET HOLLYWOOD FL 33020

MAIN BUILDING COLOR:
BENJAMIN MOORE
PEARL RIVER 871

SCORED STUCCO LINE and LOW PARAPET LINE BENJAMIN MOORE
LA PALOMA GRAY 1551


STONE PANEL NATURAL SPRING SLATE



## PRELIMINARY TAC PIERCE STREET AFFORDABLE TOWNHOMES

2855 PIERCE STREET, HOLLYWOOD, FLORIDA 33020












## REPORT OF

# STANDARD PENETRATION BORING TEST \& FOUNDATION RECOMMENDATION 

SITE AT
Vacant Lot
@ 2090 Pierce Street Hollywood, FL 33020

## CERTIFIED TO

Housing Programs, Inc.
@ 683 N. Biscayne River Drive Miami, FL 33169

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.

14400 NW $77^{\text {h }}$ COURT, SUITE \#201, MIAMI LAKES, FLORIDA 33016<br>TELEPHONE: (305) 558-2588<br>FAX: (305)362-4669

June 2020
USSE PROJECT \#20-0087

Housing Programs, Inc. @ 683 N. Biscayne River Drive Miami, FL 33169

Re: Subsurface Investigation and Soil Bearing Capacity Verification
Vacant Lot @ 2090 Pierce Street, Hollywood, FL 33020
USSE Project Number: 20-0087

## Dear Sir/Madam:

Representatives of U.S. South Engineering and Testing Lab., Inc. have performed geotechnical explorations for the above reference site. The purpose of these explorations is to obtain subsurface conditions to provide site preparations and foundation design recommendations to support the proposed two-story residential structures. This report presents our findings and recommendations.

## Project Information

To explore the subsurface soil strata within proposed improvement sites, our personnel performed four (4) standard penetration boring tests to the depths of twenty-six (26') \& twenty-eight (28') feet. Representatives of U.S. South Engineering and Testing Lab., Inc. observed present site conditions at the time during our field exploration. The existing ground surface elevations at the boring/test locations were not determined and we consider being at the elevation zero.

## Subsurface Exploration/General Subsurface Conditions

## SUBSURFACE SOIL EXPLORATION

The sub-surface conditions at the site were explored with four (4) standard penetration boring tests dated June $10^{\text {th }}, 2020$. The results of the classification and stratification are shown on pages entitled Soil Standard Penetration Test Results in this report. It should be noted that soil conditions may vary between soil boring and the stratum interfaces which are shown. The soil standard penetration data reflects information from the specific test location only.

Our personnel using paced and taped measurement from the boundary lines to establish the field test locations. The boring locations, as shown on the field exploration plan, were taken in the areas that were accessible and should be considered approximate.

## GROUNDWATER

The groundwater level measured at the standard penetration test standard penetration locations at the time of drilling range from approximately three feet and three inches ( $3^{\prime}-3^{\prime \prime}$ ) to three feet and eleven inches ( $3^{\prime}-11^{\prime \prime}$ ) below the existing ground surface. Fluctuation in the observed groundwater levels should be expected due to seasonal climatic changes.

## Analysis and Recommendations

## GEOTECHNICAL SITE SUITABILITY

Based on a review of subsoil profiles developed from the engineering standard penetration test boring's we recommend that the subsoil condition is not suitable for the proposed residential structures without improvements.

Before undergoing development, preparations need to be made including removal \& clearing of any unwanted organic material (If any), topsoils, or construction debris. After removal, follow the ground works procedure under the section entitled as site preparations requires to achieve the designed bearing capacity. Sub-grade preparation fill placement and foundation construction should be completed in accordance with the recommendations presented in this report.

## FOUNDATION DESIGN

After the proposed areas have been prepared in accordance with the foundation preparation recommendations noted at the end of the report, the site should be suitable for supporting the proposed structure on a conventional shallow foundation. The shallow foundations must bear on compacted surface area (elevation) with bearing capacity value of not less than 20 blow counts per foot where the bottom of footers (foundation system) is rested. We recommend that the footings be designed using an allowable bearing stress of $\mathbf{2 , 5 0 0}$ pounds per square foot, or less based on total loads.

To provide an adequate safety factor against shearing failure in the sub soils, the bottoms of conventional spread footings should be based not less than sixteen (16") inches below final grades. We recommend a minimum width of sixteen (16) inches for continuous footings and thirty-six ( $\mathbf{3 6}^{\prime \prime}$ ) inches for individual footings, even though the soil bearing pressure may not be fully developed in all cases. (Foundation to be designed by a professional structural engineer and the size shall be recommended by the same engineer.)

## FOUNDATION SETTLEMENT

Shallow foundations designed and constructed in accordance with the recommendations of this report are estimated to sustain a maximum total settlement in the approximate range of 0.50 to 0.75 inches, which correspond to the lightest and heaviest column loading, respectively. Settlement of the foundations will occur as an elastic response of the soil to the building loads applied. In this case, nearly all the settlement of the foundations due to dead loads is expected to take place during construction. The portion of the settlement due to the live load of the structure will generally take place soon after the first application of this load. Differential settlement between adjacent foundations should be approximately one-half of the total settlement. Distortions that occur along the wall footings due to differential settlement should not to be more than 1 in 500 .

## FLOOR SLAB

It is our opinion that the floor slab system may be constructed as a slab on grades. We recommend that a vapor barrier be placed between the soil and the concrete. We also recommend that the bottom reinforcing steel be placed for tensile support in the ground floor slab.

## SITE PREPARATION

Our observations, explorations, and evaluation supplemented by a review of subsoil profiles developed from the soil engineering standard penetration tests boring indicated that the subsoil conditions at the site are not capable of providing support of shallow spread footing. Therefore, we recommend the following foundation preparation is needed to reduce excessive settlements to acceptable engineering standards:

1) Locate each individual building area plus five (5') feet outside the foot print of the new building site and remove any organic materials and construction debris and all other organic materials, grass, roots, weeds, construction debris and other obstructions (if any) resting on/and protruding under the building area.

NOTE: Sometimes the depth of the existing materials, which should be removed, will vary to some degree. Some localized areas may require more than other section of stripping to remove the significant organic and/or topsoils materials, whereas other areas may require less.
2) In addition, remove and save the top five (5') feet of the existing loose soil materials (free of any organic materials) and stockpile for future use as backfill materials. Excavate the site down to one ( $1^{\prime}$ ) foot below the water table and then the backfilling process can commence. Prior to any backfilling process, proof roll the excavated site under the entire development site. The existing excavated site under the proposed structure requires a compaction of $\mathbf{1 0 0 \%}$ of the dry density value obtained from the Modified Proctor testing -- ASTM D-1557 unless noted. (The bottom of the excavated site should be one foot above the water table).
3) Proof roll and commence the compaction procedure at the bottom of the excavated area following the next section (4) for proper compaction and verification.
4) After the proof roll is completed, the five (5') feet of excavated fill materials (Stock pile soil) can be re-used to back fill the site with an approval of geotechnical engineer as a "re-use materials" and must comply with the following section entitled as "FILL PLACEMENT \& BACKFILL REQUIREMENT". The fill material shall consist of the mixture of stockpile materials (If it is free of any organic materials) and lime rock and lime sand (with the largest dimension not greater than three (3") inches) and placed in lifts not greater than twelve (12") inches of loose thickness. The material, in general, shall be compacted by heavy vibratory roller to a minimum of $\mathbf{9 5 \%}$ of the dry density value obtained from the Modified Proctor testing ASTM D-1557 unless noted. Preparation of each lift must be repeated with the above procedure up to the finished elevation for the site preparation prior to first floor concrete slab pour elevation.

The last two feet of the back-fill materials underneath the foundation must be consisted of lime rock and lime sand (with the largest dimension not greater than three ( $3^{\prime \prime}$ ) inches) and placed in lifts not greater than twelve (12") inches of loose thickness. These last two lifts must be compacted to a minimum of $100 \%$ of the dry density value obtained from the Modified Proctor testing ASTM D-1557.

NOTE: Prior to commencing compaction, the moisture content of the fill material shall be adjusted to within plus/minus two (2\%) percent of the optimum moisture determined by ASTM D-1557; by so wetting or drying the fill material, the amount of compactive energy required to
attain compaction is minimized. Attempted compaction of fill material which is more than 5 percent below or three (3\%) percent above optimum moisture will generally yield unsatisfactory results. (NOTE: adding moisture after compaction has no effect upon the compaction test results.)
5) Verify all densification procedures by taking one (1) field density test probing twelve (12") inches into the underlying soils for every 2000 square feet but shall not be less than three (3) tests per lift of fill material, one (1) field test for every fifty (50) LF for the trench area and one (1) test for every column pad (if any).

## FILL PLACEMENT\& BACKFILL REQUIREMENT

All fill material will be free of organic matter, debris, or clay balls, with a maximum size not exceeding 3 inches. Structural fill will also have a Plastic Index of less than 10, a Liquid Limit of less than 10, and a maximum fine content (passing the 200 sieve) of 5 percent. Granular, uniformly graded material with a maximum aggregate size of 0.5 inch may be used for pipe bedding. Structural fill will be compacted to at least 95 percent of the maximum dry density as determined by American Society for Testing and Materials (ASTM) D-1557 when used for raising the grade in lifts not greater than twelve (12") inches thick throughout the site, below footings or for rough grading. Fill placed behind retaining structures may be compacted to 90 percent of the maximum dry density as determined by ASTM D-1557. Initially, structural fill will be placed in lifts not exceeding 12 -inches lose thickness. Thicker lifts may be used pursuant to approval based on results of field compaction performance. The moisture content of all compacted fill will fall within 2 percentage points of the optimum moisture content measured by ASTM D-1557.

Verify all densification procedures by taking one (1) field density test probing twelve (12") inches into the underlying soils for every 2000 square feet of compacted surface but will not are less than three (3) tests per lift of fill material, one (1) field test for every fifty (50) LF for the trench area and one (1) tests for every column pad (if any).

## FOUNDATION CONSTRUCTION

Following proposed construction as discussed above, the foundation area should be excavated, and the footings formed. As mentioned previously, the foundations should be based on stabilized lime sand and lime rock back fill material formation. The excavation bottom should be inspected a Geotechnical engineer form this office to verify the integrity of the lime rock and lime sand. If pockets of loose or soft soils or solution features in the form of slots or chimneys are found in the carbonate rock formation, they should be excavated to a depth of three (3) times the feature width or diameter and backfilled with lean concrete.

## GROUNDWATER CONDITIONS

We do not anticipate groundwater control for foundation construction excavations less than three (3) feet at this site. If required due to heavy rainfall conditions or temporarily perched water, pumping from sumps located in ditches or pits can probably control groundwater.

## LIMITATIONS

The findings and recommendations provided in this report are based on our soil boring data and information collected from the test boring locations. Uniformity of soil strata in the immediate vicinity may be assumed, however, it is not guaranteed, and this office assumes no responsibility of areas other than those where the subsoil investigation was made and reported herein. Experienced geotechnical personnel should observe and document the construction procedures used, and the conditions encountered. Unanticipated conditions and inadequate procedures should be reported to the design team along with timely recommendation to solve the problem. We recommend that the owner retain U.S. South Engineering and Testing Lab., Inc. to provide these services based on our familiarity with the project, the subsurface conditions, and the intent of recommendations and design.

The information presented in this report is intended for the exclusive use of Housing Programs, Inc. and/or theirs assign, U.S. South Engineering and Testing Laboratory, Inc. will not be responsible for conclusions, opinions, or recommendations made by others based on data presented herein. If deviations from the noted conditions are encountered during remedial application, they should be brought to U.S. South Engineering and Testing Laboratory, Inc.'s attention.

## General Information

The contractor should exercise CAUTION while clearing and excavating the site. If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office will be notified immediately so that the condition or change can be evaluated, and appropriate action taken.

Attached is a copy of our full report for your review.
U.S. South Engineering and Testing Laboratory, Inc. appreciate the opportunity of assisting you in this project. If you have any questions or comments, please do not hesitate to contact the undersigned.

## Respectfully submitted,



Eduardo Rodriguez, Jr., P.E. \# 56197
Project Manager

Re: Subsurface Investigation and Soil Bearing Capacity Verification
Vacant Lot @2090 Pierce Street, Hollywood, FL 33020
USSE Project Number: 20-0087

## SOIL STANDARD PENETRATION TEST RESULTS

The penetration testing and soil sampling are accomplished simultaneously using procedures in general accordance with ASTM D-1586, the Standard Penetration Test (SPT). A 2-inch O.D. by 1.4-inch I.D. split-spoon samplers is driven with a 140 pounds' hammer falling 30 inches. The number of hammer blows required to drive the sampler is recorded on the borehole logs, which are shown as Soil Standard Penetration Test Results. Where possible, the sampler is driven 24 inches, with the hammer blows being recorded for each of four 6 -inch intervals. The "Penetration Resistance" or " N " value is the sum of the blows recorded for the second and third six-inch intervals. This value is widely accepted by geotechnical engineer as an indication of the relative density and strength of the soil being sampled.

## SITE PLAN



|  | Client No.; 20-0087 <br> Housing Programs, Inc. <br> Vacant Lot <br> @ 2090 Pierce Street <br> Hollywood, FL 33020 | Legend: <br> -Approximate Boring Test Location |
| :---: | :---: | :---: |

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.
14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016
TEL : (305) 558-2588 FAX : (305) 362-4669

| TEST BORING REPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Client: | Housing Programs, Inc. |  |  | Order No. |  | 20-0087 |
| Project: | Vacant Lot |  |  | Report No. |  | Br\#1 |
| Site Address | @ 2090 Pierce Street, Hollywood, FL 33020 |  |  | Hole No. |  | Br\#1 |
| Test Location | see site plan |  |  | Start date |  | 06-10-20 |
| Driller: | A.A. \& J.B. Jr |  |  | Finish date |  | 06-10-20 |
| DEPTH | DESCRIPTION | SAMPLE No. | HAMMER BLOW ON SAMPLE |  | "N" | REMARK Test Depth (ft) |
| 01 | From $0^{\prime}-0^{\prime \prime}$ to $1^{\prime \prime}-0^{\prime \prime}$ Brown medium sand with some rock | S-1 | 3 | 3 | 7 | 0-2 |
| 02 | From 1'-0" to 4'-0" Tan lime sand with some rock |  | 4 | 6 |  |  |
| 03 |  | S-2 | 6 | 5 | 7 | 2-4 |
| 04 |  |  | 2 | 2 |  | Water Table @ 3'-11" |
| 05 | From 4'-0" to $9^{\prime}-00^{\prime \prime}$ Dark brown medium sand | S-3 | 2 | 1 | 2 | 4-6 |
| 06 |  |  | 1 | 2 |  |  |
| 07 |  | S-4 | 2 | 3 | 6 | 6-8 |
| 08 |  |  | 3 | 8 |  |  |
| 09 |  | S-5 | 6 | 6 | 8 | 8-10 |
| 10 | From 9'-0" to 18'-0" Brown medium sand |  | 2 | 1 |  |  |
| 11 |  | S-6 | 1 | 1 | 2 | 10-12 |
| 12 |  |  | 1 | 1 |  |  |
| 13 |  | S-7 | 1 | 1 | 2 | 12-14 |
| 14 |  |  | 1 | 1 |  |  |
| 15 |  | S-8 | 1 | 3 | 6 | 14-16 |
| 16 |  |  | 3 | 5 |  |  |
| 17 |  | S-9 | 5 | 8 | 18 | 16-18 |
| 18 |  |  | 10 | 12 |  |  |
| 19 | From $18^{\prime}-0$ to $26^{\prime}-0$ " Light brown medium sand with coarse sand | S-10 | 18 | 15 | 34 | 18-20 |
| 20 |  |  | 19 | 18 |  |  |
| ${ }^{* \pi *}$ As further protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval *** |  |  |  |  |  |  |

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.
14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016
TEL : (305) 558-2588 FAX : (305) 362-4669


## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.
14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016
TEL : (305) 558-2588 FAX : (305) 362-4669

| TEST BORING REPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Client: | Housing Programs, Inc. |  |  | Order No. |  | 20-0087 |
| Project: | Vacant Lot |  |  | Report No. |  | Br\#2 |
| Site Address | @ 2090 Pierce Street, Hollywood, FL 33020 |  |  | Hole No. |  | Br\#2 |
| Test Location | see site plan |  |  | Start date |  | 06-10-20 |
| Driller: | A.A. \& J.B. Jr |  |  | Finish date |  | 06-10-20 |
| DEPTH | DESCRIPTION | SAMPLE NO. | HAMMER BLOW ON SAMPLE |  | "N" | REMARK Test Depth <br> (ft) |
| 01 | From 0'-0" to 1'-0" Brown medium sand with rock | S-1 | 4 | 4 | 8 | 0-2 |
| 02 | From 1'-0" to 3'-0" Tan lime sand with some rock |  | 4 | 5 |  |  |
| 03 |  | S-2 | 4 | 3 | 11 | 2-4 |
| 04 | From 3'-0" to 5'-0" Dark brown medium sand |  | 8 | 7 |  | Water Table @ 3'-8" |
| 05 |  | S-3 | 3 | 2 | 4 | 4-6 |
| 06 | From 5'-0" to 10'-0" Dark brown medium sand |  | 2 | 2 |  |  |
| 07 |  | S-4 | 3 | 2 | 6 | 6-8 |
| 08 |  |  | 4 | 4 |  |  |
| 09 |  | S-5 | 5 | 5 | 7 | 8-10 |
| 10 |  |  | 2 | 2 |  |  |
| 11 | From 10'-0" to $18^{\prime}-00^{\prime \prime}$ Brown medium sand | S-6 | 2 | 2 | 4 | 10-12 |
| 12 |  |  | 2 | 2 |  |  |
| 13 |  | S-7 | 1 | 1 | 2 | 12-14 |
| 14 |  |  | 1 | 1 |  |  |
| 15 |  | S-8 | 2 | 2 | 4 | 14-16 |
| 16 |  |  | 2 | 3 |  |  |
| 17 |  | S-9 | 4 | 6 | 17 | 16-18 |
| 18 |  |  | 11 | 10 |  |  |
| 19 | From $18^{\prime}-0^{\prime \prime}$ to $26^{\prime}-0^{\prime \prime}$ Light brown medium sand with coarse sand | S-10 | 9 | 9 | 21 | 18-20 |
| 20 |  |  | 12 | 14 |  |  |
| ${ }^{* * *}$ As further protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reseryed pending our written approval *** |  |  |  |  |  |  |

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.
14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016
TEL : (305) 558-2588 FAX : (305) 362-4669

| TEST BORING REPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Client: | Housing Programs, Inc. |  |  | Order No. |  | 20-0087 |
| Project: | Vacant Lot |  |  | Report No. |  | Br\#2 |
| Site Address | @ 2090 Pierce Street, Hollywood, FL 33020 |  |  | Hole No. |  | Br\#2 |
| Test Location | see site plan |  |  | Start date |  | 06-10-20 |
| Driller: | A.A. \& J.B. Jr |  |  | Finish date |  | 06-10-20 |
| DEPTH | DESCRIPTION | SAMPLE NO. | HAMMER BLOW ON SAMPLE |  | "N" | REMARK Test Depth <br> (ft) |
| 21 |  | S-11 | 15 | 18 | 36 | 20-22 |
| 22 |  |  | 18 | 21 |  |  |
| 23 |  | S-12 | 23 | 24 | 44 | 22-24 |
| 24 |  |  | 20 | 26 |  |  |
| 25 |  | S-13 | 31 | 40 | 82 | 24-26 |
| 26 |  |  | 42 | 50 |  |  |
| 27 | Boring Terminated @ 26'-0" | S - 14 |  |  |  | 26-28 |
| 28 |  |  |  |  |  |  |
| 29 |  |  |  |  |  | 28-30 |
| 30 |  |  |  |  |  |  |
| 31 |  | S-16 |  |  |  | 30-32 |
| 32 |  |  |  |  |  |  |
| 33 |  | S-17 |  |  |  | 32-34 |
| 34 |  |  |  |  |  |  |
| 35 |  | S-18 |  |  |  | 34-36 |
| 36 |  |  |  |  |  |  |
| 37 |  | S-19 |  |  |  | 36-38 |
| 38 |  |  |  |  |  |  |
| 39 |  | S-20 |  |  |  | 38-40 |
| 40 |  |  |  |  |  |  |
| ***As further protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.*** |  |  |  |  |  |  |

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC. 14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016 TEL : (305) 558-2588 FAX : (305) 362-4669

| TEST BORING REPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Client: | Housing Programs, Inc. |  |  | Order No. |  | 20-0087 |
| Project: | Vacant Lot |  |  | Report No. |  | Br\#3 |
| Site Address | @ 2090 Pierce Street, Hollywood, FL 33020 |  |  | Hole No. |  | Br\#3 |
| Test Location | see site plan |  |  | Start date |  | 06-10-20 |
| Driller: | A.A. \& J.B. Jr |  |  | Finish date |  | 06-10-20 |
| DEPTH | DESCRIPTION | SAMPLE NO. | HAMMER <br> BLOW ON SAMPLE |  | "N" | REMARK Test Depth (ft) |
| 01 | From $0^{\prime}-0$ " to 1'-0" Light brown medium sand with some rock | S-1 | 2 | 2 | 4 | 0-2 |
| 02 | From 1'-0" to 4'-0" Dark tan medium sand with some rock |  | 2 | 3 |  |  |
| 03 |  | S-2 | 3 | 5 | 10 | 2-4 |
| 04 |  |  | 5 | 5 |  | Water Table @ 3'-8" |
| 05 | From 4'-0" to 5'-0" Dark tan medium sand | S-3 | 4 | 5 | 7 | 4-6 |
| 06 | From 5'-0" to 10'-0" Dark brown medium sand |  | 2 | 2 |  |  |
| 07 |  | S-4 | 2 | 1 | 3 | 6-8 |
| 08 |  |  | 2 | 3 |  |  |
| 09 |  | S-5 | 3 | 6 | 12 | 8-10 |
| 10 |  |  | 6 | 5 |  |  |
| 11 | From 10'-0" to 21'-0" Brown medium sand | S-6 | 4 | 2 | 3 | 10-12 |
| 12 |  |  | 1 | 1 |  |  |
| 13 |  | S-7 | 1 | 1 | 3 | 12-14 |
| 14 |  |  | 2 | 2 |  |  |
| 15 |  | S-8 | 2 | 2 | 4 | 14-16 |
| 16 |  |  | 2 | 3 |  |  |
| 17 |  | S-9 | 3 | 6 | 16 | 16-18 |
| 18 |  |  | 10 | 10 |  |  |
| 19 |  | S-10 | 12 | 11 | 26 | 18-20 |
| 20 |  |  | 15 | 18 |  |  |
| ${ }^{* * *}$ As further protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval *** |  |  |  |  |  |  |

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.
14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016
TEL : (305) 558-2588 FAX : (305) 362-4669

| TEST BORING REPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Client: | Housing Programs, Inc. |  |  | Order No. |  | 20-0087 |
| Project: | Vacant Lot |  |  | Report No. |  | Br\#3 |
| Site Address | @ 2090 Pierce Street, Hollywood, FL 33020 |  |  | Hole No. |  | Br\#3 |
| Test Location | see site plan |  |  | Start date |  | 06-10-20 |
| Driller: | A.A. \& J.B. Jr |  |  | Finish date |  | 06-10-20 |
| DEPTH | DESCRIPTION | SAMPLE NO. |  |  | "N" | REMARK Test Depth <br> (ft) |
| 21 | From 21 '-0" to $28^{\prime}-0$ " Light brown medium sand | S-11 | 18 | 20 | 45 | 20-22 |
| 22 |  |  | 25 | 20 |  |  |
| 23 |  | S-12 | 24 | 24 | 52 | 22-24 |
| 24 |  |  | 28 | 26 |  |  |
| 25 |  | S-13 | 26 | 29 | 60 | 24-26 |
| 26 |  |  | 31 | 30 |  |  |
| 27 |  | S-14 | 36 | 40 | 82 | 26-28 |
| 28 |  |  | 42 | 45 |  |  |
| 29 | Boring Terminated @ 28'-0' |  |  |  |  |  |
| 30 |  |  |  |  |  | 28-30 |
| 31 |  | S-16 |  |  |  | 30-32 |
| 32 |  |  |  |  |  |  |
| 33 |  | S-17 |  |  |  | 32-34 |
| 34 |  |  |  |  |  |  |
| 35 |  | S-18 |  |  |  | 34-36 |
| 36 |  |  |  |  |  |  |
| 37 |  | S-19 |  |  |  | 36-38 |
| 38 |  |  |  |  |  |  |
| 39 |  | S-20 |  |  |  | 38-40 |
| 40 |  |  |  |  |  |  |
| ***As further protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval. *** |  |  |  |  |  |  |

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.
14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016
TEL : (305) 558-2588 FAX : (305) 362-4669

| TEST BORING REPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Client: | Housing Programs, Inc. |  |  | Order No. |  | 20-0087 |
| Project: | Vacant Lot |  |  | Report No. |  | Br\#4 |
| Site Address | @ 2090 Pierce Street, Hollywood, FL 33020 |  |  | Hole No. |  | Br\#4 |
| Test Location | see site plan |  |  | Start date |  | 06-10-20 |
| Driller: | A.A. \& J.B. Jr |  |  | Finish date |  | 06-10-20 |
| DEPTH | DESCRIPTION | SAMPLE NO. | HAMMER BLOW ON SAMPLE |  | "N" | REMARK Test Depth <br> (ft) |
| 01 | From 0'-0" to 1'-0" Light brown medium sand with some rock | S-1 | 2 | 3 | 6 | 0-2 |
| 02 | From 1'-0" to 4'-0" Dark tan medium sand with rock |  | 3 | 4 |  |  |
| 03 |  | S-2 | 4 | 3 | 7 | 2-4 |
| 04 |  |  | 4 | 4 |  | Water Table @ 3'-3" |
| 05 | From 4'-0" to 6'-0" Dark tan medium sand | S-3 | 2 | 2 | 3 | 4-6 |
| 06 |  |  | 1 | 1 |  |  |
| 07 | From 6'-0" to 11'-0" Dark brown medium sand | S-4 | 1 | 1 | 3 | 6-8 |
| 08 |  |  | 2 | 3 |  |  |
| 09 |  | S-5 | 2 | 3 | 7 | 8-10 |
| 10 |  |  | 4 | 4 |  |  |
| 11 |  | S-6 | 3 | 3 | 6 | 10-12 |
| 12 | From 11'-0" to 20'-0" Brown medium sand |  | 3 | 2 |  |  |
| 13 |  | S-7 | 1 | 1 | 2 | 12-14 |
| 14 |  |  | 1 | 1 |  |  |
| 15 |  | S-8 | 1 | 1 | 2 | 14-16 |
| 16 |  |  | 1 | 1 |  |  |
| 17 |  | S-9 | 5 | 5 | 13 | 16-18 |
| 18 |  |  | 8 | 8 |  |  |
| 19 |  | S-10 | 10 | 11 | 22 | 18-20 |
| 20 |  |  | 11 | 18 |  |  |
| ***As further protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reseryed pending our written approval. *** |  |  |  |  |  |  |

## U.S. SOUTH

ENGINEERING \& TESTING LAB., INC.
14400 NW 77th Court, Suite \#201, Miami-Lakes, FL 33016
TEL : (305) 558-2588 FAX : (305) 362-4669

| TEST BORING REPORT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Client: | Housing Programs, Inc. |  |  | Order No. |  | 20-0087 |
| Project: | Vacant Lot |  |  | Report No. |  | Br\#4 |
| Site Address | @ 2090 Pierce Street, Hollywood, FL 33020 |  |  | Hole No. |  | Br\#4 |
| Test Location | see site plan |  |  | Start date |  | 06-10-20 |
| Driller: | A.A. \& J.B. Jr |  |  | Finish date |  | 06-10-20 |
| DEPTH | DESCRIPTION | SAMPLE NO. |  | $\begin{aligned} & \text { AMER } \\ & \text { W ON } \\ & \text { APLE } \end{aligned}$ | "N" | REMARK Test Depth <br> (ft) |
| 21 | From $20^{\prime}-0^{\prime \prime}$ to $28^{\prime}-0^{\prime \prime}$ Light brown medium sand with trace of rock | S-11 | 18 | 20 | 41 | 20-22 |
| 22 |  |  | 21 | 22 |  |  |
| 23 |  | S-12 | 28 | 30 | 63 | 22-24 |
| 24 |  |  | 33 | 30 |  |  |
| 25 |  | S-13 | 31 | 28 | 63 | 24-26 |
| 26 |  |  | 35 | 31 |  |  |
| 27 |  | S - 14 | 38 | 40 | 82 | 26-28 |
| 28 |  |  | 42 | 48 |  |  |
| 29 | Boring Terminated @ 28'-0" |  |  |  |  |  |
| 30 |  |  |  |  |  | 28-30 |
| 31 |  | S-16 |  |  |  | 30-32 |
| 32 |  |  |  |  |  |  |
| 33 |  | S-17 |  |  |  | 32-34 |
| 34 |  |  |  |  |  |  |
| 35 |  | S-18 |  |  |  | 34-36 |
| 36 |  |  |  |  |  |  |
| 37 |  | S-19 |  |  |  | 36-38 |
| 38 |  |  |  |  |  |  |
| 39 |  | S-20 |  |  |  | 38-40 |
| 40 |  |  |  |  |  |  |
| ${ }^{* \pi *}$ As further protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval *** |  |  |  |  |  |  |

## GENERAL NOTES

## DRILLING \& SAMPLING SYMBOLS:

SS: Split Spoon - $1.3^{3} / \mathrm{B}^{\prime \prime}$ I.D., 2" O.D., unless otherwise noted
ST: Thin-Walled Tube - 2" O.D., unless otherwise noted
RS: Ring Sampler - 2.42"I.D., 3" O.D., unless otherwise noted
DB: Diamond Bit Coring - 4', $^{\prime \prime}$ N, B
BS: Bulk Sample or Auger Sample

HS: Hollow Stem Auger
PA: Power Auger
HA: Hand Auger
RB: Rock Bit
WB: Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) the last 12 inches of the total 18 -inch penetration with a 140 -pound hammer falling 30 inches is considered the "Standard Penetration" or " N -value".

WATER LEVEL MEASUREMENT SYMBOLS:

| WL: | Water Level | WS: | While Sampling | N/E: | Not Encountered |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WCl: | Wet Cave in | WD: | While Drilling | ESH | Estimated Seasonal High Groundwater |
| DCI: | Dry Cave in | BCR: | Before Casing Removal | ESL | Estimated Seasonal Low Groundwater |
| AB: | After Boring | ACR: | After Casing Removal |  |  |

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Classification System. Coarse Grained Soils have more than $50 \%$ of their dry weight retained on a \#200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than $50 \%$ of their dry weight retained on a \#200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

| CONSISTENCY OF FINE-GRAINED SOILS |  |  |  |
| :---: | :---: | :---: | :---: |
| Unconfined | Standard Penetration |  |  |
| Compressive | Stansistency |  |  |
| Strenqth, Qu_psi | $\frac{\text { or N-value (SS) }}{}$ | Cows/Ft. |  |
| $<500$ | $0-1$ |  |  |
| $500-1,000$ | $2-4$ | Very Soft |  |
| $1,001-2,000$ | $4-8$ | Soft |  |
| $2,001-4,000$ | $8-15$ | Medium Stiff |  |
| $4,001-8,000$ | $15-30$ | Stiff |  |
| $8,000+$ | $>30$ | Very Stiff |  |
|  |  | Hard |  |


| RELATIVE PROPORTIONS OF SAND AND GRAVEL |  |
| :---: | :---: |
| Descriptive Term(s) of other | Percent of |
| Constituents | Drv Weight |
| Trace | $<15$ |
| With | $15-29$ |
| Modifier | $>30$ |


| RELATIVE PROPORTIONS OF FINES |  |
| :---: | :---: |
| Descriptive Term(s) of other | Percent of |
| Constituents | Dry Weight |
| Trace | < 5 |
| With | 5-12 |
| Modifiers | > 12 |

RELATIVE DENSITY OF COARSE-GRAINED SOILS

$\frac{\text { Standard Penetration }}{\text { or } N \text {-value }(\mathbf{S S})}$| $\frac{B l o w s / F t}{}$ | Relative Density |
| :---: | :---: |
| $4-3$ |  |
| $4-9$ | Very Loose |
| $10-29$ | Loose |
| $30-49$ | Medium Dense |
| $>50$ | Dense |
|  | Very Dense |


| GRAIN SIZE TERMINOLOGY |  |
| :---: | :---: |
| Major Component | Particle Size |
| of Sample | Particle Size |
| Boulders | Over 12 in ( 300 mm ) |
| Cobbles | 12 in . to 3 in . ( 300 mm to 75 mm ) |
| Gravel | 3 in . to \#4 sieve ( 75 mm to 4.75 mm ) |
| Sand | \#4 to \#200 sieve $(4.75 \mathrm{~mm}$ to 0.075 mm$)$ |
| Sill or Clay | Passing \#200 Sieve $(0.075 \mathrm{~mm})$ |
| PLASTICITY DESCRIPTION |  |
| Term | Plasticity |
| Term | Index |
| Non-plastic | c 0 |
| Low | 1-10 |
| Medium | 11-30 |
| High | > 30 |

Exhibit C-1

## general notes

## Description of Rock Properties

## WEATHERING

| Fresh | Rock fresh, crystals bright, few joints may show slight staining. Rock rings under hammer if crystalline. |
| :---: | :---: |
| Very slight | Rock generally frèsh, joints stained, some joints may show thin clay coatings, crystals in broken face show bright. Rock rings under hammer if crystalline. |
| Slight | Rock generally fresh, joints stained, and discoloration extends into rock up to 1 in. Joints may contain clay. In granitoid rocks some occasional feldspar crystals are dull and discolored. Crystalline rocks ring under hammer. |
| Moderate | Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some show clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock. |
| Moderately severe | All rock except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. |
| Severe | All rock except quariz discolored or stained. Rock "fabric" clear and evident, but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of strong rock usually left. |
| Very severe | All rock except quartz discolored or stained. Rock "fabric" discernible, but mass effectively reduced to "soil" with only fragments of strong rock remaining. |
| Complete | Rock reduced to "soil". Rock "fabric" not discernible or discernible only in small, scattered locations. Quartz may be present as dikes or stringers. |

## HARDNESS (for engineering description of rock - not to be confused with Moh's scale for minerals)

Very hard Cannot be scratched with knife or sharp pick. Breaking of hand specimens requires several hard blows of geologist's pick.
Hard Can be scratched with knife or pick only with difficulty. Hard blow of hammer required to detach hand specimen.
Moderately hard Can be scratched with knife or pick. Gouges or grooves to $\frac{1}{4} \mathrm{in}$. deep can be excavated by hard blow of point of a geologist's pick. Hand specimens can be detached by moderate blow.

Medium Can be grooved or gouged $1 / 16 \mathrm{in}$. deep by firm pressure on knife or pick point. Can be excavated in small chips to pieces about 1-in. maximum size by hard blows of the point of a geologist's pick.

Soft Can be gouged or grooved readily with knife or pick point. Can be excavated in chips to pieces several inches in size by moderate blows of a pick point. Small thin pieces can be broken by finger pressure.
Very soft Can be carved with knife. Can be excavated readily with point of pick. Pieces 1 -in. or more in thickness can be broken with finger pressure. Can be scratched readily by fingernail.

| Joint, Bedding and Follation Spacing in Rock ${ }^{\text {a }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Spacing Less than 2 in. 2 ln . 1 ft . $1 \mathrm{ft} .-3 \mathrm{ft}$. 3 ft .10 ft . More than 10 ft . |  Joints <br>  Very close <br> Close  <br> Moderately close  <br>  Wide <br>  Very wide |  |  | Bedding/Foliatlon <br> Very thin <br> Thin <br> Medium <br> Thick <br> Very thick |
| Rock Quallty Designator (RQD)b |  |  | Jolnt Openness Descriptors |  |
| RQD, as a percentage | Diagnostic description |  | Openness | Descriptor |
| Exceeding 90 | Excellent |  | No Visible Separation | Tight |
| 90-75 |  |  | Less than 1/32 in. | Slightly Open |
| 75-50 | Fair |  | $1 / 32$ to $1 / 8 \mathrm{ln}$. | Moderately Open |
| 50-25 | Poor |  | $1 / 8$ to $3 / 8 \mathrm{in}$. | Open |
| Less than 25 | Very poor |  | $3 / 8 \mathrm{in}$. to 0.1 ft . <br> Greater than 0.1 ft . | Moderately Wide Wide |

a. Spacing refers to the distance normal to the planes, of the described feature, which are parallel to each other or nearly so.
b. RQD (given as a percentage) $=$ length of core in pieces 4 in . and longer/length of run.

References: American Society of Civil Engineers. Manuals and Reports on Engineering Practice - No. 56. Subsurface Investigation for Design and Construction of Foundations of Buildings. New York: American Society of Civil Engineers, 1976.
U.S. Depariment of the Interior, Bureau of Reclamation, Engineering Geology Field Manual.

## UNIFIED SOIL CLASSIFICATION SYSTEM



Exhibit C-3

## Hydrant Flow Test Procedure

## Procedure For One \& Two Flow Hydrant Test:

- Establish hydrants closest to location and associated water main(s).
- Static/Residual hydrant ( $\mathbf{( P )}$ should be located close to location (preferably off same main as to provide future water source).
- Flow hydrant(s) (F) should be located off same main up and down stream from mid-point test (static/residual) hydrant.
- Note static system pressure off $\mathbf{P}$ hydrant before opening any other (note any unusual or remarkable anomalies such as high demand sources, construction, etc.)
- Flow F1 hydrant and record GPM and residual off $\mathbf{P}$ hydrant.
- Flow F2 hydrant and record GPM and residual off $\mathbf{P}$ hydrant.
- Flow F1 \& F2 simultaneously and record GPM separately from F1 and F2 and record $\mathbf{P}$ hydrant residual.

| Legend: | F1 \& F2 | Designation shall represent first and second flowed hydrants respectively <br> Designation shall represent test hydrant for static and residual distribution system pressures. |
| :--- | :--- | :--- |



