




**DATE:** March 4, 2025  
**TO:** Mandy Cole, Chair Planning Commission  
**BY:** David Peterson, Planner II   
**THROUGH:** Jill Lawhorne, Director, AICP

**PROPOSAL:** Preliminary Plan approval for the Ravenwood/Brow Tine Subdivision, an Alternative Residential Subdivision creating 42 Unit Lots with common-wall dwellings and one (1) parent-lot.

**STAFF RECOMMENDATION:** Approval with conditions

**KEY CONSIDERATIONS FOR REVIEW:**

- 42 unit lots will have 42 common wall dwellings.
- Proposed configuration is at ~55% of maximum density.
- Final Plan application will require homeowners' association documents.
- Driveway access will need to be re-constructed to a commercial grade approach meeting ADA standard.
- No density bonuses are being requested.
- A private street will be provided within the ARS.

GENERAL INFORMATION	
Property Owner	R&S Construction LLC; Misty Sea Charters & Lodging
Applicant	R&S Construction LLC
Property Address	4670 Glacier Hwy
Legal Description	RAVENWOOD LT 1
Parcel Number	7B1001150063
Zoning	D15
Lot Size	5.1 acres, 221,678 square feet
Water/Sewer	CBJ Water/Sewer provided
Access	Glacier Highway (Collector)
Existing Land Use	Single Residence
Associated Applications	N/A

**ALTERNATIVE ACTIONS:**

1. **Amend:** require additional conditions, or delete or modify the recommended conditions.
2. **Deny:** deny the permit and adopt new findings for items 1-14 below that support the denial.
3. **Continue:** to a future meeting date if determined that additional information or analysis is needed to make a decision, or if additional testimony is warranted.

**ASSEMBLY ACTION REQUIRED:**

Assembly action is not required for this permit.

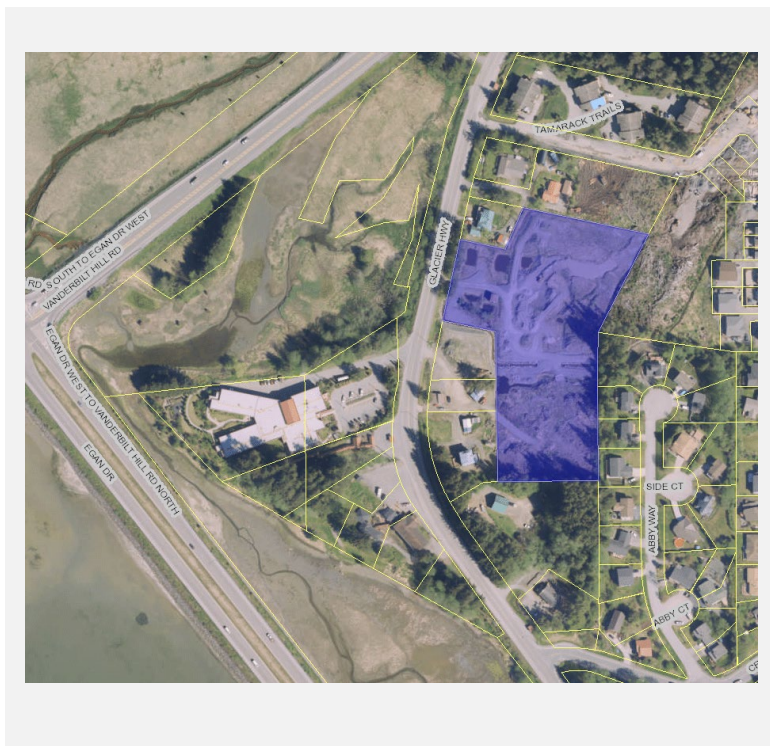
**STANDARD OF REVIEW:**

- Quasi-judicial decision
- Requires five (5) affirmative votes for approval
- Code Provisions:
  - CBJ 49.15.920
  - CBJ 49.15.930
  - CBJ 49.15.940
  - CBJ 49.80

**The Commission shall hear and decide the case per CBJ 49.15.900 - Purpose.** *The general purpose of this article is to provide reasonable minimum standards and procedures for unit-lot residential communities in which all or some of the lots do not substantially conform to the minimum requirements for a traditional subdivided lot. This article provides a housing option to allow dwellings on unit-lots to be conveyed by long-term leases, less than fee-simple ownership, or fee-simple ownership, including condominium and other common-interest communities*

**And per CBJ 49.15.930(a) -** *A proposed alternative residential subdivision shall be reviewed according to the requirements of section 49.15.330, conditional use permit, and in the case of an application proposing a change in the number or boundaries of unit-lots, section 49.15.402, major subdivisions, except as otherwise provided in this article. Approval shall be a two-step process, preliminary plan approval and final plan approval. In cases involving a change in the number or boundaries of unit-lots, the preliminary and final plat submissions required by section 49.15.402 shall be included with the preliminary and final plan submissions required by this chapter.*

**SITE FEATURES AND ZONING**



SURROUNDING ZONING AND LAND USES	
North (D15)	Single-family residential
South (D5)	Single-family residential
East (D5/D15)	Single-family & Multifamily residential
West (D15)	DNR land/Pioneer Home/ Single-Family Residential

SITE FEATURES	
Anadromous	N/A
Flood Zone	N/A
Hazard	No mapped hazard
Hillside	Yes
Wetlands	N/A
Parking District	N/A
Historic District	N/A
Overlay Districts	Mining & Exploration Surface Activities Exclusion District.



**BACKGROUND INFORMATION**

**Project Description** – This staff report analysis, and conditions are specific to requirements for an Alternative Residential Preliminary Plan. Some requirements, for instance a construction plan and drainage plan are required for Final Plat Approval and are not part of this review.

The ARS project can be split between planning elements and land documents.

Target Date	Plan Element	Land Documents
March 11, 2025	Preliminary Plan Approval	
TBD	Final Plan Approval, Phase 1	Preliminary Plat Approval, Sketch Plat
TBD		Final Plat Approval, Phase 1

The 42 unit lots will yield 42 common wall dwellings. Unit lots will be recorded as the dwellings are built. This will ensure the accuracy of the location of the unit lots and the structures built.

*Parent Lot:* The parent lot will meet setback requirements of the D15 zoning. [49.25.400] Upon approval of the development, a homeowners' association will be formed, so it may obtain liability insurance, and is solely responsible for maintaining the private access—including winter maintenance and parking. Portions of the parent lot not subdivided into unit-lots shall be owned in common by a homeowners' association, or similar entity, comprised of the owners of the unit-lots located within the parent lot.

Alternative residential subdivisions are permitted in the D-15 zoning district. The parent lot must be at least 150% of the minimum lot size required for the D-15 zoning district. The lot is 10.07 times larger than the minimum required lot size. There is no minimum size requirement for unit-lots. Lot dimensions, lot coverage, and vegetative coverage requirements apply only to the parent lot, not individual unit-lots.

The number of permitted dwelling units is determined by multiplying the maximum allowable units per gross acre by the total acreage of the subdivision and rounding to the nearest whole number. D15 zoning allows for 15 dwellings per acre. The lot is 5.09 acres in a D15 zone which yields approximately 76 dwellings. As proposed, the lot will have 21 common wall dwellings. Each side of the common wall dwelling will reside on its own unit lot.

**Background** – The Applicant purchased the property in September 2024. The applicant originally proposed a 42-lot common wall subdivision. However, under common wall subdivision regulations, framing inspections must be completed before final plat approval. [49.65.720(a)(1)(B)] In other words, all 42 units would have to be framed before subdivision could be completed and tax identification numbers were assigned. The Alternative Residential Subdivision offers greater flexibility by allowing individual unit lots to be recorded and sold. The table below summarizes relevant history for the lot and proposed development.

Item	Summary
Alternative Residential Subdivision (ARP2024-0001)	A plat of Ravenwood Subdivision II/Brow Tine Subdivision, a Subdivision of Lot 1, Ravenwood Subdivision as shown on record plat 2019-3. This subdivision creates 42 unit lots on a parent lot. <b>(Attachment B)</b>
2024 Warranty Deed	Warranty deed transferring Lot 1, Ravenwood Subdivision from Grantor, Lowpete Construction Inc., to Grantees, Misty Sea Charters and Lodging LLC, and R&S Construction, LLC. <b>(Attachment C)</b>

Consolidation Plat 2019-3	A plat of Ravenwood Subdivision, a Subdivision of Lot 2A, Chilkat View Sub. II & Tract 1A1, U.S. Survey No. 3246. Subdivision resulted in Ravenwood Lot 1 and Lot 2. <b>(Attachment D)</b>
Ordinance 2014-10	An ordinance amending the official zoning map of the City and Borough to change the zoning of USS 3246 Tracts 1A, 2A1, and 2A2, Located at 4660, 4664, and 4670 Glacier Highway, from D5 to D15. <b>(Attachment E)</b>

**ANALYSIS**

The Alternative Residential Subdivision (ARS) will be accessed from Glacier Highway via a private street serving 42 common wall dwellings on 42 unit lots. Based on traffic projections, the development will require a 60-foot right-of-way with a sidewalk along one side of a 48-foot-wide paved street. The Alaska Department of Transportation (AKDOT) has requested the driveway apron be rebuilt to commercial grade and meet ADA standards. Per D107.1, residential developments with more than 30 units must have two fire apparatus access roads with, exceptions for: more than 30 units can be accessed by a fire apparatus, or all units have automatic sprinklers. Future development plans must include additional fire access connections as determined by the fire code official.

All dwelling units in the subdivision must connect to public sewer and water services, with a master water meter installed by the developer. Stormwater management must adequately handle runoff, and the city may require offsite drainage improvements. The parent lot will be maintained by a homeowners' association. Permitted uses on the parent lot include recreational center, community facility, or childcare center. Each unit-lots can have one dwelling unit and accessory structures (e.g. shed, garage). Unit-lots cannot have accessory dwelling units. Street signage and mailbox placement must comply with city and postal regulations.

Before Final Plan approval, developers must submit proof of ownership and a preliminary development plan outlining housing, open spaces, buffers, parking, and natural features. The design must detail building placement, utilities, roads, and pedestrian pathways. If developed in phases, a schedule and plans for each phase must be included. The preliminary plan must also include subdivision connectivity and impact assessments.

**Zoning District and Dimensional Standards** – The parent lot meets or exceeds dimensional requirements for an ARS in the D15 zoning district.

Topic and Code Reference	Summary	Complies
<b>CBJ 49.15.920(b)</b> Zoning Districts	<i>An alternative residential subdivision is only allowed in the following zoning districts: RR, D-1, D-3, D-5, D-10SF, D-10, D-15, D-18, and LC.</i>  The subject lot is zoned D15. The rear and side a lot lines abut a D5 zoned area. Per Note 3 of the Table of Dimensional Standards, where one district abuts another the greater of the two setbacks is required for both uses on the common property line.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<b>CBJ 49.15.920(c)</b> Lot Size	<i>The parent lot shall be at least 150 percent of the minimum lot size for the zoning district in which it is located. There is no minimum size for the unit-lots.</i>  Lot 1 is 4,333.56% larger than the minimum required.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Topic and Code Reference	Summary	Complies
<b>CBJ 49.15.920(d) Other Dimensional Standards</b>	<p><i>The minimum lot dimensions, lot coverage, and vegetative coverage shall be applied to the parent lot and not the unit-lots.</i></p> <p>A condition of the final plan approval will be to have these items quantified on the plat.</p> <p><i>Vegetative cover requirement is D15 is 30 percent, or 221,678 square feet. The proposed plat shows the parent lot square footage 75,489 including proposed pavement.</i></p> <p><i>Draft engineered plans will need to show building pads with a total square footage. This will provide a total lot coverage.</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

**Condition 1:** Per 49.15.930(b), prior to submittal of the ARS final plan, the applicant must provide a plan for landscaping and snow removal.

**Condition 2:** Prior to submittal of the ARS final plan application, the lot coverage and vegetative coverage applied to the parent lot shall be calculated and included on the ARS final plan.

**Density** – Per CBJ 49.15.920(e)(1), The number of dwelling units permitted in the development shall be calculated by multiplying the maximum number of dwelling units per gross acre permitted in the underlying zoning district by the number of acres in the alternative residential subdivision and rounding to the nearest whole number.

Maximum Dwelling Units Per Acre	Parent Lot Size	Maximum Density	Number of Dwelling Units Proposed
15	5.09 acres	76.35 dwellings	<b>42</b>

No density bonuses are being requested.

**Frontage and Access** – Per CBJ 49.15.920(f) *The parent lot shall front on and be accessed by a publicly maintained right-of-way. Access within the development may be exempted from CBJ 49.35 and be privately owned and maintained if it complies with the following requirements (listed in the table below).*

The parent lot has frontage and access onto Glacier Highway. The applicant proposes privately maintained access within the development with a currently unnamed street.

Topic and Code Reference	Summary	Complies	Recommended Condition
<b>CBJ 49.15.920(f)(1) Location</b>	<p><i>The access shall be located completely on the parent lot.</i></p> <p><i>An unnamed street will provide access to unit lots within the ARS.</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<b>CBJ 49.15.920(f)(2) Safety</b>	<i>The access does not endanger public safety or welfare and</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Topic and Code Reference	Summary	Complies	Recommended Condition
	<p><i>provides for safe pedestrian and vehicular traffic circulation.</i></p> <p>Street will be constructed to the improvement standards of 49.35.240.</p>	<input type="checkbox"/> N/A	
<b>CBJ 49.15.920(f)(3)</b> Emergency Services	<p><i>The access complies with the emergency service access requirements of CBJ [chapter] 19.10.</i></p> <p>Capital City Fire and Rescue has confirmed emergency turnarounds meet requirements.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<b>CBJ 49.15.920(f)(4)</b> Pavement	<p><i>Access to and within the development is paved.</i></p> <p><i>Bonding for improvements is a requirement of Final Plat approval.</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<b>CBJ 49.15.920(f)(5)</b> Homeowners Association (HOA)	<p><i>(5) The developer submits adequate evidence that upon approval of the development, a homeowners 'association will be formed, can obtain liability insurance, and is solely responsible for maintaining the private access—including winter maintenance.</i></p> <p><i>Required prior to approval of the Final Plat.</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<b>CBJ 49.15.920(f)(6)</b> Abutting Parcels	<p><i>The alternative residential subdivision does not abut a developable parcel that lacks alternative and practical frontage on a publicly maintained right-of-way.</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

**Utilities, Drainage, and Stormwater Management –**

Topic and Code Reference	Summary	Complies	Recommended Condition
<b>CBJ 49.15.920(g)</b> Public Utilities	<p><i>An alternative subdivision is required to connect each dwelling</i></p>	<input type="checkbox"/> Yes	



Topic and Code Reference	Summary	Complies	Recommended Condition
	<p><i>unit to public sewer and water. A master meter for water shall be installed by the developer.</i></p> <p><i>Bonding for improvements is a condition of the Final Plat recording.</i></p>	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<b>CBJ 49.15.920(I)</b> Stormwater Management	<p><i>Stormwater management. Facilities for the control and disposal of stormwater must be adequate to serve the development and areas draining through the development. Management shall be in accordance with the Stormwater Best Management Practices manual.</i></p> <p><i>Construction drawings which illustrate the drainage will be a requirement of recording the Final Plat.</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

**Design Requirements** – The table below discusses design requirements applied to an ARS. The proposed ARS meets these requirements.

Topic and Code Reference	Summary	Complies	Recommended Condition
<b>CBJ 49.15.920(i)</b> Open Space	<p><i>Open space is required as follows: 25 percent in the RR and D-1 zoning districts; 20 percent in the D-3, D-5 and D-10 zoning districts; 15 percent in the D-10SF district. Open space is not required in the D-15, D-18, or LC zoning districts.</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<b>CBJ 49.15.920(j)</b> Perimeter Buffer	<p><i>According to CBJ 49.15.920(j), there are no setback requirements on the unit-lots. A perimeter buffer is required in lieu of the setback requirements of this title on the parent lot.</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Topic and Code Reference	Summary	Complies	Recommended Condition
<b>CBJ 49.15.920(m)</b> Permitted Uses	<i>No primary uses are permitted on the parent lot except a recreational center, community facility, or a child care center. Consistent with the table of permissible uses, CBJ 49.25.300, only residential uses and associated accessory structures are allowed on the unit-lots.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<b>CBJ 49.15.920(n)</b> Street Sign	<i>The developer shall install a street sign provided by the City and Borough of Juneau at the developer's expense.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<b>CBJ 49.15.920(o)</b> Mailboxes	<i>Upon consultation with the United States Postal Service, the director shall determine the placement location of mailboxes.</i>  <i>Mailbox location will be a requirement of the first TCO.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

**Parking** – According to CBJ 49.15.920(h), *Parking may be located on the parent lot or unit lots.*

Use	Units	Spaces Required	Total Spaces
<b>Single-family Dwelling</b>	42	2 per dwelling	84
<b>Total Parking Requirement:</b>			84
<b>ADA Accessible Spaces Required:</b>			N/A

**Traffic** – According to CBJ 49.40.300(a)(3), the Director has determined that a TIA is not required for the 399.84 average daily trips. (Attachment G)

Use	Proposed Dwelling Units	Trips Generated	Total Trips
<b>Example: Single-family Dwelling</b>	42 units	9.52 per dwelling unit	399.84
<b>Total ADTs:</b>			<b>399.84</b>

**Habitat** – No wetlands or anadromous waterways are present on the property.

**Hazard Zones** – The development is not in a mapped hazard area.

Per CBJ 49.70.210(a), a Hillside Endorsement is required for cuts into or slopes of 18%. Staff anticipates that development may require hillside endorsement. Determination of the need for a Hillside Endorsement is done during the Building Permit process.

**Public Health, Safety, and Welfare** – There is no information that suggests the proposed ARS will harm the public health, safety, or welfare.

**Property Value and Neighborhood Harmony** – The Assessor’s office had no concerns regarding the effect on property values or the neighborhood harmony.

**AGENCY REVIEW**

CDD conducted an agency review comment period between February 25, 2025 – March 7, 2025. Agency review comments can be found below.

Agency	Summary
Alaska Department of Transportation	DOT&PF ROW section will require the existing driveway access to be re-permitted per 17 AAC 10.060, and the Alaska Preconstruction Manual. The re-permitting action is a formality, (the driveway meets grade and sightlines) but it appears the access will need to be re-constructed to a “commercial” grade approach with current ADA standard curb-cuts and the landing paved to commercial standards.
General Engineering	No concerns at this time.
Cartography	No concerns at this time.
Capital City Fire and Rescue	<p>D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.</p> <p>Exceptions:</p> <ol style="list-style-type: none"> <li>1. Where there are more than 30 dwelling units accessed from a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, access from two directions shall not be required.</li> <li>2. The number of dwelling units accessed from a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.</li> </ol>

**PUBLIC COMMENTS**

CDD conducted a public comment period between February 21, 2025 – March 7, 2025. Public notice was mailed to property owners within 500 feet of the subject parcel. **(Attachment H)** A public notice sign was also posted on-site two weeks prior to the scheduled hearing. **(Attachment I)** Public comments submitted at time of writing this staff report can be found in **Attachment J**.

**CONFORMITY WITH ADOPTED PLANS**

The proposed development is in general conformity with the 2013 Comprehensive Plan, 2016 Housing Action Plan, and the 2015 Juneau Economic Development Plan. Plans call for the development of housing, especially in a flexible format that fits the character of existing neighborhoods and provides housing for a variety of CBJ residents and economic groups.

PLAN	Chapter	Page No.	Item	Summary
2013 Comprehensive Plan	4	36-37	Policy 4.1/4.2	Policies promote providing an adequate supply of various types of housing for all CBJ residents and economic groups.
	10	130	Policy 10.2	Policy promotes flexibility and creativity in residential development within the urban service boundary.
	11	157	Land Use Designation	Complies with the <i>Medium Density Residential</i> Land Use Designation which allows for residential development between 5-20 units per acre.
2015 Juneau Economic Development Plan	5	103	Initiative	Plan calls for promoting housing affordability and availability.

**FINDINGS**

**Alternative Residential Subdivision Preliminary Plan Approval** – Per CBJ 49.15.940(d), the director makes the following findings on the proposed Alternative Residential Subdivision Preliminary Plan:

**1. Does the proposed development protect natural features and avoid natural hazards by reserving them as open space?**

**Analysis:** No additional analysis required.

**Finding: N/A.** There are no natural features or natural hazards on the lot to reserve as open space. The applicant will revise the vegetative cover and lot coverage calculations to conform to the land use code.

**2. Is the proposed development consistent with Title 49, the Land Use Code?**

**Analysis:** No additional analysis needed.

**Finding: Yes.** With recommended conditions, the proposed development will comply with Title 49, the Land Use Code.

**3. Does the development incorporate perimeter buffers sufficient to minimize off-site impacts of the subdivision and to maximize harmony with the neighborhood?**



**Analysis:** No additional analysis needed.

**Finding: Yes.** The parent lot incorporates the minimum setback requirements to perimeter buffers sufficient to minimize off-site impacts and maximize neighborhood harmony.

**4. Do utilities proposed for connection to the City and Borough system meet City and Borough standards, and are all others consistent with sound engineering practices, as determined by the City and Borough Engineering and Public Works Department?**

**Analysis:** The details of utilities will be finalized prior to approval of the Final Plat. CBJ EPW reviewed the proposal and said that existing infrastructure in Glacier Highway is sufficient to meet the increased use.

**Finding: Yes.** The CBJ EPW has reviewed preliminary construction plans and has determined that the development can reasonably connect to CBJ services and meet CBJ standards.

**5. Does the configuration of the development provide for economy and efficiency in utilities, housing construction, access, parking and circulation?**

**Analysis:** No additional analysis needed.

**Finding: Yes.** The proposed development proposes 42 common wall dwellings, which is less than the maximum density allowed, however, the development provides for utilities, access, and housing.

**6. If the approval is for a phased development, is each phase consistent with the preliminary development plan and design of the entire alternative residential subdivision?**

**Analysis:** No additional analysis needed.

**Finding: N/A.** The proposed development does not include phasing.

**7. Does the proposed development adequately address the cumulative impacts of the phased development on the neighborhood and the natural environment?**

**Analysis:** No additional analysis needed.

**Finding: N/A.** The proposed development does not include phasing.

**8. If the approval includes an allotment of a density bonus, the density bonus complies with section CBJ 49.15.920(e)(4).**

**Analysis:** No additional analysis required.

**Finding: N/A.** No density bonus has been requested.

**9. Is the application for the requested Alternative Residential Subdivision Preliminary Plan complete?**

**Analysis:** No further analysis needed.

**Finding: Yes.** The application contains the information necessary to conduct review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

**10. Is the proposed use appropriate according to the Table of Permissible Uses?**

**Analysis:** The application is for common wall development. The use is listed at CBJ 49.25.300, Section 1.110 for the D15 zoning district.

**Finding: Yes.** The requested permit is appropriate according to the Table of Permissible Uses.

**11. Will the proposed development comply with the other requirements of this chapter?**

**Analysis:** The proposed site design complies with code requirements at this stage. Future elements – the Preliminary Plat, Final Plan, and Final Plat will be reviewed for completion at those times.

**Finding: Yes.** With the recommended conditions, the proposed development will comply with Title 49, including parking, lighting, and vegetative cover.

**12. Will the proposed development materially endanger the public health, safety, or welfare?**

**Analysis:** No additional analysis required.

**Finding: No.** There is no evidence to suggest that with appropriate conditions, the requested ARS, in a D15 zoning district, will materially endanger the public health or safety.

**13. Will the proposed development substantially decrease the value of, or be out of harmony with, property in the neighboring area?**

**Analysis:** No additional analysis required.

**Finding: No.** Per the Assessor's office, there is no evidence to suggest that the requested ARS, in a D15 zoning district will substantially decrease the value or be out of harmony with the property in the neighboring area.

**14. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?**

**Analysis:** No additional analysis required.

**Finding: Yes.** The proposed ARS, with the recommended conditions, will be in general conformity with the 2013 comprehensive plan.

**RECOMMENDATION**

Staff recommends the Planning Commission adopt the director's analysis and findings and **APPROVE with Conditions** the preliminary plan for the Ravenwood Subdivision II/Brow Tine Subdivision, an Alternative Residential Subdivision creating 42 unit-lots with 42 common wall units and one (1) parent lot. This permit would allow the applicant to submit for the ARS final plan. This approval is subject to the following conditions:

**Condition 1:** Per 49.15.930(b), prior to submittal of the ARS final plan, the applicant must provide a plan for landscaping and snow removal.

**Condition 2:** Prior to submittal of the ARS final plan application, the lot coverage and vegetative coverage applied to the parent lot shall be calculated and included on the ARS final plan.

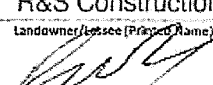
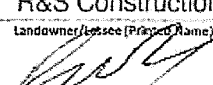
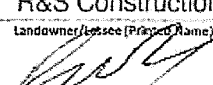
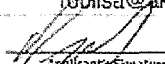
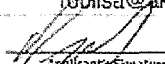
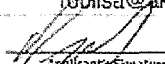
**STAFF REPORT ATTACHMENTS**

<b>Item</b>	<b>Description</b>
<b>Attachment A</b>	Application Packet
<b>Attachment B</b>	Preliminary Plan
<b>Attachment C</b>	Preliminary Construction Drawings
<b>Attachment D</b>	2024 Warranty Deed
<b>Attachment E</b>	2019 Plat
<b>Attachment F</b>	2014 Rezone Ordinance
<b>Attachment G</b>	Public Notice Posting
<b>Attachment H</b>	Abutters notice
<b>Attachment I</b>	Waived TIA Requirement correspondence



# DEVELOPMENT PERMIT APPLICATION


NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.

<b>PROPERTY LOCATION</b>					
Physical Address: 4670 Glacier Highway					
Legal Description(s) (Subdivision, Survey, Block, Tract, Lot): Lot 1 Ravenwood plat No. 2019-3					
Parcel Number(s): 7B100115063					
<input type="checkbox"/> This property is located in the downtown historic district <input type="checkbox"/> This property is located in a mapped hazard area, if so, which _____					
<b>LANDOWNER/ LESSEE</b>					
Property Owner: R&S Construction/Misty Sea Charters	Contact Person: Rob Worden				
Mailing Address: PO Box 210194 Auke Bay 99821	Phone Number(s): 907-321-5015				
E-mail Address: robisa@ak.net					
<b>LANDOWNER/ LESSEE CONSENT</b>					
Required for Planning Permits, not needed on Building/Engineering Permits.					
Consent is required of all landowners/lessees. If submitted with this application, alternative written approval may be sufficient. Written approval must include the property location, landowner/lessee's printed name, signature, and the applicant's name.					
I am (we are) the owner(s) (or lessee(s)) of the property subject to this application and I (we) consent as follows:					
A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. B. I (we) grant permission for the City and Borough of Juneau officials/employees to inspect my property as needed for purposes of this application.					
<table border="0"> <tr> <td style="width: 50%; text-align: center;"> <b>R&amp;S Construction</b>            Landowner/Lessee (Printed Name)         </td> <td style="width: 50%; text-align: center;"> <b>owner</b>            Title (e.g.: Landowner, Lessee)         </td> </tr> <tr> <td style="text-align: center;">             Landowner/Lessee (Signature)         </td> <td style="text-align: center;">           Date            December 6 2024         </td> </tr> </table>		<b>R&amp;S Construction</b> Landowner/Lessee (Printed Name)	<b>owner</b> Title (e.g.: Landowner, Lessee)	 Landowner/Lessee (Signature)	Date December 6 2024
<b>R&amp;S Construction</b> Landowner/Lessee (Printed Name)	<b>owner</b> Title (e.g.: Landowner, Lessee)				
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Landowner/Lessee (Printed Name)	Title (e.g.: Landowner, Lessee)				
Landowner/Lessee (Signature)	Date				
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours. We will make every effort to contact you in advance, but may need to access the property in your absence and in accordance with the consent above. Also, members of the Planning Commission may visit the property before a scheduled public hearing date.					
<b>APPLICANT</b>					
<input checked="" type="checkbox"/> Same as LANDOWNER, write "SAME"					
Applicant (Printed Name): R&S Construction LLC	Contact Person: Rob Worden				
Mailing Address: Po Box 210194 Auke Bay, 99821	Phone Number(s): 907-321-5015				
E-mail Address: robisa@ak.net					
<table border="0"> <tr> <td style="width: 50%; text-align: center;">             Applicant's Signature         </td> <td style="width: 50%; text-align: center;">           Date of Application            December 6 2024         </td> </tr> </table>		 Applicant's Signature	Date of Application December 6 2024		
 Applicant's Signature	Date of Application December 6 2024				

**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

For assistance filling out this form, contact the Permit Center at 586-0770.

COMMUNITY DEVELOPMENT

Intake Initials: 	
Case Number: ARP24-01	Date Received: 12/10/24

Updated 10/2022 Page 1 of 1





# ALTERNATIVE RESIDENTIAL SUBDIVISION APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

**NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.**

## PROJECT SUMMARY

We are proposing a 42 residential home subdivision on the existing 5 plus acre parcel

## TYPE OF ALTERNATIVE RESIDENTIAL SUBDIVISION APPROVAL REQUESTED (please see submittal requirements on reverse)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Alternative Residential Subdivision (ARP)<br>Preliminary Plan Approval | <input type="checkbox"/> Alternative Residential Subdivision (ARF)<br>Final Plan Approval (or Extension) |
| <input type="checkbox"/> Amendment to Approved (ARP)<br>Preliminary Plan*                                  | <input type="checkbox"/> Amendment to Approved (ARF)<br>Final Plan*                                      |

\* Minor amendments will be reviewed by the Director; Major amendments will be reviewed by the Planning Commission.

## LEGAL DESCRIPTION(S) OF PROPERTY INVOLVED

lot 1 Ravenwood plat no. 2019-3

Number of Existing Parcels 1 Total Land Area 221,678 sq ft Number of Resulting Parcels \_\_\_\_\_

## PROPOSED USE OF LAND AND BUILDING(S)

Zoning District(s) D15 Percent Open Space \_\_\_\_\_  
 Right-of-Way Frontage Proposed \_\_\_\_\_ Percent Buffer \_\_\_\_\_  
 Number of Dwelling Units Proposed 42 Density Proposed \_\_\_\_\_  
 Parking Proposed \_\_\_\_\_ Density Bonus  YES  NO

## ALL REQUIRED MATERIALS ATTACHED

- Complete application per CBJ 49.15.940 (preliminary) or CBJ 49.15.950 (final)
- Pre-Application Conference notes
- Narrative including:
  - Current use of land or building(s)
  - Unique characteristics of land or building(s)
  - How the proposed project conforms to the Comprehensive Plan and CBJ Title 49
  - How the proposed project effects public health, safety, and welfare
  - How the proposed project is in harmony with the surrounding neighborhood
- Preliminary development plan (detailed on page 2)
- Density Bonus
  - Open Space
  - Stream Setback
  - Lower Income Households / Workforce Households
  - Unusual Enhancements
  - Public Right-of-Way Access
  - Shared Use Pathways
  - 5-Star Plus Energy Efficiency
  - 6-Star Energy Efficiency
  - High-efficiency Primary Heating Methods

To be completed by Applicant

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

This form and all documents associated with it are public record once submitted.

**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number	Date Received

## Alternative Residential Subdivision Application Instructions

Alternative Residential Subdivision outlined in CBJ 49.15.900

Each application for an Alternative Residential Subdivision is reviewed by the Planning Commission at a public hearing. The permit procedure is intended to provide the Commission the flexibility necessary to make decisions tailored to individual applications. The Commission may stipulate conditions to mitigate external adverse impacts from the proposed use. If it is determined that these impacts cannot be satisfactorily overcome, the permit shall be denied.

**Pre-Application Conference:** A pre-application conference is required prior to submitting an application. The applicant will meet with City & Borough of Juneau and Agency staff to discuss the proposed development, the permit procedure, and to determine the application fees. To schedule a pre-application conference, please contact the Permit Center at 586-0770 or via email at [Permits@juneau.org](mailto:Permits@juneau.org).

**Application:** An application for an Alternative Residential Subdivision will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

1. **Forms:** Completed Alternative Residential Subdivision Application and a Development Permit Application forms.
2. **Fees:** The fee is dependent upon the number of residential structures involved. Any development, work or use done without a permit issued will be subject to double fees. All fees are subject to change.
3. **Project Narrative:** A detailed narrative describing the project.
4. **Plans:** outlined in CBJ 49.15.940(b)(2). (Surveyed Plans Required)
  - a. The amount of land for housing, open space, buffer, access, parking, and pedestrian circulation
  - b. The number and types of housing units and proposed density
  - c. The natural features to be protected and hazards to be avoided
  - d. The public, if any, and private services to be provided

**Document Format:** All materials submitted as part of an application shall be submitted in either of the following formats:

1. Electronic copies;
2. Paper copies 11" X 17" or smaller (larger paper size may be preapproved by the Community Development Department).

### Preliminary Plan Approval

#### Application Review & Hearing Procedure:

**Review:** The Community Development Department shall determine when the Alternative Residential Subdivision Application is complete and advise the developer. Within 60 days of determining that an application is complete, the Director shall schedule the preliminary plan for a public hearing.

**Hearing:** All Alternative Residential Subdivision applications must be reviewed by the Planning Commission. The Commission shall review the preliminary plan and approve, approve with conditions, or deny pursuant to 49.15.940.

**Public Notice Responsibilities:** As part of the Preliminary Plan Approval, proper public notice must be given as outlined in CBJ 49.15.230 which consists of the following:

**The Community Development Department** will give notice of the pending Planning Commission meeting and its agenda in the local newspaper a minimum of 10-days prior to the meeting. Furthermore, the department will mail abutters notices to all property owners within 500-feet of the project site.

**The Applicant** will post a sign on the site at least 14 days prior to the meeting. The sign shall be visible from a public right-of-way or where determined appropriate by CDD. Signs may be produced by the Community Development Department for a preparation fee of \$50, and a \$100 deposit that will be refunded in full if the sign is returned within seven days of the scheduled hearing date. If the sign is returned between eight and 14 days of the scheduled hearing \$50 may be refunded. The Applicant may make and erect their own sign. Please speak with the Community Development Department for more information.

### Final Plan Approval

After completion of all conditions and Commission approval of the preliminary plan in accordance with the Conditional Use permit procedures, the final plan shall be submitted for review and approval according to the following:

1. An application, fee, and a final plan must be submitted for Commission review.
2. Formation of a homeowners' association, or similar entity, is required, outlined in CBJ 49.15.950(b)(1)-(4).
3. The Commission may approve the final plan if it substantially conforms to the approved preliminary plan and all requirements of this article.

R&S CONSTRUCTION LLC  
PO BOX 210194  
AUKE BAY, AK 99821

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***RAVENWOOD SUBDIVISION NARRATIVE***

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December 7, 2024,

TO: Community Development

R&S Construction LLC and Misty Sea Charters & Lodging LLC are proposing to build a 42 residential subdivision using the Alternative Residential Subdivision "ARS" code. This property is currently vacant and has been cleared with approved drainage and inspected settling ponds and construction roads to do the brushing. We have purchased the property to continue with the ongoing project and have provided a set of engineering plans to show proposed building lots and streets with utilities. This project was initially designed as a 42 zero lot residential subdivision, but under our pre planning meeting, it was recommended that we change to the Alternate Residential Subdivision design. We feel that this use complies with the Comprehensive Plan but will have to make some small modifications to the design, which in the end, the outcome of 42 residential homes will remain on the same proposed lots. We have provided a topography on the lot with designed city streets that meet cbj code with all utilities. This project will have the required vegetative cover required by the City and Borough of Juneau prior to completion of a final plat. There are current approved projects near this property doing the same type of subdivision as well as construction on adjoining property doing apartment buildings making this project seeming very desirable for the Juneau location. These will be smaller residential homes which are going to be more affordable which seems to be a needed feature of this community. We will also need to put a Homeowners Association together for this property once we have an approval from the Planning Commission.

Sincerely,

R&S Construction LLC,



(907) 586-0715  
 CDD\_Admin@juneau.gov  
 www.juneau.org/community-development  
 155 Heritage Way • Juneau, AK 99801

## Ravenswood Subdivision

Case Number: PAC2024 0057  
 Applicant: Rob and Lisa Worden  
 Property Owner: R&S Construction LLC; Misty Sea Charters & Lodging  
 Property Address: 4670 Glacier Highway  
 Parcel Code Number: 7B100115063

Site Size: 221,678 square feet/5.01 acres  
 Zoning: D15 Multifamily  
 Existing Land Use: Residence

Conference Date: November 20, 2024  
 Report Issued: December 4, 2024

**DISCLAIMER: Pre-application conferences are conducted for the purpose of providing applicants with a preliminary review of a project and timeline. Pre-application conferences are not based on a complete application and are not a guarantee of final project approval.**

## List of Attendees

Note: Copies of the Pre-Application Conference Report will be emailed, instead of mailed, to participants who have provided their email address below.

Name	Title	Email address
Rob Worden	Applicant	<a href="mailto:RobLisa@AK.net">RobLisa@AK.net</a>
David Peterson	Planning	<a href="mailto:David.Peterson@juneau.gov">David.Peterson@juneau.gov</a>
Jeff Hedges	Building	<a href="mailto:Jeffrey.Hedges@juneau.gov">Jeffrey.Hedges@juneau.gov</a>
Bridget LaPenter	General Engineering	<a href="mailto:Bridget.LaPenter@juneau.gov">Bridget.LaPenter@juneau.gov</a>
Sydney Hawkins	Permitting	<a href="mailto:Sydney.Hawkins@juneau.gov">Sydney.Hawkins@juneau.gov</a>



## Conference Summary

**Questions/issues/agreements identified at the conference that weren't identified in the attached reports.** The following is a list of issues, comments and proposed actions, and requested technical submittal items that were discussed at the pre-application conference.

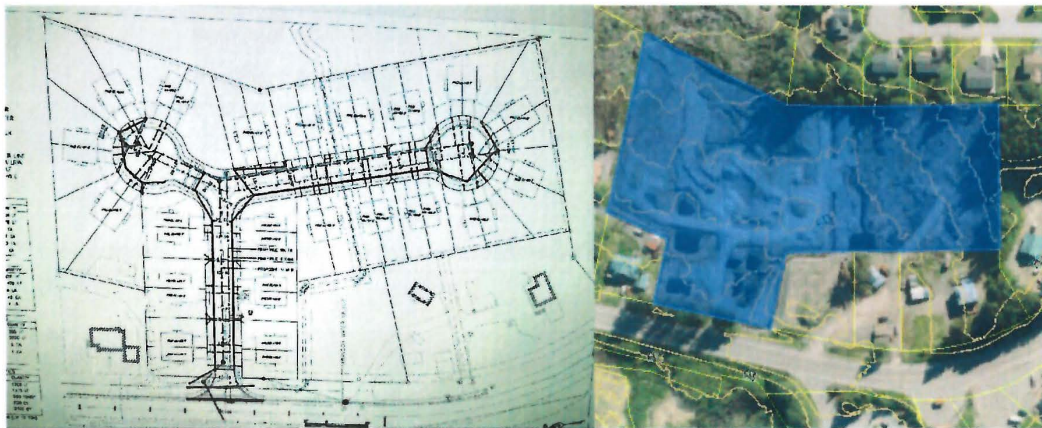
### Project Overview

The applicant is proposing a common wall subdivision with 42 dwelling units. Any subdivision involving more than 13 lots is classified as a Major Subdivision and requires approval from the Planning Commission.

A common wall subdivision follows a two-part process. Per 49.65.710, a conditional use permit will be required to approve the development, while a major subdivision preliminary plat will also be required for the subdivision portion.

Staff recommends considering alternative housing products such as condominiums, single-family detached homes, or townhomes, which may be more economically feasible.

Per the table found in T49 49.35.240, a development of 22–52 dwellings, ROW improvements will be required, including a sidewalk on at least one side of the street. For developments of 53–75 dwellings, sidewalks will be required on both sides. Additional infrastructure requirements include a Traffic Impact Analysis, a 24-foot travel way width, streetlights at all intersections, a 60-foot platted ROW width, and paved roads that will be publicly maintained.



### Planning Division

1. **Zoning** – Lot is zoned (D15) Multi Family.
  - a. Minimum lot size is 5,000 square feet for standard lots and 3,000 square feet for Bungalow lots.
  - b. Minimum lot width for standard lots is 50 feet. Minimum lot width for Common Wall dwellings is 30 feet. Minimum lot width for bungalow lots is 25 feet.
2. **Table of Permissible Uses** – D15 zoned lots are intended to accommodate densities of 15 dwelling units per acre.

**3. Subdivision – 49.15.402 Major subdivisions.**

A conditional use permit will be required for the Alternative Residential Subdivision with a major subdivision permit is required for platting the subdivision creating.

*Pre-application conference and sketch plat.* A pre-application conference and sketch plat (CBJ 49.15.410) is required prior to submitting an application for a major subdivision.

Application for a preliminary plat and conditional use permit shall be on a form provided by the department, accompanied by a draft preliminary plat and the appropriate fee. The draft plat shall meet the standards set forth in CBJ 49.15.411.

**Alternative Residential Subdivision**

The proposed ARS shall be reviewed according to the requirements of a conditional use permit as an ARP/ARF case type. (See Article IX attachment)

**Planning Commission:**

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Public notice of the application will be sent to neighbors within 500 feet of the property.

The planning commission will confirm the development coincides with the Comprehensive Area Plan and will determine if any of the following will also be required:

1. A Development Schedule.
2. Verify the use coincides with the comprehensive plan.
3. Whether an Owners Association would be required.
4. Any dedications are required.
5. Any bonds for improvements in addition to bonding for utilities or improvements.
6. The PC may require a letter from the public utility or public agency legally committing to serve the development.
7. Screening requirements.
8. Lighting requirements.

In issuing its notice of decision on a preliminary plat, the commission may accept, amend, or reject the director's proposed recommendations. The decision of the commission approving or denying a preliminary plat application will be set forth in a notice of decision and will specify any conditions or plat notes required for final plat approval. If the preliminary plat is denied, the applicant may submit a revised plat application, without paying additional application fees, within 180 days from the date of the notice of decision.

*Construction plans will be required upon approval of the preliminary plat.* Construction plans for all required improvements will be submitted to the department for review by the director of engineering and public works for compliance with CBJ 49.35.140.

An application for a final plat shall be on a form provided by the department, accompanied by a final plat and the appropriate fee. The final plat shall meet the conditions of the preliminary plat and standards set forth in CBJ 49.15.412.

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Once the application is deemed complete, the director shall schedule the final plat for commission action. If commission action on the final plat will occur more than 12 months after approval of the preliminary plat, public notice of impending commission action on the final plat may be required.

The director shall prepare and submit a report to the commission that addresses compliance of the final plat with this title and the criteria for final plat approval, and that specifies any conditions of approval or plat notes recommended by the director.

Once it has been confirmed that the applicant has complied with any conditions, plat notes, and standards set forth in CBJ 49.15.412, a Notice of Decision will be sent to the Applicant. The applicant has constructed all required improvements or provided a financial guarantee.

The chair of the commission shall sign the plat upon a determination that the final plat meets all of the requirements of this title, that all plat certificates have been signed and notarized, and that all required documents have been submitted for recording with the final plat in accordance with CBJ 49.15.412. Once property taxes have been paid in full for the current year, the department shall ship the original plat, at the applicant's expense, to be recorded with the State Recorder's Office in Anchorage.

4. **Setbacks** – Minimum setback requirement from property lines are:
  - i. Front: 20 feet
  - ii. Rear: 15 feet
  - iii. Side yard: 5 feet
  - iv. Street Side: 13 feet
  - v. Note: Zero-foot setback for the portion of the dwelling with a common wall, five-foot setback or five-foot wide easement for the portion of the dwelling at the common lot line without a common wall, and five-foot setback for the remaining side yards of the lot.
5. **Height** – Maximum permitted height for primary structures is 35 feet, and 25 feet for accessory and bungalow structures.
6. **Access** – Lots shall have direct and practical access to a publicly maintained right-of-way through their frontage. If not already accepted for public maintenance, shall be improved to the applicable standards for public acceptance and maintenance. It shall be the responsibility of the subdivider to pay the cost of the right-of-way improvements. (49.35.250)
7. **Parking & Circulation** –
  - a. Single-family and duplex: 2 spaces per each dwelling unit.
  - b. Multi family units:
    - i. 1 per one-bedroom unit
    - ii. 1.5 per two-bedroom unit
    - iii. 2 per three-bedroom unit
8. **Lot Coverage** – Maximum lot coverage for permissible and conditional uses is 50%.
9. **Vegetative Coverage** – Minimum vegetative coverage in D15 zones is 30%.
10. **Lighting** – Exterior lighting may not shed light or glare above the roofline of the building or beyond the property line of the site. Industrial and exterior lighting shall not be used in a manner that produces glare on public highways or neighboring property.

Prior to issuance of a building permit, the applicant shall submit a lighting plan illustrating the location and type of exterior lighting proposed for the development. Exterior lighting shall be designed and located to minimize offsite glare. Approval of the plan shall at the discretion of the Community Development Department, according to the requirements at §49.40.230(d) [and Historic District Design Guidelines, if applicable].

All exterior lighting fixtures shall be of a "full cutoff" design.

11. **Noise – Construction of buildings and projects.** It is unlawful to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or similar heavy construction equipment, before 7:00 a.m. or after 10:00 p.m., Monday through Friday, or before 9:00 a.m. or after 10:00 p.m., Saturday and Sunday, unless a permit shall first be obtained from the City and Borough building official.
12. **Flood** – Per panel 02110C1551E eff. 9/18/2020, N/A.
13. **Hazard/Mass Wasting/Avalanche/Hillside Endorsement** – A Hillside Endorsement is required if/when excavation of any slope in excess of 18%, or creation of a new slope in excess of 18%.
14. **Wetlands** – N/A

- 
15. **Habitat** – Check with the U.S. Fish and Wildlife on the presence of eagle nests in the area. The presence of eagle nests may impact construction scheduling. No anadromous waterbodies are on the subject parcel, or within 50 feet.
  16. **Plat or Covenant Restrictions** – N/A
  17. **Traffic** – Per 49.40.300(a)(3) - A development projected to generate more than 250 Average Daily Trips (ADT) but fewer than 500 ADT shall be required to have a *traffic* impact analysis if the Community Development Department Director determines that an analysis is necessary based on the type of development, its location, the likelihood of future expansion, and other factors found relevant by the director.

Per the Trip Generation Manual, 9<sup>th</sup> Edition, Volume 2, pg.296, the ADT anticipated to be generated by single family housing is expected to be 9.52 ADT/dwelling.

42 dwelling units X 9.52 ADT = 399.84 total ADT generated by this subdivision.

CBJ classifies Glacier Highway as a Collector.

Per 49.35.210(c) (1) Major *collectors*. If a new subdivision involves frontage along a major *collector* street:

- (A) The plat shall note that no lots shall access directly onto the major *collector*.
- (B) Access shall be provided onto an interior access street or a separate frontage road.
- (C) Exception a parcel of land with less than 500 feet of frontage or less than 350 feet of depth may be subdivided so as to allow access directly onto a major *collector* street.

18. **Nonconforming situations** – N/A

#### Building Division

- 
19. **Building** – No issues with this subdivision.

20. **Outstanding Permits** – BLD20170425 – "Grading, pioneer road, and other work to prepare for development."

## General Engineering/Public Works

### 21. Engineering –

- a. To adhere to 49.15.402 (C) (4) (E) we are requesting a submittal of a preliminary construction plan with typical section of the streets, pedestrian ways, and storm water management proposed. At the preliminary phase, these items do not need to be designed by an engineer.
  - b. At the time of preliminary plat submittal, submit an erosion control report explaining the method by which the applicant proposes to control erosion and manage runoff, and potential impacts to adjacent properties or water bodies. The report shall include a plan for preservation of ground cover in areas where runoff and resulting erosion need to be minimized.
  - c. *Construction plans to be submitted after the approval of the preliminary plat and before final plat submission. Construction plans must adhere to [49.35.140](#) and must be signed and stamped by Alaska-licensed engineers for each discipline. Construction plans for this layout of development does not need to include all phases of full buildout of development. For specific requirements, please refer to CBJ code by visiting: <http://www.juneau.org/cddftp/ordinances.php> and referencing chapter 49.35 – Public and Private Improvements.*
  - d. *Prior to final plat, an Engineer's estimate for the installation of public improvements must be submitted. Once this is received, a performance bond amount will be determined and must be paid/posted prior to recording of the final plat. Further discussion regarding the bond can take place once the project phasing is determined. For all options regarding the financial guarantee please refer to 49.55 – Financial Responsibility.*
  - e. *Dependent on the construction plan and schedule an inspection deposit will be required and a private inspector may be hired and managed by CBJ.*
  - f. *Street lighting is required and shall not exceed 250' between poles.*
22. **Drainage** – Drainage report with the submittal of the preliminary plat does not need to be engineered. At time of construction plan submittals, a drainage plan must be submitted and must be signed and stamped by an Alaska-licensed engineer.
23. **Utilities** – (water, power, sewer, etc.) At time of preliminary plat, a draft plan for the proposed water and sewer lines shall be submitted showing existing installed utilities including line sizing and connection points with elevations.

### Fire Marshal

24. **Fire Items/Access** – Fire turn-around and fire hydrant locations.

### Other Applicable Agency Review

25. Alaska Department of Transportation is requiring a Traffic Impact Analysis (TIA).

### List of required applications

Based upon the information submitted for pre-application review, the following list of applications must be submitted in order for the project to receive a thorough and speedy review.

1. Development Permit Application (DPA)
2. Subdivision Application
3. Conditional Use Permit Application

### Additional Submittal Requirements



## Pre-Application Conference Final Report

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Submittal of additional information, given the specifics of the development proposal and site, are listed below. These items will be required in order for the application to be determined Counter Complete.

1. A copy of this pre-application conference report.
2. Preliminary plat (include topography)
3. Hillside endorsement (tentative if slopes in excess of 18% are present).
4. Drainage report
5. Traffic Impact Analysis (TIA)
6. Construction Drawings (After preliminary NOD)

### Exceptions to Submittal Requirements

Submittal requirements that staff has determined **not** to be applicable or **not** required, given the specifics of the development proposal, are listed below. These items will **not** be required in order for the application to be reviewed.

1. N/A
- 

### Fee Estimates

The preliminary plan review fees listed below can be found in the CBJ code section 49.85.

Based upon the project plan submitted for pre-application review, staff has attempted to provide an accurate estimate for the permits and permit fees which will be triggered by your proposal.

1. 49.85.100(3) and (4) –
  - a. Preliminary Plat is \$110 per lot.
  - b. Final Plat is \$70 per lot.
  - c. Conditional Uses, Class IV uses, \$1,000.

For informational handouts with submittal requirements for development applications, please visit our website at [www.juneau.org/community-development](http://www.juneau.org/community-development).

### Submit your Completed Application

You may submit your application(s) online via email to [permits@juneau.gov](mailto:permits@juneau.gov)

OR in person with payment made to:

City & Borough of Juneau, Permit Center  
230 South Franklin Street  
Fourth Floor Marine View Center  
Juneau, AK 99801

Phone: (907) 586-0715

Web: [www.juneau.org/community-development](http://www.juneau.org/community-development)

### Attachments:

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Article IX. Alternative Residential Subdivisions 49.15.900  
Development-Permit Application (DPA)  
Subdivision-Application  
Preliminary Plat Checklist

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Conditional Use Application (USE)

PART II - CODE OF ORDINANCES  
TITLE 49 - LAND USE  
Chapter 49.15 - PERMITS  
ARTICLE IX. ALTERNATIVE RESIDENTIAL SUBDIVISIONS

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**ARTICLE IX. ALTERNATIVE RESIDENTIAL SUBDIVISIONS**

**49.15.900 Purpose.**

The general purpose of this article is to provide reasonable minimum standards and procedures for unit-lot residential communities in which all or some of the lots do not substantially conform to the minimum requirements for a traditional subdivided lot. This article provides a housing option to allow dwellings on unit-lots to be conveyed by long-term leases, less than fee-simple ownership, or fee-simple ownership, including condominium and other common-interest communities. The specific purpose of this article is to permit flexibility in the regulation and use of land in order to promote its most appropriate use for unit-lot residential communities; to encourage residential developments that are planned, designed and developed to function as integral units with common facilities; to encourage developments that provide different types of housing options; to encourage development of quality affordable housing; to facilitate the adequate and economical provisions of access and utilities; and to encourage developments that are in harmony with the surrounding area.

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( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )

**49.15.910 Application.**

The provisions of this article apply when a parent lot is subdivided into developable unit-lots and where a portion of the parent lot remains.

( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )

**49.15.920 General provisions.**

- (a) *General.* The requirements of this title apply except as provided in this article.
  - (b) *Zoning districts.* An alternative residential subdivision is only allowed in the following zoning districts: RR, D-1, D-3, D-5, D-10SF, D-10, D-15, D-18, and LC.
  - (c) *Lot size.* The parent lot shall be at least 150 percent of the minimum lot size for the zoning district in which it is located. There is no minimum size for the unit-lots.
  - (d) *Other dimensional standards.* The minimum lot dimensions, lot coverage, and vegetative coverage shall be applied to the parent lot and not the unit-lots.
  - (e) *Density.*
    - (1) The number of dwelling units permitted in the development shall be calculated by multiplying the maximum number of dwelling units per gross acre permitted in the underlying zoning district by the number of acres in the alternative residential subdivision and rounding to the nearest whole number.
    - (2) Land and water bodies used in calculating the number of dwelling units permitted shall be delineated on the preliminary and final plans in a manner allowing confirmation of acreage and density computations.
-



- 
- (3) The commission may award a density bonus as an incentive for enhancements to the development. The total bonus shall not exceed 50 percent in the RR, D1, D3, D5, D10 zoning districts, and 25 percent in the D-10SF, D15, D18 and LC zoning districts of the density provided in subsection (e)(1) of this section and rounded to the nearest whole number and shall be the sum of individual density bonuses as follows:
- (A) Five percent for each ten percent increment of open space in excess of that required in the zoning district to a maximum bonus of 15 percent for open space in excess of that required;
  - (B) Five percent for a continuous setback greater than 50 feet or ten percent for a continuous setback greater than 50 feet on both sides of a stream, if applicable, designated in the plan as undisturbed open space along important natural water bodies, including anadromous fish streams, lakes, and wetlands;
  - (C) Fifteen percent for a mixture of housing units restricted by a recorded document for a period of 30 years from the first sale:
    - (i) In which ten percent of the dwelling units are set aside for lower income households earning no more than 80 percent of the area median income; or
    - (ii) In which 20 percent of the dwelling units are set aside for workforce households earning no more than 120 percent of the area median income.
  - (D) Up to ten percent for provision of common facilities and additional amenities that provide an unusual enhancement to the general area, such as siting, landscaped buffers, or the creation or preservation of view corridors;
  - (E) Ten percent for dedication of a public right-of-way accessible to all unit-lots consistent with chapter 49.35;
  - (F) Five percent in the RR, D-1, D-3, D-5, and D-10SF zoning districts, and ten percent in the D-10, D-15, D-18 and LC zoning districts for providing shared use pathways to facilitate safe pedestrian and bicycle movement within the development and to ensure non-vehicular access to open space, common facilities and to public services;
  - (G) Five percent for designing all dwelling structures to a five-star plus energy efficiency rating; ten percent for designing all dwelling structures to a six-star energy efficiency rating; and
  - (H) Up to ten percent for using high-efficiency primary heating methods, such as heat pumps, in all dwelling structures.
- (4) A density bonus may be limited or denied if it will more probably than not:
- (A) Materially endanger public health or safety;
  - (B) Substantially be out of harmony with property in the neighboring area;
  - (C) Lack general conformity with the comprehensive plan or another adopted plan; or
  - (D) Create an excessive burden on roads, sewer, water, schools, or other existing or proposed public facilities.
- (f) *Frontage and access.* The parent lot shall front on and be accessed by a publically maintained right-of-way. Access within the development may be exempted from [chapter] 49.35 and be privately owned and maintained if it complies with the following requirements:
- (1) The access shall be located completely on the parent lot;
  - (2) The access does not endanger public safety or welfare and provides for safe pedestrian and vehicular traffic circulation;

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- (3) The access complies with the emergency service access requirements of CBJ [chapter] 19.10;
  - (4) Access to and within the development is paved;
  - (5) The developer submits adequate evidence that upon approval of the development, a homeowners' association will be formed, can obtain liability insurance, and is solely responsible for maintaining the private access—including winter maintenance; and
  - (6) The alternative residential subdivision does not abut a developable parcel that lacks alternative and practical frontage on a publically maintained right-of-way.
- (g) *Utilities.* An alternative subdivision is required to connect each dwelling unit to public sewer and water. A master meter for water shall be installed by the developer.
- (h) *Parking.* Parking required for each dwelling unit may be located on either the parent lot or the unit-lot.
- (i) *Open space.* Open space is required as follows: 25 percent in the RR and D-1 zoning districts; 20 percent in the D-3, D-5 and D-10 zoning districts; 15 percent in the D-10SF district. Open space is not required in the D-15, D-18, or LC zoning districts.
- (j) *Buffer.* There are no setback requirements on the unit-lots. A perimeter buffer is required in lieu of the setback requirements of this title on the parent lot. The presumptive buffer width shall not be less than the setback set by the underlying zoning district to ensure neighborhood harmony and minimize off-site impacts. The commission may enlarge a buffer or a portion of a buffer up to 25 feet in total width, and the commission may reduce a buffer or a portion of a buffer by 75 percent of the setback for the underlying zoning district. The commission may only enlarge or reduce the buffer width upon considering, but not limited to: type of buffer, location of the subdivision structures and uses therein; the location and type of surrounding uses or development; topography; and the presence of existing visual and sound buffers. A buffer shall be vegetated unless the commission requires non-vegetated screening. A buffer may include fencing, natural berm, or other similar features. No parking areas, dwelling units, unit-lots, or permissible uses may be located within the perimeter buffer. Access to the development may cross a portion of the buffer.
- (k) *Parent lot.* Portions of the parent lot not subdivided into unit-lots shall be owned in common by a homeowners' association, or similar entity, comprised of the owners of the unit-lots located within the parent lot.
- (l) *Stormwater management.* Facilities for the control and disposal of stormwater must be adequate to serve the development and areas draining through the development. Management shall be in accordance with the Stormwater Best Management Practices manual. Where appropriate, natural drainage channels, swales, or other similar areas within the open space may be used for stormwater management at the development. The developer shall provide the CBJ Engineering and Public Works Department with an evaluation of offsite drainage outfalls for the additional runoff contributed by the alternative residential subdivision. The commission may require construction of offsite drainage improvements necessary to accommodate additional runoff from the development.
- (m) *Permitted uses.* No primary uses are permitted on the parent lot except a recreational center, community facility, or a child care center. Consistent with the table of permissible uses, 49.25.300, only residential uses and associated accessory structures are allowed on the unit-lots. Accessory dwelling units are prohibited on the parent lot and on any unit-lots. A home occupation or a child care home is permissible on the unit-lots. If an alternative residential subdivision creates a lot that complies with the table of dimensional standards, 49.25.400, for the underlying zoning district, the accessory dwelling unit prohibition of this subsection does not apply.
- (n) *Street sign.* Street signage is required. The developer shall install a street sign provided by the City and ~~Borough of Juneau at the developer's expense. The director shall determine the type of street sign~~
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addresses or street name—upon considering public health, safety, and welfare given the size of the subdivision.

- (o) *Mailboxes.* Upon consultation with the United States Postal Service, the director shall determine the placement location of mailboxes. The director may require additional improvements and design changes to enable efficient mail delivery and to minimize traffic interferences and compliance with CBJ standard details.

( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )

#### **49.15.930 Alternative residential subdivision review process.**

- (a) *General procedure.* A proposed alternative residential subdivision shall be reviewed according to the requirements of section 49.15.330, conditional use permit, and in the case of an application proposing a change in the number or boundaries of unit-lots, section 49.15.402, major subdivisions, except as otherwise provided in this article. Approval shall be a two-step process, preliminary plan approval and final plan approval. In cases involving a change in the number or boundaries of unit-lots, the preliminary and final plat submissions required by section 49.15.402 shall be included with the preliminary and final plan submissions required by this chapter.
- (b) *Preapplication conference.* Prior to submission of an application, the director shall conduct an informal preapplication conference with the developer to discuss the proposed alternative residential subdivision. The purpose of the preapplication conference shall be to exchange general and preliminary information and to identify potential issues and bonuses. The developer may discuss project plans and the director may provide an informal assessment of project permit eligibility, but no statement made by either party shall be regarded as binding, and the result of the conference shall not constitute preliminary approval by the department. The conference shall include a discussion of the zoning, size, topography, accessibility, and adjacent uses of the development site; the uses, density and layout of buildings, parking areas, the open space and landscaping proposed for the development; the common facilities; provision of utilities, including solid waste and recycling collection; the access, the vehicle and pedestrian circulation, and winter maintenance including snow removal locations; the development schedule and the alternative residential subdivision permit procedures. The developer shall provide a sketch of the proposed alternative residential subdivision.

( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )

#### **49.15.940 Preliminary alternative residential subdivision plan approval.**

- (a) *Application.* The developer shall submit to the department one copy of a complete alternative residential subdivision application, which shall include an application form, the required fee, any information required in subsection 49.15.402, the information required by this section, and any other information specified by the director.
- (b) *Required submissions.* The application shall include the following material:
- (1) *Ownership.* The application shall identify, and shall be signed by or upon, the included written authorization of, all owners, lessees, and optionees of land within the boundaries of all phases of the alternative residential subdivision.
  - (2) *Preliminary development plan.* The application shall include a preliminary development plan, explaining how the proposed alternative residential subdivision will achieve the purposes set forth in section 49.15.900. The preliminary development plan shall summarize the different land uses proposed, including the amount of land for housing, open space, buffer, access, parking and pedestrian circulation; the number and types of housing units and proposed density; the natural features to be protected and hazards to be avoided; and the public, if any, and private services to be provided.

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- (3) *Design.* The application shall describe the design of the alternative residential subdivision, with particular attention to building siting, massing, access, parking, and architectural features; provision of utilities including drainage and trash collection; provision of winter maintenance for access and parking areas; and the circulation of traffic and pedestrians.
  - (4) *Open space, common facilities, and general landscaping.* The preliminary plat shall show and describe common facilities, pedestrian circulation to common facilities and amenities, open space, buffers, landscaping, and similar features.
  - (5) *Request for density bonuses.* If a density bonus is being applied for, the application shall include a narrative describing the justification for the requested bonus, and the application shall show the nature and extent of the requested bonus.
  - (6) *Description of phased development.* The preliminary development plan for a phased alternative residential subdivision shall include:
    - (A) A drawing and development schedule for each phase and for the entire alternative residential subdivision;
    - (B) The size and general location of proposed land uses for each phase at the maximum level of density, including maximum allotment of density bonuses;
    - (C) A description of the access (pedestrian and vehicular) connecting all the phases and where they will connect at the alternative residential subdivision boundaries;
    - (D) A description of how the developer will address the cumulative impacts of the phased development on the neighborhood and the natural environment;
    - (E) A description of the overall design theme unifying the phases;
    - (F) An analysis of how each phase in the project will meet the requirements of subsection 49.15.960(b); and
    - (G) A sketch plat consistent with section 49.15.410.
  - (c) *Department review.* The director shall advise the developer whether the alternative residential subdivision application is complete, and, if not, what the developer must do to make it complete. Within 45 days after determining an application is complete, the director shall schedule the preliminary plan for a public hearing before the commission. The director shall give notice to the developer and the public according to section 49.15.230.
  - (d) *Commission action.* The commission may approve an alternative residential subdivision preliminary plan if it meets the following requirements:
    - (1) The development protects natural features and avoids natural hazards by reserving them as open space;
    - (2) The development is consistent with the land use code;
    - (3) The development incorporates perimeter buffers sufficient to minimize off-site impacts of the subdivision and to maximize harmony with the neighborhood;
    - (4) Utilities proposed for connection to the City and Borough system meet City and Borough standards, and all others are consistent with sound engineering practices, as determined by the City and Borough Engineering and Public Works Department;
    - (5) The configuration of the development provides for economy and efficiency in utilities, housing construction, access, parking and circulation;
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- (6) If the approval is for a phased development, that each phase is consistent with the preliminary development plan and design of the entire alternative residential subdivision;
  - (7) Adequately addresses the cumulative impacts of the phased development on the neighborhood and the natural environment; and
  - (8) If the approval includes an allotment of a density bonus, the density bonus complies with section 49.15.920(e)(4).
- (e) *Expiration.* Approval of a preliminary plan shall expire 18 months after the commission notice of decision unless a final plan for the entire project or, in the case of a phased development, the first phase thereof, is submitted to the department for commission action. An application for extension of a preliminary plan shall be according to section 49.15.250, development permit extension.

( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )

#### **49.15.950 Final alternative residential subdivision plan approval.**

- (a) *Application.* Upon completion of all conditions of the preliminary plan, the developer shall submit an application, fee, and a final plan for commission approval.
- (b) *Homeowners' association.* The formation of a homeowners' association, or similar entity, is required.
  - (1) The articles of incorporation and bylaws of the homeowners' association, required under A.S. 34.08 or this chapter, shall be prepared by a lawyer licensed to practice in the state.
  - (2) The homeowners' association shall be responsible for the maintenance of open space, water and sewer utilities, and stormwater control features and drainages. The association documents shall specify how any other common facilities shall be operated and maintained. The association documents shall require homeowners to pay periodic assessments for the operation, maintenance and repair of common facilities. The documents shall require that the governing body of the association adequately maintain common facilities.
  - (3) If the alternative residential subdivision is phased, the association documents shall specify how the cost to build, operate, and maintain improved open space and common facilities shall be apportioned among homeowners of the initial phase and homeowners of later phases.
  - (4) The homeowners' association documents shall be recorded with the approved final plat.
- (c) *Commission action.* The commission may approve the final plan if it substantially conforms to the approved preliminary plan and all requirements of this article.
- (d) *Expiration.* An approved final plan shall expire 18 months after recording if the applicant fails to obtain an associated building permit and make substantial construction progress. An application for extension of a final plan shall be according to section 49.15.250, development permit extension.

( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )

#### **49.15.960 Phased development.**

- (a) *Phasing allowed.* An applicant may develop an alternative residential subdivision in phases, provided the initial application includes a preliminary development plan sufficient to assess the cumulative effects of the entire alternative residential subdivision on the neighborhood and the environment according to the standards in subsection 49.15.940.

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- (b) *Completion of an individual phase.* Each phase shall be so designed and implemented that, when considered with reference to any previously constructed phases but without reference to any subsequent phases, it meets the design and density standards applicable to the entire alternative residential subdivision. Construction and completion of open space and common facilities serving each phase in an alternative residential subdivision shall proceed at a rate no slower than that of other structures in that phase. No phase shall be eligible for final plan approval until all components of all preceding phases are substantially complete and homeowners' association documents have been approved.
  - (c) *Standards for phases.* Each phase of an alternative residential subdivision shall be reviewed according to the provisions of this chapter then current. Each phase of an alternative residential subdivision shall maintain design continuity with earlier phases. At no point during a phased development shall the cumulative density exceed that established in the approved preliminary plan.

( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )

#### **49.15.970 Amendments to approved alternative residential subdivision plan.**

- (a) *Request for amendment.* The developer of an alternative residential subdivision may request an amendment to an approved preliminary or final alternative residential subdivision plan. The request shall state the reasons for the amendment and shall be submitted in writing to the director, who shall inform the developer within 15 days whether the request shall be processed as a minor amendment or major amendment.
- (b) *Minor amendment.* A minor amendment may be submitted without a filing fee and may be approved by the director. For purposes of this section, a minor amendment is a change consistent with the conditions of the original plan approval, and would result in:
  - (1) Insignificant change in the outward appearance of the development;
  - (2) Insignificant impacts on surrounding properties;
  - (3) Insignificant modification in the location or siting of buildings or open space;
  - (4) No reduction in the number of parking spaces below that required;
  - (5) A delay of no more than one year in the construction or completion schedule for the project or, in the case of a phased project, the phase for which the amendment is requested.
- (c) *Major amendment.* All other amendments shall be reviewed by the commission upon payment of a filing fee and in accordance with the requirements of the original plan approval.

( Serial No. 2018-41(c), § 2, 12-17-2018, eff. 1-17-2019 )



# DEVELOPMENT PERMIT APPLICATION

**NOTE: Development Permit Application forms must accompany all other Community Development Department land use applications. This form and all documents associated with it are public record once submitted.**

To be completed by Applicant	<b>PROPERTY LOCATION</b>		
	Physical Address		
	Legal Description(s) (Subdivision, Survey, Block, Tract, Lot)		
	Parcel Number(s)		
	<input type="checkbox"/> This property is located in the downtown historic district <input type="checkbox"/> This property is located in a mapped hazard area, if so, which _____		
	<b>LANDOWNER/ LESSEE</b>		
	Property Owner		Contact Person
	Mailing Address		Phone Number(s)
	E-mail Address		
	<b>LANDOWNER/ LESSEE CONSENT</b>		
	Required for Planning Permits, not needed on Building/ Engineering Permits. Consent is required of all landowners/ lessees. If submitted with the application, alternative written approval may be sufficient. Written approval must include the property location, landowner/ lessee's printed name, signature, and the applicant's name.		
	I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows: A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. B. I (we) grant permission for the City and Borough of Juneau officials/employees to inspect my property as needed for purposes of this application.		
	_____		_____
	<b>Landowner/Lessee (Printed Name)</b>		<b>Title (e.g.: Landowner, Lessee)</b>
	X	_____	_____
	<b>Landowner/Lessee (Signature)</b>	<b>Date</b>	
_____		_____	
<b>Landowner/Lessee (Printed Name)</b>		<b>Title (e.g.: Landowner, Lessee)</b>	
X	_____	_____	
	<b>Landowner/Lessee (Signature)</b>	<b>Date</b>	
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours. We will make every effort to contact you in advance, but may need to access the property in your absence and in accordance with the consent above. Also, members of the Planning Commission may visit the property before a scheduled public hearing date.			
<b>APPLICANT</b> <span style="float: right;">If same as LANDOWNER, write "SAME"</span>			
Applicant (Printed Name)		Contact Person	
Mailing Address		Phone Number(s)	
E-mail Address			
X	_____	_____	
	<b>Applicant's Signature</b>	<b>Date of Application</b>	

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

For assistance filling out this form, contact the Permit Center at 586-0770.

	Intake Initials
	Date Received



# SUBDIVISION AND DEVELOPMENT PLAN APPLICATION

See subdivision hand-outs for more information regarding the permitting process and the materials required for a complete application.

**NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.**

To be completed by Applicant	<b>PROJECT SUMMARY</b>				
	Number of Existing Parcels _____	Total Land Area _____			
	Number of Resulting Parcels _____				
	<b>HAS THE PARCEL BEEN CREATED BY A MINOR SUBDIVISION IN THE PRECEDING 24 MONTHS</b>				
<input type="radio"/> NO <input type="radio"/> YES Case Number _____					
<b>TYPE OF SUBDIVISION OR PLATTING APPROVAL REQUESTED</b>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;"><b><u>MINOR DEVELOPMENT</u></b> (changing or creating 13 or fewer lots)</td> <td style="width: 50%; text-align: center;"><b><u>MAJOR DEVELOPMENT</u></b> (changing or creating 14 or more lots)</td> </tr> <tr> <td style="vertical-align: top;"> <input type="radio"/> Preliminary Plat (MIP)  <input type="radio"/> Final Plat (MIF)  <input type="radio"/> Panhandle Subdivision  <input type="radio"/> Accretion Survey  <input type="radio"/> Boundary Adjustment  <input type="radio"/> Lot Consolidation (SLC)  <input type="radio"/> Bungalow Lot Subdivision  <input type="radio"/> Common Wall/Zero Lot Subdivision  <input type="radio"/> Other _____           </td> <td style="vertical-align: top;"> <input type="radio"/> Preliminary Plat (SMP)  <input type="radio"/> Final Plat (SMF)  <input type="radio"/> Preliminary Development Plan – PUD (PDP)  <input type="radio"/> Final Development Plan – PUD (PDF) Preliminary  <input type="radio"/> Development Plan – ARS (ARP) Final  <input type="radio"/> Development Plan – ARS (ARF)  <input type="radio"/> Bungalow Lot Subdivision  <input type="radio"/> Common Wall/Zero Lot Subdivision  <input type="radio"/> Other _____           </td> </tr> </table>		<b><u>MINOR DEVELOPMENT</u></b> (changing or creating 13 or fewer lots)	<b><u>MAJOR DEVELOPMENT</u></b> (changing or creating 14 or more lots)	<input type="radio"/> Preliminary Plat (MIP) <input type="radio"/> Final Plat (MIF) <input type="radio"/> Panhandle Subdivision <input type="radio"/> Accretion Survey <input type="radio"/> Boundary Adjustment <input type="radio"/> Lot Consolidation (SLC) <input type="radio"/> Bungalow Lot Subdivision <input type="radio"/> Common Wall/Zero Lot Subdivision <input type="radio"/> Other _____	<input type="radio"/> Preliminary Plat (SMP) <input type="radio"/> Final Plat (SMF) <input type="radio"/> Preliminary Development Plan – PUD (PDP) <input type="radio"/> Final Development Plan – PUD (PDF) Preliminary <input type="radio"/> Development Plan – ARS (ARP) Final <input type="radio"/> Development Plan – ARS (ARF) <input type="radio"/> Bungalow Lot Subdivision <input type="radio"/> Common Wall/Zero Lot Subdivision <input type="radio"/> Other _____
<b><u>MINOR DEVELOPMENT</u></b> (changing or creating 13 or fewer lots)	<b><u>MAJOR DEVELOPMENT</u></b> (changing or creating 14 or more lots)				
<input type="radio"/> Preliminary Plat (MIP) <input type="radio"/> Final Plat (MIF) <input type="radio"/> Panhandle Subdivision <input type="radio"/> Accretion Survey <input type="radio"/> Boundary Adjustment <input type="radio"/> Lot Consolidation (SLC) <input type="radio"/> Bungalow Lot Subdivision <input type="radio"/> Common Wall/Zero Lot Subdivision <input type="radio"/> Other _____	<input type="radio"/> Preliminary Plat (SMP) <input type="radio"/> Final Plat (SMF) <input type="radio"/> Preliminary Development Plan – PUD (PDP) <input type="radio"/> Final Development Plan – PUD (PDF) Preliminary <input type="radio"/> Development Plan – ARS (ARP) Final <input type="radio"/> Development Plan – ARS (ARF) <input type="radio"/> Bungalow Lot Subdivision <input type="radio"/> Common Wall/Zero Lot Subdivision <input type="radio"/> Other _____				
<b>ALL REQUIRED DOCUMENTS ATTACHED</b>					
<input type="checkbox"/> Pre-application conference notes <input type="checkbox"/> Narrative including: <ul style="list-style-type: none"> <li><input type="checkbox"/> Legal description(s) of property to be subdivided</li> <li><input type="checkbox"/> Existing structures on the land</li> <li><input type="checkbox"/> Zoning district</li> <li><input type="checkbox"/> Density</li> <li><input type="checkbox"/> Access</li> <li><input type="checkbox"/> Current and proposed use of any structures</li> <li><input type="checkbox"/> Utilities available</li> <li><input type="checkbox"/> Unique characteristics of the land or structure(s)</li> </ul> <input type="checkbox"/> Preliminary Plat checklist					

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

SUBDIVISION/PLATTING FEES	Fees	Check No.	Receipt	Date
Application Fees	\$ _____			
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
<b>Total Fee</b>	<b>\$ _____</b>			

For assistance filling out this form, contact the Permit Center at 586-0770.

**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

Case Number	Date Received
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## PRELIMINARY PLAT CHECK LIST

Name of Proposed Subdivision: \_\_\_\_\_

The following items must be included with the initial submittal of a Preliminary Plat:

- Application, filled out completely
- Project Narrative
- Pre-application Conference Report
- Disclosure of all known environmental hazards and any proposed mitigation measures recommended in the applicable environmental document.
- Preliminary Plat Checklist: I have reviewed the checklist and all submittals for completeness and accuracy.
- Application fee (see fee schedule)
- Five (5) – 24" by 36" Copies
- Lot Closure Report

\_\_\_\_\_  
Applicant or Surveyor - Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Applicant or Surveyor - Print Name

### **GENERAL REQUIREMENTS**

- The preliminary plat shall be prepared by a professional land surveyor, registered in the State of Alaska
- The preliminary plat shall be submitted on 22 by 34 inch sheets. The director of engineering and public works may approve alternate sheet sizes
- The preliminary plat shall be drawn with black ink to a scale of one-inch to 100 feet or less, or other suitable scale approved by the director of engineering and public works
- The preliminary plat shall be oriented with north toward the top of the sheet.
- A vicinity map shall be located in the upper right-hand corner of the sheet
- The vicinity map shall be oriented in the same direction as the plat
- A suitable north arrow shall be shown for the plat and vicinity map
- All line work and lettering must be of professional quality, and all line widths and lettering sizes must be of such size that all information can be clearly shown without overlap or confusion

**GRAPHIC REQUIREMENTS** - A preliminary plat shall contain the following information:

**Title block** - An enclosed title block in the lower right-hand corner containing the following information:

- The proposed name of the subdivision
- The legal description of the parcel to be subdivided including U.S. Survey, U.S. Mineral Survey, A.T.S. number or section, township, and range number, as applicable
- "City and Borough of Juneau, Alaska"
- "State Recorder's Office at Juneau"
- The date the preliminary plat was prepared and revised
- The horizontal scale
- The name and address of the owner of record
- The name, address, and telephone number of the surveyor preparing the preliminary plat

**Lot, block, and street information:**

- The area of each lot
- The dimensions in feet and hundredths of a foot
- An identifying number and letter for lots and blocks
- Lots numbered consecutively, commencing with the number "1," with no omissions or duplications
- If the remainder of an original parcel being subdivided is relatively large, it shall be designated as a "tract" with an identifying number
- All parcels of land intended to be dedicated for public use or reserved for the use of all of the property owners in the proposed subdivision shall be shown as lots, and consecutively numbered. The purpose and any conditions or limitations on the use of the parcel shall be noted on the plat
- Abutting properties shall be shown with dashed lines, numbers, and/or letters
- For resubdivisions or public way vacations, the lines and legal description of the previous lots shall be shown with light dashed lines, numbers, and/or letters, or by a separate plat on the same sheet showing the previous lot lines
  - The minimum data shown for each curve shall be as follows:
    - Length
    - Central angle
    - Radius
    - Bearing and distance of long chord
  - Setbacks shall be shown on all corner lots and any lots with multiple frontage. Setbacks shall be shown on typical lots

**Boundary lines:**

- All boundary lines of the subdivision with bearings and distances described
- All retraced boundary lines shall show record and measured bearings and distances where they differ. Record dimension information shall be shown within parentheses and include a record source identification
- The exterior boundary lines of the subdivision shall be a solid black opaque line that is of a width that distinguishes it from all other property lines shown on the plat
- If phasing is proposed, then the boundaries and number of each phase, sequential lot numbering, and a subdivision name consistent with previous phases shall be shown

**Monumentation:**

- The monuments used to establish the basis of bearing
- Each monument found or set shall be identified on the plat by a symbol
- A complete description of the monument, including type and all information printed on the cap. A typical drawing shall be shown for each type of monument cap set
- A legend showing the symbols for all the types of monuments
- The identification, description location, elevation, and datum of the benchmark used to establish vertical control

**Site access, circulation, and utilities:**

- The widths and names of existing rights-of-way within the subdivision and within 100 feet of the subdivision boundary
- Proposed rights-of-way, including their widths and proposed names
- The grades of existing and proposed streets within these rights-of-way
- The width, ownership, use, and record reference of all proposed and existing easements within the subdivision and within 100 feet of the subdivision boundary
- The width, ownership, and use of all proposed easements

- All proposed and existing easements shall have sufficient dimensions shown to determine their location on the ground
- Existing trails or pathways within the subdivision and within 100 feet of the subdivision boundary, including the width of any associated rights-of way or easements
- Proposed trails or pathways and widths of their rights-of-way
- If the plat submitted covers only a part of the tract under the control of the applicant, a sketch plat of the prospective street system of the unplatted part shall be submitted
- The location of any existing or proposed driveways/curb cuts that access or are proposed to access any existing or proposed street

**Topographic information:**

- For slopes of less than five percent, show one foot contour lines and include spot elevations at all breaks in grade, along all drainage channels or swales, and at selected points not more than 100 feet apart in all directions
- For slopes between five percent and ten percent, show two foot contour lines
- For slopes greater than ten percent, show five foot contour lines
- Every fifth elevation contour shall be distinctive and clearly labeled
- Dashed lines shall represent existing contours
- Mapping shall include any significant features which can materially affect the design of the subdivision, including, but not limited to, structures, fences, walls, and utility poles
- If irregular slopes or special features are present, additional contour information may be required by the director of engineering and public works for planning or construction purposes. Additional required information may include projecting the topography of the site after grading has taken place, showing such items as:
  - Pad elevations and drainage patterns for each lot
  - Tops and toes of all manufactured slopes, including daylight lines
  - Existing and proposed retaining wall locations and heights
- For subdivisions located in hillside areas with slopes greater than eighteen percent, additional requirements apply in accordance with CBJ 49.70, Article II

**Sewer and water:**

- Existing sewer and water mains within the tract with pipe sizes and grades
- A draft plan for proposed water and sewer lines showing the size, approximate slope, and connection points with elevations for the purpose of determining the feasibility of construction

**Multisheet plats:**

- When a plat requires more than one sheet, exclusive of a certificate sheet, an index sheet shall be included. When a plat requires more than three sheets, a cover sheet shall also be included, showing the subdivision title, a key map, and all certificates. Each additional sheet shall include the following data:
  - North arrow
  - Legend
  - Surveyor's seal and signature
  - Title block
  - Sheet \_\_\_\_\_ of \_\_\_\_\_
  - Scale
  - All plat notes
  - Vicinity map

**ADDITIONAL MAPPING OR REPORTS-** *At the pre-application meeting, it will be determined if any of the following additional mapping or reports are required to be submitted with the preliminary plat. If required, the following additional mapping or reports shall be submitted:*

**Hazard and Special Habitat Areas:**

- Any portion of a special flood hazard area, landslide or avalanche area, habitat area as defined by CBJ 49.70.310, or watersheds, either existing at the proposed subdivision site or shown on the overlay maps, adopted pursuant to this title, to exist at the proposed subdivision site, must be depicted on the preliminary plat
- The boundaries of any wetland areas must be depicted on the preliminary plat. Boundaries must be determined by a person qualified to perform wetland delineations

**Soils report:**

- A soils report prepared by an engineer licensed by the State of Alaska shall be required if the proposed subdivision is located farther from the existing public sewer system than specified in CBJ 49.35, and the applicant chooses to provide on-lot waste disposal rather than to connect to the public system. A soils report shall include the following:
  - Certification that the proposed lots are large enough and have soil of sufficient permeability to permit the construction of approved waste treatment systems for on-lot waste disposal
  - The location and size of drain fields for each lot
  - The locations and logs of test borings, percolation test results, and a hydrological evaluation of on-site sewage disposal
  - If the soils report indicates that the soils found on the site are not of sufficient permeability or the lots are not large enough to permit the construction of systems for on-lot waste disposal, the size of the proposed lots must be increased or alternate methods for waste disposal proposed
  - The soils report shall describe the nature of the subsurface soils and any soil conditions that would affect the design of the proposed development. The soils report shall state whether the proposed subdivision plan is feasible and provide general solutions for all known geotechnical conditions or problems

**Drainage report:**

- A preliminary report specifying the method by which the applicant proposes to manage surface and subsurface drainage for the subdivision and the effect of such method on adjacent areas. Unlike the drainage plan required by CBJ 49.35.510, the preliminary drainage report does not need to be prepared by a licensed engineer. The report must address the following:
  - A calculation of the increase in stormwater runoff resulting from the proposed development as well as the runoff from all drainage areas associated with the site. Runoff calculations shall be based on a fully-developed subdivision and a 25-year storm event
  - How drainage from the proposed subdivision will join an established drainage channel or channels, unless the director of engineering and public works approves use of an alternative drainage way
  - An evaluation of existing drainage ways and structures located between the subdivision and the receiving water body, and verification that the existing drainage ways can accommodate the increased runoff. If the increased runoff cannot be handled, the plan must propose solutions to the problem
  - All required improvements, on or off site, that are shown on the construction plans in accordance with CBJ 49.35, Article V, and that will be constructed as part of the subdivision

**Water:**

- For subdivisions of five or more lots, including major subdivisions, the following shall be included, where applicable, in accordance with CBJ 49.15.412:
  - If a proposed subdivision is located at greater distance from the existing public water system than specified in CBJ 49.35, Article III, and the applicant chooses not to connect to the public system, a statement that the applicant will provide a community water system or that individual wells will be used

Preliminary Plat Checklist

Updated 1/2018

Page 5 of 5

- A report by a registered engineer or geologist that clearly supports the legal and physical availability of adequate water. Methods for proof of water availability and the standards for quantity are listed in CBJ 49.35, Article III
- A copy of the State application for a permit to appropriate water in the quantity required to meet the subdivisions demands
- This does not apply to remote subdivisions unless: the subdivider of the remote subdivision chooses to provide potable water, a public water system is available and the subdivision falls within the criteria outlined in CBJ 49.35.310(a), or the subdivision has four or fewer lots.
- The director for minor subdivisions, and the planning commission for major subdivisions, may, for good cause, temporarily waive the requirement to provide a water report and proof of water, and condition the approval of the preliminary plat upon the provision of both documents as part of the final plat application and approval process.

**Erosion control:**

- A report explaining the method by which the applicant proposes to control erosion and manage runoff, and potential impacts to adjacent properties or water bodies. The report shall include a plan for preservation of ground cover in areas where runoff and resulting erosion need to be minimized.

**Traffic study:**

- A traffic impact analysis may be required with the preliminary plat in accordance with CBJ 49.40.300.

**Shadow plats:**

- For subdivisions of five or more lots in transition areas, a shadow plat shall be submitted according to CBJ 49.70.710. The shadow plat shall consist of a sketch superimposed on the proposed subdivision layout. This sketch shall reflect any future resubdivision of the parcels into smaller lots consistent with the higher density and the lot size allowed under the transition zoning.



# ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION

See reverse side for more information regarding the permitting process and the materials required for a complete application.

**NOTE: Must be accompanied by a DEVELOPMENT PERMIT APPLICATION form.**

To be completed by Applicant

**PROJECT SUMMARY**

**TYPE OF ALLOWABLE OR CONDITIONAL USE PERMIT REQUESTED**

- Accessory Apartment – Accessory Apartment Application (AAP)
- Use Listed in 49.25.300 – Table of Permissible Uses (USE)  
Table of Permissible Uses Category: \_\_\_\_\_

**IS THIS A MODIFICATION or EXTENSION OF AN EXISTING APPROVAL?**     YES – Case # \_\_\_\_\_     NO

**UTILITIES PROPOSED**      **WATER:**     Public     On Site      **SEWER:**     Public     On Site

**SITE AND BUILDING SPECIFICS**

Total Area of Lot \_\_\_\_\_ square feet      Total Area of Existing Structure(s) \_\_\_\_\_ square feet  
Total Area of Proposed Structure(s) \_\_\_\_\_ square feet

**EXTERNAL LIGHTING**

- Existing to remain     No     Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures
- Proposed                 No     Yes – Provide fixture information, cutoff sheets, and location of lighting fixtures

**ALL REQUIRED DOCUMENTS ATTACHED**

- Narrative including:**
- Current use of land or building(s)
  - Description of project, project site, circulation, traffic etc.
  - Proposed use of land or building(s)
  - How the proposed use complies with the Comprehensive Plan

- Plans including:**
- Site plan
  - Floor plan(s)
  - Elevation view of existing and proposed buildings
  - Proposed vegetative cover
  - Existing and proposed parking areas and proposed traffic circulation
  - Existing physical features of the site (e.g.: drainage, habitat, and hazard areas)

*If this is a modification or extension include:*

- Notice of Decision and case number
- Justification for the modification or extension
- Application submitted at least 30 days before expiration date

-----DEPARTMENT USE ONLY BELOW THIS LINE-----

ALLOWABLE/CONDITIONAL USE FEES				
	Fees	Check No.	Receipt	Date
Application Fees	\$ _____			
Admin. of Guarantee	\$ _____			
Adjustment	\$ _____			
Pub. Not. Sign Fee	\$ _____			
Pub. Not. Sign Deposit	\$ _____			
<b>Total Fee</b>	\$ _____			

This form and all documents associated with it are public record once submitted.

**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

For assistance filling out this form, contact the Permit Center at 586-0770.

Case Number	Date Received



## Allowable/Conditional Use Permit Application Instructions

Allowable Use permits are outlined in CBJ 49.15.320, Conditional Use permits are outline in CBJ 49.15.330

**Pre-Application Conference:** A pre-application conference is required prior to submitting an application. There is no fee for a pre-application conference. The applicant will meet with City & Borough of Juneau and Agency staff to discuss the proposed development, the permit procedure, and to determine the application fees. To schedule a pre-application conference, please contact the Permit Center at 586-0770 or via e-mail at [permits@juneau.org](mailto:permits@juneau.org).

**Application:** An application for an Allowable/Conditional Use Permit will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

1. **Forms:** Completed Allowable/Conditional Use Permit Application and Development Permit Application forms.
2. **Fees:** Fees generally range from \$350 to \$1,600. Any development, work, or use done without a permit issued will be subject to double fees. All fees are subject to change.
3. **Project Narrative:** A detailed narrative describing the project.
4. **Plans:** All plans are to be drawn to scale and clearly show the items listed below:
  - A. Site plan, floor plan and elevation views of existing and proposed structures
  - B. Existing and proposed parking areas, including dimensions of the spaces, aisle width and driveway entrances
  - C. Proposed traffic circulation within the site including access/egress points and traffic control devices
  - D. Existing and proposed lighting (including cut sheets for each type of lighting)
  - E. Existing and proposed vegetation with location, area, height and type of plantings
  - F. Existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.)

**Document Format:** All materials submitted as part of an application shall be submitted in either of the following formats:

1. Electronic copies in the following formats: .doc, .txt, .xls, .bmp, .pdf, .jpg, .gif, .xlm, .rtf (other formats may be preapproved by the Community Development Department).
2. Paper copies 11" X 17" or smaller (larger paper size may be preapproved by the Community Development Department).

**Application Review & Hearing Procedure:** Once the application is determined to be complete, the Community Development Department will initiate the review and scheduling of the application. This process includes:

**Review:** As part of the review process the Community Development Department will evaluate the application for consistency with all applicable City & Borough of Juneau codes and adopted plans. Depending on unique characteristics of the permit request the application may be required to be reviewed by other municipal boards and committees. During this review period, the Community Development Department also sends all applications out for a 15-day agency review period. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

**Hearing:** All Allowable/Conditional Use Permit Applications must be reviewed by the Planning Commission for vote. Once an application has been deemed complete and has been reviewed by all applicable parties the Community Development Department will schedule the requested permit for the next appropriate meeting.

**Public Notice Responsibilities:** Allowable/Conditional Use requests must be given proper public notice as outlined in CBJ 49.15.230:

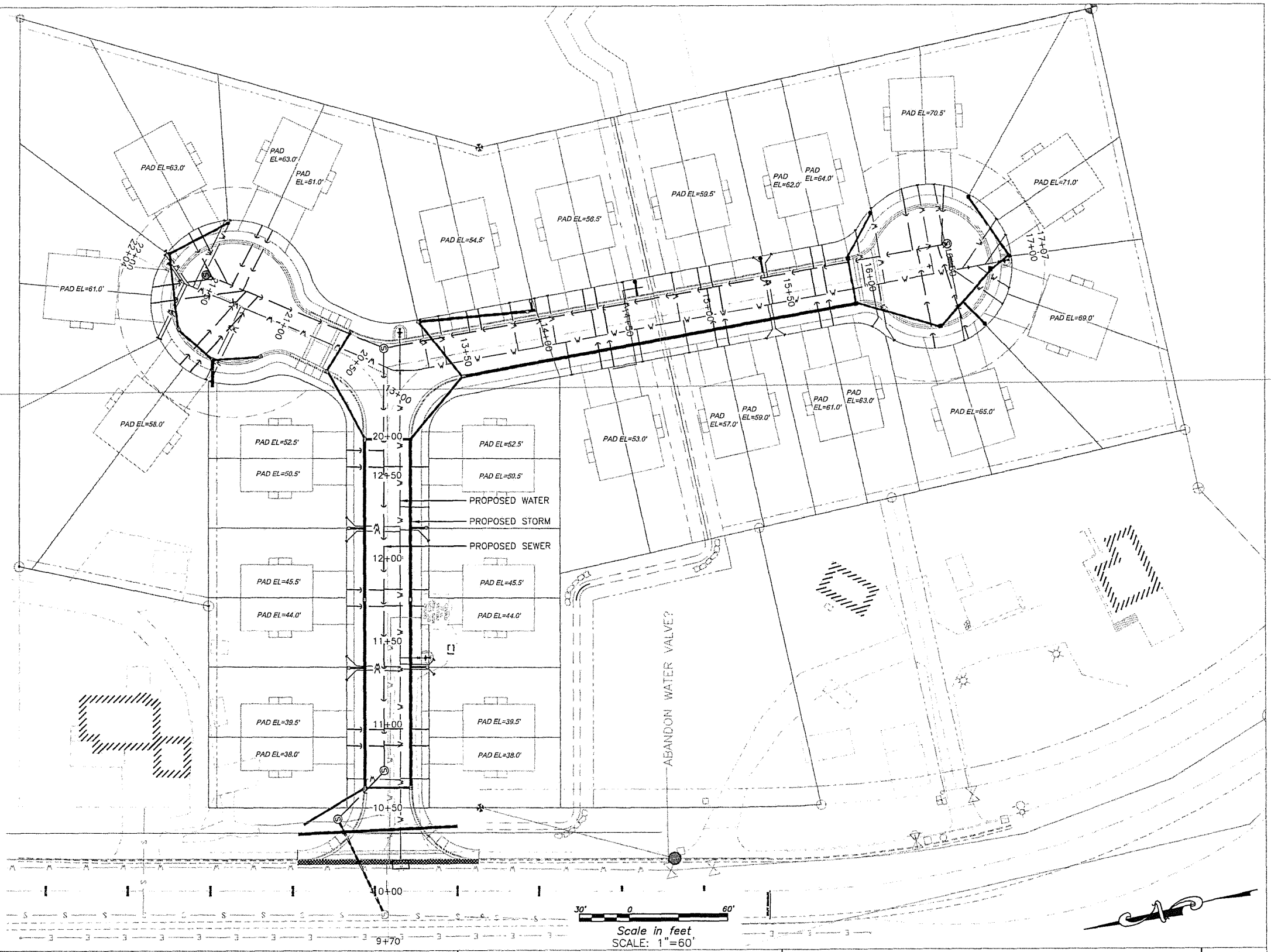
**The Community Development Department** will give notice of the pending Planning Commission meeting and its agenda in the local newspaper a minimum of 10-days prior to the meeting. Furthermore, CDD will mail notices to all property owners within 500-feet of the project site.

**The Applicant** will post a sign on the site at least 14 days prior to the meeting. The sign shall be visible from a public right-of-way or where determined appropriate by CDD. Signs may be produced by the Community Development Department for a preparation fee of \$50, and a \$100 deposit that will be refunded in full if the sign is returned within seven days of the scheduled hearing date. If the sign is returned between eight and 14 days of the scheduled hearing \$50 may be refunded. The Applicant may make and erect their own sign. Please contact the Community Development Department for more information.

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**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

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  - CENTERLINE
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  - - - EXISTING WATER LINE
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  - ===== PROPOSED CURB & GUTTER WITH CURB INLET
  - - - PROPOSED BACK SIDEWALK
  - - - PROPOSED CUT SLOPE
  - - - PROPOSED FILL SLOPE
  - PROPOSED 8" PVC SEWER LINE
  - PROPOSED 4" SEWER LATERAL
  - ⊙ EXISTING SEWER MANHOLE
  - ⊙ PROPOSED SEWER MANHOLE



STORM QUANTITIES	
SIZE/TYPE	QUANTITY
18" CORRUGATED POLY.	484 LF
12" CORRUGATED POLY.	978 LF
TYPE III CATCH BASIN	5 EA
TYPE IV CATCH BASIN	11 EA
TYPE CBJ 310 AREA DRAIN	13 EA
STD. 305 STORM DRAIN MH	2 EA

WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	835 LF
1" TYPE "K" SERVICE LINE	1470 LF
FIRE HYDRANT	4 EA
WATER METER	42 EA
MAINLINE VALVE	7 EA

SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	855 LF
4" SDR 35 PVC SIDE SEWER	2320 LF
TYPE I MANHOLE	5 EA
DOT K-16 MANHOLE	1 EA

ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	1705 LF
5' SIDEWALK	1375 LF
ASPHALT PAVING	500 TONS*
2" MINUS BASE	750 CY
SHOT ROCK	2100 CY

\*USING 2.0 CONVERSION FACTOR (CY TO TON)

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**MOORE ENGINEERING**  
 P.O. BOX 397 CRAIG, ALASKA 99921  
 (907) 530-7008  
*TRACY MOORE, P.E.*  
 REGISTERED PROFESSIONAL CIVIL ENGINEER

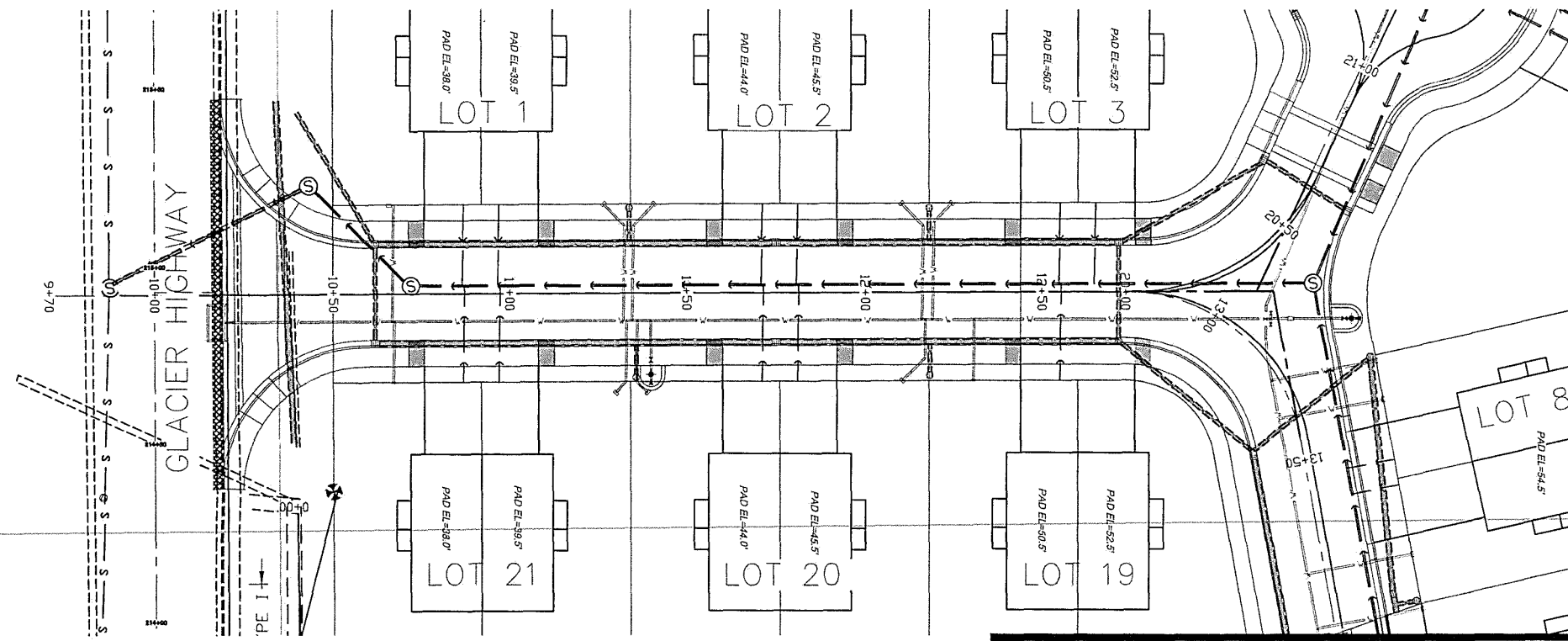
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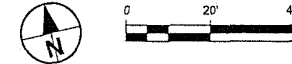


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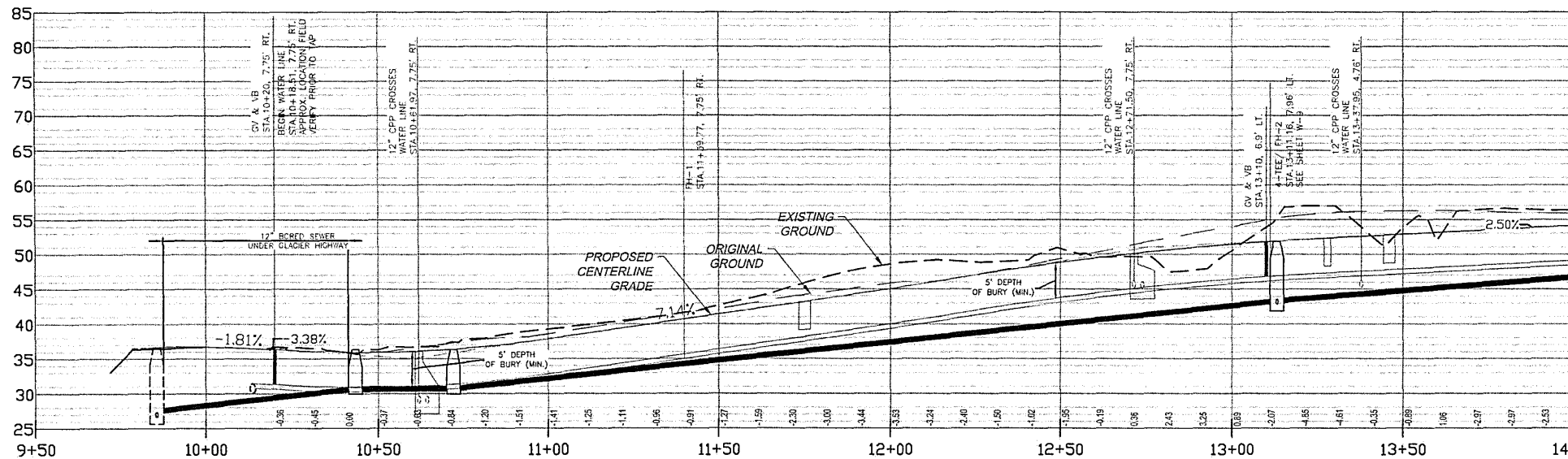
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- PROPOSED 1" WATER LINE SERVICE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED THRUST BLOCK
- EXISTING SEWER MANHOLE



**A UTILITY PLAN**  
SCALE: 1" = 20' ON FULL SIZE



MATCHLINE STA. 14+00  
SEE SHEET P&P 2



**B PROFILE**  
SCALE: 1" = 20' ON FULL SIZE

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ph: (360) 352-2477 fax: (360) 352-0179 E-mail: admin@vectorengineeringinc.com

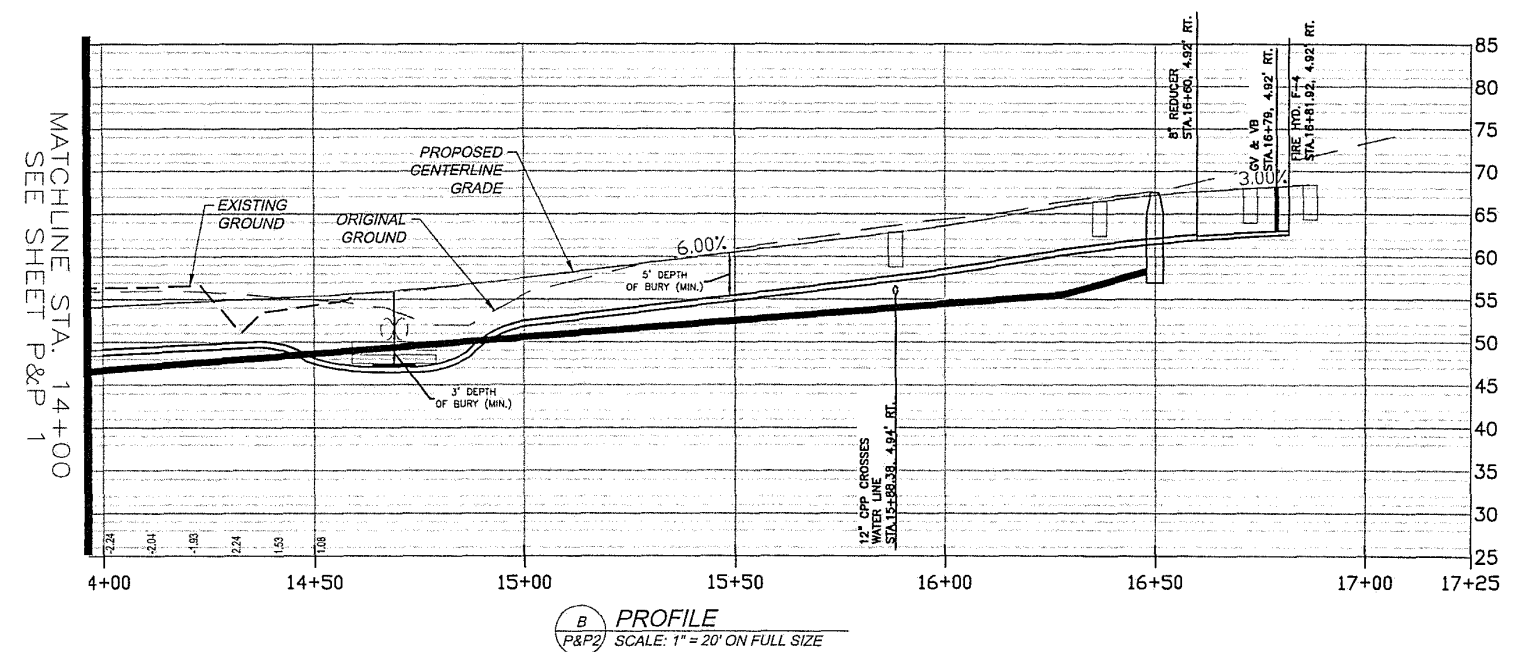
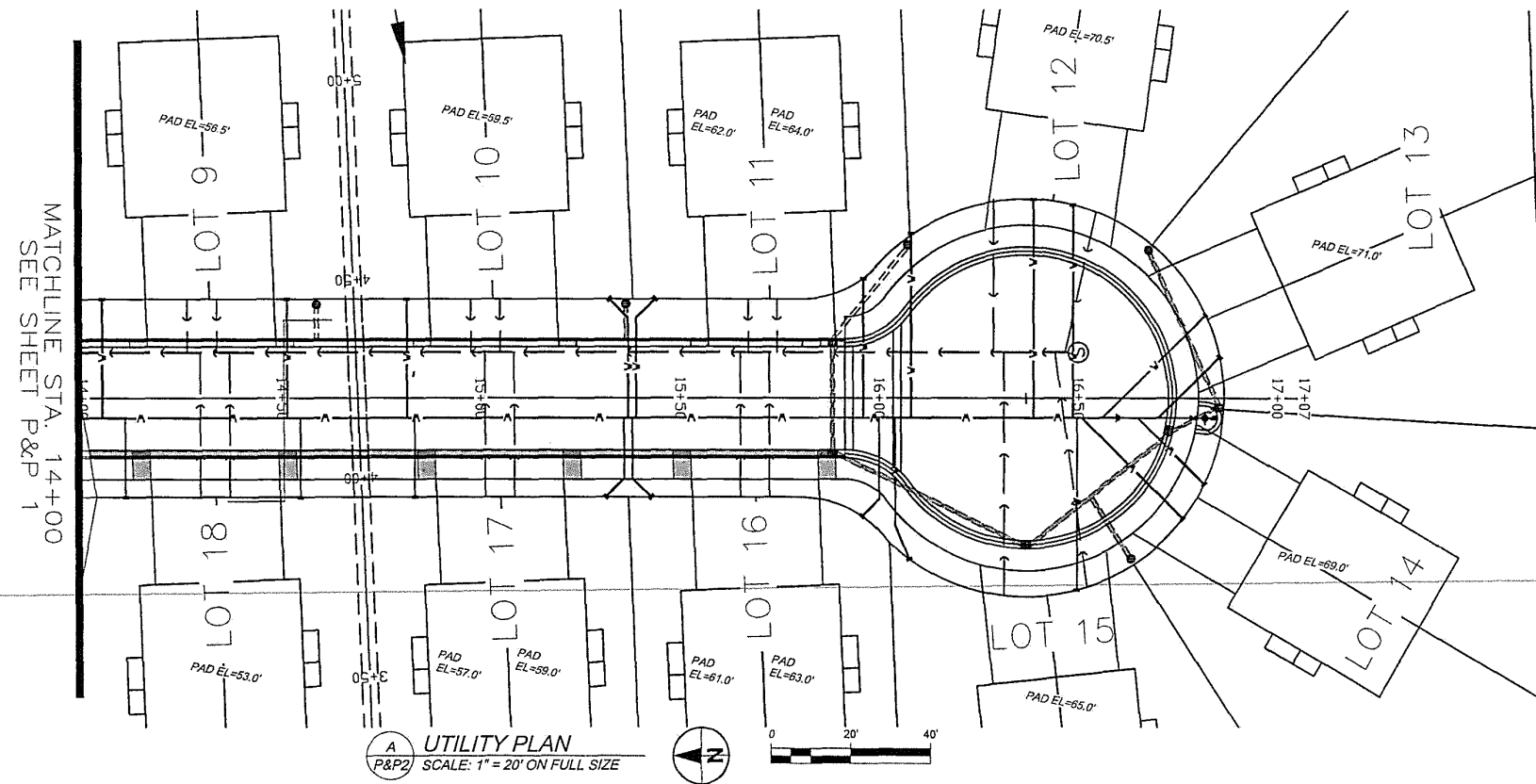
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P&P 1  
UTILITY PLAN &  
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SHT 1 OF 6

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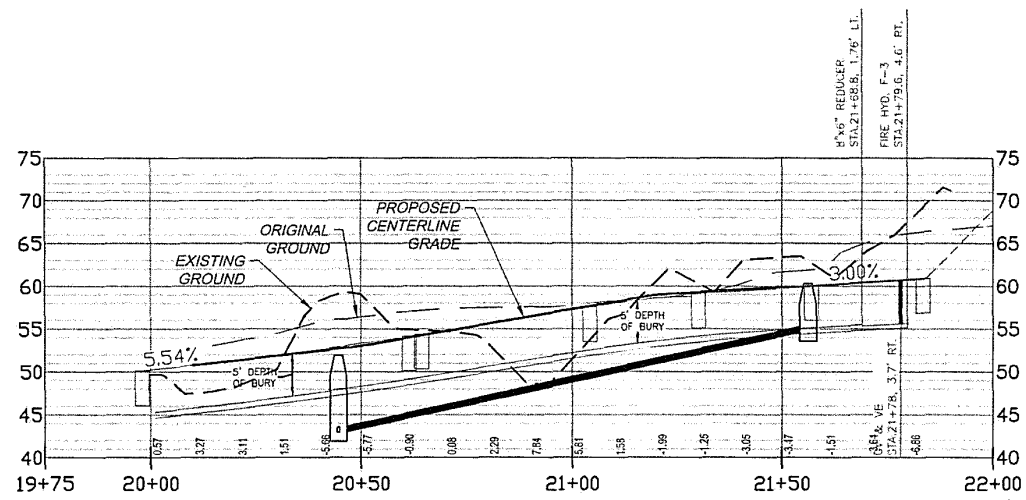
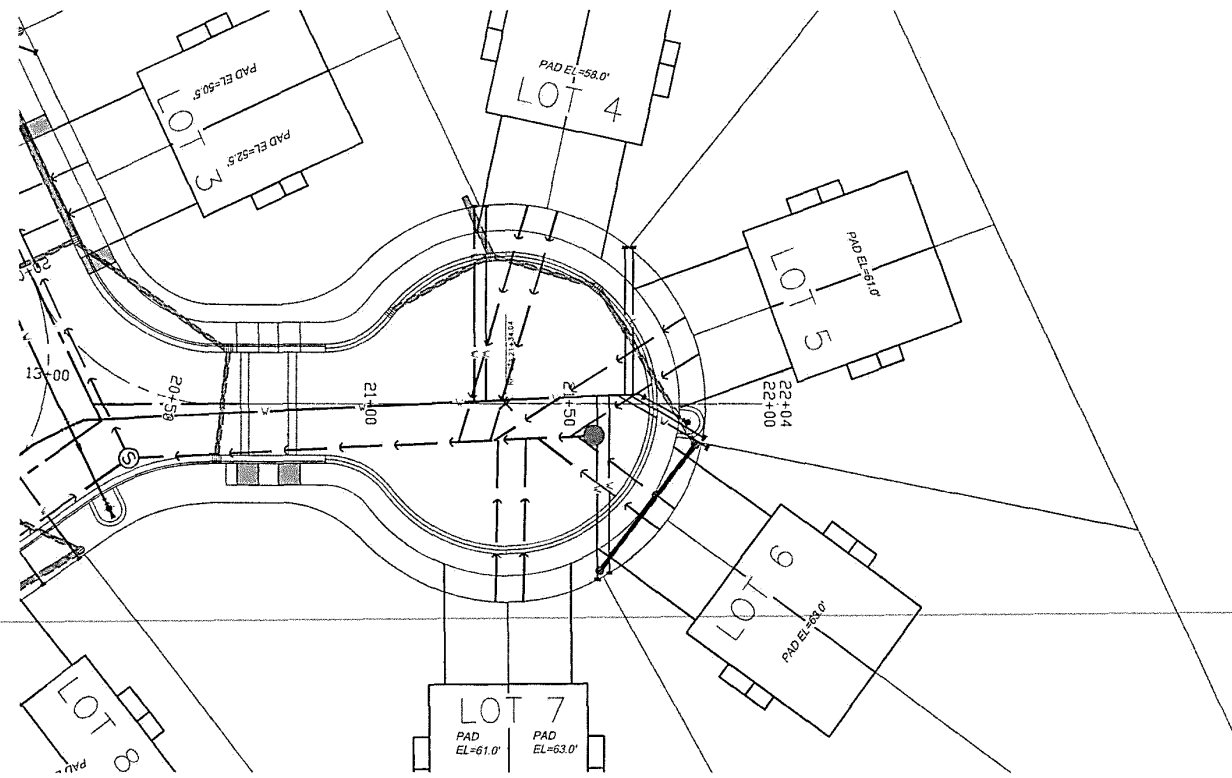
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JUNEAU, AK

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UTILITY PLAN &  
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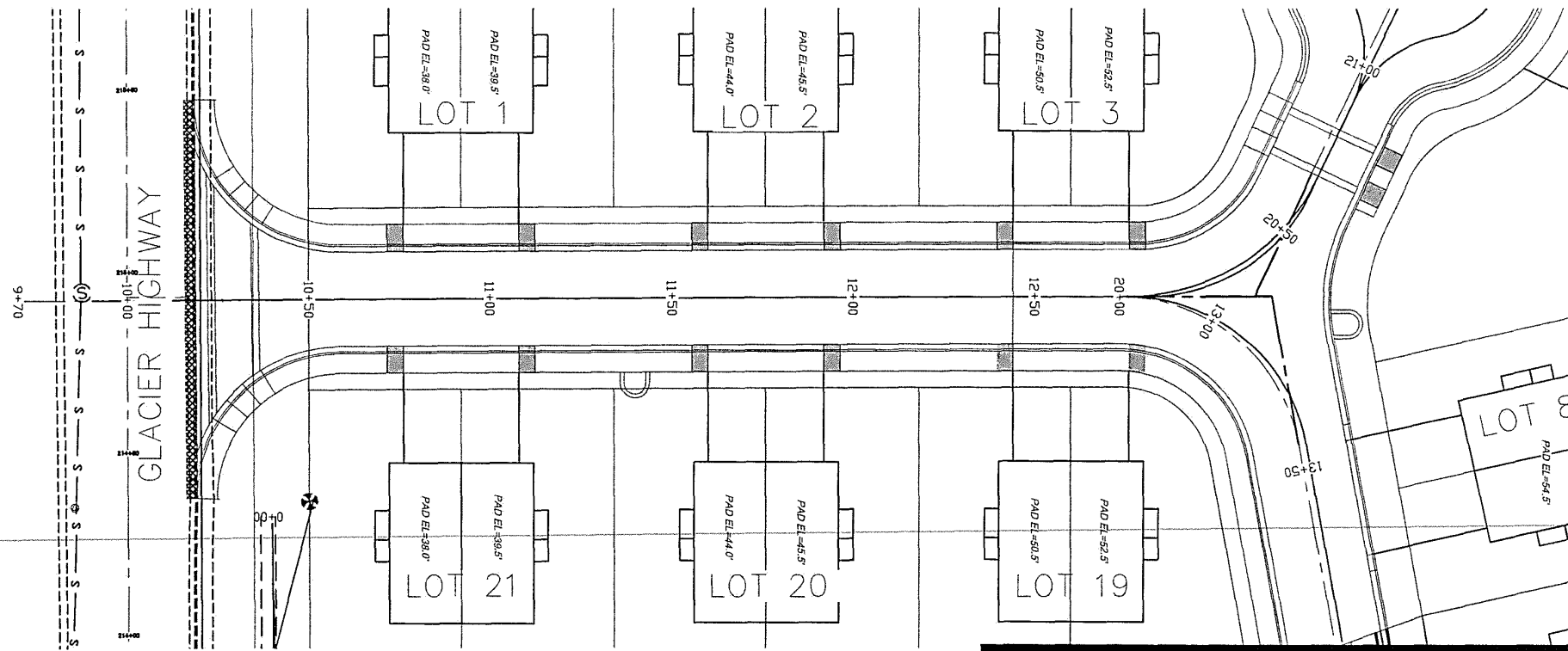
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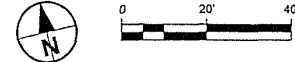
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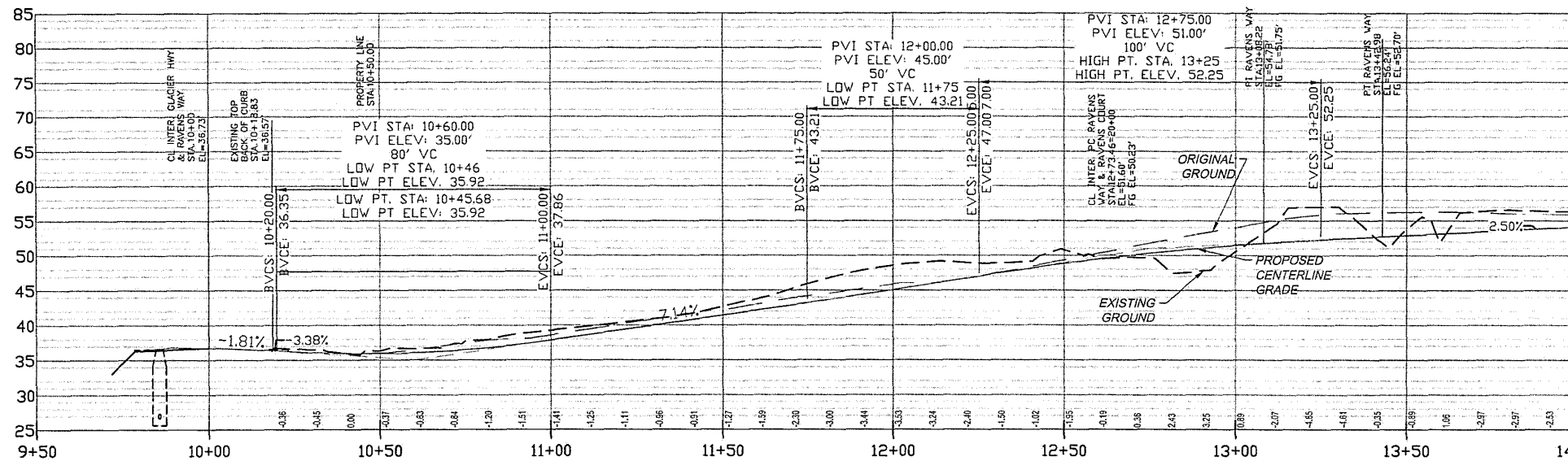
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**A PLAN**  
SCALE: 1" = 20' ON FULL SIZE



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SEE SHEET P&P 5



**B PROFILE**  
SCALE: 1" = 20' ON FULL SIZE

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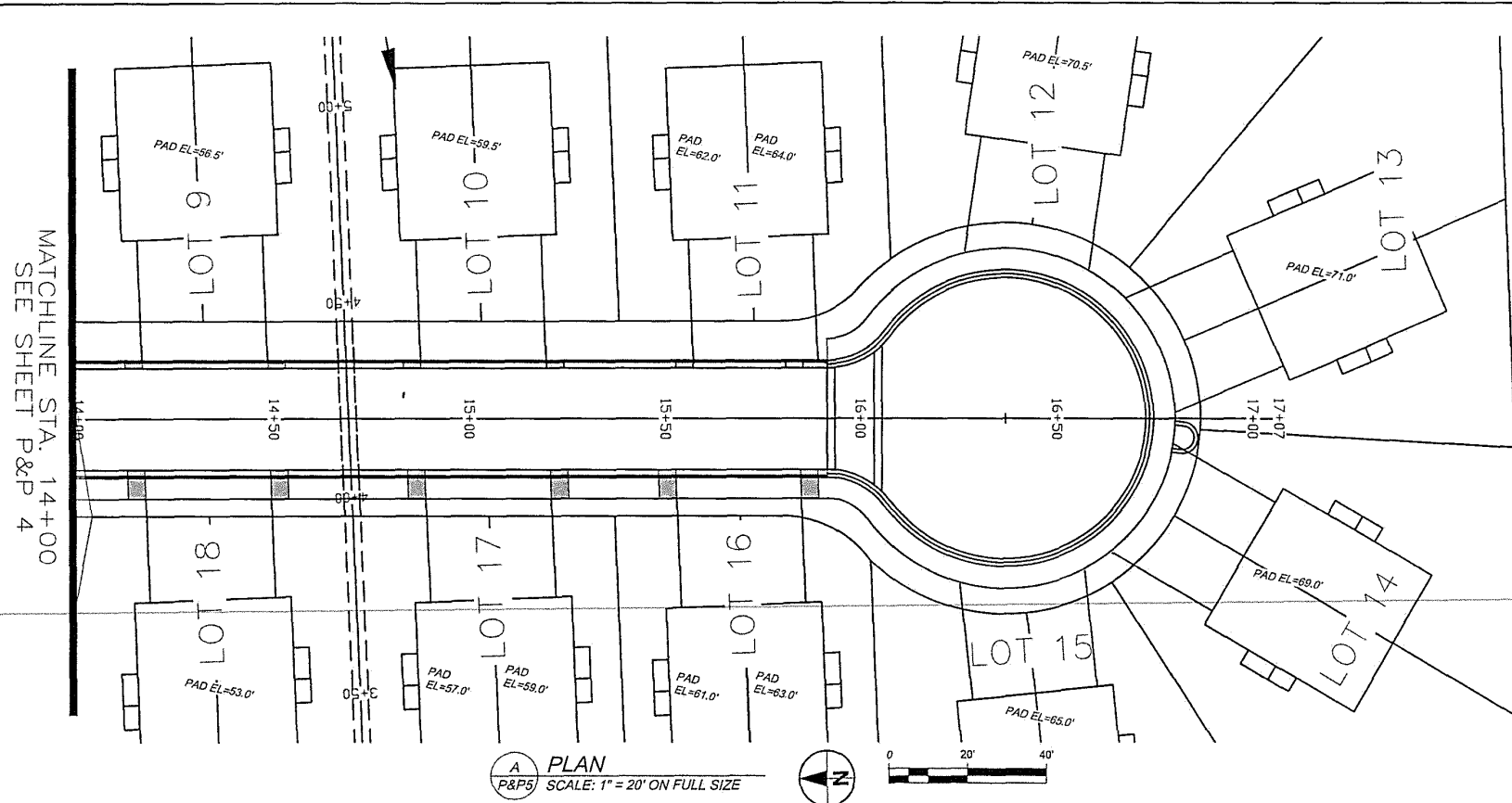
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PLAN & PROFILE

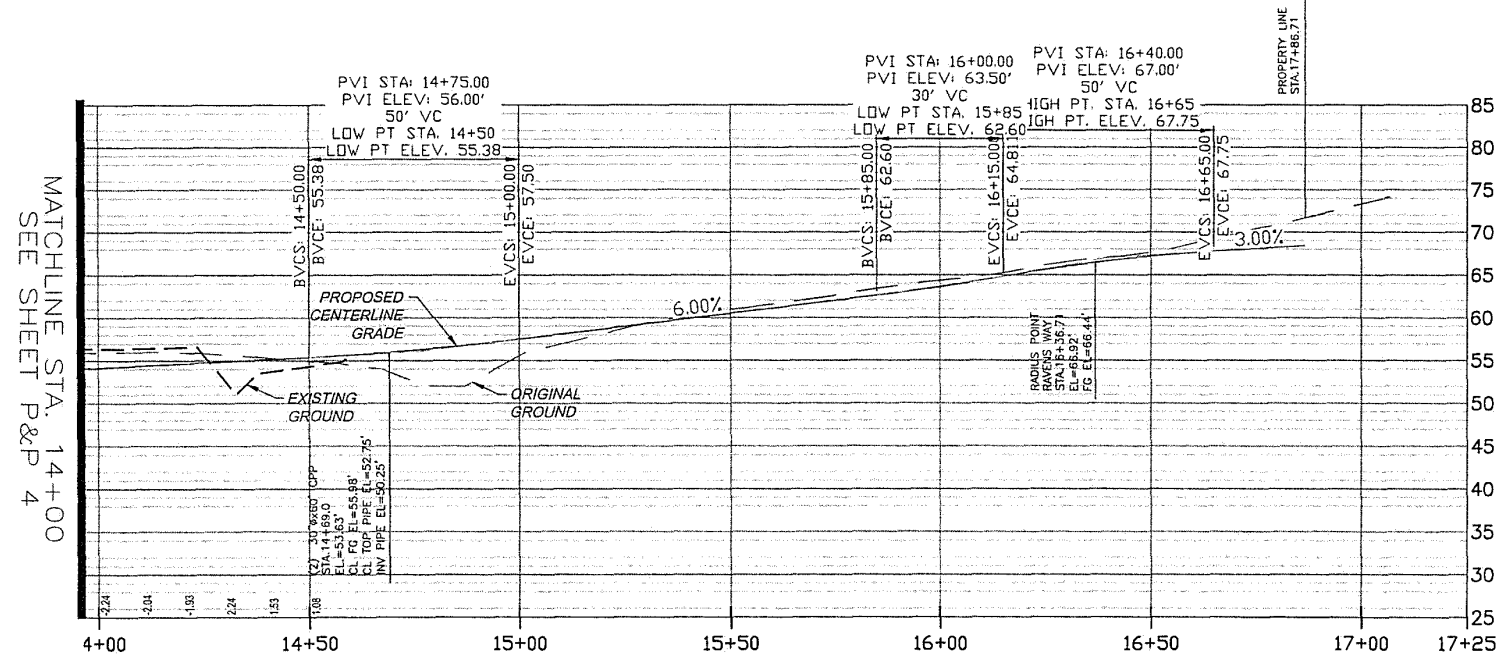
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**A PLAN**  
P&P5 SCALE: 1" = 20' ON FULL SIZE



**B PROFILE**  
P&P5 SCALE: 1" = 20' ON FULL SIZE

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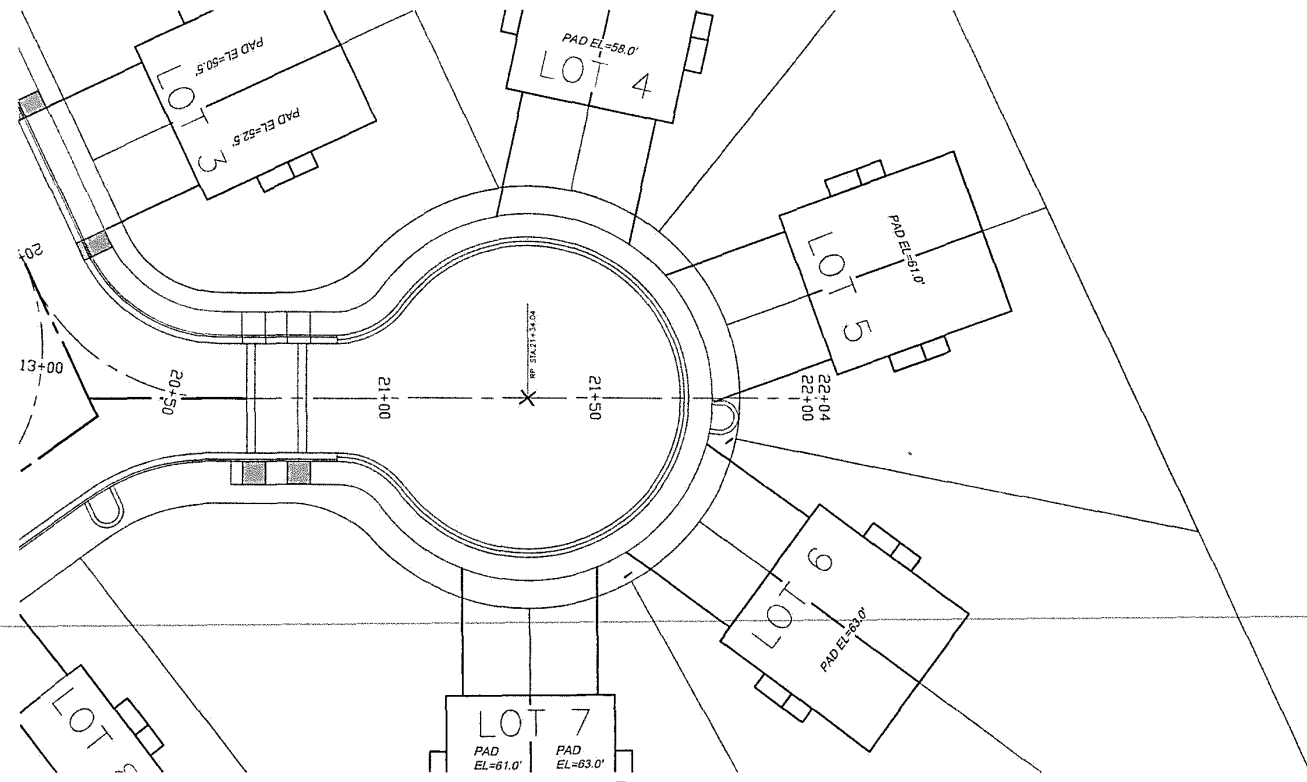
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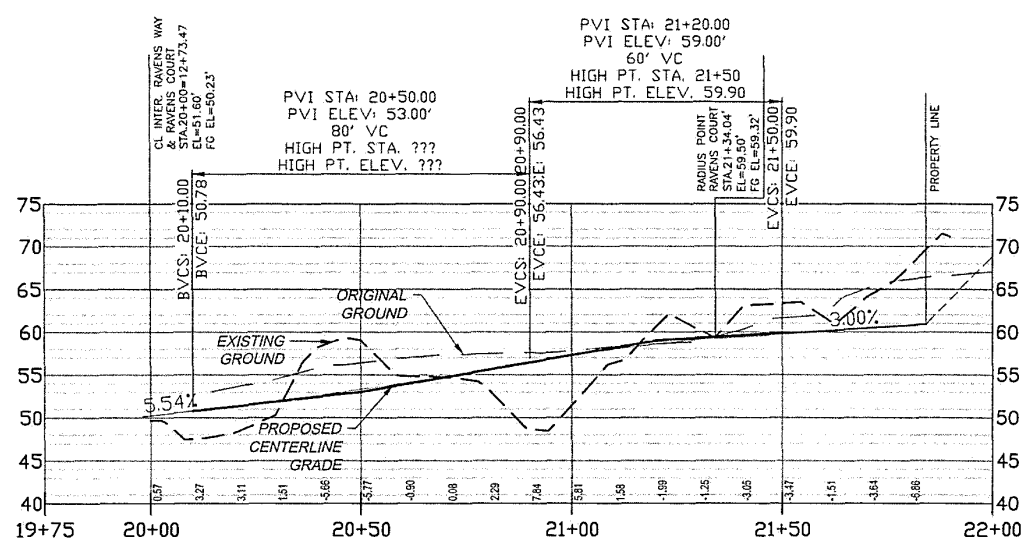
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**A PLAN**  
 P&P6 SCALE: 1" = 20' ON FULL SIZE



**B PROFILE**  
 P&P6 SCALE: 1" = 20' ON FULL SIZE

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 ph: (360) 352-2477 fax: (360) 352-0179 E-mail: admin@vectorengineeringinc.com

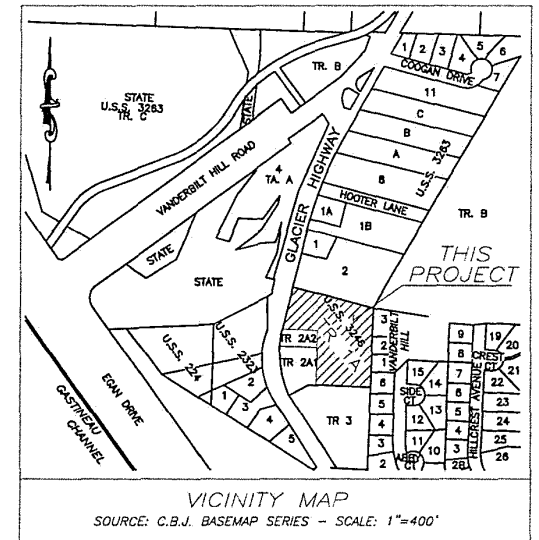
RAVENSWOOD P&P JUNEAU, AK	P&P 6
---	PLAN & PROFILE
---	
---	SHT 6 OF 6

# RAVENSWOOD SUBDIVISION

## PHASE I

### JUNEAU, ALASKA 99801

### JUNE, 2016



**PROJECT DATA:**

LOCATION: APPROX. 4.5 MILE OLD GLACIER HIGHWAY  
CITY & BOROUGH OF JUNEAU

ZONING: R-15  
SITE AREA: 5.59 ACRES - PHASE I & PHASE II  
NO. OF LOTS: 42 TOWNHOMES (ZERO LOT LINES)  
21 DETACHED

AVG. LOT SIZE: 8,406 S.F.  
MIN. LOT SIZE: 6,720 S.F.  
MEAN NET DENSITY: UNITS/ACRE

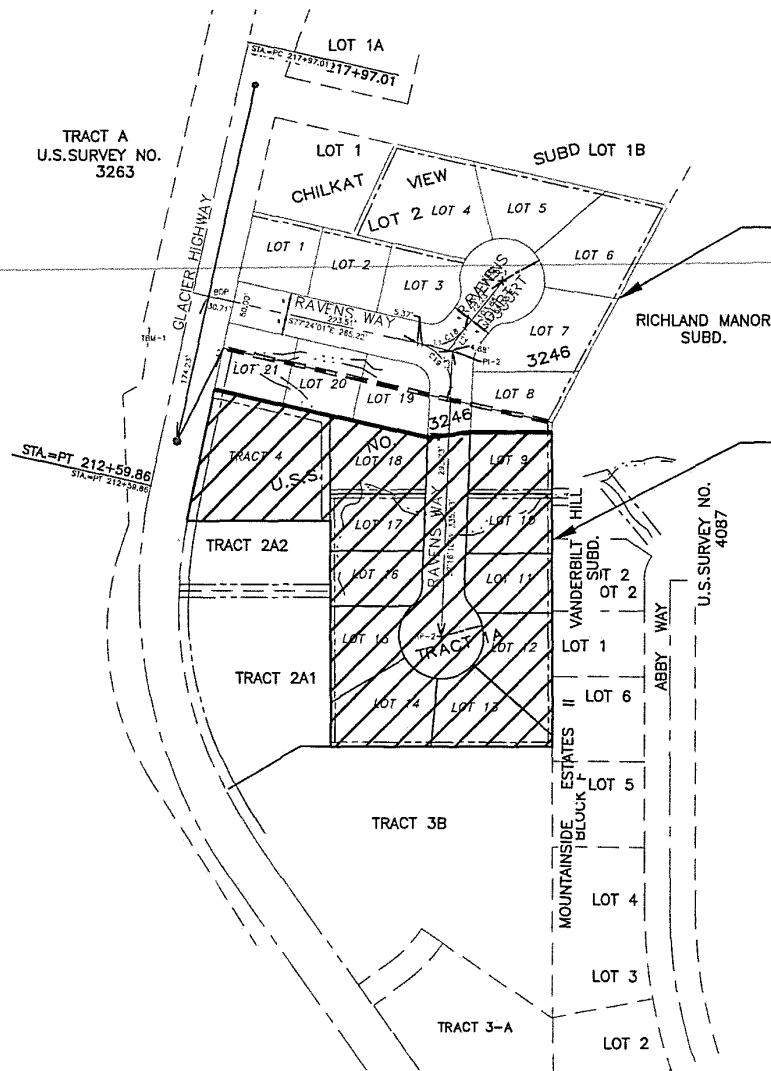
PARKING: 2 PER UNIT

DRAINAGE: CONTROLLED STORM DRAIN

SEWER: PUBLIC-CITY & BOROUGH OF JUNEAU  
WATER: PUBLIC-CITY & BOROUGH OF JUNEAU

ELECTRIC: AEL&P

ACCESS PERMIT: STATE OF ALASKA ADOT/PF  
# \_\_\_\_\_



PHASE I  
(2016-2017)  
(13 LOTS)

PHASE II  
(2024-2025) TENTATIVE  
(8 LOTS)

- NOTES  
CONSTRUCTION INSPECTION
1. CITY & BOROUGH JUNEAU AND/OR CONTRACT
  2. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CBJ STANDARD DETAILS AND CBJ STANDARD SPECIFICATIONS FOR ENGINEERING AND SUBDIVISION IMPROVEMENTS

FOR:  
CITY & BOROUGH OF JUNEAU

DEVELOPER:  
LOAPETE CONSTRUCTION, INC.  
PO Box 34939  
JUNEAU, ALASKA 99803  
(907) 789-5025  
ATTN: RICH PETERSON

BID PLAN SET DATED: MAY, 2016

SHEET  
G1  
SHEET NO.  
1 OF 64

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**SHEET INDEX**

SHEET NO.	SHEET NO.	DESCRIPTION
G1	G1 OF X	COVER SHEET
G2	G2 OF X	LEGEND, ABBREVIATION, AND GENERAL NOTES
C1	C1 OF X	ROADWAY TYPICAL SECTIONS
T1	T1 OF X	TRAFFIC CONTROL PLAN
B1	B1 OF X	SURVEY CONTROL SHEET
EC1	EC1 OF X	STORM WATER SEDIMENT CONTROL PLAN
EC2	EC2 OF X	STORM WATER SEDIMENT CONTROL PLAN DETAILS
SR1	SL1 OF X	STREAM LOCATION PLAN
SR2	D2 OF X	STREAM LOCATION PROFILE
P1	P1 OF X	ROADWAY PLAN STA. 10+00 TO 12+00
P2	P2 OF X	ROADWAY PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
P2A	P2A OF X	INTERSECTION GRADE CONTROL
P3	P3 OF X	ROADWAY PLAN STA. 20+00 TO 21+82.87
P4	P4 OF X	ROADWAY PROFILE STA. 10+00 TO 12+00
P5	P5 OF X	ROADWAY PROFILE STA. 12+00 TO 14+00
P6	P6 OF X	ROADWAY PROFILE STA. 20+00 TO 20+85
P7	P7 OF X	ROADWAY PROFILE STA. 20+85 TO 21+82.87
P8	P8 OF X	ROADWAY PLAN STA. 14+00 TO 17+00
P9	P9 OF X	ROADWAY PROFILE STA. 14+00 TO 17+00
U1	U1 OF X	ROADWAY AND UTILITIES PLAN STA. 10+00 TO 12+00
U2	U2 OF X	ROADWAY AND UTILITIES PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
U3	U3 OF X	ROADWAY AND UTILITIES PLAN STA. 14+00 TO 17+00
U4	U4 OF X	ROADWAY AND UTILITIES PROFILE STA. 10+00 TO 12+00
U5	U5 OF X	ROADWAY AND UTILITIES PROFILE STA. 12+00 TO 14+00
U6	U6 OF X	ROADWAY AND UTILITIES PROFILE STA. 20+00 TO 20+85
U7	U7 OF X	ROADWAY AND UTILITIES PROFILE STA. 20+85 TO 21+82.87
U8	U8 OF X	ROADWAY AND UTILITIES PLAN STA. 14+00 TO 17+00
U9	U9 OF X	ROADWAY AND UTILITIES PROFILE STA. 14+00 TO 17+00
SD1	SD1 OF X	STORM DRAIN PLAN STA. 10+00 TO 12+00
SD2	SD2 OF X	STORM DRAIN PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
SD3	SD3 OF X	STORM DRAIN PLAN STA. 12+85 TO 21+82.87
SD4	SD4 OF X	STORM DRAIN PROFILE STA. 10+00 TO 12+00
SD5	SD5 OF X	STORM DRAIN PROFILE STA. 12+00 TO 14+00
SD6	SD6 OF X	STORM DRAIN PROFILE STA. 20+00 TO 20+85
SD7	SD7 OF X	STORM DRAIN PROFILE STA. 20+85 TO 21+82.87
SD8	SD8 OF X	STORM DRAIN PLAN STA. 14+00 TO 17+00
SD9	SD9 OF X	STORM DRAIN PROFILE STA. 14+00 TO 17+00
W1	W1 OF X	WATERLINE PLAN STA. 10+00 TO 12+00
W2	W2 OF X	WATERLINE PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
W3	W3 OF X	WATERLINE PLAN STA. 20+85 TO 21+82.87
W4	W4 OF X	WATERLINE PROFILE STA. 10+00 TO 12+00
W5	W5 OF X	WATERLINE PROFILE STA. 12+00 TO 14+00
W6	W6 OF X	WATERLINE PROFILE STA. 20+00 TO 20+82.87
W7	W7 OF X	WATERLINE PROFILE STA. 20+85 TO 21+82.87
W8	W8 OF X	WATERLINE PLAN STA. 14+00 TO 17+00
W9	W9 OF X	WATERLINE PROFILE STA. 14+00 TO 17+00
W10	W10 OF X	WATERLINE DETAILS
WS1	WS1 OF X	WATER & SEWER SERVICES
SS1	SS1 OF X	SANITARY SEWER PLAN STA. 10+00 TO 12+00
SS2	SS2 OF X	SANITARY SEWER PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
SS3	SS3 OF X	SANITARY SEWER PLAN STA. 20+85 TO 21+82.87
SS4	SS4 OF X	SANITARY SEWER PROFILE STA. 10+00 TO 12+00
SS5	SS5 OF X	SANITARY SEWER PROFILE STA. 12+00 TO 14+00
SS6	SS6 OF X	SANITARY SEWER PROFILE STA. 20+00 TO 20+85
SS7	SS7 OF X	SANITARY SEWER PROFILE STA. 20+85 TO 21+82.87
SS8	SS8 OF X	SANITARY SEWER PLAN STA. 14+00 TO 17+00
SS9	SS9 OF X	SANITARY SEWER PROFILE STA. 14+00 TO 17+00
DT2	DT2 OF X	STREAM CHANNEL RELOCATION DETAILS
DT3	DT3 OF X	PROPERTY LINE SLOPES & TRENCH DETAIL
DT4	DT4 OF X	CBJ STANDARD DETAILS
DT5	DT5 OF X	CBJ STANDARD DETAILS
DT6	DT6 OF X	CBJ STANDARD DETAILS
DT11	DT11 OF X	DETAILS
DT12	DT12 OF X	DETAILS
L1	L1 OF X	ELECTRICAL PLANS
L2	L2 OF X	ELECTRICAL PLANS

**ABBREVIATIONS**

CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CO	CLEANOUT
CONC	CONCRETE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIA	DIAMETER
EOP	END OF PROJECT
FG	FINISHED GRADE
FH	FIRE HYDRANT
GV	GRATE VALVE
INV	INVERT
LG	LIP OF GUTTER
LT	LEFT
MH	MANHOLE
MTE	MATCH TO EXISTING
NO	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
POC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PVC	POLYVINYL CHLORIDE PIPE
RT	RIGHT
STA	STATION
STD	STANDARD
TBC	TOP BACK OF CURB
TBVC	TOP BACK OF VALLEY GUTTER
TP	TOP OF PAVEMENT
UD	UNDERDRAIN
VG	VALLEY GUTTER

ABBREVIATIONS TO USED WITHOUT PERIODS

**LEGEND:**

DESCRIPTION	EXISTING	REMOVE	PROPOSED
SURVEYED	—————		—————
UNSURVEYED	- - - - -		- - - - -
CENTERLINE	—————		—————
EASEMENT	—————		—————
CUT SLOPE	—————		—————
FILL SLOPE	—————		—————
WATER LINE	- v - - - v - - - v - - -		—————
SEWER LINE	————— s ——— s ———		—————
STORM DRAIN	—————		—————
FENCE	- x - - - x - - - x - - -		—————
TELEPHONE			—————
CABLE			—————
CURB INLET			—————
WATER VALVE	⊗		⊗
POWER POLE	⊙		⊙
FIRE HYDRANT	⊙		⊙
SANITARY MANHOLE	⊙		⊙
CLEANOUT	oo		oo
CATCH BASIN	▣		▣
AREA DRAIN	⊙		⊙
UNDER DRAIN	⊙		⊙
SIGN	⊥		⊥

**NOTES:**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY AND BOROUGH OF JUNEAU STANDARDS AND THE MOST CURRENT COPY OF THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION (AKDOT/PF).
2. ALL SAFETY STANDARDS AND REQUIREMENTS SHALL BE AS SET FORTH BY OSHA, AKDOT/PF AND ALASKA STATE DEPARTMENT OF LABOR.
3. TEMPORARY EROSION/WATER POLLUTION MEASURES SHALL BE REQUIRED IN ACCORDANCE WITH CURRENT SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT (907) 586-1333. A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

**PROJECT TEAM**

<b>ENGINEER:</b> Moore Engineering, INC. PO Box 397 Craig, AK 99921 907 530-7008 Ph POC: Tracy Moore, P.E.	<b>SURVEYOR</b> JW Bean, INC. Professional Surveyor 1070 Arctic Circle Juneau, AK 9980 907 723-3610 Cell POC: JW Bean
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**OWNER:**  
Lowpete Constriction, INC.  
PO Box 34939  
Juneau, AK. 99803  
(907) 789-5025

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SCALE	GRAPHIC		
DESIGNED	###		
DRAWN	###		
CHECKED	###		
DATE	September 30, 2024		
REV	DATE	BY	DESCRIPTION

**MOORE ENGINEERING**

P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008

**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET

G2

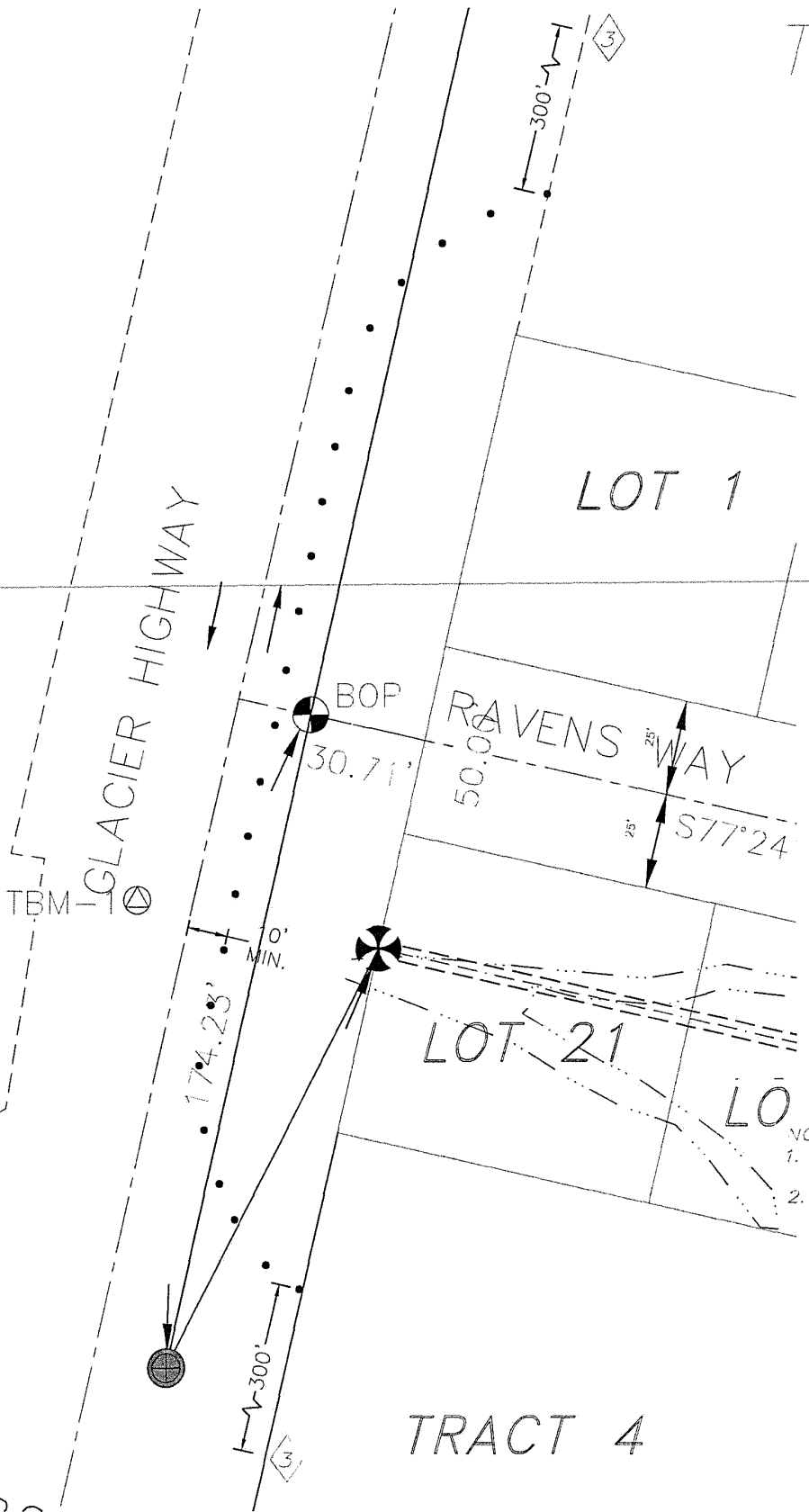
SHEET NO.

2 OF 64



# TRAFFIC CONTROL PLAN

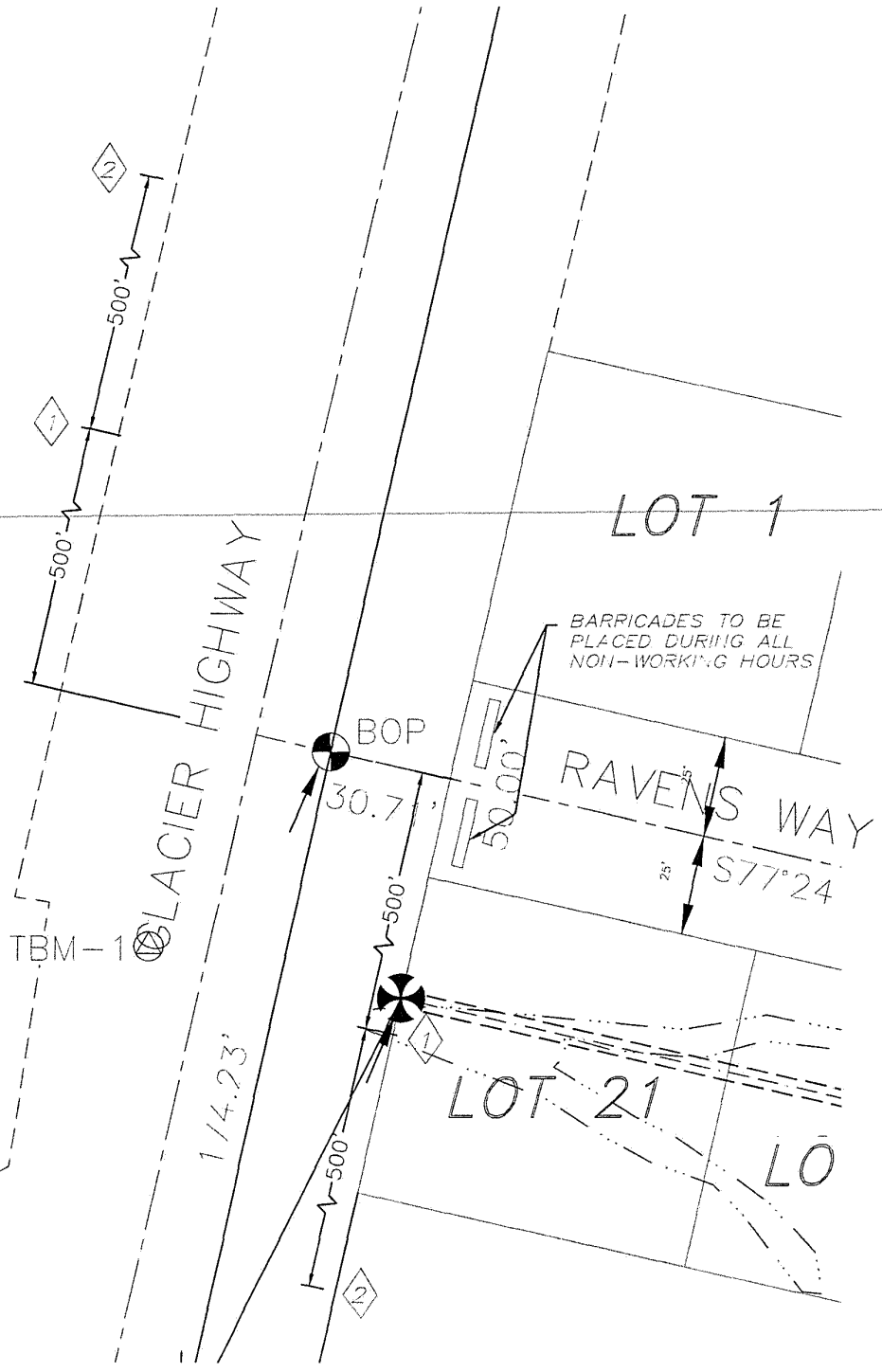
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SHOULDER WORK - TWO LANE TRAFFIC

- NOTES:
1. CONE OFF SHOULDER AND REDUCE LANE TO 10' WHILE WORKING ON SHOULDER.
  2. WORK LIMITS 5am TO 3pm (MONDAY THRU FRIDAY)

- LEGEND
- 1 ROAD CONSTRUCTION AHEAD
  - 2 TRUCK TURNING AHEAD
  - 3 ROADWAY NARROWS MEN & EQUIPMENT ON SHOULDER



BARRICADES TO BE PLACED DURING ALL NON-WORKING HOURS

TRAFFIC CONTROL PLAN

SHEET
T1
SHEET NO.
4 OF 64

# SURVEY CONTROL SHEET

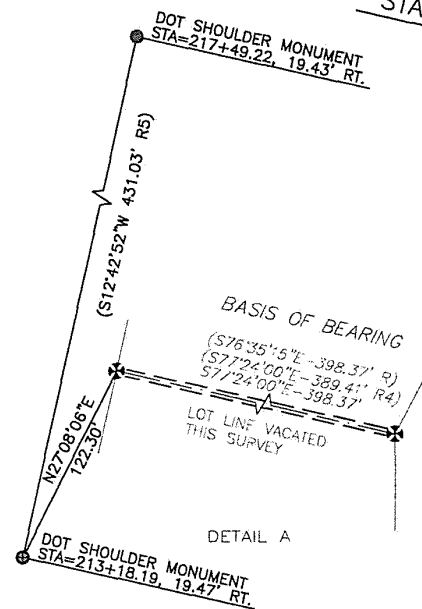
- LEGEND**
- ⊗ B.L.M. 2-1/2" BRASS MONUMENT RECOVERED THIS SURVEY
  - ⊕ PRIMARY DOT SHOULDER MONUMENT IN CASING RECOVERED THIS SURVEY  
2" BRASS CAP, NO MARKINGS
  - ⊙ PRIMARY MONUMENT RE-SET THIS SURVEY  
3" ALUMINUM MONUMENT, JW BEAN
  - ⊙ SURVEY NAIL SET THIS SURVEY  
PK NAIL W/ STAINLESS STEEL WASHER, J.W. BEAN
  - SURVEYED
  - - - - - UNSURVEYED
  - CENTERLINE
  - SURVEY TIE
  - - - - - EASEMENT
  - ==== BASIS OF BEARING LINE AND VACATED LOT LINE THIS SURVEY

(R) = AS PER PLAT NO. 2009-3  
(R4) = AS PER PLAT NO. 2005-20

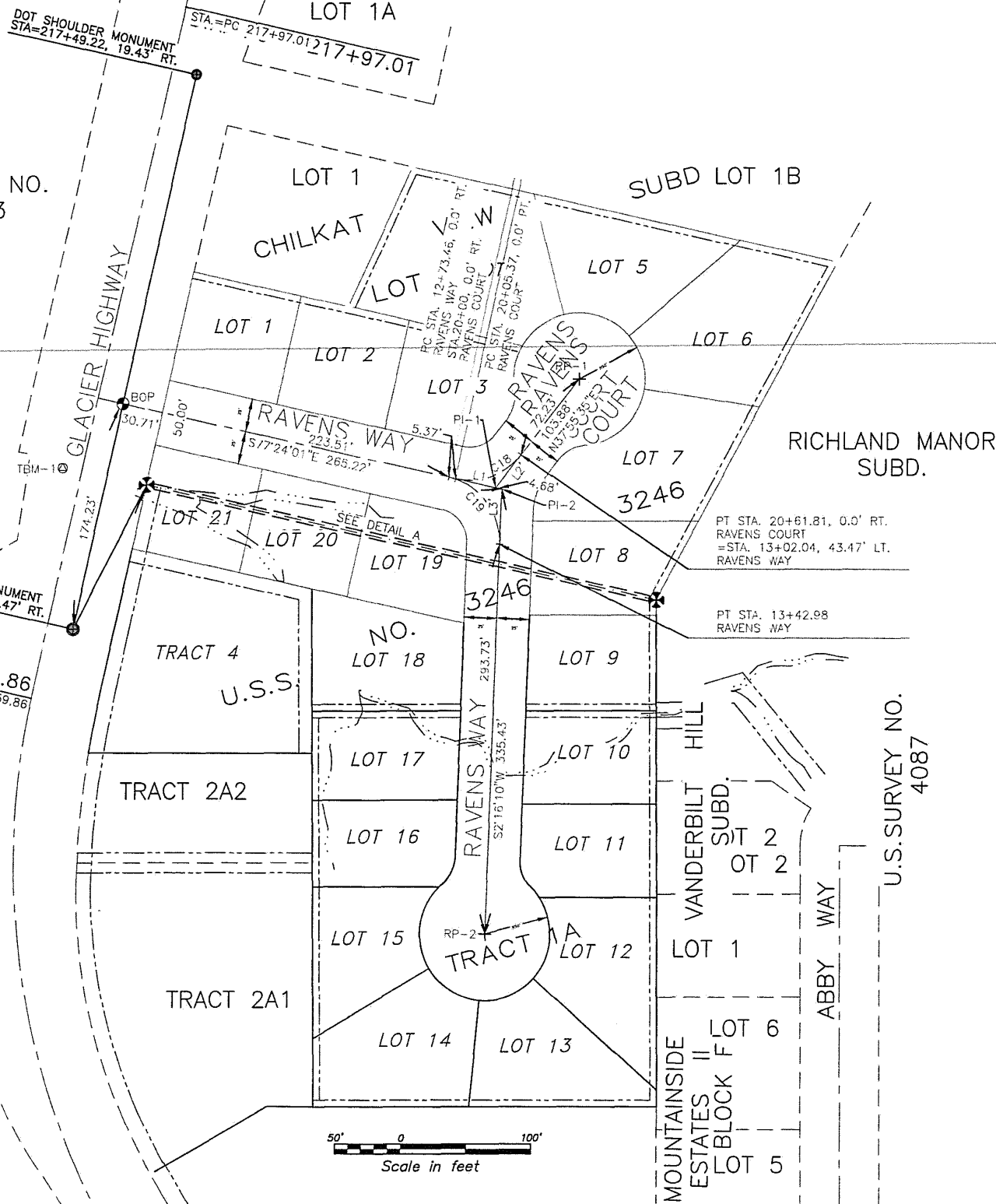
**BASIS OF BEARING**  
BASIS OF BEARING FOR THIS PLAT IS THE RECORD BEARING OF S76°35'15"E FROM A FOUND BLM MONUMENT BEING CORNER 2 OF U.S.S. 3263 TO A FOUND BLM MONUMENT BEING CORNER 3 OF U.S.S. 3263 AS SHOWN ON RECORD PLAT NO. 2009-3.

CURVE TABLE					
CURVE #	DELTA	RADIUS	ARC LENGTH	CHORD BEARING & DISTANCE	
C18	64°40'24"	50.00'	56.44'	N7°0'15"47"E	53.49'
C19	79°40'11"	50.00'	69.52'	S37°33'56"E	64.06'

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S77°24'01"E	36.34'
L2	N37°56'35"E	31.65'
L3	S2°16'10"W	41.71'



TRACT A  
U.S. SURVEY NO.  
3263



STA=217+49.22, 19.43' RT.
GLACIER HWY MON.
STA. 10+19.39, 256.79 LT.
N=6311.7522
E=3036.4987
ELEV.=28.93'

STA=213+18.19, 19.47' RT.
GLACIER HWY MON.
STA. 10+19.14, 174.23' RT.
N=5891.1613
E=2944.2230
ELEV.=43.69'

TBM-1
PK NAIL/W WASHER
STA. 9+85.23, 57.15' RT.
N=6012.8211
E=2936.6712
ELEV.=38.67'

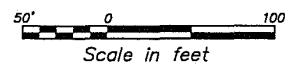
BOP
GLACIER HWY & RAVENS WAY
STA. 10+00
N=6061.1759
E=2982.3319
ELEV.=36.73'

PI-1
PI RAVENS WAY & RAVENS COURT
STA. 20+33.59, 9.18 RT.
=STA. 13+05.33, 12.22 LT.
N=5997.6445
E=3266.5618
FG. ELEV.=51.65'

PI-2
ANG. PT. PI RAVENS WAY
STA. 13+08.22, 15.11' LT.
N=5996.6224
E=3271.1342
FG. ELEV.=51.75'

RP-1
RAVENS COURT RADIUS POINT
STA. 21+34.04, RT. 0.0'
N=6079.5914
E=3330.4228
CL. FG. ELEV.=59.32'






RP-2
RAVENS WAY RADIUS POINT
STA. 16+36.71, RT. 0.0'
N=5661.4529
E=3257.8515
CL. FG. ELEV.=67.00'



SHEET  
C1  
SHEET NO.  
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**LEGEND**

- x-x- SILT FENCE, BRUSH BERM, 1" ROCK BERM OR TEMP. CONTROL SWALE TO CONTAIN RUNOFF WITHIN WORK AREA IF NATURAL 25' BUFFER CAN NOT MAINTAINED
- o-o- FLAGGED BOUNDARY
-  CONTROLLED ENTRANCE / EXIT CONTAINMENT SPILL ROCK
-  TEMPORARY CULVERT
-  TEMPORARY WATER DITCH (SWALE)
-  WETLANDS AREA "A"=624 S.F.  
UPLANDS AREA "A"=3,534 S.F.  
WETLANDS AREA "B"=1,935 S.F.  
UPLANDS AREA "B"=10,985 S.F.  
WETLANDS AREA "C"=4,508 S.F.  
UPLANDS AREA "C"=501 S.F.  
WETLANDS AREA "D"=1,408 S.F.  
UPLANDS AREA "D"=157 S.F.  
TOTAL WETLANDS AREA=8,475 S.F.  
TOTAL UPLANDS AREA=15,177 S.F.  
TOTAL AREA=23,652 S.F.
-  TEMPORARY CHECK DAM

**CONSTRUCTION NOTES:**

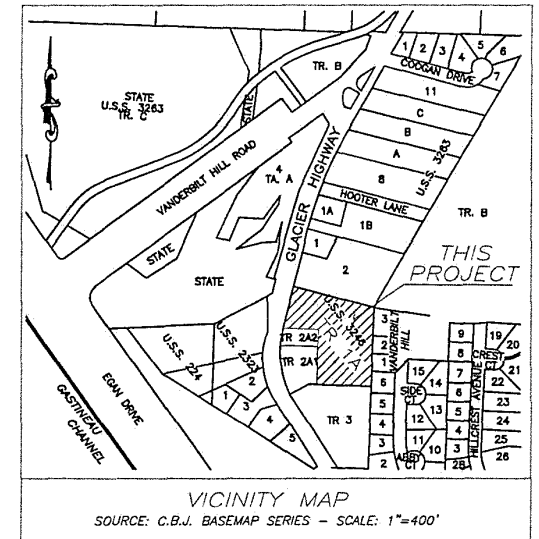
1. DO NOT MIX EXISTING DRAINAGE WITH CONSTRUCTION DRAINAGE. KEEP SEPARATE AT ALL TIMES UNTIL SITE IS STABILIZED.
2. COVER ALL DISTURBED SLOPES WITHIN 14 DAYS OF NO ACTIVITY OR FINISH CONDITION WITH HYDRO MULCH AND SEEDING.
3. STOCKPILE OF WASTE MATERIAL SHALL BE COVERED WITH PLASTIC SHEATHING DURING INCLEMENT WEATHER.
4. TRANSFER DRAINAGE TO NEW COMPLETED CHANNEL AFTER SLOPES ARE STABILIZED AND STREAM BED MATERIAL PLACED IN STREAM RELOCATION AREA.
5. CONTRACTOR SWPP TO BE REVIEWED BY ENGINEER PRIOR TO IMPLEMENTATION.
6. ANY SNOW STORAGE WILL BE PLACED ON LOTS SO AS TO NOT BLOCK DRAINAGE OR BERM.

LOT 19 DEDICATED FOR RE-FUELING, CLEANOUTS, DUMPSTERS, EQUIPMENT AND MATERIALS STORAGE AREAS

BATHROOM FACILITIES AVAILABLE DURING CONSTRUCTION ON CBJ SEWER AND WATER

**NOTE:**

1. ALL OTHER SEDIMENT PONDS AND DRAINAGE ON ATTACHED PLANS.
2. SOIL STORAGE IF ANY WILL BE ON LOTS 4-8.

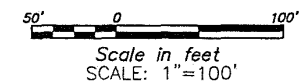


**PHASE I - WORK PLAN**

- CONSTRUCT RAVENS WAY TO STA.=14+00 AND RAVENS COURT INCLUDING TEMPORARY CUL=DE=SAC AT STA.=15+38.
- CONSTRUCT WATER, SEWER, POWER AND STORM DRAIN FROM GLACIER HIGHWAY.
- CONSTRUCT RELOCATED STREAM CHANNEL INSTALL CULVERTS.

**PHASE II - WORK PLAN**

- FINISH RAVENS WAY FROM STA.=14+00 TO END INCLUDING ALL UTILITIES.



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SCALE	GRAPHIC
DESIGNED	####
DRAWN	####
CHECKED	####
DATE	September 30, 2024
REV	DATE BY DESCRIPTION

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
EC1  
SHEET NO.  
6 OF 64

**LEGEND**

- x-x- SILT FENCE, BRUSH BERM, ROCK BERM OR TEMP. CONTROL SWALE TO CONTAIN RUNOFF WITHIN WORK AREA IF NATURAL 25' BUFFER CAN NOT MAINTAINED
- o-o FLAGGED BOUNDARY
- [Pattern] CONTROLLED ENTRANCE / EXIT CONTAINMENT SPALL ROCK
- TEMPORARY CULVERT
- TEMPORARY WATER DITCH (SWALE)
- [Hatched] WETLANDS AREA "A"=624 S.F.  
UPLANDS AREA "A"=3,534 S.F.  
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TOTAL WETLANDS AREA=8,475 S.F.  
TOTAL UPLANDS AREA=15,177 S.F.  
TOTAL AREA=23,652 S.F.
- ◇◇◇ TEMPORARY CHECK DAM

C10 MANHOLE EXISTING  
STA 9+85.55, 3.3' LT.  
RIM EL=36.26'  
INV. EL=26.67'

100' STABILIZED CONSTRUCTION EXIT  
4" CLEAN SHOT ROCK 6" DEPTH

**NOTES:**

1. TEMP 12" CULVERT OFFFALL 6" BELOW OVER OFFFALL PIPE CAN BE REMOVED AFTER STREAM LOCATION, BUT CAN STAY TILL LOT 18 DEVELOPED.
2. 12"x80" CULVERT ABANDON WHEN NOT NEEDED. 12" UNDER DRAIN UNDER CULVERT.
3. 12"x80" CPP. ABANDON AT END OFF CONSTRUCTION.
4. 12"x8' POND (BASE), INV. EL.=46', OFFFALL EL.=49'
5. ALL OTHER SEDIMENT PONDS AND DRAINAGE ON ATTACHED PLANS.
6. LOT 17 TO BE LAST LOT BUILT ON PHASE 2 TO KEEP SETTLING POND IN PLACE TILL END OF PROJECT.
7. 20'x30' SEDIMENT POND (BASE), INV. EL.=39', OFFFALL EL.=43'.
8. 20'x40' SEDIMENT POND (BASE), INV. EL.=29', OFFFALL EL.=32'.
9. 20'x40' SEDIMENT POND, INV EL.=30', OFFFALL EL.=33'
10. 20'x40' SEDIMENT POND, INV EL.=39', OFFFALL EL.=42'
11. 15'x15' POND, INV EL.=41', OFFFALL EL.=45'
12. 4" ROCK LINER ON THE TWO LOWER PONDS. ON LOTS 1, 17 & 21 AND DRAINAGE TO POND ABOVE.
13. LOT1 AND LOT 21 TO BE LAST LOTS BUILT ON AND LOWER SEDIMENT PONDS TO BE REMAIN TILL ALL EXCAVATION ABOVE IS COMPLETE.
14. UNDER DRAIN INSTALLED DURING ROAD CONSTRUCTION.

**PHASE I - WORK PLAN**

CONSTRUCT RAVENS WAY TO STA.=14+00 AND RAVENS COURT INCLUDING TEMPORARY CUL-DE-SAC AT STA.=15+38.

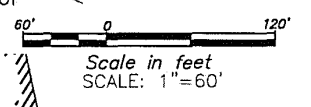
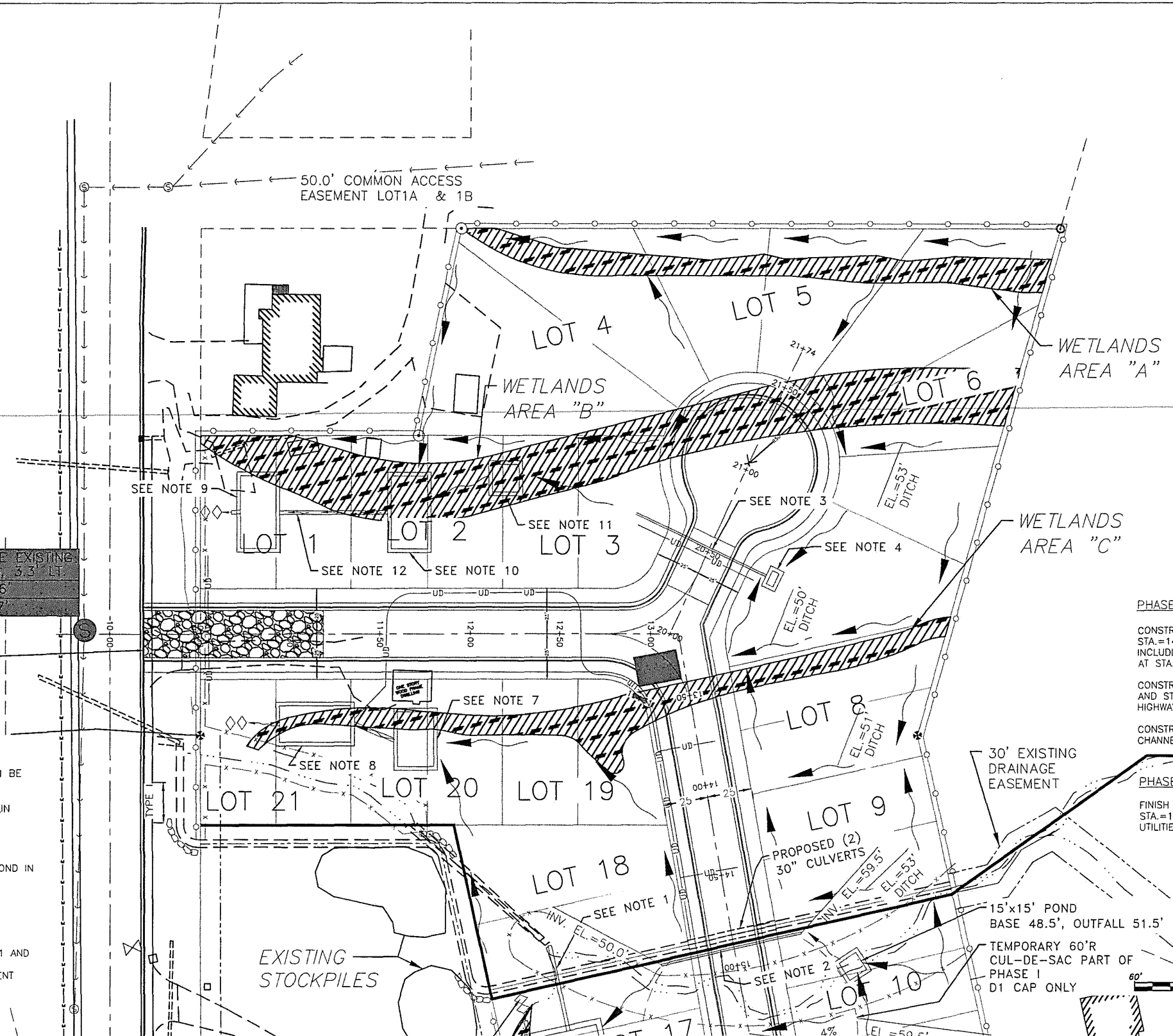
CONSTRUCT WATER, SEWER, POWER AND STORM DRAIN FROM GLACIER HIGHWAY.

CONSTRUCT RELOCATED STREAM CHANNEL INSTALL CULVERTS.

**PHASE II - WORK PLAN**

FINISH RAVENS WAY FROM STA.=14+00 TO END INCLUDING ALL UTILITIES.

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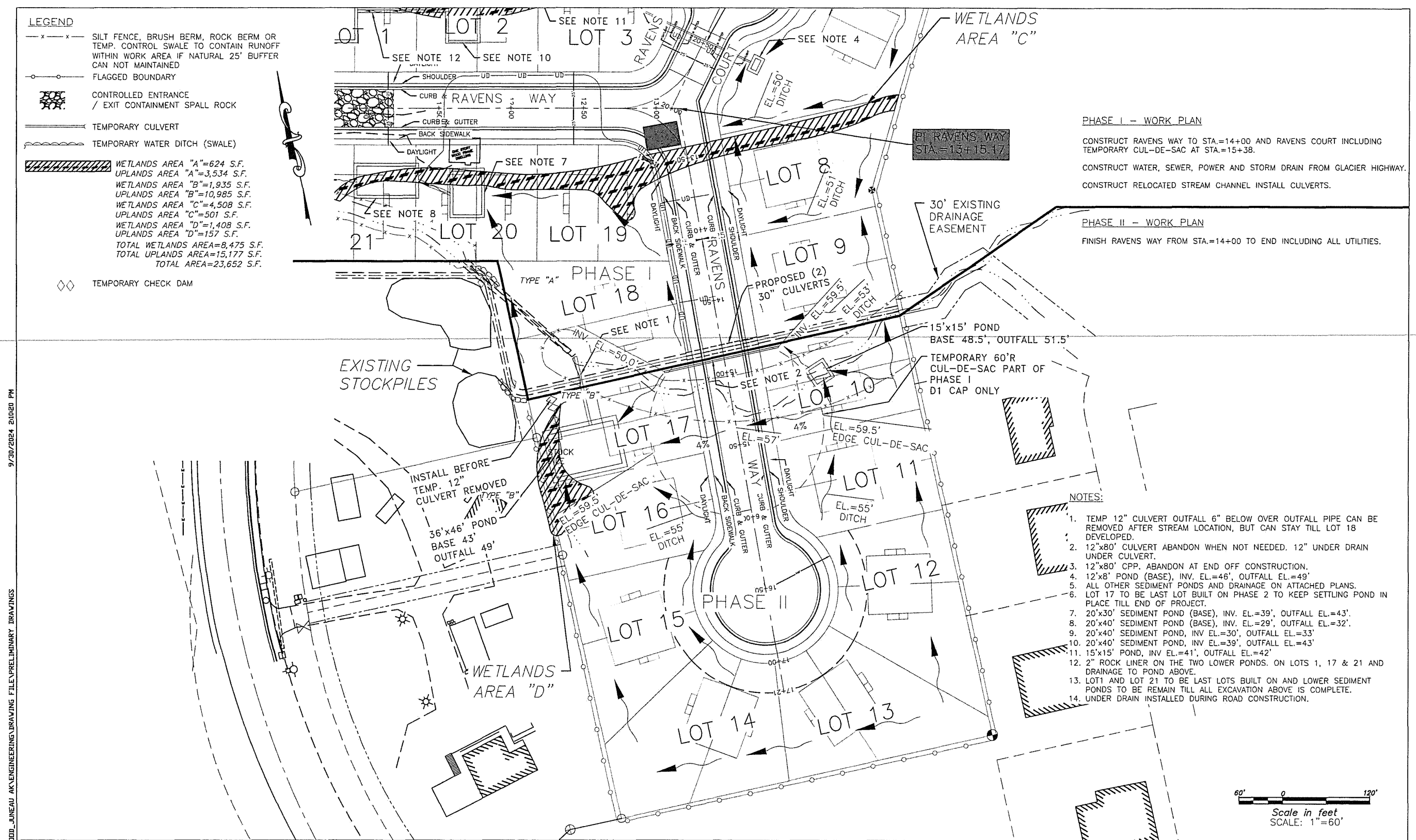


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REV	DATE BY DESCRIPTION

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
EC2  
SHEET NO.  
7 OF 64



- LEGEND**
- x---x--- SILT FENCE, BRUSH BERM, ROCK BERM OR TEMP. CONTROL SWALE TO CONTAIN RUNOFF WITHIN WORK AREA IF NATURAL 25' BUFFER CAN NOT MAINTAINED
  - FLAGGED BOUNDARY
  - ▨ CONTROLLED ENTRANCE / EXIT CONTAINMENT SPALL ROCK
  - TEMPORARY CULVERT
  - TEMPORARY WATER DITCH (SWALE)
  - ▨ WETLANDS AREA "A"=624 S.F.  
UPLANDS AREA "A"=3,534 S.F.  
WETLANDS AREA "B"=1,935 S.F.  
UPLANDS AREA "B"=10,985 S.F.  
WETLANDS AREA "C"=4,508 S.F.  
UPLANDS AREA "C"=501 S.F.  
WETLANDS AREA "D"=1,408 S.F.  
UPLANDS AREA "D"=157 S.F.  
TOTAL WETLANDS AREA=8,475 S.F.  
TOTAL UPLANDS AREA=15,177 S.F.  
TOTAL AREA=23,652 S.F.
  - ◇◇ TEMPORARY CHECK DAM

- PHASE I - WORK PLAN**
- CONSTRUCT RAVENS WAY TO STA.=14+00 AND RAVENS COURT INCLUDING TEMPORARY CUL-DE-SAC AT STA.=15+38.
  - CONSTRUCT WATER, SEWER, POWER AND STORM DRAIN FROM GLACIER HIGHWAY.
  - CONSTRUCT RELOCATED STREAM CHANNEL INSTALL CULVERTS.
- PHASE II - WORK PLAN**
- FINISH RAVENS WAY FROM STA.=14+00 TO END INCLUDING ALL UTILITIES.

- NOTES:**
1. TEMP 12" CULVERT OUTFALL 6" BELOW OVER OUTFALL PIPE CAN BE REMOVED AFTER STREAM LOCATION, BUT CAN STAY TILL LOT 18 DEVELOPED.
  2. 12"x80" CULVERT ABANDON WHEN NOT NEEDED. 12" UNDER DRAIN UNDER CULVERT.
  3. 12"x80" CPP. ABANDON AT END OFF CONSTRUCTION.
  4. 12'x8' POND (BASE), INV. EL.=46', OUTFALL EL.=49'
  5. ALL OTHER SEDIMENT PONDS AND DRAINAGE ON ATTACHED PLANS.
  6. LOT 17 TO BE LAST LOT BUILT ON PHASE 2 TO KEEP SETTLING POND IN PLACE TILL END OF PROJECT.
  7. 20'x30' SEDIMENT POND (BASE), INV. EL.=39', OUTFALL EL.=43'
  8. 20'x40' SEDIMENT POND (BASE), INV. EL.=29', OUTFALL EL.=32'
  9. 20'x40' SEDIMENT POND, INV. EL.=30', OUTFALL EL.=33'
  10. 20'x40' SEDIMENT POND, INV. EL.=39', OUTFALL EL.=43'
  11. 15'x15' POND, INV. EL.=41', OUTFALL EL.=42'
  12. 2" ROCK LINER ON THE TWO LOWER PONDS. ON LOTS 1, 17 & 21 AND DRAINAGE TO POND ABOVE.
  13. LOT 1 AND LOT 21 TO BE LAST LOTS BUILT ON AND LOWER SEDIMENT PONDS TO BE REMAIN TILL ALL EXCAVATION ABOVE IS COMPLETE.
  14. UNDER DRAIN INSTALLED DURING ROAD CONSTRUCTION.

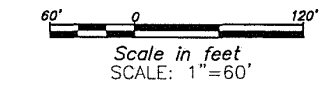
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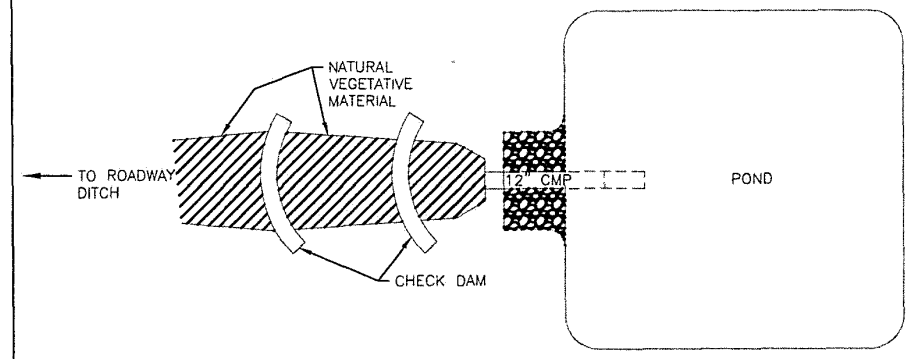
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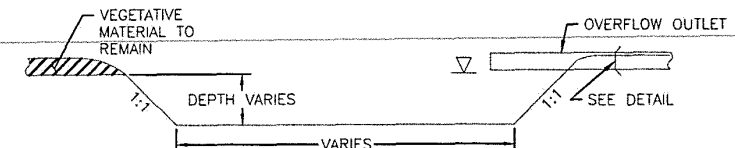
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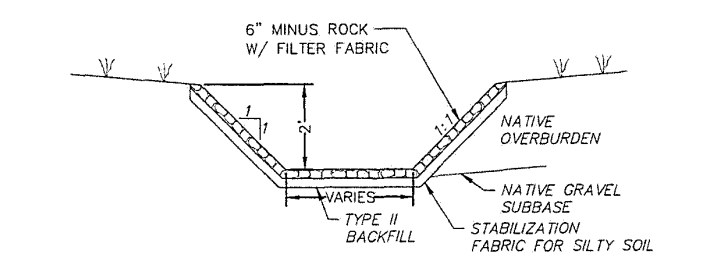


**OVERFLOW OUTLET DETAIL**  
SCALE: 1"=10'

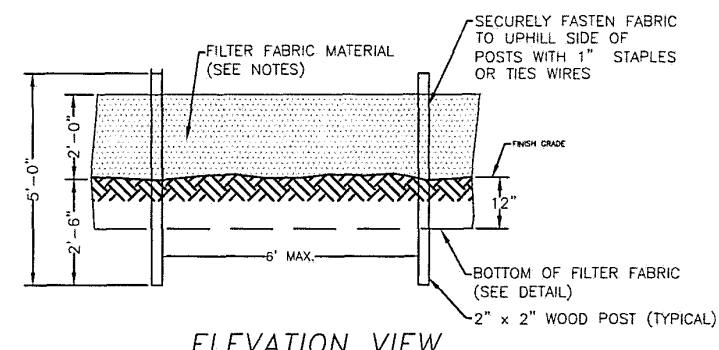


**SEDIMENT POND DETAIL**  
SCALE: 1"=10'

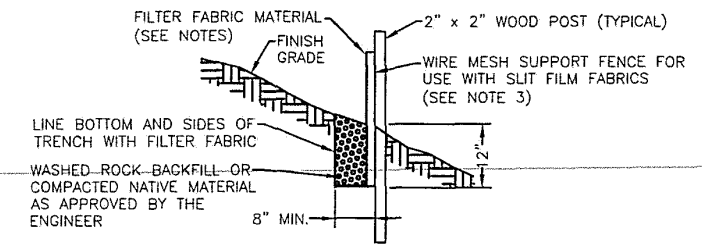
- NOTES:**
- CLEAN OUT AND HAUL SILT TO APPROVED WASTER SITE OFF PROJECT AS NECESSARY.
  - IF OVERFLOW IS INTERMITTED ADDITIONAL SETTLEMENT IS NECESSARY AND STORM WATER TO BE PUMPED TO PRIMARY SETTLEMENT POND 3.



**TYPICAL DRAINAGE DITCH SECTION TYPE A**  
SCALE: 1"=4'



**ELEVATION VIEW**

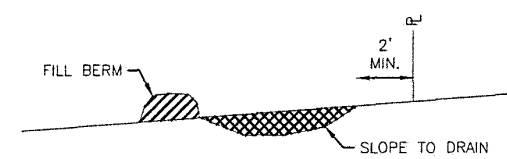


**SIDE VIEW**

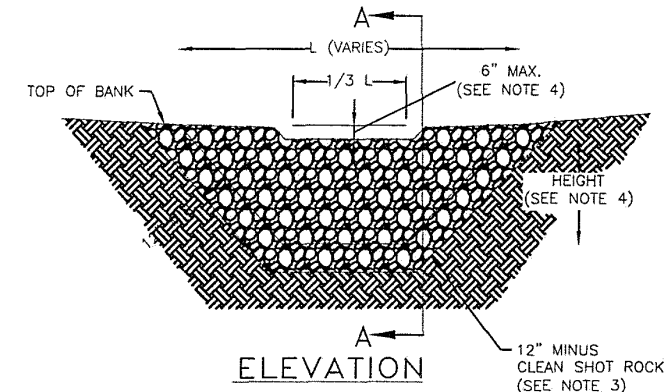
- NOTES:**
- INSTALL FENCE AT THE APPROPRIATE LOCATION BY CONSIDERING TERRAIN, SLOPE, WATER FLOW AND DISTURBANCE AREA. PLACE THE FENCE AWAY FROM THE TOE OF SLOPE LEAVING ROOM TO ACCUMULATE SEDIMENT AND PERFORM WORK.
  - SILT FENCE FABRIC SHALL BE UV RESISTANT POLYPROPYLENE WITH OPENINGS LESS THAN A NO. 30 SIEVE, OR APPROVED BY THE ENGINEER.
  - SILT FENCE FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL WITH JOINTS KEPT TO A MINIMUM. JOINTS SHALL BE SECURED AT SUPPORT POSTS WITH A MINIMUM OF 6" OF OVERLAP. LESS POSTS MAY BE INSTALLED WHEN WIRE MESH IS USED TO SUPPORT THE SILT FENCE FABRIC AS APPROVED BY THE ENGINEER.
  - AN 8" WIDE BY 2" DEEP TRENCH SHALL BE CONSTRUCTED ALONG THE ENTIRE LENGTH OF THE UPHILL SIDE OF THE SILT FENCE. THE TRENCH SHALL BE BACKFILLED WITH WASHED ROCK OR COMPACTED NATIVE MATERIAL.
  - THE SILT FENCE SHALL BE MAINTAINED UNTIL THE ENTIRE DISTURBANCE AREA HAS BEEN STABILIZED. THE SILT FENCE MAY BE REMOVED ONLY AFTER THE RETAINED MATERIALS HAVE BEEN PROPERLY DISPOSED OF.
  - ALTERNATE COMPRESSED 36" HIGH BRUSH BURM OR 18" HIGH 1" ROCK BURM MAY BE USED.

**311-SILT FENCE**

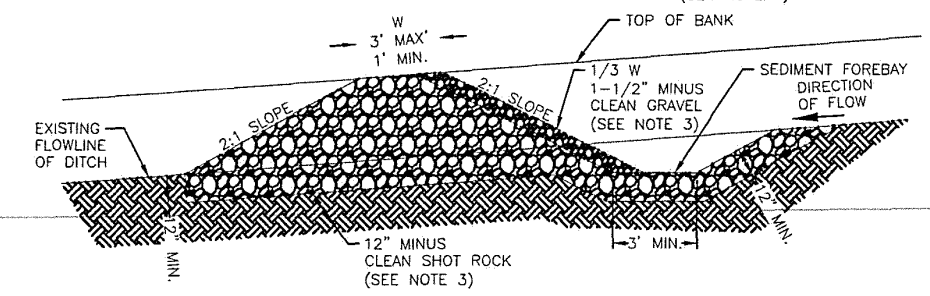
SCALE: 1"=4'



**TEMPORARY WATER CONTROL SWALE**  
N.T.S.



**ELEVATION**



**SECTION A-A**

AMOUNT ROCK SIZE		ROCK CHECK DAM SPACING TABLE	
AMOUNT ROCK SIZE	DITCH GRADE	SPACING	
100% < 12"	1%	200 FT	
100% > 2"	2%	100 FT	
UPSTREAM FACE OF STORMWATER MANAGEMENT ROCK CHECK DAM TO BE CLEAN 1-1/2" MINUS GRAVEL	4%	50 FT	
	6%	33 FT	
	8%	25 FT	

DITCH SLOPES GREATER THAN 8% SPACING MUST BE APPROVED BY THE ENGINEER

- NOTES:**
- ROCK CHECK DAMS ARE NOT ALLOWED IN ANDRONOMUS FISH STREAMS WITHOUT PERMISSION OF THE APPLICABLE STATE & FEDERAL AGENCIES AND THE CBJ DEPARTMENT OF ENGINEERING.
  - ROCK CHECK DAMS DESIGNATED AS STORMWATER MANAGEMENT ITEMS ARE TO REMAIN IN PLACE. TEMPORARY ROCK CHECK DAMS INSTALLED FOR SEDIMENT CONTROL DURING CONSTRUCTION MUST REMAIN IN PLACE UNTIL SOILS ARE STABILIZED AND REVEGATION IS COMPLETE AS APPROVED BY THE ENGINEER.
  - STORM WATER MANAGEMENT ROCK CHECK DAMS SHALL BE CONSTRUCTED WITH CLEAN, WELL-GRADED MATERIAL (NO FINES), PER ROCK SIZE TABLE AND FACED ON THE UPSTREAM SIDE WITH CLEAN 1-1/2" MINUS GRAVEL. TEMPORARY ROCK CHECK DAMS MAY OMIT THE 1-1/2" GRAVEL FACE.
  - THE HEIGHT OF THE ROCK CHECK DAM SPILLWAY SHALL BE NO GREATER THAN 3'. THE TOP OF DAM SHALL BE NO MORE THAN 3'-6". THE HEIGHT OF THE SPILLWAY SHALL BE PROPORTIONATE TO THE HEIGHT OF THE DAM BUT NO LESS THAN 2".
  - ALL ROCK CHECK DAMS SHALL BE SPACED PER TABLE ABOVE AT A MINIMUM OR AS DIRECTED BY THE ENGINEER.

**312-ROCK CHECK DAM**

SCALE: 1"=6'

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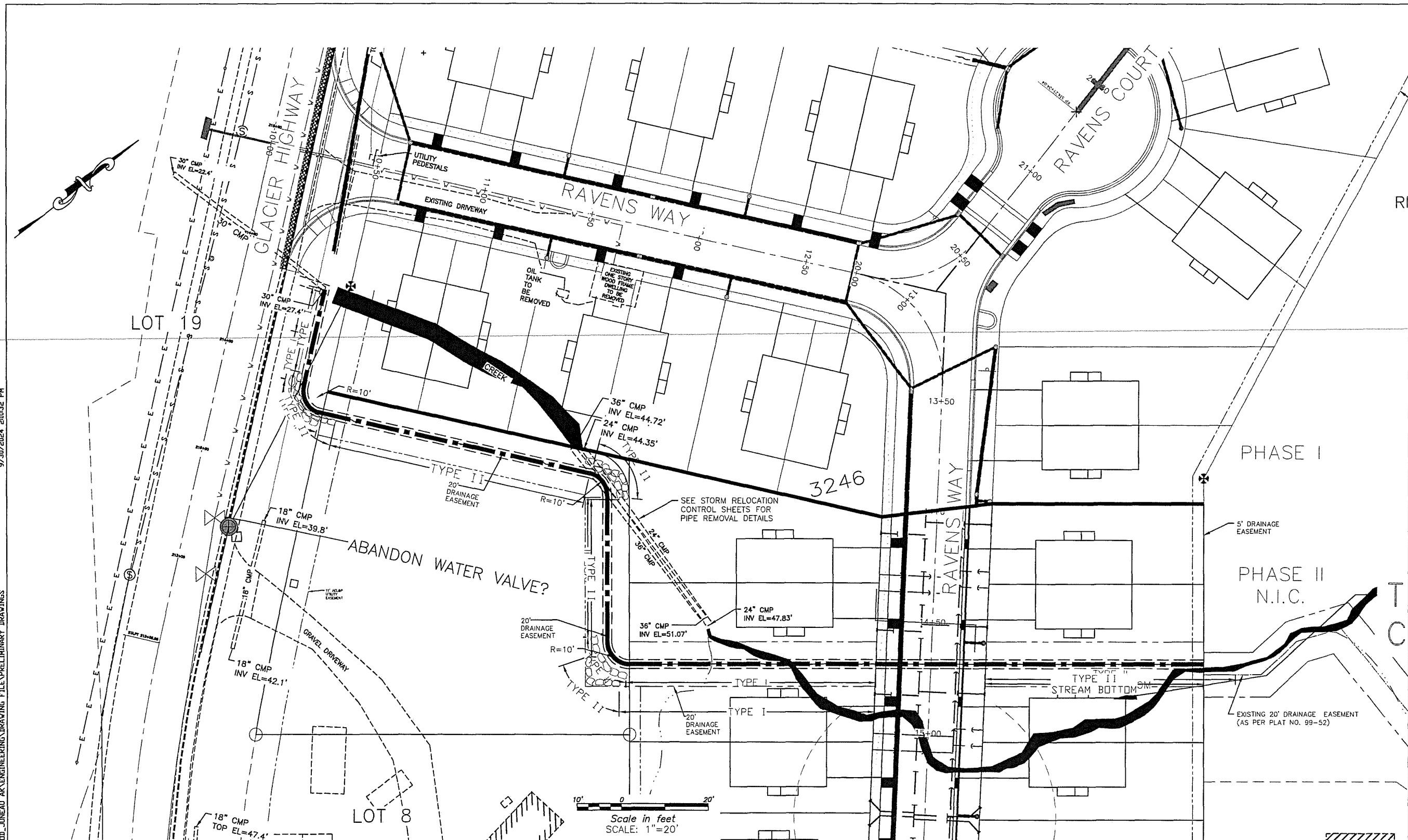
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PHASE I  
PHASE II N.I.C.  
EXISTING 20' DRAINAGE EASEMENT (AS PER PLAT NO. 99-52)

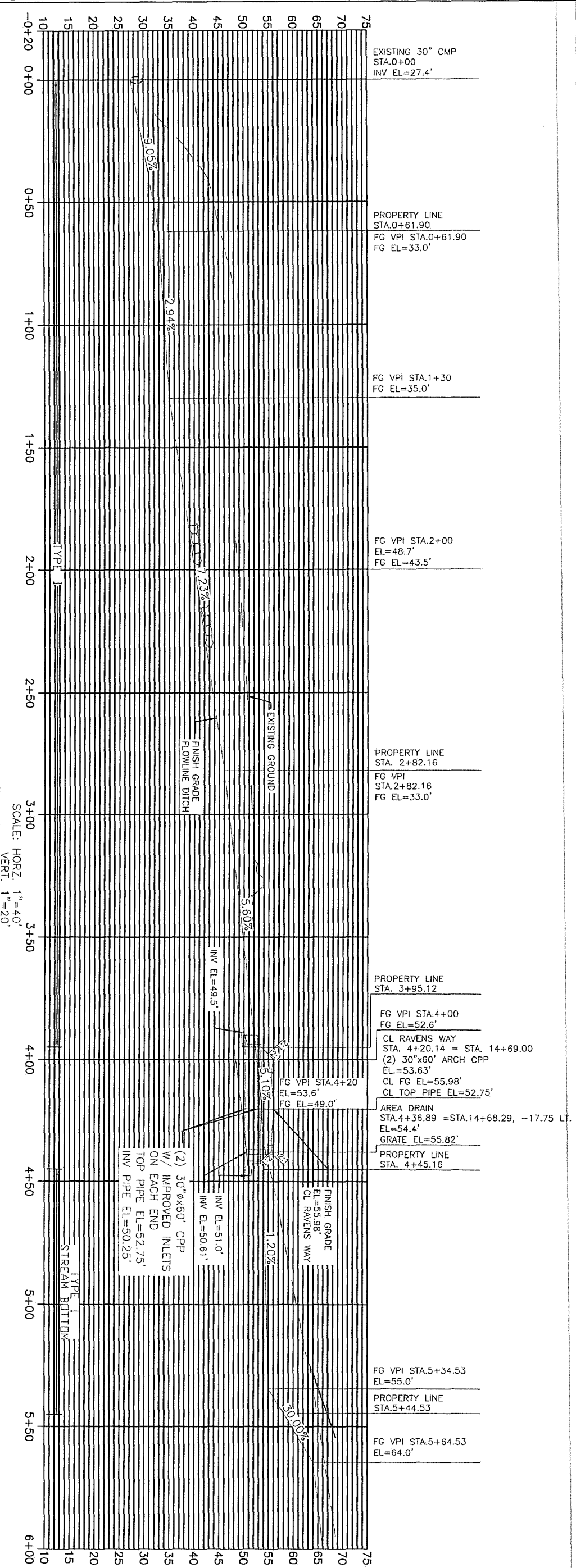
SHEET SR1 SHEET NO. 10 OF 64

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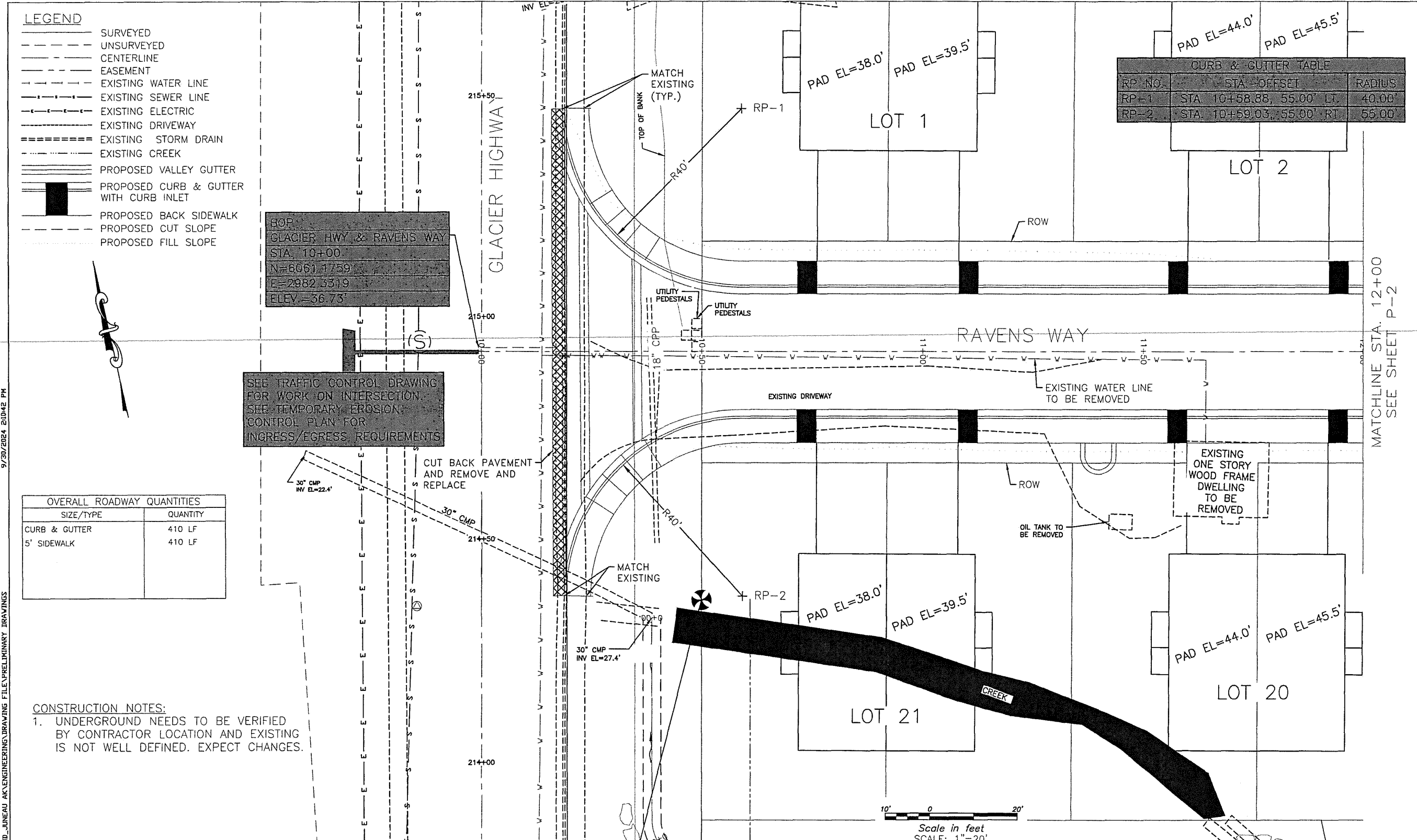
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**RAVENSWOOD SUBDIVISION**



SHEET	SR2
SHEET NO.	11 OF 64





**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE

BOP  
 GLACIER HWY & RAVENS WAY  
 STA. 10+00  
 N=6067.1759  
 E=2982.3319  
 ELEV.=36.73'

SEE TRAFFIC CONTROL DRAWING FOR WORK ON INTERSECTION.  
 SEE TEMPORARY EROSION CONTROL PLAN FOR INGRESS/EGRESS REQUIREMENTS

**OVERALL ROADWAY QUANTITIES**

SIZE/TYPE	QUANTITY
CURB & GUTTER	410 LF
5' SIDEWALK	410 LF

**CONSTRUCTION NOTES:**  
 1. UNDERGROUND NEEDS TO BE VERIFIED BY CONTRACTOR LOCATION AND EXISTING IS NOT WELL DEFINED. EXPECT CHANGES.

**CURB & GUTTER TABLE**

RP NO	STA	OFFSET	RADIUS
RP-1	STA 10+58.88	55.00' LT	40.00'
RP-2	STA 10+59.03	55.00' RT	55.00'

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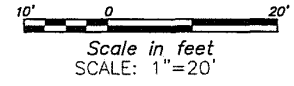
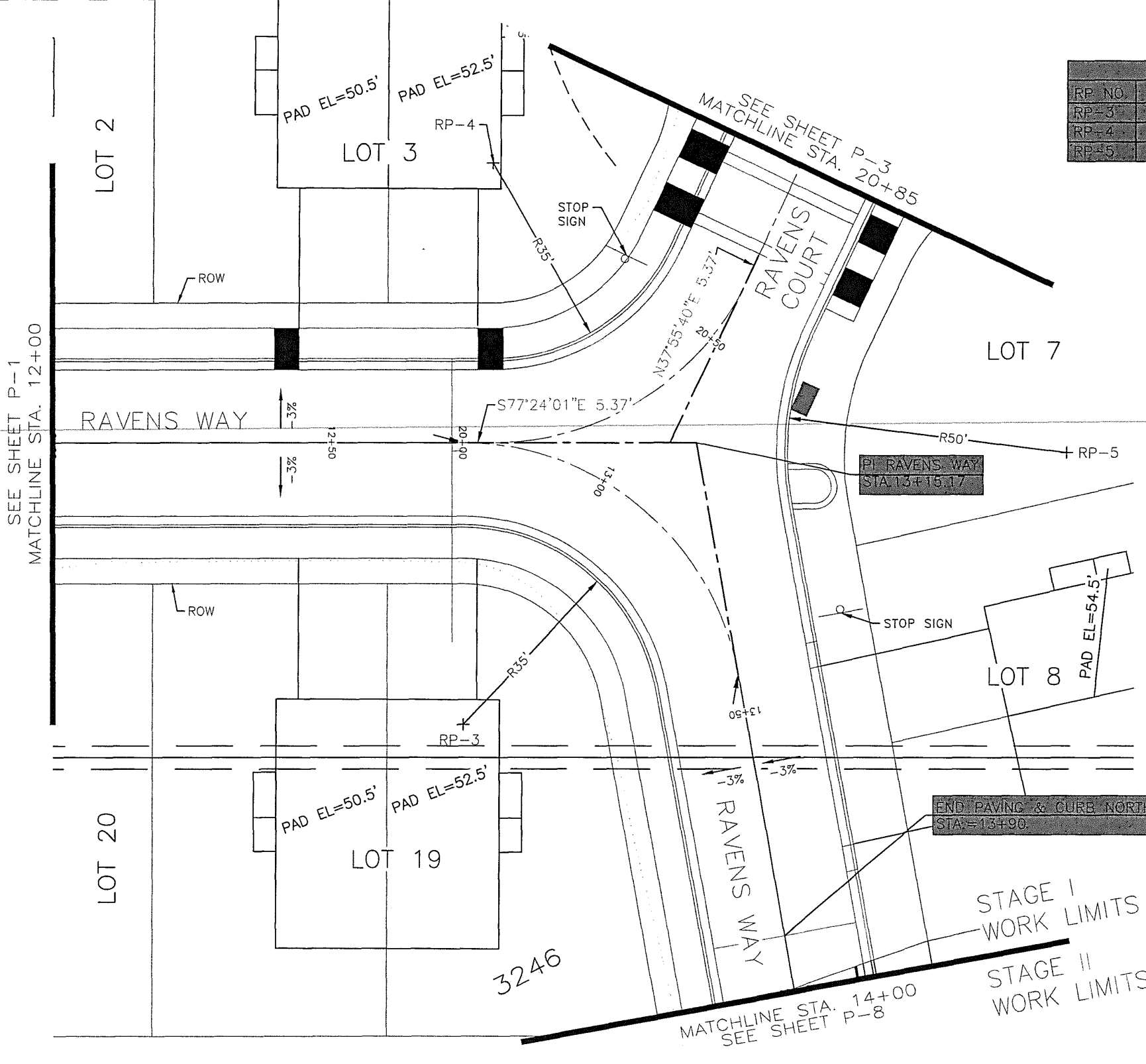
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 SHEET NO. 12 OF 64

**LEGEND**

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- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE

CURB & GUTTER TABLE		
RP NO.	STA-OFFSET	RADIUS
RP-3	STA. 12+73.46, 50.00' LT.	35.00'
RP-4	STA. 12+76.14, 50.14' LT.	35.00'
RP-5	STA. 13+31.01, 68.38' LT.	50.00'

OVERALL ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	470 LF
5' SIDEWALK	470 LF



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**LEGEND**

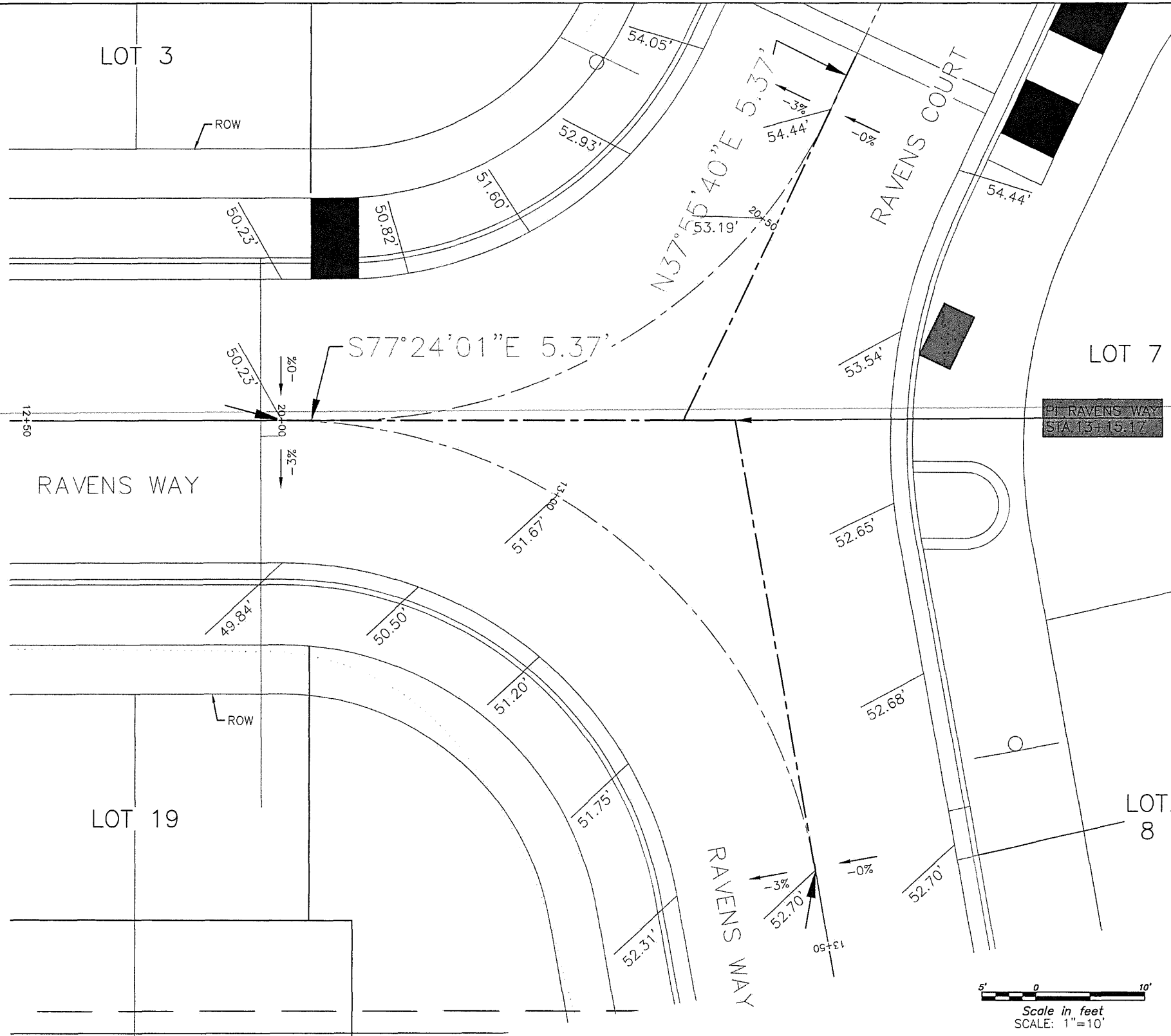
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- - - EXISTING DRIVEWAY
- ===== EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ===== PROPOSED VALLEY GUTTER
- █ PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE

CROSS SLOPE TABLE CHANGES TO NORMAL CROWN		
STA.	RT.	LT.
12+73.46		0.00%
13+42.95		0.00%
20+51.81	0.00%	
21+00	3.00%	
21+34.74	3.00%	
14+00		3.00%
16+36		3.00%

STRAIGHT LINE TRANSITIONS BETWEEN STATIONS UNLESS CURB GRADES ARE DIFFERENT (CURB GRADES CONTROL)

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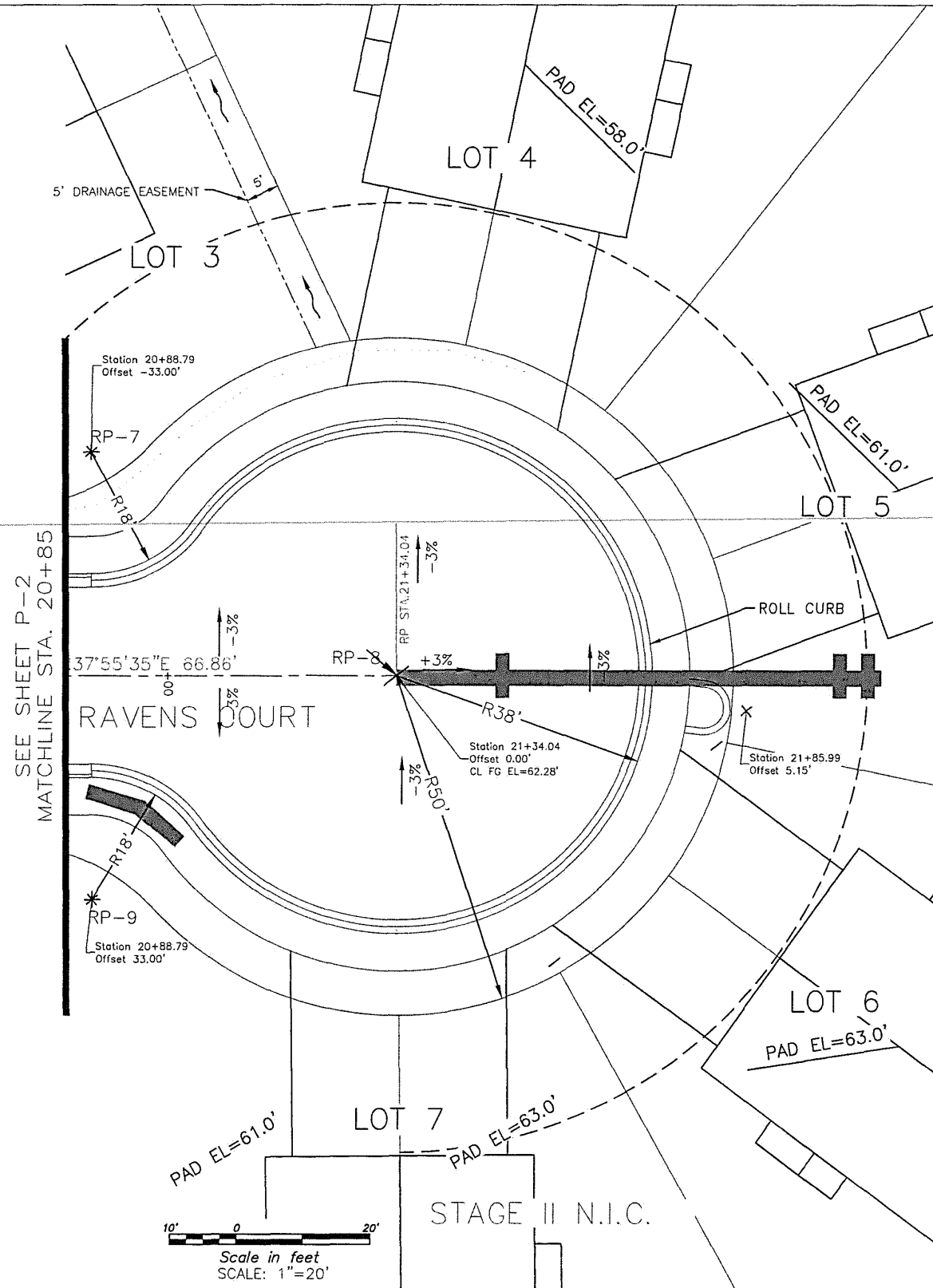
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SHEET NO.	14 OF 64

**LEGEND**

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- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
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- ==== EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ==== PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE

CURB & GUTTER TABLE		
RP NO.	STA. - OFFSET	RADIUS
RP-7	STA. 20+88.79, 33.00' LT.	18.00'
RP-8	STA. 20+88.79, 33.00' RT.	18.00'
RP-9	STA. 21+34.04, 0.00' RT.	38.00'

OVERALL ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	225 LF
5' SIDEWALK	225 LF



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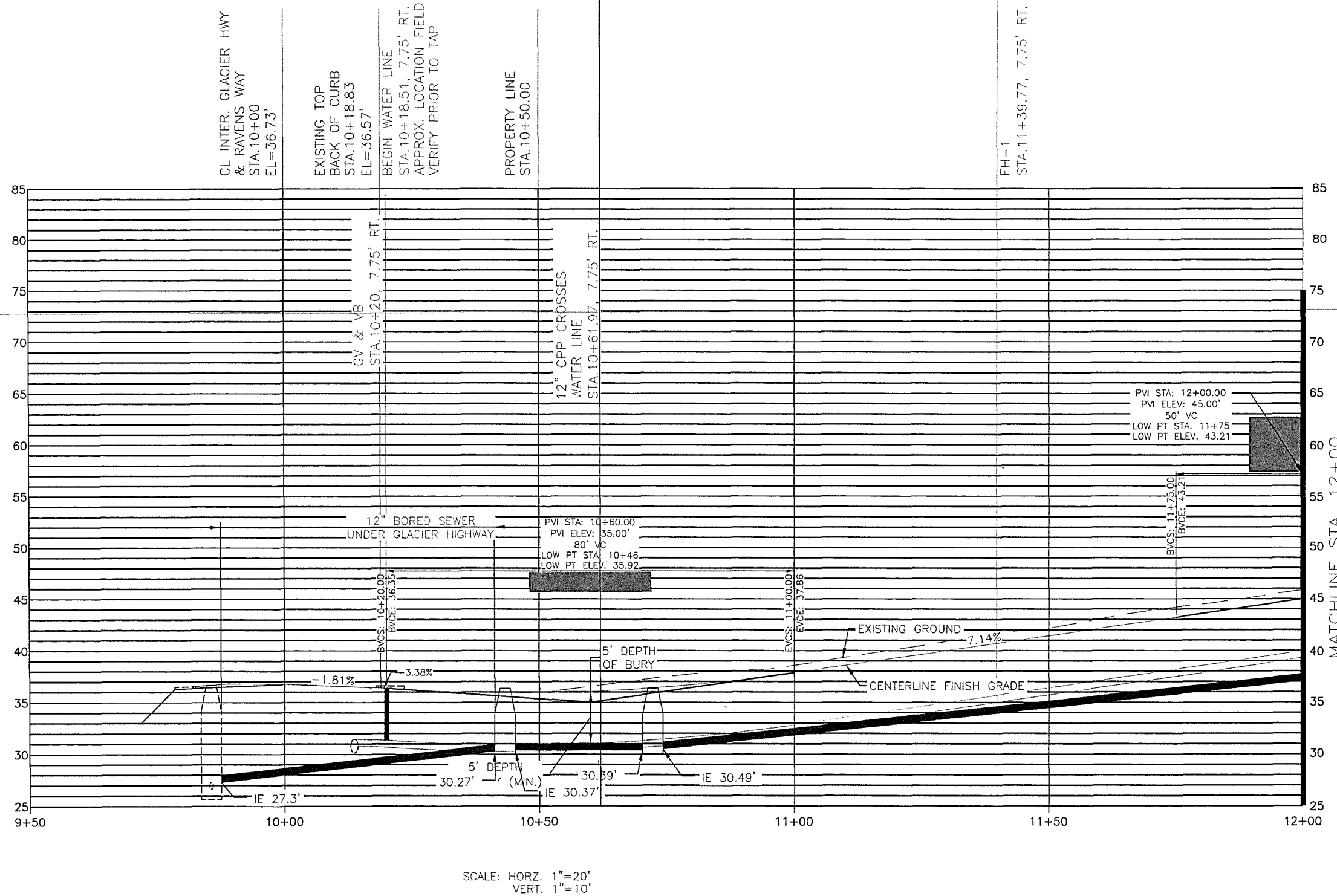
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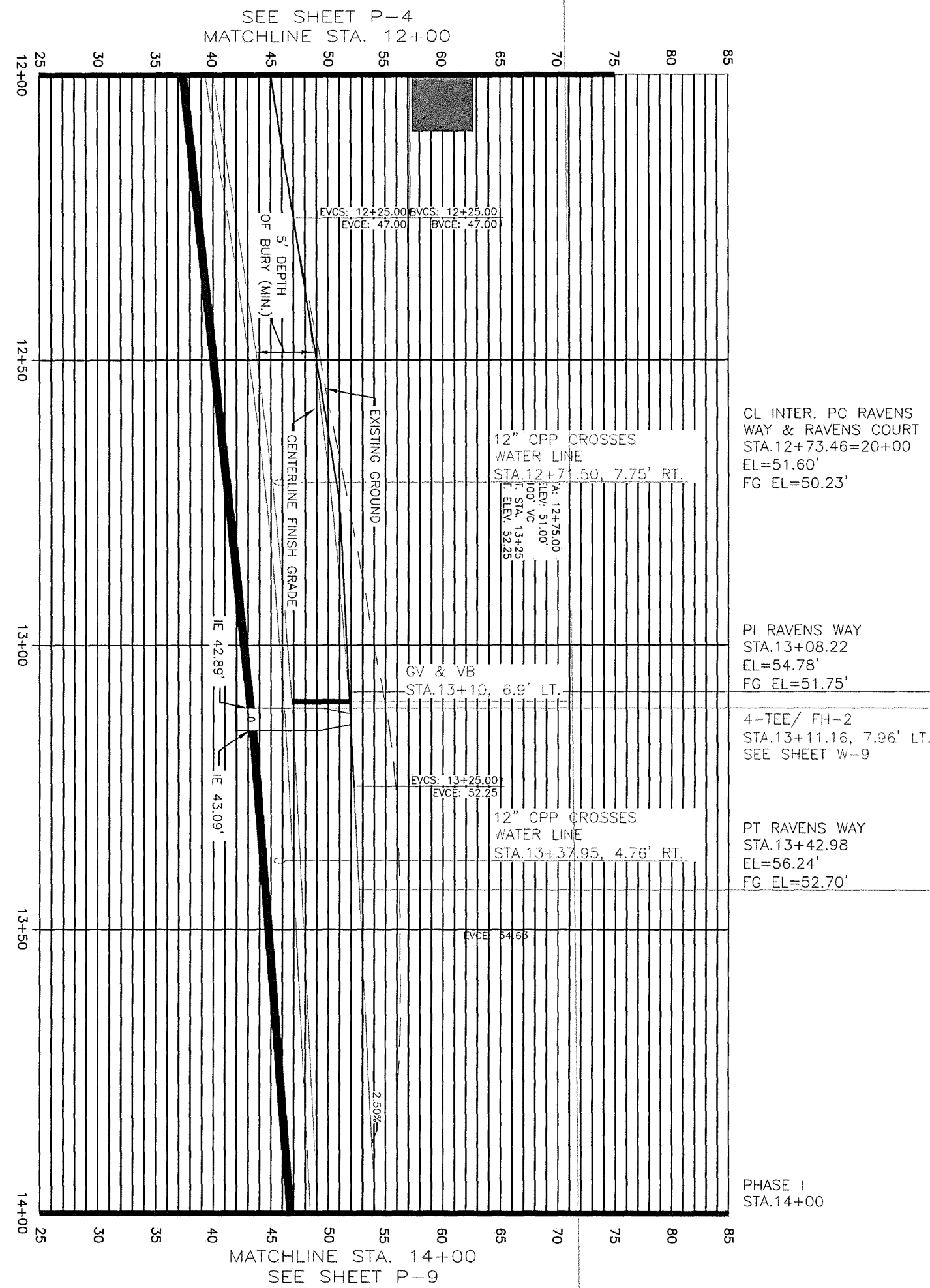
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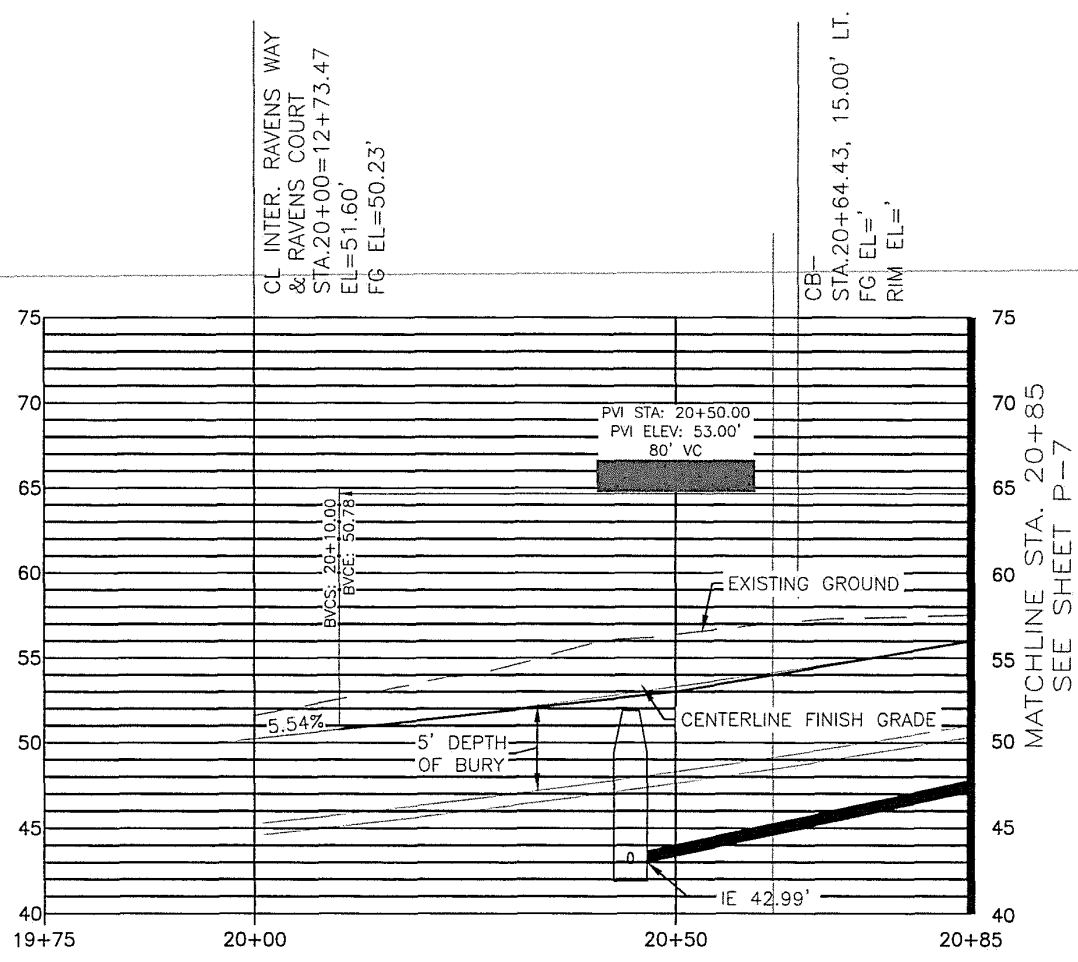
SHEET P5  
 SHEET NO. 17 OF 64

SCALE: HORZ. 1"=20'  
 VERT. 1"=10'



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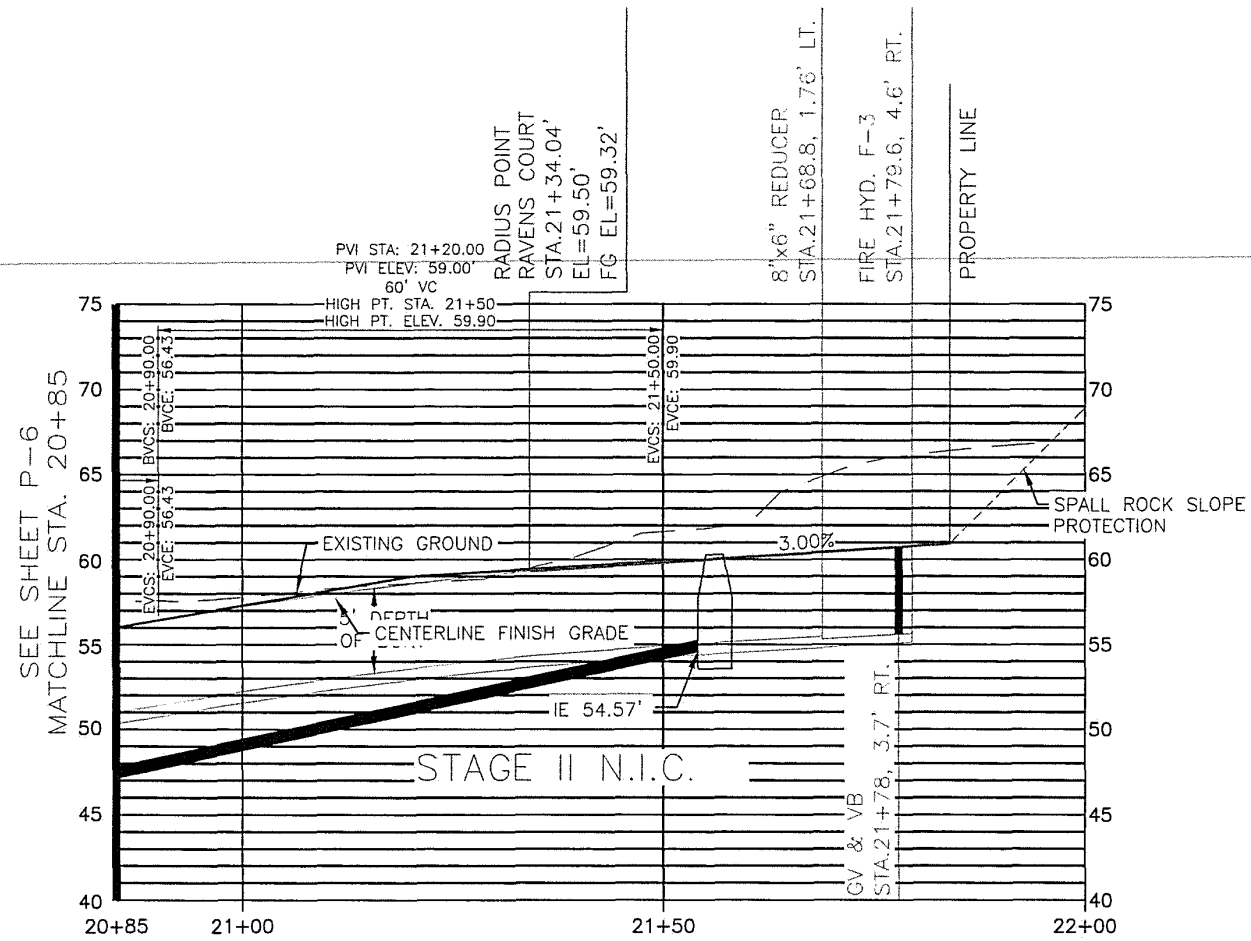


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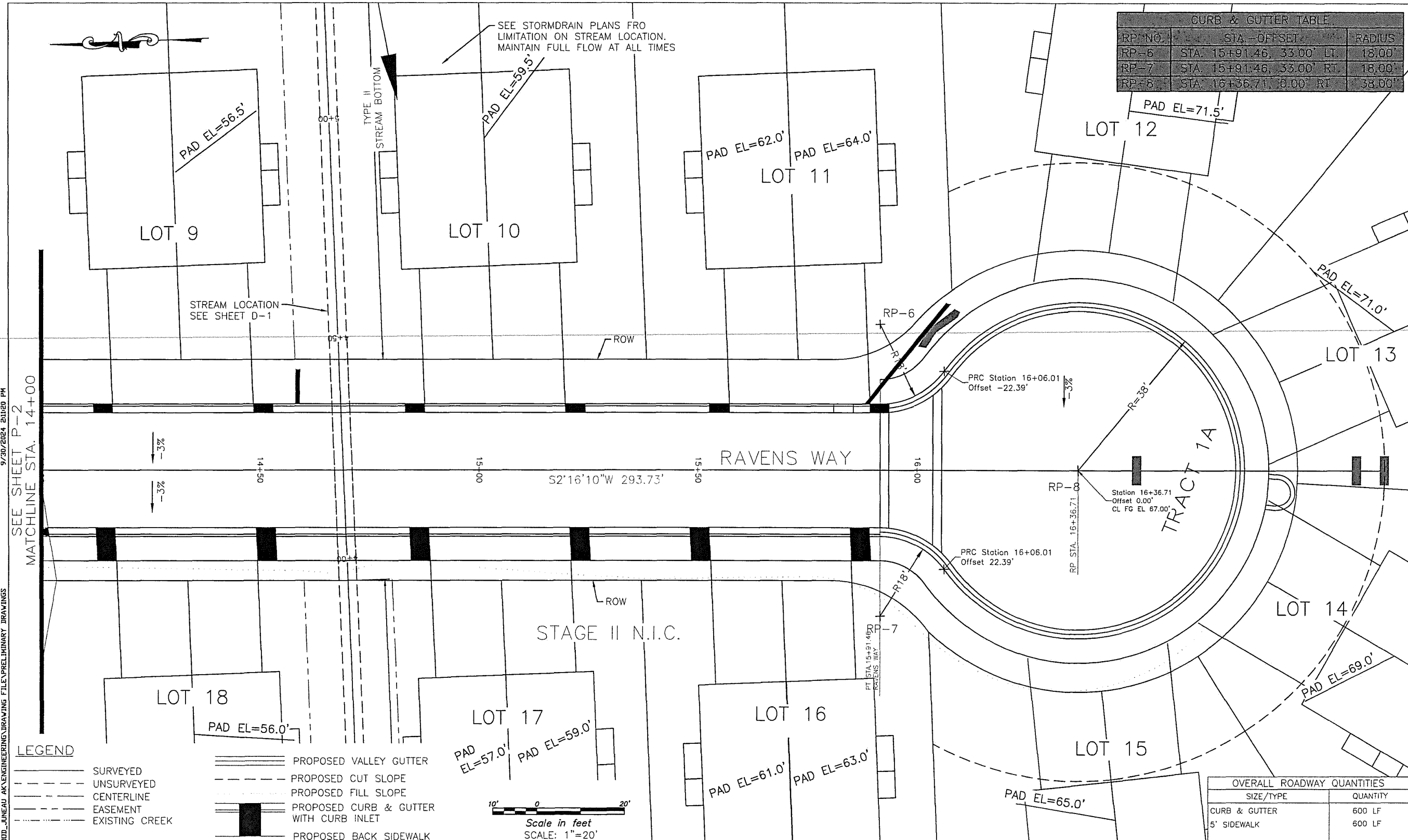
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SHEET NO.  
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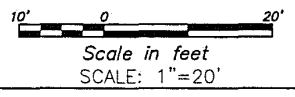
RP NO.	STA. - OFFSET	RADIUS
RP-6	STA. 15+91.46, 33.00' LT.	18.00'
RP-7	STA. 15+91.46, 33.00' RT.	18.00'
RP-8	STA. 16+36.71, 0.00' RT.	38.00'

OVERALL ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	600 LF
5' SIDEWALK	600 LF

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 SEE SHEET P-2  
 MATCHLINE STA. 14+00  
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**LEGEND**

- SURVEYED
- UNSURVEYED
- CENTERLINE
- EASEMENT
- EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK



REV	DATE	BY	DESCRIPTION

SCALE	GRAPHIC
DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

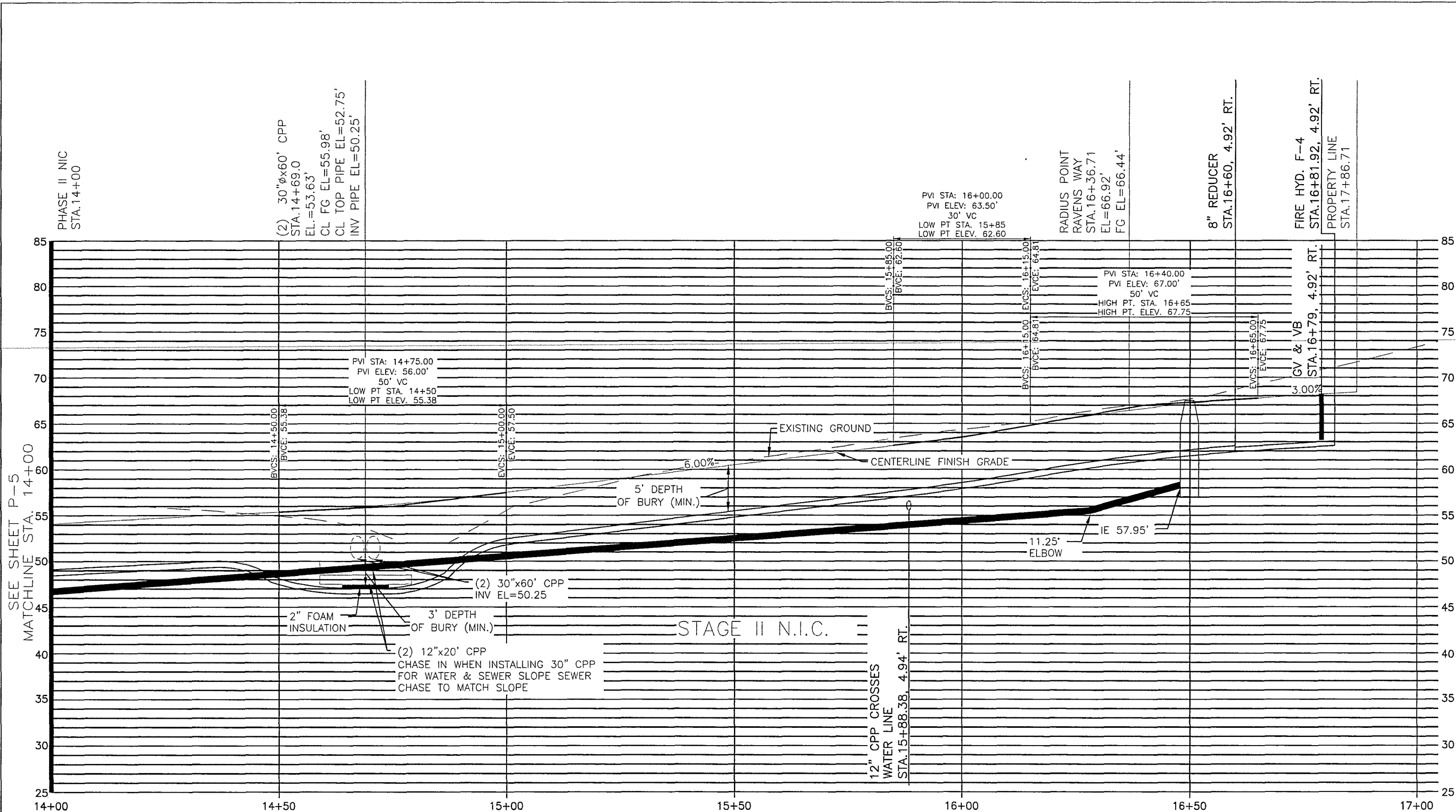
**MOORE ENGINEERING**  
 P.O. BOX 397 CRAIG, ALASKA 99921  
 (907) 530-7008  
**TRACY MOORE, P.E.**  
 REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
 P8  
 SHEET NO.  
 20 OF 64

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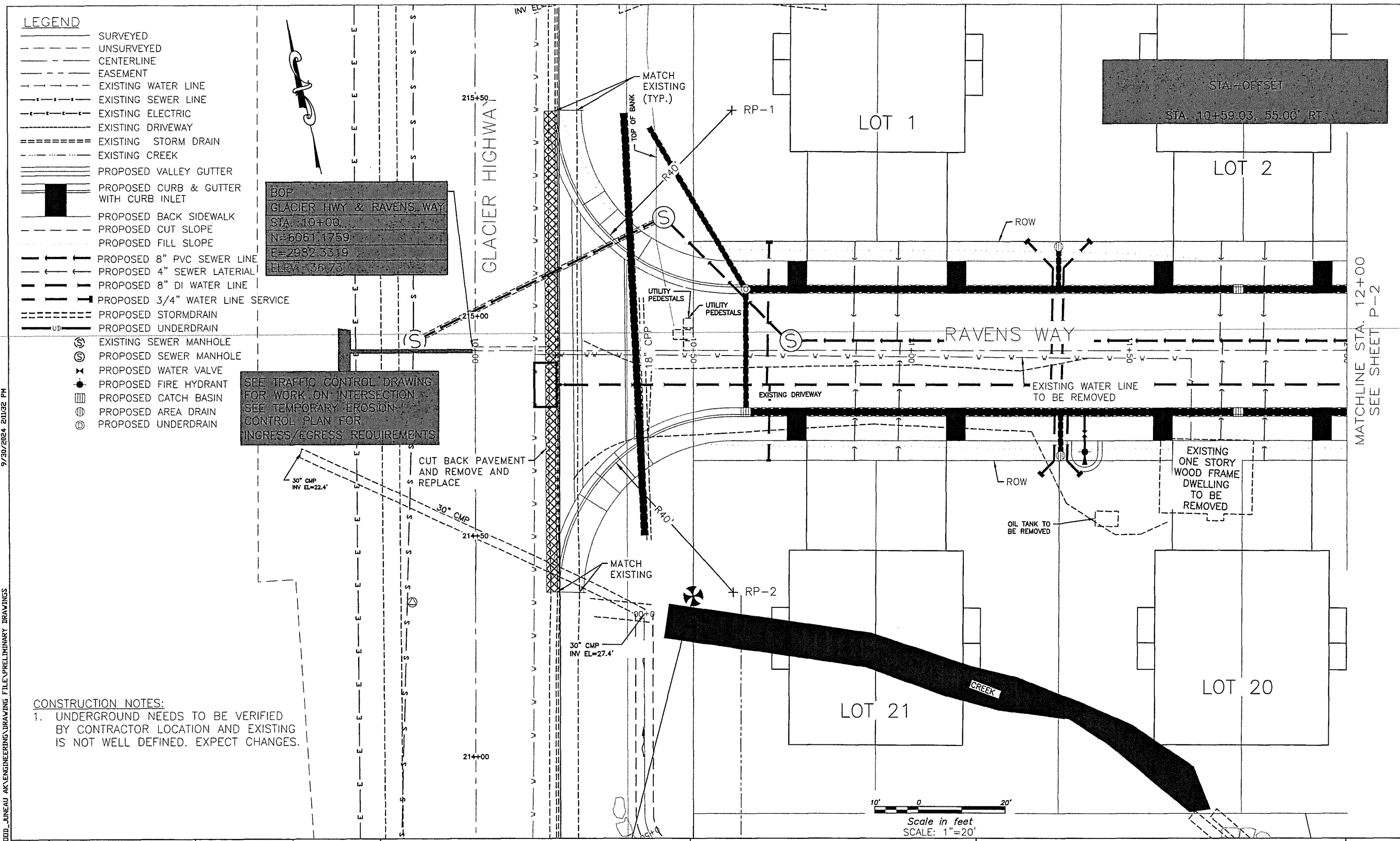


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CHECKED	###
DATE	September 30, 2024

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RAVENWOOD SUBDIVISION

SHEET P9  
SHEET NO. 21 OF 64



- LEGEND**
- SURVEYED
  - - - UNSURVEYED
  - CENTERLINE
  - EASEMENT
  - - - EXISTING WATER LINE
  - - - EXISTING SEWER LINE
  - - - EXISTING ELECTRIC
  - - - EXISTING DRIVEWAY
  - - - EXISTING STORM DRAIN
  - - - EXISTING CREEK
  - PROPOSED VALLEY GUTTER
  - PROPOSED CURB & GUTTER WITH CURB INLET
  - PROPOSED BACK SIDEWALK
  - PROPOSED CUT SLOPE
  - PROPOSED FILL SLOPE
  - PROPOSED 8" PVC SEWER LINE
  - PROPOSED 4" SEWER LATERAL
  - PROPOSED 8" DI WATER LINE
  - PROPOSED 3/4" WATER LINE SERVICE
  - PROPOSED STORM DRAIN
  - PROPOSED UNDERDRAIN
  - ⊙ EXISTING SEWER MANHOLE
  - ⊙ PROPOSED SEWER MANHOLE
  - ⊙ PROPOSED WATER VALVE
  - ⊙ PROPOSED FIRE HYDRANT
  - ⊙ PROPOSED CATCH BASIN
  - ⊙ PROPOSED AREA DRAIN
  - ⊙ PROPOSED UNDERDRAIN

**BOP**  
**GLACIER HWY & RAVENS WAY**  
 STA. 10+00  
 N=6061 1759  
 E=2982 3319  
 ELEV.=36.73

SEE TRAFFIC CONTROL DRAWING FOR WORK ON INTERSECTION  
 SEE TEMPORARY EROSION CONTROL PLAN FOR INGRESS/EGRESS REQUIREMENTS

**CONSTRUCTION NOTES:**  
 1. UNDERGROUND NEEDS TO BE VERIFIED BY CONTRACTOR LOCATION AND EXISTING IS NOT WELL DEFINED. EXPECT CHANGES.

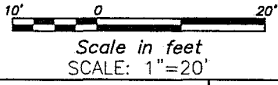
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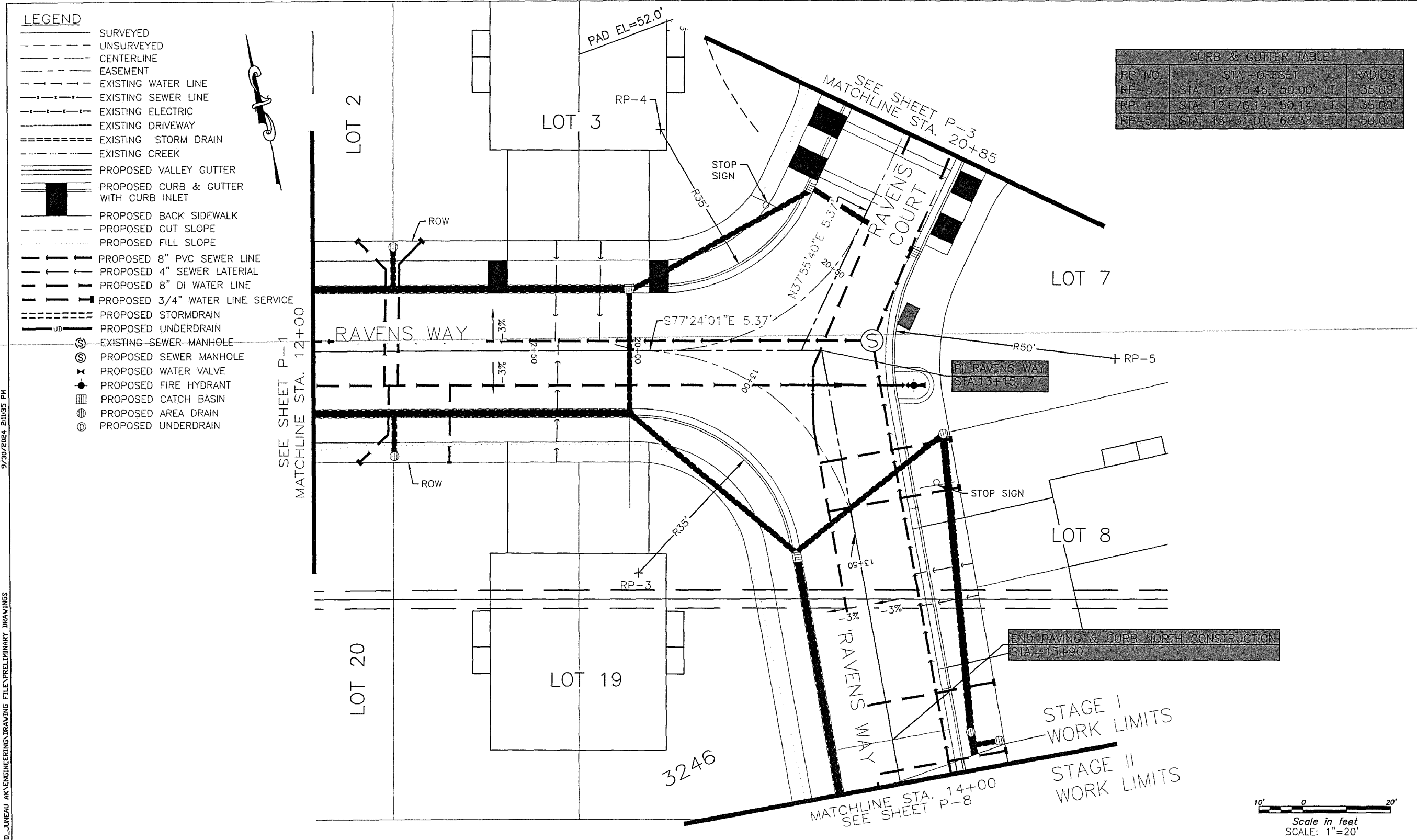
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SHEET  
 U1  
 SHEET NO.  
 22 OF 64





CURB & GUTTER TABLE		
RP NO.	STA. - OFFSET	RADIUS
RP-3	STA. 12+73.46, 50.00' LT.	35.00'
RP-4	STA. 12+76.14, 50.14' LT.	35.00'
RP-5	STA. 13+51.01, 68.38' LT.	50.00'

- LEGEND**
- SURVEYED
  - UNSURVEYED
  - CENTERLINE
  - EASEMENT
  - EXISTING WATER LINE
  - EXISTING SEWER LINE
  - EXISTING ELECTRIC
  - EXISTING DRIVEWAY
  - EXISTING STORM DRAIN
  - EXISTING CREEK
  - PROPOSED VALLEY GUTTER
  - PROPOSED CURB & GUTTER WITH CURB INLET
  - PROPOSED BACK SIDEWALK
  - PROPOSED CUT SLOPE
  - PROPOSED FILL SLOPE
  - PROPOSED 8" PVC SEWER LINE
  - PROPOSED 4" SEWER LATERAL
  - PROPOSED 8" DI WATER LINE
  - PROPOSED 3/4" WATER LINE SERVICE
  - PROPOSED STORM DRAIN
  - PROPOSED UNDERDRAIN
  - ⊙ EXISTING SEWER MANHOLE
  - ⊙ PROPOSED SEWER MANHOLE
  - ⊙ PROPOSED WATER VALVE
  - ⊙ PROPOSED FIRE HYDRANT
  - ⊙ PROPOSED CATCH BASIN
  - ⊙ PROPOSED AREA DRAIN
  - ⊙ PROPOSED UNDERDRAIN

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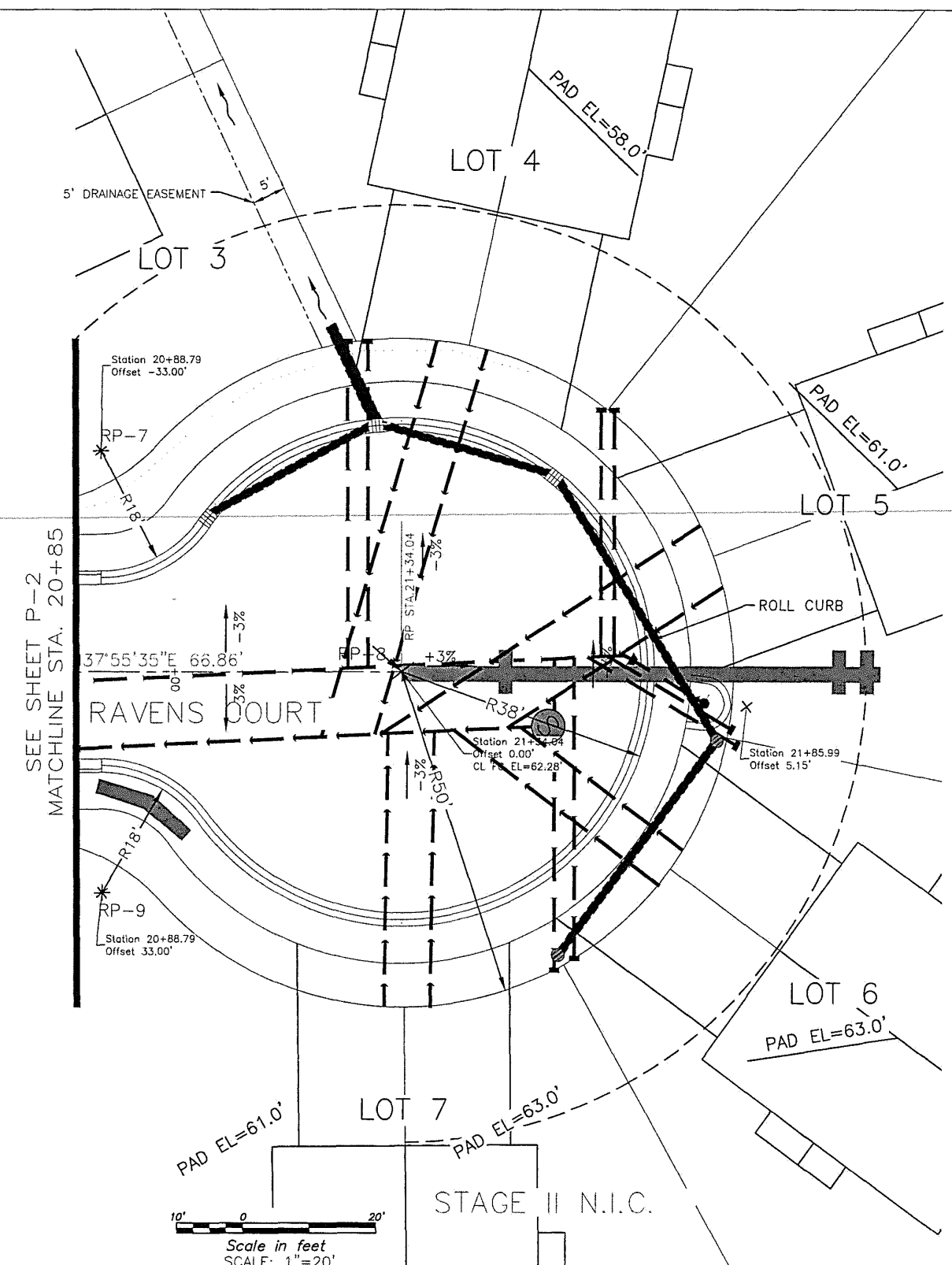
RAVENWOOD SUBDIVISION

SHEET U2  
 SHEET NO. 23 OF 64

**LEGEND**

- SURVEYED
- - - - - UNSURVEYED
- CENTERLINE
- - - - - EASEMENT
- - - - - EXISTING WATER LINE
- - - - - EXISTING SEWER LINE
- - - - - EXISTING ELECTRIC
- - - - - EXISTING DRIVEWAY
- - - - - EXISTING STORM DRAIN
- - - - - EXISTING CREEK
- - - - - EXISTING SEWER LINE
- - - - - EXISTING WATER LINE
- ==== PROPOSED VALLEY GUTTER
- ▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬ PROPOSED BACK SIDEWALK
- - - - - PROPOSED CUT SLOPE
- - - - - PROPOSED FILL SLOPE
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- PROPOSED 8" DI WATER LINE
- PROPOSED 3/4" WATER LINE SERVICE
- - - - - PROPOSED STORM DRAIN
- PROPOSED UNDERDRAIN
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE
- ⊙ PROPOSED WATER VALVE
- ⊙ PROPOSED FIRE HYDRANT
- ⊙ PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED STORM DRAIN MANHOLE

CURB & GUTTER TABLE		
RP NO.	STA. - OFFSET	RADIUS
RP-7	STA. 20+88.79, 33.00' LT.	18.00'
RP-8	STA. 20+88.79, 33.00' RT.	18.00'
RP-9	STA. 21+34.04, 0.00' RT.	38.00'



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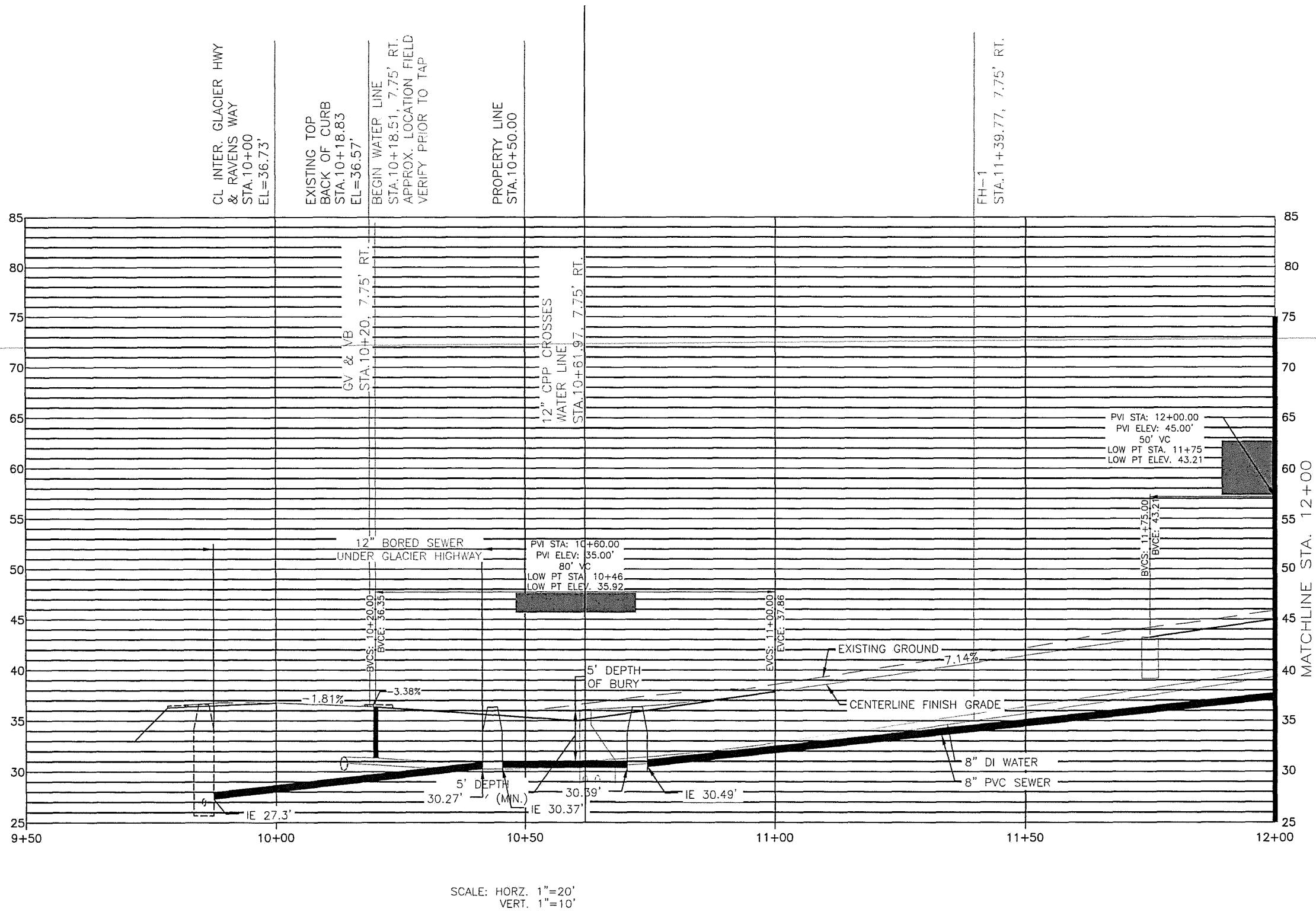
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SHEET  
 U3  
 SHEET NO.  
 24 OF 64

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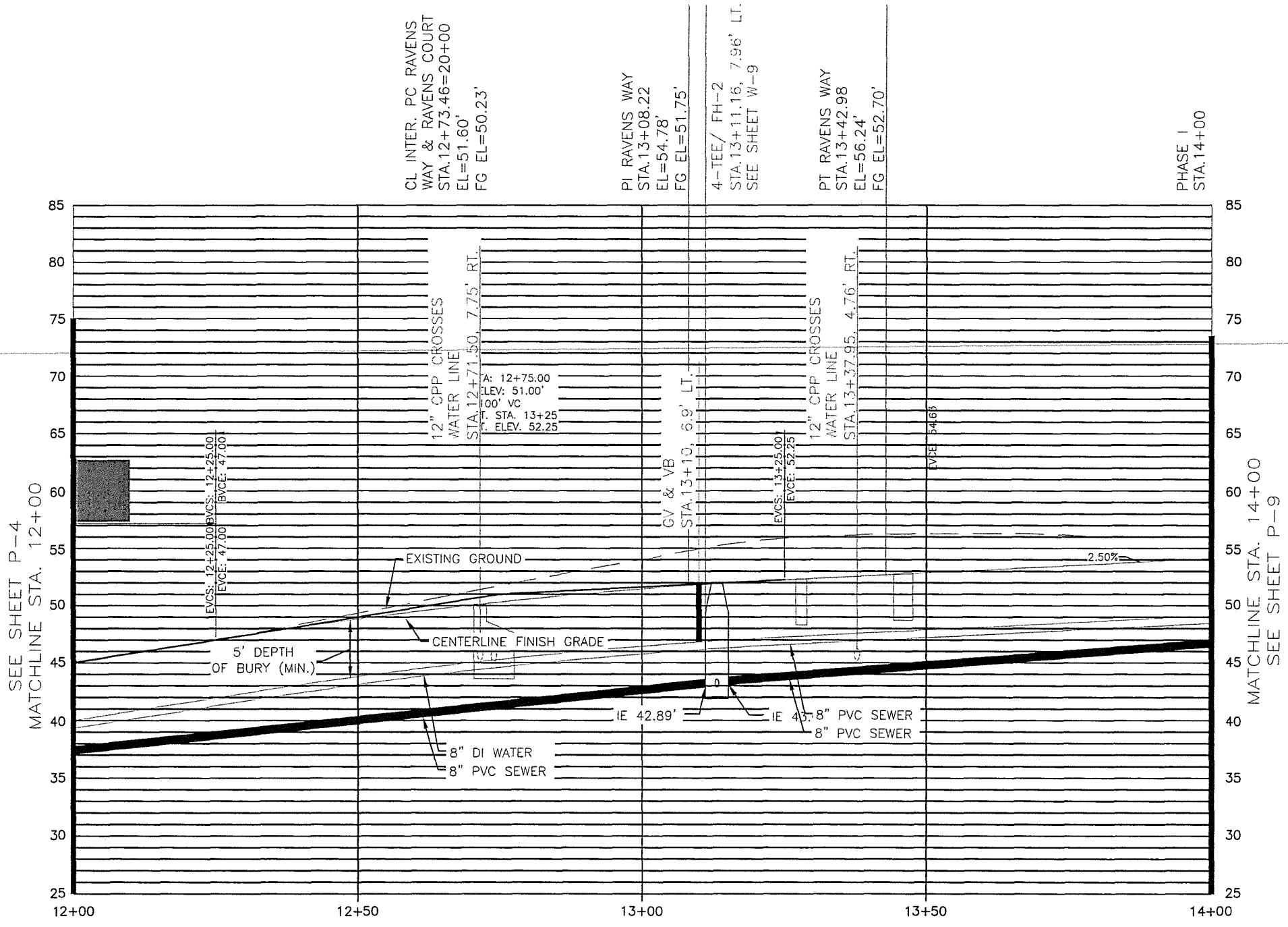
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SHEET	U4
SHEET NO.	25 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

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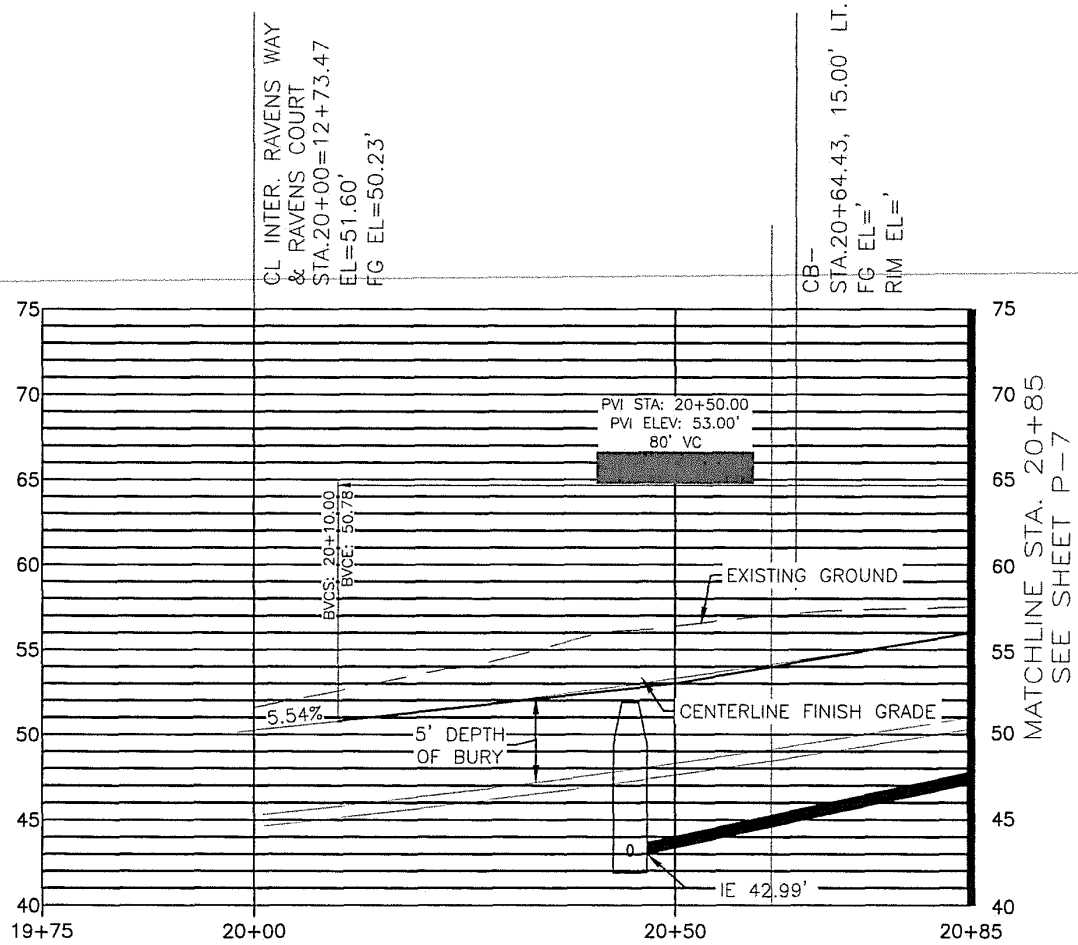
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SHEET	U5
SHEET NO.	26 OF 64

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MATCHLINE STA. 20+85  
SEE SHEET P-7

SCALE: HORZ. 1"=20'  
VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

SCALE GRAPHIC  
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DATE September 30, 2024

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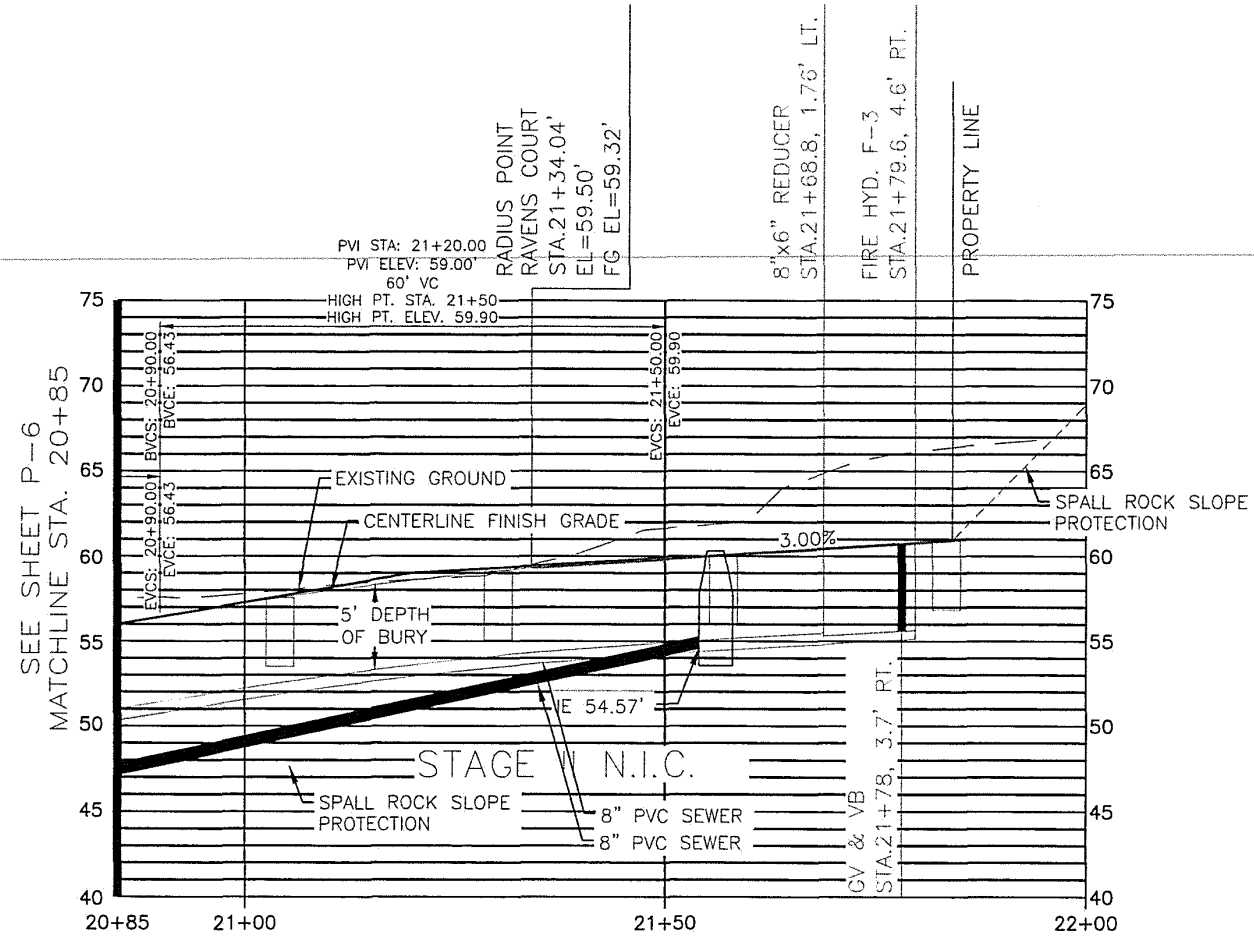
RAVENWOOD SUBDIVISION

SHEET U6  
SHEET NO. 27 OF 64



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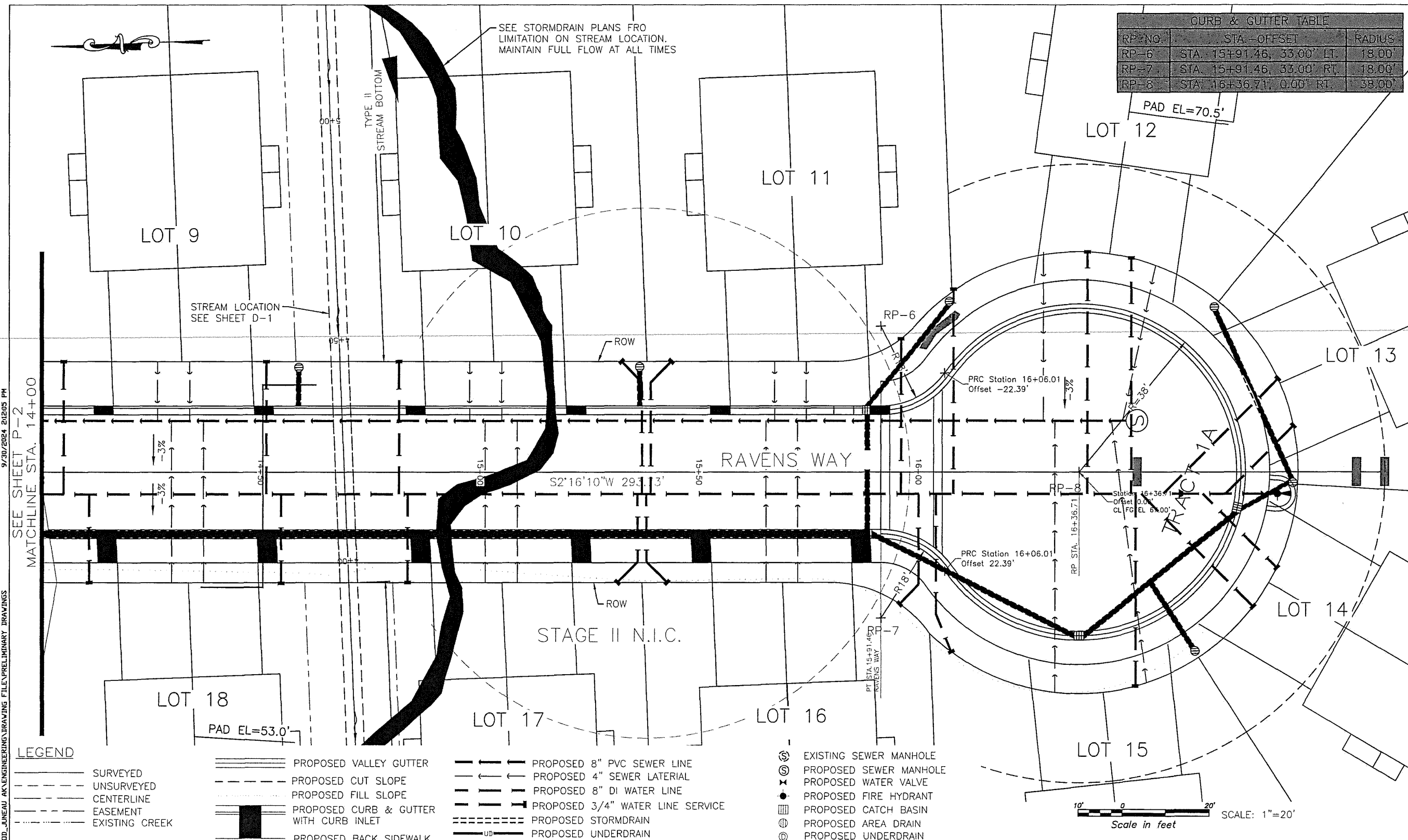
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CHECKED	###		
DATE	September 30, 2024		
REV	DATE	BY	DESCRIPTION

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RAVENWOOD SUBDIVISION

SHEET  
U7  
SHEET NO.  
28 OF 64



SCALE	GRAPHIC
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DATE	September 30, 2024

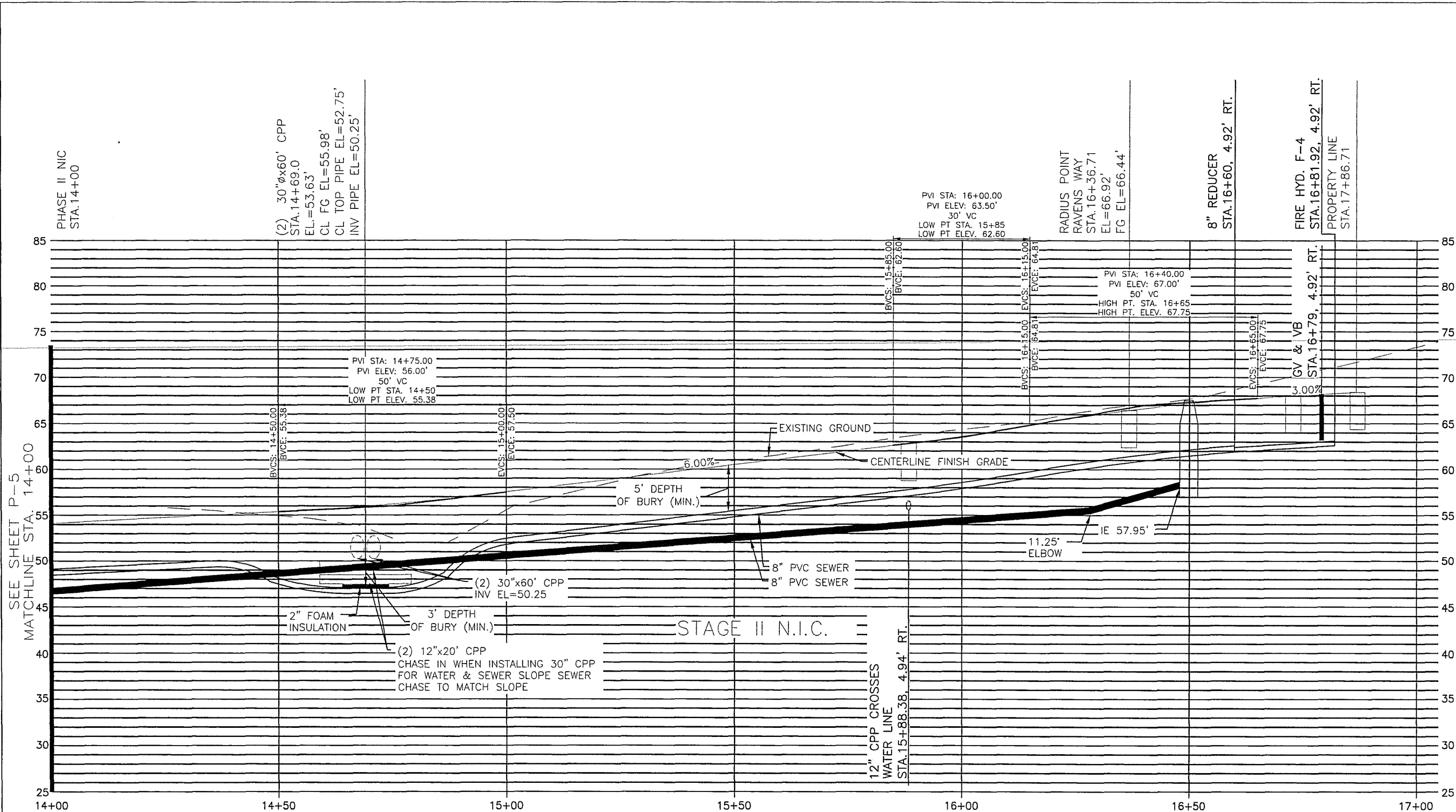
**MOORE ENGINEERING**  
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RAVENWOOD SUBDIVISION

SHEET U8  
SHEET NO. 29 OF 64

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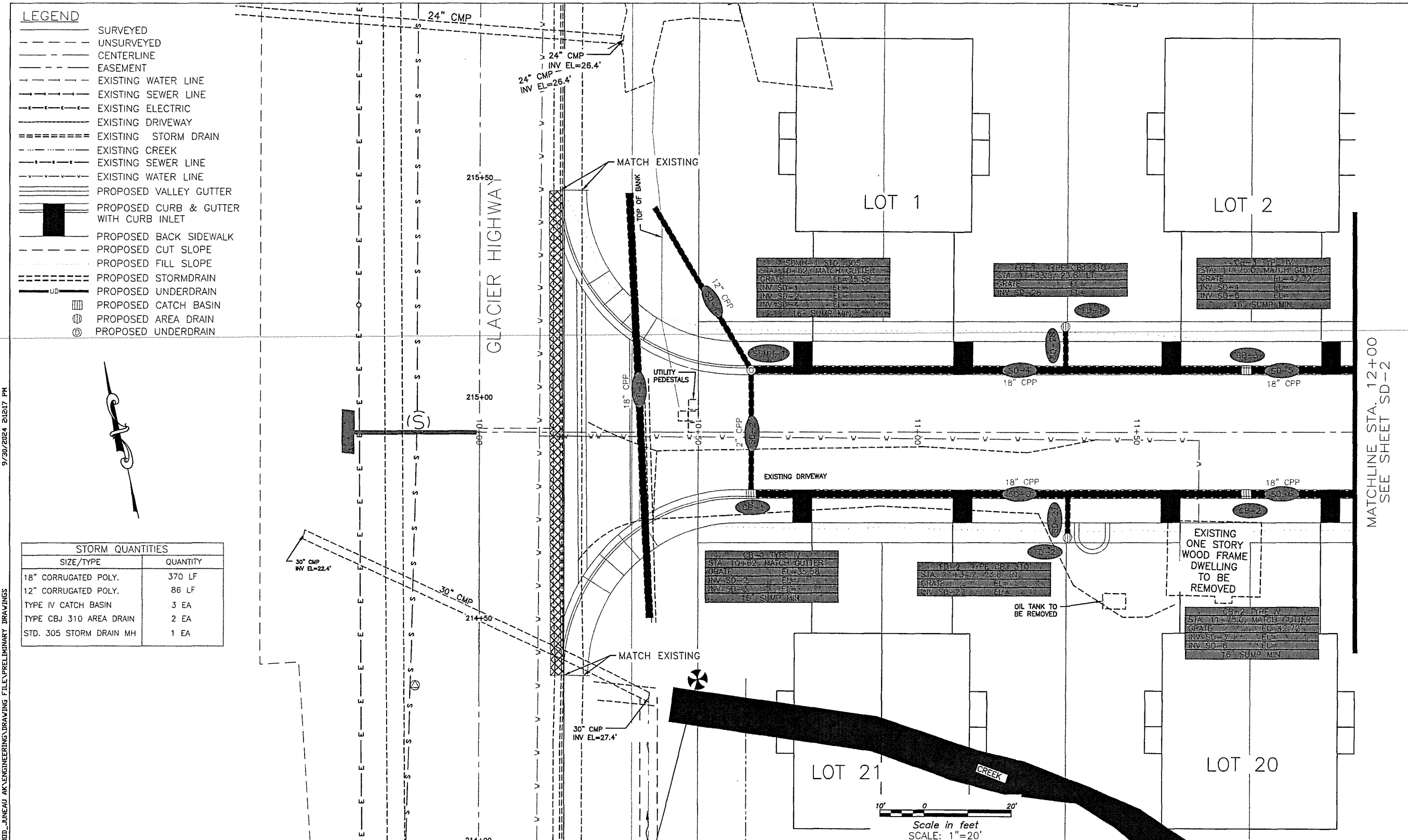
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DESIGNED	###
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CHECKED	###
DATE	September 30, 2024

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RAVENWOOD SUBDIVISION

SHEET  
U9  
SHEET NO.  
30 OF 64



**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- - - PROPOSED VALLEY GUTTER
- - - PROPOSED CURB & GUTTER WITH CURB INLET
- - - PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- - - PROPOSED STORMDRAIN
- - - PROPOSED UNDERDRAIN
- - - PROPOSED CATCH BASIN
- - - PROPOSED AREA DRAIN
- - - PROPOSED UNDERDRAIN

**STORM QUANTITIES**

SIZE/TYPE	QUANTITY
18" CORRUGATED POLY.	370 LF
12" CORRUGATED POLY.	86 LF
TYPE IV CATCH BASIN	3 EA
TYPE CBJ 310 AREA DRAIN	2 EA
STD. 305 STORM DRAIN MH	1 EA

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SCALE	GRAPHIC
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DATE	September 30, 2024

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SHEET SD1  
 SHEET NO. 31 OF 64

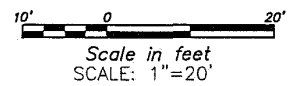
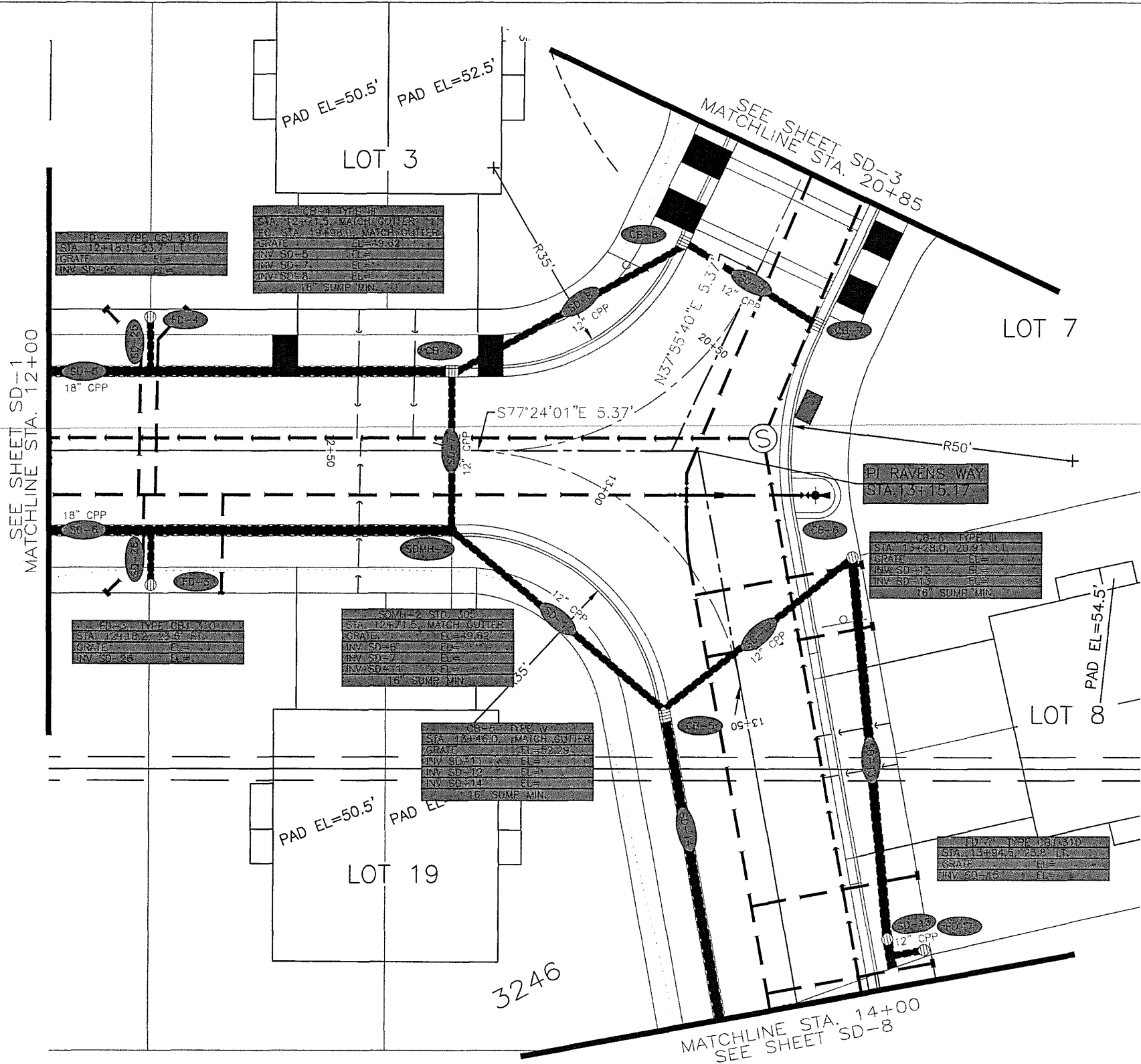
Attachment A – Application Packet

**LEGEND**

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- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- - - PROPOSED VALLEY GUTTER
- - - PROPOSED CURB & GUTTER WITH CURB INLET
- - - PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- - - PROPOSED STORM DRAIN
- - - PROPOSED UNDERDRAIN
- ▨ PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN



STORM QUANTITIES	
SIZE/TYPE	QUANTITY
18" CORRUGATED POLY.	114 LF
12" CORRUGATED POLY.	317 LF
TYPE III CATCH BASIN	5 EA
TYPE IV CATCH BASIN	1 EA
TYPE CBJ 310 AREA DRAIN	3 EA
STD. 305 STORM DRAIN MH	1 EA



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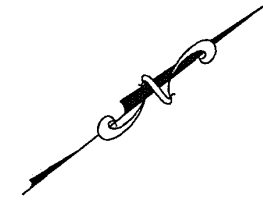
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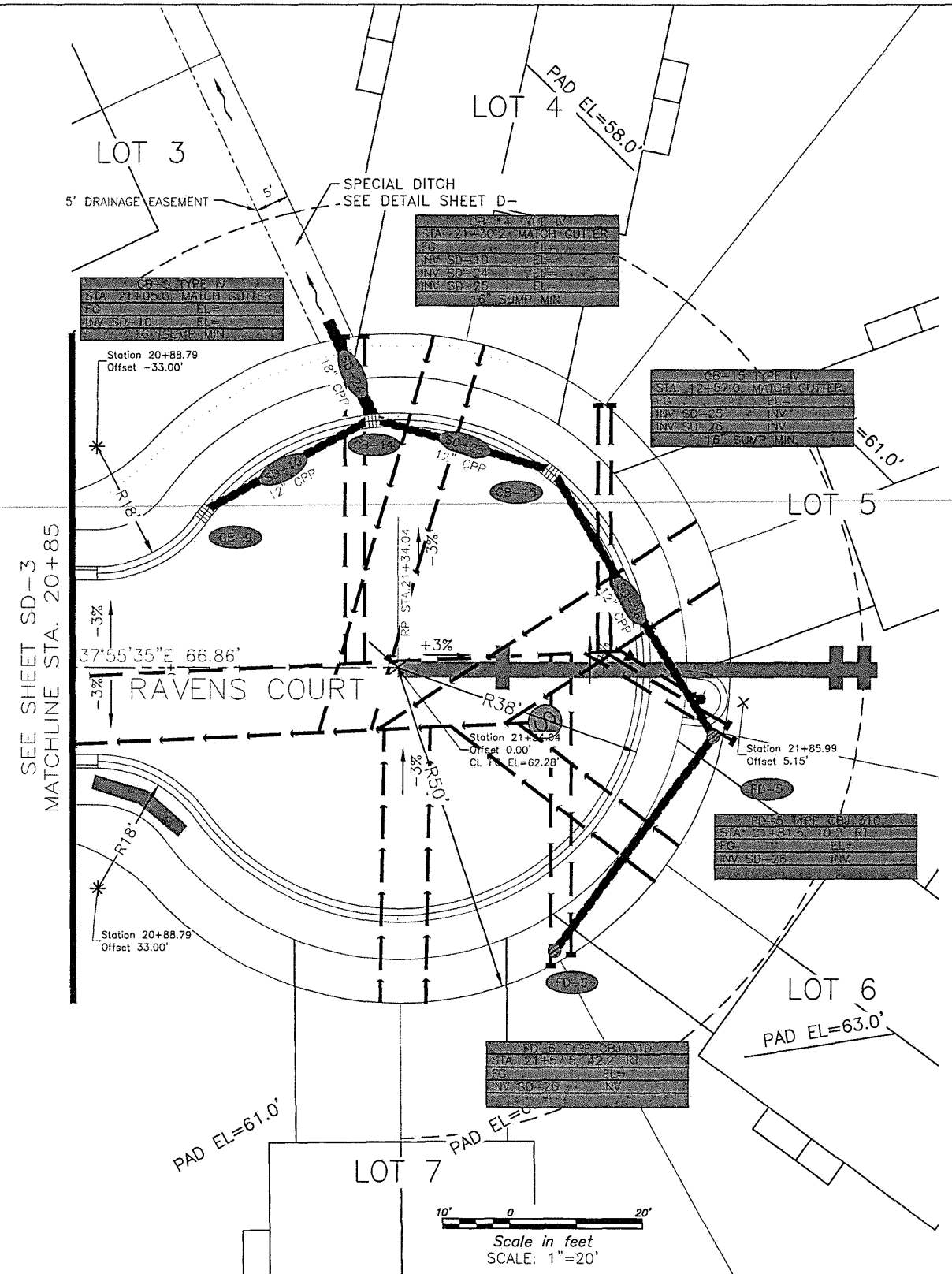
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SD2  
SHEET NO.  
32 OF 64

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- ===== EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ===== PROPOSED VALLEY GUTTER
- ▬ PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- - - PROPOSED STORM DRAIN
- PROPOSED UNDERDRAIN
- ▬ PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN



STORM QUANTITIES	
SIZE/TYPE	QUANTITY
12" CORRUGATED POLY.	150 LF
TYPE IV CATCH BASIN	3 EA
TYPE CBJ 310 AREA DRAIN	2 EA



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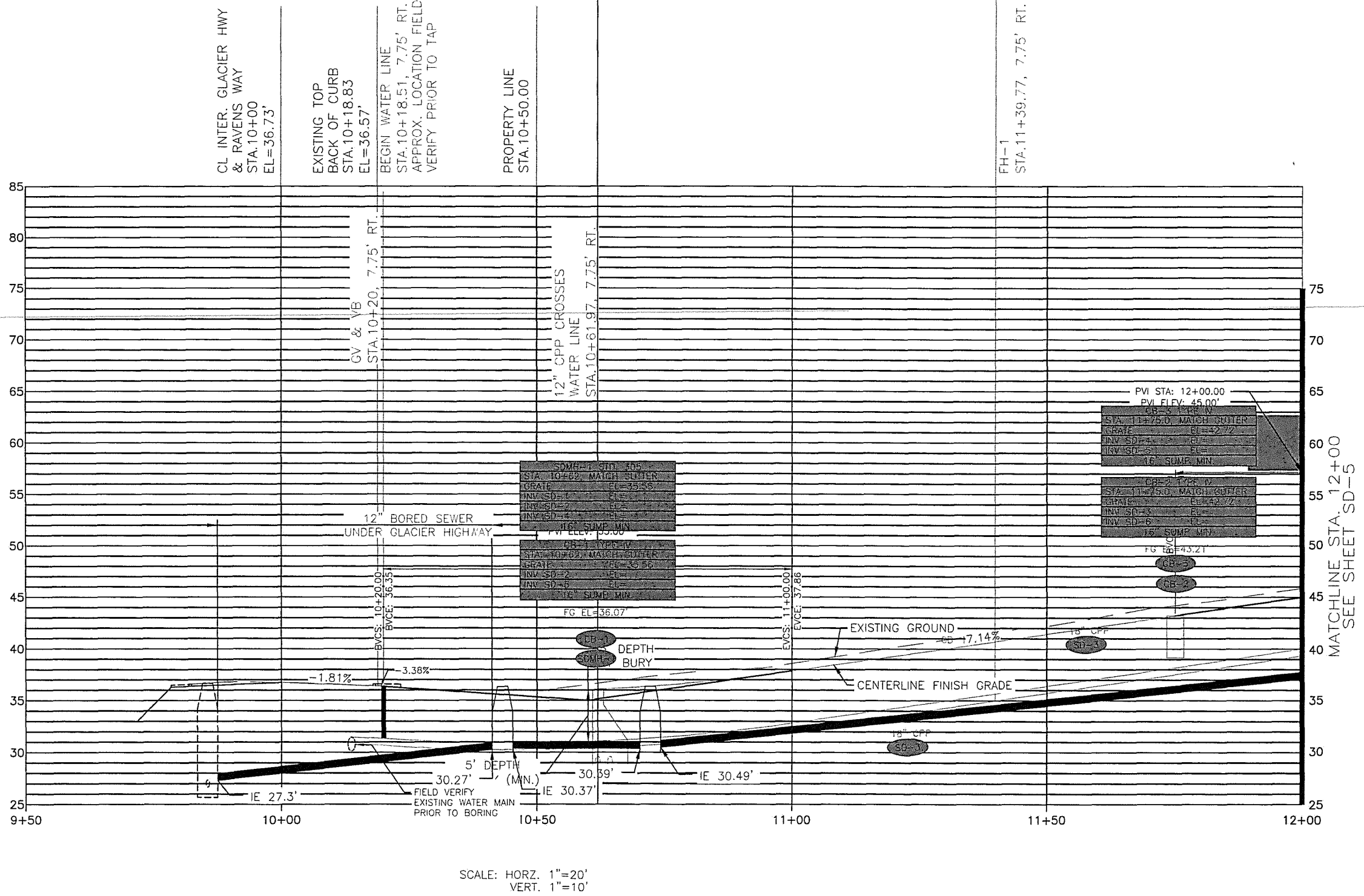
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SHEET SD3  
 SHEET NO. 33 OF 64

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DATE	September 30, 2024

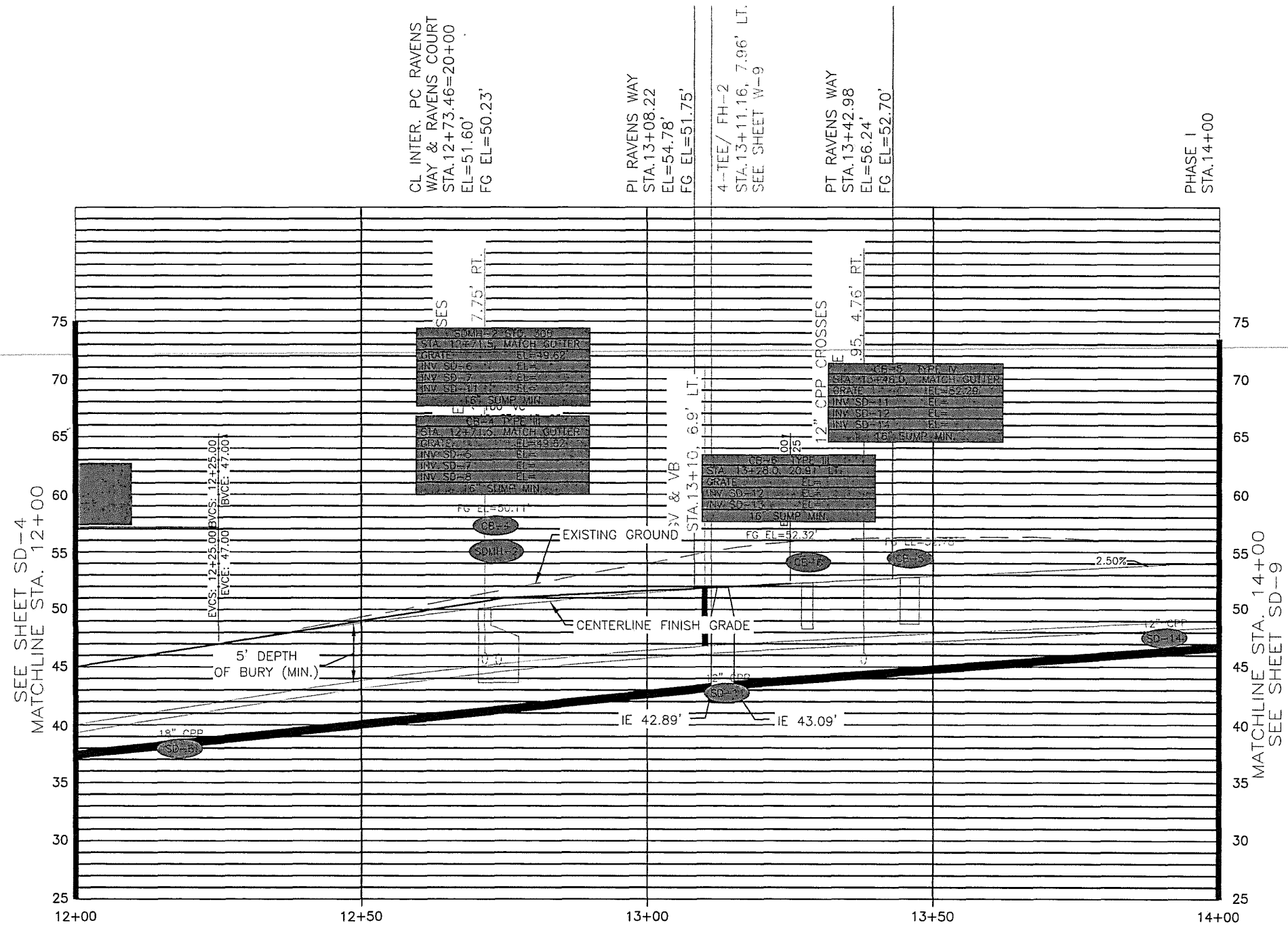
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(907) 530-7008  
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RAVENWOOD SUBDIVISION

SHEET  
SD4  
SHEET NO.  
34 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

SCALE	GRAPHIC
DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

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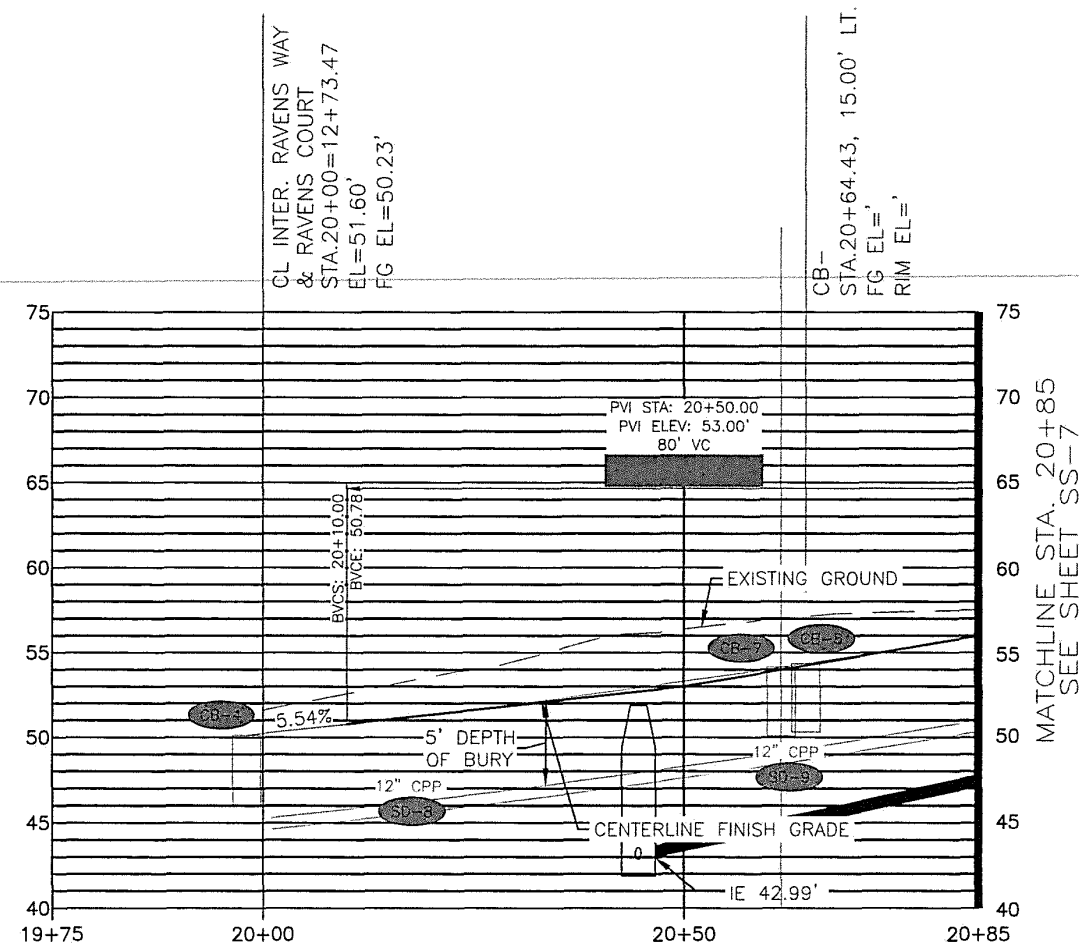
RAVENWOOD SUBDIVISION

SHEET  
SD5  
SHEET NO.  
35 OF 64



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CB-2 TYPE IV
STA 20+68.0 MATCH GUTTER
FG EL=
INV SD=3' EL=
15' SUMP MIN

CB-7 TYPE IV
STA 20+61.5 MATCH GUTTER
FG EL=
INV SD=9' EL=
15' SUMP MIN

SCALE: HORZ. 1"=20'  
VERT. 1"=10'

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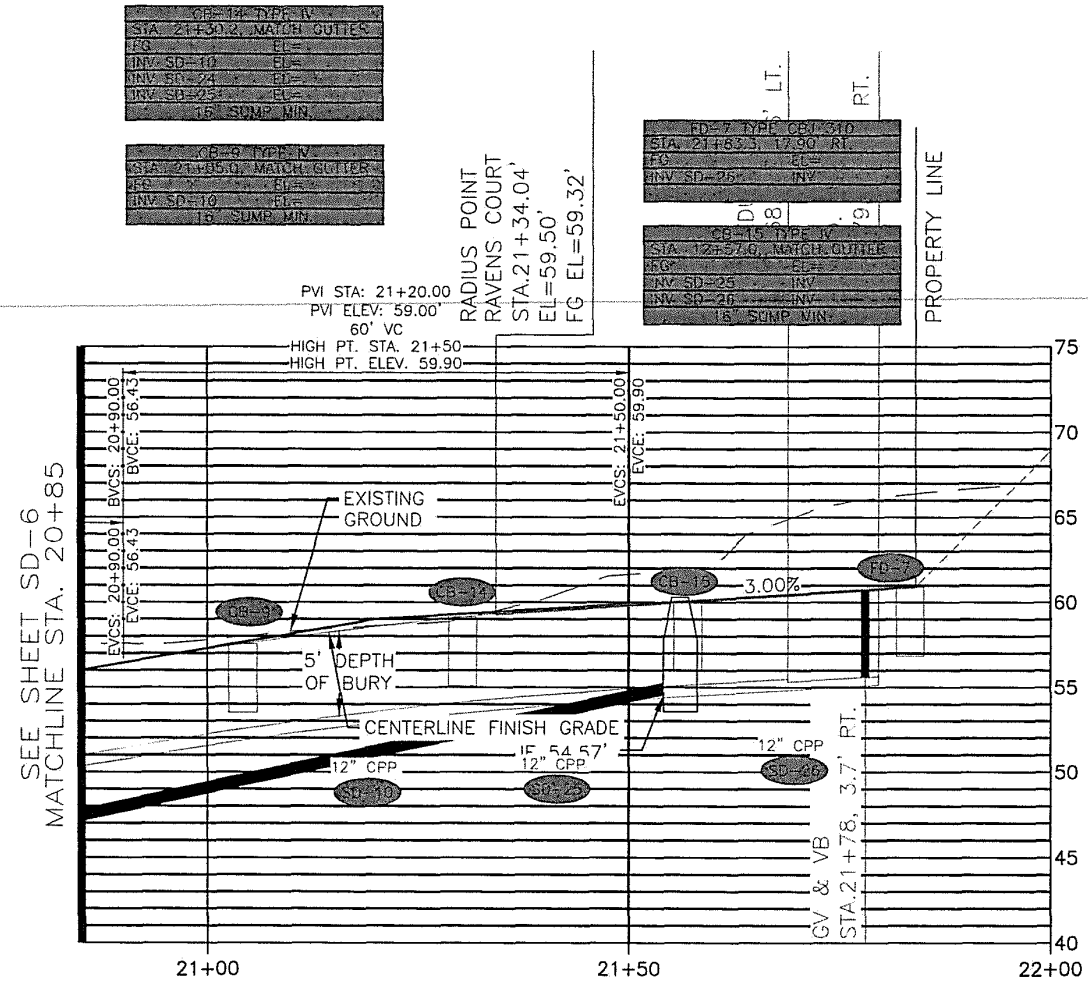
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SHEET
SD6
SHEET NO.
36 OF 64

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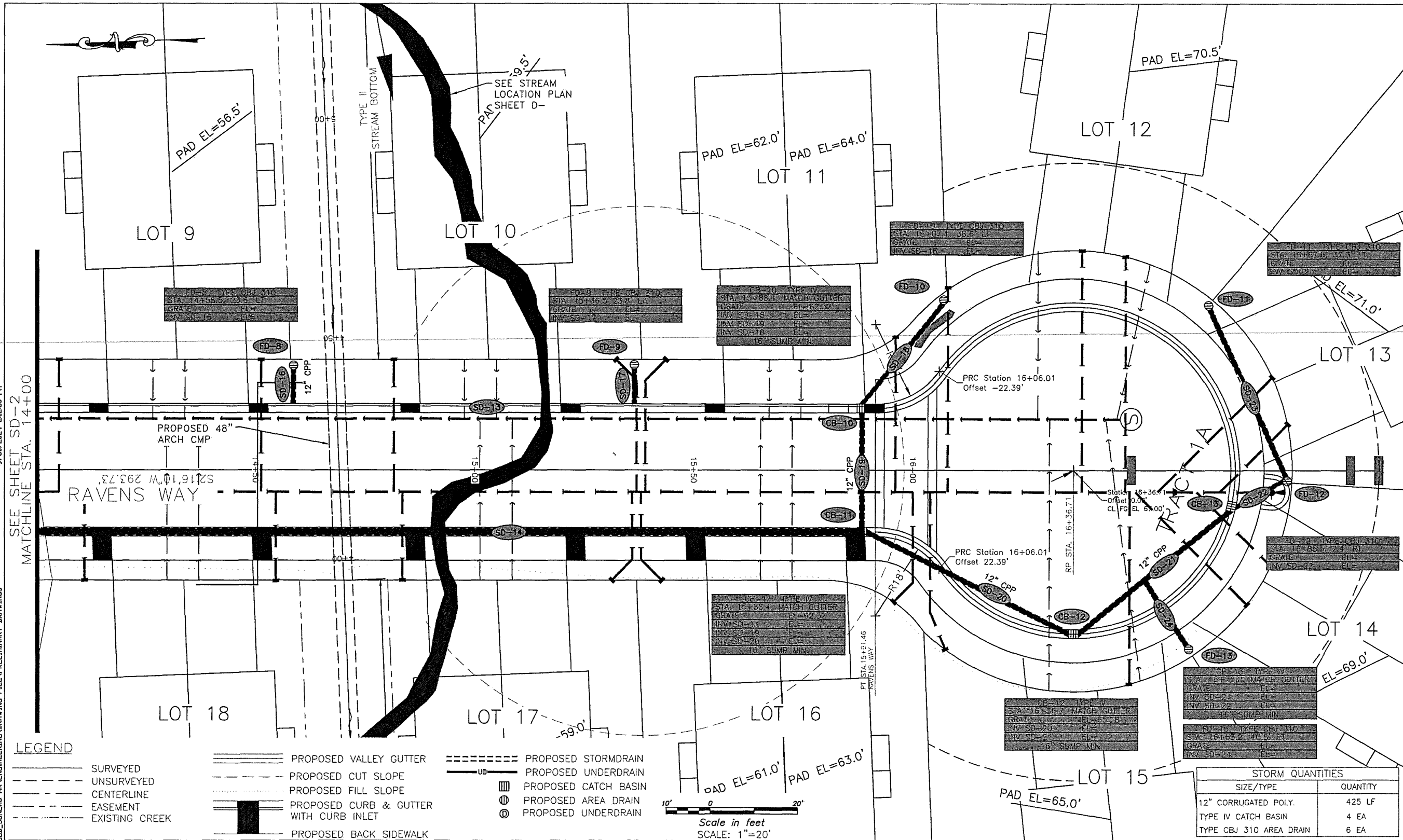
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**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
*TRACY MOORE, P.E.*  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

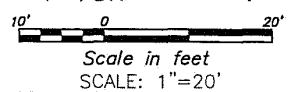
SHEET SD7  
SHEET NO. 37 OF 64

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**LEGEND**

- |  |                       |  |  |  |                      |
|--|-----------------------|--|--|--|----------------------|
|  | SURVEYED CENTERLINE   |  | PROPOSED VALLEY GUTTER                 |  | PROPOSED STORMDRAIN  |
|  | UNSURVEYED CENTERLINE |  | PROPOSED CUT SLOPE                     |  | PROPOSED UNDERDRAIN  |
|  | EASEMENT              |  | PROPOSED FILL SLOPE                    |  | PROPOSED CATCH BASIN |
|  | EXISTING CREEK        |  | PROPOSED CURB & GUTTER WITH CURB INLET |  | PROPOSED AREA DRAIN  |
|  |                       |  | PROPOSED BACK SIDEWALK                 |  | PROPOSED UNDERDRAIN  |



STORM QUANTITIES	
SIZE/TYPE	QUANTITY
12" CORRUGATED POLY.	425 LF
TYPE IV CATCH BASIN	4 EA
TYPE CBJ 310 AREA DRAIN	6 EA

SCALE	GRAPHIC
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DRAWN	###
CHECKED	###
DATE	September 30, 2024

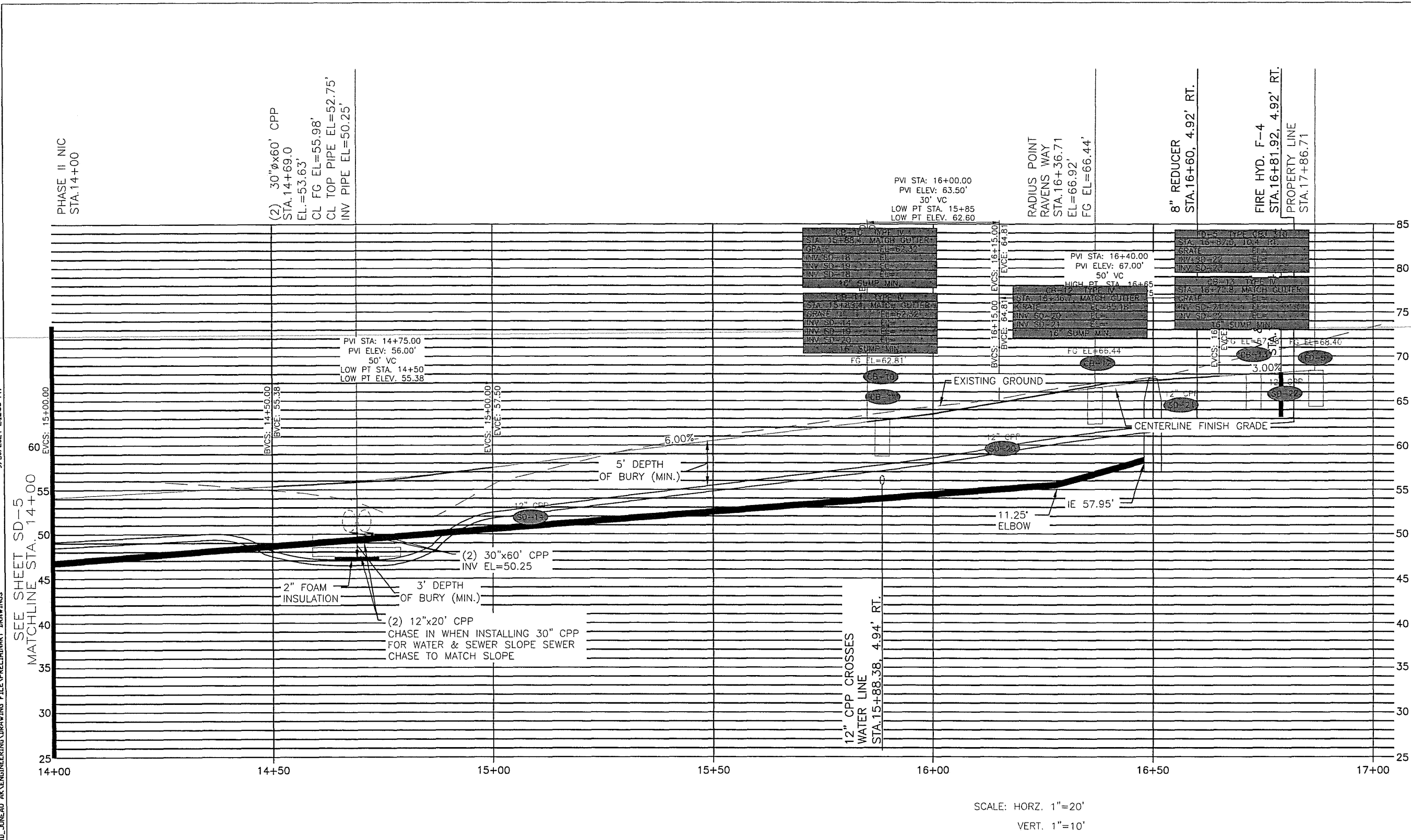
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SHEET  
 SD8  
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 38 OF 64

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SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

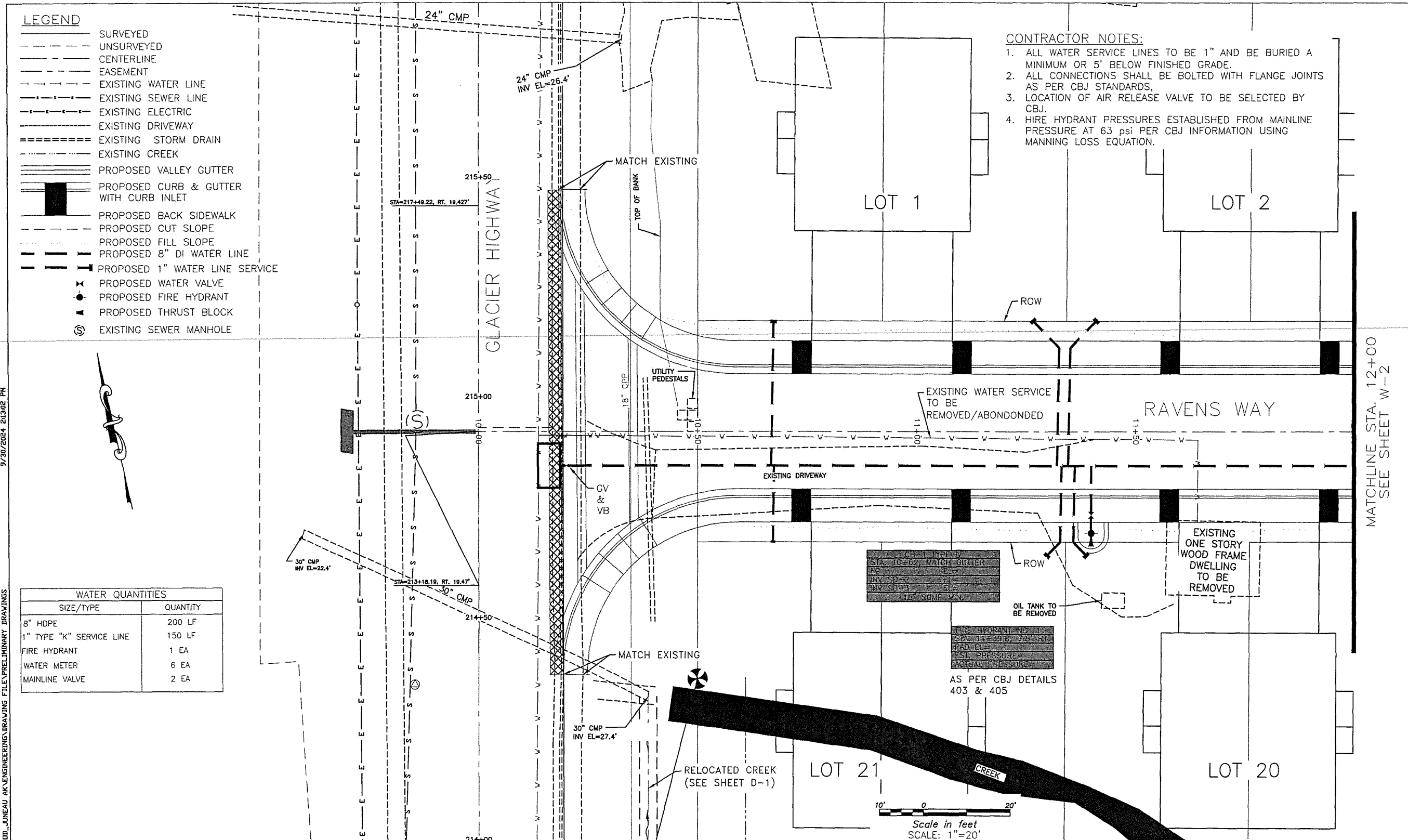
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DATE	September 30, 2024

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SHEET  
SD9  
SHEET NO.  
39 OF 64



**LEGEND**

- SURVEYED CENTERLINE
- - - UNSURVEYED CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- PROPOSED 8" DI WATER LINE
- PROPOSED 1" WATER LINE SERVICE
- ⊗ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- ▲ PROPOSED THRUST BLOCK
- ⊙ EXISTING SEWER MANHOLE

- CONTRACTOR NOTES:**
1. ALL WATER SERVICE LINES TO BE 1" AND BE BURIED A MINIMUM OR 5' BELOW FINISHED GRADE.
  2. ALL CONNECTIONS SHALL BE BOLTED WITH FLANGE JOINTS AS PER CBJ STANDARDS.
  3. LOCATION OF AIR RELEASE VALVE TO BE SELECTED BY CBJ.
  4. HIRE HYDRANT PRESSURES ESTABLISHED FROM MAINLINE PRESSURE AT 63 psi PER CBJ INFORMATION USING MANNING LOSS EQUATION.

**WATER QUANTITIES**

SIZE/TYPE	QUANTITY
8" HDPE	200 LF
1" TYPE "K" SERVICE LINE	150 LF
FIRE HYDRANT	1 EA
WATER METER	6 EA
MAINLINE VALVE	2 EA

**CBJ TYPICAL**

STA: 10+62, MATCH GUTTER	EL: _____
PC	EL: _____
INV: 50+0	EL: _____
INV: 50+0	EL: _____
16" SGMP MIN.	

**FIRE HYDRANT PAD**

STA: 14+39.6, 7'8" DIA	
PAD ELEV: _____	
TEST PRESSURE: _____	
ACTUAL PRESSURE: _____	

AS PER CBJ DETAILS 403 & 405

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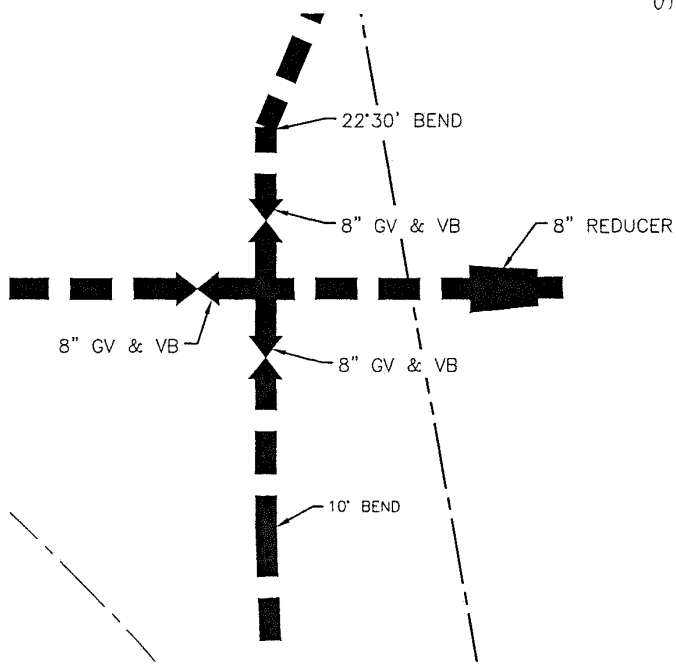
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SHEET W1  
 SHEET NO. 40 OF 64

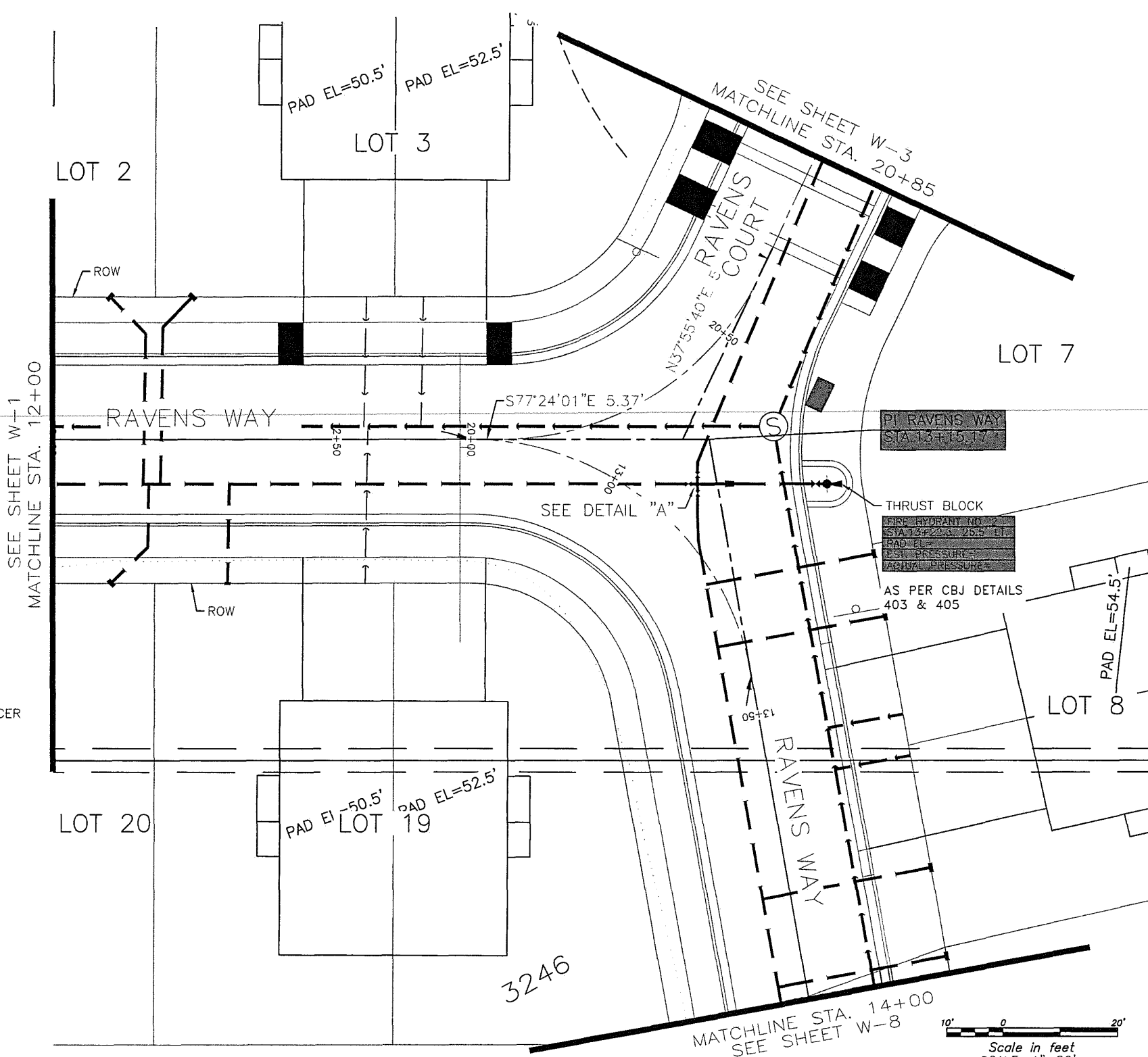
**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING CREEK
- ▬▬▬ PROPOSED VALLEY GUTTER
- ▬▬▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬▬▬ PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- PROPOSED 8" DI WATER LINE
- - - PROPOSED 1" WATER LINE SERVICE
- ⊕ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- ▲ PROPOSED THRUST BLOCK

WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	295 LF
1" TYPE "K" SERVICE LINE	270 LF
FIRE HYDRANT	1 EA
WATER METER	8 EA
MAINLINE VALVE	3 EA



DETAIL A  
SCALE: 1"=1'



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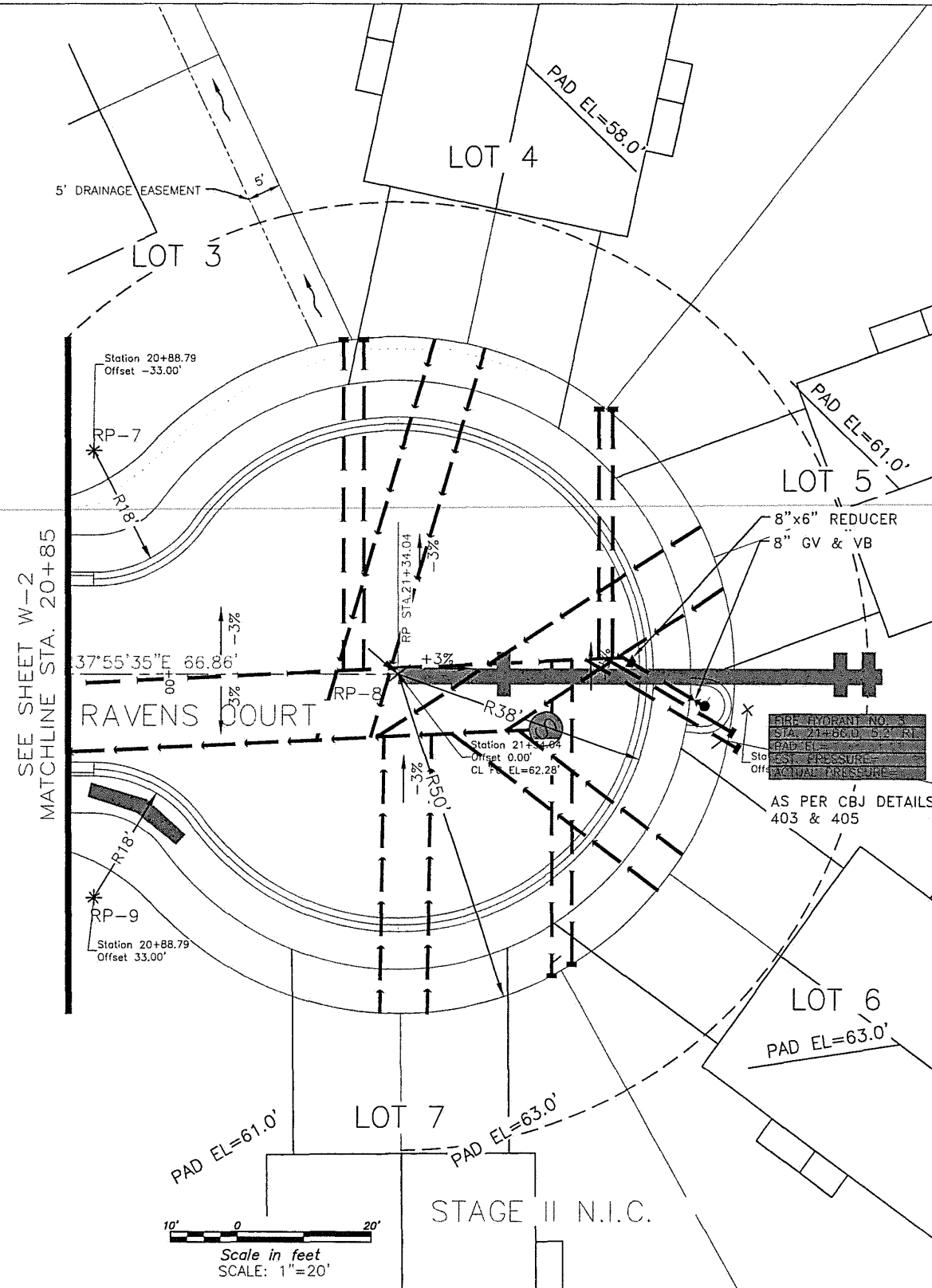
SHEET  
W2  
SHEET NO.  
41 OF 64

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- ===== EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ===== PROPOSED VALLEY GUTTER
- ===== PROPOSED CURB & GUTTER WITH CURB INLET
- ===== PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- - - PROPOSED 8" DI WATER LINE
- - - PROPOSED 3/4" WATER LINE SERVICE
- ⊗ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT

CURB & GUTTER TABLE		
RP NO.	STA. - OFFSET	RADIUS
RP-7	STA. 20+88.79, 33.00' LT.	18.00'
RP-8	STA. 20+88.79, 33.00' RT.	18.00'
RP-9	STA. 21+34.04, 0.00' RT.	58.00'

WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	70 LF
1" TYPE "K" SERVICE LINE	400 LF
FIRE HYDRANT	1 EA
WATER METER	8 EA
MAINLINE VALVE	1 EA



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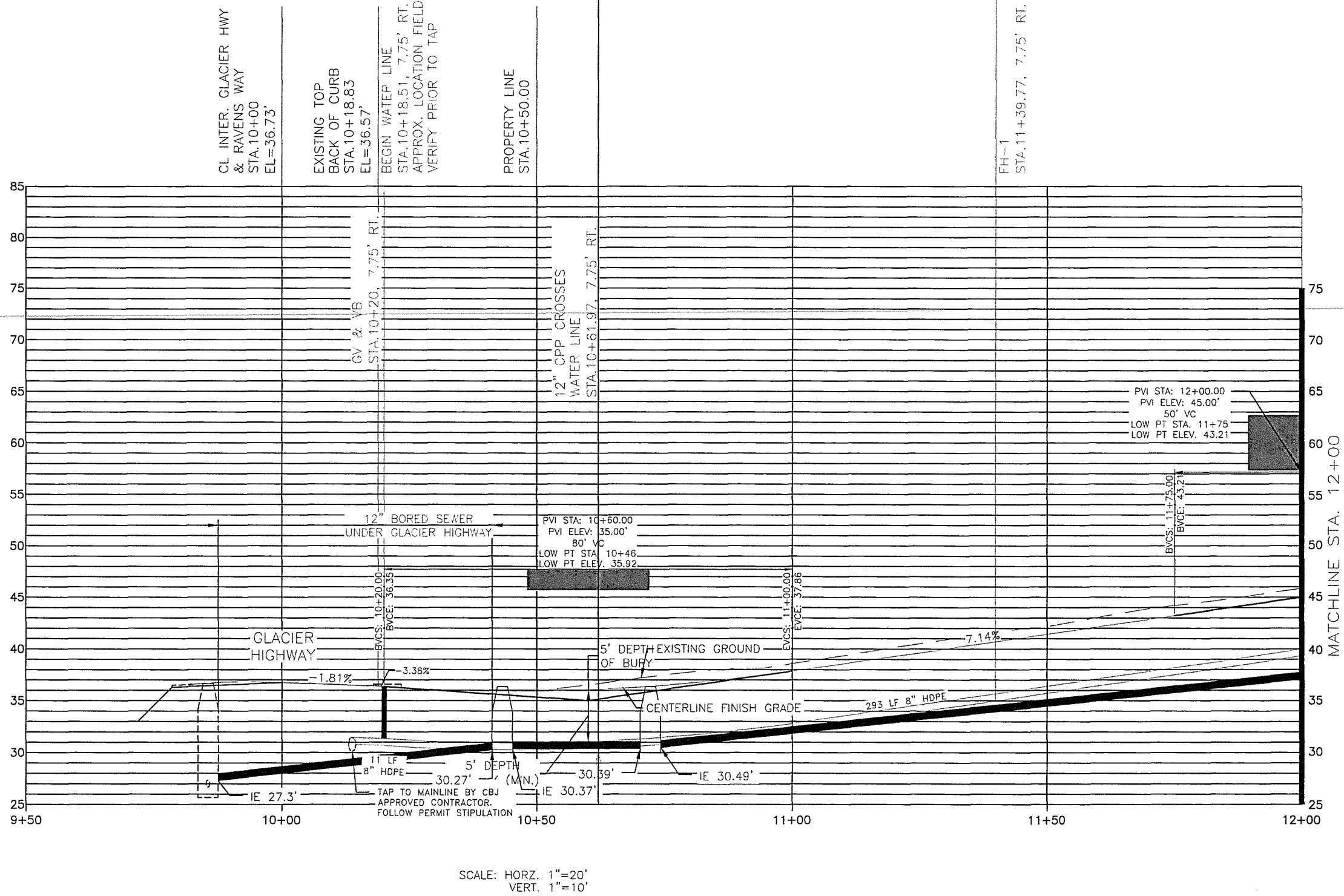
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SHEET  
W3  
SHEET NO.  
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MATCHLINE STA. 12+00  
SEE SHEET W-5

SCALE	GRAPHIC
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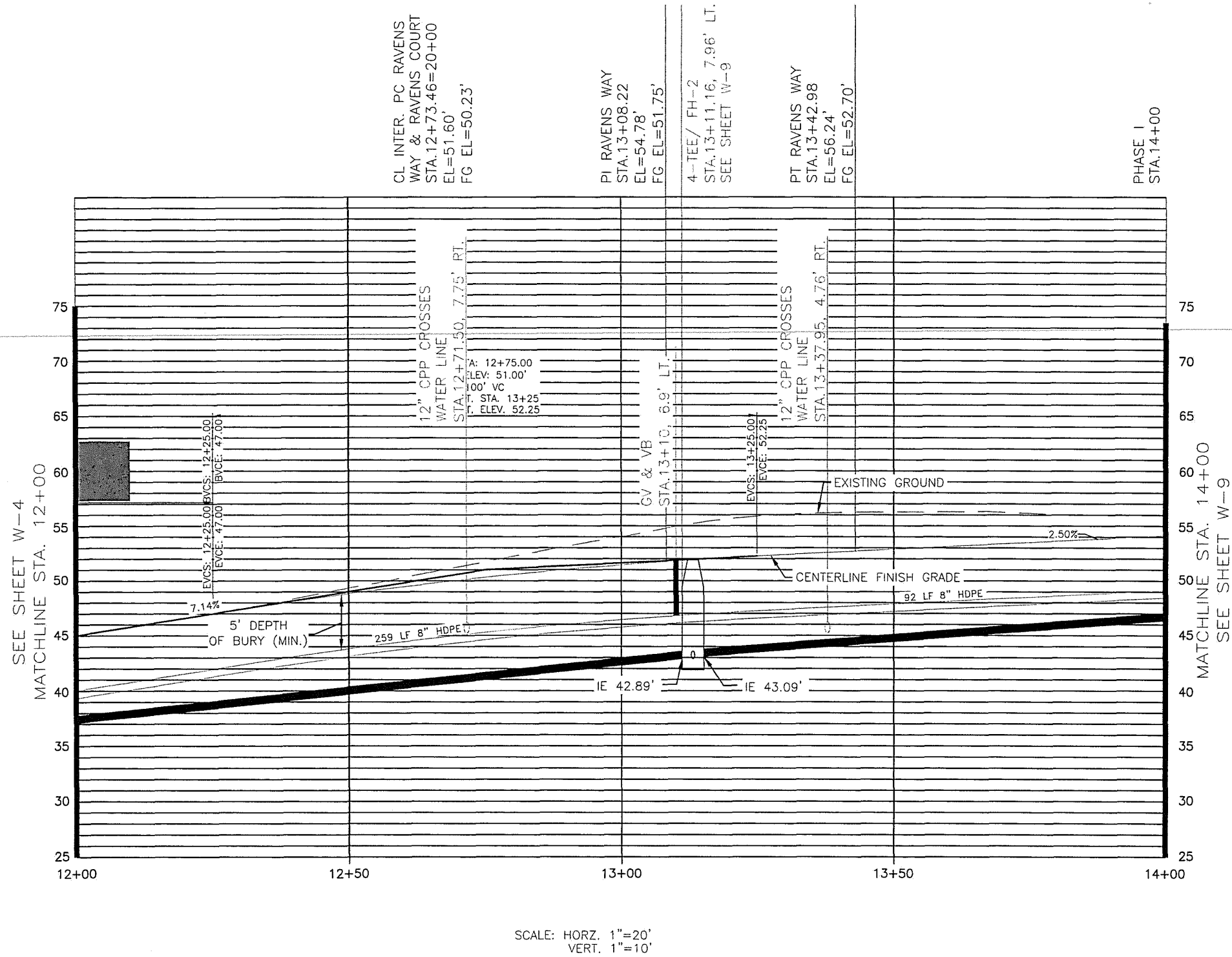
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43 OF 64



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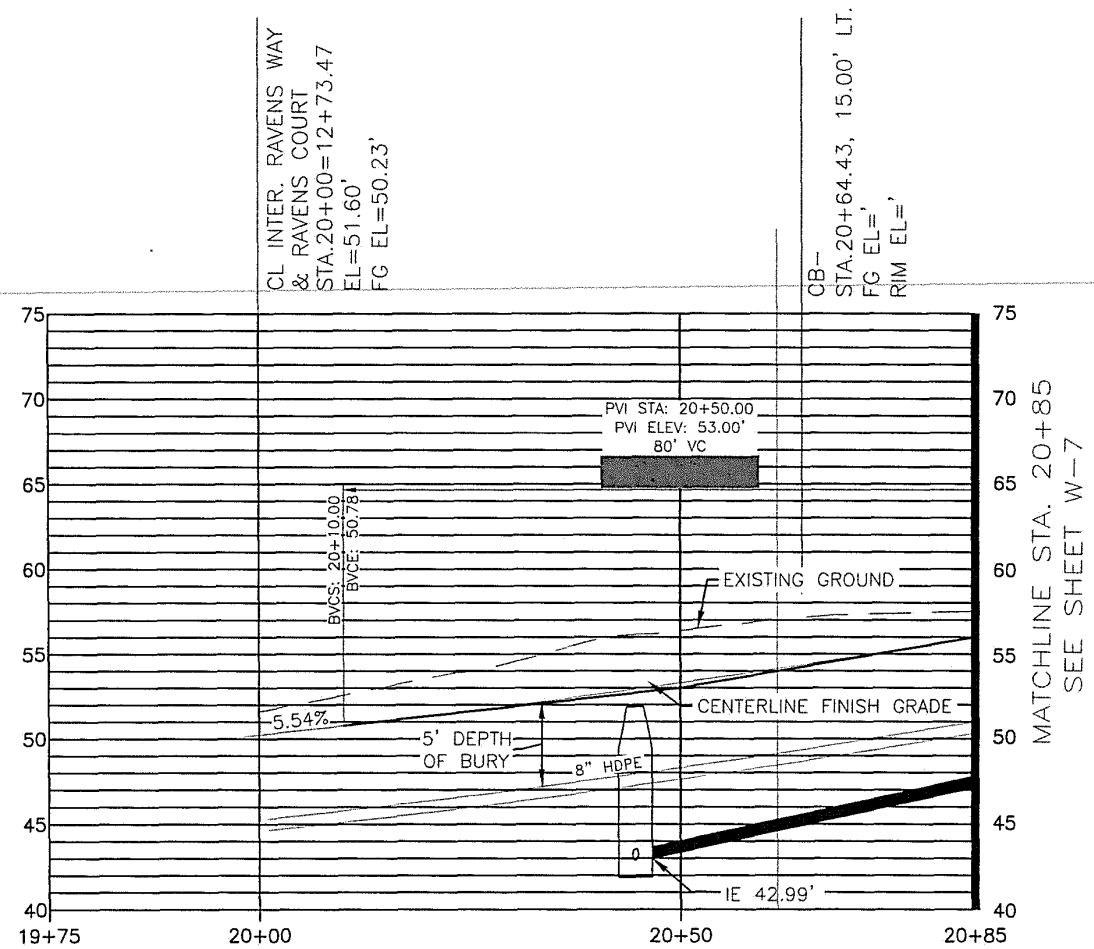
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SHEET	W5
SHEET NO.	44 OF 64

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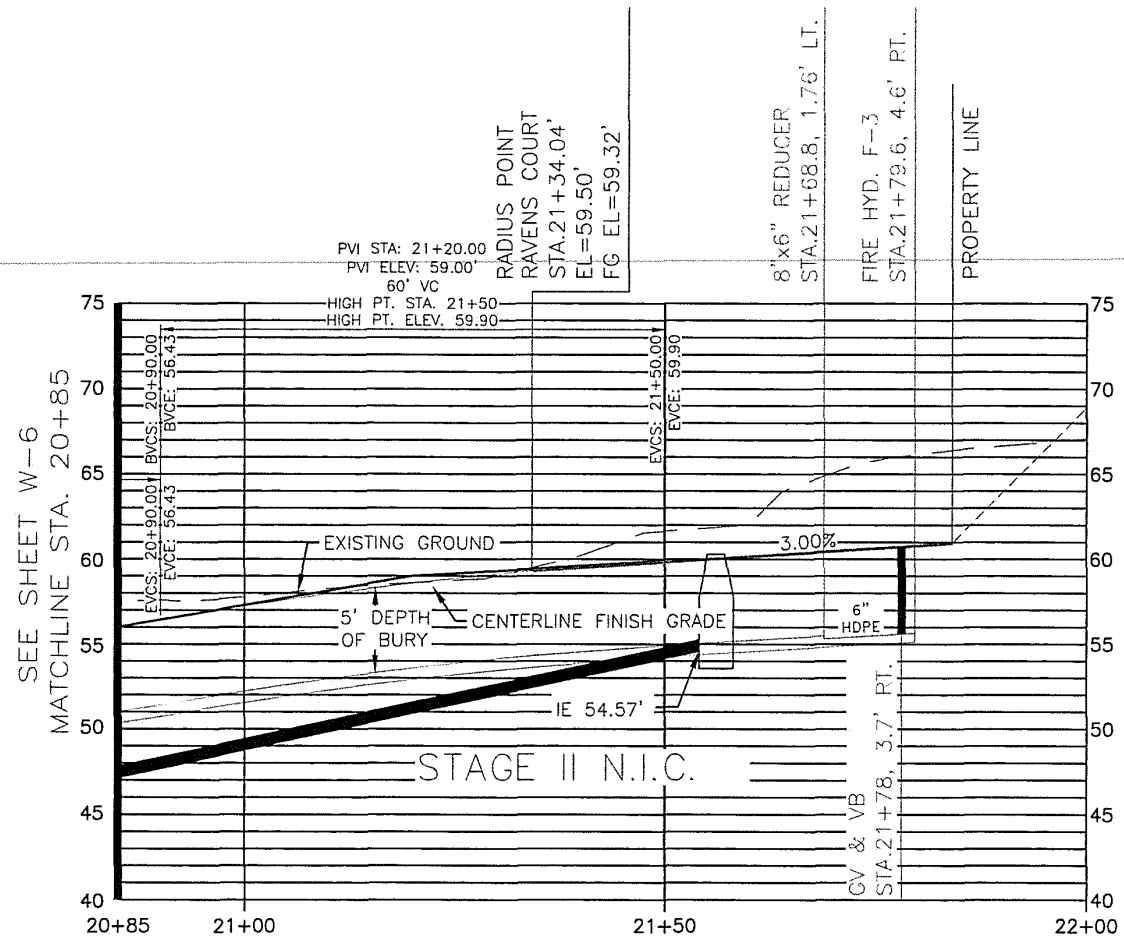
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SHEET  
W6  
SHEET NO.  
45 OF 64

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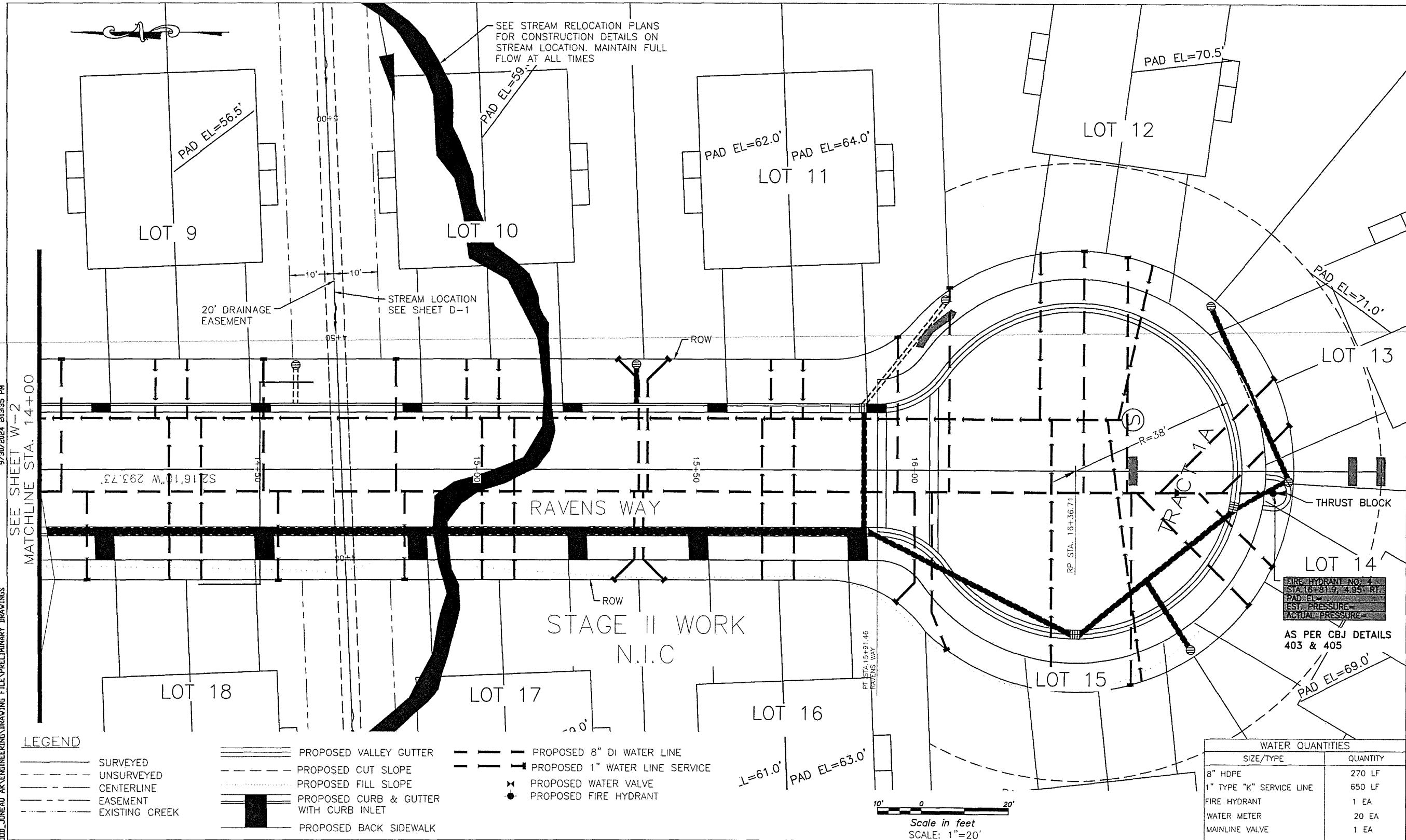
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SHEET  
W7  
SHEET NO.  
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 SEE SHEET W-2  
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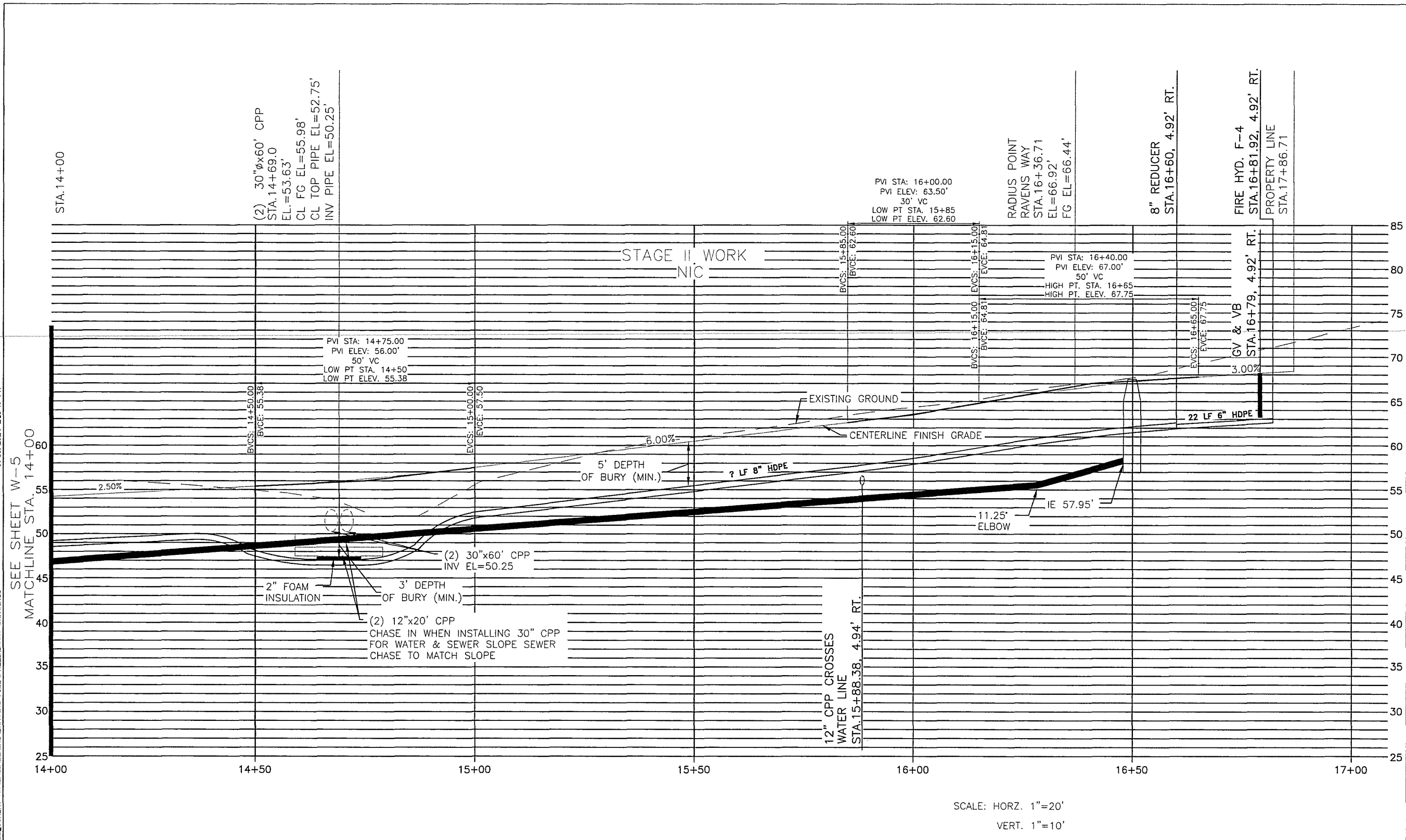
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SHEET  
 W8  
 SHEET NO.  
 47 OF 64

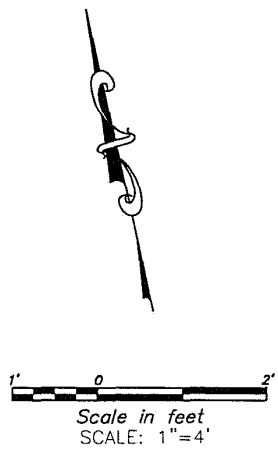
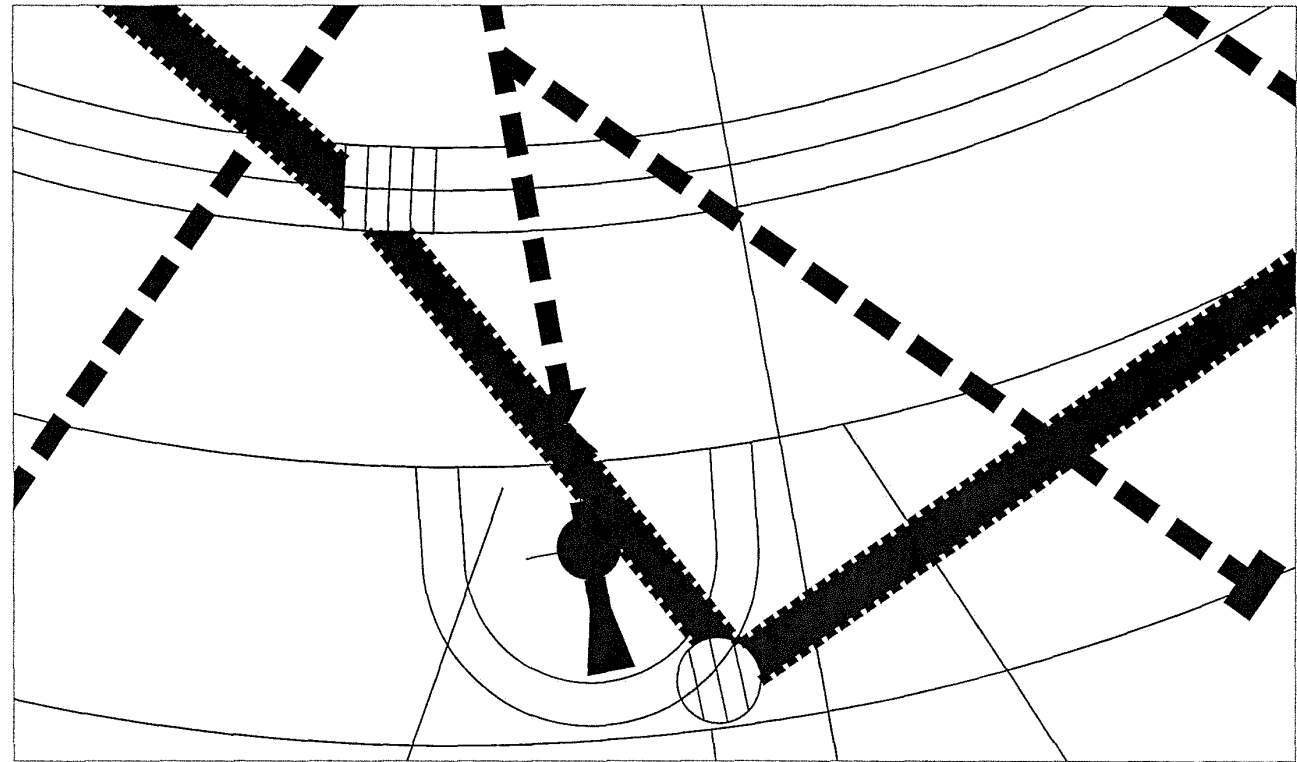
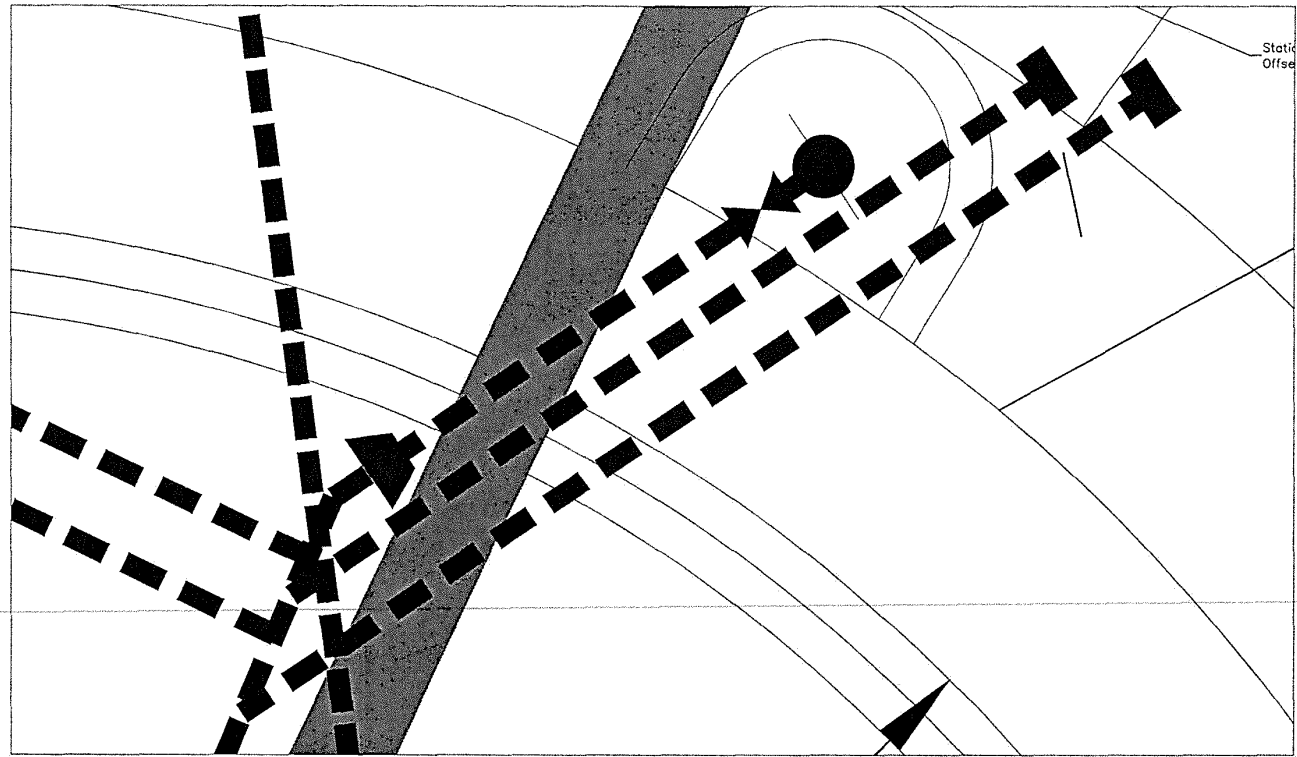
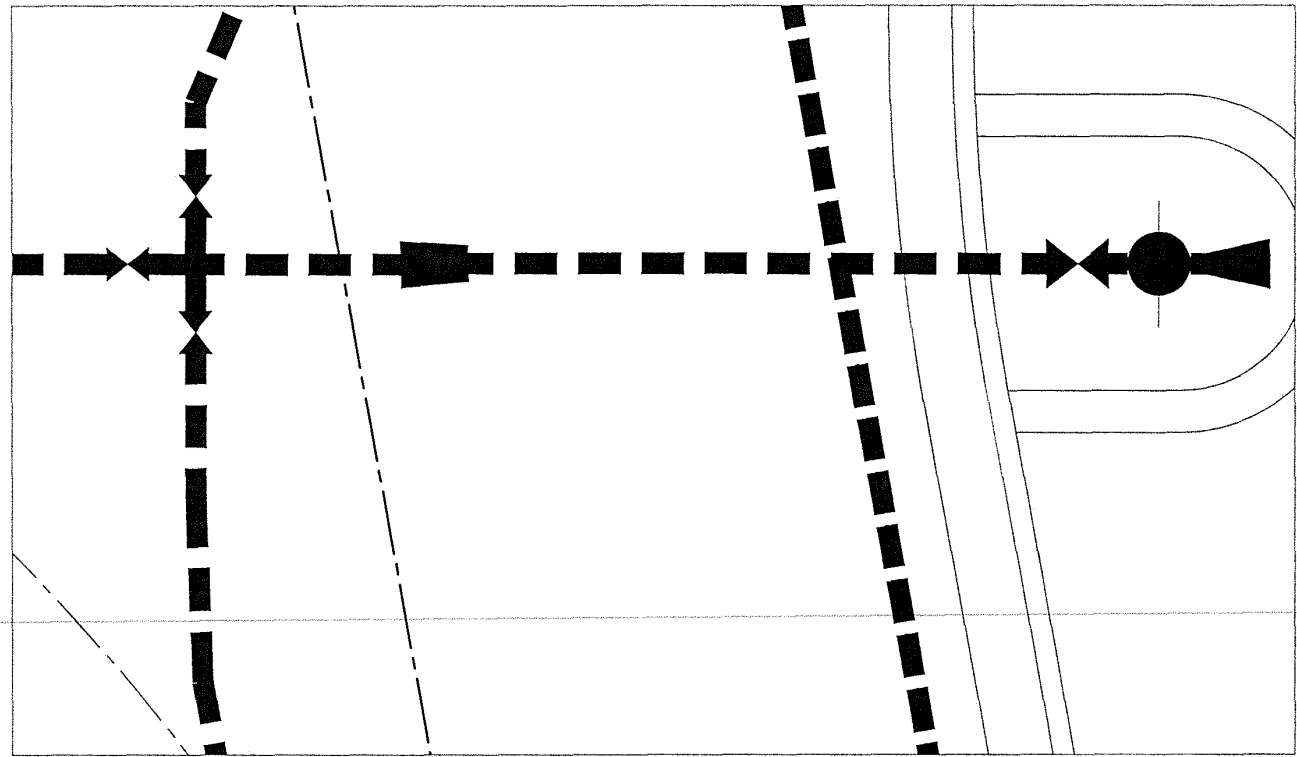
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	DESIGNED <u>###</u>				W9
	DRAWN <u>###</u>				SHEET NO.
	CHECKED <u>###</u>				48 OF 64
REV	DATE	BY	DESCRIPTION	DATE <u>September 30, 2024</u>	

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 W10  
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XA 2024 JDBS RAVENWOOD - JUNEAU AK ENGINEERING DRAWING FILE PRELIMINARY DRAWINGS

PHASE 1 - RAVENS WAY WATER SERVICE LOCATION TABLE	
EXISTING 16" WATER	STA.10+13.68
EL=	'
GV & VB	
STA.10+20.22, 7.75' RT.	EL=
SERVICE LOT 1	STA.10+78, 7.75' RT.
SERVICE LOT 21	STA.10+80, 7.75' RT.
SERVICE LOT 1	STA.11+32, 7.75' RT.
SERVICE LOT 21	STA.11+33, 7.75' RT.
SERVICE LOT 2	STA.11+35, 7.75' RT.
SERVICE LOT 22	STA.11+36, 7.75' RT.
SERVICE LOT 2	STA.12+16, 7.75' RT.
SERVICE LOT 20	STA.12+17, 7.75' RT.
SERVICE LOT 3	STA. 12+19, 7.75' RT.
SERVICE LOT 19	STA.12+20, 7.75' RT.
SERVICE LOT 7	STA.13+22, 0.72' RT.
SERVICE LOT 8	STA.13+25, 1.92' RT.
SERVICE LOT 8	STA. 13+94, 4.98' RT.
SERVICE LOT 9	STA.13+97, 4.98' RT.
SERVICE LOT 10	STA.14+97.6, 11.6' LT.
SERVICE LOT 17	STA.15+01.1, 11.6' LT.
SERVICE LOT 10	STA.15+04.9, 11.6' LT.
SERVICE LOT 17	STA.15+08.4, 11.6' LT.

PHASE 1 - RAVENS COURT WATER SERVICE LOCATION TABLE	
SERVICE LOT 3	STA.21+26, 0.6' LT.
SERVICE LOT 4	STA.21+29, 0.7' LT.
SERVICE LOT 7	STA.21+57, 2.0' LT.
SERVICE LOT 6	STA.21+60, 2.1' LT.
SERVICE LOT 6	STA.21+62, 2.2' LT.
SERVICE LOT 4	STA.21+65, 2.3' LT.
SERVICE LOT 5	STA.21+65, 2.4' LT.
SERVICE LOT 5	STA.21+66, 2.4' LT.

PHASE II - RAVENS WAY WATER SERVICE LOCATION TABLE	
SERVICE LOT 18	STA.14+05, 4.98' RT.
SERVICE LOT 9	STA.14+65, 4.98' RT.
SERVICE LOT 18	STA.14+66, 4.98' RT.
SERVICE LOT 10	STA.14+72, 4.79' RT.
SERVICE LOT 17	STA.14+73, 4.97 RT.
SERVICE LOT 17	STA.15+36, 4.95' RT.
SERVICE LOT 10	STA.15+37, 4.95' RT.
SERVICE LOT 16	STA.15+38, 4.95 RT.
SERVICE LOT 11	STA.15+39, 4.95 RT.
SERVICE LOT 16	STA.16+00, 4.94' RT.
SERVICE LOT 15	STA.16+04, 4.94 RT.
SERVICE LOT 11	STA.16+06, 4.94 RT.
SERVICE LOT 12	STA.16+08, 4.94 RT.
SERVICE LOT 12	STA.16+42, 4.93' RT.
SERVICE LOT 12	STA.16+45, 4.93' RT.
SERVICE LOT 15	STA.16+63, 4.92' RT.
SERVICE LOT 14	STA.16+65, 4.92' RT.
SERVICE LOT 13	STA.16+67, 4.92' RT.
SERVICE LOT 14	STA.16+70, 4.92' RT.

PHASE 1 - RAVENS WAY SEWER SERVICE LOCATION TABLE	
SERVICE LOT 1	STA.10+86.7, 2.2' LT.
SERVICE LOT 21	STA.10+87.40, 2.2' RT.
SERVICE LOT 1	STA.10+96.7, 2.2' LT.
SERVICE LOT 21	STA.10+97.4, 2.2' LT.
SERVICE LOT 2	STA.11+70.8, 2.2' LT.
SERVICE LOT 20	STA.11+74.4, 2.2' LT.
SERVICE LOT 2	STA.11+80.7, 2.2' LT.
SERVICE LOT 20	STA.11+81.4, 2.2' LT.
SERVICE LOT 3	STA.12+54.8, 2.2' LT.
SERVICE LOT 19	STA.12+55.4, 2.2' LT.
SERVICE LOT 3	STA.12+64.7, 2.2' LT.
SERVICE LOT 19	STA.12+65.44, 2.2' LT.
SERVICE LOT 8	STA.13+54.4, 11.6' LT.
SERVICE LOT 8	STA.13+61.7, 11.6' LT.

PHASE 1 - RAVENS COURT SEWER SERVICE LOCATION TABLE	
SERVICE LOT 4	STA.21+22, 9.69' RT.
SERVICE LOT 4	STA.21+30, 9.3' RT.
SERVICE LOT 5	STA.21+31, 9.3' RT.
SERVICE LOT 7	STA.21+32, 9.2' RT.
SERVICE LOT 7	STA.21+39, 8.9' RT.
SERVICE LOT 6	STA.21+42, 8.7' RT.
SERVICE LOT 5	STA.21+50, 8.3' RT.
SERVICE LOT 6	STA.21+52, 8.2' RT.

PHASE II - RAVENS WAY SEWER SERVICE LOCATION TABLE	
SERVICE LOT 9	STA.14+26.5, 11.6' LT.
SERVICE LOT 18	STA.14+29.6, 11.6' LT.
SERVICE LOT 9	STA.14+33.8, 11.6' LT.
SERVICE LOT 18	STA.14+36.9, 11.6' LT.
SERVICE LOT 16	STA.15+65.2, 11.6' LT.
SERVICE LOT 11	STA.15+67.2, 11.6' LT.
SERVICE LOT 16	STA.15+72.5, 11.6' LT.
SERVICE LOT 11	STA.15+74.5, 11.6' LT.
SERVICE LOT 15	STA.16+31.2, 11.6' LT.
SERVICE LOT 12	STA.16+36.6, 11.6' LT.
SERVICE LOT 15	STA.16+44.0, 11.6' LT.
SERVICE LOT 12	STA.16+46.6, 11.6' LT.

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SCALE GRAPHIC

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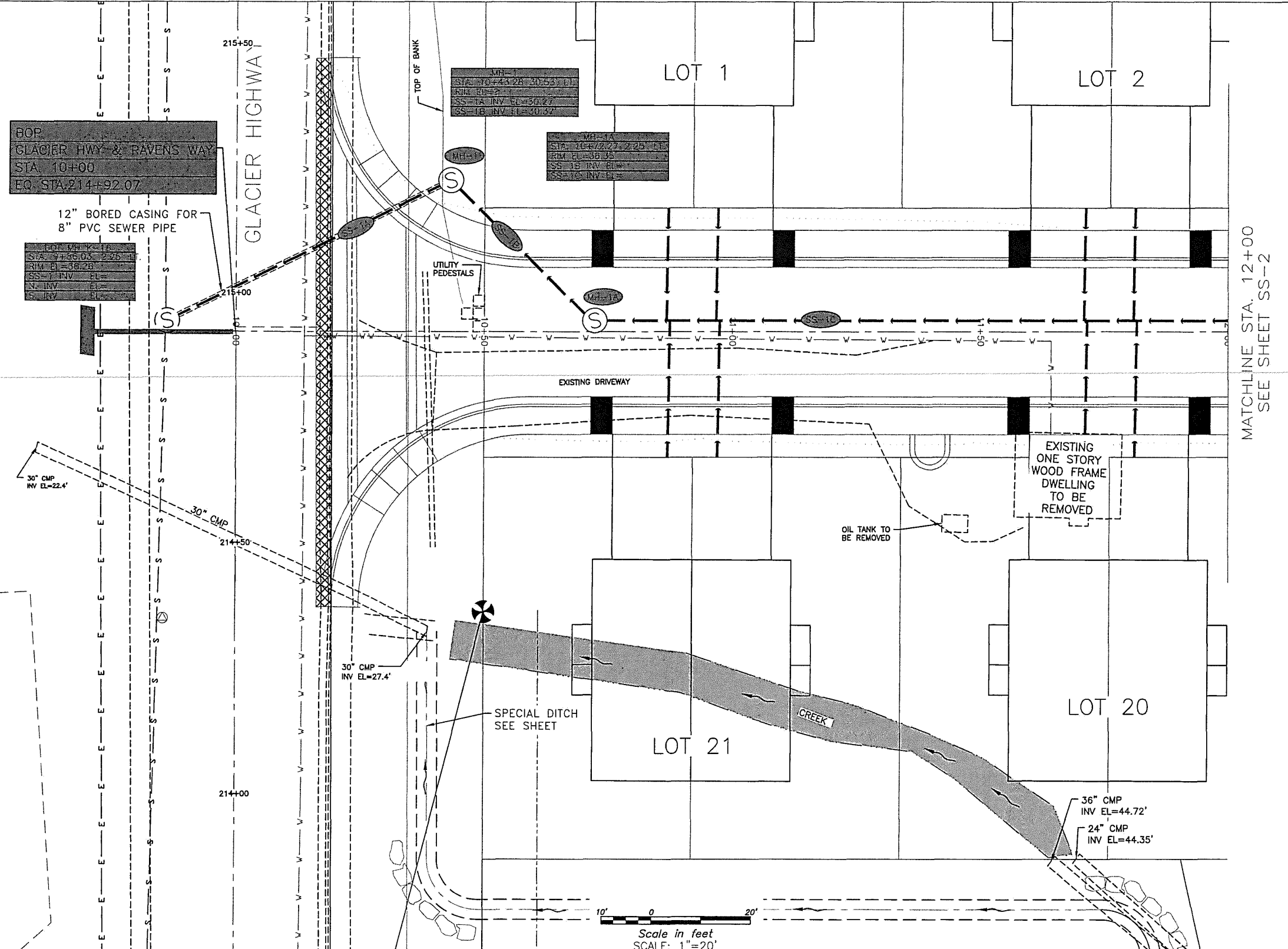
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RAVENWOOD SUBDIVISION

SHEET  
 WS1  
 SHEET NO.  
 50 OF 64

- LEGEND**
- SURVEYED
  - UNSURVEYED
  - CENTERLINE
  - EASEMENT
  - EXISTING WATER LINE
  - EXISTING SEWER LINE
  - EXISTING ELECTRIC
  - EXISTING DRIVEWAY
  - EXISTING STORM DRAIN
  - EXISTING CREEK
  - EXISTING SEWER LINE
  - EXISTING WATER LINE
  - PROPOSED VALLEY GUTTER
  - PROPOSED CURB & GUTTER WITH CURB INLET
  - PROPOSED BACK SIDEWALK
  - PROPOSED CUT SLOPE
  - PROPOSED FILL SLOPE
  - PROPOSED 8" PVC SEWER LINE
  - PROPOSED 4" SEWER LATERAL
  - ⊙ EXISTING SEWER MANHOLE
  - ⊙ PROPOSED SEWER MANHOLE



SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	220 LF
4" SDR 35 PVC SIDE SEWER	370 LF
TYPE I MANHOLE	2 EA
DOT K-16 MANHOLE	1 EA

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MATCHLINE STA. 12+00  
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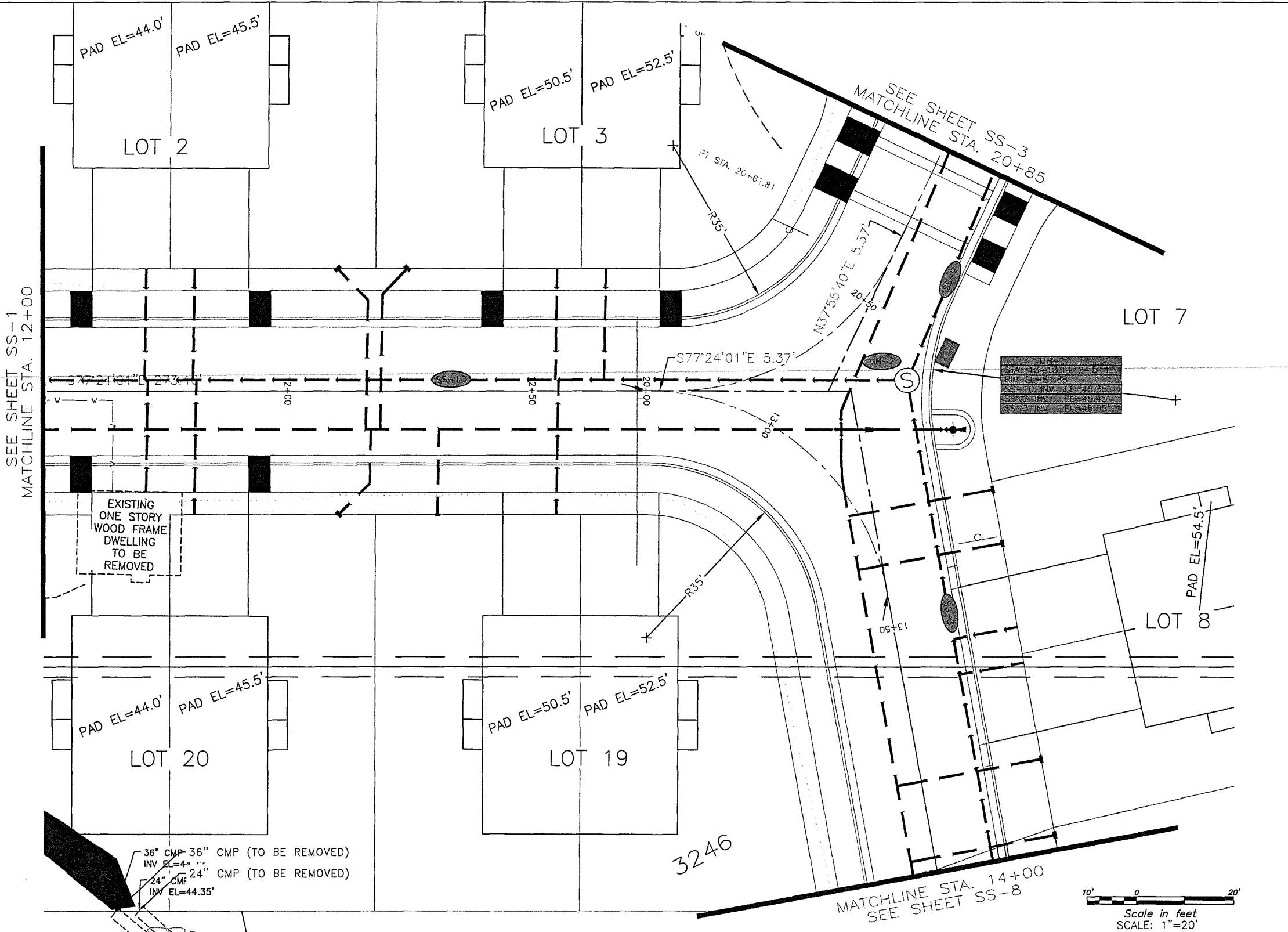
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SHEET  
 SS1  
 SHEET NO.  
 51 OF 64



- LEGEND**
- SURVEYED
  - - - UNSURVEYED
  - CENTERLINE
  - - - EASEMENT
  - - - EXISTING WATER LINE
  - - - EXISTING SEWER LINE
  - - - EXISTING ELECTRIC
  - - - EXISTING DRIVEWAY
  - - - EXISTING STORM DRAIN
  - - - EXISTING CREEK
  - - - EXISTING SEWER LINE
  - - - EXISTING WATER LINE
  - - - PROPOSED VALLEY GUTTER
  - - - PROPOSED CURB & GUTTER WITH CURB INLET
  - - - PROPOSED BACK SIDEWALK
  - - - PROPOSED CUT SLOPE
  - - - PROPOSED FILL SLOPE
  - - - PROPOSED 8" PVC SEWER LINE
  - - - PROPOSED 4" SEWER LATERAL
  - ⊙ EXISTING SEWER MANHOLE
  - ⊙ PROPOSED SEWER MANHOLE



SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	315 LF
4" SDR 35 PVC SIDE SEWER	440 LF
TYPE I MANHOLE	1 EA

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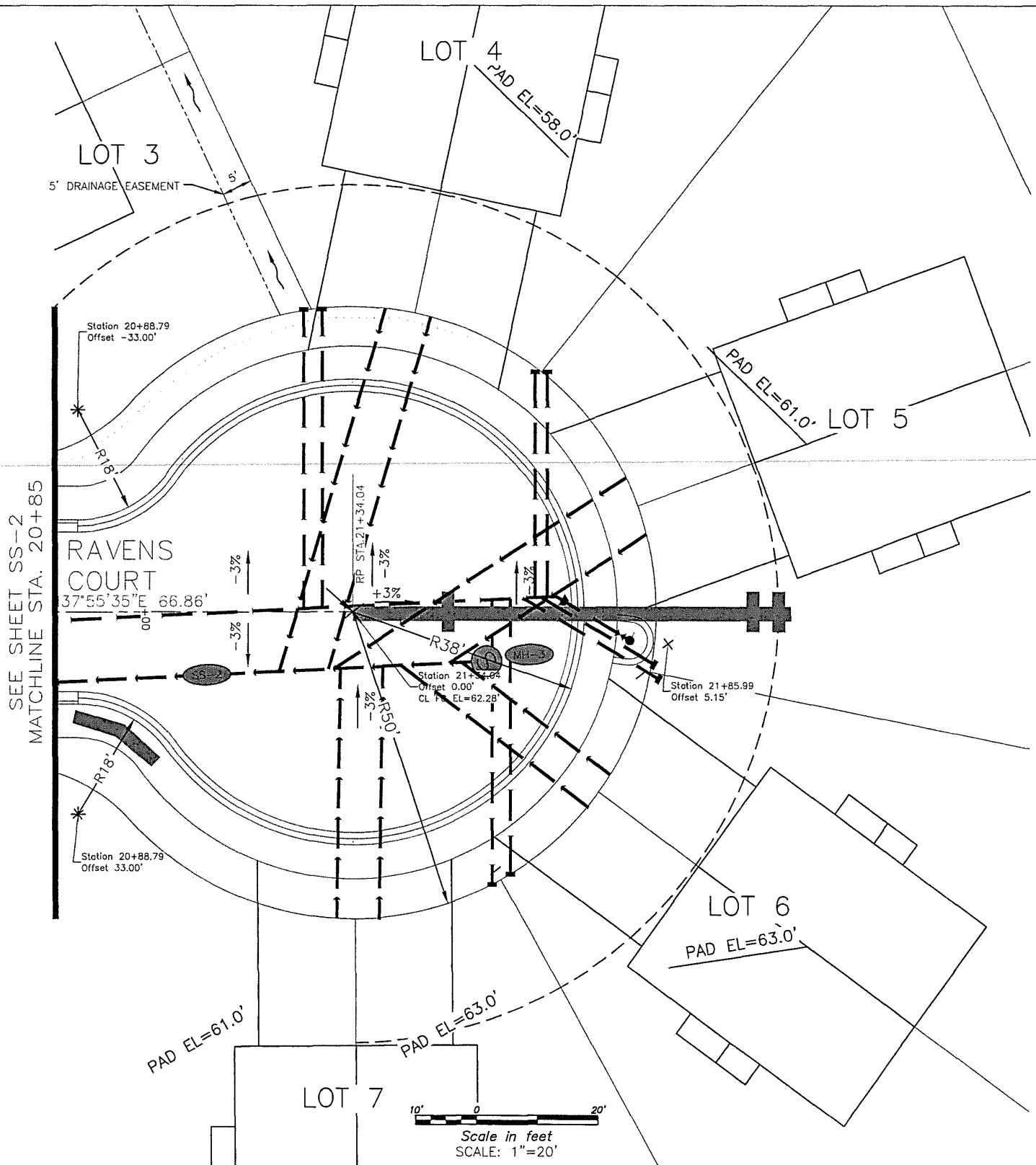
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RAVENWOOD SUBDIVISION

SHEET SS2  
SHEET NO. 52 OF 64

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ===== PROPOSED VALLEY GUTTER
- ▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬ PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- ▬ PROPOSED 8" PVC SEWER LINE
- ▬ PROPOSED 4" SEWER LATERAL
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE



SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	70 LF
4" SDR 35 PVC SIDE SEWER	420 LF
TYPE I MANHOLE	1 EA

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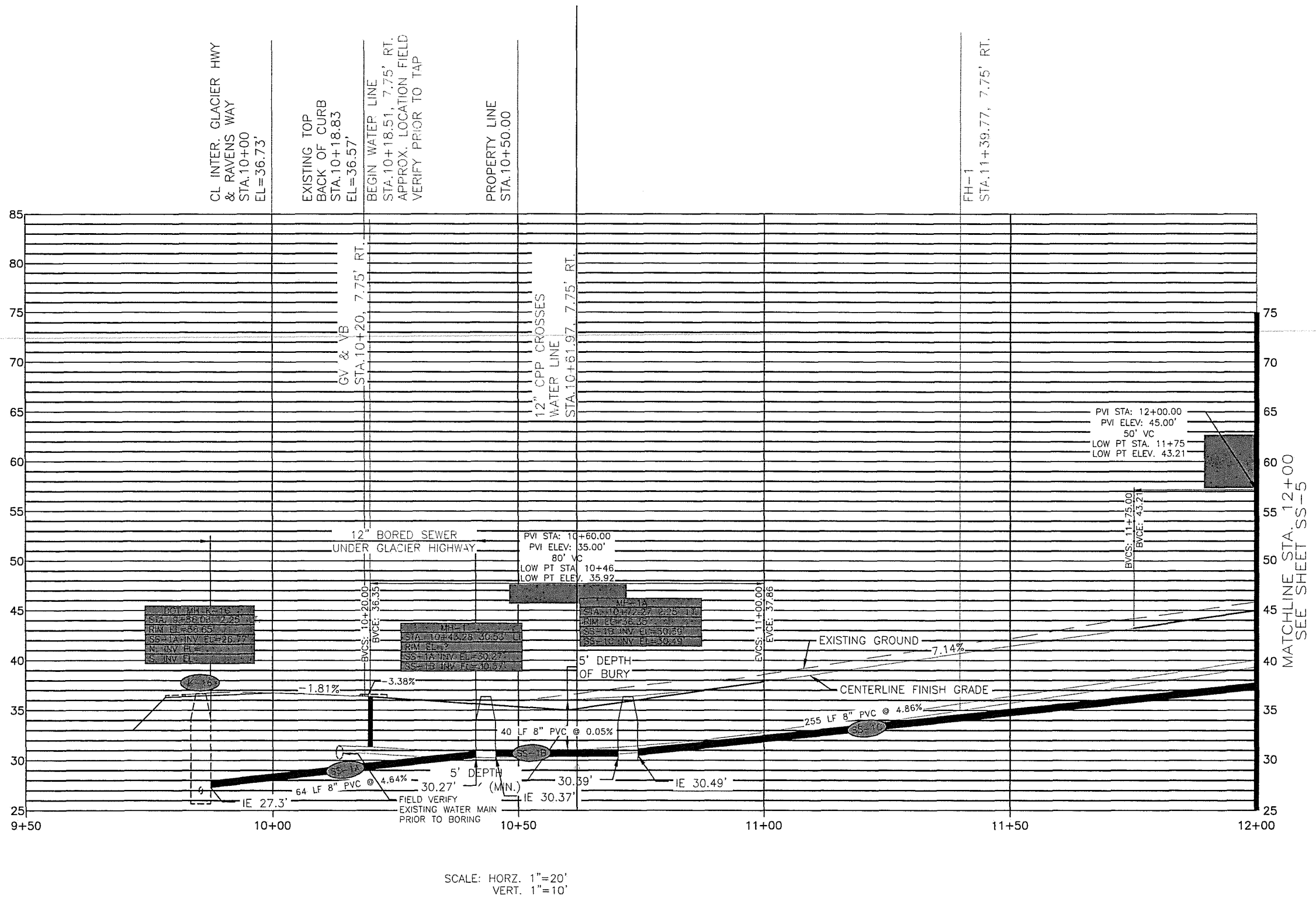
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SHEET	SS3
SHEET NO.	53 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

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DATE	September 30, 2024

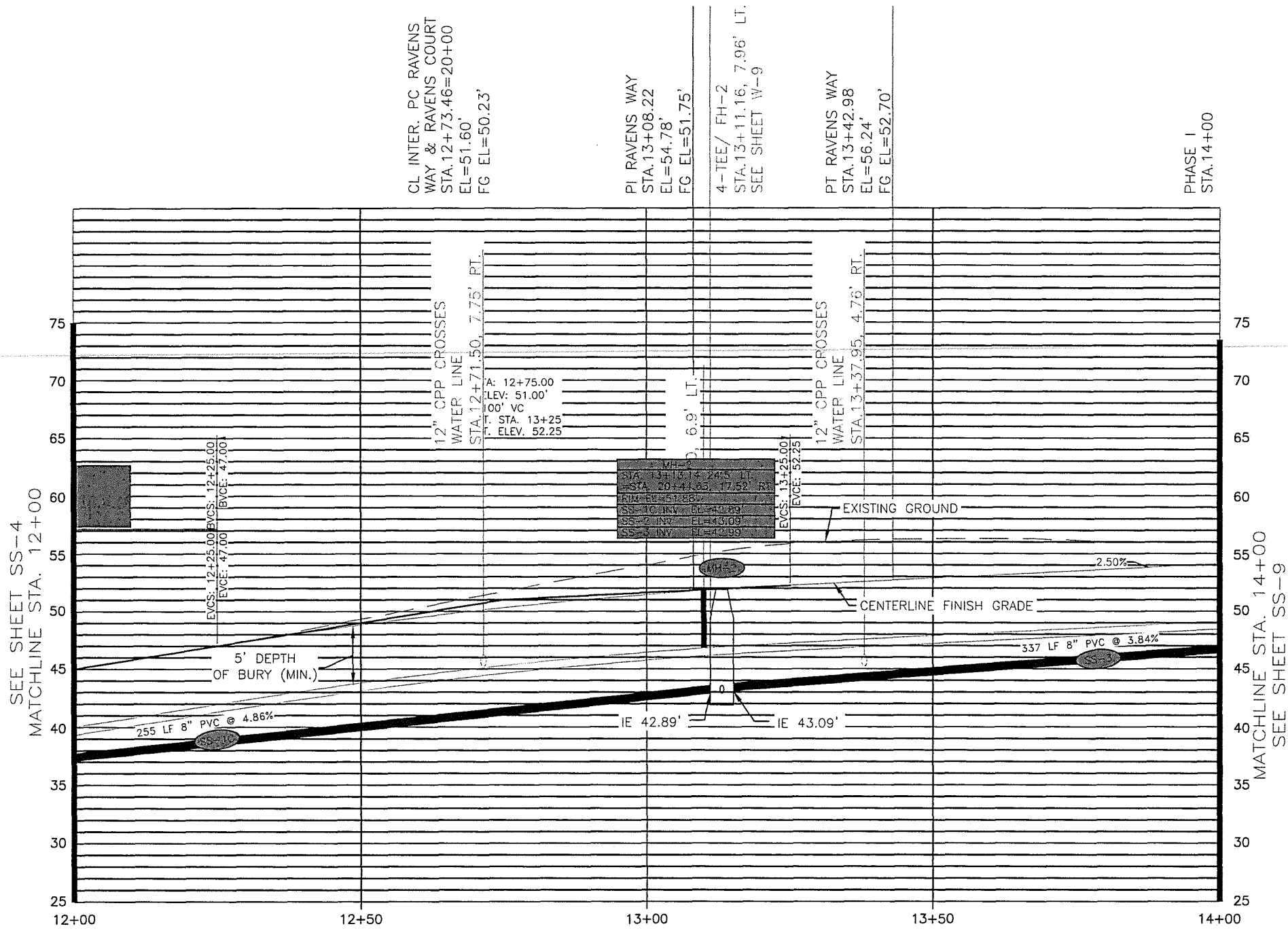
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SHEET NO.	54 OF 64

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DATE	September 30, 2024

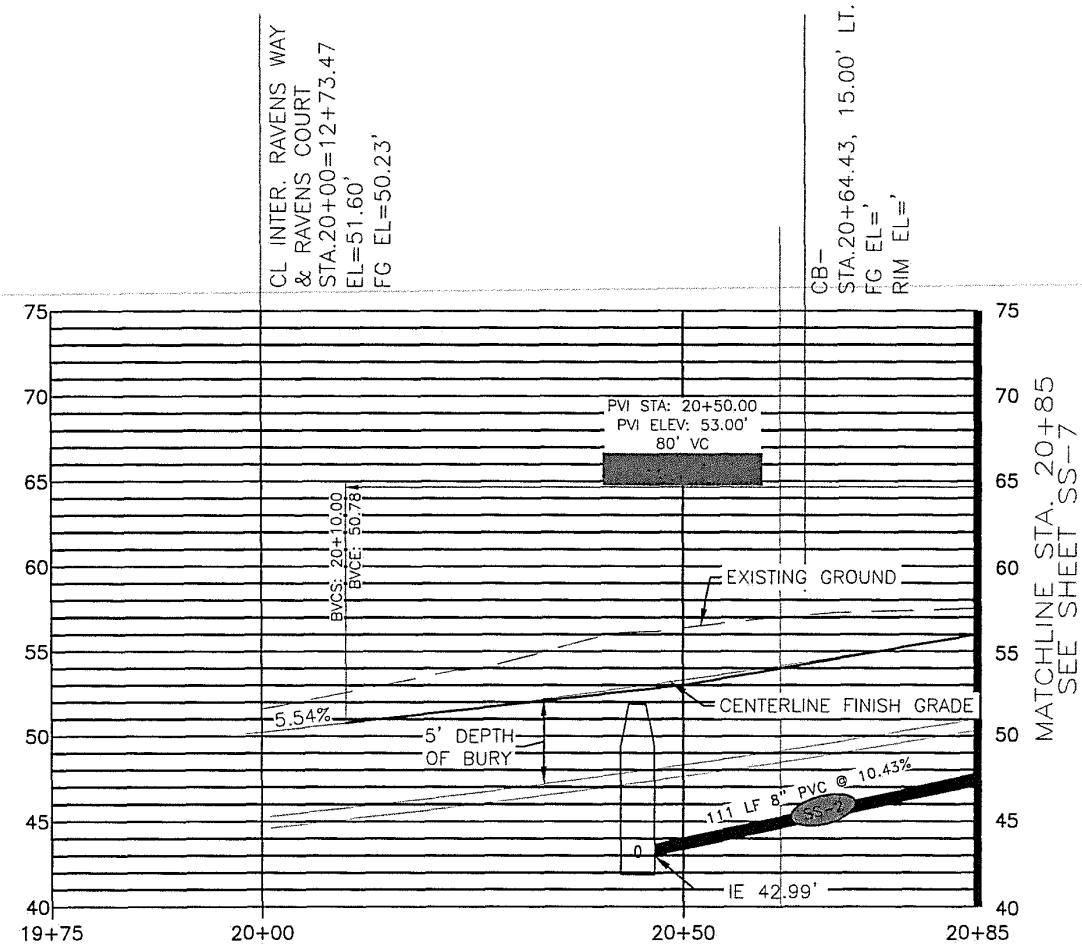
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SHEET NO.	55 OF 64

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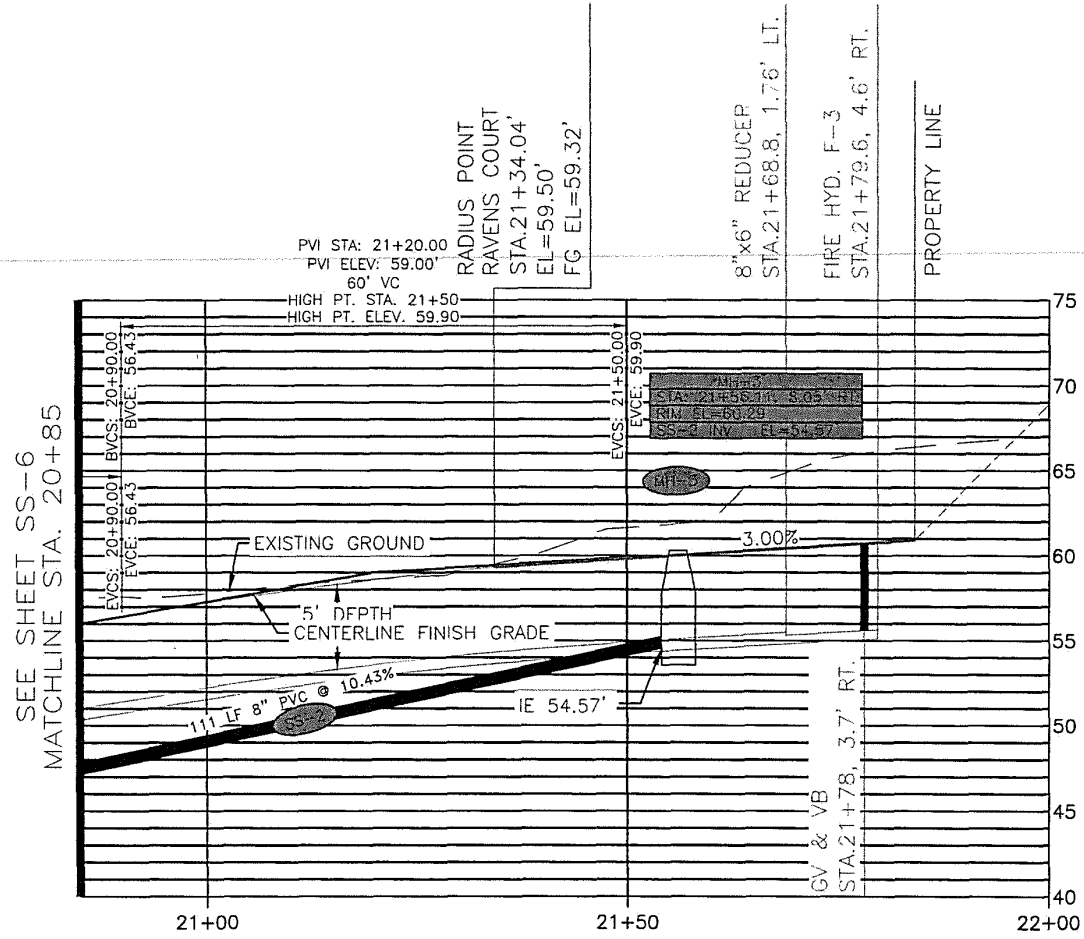
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SHEET NO.  
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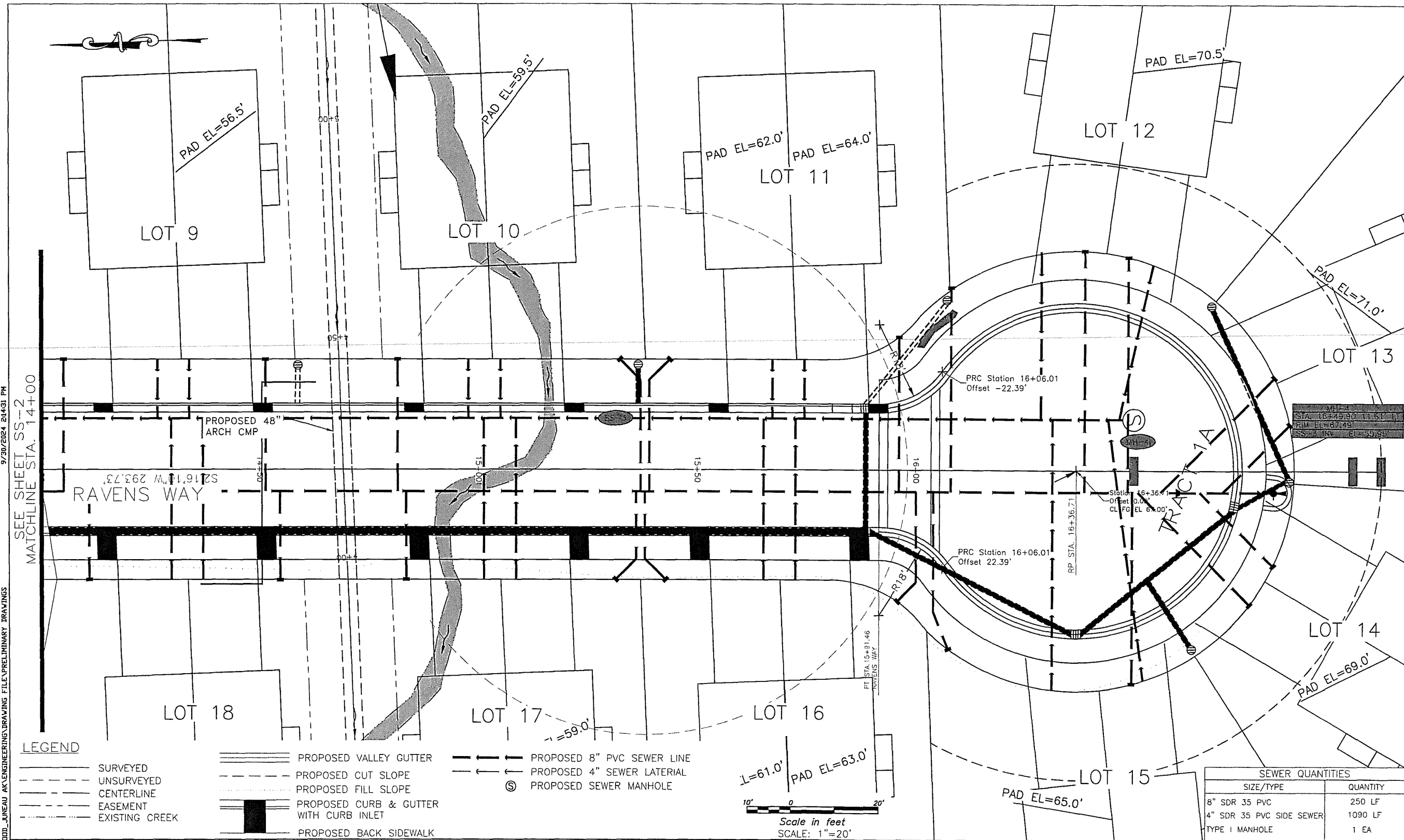
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SHEET NO.  
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**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING CREEK
- ==== PROPOSED VALLEY GUTTER
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- ⊙ PROPOSED SEWER MANHOLE

SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	250 LF
4" SDR 35 PVC SIDE SEWER	1090 LF
TYPE I MANHOLE	1 EA

REV	DATE	BY	DESCRIPTION

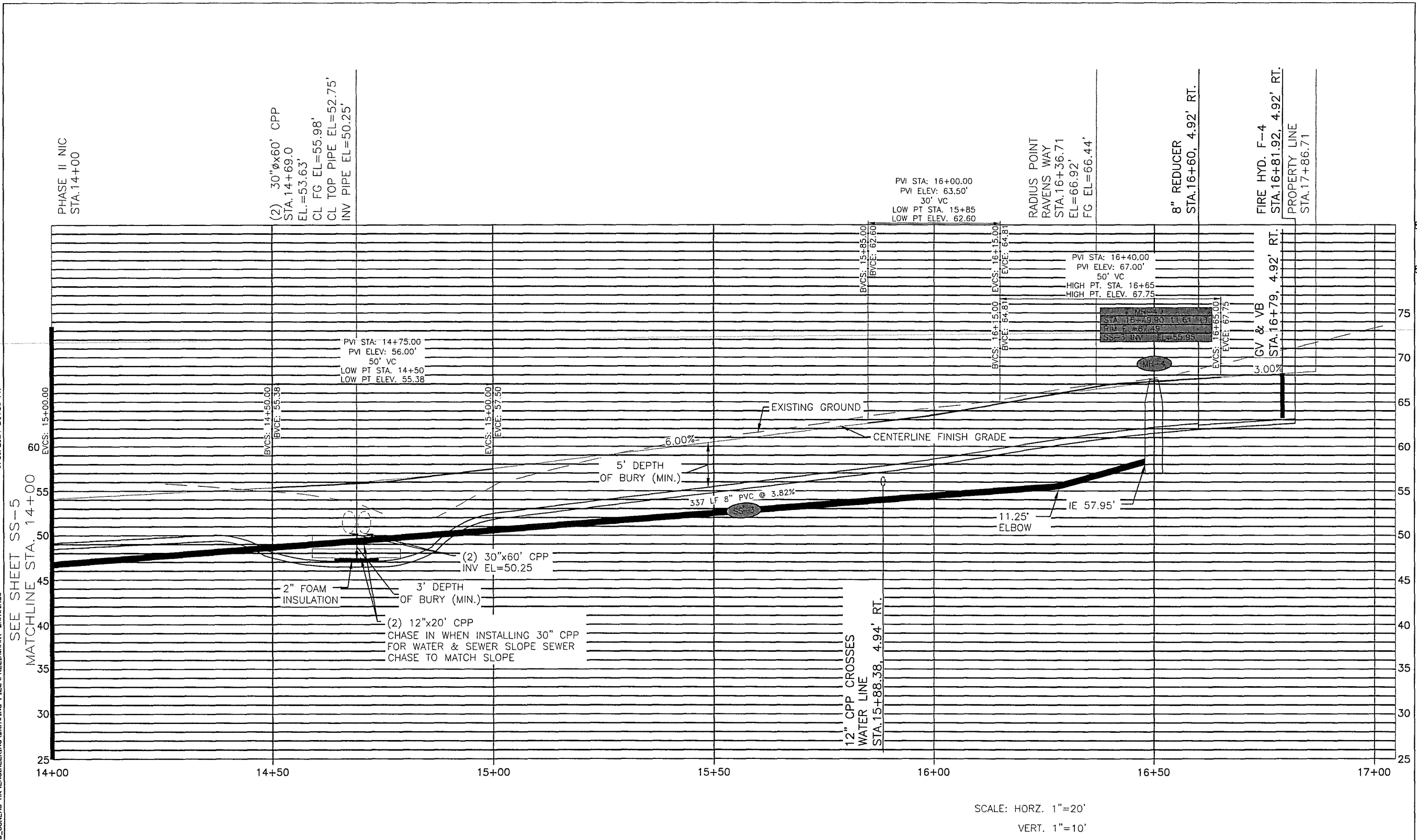
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 DRAWN ###  
 CHECKED ###  
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 SS8  
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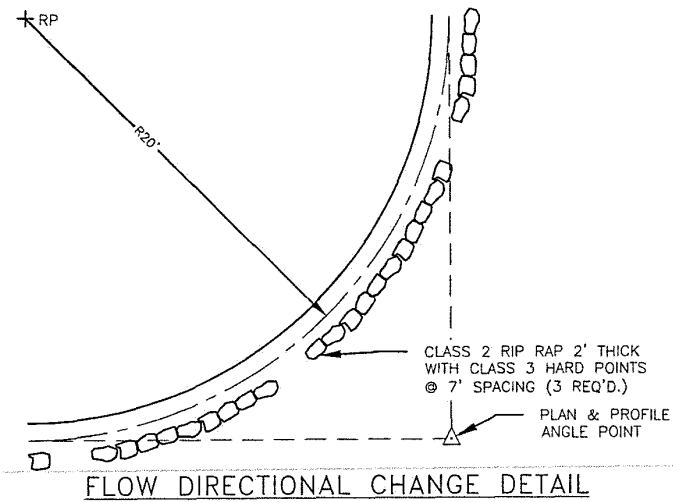
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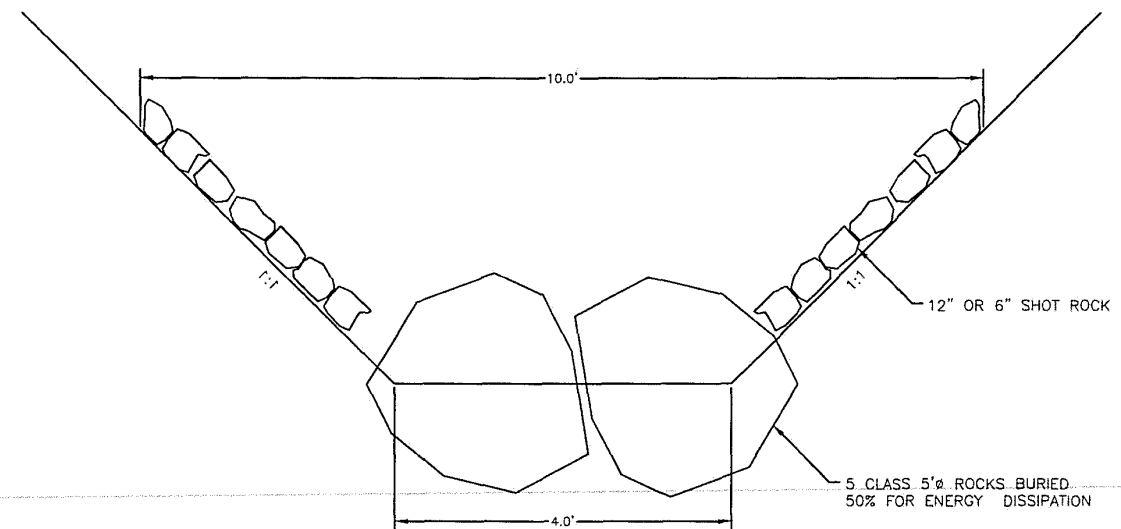
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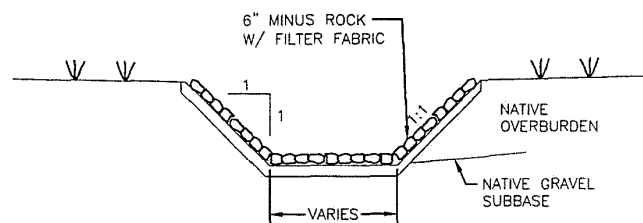
FLOW DIRECTIONAL CHANGE DETAIL

SCALE: 1"=2'



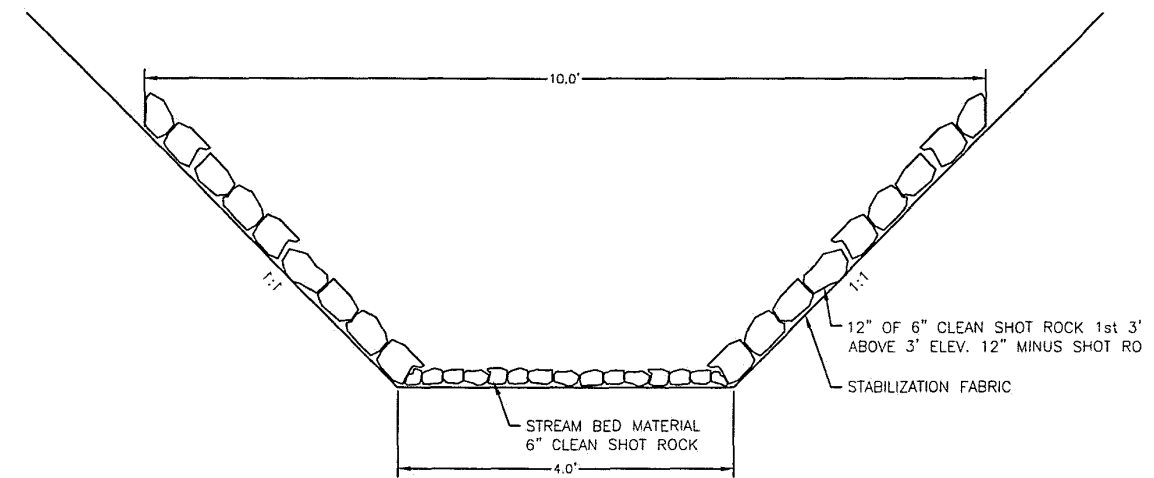
ENERGY DISSIPATION DETAIL

SCALE: 1/2"=1'



TYPICAL DRAINAGE DITCH SECTION TYPE D

SCALE: 1"=4'



TYPICAL STREAM CHANNEL DETAIL TYPE B

SCALE: 1/2"=1'

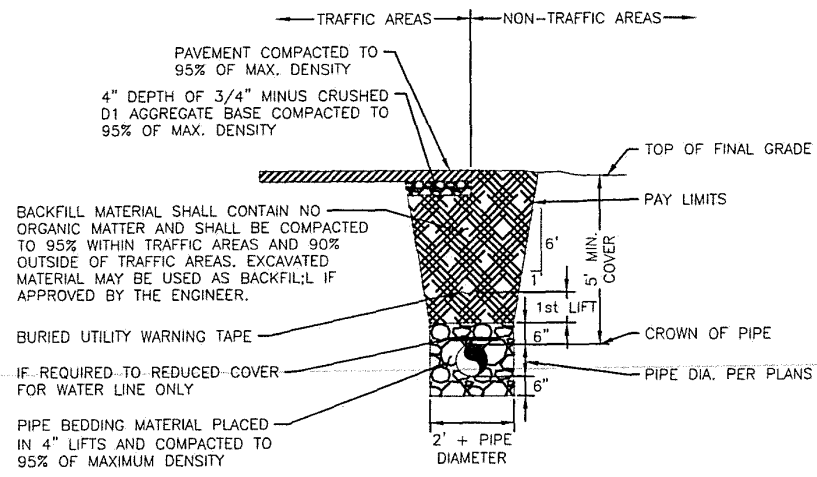
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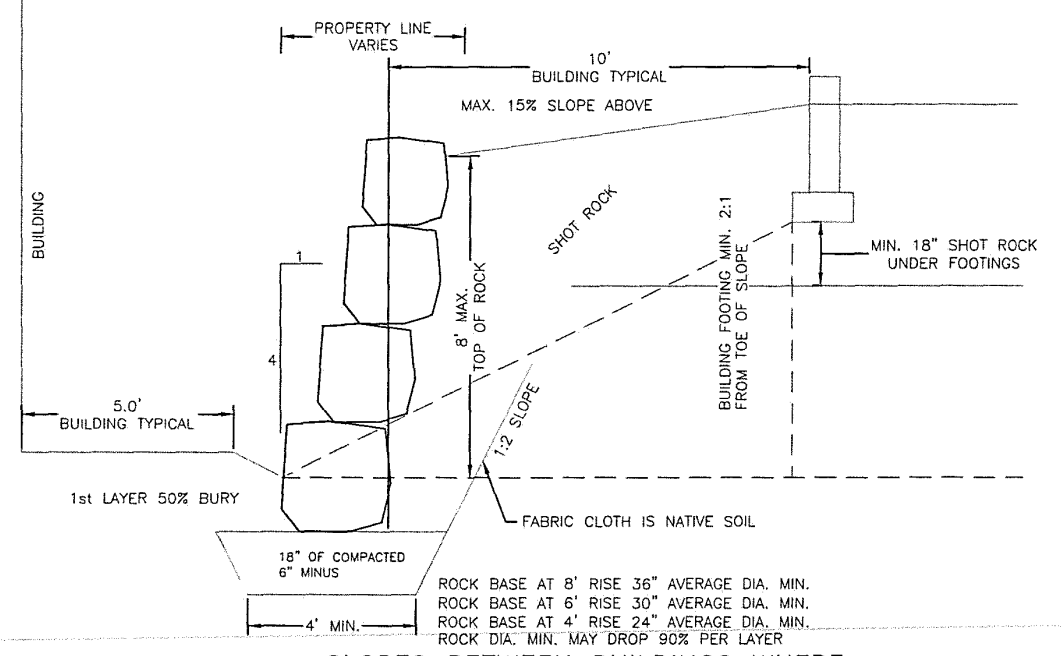


- NOTES (A):
- BACKFILL MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS AS STATED IN SPECIFICATIONS.
  - PIPE BEDDING MATERIAL MUST BE PLACED IN 6" MAX. LIFTS BETWEEN COMPACTION.
  - TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH LOCAL, STATE AND OSHA REGULATIONS AND REQUIREMENTS. INDICATED SLOPE IS FOR PAY QUANTITY DETERMINATION ONLY FOR IMPORTED BACKFILL GRAVEL AND RESURFACING REQUIREMENTS.
  - IF UNSUITABLE PIPE FOUNDATION MATERIAL IS ENCOUNTERED DURING EXCAVATION, ENGINEER MAY DIRECT THE CONTRACTOR TO OVER-EXCAVATE AND BACKFILL WITH SUITABLE MATERIAL.
  - THE DITCH LINE, IF ONE EXISTS, SHALL BE RESHAPED IN SUCH A MANNER TO ALLOW POSITIVE DRAINAGE TO MATCH PRE-CONSTRUCTION CONDITIONS.
  - TRENCH SECTION APPLICABLE FOR BOTH SEWER, WATER PIPE AND STORM. EXCEPT STORM WATER DOES NOT REQUIRE MINIMUM COVER.

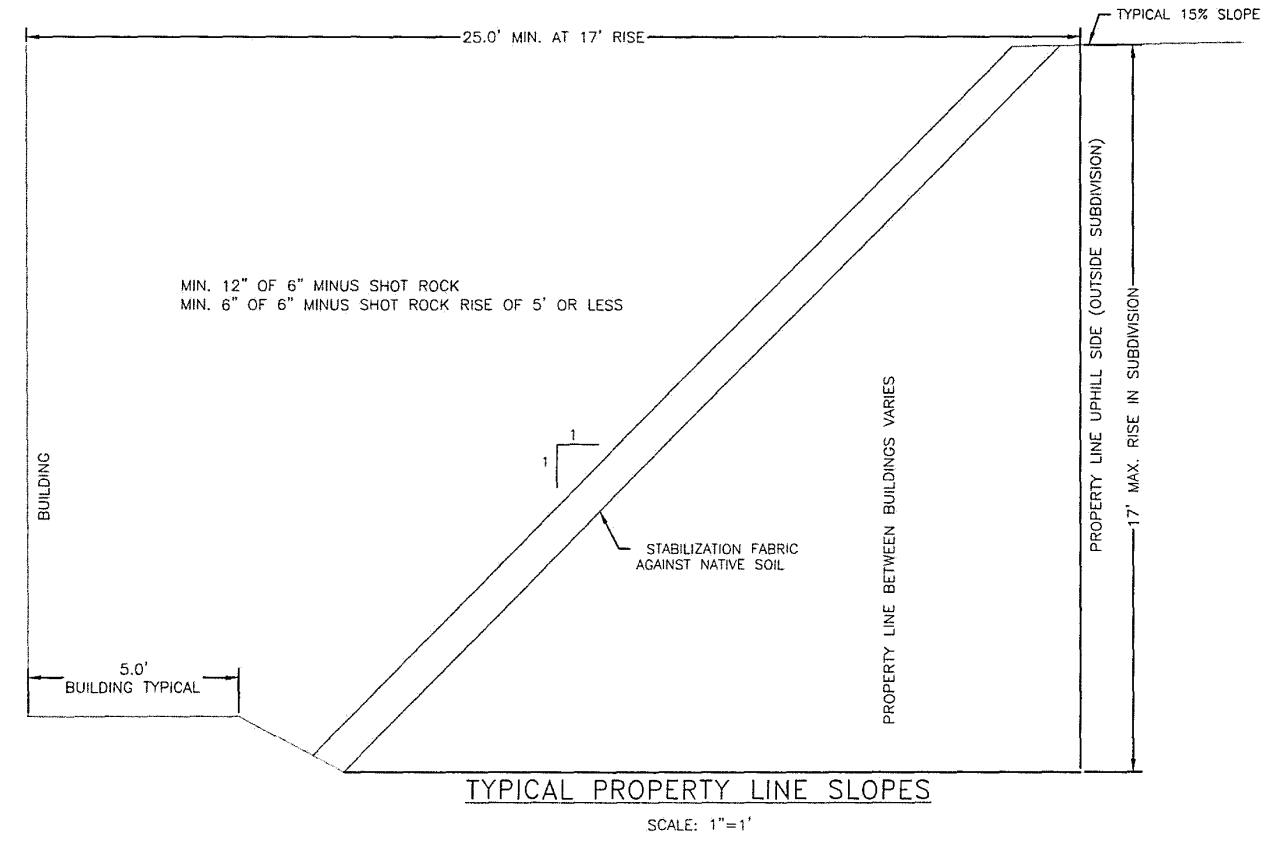
- NOTES (B):
- INSULATION BOARD JOINTS SHALL BE LAPPED.
  - MINIMUM DEPTH OF COVER SHALL BE 3'-0" UNLESS SHOWN OTHERWISE ON DRAWINGS OR PRIOR APPROVAL IS GRANTED FROM ENGINEER.
  - ALL INSULATION SHALL BE DOW HI-60 EXTRUDED POLYSTYRENE (BLUE BOARD) OR APPROVED EQUAL.

"H" DEPTH OF COVER	"T" INSULATION THICKNESS
4'-0" OR GREATER	NONE REQUIRED.
3'-8" OR GREATER	2 INCHES
3'-0" OR GREATER	4 INCHES

**TYPICAL TRENCH DETAIL**  
SCALE: 1"=4'



**SLOPES BETWEEN BUILDINGS WHERE SLOPES GREATER THAN 1:1 NEEDED**  
SCALE: 1"=1'



**TYPICAL PROPERTY LINE SLOPES**  
SCALE: 1"=1'

SCALE	GRAPHIC
DESIGNED	###
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CHECKED	###
DATE	September 30, 2024
REV	DATE BY DESCRIPTION

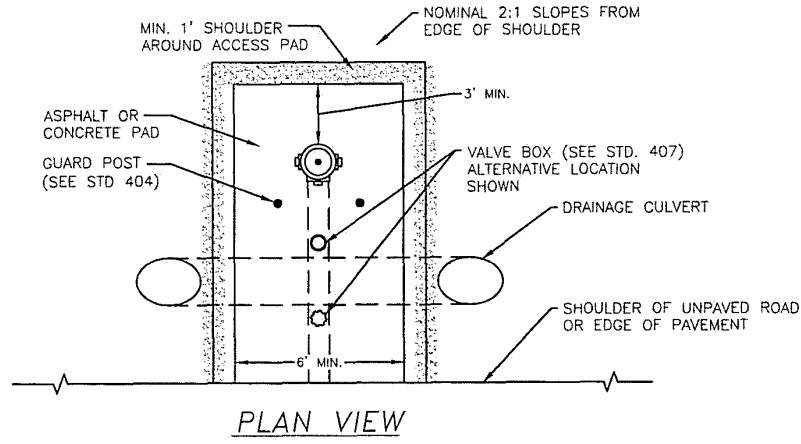
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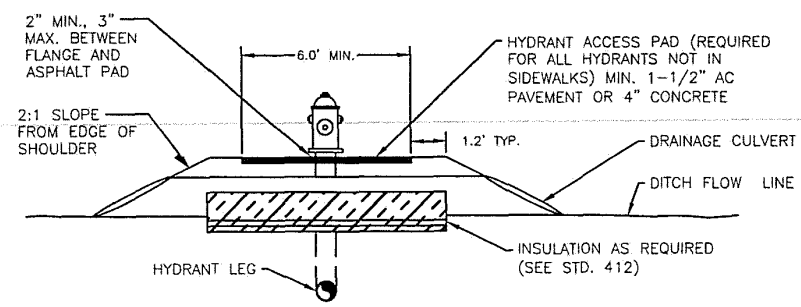
SHEET  
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PLAN VIEW

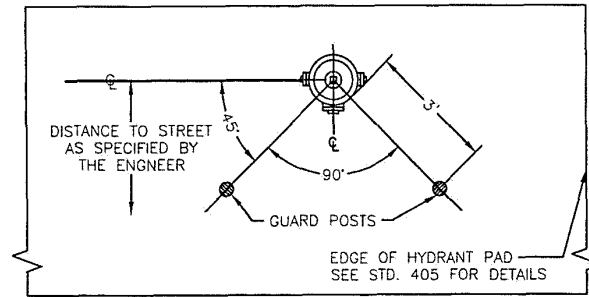


ELEVATION VIEW

- NOTES:
- FROM EDGE OF ROAD TO DITCH LINE, SLOPE SURFACE OF HYDRANT PAD TO MATCH EXTENSION OF ROADWAY CROWN.
  - SEED SIDE SLOPES IN ACCORDANCE WITH SECTION 02710.
  - NFS BACKFILL AND D-1 IN PAD SHALL CONFORM WITH MATERIALS AND COMPACTION REQUIREMENTS OF STANDARD 102A. 4. EXTEND LAYER OF D-1 TO EDGE OF PAD SHOULDER.

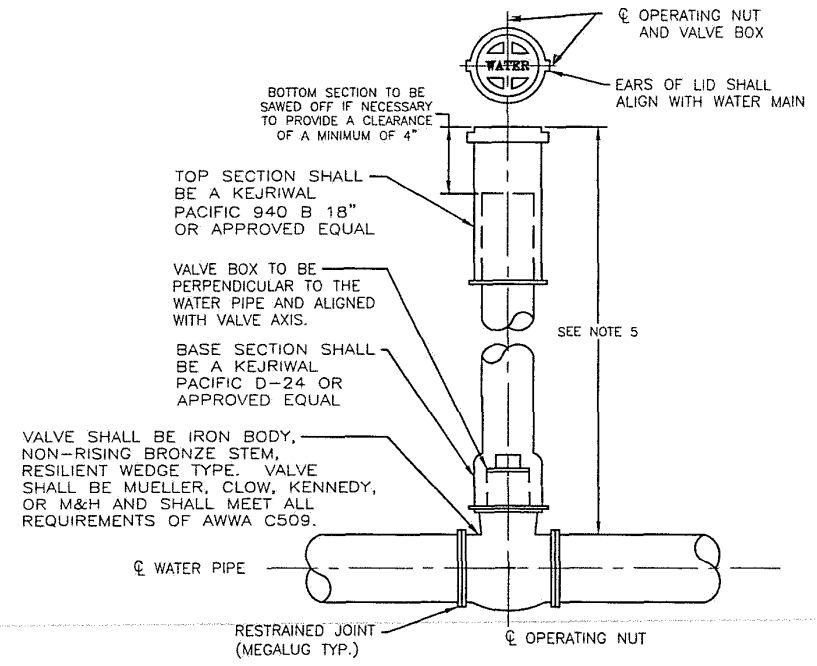
405-HYDRANT PAD

SCALE: 1"=6'



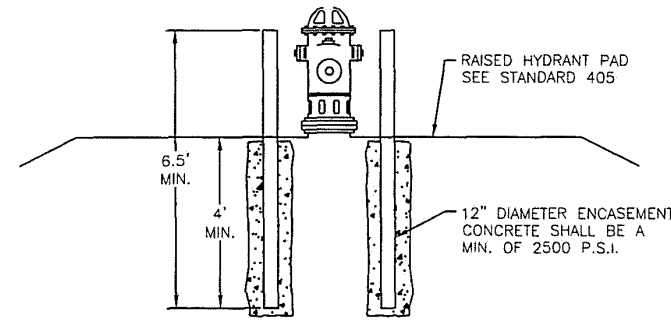
PLAN VIEW

404-HYDRANT GUARD POSTS



407-MAINLINE VALVE

SCALE: 1"=2'

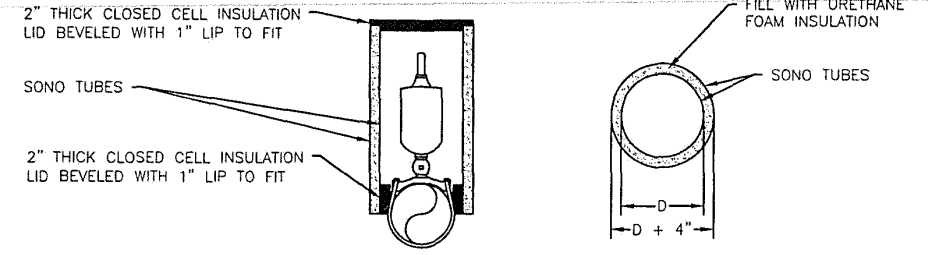
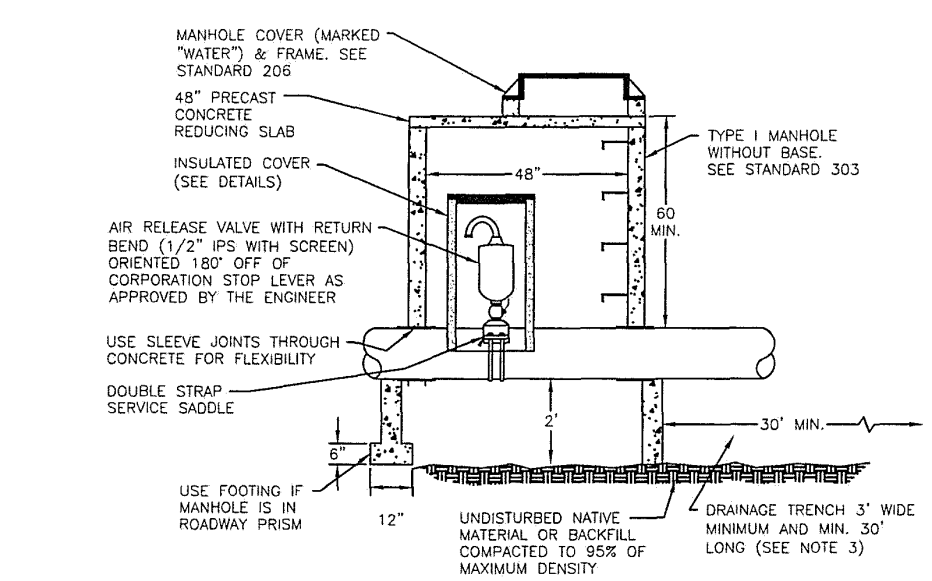


ELEVATION VIEW

404-HYDRANT GUARD POSTS

SCALE: 1"=4'

- NOTES:
- GUARD POST ARE REQUIRED ON ALL HYDRANTS EXCEPT THOSE IN SIDEWALKS OR ALONG STATE HIGHWAYS.
  - GUARD POST SHALL BE 4" DIAMETER, SCHEDULE 40 STEEL PIPE.
  - POSTS SHALL BE FILLED FLUSH WITH CONCRETE AND PAINTED WITH OSHA YELLOW ENAMEL AFTER INSTALLATION.
  - POSTS SHALL NOT BLOCK OPERATION OF VALVE.



SIDE VIEW TOP VIEW  
INSULATED COVER DETAILS

- NOTES:
- PVC DRAIN TO DAYLIGHT MAY BE SUBSTITUTED FOR DRAINAGE TRENCH IF APPROVED BY ENGINEER.
  - SONO TUBES SHALL BE CONCENTRIC TO INSURE A MINIMUM OF 2" OF INSULATION AT ALL POINTS. TRIM TUBES AND INSULATION TO FIT CURVATURE OF PIPE.
  - FILL DRAIN TRENCH WITH MATERIAL AS DESCRIBED IN TABLE:

SEIVE SIZE	% PASSING
2"	100
4"	0-10
1"	0-3

409-AIR RELEASE VALVE

SCALE: 1"=4'

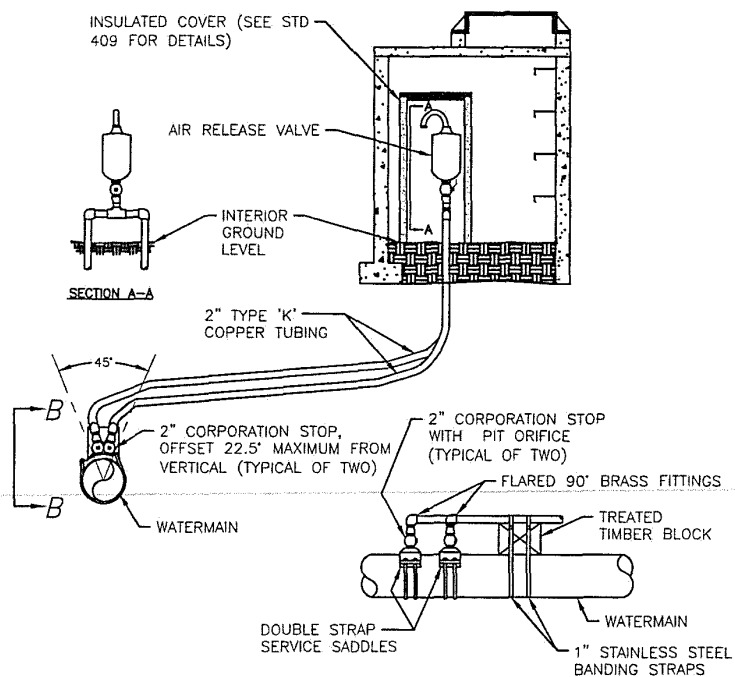
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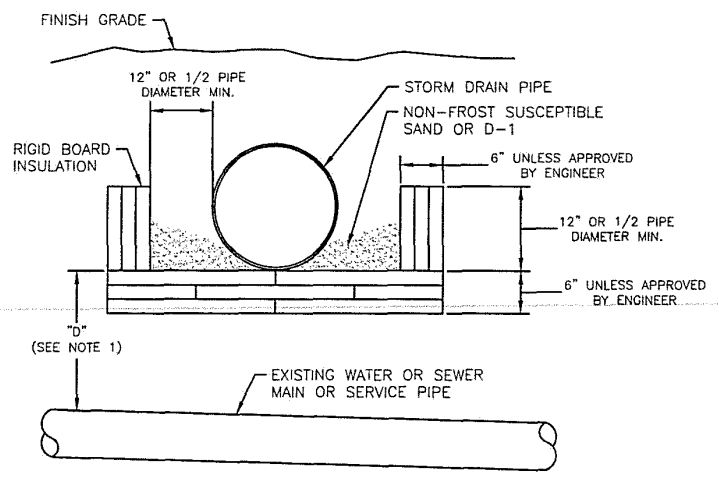
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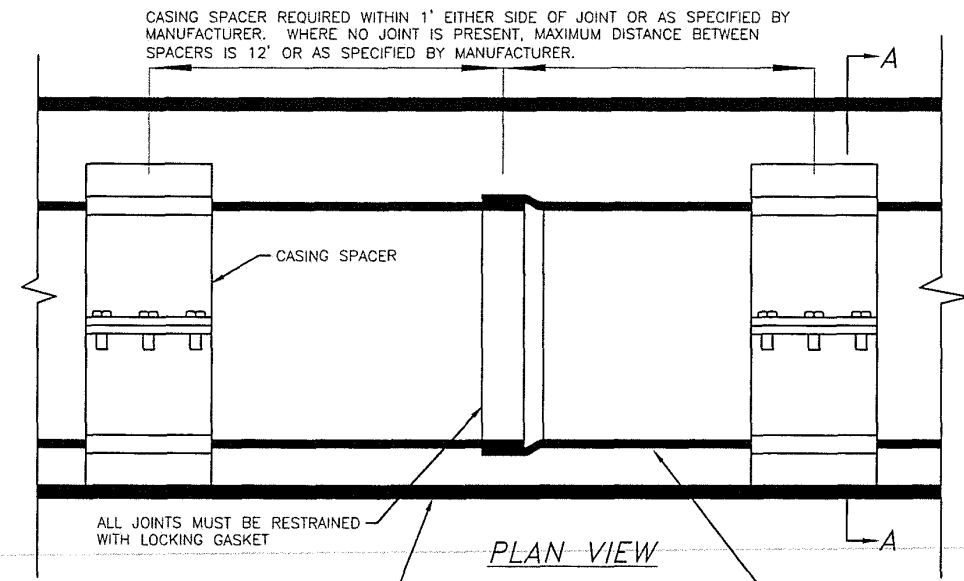
- NOTES:**
1. MANHOLE, COVER & FRAME CONSTRUCTION SHALL COMPLY WITH STANDARDS 206, 303, AND 409.
  2. COPPER TUBING SHALL MAINTAIN A POSITIVE GRADE FROM THE WATERMAIN TO THE AIR RELEASE VALVE. CONNECTIONS IN COPPER TUBING SHALL BE FLARED UNIONS.
  3. A 60" MINIMUM COVER SHALL BE MAINTAINED OVER THE COPPER TUBING AND WATERMAIN AT ALL LOCATIONS.
  4. DRAINAGE TRENCH, AIR RELEASE VALVE, AND INSULATED COVER SHALL COMPLY WITH STANDARD 409.

**410-AIR RELEASE VALVE OFFSET LOCATION**  
SCALE: 1"=2'



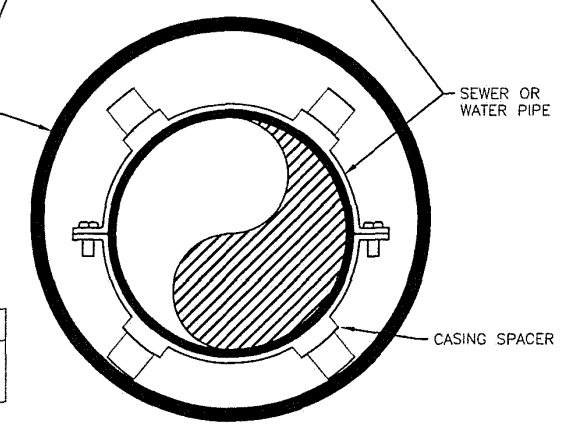
- NOTES:**
1. INSTALL INSULATION AS SHOWN WHEN "D" IS LESS THAN 5'-0" FOR WATER PIPE OR 3'8" FOR SEWER PIPE.
  2. INSULATION SHALL CONFORM TO SECTION 02607 OF THE STANDARD SPECIFICATIONS.
  3. PIPE INSULATION SHALL BE 8'-0" IN LENGTH, CENTERED OVER EXISTING WATER OR SEWER PIPE.
  4. PIPE INSULATION WITH R-FACTOR EQUAL TO RIGID BOARD MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.
  5. INSULATION BOARDS SHALL OVERLAP 12" AS SHOWN IN DRAWING.

**412-RIGID INSULATION**  
SCALE: 1"=2'



CASING PIPE DIAMETER	MIN. WALL THICKNESS
4"	0.237"
6" - 24"	0.250"
26" - 30"	0.312"

- NOTES:**
1. CASING SPACERS SHALL BE "ADVANCE PRODUCT AND SYSTEMS" HIGH-DENSITY POLYETHYLENE OR APPROVED EQUAL.
  2. ENDS OF CASING PIPE SHALL BE PERMANENTLY SEALED AGAINST THE ENTRY OF FOREIGN MATERIAL.



**413-BORED ENCASEMENT**  
SCALE: 1"=2'

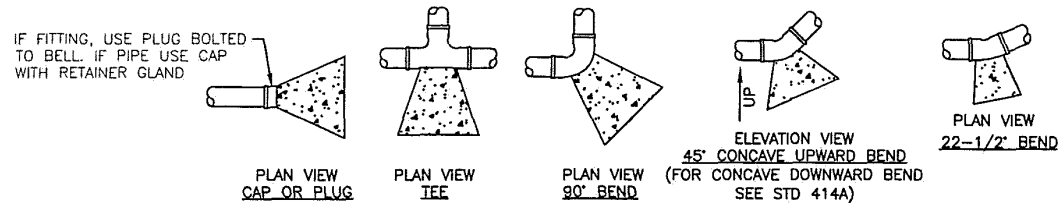
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PIPE SIZE	TEES, CAPS, & PLUGS		90° BENDS		ALTERNATIVE RESTRAINED LENGTH IN ALL DIRECTIONS (FEET) - SEE NOTE 5		
	MIN. CONCRETE VOL. (YD.)	MIN. BEARING AREA (FT <sup>2</sup> )	MIN. CONCRETE VOL. (YD.)	MIN. BEARING AREA (FT <sup>2</sup> )	TEES	90° BENDS	CAPS & PLUGS
4"	0.1	1.7	0.1	2.4	11	16	33
6"	0.2	3.5	0.4	4.9	15	23	47
8"	0.5	6.0	0.9	8.5	20	30	62
10"	1.0	9.1	1.7	12.8	24	37	74
12"	1.7	12.8	2.9	18.1	29	44	88
14"	2.6	17.2	4.5	24.4	33	50	100
16"	3.9	22.3	6.6	31.5	38	57	113
18"	5.5	28.0	9.2	39.6	42	63	126
20"	7.5	34.4	12.5	48.6	47	70	138
24"	12.7	49.0	21.4	69.3	56	83	162

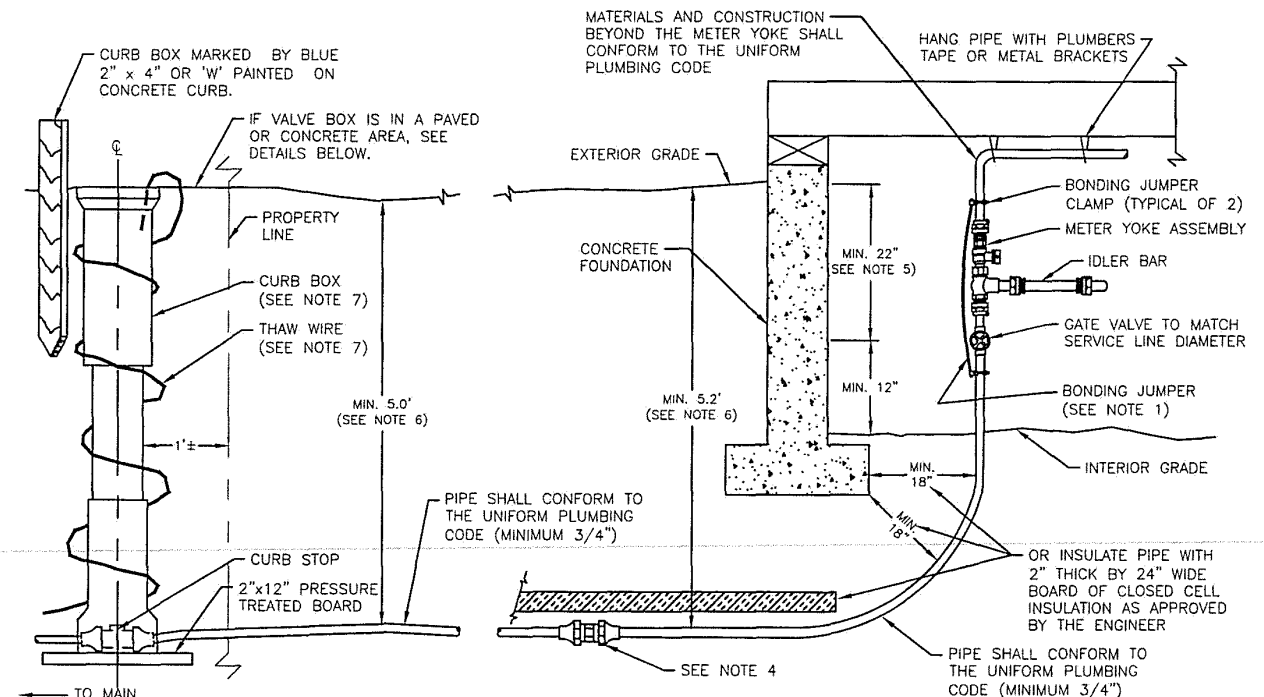
SMALL ANGLE ADJUSTMENT	
FOR ANGLES LESS THAN 90° MULTIPLY VOLUMES, AREAS, AND LENGTHS FOR 90° ANGLE BY THIS FACTOR	
ANGLE	FACTOR
45°	0.414
22-1/2°	0.199
11-1/4°	0.098

- NOTES:**
- CENTER-OF-MASS OF THRUST BLOCK MUST LAY OPPOSITE TO AND ALIGNED AGAINST THE DIRECTION OF THRUST.
  - THRUST BLOCKS SHALL BE POURED SO THAT JOINTS OF FITTINGS, INCLUDING ALL NUTS AND FOLLOWERS REMAIN ACCESSIBLE.
  - CONCRETE THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH. UNSTABLE OR UNSUITABLE MATERIALS SHALL BE REMOVED, REPLACED AND/OR COMPACTED AS DETERMINED BY THE ENGINEER.
  - VOLUME AND BEARING SURFACE OF 2500 P.S.I. CONCRETE THRUST BLOCKS ARE BASED ON 150 P.S.I. WATER PRESSURE AND SOIL BEARING CAPACITY OF 2000 P.S.F. ALL OTHER PRESSURE AND/OR SOIL CONDITIONS ARE SUBJECT TO THE ENGINEER'S REVIEW AND APPROVAL.
  - THRUST BLOCKS MAY BE OMITTED IF ALL JOINTS WITHIN MINIMUM DISTANCE GIVEN BY ABOVE TABLE ARE RESTRAINED AND PIPE IS BEDDED IN SAND. THE DISTANCES APPEARING IN THE TABLE ASSUME THAT THE PIPE IS BURIED AT LEAST 5' DEEP AND THAT SOIL CONDITIONS ARE AS LISTED IN NOTE 4. THE INFORMATION IN THE TABLE IS BASED ON DIPRA'S "THRUST RESTRAINT FOR DUCTILE IRON PIPE" WHICH SHOULD BE CONSULTED IF THESE ASSUMPTIONS ARE NOT MET.
  - SUBJECT TO THE CONDITIONS LISTED IN NOTE 4, A COMBINATION OF A SMALLER THRUST BLOCK AND A REDUCED LENGTH OF RESTRAINED PIPE IS ALLOWED PER THE FOLLOWING FORMULA:

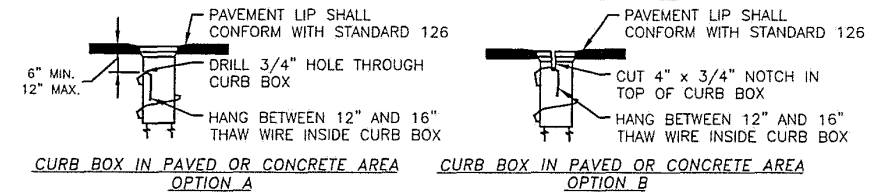
$$\frac{\text{ACTUAL BEARING AREA OF BLOCK}}{\text{BEARING AREA REQUIRED BY TABLE}} + \frac{\text{ACTUAL RESTRAINED LENGTH OF PIPE}}{\text{RESTRAINED LENGTH REQUIRED BY TABLE}} \geq 1.1$$

- THRUST BLOCKS ARE REQUIRED FOR ALL BENDS, TEES, PLUGS, AND CAPS IN PIPE 4" AND LARGER EXCEPT AS LISTED IN NOTE 5.
- REGARDLESS OF SIZE OF THRUST BLOCKS ALL JOINTS AT CAPS, PLUGS, BENDS, AND TEES MUST BE RESTRAINED.
- RESTRAINED LENGTHS USED IN PLACE OF THRUST BLOCKS IN STANDARDS 414A, 414B, AND 414C MAY NOT OVERLAP.
- FIELD-LOCK GASKETS, MEGA-LUG AND UNIFLANGE COUPLINGS ARE THE ONLY APPROVED MEANS OF RESTRAINING PIPE.

**414B-HORIZONTAL AND CONCAVE UPWARD THRUST BLOCKS**



**RESIDENTIAL WATER SERVICE CONNECTION**



- NOTES:**
- BONDING JUMPER MUST MATCH ELECTRICAL COLD WATER GROUND WIRE. (EXAMPLE: NO. 4 WIRE FOR UP TO 200 AMP SERVICE.) BONDING JUMPER CLAMP MUST BE COMPATIBLE WITH COPPER PIPE.
  - ALL JOINTS OR VALVES ON SERVICE SIDE OF METER YOKE MUST BE MECHANICAL FITTINGS.
  - COMMERCIAL FACILITIES AND RESIDENTIAL BUILDINGS WITH THREE OR MORE UNITS MUST INSTALL A WATER METER (OBTAINABLE FROM CBJ WATER UTILITY). SEE STANDARD 420.
  - ALL UNDERGROUND COPPER TUBE CONNECTIONS (IF ANY) SHALL BE EITHER MUELLER OR FORD FLARED UNIONS OR APPROVED EQUAL. NIBCO BRAND IS NOT AN APPROVED EQUAL.
  - AFTER INSTALLATION, CONTINUE TO MAINTAIN A MINIMUM OF 22" UNOBSTRUCTED CLEARANCE FOR THE METER YOKE.
  - BURIAL DEPTHS GREATER THAN 5' MAY BE REQUIRED BY THE ENGINEER.
  - CURB BOX MUST BE RESET SO THAT IT IS PLUMB, AND THAW WIRE SHALL BE WOUND AROUND OUTSIDE OF CURB BOX.
  - UNDERGROUND SERVICE LINE SHALL NOT BE WITHIN 1" OF ANY OTHER SERVICE LINE.

**419-RESIDENTIAL WATER SERVICE CONNECTION**  
SCALE: 1"=2'

REV	DATE	BY	DESCRIPTION

SCALE GRAPHIC

DESIGNED ###

DRAWN ###

CHECKED ###

DATE September 30, 2024

---

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008

---

**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET DT6

SHEET NO. 64 OF 64



**LOT 1 RAVENWOOD SUBDIVISION OWNERSHIP CERTIFICATE**

I, CERTIFY THAT MISTY SEA CHARTERS & LODGING LLC, AN ALASKA LIMITED LIABILITY COMPANY, IS THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I, AS MANAGING MEMBER OF MISTY SEA LODGING AND CHARTERS LLC, HAVING THE AUTHORITY TO DO SO, HEREBY ADOPT THIS PLAT OF SUBDIVISION WITH MY FREE CONSENT AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS, AND OTHER OPEN SPACES TO THE PUBLIC OR PRIVATE USE AS NOTED.

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_, 2025

SIGNATURE \_\_\_\_\_

**NOTARY ACKNOWLEDGEMENT**

UNITED STATES OF AMERICA )  
 ) SS  
 STATE OF ALASKA )

THIS IS TO CERTIFY THAT ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2025, BEFORE ME, THE UNDERSIGNED A NOTARY PUBLIC IN AND FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, PERSONALLY APPEARED \_\_\_\_\_ TO ME KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE/SHE SIGNED AND SEALED THE SAME FREELY AND VOLUNTARILY FOR THE USES AND PURPOSES THEREIN MENTIONED. WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA \_\_\_\_\_

MY COMMISSION EXPIRES \_\_\_\_\_

**LOT 1 RAVENWOOD SUBDIVISION OWNERSHIP CERTIFICATE**

I, CERTIFY THAT R&S CONSTRUCTION, LLC, AN ALASKA LIMITED LIABILITY COMPANY, IS THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I, AS MANAGING MEMBER OF R&S CONSTRUCTION, LLC, HAVING THE AUTHORITY TO DO SO, HEREBY ADOPT THIS PLAT OF SUBDIVISION WITH MY FREE CONSENT AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS, AND OTHER OPEN SPACES TO THE PUBLIC OR PRIVATE USE AS NOTED.

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_, 2025

SIGNATURE \_\_\_\_\_

**NOTARY ACKNOWLEDGEMENT**

UNITED STATES OF AMERICA )  
 ) SS  
 STATE OF ALASKA )

THIS IS TO CERTIFY THAT ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2025, BEFORE ME, THE UNDERSIGNED A NOTARY PUBLIC IN AND FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, PERSONALLY APPEARED \_\_\_\_\_ TO ME KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE/SHE SIGNED AND SEALED THE SAME FREELY AND VOLUNTARILY FOR THE USES AND PURPOSES THEREIN MENTIONED. WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA \_\_\_\_\_

MY COMMISSION EXPIRES \_\_\_\_\_

**PLANNING COMMISSION PLAT APPROVAL**

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS OF THE CITY AND BOROUGH OF JUNEAU, ALASKA AND THAT THIS PLAT HAS BEEN APPROVED BY THE PLANNING COMMISSION BY PLAT RESOLUTION No. \_\_\_\_\_, DATED \_\_\_\_\_, 2025, AND THAT THE PLAT SHOWN HEREON HAS BEEN APPROVED FOR RECORDING IN THE JUNEAU RECORDING DISTRICT OFFICE, LOCATED IN ANCHORAGE, ALASKA.

DATE: \_\_\_\_\_, 2025

CHAIRPERSON OF THE PLANNING COMMISSION  
 CITY & BOROUGH OF JUNEAU

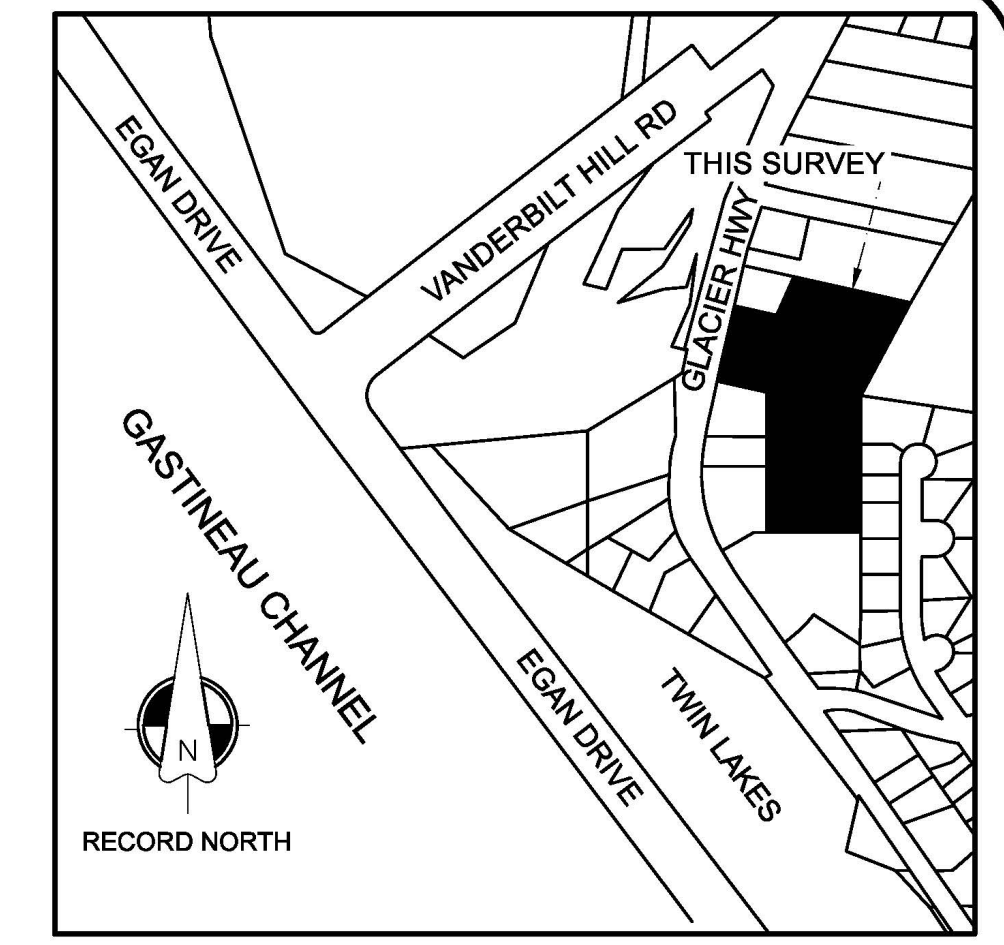
ATTEST:

MUNICIPAL CLERK  
 CITY AND BOROUGH OF JUNEAU

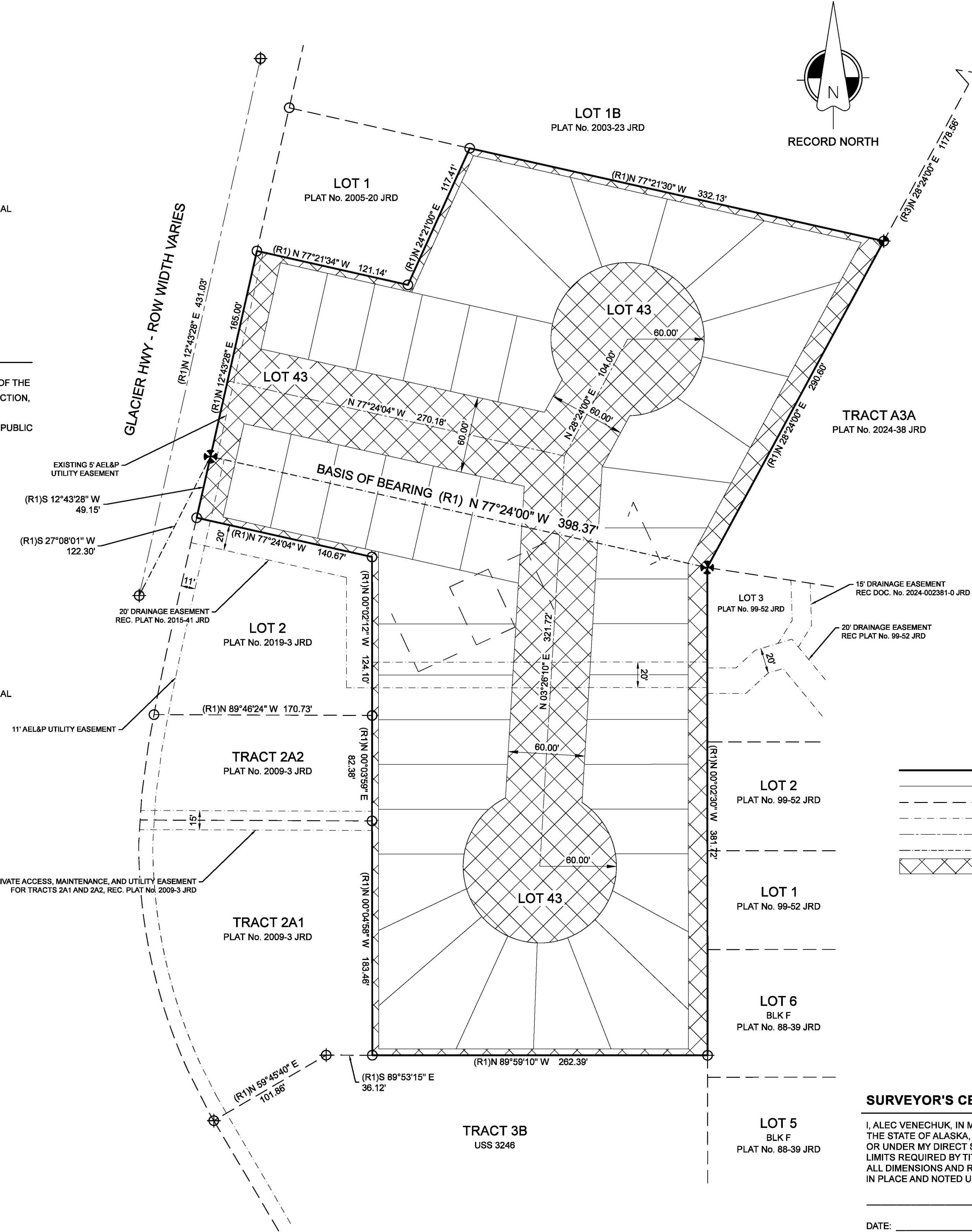
**BASIS OF BEARING**

THE BASIS OF BEARING FOR THIS PLAT IS THE RECORD BEARING OF N 77° 24' 00" W, AS DELINEATED IN THE OFFICIAL PLAT OF CHILKAT VIEW SUBDIVISION II, RECORD PLAT No. 2015-41 JUNEAU RECORDING DISTRICT, DATED OCTOBER 6, 2015 BETWEEN RECOVERED BUREAU OF LAND MANAGEMENT BRASS CAP MONUMENTS.

LOT AREA TABLE		
LOT	AREA (SF)	AREA (AC)
RECORD LOT 1	221,676	5.09
LOT 43 THIS SURVEY	75,489	1.73
UNIT LOTS 1-42 THIS SURVEY	146,187	3.36



VICINITY MAP - JUNEAU, ALASKA  
 SOURCE: CITY AND BOROUGH OF JUNEAU GIS  
 NOT TO SCALE

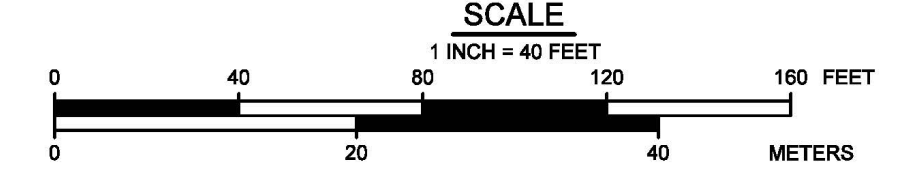


**NOTES**

1. THE ERROR OF CLOSURE OF THIS SURVEY DOES NOT EXCEED 1:5,000.
2. ALL BEARINGS SHOWN ARE TRUE BEARINGS RELATIVE TO THE BASIS OF BEARING, AS SHOWN HEREON. SURVEY COURSE DISTANCES SHOWN ARE MEASURED IN U.S. SURVEY FEET AND REDUCED TO HORIZONTAL FIELD DISTANCES.
3. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
4. DOMESTIC WATER AND SANITARY SEWER PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC UTILITIES.
5. WHEN DIFFERENT FROM MEASURED, RECORD BEARINGS AND DISTANCES ARE SHOWN IN PARENTHESIS AND REFERENCED TO A RECORD PLAT (R#).
6. RECORD INFORMATION FOR THIS SUBDIVISION IS DERIVED FROM THE FOLLOWING OFFICIAL PLATS: RECORD PLAT No. 433 JRD, A PLAT OF FAIRPORT SUBDIVISION, RECORDED ON 4/7/1965; RECORD PLAT No. 440 JRD, A PLAT OF LOTS B AND D FAIRPORT SUBDIVISION, RECORDED ON 5/28/1965; RECORD PLAT No. 74-15 JRD, A PLAT OF SUBDIVISION OF LOT A OF FAIRPORT SUBDIVISION, RECORDED ON 5/24/1974; RECORD PLAT No. 362 JRD, A PLAT OF TOTEM PARK SUBDIVISION, RECORDED ON 12/12/1962; RECORD PLAT No. 78-40 JRD, A PLAT OF JUNEAU INTERNATIONAL AIRPORT SUBDIVISION, RECORDED ON 11/20/1978.
7. THIS PLAT CREATES AN ALTERNATIVE RESIDENTIAL SUBDIVISION (ARS) PURSUANT TO AND GOVERNED BY THE CITY AND BOROUGH OF JUNEAU LAND USE CODE TITLE 49 ARTICLE IX. EACH OWNER OF A UNIT-LOT IS REQUIRED TO, AND SHALL BE, THROUGHOUT THEIR OWNERSHIP, A MEMBER OF THE RAVENWOOD SUBDIVISION HOA, AND REQUIRED TO PAY ASSESSMENTS ASSESSED BY THE RAVENWOOD SUBDIVISION HOA.
8. PER CBJ 49.15.920(j), NO PARKING AREAS, DWELLING UNITS, UNIT-LOTS, OR PERMISSIBLE USES MAY BE LOCATED WITHIN THE ARS PARENT LOT, OR LOT 43 THIS SURVEY.
9. ACCESS TO LOTS SHALL BE VIA ACCESS EASEMENTS SHOWN ON THIS PLAT AND IS SUBJECT TO THE REQUIREMENTS IN THE BYLAWS OF RAVENWOOD HOA.
10. A COMBINED BLANKET EASEMENT FOR DRAINAGE, UTILITIES, AND INGRESS AND EGRESSES IS CREATED ACROSS LOT 43, AS SHOWN HEREON. THE EASEMENT CREATED IS PRIVATE AND FOR THE BENEFIT OF THE UNIT LOTS CREATED WITH THIS SUBDIVISION. THE LAND ON WHICH THE PRIVATE EASEMENT IS LOCATED IS OWNED AND MANAGED BY THE RAVENWOOD SUBDIVISION HOA.

**LEGEND**

- 3" PRIMARY MONUMENT RESET THIS SURVEY
- ALUMINUM CAP PRIMARY MONUMENT RECOVERED
- SECONDARY MONUMENT RECOVERED
- 2.5" BLM BRASS CAP MONUMENT RECOVERED
- 2" ALUMINUM CAP MONUMENT SET THIS SURVEY, SEE TYPICAL DETAIL
- SUBDIVISION BOUNDARY LINE, THIS SURVEY
- UNIT LOT PROPERTY LINE, THIS SURVEY
- PROPERTY LINE, OUTSIDE OF THIS SURVEY
- EASEMENT BOUNDARY
- RIGHT-OF-WAY CENTERLINE
- SURVEY TIE
- LOT 43 THIS SURVEY, ARS PARENT LOT, SEE NOTE 10
- R1) PLAT No. 2019-3 JRD
- R2) PLAT No. 2015-41 JRD
- R3) PLAT No. 2024-5 JRD
- R4) OFFICIAL PLAT US SURVEY No. 3263
- JRD JUNEAU RECORDING DISTRICT



**SURVEYOR'S CERTIFICATE**

I, ALEC VENECHUK, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT, AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATE: \_\_\_\_\_

**LAST FRONTIER SURVEYING & ENGINEERING LLC**

SURVEYOR: ALEC VENECHUK PLS  
 PO BOX 32346  
 JUNEAU AK 99803

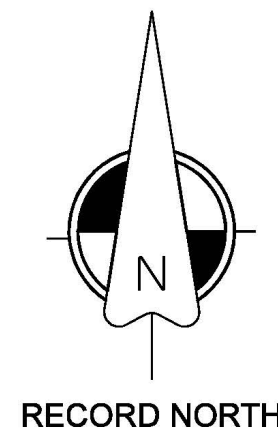
MISTY SEA CHARTERS AND LODGING LLC  
 AND R & S CONSTRUCTION, LLC  
 PO BOX 210194  
 AUKER BAY, AK 99821

A PLAT OF  
 RAVENWOOD SUBDIVISION II  
 A SUBDIVISION OF  
 LOTS 1 RAVENWOOD SUBDIVISION  
 AS SHOWN ON RECORD PLAT 2019-3 JUNEAU RECORDING DISTRICT  
 WITHIN U.S. SURVEY No. 3246

- STATE RECORDERS OFFICE AT ANCHORAGE -  
 WITHIN THE CITY AND BOROUGH OF JUNEAU, ALASKA  
 CBJ CASE No. PAC20240057

DRAWN BY: AMV DATE: 02/09/2025 SHEET 1 OF 3

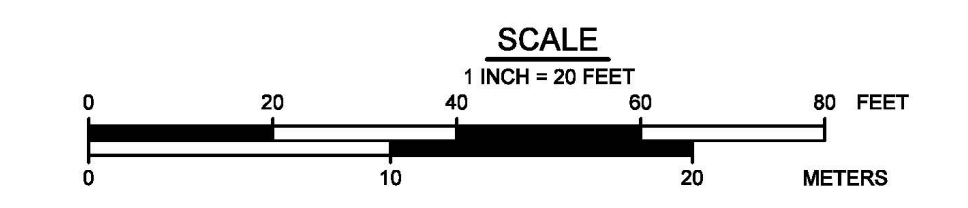




CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	45.19	60.00	43°08'14"	S 10°01'23" E	44.13
C2	31.42	60.00	30°00'30"	N 26°33'30" E	31.07
C3	30.32	60.00	28°57'18"	N 56°02'24" E	30.00
C4	36.96	60.00	35°17'24"	N 88°09'45" E	36.37
C5	34.85	60.00	33°16'48"	N 57°33'08" W	34.36
C6	29.37	60.00	28°03'02"	N 26°53'12" W	29.08
C7	27.23	60.00	26°00'21"	N 00°08'29" E	27.00
C8	38.46	60.00	36°43'47"	N 31°30'33" E	37.81
C9	40.34	60.00	38°31'33"	N 69°08'13" E	39.59
C10	8.71	60.00	8°19'19"	S 52°24'11" E	8.71
C11	40.70	60.00	38°52'08"	N 28°48'27" W	39.93
C12	29.19	60.00	27°52'23"	N 04°33'48" E	28.90
C13	26.68	60.00	25°28'28"	N 31°14'14" E	26.46
C14	25.90	60.00	24°43'46"	N 56°20'22" E	25.70
C15	24.36	60.00	23°15'32"	N 80°20'02" E	24.19
C16	23.74	60.00	22°39'55"	S 76°42'15" E	23.58
C17	25.65	60.00	24°29'39"	S 53°07'28" E	25.46
C18	25.05	60.00	23°55'14"	S 28°55'01" E	24.87
C19	27.49	60.00	26°14'48"	S 03°50'00" E	27.25
C20	40.70	60.00	38°52'08"	S 28°43'27" W	39.93
C21	16.00	60.00	15°16'39"	N 55°47'50" E	15.95

GLACIER HWY - ROW WIDTH VARIES

20' DRAINAGE EASEMENT  
REC. PLAT No. 2015-41 JRD



# LAST FRONTIER

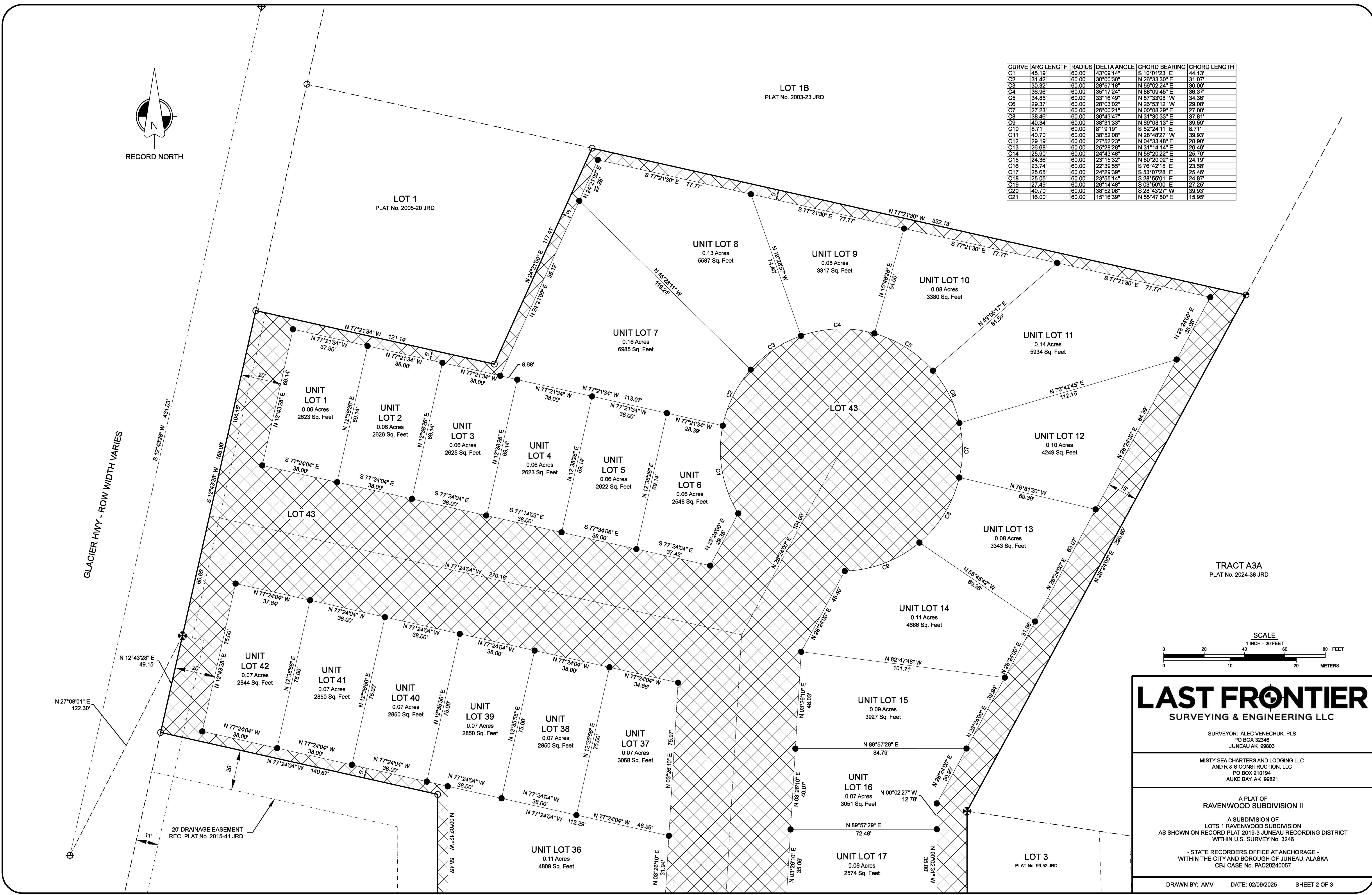
SURVEYING & ENGINEERING LLC

SURVEYOR: ALEC VENECHUK PLS  
PO BOX 32346  
JUNEAU AK 99803

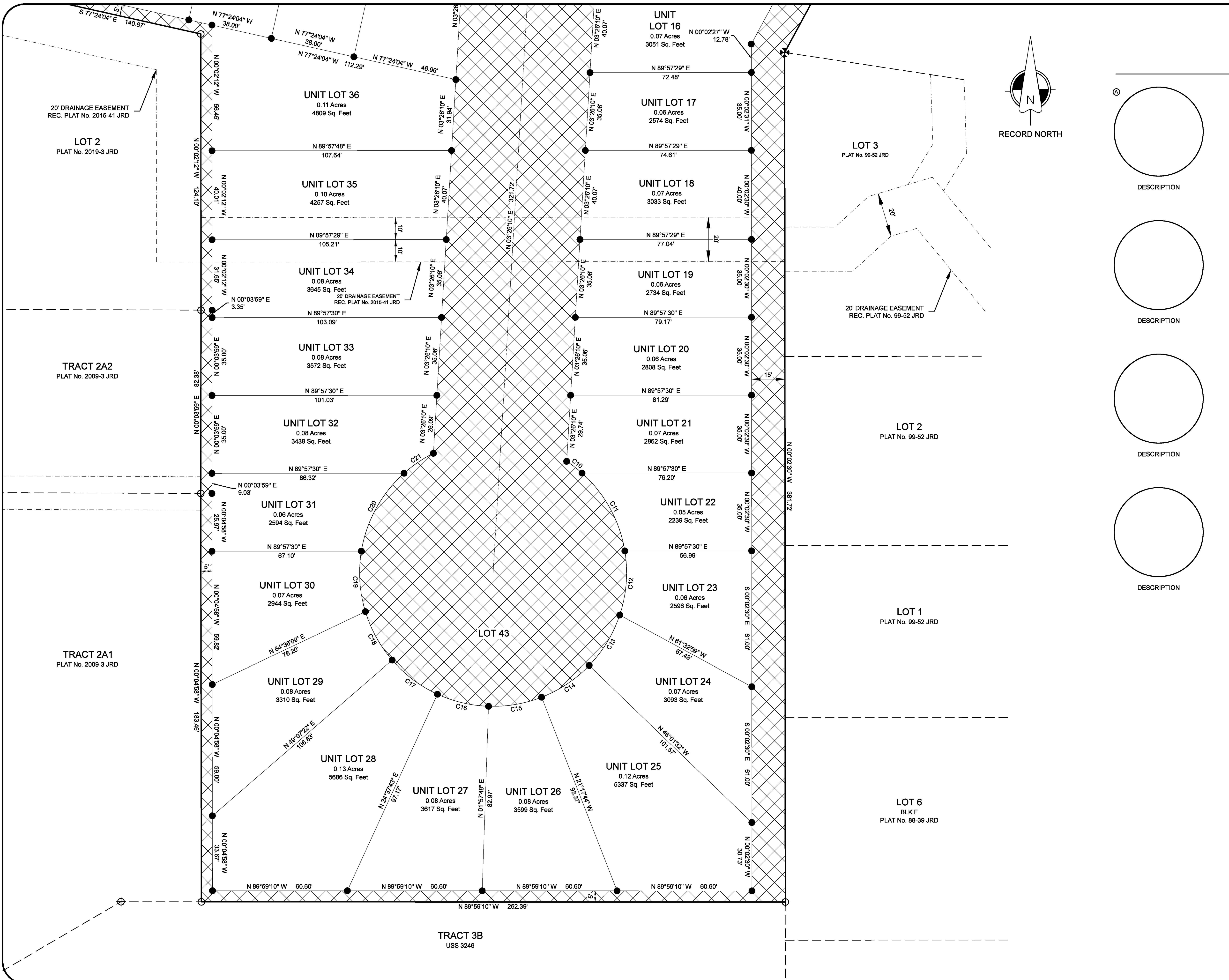
MISTY SEA CHARTERS AND LODGING LLC  
AND R & S CONSTRUCTION, LLC  
PO BOX 210194  
AUKIE BAY, AK 99821

A PLAT OF  
RAVENWOOD SUBDIVISION II  
A SUBDIVISION OF  
LOTS 1 RAVENWOOD SUBDIVISION  
AS SHOWN ON RECORD PLAT 2019-3 JUNEAU RECORDING DISTRICT  
WITHIN U.S. SURVEY No. 3246  
- STATE RECORDERS OFFICE AT ANCHORAGE -  
WITHIN THE CITY AND BOROUGH OF JUNEAU, ALASKA  
CBJ CASE No. PAC20240057

DRAWN BY: AMV DATE: 02/09/2025 SHEET 2 OF 3

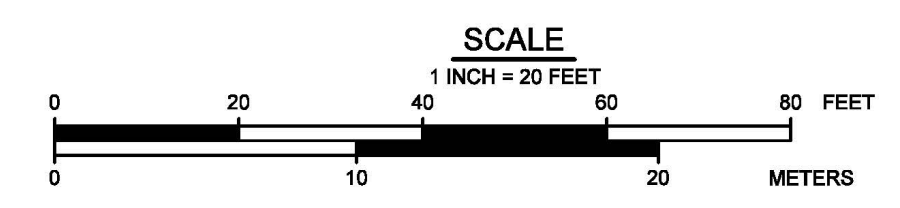






MONUMENT DETAILS

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DESCRIPTION	DESCRIPTION	DESCRIPTION



**LAST FRONTIER**  
SURVEYING & ENGINEERING LLC

SURVEYOR: ALEC VENECHUK PLS  
PO BOX 32346  
JUNEAU AK 99803

MISTY SEA CHARTERS AND LODGING LLC  
AND R & S CONSTRUCTION, LLC  
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AUKE BAY, AK 99821

A PLAT OF  
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WITHIN THE CITY AND BOROUGH OF JUNEAU, ALASKA  
CBJ CASE No. PAC20240057

DRAWN BY: AMV DATE: 02/09/2025 SHEET 3 OF 3



X:\2024\_JOBS\RAVENS\WDD\_JUNEAU\_AK\ENGINEERING\DRAWING FILES\PRELIMINARY DRAWINGS 6/17/2016 100008 AM AST 10/15/2024 11:44:03 AM

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- - - PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- ⊕ EXISTING SEWER MANHOLE
- ⊕ PROPOSED SEWER MANHOLE

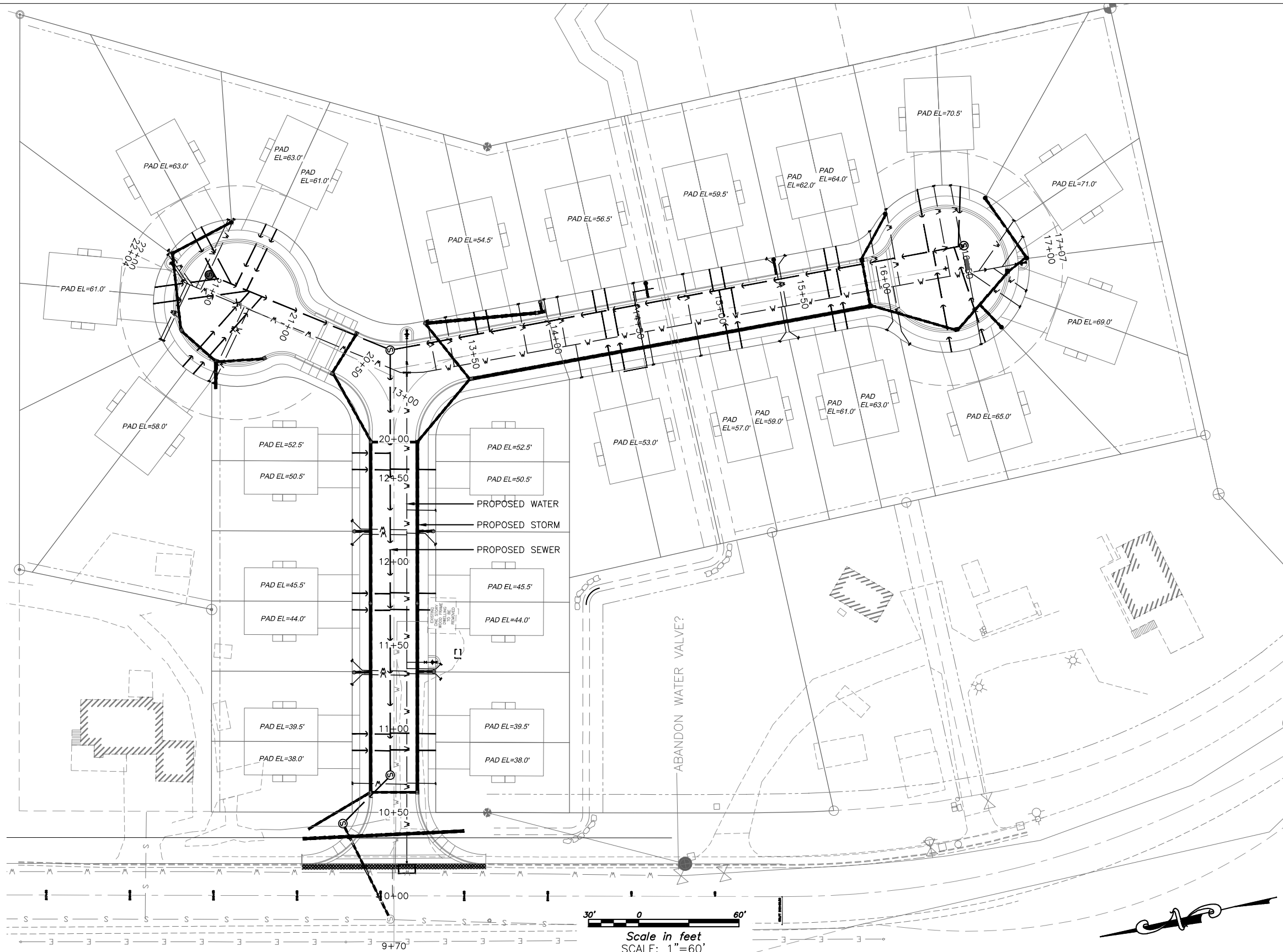
STORM QUANTITIES	
SIZE/TYPE	QUANTITY
18" CORRUGATED POLY.	484 LF
12" CORRUGATED POLY.	978 LF
TYPE III CATCH BASIN	5 EA
TYPE IV CATCH BASIN	11 EA
TYPE CBJ 310 AREA DRAIN	13 EA
STD. 305 STORM DRAIN MH	2 EA

WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	835 LF
1" TYPE "K" SERVICE LINE	1470 LF
FIRE HYDRANT	4 EA
WATER METER	42 EA
MAINLINE VALVE	7 EA

SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	855 LF
4" SDR 35 PVC SIDE SEWER	2320 LF
TYPE I MANHOLE	5 EA
DOT K-16 MANHOLE	1 EA

ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	1705 LF
5' SIDEWALK	1375 LF
ASPHALT PAVING	500 TONS*
2" MINUS BASE	750 CY
SHOT ROCK	2100 CY

\*USING 2.0 CONVERSION FACTOR (CY TO TON)



REV	DATE	BY	DESCRIPTION

SCALE	GRAPHIC
DESIGNED	
DRAWN	
CHECKED	
DATE	

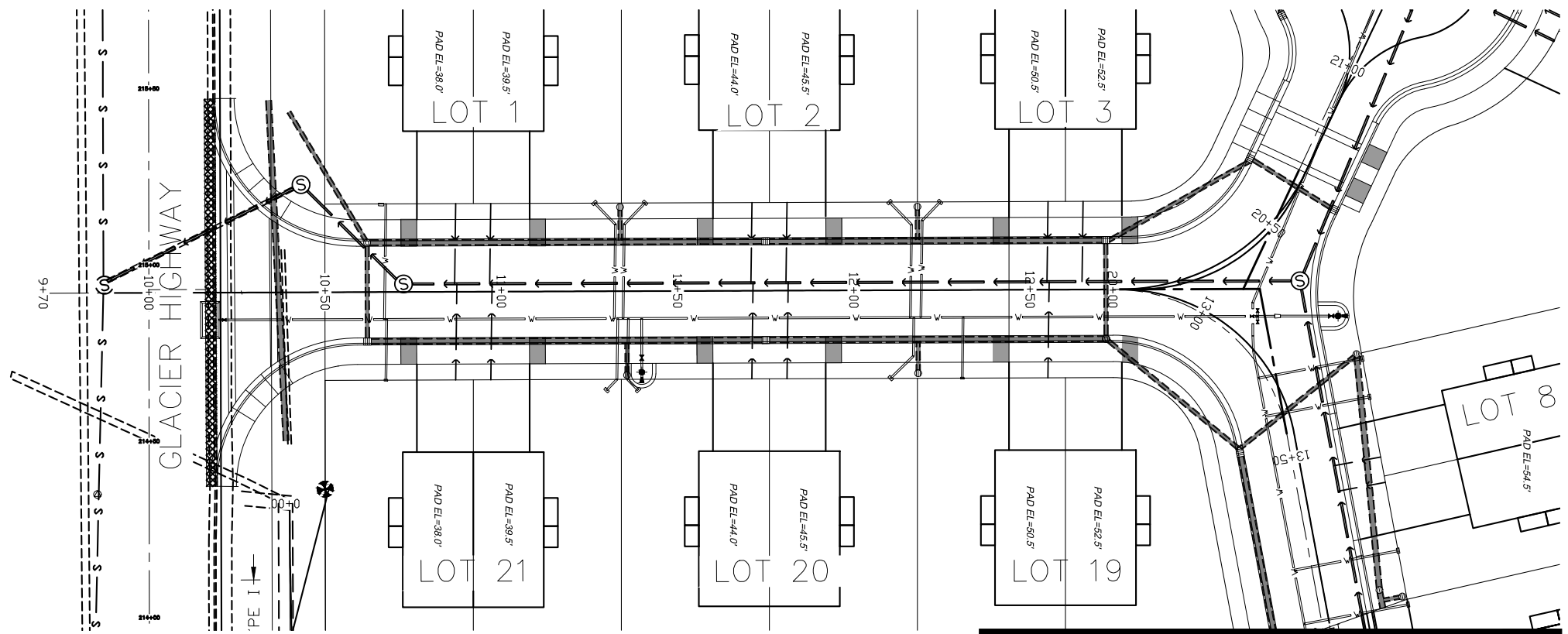
**MOORE ENGINEERING**  
 P.O. BOX 397 CRAIG, ALASKA 99921  
 (907) 530-7008  
**TRACY MOORE, P.E.**  
 REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION  
 OVERALL UTILITY PLAN  
 RAVENS WAY

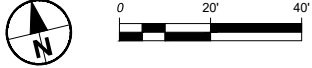
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 SHEET NO.  
 OF

**LEGEND**

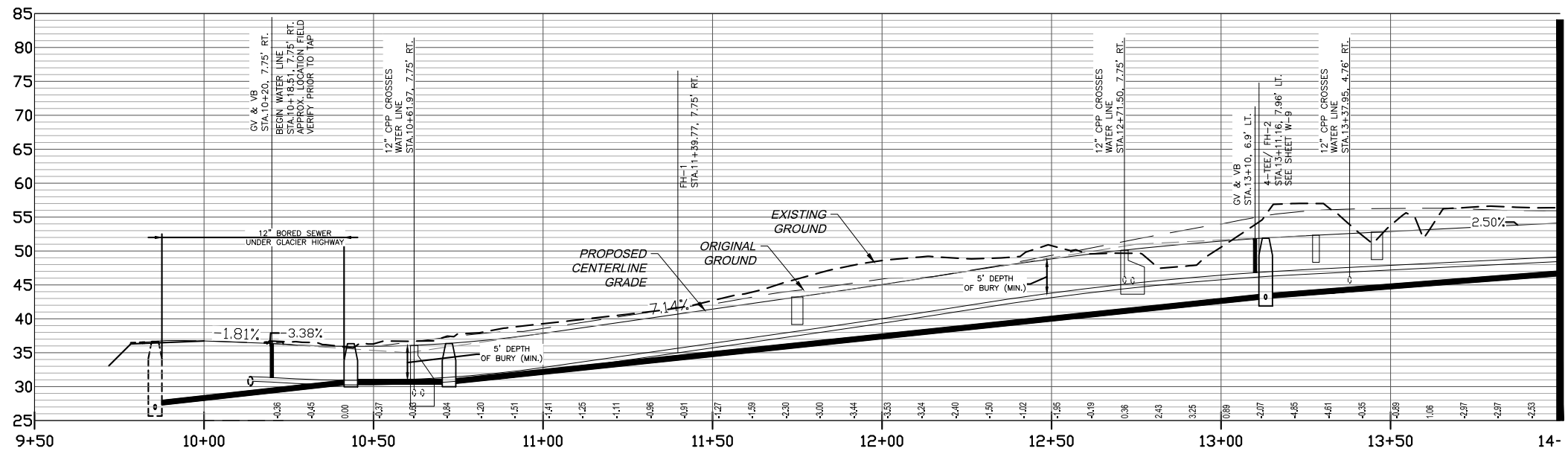
- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING ELECTRIC
- EXISTING DRIVEWAY
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- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- PROPOSED STORM DRAIN
- UD --- PROPOSED UNDERDRAIN
- PROPOSED CATCH BASIN
- PROPOSED AREA DRAIN
- PROPOSED UNDERDRAIN
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- PROPOSED 8" DI WATER LINE
- PROPOSED 1" WATER LINE SERVICE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED THRUST BLOCK
- EXISTING SEWER MANHOLE



**A UTILITY PLAN**  
SCALE: 1" = 20' ON FULL SIZE



MATCHLINE STA. 14+00  
SEE SHEET P&P 2



**B PROFILE**  
SCALE: 1" = 20' ON FULL SIZE

MATCHLINE STA. 14+00  
SEE SHEET P&P 2

X:\2024\Jobs\Ravenswood\_Juneau\_AK\Engineering\Drawing File\Preliminary Drawings\Ravenswood\_P&P\_VEL.dwg - Oct 15, 2024 - 11:21am

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CHECKED BY: ---	△			
DETAILED BY: ---	△			
DESIGNED BY: ---	△			
DATE	NO.	REVISION	BY	

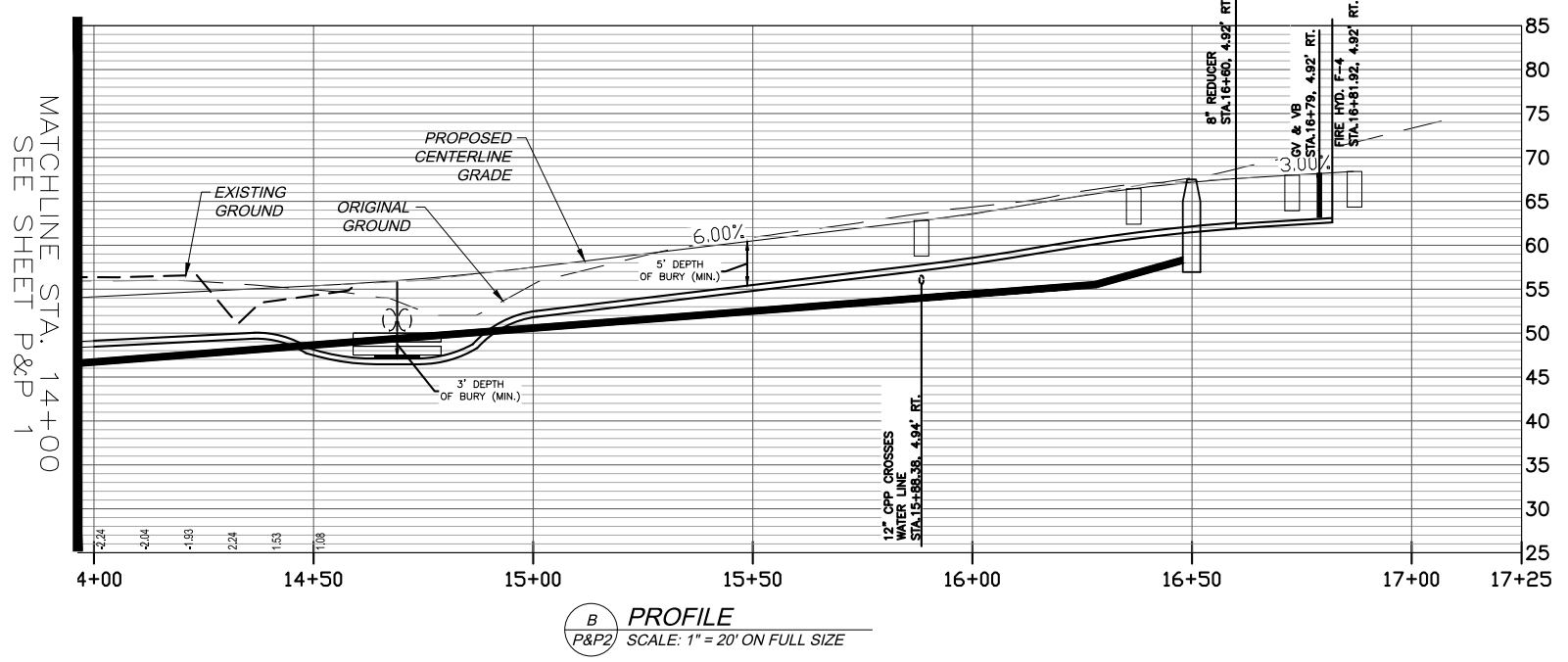
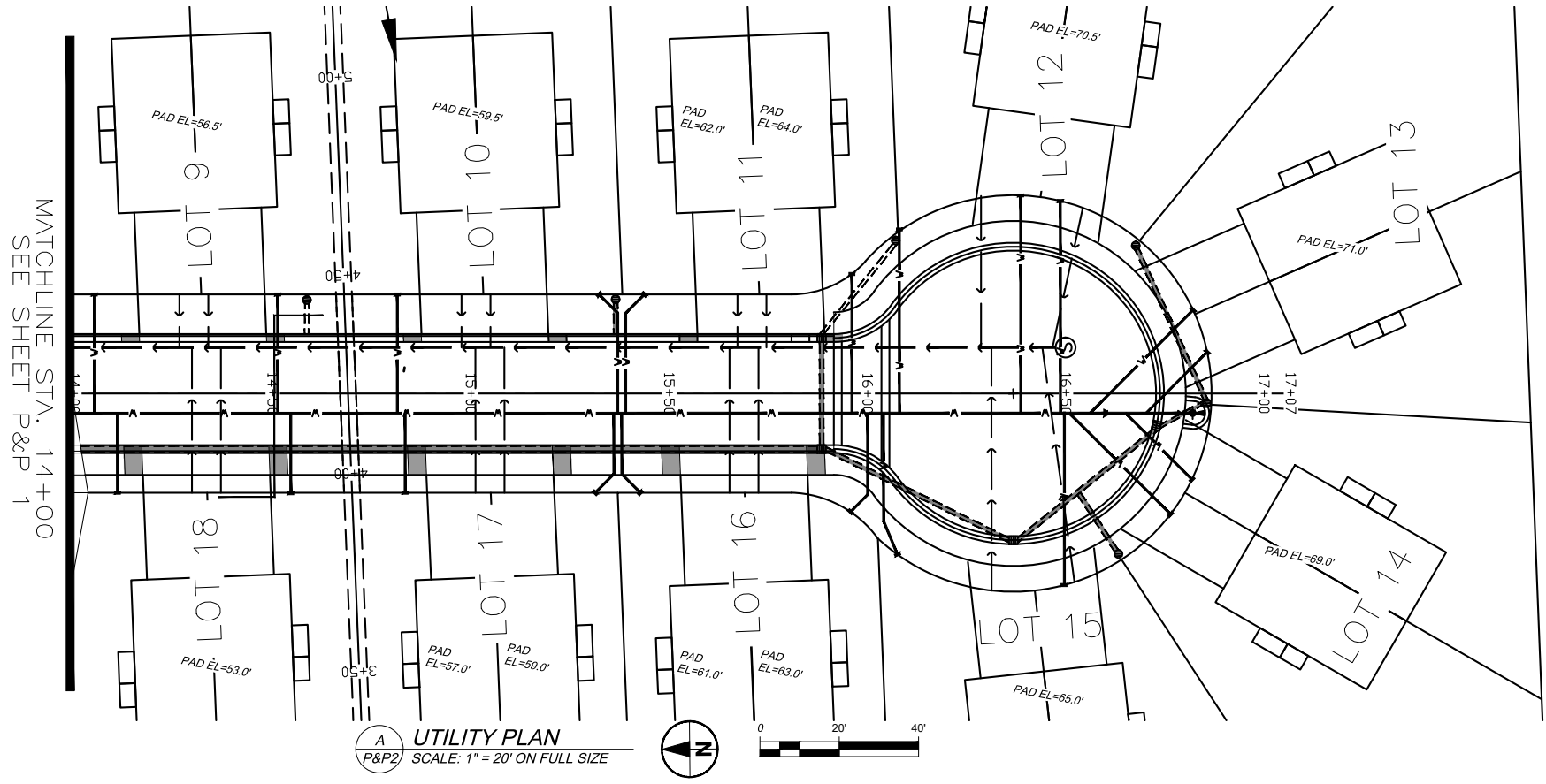
**Vector**  
ENGINEERING INC.  
2724 Black Lake Boulevard SW Suite 202  
Tumwater, WA 98512  
ph: (360) 352-2477 fax: (360) 352-0179 E-mail: admin@vectorengineeringinc.com

**RAVENSWOOD P&P**  
JUNEAU, AK

**P&P 1**  
UTILITY PLAN &  
PROFILE  
SHT 1 OF 6

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- EXISTING WATER LINE
- EXISTING SEWER LINE
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- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE
- PROPOSED 8" DI WATER LINE
- PROPOSED 1" WATER LINE SERVICE
- ⊙ PROPOSED WATER VALVE
- ⊙ PROPOSED FIRE HYDRANT
- ▲ PROPOSED THRUST BLOCK
- ⊙ EXISTING SEWER MANHOLE



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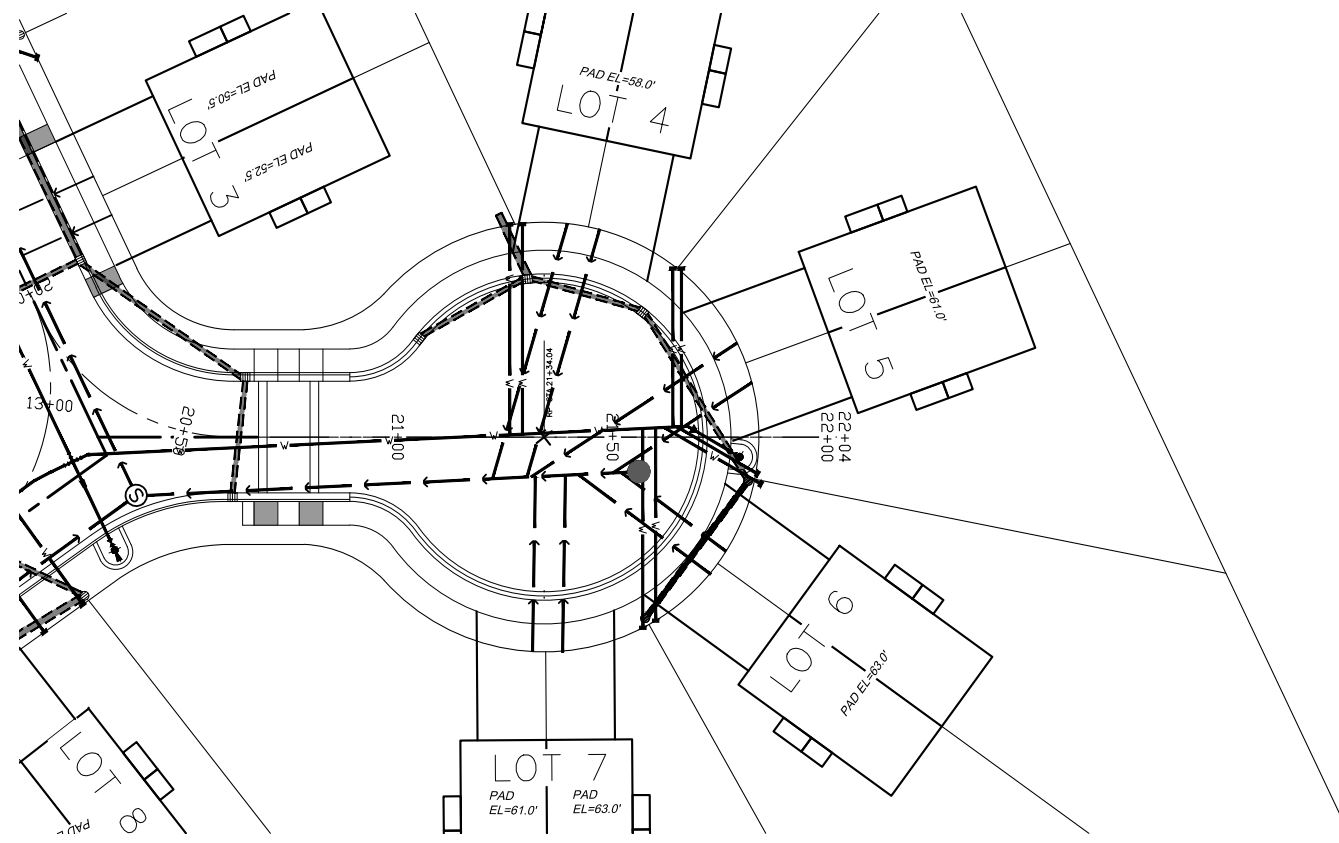
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DETAILED BY: ---		2			
DESIGNED BY: ---	DATE	NO.	REVISION	BY	

**Vector**  
ENGINEERING INC.  
2724 Black Lake Boulevard SW Suite 202  
Tumwater, WA 98512  
ph: (360) 352-2477 fax: (360) 352-0179 E-mail: admin@vectorengineeringinc.com

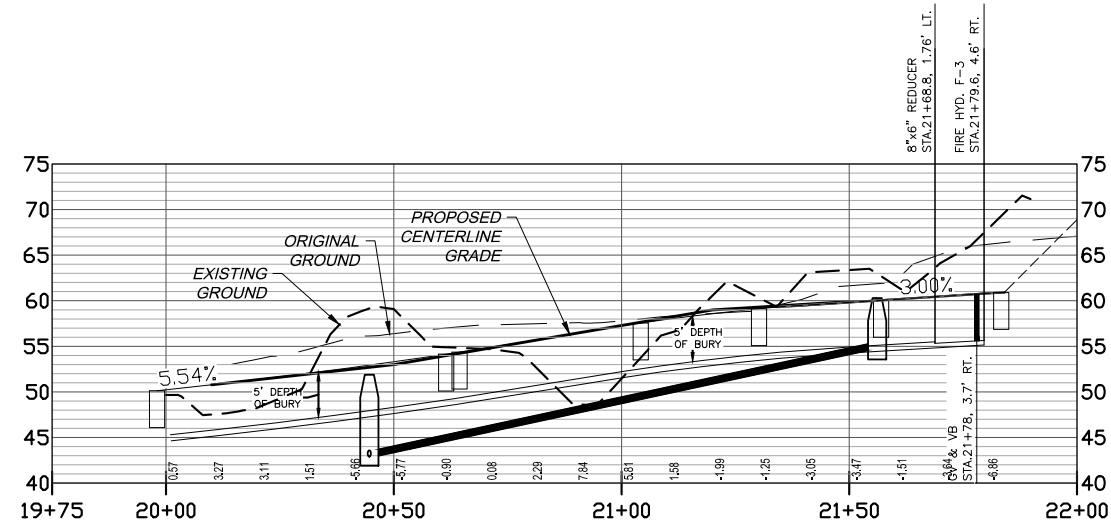
RAVENSWOOD P&P JUNEAU, AK	P&P 2
---	UTILITY PLAN & PROFILE
---	SHT 2 OF 6

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING ELECTRIC
- EXISTING DRIVEWAY
- EXISTING STORM DRAIN
- EXISTING CREEK
- EXISTING SEWER LINE
- EXISTING WATER LINE
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- PROPOSED STORM DRAIN
- PROPOSED UNDERDRAIN
- PROPOSED CATCH BASIN
- PROPOSED AREA DRAIN
- PROPOSED UNDERDRAIN
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- PROPOSED 8" DI WATER LINE
- PROPOSED 1" WATER LINE SERVICE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED THRUST BLOCK
- EXISTING SEWER MANHOLE



**A UTILITY PLAN**  
 P&P3 SCALE: 1" = 20' ON FULL SIZE



**B PROFILE**  
 P&P3 SCALE: 1" = 20' ON FULL SIZE

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DETAILED BY: ---	2			
DESIGNED BY: ---	1			
DATE	NO.	REVISION	BY	

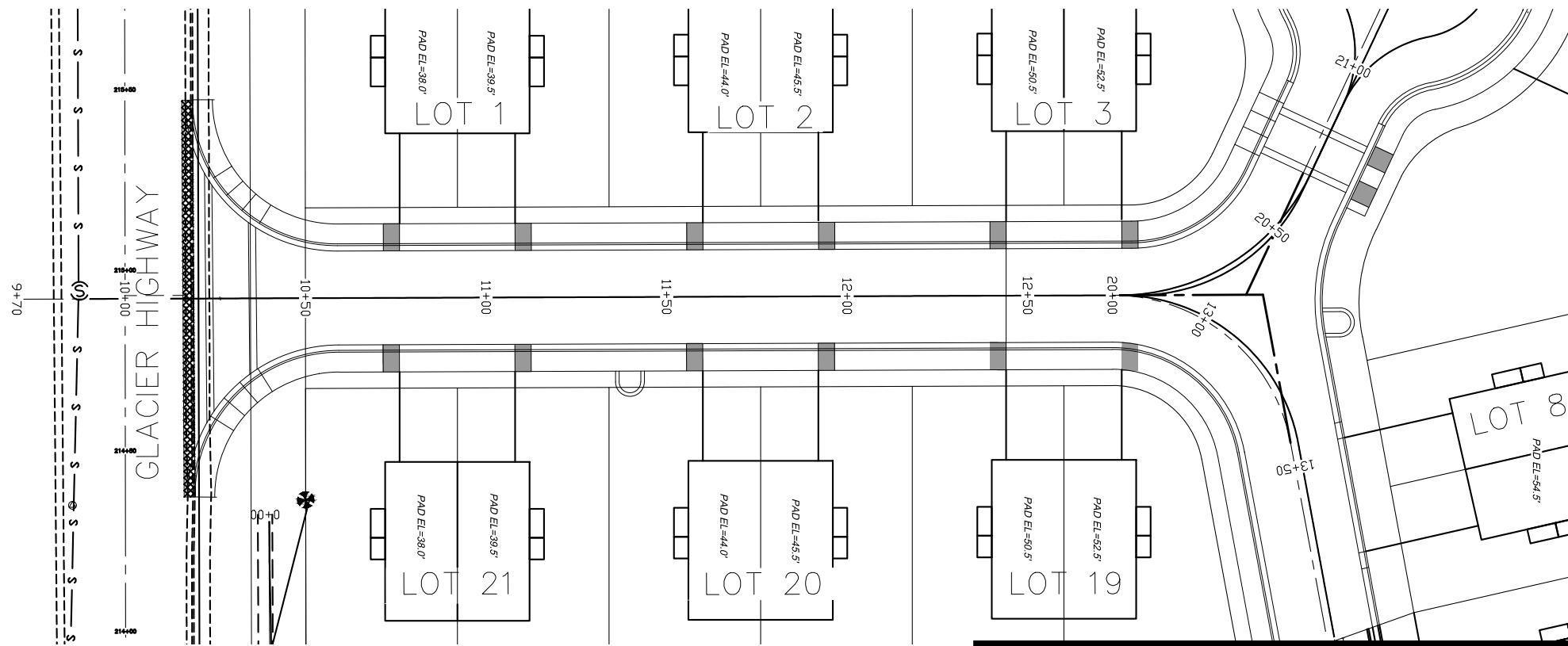
**Vector**  
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 2724 Black Lake Boulevard SW Suite 202  
 Tumwater, WA 98512  
 ph: (360) 352-2477 fax: (360) 352-0179 E-mail: admin@vectorengineeringinc.com

RAVENSWOOD P&P JUNEAU, AK	---
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**P&P 3**  
 UTILITY PLAN &  
 PROFILE  
 SHT 3 OF 6

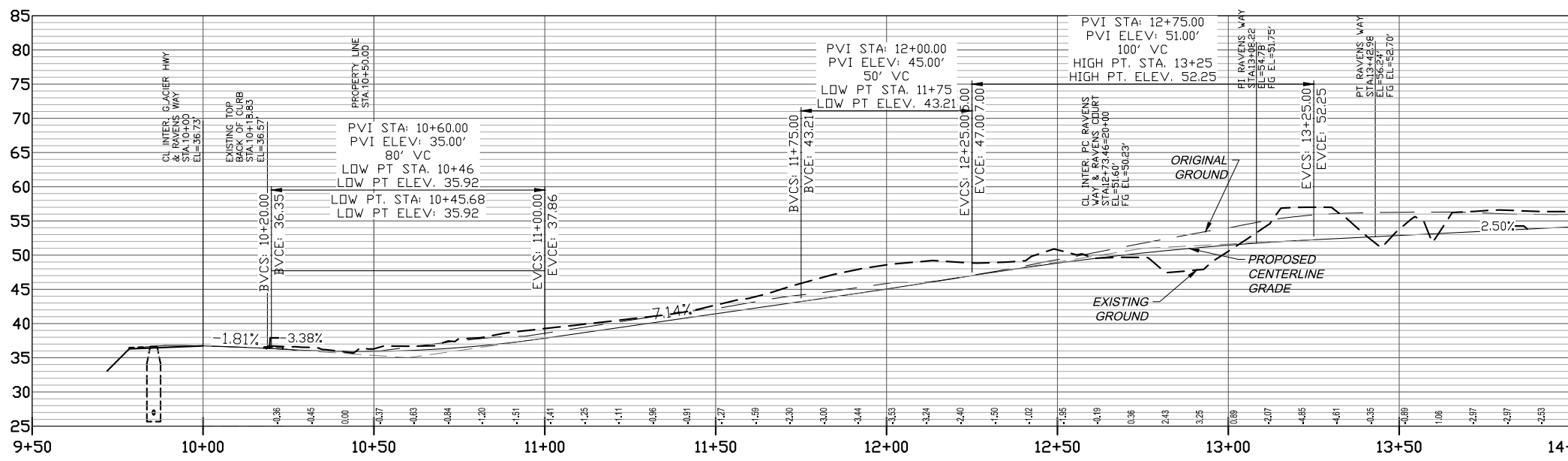
**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING ELECTRIC
- EXISTING DRIVEWAY
- EXISTING STORM DRAIN
- EXISTING CREEK
- EXISTING SEWER LINE
- EXISTING WATER LINE
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE



**A PLAN**  
 P&P4 SCALE: 1" = 20' ON FULL SIZE

MATCHLINE STA. 14+00  
 SEE SHEET P&P 5



**B PROFILE**  
 P&P4 SCALE: 1" = 20' ON FULL SIZE

MATCHLINE STA. 14+00  
 SEE SHEET P&P 5

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PROJECT: 24-RAVEN	△
CHECKED BY: ---	△
DETAILED BY: ---	△
DESIGNED BY: ---	△

DATE	NO.	REVISION	BY

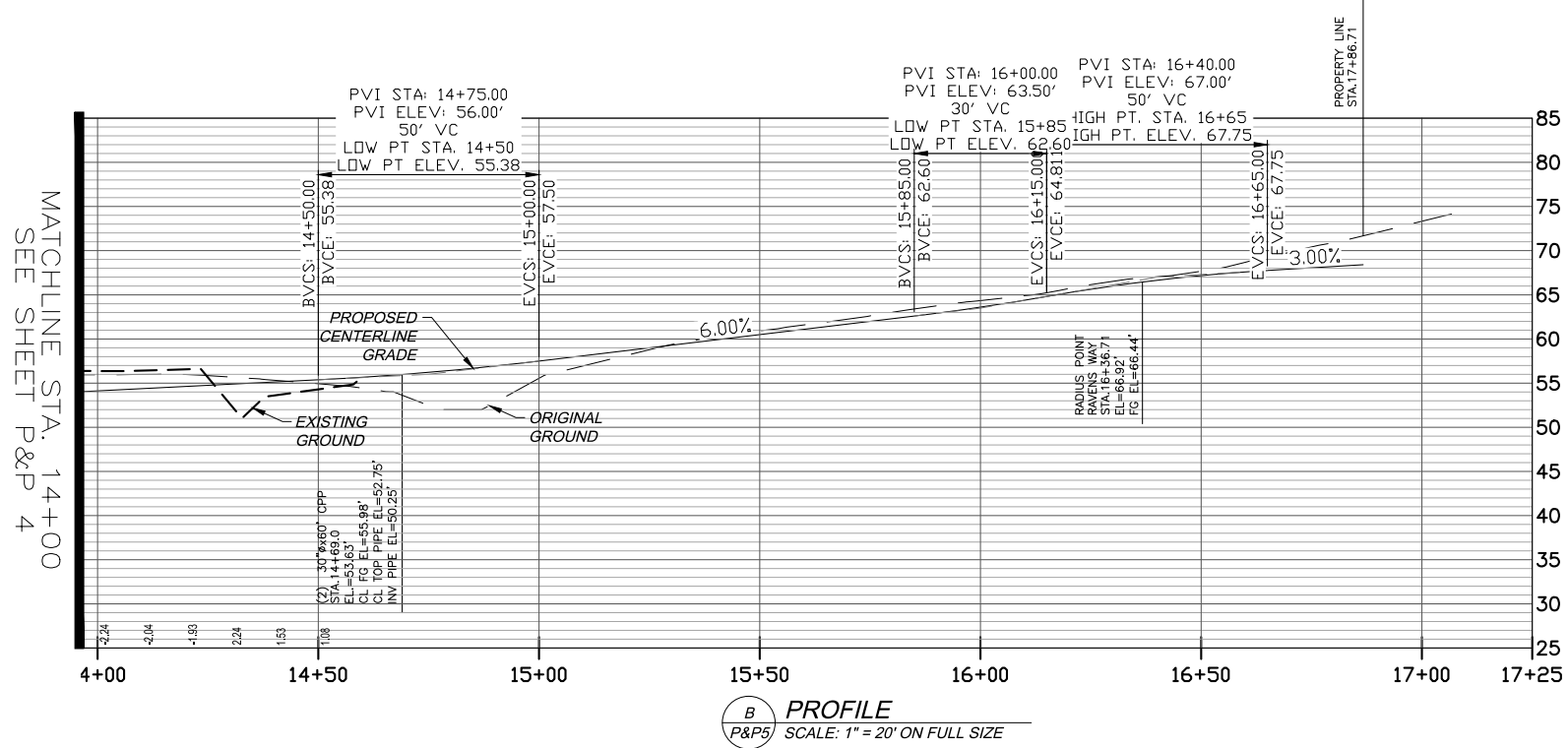
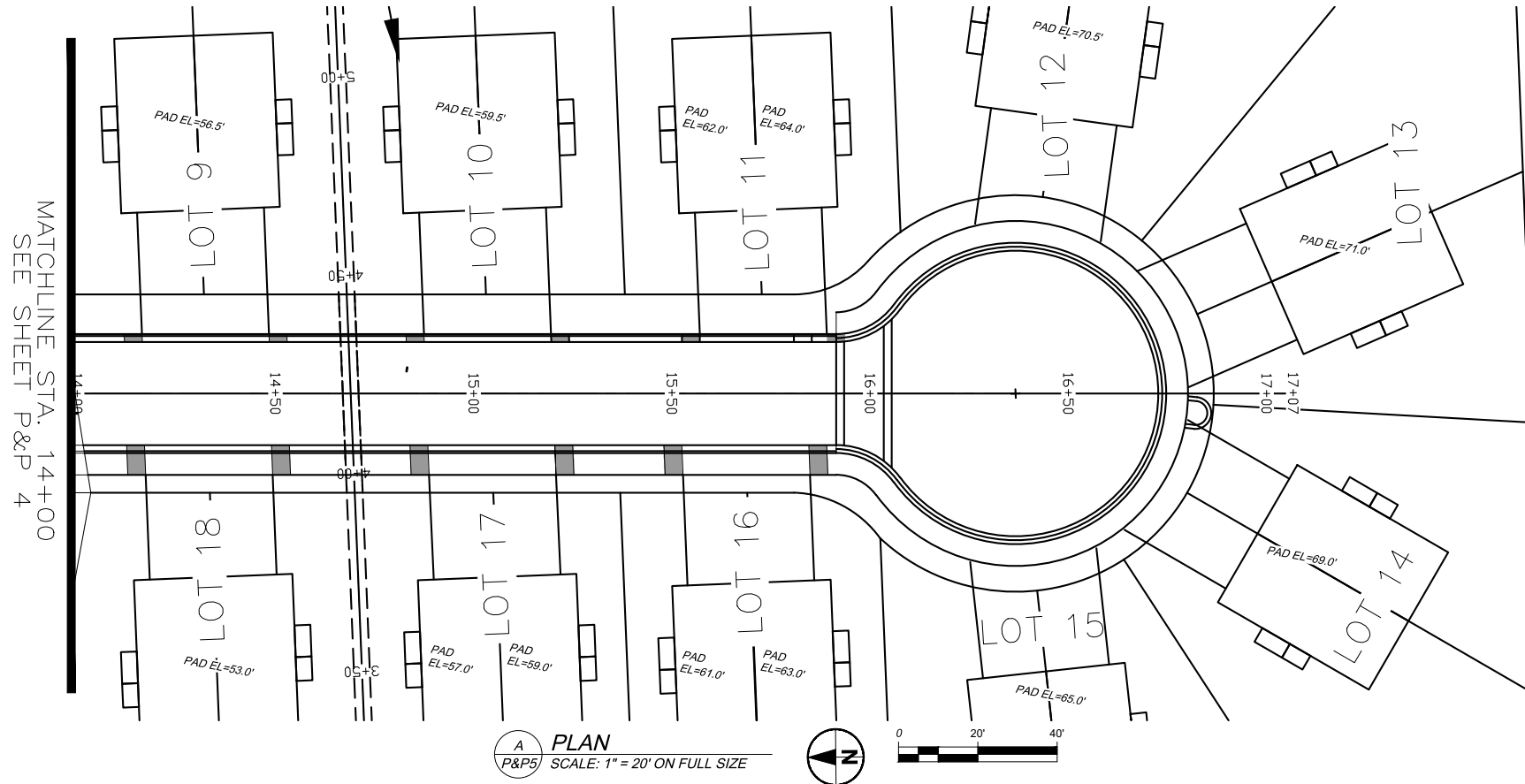
**Vector**  
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 Tumwater, WA 98512  
 ph: (360) 352-2477 fax: (360) 352-0179 E-mail: admin@vectorengineeringinc.com

RAVENSWOOD P&P JUNEAU, AK	P&P 4
---	PLAN & PROFILE
---	---
---	---
---	SHT 4 OF 6



**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING ELECTRIC
- EXISTING DRIVEWAY
- EXISTING STORM DRAIN
- EXISTING CREEK
- EXISTING SEWER LINE
- EXISTING WATER LINE
- PROPOSED VALLEY CUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- ..... PROPOSED FILL SLOPE



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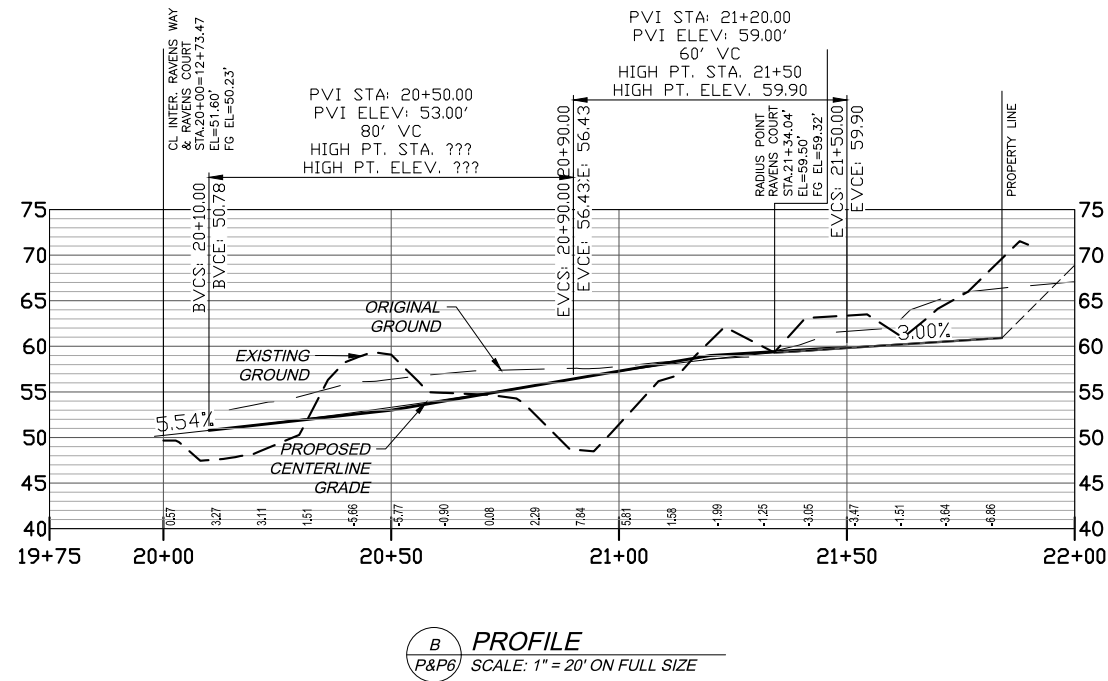
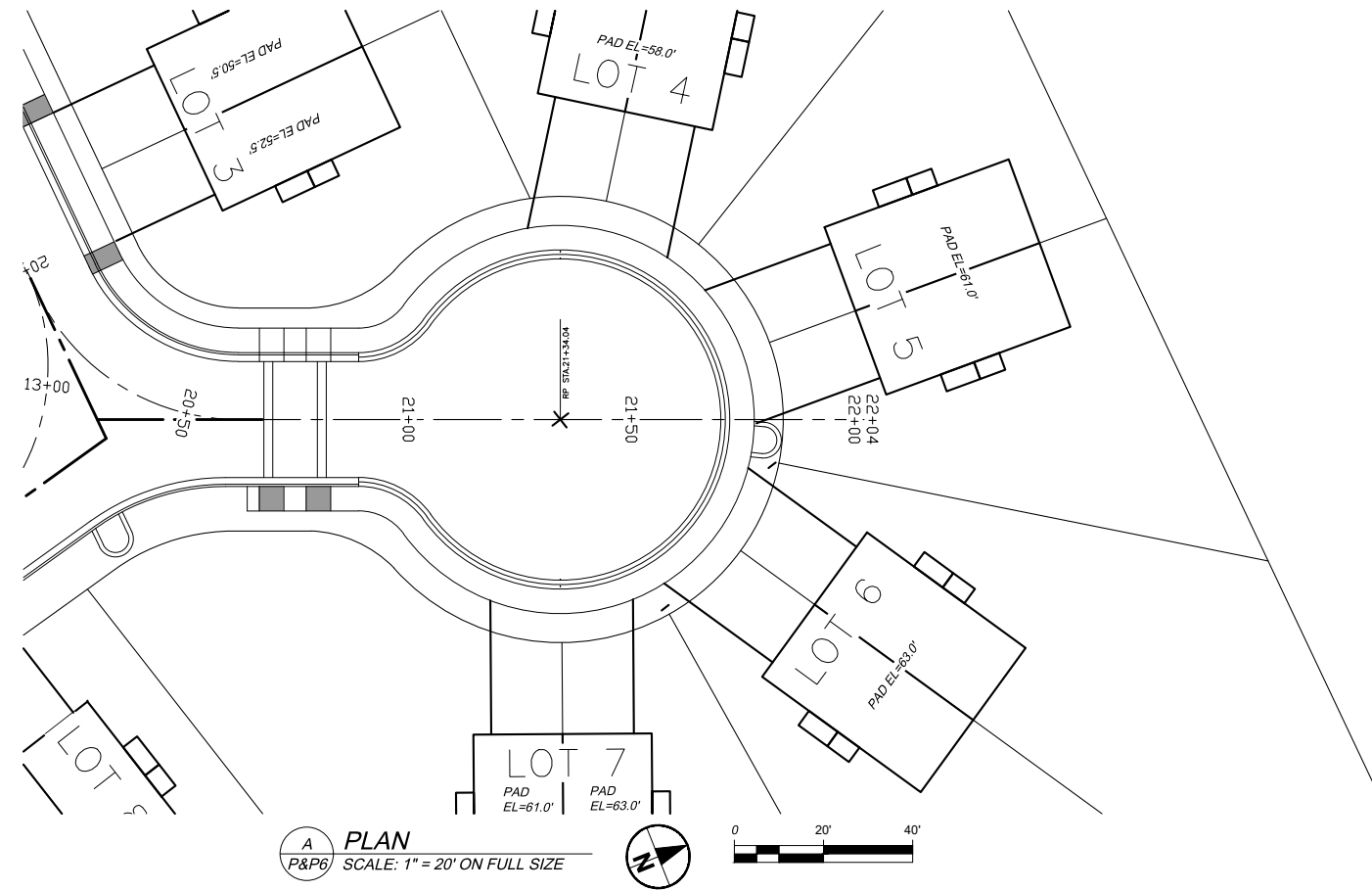
FILE: Ravenswood_P&P_VEI.dwg	5			
PROJECT: 24-RAVEN	4			
CHECKED BY: ---	3			
DETAILED BY: ---	2			
DESIGNED BY: ---	1			
DATE	NO.	REVISION	BY	

**Vector**  
ENGINEERING INC.  
2724 Black Lake Boulevard SW Suite 202  
Tumwater, WA 98512  
ph: (360) 352-2477 fax: (360) 352-0179 E-mail: admin@vectorengineeringinc.com

RAVENSWOOD P&P JUNEAU, AK	P&P 5 PLAN & PROFILE
---	---
---	---
---	---
---	SHT 5 OF 6

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING ELECTRIC
- EXISTING DRIVEWAY
- EXISTING STORM DRAIN
- EXISTING CREEK
- EXISTING SEWER LINE
- EXISTING WATER LINE
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- ..... PROPOSED FILL SLOPE



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PROJECT: 24-RAVEN	4			
CHECKED BY: ---	3			
DETAILED BY: ---	2			
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DATE	NO.	REVISION	BY	

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RAVENSWOOD P&P  
JUNEAU, AK

P&P 6

PLAN & PROFILE

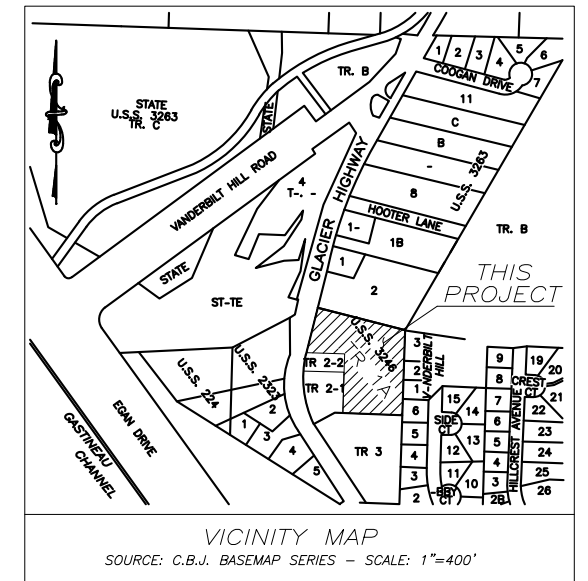
SHT 6 OF 6

# RAVENSWOOD SUBDIVISION

## PHASE I

### JUNEAU, ALASKA 99801

### JUNE, 2016



**PROJECT DATA:**

LOCATION: APPROX. 4.5 MILE OLD GLACIER HIGHWAY  
CITY & BOROUGH OF JUNEAU

ZONING: R-15  
SITE AREA: 5.59 ACRES - PHASE I & PHASE II  
NO. OF LOTS: 42 TOWNHOMES (ZERO LOT LINES)  
21 DETACHED

AVG. LOT SIZE: 8,406 S.F.  
MIN. LOT SIZE: 6,720 S.F.  
MEAN NET DENSITY: UNITS/ACRE

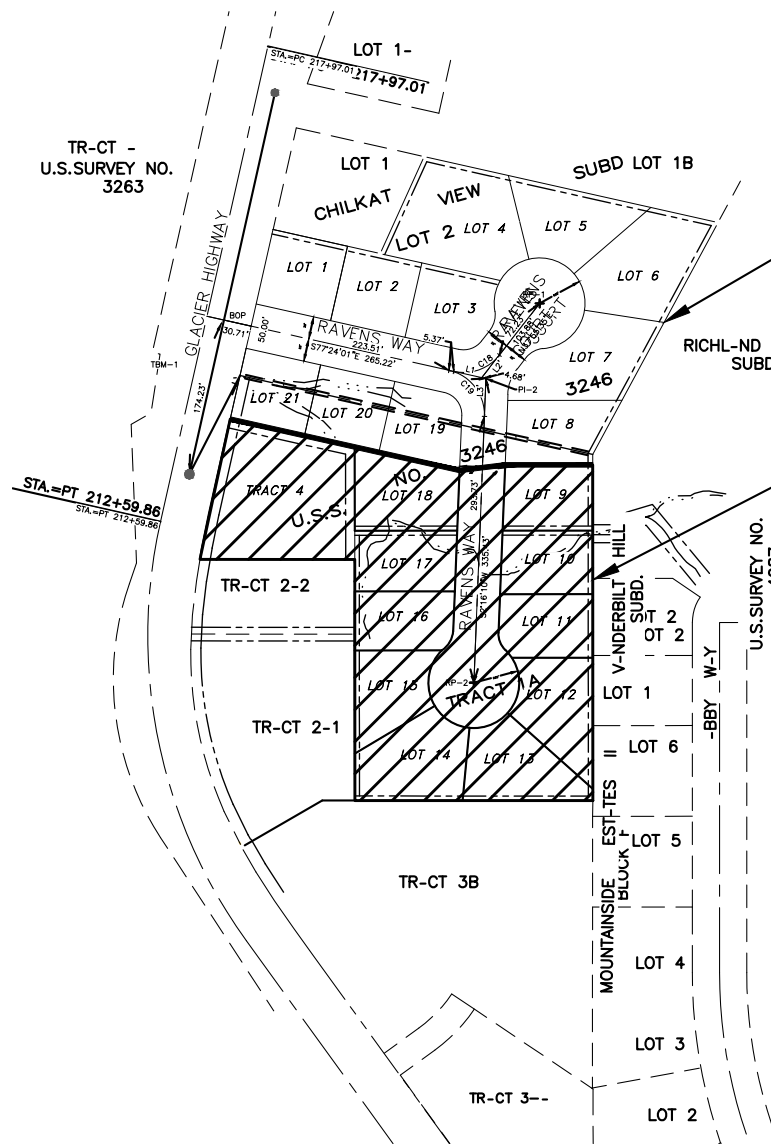
PARKING: 2 PER UNIT

DRAINAGE: CONTROLLED STORM DRAIN

SEWER: PUBLIC-CITY & BOROUGH OF JUNEAU  
WATER: PUBLIC-CITY & BOROUGH OF JUNEAU

ELECTRIC: AEL&P

ACCESS PERMIT: STATE OF ALASKA ADOT/PF  
# \_\_\_\_\_



PHASE I  
(2016-2017)  
(13 LOTS)

PHASE II  
(2024-2025) TENTATIVE  
(8 LOTS)

**NOTES**

**CONSTRUCTION INSPECTION**

1. CITY & BOROUGH JUNEAU AND/OR CONTRACT
2. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CBJ STANDARD DETAILS AND CBJ STANDARD SPECIFICATIONS FOR ENGINEERING AND SUBDIVISION IMPROVEMENTS

FOR:  
CITY & BOROUGH OF JUNEAU

DEVELOPER:  
LOWPETE CONSTRUCTION, INC.  
PO Box 34939  
JUNEAU, ALASKA 99803  
(907) 789-5025  
ATTN: RICH PETERSON

BID PLAN SET DATED: MAY, 2016

SHEET

G1

SHEET NO.

1 OF 64



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## SHEET INDEX

SHEET NO.	SHEET NO.	DESCRIPTION
G1	G1 OF X	COVER SHEET
G2	G2 OF X	LEGEND, ABBREVIATION, AND GENERAL NOTES
<del>G1</del>	<del>G1 OF X</del>	<del>ROADWAY TYPICAL SECTIONS</del>
T1	T1 OF X	TRAFFIC CONTROL PLAN
B1	B1 OF X	SURVEY CONTROL SHEET
EC1	EC1 OF X	STORM WATER SEDIMENT CONTROL PLAN
EC2	EC2 OF X	STORM WATER SEDIMENT CONTROL PLAN DETAILS
SR1	SL1 OF X	STREAM LOCATION PLAN
SR2	D2 OF X	STREAM LOCATION PROFILE
P1	P1 OF X	ROADWAY PLAN STA. 10+00 TO 12+00
P2	P2 OF X	ROADWAY PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
P2A	P2A OF X	INTERSECTION GRADE CONTROL
P3	P3 OF X	ROADWAY PLAN STA. 20+00 TO 21+82.87
P4	P4 OF X	ROADWAY PROFILE STA. 10+00 TO 12+00
P5	P5 OF X	ROADWAY PROFILE STA. 12+00 TO 14+00
P6	P6 OF X	ROADWAY PROFILE STA. 20+00 TO 20+85
P7	P7 OF X	ROADWAY PROFILE STA. 20+85 TO 21+82.87
P8	P8 OF X	ROADWAY PLAN STA. 14+00 TO 17+00
P9	P9 OF X	ROADWAY PROFILE STA. 14+00 TO 17+00
U1	U1 OF X	ROADWAY AND UTILITIES PLAN STA. 10+00 TO 12+00
U2	U2 OF X	ROADWAY AND UTILITIES PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
U3	U3 OF X	ROADWAY AND UTILITIES PLAN STA. 14+00 TO 17+00
U4	U4 OF X	ROADWAY AND UTILITIES PROFILE STA. 10+00 TO 12+00
U5	U5 OF X	ROADWAY AND UTILITIES PROFILE STA. 12+00 TO 14+00
U6	U6 OF X	ROADWAY AND UTILITIES PROFILE STA. 20+00 TO 20+85
U7	U7 OF X	ROADWAY AND UTILITIES PROFILE STA. 20+85 TO 21+82.87
U8	U8 OF X	ROADWAY AND UTILITIES PLAN STA. 14+00 TO 17+00
U9	U9 OF X	ROADWAY AND UTILITIES PROFILE STA. 14+00 TO 17+00
SD1	SD1 OF X	STORM DRAIN PLAN STA. 10+00 TO 12+00
SD2	SD2 OF X	STORM DRAIN PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
SD3	SD3 OF X	STORM DRAIN PLAN STA. 120+85 TO 21+82.87
SD4	SD4 OF X	STORM DRAIN PROFILE STA. 10+00 TO 12+00
SD5	SD5 OF X	STORM DRAIN PROFILE STA. 12+00 TO 14+00
SD6	SD6 OF X	STORM DRAIN PROFILE STA. 20+00 TO 20+85
SD7	SD7 OF X	STORM DRAIN PROFILE STA. 20+85 TO 21+82.87
SD8	SD8 OF X	STORM DRAIN PLAN STA. 14+00 TO 17+00
SD9	SD9 OF X	STORM DRAIN PROFILE STA. 14+00 TO 17+00
W1	W1 OF X	WATERLINE PLAN STA. 10+00 TO 12+00
W2	W2 OF X	WATERLINE PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
W3	W3 OF X	WATERLINE PLAN STA. 20+85 TO 21+82.87
W4	W4 OF X	WATERLINE PROFILE STA. 10+00 TO 12+00
W5	W5 OF X	WATERLINE PROFILE STA. 12+00 TO 14+00
W6	W6 OF X	WATERLINE PROFILE STA. 20+00 TO 20+82.87
W7	W7 OF X	WATERLINE PROFILE STA. 20+85 TO 21+82.87
W8	W8 OF X	WATERLINE PLAN STA. 14+00 TO 17+00
W9	W9 OF X	WATERLINE PROFILE STA. 14+00 TO 17+00
W10	W10 OF X	WATERLINE DETAILS
WS1	WS1 OF X	WATER & SEWER SERVICES
SS1	SS1 OF X	SANITARY SEWER PLAN STA. 10+00 TO 12+00
SS2	SS2 OF X	SANITARY SEWER PLAN STA. 12+00 TO 14+00, STA. 20+00 TO 20+85
SS3	SS3 OF X	SANITARY SEWER PLAN STA. 20+85 TO 21+82.87
SS4	SS4 OF X	SANITARY SEWER PROFILE STA. 10+00 TO 12+00
SS5	SS5 OF X	SANITARY SEWER PROFILE STA. 12+00 TO 14+00
SS6	SS6 OF X	SANITARY SEWER PROFILE STA. 20+00 TO 20+85
SS7	SS7 OF X	SANITARY SEWER PROFILE STA. 20+85 TO 21+82.87
SS8	SS8 OF X	SANITARY SEWER PLAN STA. 14+00 TO 17+00
SS9	SS9 OF X	SANITARY SEWER PROFILE STA. 14+00 TO 17+00
DT2	DT2 OF X	STREAM CHANNEL RELOCATION DETAILS
DT3	DT3 OF X	PROPERTY LINE SLOPES & TRENCH DETAIL
DT4	DT4 OF X	CBJ STANDARD DETAILS
DT5	DT5 OF X	CBJ STANDARD DETAILS
DT6	DT6 OF X	CBJ STANDARD DETAILS
<del>W11</del>	<del>DT11 OF X</del>	<del>DETAILS</del>
<del>W12</del>	<del>DT12 OF X</del>	<del>DETAILS</del>
<del>L1</del>	<del>L1 OF X</del>	<del>ELECTRIAL PLANS</del>
<del>L2</del>	<del>L2 OF X</del>	<del>ELECTRIAL PLANS</del>

### ABBREVIATIONS

CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CO	CLEANOUT
CONC	CONCRETE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIA	DIAMETER
EOP	END OF PROJECT
FG	FINISHED GRADE
FH	FIRE HYDRANT
GV	GRATE VALVE
INV	INVERT
LG	LIP OF GUTTER
LT	LEFT
MH	MANHOLE
MTE	MATCH TO EXISTING
NO	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
POC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PVC	POLYVINYL CHLORIDE PIPE
RT	RIGHT
STA	STATION
STD	STANDARD
TBC	TOP BACK OF CURB
TBVC	TOP BACK OF VALLEY GUTTER
TP	TOP OF PAVEMENT
UD	UNDERDRAIN
VG	VALLEY GUTTER

ABBREVIATIONS TO USED WITHOUT PERIODS

#### PROJECT TEAM

ENGINEER: Moore Engineering, INC. PO Box 397 Craig, AK 99921 907 530-7008 Ph POC: Tracy Moore, P.E.	SURVEYOR JW Bean, INC. Professional Surveyor 1070 Arctic Circle Juneau, AK 9980 907 723-3610 Cell POC: JW Bean
--	--

OWNER:  
Lowpete Constriction, INC.  
PO Box 34939  
Juneau, AK. 99803  
(907) 789-5025

### LEGEND:

DESCRIPTION	EXISTING	REMOVE	PROPOSED
SURVEYED	—————		—————
UNSURVEYED	- - - - -		- - - - -
CENTERLINE	—————		—————
EASEMENT	- - - - -		- - - - -
CUT SLOPE	—————		—————
FILL SLOPE	—————		—————
WATER LINE	— w — w — w —		—   —   —   —
SEWER LINE	— s — s — s —		— ← — ← — ← —
STORM DRAIN	- - - - -		- - - - -
FENCE	— x — x — x —		—————
TELEPHONE			—————
CABLE			—————
CURB INLET			—————
WATER VALVE	⊗		⊗
POWER POLE	⊙		⊙
FIRE HYDRANT	⊙		⊙
SANITARY MANHOLE	⊙		⊙
CLEANOUT	∞		∞
CATCH BASIN	▢		▢
AREA DRAIN	⊙		⊙
UNDER DRAIN	⊙		⊙
SIGN	⊥		⊥

### NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY AND BOROUGH OF JUNEAU STANDARDS AND THE MOST CURRENT COPY OF THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION (AKDOT/PF).
- ALL SAFETY STANDARDS AND REQUIREMENTS SHALL BE AS SET FORTH BY OSHA, AKDOT/PF AND ALASKA STATE DEPARTMENT OF LABOR.
- TEMPORARY EROSION/WATER POLLUTION MEASURES SHALL BE REQUIRED IN ACCORDANCE WITH CURRENT SPECIFICATIONS.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT (907) 586-1333. A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

SCALE	GRAPHIC
DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

## MOORE ENGINEERING

P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008

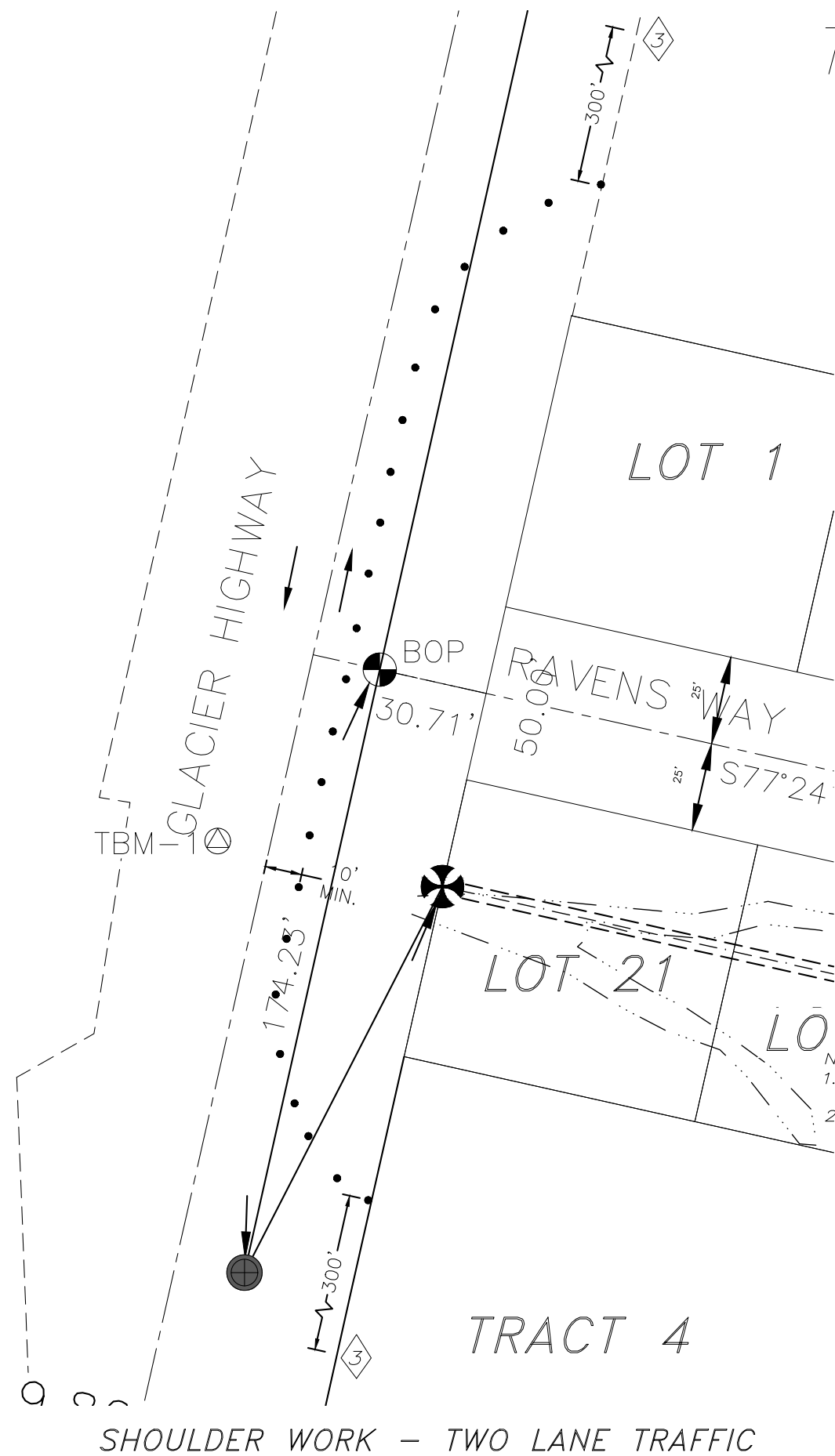
*TRACY MOORE, P.E.*  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
G2  
SHEET NO.  
2 OF 64

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# TRAFFIC CONTROL PLAN



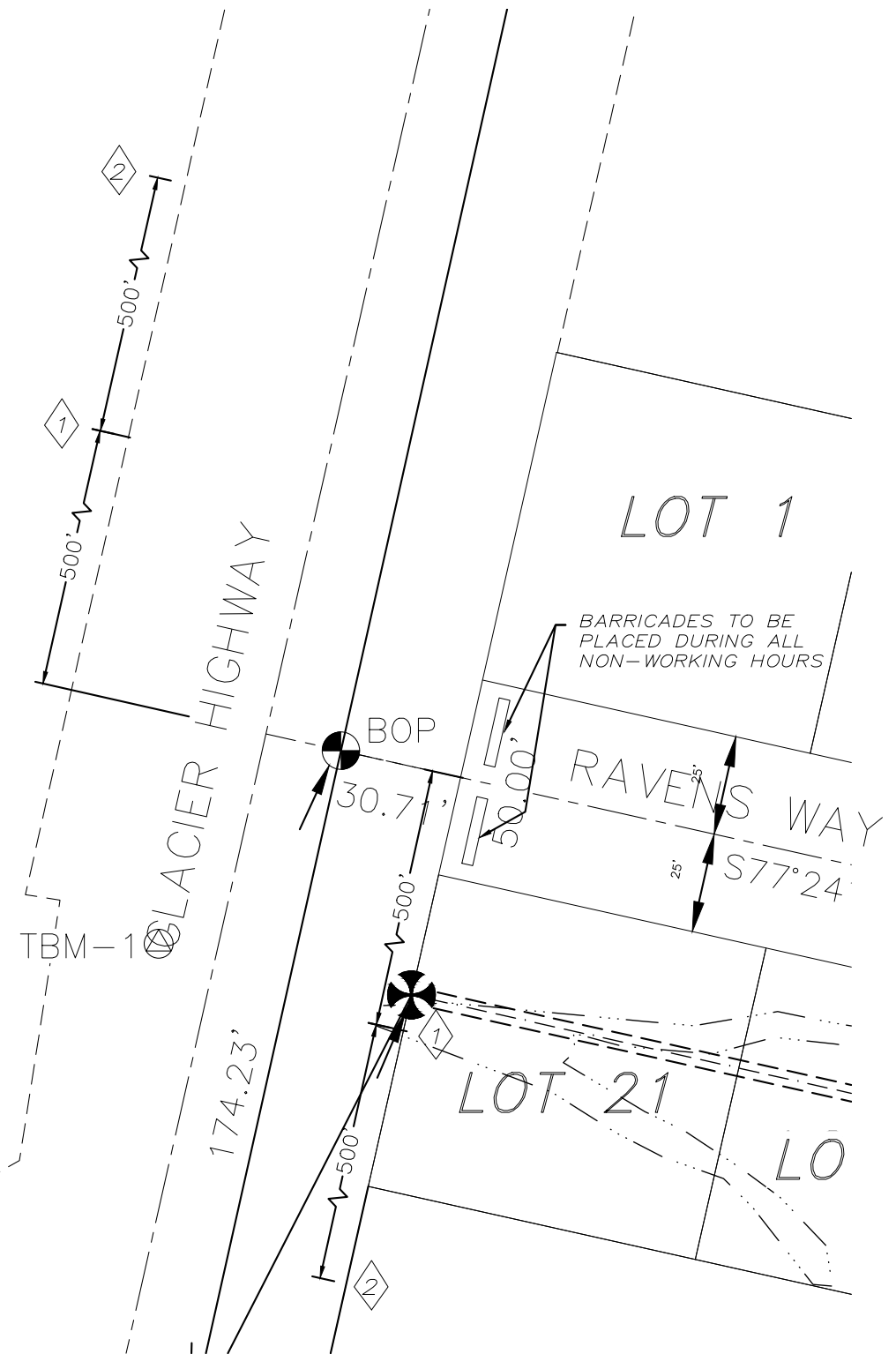
SHOULDER WORK - TWO LANE TRAFFIC

## TRACT 4

- NOTES:
1. CONE OFF SHOULDER AND REDUCE LANE TO 10' WHILE WORKING ON SHOULDER.
  2. WORK LIMITS 5am TO 3pm (MONDAY THRU FRIDAY)

### LEGEND

- ① ROAD CONSTRUCTION AHEAD
- ② TRUCK TURNING AHEAD
- ③ ROADWAY NARROWS MEN & EQUIPMENT ON SHOULDER



TRAFFIC CONTROL PLAN

SHEET
T1
SHEET NO.
4 OF 64

# SURVEY CONTROL SHEET

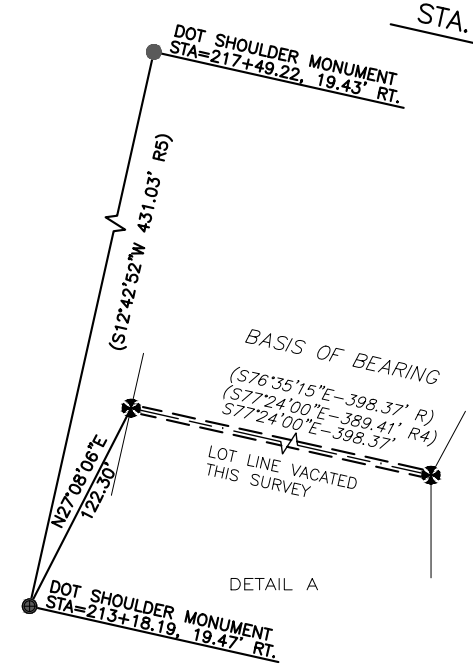
- LEGEND**
- ⊗ B.L.M. 2-1/2" BRASS MONUMENT RECOVERED THIS SURVEY
  - ⊕ PRIMARY DOT SHOULDER MONUMENT IN CASING RECOVERED THIS SURVEY
  - ⊙ 2" BRASS CAP, NO MARKINGS
  - ⊖ PRIMARY MONUMENT RE-SET THIS SURVEY
  - ⊗ 3" ALUMINUM MONUMENT, JW BEAN
  - ⊙ SURVEY NAIL SET THIS SURVEY
  - ⊗ PK NAIL W/ STAINLESS STEEL WASHER, J.W. BEAN
  - SURVEYED
  - - - UNSURVEYED
  - CENTERLINE
  - SURVEY TIE
  - - - EASEMENT
  - ≡≡≡ BASIS OF BEARING LINE AND VACATED LOT LINE THIS SURVEY LINE

(R) = AS PER PLAT NO. 2009-3  
 (R4) = AS PER PLAT NO. 2005-20

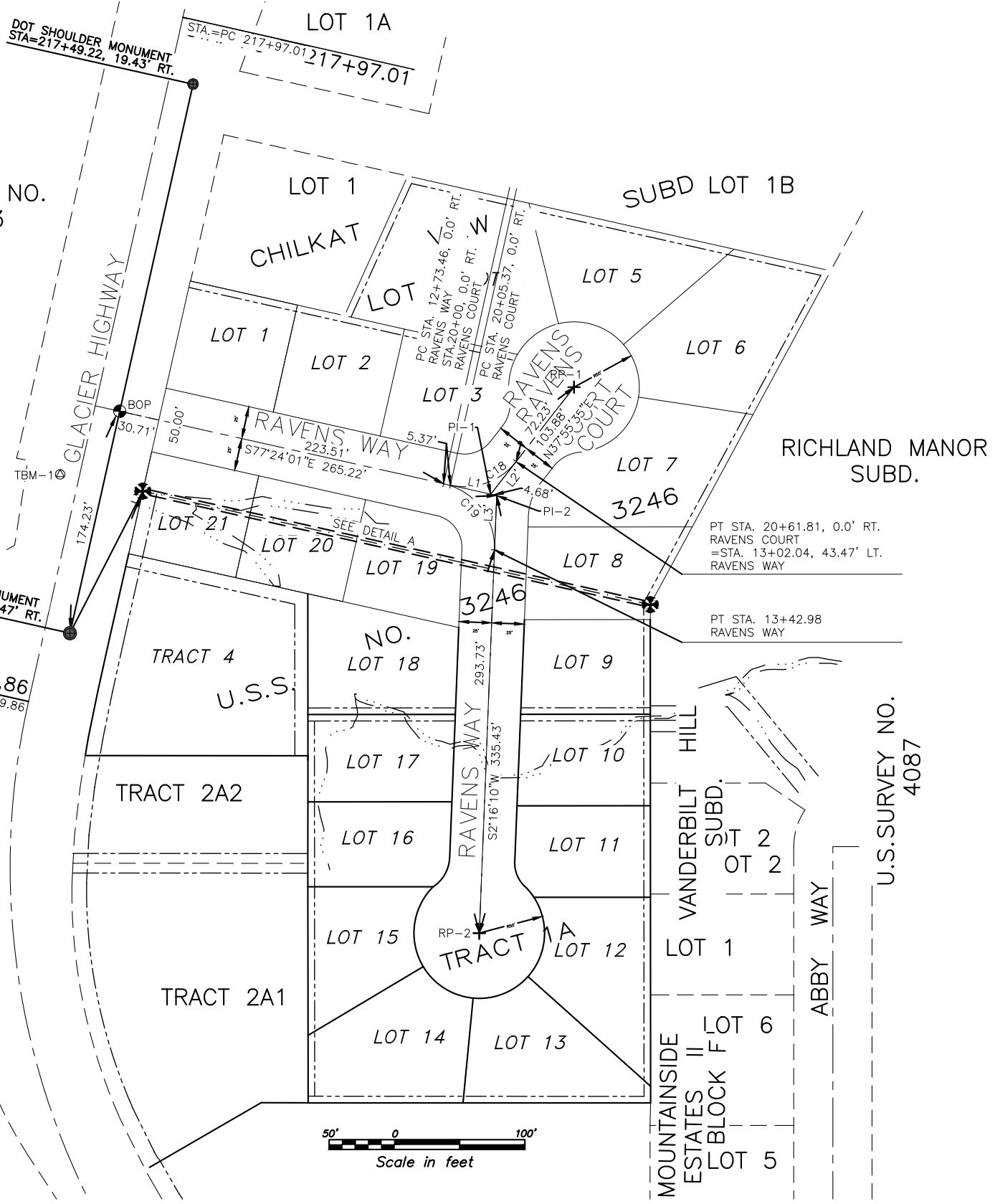
**BASIS OF BEARING**  
 BASIS OF BEARING FOR THIS PLAT IS THE RECORD BEARING OF S76°35'15"E FROM A FOUND BLM MONUMENT BEING CORNER 2 OF U.S.S. 3263 TO A FOUND BLM MONUMENT BEING CORNER 3 OF U.S.S. 3263 AS SHOWN ON RECORD PLAT NO. 2009-3.

CURVE TABLE				
CURVE #	DELTA	RADIUS	ARC LENGTH	CHORD BEARING & DISTANCE
C18	64°40'24"	50.00'	56.44'	N70°15'47"E 53.49'
C19	79°40'11"	50.00'	69.52'	S37°33'56"E 64.06'

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S77°24'01"E	36.34'
L2	N37°55'35"E	31.65'
L3	S2°16'10"W	41.71'



TRACT A  
 U.S.SURVEY NO.  
 3263



STA=217+49.22, 19.43' RT.
GLACIER HWY MON.
STA. 10+19.39, 256.79 LT.
N=6311.7522
E=3038.4987
ELEV.=28.93'

STA=213+18.19, 19.47' RT.
GLACIER HWY MON.
STA. 10+19.14, 174.23' RT.
N=5891.1613
E=2944.2230
ELEV.=43.69'

TBM-1
PK NAIL/W WASHER
STA. 9+85.23, 57.15' RT.
N=6012.8211
E=2936.6712
ELEV.=38.67'

BOP
GLACIER HWY & RAVENS WAY
STA. 10+00
N=6061.1759
E=2982.3319
ELEV.=36.73'

PI-1
PI RAVENS WAY & RAVENS COURT
STA. 20+33.59, 9.18 RT.
=STA. 13+05.33, 12.22 LT.
N=5997.6445
E=3266.5618
FG. ELEV.=51.65'

PI-2
ANG. PT. PI RAVENS WAY
STA. 13+08.22, 15.11' LT.
N=5996.6224
E=3271.1342
FG. ELEV.=51.75'

RP-1
RAVENS COURT RADIUS POINT
STA. 21+34.04, RT. 0.0'
N=6079.5914
E=3330.4228
CL. FG. ELEV.=59.32'

RP-2
RAVENS WAY RADIUS POINT
STA. 16+36.71, RT. 0.0'
N=5661.4529
E=3257.8515
CL. FG. ELEV.=67.00'

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SHEET  
 C1  
 SHEET NO.  
 5 OF 64

**LEGEND**

- x — x — SILT FENCE, BRUSH BERM, 1" ROCK BERM OR TEMP. CONTROL SWALE TO CONTAIN RUNOFF WITHIN WORK AREA IF NATURAL 25' BUFFER CAN NOT MAINTAINED
- — ○ — FLAGGED BOUNDARY
- CONTROLLED ENTRANCE / EXIT CONTAINMENT SPALL ROCK
- TEMPORARY CULVERT
- TEMPORARY WATER DITCH (SWALE)
- WETLANDS AREA "A"=624 S.F.  
UPLANDS AREA "A"=3,534 S.F.
- WETLANDS AREA "B"=1,935 S.F.  
UPLANDS AREA "B"=10,985 S.F.
- WETLANDS AREA "C"=4,508 S.F.  
UPLANDS AREA "C"=501 S.F.
- WETLANDS AREA "D"=1,408 S.F.  
UPLANDS AREA "D"=157 S.F.
- TOTAL WETLANDS AREA=8,475 S.F.  
TOTAL UPLANDS AREA=15,177 S.F.  
TOTAL AREA=23,652 S.F.
- TEMPORARY CHECK DAM

**CONSTRUCTION NOTES:**

1. DO NOT MIX EXISTING DRAINAGE WITH CONSTRUCTION DRAINAGE. KEEP SEPARATE AT ALL TIMES UNTIL SITE IS STABILIZED.
2. COVER ALL DISTURBED SLOPES WITHIN 14 DAYS OF NO ACTIVITY OR FINISH CONDITION WITH HYDRO MULCH AND SEEDING.
3. STOCKPILE OF WASTE MATERIAL SHALL BE COVERED WITH PLASTIC SHEATHING DURING INCLEMENT WEATHER.
4. TRANSFER DRAINAGE TO NEW COMPLETED CHANNEL AFTER SLOPES ARE STABILIZED AND STREAM BED MATERIAL PLACED IN STREAM RELOCATION AREA.
5. CONTRACTOR SWPP TO BE REVIEWED BY ENGINEER PRIOR TO IMPLEMENTATION.
6. ANY SNOW STORAGE WILL BE PLACED ON LOTS SO AS TO NOT BLOCK DRAINAGE OR BERM.

LOT 19 DEDICATED FOR RE-FUELING, CLEANOUTS, DUMPSTERS, EQUIPMENT AND MATERIALS STORAGE AREAS

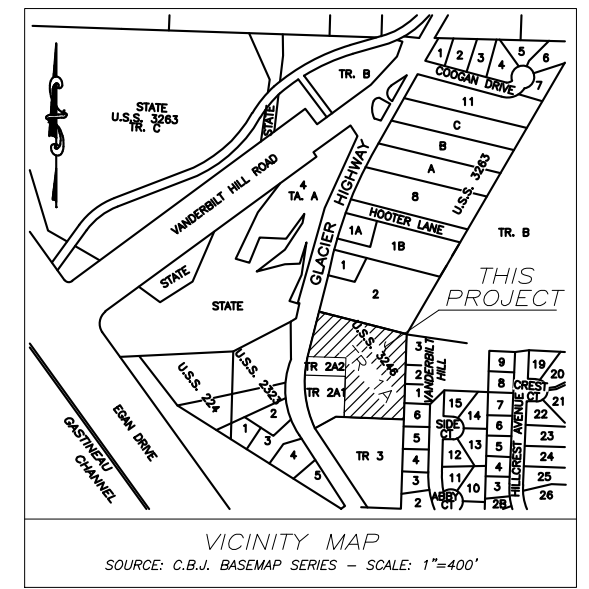
BATHROOM FACILITIES AVAILABLE DURING CONSTRUCTION ON CBJ SEWER AND WATER

**NOTE:**

1. ALL OTHER SEDIMENT PONDS AND DRAINAGE ON ATTACHED PLANS.
2. SOIL STORAGE IF ANY WILL BE ON LOTS 4-8.

C10 MANHOLE EXISTING  
STA 9+85.55, 3.3' LT.  
RIM EL=36.26'  
INV. EL=26.67'

PI RAVENS WAY  
STA.=13+15.17

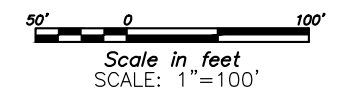


**PHASE I – WORK PLAN**

- CONSTRUCT RAVENS WAY TO STA.=14+00 AND RAVENS COURT INCLUDING TEMPORARY CUL-DE-SAC AT STA.=15+38.
- CONSTRUCT WATER, SEWER, POWER AND STORM DRAIN FROM GLACIER HIGHWAY.
- CONSTRUCT RELOCATED STREAM CHANNEL INSTALL CULVERTS.

**PHASE II – WORK PLAN**

- FINISH RAVENS WAY FROM STA.=14+00 TO END INCLUDING ALL UTILITIES.



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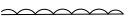

SCALE	GRAPHIC		
DESIGNED	###		
DRAWN	###		
CHECKED	###		
DATE	September 30, 2024		
REV	DATE	BY	DESCRIPTION

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
EC1  
SHEET NO.  
6 OF 64

**LEGEND**

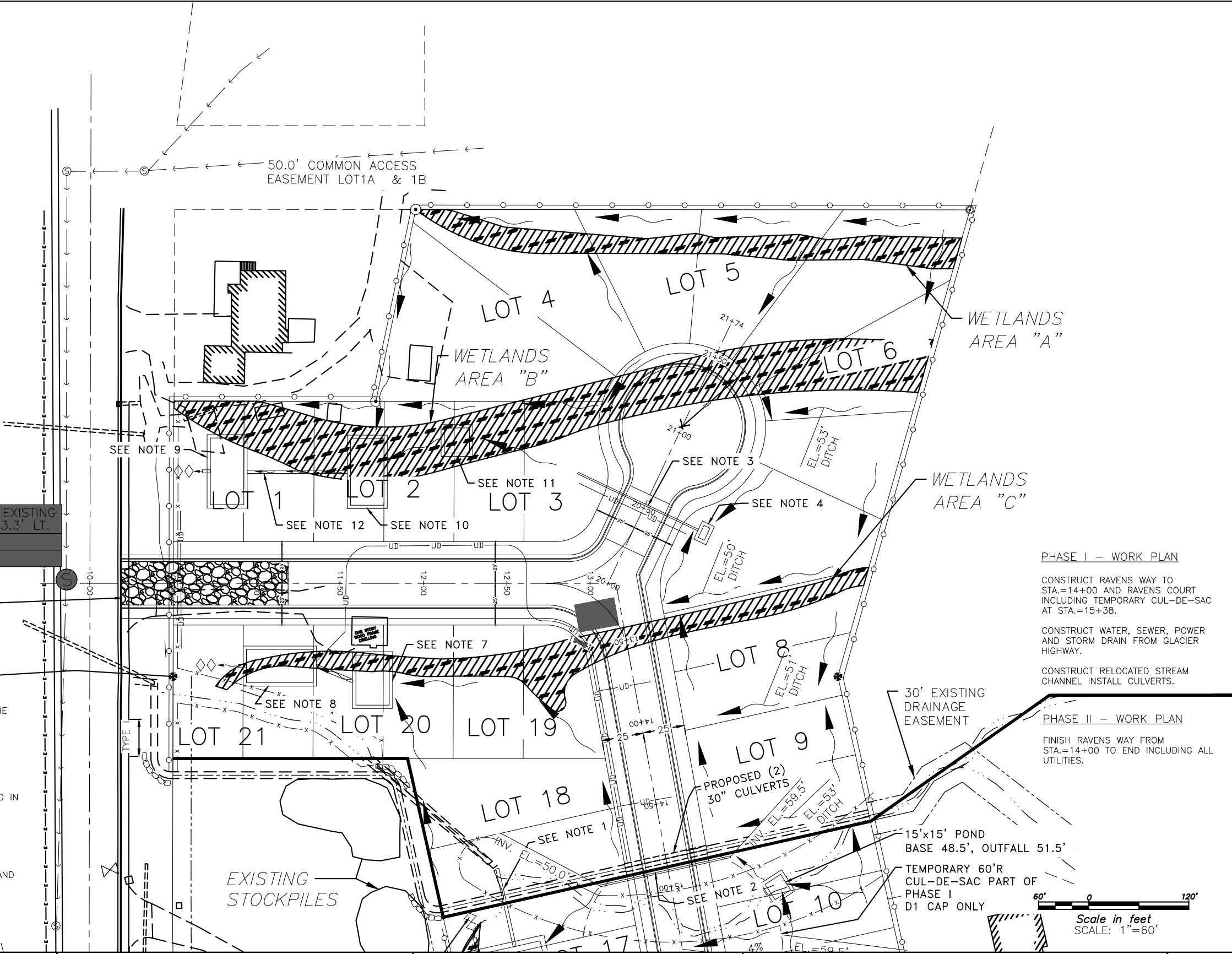
- x-x- SILT FENCE, BRUSH BERM, ROCK BERM OR TEMP. CONTROL SWALE TO CONTAIN RUNOFF WITHIN WORK AREA IF NATURAL 25' BUFFER CAN NOT MAINTAINED
- FLAGGED BOUNDARY
-  CONTROLLED ENTRANCE / EXIT CONTAINMENT SPALL ROCK
-  TEMPORARY CULVERT
-  TEMPORARY WATER DITCH (SWALE)
-  WETLANDS AREA "A"=624 S.F.  
UPLANDS AREA "A"=3,534 S.F.  
WETLANDS AREA "B"=1,935 S.F.  
UPLANDS AREA "B"=10,985 S.F.  
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WETLANDS AREA "D"=1,408 S.F.  
UPLANDS AREA "D"=157 S.F.  
TOTAL WETLANDS AREA=8,475 S.F.  
TOTAL UPLANDS AREA=15,177 S.F.  
TOTAL AREA=23,652 S.F.
- ◇◇ TEMPORARY CHECK DAM

C10 MANHOLE EXISTING  
STA 9+85.55, 3.3' LT.  
RIM EL.=36.26'  
INV EL.=26.67'

100' STABILIZED  
CONSTRUCTION EXIT  
4" CLEAN SHOT  
ROCK 6" DEPTH

**NOTES:**

1. TEMP 12" CULVERT OUTFALL 6" BELOW OVER OUTFALL PIPE CAN BE REMOVED AFTER STREAM LOCATION, BUT CAN STAY TILL LOT 18 DEVELOPED.
2. 12"x80' CULVERT ABANDON WHEN NOT NEEDED. 12" UNDER DRAIN UNDER CULVERT.
3. 12"x80' CPP. ABANDON AT END OFF CONSTRUCTION.
4. 12"x8' POND (BASE), INV. EL.=46', OUTFALL EL.=49'
5. ALL OTHER SEDIMENT PONDS AND DRAINAGE ON ATTACHED PLANS.
6. LOT 17 TO BE LAST LOT BUILT ON PHASE 2 TO KEEP SETTLING POND IN PLACE TILL END OF PROJECT.
7. 20'x30' SEDIMENT POND (BASE), INV. EL.=39', OUTFALL EL.=43'
8. 20'x40' SEDIMENT POND (BASE), INV. EL.=29', OUTFALL EL.=32'
9. 20'x40' SEDIMENT POND, INV EL.=30', OUTFALL EL.=33'
10. 20'x40' SEDIMENT POND, INV EL.=39', OUTFALL EL.=42'
11. 15'x15' POND, INV EL.=41', OUTFALL EL.=45'
12. 4" ROCK LINER ON THE TWO LOWER PONDS. ON LOTS 1, 17 & 21 AND DRAINAGE TO POND ABOVE.
13. LOT1 AND LOT 21 TO BE LAST LOTS BUILT ON AND LOWER SEDIMENT PONDS TO BE REMAIN TILL ALL EXCAVATION ABOVE IS COMPLETE.
14. UNDER DRAIN INSTALLED DURING ROAD CONSTRUCTION.



**PHASE I – WORK PLAN**

- CONSTRUCT RAVENS WAY TO STA.=14+00 AND RAVENS COURT INCLUDING TEMPORARY CUL-DE-SAC AT STA.=15+38.
- CONSTRUCT WATER, SEWER, POWER AND STORM DRAIN FROM GLACIER HIGHWAY.
- CONSTRUCT RELOCATED STREAM CHANNEL INSTALL CULVERTS.

**PHASE II – WORK PLAN**

- FINISH RAVENS WAY FROM STA.=14+00 TO END INCLUDING ALL UTILITIES.



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DATE	September 30, 2024
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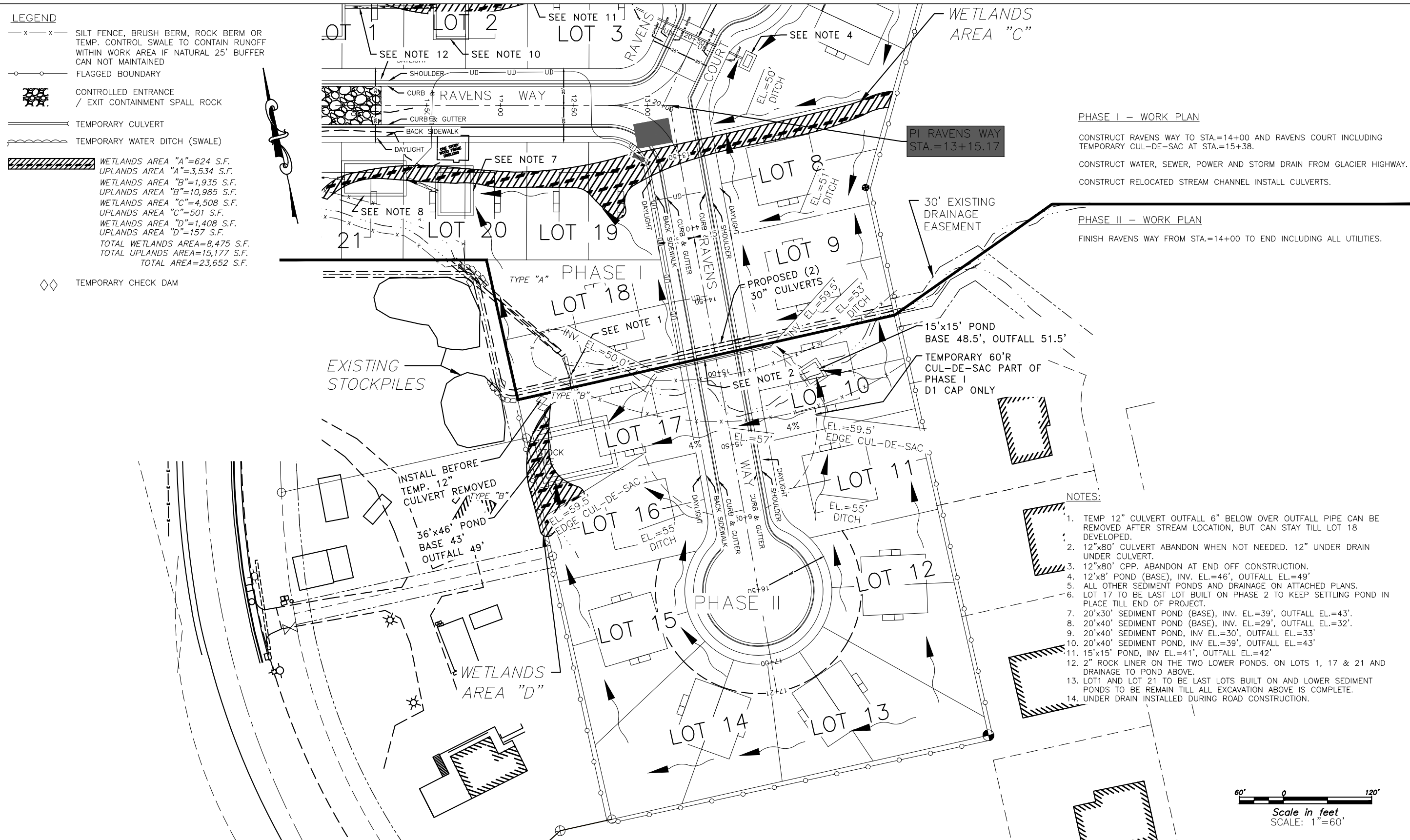
**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
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RAVENWOOD SUBDIVISION

SHEET  
EC2  
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7 OF 64



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**PHASE I - WORK PLAN**

CONSTRUCT RAVENS WAY TO STA.=14+00 AND RAVENS COURT INCLUDING TEMPORARY CUL-DE-SAC AT STA.=15+38.

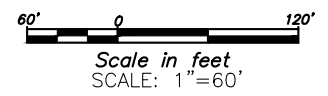
CONSTRUCT WATER, SEWER, POWER AND STORM DRAIN FROM GLACIER HIGHWAY.

CONSTRUCT RELOCATED STREAM CHANNEL INSTALL CULVERTS.

**PHASE II - WORK PLAN**

FINISH RAVENS WAY FROM STA.=14+00 TO END INCLUDING ALL UTILITIES.

- NOTES:**
1. TEMP 12" CULVERT OUTFALL 6" BELOW OVER OUTFALL PIPE CAN BE REMOVED AFTER STREAM LOCATION, BUT CAN STAY TILL LOT 18 DEVELOPED.
  2. 12"x80' CULVERT ABANDON WHEN NOT NEEDED. 12" UNDER DRAIN UNDER CULVERT.
  3. 12"x80' CPP. ABANDON AT END OFF CONSTRUCTION.
  4. 12"x8' POND (BASE), INV. EL.=46', OUTFALL EL.=49'
  5. ALL OTHER SEDIMENT PONDS AND DRAINAGE ON ATTACHED PLANS.
  6. LOT 17 TO BE LAST LOT BUILT ON PHASE 2 TO KEEP SETTLING POND IN PLACE TILL END OF PROJECT.
  7. 20'x30' SEDIMENT POND (BASE), INV. EL.=39', OUTFALL EL.=43'.
  8. 20'x40' SEDIMENT POND (BASE), INV. EL.=29', OUTFALL EL.=32'.
  9. 20'x40' SEDIMENT POND, INV EL.=30', OUTFALL EL.=33'
  10. 20'x40' SEDIMENT POND, INV EL.=39', OUTFALL EL.=43'
  11. 15'x15' POND, INV EL.=41', OUTFALL EL.=42'
  12. 2" ROCK LINER ON THE TWO LOWER PONDS. ON LOTS 1, 17 & 21 AND DRAINAGE TO POND ABOVE.
  13. LOT1 AND LOT 21 TO BE LAST LOTS BUILT ON AND LOWER SEDIMENT PONDS TO BE REMAIN TILL ALL EXCAVATION ABOVE IS COMPLETE.
  14. UNDER DRAIN INSTALLED DURING ROAD CONSTRUCTION.



SCALE	GRAPHIC
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DATE	September 30, 2024

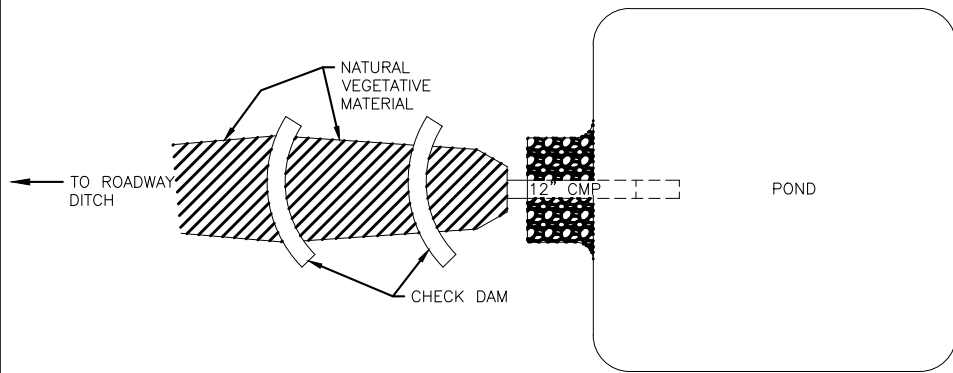
**MOORE ENGINEERING**  
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**TRACY MOORE, P.E.**  
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RAVENWOOD SUBDIVISION

SHEET EC3  
SHEET NO. 8 OF 64

Attachment C - Preliminary Construction Drawings

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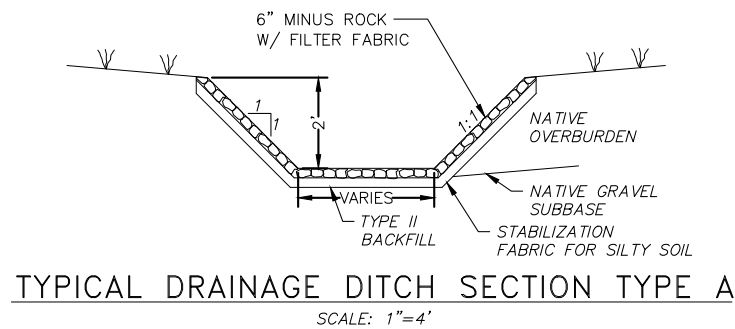
**OVERFLOW OUTLET DETAIL**  
SCALE: 1"=10'



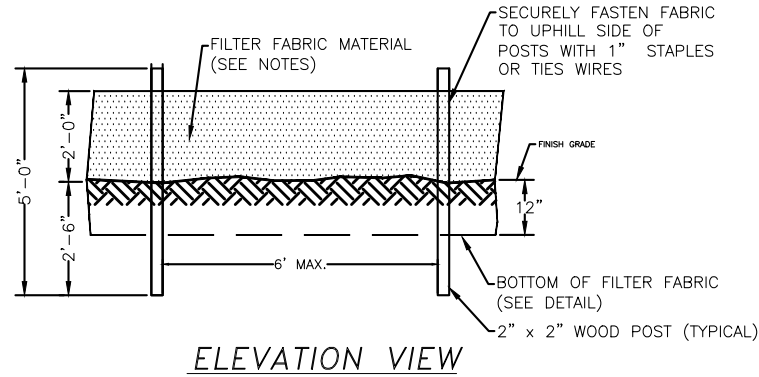
**SEDIMENT POND DETAIL**  
SCALE: 1"=10'

**NOTES:**

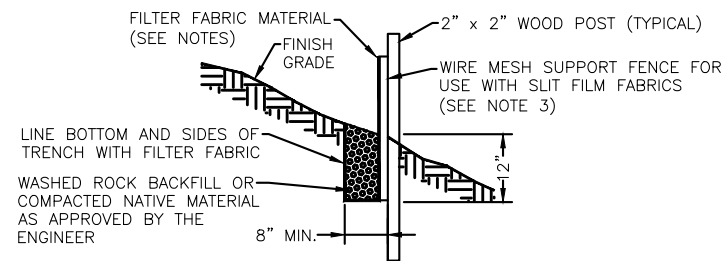
- CLEAN OUT AND HAUL SILT TO APPROVED WASTER SITE OFF PROJECT AS NECESSARY.
- IF OVERFLOW IS INTERMITTED ADDITIONAL SETTLEMENT IS NECESSARY AND STORM WATER TO BE PUMPED TO PRIMARY SETTLEMENT POND 3.



**TYPICAL DRAINAGE DITCH SECTION TYPE A**  
SCALE: 1"=4'



**ELEVATION VIEW**



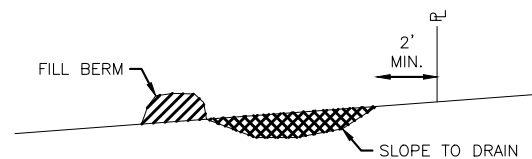
**SIDE VIEW**

**NOTES:**

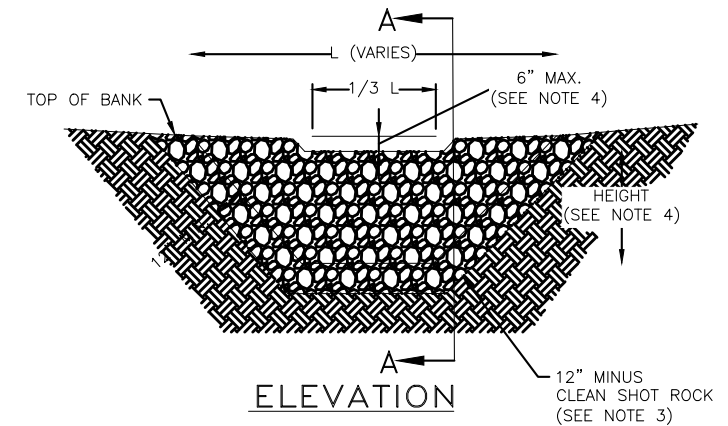
- INSTALL FENCE AT THE APPROPRIATE LOCATION BY CONSIDERING TERRAIN, SLOPE, WATER FLOW AND DISTURBANCE AREA. PLACE THE FENCE AWAY FROM THE TOE OF SLOPE LEAVING ROOM TO ACCUMULATE SEDIMENT AND PERFORM WORK.
- SILT FENCE FABRIC SHALL BE UV RESISTANT POLYPROPYLENE WITH OPENINGS LESS THAN A NO. 30 SIEVE, OR APPROVED BY THE ENGINEER.
- SILT FENCE FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL WITH JOINTS KEPT TO A MINIMUM. JOINTS SHALL BE SECURED AT SUPPORT POSTS WITH A MINIMUM OF 6" OF OVERLAP. LESS POSTS MAY BE INSTALLED WHEN WIRE MESH IS USED TO SUPPORT THE SILT FENCE FABRIC AS APPROVED BY THE ENGINEER.
- AN 8" WIDE BY 2" DEEP TRENCH SHALL BE CONSTRUCTED ALONG THE ENTIRE LENGTH OF THE UPHILL SIDE OF THE SILT FENCE. THE TRENCH SHALL BE BACKFILLED WITH WASHED ROCK OR COMPACTED NATIVE MATERIAL.
- THE SILT FENCE SHALL BE MAINTAINED UNTIL THE ENTIRE DISTURBANCE AREA HAS BEEN STABILIZED. THE SILT FENCE MAY BE REMOVED ONLY AFTER THE RETAINED MATERIALS HAVE BEEN PROPERLY DISPOSED OF.
- ALTERNATE COMPRESSED 36" HIGH BRUSH BURM OR 18" HIGH 1" ROCK BURM MAY BE USED.

**311-SILT FENCE**

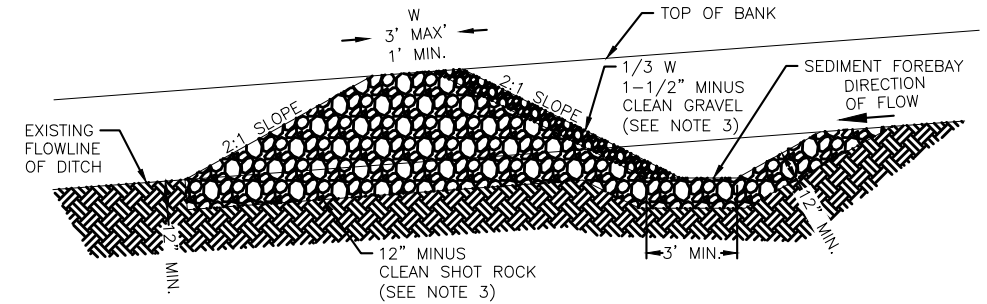
SCALE: 1"=4'



**TEMPORARY WATER CONTROL SWALE**  
N.T.S.



**ELEVATION**



**SECTION A-A**

**AMOUNT ROCK SIZE**

AMOUNT ROCK SIZE	DITCH GRADE	SPACING
100% < 12"	1%	200 FT
100% > 2"	2%	100 FT
	4%	50 FT
	6%	33 FT
	8%	25 FT

**ROCK CHECK DAM SPACING TABLE**

DITCH GRADE	SPACING
1%	200 FT
2%	100 FT
4%	50 FT
6%	33 FT
8%	25 FT

**NOTES:**

- ROCK CHECK DAMS ARE NOT ALLOWED IN ANDRONOMUS FISH STREAMS WITHOUT PERMISSION OF THE APPLICABLE STATE & FEDERAL AGENCIES AND THE CBJ DEPARTMENT OF ENGINEERING.
- ROCK CHECK DAMS DESIGNATED AS STORMWATER MANAGEMENT ITEMS ARE TO REMAIN IN PLACE. TEMPORARY ROCK CHECK DAMS INSTALLED FOR SEDIMENT CONTROL DURING CONSTRUCTION MUST REMAIN IN PLACE UNTIL SOILS ARE STABILIZED AND REVEGATION IS COMPLETE AS APPROVED BY THE ENGINEER.
- STORM WATER MANAGEMENT ROCK CHECK DAMS SHALL BE CONSTRUCTED WITH CLEAN, WELL-GRADED MATERIAL (NO FINES), PER ROCK SIZE TABLE AND FACED ON THE UPSTREAM SIDE WITH CLEAN 1-1/2" MINUS GRAVEL. TEMPORARY ROCK CHECK DAMS MAY OMIT THE 1-1/2" GRAVEL FACE.
- THE HEIGHT OF THE ROCK CHECK DAM SPILLWAY SHALL BE NO GREATER THAN 3'. THE TOP OF DAM SHALL BE NO MORE THAN 3'-6". THE HEIGHT OF THE SPILLWAY SHALL BE PROPORTIONATE TO THE HEIGHT OF THE DAM BUT NO LESS THAN 2".
- ALL ROCK CHECK DAMS SHALL BE SPACED PER TABLE ABOVE AT A MINIMUM OR AS DIRECTED BY THE ENGINEER.

**312-ROCK CHECK DAM**

SCALE: 1"=6'

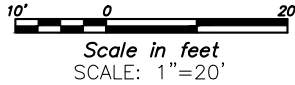
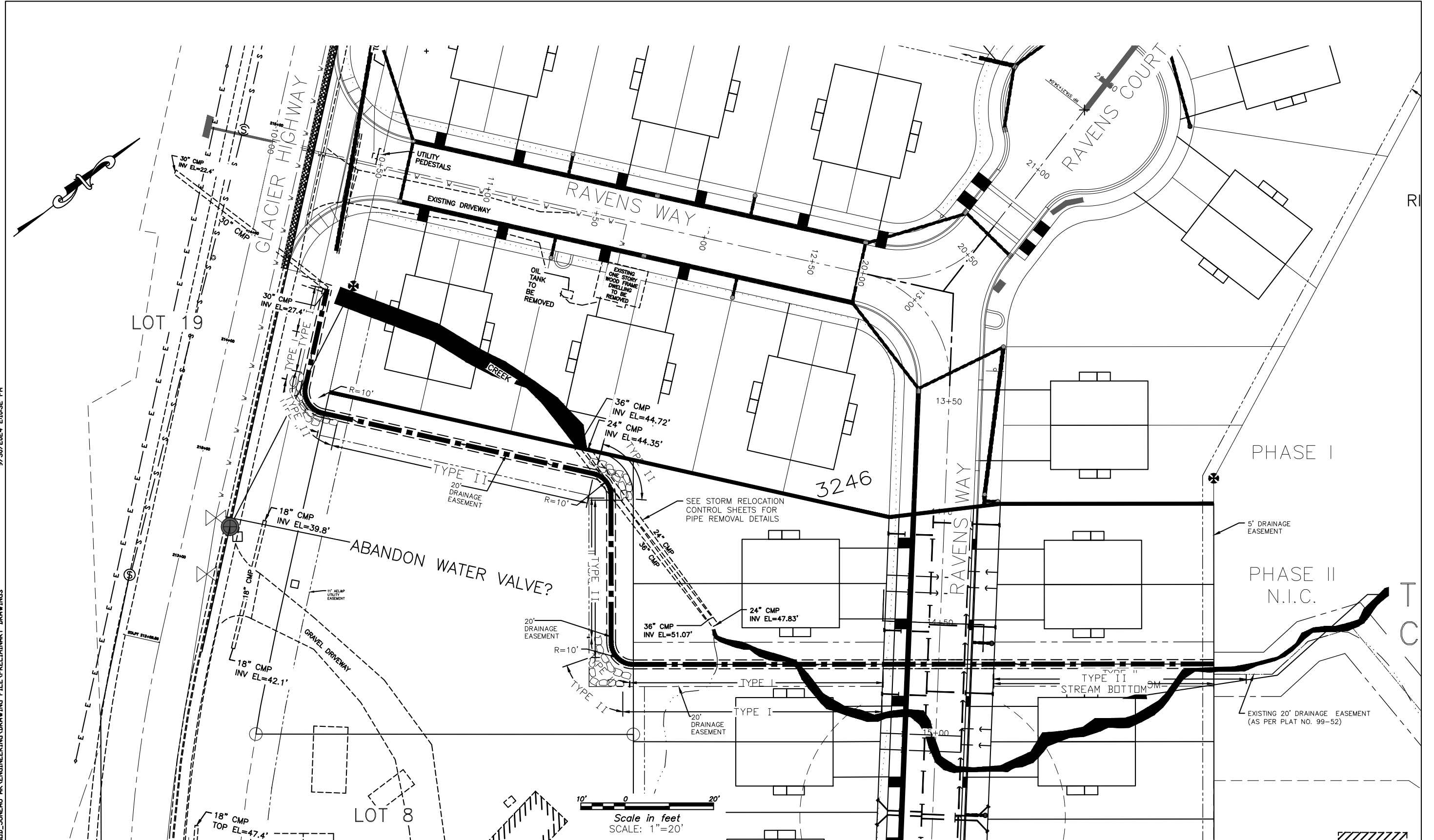
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DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
EC4  
SHEET NO.  
9 OF 64

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SCALE	GRAPHIC
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DATE	September 30, 2024

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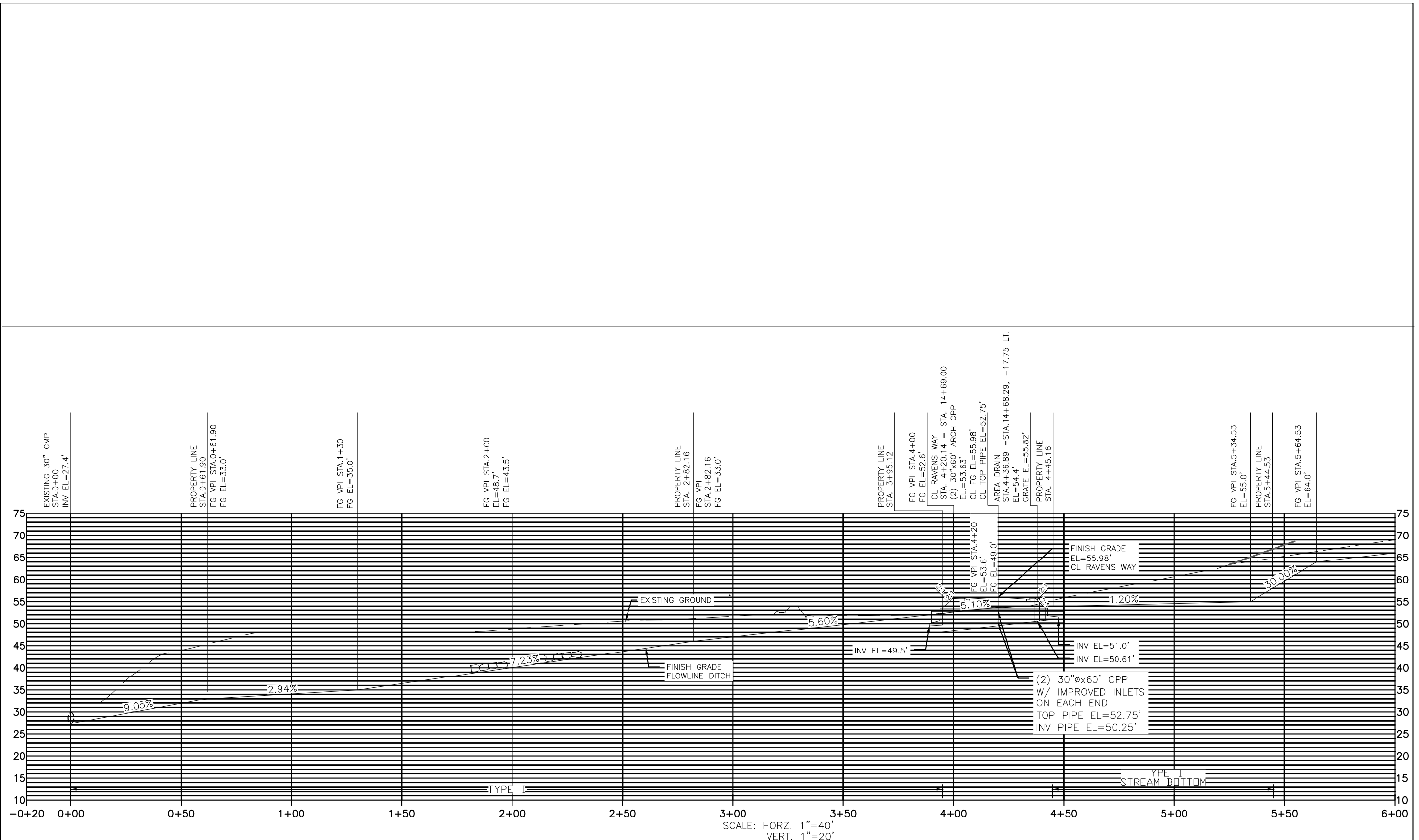
RAVENWOOD SUBDIVISION

PHASE I  
PHASE II  
N.I.C.

SHEET  
SR1  
SHEET NO.  
10 OF 64

Attachment C – Preliminary Construction Drawings





SCALE: HORZ. 1"=40'  
VERT. 1"=20'

REV	DATE	BY	DESCRIPTION

SCALE	GRAPHIC
DESIGNED	####
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CHECKED	####
DATE	September 30, 2024

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RAVENWOOD SUBDIVISION

SHEET	SR2
SHEET NO.	11 OF 64

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- ..... PROPOSED FILL SLOPE

BOP  
GLACIER HWY & RAVENS WAY  
STA. 10+00  
N=6061.1759  
E=2982.3319  
ELEV.=36.73'

SEE TRAFFIC CONTROL DRAWING FOR WORK ON INTERSECTION.  
SEE TEMPORARY EROSION CONTROL PLAN FOR INGRESS/EGRESS REQUIREMENTS

OVERALL ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	410 LF
5' SIDEWALK	410 LF

CONSTRUCTION NOTES:  
1. UNDERGROUND NEEDS TO BE VERIFIED BY CONTRACTOR LOCATION AND EXISTING IS NOT WELL DEFINED. EXPECT CHANGES.

SCALE	GRAPHIC
DESIGNED	####
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CHECKED	####
DATE	September 30, 2024

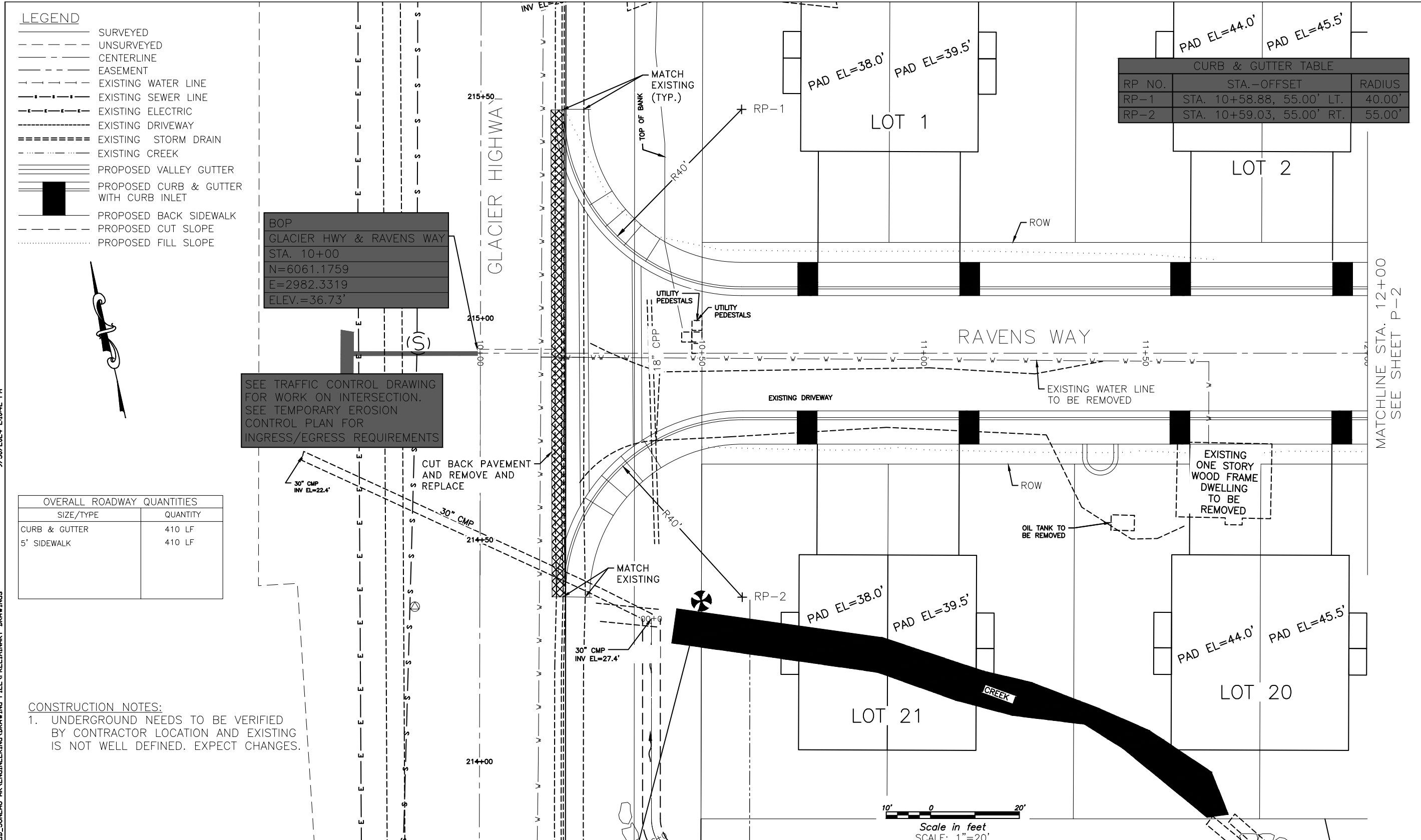
**MOORE ENGINEERING**  
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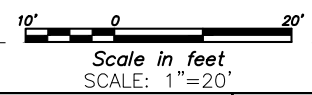
SHEET  
P1  
SHEET NO.  
12 OF 64

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CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-1	STA. 10+58.88, 55.00' LT.	40.00'
RP-2	STA. 10+59.03, 55.00' RT.	55.00'



MATCHLINE STA. 12+00  
SEE SHEET P-2

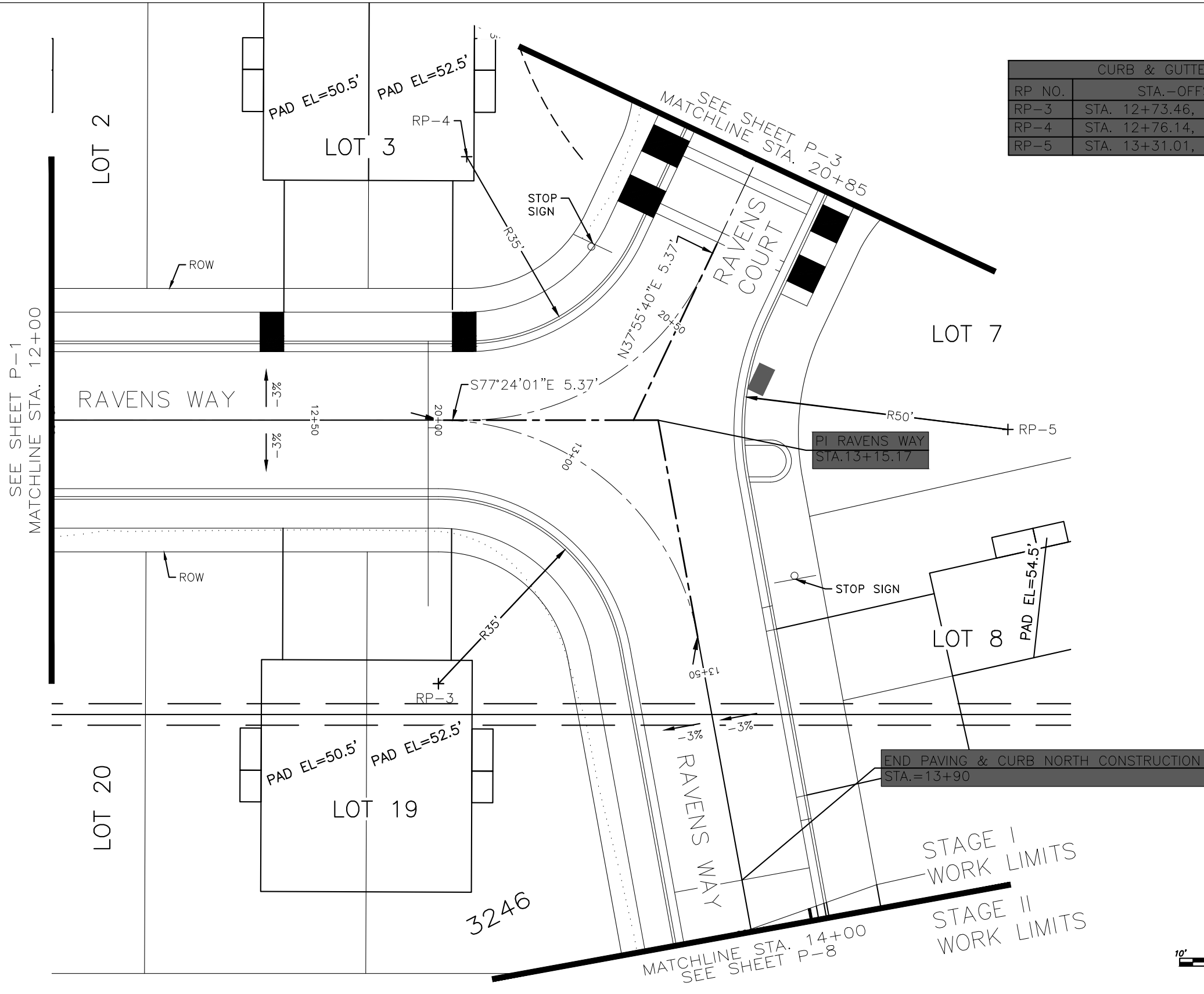
Attachment C – Preliminary Construction Drawings

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- ..... PROPOSED FILL SLOPE

CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-3	STA. 12+73.46, 50.00' LT.	35.00'
RP-4	STA. 12+76.14, 50.14' LT.	35.00'
RP-5	STA. 13+31.01, 68.38' LT.	50.00'

OVERALL ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	470 LF
5' SIDEWALK	470 LF



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 (907) 530-7008  
**TRACY MOORE, P.E.**  
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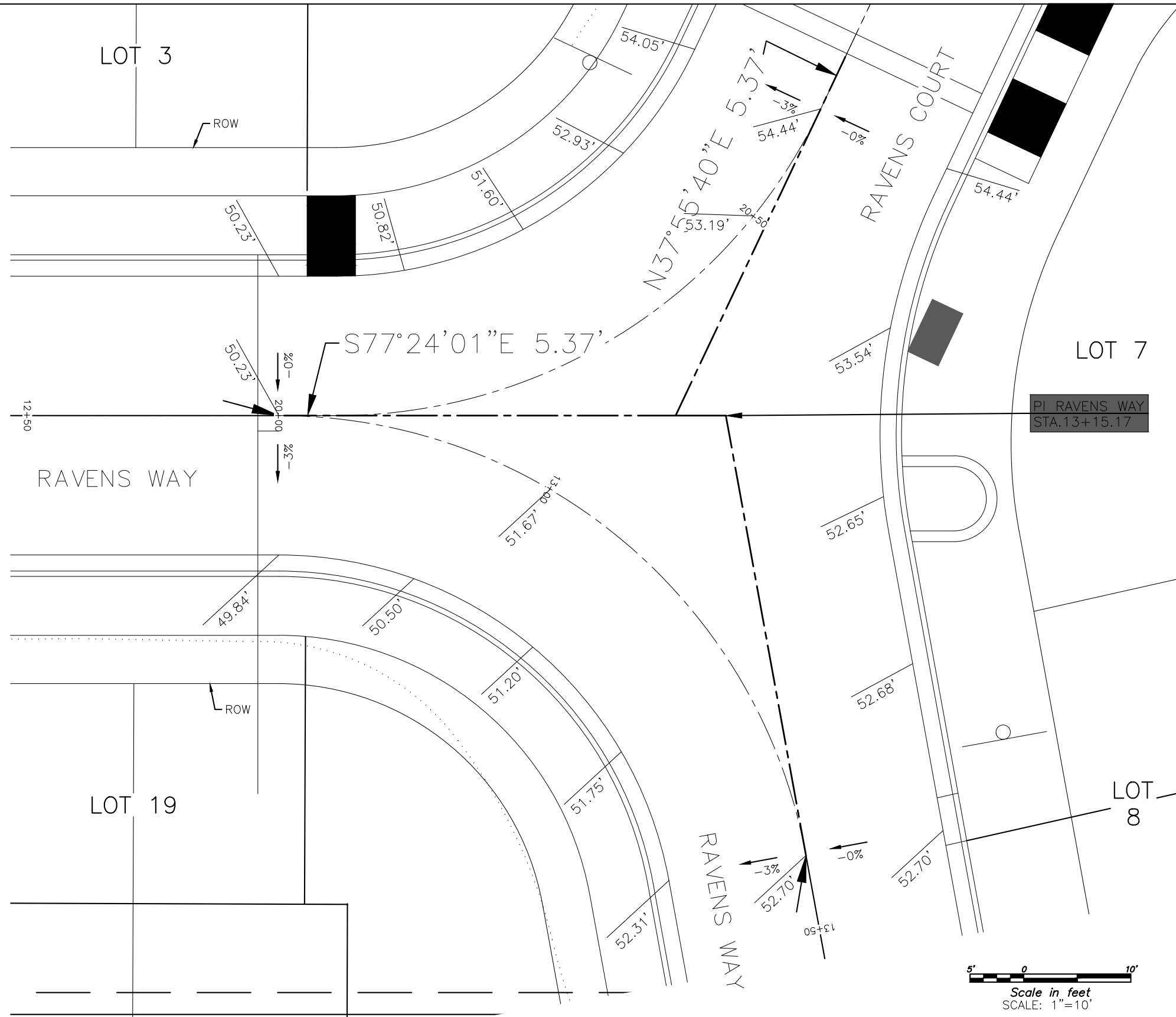
RAVENWOOD SUBDIVISION

STAGE I WORK LIMITS  
 STAGE II WORK LIMITS

SHEET  
 P2  
 SHEET NO.  
 13 OF 64

**LEGEND**

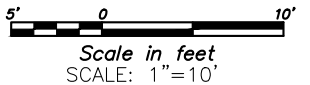
- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
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- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- - - PROPOSED VALLEY GUTTER
- - - PROPOSED CURB & GUTTER WITH CURB INLET
- - - PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE



CROSS SLOPE TABLE CHANGES TO NORMAL CROWN		
STA.	RT.	LT.
12+73.46		0.00%
13+42.95		0.00%
20+51.81	0.00%	
21+00	3.00%	
21+34.74	3.00%	
14+00		3.00%
16+36		3.00%

STRAIGHT LINE TRANSITIONS BETWEEN STATIONS UNLESS CURB GRADES ARE DIFFERENT (CURB GRADES CONTROL)

PI RAVENS WAY  
STA. 13+15.17



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REV	DATE	BY	DESCRIPTION

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 DRAWN: ###  
 CHECKED: ###  
 D-TE: September 30, 2024

**MOORE ENGINEERING**  
 P.O. BOX 397 CRAIG, ALASKA 99921  
 (907) 530-7008  
**TRACY MOORE, P.E.**  
 REGISTERED PROFESSIONAL CIVIL ENGINEER

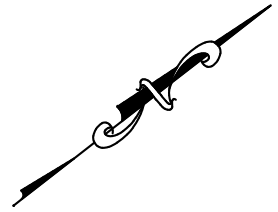
RAVENWOOD SUBDIVISION

SHEET  
 P2A  
 SHEET NO.  
 14 OF 64

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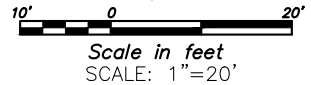
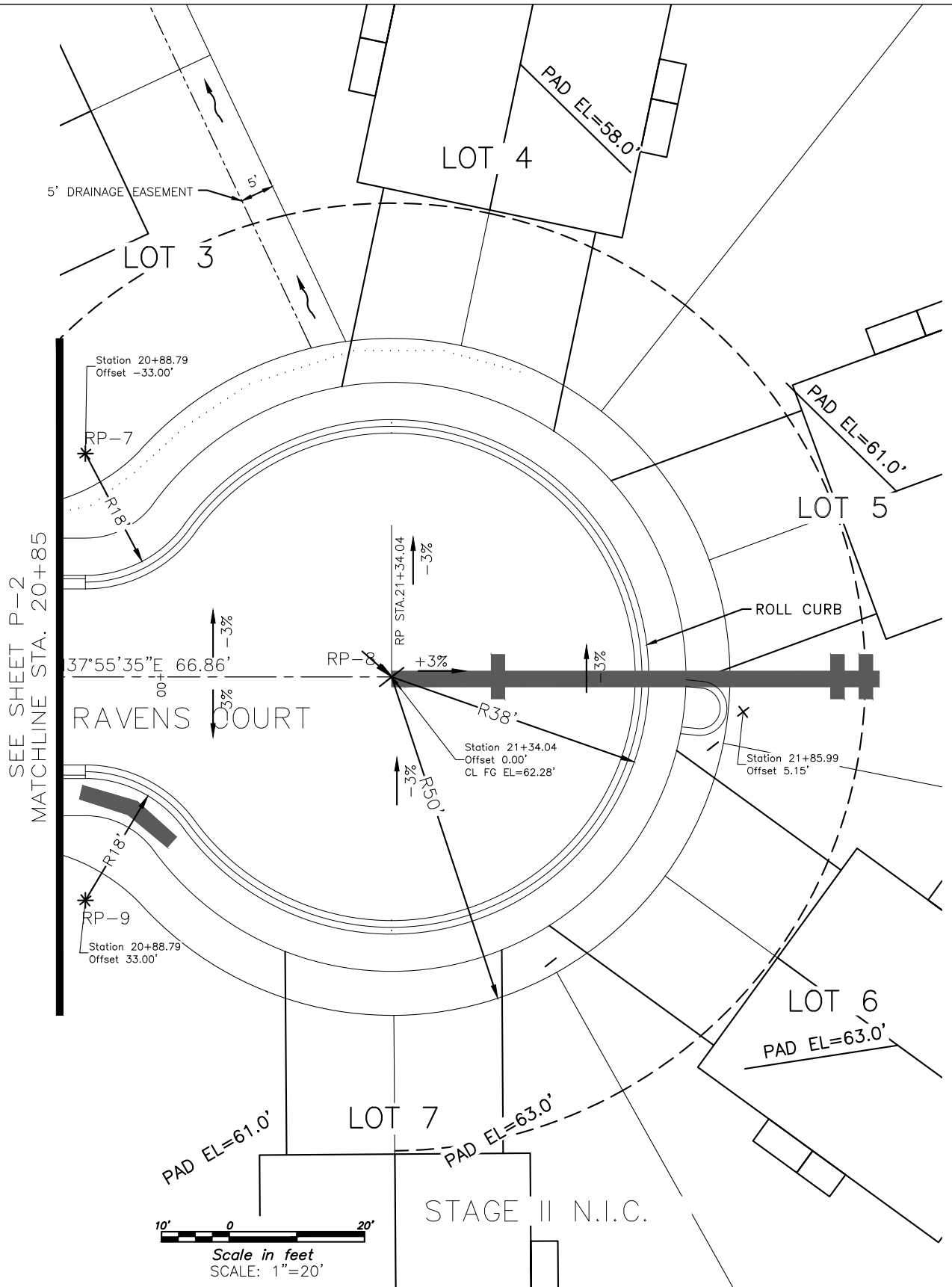
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- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ==== PROPOSED VALLEY GUTTER
- █ PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- ..... PROPOSED FILL SLOPE



CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-7	STA. 20+88.79, 33.00' LT.	18.00'
RP-8	STA. 20+88.79, 33.00' RT.	18.00'
RP-9	STA. 21+34.04, 0.00' RT.	38.00'

OVERALL ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	225 LF
5' SIDEWALK	225 LF



REV	DATE	BY	DESCRIPTION

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DATE	September 30, 2024

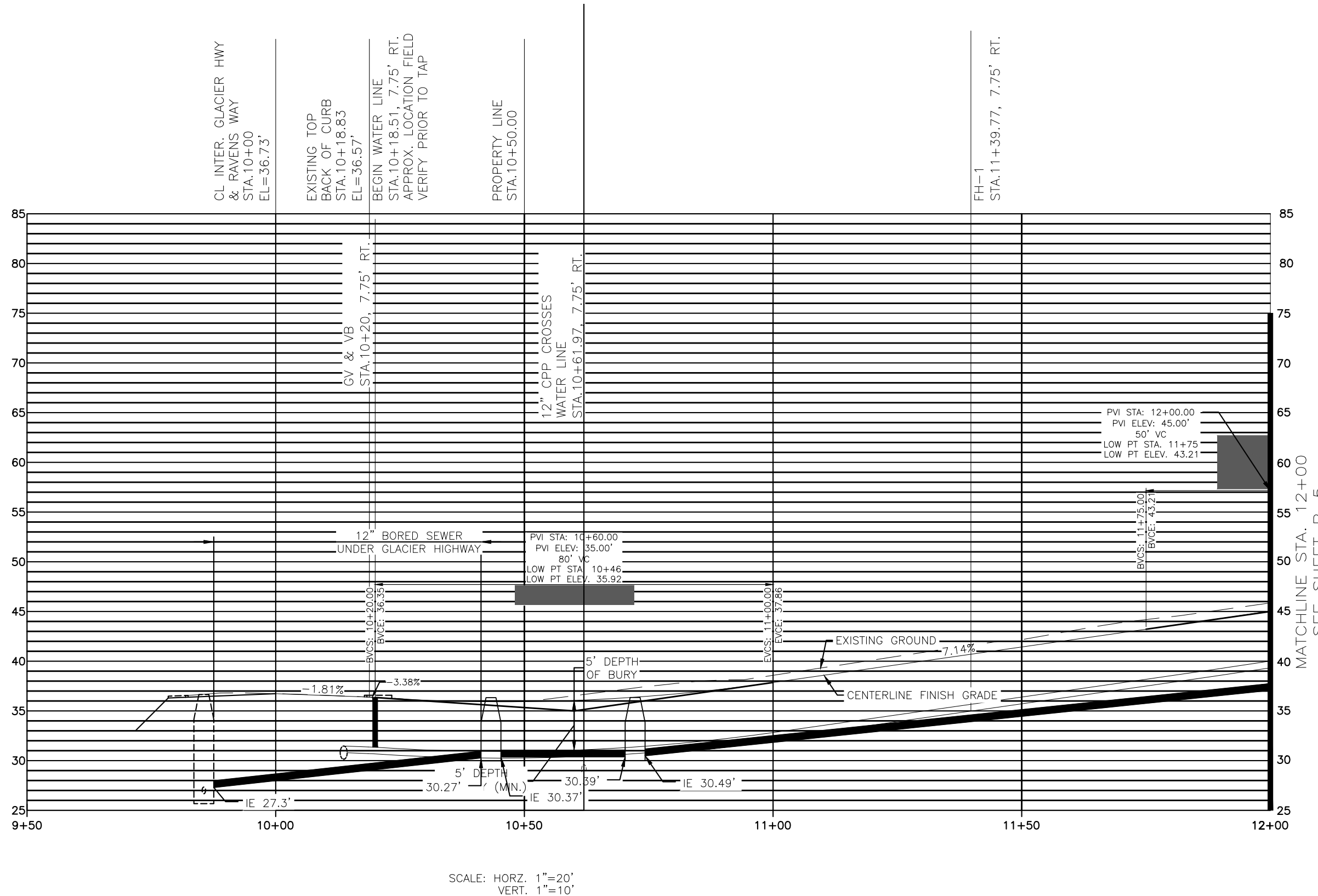
**MOORE ENGINEERING**  
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SHEET	P3
SHEET NO.	15 OF 64

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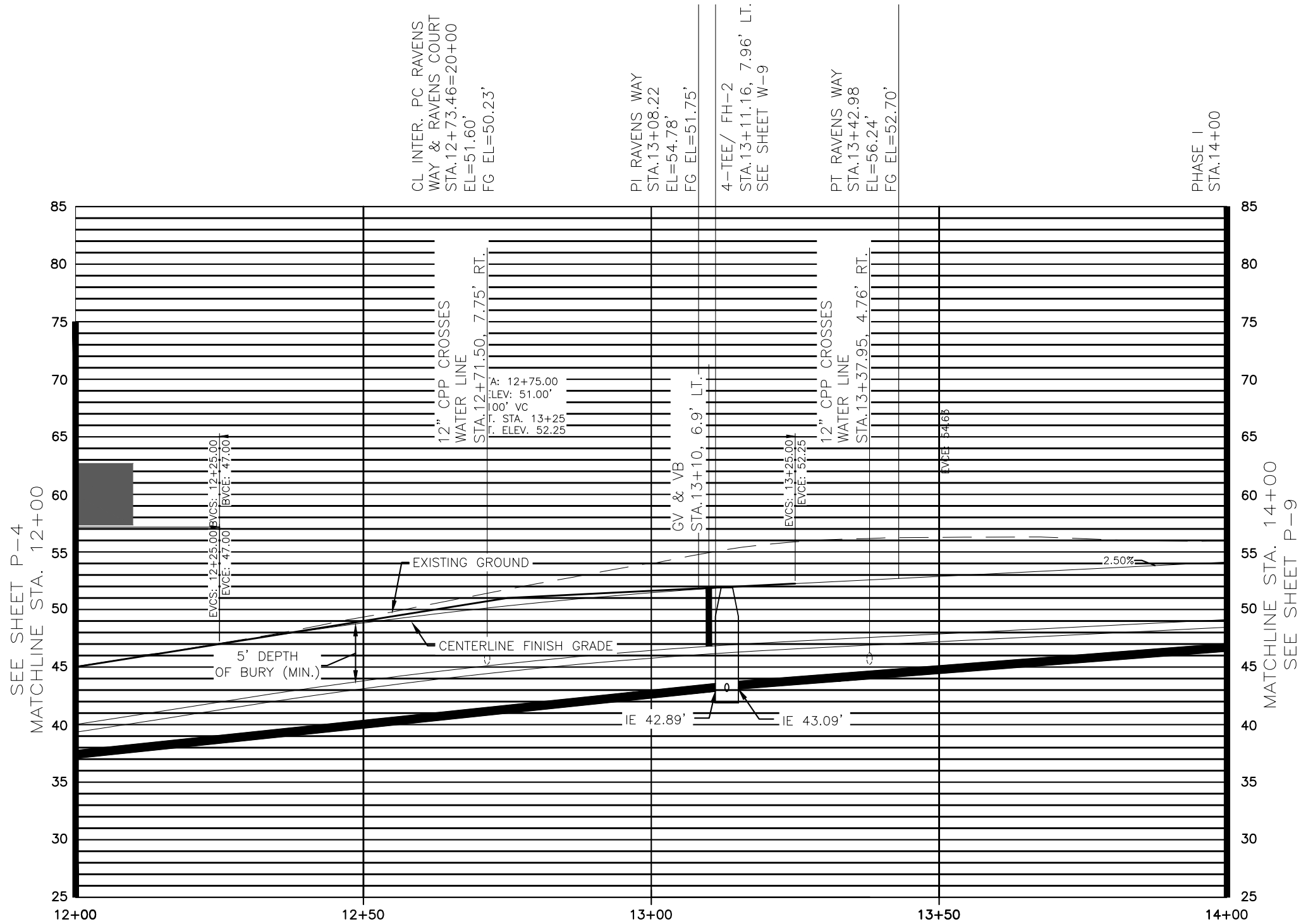
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SHEET P4  
 SHEET NO. 16 OF 64



SCALE: HORZ. 1"=20'  
VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

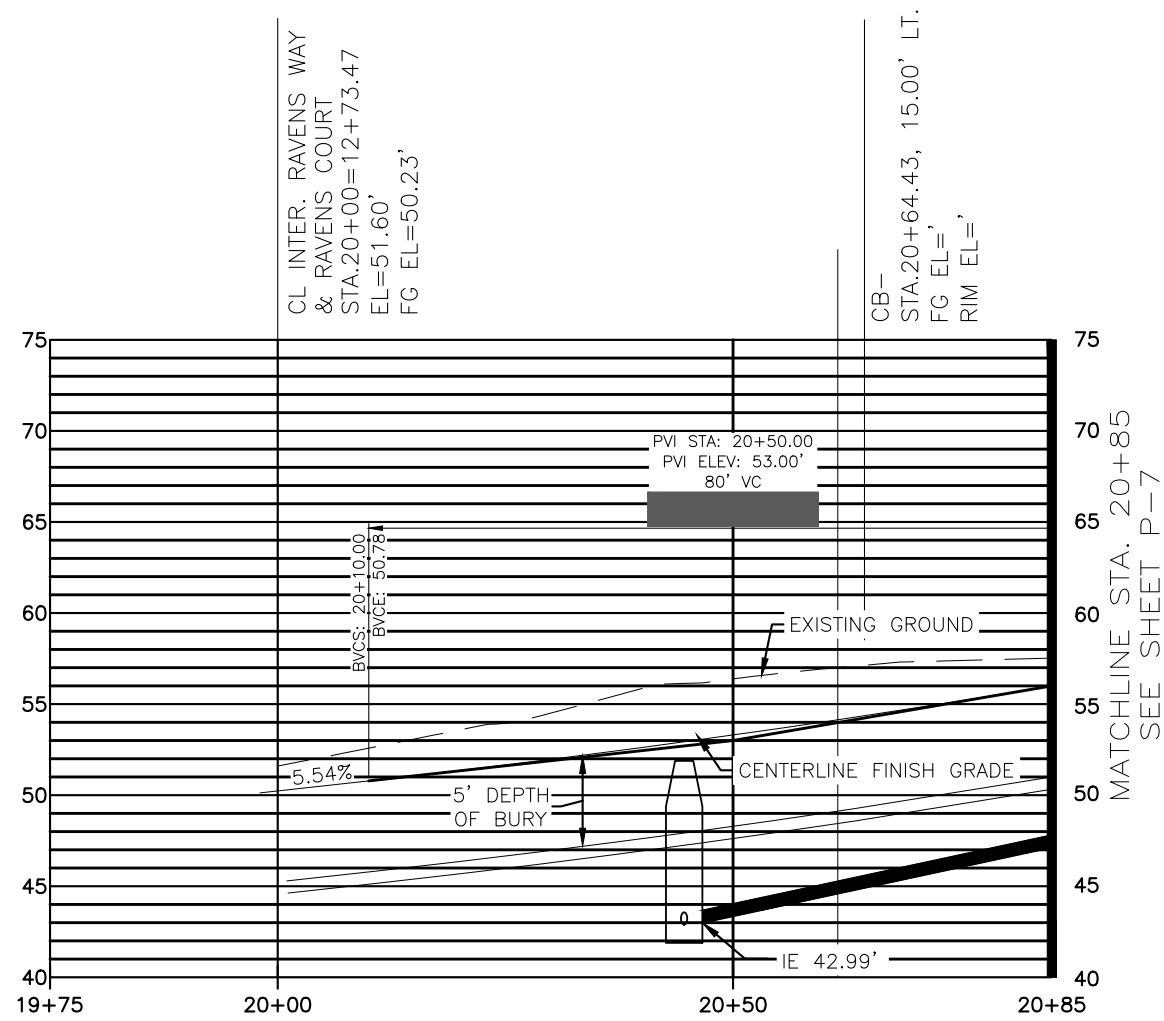
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SHEET P5  
SHEET NO. 17 OF 64

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 VERT. 1"=10'

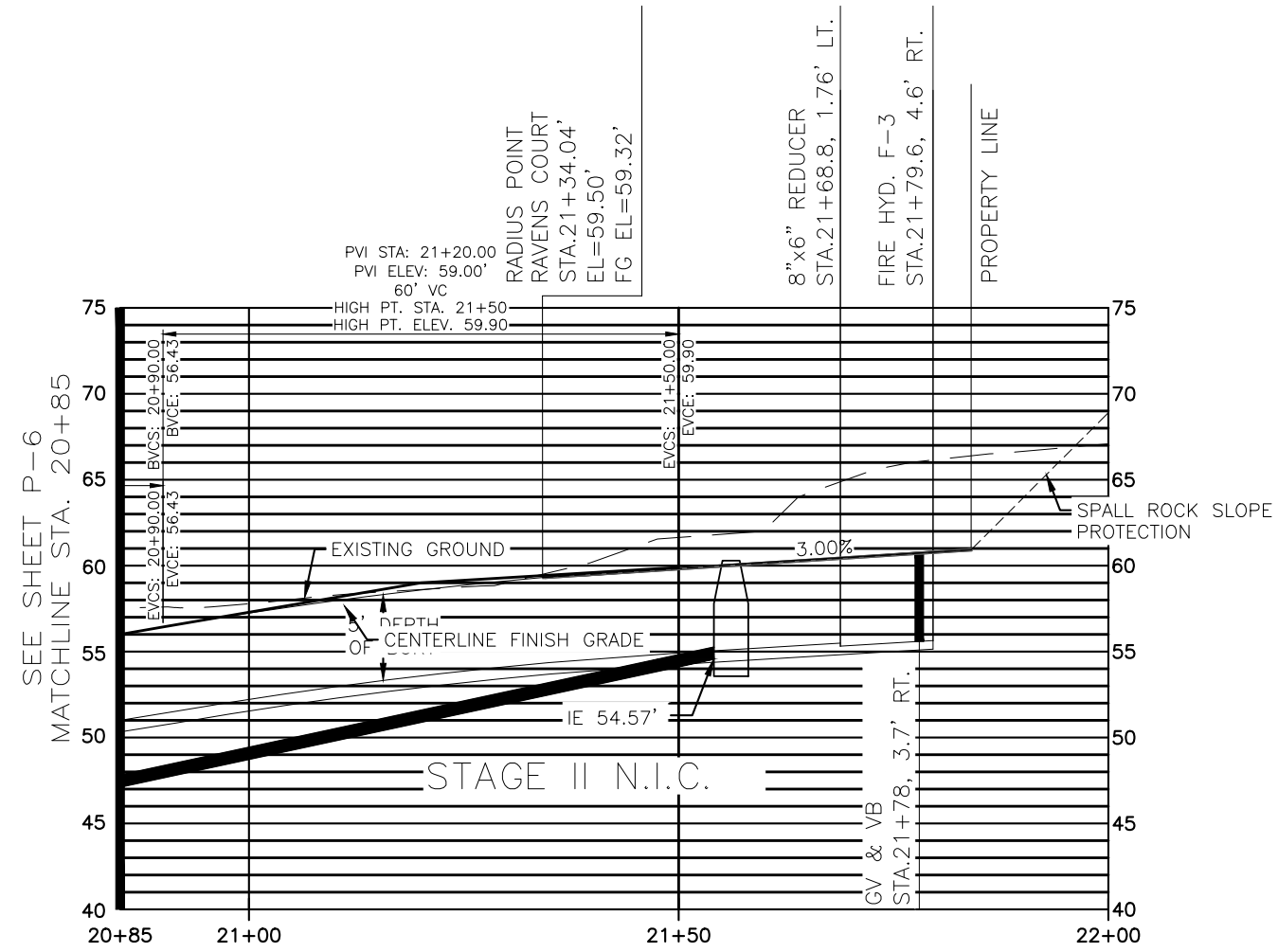
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DRAWN	###
CHECKED	###
DATE	September 30, 2024

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SHEET  
 P6  
 SHEET NO.  
 18 OF 64





SCALE: HORZ. 1"=20'  
VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

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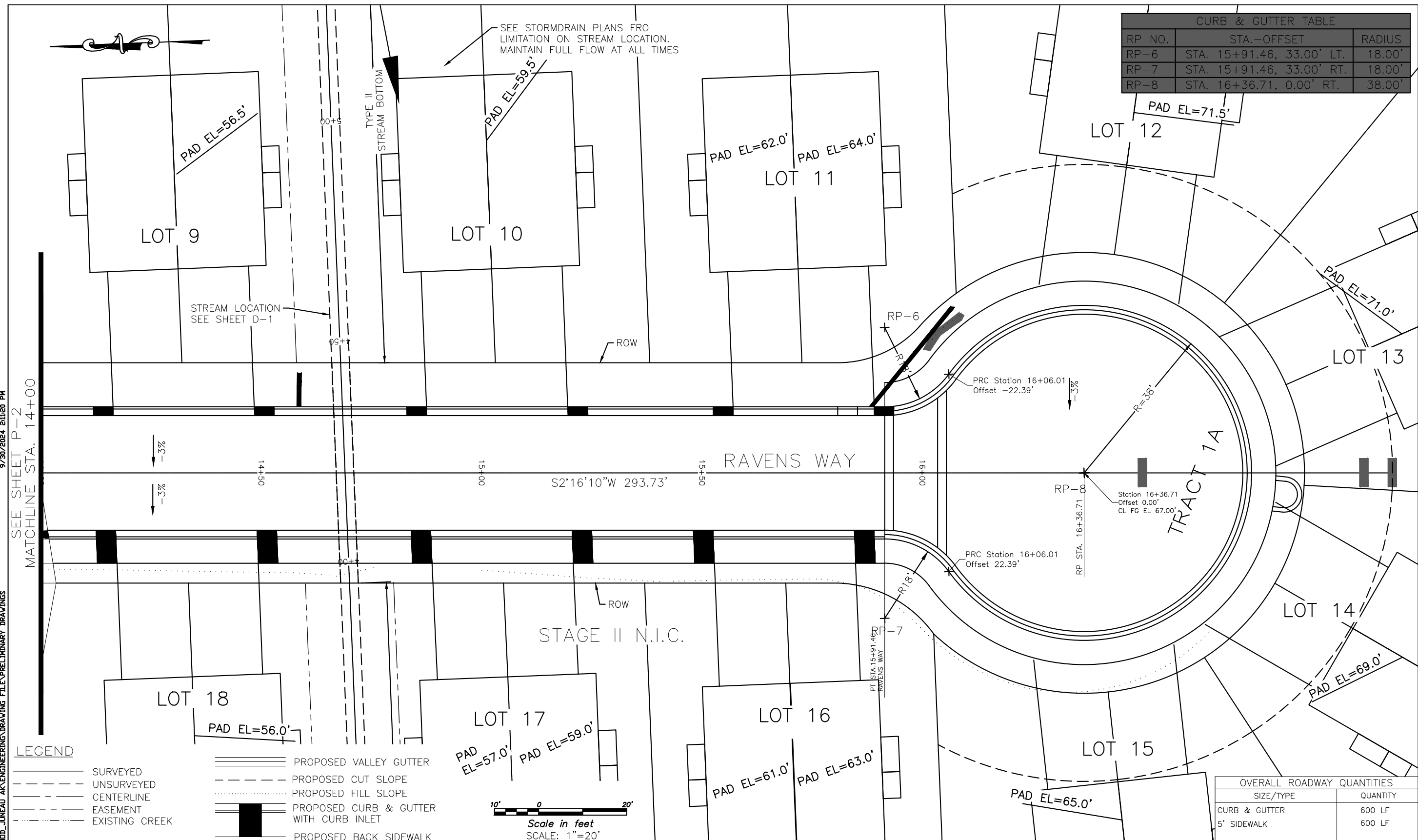
**MOORE ENGINEERING**  
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SHEET P7  
 SHEET NO. 19 OF 64

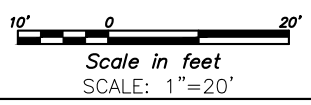
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CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-6	STA. 15+91.46, 33.00' LT.	18.00'
RP-7	STA. 15+91.46, 33.00' RT.	18.00'
RP-8	STA. 16+36.71, 0.00' RT.	38.00'



**LEGEND**

- SURVEYED
- UNSURVEYED
- CENTERLINE
- EASEMENT
- EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK



OVERALL ROADWAY QUANTITIES	
SIZE/TYPE	QUANTITY
CURB & GUTTER	600 LF
5' SIDEWALK	600 LF

REV	DATE	BY	DESCRIPTION

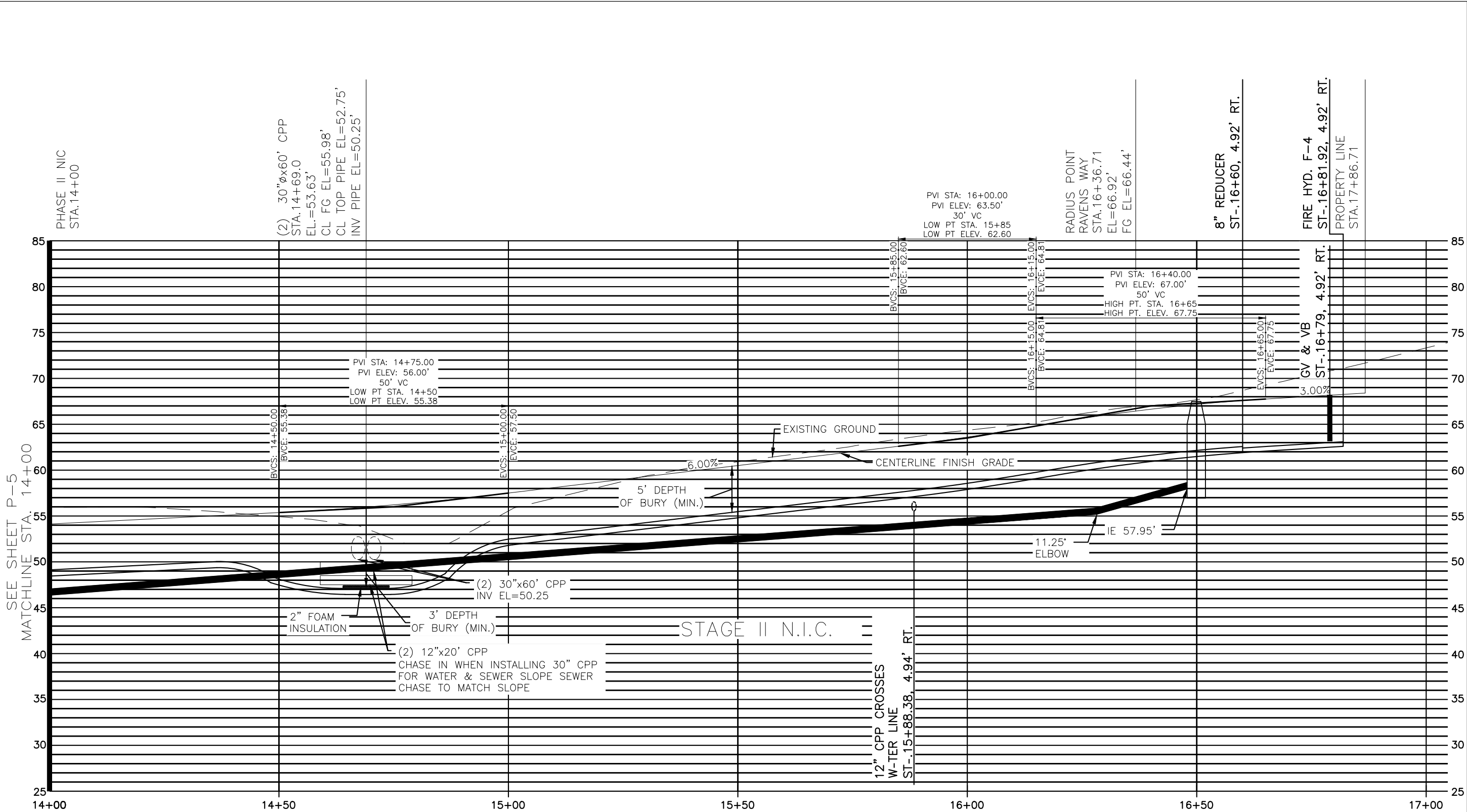
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SHEET P8  
 SHEET NO. 20 OF 64

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SCALE: HORZ. 1"=20'  
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SHEET P9  
SHEET NO. 21 OF 64

Attachment C – Preliminary Construction Drawings

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- PROPOSED 8" DI WATER LINE
- PROPOSED 3/4" WATER LINE SERVICE
- PROPOSED STORM DRAIN
- PROPOSED UNDERDRAIN
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE
- ⊙ PROPOSED WATER VALVE
- ⊙ PROPOSED FIRE HYDRANT
- ⊙ PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN

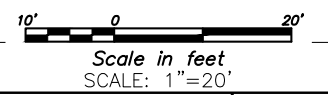
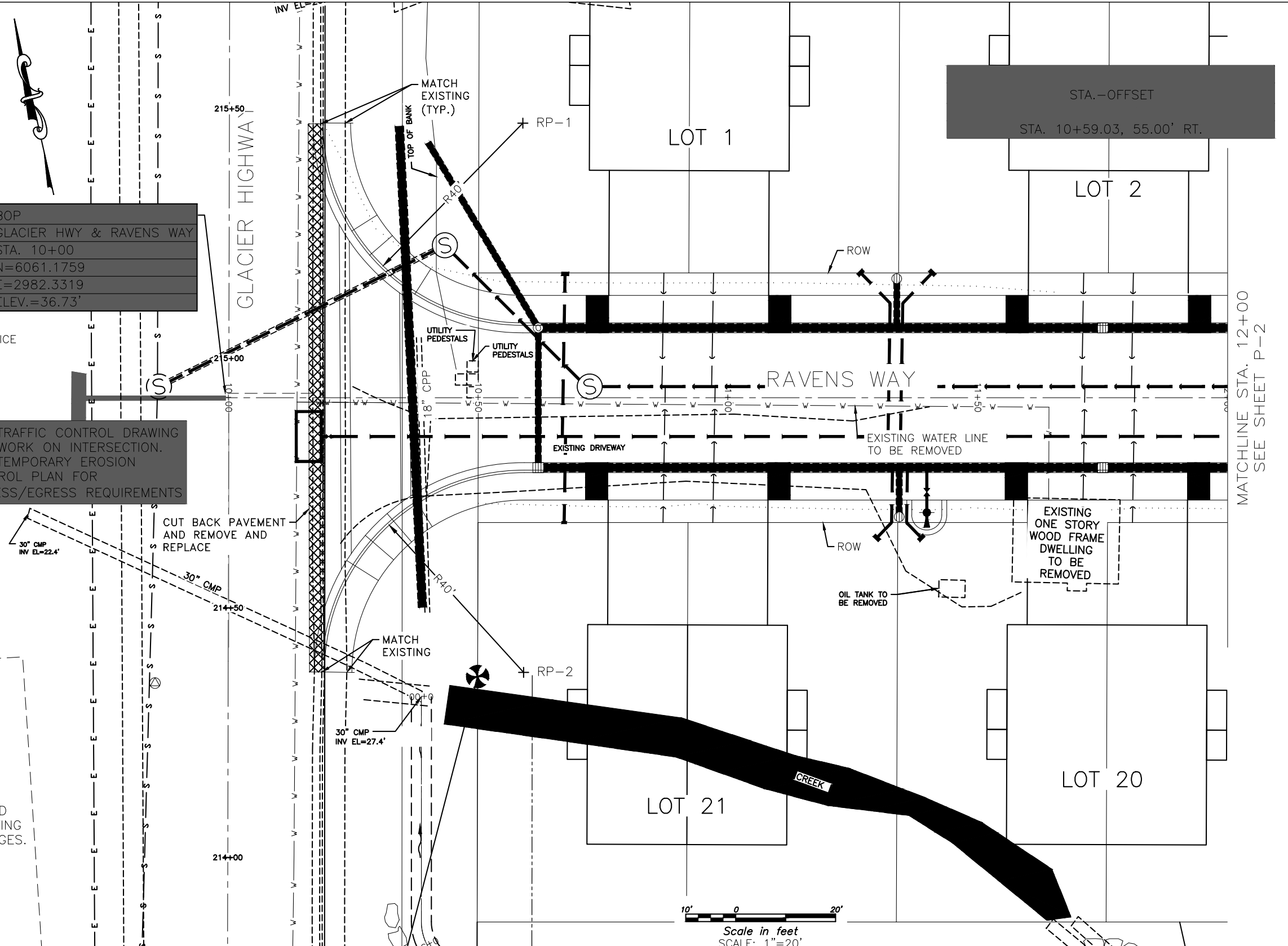
**BOP**  
 GLACIER HWY & RAVENS WAY  
 STA. 10+00  
 N=6061.1759  
 E=2982.3319  
 ELEV.=36.73'

SEE TRAFFIC CONTROL DRAWING FOR WORK ON INTERSECTION.  
 SEE TEMPORARY EROSION CONTROL PLAN FOR INGRESS/EGRESS REQUIREMENTS

**CONSTRUCTION NOTES:**  
 1. UNDERGROUND NEEDS TO BE VERIFIED BY CONTRACTOR LOCATION AND EXISTING IS NOT WELL DEFINED. EXPECT CHANGES.

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SCALE	GRAPHIC
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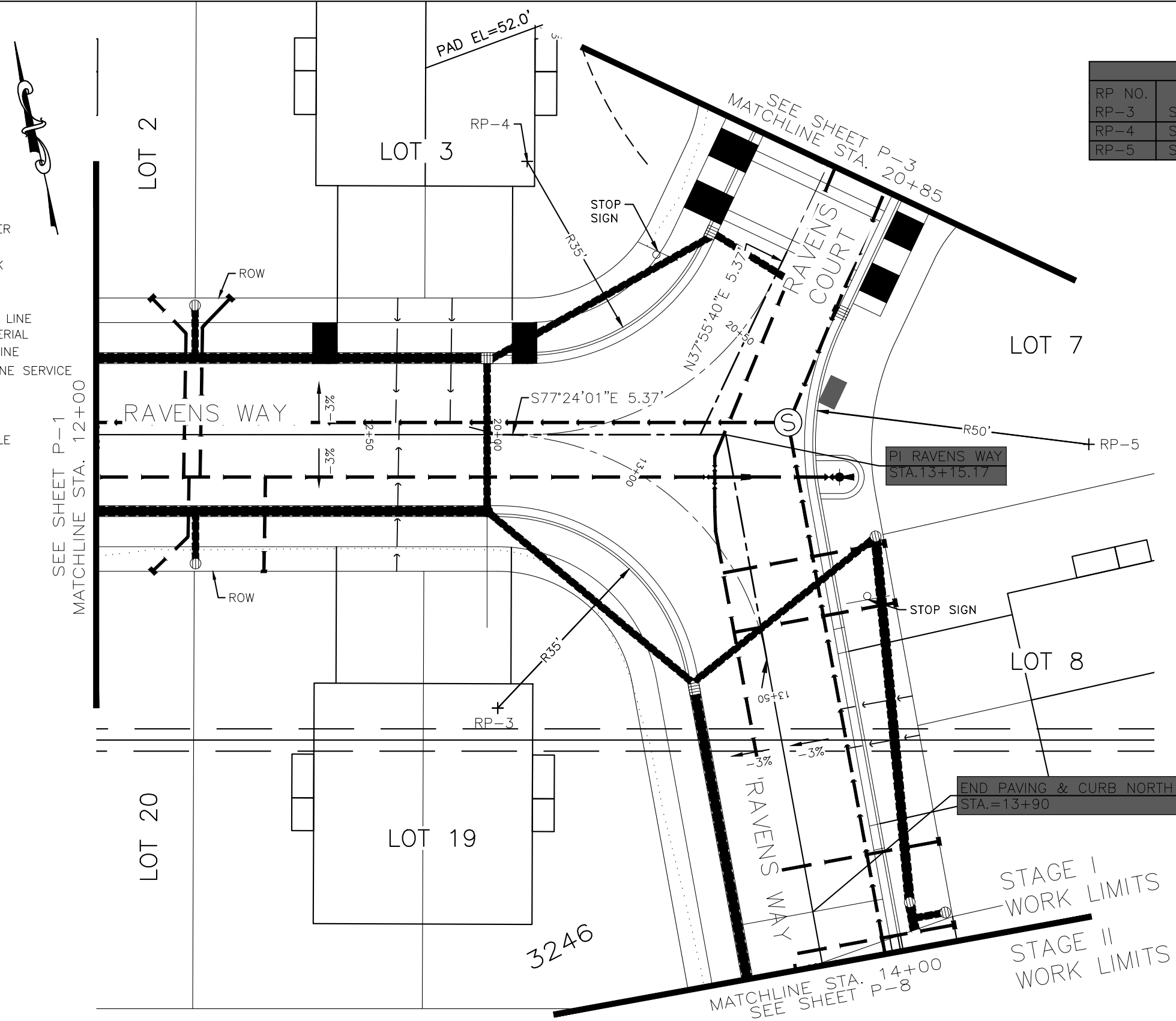
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 SHEET NO. 22 OF 64

Attachment C – Preliminary Construction Drawings

**LEGEND**

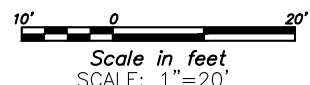
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- - - - - UNSURVEYED
- CENTERLINE
- - - - - EASEMENT
- - - - - EXISTING WATER LINE
- - - - - EXISTING SEWER LINE
- - - - - EXISTING ELECTRIC
- - - - - EXISTING DRIVEWAY
- ===== EXISTING STORM DRAIN
- - - - - EXISTING CREEK
- ===== PROPOSED VALLEY GUTTER
- ===== PROPOSED CURB & GUTTER WITH CURB INLET
- ===== PROPOSED BACK SIDEWALK
- - - - - PROPOSED CUT SLOPE
- - - - - PROPOSED FILL SLOPE
- ===== PROPOSED 8" PVC SEWER LINE
- ===== PROPOSED 4" SEWER LATERAL
- ===== PROPOSED 8" DI WATER LINE
- ===== PROPOSED 3/4" WATER LINE SERVICE
- ===== PROPOSED STORM DRAIN
- ===== PROPOSED UNDERDRAIN
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE
- ⊙ PROPOSED WATER VALVE
- ⊙ PROPOSED FIRE HYDRANT
- ⊙ PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN

CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-3	STA. 12+73.46, 50.00' LT.	35.00'
RP-4	STA. 12+76.14, 50.14' LT.	35.00'
RP-5	STA. 13+31.01, 68.38' LT.	50.00'



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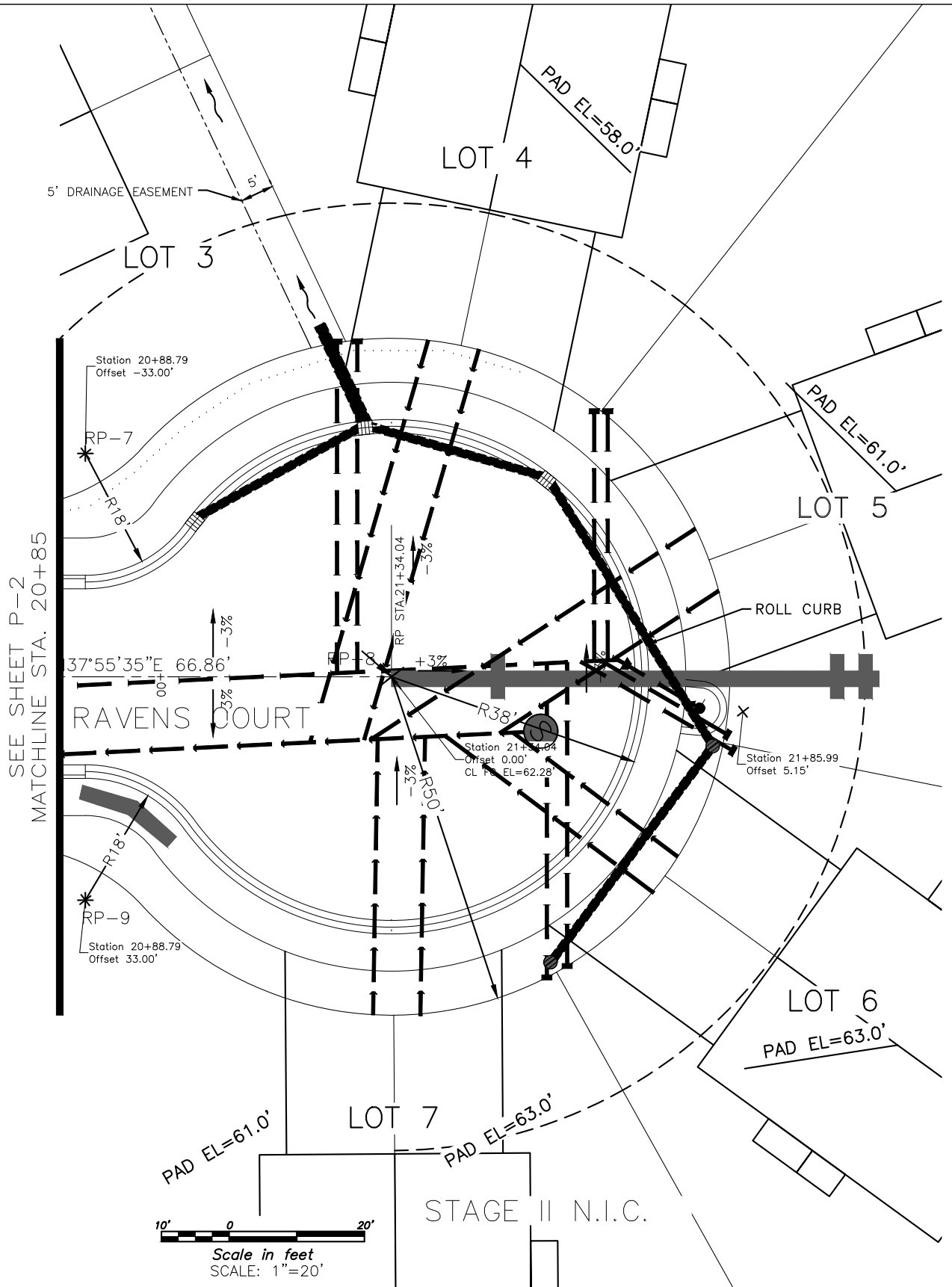
RAVENWOOD SUBDIVISION

SHEET U2  
 SHEET NO. 23 OF 64

**LEGEND**

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- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ==== PROPOSED VALLEY GUTTER
- █ PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- ..... PROPOSED FILL SLOPE
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- PROPOSED 8" DI WATER LINE
- PROPOSED 3/4" WATER LINE SERVICE
- PROPOSED STORMDRAIN
- PROPOSED UNDERDRAIN
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE
- ⊗ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- ▣ PROPOSED CATCH BASIN
- ⊕ PROPOSED AREA DRAIN
- ⊙ PROPOSED STORMDRAIN MANHOLE

CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-7	STA. 20+88.79, 33.00' LT.	18.00'
RP-8	STA. 20+88.79, 33.00' RT.	18.00'
RP-9	STA. 21+34.04, 0.00' RT.	38.00'



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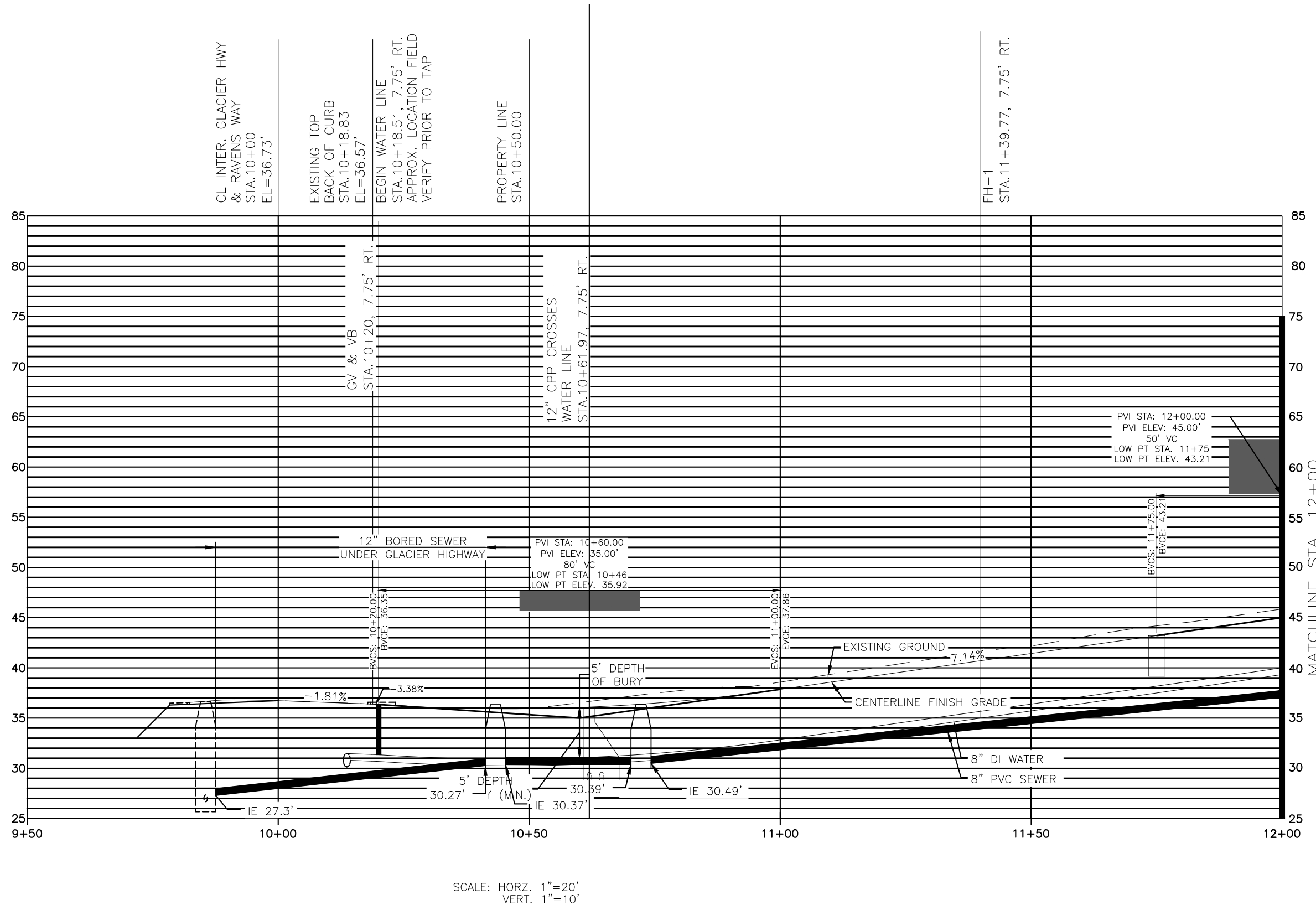
**MOORE ENGINEERING**  
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SHEET  
 U3  
 SHEET NO.  
 24 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

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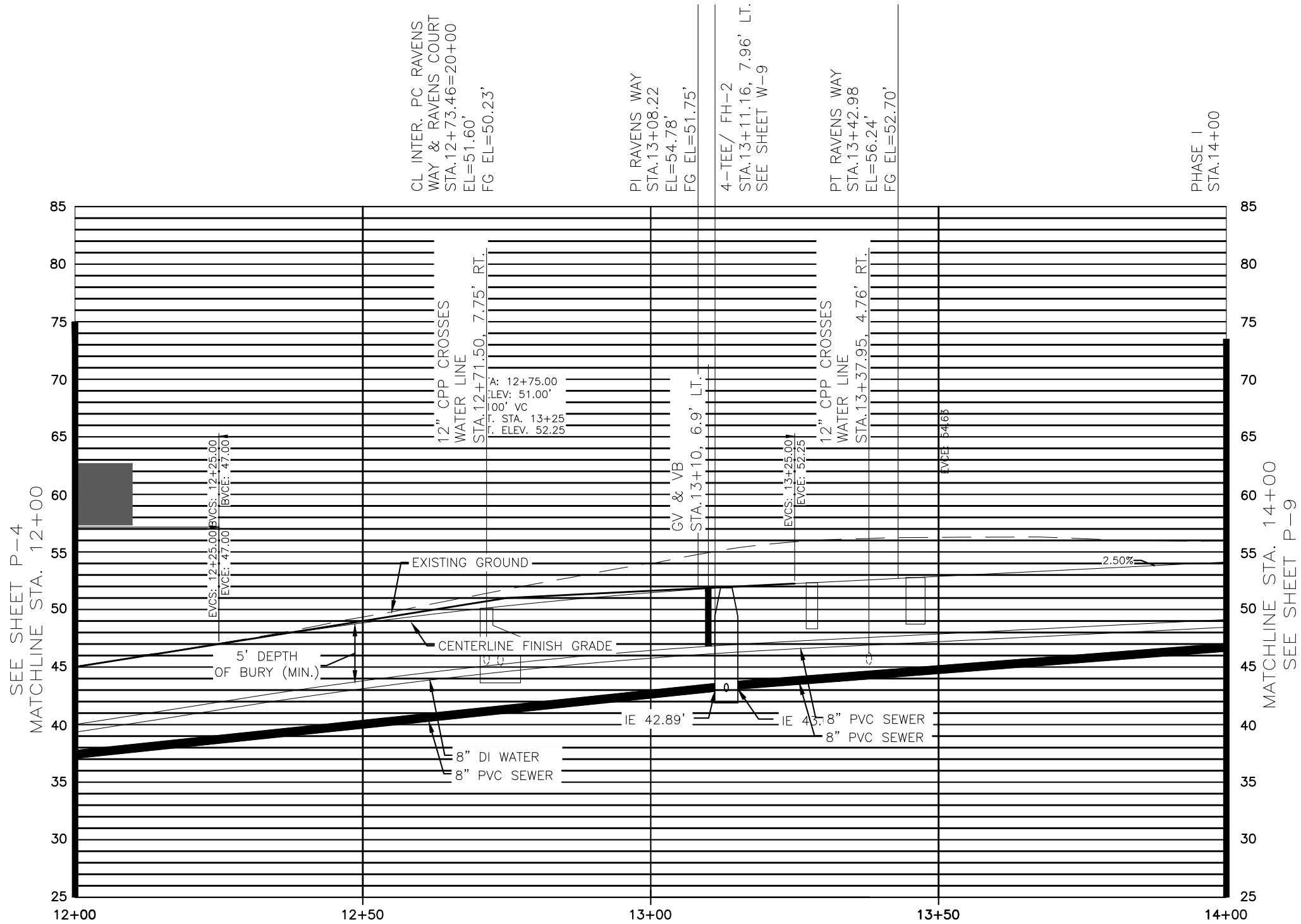
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SHEET U4  
SHEET NO. 25 OF 64





SCALE: HORZ. 1"=20'  
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CHECKED	###
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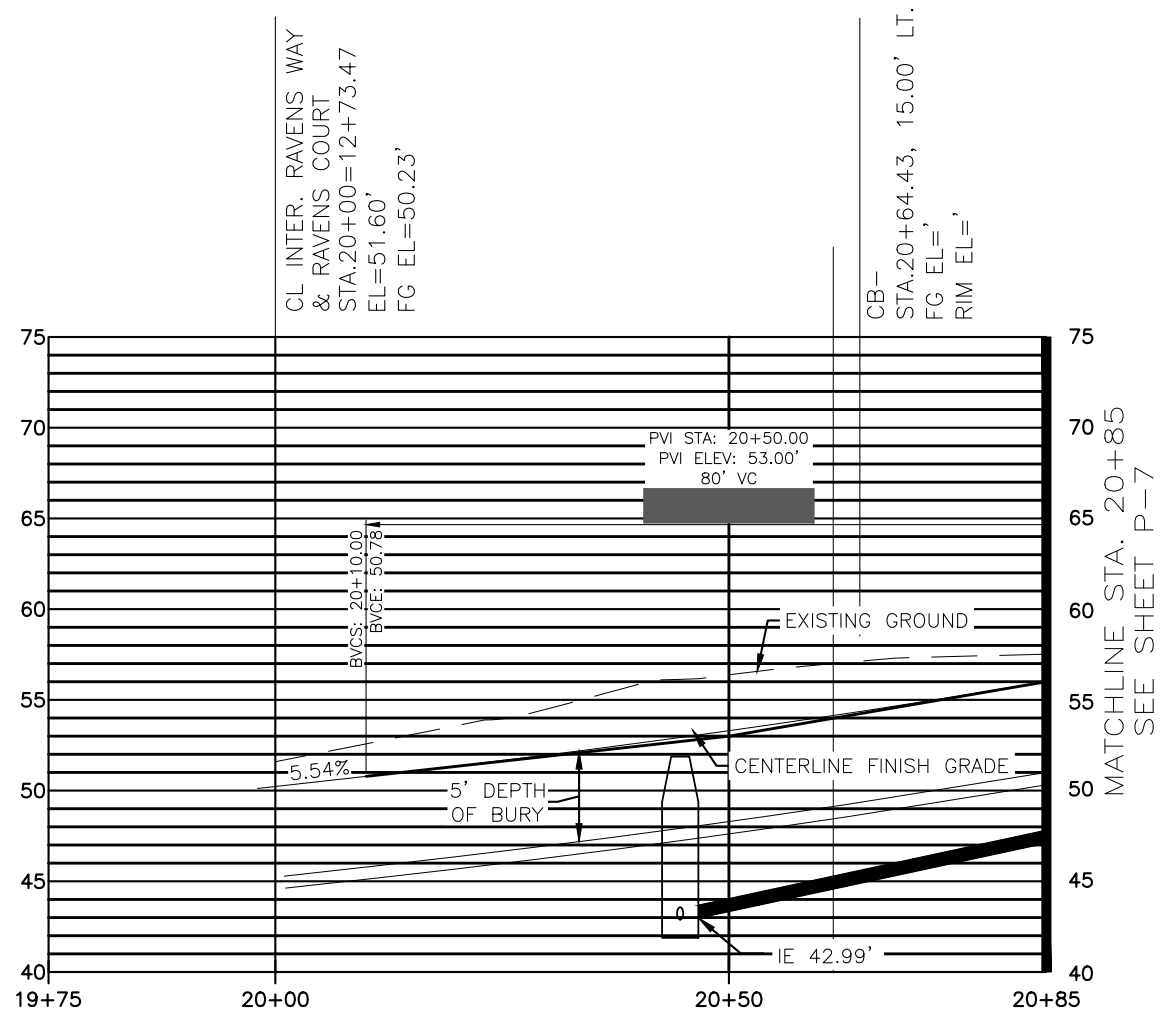
**MOORE ENGINEERING**  
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SHEET U5  
SHEET NO. 26 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

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REV	DATE	BY	DESCRIPTION

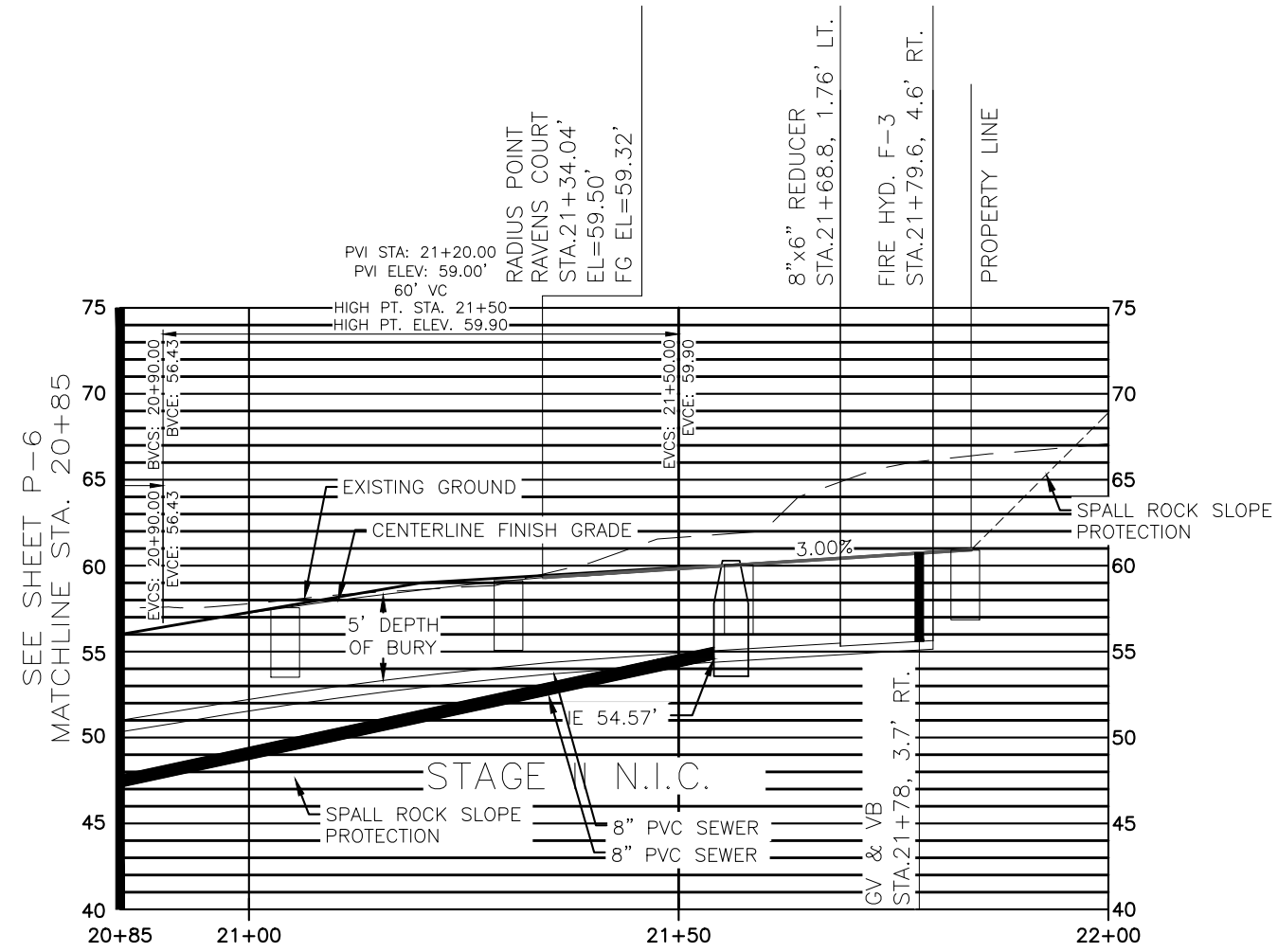
**MOORE ENGINEERING**  
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SHEET  
U6  
SHEET NO.  
27 OF 64

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SCALE: HORZ. 1"=20'  
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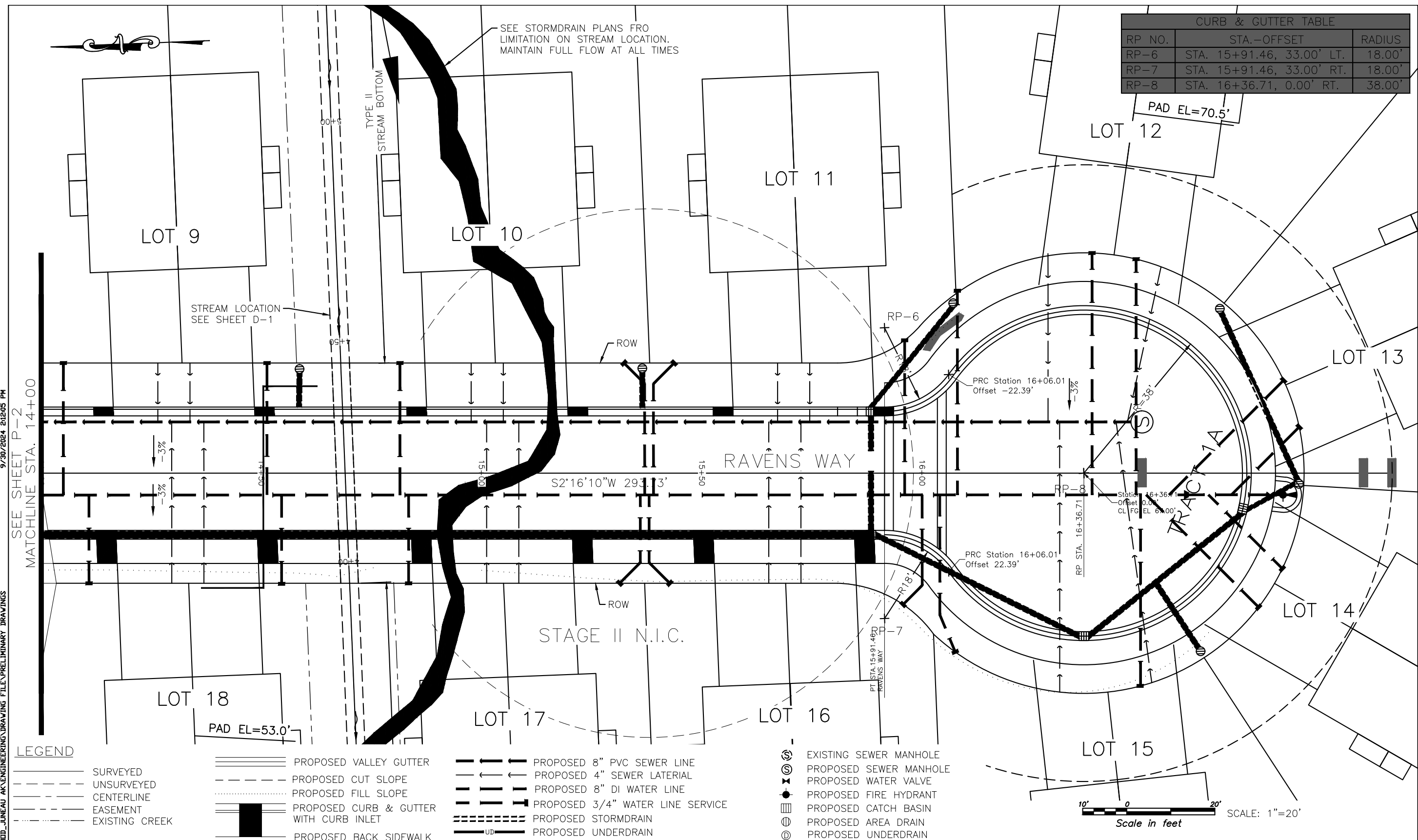
**MOORE ENGINEERING**  
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SHEET  
U7  
SHEET NO.  
28 OF 64

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CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-6	STA. 15+91.46, 33.00' LT.	18.00'
RP-7	STA. 15+91.46, 33.00' RT.	18.00'
RP-8	STA. 16+36.71, 0.00' RT.	38.00'



REV	DATE	BY	DESCRIPTION

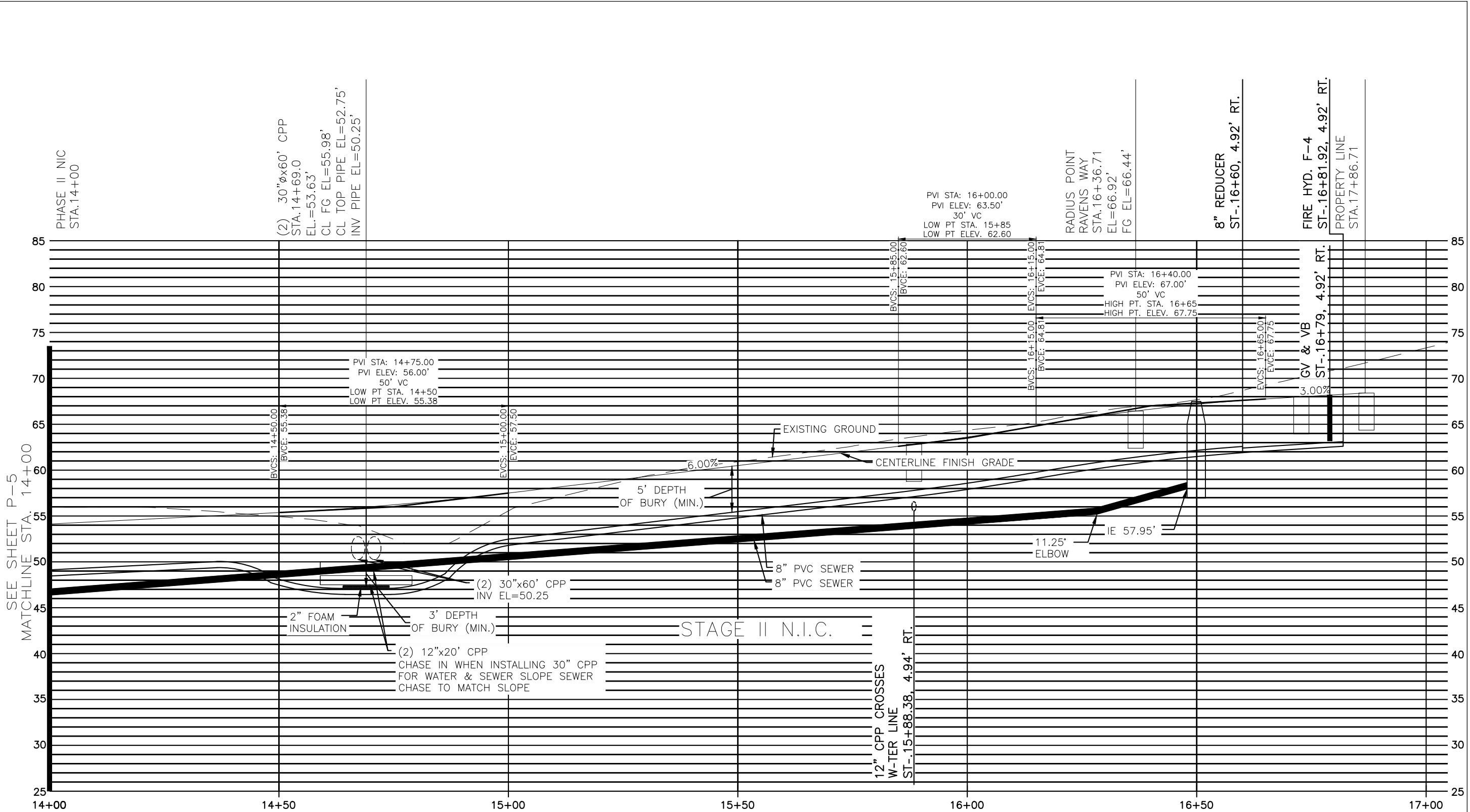
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SHEET  
 U8  
 SHEET NO.  
 29 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

SCALE GRAPHIC

DESIGNED: ###

DRAWN: ###

CHECKED: ###

DATE September 30, 2024

**MOORE ENGINEERING**  
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SHEET U9

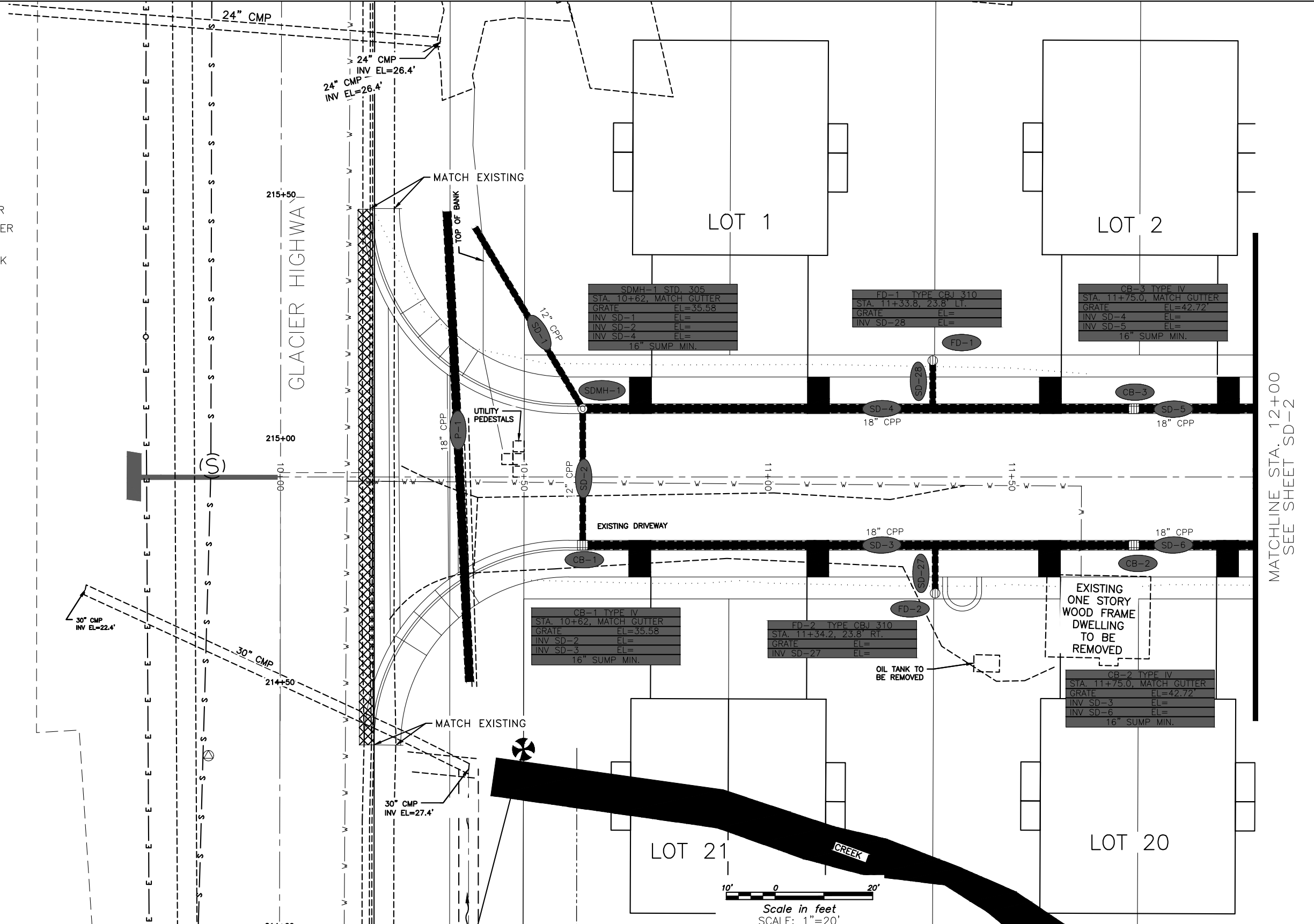
SHEET NO. 30 OF 64

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ▬▬▬ PROPOSED VALLEY GUTTER
- ▬▬▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬▬▬ PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- - - PROPOSED STORMDRAIN
- ▬▬▬ PROPOSED UNDERDRAIN
- ▬▬▬ PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN



STORM QUANTITIES	
SIZE/TYPE	QUANTITY
18" CORRUGATED POLY.	370 LF
12" CORRUGATED POLY.	86 LF
TYPE IV CATCH BASIN	3 EA
TYPE CBJ 310 AREA DRAIN	2 EA
STD. 305 STORM DRAIN MH	1 EA



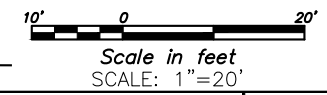
SDMH-1 STD. 305	STA. 10+62, MATCH GUTTER
GRATE	EL=35.58
INV SD-1	EL=
INV SD-2	EL=
INV SD-4	EL=
16" SUMP MIN.	

FD-1 TYPE CBJ 310	STA. 11+33.8, 23.8' LT.
GRATE	EL=
INV SD-28	EL=

CB-3 TYPE IV	STA. 11+75.0, MATCH GUTTER
GRATE	EL=42.72
INV SD-4	EL=
INV SD-5	EL=
16" SUMP MIN.	

FD-2 TYPE CBJ 310	STA. 11+34.2, 23.8' RT.
GRATE	EL=
INV SD-27	EL=

CB-2 TYPE IV	STA. 11+75.0, MATCH GUTTER
GRATE	EL=42.72
INV SD-3	EL=
INV SD-6	EL=
16" SUMP MIN.	



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SCALE	GRAPHIC		
DESIGNED	####		
DRAWN	####		
CHECKED	####		
DATE	September 30, 2024		
REV	DATE	BY	DESCRIPTION

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
**TRACY MOORE, P.E.**  
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RAVENWOOD SUBDIVISION

MATCHLINE STA. 12+00  
SEE SHEET SD-2

SHEET  
SD1  
SHEET NO.  
31 OF 64

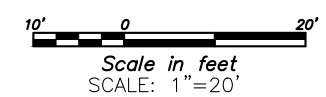
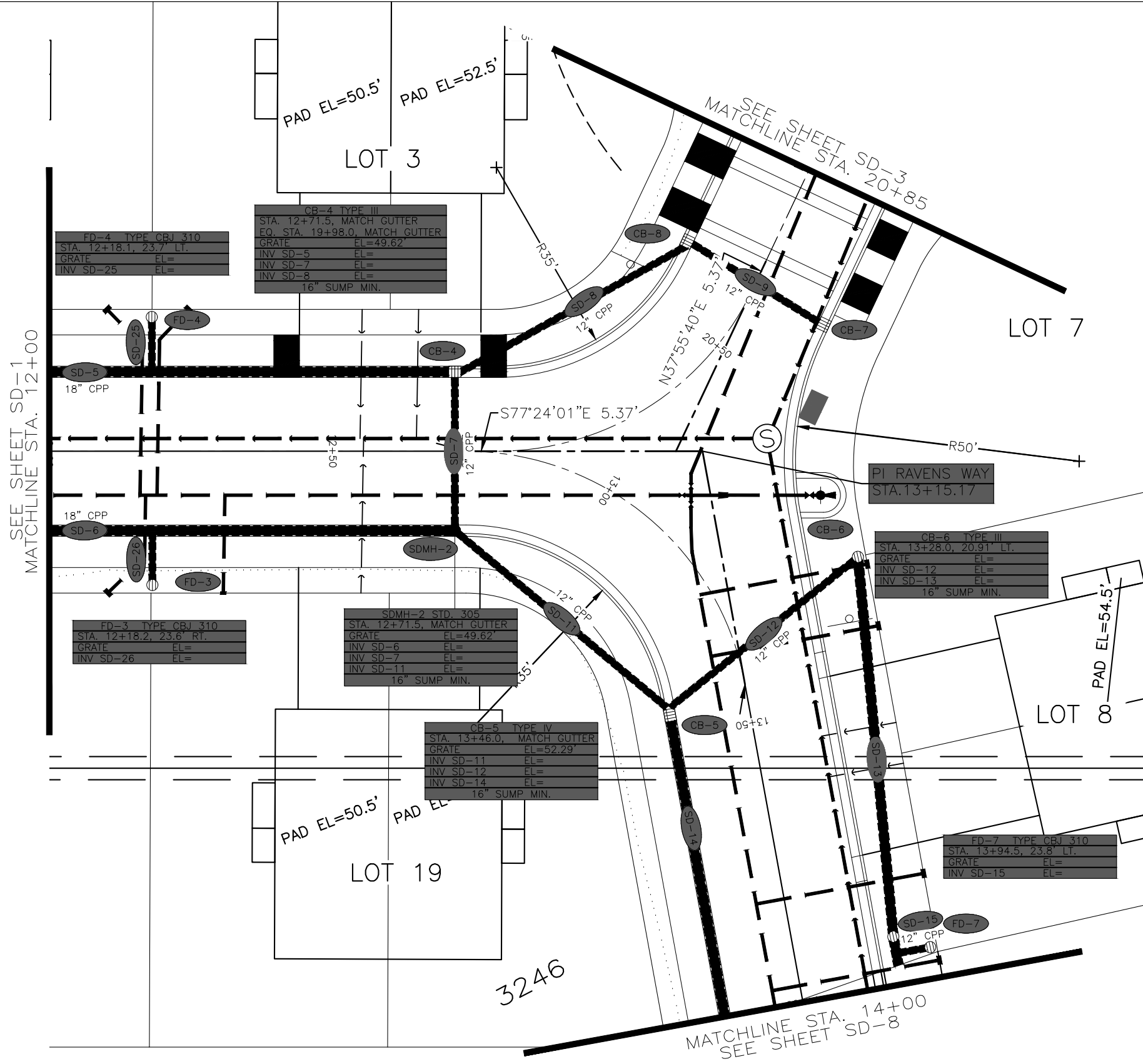
Attachment C – Preliminary Construction Drawings

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- - - PROPOSED STORM DRAIN
- - - PROPOSED UNDERDRAIN
- ▨ PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN



STORM QUANTITIES	
SIZE/TYPE	QUANTITY
18" CORRUGATED POLY.	114 LF
12" CORRUGATED POLY.	317 LF
TYPE III CATCH BASIN	5 EA
TYPE IV CATCH BASIN	1 EA
TYPE CBJ 310 AREA DRAIN	3 EA
STD. 305 STORM DRAIN MH	1 EA



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SCALE	GRAPHIC
DESIGNED	####
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DATE	September 30, 2024

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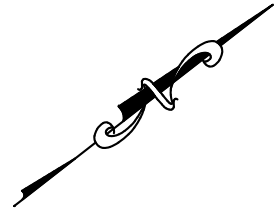
RAVENWOOD SUBDIVISION

SHEET SD2  
 SHEET NO. 32 OF 64

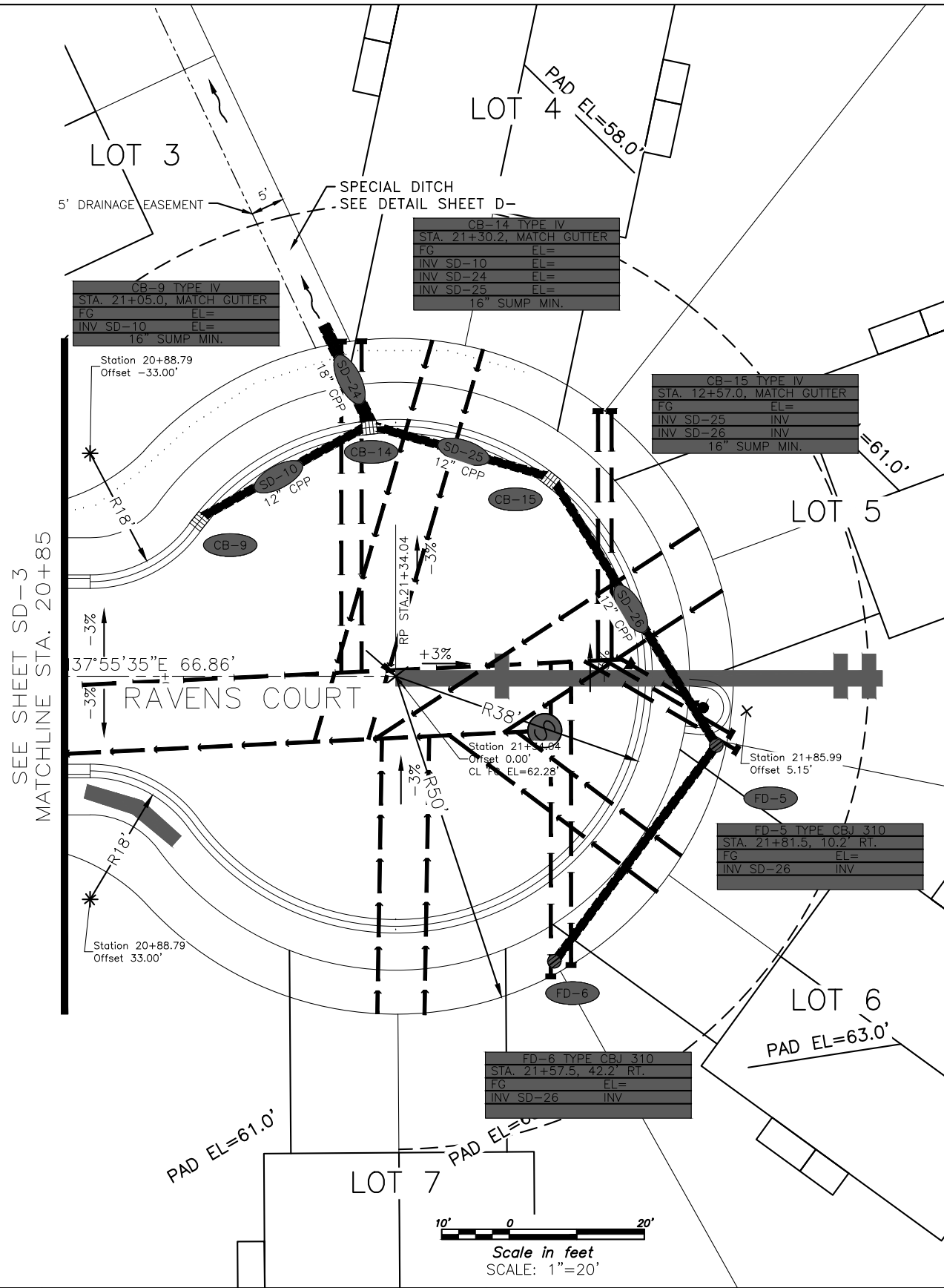


**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- ===== EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ===== PROPOSED VALLEY GUTTER
- ===== PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- PROPOSED STORM DRAIN
- PROPOSED UNDERDRAIN
- PROPOSED CATCH BASIN
- ⊙ PROPOSED AREA DRAIN
- ⊙ PROPOSED UNDERDRAIN



STORM QUANTITIES	
SIZE/TYPE	QUANTITY
12" CORRUGATED POLY.	150 LF
TYPE IV CATCH BASIN	3 EA
TYPE CBJ 310 AREA DRAIN	2 EA



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DATE	September 30, 2024

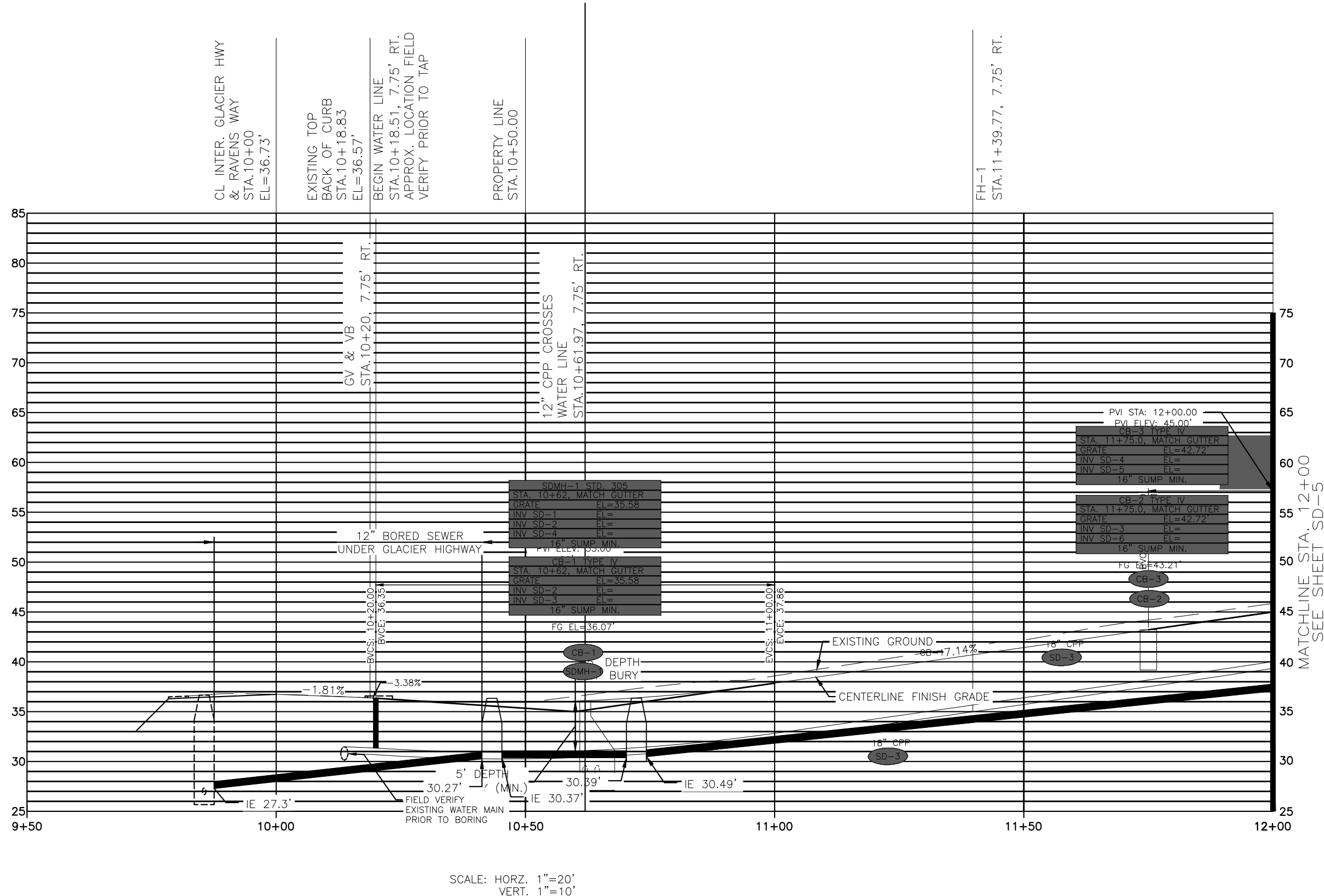
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SHEET SD3  
 SHEET NO. 33 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

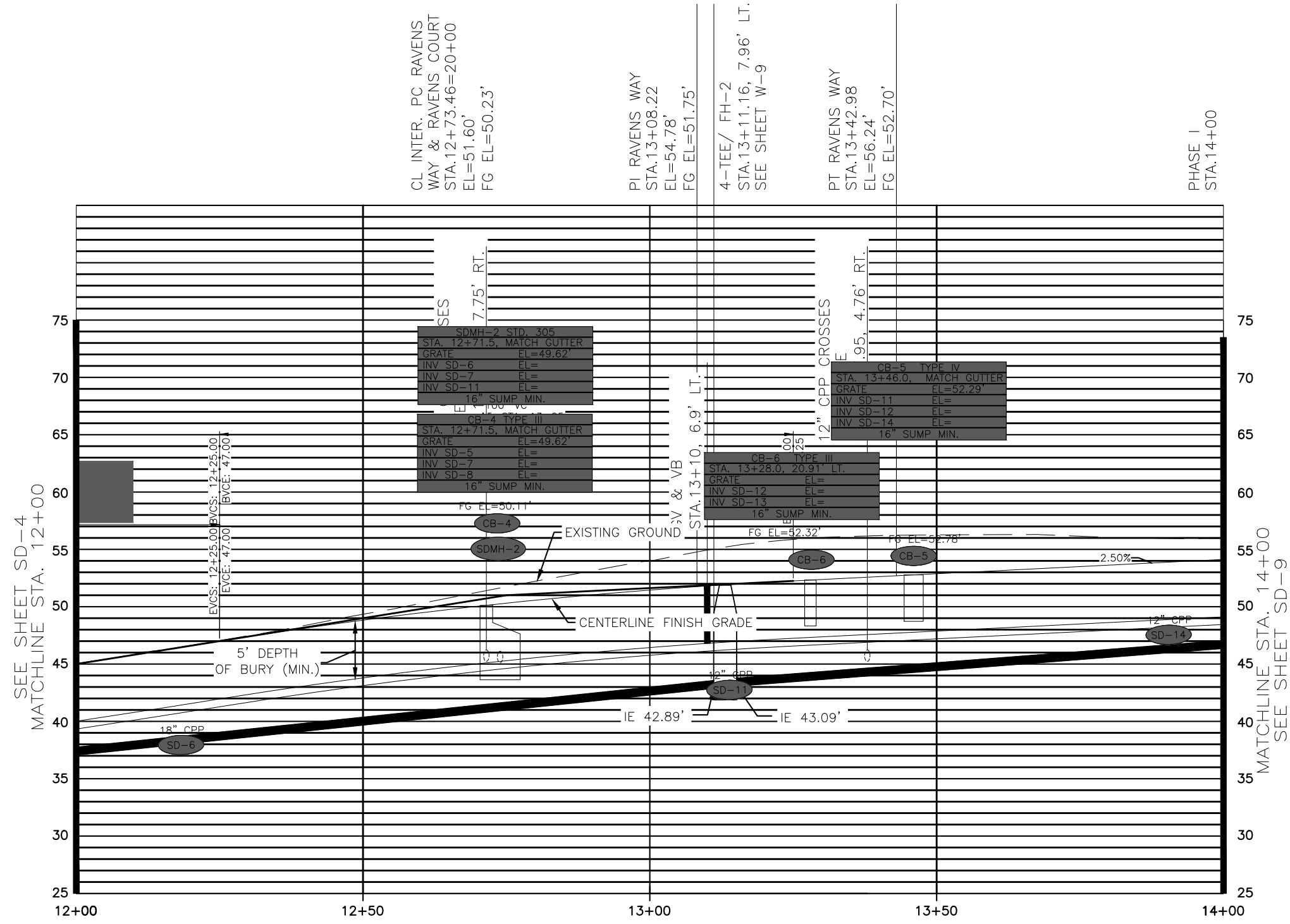
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SCALE	GR-PHIC
DESIGNED	####
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DATE	September 30, 2024

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SHEET	SD4
SHEET NO.	34 OF 64



SCALE: HORZ. 1"=20'  
VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

SCALE	GRAPHIC
DESIGNED	###
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DATE	September 30, 2024

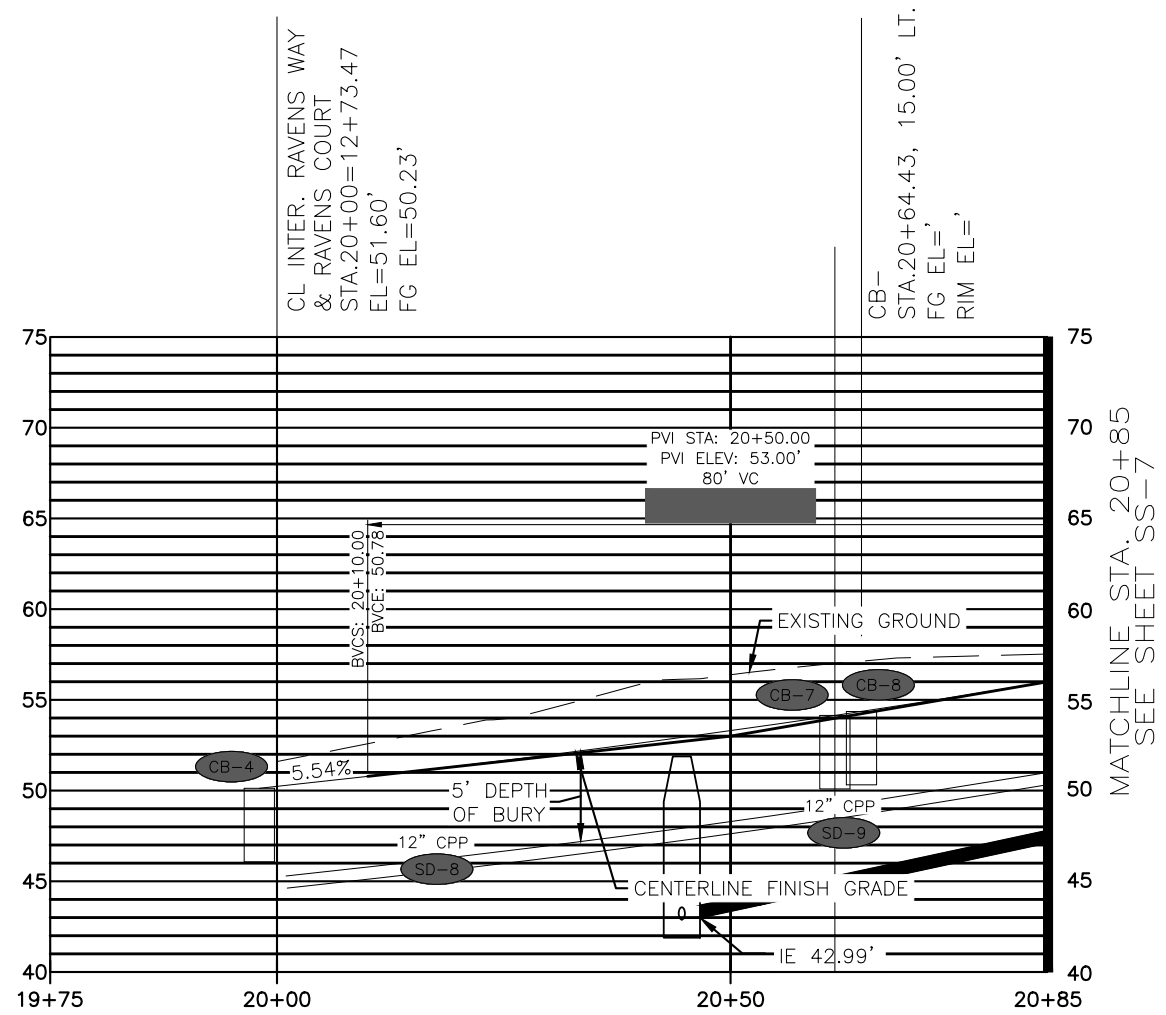
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SHEET  
SD5  
SHEET NO.  
35 OF 64

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CB-4 TYPE IV	STA. 19+98.0, MATCH GUTTER
FG	EL=
INV SD-8	EL=
16" SUMP MIN.	

CB-7 TYPE IV	STA. 20+61.5, MATCH GUTTER
FG	EL=
INV SD-9	EL=
16" SUMP MIN.	

SCALE: HORZ. 1"=20'  
VERT. 1"=10'

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DATE	September 30, 2024

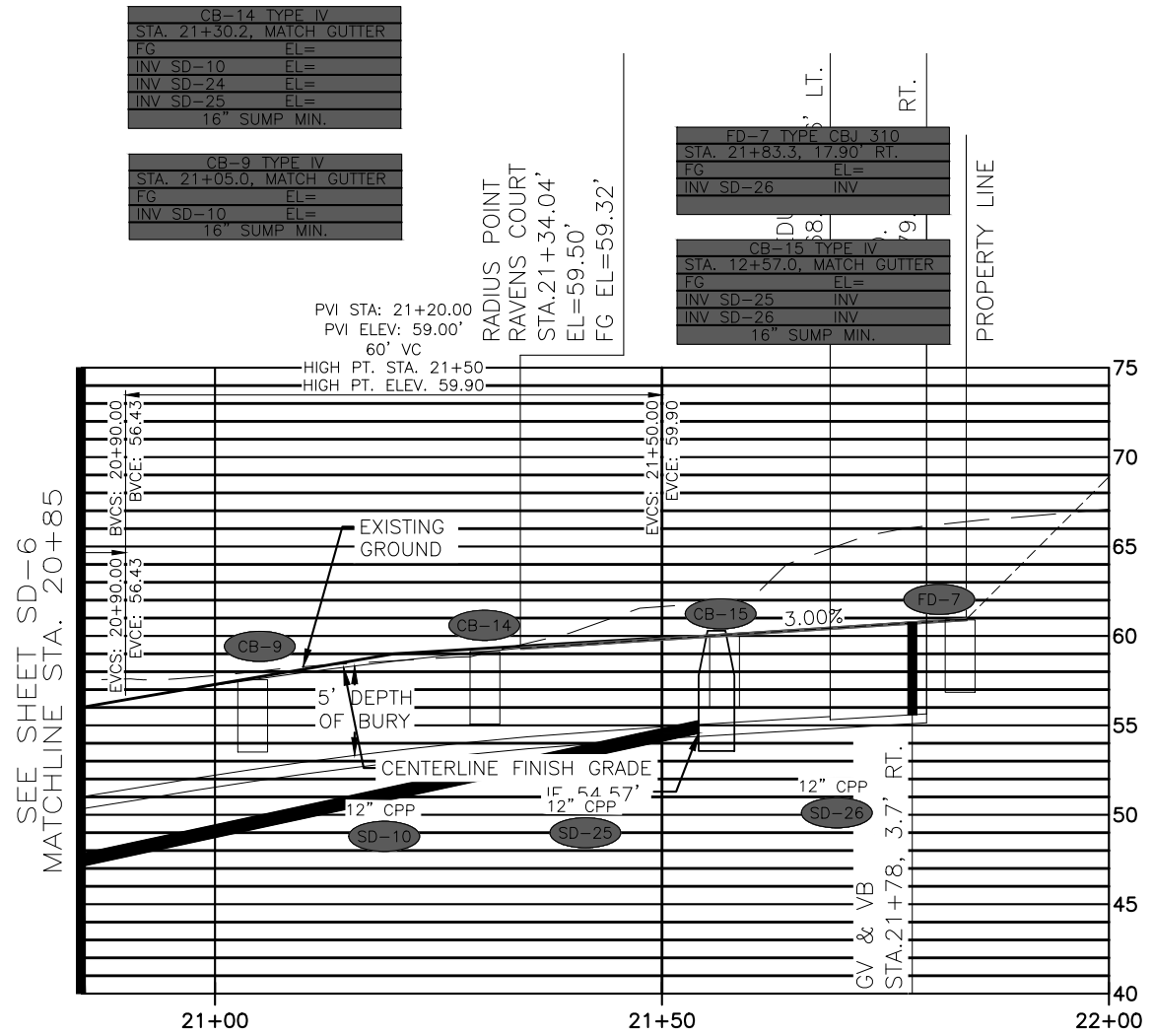
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SHEET  
SD6  
SHEET NO.  
36 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

SC-LE	GRAPHIC
DESIGNED	###
DR-WN	###
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DATE	September 30, 2024

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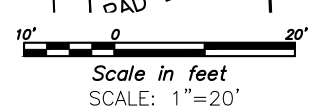
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SHEET NO.  
37 OF 64

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SEE SHEET SD-2  
MATCHLINE STA. 14+00

**LEGEND**

- SURVEYED
- UNSURVEYED
- CENTERLINE
- EASEMENT
- EXISTING CREEK
- PROPOSED VALLEY GUTTER
- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- PROPOSED STORMDRAIN
- PROPOSED UNDERDRAIN
- PROPOSED CATCH BASIN
- PROPOSED AREA DRAIN
- PROPOSED UNDERDRAIN



SCALE	GRAPHIC
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DRAWN	###
CHECKED	###
DATE	September 30, 2024

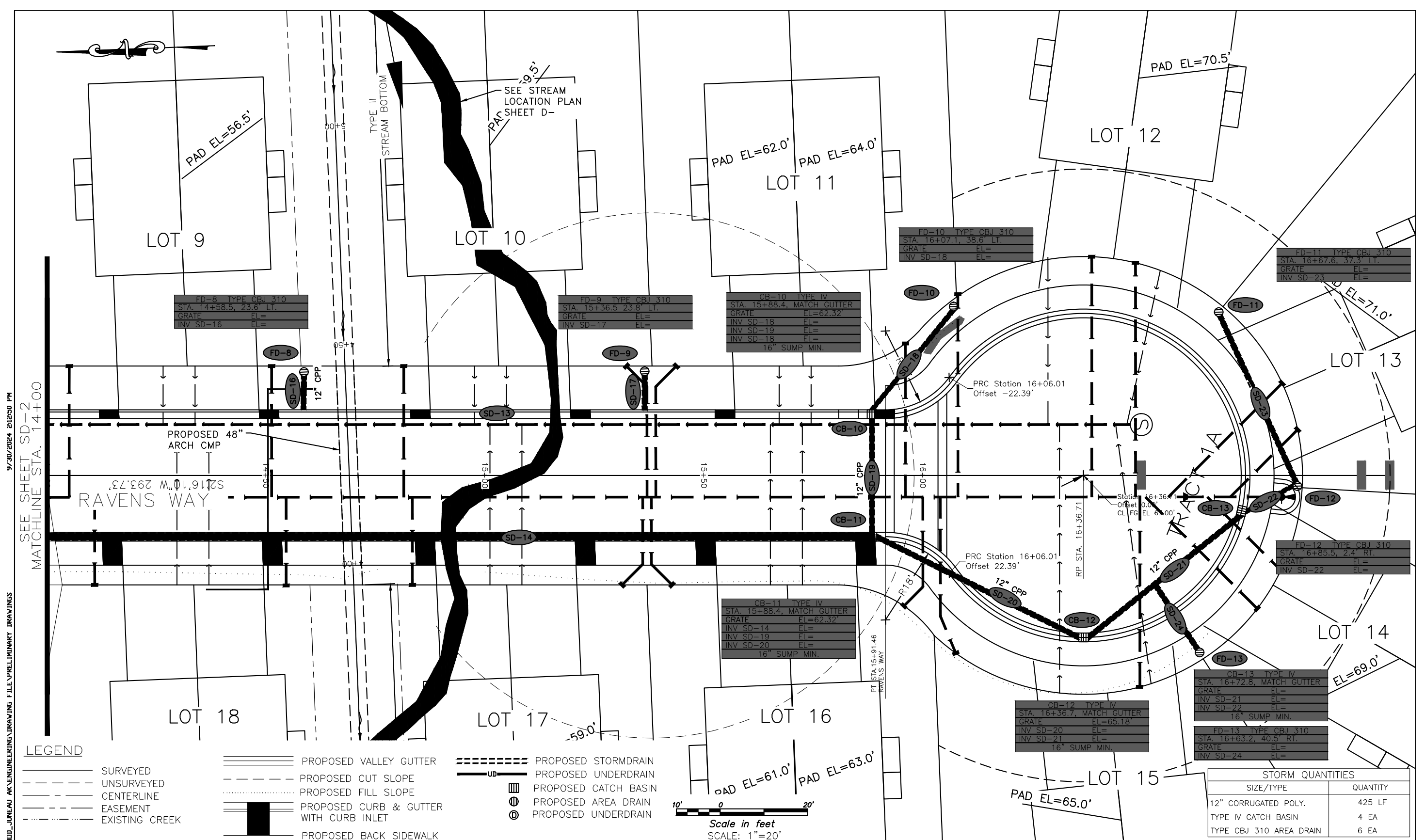
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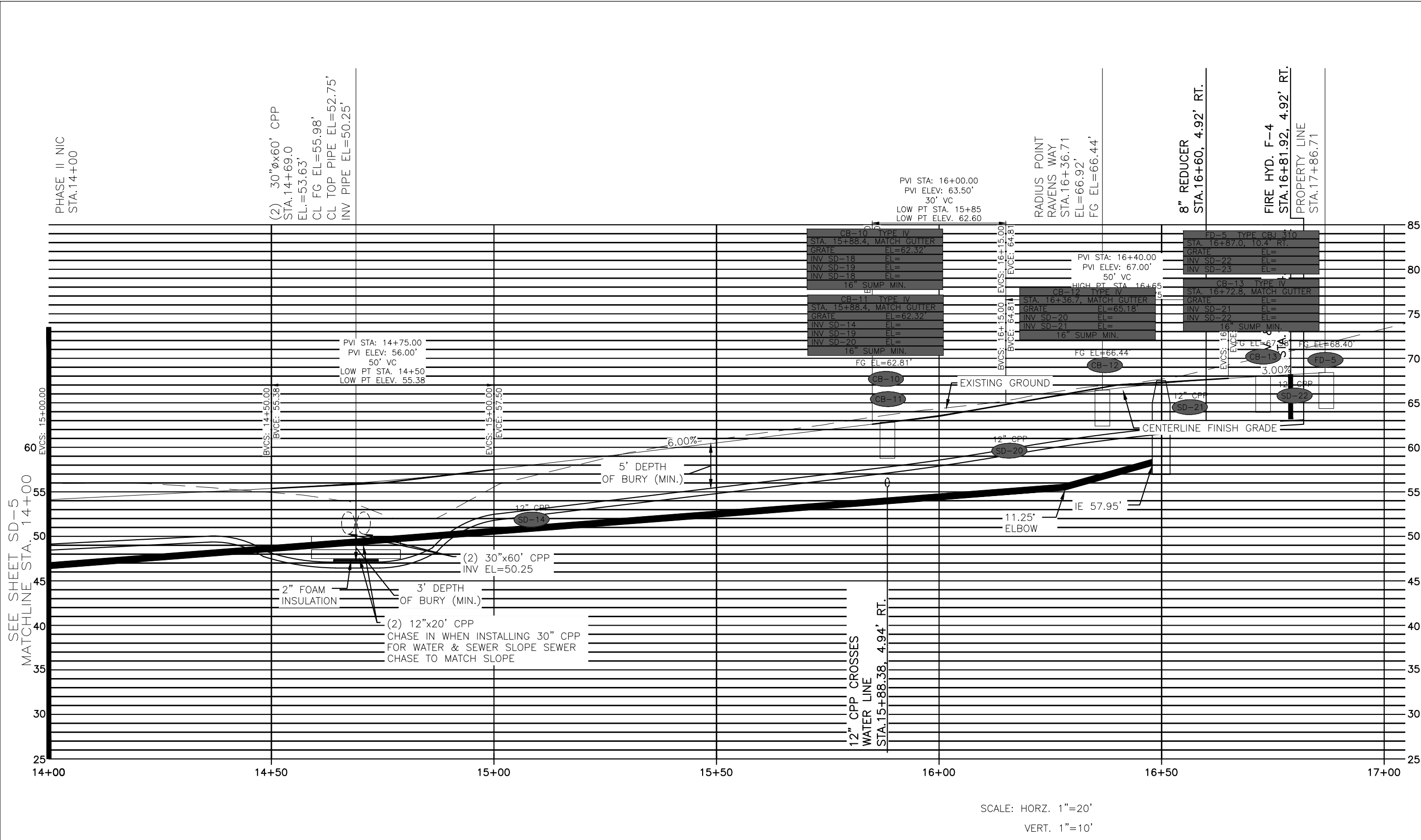
STORM QUANTITIES	
SIZE/TYPE	QUANTITY
12" CORRUGATED POLY.	425 LF
TYPE IV CATCH BASIN	4 EA
TYPE CBJ 310 AREA DRAIN	6 EA

SHEET  
SD8  
SHEET NO.  
38 OF 64



Attachment C – Preliminary Construction Drawings

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VERT. 1"=10'

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DATE	September 30, 2024

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SHEET	SD9
SHEET NO.	39 OF 64

Attachment C – Preliminary Construction Drawings

**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- ▬ PROPOSED VALLEY GUTTER
- ▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬ PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- - - PROPOSED 8" DI WATER LINE
- - - PROPOSED 1" WATER LINE SERVICE
- ⊗ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- ▲ PROPOSED THRUST BLOCK
- ⊙ EXISTING SEWER MANHOLE

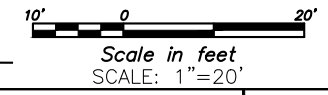
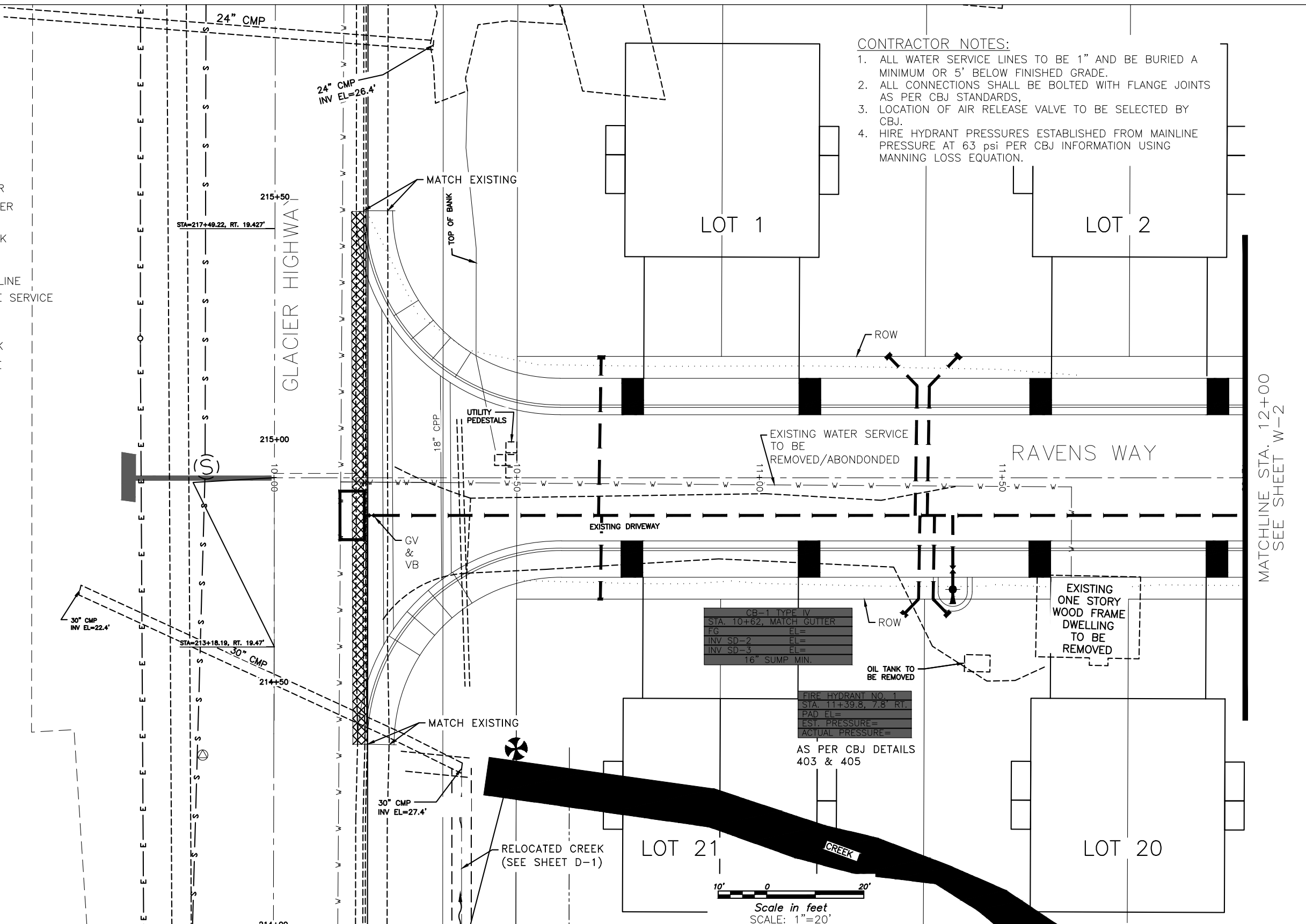


WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	200 LF
1" TYPE "K" SERVICE LINE	150 LF
FIRE HYDRANT	1 EA
WATER METER	6 EA
MAINLINE VALVE	2 EA

**CONTRACTOR NOTES:**

1. ALL WATER SERVICE LINES TO BE 1" AND BE BURIED A MINIMUM OR 5' BELOW FINISHED GRADE.
2. ALL CONNECTIONS SHALL BE BOLTED WITH FLANGE JOINTS AS PER CBJ STANDARDS.
3. LOCATION OF AIR RELEASE VALVE TO BE SELECTED BY CBJ.
4. HIRE HYDRANT PRESSURES ESTABLISHED FROM MAINLINE PRESSURE AT 63 psi PER CBJ INFORMATION USING MANNING LOSS EQUATION.

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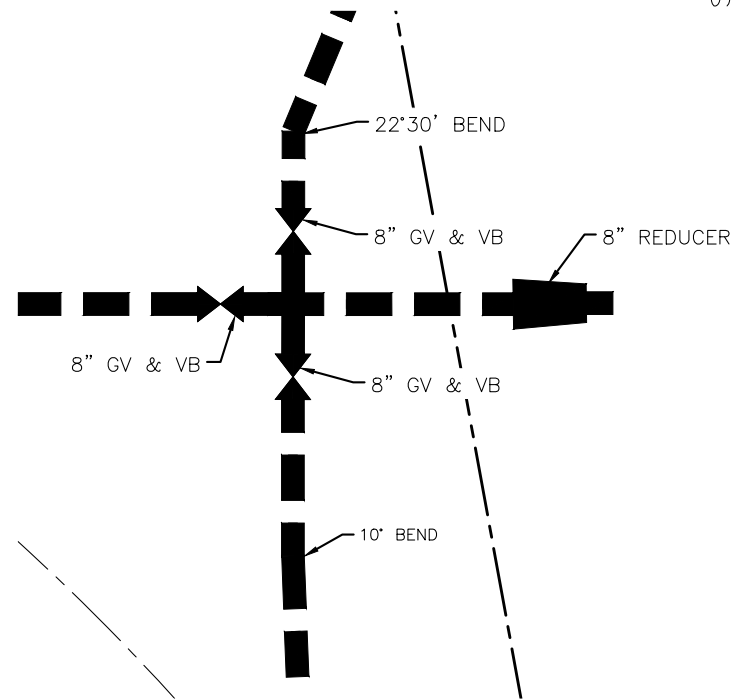
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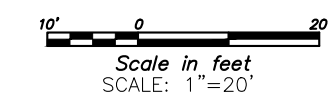
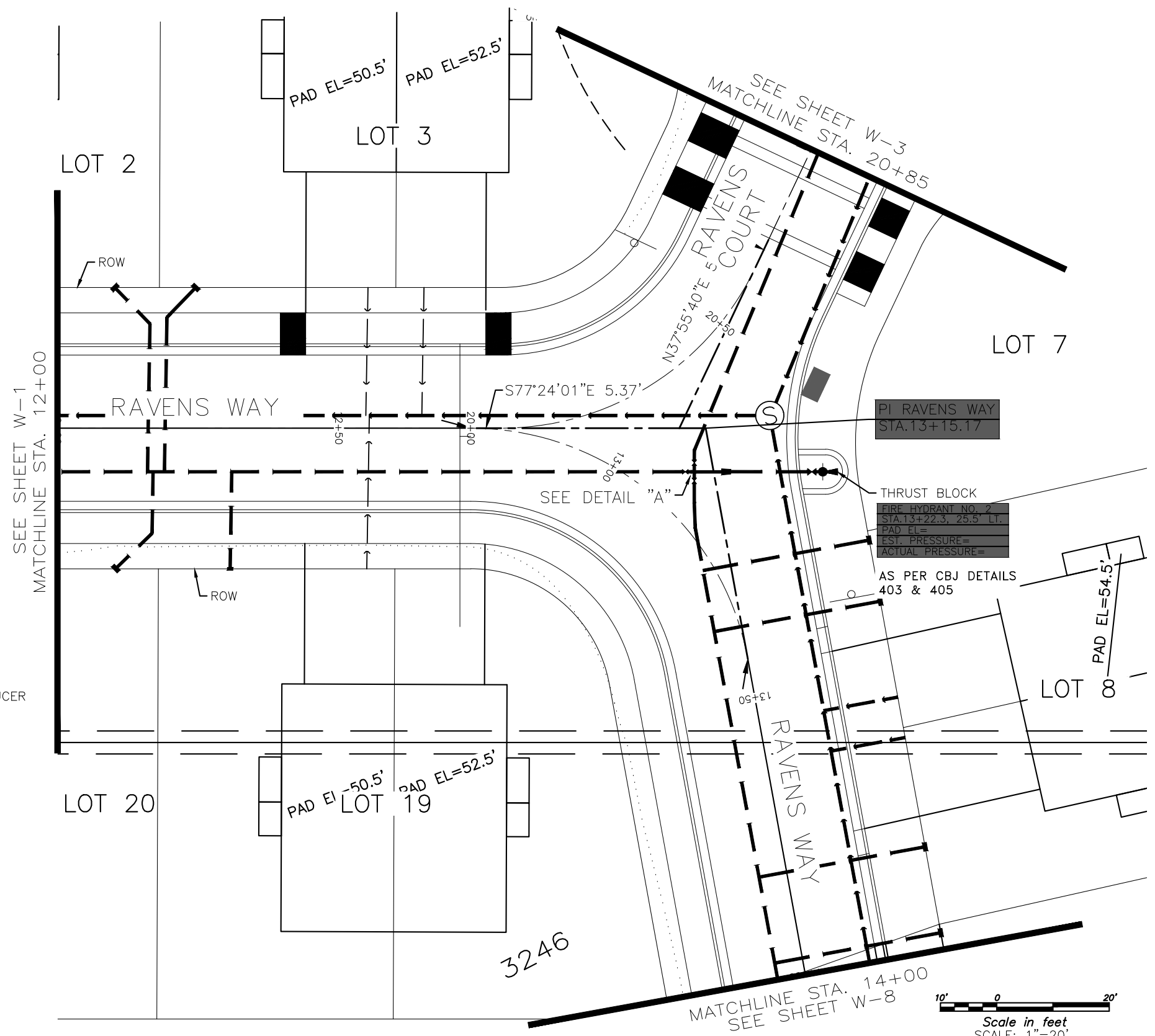
**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING CREEK
- ▬ PROPOSED VALLEY GUTTER
- ▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬ PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- ▬ PROPOSED 8" DI WATER LINE
- ▬ PROPOSED 1" WATER LINE SERVICE
- ⊗ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- ▲ PROPOSED THRUST BLOCK

WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	295 LF
1" TYPE "K" SERVICE LINE	270 LF
FIRE HYDRANT	1 EA
WATER METER	8 EA
MAINLINE VALVE	3 EA



DETAIL A  
SCALE: 1"=1'



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DATE	September 30, 2024

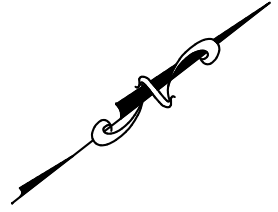
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SHEET W2  
SHEET NO. 41 OF 64

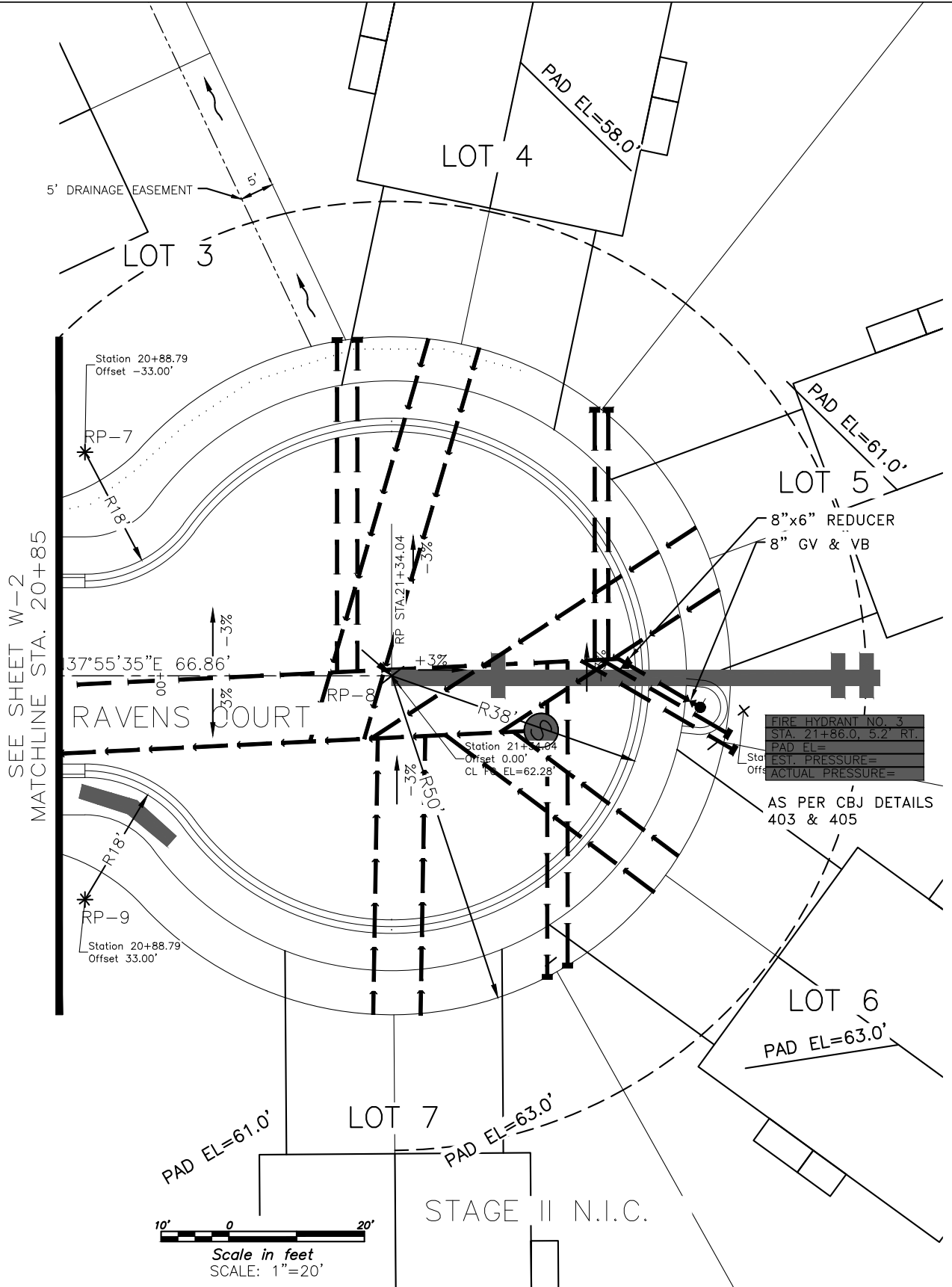
**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ▬ PROPOSED VALLEY GUTTER
- ▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬ PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- ▬ PROPOSED 8" DI WATER LINE
- ▬ PROPOSED 3/4" WATER LINE SERVICE
- ⊗ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT



CURB & GUTTER TABLE		
RP NO.	STA.-OFFSET	RADIUS
RP-7	STA. 20+88.79, 33.00' LT.	18.00'
RP-8	STA. 20+88.79, 33.00' RT.	18.00'
RP-9	STA. 21+34.04, 0.00' RT.	38.00'

WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	70 LF
1" TYPE "K" SERVICE LINE	400 LF
FIRE HYDRANT	1 EA
WATER METER	8 EA
MAINLINE VALVE	1 EA



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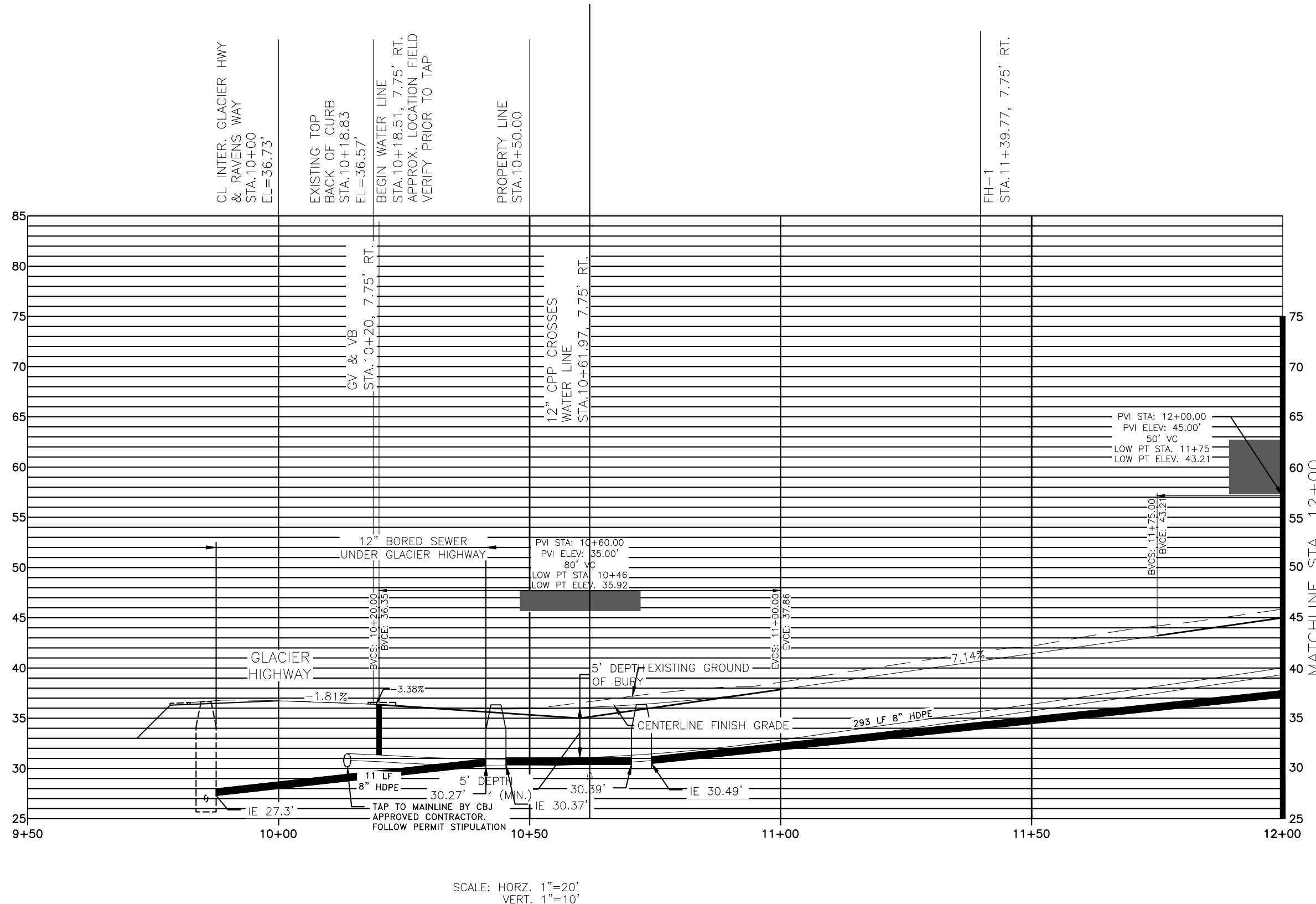
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SHEET  
W3  
SHEET NO.  
42 OF 64

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VERT. 1"=10'

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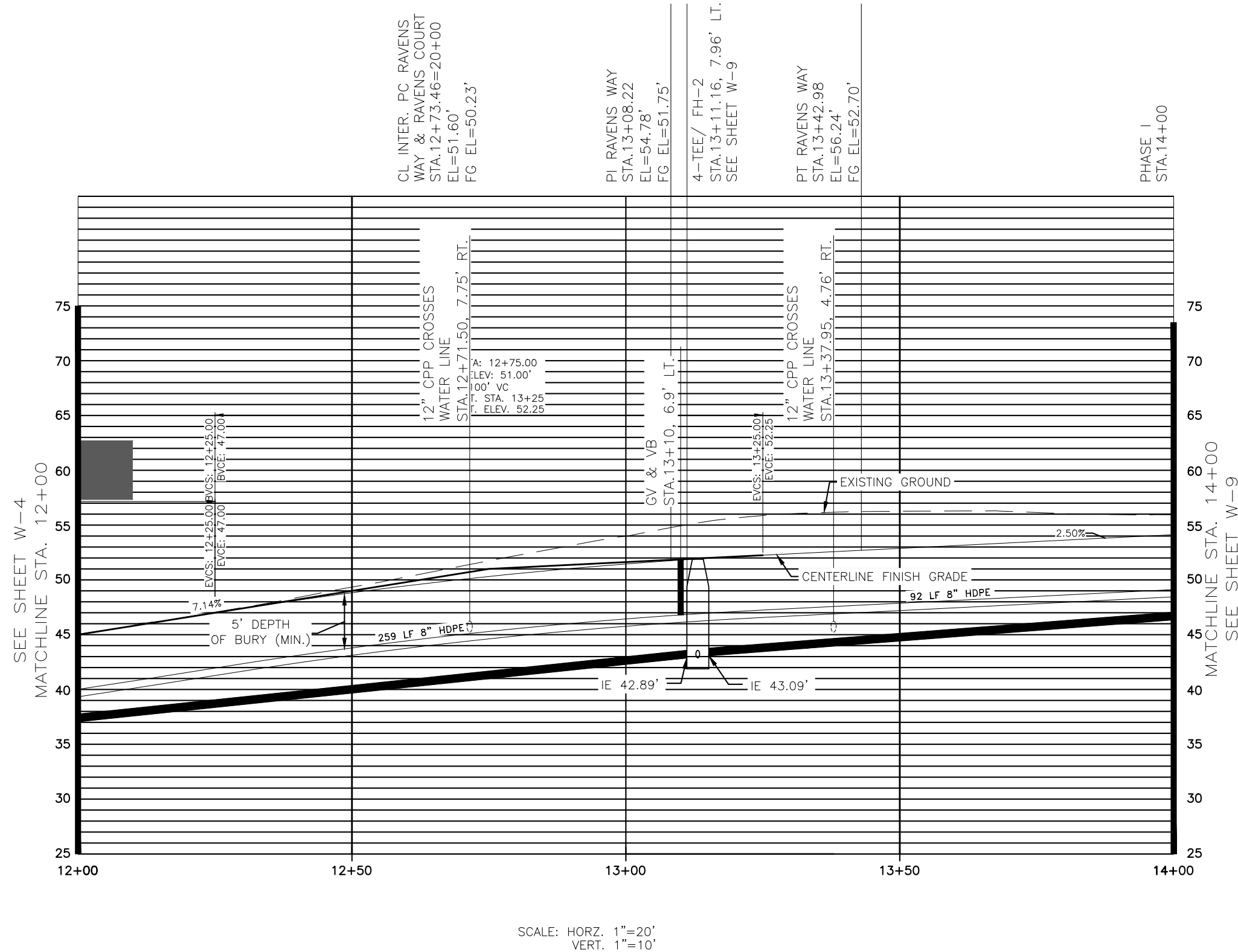
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SHEET	W4
SHEET NO.	43 OF 64

MATCHLINE STA. 12+00  
SEE SHEET W-5



REV	DATE	BY	DESCRIPTION

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CHECKED	###
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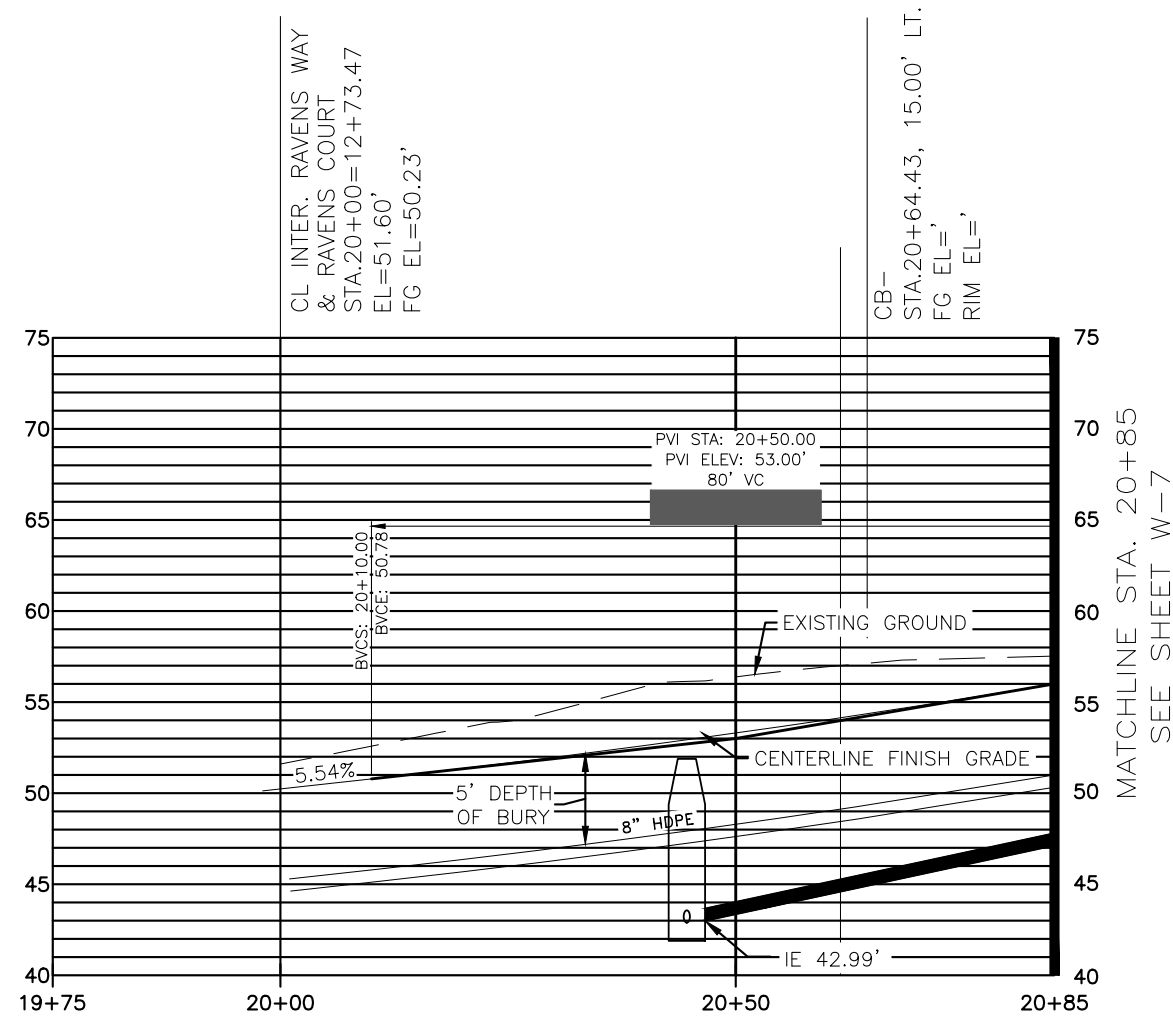
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SHEET  
W5  
SHEET NO.  
44 OF 64

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SCALE: HORZ. 1"=20'  
VERT. 1"=10'

SCALE	GRAPHIC
DESIGNED	###
DRAWN	###
CHECKED	###
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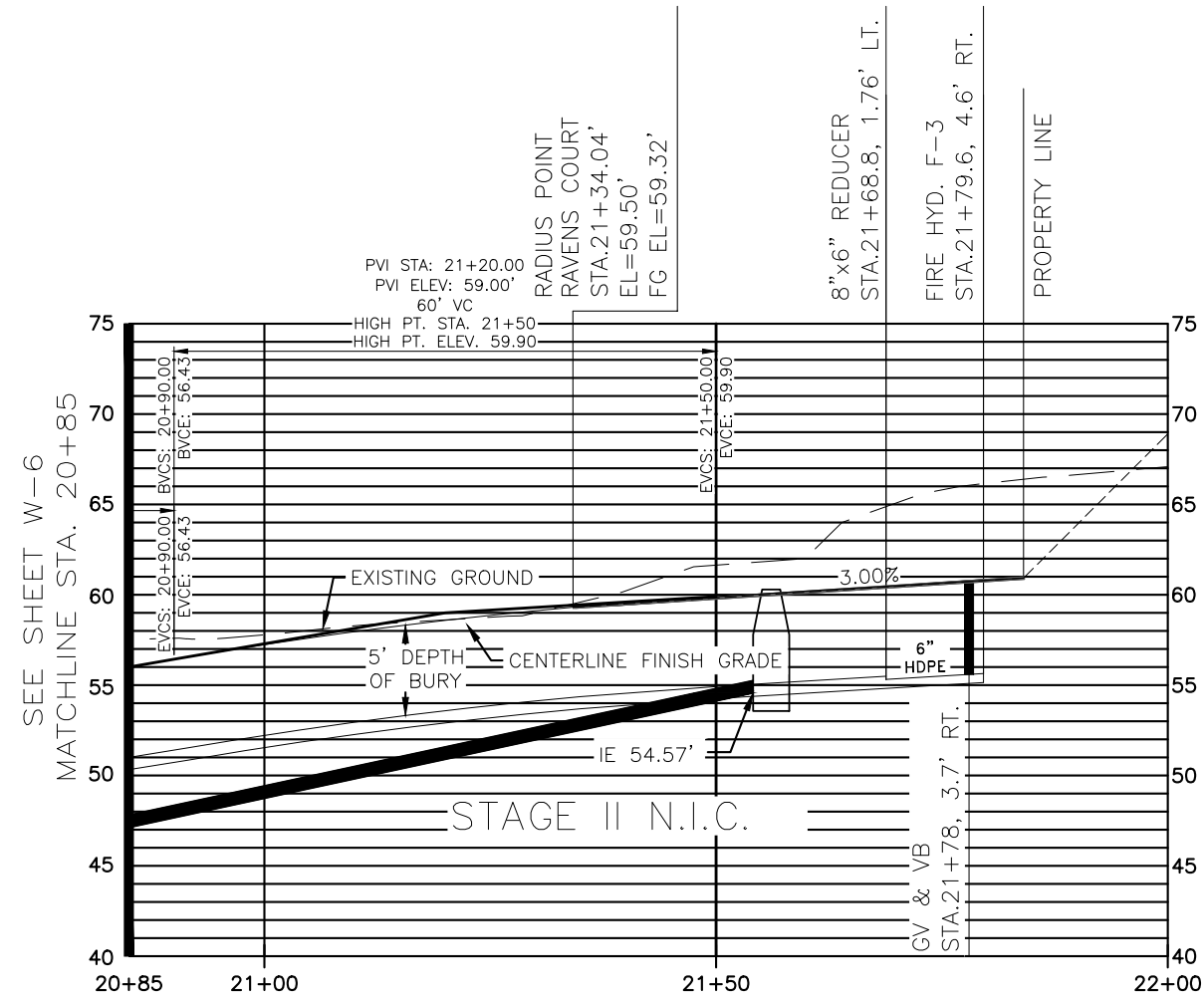
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REV	D-TE	BY	DESCRIPTION

SHEET W6  
SHEET NO. 45 OF 64

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SCALE: HORZ. 1"=20'  
 VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

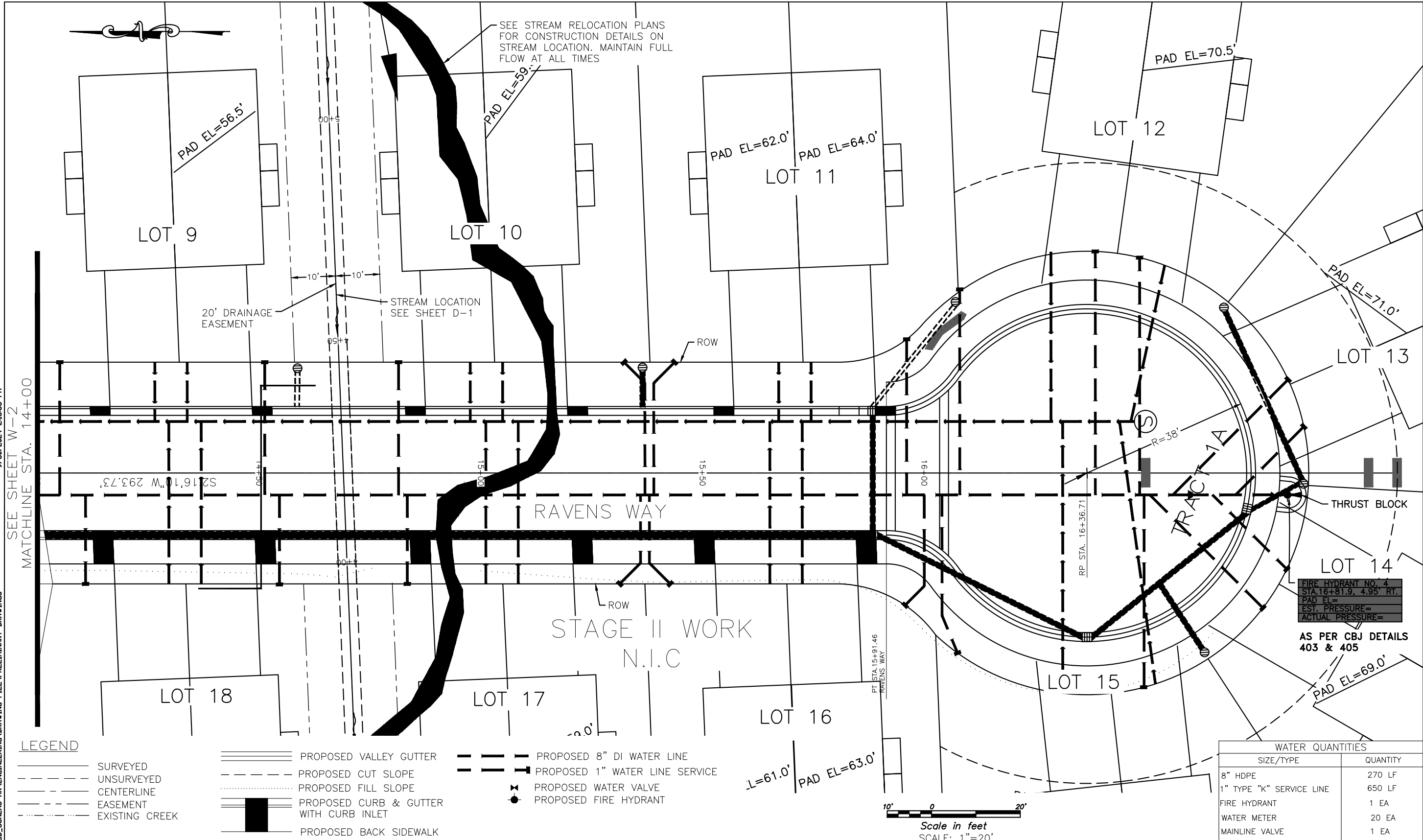
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SHEET  
 W7  
 SHEET NO.  
 46 OF 64

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 SEE SHEET W-2  
 MATCHLINE STA. 14+00



**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- EXISTING CREEK
- ==== PROPOSED VALLEY GUTTER
- - - PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- PROPOSED 8" DI WATER LINE
- PROPOSED 1" WATER LINE SERVICE
- ⊕ PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT

WATER QUANTITIES	
SIZE/TYPE	QUANTITY
8" HDPE	270 LF
1" TYPE "K" SERVICE LINE	650 LF
FIRE HYDRANT	1 EA
WATER METER	20 EA
MAINLINE VALVE	1 EA

REV	DATE	BY	DESCRIPTION

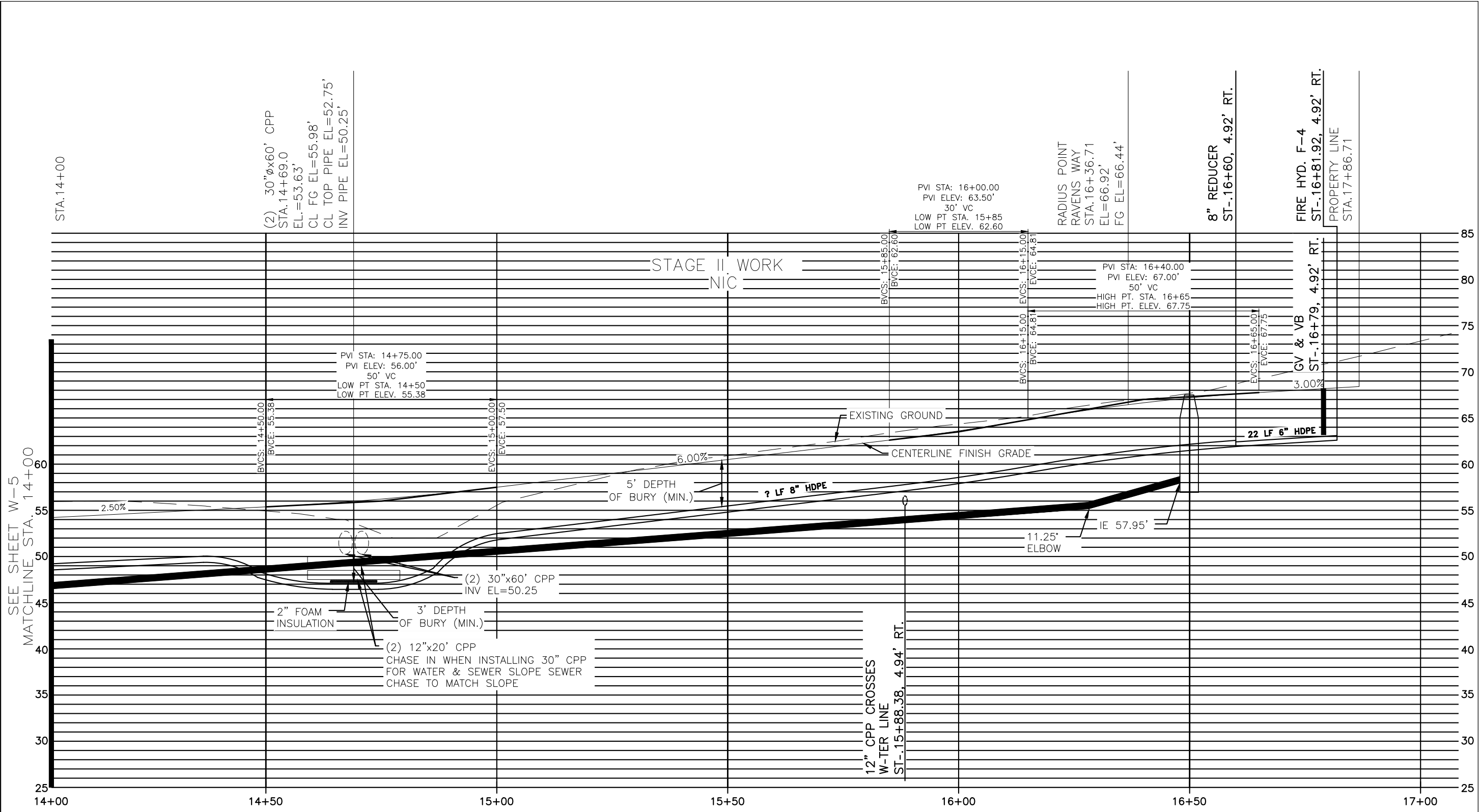
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DATE	September 30, 2024

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SHEET  
 W8  
 SHEET NO.  
 47 OF 64

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SCALE: HORZ. 1"=20'  
 VERT. 1"=10'

REV	DATE	BY	DESCRIPTION

SCALE	GRAPHIC
DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

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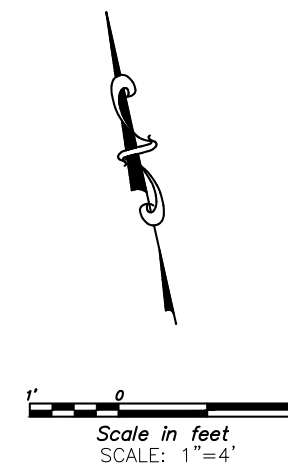
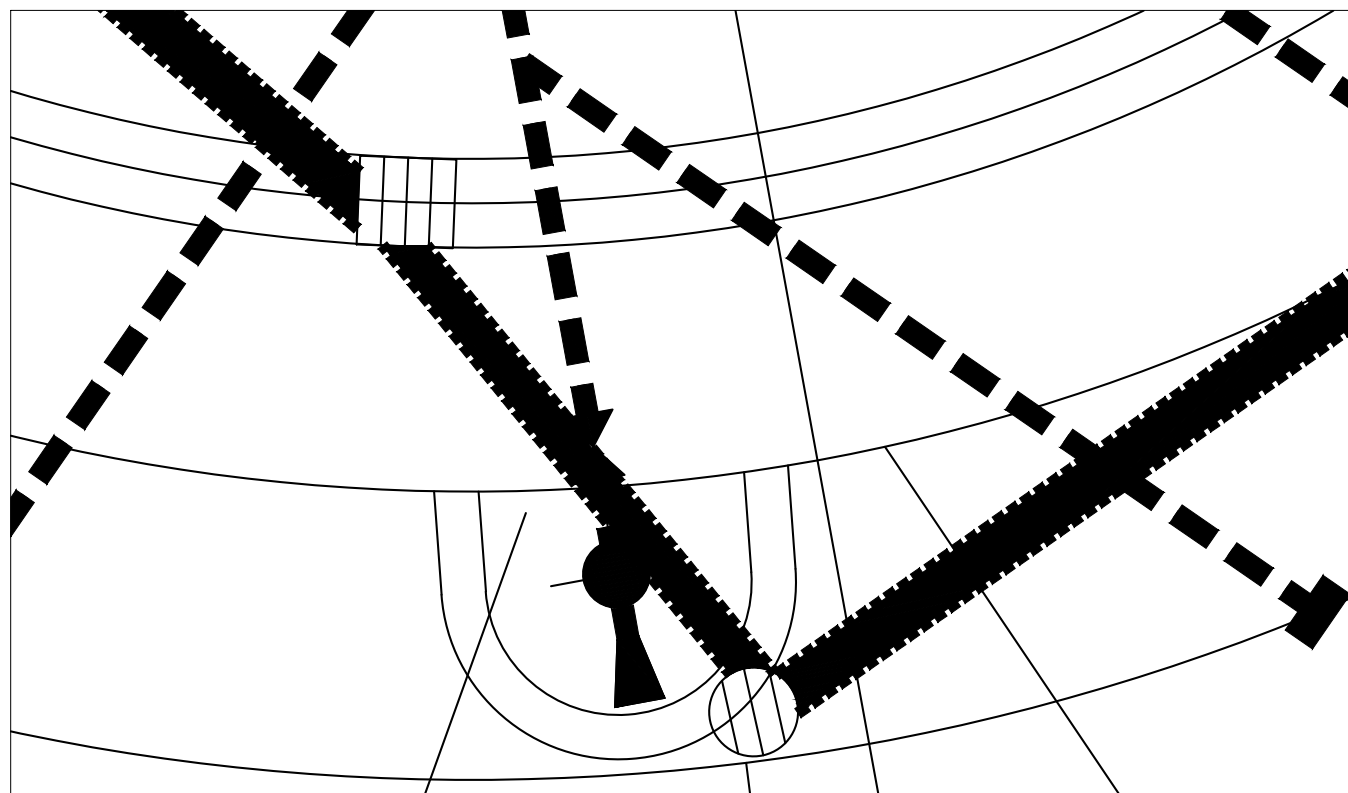
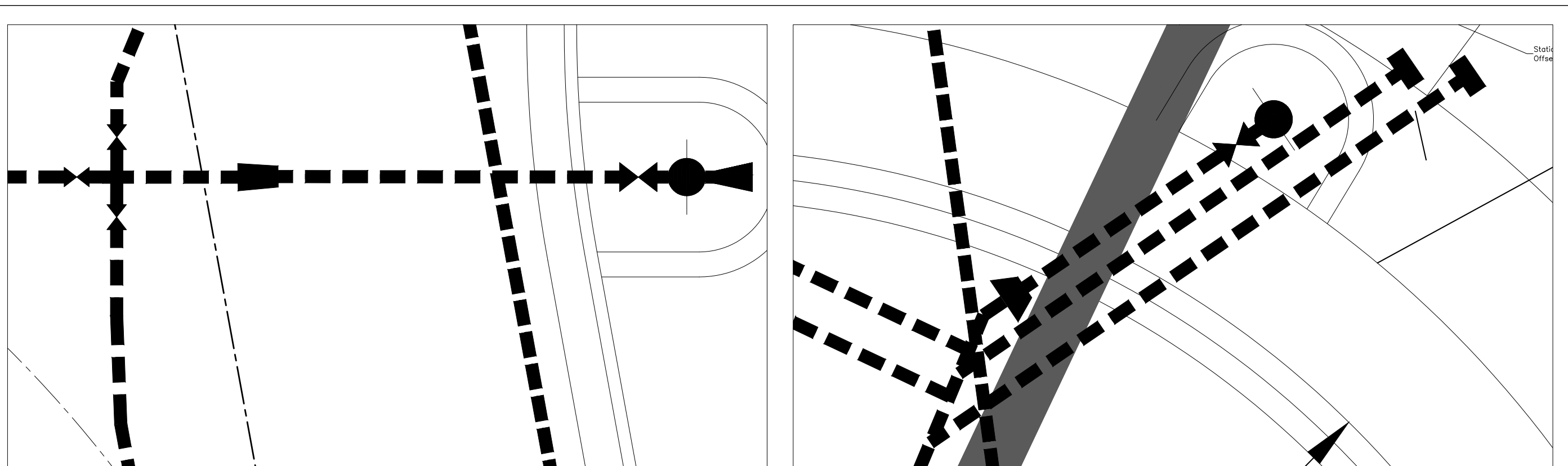
RAVENWOOD SUBDIVISION

SHEET  
 W9  
 SHEET NO.  
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Attachment C – Preliminary Construction Drawings

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PHASE 1 – RAVENS WAY WATER SERVICE LOCATION TABLE	
EXISTING 16" WATER	STA.10+13.68
EL=	
GV & VB	STA.10+20.22, 7.75' RT.
EL=	
SERVICE LOT 1	STA.10+78, 7.75' RT.
SERVICE LOT 21	STA.10+80, 7.75' RT.
SERVICE LOT 1	STA.11+32, 7.75' RT.
SERVICE LOT 21	STA.11+33, 7.75' RT.
SERVICE LOT 2	STA.11+35, 7.75' RT.
SERVICE LOT 22	STA.11+36, 7.75' RT.
SERVICE LOT 2	STA.12+16, 7.75' RT.
SERVICE LOT 20	STA.12+17, 7.75' RT.
SERVICE LOT 3	STA. 12+19, 7.75' RT.
SERVICE LOT 19	STA.12+20, 7.75' RT.
SERVICE LOT 7	STA.13+22, 0.72' RT.
SERVICE LOT 8	STA.13+25, 1.92' RT.
SERVICE LOT 8	STA. 13+94, 4.98' RT.
SERVICE LOT 9	STA.13+97, 4.98' RT.
SERVICE LOT 10	STA.14+97.6, 11.6' LT.
SERVICE LOT 17	STA.15+01.1, 11.6' LT.
SERVICE LOT 10	STA.15+04.9, 11.6' LT.
SERVICE LOT 17	STA.15+08.4, 11.6' LT.

PHASE 1 – RAVENS COURT WATER SERVICE LOCATION TABLE	
SERVICE LOT 3	STA.21+26, 0.6' LT.
SERVICE LOT 4	STA.21+29, 0.7' LT.
SERVICE LOT 7	STA.21+57, 2.0' LT.
SERVICE LOT 6	STA.21+60, 2.1' LT.
SERVICE LOT 6	STA.21+62, 2.2' LT.
SERVICE LOT 4	STA.21+65, 2.3' LT.
SERVICE LOT 5	STA.21+65, 2.4' LT.
SERVICE LOT 5	STA.21+66, 2.4' LT.

PH-SE II – R- ENS W-Y W-TER SERVICE LOC-TION T-BLE	
SERVICE LOT 18	ST-.14+05, 4.98' RT.
SERVICE LOT 9	ST-.14+65, 4.98' RT.
SERVICE LOT 18	ST-.14+66, 4.98' RT.
SERVICE LOT 10	ST-.14+72, 4.79' RT.
SERVICE LOT 17	ST-.14+73, 4.97 RT.
SERVICE LOT 17	ST-.15+36, 4.95' RT.
SERVICE LOT 10	ST-.15+37, 4.95' RT.
SERVICE LOT 16	ST-.15+38, 4.95 RT.
SERVICE LOT 11	ST-.15+39, 4.95 RT.
SERVICE LOT 16	ST-.16+00, 4.94' RT.
SERVICE LOT 15	ST-.16+04, 4.94 RT.
SERVICE LOT 11	ST-.16+06, 4.94 RT.
SERVICE LOT 12	ST-.16+08, 4.94 RT.
SERVICE LOT 12	ST-.16+42, 4.93' RT.
SERVICE LOT 12	ST-.16+45, 4.93' RT.
SERVICE LOT 15	ST-.16+63, 4.92' RT.
SERVICE LOT 14	ST-.16+65, 4.92' RT.
SERVICE LOT 13	ST-.16+67, 4.92' RT.
SERVICE LOT 14	ST-.16+70, 4.92' RT.

PHASE 1 – RAVENS WAY SEWER SERVICE LOCATION TABLE	
SERVICE LOT 1	STA.10+86.7, 2.2' LT.
SERVICE LOT 21	STA.10+87.40, 2.2' RT.
SERVICE LOT 1	STA.10+96.7, 2.2' LT.
SERVICE LOT 21	STA.10+97.4, 2.2' LT.
SERVICE LOT 2	STA.11+70.8, 2.2' LT.
SERVICE LOT 20	STA.11+74.4, 2.2' LT.
SERVICE LOT 2	STA.11+80.7, 2.2' LT.
SERVICE LOT 20	STA.11+81.4, 2.2' LT.
SERVICE LOT 3	STA.12+54.8, 2.2' LT.
SERVICE LOT 19	STA.12+55.4, 2.2' LT.
SERVICE LOT 3	STA.12+64.7, 2.2' LT.
SERVICE LOT 19	STA.12+65.44, 2.2' LT.
SERVICE LOT 8	STA.13+54.4, 11.6' LT.
SERVICE LOT 8	STA.13+61.7, 11.6' LT.

PHASE 1 – RAVENS COURT SEWER SERVICE LOCATION TABLE	
SERVICE LOT 4	STA.21+22, 9.69' RT.
SERVICE LOT 4	STA.21+30, 9.3' RT.
SERVICE LOT 5	STA.21+31, 9.3' RT.
SERVICE LOT 7	STA.21+32, 9.2' RT.
SERVICE LOT 7	STA.21+39, 8.9' RT.
SERVICE LOT 6	STA.21+42, 8.7' RT.
SERVICE LOT 5	STA.21+50, 8.3' RT.
SERVICE LOT 6	STA.21+52, 8.2' RT.

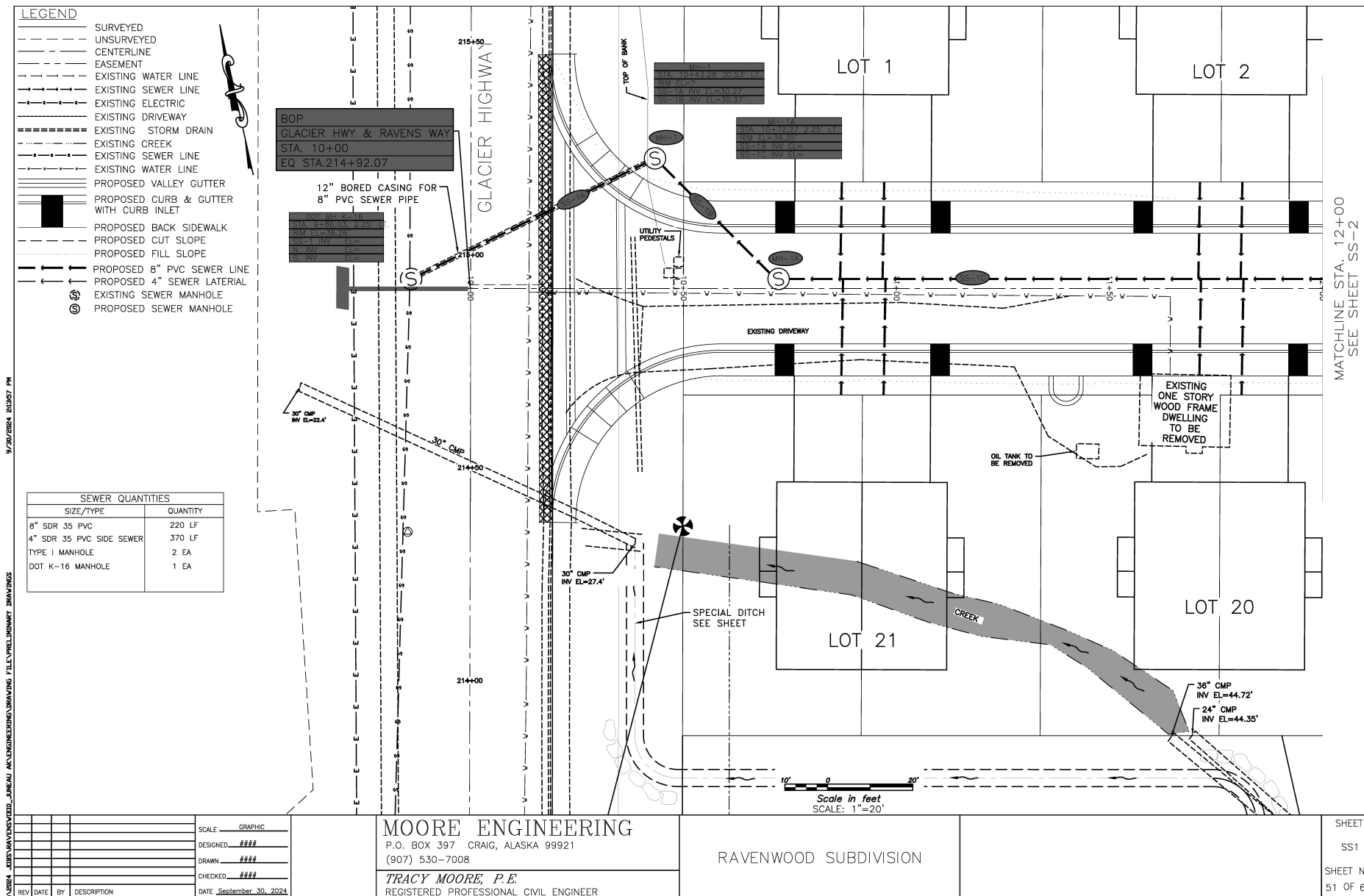
PH-SE II – R- ENS W-Y SEWER SERVICE LOC-TION T-BLE	
SERVICE LOT 9	ST-.14+26.5, 11.6' LT.
SERVICE LOT 18	ST-.14+29.6, 11.6' LT.
SERVICE LOT 9	ST-.14+33.8, 11.6' LT.
SERVICE LOT 18	ST-.14+36.9, 11.6' LT.
SERVICE LOT 16	ST-.15+65.2, 11.6' LT.
SERVICE LOT 11	ST-.15+67.2, 11.6' LT.
SERVICE LOT 16	ST-.15+72.5, 11.6' LT.
SERVICE LOT 11	ST-.15+74.5, 11.6' LT.
SERVICE LOT 15	ST-.16+31.2, 11.6' LT.
SERVICE LOT 12	ST-.16+36.6, 11.6' LT.
SERVICE LOT 15	ST-.16+44.0, 11.6' LT.
SERVICE LOT 12	ST-.16+46.6, 11.6' LT.

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 50 OF 64

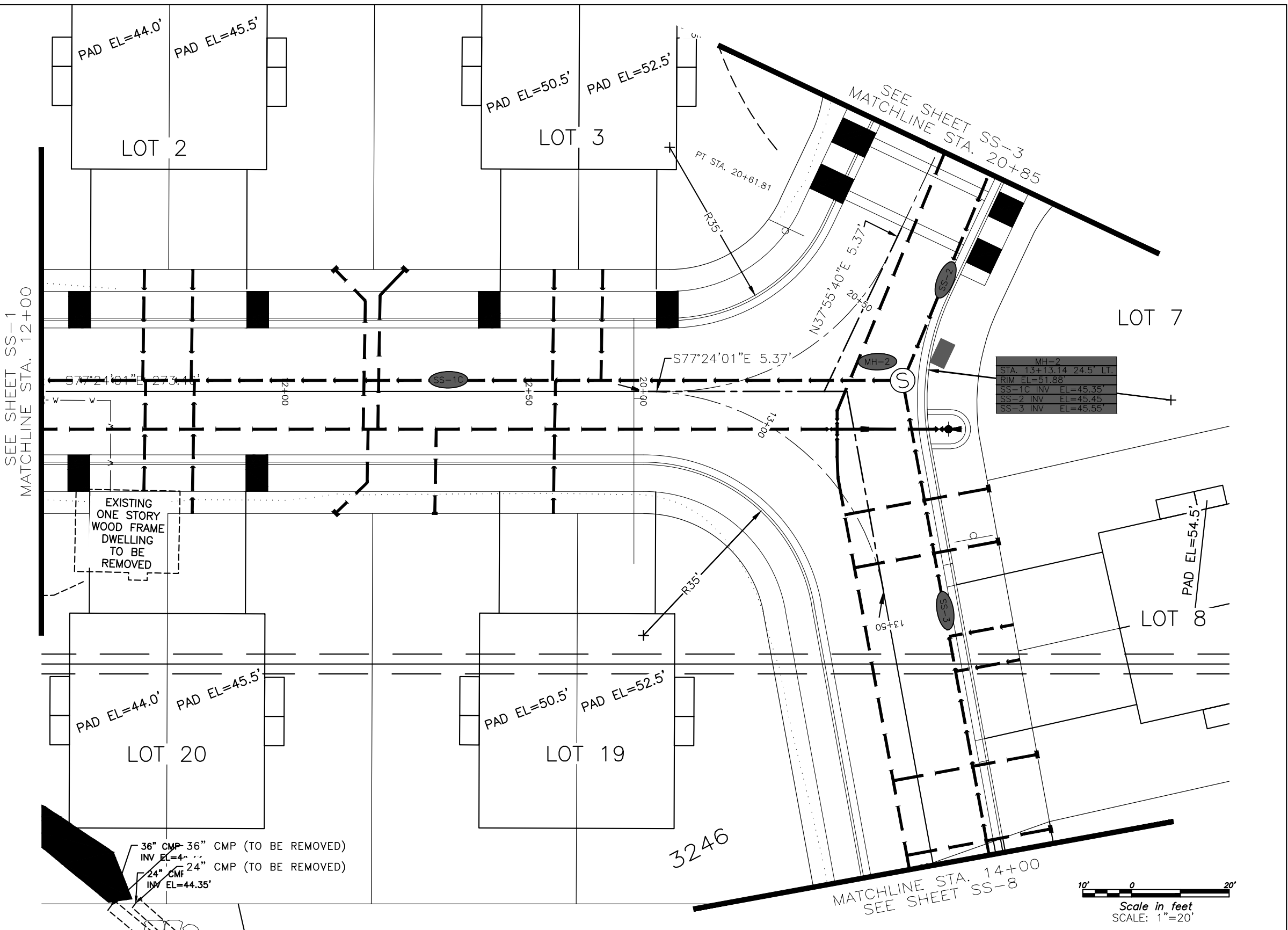


Attachment C – Preliminary Construction Drawings

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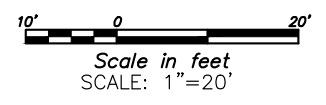
**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- PROPOSED VALLEY GUTTER
- PROPOSED CURB & GUTTER WITH CURB INLET
- PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- - - PROPOSED FILL SLOPE
- PROPOSED 8" PVC SEWER LINE
- PROPOSED 4" SEWER LATERAL
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE



SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	315 LF
4" SDR 35 PVC SIDE SEWER	440 LF
TYPE I MANHOLE	1 EA

MH-2	STA. 13+13.14 24.5' LT.
RIM	EL=51.88'
SS-1C INV	EL=45.35'
SS-2 INV	EL=45.45'
SS-3 INV	EL=45.55'



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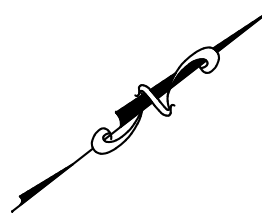
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Attachment C – Preliminary Construction Drawings

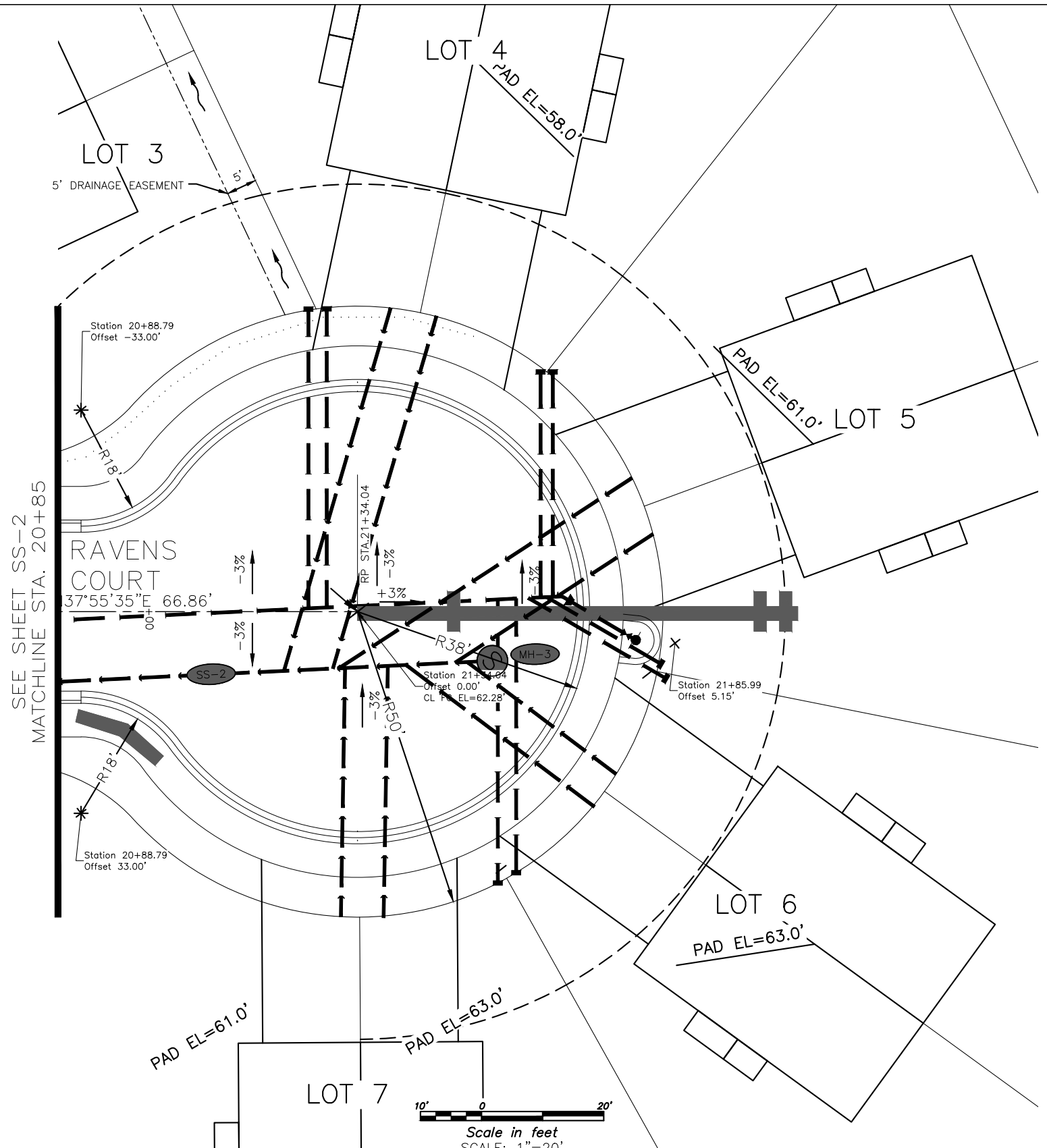
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**LEGEND**

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- - - EASEMENT
- - - EXISTING WATER LINE
- - - EXISTING SEWER LINE
- - - EXISTING ELECTRIC
- - - EXISTING DRIVEWAY
- - - EXISTING STORM DRAIN
- - - EXISTING CREEK
- - - EXISTING SEWER LINE
- - - EXISTING WATER LINE
- ▬ PROPOSED VALLEY GUTTER
- ▬ PROPOSED CURB & GUTTER WITH CURB INLET
- ▬ PROPOSED BACK SIDEWALK
- - - PROPOSED CUT SLOPE
- ..... PROPOSED FILL SLOPE
- ▬ PROPOSED 8" PVC SEWER LINE
- ▬ PROPOSED 4" SEWER LATERAL
- ⊙ EXISTING SEWER MANHOLE
- ⊙ PROPOSED SEWER MANHOLE



SEWER QUANTITIES	
SIZE/TYPE	QUANTITY
8" SDR 35 PVC	70 LF
4" SDR 35 PVC SIDE SEWER	420 LF
TYPE I MANHOLE	1 EA



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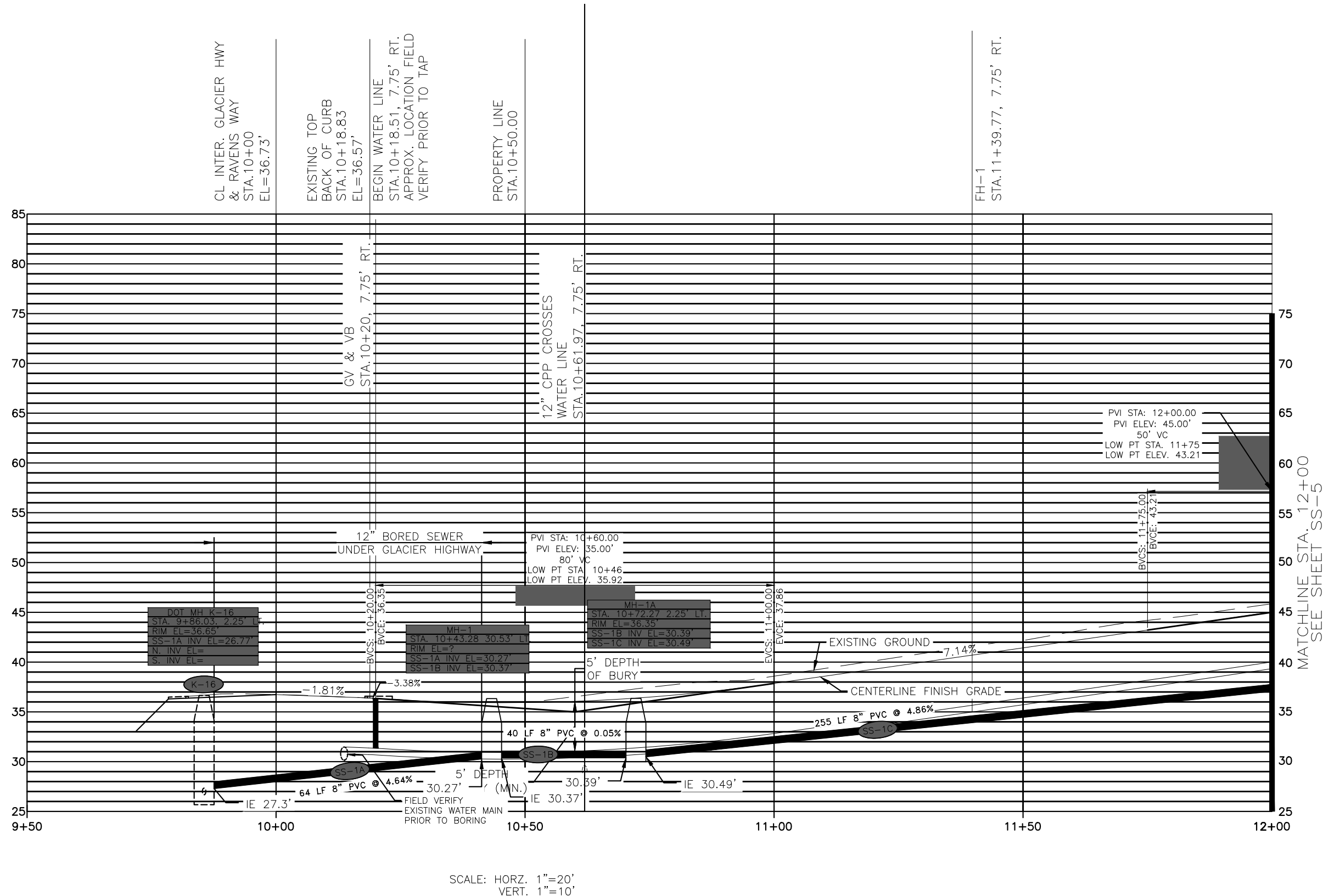
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SHEET	SS3
SHEET NO.	53 OF 64

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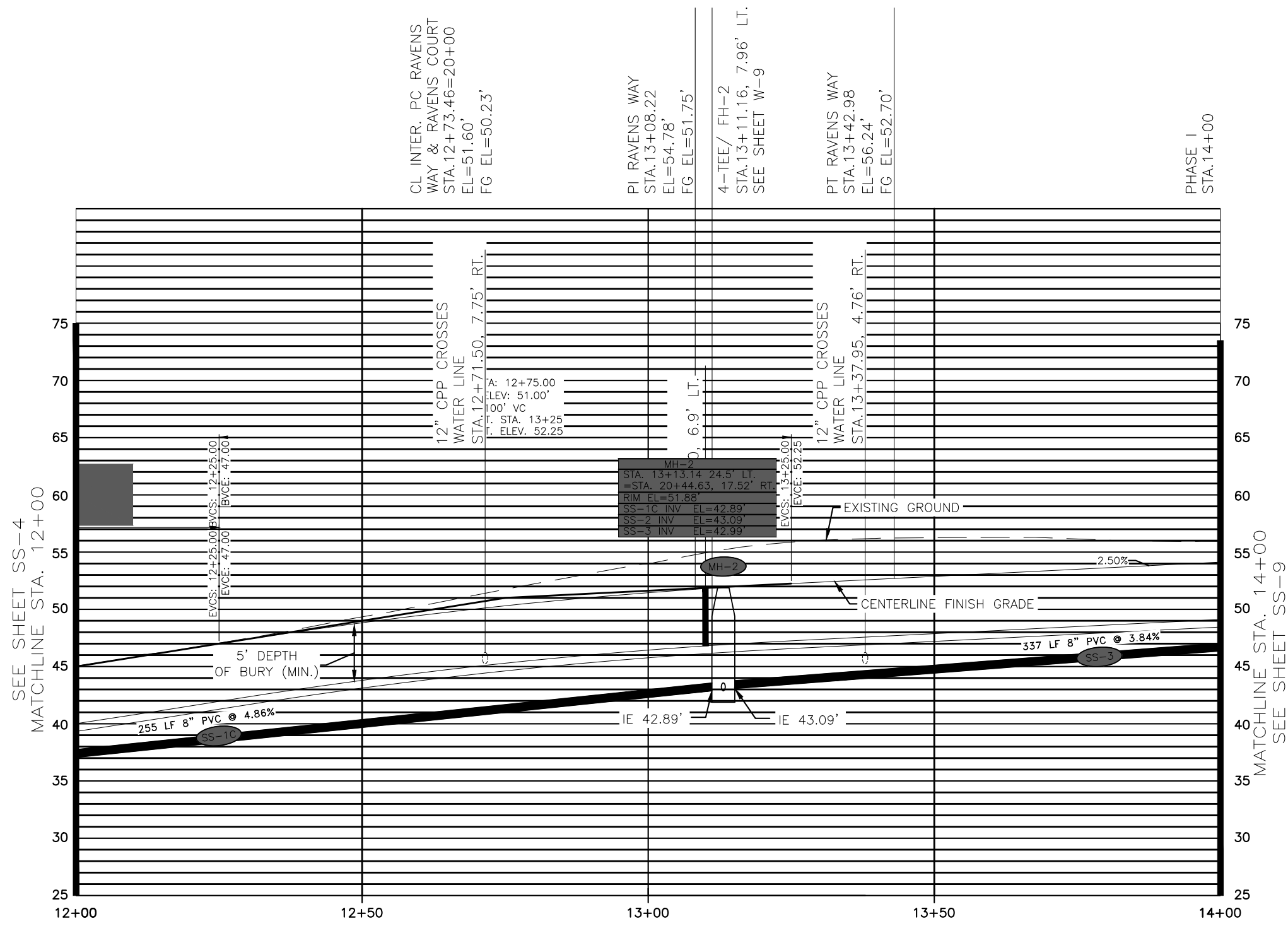
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SCALE	GR-PHIC
DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

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SHEET  
SS4  
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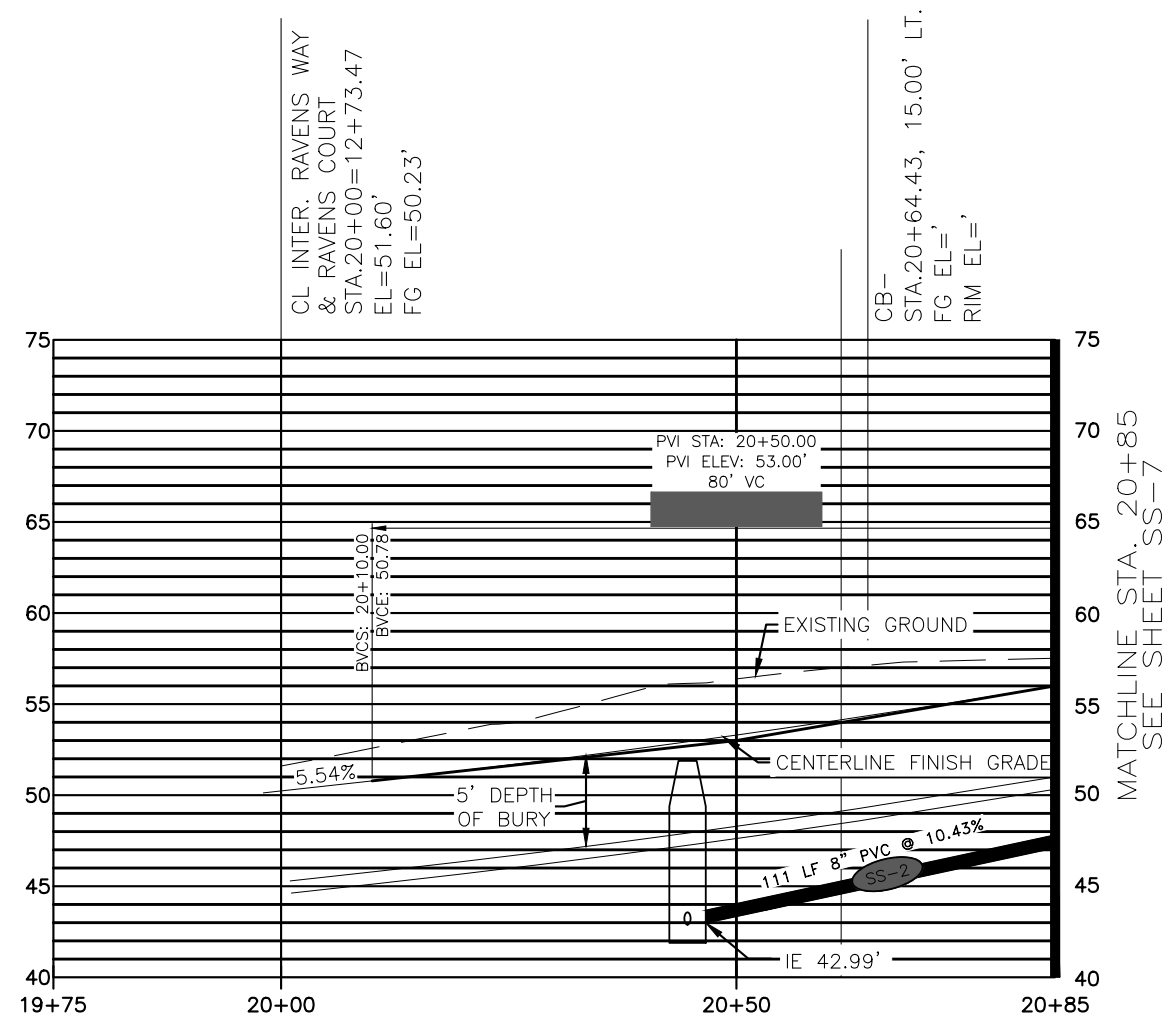
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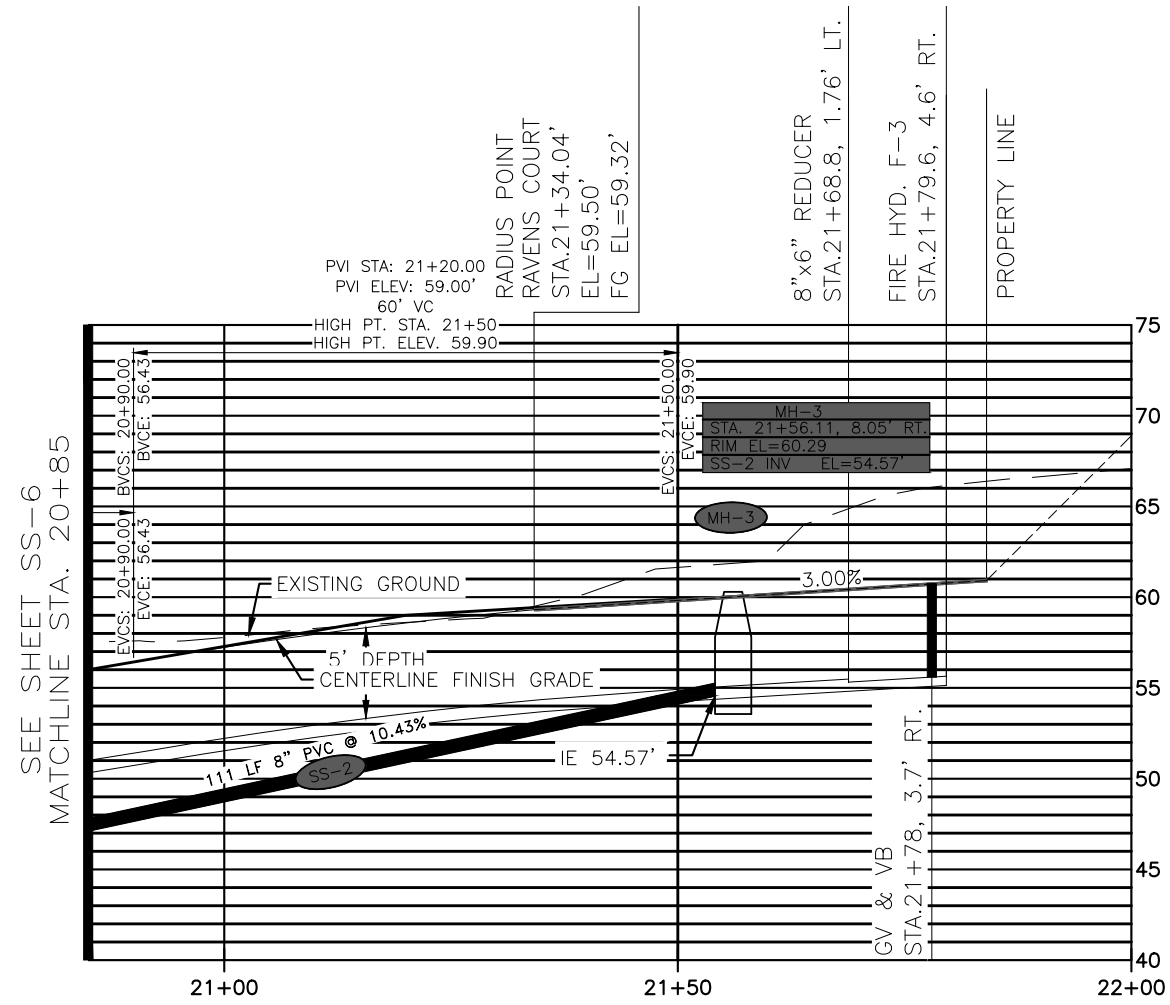
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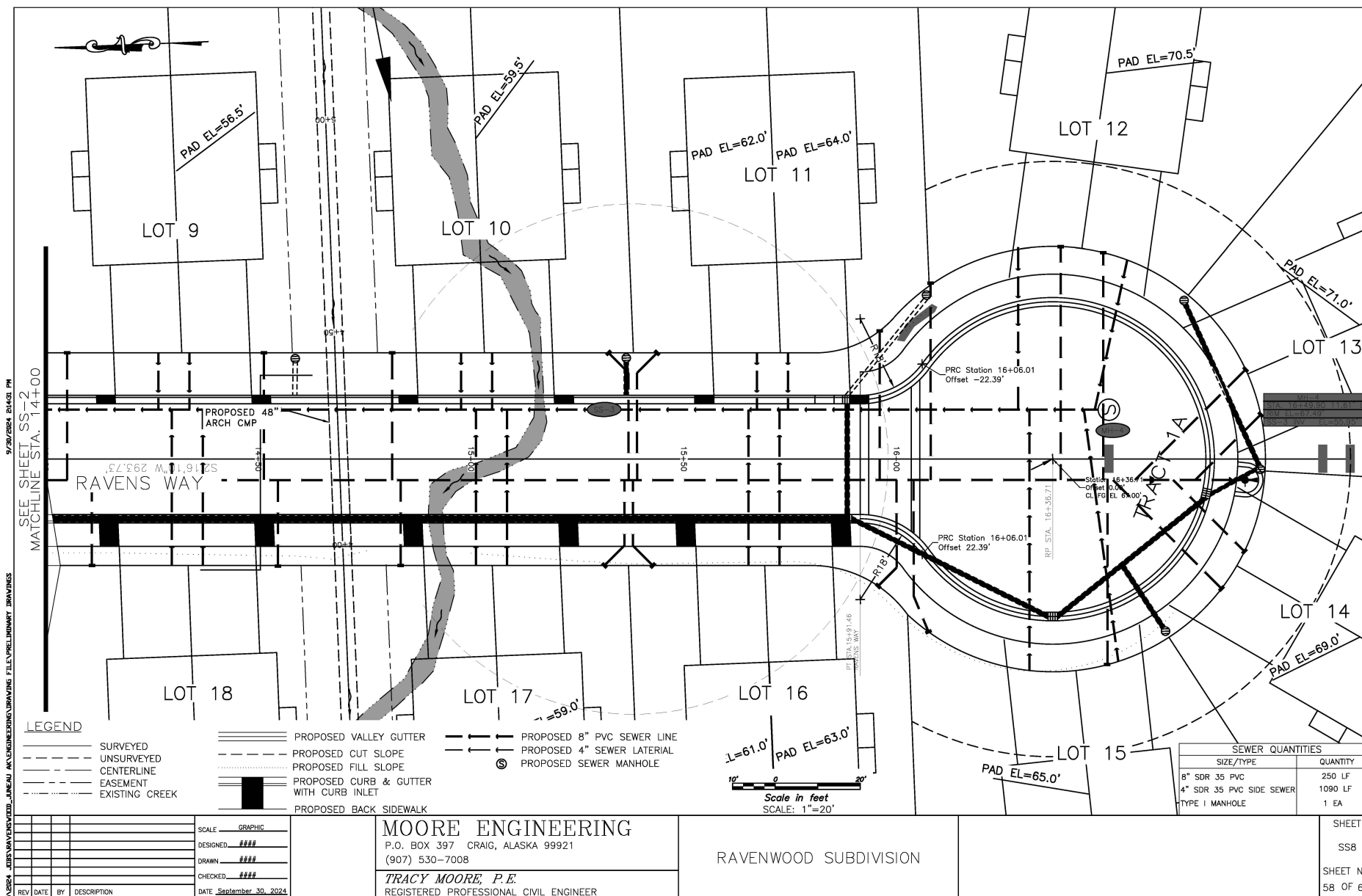
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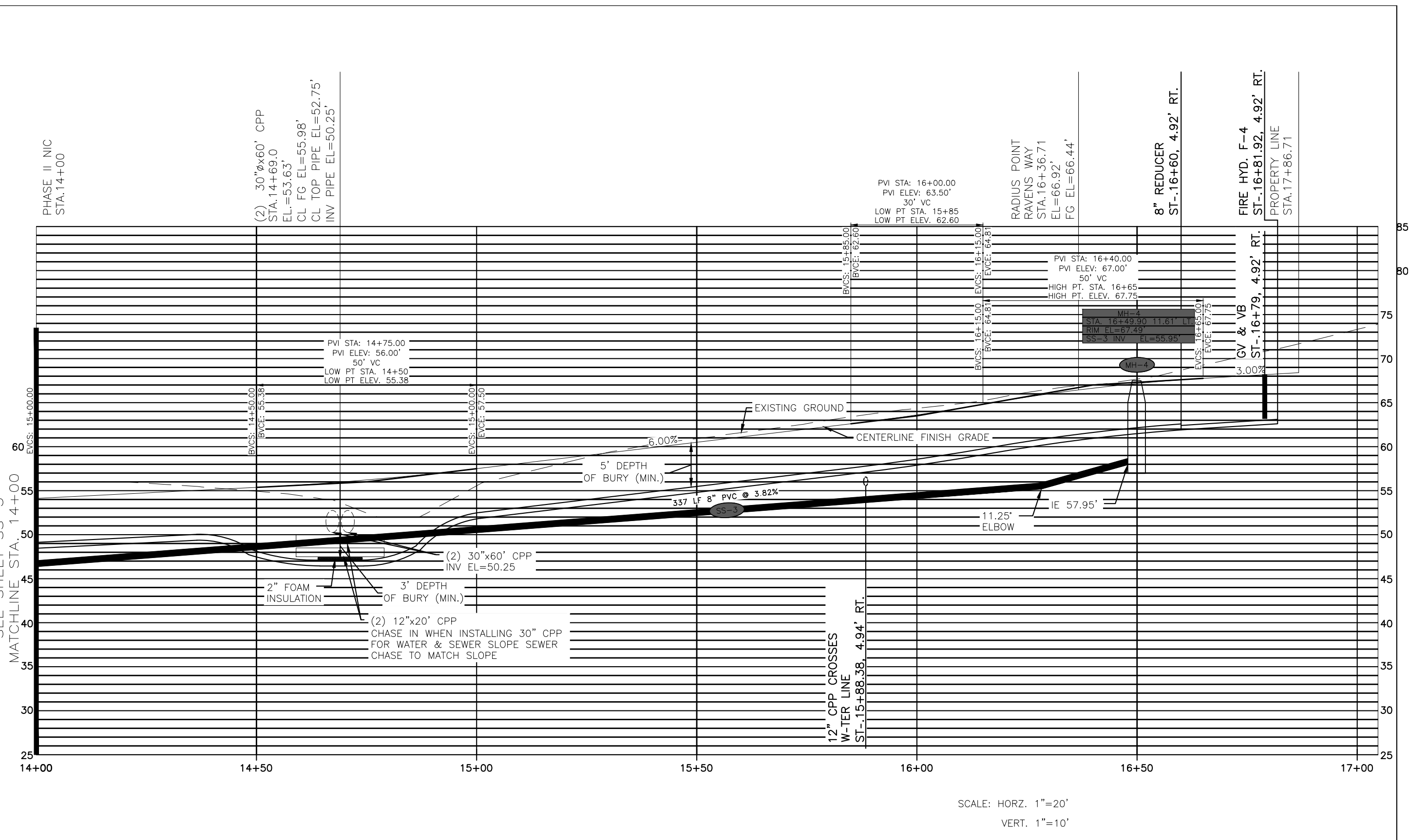
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Attachment C – Preliminary Construction Drawings

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MATCHLINE STA. 14+00



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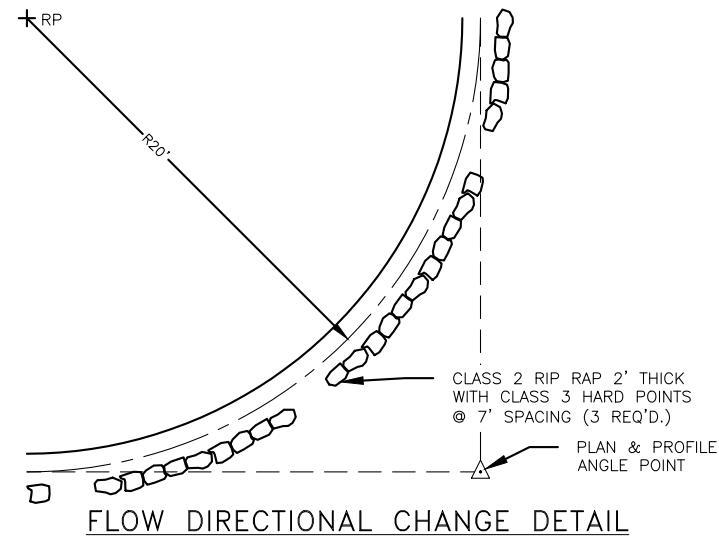
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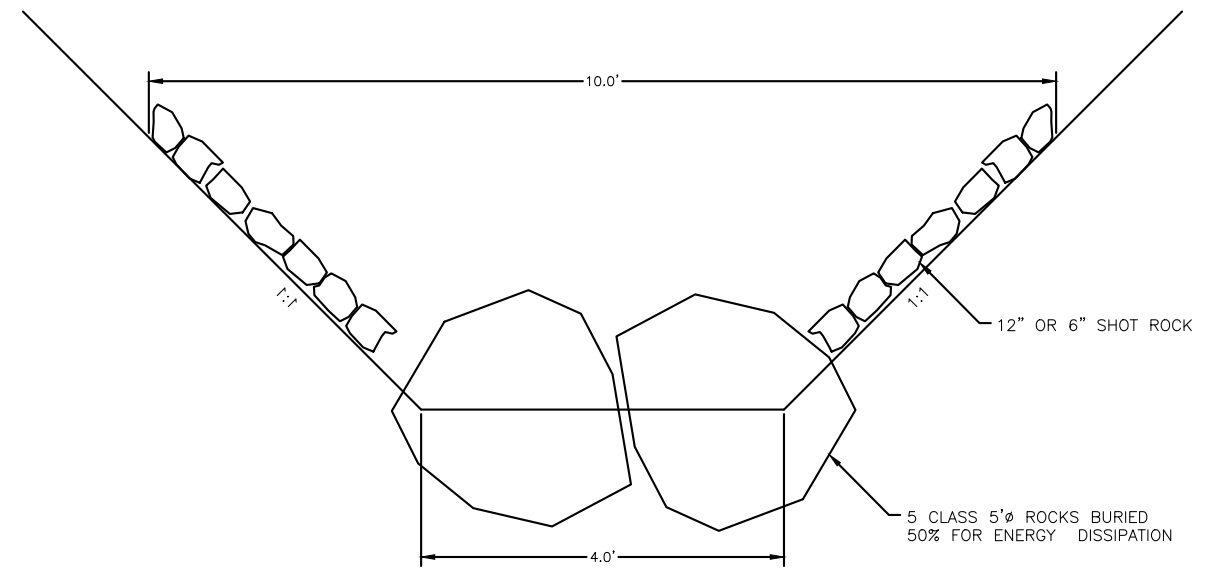
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SHEET NO.	59 OF 64

Attachment C – Preliminary Construction Drawings

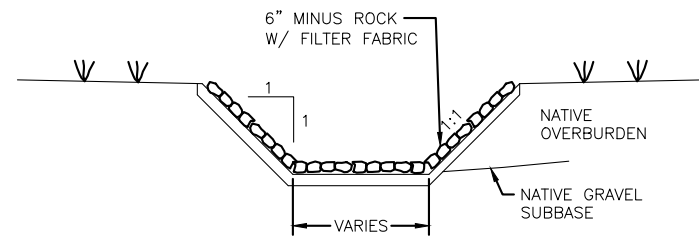
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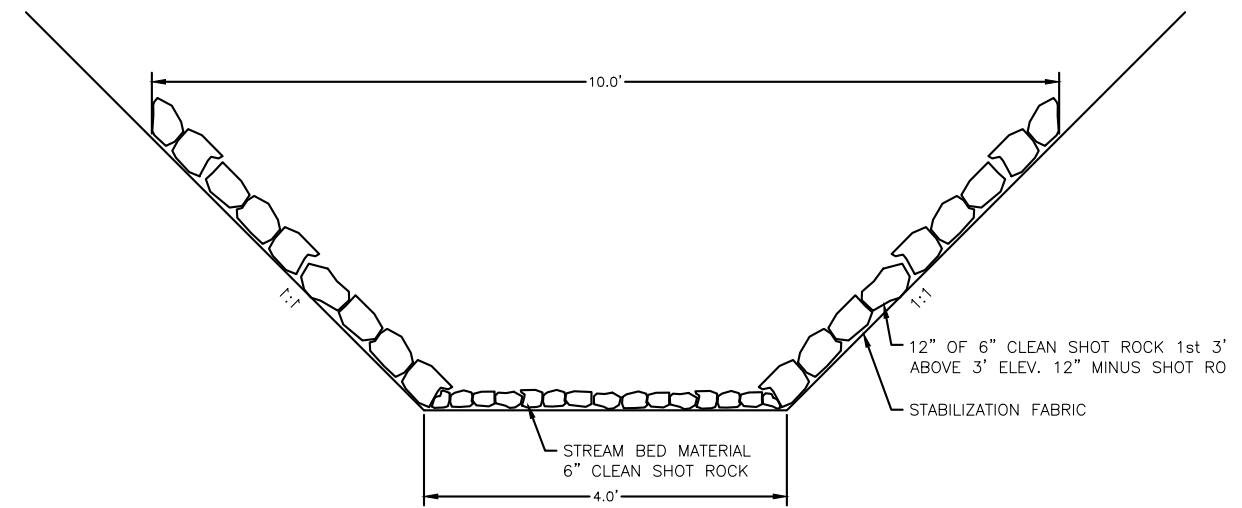
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SCALE: 1/2"=1'



SCALE: 1"=4'



SCALE: 1/2"=1'

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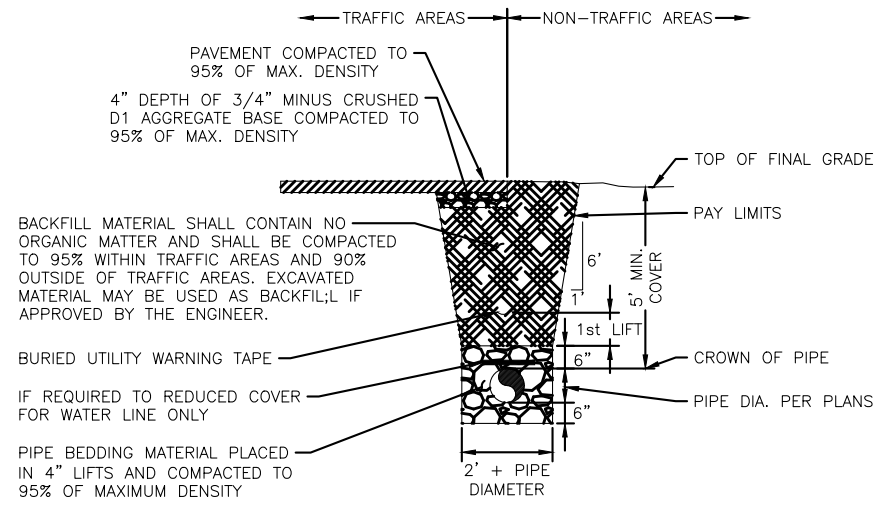
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SHEET DT2  
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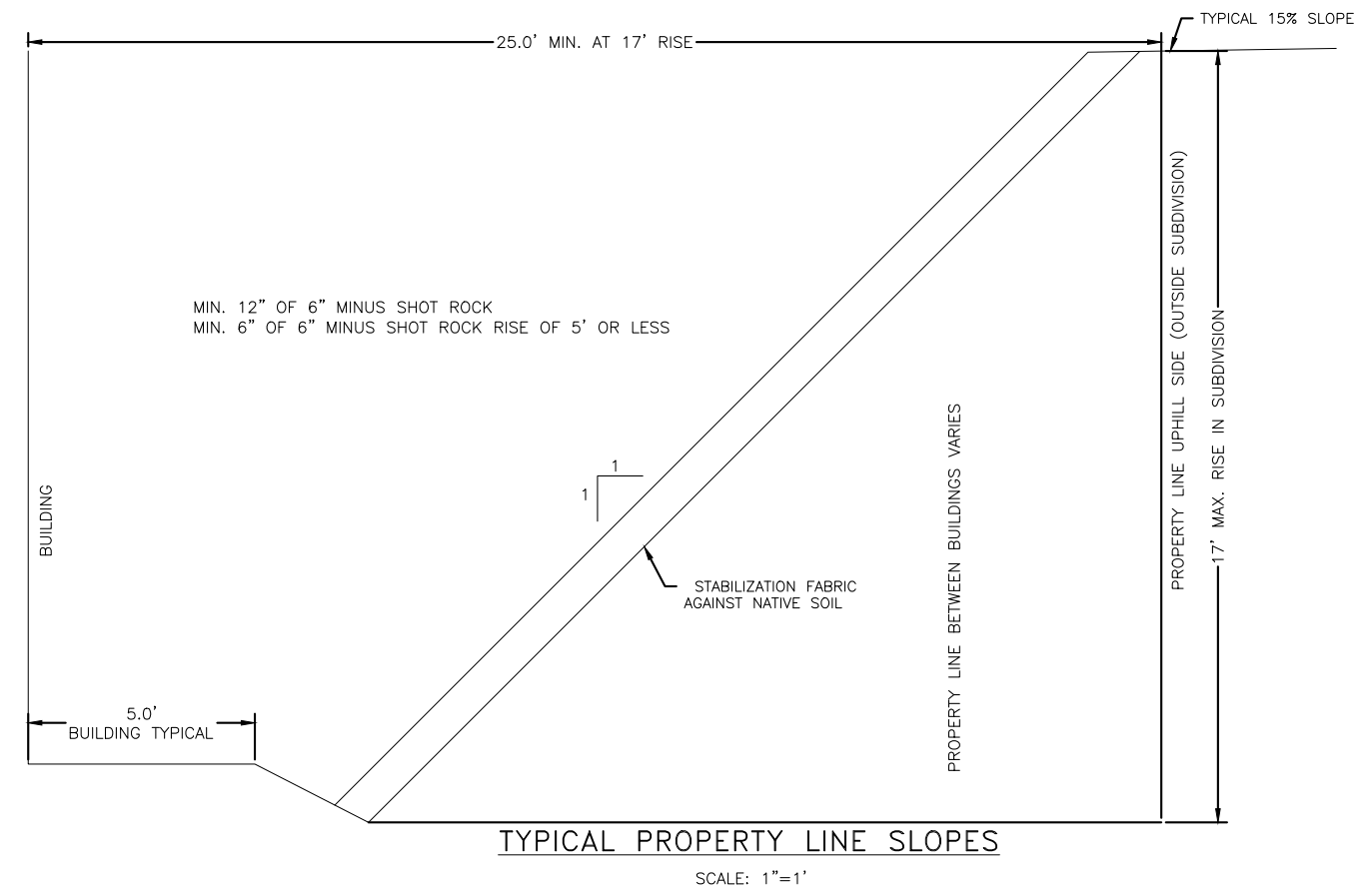
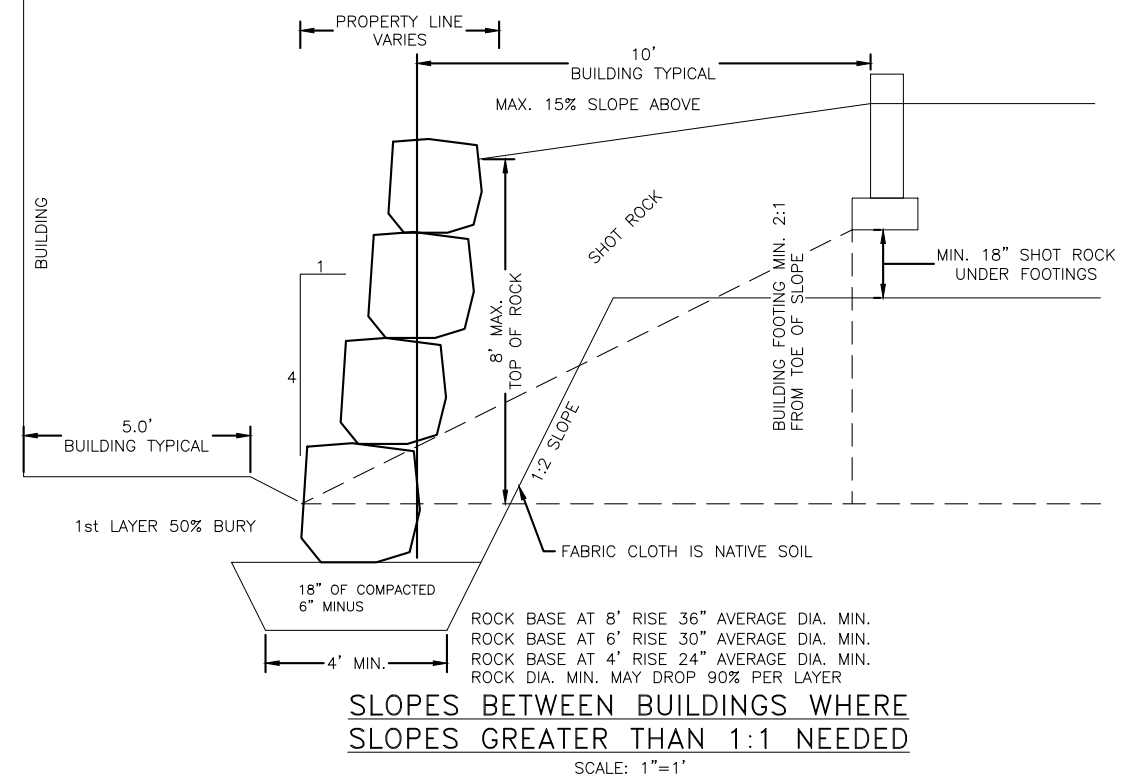


- NOTES (A):
- BACKFILL MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS AS STATED IN SPECIFICATIONS.
  - PIPE BEDDING MATERIAL MUST BE PLACED IN 6" MAX. LIFTS BETWEEN COMPACTION.
  - TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH LOCAL, STATE AND OSHA REGULATIONS AND REQUIREMENTS. INDICATED SLOPE IS FOR PAY QUANTITY DETERMINATION ONLY FOR IMPORTED BACKFILL GRAVEL AND RESURFACING REQUIREMENTS.
  - IF UNSUITABLE PIPE FOUNDATION MATERIAL IS ENCOUNTERED DURING EXCAVATION, ENGINEER MAY DIRECT THE CONTRACTOR TO OVER-EXCAVATE AND BACKFILL WITH SUITABLE MATERIAL.
  - THE DITCH LINE, IF ONE EXISTS, SHALL BE RESHAPED IN SUCH A MANNER TO ALLOW POSITIVE DRAINAGE TO MATCH PRE-CONSTRUCTION CONDITIONS.
  - TRENCH SECTION APPLICABLE FOR BOTH SEWER, WATER PIPE AND STORM. EXCEPT STORM WATER DOES NOT REQUIRE MINIMUM COVER.

- NOTES (B):
- INSULATION BOARD JOINTS SHALL BE LAPPED.
  - MINIMUM DEPTH OF COVER SHALL BE 3'-0" UNLESS SHOWN OTHERWISE ON DRAWINGS OR PRIOR APPROVAL IS GRANTED FROM ENGINEER.
  - ALL INSULATION SHALL BE DOW HI-60 EXTRUDED POLYSTYRENE (BLUE BOARD) OR APPROVED EQUAL.

"H" DEPTH OF COVER	"T" INSULATION THICKNESS
4'-0" OR GREATER	NONE REQUIRED.
3'-8" OR GREATER	2 INCHES
3'-0" OR GREATER	4 INCHES

**TYPICAL TRENCH DETAIL**  
SCALE: 1"=4'



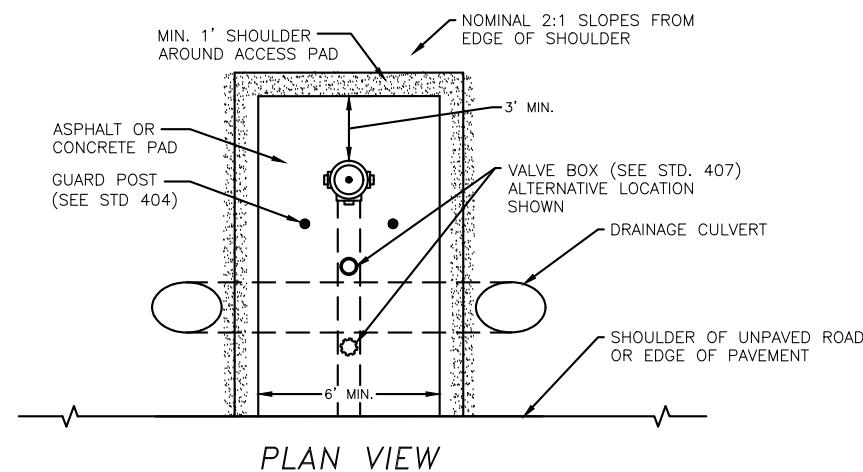
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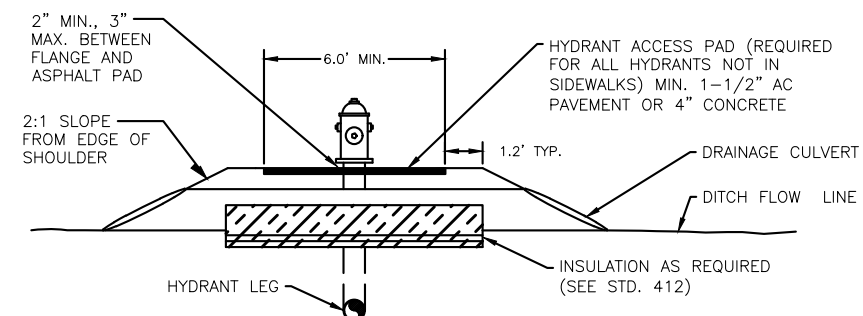
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PLAN VIEW

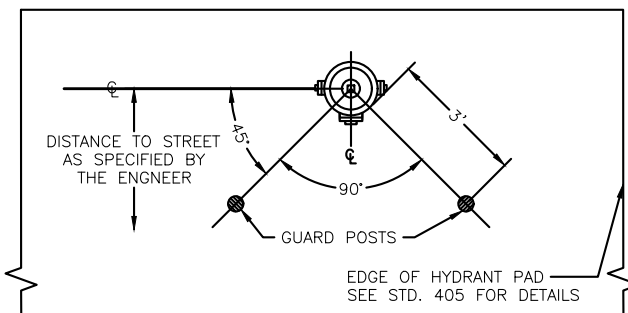


ELEVATION VIEW

- NOTES:
- FROM EDGE OF ROAD TO DITCH LINE, SLOPE SURFACE OF HYDRANT PAD TO MATCH EXTENSION OF ROADWAY CROWN.
  - SEED SIDE SLOPES IN ACCORDANCE WITH SECTION 02710.
  - NFS BACKFILL AND D-1 IN PAD SHALL CONFORM WITH MATERIALS AND COMPACTION REQUIREMENTS OF STANDARD 102A. 4. EXTEND LAYER OF D-1 TO EDGE OF PAD SHOULDER.

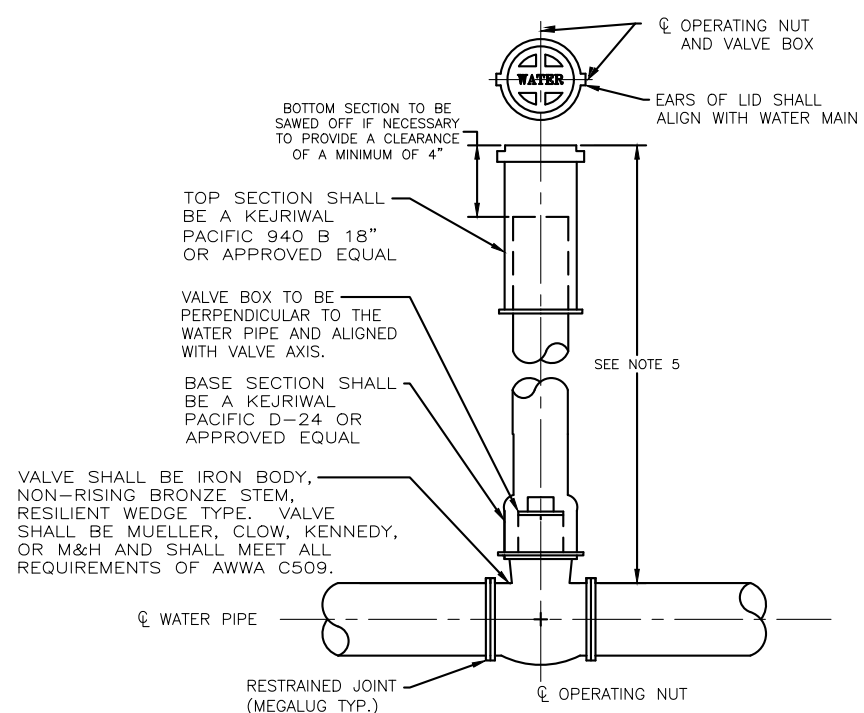
405-HYDRANT PAD

SCALE: 1"=6'



PLAN VIEW

404-HYDRANT GUARD POSTS



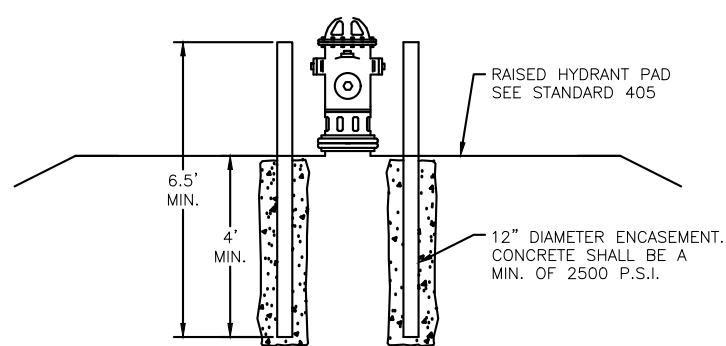
VALVE SHALL BE IRON BODY, NON-RISING BRONZE STEM, RESILIENT WEDGE TYPE. VALVE SHALL BE MUELLER, CLOW, KENNEDY, OR M&H AND SHALL MEET ALL REQUIREMENTS OF AWWA C509.

NOTES:

- A VALVE IS REQUIRED FOR EVERY 500' OF STRAIGHT MAINLINE.
- A MINIMUM OF 2 VALVES ARE REQUIRED AT ALL TEES IN MAINLINE. A MINIMUM OF 3 VALVES ARE REQUIRED AT ALL 4-WAY CROSSES IN MAINLINE. NOTE THAT TEES AND CROSSES THAT FEED SERVICES AND FIRE HYDRANTS ARE NOT SUBJECT TO THIS REQUIREMENT.
- MAINLINE VALVES REQUIRE THRUST BLOCKS. SEE STANDARD 414C.
- IF REQUIRED BY THE ENGINEER, PLACE CONCRETE COLLAR AROUND TOP SECTION PER STANDARD 126.
- ON UNPAVED ROADS, RECESS TOP OF VALVE BOX 6" TO 8".
- IF WATER PIPE IS MORE THAN 6' DEEP, USE 4" I.D. CAST IRON SOIL PIPE WITH TOP SECTION OF APPROVED CAST IRON VALVE BOX.
- THIS DETAIL APPLIES TO ALL MAINLINE VALVES AND ALL WATER VALVES GREATER THAN 4" IN DIAMETER.

407-MAINLINE VALVE

SCALE: 1"=2'

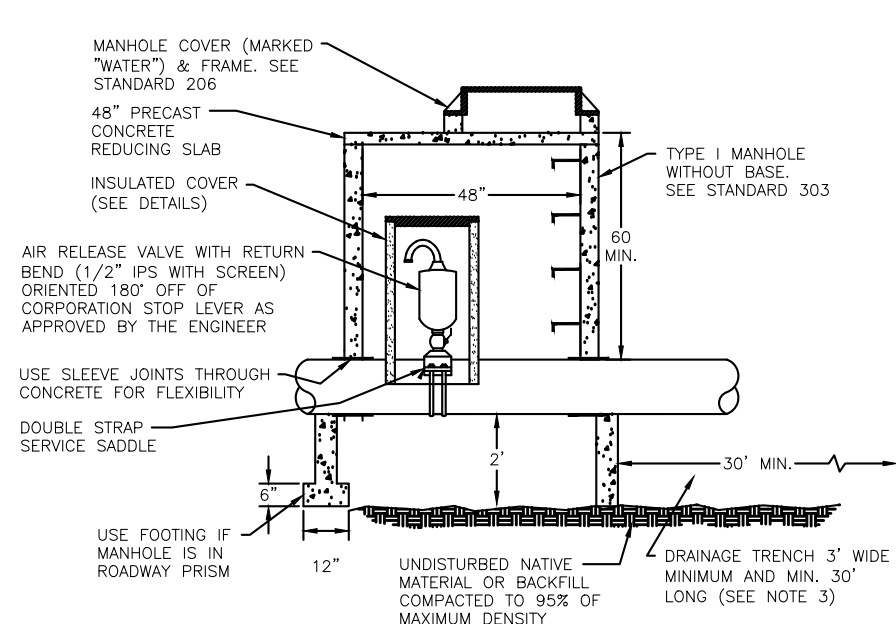


ELEVATION VIEW

404-HYDRANT GUARD POSTS

SCALE: 1"=4'

- NOTES:
- GUARD POST ARE REQUIRED ON ALL HYDRANTS EXCEPT THOSE IN SIDEWALKS OR ALONG STATE HIGHWAYS.
  - GUARD POST SHALL BE 4" DIAMETER, SCHEDULE 40 STEEL PIPE.
  - POSTS SHALL BE FILLED FLUSH WITH CONCRETE AND PAINTED WITH OSHA YELLOW ENAMEL AFTER INSTALLATION.
  - POSTS SHALL NOT BLOCK OPERATION OF VALVE.



SIDE VIEW TOP VIEW  
INSULATED COVER DETAILS

NOTES:

- PVC DRAIN TO DAYLIGHT MAY BE SUBSTITUTED FOR DRAINAGE TRENCH IF APPROVED BY ENGINEER.
- SONO TUBES SHALL BE CONCENTRIC TO INSURE A MINIMUM OF 2" OF INSULATION AT ALL POINTS. TRIM TUBES AND INSULATION TO FIT CURVATURE OF PIPE.
- FILL DRAIN TRENCH WITH MATERIAL AS DESCRIBED IN TABLE:

SEIVE SIZE	% PASSING
.2"	100
.4"	0-10
1"	0-3

409-AIR RELEASE VALVE

SCALE: 1"=4'

SCALE	GRAPHIC
DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

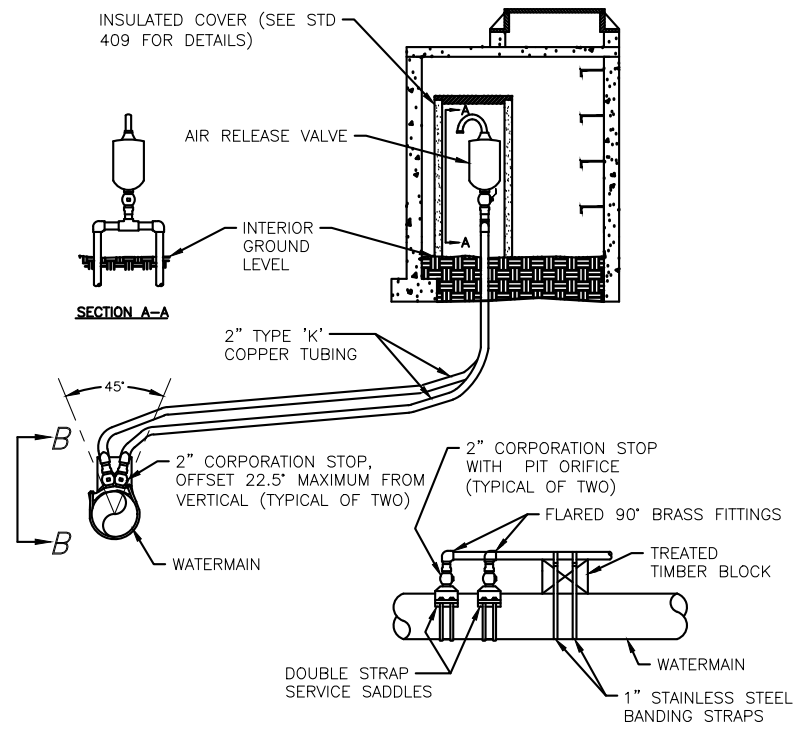
**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
*TRACY MOORE, P.E.*  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
DT4  
SHEET NO.  
62 OF 64

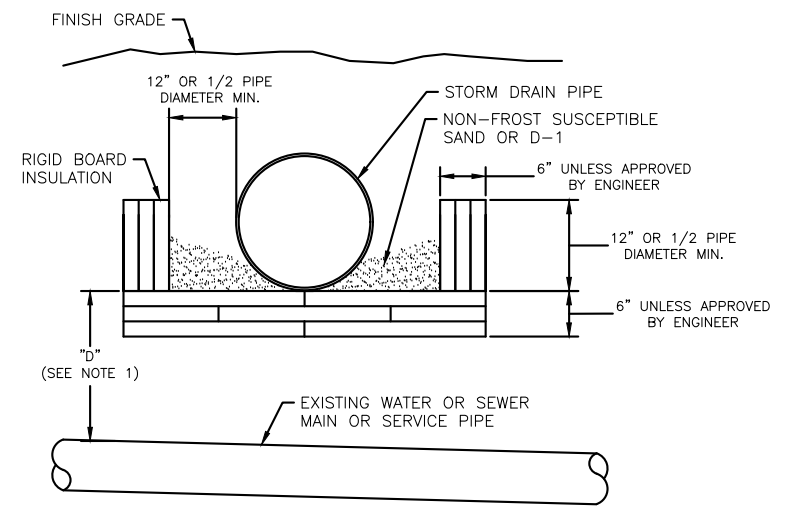
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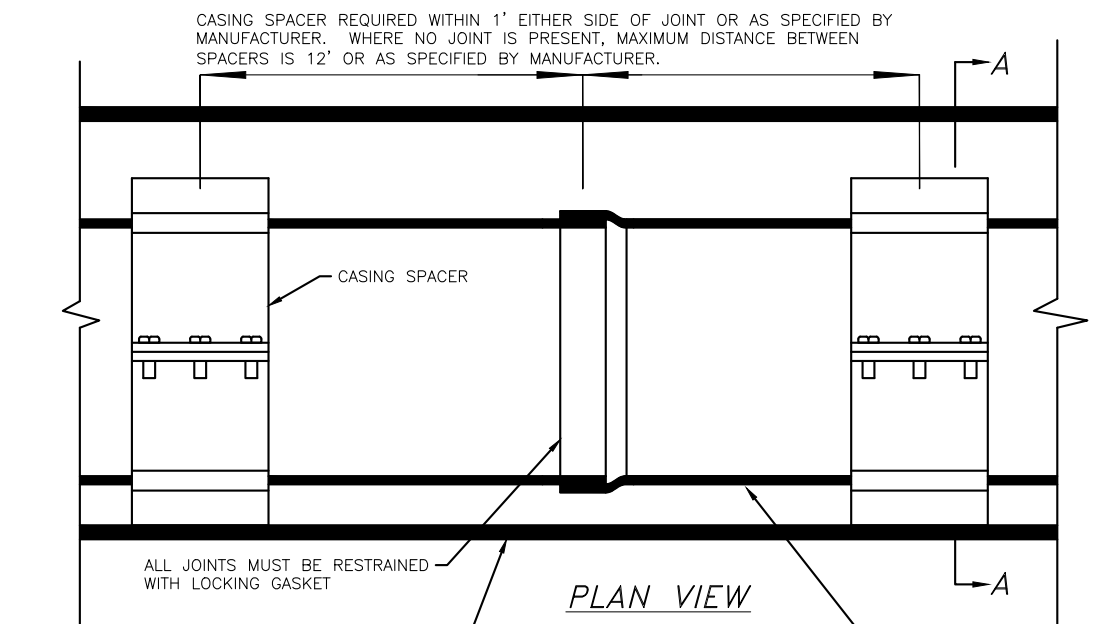
- NOTES:**
1. MANHOLE, COVER & FRAME CONSTRUCTION SHALL COMPLY WITH STANDARDS 206, 303, AND 409.
  2. COPPER TUBING SHALL MAINTAIN A POSITIVE GRADE FROM THE WATERMAIN TO THE AIR RELEASE VALVE. CONNECTIONS IN COPPER TUBING SHALL BE FLARED UNIONS.
  3. A 60" MINIMUM COVER SHALL BE MAINTAINED OVER THE COPPER TUBING AND WATERMAIN AT ALL LOCATIONS.
  4. DRAINAGE TRENCH, AIR RELEASE VALVE, AND INSULATED COVER SHALL COMPLY WITH STANDARD 409.

**410-AIR RELEASE VALVE  
OFFSET LOCATION**  
SCALE: 1"=2'



- NOTES:**
1. INSTALL INSULATION AS SHOWN WHEN "D" IS LESS THAN 5'-0" FOR WATER PIPE OR 3'-8" FOR SEWER PIPE.
  2. INSULATION SHALL CONFORM TO SECTION 02607 OF THE STANDARD SPECIFICATIONS.
  3. PIPE INSULATION SHALL BE 8'-0" IN LENGTH, CENTERED OVER EXISTING WATER OR SEWER PIPE.
  4. PIPE INSULATION WITH R-FACTOR EQUAL TO RIGID BOARD MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.
  5. INSULATION BOARDS SHALL OVERLAP 12" AS SHOWN IN DRAWING.

**412-RIGID INSULATION**  
SCALE: 1"=2'



CASING PIPE DIAMETER	MIN. WALL THICKNESS
4"	0.237"
6" - 24"	0.250"
26" - 30"	0.312"

- NOTES:**
1. CASING SPACERS SHALL BE "ADVANCE PRODUCT AND SYSTEMS" HIGH-DENSITY POLYETHYLENE OR APPROVED EQUAL.
  2. ENDS OF CASING PIPE SHALL BE PERMANENTLY SEALED AGAINST THE ENTRY OF FOREIGN MATERIAL.

**413-BORED  
ENCASEMENT**  
SCALE: 1"=2'

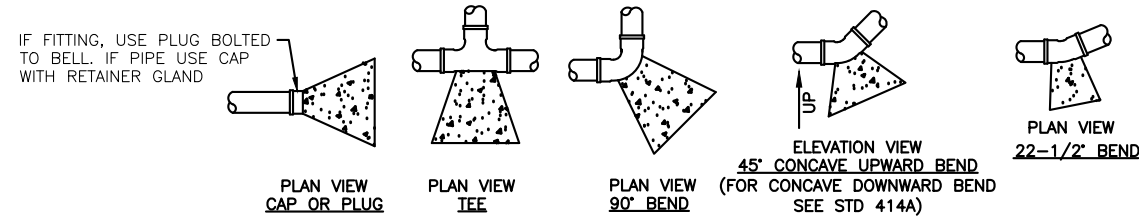
REV	DATE	BY	DESCRIPTION

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
DT5  
SHEET NO.  
63 OF 64

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PIPE SIZE	TEES, CAPS, & PLUGS		90° BENDS		ALTERNATIVE RESTRAINED LENGTH IN ALL DIRECTIONS (FEET) - SEE NOTE 5		
	MIN. CONCRETE VOL. (YD;)	MIN. BEARING AREA (FT <sup>2</sup> )	MIN. CONCRETE VOL. (YD;)	MIN. BEARING AREA (FT <sup>2</sup> )	TEES	90° BENDS	CAPS & PLUGS
4"	0.1	1.7	0.1	2.4	11	16	33
6"	0.2	3.5	0.4	4.9	15	23	47
8"	0.5	6.0	0.9	8.5	20	30	62
10"	1.0	9.1	1.7	12.8	24	37	74
12"	1.7	12.8	2.9	18.1	29	44	88
14"	2.6	17.2	4.5	24.4	33	50	100
16"	3.9	22.3	6.6	31.5	38	57	113
18"	5.5	28.0	9.2	39.6	42	63	126
20"	7.5	34.4	12.5	48.6	47	70	138
24"	12.7	49.0	21.4	69.3	56	83	162

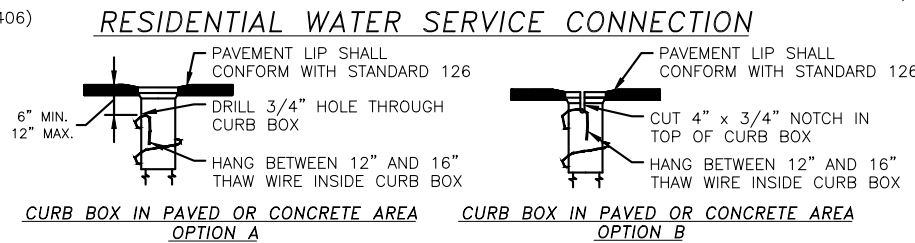
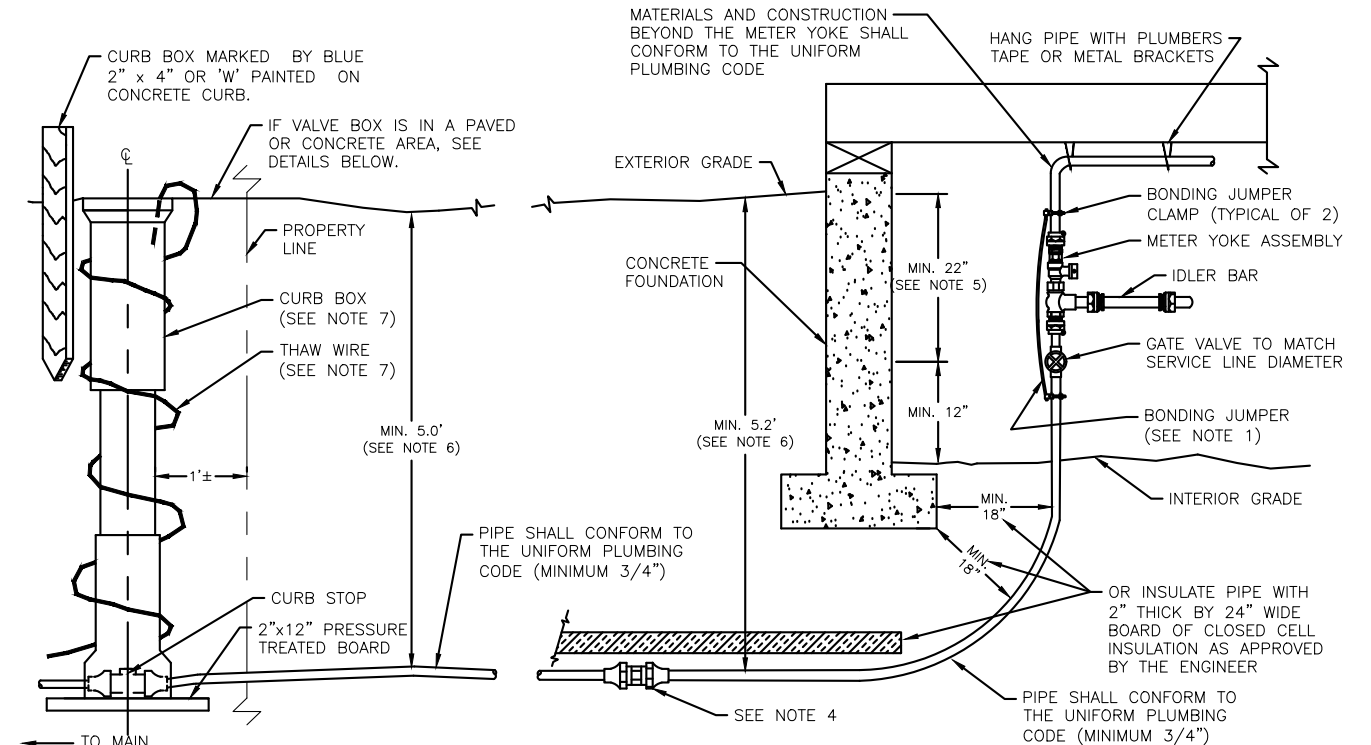
SMALL ANGLE ADJUSTMENT	
FOR ANGLES LESS THAN 90° MULTIPLY VOLUMES, AREAS, AND LENGTHS FOR 90° ANGLE BY THIS FACTOR	
ANGLE	FACTOR
45°	0.414
22-1/2°	0.199
11-1/4°	0.098

- NOTES:**
- CENTER OF MASS OF THRUST BLOCK MUST LAY OPPOSITE TO AND ALIGNED AGAINST THE DIRECTION OF THRUST.
  - THRUST BLOCKS SHALL BE POURED SO THAT JOINTS OF FITTINGS, INCLUDING ALL NUTS AND FOLLOWERS REMAIN ACCESSIBLE.
  - CONCRETE THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH. UNSTABLE OR UNSUITABLE MATERIALS SHALL BE REMOVED, REPLACED AND/OR COMPACTED AS DETERMINED BY THE ENGINEER.
  - VOLUME AND BEARING SURFACE OF 2500 P.S.I. CONCRETE THRUST BLOCKS ARE BASED ON 150 P.S.I. WATER PRESSURE AND SOIL BEARING CAPACITY OF 2000 P.S.F. ALL OTHER PRESSURE AND/OR SOIL CONDITIONS ARE SUBJECT TO THE ENGINEER'S REVIEW AND APPROVAL.
  - THRUST BLOCKS MAY BE OMITTED IF ALL JOINTS WITHIN MINIMUM DISTANCE GIVEN BY ABOVE TABLE ARE RESTRAINED AND PIPE IS BEDDED IN SAND. THE DISTANCES APPEARING IN THE TABLE ASSUME THAT THE PIPE IS BURIED AT LEAST 5' DEEP AND THAT SOIL CONDITIONS ARE AS LISTED IN NOTE 4. THE INFORMATION IN THE TABLE IS BASED ON DIPRA'S "THRUST RESTRAINT FOR DUCTILE IRON PIPE" WHICH SHOULD BE CONSULTED IF THESE ASSUMPTIONS ARE NOT MET.
  - SUBJECT TO THE CONDITIONS LISTED IN NOTE 4, A COMBINATION OF A SMALLER THRUST BLOCK AND A REDUCED LENGTH OF RESTRAINED PIPE IS ALLOWED PER THE FOLLOWING FORMULA:

$$\frac{\text{ACTUAL BEARING AREA OF BLOCK}}{\text{BEARING AREA REQUIRED BY TABLE}} + \frac{\text{ACTUAL RESTRAINED LENGTH OF PIPE}}{\text{RESTRAINED LENGTH REQUIRED BY TABLE}} \geq 1.1$$

- THRUST BLOCKS ARE REQUIRED FOR ALL BENDS, TEES, PLUGS, AND CAPS IN PIPE 4" AND LARGER EXCEPT AS LISTED IN NOTE 5.
- REGARDLESS OF SIZE OF THRUST BLOCKS ALL JOINTS AT CAPS, PLUGS, BENDS, AND TEES MUST BE RESTRAINED.
- RESTRAINED LENGTHS USED IN PLACE OF THRUST BLOCKS IN STANDARDS 414A, 414B, AND 414C MAY NOT OVERLAP.
- FIELD-LOCK GASKETS, MEGA-LUG AND UNIFLANGE COUPLINGS ARE THE ONLY APPROVED MEANS OF RESTRAINING PIPE.

### 414B-HORIZONTAL AND CONCAVE UPWARD THRUST BLOCKS



- NOTES:**
- BONDING JUMPER MUST MATCH ELECTRICAL COLD WATER GROUND WIRE. (EXAMPLE: NO. 4 WIRE FOR UP TO 200 AMP SERVICE.) BONDING JUMPER CLAMP MUST BE COMPATIBLE WITH COPPER PIPE.
  - ALL JOINTS OR VALVES ON SERVICE SIDE OF METER YOKE MUST BE MECHANICAL FITTINGS.
  - COMMERCIAL FACILITIES AND RESIDENTIAL BUILDINGS WITH THREE OR MORE UNITS MUST INSTALL A WATER METER (OBTAINABLE FROM CBJ WATER UTILITY). SEE STANDARD 420.
  - ALL UNDERGROUND COPPER TUBE CONNECTIONS (IF ANY) SHALL BE EITHER MUELLER OR FORD FLARED UNIONS OR APPROVED EQUAL. NIBCO BRAND IS NOT AN APPROVED EQUAL.
  - AFTER INSTALLATION, CONTINUE TO MAINTAIN A MINIMUM OF 22" UNOBSTRUCTED CLEARANCE FOR THE METER YOKE.
  - BURIAL DEPTHS GREATER THAN 5' MAY BE REQUIRED BY THE ENGINEER.
  - CURB BOX MUST BE RESET SO THAT IT IS PLUMB, AND THAW WIRE SHALL BE WOUND AROUND OUTSIDE OF CURB BOX.
  - UNDERGROUND SERVICE LINE SHALL NOT BE WITHIN 1" OF ANY OTHER SERVICE LINE.

### 419-RESIDENTIAL WATER SERVICE CONNECTION

SCALE: 1"=2'

SCALE	GRAPHIC
DESIGNED	###
DRAWN	###
CHECKED	###
DATE	September 30, 2024

**MOORE ENGINEERING**  
P.O. BOX 397 CRAIG, ALASKA 99921  
(907) 530-7008  
**TRACY MOORE, P.E.**  
REGISTERED PROFESSIONAL CIVIL ENGINEER

RAVENWOOD SUBDIVISION

SHEET  
DT6  
SHEET NO.  
64 OF 64



A  
L  
A  
S  
K  
A

**2024-002967-0**

Recording Dist: 101 - Juneau  
9/16/2024 08:39 AM Pages: 1 of 2



AFTER RECORDING, RETURN TO:  
Misty Sea Charters & Lodging LLC  
and R&S Construction LLC  
*c/o Misty Sea Charters & Lodging LLC*  
1044 Timberwolf Lane  
Juneau, Alaska 99801

*Juneau Recording District*

**WARRANTY DEED**  
*(A.S. 34.15.030)*

AETIA: 68468

The GRANTOR, **LOWPETE CONSTRUCTION, INC.**, an Alaska business corporation, whose mailing address is *P.O. Box 34939, Juneau, Alaska 99801*, for and in consideration of TEN DOLLARS (\$10.00) and other good and valuable consideration in hand paid, the receipt of which is hereby acknowledged, conveys and warrants to GRANTEES, **MISTY SEA CHARTERS & LODGING LLC**, an Alaska limited liability company, whose mailing address is *1044 Timberwolf Lane, Juneau, Alaska 99801*, AND **R & S CONSTRUCTION, LLC**, an Alaska limited liability company, whose mailing address is *P.O. Box 210194, Auke Bay, Alaska 99821*, together as tenants in common, the following-described real estate:

Lot 1, RAVENWOOD SUBDIVISION, according to Plat 2019-3, Juneau  
Recording District, First Judicial District, State of Alaska.

SUBJECT TO ALL the reservations, exceptions, easements, encumbrances, leases, covenants, conditions, and restrictions of record, if any.

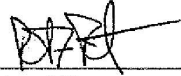
*[Grantor signature and notary acknowledgement appear on the following page]*

WARRANTY DEED

Page 1 of 2

DATED: this 13 day of September, 2024.

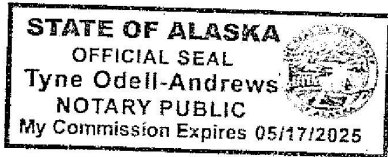
GRANTOR: **LOWPETE CONSTRUCTION, INC., an Alaska Business Corporation**



By: Richard Petersen  
Its: President

STATE OF ALASKA )  
 ) ss.  
FIRST JUDICIAL DISTRICT )

The foregoing instrument was acknowledged before me this 13 day of September, 2024, by **RICHARD PETERSEN, PRESIDENT** of **LOWPETE CONSTRUCTION, INC.**, an Alaska business corporation, on behalf of the corporation.



Notary Public in and for Alaska

My Commission Expires: 5/17/25

WARRANTY DEED

Page 2 of 2



2 of 2

101-2024-002967-0

**LEGEND**

- ⊕ B.L.M. 2-1/2" BRASS MONUMENT RECOVERED THIS SURVEY
- ⊕ PRIMARY DOT SHOULDER MONUMENT IN CASING RECOVERED THIS SURVEY
- ⊕ 2" BRASS CAP, NO MARKINGS
- ⊕ PRIMARY MONUMENT RE-SET THIS SURVEY
- ⊕ 3" ALUMINUM MONUMENT, J.W. BEAN
- ⊕ PRIMARY MONUMENT RECOVERED THIS SURVEY
- ⊕ 3" ALUMINUM MONUMENT, R&M ENGINEERING
- ⊕ SECONDARY MONUMENT SET THIS SURVEY BY J.W. BEAN
- ⊕ SECONDARY MONUMENT RECOVERED THIS SURVEY
- ⊕ REBAR & CAP, R&M ENGINEERING
- ⊕ SECONDARY MONUMENT RECOVERED THIS SURVEY
- ⊕ REBAR & CAP, T&N ENGINEERING
- ⊕ SECONDARY MONUMENT RECOVERED THIS SURVEY
- ⊕ REBAR & CAP, J.W. BEAN

- SURVEYED
- - - UNSURVEYED
- CENTERLINE
- SURVEY TIE
- BASIS OF BEARING
- VACATED LOT LINE
- EASEMENT
- EASEMENT

R = AS PER PLAT NO. 2015-41, DATED 10/06/2015

**BASIS OF BEARING**  
 THE BASIS OF BEARING FOR THIS PLAT IS THE RECORD BEARING OF 578°35'15"E AS DELINEATED ON THE OFFICIAL PLAT 2015-41, DATED 10/16/81, LOT 2A, CHILKAT VIEW SUBDIVISION II AND TRACT 1A1, U.S. SURVEY NO. 3246, BETWEEN FOUND BLM PRIMARY MONUMENTS WHICH MARK THE SW CORNER 2 OF U.S. SURVEY NO. 3263 AND THE CORNER 3 OF U.S. SURVEY NO. 3263 AS SHOWN ON THIS PLAT.

**RECORD INFORMATION**  
 RECORD INFORMATION THIS SUBDIVISION IS DERIVED FROM OFFICIAL PLAT NO. 2015-41, DATED 10/06/2015, LOT 2A, CHILKAT VIEW SUBDIVISION II, AND TRACT 1A1, U.S. SURVEY NO. 3246, JUNEAU RECORDING DISTRICT.

**OWNERSHIP CERTIFICATE:**

LOWPETE CONSTRUCTION, LLC, HEREBY CERTIFIES THAT LOWPETE CONSTRUCTION, LLC, IS THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT IT HEREBY ADOPTS THIS PLAT OF SUBDIVISION WITH MY FREE CONSENT, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED:

OWNER: Richard F. Petersen DATE: 1/16/19  
 RICHARD F. PETERSEN  
 PRESIDENT/CEO  
 LOWPETE CONSTRUCTION, INC.  
 OWNER LOT 1

**NOTARY ACKNOWLEDGMENT:**

STATE OF ALASKA )  
 ) S.S.  
 FIRST JUDICIAL DISTRICT )

THIS IS TO CERTIFY THAT ON THIS 17 DAY OF January, 2019 BEFORE ME THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, PERSONALLY APPEARED RICHARD F. PETERSEN, PRESIDENT/CEO TO ME KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE SIGNED AND SEALED THE SAME FREELY AND VOLUNTARILY FOR THE USES AND PURPOSES THEREIN MENTIONED.

WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA Quinn M. Bishop  
 MY COMMISSION EXPIRES July 28, 2019

**COMMUNITY DEVELOPMENT PLAT APPROVAL**

I HEREBY CERTIFY THAT THE PLAT HEREON HAS BEEN FOUND TO COMPLY WITH TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU AND IS APPROVED BY THE CITY AND BOROUGH OF JUNEAU, DEPARTMENT OF COMMUNITY DEVELOPMENT, FOR RECORDING IN THE OFFICE OF THE JUNEAU RECORDING DISTRICT, JUNEAU, ALASKA.

Jill Maclean DATED: 1/25/19  
 JILL MACLEAN, DIRECTOR  
 CITY & BOROUGH OF JUNEAU  
 DEPARTMENT OF COMMUNITY DEVELOPMENT

ATTEST:  
Quinn M. Bishop  
 MUNICIPAL CLERK  
 CITY & BOROUGH OF JUNEAU

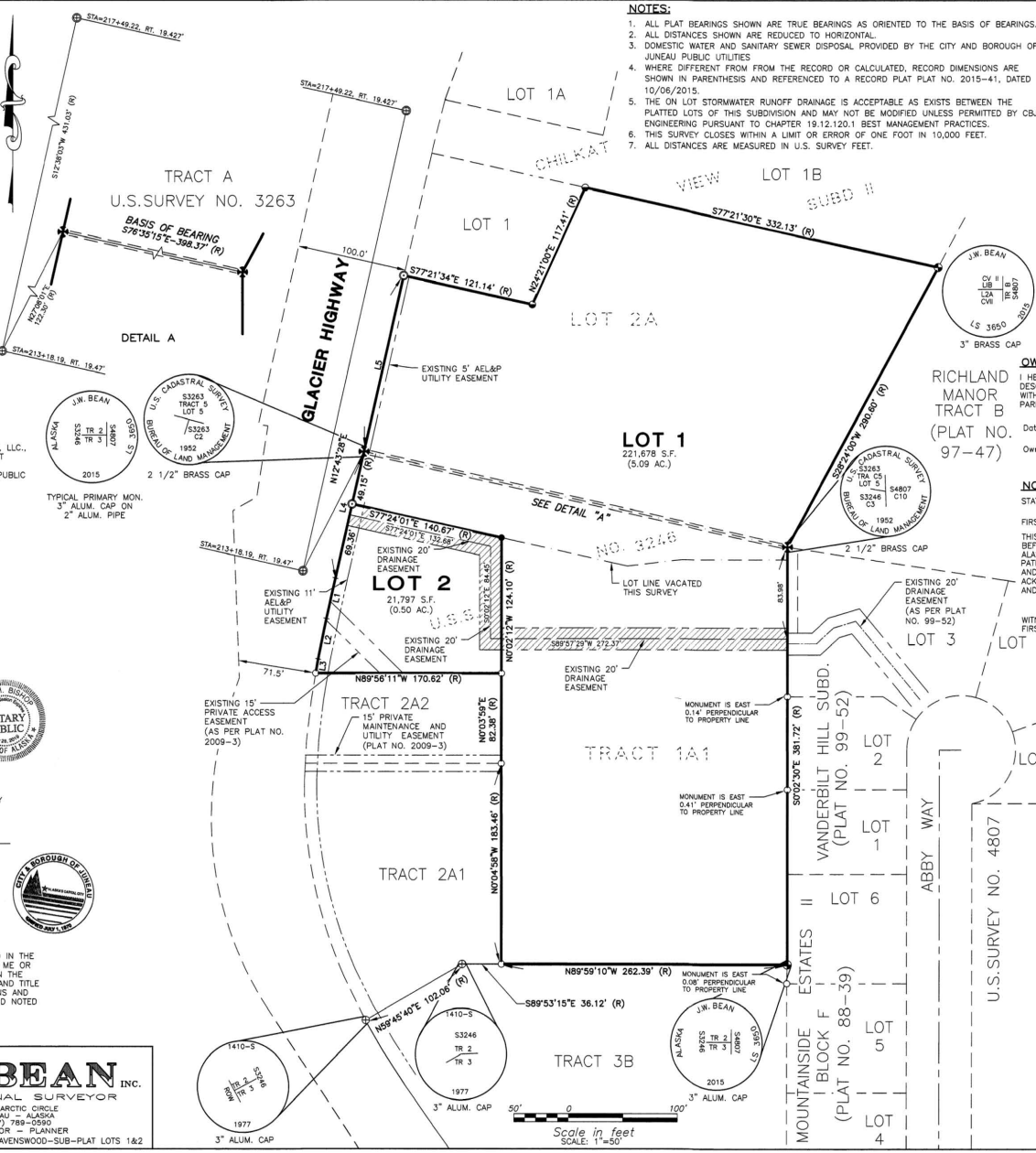
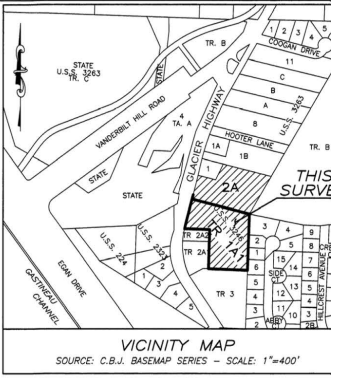
**CERTIFICATE OF REGISTERED LAND SURVEYOR**

I, J.W. BEAN, IN MY CAPACITY AS A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, CERTIFY THAT THIS PLAT REPRESENTS THE SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE ACCURACY OF THE SURVEY IS WITHIN THE LIMITS REQUIRED BY TITLE 04 OF THE COMMUNITY DEVELOPMENT REGULATIONS AND TITLE 49 OF THE CODE OF THE CITY AND BOROUGH OF JUNEAU, THAT ALL DIMENSIONS AND RELATIVE BEARINGS ARE CORRECT AND THAT MONUMENTS ARE SET IN PLACE AND NOTED UPON THIS PLAT AS PRESENTED.

DATE: 1-16-2019

**NOTES:**

1. ALL PLAT BEARINGS SHOWN ARE TRUE BEARINGS AS ORIENTED TO THE BASIS OF BEARINGS.
2. ALL DISTANCES SHOWN ARE REDUCED TO HORIZONTAL.
3. DOMESTIC WATER AND SANITARY SEWER DISPOSAL PROVIDED BY THE CITY AND BOROUGH OF JUNEAU PUBLIC UTILITIES.
4. WHERE DIFFERENT FROM THE RECORD OR CALCULATED, RECORD DIMENSIONS ARE SHOWN IN PARENTHESIS AND REFERENCED TO A RECORD PLAT PLAT NO. 2015-41, DATED 10/06/2015.
5. THE ON LOT STORMWATER RUNOFF DRAINAGE IS ACCEPTABLE AS EXISTS BETWEEN THE PLATTED LOTS OF THIS SUBDIVISION AND MAY NOT BE MODIFIED UNLESS PERMITTED BY CBJ ENGINEERING PURSUANT TO CHAPTER 19.12.120.1 BEST MANAGEMENT PRACTICES.
6. THIS SURVEY CLOSES WITHIN A LIMIT OR ERROR OF ONE FOOT IN 10,000 FEET.
7. ALL DISTANCES ARE MEASURED IN U.S. SURVEY FEET.



**OWNERSHIP CERTIFICATE:**

I HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I HEREBY ADOPT THIS PLAT OF SUBDIVISION WITH MY FREE CONSENT, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED.

Date: 1-17 2019  
 Owner: Patrick L. McMurtrie  
 PATRICK L. MCMURTRIE  
 OWNER LOT 2

**NOTARY ACKNOWLEDGMENT:**

STATE OF ALASKA )  
 ) S.S.  
 FIRST JUDICIAL DISTRICT )

THIS IS TO CERTIFY THAT ON THIS 17 DAY OF January, 2019 BEFORE ME THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE STATE OF ALASKA, DULY COMMISSIONED AND SWORN, PERSONALLY APPEARED PATRICK L. MCMURTRIE TO ME KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE SIGNED AND SEALED THE SAME FREELY AND VOLUNTARILY FOR THE USES AND PURPOSES THEREIN MENTIONED.

WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR IN THIS CERTIFICATE FIRST ABOVE WRITTEN.

NOTARY PUBLIC FOR ALASKA Quinn M. Bishop  
 MY COMMISSION EXPIRES July 28, 2019

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	N12°31'30"E	37.81' (R)
L2	N11°34'28"E	37.81' (R)
L3	N8°35'25"E	13.17' (R)
L4	N12°43'28"E	118.51' (R)
L5	N12°43'28"E	165.00' (R)

2019-3  
 Plat #  
JUNEAU  
 No. 17  
 Date  
1/17/2019  
 Time  
2:45P

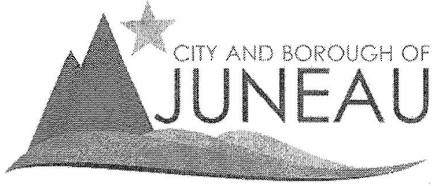
PLAT OF  
**RAVENWOOD SUBDIVISION**  
 A SUBDIVISION OF  
**LOT 2A, CHILKAT VIEW SUB. II & TRACT 1A1, U.S. SURVEY NO. 3246**  
 WITHIN CITY & BOROUGH OF JUNEAU, ALASKA JUNEAU RECORDING DISTRICT

OWNERS:  
 PATRICK L. MCMURTRIE  
 PO BOX 240487  
 DOUGLAS, ALASKA 99824  
 LOWPETE CONSTRUCTION, INC.  
 PO BOX 34039  
 JUNEAU, ALASKA 99803

SURVEYOR:  
 J.W. BEAN, INC.  
 PROFESSIONAL SURVEYOR  
 1070 ARCTIC CIRCLE  
 JUNEAU, ALASKA 99801

DATE: 12-27-2018 SCALE: 1"=50' SHEET 1 OF 04

Juneau 2019-2



Treasury Division  
155 S. Seward Street  
Juneau, AK 99801  
(907) 586-0377 Phone  
(907) 586-5367 Fax

### CERTIFICATION OF TAXES AND ASSESSMENTS PAID

I, the undersigned, being duly appointed, qualified Treasurer for the City and Borough of Juneau, First Judicial District, State of Alaska, do hereby certify that, according to the records of the City and Borough of Juneau, the following described real property is carried on the tax records in the name of:

State of Alaska Department of Natural Resources

Current Owner

USS 3853 FR

Legal Description

3D0201000050

Parcel Code Number

and that, according to the records in my possession, there are no taxes assessed against said parcel as this parcel is owned by the State of Alaska, which is a tax exempt entity; and any special assessments assessed against said parcel and in favor of the City and Borough of Juneau have been paid in full.

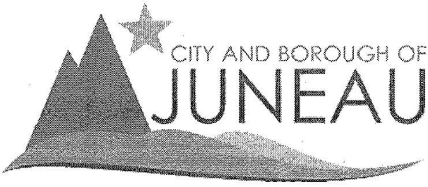
  
Cheryl A. Crawford

January 22, 2019

Date

**This Certification of Payment of Taxes is valid through December 31, 2019**

Juneau 2019-2



Treasury Division  
155 S. Seward Street  
Juneau, AK 99801  
(907) 586-0377 Phone  
(907) 586-5367 Fax

### CERTIFICATION OF TAXES AND ASSESSMENTS PAID

I, the undersigned, being duly appointed, qualified Treasurer for the City and Borough of Juneau, First Judicial District, State of Alaska, do hereby certify that, according to the records of the City and Borough of Juneau, the following described real property is carried on the tax records in the name of:

City and Borough of Juneau Lands and Resources

Current Owner

USS 3853 LT 2 FR

Legal Description

3D0201000070

Parcel Code Number

and that, according to the records in my possession, there are no taxes assessed against said parcel as this parcel is owned by the City and Borough of Juneau, which is a tax exempt entity; and any special assessments assessed against said parcel and in favor of the City and Borough of Juneau have been paid in full.

  
Cheryl A. Crawford

January 22, 2019

Date

**This Certification of Payment of Taxes is valid through December 31, 2019**

Presented by: The Manager  
Introduced: 02/24/2014  
Drafted by: A.G. Mead

## ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 2014-10

### **An Ordinance Amending the Official Zoning Map of the City and Borough to Change the Zoning of USS 3246 Tracts 1A, 2A1 and 2A2, Located at 4660, 4664 and 4670 Glacier Highway, from D-5 to D-15.**

WHEREAS, the area of the proposed rezone, USS 3246, Tracts 1A, 2A1 and 2A2, located near the Pioneer Home at 4660, 4664, and 4670 Glacier Highway, is currently zoned as D-5 (single family/duplex – five units per acre); and

WHEREAS, the CBJ Comprehensive Plan supports denser residential zoning adjacent to transit corridors; and

WHEREAS, the proposed rezone is located within the Urban Service Area Boundary map, which has access to City and Borough water and sewer utilities to adequately accommodate higher development usage and which the CBJ Comprehensive Plan supports as an area for compact development to increase efficient land use; and

WHEREAS, changing the zoning of these three properties would expand an existing D-15 Zone (15 units per acre), rather than create a new one; and

WHEREAS, at its November 26, 2013 regular meeting the Planning Commission recommended that a rezoning request be forwarded to the Assembly for approval.

NOW, THEREFORE, BE IT ENACTED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, ALASKA:

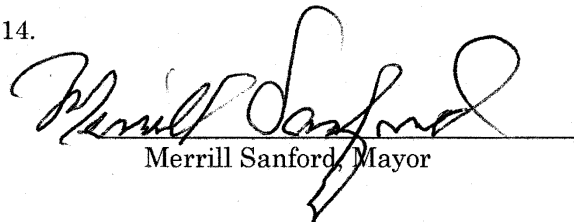
**Section 1. Classification.** This ordinance is of a general and permanent nature and shall become a part of the City and Borough of Juneau Municipal Code.

**Section 2. Amendment to the Official Zoning Map.** The official zoning map of the City and Borough, adopted pursuant to CBJ 49.25.110, is amended to change the zoning of USS 3246, Tracts 1A, 2A1 and 2A2, located near the Pioneer Home at 4660, 4664, and 4670 Glacier Highway, from D-5, to D-15.

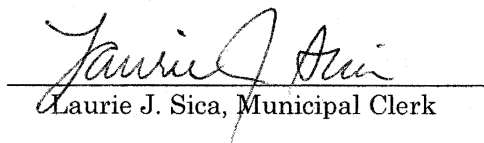
The described rezone is shown on the attached Exhibit “A” illustrating the area of the proposed zone change.

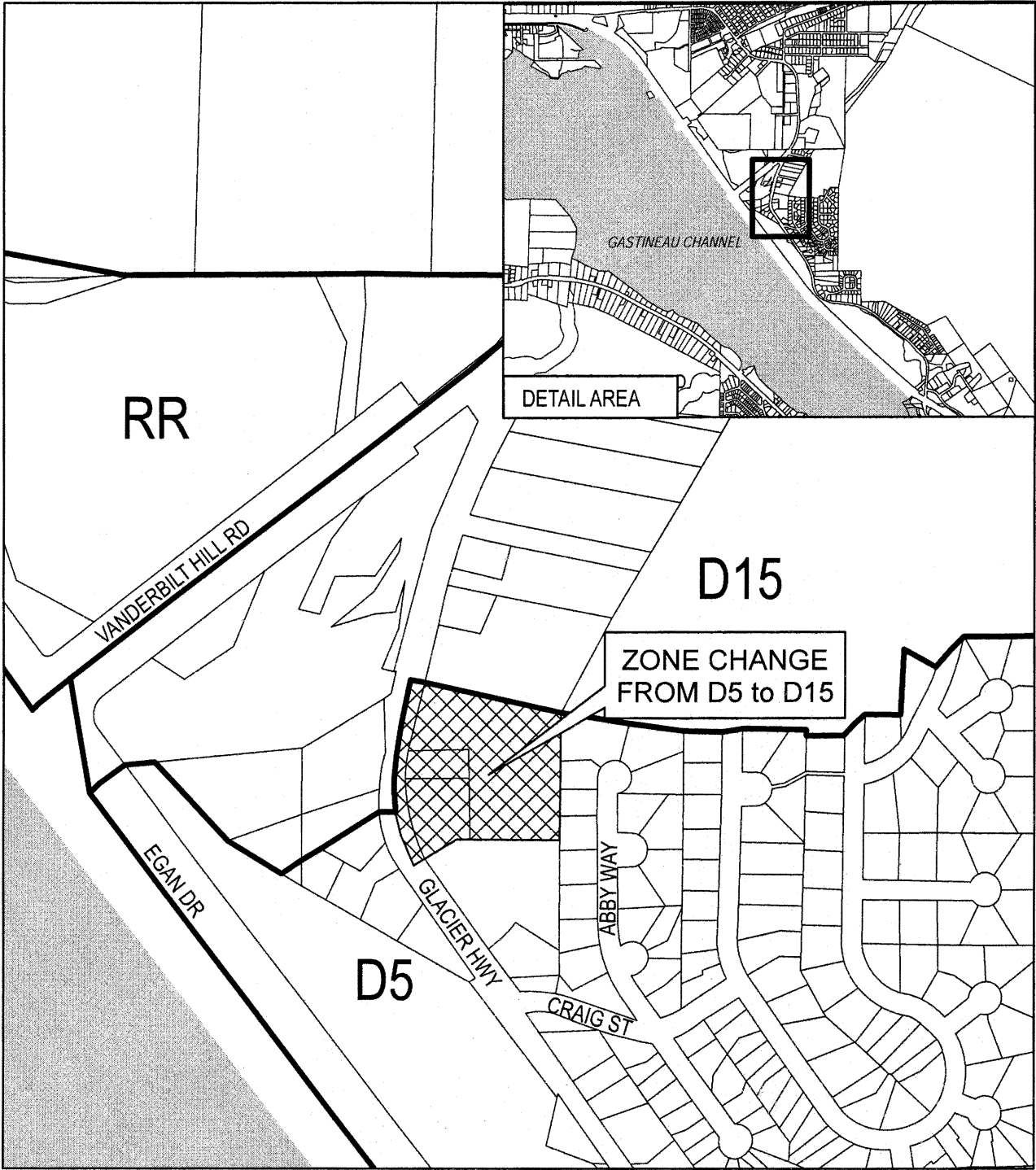
**Section 3. Effective Date.** This ordinance shall be effective 30 days after its adoption.

Adopted this 17<sup>th</sup> day of March, 2014.

  
Merrill Sanford, Mayor

Attest:

  
Laurie J. Sica, Municipal Clerk



<p align="center"><b>Exhibit A - Ord. 2014-10</b></p> <p align="center">Zoning Change for USS 3246 Tracts 1A, 2A1, and 2A2 from D5 to D15.</p>	<p align="center">0 125 250 500 750 Feet</p> <p align="right">   <b>N</b> </p>
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Map created: 1/27/2014

Project source: F:\gis\_work\Quinn\Projects\CDD\vicinity maps 14.mxd





Attachment G – Public Notice Posting





Attachment G – Public Notice Posting



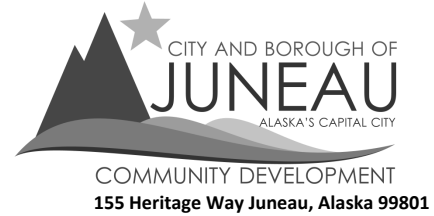
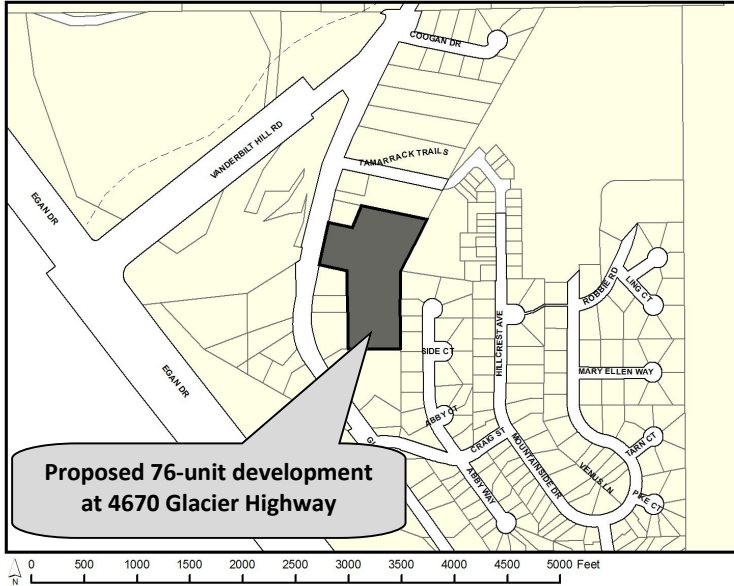
Attachment G – Public Notice Posting



# Invitation to Comment

On a proposal to be heard by the CBJ Planning Commission

*Your Community, Your Voice*



TO

**A Preliminary Plan for an Alternative Residential Subdivision** has been submitted for consideration and public hearing by the Planning Commission for **developing up to 76 dwelling units on 5.1 acres at 4670 Glacier Highway** in a **D15 zone**.

**PROJECT INFORMATION:**

Project Information can be found at:  
<https://juneau.org/community-development/short-term-projects>

**PLANNING COMMISSION DOCUMENTS:**

Staff Report expected to be posted **Monday, March 3, 2025** at  
<https://juneau.org/community-development/planning-commission>  
 Find hearing results, meeting minutes, and more here, as well.

Now through Feb. 20	Feb. 21— noon, March 7	HEARING DATE & TIME: 6:00 pm, March 11, 2025	March 12
Comments received during this period will be sent to the Planner, <b>David Peterson</b> , to be included as an attachment in the staff report.	Comments received during this period will be sent to Commissioners to read in preparation for the hearing.	This meeting will be held in person and by remote participation. For remote participation: join the Webinar by visiting <a href="https://juneau.zoom.us/j/85421744892">https://juneau.zoom.us/j/85421744892</a> and use the Webinar ID: 854 2174 4892 OR join by telephone, calling: 1-253-215-8782 and enter the Webinar ID (above).  You may also participate in person in City Hall Assembly Chambers, 155 Heritage Way Juneau, Alaska.	The results of the hearing will be posted online.
<p><b>FOR DETAILS OR QUESTIONS,</b>                  Phone: (907)586-0753 ext. 4132                  Email: <a href="mailto:pc_comments@juneau.gov">pc_comments@juneau.gov</a> or <a href="mailto:David.Peterson@juneau.gov">David.Peterson@juneau.gov</a>                  Mail: Community Development, 155 Heritage Way, Juneau AK 99801</p>		<p><b>Case No.: ARP2024 0001</b>  <b>Parcel No.: 7B1001150063</b>  <b>CBJ Parcel Viewer:</b> <a href="http://epv.juneau.org">http://epv.juneau.org</a></p>	

**From:** [Jill Lawhorne](#)  
**To:** [David Peterson](#)  
**Cc:** [Nicolette Chappell](#); [Madeline Carse](#)  
**Subject:** FW: Ravenwood subdivision  
**Date:** Friday, February 21, 2025 12:43:50 PM  
**Importance:** High

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Hi David – just looping in Nicolette and Maddie. I just spoke with Nicolette. The legal ads are in paper now on the two Wednesdays prior, not the Fridays. Please make sure to care for the details first thing Monday morning with the Admin team.

Hopefully, you can rest up this weekend.

Jill

---

**From:** Jill Lawhorne <[jill.lawhorne@juneau.gov](mailto:jill.lawhorne@juneau.gov)>  
**Sent:** Friday, February 21, 2025 12:40 PM  
**To:** David Peterson <[David.Peterson@juneau.gov](mailto:David.Peterson@juneau.gov)>  
**Subject:** RE: Ravenwood subdivision  
**Importance:** High

Hi David,

If the PAC is correct on the TIA numbers (about 400 ADT), then a TIA is not required, however, DOT must submit comments and any conditions they need for Glacier Hwy.

[Redacted]

- [Redacted]
- [Redacted]
- [Redacted]

[Redacted]

[Redacted]

Jill

---

**From:** David Peterson <[David.Peterson@juneau.gov](mailto:David.Peterson@juneau.gov)>  
**Sent:** Thursday, February 20, 2025 9:58 AM  
**To:** Jill Lawhorne <[jill.lawhorne@juneau.gov](mailto:jill.lawhorne@juneau.gov)>  
**Subject:** Re: Ravenwood subdivision

Jill,

We could condition those items.

Are you going to want a TIA?

And, can this still make the March 11 PC meeting?

DP

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**From:** Jill Lawhorne <[jill.lawhorne@juneau.gov](mailto:jill.lawhorne@juneau.gov)>  
**Sent:** Thursday, February 20, 2025 9:39:33 AM  
**To:** David Peterson <[David.Peterson@juneau.gov](mailto:David.Peterson@juneau.gov)>  
**Subject:** RE: Ravenwood subdivision

Hi David,

Couldn't we condition the preliminary plat for snow storage and mailbox location? I don't see that these are required to send the plat to the commission?

Thanks – hope you feel better!

Jill

---

**From:** David Peterson <[David.Peterson@juneau.gov](mailto:David.Peterson@juneau.gov)>  
**Sent:** Thursday, February 20, 2025 6:32 AM  
**To:** Rob Worden <[roblisa@ak.net](mailto:roblisa@ak.net)>; Jill Lawhorne <[jill.lawhorne@juneau.gov](mailto:jill.lawhorne@juneau.gov)>  
**Subject:** Re: Ravenwood subdivision

Hello Rob,

I am out sick this week. Are there any questions I can answer via email?

Last I discussed with your surveyor, I requested mailbox location and snow storage to be shown.

Best Regards,

DP

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**From:** Rob Worden <[roblisa@ak.net](mailto:roblisa@ak.net)>

**Sent:** Wednesday, February 19, 2025 11:32:02 AM

**To:** Jill Lawhorne <[jill.lawhorne@juneau.gov](mailto:jill.lawhorne@juneau.gov)>; David Peterson <[David.Peterson@juneau.gov](mailto:David.Peterson@juneau.gov)>

**Subject:** Ravenwood subdivision

EXTERNAL E-MAIL: BE CAUTIOUS WHEN OPENING FILES OR FOLLOWING LINKS

Hello Jill and David,

I had ran down to the city today as per my email yesterday to David. I was wanting to go over a few questions from Vector engineering and Last Frontier Surveying and Engineering in regards to finalizing the plat we had turned in on February 10th. I would like to set a time tomorrow morning to meet with hopefully the both of you in regards to confirming we are on the march 10th Planning commission and we had other questions that I will list below so you have time to review them to coincide with our plat that we had submitted by the timeframe requested by David Peterson to make the March 10th PC meeting.

- 1- The minimum parent lot size is 150% of the minimum lot size for the zoning district in which it is located. In this case 7500 sq ft is the minimum parent lot size. In our current plat, the required setbacks and frontage combine to 20,000+ sq ft. This doesn't include the ROW area. We want to verify that this meets the intent of the code?
- 2- Do we need to meet CBJ ROW requirements? Or can we use engineering standards to determine road geometry, sidewalks , etc.?
- 3- Do we need to meet CBJ street lighting requirements? Or can we design based standard engineering requirements?
- 4- Our average daily trips generated are below the 500 trip threshold for a required traffic study, is one going to be required or is there one nearby that we can utilize?
- 5- How do you want the "Additional Mapping or Reports" packaged and delivered? At the back of the plat? Or a standalone package?
- 6- Because the street will be HOA owned, do CBJ snow storage requirements apply?
- 7- If we build the streets city standards, will the city take the street dedication?
- 8- We are confirming from my emailed questions regarding section D107 of the code that we do not fall under 2 separate accesses to glacier highway to provide 42 single family homes on an ARS subdivision? I had a response from Theresa Ross from Capital City Fire stating one access was sufficient on January 27th but just wanted final verification?

9- We are proposing a name change requested by the city from Ravenwood Subdivision to Brow Tine Subdivision and are checking that this is acceptable?

Rob Worden  
907-321-5015