



Beck North Lot 53 JSP14-03

Beck North Lot 53, JSP14-03

Consideration of the request of Amson Dembs Development for Preliminary Site Plan and Stormwater Management Plan approval. The subject property is located in Section 4, at the northeast corner of Nadlan Court and Hudson Drive in the I-1, Light Industrial District. The subject property is 3.90 acres and the applicant is proposing to construct a 50,058 square foot speculative office and industrial building with associated parking and landscaping.

REQUIRED ACTION

Approval/denial of the Preliminary Site Plan and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	02/26/14	<ul style="list-style-type: none"> • Applicant should revise the proposed floor plan to more clearly show areas that can be deducted from parking calculations or provide 5 additional parking spaces • Items to address on the Final Site Plan submittal
Engineering	Approval recommended	02/26/14	Items to address on the Final Site Plan submittal
Traffic	Approval recommended	02/24/14	Items to address on the Final Site Plan submittal
Landscaping	Approval recommended	02/26/14	Items to address on the Final Site Plan submittal
Façade	Approval recommended	02/27/14	Sample board must be submitted prior to the Planning Commission meeting
Fire	Approval recommended	02/10/14	No additional items to address

Motion sheet

Approval – Preliminary Site Plan

In the matter of Beck North Lot 53, JSP14-03, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. Applicant revising the floor plan to more clearly show areas that can be deducted from required parking calculations as indicated in their response letter;
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- c. *(additional conditions here if any)*

This motion is made because the plan is otherwise in compliance with Article 19, Article 24 and Article 25 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

-AND-

Approval – Stormwater Management Plan

In the matter of Beck North Lot 53, JSP14-03, motion to **approve** the Stormwater Management Plan, subject to:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

This motion is made because the plan is otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-OR-

Denial

In the matter of Beck North Lot 53, JSP14-03 motion to **deny** the Preliminary Site Plan, for the following reasons...*(because the plan is not in compliance with Article 19, Article 24 and Article 25 of the Zoning Ordinance.)*

-AND-

Denial Stormwater Management Plan

In the matter of Beck North Lot 53, JSP14-03, motion to **deny** the Stormwater Management Plan, for the following reasons...*(because the plan is not in compliance with Chapter 11 of the Ordinance.)*

MAPS
Location
Zoning
Future Land Use
Natural Features

JSP14-03 Beck North Lot 53

Location



Map Legend

 Subject Property



1 inch = 167 feet



City of Novi

Planning Division
Community Development Dept.
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

Map Author: Kristen Kapelanski

Date: 03/03/14

Project: JSP14-03 Beck North Lot 53

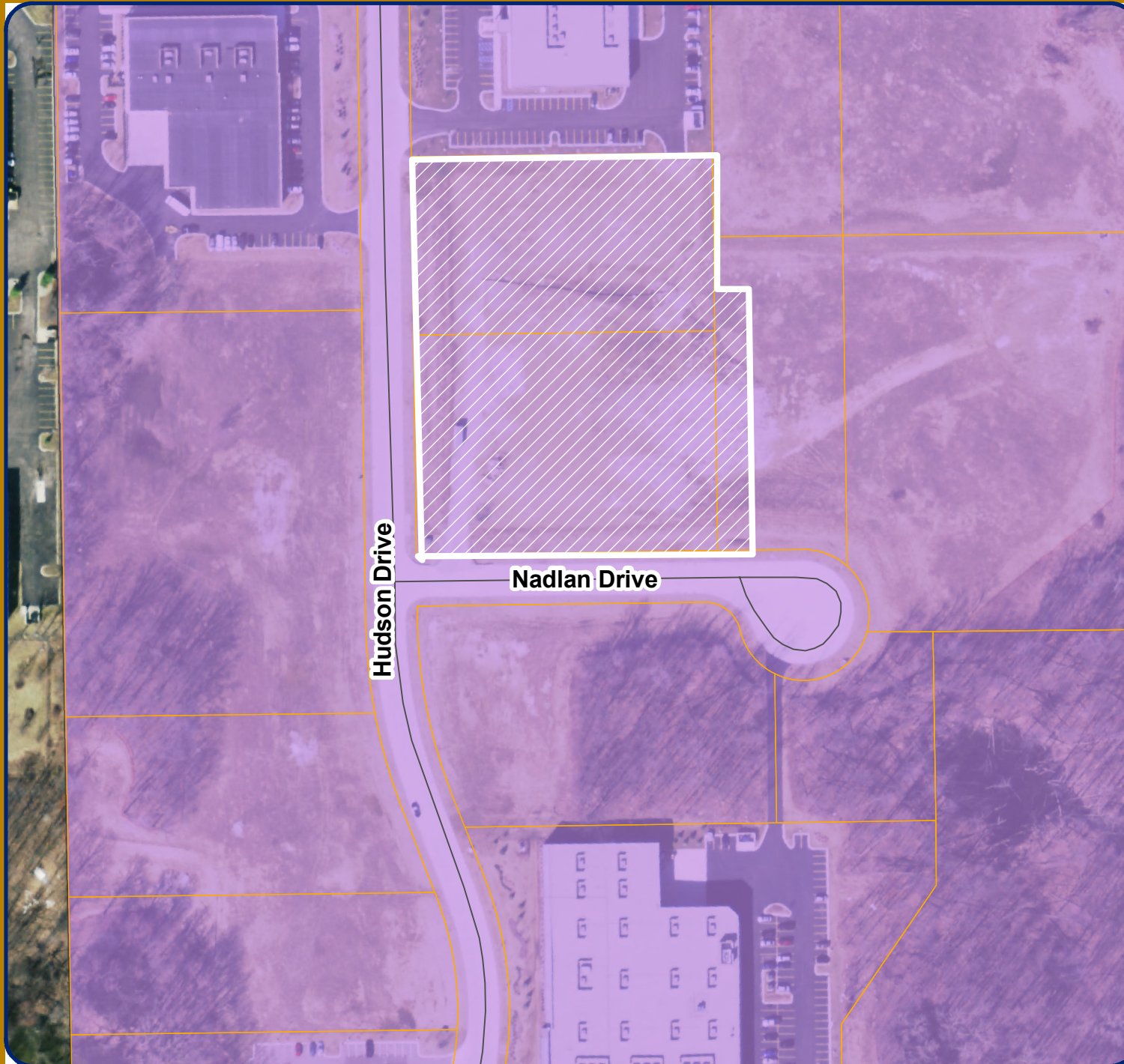
Version #: 1.0

MAP INTERPRETATION NOTICE



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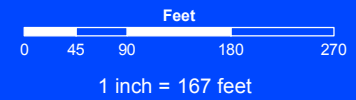
JSP14-03 Beck North Lot 53

Zoning



Map Legend

-  I-1: Light Industrial District
-  Subject Property



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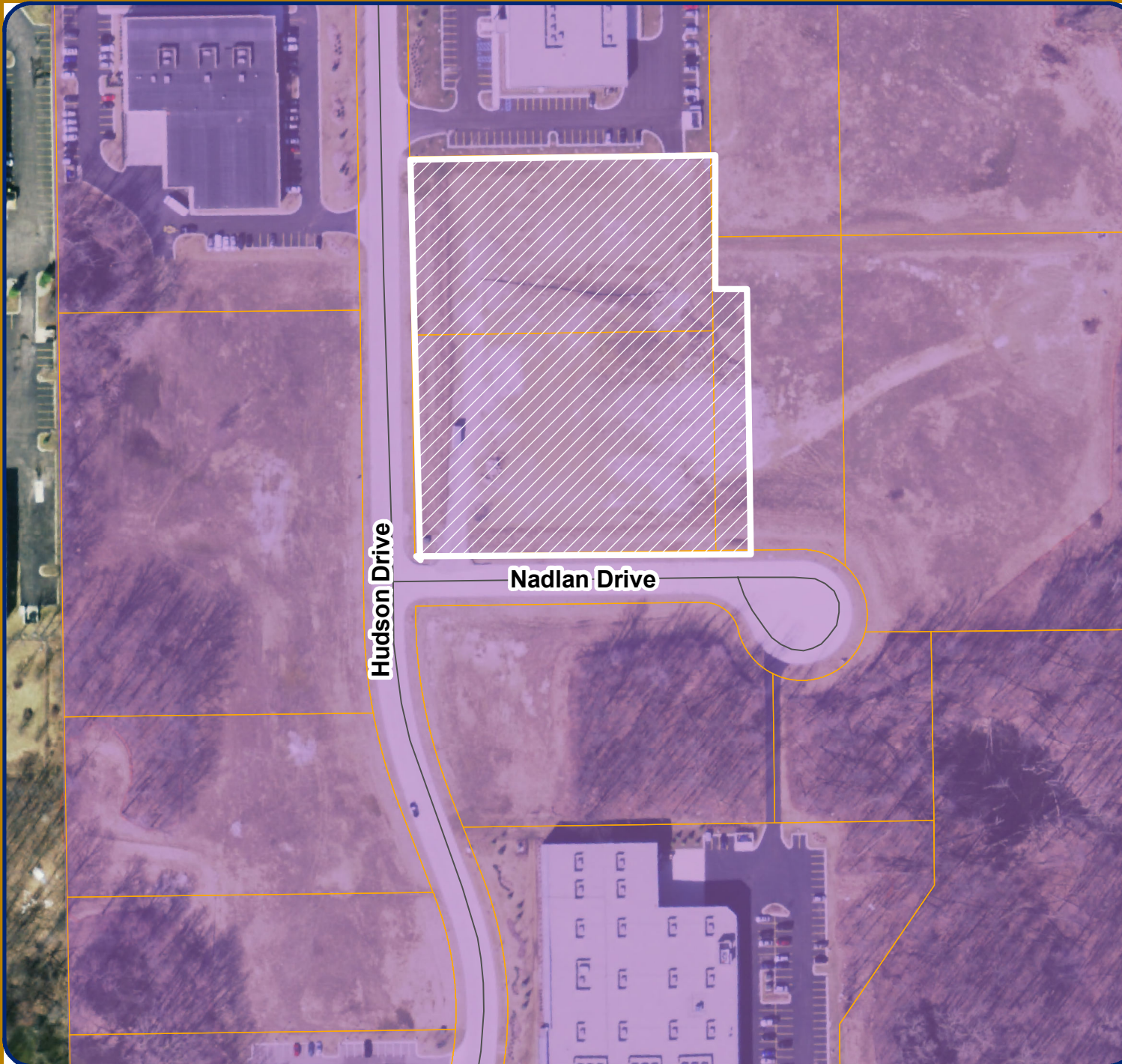
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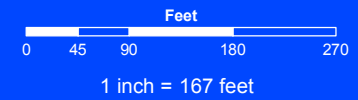
JSP14-03 Beck North Lot 53

Future Land Use



Map Legend

-  Industrial RD Tech
-  Subject Property



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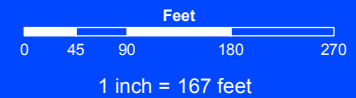
JSP14-03 Beck North Lot 53

Natural Features



Map Legend

-  Wetlands
-  Woodlands
-  Subject Property



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SITE PLAN

PARCEL ID: 50-22-04-151-024, 50-22-04-151-030 & PART OF 50-22-04-151-025

LEGAL DESCRIPTION:

UNIT 23, UNIT 44, AND PART OF UNIT 24 PART OF "BECK NORTH CORPORATE PARK," AS RECORDED IN LIBER 35825, PAGE 628 OF OAKLAND COUNTY RECORDS, OAKLAND COUNTY, MICHIGAN.

ALSO, DESCRIBED AS: BEGINNING AT THE SOUTHWEST CORNER OF UNIT 23, "BECK NORTH CORPORATE PARK," AS RECORDED IN LIBER 35825, PAGE 628 OF OAKLAND COUNTY RECORDS, OAKLAND COUNTY, MICHIGAN, AS AMENDED; THENCE N00°07'31"E 255.05 FEET; THENCE N00°07'31"E 206.90 FEET; THENCE S89°52'29"E 349.89 FEET; THENCE S00°07'31"W 134.50 FEET; THENCE S89°52'29"E 25.02 FEET; THENCE S00°07'30"W 327.45 FEET; THENCE N89°52'29"W 374.92 FEET TO THE POINT OF BEGINNING, CONTAINING 3.90 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

TRAFFIC SIGNING REQUIREMENTS

ITEM	MULTICO	CODE	QUANTITY	SIZE	DESCRIPTION
Ⓐ	R1-1	2	24"x24"	STOP	
Ⓑ	R7-8	5	12"x18"	RESERVED PARKING ONLY	
Ⓒ	R7-8P	2	12"x6"	VAN ACCESSIBLE	
Ⓓ	R7-9A MOD	6	12"x18"	NO PARKING FIRE LANE	

TRAFFIC SIGNING AND STRIPING REQUIREMENTS

- ALL PERMANENT AND TEMPORARY TRAFFIC SIGNAGE & STRIPING SHALL COMPLY WITH THE 2011 MUTCD.
- SIGNS SHALL BE MOUNTED ON 1 1/2" SQUARE GALVANIZED STEEL POST, WALL OR FENCE MOUNTED AS INDICATED ON THE PLANS, LOCATE AND INSTALL IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND REGULATIONS.
- MARKINGS FOR HANDICAPPED PARKING SPACES SHALL BE BLUE AND MARKINGS FOR NON-HANDICAPPED PARKING SPACES SHALL BE WHITE.
- REGULAR PARKING SPACES ADJACENT TO RAISED ISLANDS SHALL BE 9 FEET WIDE TO FACE OF CURB, AND BARRIER-FREE PARKING SPACES ADJACENT TO RAISED ISLANDS SHALL BE 8 FEET WIDE TO FACE OF CURB.
- SOLID ARROWS INDICATE WHERE ARROWS ARE PROPOSED AS PART OF THE STRIPING PLAN; HOLLOW ARROWS ARE PROVIDED TO DENOTE TRAFFIC FLOW DIRECTION.
- SEE SHEETS 4 AND 8 FOR BARRIER FREE SIGNAGE DETAILS.

LEGEND

---	EXISTING STORM	FF	FINISH FLOOR
---	EXISTING WATER MAIN	→	PROP. DRAINAGE ARROW
---	EXISTING SANITARY	↑	PROP. TOP OF PAVEMENT ELEV.
---	EXISTING GAS	○	PROP. TOP OF CURB ELEV.
□	EX. CATCH BASIN	ⓐ	PROP. GUTTER ELEV.
○	EX. MANHOLE	ⓑ	PROP. TOP OF WALK ELEV.
○	EX. END SECTION	Ⓒ	PROP. SPOT ELEV.
○	EX. HYDRANT	Ⓓ	PROP. CONTOUR
○	EX. WATER SHUTOFF	Ⓔ	PROP. CATCH BASIN
○	EX. GATE VALVE	Ⓕ	PROP. MANHOLE
○	EX. SIGN	Ⓖ	PROP. END SECTION
○	EX. PEDESTAL	Ⓗ	PROP. STORM SEWER
○	EX. TRANSFORMER	Ⓘ	PROP. SANITARY SEWER
○	EX. LIGHT POLE	Ⓚ	PROP. GATE VALVE
○		Ⓛ	PROP. HYDRANT
○		Ⓜ	PROP. SAN. STR. NUMBER
○		Ⓨ	PROP. STM. STR. NUMBER
○		Ⓩ	PROP. GATE VALVE NUMBER
○		ⓓ	PROP. HYDRANT NUMBER
○		ⓔ	PITCH IN CURB AND GUTTER
○		ⓕ	PITCH OUT CURB AND GUTTER
○		ⓖ	CROSS-ACCESS EASEMENT

BENCHMARKS:

BM #1
CITY BENCHMARK 4-2
NORTHEAST BOLT OF WEST SIGNAL AT RAILROAD TRACKS & WEST ROAD ELEVATION=952.86

BM #2
ARROW ON HYDRANT ON NORTH SIDE OF NADLAN DRIVE AT CENTER OF UNIT 23
ELEVATION= 955.96

BM #3
ARROW ON HYDRANT AT SOUTHEAST CORNER OF HUDSON DR. & NADLAN DR.
ELEVATION= 956.75

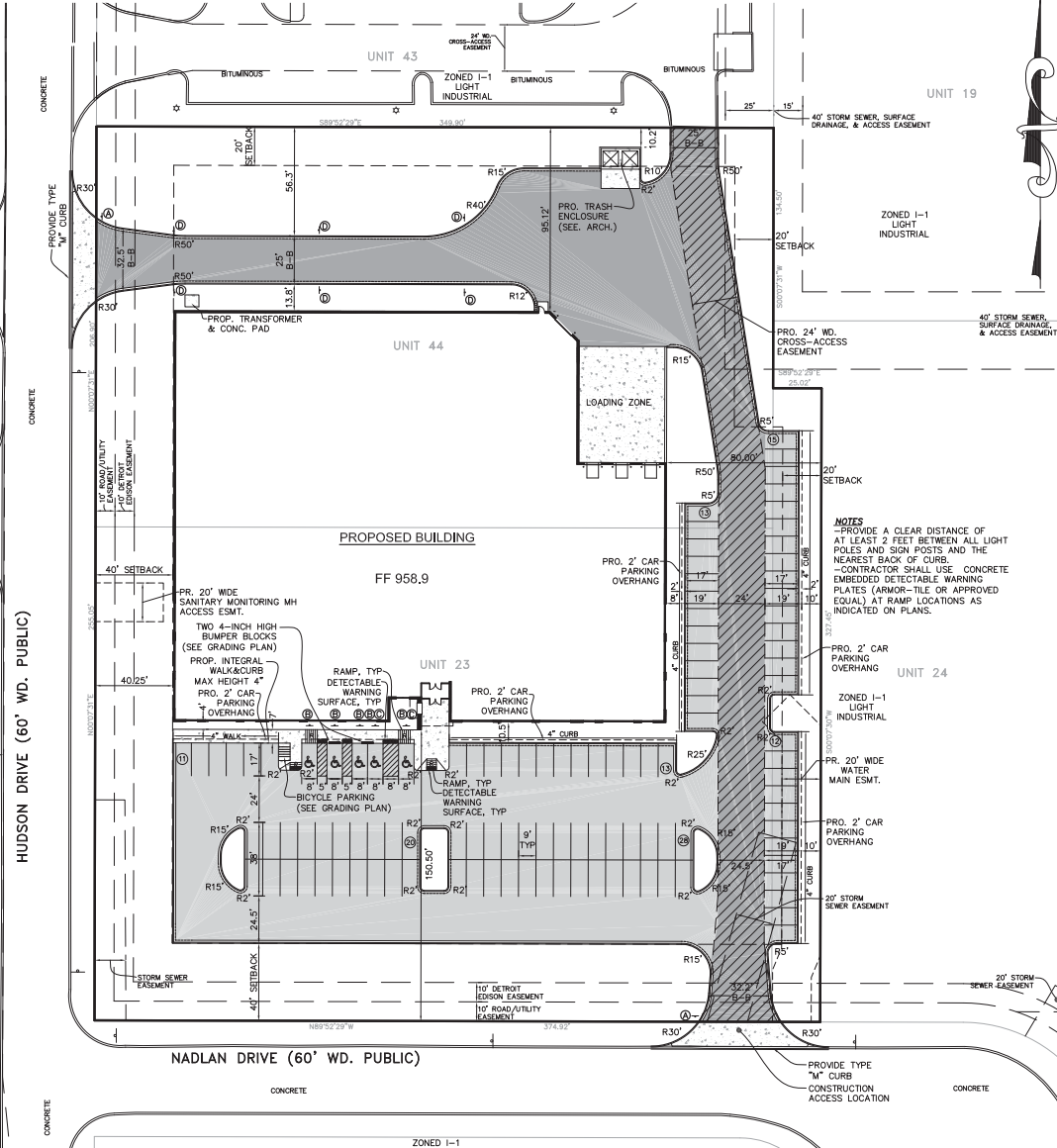
BM #4
ARROW ON HYDRANT AT EAST SIDE OF HUDSON DRIVE AT UNIT 23
ELEVATION= 958.71

PAVING LEGEND

▒	STANDARD PAVING
▒	HEAVY DUTY PAVING
▒	CONCRETE

NOTICE: CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

NOTE: THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.



SITE DATA:
 SITE AREA: 3.90 ACRES
 EXISTING/PROPOSED ZONING: I-1 LIGHT INDUSTRIAL
 PROPOSED SPECULATIVE BUILDING SHELL:
 15,567 S.F. OFFICE
 23,491 S.F. INDUSTRIAL/RESEARCH
 50,058 S.F. BUILDING TOTAL
 REQUIRED BUILDING SETBACKS: 40' FRONT MINIMUM
 20' EACH SIDE MINIMUM
 20' REAR MINIMUM
 REQUIRED PARKING:
 OFFICE: 15,416 SF (GROSS LEASABLE FLOOR AREA) / 222 SF
 = 69 SPACES
 INDUSTRIAL/RESEARCH: 33,491 SF GROSS X 80%
 = 268 SPACES
 TOTAL: 344 SPACES
 107 TOTAL SPACES REQUIRED
 112 TOTAL PARKING SPACES PROVIDED (INCLUDES 5 B.F. SPACES)
 REQUIRED BICYCLE PARKING:
 REQUIRED: 5% OF REQUIRED AUTO SPACES
 = 112x.05= 6 BICYCLE PARKING SPACES
 PROVIDED: 6 BICYCLE PARKING SPACES

SOUTHERN YARD PARKING CALCULATIONS:
 PARKING OCCUPANCY REQUIRED: LESS THAN 50%
 PARKING OCCUPANCY PROPOSED:
 SOUTHERN YARD PARKING SPACE AREA: 14,868 S.F.
 SOUTHERN YARD AREA: 38,716 S.F.
 SOUTHERN YARD PARKING OCCUPANCY: 38%

HOURS OF OPERATION:
 SINCE THE BUILDING IS PROPOSED AS A SPECULATIVE SHELL WITH NO POTENTIAL OCCUPANTS AT PRESENT A DEFINED HOURS OF OPERATION CAN NOT BE DETERMINED AND IS UNKNOWN. HOWEVER, THE BUILDING IS INTENDED TO BE OCCUPIED MAINLY BY BUSINESS USERS, THEREFORE ASSUMED HOURS OF OPERATION FROM 8:00 A.M. TO 5:00 P.M. FOR STANDARD BUSINESS PRACTICE CAN BE APPLIED.

FIRE DEPARTMENT NOTES:
 1. WATER MAINS AND FIRE HYDRANTS SHALL BE INSTALLED PRIOR TO CONSTRUCTION ABOVE FOUNDATION.
 2. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3" HIGH ON A CONTRASTING BACKGROUND.
 3. PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION OF NON-RESIDENTIAL BUILDINGS, AN ALL WEATHER ACCESS ROAD CAPABLE OF SUPPORTING 25 TONS SHALL BE PROVIDED.

GENERAL SITE NOTES:
 1) ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOVI STANDARDS AND SPECIFICATIONS.
 2) STORM WATER OUTLETS TO BECK NORTH PHASE II DEVELOPMENT DISCHARGE BASINS AND ULTIMATELY INTO EXISTING RETAINERS.
 3) ROOFTOP EQUIPMENT MUST BE SCREENED PER ORDINANCE REQUIREMENTS.
 4) EXTERIOR LIGHTING MUST COMPLY WITH SECTION 2511 OF THE CITY OF NOVI CODE.
 5) RIGHT OF WAY PERMIT IS REQUIRED FROM THE CITY OF NOVI FOR ANY WORK IN THE HUDSON DRIVE AND NADLAN DRIVE RIGHT-OF-WAY.
 6) ALL SIGNS SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES (CHAPTER 283) OF THE CITY OF NOVI, AND WHERE REQUIRED SHALL BE RENEWED AND APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY AND A PERMIT ISSUED. NO SIGNS OTHER THAN TYPICAL TRAFFIC CONTROL SIGNS ARE APPROVED AS PART OF THIS SITE PLAN APPROVAL. PRIOR TO ERECTION OF A SIGN, AN APPLICATION AND APPROPRIATE SUBMISSIONS SHALL BE MADE TO THE BUILDING DEPARTMENT FOR REVIEW, APPROVAL AND ISSUANCE OF A SIGN PERMIT.
 7) ALL PARKING AND TRAFFIC CONTROL SIGNS SHALL COMPLY WITH THE DESIGN AND PLACEMENT REQUIREMENTS OF THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (2011 MUTCD).
 8) NOTIFY THE CITY OF NOVI A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
 9) CALL MISS DIG (811) A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
 10) ALL SOIL EROSION AND SILT MUST BE CONTROLLED AND CONTAINED ON-SITE.
 11) ALL EXCAVATION UNDER OR WITHIN A 1 ON 1 INFLUENCE OF PUBLIC PAVEMENT, EXISTING OR PROPOSED, SHALL BE BACKFILLED AND COMPACTED WITH SAND (CLASS II MDOOT).
 12) THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
 13) PRIOR TO ISSUANCE OF AN OCCUPANCY PERMIT, ENGINEERING SITE INSPECTION IS REQUIRED.
 14) IF Dewatering IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION THE CONTRACTOR IS REQUIRED TO SUBMIT A Dewatering PLAN TO THE CITY ENGINEERING DIVISION FOR REVIEW.
 15) DIMENSIONS OF PARKING STALLS (LENGTH AS WELL AS WIDTH) INCLUDING A CURB OR SIDEWALK ARE TO THE FACE OF CURB OR WALK. ALL OTHER DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE INDICATED.
 16. ONLY NECESSARY LIGHTING FOR SECURITY PURPOSES AND LIMITED OPERATIONS SHALL BE USED AFTER THE SITE'S HOURS OF OPERATION.
 17. NO FLASHING LIGHTING WILL BE USED ON THE SITE.
 18. NO OUTSIDE STORAGE SHALL BE PERMITTED.
 19. NO TRUCKS WILL BE CLEANED OR SERVICED OUTSIDE THE BUILDING.
 20. AS REQUIRED BY THE CITY OF NOVI, SOUND LEVELS OF BUILDING OCCUPANT OPERATIONS, INCLUDING THE OPERATION OF ROOFTOP MECHANICAL EQUIPMENT, SHALL NOT EXCEED 55 DECIBELS DURING NIGHT TIME HOURS AND 60 DECIBELS DURING DAY TIME HOURS. THE OCCUPANCY OF THE CONFORMANCE MAY BE REQUIRED AT THE TIME OF OCCUPANCY.

COMMERCIAL SITE PLANNING
 RESIDENTIAL SUBDIVISIONS
 SURVEYING
 ALTA SURVEYS
 TOPOGRAPHIC SURVEYS
 INDUSTRIAL & MULTI-UNIT PARCEL SPLIT
 CONSTRUCTION LAYOUT

AMSON DOWNS DEVELOPMENT, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 44892 MEEB ROAD
 NOVI, MICHIGAN 48377
 (248) 804-3701 (BEO)
 WWW.AMSON-INC.COM

APINE ENGINEERING, INC.
 CIVIL ENGINEERS & LAND SURVEYORS

811
 Know what's below
 Call before you dig.

AMSON DOWNS DEVELOPMENT, INC.
 PRELIMINARY SITE PLAN
 BECK NORTH CORPORATE PARK - UNIT 53
 SECTION 4
 TOWNSHIP N
 RANGE 8 E
 COUNTY OAKLAND MICHIGAN

CLIENT:

REVISED
 2014/01/22 PRE-APP SUBMITTAL
 2014/02/07 PSP SUBMITTAL

DATE: 2014/01/17
 DRAWN BY: TAG
 CHECKED BY: TAG

SCALE: HOR [1" = 30' FT]
 VER [1" = 10' FT]

2
 13-331

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

February 26, 2014

Planning Review

Beck North Lot 53

JSP14-03

Petitioner

Amson Dembs Development

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: Northeast corner of Nadlan Court and Hudson Drive (Section 4)
- Site School District: Walled Lake Consolidate Schools
- Site Zoning: I-1, Light Industrial
- Adjoining Zoning: North, East, West, and South: I-1, Light Industrial
- Site Use(s): Vacant
- Adjoining Uses: North, East, West and South: Vacant; Various office/industrial
- Site Size: 3.90 acres
- Building Size: 50,058 square feet
- Plan Date: Site Plan 02/07/14

Project Summary

The applicant is proposing to construct a 50,058 square foot speculative industrial building in the Beck North Corporate Park. The proposed building will be approximately 16,567 sq. ft. of office space with the remainder to be used as industrial/warehouse space depending on the eventual tenant. Associated parking, landscaping and other site work would also be done.

Recommendation

Approval of the ***Preliminary Site Plan is recommended***. The plan conforms to the requirements of the Zoning Ordinance for the I-1 district as indicated in this review letter and attached chart. There are only minor Planning related items that need to be addressed at the time of Final Site Plan review. Planning Commission approval of the Preliminary Site Plan is required.

Ordinance Requirements

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 19 (I-1, Light Industrial District), Article 24 (Schedule of Regulations), Article 25 (General Provisions), and any other applicable provisions of the Zoning Ordinance. Please see the attached charts for information pertaining to ordinance requirements. Applicable sections of the Zoning Ordinance and other regulatory documents are highlighted in gray on the attached chart. Items in **bold** below must be addressed by the applicant or the Planning Commission.

1. Required Parking: **The applicant should provide five additional parking spaces or additional detail on the floor plan showing areas that can be deducted from gross leasable and useable floor area calculations (such as storage or mechanical rooms) in order to comply with parking requirements.** The applicant should note that floor plans can be altered and approved administratively once a building tenant is identified. Alternately, the applicant could seek a variance from the Zoning Board of Appeals.

2. Master Deed Amendment: It appears a lot combination is required in order to assemble the proposed lot for development purposes. This will require a change to the exhibit B of the existing Master Deed for the property. **Plans cannot be stamped approved until the master deed changes are submitted for review by City staff and the City attorney's office.**
3. Economic Information: The applicant has the estimated amount of construction workers needed to complete the building shell alone is approximately 120 with another 120 workers needed to complete the interior building improvements once a tenant is identified. The building is sized to house a company employing over 100 people. **The applicant should indicate in their response letter the expected approximate construction cost of the project.**

Response Letter

A letter from either the applicant or the applicant's representative addressing comments in this, and in the other review letters, is requested **prior to the Planning Commission meeting and with the Final Site Plan submittal.**

Site Addressing

The applicant should contact the Building Division for an address prior to applying for a building permit. Building permit applications cannot be processed without a correct address. The address application can be found on the Internet at www.cityofnovi.org under the forms page of the Community Development Department.

Please contact Jeannie Niland [248.347.0438] in the Community Development Department with any specific questions regarding addressing of sites.

Pre-Construction Meeting

Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled. If you have questions regarding the Pre-Con, please contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] in the Community Development Department.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.347.0586 or kkapelanski@cityofnovi.org.



Kristen Kapelanski, AICP, Planner
Attachments: Planning Review Chart

PLANNING REVIEW SUMMARY CHART

Project Name: Beck North Lot 53 JSP14-03

Plan Date: 02-07-14

Preliminary Site Plan

Item	Required	Proposed	Meets Requirements?	Comments
Master Plan	Industrial Research Development Technology	No Change Proposed	Yes	
Zoning	I-1 Light Industrial District	No Change Proposed	Yes	
Use (Article 19)	Office, research & development, technology centers, warehousing, manufacturing, laboratories, utility buildings, indoor/outdoor recreation, other similar uses, and accessory structures	Speculative 50,058 sq. ft. office and light industrial building	Yes	
Building Height (Sec. 2400 & Sec. 2503.2.E)	40 feet maximum	34 feet to top of RTU screen	Yes	
Building Setback (Sec. 2400)				
Front (west)	40 ft.	40 ft.	Yes	
Exterior Side (south)	20 ft.	155 ft.	Yes	
Interior Side (north)	20 ft.	95 ft.	Yes	
Rear (east)	20 ft.	81 ft.	Yes	
Parking Setback (Sec. 2400)				
Front (west)	Front yard parking permitted subject to (a) Dev. must be 2 acres	No front yard parking proposed	Yes	
Exterior Side (south)	(b) Must be setback same as req. bldg. setback (40 ft.) (c) Cannot occupy more than 50% of the area btwn. min. front yard setback and bldg. setback (d) Must be	(a) Dev. Is 3.9 acres (b) Setback 40 ft. (c) Parking occupies 38% of the southern yard (d) Landscaped berm proposed	Yes	Planning Commission will be required to make a finding that parking is compatible with surrounding uses.

Item	Required	Proposed	Meets Requirements?	Comments
	<p>screened by brick wall or landscaped berm</p> <p>Planning Commission must make finding that prkg. area and lighting is compatible w/ surrounding development</p>			
Interior Side (north)	10 ft.	20 ft.	Yes	
Rear (east)	10 ft.	12 ft.	Yes	
Number of Parking Spaces (Sec. 2505)	<p><u>Office = 15,416 sq. ft.</u> one space per 222 of GLA = 69 spaces</p> <p><u>Industrial/ Research = 33,491 sq. ft.</u> One space for each seven hundred square feet of usable floor area or five (5) plus one (1) for each one and one-half (1 ½) employees in the largest working shift, whichever is greater. = 48 spaces</p> <p>69 spaces + 48 spaces = 117 spaces required</p>	112 spaces	No	<p>Applicant will need to provide additional detail on the floor plan identifying areas that could be subtracted from the parking calculations in order to bring down the number of required parking spaces.</p> <p>Alternately, a variance from the Zoning Board of Appeals could be sought.</p> <p>Parking requirements will be confirmed when a use is proposed and the number of employees in the largest working shift is identified.</p>
Parking Space Dimensions and Maneuvering Lanes (Sec. 2506)	<p>9' x 19' parking space dimensions and 24' wide drives.</p> <p>9' x 17' parking spaces allowed along 7' wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping.</p>	<p>9' x 19' interior spaces provided</p> <p>9' X 17' spaces provided around perimeter</p> <p>24' access aisles provided</p> <p>7' sidewalk provided where adjacent to 17'</p>	Yes	

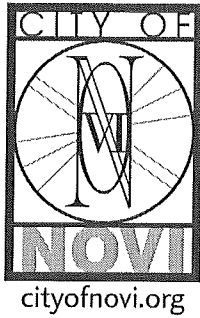
Item	Required	Proposed	Meets Requirements?	Comments
		parking spaces		
Barrier Free Spaces (Barrier Free Code)	5 barrier free spaces required (1 van accessible)	5 barrier free spaces (2 van accessible) provided	Yes	
Barrier Free Space Dimensions (Barrier Free Code)	8' wide with a 5' wide access aisle for standard barrier free spaces, and 8' wide with an 8' wide access aisle for van accessible spaces	8' wide with a 5' wide access aisles for standard barrier free spaces, and 8' wide with a shared 8' wide access aisle for van accessible spaces	Yes	
Barrier Free Signs (Barrier Free Design Graphics Manual)	One sign for each accessible parking space.	One barrier free sign provided for each space	Yes	
Loading Spaces (Sec. 2507)	Must be in rear yard and screened from right-of-way and neighboring properties - minimum 360 sq. ft.	3 below-grade truckwells provided in rear yard; approx. 2,700 sq. ft.	Yes	
Accessory Structure Setback-Dumpster (Sec. 2503)	Accessory structures should be setback a minimum of 10 feet from any building unless structurally attached and setback the same as parking from all property lines; the structure must be in the rear or interior side yard.	Dumpsters in the north interior side yard and setback appropriately	Yes	

Item	Required	Proposed	Meets Requirements?	Comments
Dumpster (Chap. 21, Sec. 21-145)	Screening of not less than 5 feet required, interior bumpers or posts required. Enclosure to match building materials and be at least one foot taller than height of refuse bin.	Screening per ordinance requirements provided	Yes	
Exterior lighting (Sec. 2511)	Photometric plan and exterior lighting details needed at time of Final Site Plan	Lighting plan not submitted		Lighting plan required at time of Final Site Plan review.
Sidewalks (City Code Sec. 11-276(b) and Subdivision Ordinance Sec. 4.05A)	A 5'-8' wide sidewalk shall be constructed along all major thoroughfares <u>and</u> <u>collectors</u> per DCS, but not along industrial service streets per Subdivision Ordinance Building exits must be connected to sidewalk system or parking lot.	No sidewalk provided Building entrances connected to parking lot and BF ramps	Yes	
Bicycle Parking Facilities (Sec. 2526)	5% of required auto parking spaces $117 \times 0.05 = 6$ bicycle parking spaces required for site Shall be located along the building approach line and easily accessible from the building entrance Max. 120 feet from entrance being served or the nearest auto parking space to that entrance Must be accessible via a paved 6 foot wide route and	6 bicycle parking spaces proposed Meets accessibility requirements Approx. 80 ft. from the entrance being served Accessible along parking aisle and separated from	Yes	

Item	Required	Proposed	Meets Requirements?	Comments
	separated from auto facilities 4 foot wide maneuvering lane required with a 6 foot parking space width and a depth of 2 feet for single spaces and 2.5 feet for double spaces	auto facilities Meets dimensional requirements		
Development/ Business Sign	Signage if proposed requires a permit.			Please contact Jeannie Niland (248.347.0438) for information on sign permits

Prepared by Kristen Kapelanski, AICP (248)347-0586

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

February 26, 2014

Engineering Review

BNCP Lot 53

JSP14-0003

Petitioner

Amson Dembs Development Inc., property owner

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: N. of Nadlan Drive and E. of Hudson Drive
- Site Size: 3.9 acres
- Plan Date: February 7, 2014

Project Summary

- Construction of an approximately 50,058 square-foot building and associated parking. Site access would be provided driveways off of Hudson Drive and Nadlan Drive.
- Water service would be provided by an 8-inch fire service lead and a 2-inch water service lead. An additional fire hydrant is proposed off of an 8-inch extension from the existing water main on Nadlan Drive.
- Sanitary sewer service would be provided by a non-domestic lead from the existing 18-inch sanitary sewer on Hudson Drive.
- Storm water would be collected by two collection systems with the southern portion of the site tributary to dissipation basin E and the northern portion tributary to dissipation basin D per the Beck North Phase II Storm Water Management Plan.

Recommendation

Approval of the Preliminary Site Plan and Preliminary Storm Water Management Plan is recommended.

Comments:

The Preliminary Site Plan meets the general requirements of Chapter 11, the Storm Water Management Ordinance and the Engineering Design Manual with the following items to be addressed at the time of Final Site Plan submittal (further engineering detail will be required at the time of the final site plan submittal):

General

1. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal.
2. Submit a completed Non-Domestic User Survey to Community Development.
3. Provide the liber and page numbers on the plan for all existing easements within the proposed parcel limits.
4. Revise the plan set to reference at least one city established benchmark. An interactive map of the City's established survey benchmarks can be found under the 'Map Gallery' tab on cityofnovi.org.
5. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided at each crossing.

Water Main

6. Provide a profile for the proposed water main with the pipe invert and stationing of all valves, fittings, flanges, hydrants, blow-offs, high and low points, and any other appurtenances.
7. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Department for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

Sanitary Sewer

8. Provide the invert elevations for the proposed 6-inch sanitary sewer lead at the monitoring manhole, the connection to the existing lead under Hudson Drive, and at the proposed building riser.

Storm Sewer

9. Provide a profile of the proposed storm sewer showing a minimum cover of 3 feet and all catch basin sumps. Indicate all structure types and diameter.

Paving & Grading

10. Provide spot elevations at 50' intervals along the edge of pavement and along lines of surface flow.
11. Please note that minimum slopes shall be one (1) percent unless otherwise.
12. Revise the plan set to provide a minimum ground slope of 2% for any part of the site outside of paved areas. The spot elevations of 58.9 and 57.7 to the north of the building footprint provide a slope of approximately 1%.
13. Revise the plan set to provide a minimum slope of five (5) percent away from the finish grade elevation of building for a minimum distance of ten (10) feet for non-paved areas adjacent to the building.

The following must be submitted at the time of Final Site Plan submittal:

14. A letter from either the applicant or the applicant's engineer must be submitted with the Final Site Plan highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved.
15. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. **The cost estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving, right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).

The following must be submitted at the time of Stamping Set submittal:

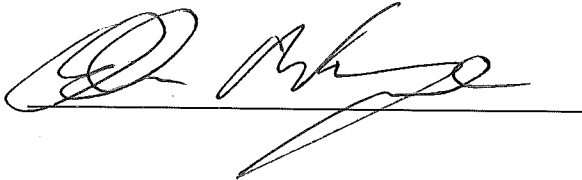
16. A draft copy of the 20-foot wide access easement for the sanitary sewer monitoring manhole to be constructed on the site must be submitted to the Community Development Department.
17. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department.
18. Please note that incomplete legal submittals or legal submittals that are not accompanied by the City's legal review transmittal form will not be accepted by Community Development. All easement documents shall be unsigned and in draft form until directed otherwise by the City Attorney.

The following must be addressed prior to construction:

19. A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
20. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting. Once determined, a grading permit fee must be paid to the City Treasurer's Office.
21. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department (248-347-0430) for forms and information.
22. A permit for work within the right-of-way of Hudson Drive and Nadlan Drive must be obtained from the City of Novi. The application is available from the City Engineering Department and should be filed at the time of Final Site Plan submittal. Please contact the Engineering Department at 248-347-0454 for further information.

23. Construction Inspection Fees to be determined once the construction cost estimate is submitted must be paid prior to the pre-construction meeting.
24. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the water main plans have been approved.
25. An incomplete site work performance guarantee for this development will be calculated (equal to 1.5 times the amount required to complete the site improvements, excluding the storm water facilities) as specified in the Performance Guarantee Ordinance. This guarantee will be posted prior to TCO, at which time it may be reduced based on percentage of construction completed.
26. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted at the Treasurer's Office.

Please contact Adam Wayne at (248) 735-5648 with any questions.

A handwritten signature in black ink, appearing to read 'Adam Wayne', is written over a horizontal line.

cc: Brian Coburn, Engineering
Kristen Kapelanski, Community Development Department
Michael Andrews, Water & Sewer Dept.

TRAFFIC REVIEW

February 24, 2014

Barbara McBeth, AICP
Deputy Director of Community Development
City of Novi
45175 W. Ten Mile Rd.
Novi, MI 48375

SUBJECT: Beck North Unit 53, JSP14-0003, Traffic Review of Preliminary Site Plan, PSP14-0015

Dear Ms. McBeth:

At your request, we have reviewed the above and offer the following recommendation and supporting comments.

Recommendation

We recommend approval of the preliminary site plan, subject to the items shown below in **bold** being satisfactorily addressed on or before submission of the final site plan (as applicable).

Site Description

What is the applicant proposing, and what are the surrounding land uses and road network?

1. The applicant is proposing a 50,058-s.f. light-industrial building on the northeast corner of Hudson Drive and Nadlan Drive. The neighboring site to the north is developed, but those immediately to the east and south are not.

Trip Generation

How much new traffic would be generated?

2. A light-industrial building of the proposed size can be expected to generate about 46 one-way vehicle trips in the AM peak hour (40 in and 6 out) and 49 such trips in the PM peak hour (6 in and 43 out).

Vehicular Access Locations

Do the proposed "driveway" locations meet City spacing standards?

3. No. The north drive would be only 67 ft from the existing driveway for the neighboring site. **A Planning Commission waiver of the City's minimum same-side driveway spacing (105 ft for a 25-mph roadway, per Sec 11-216(d)(1)d of the Design and Construction Standards) will therefore be required.**

Vehicular Access Improvements

Will there be any improvements to the abutting road(s) at the proposed access point(s)?

4. No, and none are required.

Access Drive Design and Control

Are the proposed design, pavement markings, and signage satisfactory?

5. Yes.

Pedestrian Access

Are pedestrians safely and reasonably accommodated?

6. Yes. Two four-inch-high bumper blocks were added (at our request) where the parking and sidewalk surfaces abut at the same grade, so as to keep overhanging vehicles from reducing the effective sidewalk area to less than that needed for safe walking and wheelchair travel.

Circulation and Parking

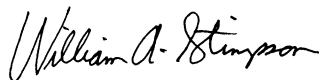
Can vehicles safely and conveniently maneuver through the site?

7. The Traffic Signing and Striping Requirements, listed on plan sheet 2, should be refined to more explicitly reinforce current MMUTCD guidelines. Specifically:
- a. **Note 3 should change the word “markings” to the word “striping” (see comment b, below). Also, another sentence should be added to note 3, stating that “Where a handicapped parking space abuts a non-handicapped space, the two spaces shall be separated by abutting blue and white stripes.”**
 - b. **A note should be added stating that each International Symbol of Accessibility (wheelchair) to be painted on the pavement shall be white.**
 - c. Note 4 should be made more general, since it applies to all end parking spaces adjacent to sidewalks and landscape areas, not necessary just end islands. We suggest new wording as follows: **“An end parking space abutting a curb or walk should be 8 ft wide if designated a handicapped space or 9 ft wide if not. Per general site note 15, these widths are referenced to the face of curb or walk.”**

Sincerely,
CLEARZONING, INC.



Rodney L. Arroyo, AICP
President



William A. Stimpson, P.E.
Director of Traffic Engineering

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

February 26, 2014

Preliminary Site Plan

Beck North Lot 53 JSP14-03

Review Type

Preliminary Landscape Review

Property Characteristics

Site Location: Cartier at Hudson Drive
Site Zoning: I-1: Light Industrial District
Adjoining Zoning: North, south, east, west: I-1 Light Industrial
Site Use(s): Light Industrial
Adjoining Uses: Light Industrial or Unoccupied
Site Size: 5.46 net acres
Plan Date: 2/7/2014

Recommendation

Preliminary Site Plan Approval for Beck North Lot 53 – JSP14-03 is recommended.

Ordinance Considerations

Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Sec. 2509.3.b.)

1. A 40' wide greenbelt is required along both road frontages. This requirement has been met.
2. A 3' high berm is required. The berm must be landscaped with shrubs and perennials. *Shrubs and perennials must be added along Nadlan Drive in order to meet the requirement. All shrubs should be bedded.*
3. A canopy tree is required for each 40 l.f. of frontage. Twelve (12) trees are required. This requirement has been met.
4. A sub-canopy tree is required for each 35 l.f. of frontage. Thirteen (13) trees are required. This requirement has been met.

Street Tree Requirements (Sec. 2509.3.b.)

1. A street tree is required for every 55 l.f. of road frontage. Eight (8) trees are required along Hudson; seven (7) trees are required along Nadlan. This requirement has been met on both frontages.

Parking Landscape (Sec. 2509.3.c.)

1. A total of 1,751 s.f. of parking lot landscape area is required. This requirement has been met.
2. A total of eighteen (18) parking lot canopy trees are required. This requirement has been met.
3. Perimeter trees are required for every 35 l.f. of parking lot boundary. Eighteen (18) trees are required. This requirement has been met.
4. No portion of the proposed parking contains an excess of 15 contiguous spaces.

Building Foundation Landscape (Sec. 2509.3.d.)

1. A 4' wide landscape bed is required at the full foundation with the exception of access areas. This requirement has been met.
2. A total of 7,400 s.f. of building foundation landscape is required. This requirement has been met.

Plant List (LDM)

1. The Plant List as provided generally meets the requirements of the Ordinance and the Landscape Design Manual.
2. *Please revise the Plant List to depict all shrubs at a value of \$50.*

Planting Notations and Details (LDM)

1. Planting Details and Notations meet the requirements of the Ordinance and the Landscape Design Manual.

Storm Basin Landscape (LDM)

1. No storm basin is proposed with the project.

Irrigation (Sec. 2509 3.f.(6)(b))

1. An Irrigation Plan must be provided upon future submittals. The cul-de-sac must be irrigated.

General

1. The loading area has been appropriately placed at the rear of the proposed building.
2. Snow deposit areas have been shown as required.
3. Clear vision corners are shown as required.
4. Please see the woodland and wetland reviews for further comments.

Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and not intended to substitute for any Ordinance. For the landscape requirements, see the Zoning Ordinance landscape section on 2509, Landscape Design Manual and the appropriate items in the applicable zoning classification.

Reviewed by: David R. Beschke, RLA

FAÇADE REVIEW



February 27, 2014

City of Novi Planning Department
 45175 W. 10 Mile Rd.
 Novi, MI 48375-3024

Re: **FACADE ORDINANCE - Facade Review**
Beck North Corporate Park Lot 53, PSP14-0015
 Façade Region: 3, Zoning District: I-1

Dear Ms. McBeth;

The following is the Facade Review for Preliminary and Final Site Plan Approval of the above referenced project based on the drawings prepared by Faudie Architecture, dated 2/7/14. The percentages of materials proposed for each façade are as shown on the table below. The maximum percentages allowed by the Schedule Regulating Façade Materials (AKA Façade Chart) of Ordinance Section 2520 are shown in the right hand column. Materials in non-compliance with the Façade Chart, if any, are highlighted in bold.

50,000 S.F. Building	South (Front)	West	North	East	Ordinance Maximum (Minimum)
Brick (Natural Clay)	26%	26%	22%	26%	100%
Split Faced CMU	68%	72%	73%	71%	75%
Metal Siding, Ribbed	5%	2%	5%	3%	50%
Flat Metal Panels	1%	0%	0%	0%	75%

No sample board was provided for this project. This review is based on the “Clay Utility Brick” being qualifying fired natural clay brick. A sample board showing carefully coordinated colors of all façade materials should be provided prior to the Planning Commission meeting.

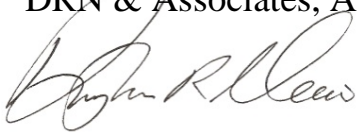
It is our recommendation that this application is in full compliance with the Façade Ordinance. A Section 9 Waiver is not required. This recommendation is contingent upon the aforementioned clarifications being provided.

Notes to the Applicant: Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board will be compared to materials delivered to the site. It is the applicant's responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department's Online Inspection Portal with the following link. Please click on "Click here to Request an Inspection" under "Contractors", then click "Façade".

<http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp>.

If you have any questions regarding this project please do not hesitate to call.

Sincerely,
DRN & Associates, Architects PC

A handwritten signature in black ink, appearing to read "Douglas R. Necci". The signature is fluid and cursive, written over the printed name below.

Douglas R. Necci, AIA

FIRE REVIEW



January 30, 2014

February 10, 2014

TO: Barbara McBeth- Deputy Director of Community Development
Kristen Kapelanski- Plan Review Center
Sara Roediger- Plan Review Center

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Gwen Markham

Andrew Mutch

Justin Fischer

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Laura Marie Casey

City Manager
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**Director of Public Safety
Chief of Police**
David E. Molloy

Director of EMS/Fire Operations
Jeffery R. Johnson

Assistant Chief of Police
Victor C.M. Lauria

Assistant Chief of Police
Jerrod S. Hart

RE: Beck North Lot #53

SP#: PSP14-0008
PSP14-0015

Project Description:

Approx. 50,000sq. ft. building at the corner of Hudson Dr. and Nadlan Dr. Section #4

Comments:

1. Proximity to hydrant: In any building or structure required to be equipped with a fire department connection, the connection shall be located within one hundred (100) feet of a fire hydrant. *(Fire Prevention Ord. Sec. 15-17)* **Corrected 2/10/14**
1. For interior fire protection systems a separate fire protection line shall be provided in addition to a domestic service for each building. Individual shutoff valves for interior fire protection shall be by post indicator valve (P.I.V.) or by valve in well and shall be provided within a public water main easement. *(D.C.S. Sec.11-68(a)(9))* **Corrected 2/10/14**

Recommendation:

Change location of the buildings FDC, Site plan shows landscaping that can block access to the FDC for Hudson Dr.

All Items Corrected 2/10/14, Recommend Approval

Sincerely,

Joseph Shelton- Fire Marshal
City of Novi – Fire Dept.

Novi Public Safety Administration
45125 W. Ten Mile Road
Novi, Michigan 48375
248.348.7100
248.347.0590 fax

cityofnovi.org

APPLICANT RESPONSE LETTER



46892 West Road, Suite 109
Novi, Michigan 48377
Phone: (248) 926-3701
Fax: (248) 926-3765
Web: www.alpine-inc.net

March 5, 2014

Kristen Kapelanski, AICP
City of Novi Community Development Department
45175 West 10 Mile Road
Novi, Michigan 48375

Re: **Beck North Corporate Park- Unit 53**
Response to Preliminary Site Plan Comments
City of Novi Review# JSP14-03

Dear Kristen:

We offer the below comments, on behalf of our client, to several key topics with regards to the Novi review package received on March 5, 2014. Additional plan revisions will be made to satisfy City Departments at a later date during the Final Site Plan process as indicated in the review package.

Planning Review dated February 26, 2014

Review recommends approval of the Preliminary Site Plan. Items listed in the review letter will be addressed at Final Site Plan.

1. Additional detail will be provided on the floor plan showing areas that can be deducted from gross leasable and useable floor area calculations (such as storage or mechanical rooms) in order to comply with parking requirements.
2. Revised master deed will be submitted for review.

Engineering Review dated February 26, 2014

Review recommends approval of the Preliminary Site Plan and Preliminary Storm Water Management Plan. Items listed in the review letter will be addressed at Final Site Plan.

General

1. City standard detail sheets will be provided with stamping sets.
2. Non-Domestic User Survey will be provided by the applicant.
3. Liber and page numbers will be provided for existing easements.
4. One City benchmark will be referenced.
5. Utility crossing information will be provided.

Water Main

6. Public water main will be profiled with details.
7. MDEQ water main permit application and plans will be submitted at a later date.

Sanitary Sewer

8. Sanitary sewer profile and elevations will be provided.

Storm Sewer

9. Storm sewer profiles with 3 feet minimum cover will be provided.

Paving and Grading

10. Additional spot elevations will be provided along edge of pavement and along lines of surface flow.
11. A note will be provided that minimum slopes shall be 1% minimum.
12. Ground slopes outside of paving will be revised to propose 2% minimum.



46892 West Road, Suite 109
Novi, Michigan 48377
Phone: (248) 926-3701
Fax: (248) 926-3765
Web: www.alpine-inc.net

13. 5% minimum slope for a minimum distance of 10 feet will be provided away from the building in non-paved areas.

Required at the time of Final Site Plan submittal

14. Letter is provided.

15. Cost estimate will be provided.

Required at the time of Stamping Set submittal

16.-18. Draft easements will be provided.

Required prior to construction

19.-26. Items will be provided prior to construction, as necessary.

Clearzoning, Inc. Review dated February 24, 2014

Review recommends approval of the Preliminary Site Plan, subject to several items being addressed at the time of Final Site Plan. Items listed in the review letter will be addressed at Final Site Plan.

Landscape Review dated February 26, 2014

Review recommends approval of the Preliminary Site Plan, subject to several items being addressed at the time of Final Site Plan. Items listed in the review letter will be addressed at Final Site Plan.

Facade Review dated February 27, 2014

Review recommends approval.

City of Novi Fire Department Review dated February 10, 2014

Review recommends approval.

If you have any questions please feel free to call our office at (248) 926-3701.

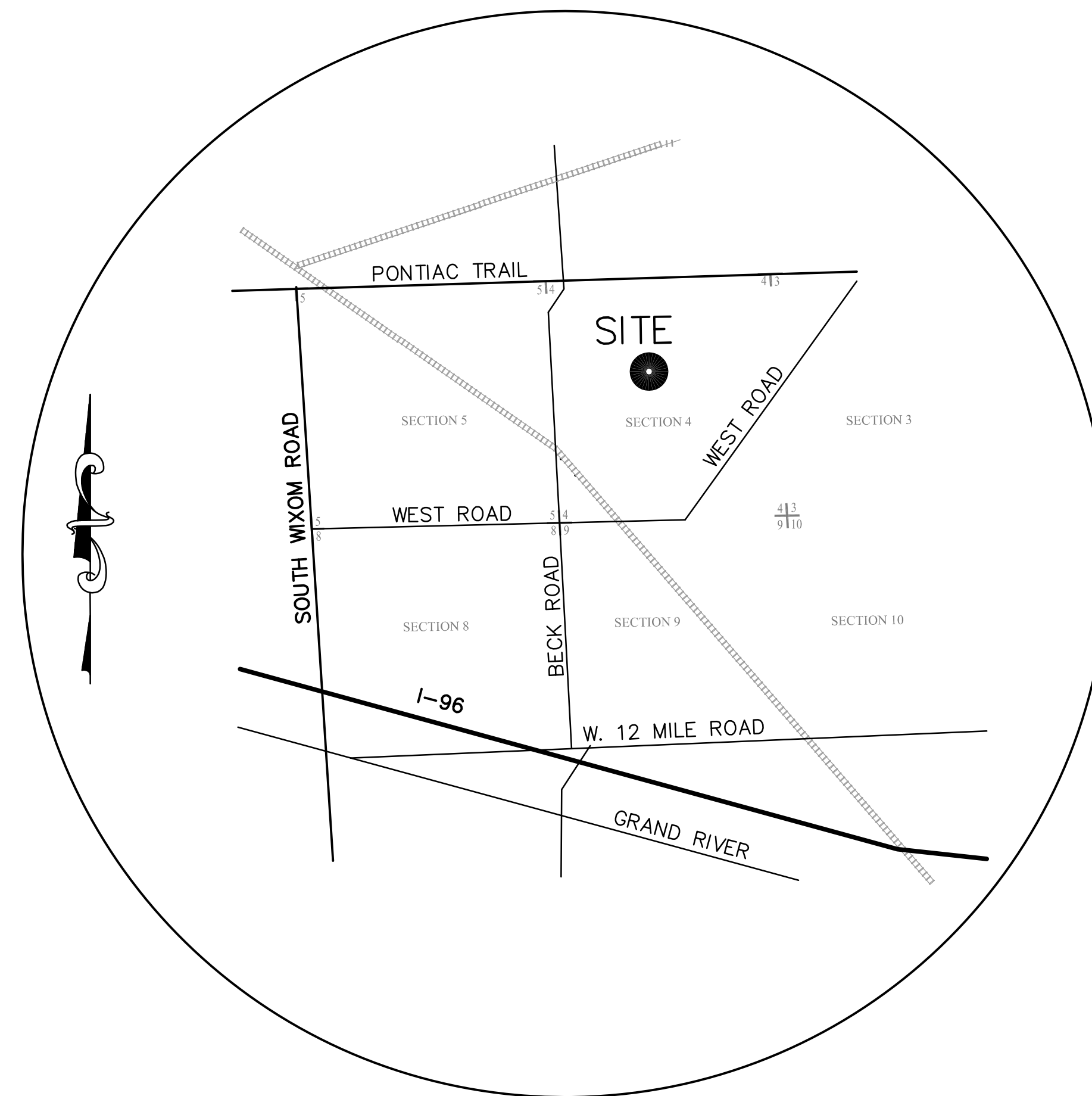
Regards,
Alpine Engineering Inc.

Tom Gizoni, PE

cc: Amson Dembs Development, Inc.

PROPOSED UNIT 53 OF BECK NORTH CORPORATE PARK

(A.K.A. UNIT 23, 44 AND PART OF UNIT 24)
 PRELIMINARY SITE PLAN
 CITY OF NOVI, OAKLAND COUNTY



LOCATION MAP
 SCALE: 1" = ±2,500 FEET

APPLICANT/DEVELOPER:
 AMSON DEMBS DEVELOPMENT, INC.
 46855 MAGELLAN DRIVE, SUITE 200
 NOVI, MI 48377
 PHONE: (248) 380-7100
 FAX: (248) 560-3030

ARCHITECT:
 FAUDIE ARCHITECTURE
 2430 ROCHESTER COURT,
 SUITE 101
 TROY, MI 48083
 PHONE: (248) 619-2354

LANDSCAPE ARCHITECT:
 ALLEN DESIGN
 557 CARPENTER
 NORTHVILLE, MI 48167
 PHONE: (248) 467-4668

ALPINE ENGINEERING, INC.
 CIVIL ENGINEERS & LAND SURVEYORS

COMMERCIAL
 SITE PLANNING
 SITE ENGINEERING
 INDUSTRIAL & MULTI-UNIT
 LAND SURVEYING
 CONSTRUCTION LAYOUT

SURVEYING
 ALTA SURVEYS
 BOUNDARY SURVEYS
 TOPOGRAPHIC SURVEYS
 PARCEL SPLITS

RESIDENTIAL
 SUBDIVISIONS
 SITE CONDOMINIUM
 MULTI-FAMILY
 PLOT PLANS
 CONSTRUCTION LAYOUT

46892 WEST ROAD
 SUITE 109
 NOVI, MICHIGAN 48377

(248) 928-3701 (BUS)
 (248) 928-3765 (FAX)
 WWW.ALPINE-INC.NET

811
 Know what's below
 Call before you dig.

CLIENT: AMSON DEMBS DEVELOPMENT, INC.

COVER SHEET

BECK NORTH CORPORATE PARK - UNIT 53
 RANGE: 8 E
 TOWNSHIP: 1 N
 CITY OF NOVI
 OAKLAND COUNTY
 MICHIGAN

REVISED

2014/01/22 PRE-APP SUBMITTAL

2014/02/07 PSP SUBMITTAL

DATE: 2014/01/17

DRAWN BY: TAG

CHECKED BY: TAG

FBK:

CHF:

SCALE HOR 1" = FT.
 VER 1" = FT.

1

13-331

LEGEND

EXISTING STORM	FF	FINISH FLOOR
EXISTING WATER MAIN	→	PROP. DRAINAGE ARROW
EXISTING SANITARY	TP 40.00	PROP. TOP OF PAVEMENT ELEV.
EXISTING GAS	TC 40.00	PROP. TOP OF CURB ELEV.
EX. CATCH BASIN	CU 40.00	PROP. CUTTER ELEV.
EX. MANHOLE	TW 40.00	PROP. TOP OF WALK ELEV.
EX. END SECTION	40.00	PROP. SPOT ELEV.
EX. HYDRANT	940	PROP. CONTOUR
EX. WATER SHUTOFF	●	PROP. CATCH BASIN
EX. GATE VALVE	■	PROP. MANHOLE
EX. SIGN	▲	PROP. END SECTION
EX. PEDESTAL	▽	PROP. STORM SEWER
EX. TRANSFORMER	⊠	PROP. SANITARY SEWER
EX. LIGHT POLE	⊞	PROP. WATER MAIN
		PROP. GATE VALVE
		PROP. HYDRANT
		PROP. SAN. STR. NUMBER
		PROP. STM. STR. NUMBER
		PROP. GATE VALVE NUMBER
		PROP. HYDRANT NUMBER
		PITCH IN CURB AND GUTTER
		PITCH OUT CURB AND GUTTER
		CROSS-ACCESS EASEMENT

SHEET INDEX

1	COVER SHEET
2	PRELIMINARY SITE PLAN
3	TOPOGRAPHIC SURVEY
4	PRELIMINARY GRADING PLAN
5	PRELIMINARY UTILITY PLAN
6	PRELIMINARY STORM WATER MANAGEMENT PLAN
7	PRELIMINARY TRUCK CIRCULATION PLAN
8	DETAIL SHEET
ALLEN DESIGN	
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE DETAILS
FAUDIE ARCHITECTURE	
PFP-6	PRELIMINARY FLOOR PLAN
PE-3	PRELIMINARY ELEVATIONS

PARCEL ID: 50-22-04-151-024, 50-22-04-151-030 & PART OF 50-22-04-151-025

LEGAL DESCRIPTION:

UNIT 23, UNIT 44, AND PART OF UNIT 24 PART OF "BECK NORTH CORPORATE PARK", AS RECORDED IN LIBER 35825, PAGE 628 OF OAKLAND COUNTY RECORDS, OAKLAND COUNTY, MICHIGAN.

ALSO, DESCRIBED AS:
BEGINNING AT THE SOUTHWEST CORNER OF UNIT 23, "BECK NORTH CORPORATE PARK", AS RECORDED IN LIBER 35825, PAGE 628 OF OAKLAND COUNTY RECORDS, OAKLAND COUNTY, MICHIGAN, AS AMENDED; THENCE N00°07'31"E 255.05 FEET; THENCE N00°07'31"E 206.90 FEET; THENCE S89°52'29"E 349.89 FEET; THENCE S00°07'31"W 134.50 FEET; THENCE S89°52'29"E 25.02 FEET; THENCE S00°07'30"W 327.45 FEET; THENCE N89°52'29"W 374.92 FEET TO THE POINT OF BEGINNING, CONTAINING 3.90 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

TRAFFIC SIGNING REQUIREMENTS

ITEM	MMUTCD CODE	QUANTITY	SIZE	DESCRIPTION
(A)	R1-1	2	24"x24"	STOP
(B)	R7-8	5	12"x18"	RESERVED PARKING ONLY
(C)	R7-8P	2	12"x6"	VAN ACCESSIBLE
(D)	R7-9A MOD	6	12"x18"	NO PARKING FIRE LANE

TRAFFIC SIGNING AND STRIPING REQUIREMENTS

- ALL PERMANENT AND TEMPORARY TRAFFIC SIGNAGE & STRIPING SHALL COMPLY WITH THE 2011 MMUTCD.
- SIGNS SHALL BE MOUNTED ON 1 1/2" SQUARE GALVANIZED STEEL POST, WALL OR FENCE MOUNTED AS INDICATED ON THE PLANS, LOCATE AND INSTALL IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND REGULATIONS.
- MARKINGS FOR HANDICAPPED PARKING SPACES SHALL BE BLUE AND MARKINGS FOR NON-HANDICAPPED PARKING SPACES SHALL BE WHITE.
- REGULAR PARKING SPACES ADJACENT TO RAISED ISLANDS SHALL BE 9 FEET WIDE TO FACE OF CURB, AND BARRIER-FREE PARKING SPACES ADJACENT TO RAISED ISLANDS SHALL BE 8 FEET WIDE TO FACE OF CURB.
- SOLID ARROWS INDICATE WHERE ARROWS ARE PROPOSED AS PART OF THE STRIPING PLAN; HOLLOW ARROWS ARE PROVIDED TO DENOTE TRAFFIC FLOW DIRECTION.
- SEE SHEETS 4 AND 8 FOR BARRIER FREE SIGNAGE DETAILS.

LEGEND

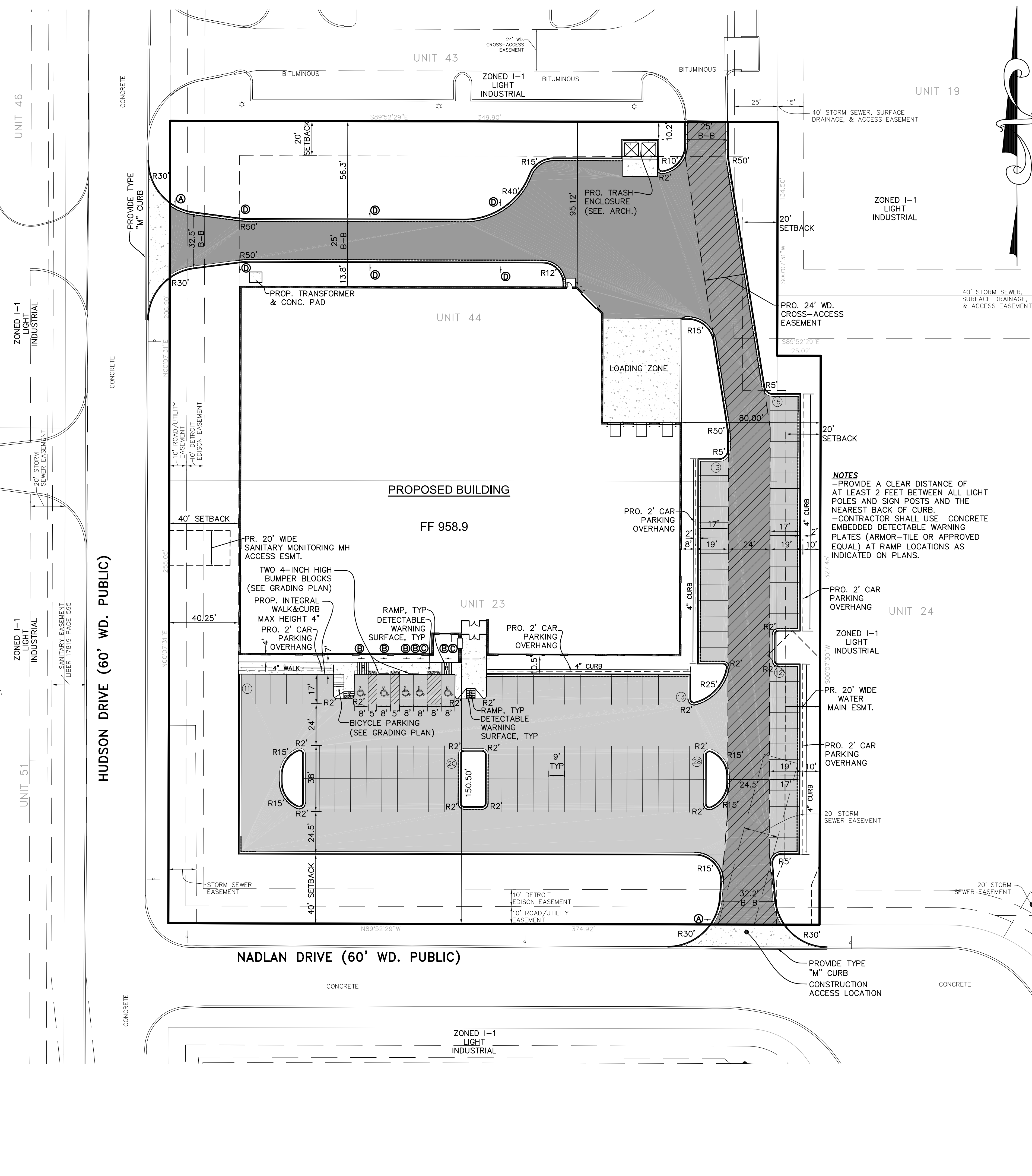
---	EXISTING STORM	FF	FINISH FLOOR
---	EXISTING WATER MAIN	TP 40.00	PROP. DRAINAGE ARROW
---	EXISTING SANITARY	TC 40.00	PROP. TOP OF PAVEMENT ELEV.
---	EXISTING GAS	CU 40.00	PROP. TOP OF CURB ELEV.
---	EX. CATCH BASIN	GU 40.00	PROP. GUTTER ELEV.
---	EX. MANHOLE	TW 40.00	PROP. TOP OF WALK ELEV.
---	EX. END SECTION	40.00	PROP. SPOT ELEV.
---	EX. HYDRANT	940	PROP. CONTOUR
---	EX. WATER SHUTOFF		PROP. CATCH BASIN
---	EX. GATE VALVE		PROP. MANHOLE
---	EX. SIGN		PROP. END SECTION
---	EX. PEDESTAL		PROP. STORM SEWER
---	EX. TRANSFORMER		PROP. SANITARY SEWER
---	EX. LIGHT POLE		PROP. WATER MAIN
---			PROP. GATE VALVE
---			PROP. HYDRANT
---			PROP. SAN. STR. NUMBER
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---			PROP. GATE VALVE NUMBER
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---			PITCH IN CURB AND GUTTER
---			PITCH OUT CURB AND GUTTER
---			CROSS-ACCESS EASEMENT

PAVING LEGEND

---	STANDARD PAVING
---	HEAVY DUTY PAVING
---	CONCRETE

NOTICE:
 CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

NOTE:
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SITE DATA:
 SITE AREA: 3.90 ACRES
 EXISTING/PROPOSED ZONING: I-1 LIGHT INDUSTRIAL
 PROPOSED SPECULATIVE BUILDING SHELL:
 16,567 S.F. OFFICE
 33,491 S.F. INDUSTRIAL/RESEARCH
 50,058 S.F. BUILDING TOTAL
 REQUIRED BUILDING SETBACKS: 40' FRONT MINIMUM
 20' EACH SIDE MINIMUM
 20' REAR MINIMUM

REQUIRED PARKING:
 OFFICE: 15,416 SF (GROSS LEASABLE FLOOR AREA) / 222 SF = 69 SPACES
 INDUSTRIAL/RESEARCH: 33,491 SF GROSS X 80% = 26,793 SF USABLE FLOOR AREA / 700 SF = 38 SPACES
 117 TOTAL SPACES REQUIRED
 112 TOTAL PARKING SPACES PROVIDED (INCLUDES 5 B.F. SPACES)

REQUIRED BICYCLE PARKING:
 REQUIRED: 5% OF REQUIRED AUTO SPACES = 112x.05= 6 BICYCLE PARKING SPACES
 PROVIDED: 6 BICYCLE PARKING SPACES

SOUTHERN YARD PARKING CALCULATIONS:
 PARKING OCCUPANCY REQUIRED: LESS THAN 50%
 PARKING OCCUPANCY PROPOSED:
 SOUTHERN YARD PARKING SPACE AREA: 14,868 S.F.
 SOUTHERN YARD AREA: 38,716 S.F.
 SOUTHERN YARD PARKING OCCUPANCY: 38%

HOURS OF OPERATION:
 SINCE THE BUILDING IS PROPOSED AS A SPECULATIVE SHELL WITH NO POTENTIAL OCCUPANTS AT PRESENT A DEFINED HOURS OF OPERATION CAN NOT BE DETERMINED AND IS UNKNOWN. HOWEVER, THE BUILDING IS INTENDED TO BE OCCUPIED MAINLY BY BUSINESS USERS, THEREFORE ASSUMED HOURS OF OPERATION FROM 8:00 A.M. TO 5:00 P.M. FOR STANDARD BUSINESS PRACTICE CAN BE APPLIED

FIRE DEPARTMENT NOTES:
 1. WATER MAINS AND FIRE HYDRANTS SHALL BE INSTALLED PRIOR TO CONSTRUCTION ABOVE FOUNDATION.
 2. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3" HIGH ON A CONTRASTING BACKGROUND.
 3. PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION OF NON RESIDENTIAL BUILDINGS, AN ALL WEATHER ACCESS ROAD CAPABLE OF SUPPORTING 25 TONS SHALL BE PROVIDED.

GENERAL SITE NOTES:
 1) ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOVI STANDARDS AND SPECIFICATIONS.
 2) STORM WATER OUTLETS TO BECK NORTH PHASE II DEVELOPMENT DISSIPATION BASINS AND ULTIMATELY INTO EXISTING WETLANDS.
 3) ROOFTOP EQUIPMENT MUST BE SCREENED PER ORDINANCE REQUIREMENTS.
 4) EXTERIOR LIGHTING MUST COMPLY WITH SECTION 2511 OF THE CITY OF NOVI CODE.
 5) RIGHT OF WAY PERMIT IS REQUIRED FROM THE CITY OF NOVI FOR ANY WORK IN THE HUDSON DRIVE AND NADLAN DRIVE RIGHT-OF-WAY.

- ALL SIGNS SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES (CHAPTER 28) OF THE CITY OF NOVI, AND WHERE REQUIRED SHALL BE RENEWED AND APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY AND A PERMIT ISSUED. NO SIGNS (OTHER THAN TYPICAL TRAFFIC CONTROL SIGNS) ARE APPROVED AS PART OF THIS SITE PLAN APPROVAL PRIOR TO ERECTION OF A SIGN, AN APPLICATION AND APPROPRIATE SUBMISSIONS SHALL BE MADE TO THE BUILDING DEPARTMENT FOR REVIEW, APPROVAL AND ISSUANCE OF A SIGN PERMIT.
- ALL PARKING AND TRAFFIC CONTROL SIGNS SHALL COMPLY WITH THE DESIGN AND PLACEMENT REQUIREMENTS OF THE "2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (2011 MMUTCD).
- NOTIFY THE CITY OF NOVI A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- CALL MISS DIG (811) A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL SOIL EROSION AND SILT MUST BE CONTROLLED AND CONTAINED ON-SITE.
- ALL EXCAVATION UNDER OR WITHIN A 1 ON 1 INFLUENCE OF PUBLIC PAVEMENT, EXISTING OR PROPOSED, SHALL BE BACKFILLED AND COMPACTED WITH SAND (CLASS II MDOT).
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
- PRIOR TO ISSUANCE OF AN OCCUPANCY PERMIT, ENGINEERING SITE INSPECTION IS REQUIRED.
- IF DEWATERING IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION THE CONTRACTOR IS REQUIRED TO SUBMIT A DEWATERING PLAN TO THE CITY ENGINEERING DIVISION FOR REVIEW.
- DIMENSIONS OF PARKING STALLS (LENGTH AS WELL AS WIDTH) ABUTTING A CURB OR SIDEWALK ARE TO THE FACE OF CURB OR WALK. ALL OTHER DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE INDICATED.
- ONLY NECESSARY LIGHTING FOR SECURITY PURPOSES AND LIMITED OPERATIONS SHALL BE USED AFTER THE SITE'S HOURS OF OPERATION.
- NO FLASHING LIGHTING WILL BE USED ON THE SITE.
- NO OUTSIDE STORAGE SHALL BE PERMITTED.
- NO TRUCKS WILL BE CLEANED OR SERVICED OUTSIDE THE BUILDING.
- AS REQUIRED BY THE CITY OF NOVI, SOUND LEVELS OF BUILDING OCCUPANT OPERATIONS, INCLUDING THE OPERATION OF ROOFTOP MECHANICAL EQUIPMENT, SHALL NOT EXCEED 55 DECIBELS DURING NIGHT TIME HOURS AND 60 DECIBELS DURING DAY TIME HOURS. VERIFICATION OF THE CONFORMANCE MAY BE REQUIRED AT THE TIME OF OCCUPANCY.

AMSON DEMBS DEVELOPMENT, INC.
PRELIMINARY SITE PLAN
 BECK NORTH CORPORATE PARK - UNIT 53
 SECTION: 4
 TOWNSHIP: 1 N
 RANGE: 8 E
 CITY OF NOVI
 OAKLAND COUNTY
 MICHIGAN

CLIENT: AMSON DEMBS DEVELOPMENT, INC.
REVISED:
 2014/01/22 PRE-APP SUBMITTAL
 2014/02/07 PSP SUBMITTAL

DATE: 2014/01/17
DRAWN BY: TAG
CHECKED BY: TAG

FBK:
CHF:
SCALE: HOR 1"=30 FT.
 VER 1"=30 FT.

2
 13-331

ALPINE ENGINEERING, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 46892 WEST ROAD
 SUITE 109
 NOVI, MICHIGAN 48377
 (248) 926-3701 (BUS)
 (248) 926-3765 (FAX)
 WWW.ALPINE-INC.NET



DESCRIPTION:
 UNIT 23, UNIT 44, AND PART OF UNIT 24 PART OF "BECK NORTH CORPORATE PARK", AS RECORDED IN LIBER 35825, PAGE 628 OF OAKLAND COUNTY RECORDS, OAKLAND COUNTY, MICHIGAN.

ALSO, DESCRIBED AS:
BEGINNING AT THE SOUTHWEST CORNER OF UNIT 23, "BECK NORTH CORPORATE PARK", AS RECORDED IN LIBER 35825, PAGE 628 OF OAKLAND COUNTY RECORDS, OAKLAND COUNTY, MICHIGAN, AS AMENDED; THENCE N00°07'31"E 255.05 FEET; THENCE N00°07'31"E 206.90 FEET; THENCE S89°52'29"E 349.89 FEET; THENCE S00°07'31"W 134.50 FEET; THENCE N89°52'29"W 25.02 FEET; THENCE S00°07'30"W 327.45 FEET; THENCE N89°52'29"W 374.92 FEET TO THE POINT OF BEGINNING, CONTAINING 3.90 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

- LEGEND**
- EXISTING STORM
 - EXISTING WATER MAIN
 - EXISTING SANITARY
 - EXISTING GAS
 - EX. CATCH BASIN
 - EX. MANHOLE
 - EX. END SECTION
 - EX. HYDRANT
 - EX. WATER SHUTOFF
 - EX. GATE VALVE
 - EX. SIGN
 - EX. PEDESTAL
 - EX. TRANSFORMER
 - EX. LIGHT POLE

- BENCHMARKS:**
- BM #1
CITY BENCHMARK 4-2
"+" NORTHEAST BOLT OF WEST SIGNAL AT RAILROAD TRACKS & WEST ROAD ELEVATION=952.86
 - BM #2
ARROW ON HYDRANT ON NORTH SIDE OF NADLAN DRIVE AT CENTER OF UNIT 23
ELEVATION= 955.96
 - BM #3
ARROW ON HYDRANT AT SOUTHEAST CORNER OF HUDSON DR. & NADLAN DR.
ELEVATION= 956.75
 - BM #4
ARROW ON HYDRANT AT EAST SIDE OF HUDSON DRIVE AT UNIT 23
ELEVATION= 958.71

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COMMERCIAL
 SITE PLANNING
 SITE ENGINEERING
 INDUSTRIAL & MULTI-UNIT
 LAND SURVEYING
 CONSTRUCTION LAYOUT

SURVEYING
 ALTA SURVEYS
 BOUNDARY SURVEYS
 TOPOGRAPHIC SURVEYS
 PARCEL SPLITS

RESIDENTIAL
 SUBDIVISIONS
 SITE CONDOMINIUM
 MULTI-FAMILY
 PLOT PLANS
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CLIENT: **AMSON DEMBS DEVELOPMENT, INC.**

TOPOGRAPHIC SURVEY

BECK NORTH CORPORATE PARK - UNIT 53
 SECTION: 4
 TOWNSHIP: 1 N
 CITY OF NOVI
 OAKLAND COUNTY
 MICHIGAN

REVISED
 2014/01/22 PRE-APP SUBMITTAL
 2014/02/07 PSP SUBMITTAL

DATE: **2014/01/17**

DRAWN BY: **GLM**

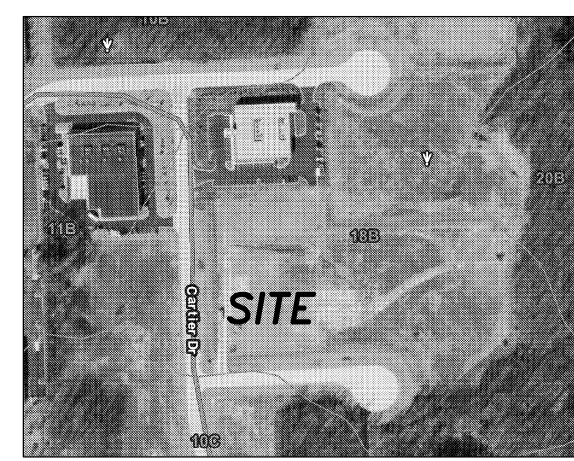
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 CHF:

SCALE: HOR 1"=30 FT.
 VER 1"=3 FT.

3

13-331



EXISTING SOILS
(USDA WEB SOIL SURVEY)
SOIL TYPE: 18B - FOX SANDY LOAM

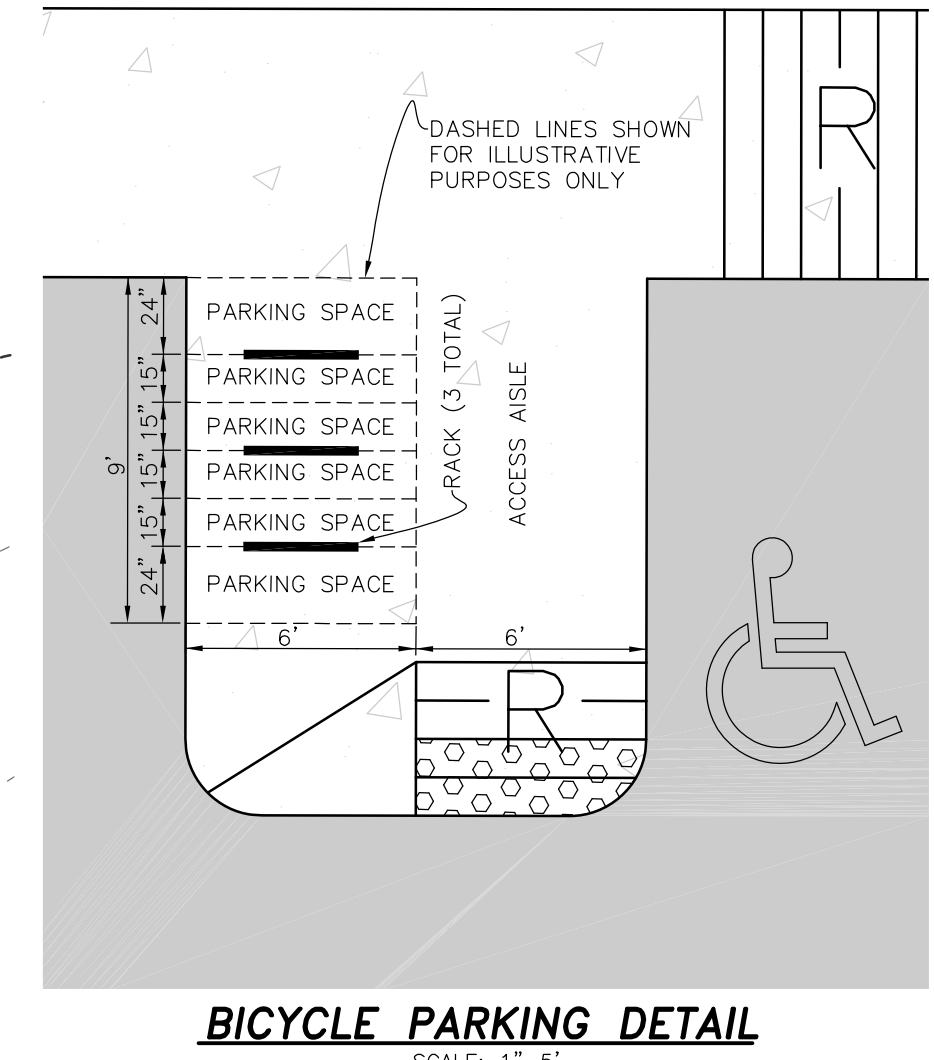
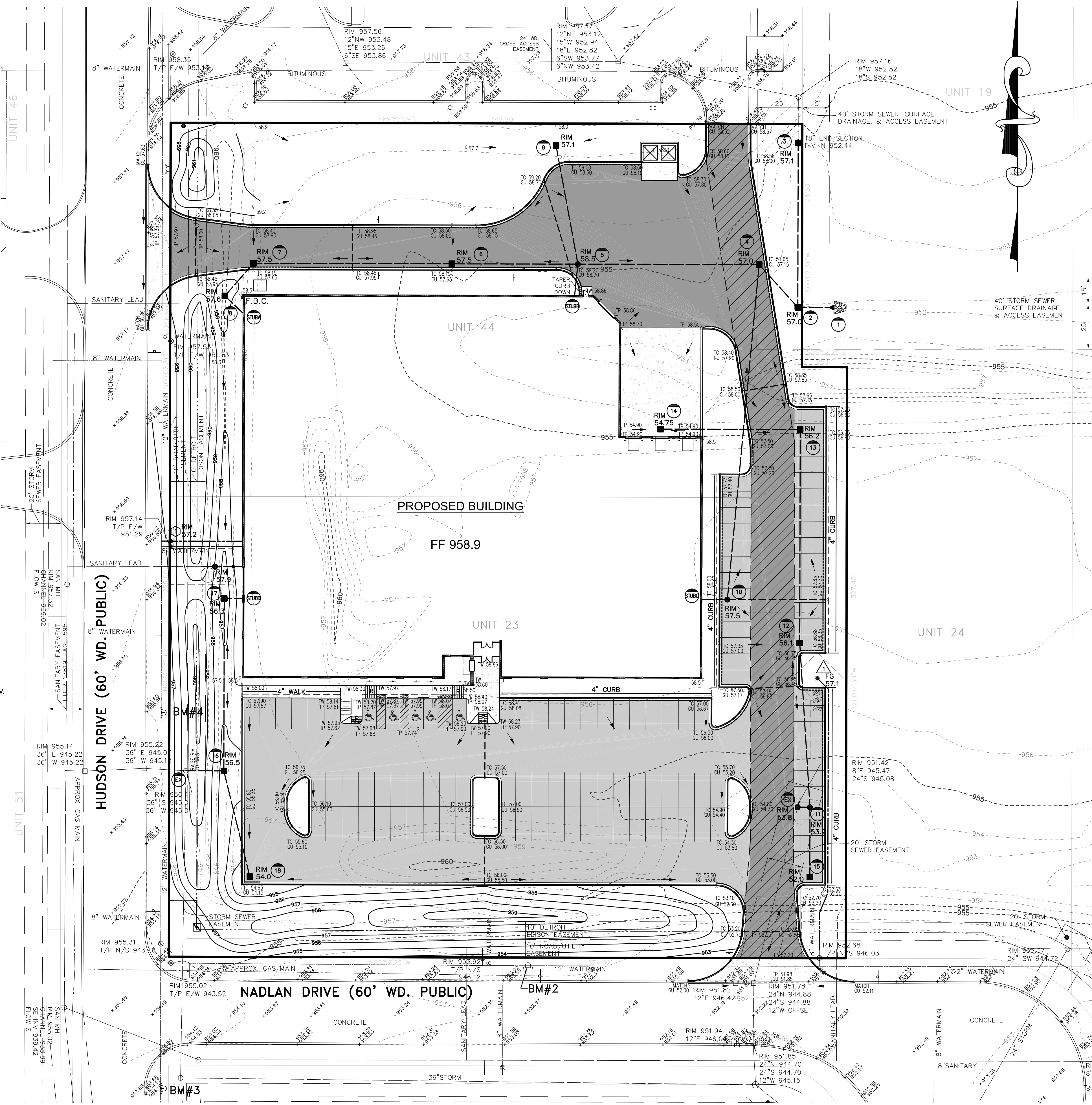
LEGEND

---	EXISTING STORM	FF	FINISH FLOOR
---	EXISTING WATER MAIN	→	PROP. DRAINAGE ARROW
---	EXISTING SANITARY	TP 40.00	PROP. TOP OF PAVEMENT ELEV.
---	EXISTING GAS	TC 40.00	PROP. TOP OF CURB ELEV.
□	EX. CATCH BASIN	GU 40.00	PROP. GUTTER ELEV.
○	EX. MANHOLE	TW 40.00	PROP. TOP OF WALK ELEV.
○	EX. END SECTION	40.00	PROP. SPOT ELEV.
○	EX. HYDRANT	94.00	PROP. CONTOUR
○	EX. WATER SHUTOFF	□	PROP. CATCH BASIN
○	EX. GATE VALVE	○	PROP. MANHOLE
○	EX. SIGN	○	PROP. END SECTION
○	EX. PEDESTAL	○	PROP. STORM SEWER
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○	EX. LIGHT POLE	○	PROP. WATER MAIN
○		○	PROP. GATE VALVE
○		○	PROP. HYDRANT
○		○	PROP. SAN. STR. NUMBER
○		○	PROP. STM. STR. NUMBER
○		○	PROP. GATE VALVE NUMBER
○		○	PROP. HYDRANT NUMBER
○		○	PITCH IN CURB AND GUTTER
○		○	PITCH OUT CURB AND GUTTER
○		○	CROSS-ACCESS EASEMENT

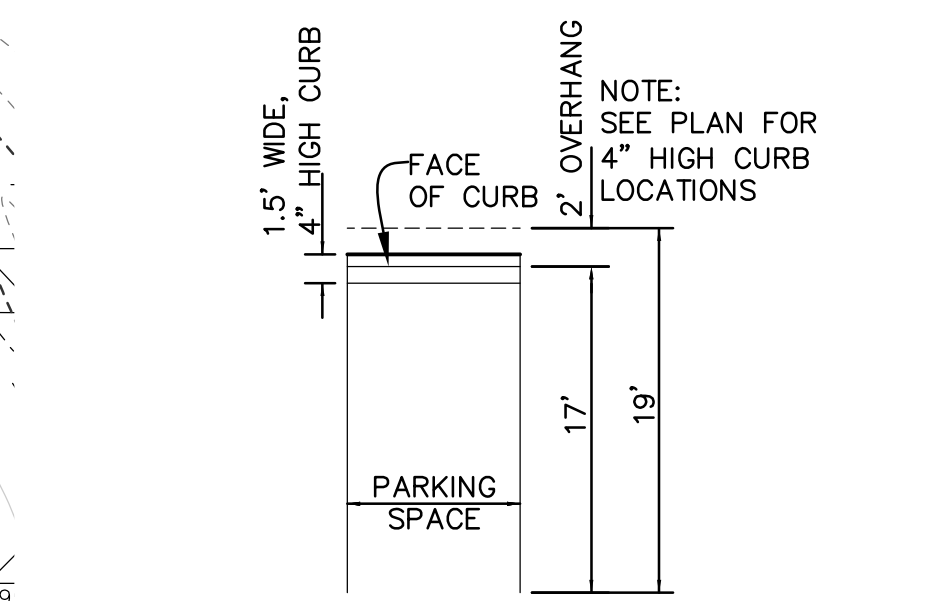
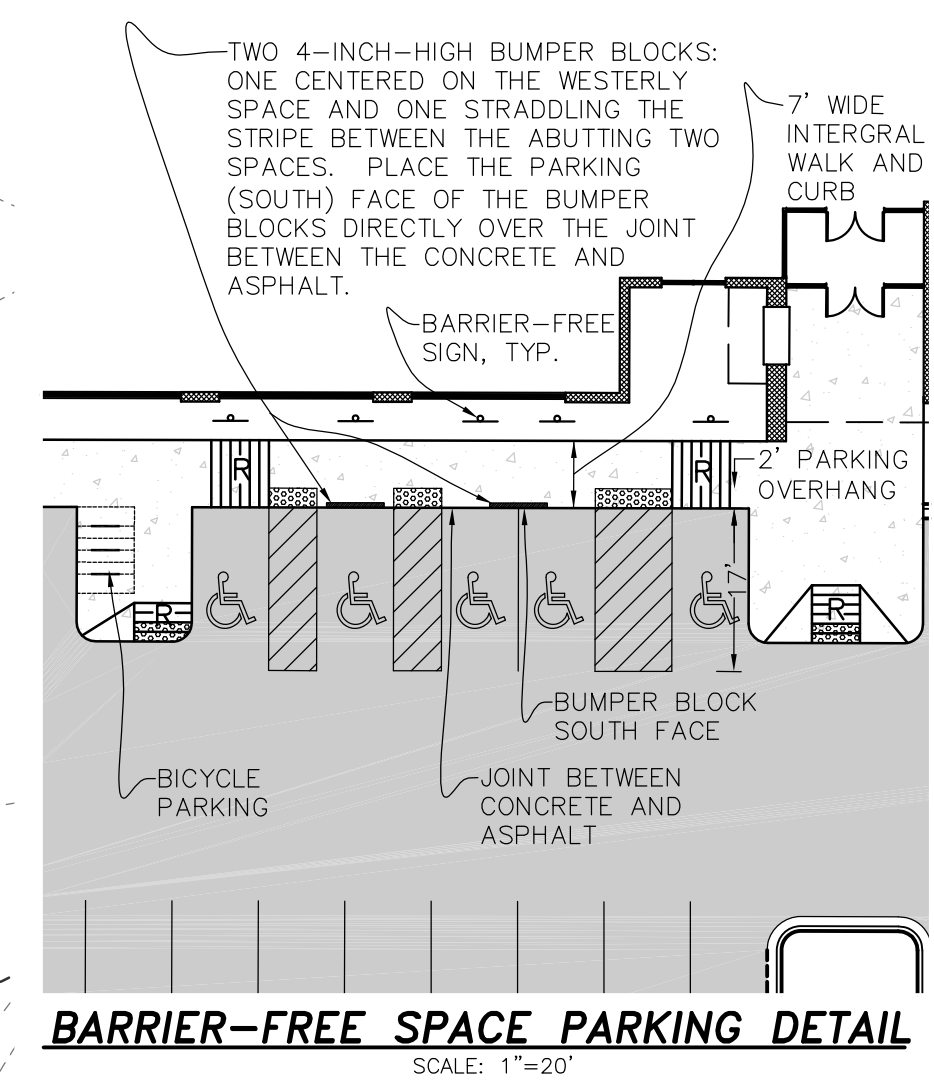
- BENCHMARKS:**
- BM #1
CITY BENCHMARK 4-2
"X" NORTHEAST BOLT OF WEST SIGNAL AT RAILROAD TRACKS & WEST ROAD ELEVATION=952.86
 - BM #2
ARROW ON HYDRANT ON NORTH SIDE OF NADLAN DRIVE AT CENTER OF UNIT 23
ELEVATION= 955.96
 - BM #3
ARROW ON HYDRANT AT SOUTHEAST CORNER OF HUDSON DR. & NADLAN DR.
ELEVATION= 956.75
 - BM #4
ARROW ON HYDRANT AT EAST SIDE OF HUDSON DRIVE AT UNIT 23
ELEVATION= 958.71

PAVING LEGEND

▒	STANDARD PAVING
▓	HEAVY DUTY PAVING
□	CONCRETE



- NOTES:**
- ALL BICYCLE PARKING SPACES SHALL BE PAVED AND ADJACENT TO A BICYCLE RACK OF THE INVERTED "U" DESIGN, THAT IS SOLID, CANNOT BE EASILY REMOVED WITH COMMON TOOLS, PROVIDES AT LEAST TWO (2) CONTACT POINTS FOR A BICYCLE, IS AT LEAST THREE (3) FEET IN HEIGHT, AND PERMITS THE LOCKING OF A BICYCLE THROUGH THE FRAME AND ONE (1) WHEEL WITH A STANDARD U-LOCK OR CABLE IN AN UPRIGHT POSITION. THE RACK SHALL BE SECURELY ANCHORED IN CONCRETE OR ASPHALT. ALTERNATIVE INSTALLATIONS AND DESIGNS MAY BE CONSIDERED IF THE PROPOSED RACK DESIGN FUNCTIONS SIMILAR TO THE INVERTED "U" DESIGN.
 - ALL BICYCLE PARKING FACILITIES SHALL BE ACCESSIBLE FROM ADJACENT STREET(S) AND PATHWAY(S) VIA A PAVED ROUTE THAT HAS A MINIMUM WIDTH OF SIX (6) FEET.
 - ALL BICYCLE PARKING FACILITIES SHALL BE SEPARATED FROM AUTOMOBILE PARKING SPACES AND ACCESS AISLES BY A RAISED CURB, LANDSCAPE AREA, SIDEWALK, OR OTHER METHOD THAT COMPLIES WITH ALL CITY ORDINANCES.



PARKING STALL DETAIL AT REDUCED DEPTH STALL LOCATIONS
NOT TO SCALE

NOTE
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COMMERCIAL
SITE PLANNING
ENGINEERING
INDUSTRIAL & MULTI-UNIT
LAND SURVEYING
CONSTRUCTION LAYOUT

SURVEYING
ALTA SURVEYS
BOUNDARY SURVEYS
TOPOGRAPHIC SURVEYS
PARCEL SPLITS
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RESIDENTIAL
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SITE CONDOMINIUM
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ALPINE ENGINEERING, INC.
CIVIL ENGINEERS & LAND SURVEYORS

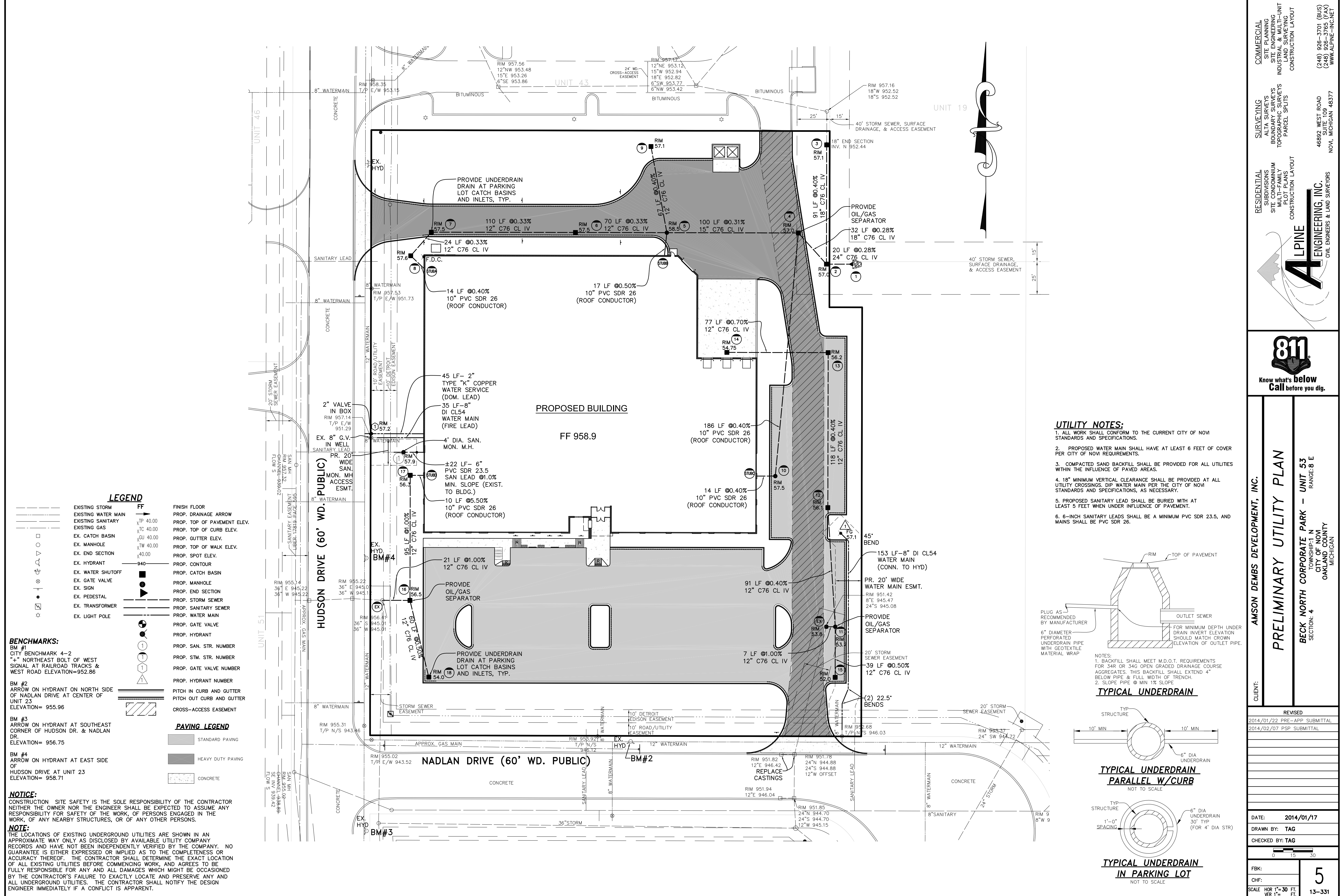
811
Know what's below
Call before you dig.

AMSON DEMBS DEVELOPMENT, INC.
PRELIMINARY GRADING PLAN
BECK NORTH CORPORATE PARK - UNIT 53
SECTION: 4
TOWNSHIP: 1 N
RANGE: 8 E
CITY OF NOV
OAKLAND COUNTY
MICHIGAN

REVISIONS
2014/01/22 PRE-APP SUBMITTAL
2014/02/07 PSP SUBMITTAL

DATE: 2014/01/17
DRAWN BY: TAG
CHECKED BY: TAG

FBK:
CHF:
SCALE: HOR 1"=30 FT.
VER 1"=3 FT.
4
13-331



LEGEND

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EX. MANHOLE	40.00	PROP. TOP OF WALK ELEV.
EX. END SECTION	940	PROP. SPOT ELEV.
EX. HYDRANT		PROP. CONTOUR
EX. WATER SHUTOFF		PROP. CATCH BASIN
EX. GATE VALVE		PROP. MANHOLE
EX. SIGN		PROP. END SECTION
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		PROP. GATE VALVE
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		PROP. GATE VALVE NUMBER
		PROP. HYDRANT NUMBER
		PITCH IN CURB AND GUTTER
		PITCH OUT CURB AND GUTTER
		CROSS-ACCESS EASEMENT

BENCHMARKS:

BM #1
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"+" NORTHEAST BOLT OF WEST SIGNAL AT RAILROAD TRACKS & WEST ROAD ELEVATION=952.86

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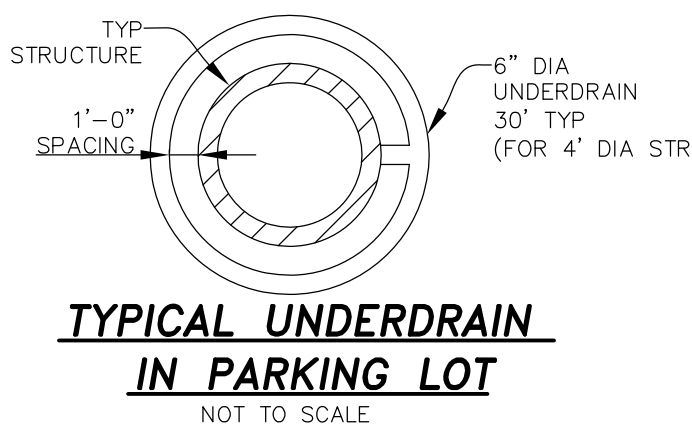
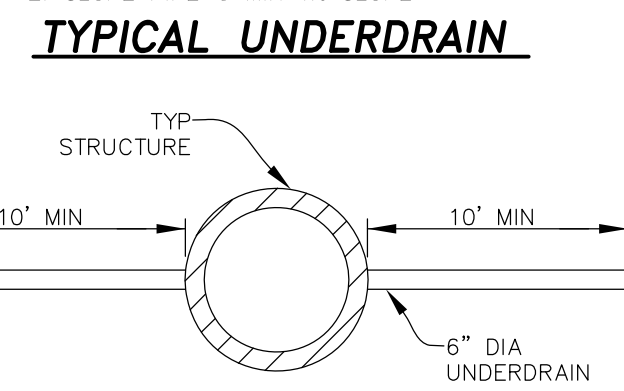
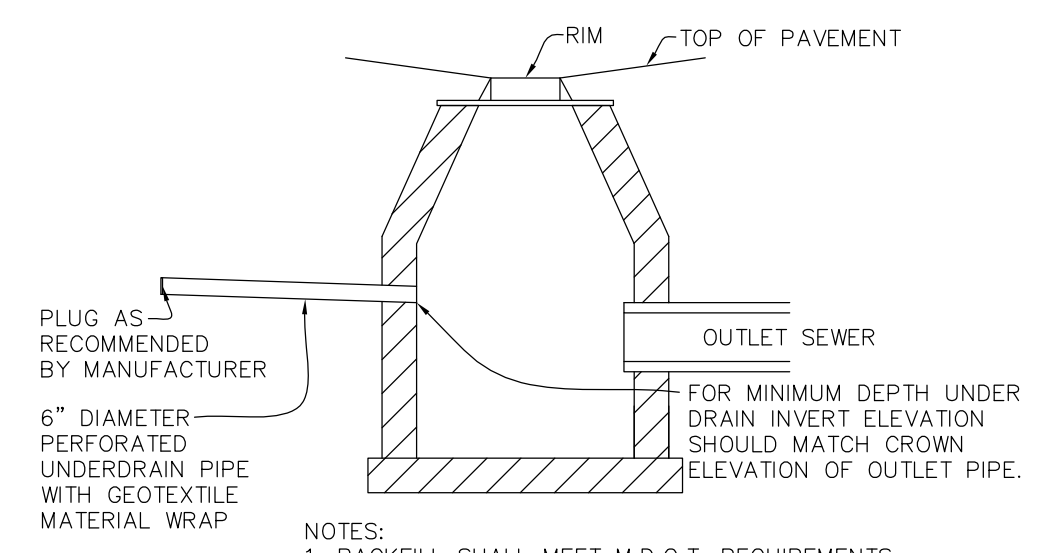
PAVING LEGEND

[Symbol]	STANDARD PAVING
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- UTILITY NOTES:**
1. ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOVI STANDARDS AND SPECIFICATIONS.
 2. PROPOSED WATER MAIN SHALL HAVE AT LEAST 6 FEET OF COVER PER CITY OF NOVI REQUIREMENTS.
 3. COMPACTED SAND BACKFILL SHALL BE PROVIDED FOR ALL UTILITIES WITHIN THE INFLUENCE OF PAVED AREAS.
 4. 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED AT ALL UTILITY CROSSINGS. DIP WATER MAIN PER THE CITY OF NOVI STANDARDS AND SPECIFICATIONS, AS NECESSARY.
 5. PROPOSED SANITARY LEAD SHALL BE BURIED WITH AT LEAST 5 FEET WHEN UNDER INFLUENCE OF PAVEMENT.
 6. 6-INCH SANITARY LEADS SHALL BE A MINIMUM PVC SDR 23.5, AND MAINS SHALL BE PVC SDR 26.



AMSON DEMBS DEVELOPMENT, INC.

PRELIMINARY UTILITY PLAN

CLIENT: AMSON DEMBS DEVELOPMENT, INC.

REVISED
2014/01/22 PRE-APP SUBMITTAL
2014/02/07 PSP SUBMITTAL

DATE: 2014/01/17
DRAWN BY: TAG
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CHF:

SCALE: HOR 1"=30 FT.
VER 1"=3 FT.

5

13-331

811

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46892 WEST ROAD
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NOVI, MICHIGAN 48377

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SECTION: 4

TOWNSHIP: 1 N
RANGE: 8 E
CITY OF NOVI
OAKLAND COUNTY
MICHIGAN

Aqua-Swirl™ Specifications

GENERAL
This specification shall govern the performance, materials and fabrication of the Stormwater Treatment System.

SCOPE OF WORK
The Aqua-Swirl™ Concentrator shall be provided by AquaShield™, Inc. 2733 Kanasta Drive, Chattanooga, TN (423-870-8888) and shall adhere to the following material and performance specifications at the specified design flows, and storage capacities.

- MATERIALS**
- Stormwater Treatment System shall be made from high-density polyethylene (HDPE) resins meeting the following requirements:
 - HDPE Material - The HDPE material supplied under this specification shall be high density, high molecular weight as supplied by manufacturer. The HDPE material shall conform to ASTM D3350-02 with minimum cell classification values of 345464C.
 - PHYSICAL PROPERTIES OF HDPE COMPOUND
 - Density - the density shall be no less than 0.955 g/cm³ as referenced in ASTM D 1505.
 - Melt Index - the melt index shall be no greater than 0.15 g/10 minutes when tested in accordance with ASTM D 1238- Condition 190/2.16.
 - Flex Modulus - flexural modulus shall be 110,000 to less than 160,000 psi as referenced in ASTM D 790.
 - Tensile Strength at Yield - tensile strength shall be 3,000 to less than 3,500 psi as referenced in ASTM D 638.
 - Slow Crack Growth Resistance shall be greater than 100 hours (PENT Test) as referenced in ASTM F 1473 or greater than 5000 hours (ESCR) as referenced in ASTM D 1693 (condition C).
 - The inlets and outlets shall be extrusion welded on the inside and outside of the structure using accepted welding practice.
 - The arched baffle wall shall be constructed from HDPE and shall be extrusion welded to the interior of the treatment chamber using accepted welding methods with connections made at 180 degrees of each end.
 - HDPE lifting supports may be provided on the exterior of the Stormwater Treatment System in such a way as to allow the prevention of undue stress to critical components of the Stormwater Treatment System during loading, off-loading and moving operations. The lifting supports shall be constructed as an integral part of the treatment chamber and extrusion welded using accepted welding practices.
 - Top of the treatment chamber shall be built to the requirements of the drawings. Deep burial applications shall require a reinforced HDPE top.

DIVISION OF RESPONSIBILITY

- Stormwater Treatment System Manufacturer**
The Manufacturer shall be responsible for delivering the Stormwater Treatment System to the site. The system includes the treatment chamber with debris baffle, inlet and outlet stub-outs, lifting supports, 30-inch ID service access riser(s) to grade with temporary cover, and manhole frame(s) and cover(s).
- Contractor**
The Contractor shall be responsible for preparing the site for the system installation including, but not limited to, temporary shoring, excavation, cutting and removing pipe, new pipe, bedding, and compaction. The Contractor shall be responsible for furnishing the means to lift the system components off the delivery trucks. The Contractor shall be responsible for providing any concrete anti-floatation/anti-creep restrains, anchors, collars, etc. with any straps or connection devices required. The Contractor shall be responsible for field cutting, if necessary, HDPE service access risers to grade. The Contractor shall be responsible for sealing the pipe connections to the Stormwater Treatment System, backfilling and furnishing all labor, tools, and materials needed.

INSTALLATION

- Excavation and Bedding**
The trench and trench bottom shall be constructed in accordance with ASTM D 2321, Section 6, Trench Excavation, and Section 7, Installation. The HDPE Stormwater Treatment System shall be installed on a stable base consisting of 12 inches of Class 1 stone materials (angular, crushed stone or rock, crushed gravel; large void content, containing little or no fines) as defined by ASTM D 2321, Section 5, Materials, and compacted to 95% proctor density.

SUBMITTALS

The Contractor shall be provided with dimensional drawings and, when specified, utilize these drawings as the basis for preparation of shop drawings showing details for construction and reinforcing. Shop drawings shall be annotated to indicate all materials to be used and all applicable standards for materials, required tests of materials and design assumptions for structural analysis. Shop drawings shall be prepared at a scale of not less than 1/4 inch per foot. Three (3) hard copies of said shop drawings shall be submitted to the Specifying Engineer for review and approval.

QUALITY CONTROL INSPECTION

- Materials**
The quality of materials, the process of manufacture, and the finished sections shall be subject to inspection by the Specifying Engineer. Such inspection may be made at the place of manufacture, or on the work site after delivery, or at both places. The sections shall be subject to rejection at any time if material conditions fail to meet any of the specification requirements, even though sample sections may have been accepted as satisfactory at the place of manufacture. Sections rejected after delivery to the site shall be marked for identification and shall be removed from the site at once. All sections, which are damaged beyond repair after delivery will be rejected and, if already installed, shall be repaired to the Specifying Engineer's acceptance level, if permitted, or removed and replaced, entirely at the Contractor's expense.
- Inspection**
All sections shall be inspected for general appearance, dimensions, soundness, etc.
- Defects**
Structural defects may be repaired, subject to the acceptance of the Specifying Engineer, after demonstration by the manufacturer that strong and permanent repairs will be made. The Specifying Engineer before final acceptance of the components shall carefully inspect repairs.

NOTE:
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

Hydrostatic Design Basis shall be 1,600 psi at 23 degrees C when tested in accordance with ASTM D 2837.
Color - black with minimum 2% carbon black.

REJECTION - The Stormwater Treatment System may be rejected for failure to meet any of the requirements of this specification.

PERFORMANCE

- The Stormwater Treatment System shall include a ___-inch inner diameter (ID) circular hydrodynamic flow-through treatment chamber to treat the incoming water. A tangential inlet shall be provided to induce a swirling flow pattern that will cause sedimentary solids to accumulate in the bottom center of the chamber in such a way as to prevent re-suspension of captured particles. An arched baffle wall shall be provided in such a way as to prevent floatable liquid oils and solids from exiting the treatment chamber while enhancing the swirling action of the stormwater.
- The Stormwater Treatment System shall have a sediment storage capacity of ___ cubic feet and be capable of capturing ___ gallons of petroleum hydrocarbons. The Stormwater Treatment System shall have a treatment capacity of ___ cubic feet per second (cfs). The Stormwater Treatment System shall be capable of removing floating trash and debris, floatable oils and 80% of total suspended solids from stormwater entering the treatment chamber.
- Service access to the Stormwater Treatment System shall be provided via 30-inch inner diameter (ID) access riser(s) over the treatment chamber such that no confined space entry is required to perform routine inspection and maintenance functions.

TREATMENT CHAMBER CONSTRUCTION

- The treatment chamber shall be constructed from solid wall high-density polyethylene (HDPE) ASTM F 714 cell class 345464C. For sizes above 63-inch OD, the treatment chamber shall be constructed from profile wall HDPE ASTM F 894 RSC 250 pipe or solid wall HDPE.
- The bottom thickness of the treatment chamber will be determined in accordance with ASTM F 1759. Calculations must be provided to justify the thickness of the bottom.

All required safety precautions for Stormwater Treatment System installation are the responsibility of the Contractor.

- Backfill Requirements**
Backfill materials shall be Class I or II stone materials (well graded gravels, gravelly sands; containing little or no fines) as defined by ASTM D 2321, Section 5, Materials and compacted to 90% proctor density. Class I materials are preferred. Backfill and bedding materials shall be free of debris. Backfilling shall conform to ASTM F 1759, Section 4.2, "Design Assumptions". Backfill shall extend at least 3.5 feet beyond the edge of the Swirl Concentrator for the full height to sub grade and extend laterally into undisturbed soils.
- Pipe Couplings**
Pipe couplings to and from the Stormwater Treatment System shall be Fernco®, Mission™ or equal type flexible boot with stainless steel tension bands. A metal sheer guard shall be used to protect the flexible boot.

Reinforced concrete pads spanning the treatment chamber will be required with traffic rated frames and covers when the Stormwater Treatment System is used in traffic areas. A professional engineer shall approve the design of the concrete pad and the calculations must be included in the submittal.

The manufacturer upon request can supply anti-floatation/ buoyancy calculations. In addition, typical drawings of the AquaShield Stormwater Treatment System with concrete anti-floatation structures can also be provided. Anti-floatation structure design and approval are ultimately the responsibility of the specifying engineer. The contractor shall provide the anti-floatation structures.

Aqua-Swirl™ Sizing Chart (English)

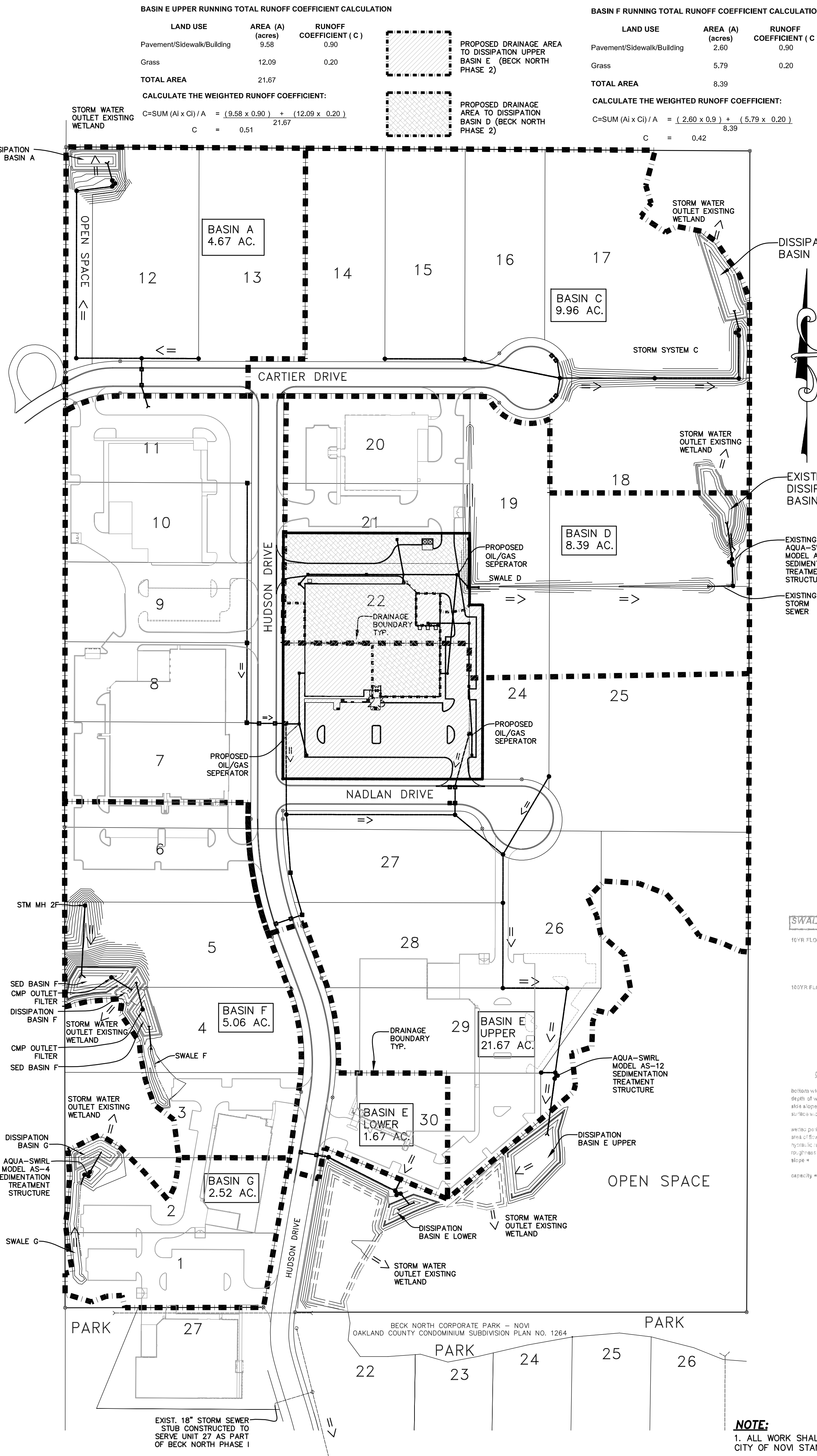
Aqua-Swirl™ Model	Swirl Chamber Diameter (ft)	Maximum Stub-Out Pipe Outer Diameter (in)	Water Quality Treatment Flow* (cfs)	Oil/Debris Storage Capacity (gal)	Sediment Storage Capacity (ft ³)
AS-2	2.50	8	1.1	37	10
AS-3	3.25	10	1.8	110	20
AS-4	4.25	12	3.2	190	32
AS-5	5.00	12	4.4	270	45
AS-6	6.00	14	6.3	390	65
AS-7	7.00	16	8.6	540	90
AS-8	8.00	18	11.2	710	115
AS-9	9.00	20	14.2	910	145
AS-10	10.0	22	17.5	1130	180
AS-12	12.0	24	25.2	1698	270
AS-XX*	Custom	--	>26	--	--

*Higher water quality treatment flow rates can be designed with multiple swirls.

- The Aqua-Swirl™ Conveyance Flow Diverter (CFD) provides full treatment of the "first flush" while the peak design storm is diverted and channeled through the main conveyance pipe. Please refer to your local representative for more information.
- Many regulatory agencies are establishing "water quality treatment flow rates" for their areas based on the initial movement of pollutants into the storm drainage system. The treatment flow rate of the Aqua-Swirl™ system is engineered to meet or exceed the local water quality treatment criteria. This "water quality treatment flow rate" typically represents approximately 90% to 95% of the total annual runoff volume.

The design and orientation of the Aqua-Swirl™ generally entails some degree of customization. For assistance in design and specific sizing using historical rainfall data, please refer to an AquaShield™ representative or visit our website at www.AquaShieldInc.com. CAD details and specifications are available upon request.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.



STORM WATER DRAINAGE NARRATIVE:

PROPOSED NORTHERLY ON-SITE STORM WATER WILL PASS THROUGH A PROPOSED ON-SITE OIL/GAS SEPARATOR PRIOR TO OUTLET INTO AN EXISTING 36" DIAMETER STORM SEWER. THE STORM WATER WILL THEN PASS THROUGH AN EXISTING SEDIMENTATION TREATMENT STRUCTURE AND THEN INTO AN EXISTING DISSIPATION BASIN. THE DISSIPATION BASIN OUTLETS INTO ADJACENT EXISTING WETLANDS. THE PROPOSED STORM WATER OUTLETS INTO AN APPROVED SYSTEM AS DESIGNED BY OTHERS.

THE PROPOSED ULTIMATE 10-YR FLOW TO THE EXISTING 36" DIAMETER STORM SEWER IS: Q = 24.71 CFS (FROM UNIT 53 STORM CALC'S)

A 36" DIAMETER STORM SEWER @0.20% HAS A CAPACITY OF 29.8 CFS.

PROPOSED SOUTHEASTERLY ON-SITE STORM WATER WILL PASS THROUGH A PROPOSED ON-SITE OIL/GAS SEPARATOR PRIOR TO OUTLET INTO AN EXISTING 36" DIAMETER STORM SEWER. THE STORM WATER WILL THEN TRAVEL THROUGH THE EXISTING BECK NORTH PH. II STORM SEWER WHERE IT WILL PASS THROUGH AN EXISTING SEDIMENTATION TREATMENT STRUCTURE AND THEN INTO AN EXISTING DISSIPATION BASIN. THE DISSIPATION BASIN OUTLETS INTO ADJACENT EXISTING WETLANDS. THE PROPOSED STORM WATER OUTLETS INTO AN APPROVED SYSTEM AS DESIGNED BY OTHERS.

THE PROPOSED 10-YR FLOW TO THE EXISTING 36" DIAMETER STORM SEWER IS: Q = 22.46 CFS (TOTAL)

AN 36" DIAMETER STORM SEWER @0.12% HAS A CAPACITY OF 23.10 CFS.

PROPOSED SOUTHEASTERLY ON-SITE STORM WATER WILL PASS THROUGH A PROPOSED ON-SITE OIL/GAS SEPARATOR PRIOR TO OUTLET INTO AN EXISTING 24" DIAMETER STORM SEWER. THE STORM WATER WILL THEN TRAVEL THROUGH THE EXISTING BECK NORTH PH. II STORM SEWER WHERE IT WILL PASS THROUGH AN EXISTING SEDIMENTATION TREATMENT STRUCTURE AND THEN INTO AN EXISTING DISSIPATION BASIN. THE DISSIPATION BASIN OUTLETS INTO ADJACENT EXISTING WETLANDS. THE PROPOSED STORM WATER OUTLETS INTO AN APPROVED SYSTEM AS DESIGNED BY OTHERS.

THE PROPOSED 10-YR FLOW TO THE EXISTING 24" DIAMETER STORM SEWER IS: Q = 3.41 CFS (FROM UNIT 53 STORM CALC'S)

AN 24" DIAMETER STORM SEWER @0.12% HAS A CAPACITY OF 7.84 CFS.

NOTE:
SEE "BECK NORTH PHASE II" ENGINEERING PLANS BY A R DECKER & ASSOCIATES FOR APPROVED OVERALL STORM WATER MANAGEMENT SYSTEM DESIGN.

DISSIPATION BASIN D CALCULATIONS (BY OTHERS):

DISSIPATION BASIN D AREA "D"	SITE AREA (AC)	First Flood Volume (1815 x Area in AC x C Factor)	First Flood Volume	Dissemination Bay Volume (20% of First Flood Volume)
8.39	8.39	10559 cf	2132 cf	2132 cf

SWALE D CALCULATIONS (BY OTHERS):

SWALE D	STRUC. FROM	10YR FLOW	5YR FLOW	2YR FLOW	1YR FLOW
SWALE D	SED D	6.39	0.76	0.87	0.97

DISSIPATION BASIN E CALCULATIONS (BY OTHERS):

DISSIPATION BASIN E UPPER AREA "E UPPER"	SITE AREA (AC)	First Flood Volume (1815 x Area in AC x C Factor)	First Flood Volume	Dissemination Bay Volume (20% of First Flood Volume)
21.67	21.67	27592 cf	5508 cf	5508 cf

REVISIONS

NO.	DATE	DESCRIPTION
1	2014/01/22	PRE-APP SUBMITTAL
2	2014/02/07	PSP SUBMITTAL

DATE: 2014/01/17
 DRAWN BY: TAG
 CHECKED BY: TAG

FBK: 6
 CHF: 6

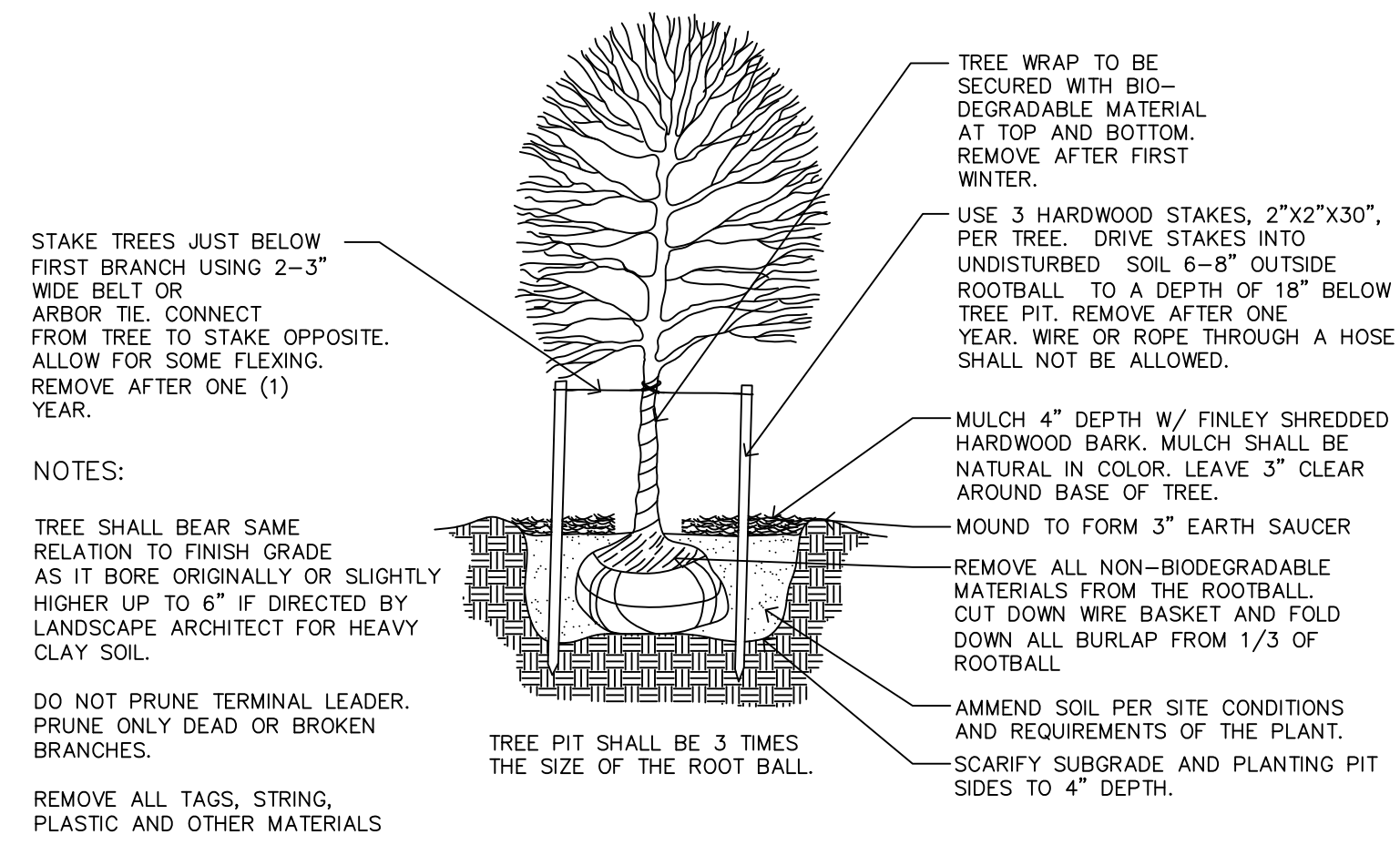
SCALE: HOR 1" = 120 FT., VER 1" = 10 FT.

13-331

AMSON DEMBS DEVELOPMENT, INC.
PRELIMINARY STORM WATER MANAGEMENT PLAN
 BECK NORTH CORPORATE PARK - UNIT 53
 SECTION: 4
 TOWNSHIP: 1 N
 RANGE: 8 E
 CITY OF NOVI
 OAKLAND COUNTY MICHIGAN

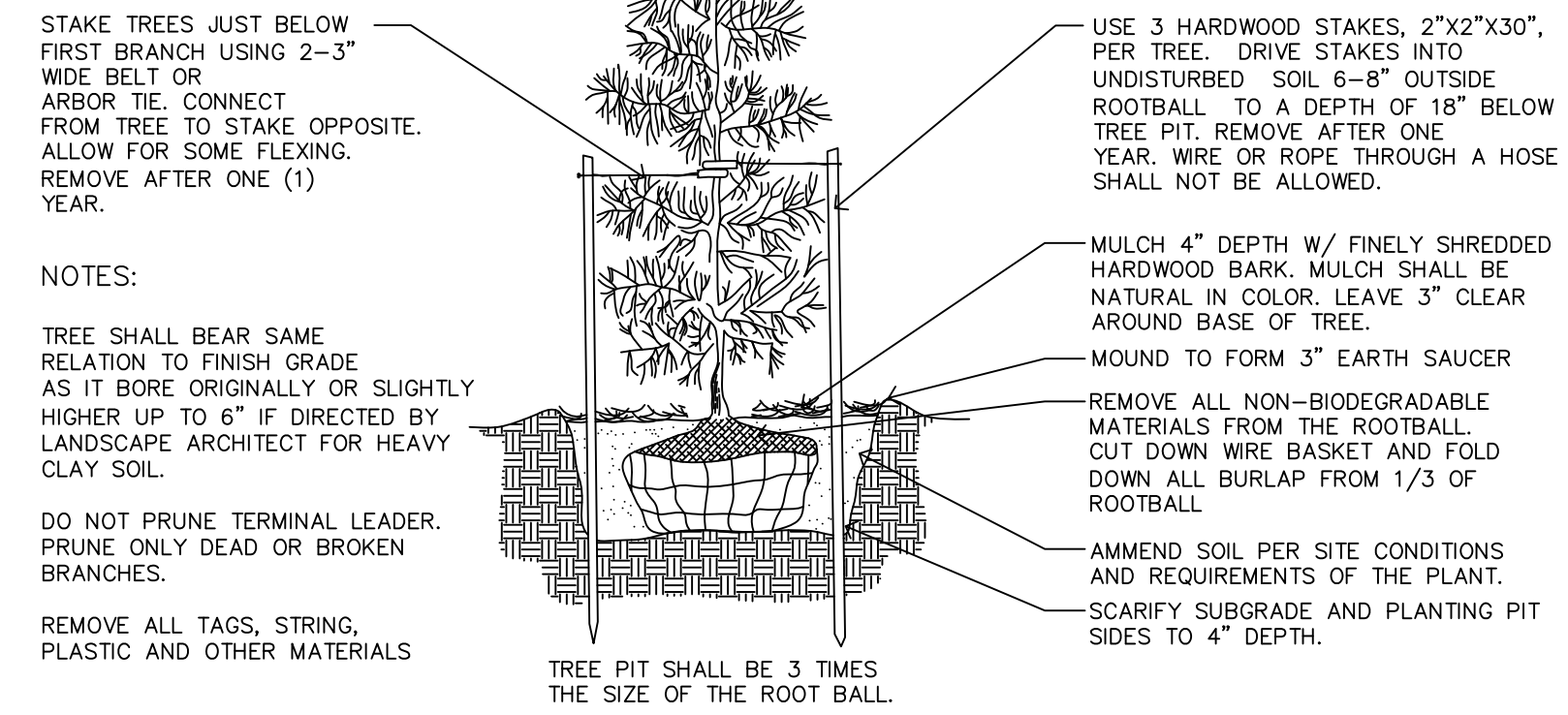
ALPINE ENGINEERING, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 46892 WEST ROAD
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DECIDUOUS TREE PLANTING DETAIL

NTS



EVERGREEN TREE PLANTING DETAIL

NTS

LANDSCAPE NOTES

- All plants shall be north Midwest American region grown, No. 1 grade plant materials, and shall be true to name, free from physical damage and wind burn.
- Plants shall be full, well-branched, and in healthy vigorous growing condition.
- Plants shall be watered before and after planting is complete.
- All trees must be staked, fertilized and mulched and shall be guaranteed to exhibit a normal growth cycle for at least two (2) full years following City approval.
- All material shall conform to the guidelines established in the most recent edition of the American Standard for Nursery Stock.
- Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, and stone.
- "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
- Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand and 1/3 peat, mixed well and spread to the depth as indicated in planting details.
- All plantings shall be mulched per planting details located on this sheet.
- The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
- No substitutions or changes of location, or plant types shall be made without the approval of the Landscape Architect.
- The City of Novi's Landscape Architect shall be notified of any discrepancies between the plans and field conditions prior to installation.
- The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
- The Landscape Architect shall have the right, at any stage of the installation, to reject any work or material that does not meet the requirements of the plans and specifications, if requested by owner.
- Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a discrepancy, the quantities on the plans shall prevail.
- The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
- A pre-emergent weed control agent, "Preen" or equal, shall be applied uniformly on top of all mulching in all planting beds.
- All landscape areas shall be provided with an underground automatic sprinkler system.
- Sod shall be two year old "Baron/Cheriadelpi" Kentucky Blue Grass grown in a sod nursery on loam soil.

CITY OF NOVI NOTES

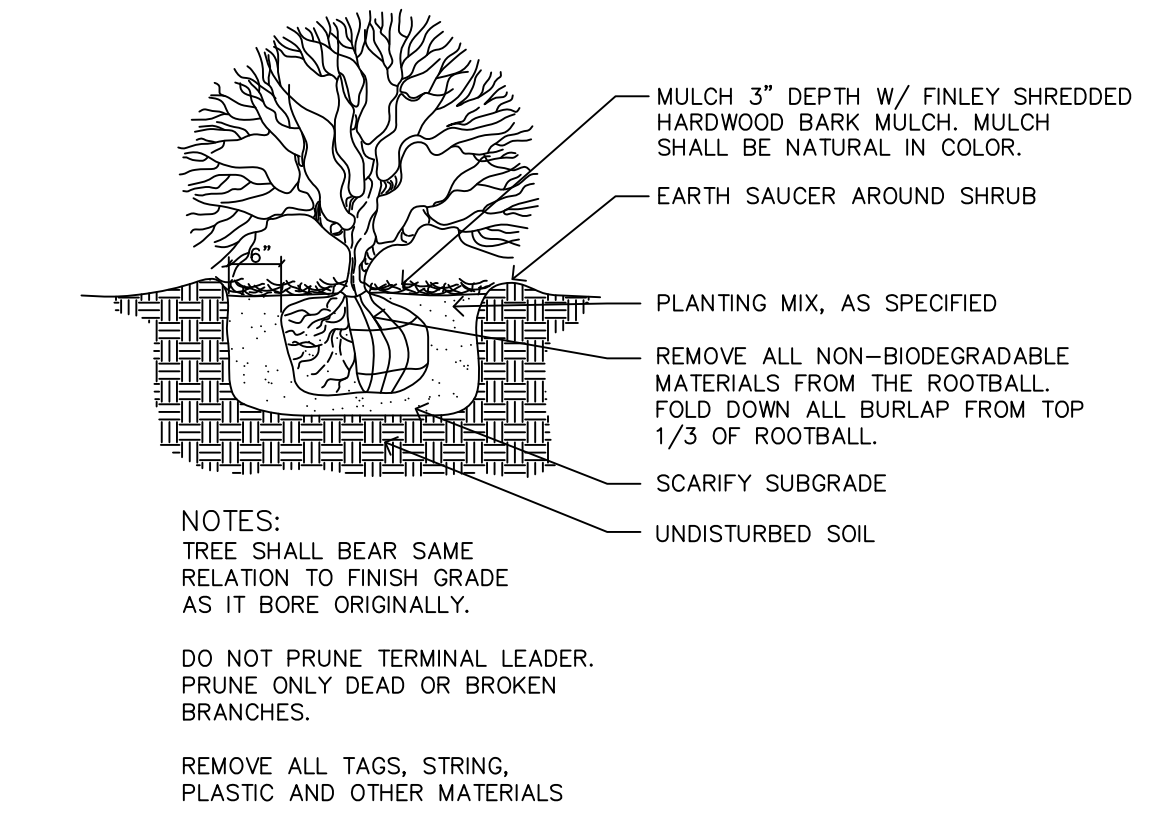
- All landscape islands shall be backfilled with a sand mixture to facilitate drainage.
- All proposed landscape islands shall be curbed.
- All landscape areas shall be irrigated.
- Overhead utility lines and poles to be relocated as directed by utility company of record.
- Evergreen and canopy trees shall be planted a minimum of 10' from a fire hydrant, and manhole, 15' from overhead wires.
- All plant material shall be guaranteed for two (2) years after City Approval and shall be installed and maintained according to City of Novi standards. Replace Failing Material During the Next Appropriate Planting Period.
- All proposed street trees shall be planted a minimum of 4' from both the back of curb and proposed walks.
- All tree and shrub planting beds shall be mulched with shredded hardwood bark, spread to minimum depth of 4". All lawn area trees shall have a 4' diameter circle of shredded hardwood mulch 3' away from trunk. All perennial, annual and ground cover beds shall receive 2" of dark colored bark mulch as indicated on the plant list. Mulch is to be free from debris and foreign material, and shall contain no pieces of inconsistent size.
- All Substitutions or Deviations from the Landscape Plan Must be Approved by the City of Novi Prior to their Installation.

NOTES:
THE APPROXIMATE DATE OF INSTALLATION FOR THE PROPOSED LANDSCAPE WILL BE FALL 2014.

THE SITE WILL BE MAINTAINED BY THE DEVELOPER IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE CITY OF NOVI ZONING ORDINANCE. THIS INCLUDES WEEDING AND WATERING AS REQUIRED BY NORMAL MAINTENANCE PRACTICES.

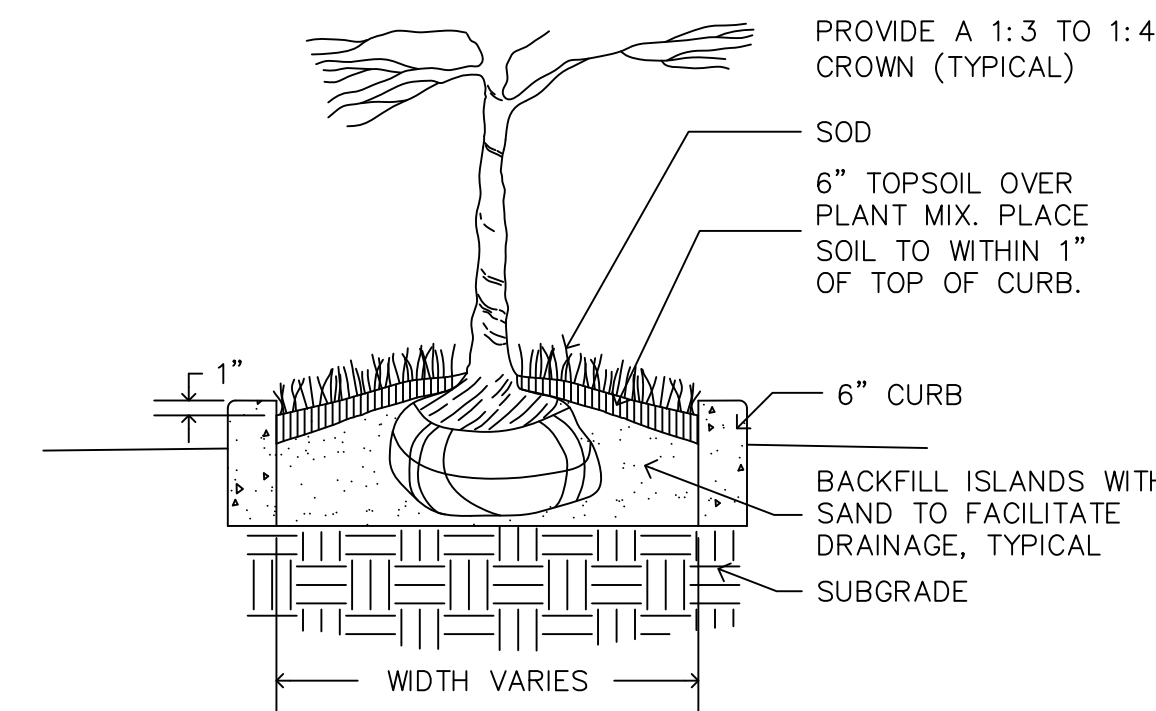
DEVELOPER SHALL BE RESPONSIBLE FOR REPLACING ANY TREES WITHIN UTILITY EASEMENTS THAT ARE DAMAGED THROUGH NORMAL MAINTENANCE OR REPAIRS.

PLANT MATERIALS SHALL BE GUARANTEED FOR 2 YEARS AND SHALL BE MAINTAINED IN ACCORDANCE WITH CITY ORDINANCES. WARRANTY PERIOD BEGINS AT THE TIME OF CITY APPROVAL. WATERING AS NECESSARY SHALL OCCUR DURING THIS WARRANTY PERIOD.



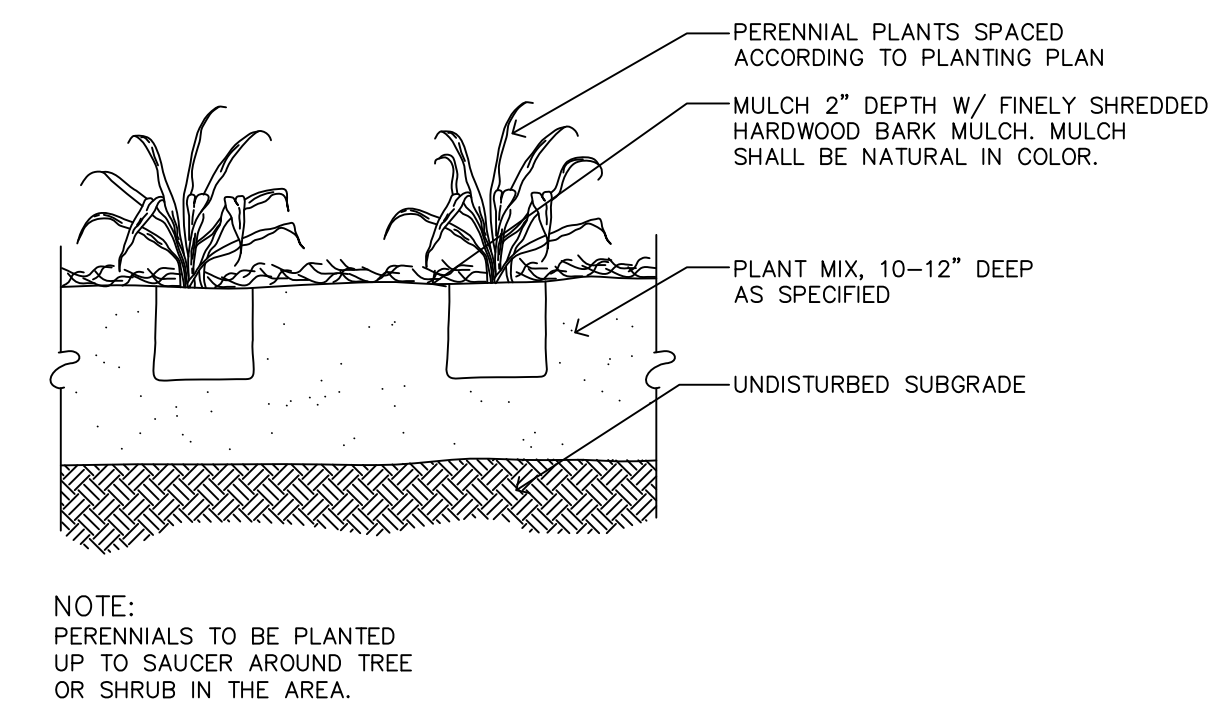
SHRUB PLANTING DETAIL

NTS



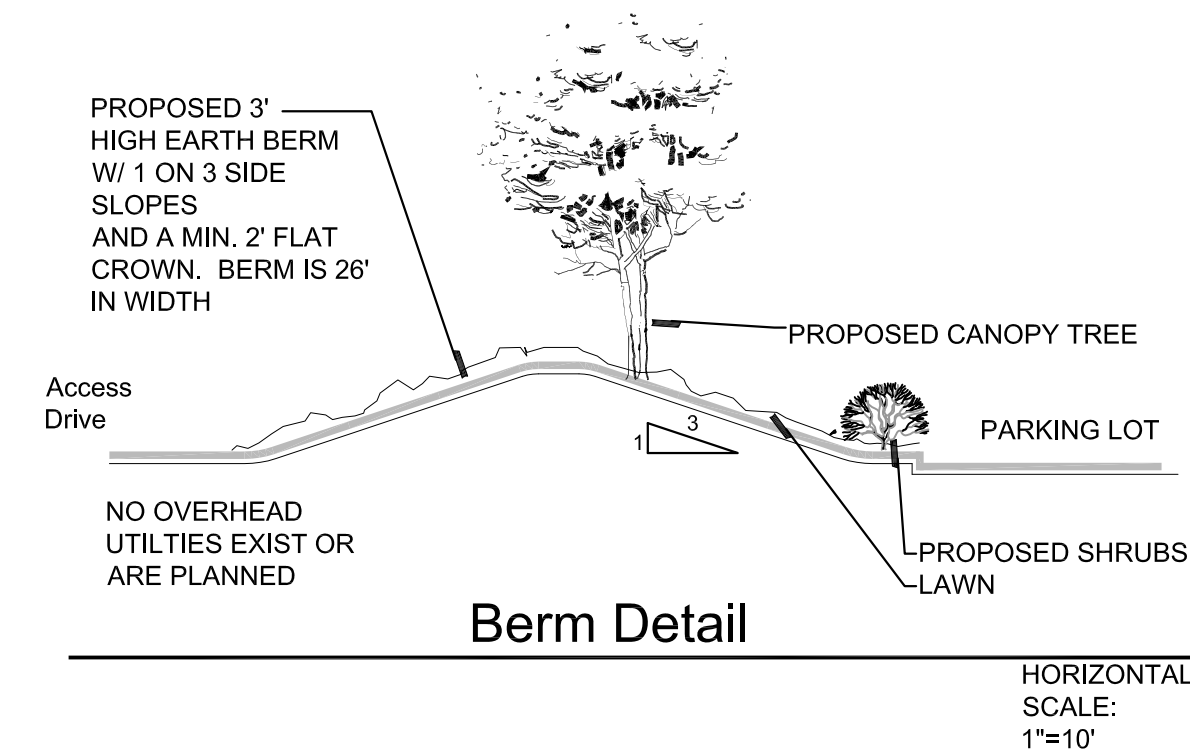
CURBED ISLAND DETAIL

NTS

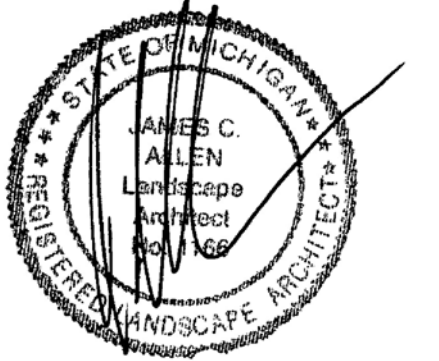


PERENNIAL PLANTING DETAIL

NTS



Seal:



Title:

Landscape Details

Project:

Lot 53
Novi, Michigan

Prepared for:

Amson Dems Development, Inc.
46855 Magellan Dr.
Novi, Michigan 48377

Revision:

Issued:

Submission	January 22, 2014
Revised	February 7, 2014

Job Number:

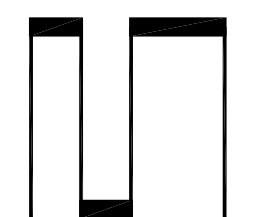
14-001

Drawn By:

jca

Checked By:

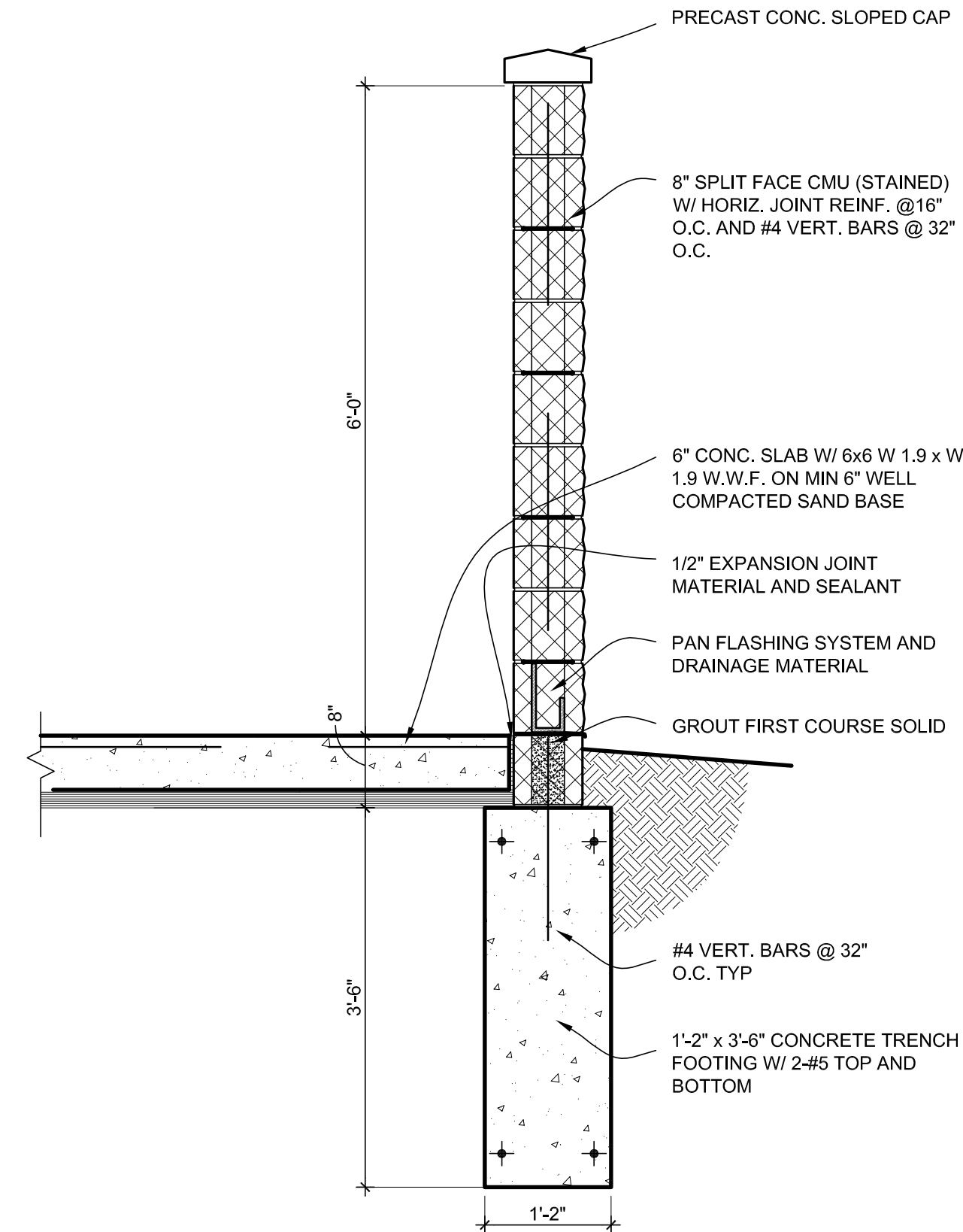
jca



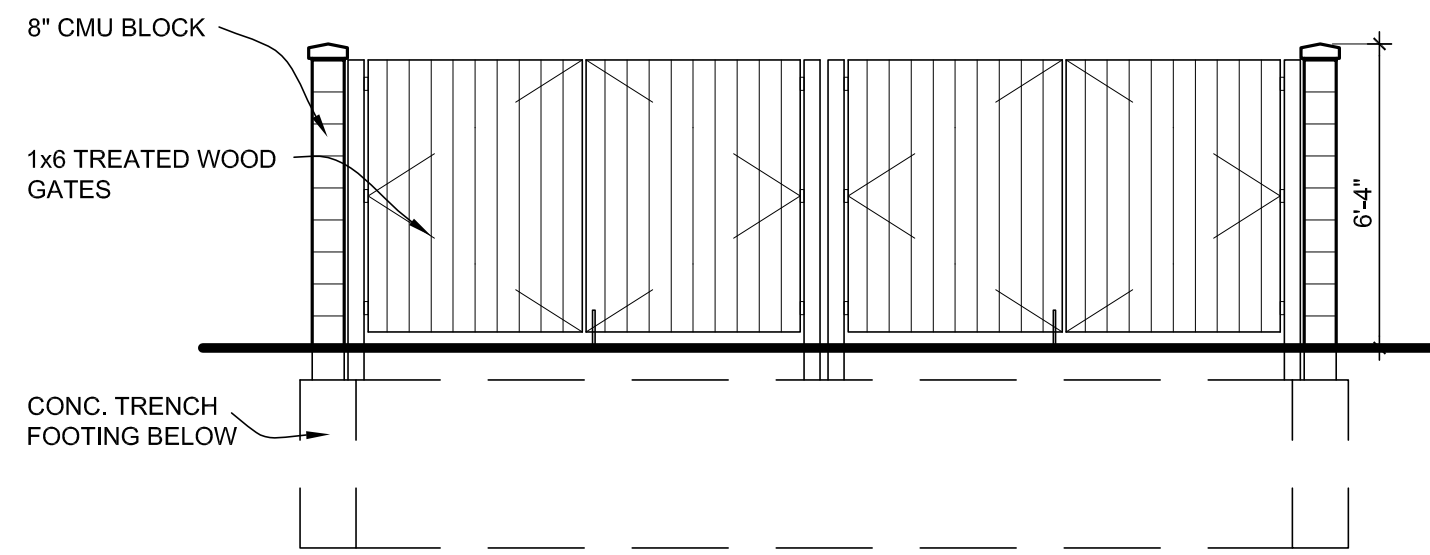
NORTH

Sheet No.

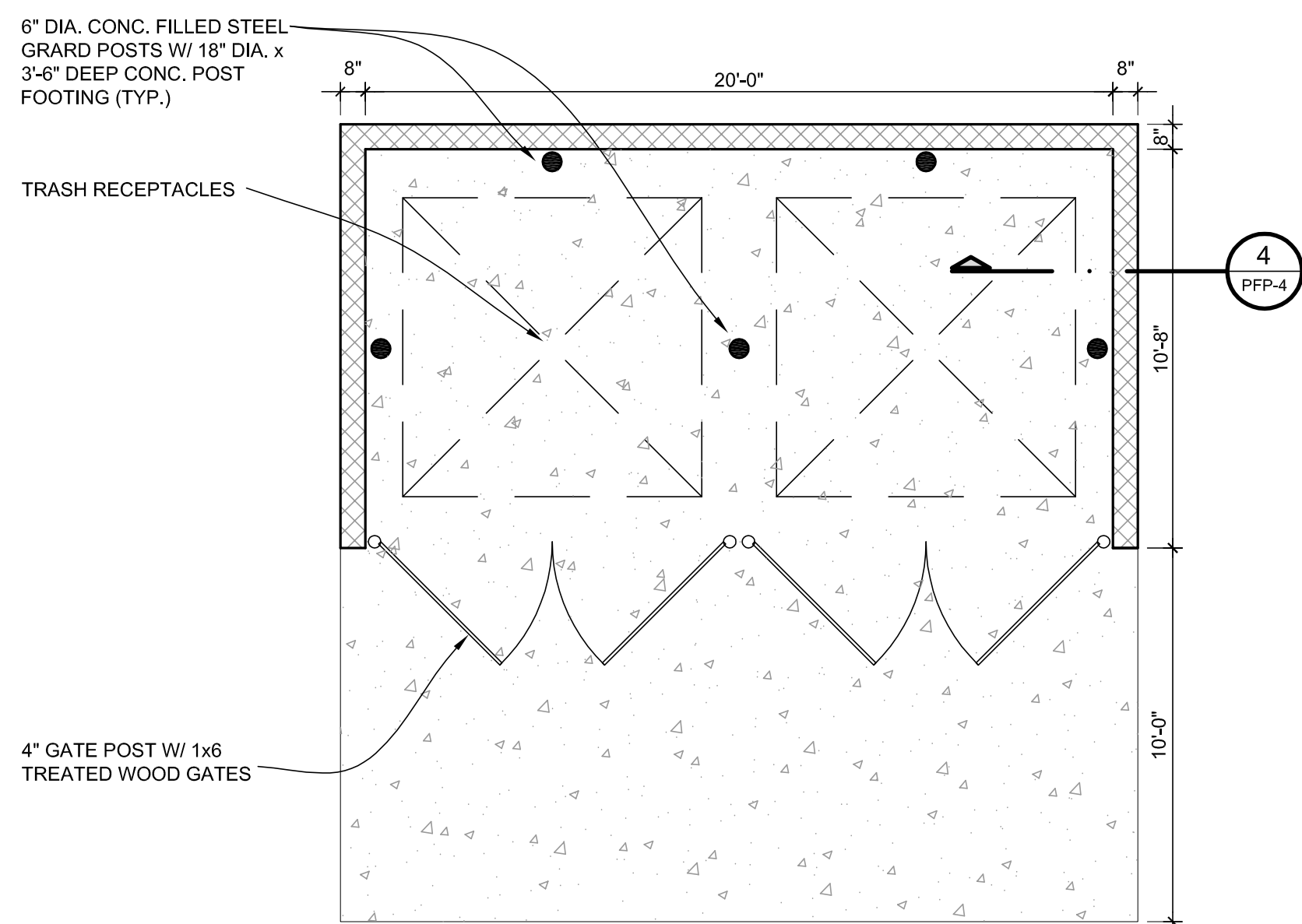




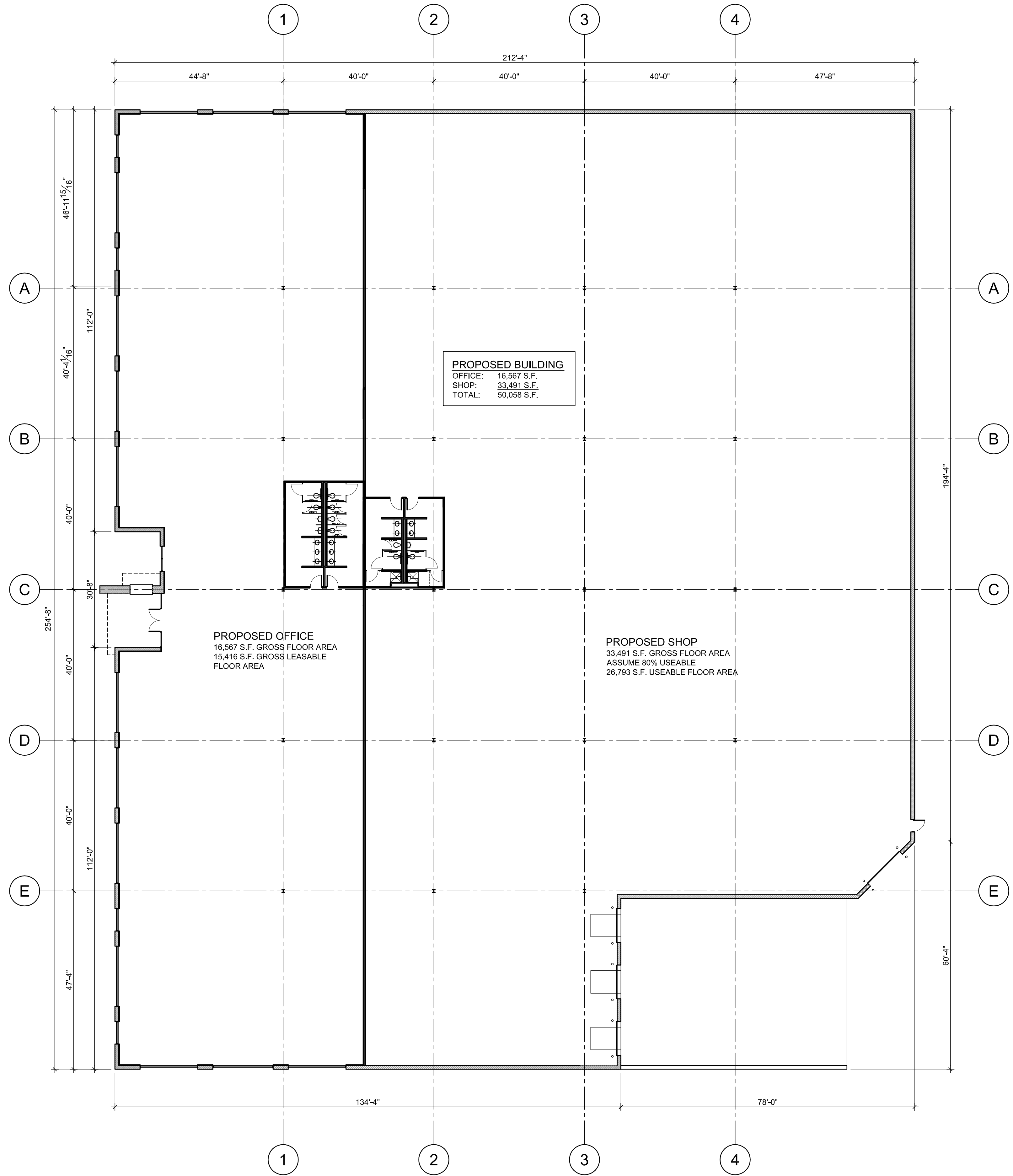
DUMPSTER ENCLOSURE SECTION 4
SCALE: 3/4" = 1'-0"



DUMPSTER ENCLOSURE ELEVATION 3
SCALE: 1/4" = 1'-0"

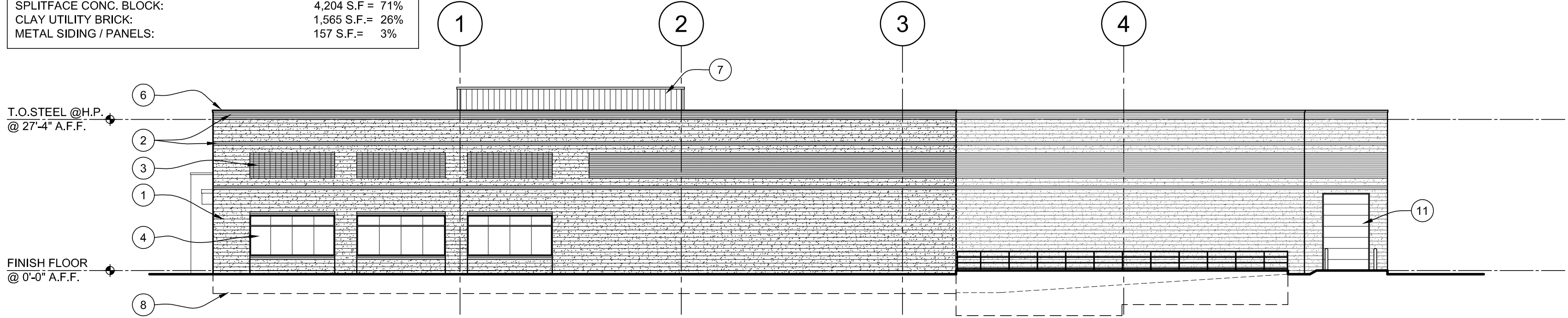


DUMPSTER ENCLOSURE PLAN 2
SCALE: 1/4" = 1'-0"



PRELIMINARY FLOOR PLAN 1
SCALE: 1/16" = 1'-0"

BUILDING FACADE MATERIAL BREAKDOWN
ELEVATION AREA LESS WINDOWS AND DOORS: 5,326 S.F.
SPLITFACE CONC. BLOCK: 4,204 S.F. = 71%
CLAY UTILITY BRICK: 1,565 S.F. = 26%
METAL SIDING / PANELS: 157 S.F. = 3%

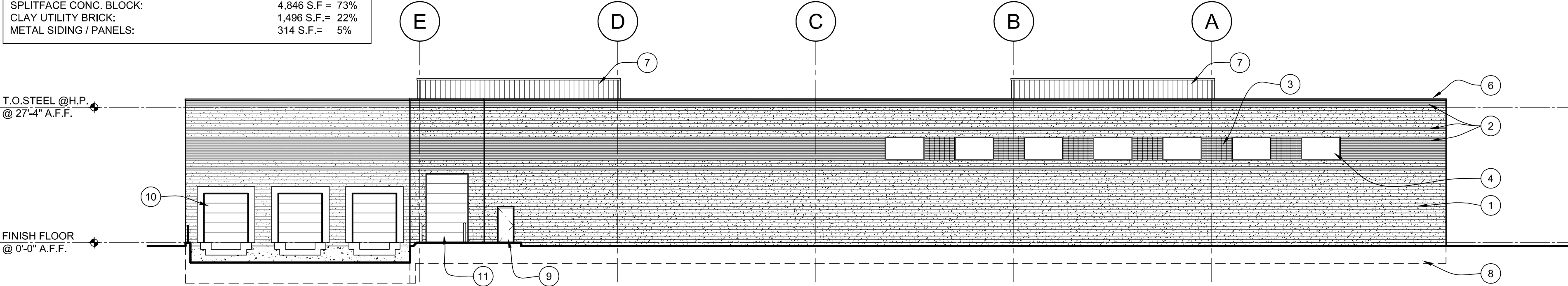


PROPOSED EAST ELEVATION

SCALE: 1/16"=1'-0"

4

BUILDING FACADE MATERIAL BREAKDOWN
ELEVATION AREA LESS WINDOWS AND DOORS: 6,656 S.F.
SPLITFACE CONC. BLOCK: 4,846 S.F. = 73%
CLAY UTILITY BRICK: 1,496 S.F. = 22%
METAL SIDING / PANELS: 314 S.F. = 5%

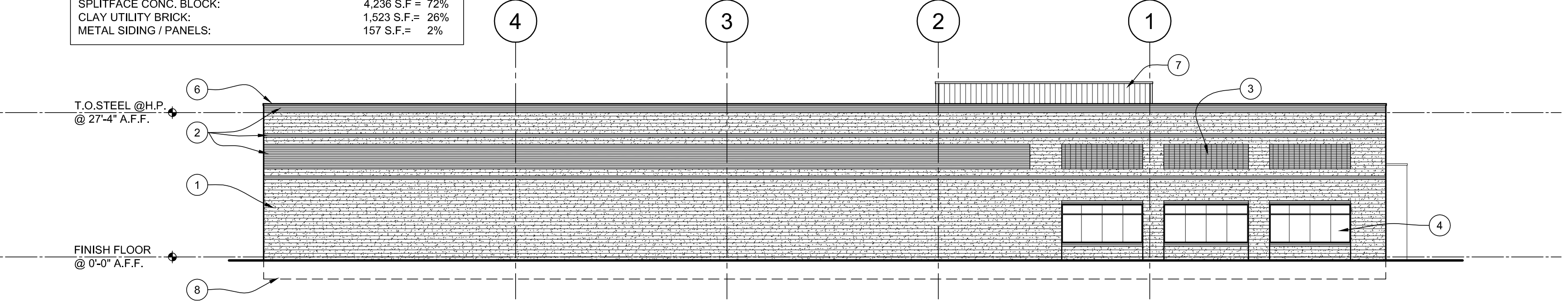


PROPOSED NORTH ELEVATION

SCALE: 1/16"=1'-0"

3

BUILDING FACADE MATERIAL BREAKDOWN
ELEVATION AREA LESS WINDOWS AND DOORS: 5,916 S.F.
SPLITFACE CONC. BLOCK: 4,236 S.F. = 72%
CLAY UTILITY BRICK: 1,523 S.F. = 26%
METAL SIDING / PANELS: 157 S.F. = 2%

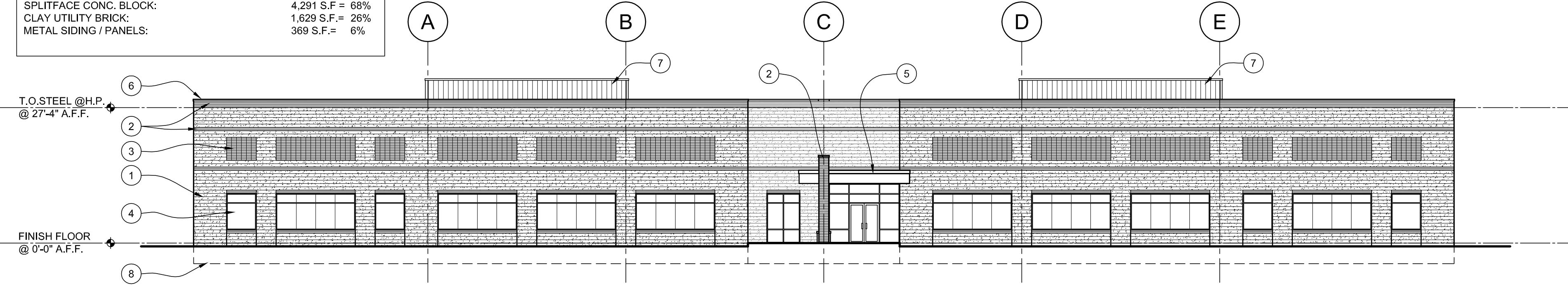


PROPOSED WEST ELEVATION

SCALE: 1/16"=1'-0"

2

BUILDING FACADE MATERIAL BREAKDOWN
ELEVATION AREA LESS WINDOWS AND DOORS: 6,289 S.F.
SPLITFACE CONC. BLOCK: 4,291 S.F. = 68%
CLAY UTILITY BRICK: 1,629 S.F. = 26%
METAL SIDING / PANELS: 369 S.F. = 6%



PROPOSED SOUTH ELEVATION

SCALE: 1/16"=1'-0"

1

EXTERIOR MATERIAL SCHEDULE

1	SPLITFACE CMU STAINED FINISH
2	UTILITY BRICK
3	UTILITY BRICK STACK BOND ACCENT
4	1" TINTED LOW 'E' INSUL. GLAZING IN CLEAR ANOD. ALUM. THERMAL BREAK FRAMES.
5	ALUMINUM COMPOSITE METAL PANEL SYSTEM (ACM)
6	PREFINISHED METAL COPING
7	PREFINISHED METAL PANEL R.T.U. SCREEN
8	CONC. TRENCH FOOTING BELOW
9	3'x7' H.M. DOOR AND FRAME
10	9'x10' SECTIONAL INSULATED OVERHEAD TRUCK DOCK DOOR (MANUAL CHAIN OPERATED) w/ DOCK LEVELER, & SHELTER/SEAL
11	12'x14' SECTIONAL INSULATED OVERHEAD GRADE DOOR w/ MOTOR OPERATED OPENER

PROPOSED 50,000 S.F. SPEC BUILDING
NOVI, MI

ISSUED FOR:
PRE-APPLICATION SUBMITTAL
SITE PLAN APPROVAL

DATE:
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