



TOWN OF EDSON BYLAW NO. 2202

A BYLAW OF THE TOWN OF EDSON IN THE PROVINCE OF ALBERTA, PURSUANT TO THE PROVISIONS OF THE MUNICIPAL GOVERNMENT ACT, BEING CHAPTER M26 OF THE STATUTES OF ALBERTA 2000 AND AMENDMENTS THERETO, TO ADOPT THE ANDERSON AREA STRUCTURE PLAN

WHEREAS Section 633 of the Municipal Government Act authorizes a Council to adopt an area structure plan to provide a framework for the subdivision and development of land within the municipality;

AND WHEREAS the Council of the Town of Edson requires that such a plan be prepared pursuant to Section 4.1 of the Town of Edson Municipal Development Plan Bylaw No. 2172;

AND WHEREAS the Council of the Town of Edson has properly notified all parties in accordance with Section 636 of the Municipal Government Act;

AND WHEREAS, the Council of the Town of Edson has held a public hearing pursuant to Section 692 of the Municipal Government Act after giving notice of it in accordance with 606 of the Municipal Government Act;

NOW THEREFORE the Municipal Council of the Town of Edson duly assembled, hereby enacts as follows:

PART I – PURPOSE

1. That this Bylaw shall be known as the "The Anderson Area Structure Plan Bylaw" (Part of SE-20-53-17-5) as shown in attached Schedule "A" which is a part of this document.
2. That this Bylaw shall have force and take effect from the final reading. that the Anderson Area Structure Plan Bylaw shall provide the framework for future subdivision and development of the lands described herein.


PART II -GENERAL

3. That this Bylaw shall have force and take effect from the final reading thereof.

READ a first time this 20th day of June A.D. 2017



Mayor Greg Pasychny



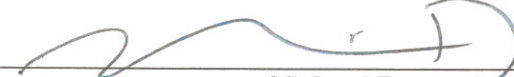
Michael Derricott, CAO

READ a second time this 18th day of July A.D. 2017.

READ a third time and finally passed this 18th day of July A.D. 2017.



Mayor Greg Pasychny



Michael Derricott, CAO

Anderson Area Structure Plan

SE 20-53-17 W5

Town of Edson

JUNE 2017



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1.0 Introduction

1.1 Purpose

The Anderson Area Structure Plan has been prepared with the intention of describing the detailed land use framework for a portion on land within the SE 20-53-17-W5 (See Figure 1) located within the Town of Edson. Through the administration of the Anderson ASP, the developer intends to provide for varying densities of residential consisting of Single Family Residential (R-1C) and Multi-Family Residential (R-2) district as shown in Figure 5.

1.2 Plan Area and Boundaries

The subject area currently consists of undeveloped parcel of lands involving Lots 1 & 2, Block 3 Plan 072 8621, part of Lot 4 Block 3 Plan 3719 ET, as well as part of the Undeveloped Road Plan 872 2170 (8th Avenue), which occupies a total of 6.48 hectares (See Figure 2). The plan area is bound by 63rd Street to the east, estate residential large lot to the north, undeveloped future residential land to the west, and undeveloped future 8th Avenue to the south.

1.3 Plan Preparation Process

The subject area currently is under the jurisdiction of the Town of Edson. The plan must be consistent with the Land Use Bylaw (L.U.B) No. 2070 and the Municipal Development Plan (M.D.P) Bylaw No. 2172. In addition to the compliance with the Town of Edson's M.D.P. and L.U.B, must adhere to the conditions set out under Section 633 of the Municipal Government Act.

2.0 Background

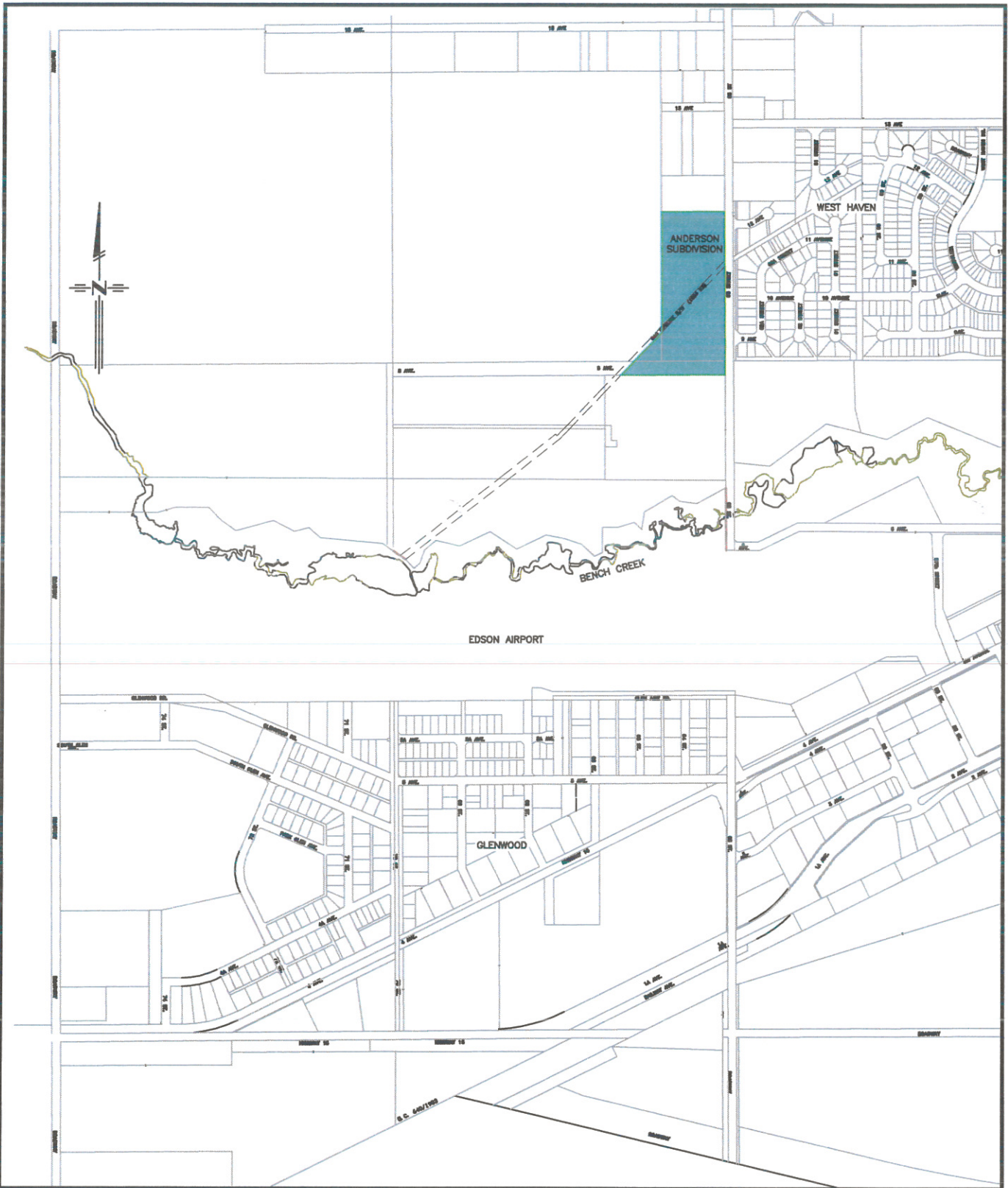
2.1 Land Ownership


The area consists of three separate titled parcels, Lots 1 & 2, Block 3 Plan 072 8621, owned jointly by R.B. Anderson Construction Ltd. and Mint Homes Ltd. along with Part of Lot 4, Block 3, Plan 3719 ET, owned by Marri Properties Ltd., and part of the undeveloped roadway for 8th Avenue owned by the Town of Edson.

TABLE 1: LAND OWNERSHIP

Parcel	Ownership	Area (6.48 ha)
Lot 1 Block 3 Plan 072 8621	R.B. Anderson Construction Ltd. and Mint Homes Ltd.	3.21 ha
Lot 2 Block 3 Plan 072 8621	R.B. Anderson Construction Ltd. and Mint Homes Ltd.	2.26 ha
Pt.Lot 4 Block 3 Plan 3719 ET	Marri Properties Ltd.	0.23 ha
Road Plan 872 2170 (8 th Avenue)	Town of Edson	0.78 ha

Anderson Projects\2016 Contractors\Anderson Subdivision - 63rd Street - 2016 - 161-13969-00\Design and Drafting\01 PROD\asp\FIGURE 1 LOCATION PLAN

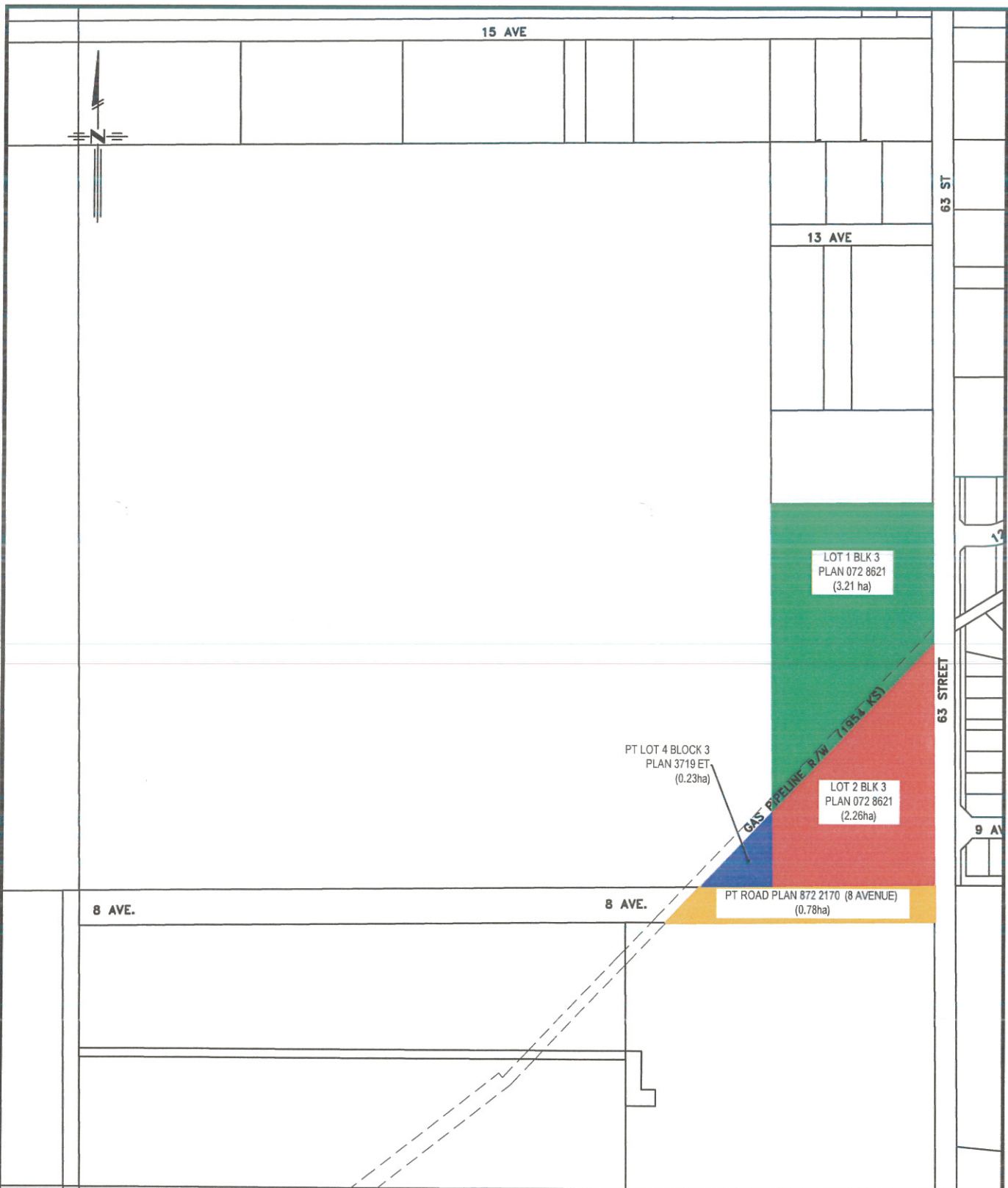



CLIENT: BOB ANDERSON  131-135 27th STREET EDSON, ALBERTA T7E 1N9 TEL: 1 780-712-5000 FAX: 1 780-712-4339 WWW.WSPGROUP.COM	SCALE: N.T.S DESIGNED BY: M.STEFFLER DRAWN BY: J.JOHNSTON CHECKED BY: M.STEFFLER DATE: 2017/02/06 PROJECT NO: 161-13969-00	PROJECT: ANDERSON AREA STRUCTURE PLAN TITLE: LOCATION PLAN DRAWING NO: FIGURE 1	ISSUE: REVIEW 2017/02/06 ISS/REV: 0
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N:\Edson Projects\2016 Contractors\Anderson Subdivision - 63rd Street - 2016 - 161-13969-00\Edson and Drafting\01 PRODL\app\FIGURE 2 LAND OWNERSHIP PLAN



CLIENT: BOB ANDERSON  131-135 27th STREET EDSON, ALBERTA T7E 1N9 TEL: 1 780-712-5000 FAX: 1 780-712-4339 WWW.WSPGROUP.COM	SCALE: N.T.S DESIGNED BY: M.STEFFLER	PROJECT: ANDERSON AREA STRUCTURE PLAN		
	DRAWN BY: J.JOHNSTON CHECKED BY: M.STEFFLER	TITLE: LAND OWNERSHIP PLAN		
DATE: 2017/02/06 PROJECT NO: 161-13969-00	DRAWING NO: FIGURE 2	ISSUE: REVIEW 2017/02/06	ISS/REV: 0	

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2.2 Existing Land Uses

The lands that abuts the plan area to the north are developed as an estate residential large lot. The area east of 63rd Street consists of low density single family residential use. The remaining surrounding lands to the west and south are identified as Urban Reserve according to the Land Use District Map that forms part of LUB.

The study area is mostly undeveloped and has no specified purpose other than future residential. In accordance with the current L.U.B., as illustrated in Figure 3, the north half of the area is designated for R-1C while the remaining south portions designated R-2. Considering the land uses proposed by the Anderson ASP concept plan, a rezoning of these lands is implied.

3.0 Site Analysis

3.1 Existing Conditions

The land generally slopes from north to south at an average grade of 4.1% as illustrated in Figure 4. The area is constrained by a natural gas pipeline right-of-way which runs diagonally through the middle of the area separating Lots 1 and 2.

There are two existing buildings within the plan area on the north portion of the plan area (Lot 1); a single family dwelling and accessory building.

3.2 Vegetation

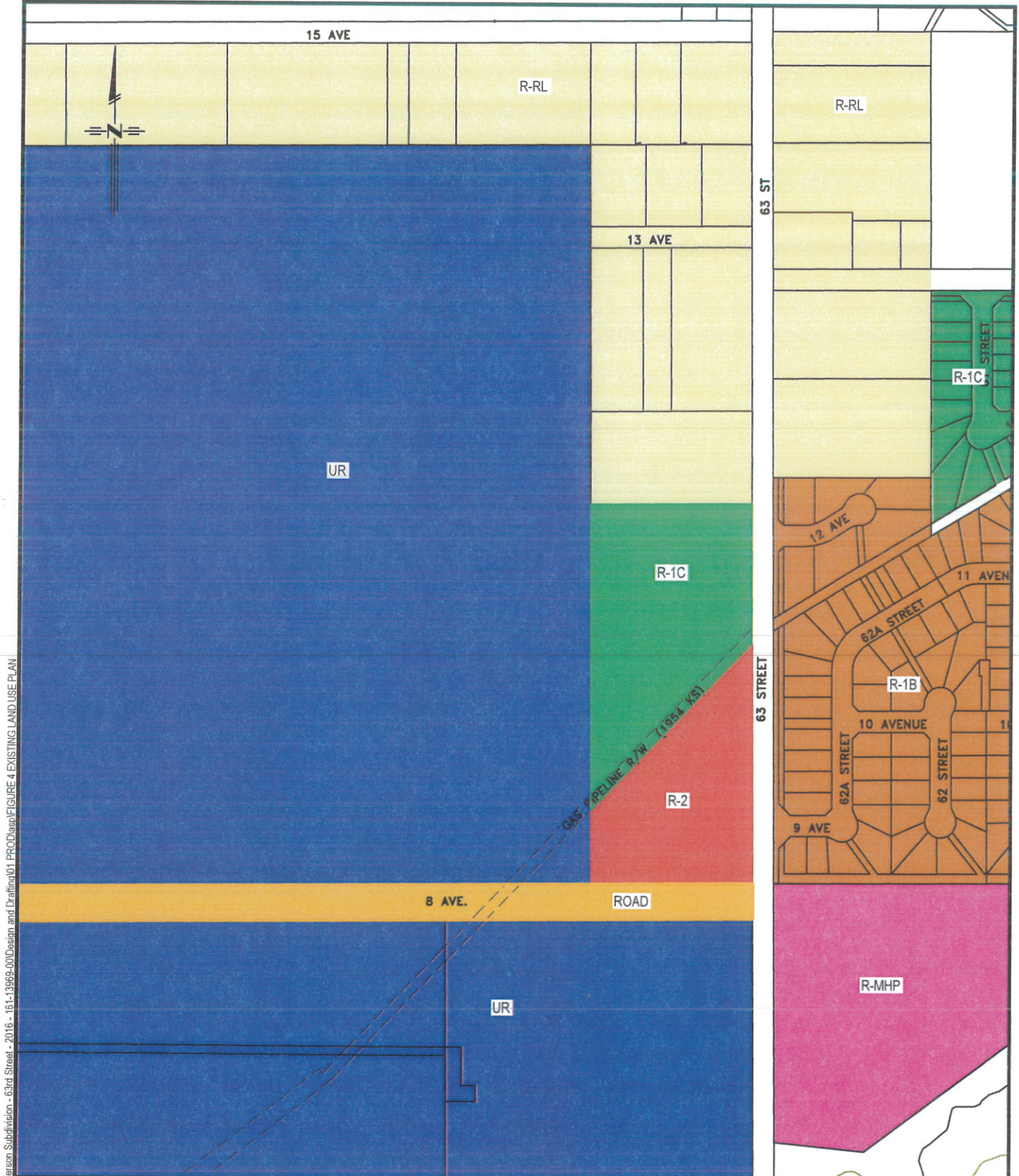
The entire area has been cleared for development. As a result, there little to no natural vegetation located on this parcel.

3.3 Bio-physical Analysis


A bio-physical assessment is for the purpose of characterizing and evaluating soil conditions, local vegetation, and to bring forward any environmental constraints would prohibit development under Federal and Provincial legislation. A site investigation was conducted to determine the texture and depth of topsoil and subsoil. The average topsoil and subsoil depths were determined to be on average 20 millimeters.

A bio-physical assessment concludes that development of the plan area will require compliance with applicable environmental regulations, and that the following regulations and considerations need to be observed:

- Prior to any clearing operations, be aware of the federal *Migratory Birds Convention Act* and *Species at Risk Act* guidelines relating to the removal or modification of habitat. A qualified biologist may be needed to survey the sites needed for clearing to ensure no habitat is damaged or destroyed.

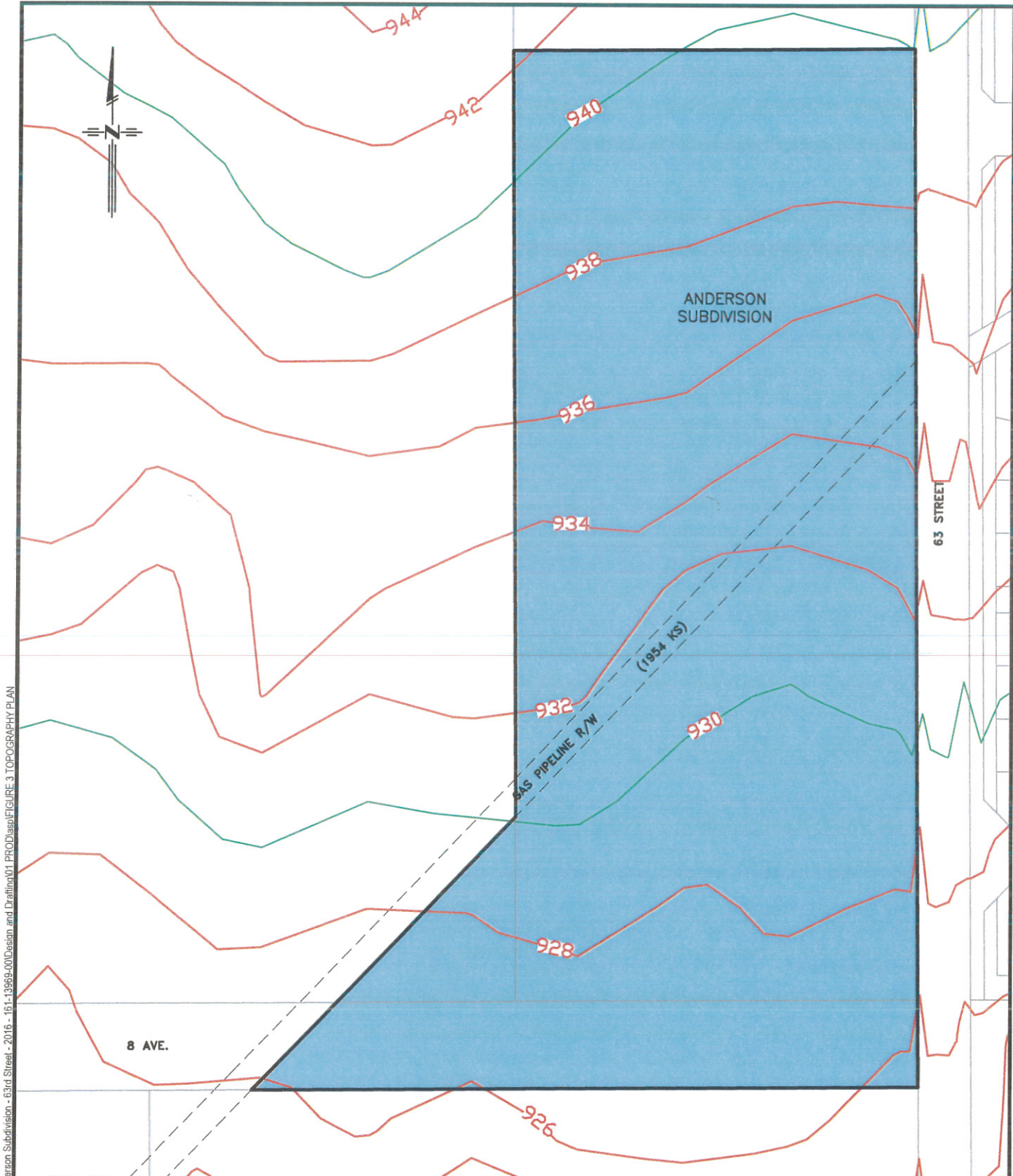


N:\Edson Projects\2016 Contractors\Anderson Subdivision - 63rd Street - 2016 - 16 L-13969-00\Design and Drafting\01_PROD\app\Figure 4 Existing Land Use Plan


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	DRAWN BY: J.JOHNSTON CHECKED BY: M.STEFFLER	TITLE: EXISTING LAND USE PLAN	
DATE: 2017/02/06 PROJECT NO: 161-13969-00	DRAWING NO: FIGURE 3	ISSUE: REVIEW 2017/02/06	ISS/REV: 0

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N:\Edson Projects\2016 Contractors\Anderson Subdivision - 63rd Street - 2016 - 161-13969-00\Edson and Drafting\01 PROD\aspl\FIGURE 3 TOPOGRAPHY PLAN

CLIENT: BOB ANDERSON	SCALE: N.T.S.	PROJECT: ANDERSON AREA STRUCTURE PLAN	
	DESIGNED BY: M.STEFFLER	TITLE: TOPOGRAPHY PLAN	
 131-135 27th STREET EDSON, ALBERTA T7E 1N9 TEL: 1 780-712-5000 FAX: 1 780-712-4339 WWW.WSPGROUP.COM	DRAWN BY: J.JOHNSTON	DRAWING NO: FIGURE 4	
	CHECKED BY: M.STEFFLER	DATE: 2017/02/06	ISSUE: REVIEW 2017/02/06
	PROJECT NO: 161-13969-00	ISS/REV: 0	

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- Pursuant to the *Alberta Historical Resources Act*, should any historical resources be found during construction, all activity must stop and the Province must be notified immediately.
- The *Alberta Water Act* regulates all water bodies in the province, including dugouts and storm water ponds. The development of any storm water ponds will require approval.
- An approval or registration under the *Alberta Environmental Protection and Enhancement Act* will be needed for any storm water systems that will discharge water offsite.

3.4 Geotechnical Investigation

An on-site geotechnical investigation was conducted in April 2017 consisting of 4 test holes. Groundwater seepage was noted 4 x test holes. Subsurface conditions consisted of approximately 20mm of topsoil over the entire site, followed by a consistent brown clay material to a depth of approximately 3m. Laboratory test results concluded that the clay material has a medium to high plasticity index from 12 to 23 percent with an Atterberg Limit ranging from 32 to 40 percent. The site moisture content is generally ranging 3-5 percent higher than optimum. Geotechnical results can be found in Appendix A

Conditions at this site are considered to be good, and suitable for the proposed residential development and internal road network.

4.0 Relevant Policy and Planning Documents

4.1 Municipal Development Plan

The Town of Edson M.D.P. was adopted in January 2016. The M.D.P. sets policies that guide the orderly development of the community by promoting growth that is appropriate, sustainable, and efficient. The MDP identifies the area west of 63rd Street, and north of Bench Creek in the NE 17 and SE 20 53-17-W5 as the "Creekside A.S.P. Area". As part of the Policies set out in Section 4.7.2 of the MDP, the Anderson ASP is to incorporate the following:

- a) A mixture of residential uses should be encouraged that addresses existing and future housing needs including seniors housing, manufactured housing, multi-family, single family, neighborhood commercial and rental units.
- b) The intermittent drainage that flows southward to join Bench Creek, and Bench Creek just north of the Edson Airport and land within 20m of the top of the bank, is considered an important open space, environmental asset and trail linkage. The Town may accept a combination of MR, ER or other designation that ensures public access.
- c) Topographical, geotechnical and soil assessments shall be included.
- d) The Impacts of fragmentation by pipeline right-of-ways to development potential shall be included.
- e) A long term municipal cost/benefit assessment of residential versus non-residential uses shall be included.

- f) A future transportation network including expected roadway cross-sections shall be included.
- g) An assessment of the potential for long term municipal provision of piped servicing shall be included.
- h) An assessment of the potential for land use conflict between residential and non-residential uses should be included.

4.2 Land Use Bylaw

The L.U.B. controls development of lands within the Town of Edson. The lands within the plan area are currently designated as R-1C, R-2 (permitted uses only) and UR.

- Lot 1 is currently designated R-1C and is to provide an area for small parcel residential lots.
- Lot 2 is currently designated as R-2 and is intended for multi-family units limited to duplex housing units only.
- PT Lot 4 is currently designated UR

5.0 Development Concept

5.1 Concept Plan and Land Uses

The adoption of the Anderson ASP implies an acceptance of the L.U.B. The lands in the South portion of the concept plan that is slated as R2 - Low Density Multi-Family (permitted uses only) under the existing L.U.B will remain the same. Similarly, the North portion of the area will remain R1-C Single Family Residential.

The respective land use for the Study Area is illustrated in the Development Concept Plan (Figure 5) in accordance with following table.

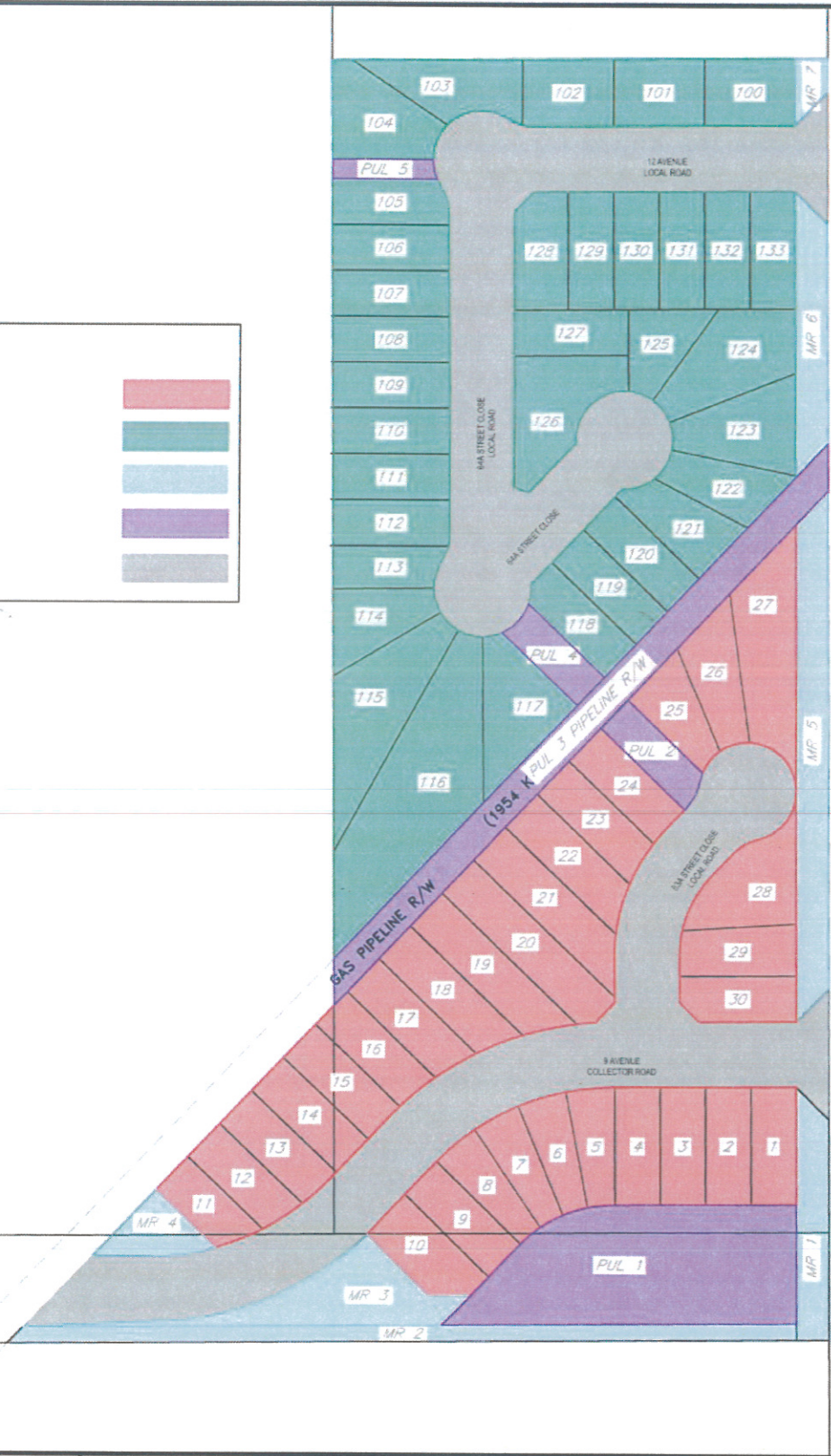
TABLE 2: LAND USE STATISTICS

	Ha	% of GDA
GROSS DEVELOPABLE AREA	6.48	100
Park / Municipal Reserve (MR)	0.59	9.1
Storm Water Management (PUL)	0.33	5.1
Utility ROW (PUL)	0.10	1.5
Pipeline ROW	0.22	3.4
Local Roadway	1.42	21.9
UNDEVELOPABLE AREA AND PUBLIC LANDS	2.66	41.0
R-1C Residential	2.16	33.3
R-2 Low Density Multiple Family Residential	1.66	26.7
NET DEVELOPABLE AREA	3.82	59.0




LEGEND

R-2	
R-1C	
MR	
PUL	
ROAD	



Anderson Projects (2016 Contractors) Anderson Subdivision - 63rd Street - 2016 - 161-13969-00 Design and Drafting 01 PRODUCE FIGURE 5 DEVELOPMENT CONCEPT PLAN

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	DRAWING NO: FIGURE 5	ISSUE: REVIEW 2017/02/06	ISS/REV: 0

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5.2 Constraints

There is an existing natural gas right of way that represents the most significant impediment to the development area. This easement will be re-designated as a Public Utility Lot.

There are no natural constraints impacting development.

5.3 Population Density

The subdivision will be designed based on 18 units per developable hectare with an average of 2.5 persons per occupied unit. Based on a total developable area of 3.82 hectares, this is equivalent to a population base of 172 people.

6.0 Servicing Plan

6.1 Transportation

The concept plan as shown in Figure 6, proposes a network of local roads designed to connect to 63rd Street and limited to the existing intersections at 63rd Street and 9th Avenue and 63rd Street and 12th Avenue. The main east-west local road is an extension of 9th Avenue that will provide a link between 63rd Street future developments west of the plan area. An east-west local road will provide access to the plan area north of the natural gas pipeline right-of-way opposite of 12th Avenue. All dead end roadways will have a secondary emergency access provided.

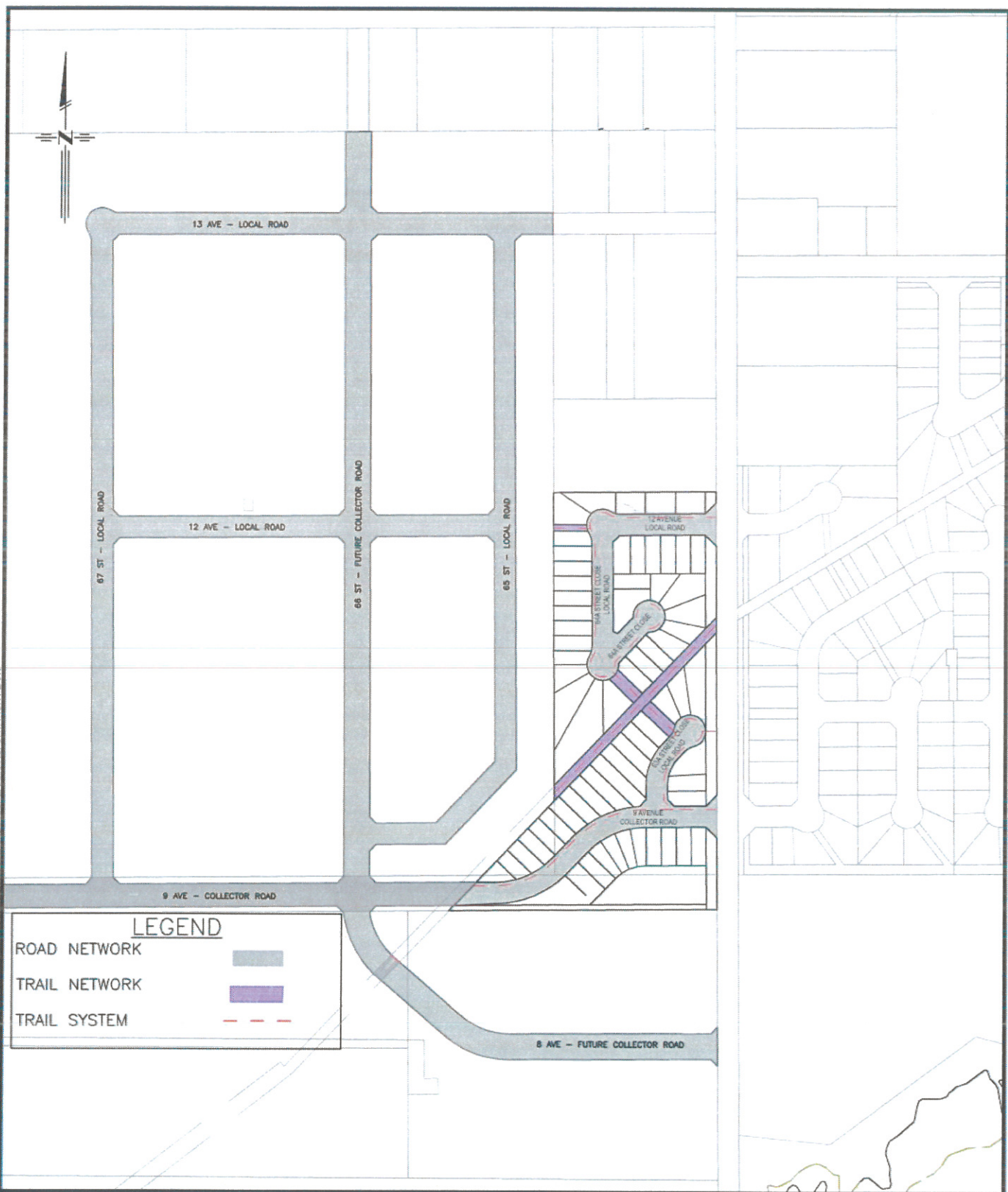
All roads will be paved with concrete curb, gutter and sidewalk, constructed to the Town of Edson standards. Street lighting will be provided throughout the road network within the plan area. Pedestrian corridors will be integrated in the plan area utilizing sidewalks and/or trails within the road network or public utility lots.

6.2 Storm Water Management

As illustrated in Figure 7, storm water management will be implemented through a combination of storm sewer and overland drainage to a proposed storm water detention (dry) pond located within the southeast portion of the development adjacent to 63rd Street. Storm water will be controlled to pre-development runoff rate of 2.8 L/s/ha into the adjacent roadside ditch along 63 Street and outlet into Bench Creek. A 1.5m drainage easement will be implemented along the back of adjoining lane-less lots.


6.3 Sanitary Collection


Every parcel will be required to connect to the sanitary sewer located within the road system utilizing a conventional gravity system that will flow into an existing 200mm sewer main on 63rd Street as shown in Figure 8. The Town of Edson Municipal Servicing Plan Update 2011 identifies that a sanitary trunk main is required through for this study area to service future development.





H:\Edson Projects\2016 Conferral\Anderson Subdivision - 66ra Street - 2016 - 161-13969-00\Design and Drafting\01 PROD\map\FIGURE 6 TRANSPORTATION PLAN

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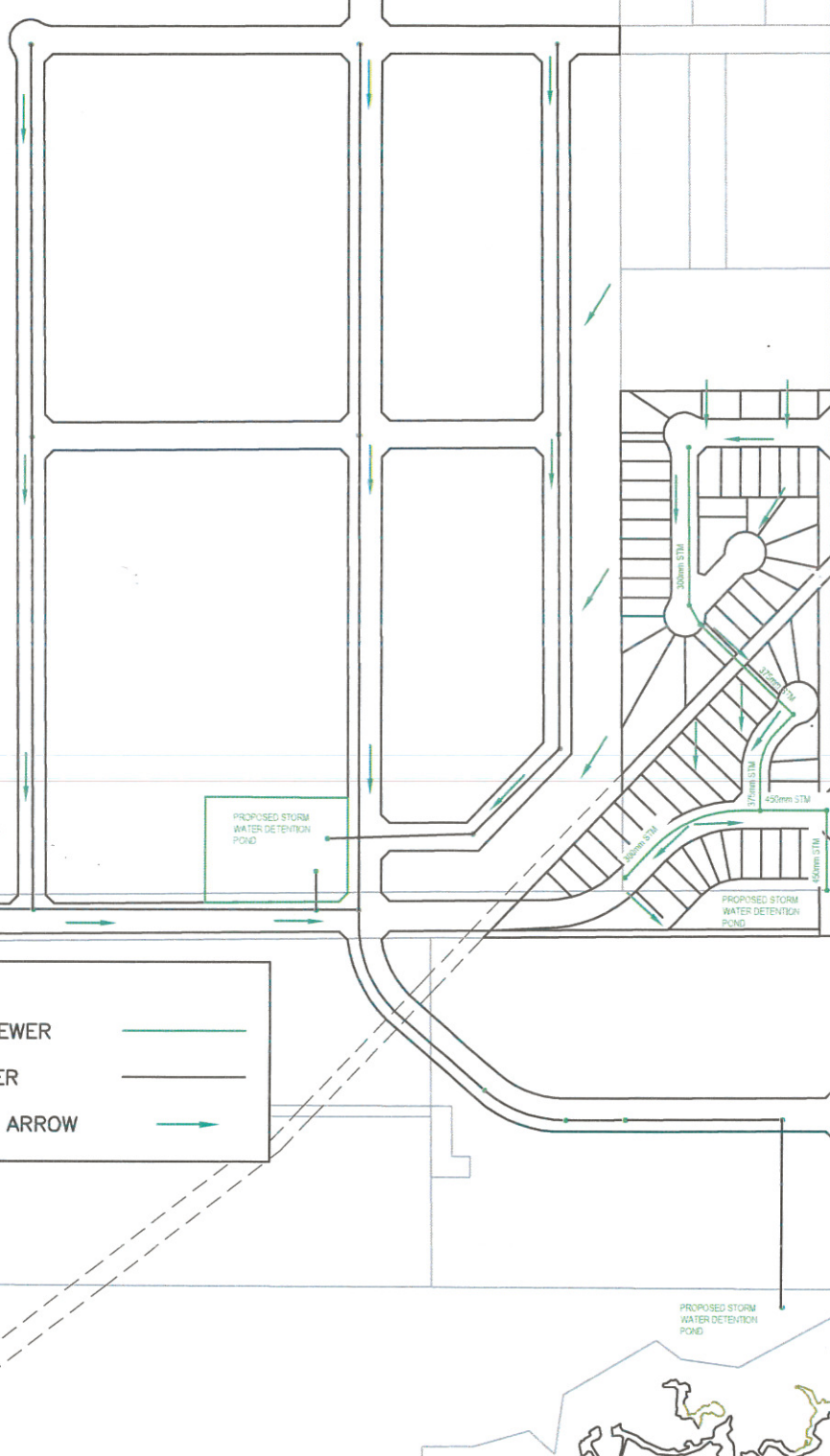
ROAD NETWORK 

TRAIL NETWORK 

TRAIL SYSTEM 

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	DRAWN BY: J.JOHNSTON CHECKED BY: M.STEFFLER	TITLE: TRANSPORTATION PLAN	
DATE: 2017/02/06 PROJECT NO: 161-13969-00	DRAWING NO: FIGURE 6	ISSUE: REVIEW 2017/02/06	ISS/REV: 0

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LEGEND	
PROPOSED STORM SEWER	
FUTURE STORM SEWER	
OVERLAND DRAINAGE ARROW	

N:\Edson Projects\2016 Contractors\Anderson Subdivision - 63rd Street - 2016 - 161-13969-00\Design and Drafting\01 PROD\aspl\FIGURE 7 STORM WATER MANAGEMENT PLAN

CLIENT: BOB ANDERSON 131-135 27th STREET EDSON, ALBERTA T7E 1N9 TEL: 1 780-712-5000 FAX: 1 780-712-4339 WWW.WSPGROUP.COM	SCALE: N.T.S	PROJECT: ANDERSON AREA STRUCTURE PLAN	
	DESIGNED BY: M.STEFFLER	TITLE: STORM WATER MANAGEMENT PLAN	
 131-135 27th STREET EDSON, ALBERTA T7E 1N9 TEL: 1 780-712-5000 FAX: 1 780-712-4339 WWW.WSPGROUP.COM	DRAWN BY: J.JOHNSTON	DRAWING NO: FIGURE 7	
	CHECKED BY: M.STEFFLER	ISSUE: REVIEW 2017/02/06	
	DATE: 2017/02/06	ISS/REV: 0	
PROJECT NO: 161-13969-00			

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15 AVE

13 AVE

63 ST

12 AVE

62A STREET

10 AVENUE

62A STREET

9 AVE

8 AVE.

63 STREET

LEGEND

- PROPOSED SANITARY SEWER —
- EXISTING SANITARY SEWER —
- FUTURE SANITARY SEWER —

CLIENT:

BOB ANDERSON



131-135 27th STREET
EDSON, ALBERTA T7E 1N9
TEL: 1 780-712-5000 | FAX: 1 780-712-4339 | WWW.WSPGROUP.COM

SCALE: N.T.S

DESIGNED BY: M.STEFFLER

DRAWN BY: J.JOHNSTON

CHECKED BY: M.STEFFLER

DATE: 2017/02/06

PROJECT NO: 161-13969-00

PROJECT:

ANDERSON AREA STRUCTURE PLAN

TITLE:

SANITARY SYSTEM PLAN

DRAWING NO:

FIGURE 8

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6.4 Water Distribution

The Town of Edson's water distribution system can provide marginal pressures throughout the plan area from the existing 350mm water main on 63rd Street. The Town of Edson Municipal Servicing Plan Update 2011 identifies that a combination of 350mm diameter water main and 300mm diameter water main are required by this development to provide future servicing. All parcels will be serviced with municipal water through connection located within the road network or public utility lots as illustrated in Figure 9.

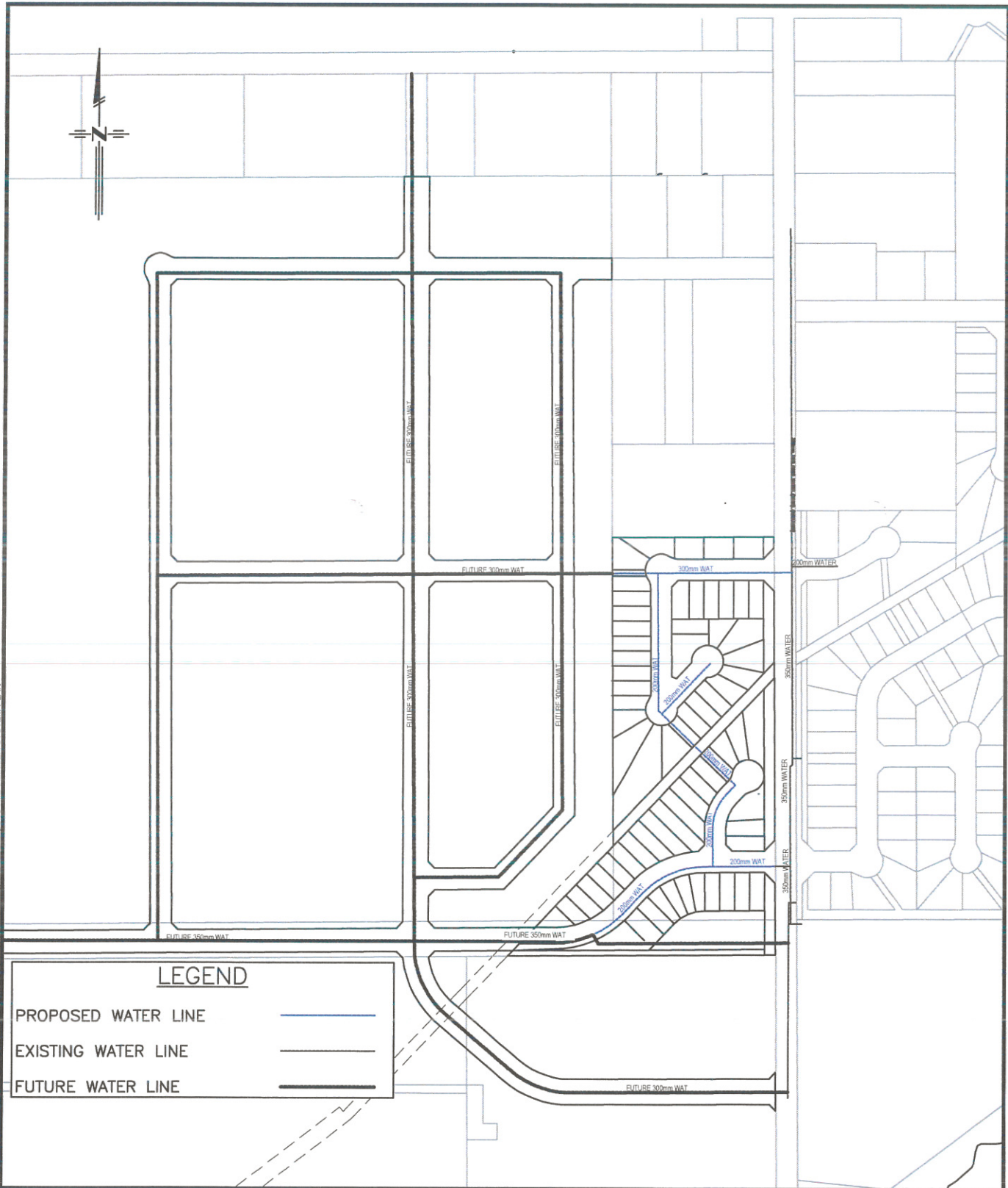
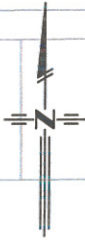
6.5 Franchise Utilities

Franchise utility easements and right of ways will be provided for within the study area. A 3.0 m Utility Right of Way Plan will be provided along all frontage parcels.

7.0 Phasing and Implementation

7.1 Phasing

The plan area will be developed in two phases in accordance with Figure 10. Development is scheduled to commence on the residential lands south of the natural gas pipeline. The general pattern and direction of development is from south to north, with all area south of the pipeline consisting of Phase 1 while the area north of the pipeline will consist of Phase 2.



LEGEND

- PROPOSED WATER LINE
- EXISTING WATER LINE
- FUTURE WATER LINE

WSP Group Inc. 2016 Anderson Subdivision - 63rd Street - 2016 - 161-13969-00 Design and Drafting 01 PROD.dwg | FIGURE 9 WATER SYSTEM PLAN

CLIENT: <p style="text-align: center;">BOB ANDERSON</p> <p style="text-align: center; font-size: small;">131-135 27th STREET EDSON, ALBERTA T7E 1N9 TEL: 1 780-712-5000 FAX: 1 780-712-4339 WWW.WSPGROUP.COM</p>	SCALE: N.T.S. DESIGNED BY: M. STEFFLER DRAWN BY: J. JOHNSTON CHECKED BY: M. STEFFLER DATE: 2017/02/06 PROJECT NO: 161-13969-00	PROJECT: <p style="text-align: center;">ANDERSON AREA STRUCTURE PLAN</p> TITLE: <p style="text-align: center;">WATER SYSTEM PLAN</p> DRAWING NO: FIGURE 9 ISSUE: REVIEW 2017/02/06 ISS/REV: 0
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PHASE 2
(3.21 ha)


PHASE 1
(3.27ha)

GAS PIPELINE R/W
(195.4 KS)

63 STREET

8 AVE.

N:\Edison Projects\2016 Contractors\Anderson Subdivision - 63rd Street - 2016 - 161-13969-00\Design and Drafting\01 PROD\app\FIGURE 10

CLIENT: BOB ANDERSON	SCALE: N.T.S	PROJECT: ANDERSON AREA STRUCTURE PLAN	
	DESIGNED BY: M.STEFFLER	TITLE: DEVELOPMENT PHASE PLAN	
 131-135 27th STREET EDSON, ALBERTA T7E 1N9 TEL: 1 780-712-5000 FAX: 1 780-712-4339 WWW.WSPGROUP.COM	DRAWN BY: J.JOHNSTON	DRAWING NO: FIGURE 10	
	CHECKED BY: M.STEFFLER	ISSUE: REVIEW	ISS/REV: 0
	DATE: 2017/02/06	2017/02/06	
PROJECT NO: 161-13969-00			

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Appendix A – Geotechnical Test Results

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ANDERSON SUBDIVSDION
TESTHOLE LOCATION PLAN

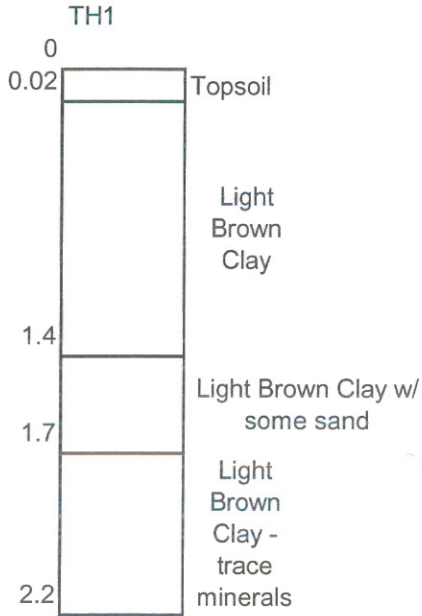


TH#1 Lat: 58.58511 Long: -116.46019
TH#2 Lat: 53.58577 Long: -116.45876
TH#3 Lat: 53.58606 Long: -116.46052
TH#4 Lat: 53.58672 Long: -116.45972

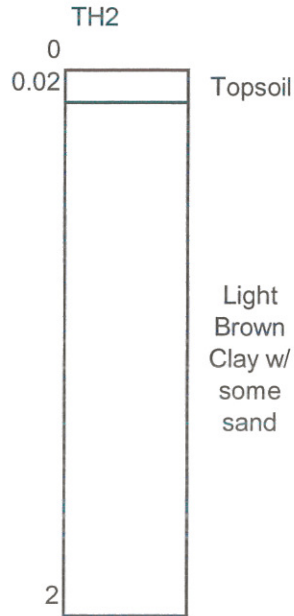
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Anderson Subdivision

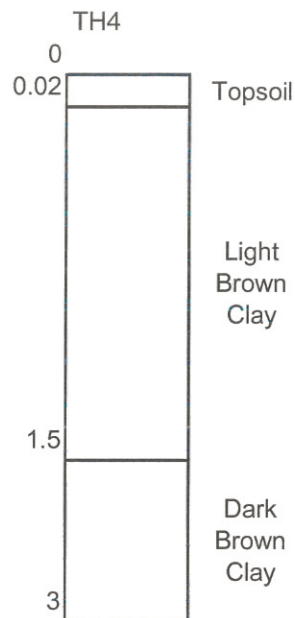
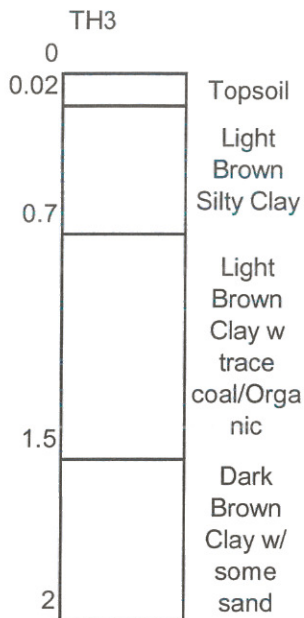
Field Soils Logs



Water Table @ approximatly 1.0m



Water Table @ approximatly 1.5m



Anderson Subdivision

Bore Hole#	1	1	1	2	2	3	3	3
Bore Sample #	1	2	3	1	2	1	2	3
Class	CH	CI	MH	CI	CI	MH	CI	CI
Fld. Mois.	30.7	25.1	42.7	24.5	21.1	41.2	19.3	19.4
Opt. Mois.	27.3	17.5	29.8	20.1	16.7	29.2	20.1	17.6
Max Dry Dens.	1495	1745	1420	1650	1740	1445	1645	1720
Liquid Limit	50.0	34.2	55.0	38.7	33.3	62.6	38.7	40.5
Plastic Limit	27.3	17.5	29.8	20.1	16.7	29.2	20.1	17.6
Bore Hole#	4	4						
Bore Sample #	1	2						
Class	CI	CL						
Fld. Mois.	22.9	18.7						
Opt. Mois.	18.2	15.7						
Max Dry Dens.	1705	1775						
Liquid Limit	31.6	28.0						
Plastic Limit	18.2	15.7						
Bore Hole#								
Bore Sample #								
Class								
Fld. Mois.								
Opt. Mois.								
Max Dry Dens.								
Liquid Limit								
Plastic Limit								
Bore Hole#								
Bore Sample #								
Class								
Fld. Mois.								
Opt. Mois.								
Max Dry Dens.								
Liquid Limit								
Plastic Limit								
Bore Hole#								
Bore Sample #								
Class								
Fld. Mois.								
Opt. Mois.								
Max Dry Dens.								
Liquid Limit								
Plastic Limit								

Tested By: Mike Armstrong

Checked By:

Date: May 13, 2017



ATTERBERG LIMITS DATA SHEET

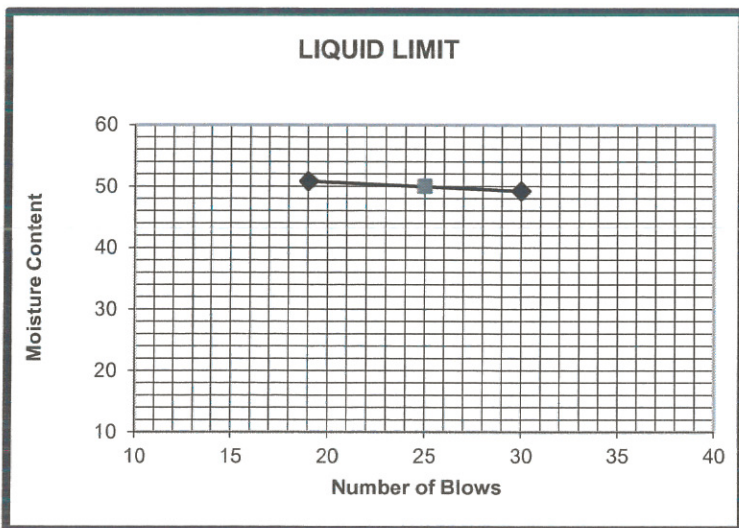
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH1-1
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 1-May

PLASTIC LIMITS (ASTM Designation: D424)

PAN NUMBER	PLASTIC LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	31.8				
B. WT. OF DRY SAMPLE + PAN g	26.8				
C. WT. OF WATER (A-B) g	5.0				
D. WT. OF PAN g	8.5				
E. WT. OF DRY SAMPLE (B-D) g	18.3				
F. MOISTURE CONTENT (100C/E) g	27.3				

LIQUID LIMITS (ASTM Designation: D423)

PAN NUMBER	LIQUID LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	35.9	36.5			
B. WT. OF DRY SAMPLE + PAN g	26.8	27.1			
C. WT. OF WATER (A-B) g	9.1	9.4			
D. WT. OF PAN g	8.3	8.6			
E. WT. OF DRY SAMPLE (B-D) g	18.5	18.5			
F. MOISTURE CONTENT (100C/E) g	49.2	50.8			
G. NUMBER OF BLOWS	30	19			



PLASTIC LIMIT (PL) =	27.3
LIQUID LIMIT (LL) =	50.0
PLASTICITY INDEX (PI) =	22.7

NOTES:

MAX DRY DENSITY: 1495
 SOILS CLASSIFICATION: CH

Materials Technologist: _____



ATTERBERG LIMITS DATA SHEET

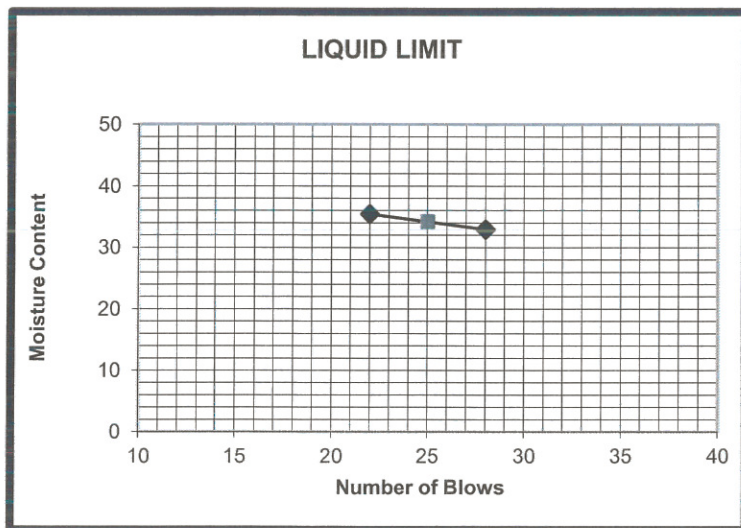
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH1-2
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 1-May

PLASTIC LIMITS (ASTM Designation: D424)

	PLASTIC LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	43.8				
B. WT. OF DRY SAMPLE + PAN g	38.5				
C. WT. OF WATER (A-B) g	5.3				
D. WT. OF PAN g	8.2				
E. WT. OF DRY SAMPLE (B-D) g	30.3				
F. MOISTURE CONTENT (100C/E) g	17.5				

LIQUID LIMITS (ASTM Designation: D423)

	LIQUID LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	44.2	35.1			
B. WT. OF DRY SAMPLE + PAN g	35.3	27.9			
C. WT. OF WATER (A-B) g	8.9	7.2			
D. WT. OF PAN g	8.3	7.6			
E. WT. OF DRY SAMPLE (B-D) g	27.0	20.3			
F. MOISTURE CONTENT (100C/E) g	33.0	35.5			
G. NUMBER OF BLOWS	28	22			



PLASTIC LIMIT (PL) =	17.5
LIQUID LIMIT (LL) =	34.2
PLASTICITY INDEX (PI) =	16.7

NOTES:

MAX DRY DENSITY: 1745
 SOILS CLASSIFICATION: CI

25 34.2

Materials Technologist: _____



ATTERBERG LIMITS DATA SHEET

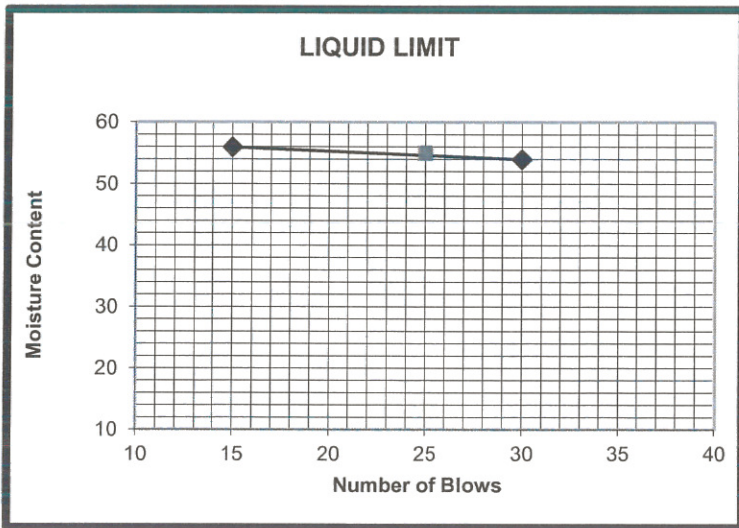
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH1-3
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 1-May

PLASTIC LIMITS (ASTM Designation: D424)

PAN NUMBER	PLASTIC LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	27.8				
B. WT. OF DRY SAMPLE + PAN g	23.3				
C. WT. OF WATER (A-B) g	4.5				
D. WT. OF PAN g	8.2				
E. WT. OF DRY SAMPLE (B-D) g	15.1				
F. MOISTURE CONTENT (100C/E) g	29.8				

LIQUID LIMITS (ASTM Designation: D423)

PAN NUMBER	LIQUID LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	45.7	43.7			
B. WT. OF DRY SAMPLE + PAN g	32.6	31.6			
C. WT. OF WATER (A-B) g	13.1	12.1			
D. WT. OF PAN g	9.2	9.2			
E. WT. OF DRY SAMPLE (B-D) g	23.4	22.4			
F. MOISTURE CONTENT (100C/E) g	56.0	54.0			
G. NUMBER OF BLOWS	15	30			



PLASTIC LIMIT (PL) =	29.8
LIQUID LIMIT (LL) =	55.0
PLASTICITY INDEX (PI) =	25.2

NOTES:

MAX DRY DENSITY: 1420
 SOILS CLASSIFICATION: MH

Materials Technologist: _____



ATTERBERG LIMITS DATA SHEET

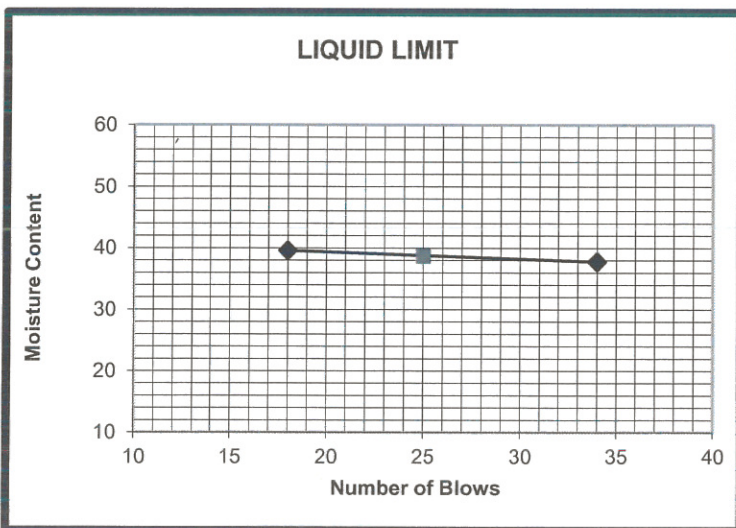
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH2-1
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 6-May

PLASTIC LIMITS (ASTM Designation: D424)

	PLASTIC LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	41.2				
B. WT. OF DRY SAMPLE + PAN g	35.7				
C. WT. OF WATER (A-B) g	5.5				
D. WT. OF PAN g	8.4				
E. WT. OF DRY SAMPLE (B-D) g	27.3				
F. MOISTURE CONTENT (100C/E) g	20.1				

LIQUID LIMITS (ASTM Designation: D423)

	LIQUID LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	44.9	38.3			
B. WT. OF DRY SAMPLE + PAN g	34.6	30.1			
C. WT. OF WATER (A-B) g	10.3	8.2			
D. WT. OF PAN g	8.6	8.4			
E. WT. OF DRY SAMPLE (B-D) g	26.0	21.7			
F. MOISTURE CONTENT (100C/E) g	39.6	37.8			
G. NUMBER OF BLOWS	18	34			



25 38.7

PLASTIC LIMIT (PL) =	20.1
LIQUID LIMIT (LL) =	38.7
PLASTICITY INDEX (PI) =	18.6

NOTES:

MAX DRY DENSITY: 1650
 SOILS CLASSIFICATION: CI

Materials Technologist: _____



ATTERBERG LIMITS DATA SHEET

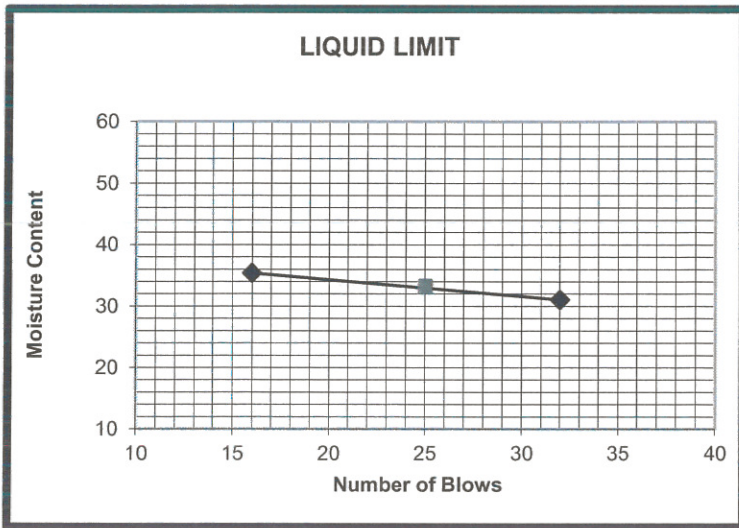
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH2-2
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 6-May

PLASTIC LIMITS (ASTM Designation: D424)

PAN NUMBER	PLASTIC LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	37.1				
B. WT. OF DRY SAMPLE + PAN g	33.0				
C. WT. OF WATER (A-B) g	4.1				
D. WT. OF PAN g	8.4				
E. WT. OF DRY SAMPLE (B-D) g	24.6				
F. MOISTURE CONTENT (100C/E) g	16.7				

LIQUID LIMITS (ASTM Designation: D423)

PAN NUMBER	LIQUID LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	26.8	38.6			
B. WT. OF DRY SAMPLE + PAN g	22.4	30.7			
C. WT. OF WATER (A-B) g	4.4	7.9			
D. WT. OF PAN g	8.3	8.4			
E. WT. OF DRY SAMPLE (B-D) g	14.1	22.3			
F. MOISTURE CONTENT (100C/E) g	31.1	35.4			
G. NUMBER OF BLOWS	32	16			



PLASTIC LIMIT (PL) =	16.7
LIQUID LIMIT (LL) =	33.3
PLASTICITY INDEX (PI) =	16.6

NOTES:

MAX DRY DENSITY: 1740
 SOILS CLASSIFICATION: CI

Materials Technologist: _____

MDP



ATTERBERG LIMITS DATA SHEET

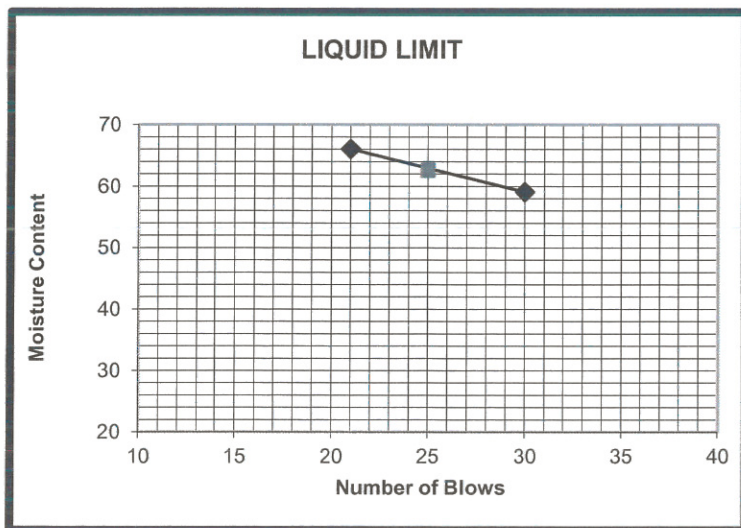
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH3-1
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 6-May

PLASTIC LIMITS (ASTM Designation: D424)

	PLASTIC LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	33.0				
B. WT. OF DRY SAMPLE + PAN g	27.4				
C. WT. OF WATER (A-B) g	5.6				
D. WT. OF PAN g	8.2				
E. WT. OF DRY SAMPLE (B-D) g	19.2				
F. MOISTURE CONTENT (100C/E) g	29.2				

LIQUID LIMITS (ASTM Designation: D423)

	LIQUID LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	36.9	40.8			
B. WT. OF DRY SAMPLE + PAN g	25.6	28.8			
C. WT. OF WATER (A-B) g	11.3	12.0			
D. WT. OF PAN g	8.5	8.5			
E. WT. OF DRY SAMPLE (B-D) g	17.1	20.3			
F. MOISTURE CONTENT (100C/E) g	66.1	59.1			
G. NUMBER OF BLOWS	21	30			



25 62.6

PLASTIC LIMIT (PL) =	29.2
LIQUID LIMIT (LL) =	62.6
PLASTICITY INDEX (PI) =	33.4

NOTES:

MAX DRY DENSITY: 1445
 SOILS CLASSIFICATION: MH

Materials Technologist: _____



ATTERBERG LIMITS DATA SHEET

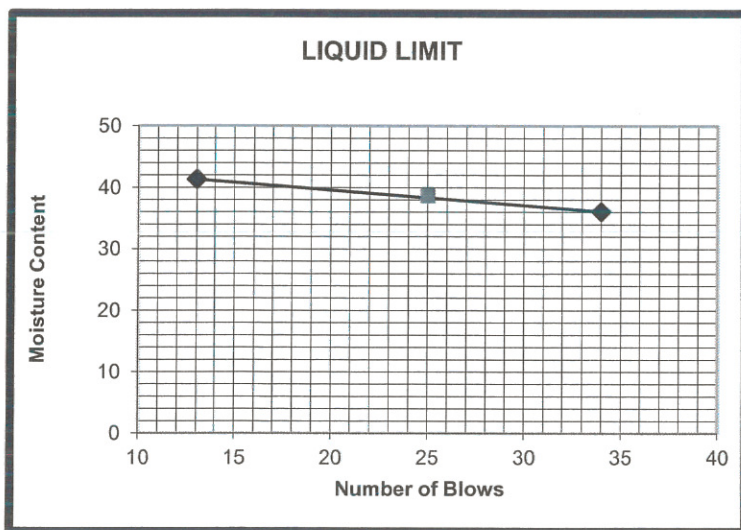
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 CLIENT Bob Anderson SAMPLE NO. TH3-2
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 6-May

PLASTIC LIMITS (ASTM Designation: D424)

	PLASTIC LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	75.2				
B. WT. OF DRY SAMPLE + PAN g	64.0				
C. WT. OF WATER (A-B) g	11.2				
D. WT. OF PAN g	8.4				
E. WT. OF DRY SAMPLE (B-D) g	55.6				
F. MOISTURE CONTENT (100C/E) g	20.1				

LIQUID LIMITS (ASTM Designation: D423)

	LIQUID LIMIT				
	1	2	3	4	5
PAN NUMBER					
A. WT. OF WET SAMPLE + PAN g	41.4	40.0			
B. WT. OF DRY SAMPLE + PAN g	31.8	31.7			
C. WT. OF WATER (A-B) g	9.6	8.3			
D. WT. OF PAN g	8.6	8.7			
E. WT. OF DRY SAMPLE (B-D) g	23.2	23.0			
F. MOISTURE CONTENT (100C/E) g	41.4	36.1			
G. NUMBER OF BLOWS	13	34			



PLASTIC LIMIT (PL) =	20.1
LIQUID LIMIT (LL) =	38.7
PLASTICITY INDEX (PI) =	18.6

NOTES:

MAX DRY DENSITY: 1645
 SOILS CLASSIFICATION: CI

Materials Technologist: _____

MD



ATTERBERG LIMITS DATA SHEET

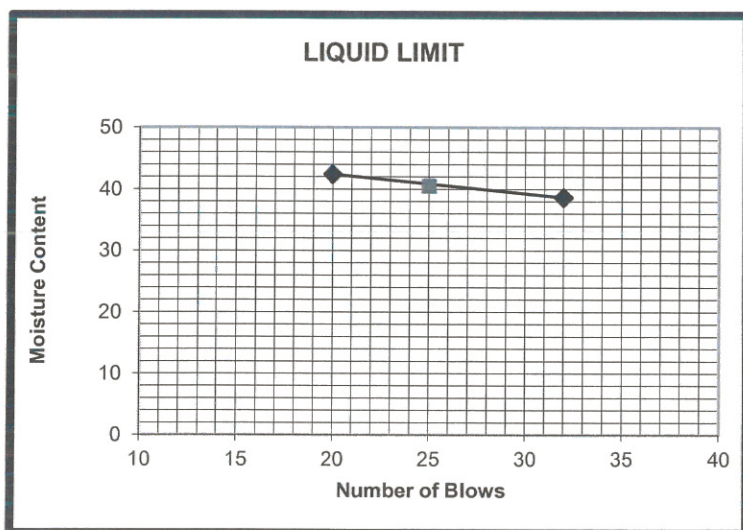
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH3-3
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 6-May

PLASTIC LIMITS (ASTM Designation: D424)

PAN NUMBER	PLASTIC LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	42.3				
B. WT. OF DRY SAMPLE + PAN g	37.2				
C. WT. OF WATER (A-B) g	5.1				
D. WT. OF PAN g	8.3				
E. WT. OF DRY SAMPLE (B-D) g	28.9				
F. MOISTURE CONTENT (100C/E) g	17.6				

LIQUID LIMITS (ASTM Designation: D423)

PAN NUMBER	LIQUID LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	49.2	49.7			
B. WT. OF DRY SAMPLE + PAN g	37.8	37.7			
C. WT. OF WATER (A-B) g	11.4	12.0			
D. WT. OF PAN g	8.3	9.4			
E. WT. OF DRY SAMPLE (B-D) g	29.5	28.3			
F. MOISTURE CONTENT (100C/E) g	38.6	42.4			
G. NUMBER OF BLOWS	32	20			



PLASTIC LIMIT (PL) =	17.6
LIQUID LIMIT (LL) =	40.5
PLASTICITY INDEX (PI) =	22.9

NOTES:

MAX DRY DENSITY: 1720
 SOILS CLASSIFICATION: CI

Materials Technologist: _____



ATTERBERG LIMITS DATA SHEET

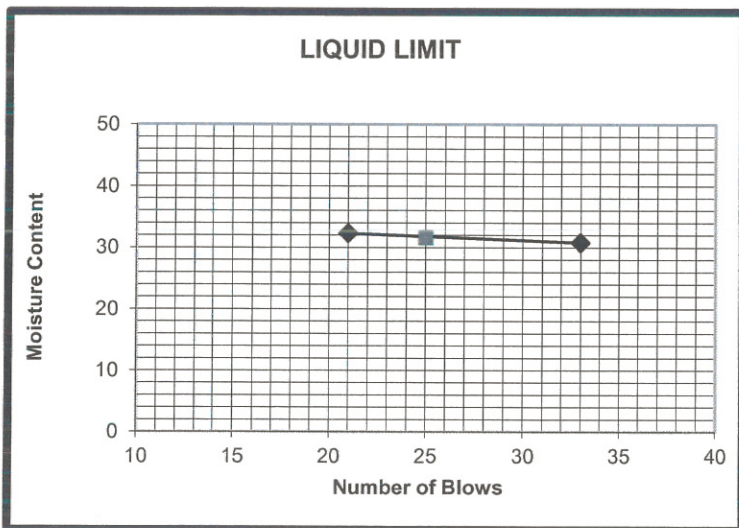
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH4-1
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 6-May

PLASTIC LIMITS (ASTM Designation: D424)

PAN NUMBER	PLASTIC LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	52.1				
B. WT. OF DRY SAMPLE + PAN g	45.4				
C. WT. OF WATER (A-B) g	6.7				
D. WT. OF PAN g	8.5				
E. WT. OF DRY SAMPLE (B-D) g	36.9				
F. MOISTURE CONTENT (100C/E) g	18.2				

LIQUID LIMITS (ASTM Designation: D423)

PAN NUMBER	LIQUID LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	49.5	45.2			
B. WT. OF DRY SAMPLE + PAN g	39.4	36.1			
C. WT. OF WATER (A-B) g	10.1	8.5			
D. WT. OF PAN g	8.2	8.5			
E. WT. OF DRY SAMPLE (B-D) g	31.2	27.6			
F. MOISTURE CONTENT (100C/E) g	32.4	30.8			
G. NUMBER OF BLOWS	21	33			



25 31.6

PLASTIC LIMIT (PL) =	18.2
LIQUID LIMIT (LL) =	31.6
PLASTICITY INDEX (PI) =	13.4

NOTES:

MAX DRY DENSITY: 1705
 SOILS CLASSIFICATION: CI

Materials Technologist: _____

MD



ATTERBERG LIMITS DATA SHEET

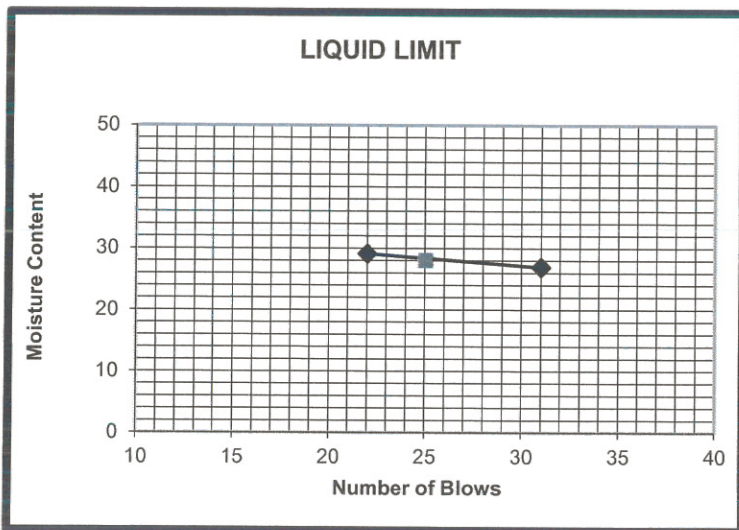
PROJECT Anderson Subdivision PROJECT NO. 161-13969-00
 CLIENT Bob Anderson SAMPLE NO. TH4-1
 LOCATION 63rd St. Subdivision
 DATE SAMPLED / TESTED: 6-May

PLASTIC LIMITS (ASTM Designation: D424)

PAN NUMBER	PLASTIC LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	42.1				
B. WT. OF DRY SAMPLE + PAN g	37.5				
C. WT. OF WATER (A-B) g	4.6				
D. WT. OF PAN g	8.2				
E. WT. OF DRY SAMPLE (B-D) g	29.3				
F. MOISTURE CONTENT (100C/E) g	15.7				

LIQUID LIMITS (ASTM Designation: D423)

PAN NUMBER	LIQUID LIMIT				
	1	2	3	4	5
A. WT. OF WET SAMPLE + PAN g	45.1	48.2			
B. WT. OF DRY SAMPLE + PAN g	37.3	37.4			
C. WT. OF WATER (A-B) g	7.8	8.5			
D. WT. OF PAN g	8.3	8.2			
E. WT. OF DRY SAMPLE (B-D) g	29.0	29.2			
F. MOISTURE CONTENT (100C/E) g	26.9	29.1			
G. NUMBER OF BLOWS	31	22			



25 28.0

PLASTIC LIMIT (PL) =	15.7
LIQUID LIMIT (LL) =	28.0
PLASTICITY INDEX (PI) =	12.3

NOTES:

MAX DRY DENSITY: 1775
 SOILS CLASSIFICATION: CL

Materials Technologist: _____