

1973 1977 MARSHALL AVENUE APARTMENTS



MCR Property Holdings, LLC
MARSHALL & MOORE APARTMENTS
SAINT PAUL, MINNESOTA

VIEW FROM SOUTHWEST

SITE PLAN REVIEW
12/28/2017
51666-17088

PROJECT TEAM:

OWNER:
MCR PROPERTY HOLDINGS, LLC
10921 EXCELSIOR BLVD SUITE 106
HOPKINS, MN 55343
(612) 282-3615
JON SCHWARTZMAN

ARCHITECT:
POPE ARCHITECTS, INC.
1295 BANDANA BLVD N SUITE 200
SAINT PAUL, MN 55108
(651) 642-9200
PAUL HOLMES

CIVIL ENGINEER:
LARSON ENGINEERING, INC.
3524 LABORE ROAD
WHITE BEAR LAKE, MN 55110
(651) 481-9120
ERIC MEYER

LIGHTING CONSULTANT:
EMANUELSON-PODAS C.E.
7705 BUSH LAKE ROAD
EDINA, MN 55439
(952) 930-0050
DANNY JOHNSON

POPE
ARCHITECTS

UNIT DATA

	3 BEDRM	4 BEDRM	TOTAL BEDS
FIRST FL -		1 UNIT	4 BEDS
SECOND FL -	1 UNIT	3 UNITS	15 BEDS
THIRD FL -	1 UNIT	3 UNITS	15 BEDS
FOURTH FL -	1 UNIT	3 UNITS	15 BEDS
FIFTH FL -		3 UNITS	12 BEDS
TOTAL -	3 UNITS	13 UNITS	61 BEDS

PARKING DATA

PARKING REQ.		
3 - 3 BR UNITS X (1.5 CARS PER UNIT) =		4.5 CARS
13- 4 BR UNITS X (2 CARS PER UNIT) =		26 CARS
TOTAL		30 CARS

PARKING PROVIDED

BELOW GRADE PARKING - (ENCLOSED)	9 STANDARD CARS 13 COMPACT CARS
FIRST FLOOR PARKING - (ENCLOSED)	4 STANDARD CARS 2 HANDICAPPED CARS 2 COMPACT CARS
TOTAL	30 CARS
BICYCLE PARKING	9 BIKES

LOT AREA DATA

16 units - @ 1,500 SF =	TOTAL	24,000 SF
LOT DIMENSIONS FR AREA =	99.8 X 141.9	14,171 SF
1/2 ALLEY=	10 x 99.8	998 SF
30 ENCLOSED STALLS X 300 =	BONUS	9,000 SF
		24,169 SF

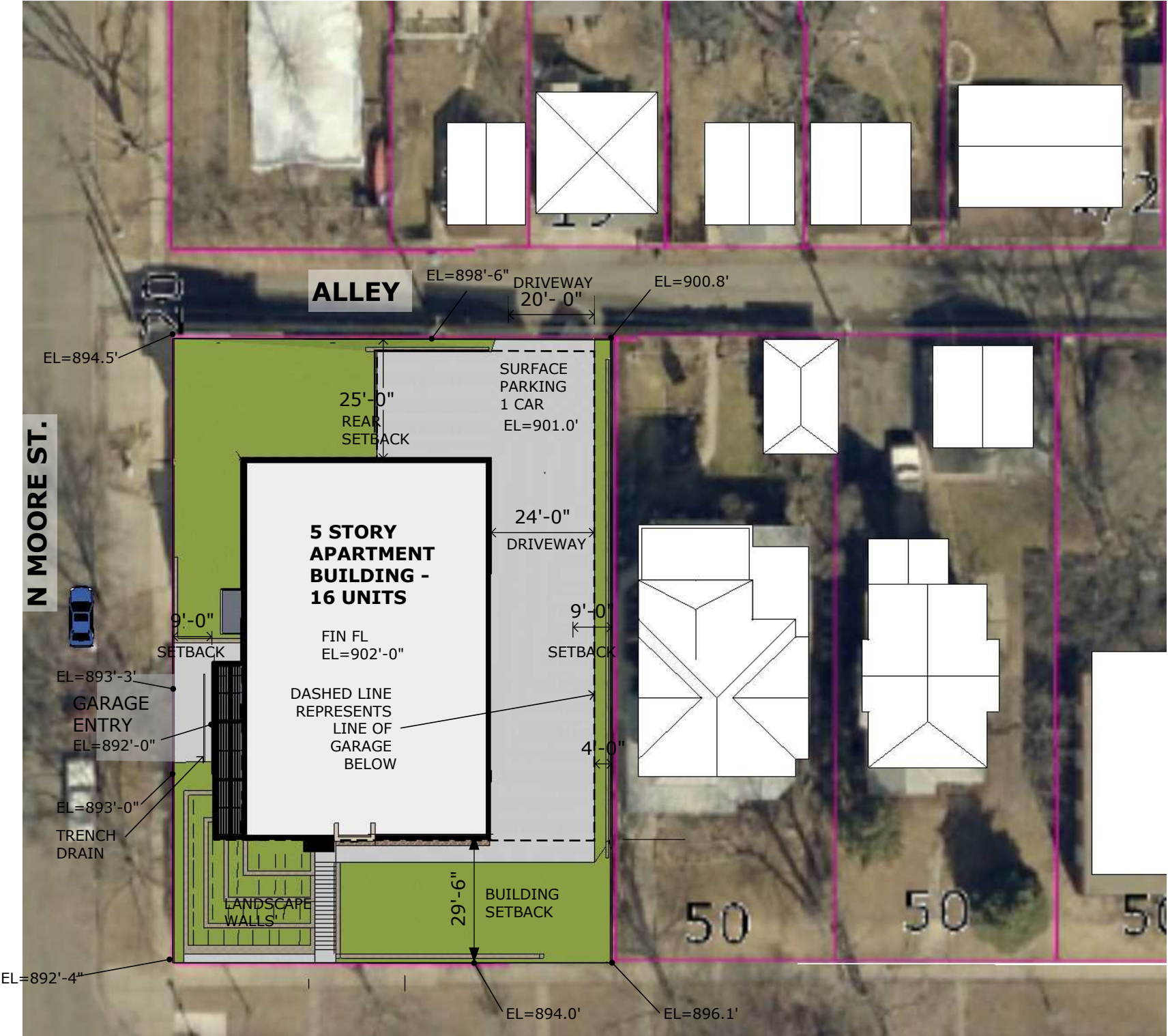
LOT COVERAGE:

LOT AREA:	14,171 SF	
1/2 ALLEY:	998 SF	
	15,169 SF	= 5,285 SF @35%

BLDG AREA:	5,190 SF	
WEST TERRACE AREA:	INC ABOVE	
WEST BALCONY AREA:	49 SF	
	5,239 SF	COVERAGE RATIO: = less than 35%

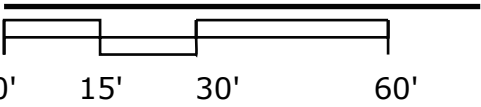
MCR Property Holdings, LLC
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SAINT PAUL, MINNESOTA

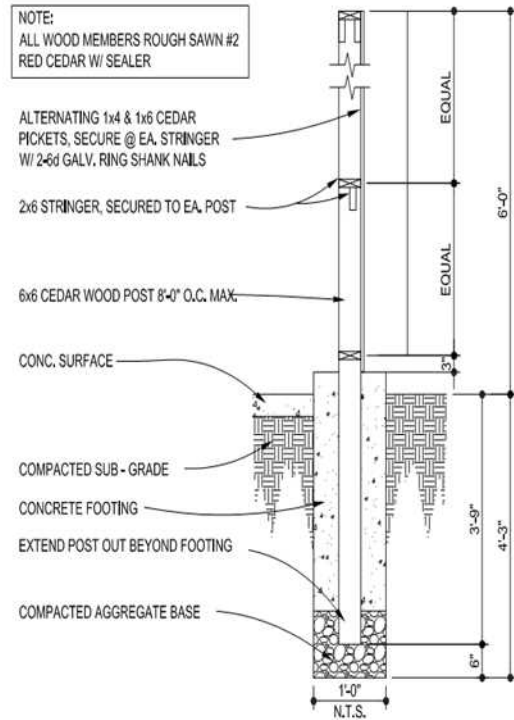
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MARSHALL AVE

SITE PLAN



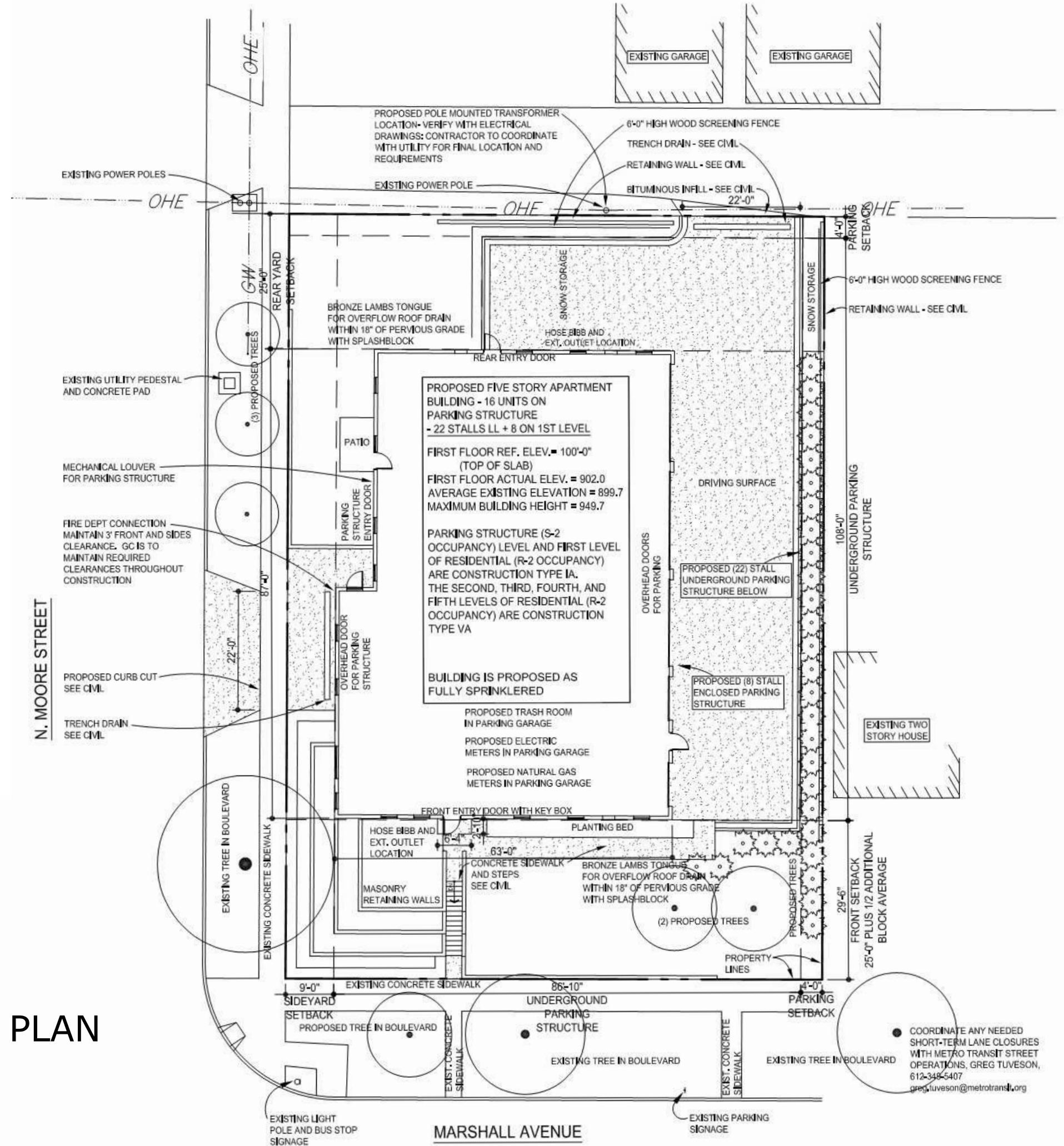
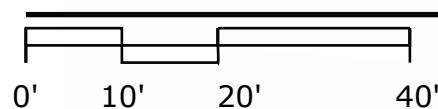


FENCE DETAIL

MCR Property Holdings, LLC MARSHALL & MOORE APARTMENTS SAINT PAUL, MINNESOTA

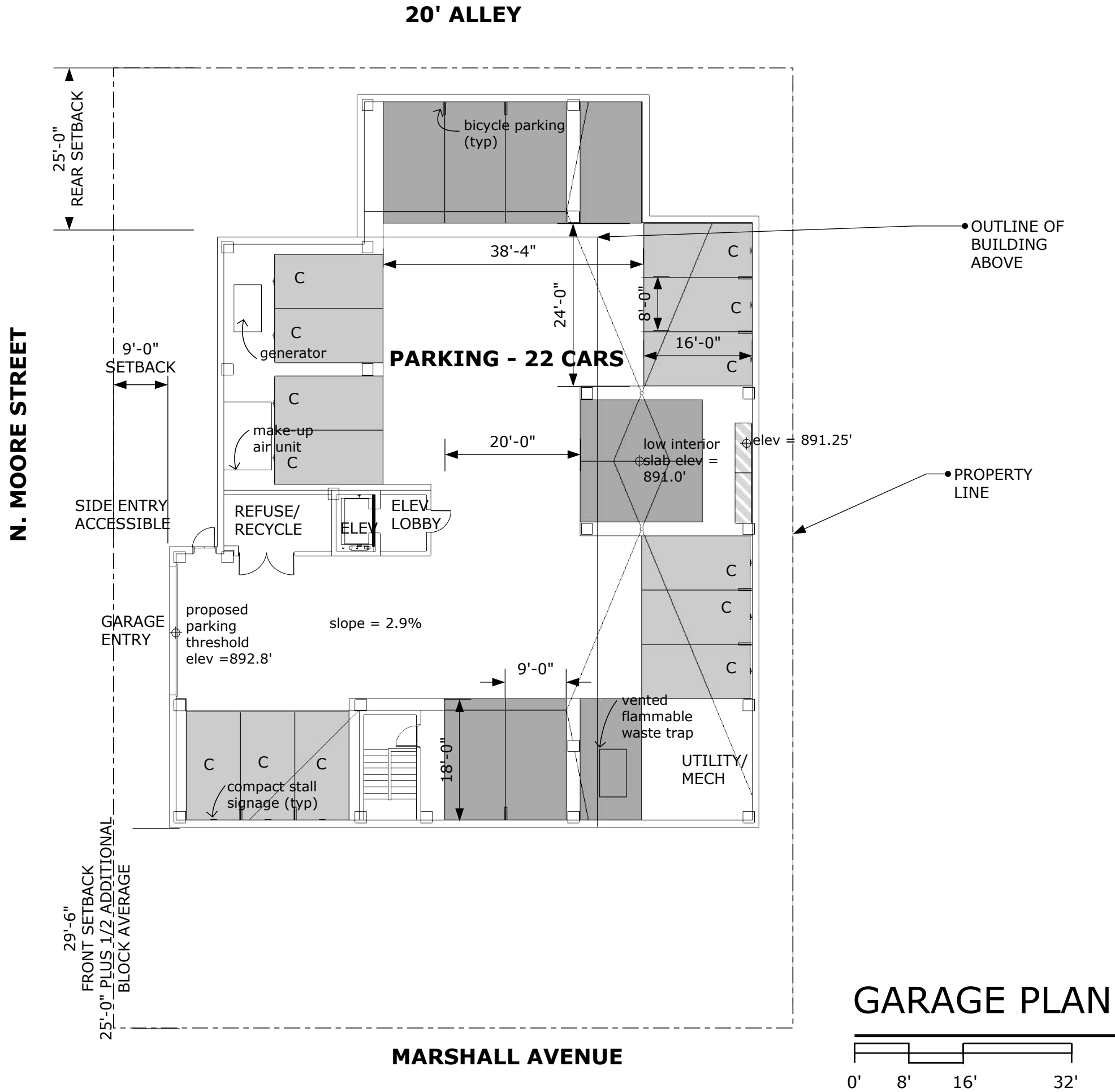
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ARCHITECTURAL SITE PLAN



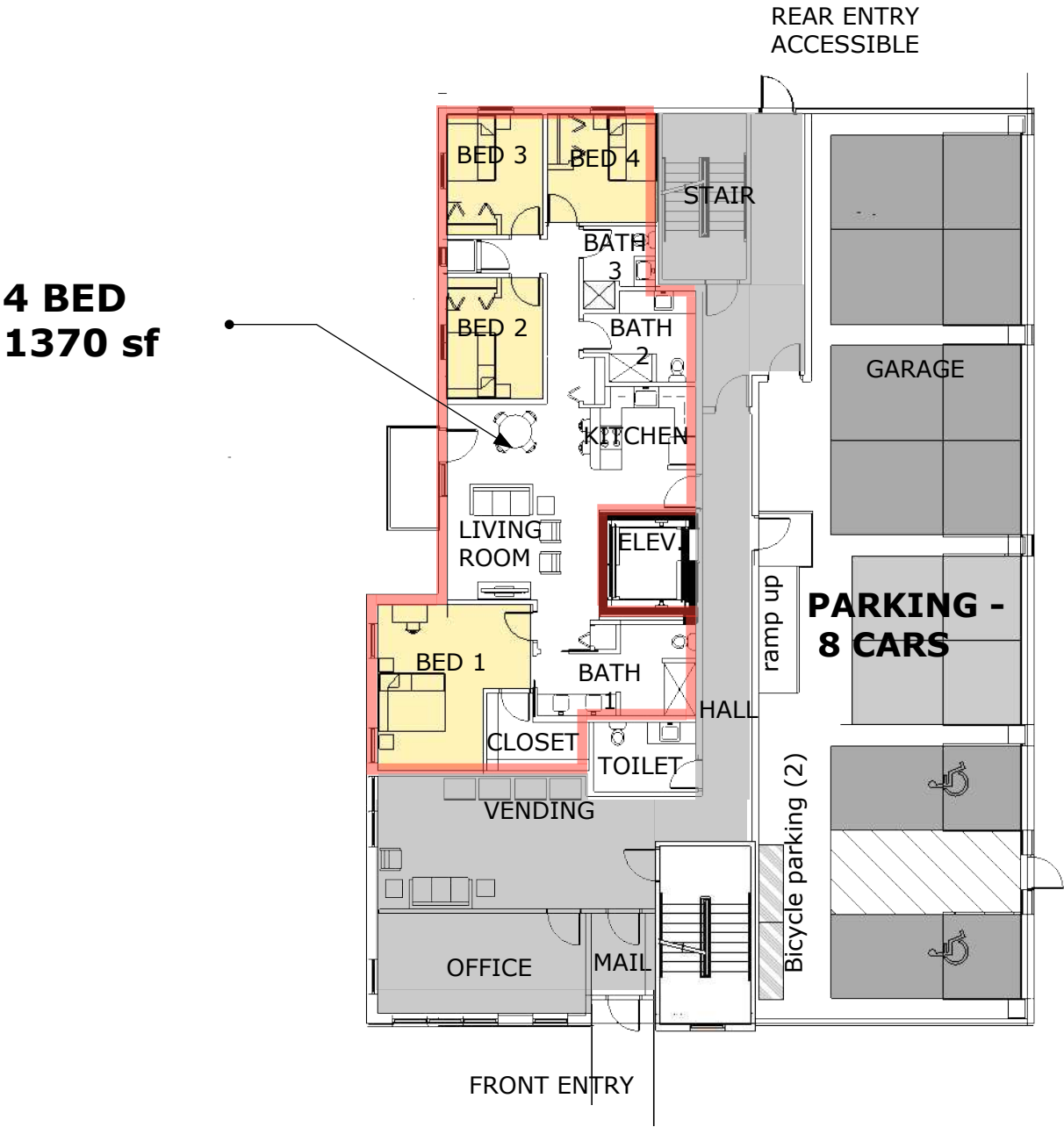
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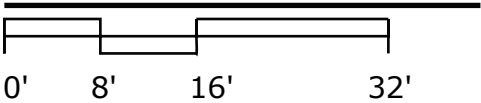


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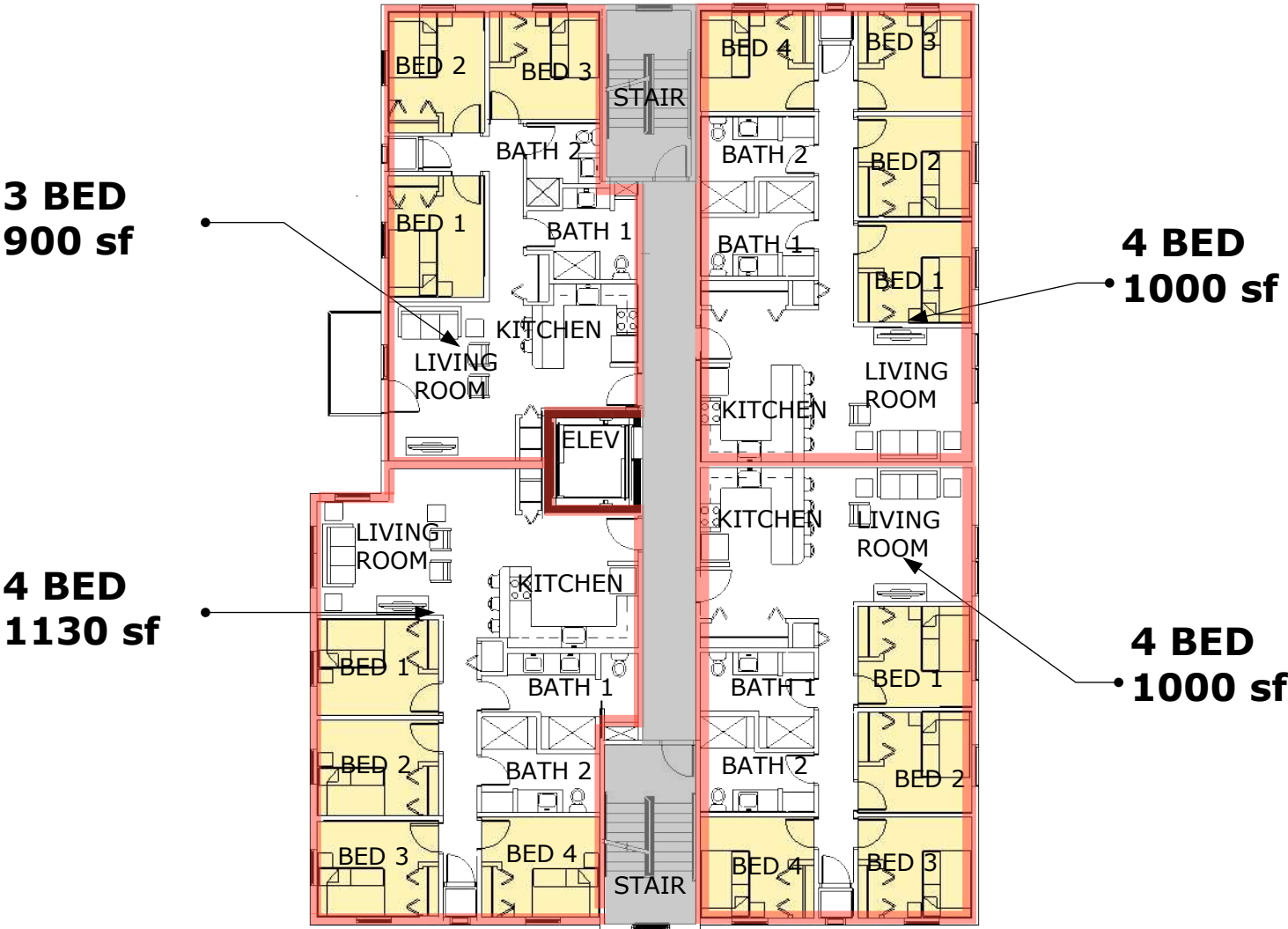


GROUND FLOOR
PLAN

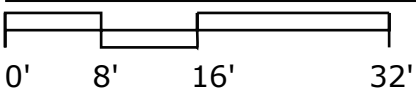


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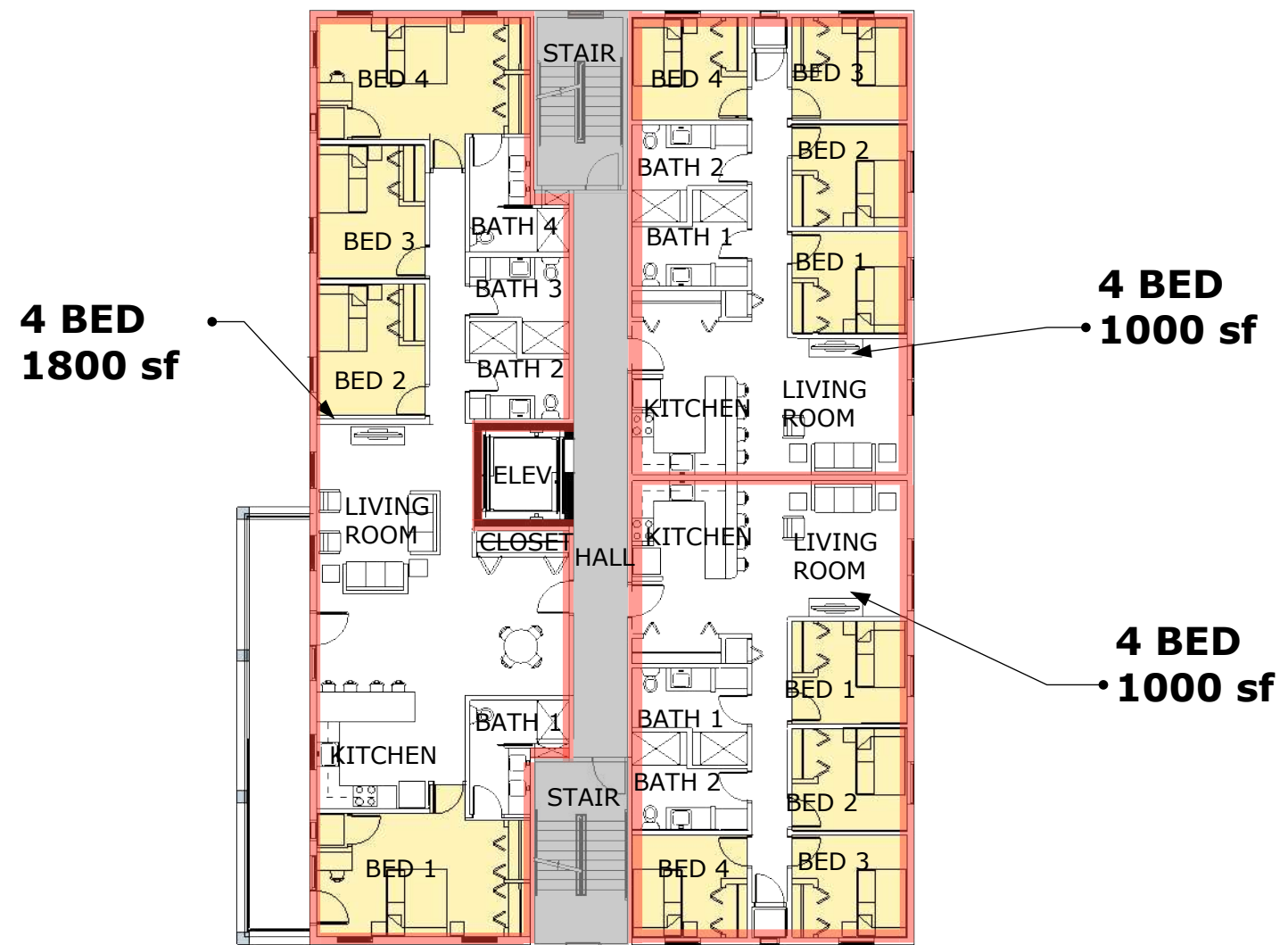


FLOOR PLAN -
2nd-4th LEVELS



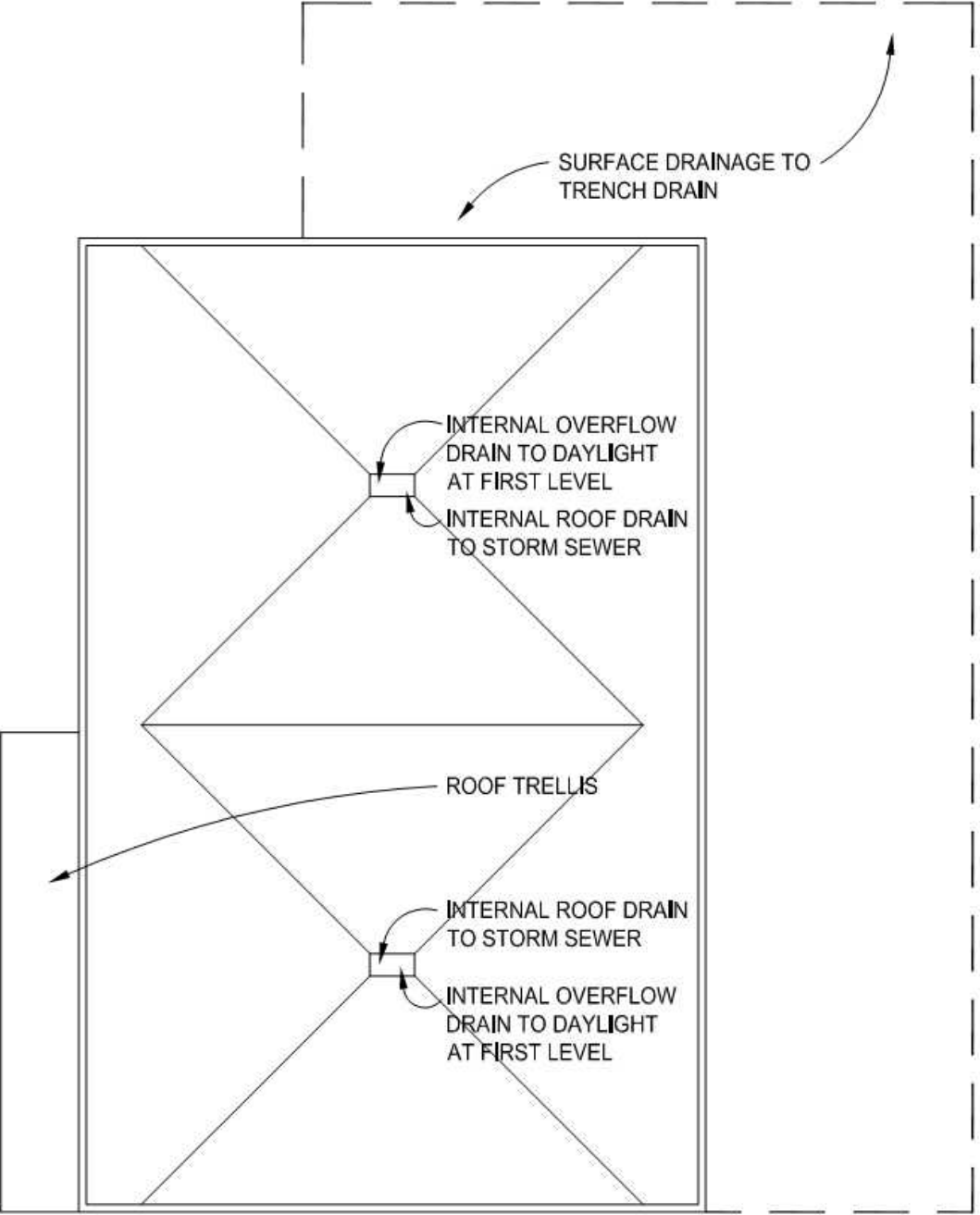
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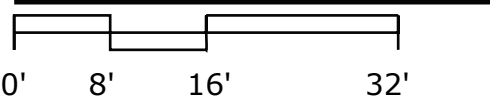


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ROOF PLAN





WEST ELEVATION

21.02% glass

SOUTH ELEVATION

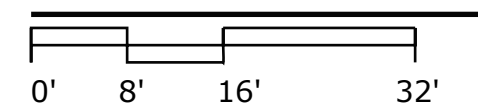
17.21% glass

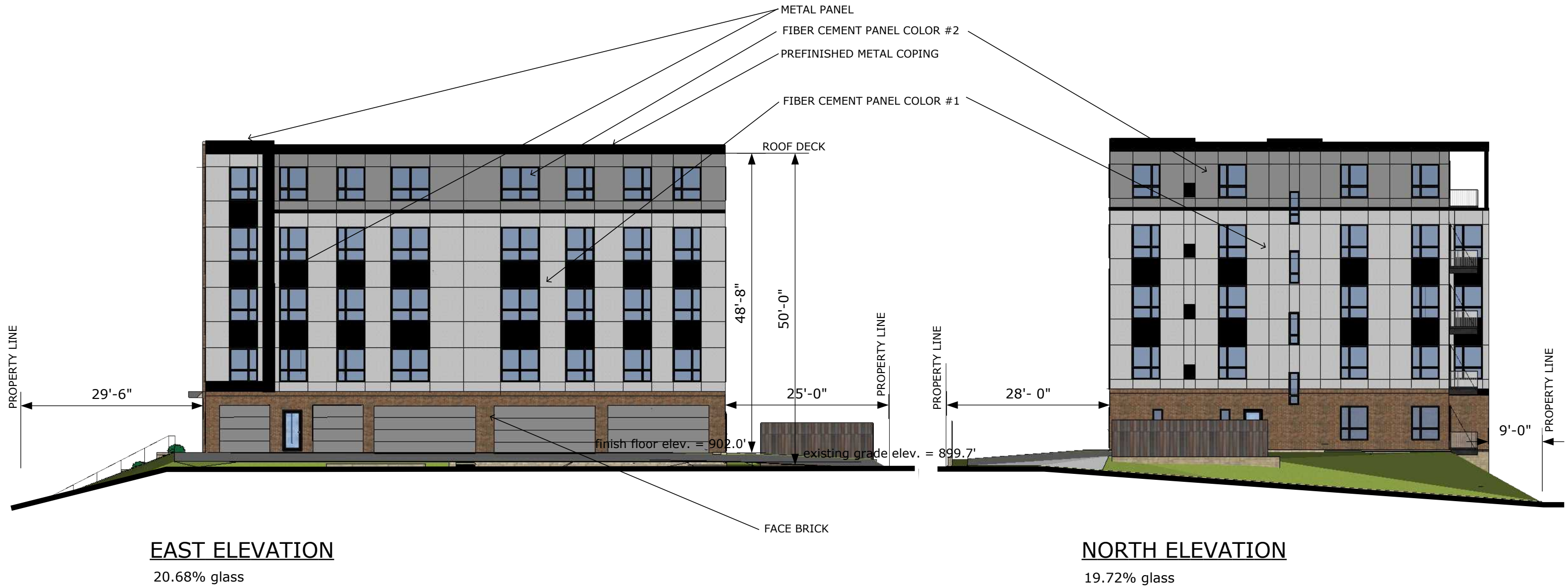
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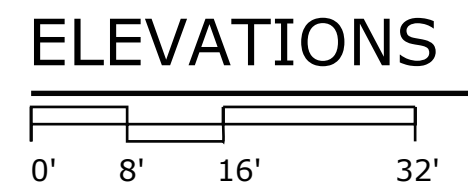
ELEVATIONS

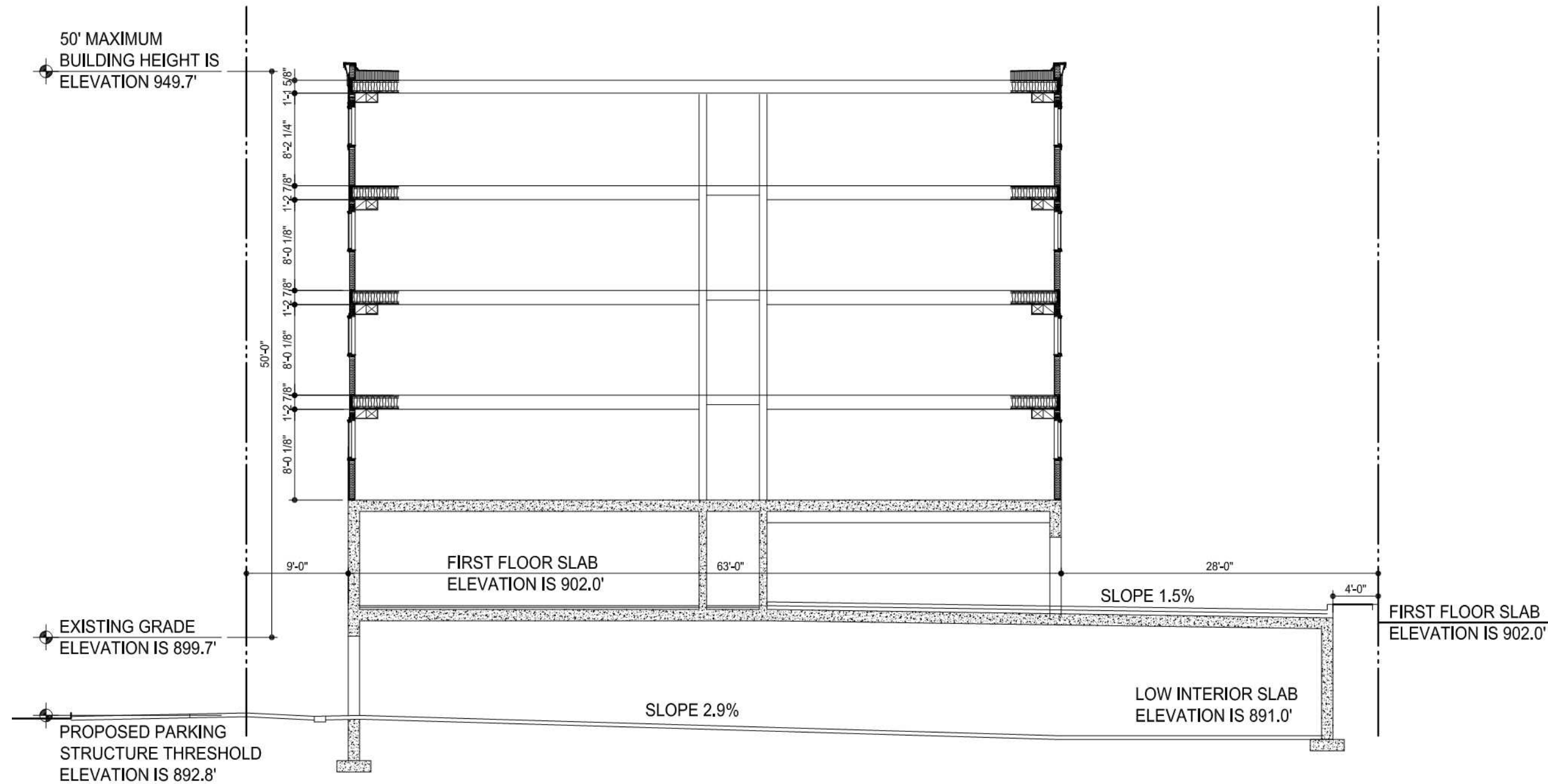




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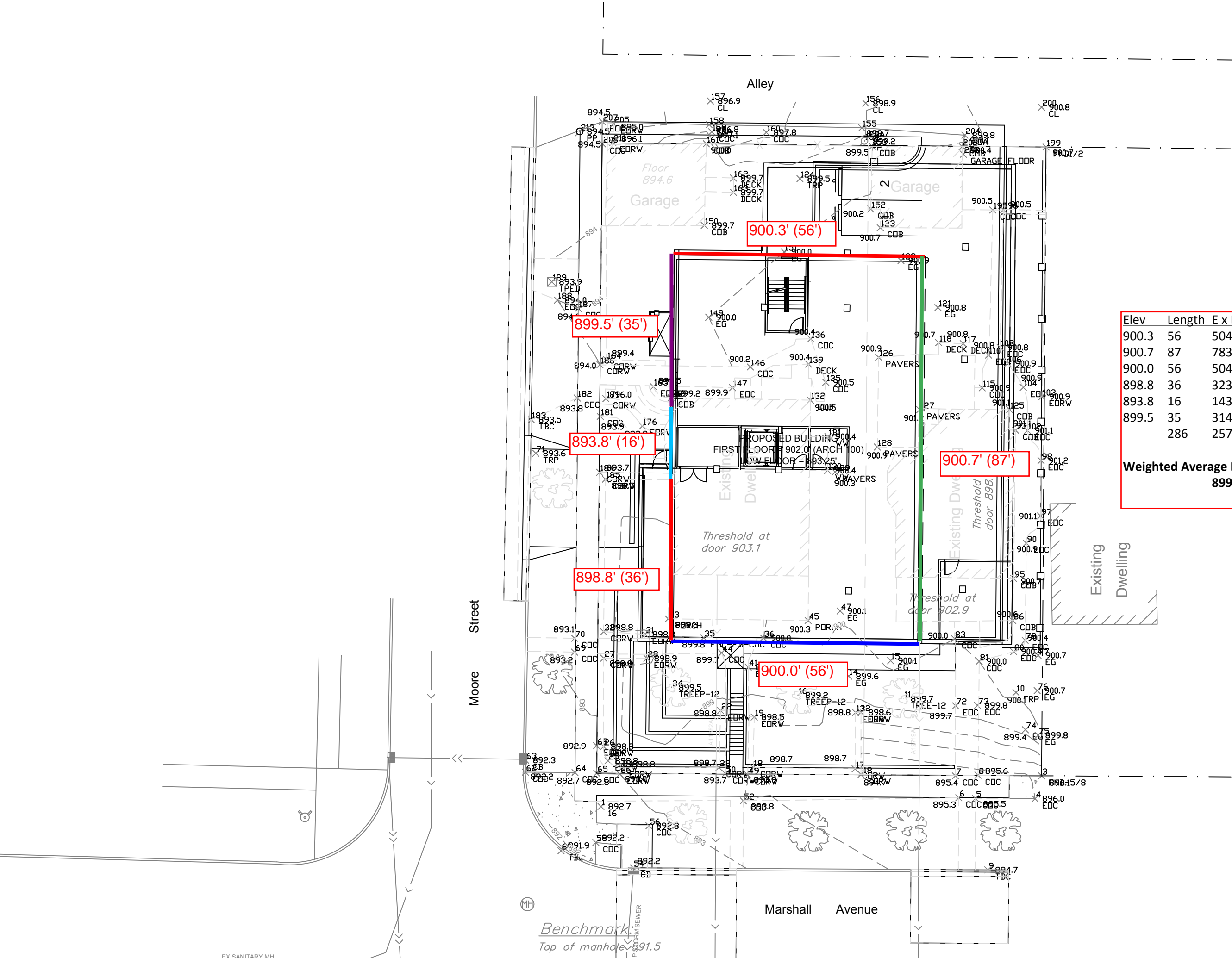


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BUILDING SECTION
 NOT TO SCALE



Lot □, □lo□□, M□RR□□M□ R□□RR□□□□M□□□ □□L□C□□ □□, □□, □□, □□, □□ M□RR□□M□ P□R□, R□□sey Co□nty, Minnesot□, e□□ept t□e □ est □□eet t□ere□□

☐e ☐ est ☐ eet o☐Lot ☐, end ☐l o☐Lot ☐, ☐lo☐☐, M☐RR☐M☐ R☐RR☐☐☐M☐☐☐ ☐☐ L☐C☐☐
☐, ☐, ☐, ☐, ☐, ☐M☐RR☐MP☐R☐, R☐sey Co☐nty, Minnesot☐

Lots and Blooms, Minnesota Real Estate LLC, LLC, LLC, LLC, LLC
Minnesota Professional Real Estate Company, Minnesota

☐ Confirming the length and direction of boundary lines of the legal description listed above the scope of our services does not include determining what you own, what is legal matter. Please see the legal description of your records or consult with competent legal counsel, if necessary, to make sure that it is correct and that any matters of record, such as easements, that you wish to be included on the survey have been shown.

☐ Confirming the location of bordered existing improvements is deemed necessary for the survey.

☐ Setting survey markers or verifying existing survey markers to establish the corners of the property.

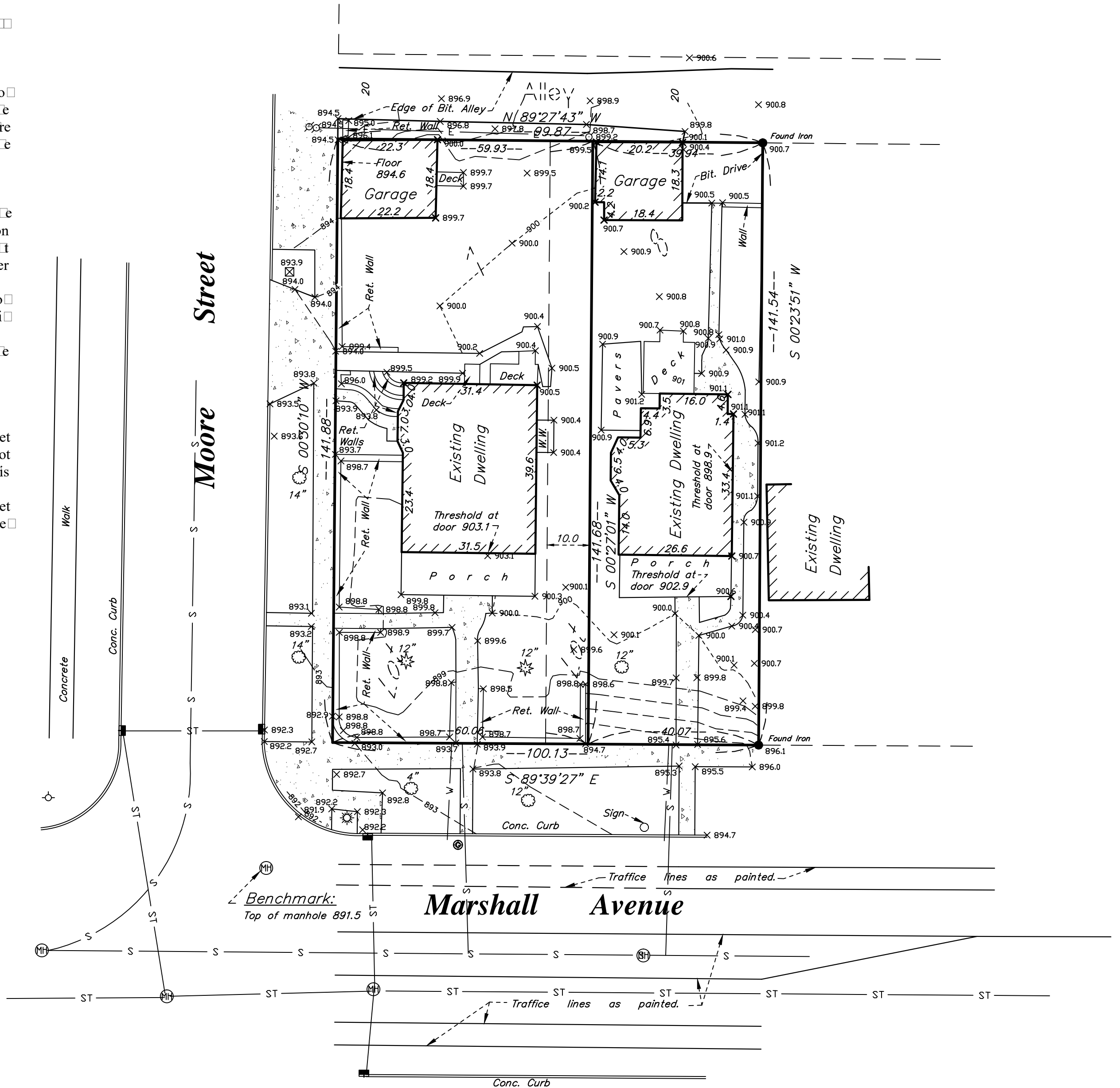
☐ Confirming elevations on the site of selected locations to give some indication of the topography of the site. We also provided benchmark for your use in determining elevations for construction on this site. These elevations shown relate only to the benchmark provided on this survey. Use of benchmark and the at least one other future shown on the survey can determine other elevations for use on this site or before beginning construction.

☐ We show proposed division of the property. Please review the proposal to see that it is what you intend and submit it to those governmental agencies that have jurisdiction to obtain their approvals, if you own, before making any decisions regarding the property.


















☐ Note that all building dimensions and building tie dimensions to the property lines, are then for the siding and or stob of the building.

[illegible]

"●" denotes iron spray or fer, set, unless otherwise noted




LEGEND

	= CATCH BASIN
	= FIRE HYDRANT
	= POWER POLE
	= MANHOLE
	= TELEPHONE PED.
	= ELEC. TRANSFORMER
	= WELL
	= GATE VALVE
	= LIGHT POLE
	= TREE
	= FENCE LINE
	= SANITARY SEWER LINE
	= WATER LINE
	= GAS LINE
	= STORM DRAIN LINE
	= OVERHEAD UTILITY LINE
	= CONCRETE SURFACE

DATE	REVISION DESCRIPTION
11/13/17	ADD UTILITIES AND ROAD WIDTHS

DRAWING ORIENTATION & SCALE


SCALE - 1" = 20'



□

□ □

□ □



CLIENT NAME / JOB ADDRESS

MCR PROPERTY HOLDINGS, LLC

1973 & 1977 MARSHALL AVENUE

ST. PAUL, MN

Advance
Surveying & Engineering, Co.

17917 Highway 7
Minnetonka Minnesota 55345
Phone (952) 474-7914
Web www.advsur.co

I HEREBY CERTIFY THAT THIS PLAN, SURVEY OR REPORT
WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A DULY REGISTERED LAND SURVEYOR
UNDER THE LAWS OF THE STATE OF MINNESOTA.

Thos M Bloo

Thos M Bloo

☐ 42379

LICENSE NO.

☐ UNE 14:2017

DATE

DATE SURVEYED: JUNE 12, 2017

DATE DRAFTED: JUNE 14, 2017

<u>SHEET TITLE</u> <i>EXISTING CONDITIONS SURVEY</i>
<u>DRAWING NUMBER</u> <i>171283</i>

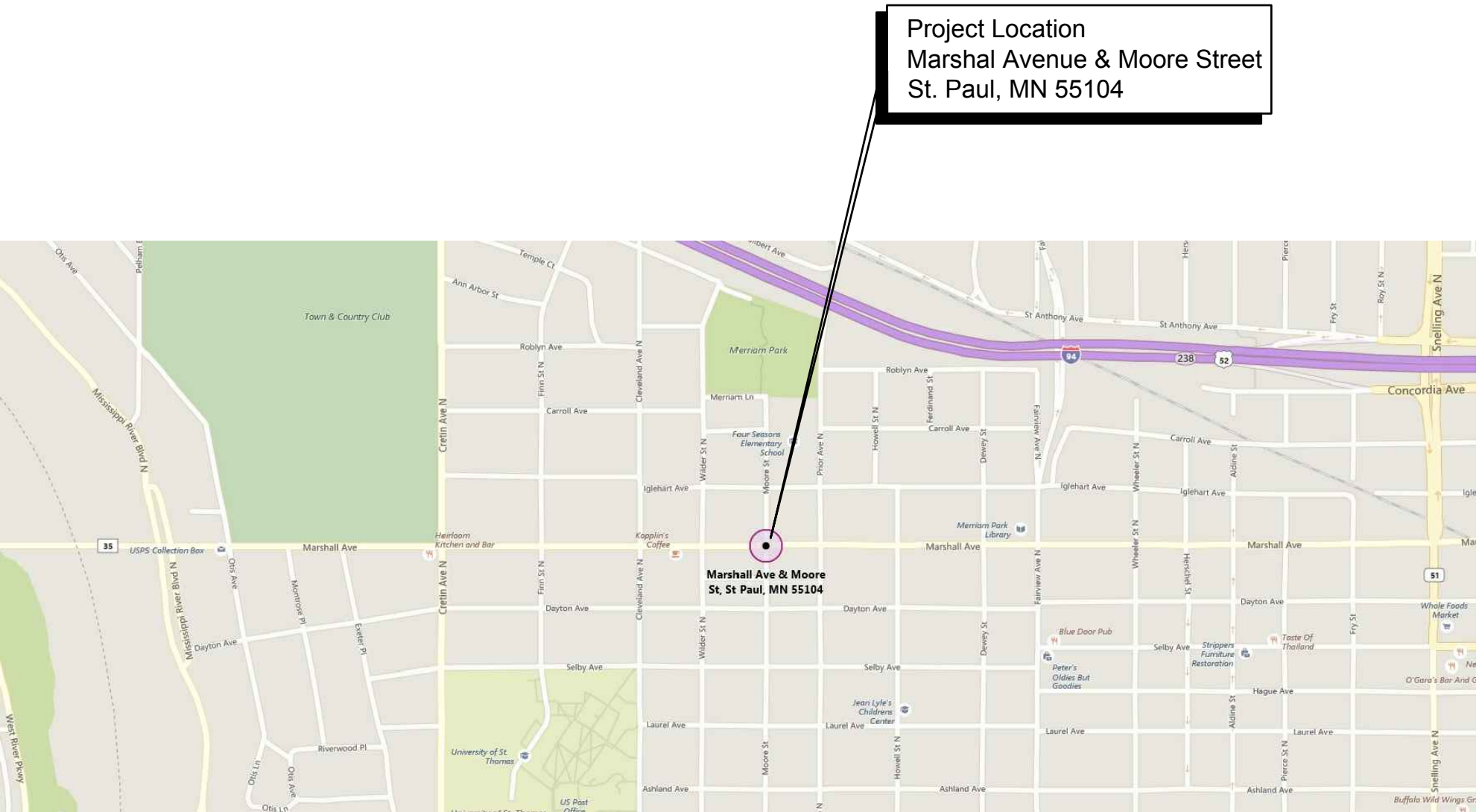
SHEET SIZE 17 X 22

SHEET NO.

S1

SHEET 1 OF 1

VICINITY MAP



GENERAL PLAN NOTES

TRAFFIC:
INSPECTION CONTACT: The developer shall contact the Right of Way inspection Dick Rohland, (651) 485-1688 (one week prior to beginning work) to discuss traffic control, pedestrian safety and coordination of all work in the public right of way. Note: If a one week notice is not provided to the City, any resulting delays shall be the sole responsibility of the Contractor. As part of the ROW permitting process, two weeks before any work begins that impacts the ROW in any way the developer shall provide to the ROW Inspector the name and contact information of the Construction Project Manager or Construction Project Superintendent. If this information is not provided there may be a delay in obtaining permits for the work in the ROW. Said delays will be the sole responsibility of the developer.

SAFE WORK SITE REQUIREMENTS: The Contractor shall provide a continuous, accessible and safe pedestrian walkway that meets ADA and MN MUTCD standards if working in a sidewalk area, and traffic control per MN MUTCD requirements for work in the public right of way.

NO PRIVATE FACILITIES IN THE RIGHT OF WAY: The developer is strictly prohibited from installing private electrical wiring, conduit, receptacles and/or lighting in the City's Right of Way. This includes stubbing conduit or cable into the public right of way to accommodate utility feeds to the site. Coordinate with each utility prior to construction to determine feed points into the property. Utilities are responsible for securing excavation permits to run their service into a site, and (where required) submitting plans for review by the Public Works Utility Review Committee. The contractor shall contact Don Bjorkman, Street Lighting Division of the Department of Public Works (612-266-9780).

The Contractor shall contact Don Bjorkman, General Foreman, Lighting - Signal Maintenance, (651-266-9780), if removal or relocation of existing facilities is required or in the event of damage to the lighting or signal utilities. The Contractor shall assume responsibility (and related costs) for any damage or relocations.

Access to signal controller and lighting cabinets must be maintained at all times. If fencing is required for a job site, a key or other means of access must be provided to the City of St. Paul's Traffic Operations Department. Contact Don Bjorkman, General Foreman Signals and Lighting at 651.266.9780 for more information.

ROADWAY RESTORATION policy, restoration on roadway surfaces less than 5 years old will require full width mill and overlay or additional degradation fees. Degradation fees are determined by contacting the Right of Way Service Desk at (651) 266-6151. Pavement restoration shall be completed by the St. Paul Public Works Street Maintenance Division. All related costs are the responsibility of the developer/contractor. Contact Street Maintenance at (651) 266-9700 for estimate of costs for pavement restoration.

ENCROACHMENTS: Per Chapter 134 of the Legislative Code, no person shall construct and maintain any projection or encroachment within the public right-of-way. Construction of the development that necessitates temporary use of the Right-of-Way (ROW) for construction purposes shall be limited to equipment, personnel, devices and apparatuses that are removable following construction. Encroachment permits will not be granted for devices such as tie backs, rock bolts, H-piles, lagging, timbers, sheet piling, etc. that the owner is seeking to abandon in the ROW. Section 3201.3 of the Minnesota Building Code defers final authority of encroachments into public rights-of-way/public property to the local authority. City Legislative Code governs management of the public rights-of-way. Provided such installations are approved by Public Works, footings may be allowed to encroach into City ROW no more than twelve (12) inches at depths below eight (8) feet as provided for in Minnesota Building Code Section 3202.1. Said encroachments would require an encroachment permit from the City per Chapter 134 of the Legislative Code. Encroachments into County or State ROW are not allowed unless authorization has been granted from said agency. Marshall Avenue is a County facility.

SIGNING: Signs regulating parking and/or traffic on private property shall be installed by the property owner or contractor outside of the public right-of-way (ROW). Removal of signs within the public ROW shall be completed by the City. New signs or the reinstallation of existing signs, as approved by Public Works Traffic Engineering, regulating parking and/or traffic in the public ROW for this development shall be installed by the City at the expense of the development. Contact Chris Gulden of Public Works 651-266-9778 two weeks in advance of needed sign work.

CONSTRUCTION IN RIGHT OF WAY: All work on curbs, driveways, and sidewalks within the public right of way must be done to City Standards and Specifications by a contractor licensed to work in the City right-of-way under a permit from Public Works Sidewalk Section (651-266- 6108). Sidewalk grades must be carried across driveways. Please coordinate any needed short term lane closures with Metro Transit Street Operations, Greg Tuveson (612-349-5407 / greg.tuveson@metrotransit.org)

RIGHT OF WAY RESTORATION: Restoration of asphalt and concrete pavements are performed by the Public Works Street Maintenance Division. The contractor is responsible for payment to the City for the cost of these restorations. The contractor shall contact Public Works Street Maintenance to set up a work order prior to beginning any removals in the street at 651- 266-9700. Procedures and unit costs are found in Street Maintenance's "General Requirements - All Restorations" and are available at the permit office.

SEWER REMOVAL/ABANDONMENT PERMIT: Plumbing Contractor to obtain "Removal Permits" from Public Works to cut off existing sewer connection services to the property. Services A11882 & A12719 will need a removal permit. Services will be cut off at the property line. Call St Paul PW permit desk (651-266-6234) for information on obtaining this permit.

TRAFFIC (cont.):
CITY OF ST. PAUL PERMIT REQUIREMENTS:
ORDERING OBSTRUCTION AND EXCAVATION PERMITS: Contact Public Works Right of Way Service Desk at (651) 266-6151. It is strongly recommended that contractors call for cost estimates prior to bidding to obtain accurate cost estimates.
OBSTRUCTION PERMITS: The contractor must obtain an Obstruction Permit if construction (including silt fences) will block City streets, sidewalks or alleys, or if driving over curbs.
EXCAVATION PERMITS: All digging in the public right of way requires an Excavation Permit. If the proposed building is close to the right of way, and excavating into the right of way is needed to facilitate construction, contact the utility inspector.
FAILURE TO SECURE PERMITS: Failure to secure Obstruction Permits or Excavation Permits will result in a double-permit fee and other fees required under City of St. Paul Legislative Codes.

WATER RESOURCE/EROSION CONTROL:
Adjacent streets and alleys must be swept to keep them free of sediment. Contractor must monitor conditions and sweep as needed or within 24 hours of notice by the City.

Project Location
Marshall Avenue & Moore Street
St. Paul, MN 55104

SYMBOL LEGEND

- REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION
- REMOVE AND DISPOSE OF EXISTING PAVERS

DEMOLITION NOTES

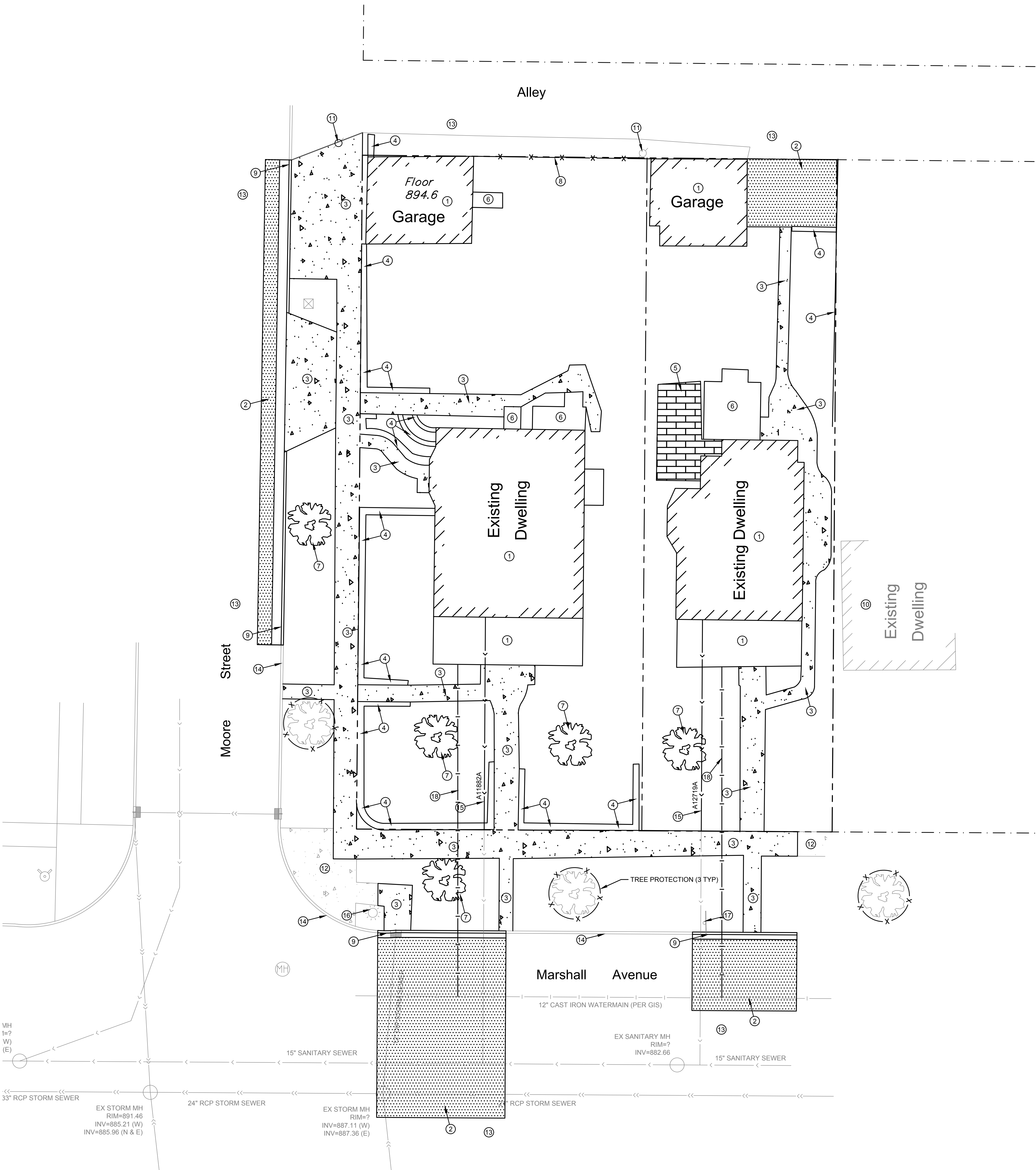
- Verify all existing utility locations.
- It is the responsibility of the Contractor to perform or coordinate all necessary utility demolitions and relocations from existing utility locations to all onsite amenities and buildings. These connections include, but are not limited to, water, sanitary sewer, cable tv, telephone, gas, electric, site lighting, etc.
- Prior to beginning work, contact Gopher State Onecall (651-454-0002) to locate utilities throughout the area under construction. The Contractor shall retain the services of a private utility locator to locate the private utilities.
- Sawcut along edges of pavements, sidewalks, and curbs to remain.
- All construction shall be performed in accordance with state and local standard specifications for construction.
- The removal, pruning, and/or planting of trees on the public boulevard requires an approved permit from the City Forester (651-632-2437). Any work must be completed by a licensed tree contractor.
- Construction supplies, materials, spoils, equipment, and vehicles shall not be stored or operated within the drip line of any public street tree or on turf boulevards without prior written approval from the City Forester. If the boulevard must be used for construction activities, site access routes, material storage or other related activities, protective measures approved by the City Forester shall be taken to reduce soil compaction and protect tree(s) from damage.
- The location of tree protection fences is shown on the plan. Tree protection fencing shall be installed prior to the start of any site work. Maintain the tree protection throughout the construction process. Any damage to the tree protection fence shall be repaired immediately. Trees damaged or removed during construction shall be resotted or replaced to the satisfaction of, and at no cost to, the City as determined by the Forestry manager.
- Contractor shall contact the City Forester (651-632-2437), prior to demolition or other land disturbance associated with site construction, to verify tree protection measures.
- Contractor shall protect existing boulevard infrastructure (signs, lighting, etc.) during construction. Any existing boulevard infrastructure items damaged during construction shall be replaced at the response of the contractor.

KEY NOTES

- REMOVE AND DISPOSE OF EXISTING BUILDING.
- REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION.
- REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION.
- REMOVE AND DISPOSE OF EXISTING RETAINING WALL.
- REMOVE AND DISPOSE OF EXISTING PAVERS.
- REMOVE AND DISPOSE OF EXISTING DECK.
- REMOVE AND DISPOSE OF EXISTING TREES, STUMPS AND ROOTS.
- REMOVE AND DISPOSE OF EXISTING FENCE.
- REMOVE AND DISPOSE OF EXISTING CONCRETE CURB AND GUTTER.
- PROTECT EXISTING BUILDING.
- PROTECT EXISTING POWER POLE.
- PROTECT EXISTING CONCRETE.
- PROTECT EXISTING BITUMINOUS.
- PROTECT EXISTING CURB AND GUTTER.
- REMOVE AND DISPOSE OF EXISTING SEWER SERVICE TO RIGHT OF WAY, THEN CAP EXISTING STUB.
- PROTECT OR REPLACE LIGHT POLE DURING CONSTRUCTION. (SEE TRAFFIC NOTES)
- SIGN TO BE REMOVED BY OTHERS (SEE TRAFFICS NOTES)
- REMOVE AND DISPOSE OF EXISTING WATER SERVICE.
- CUT OFF AT THE WATERMAIN. (FIELD VERIFY LOCATION)

SIDEWALKS:

All work on curbs, driveways, and sidewalks within the public right of way must be done to City Standards and Specifications by a licensed and bonded contractor under a permit from Public Works Sidewalk Section (651-266-6120). Sidewalk grades must be carried across driveways. Restoration of asphalt and concrete pavements are performed by the Public Works Street Maintenance Division. Contractor is responsible for damage to the mainline sidewalk, curb, drive access and boulevard landscaping cause during the construction. Contractor advised to document pre-existing condition of the right of way prior to commencement of the construction. The contractor is responsible for payment to the City for the cost of these restorations. The contractor shall contact Public Works Street Maintenance to set up a work order prior to beginning any removals in the street at 651-266-9700. Procedures and unit costs are found in Street Maintenance's "General Requirements - All Restorations" and are available at the permit office.



POPE
ARCHITECTS

POPE ARCHITECTS
1295 BANDANA BLVD N, SUITE 200
ST. PAUL, MN 55108-2735
(651) 642-9200
www.popearch.com

MCR Property
Holdings, LLC

**MARSHALL &
MOORE
APARTMENTS**
SAINT PAUL, MN
55104

Larson
Engineering, Inc.

3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (t) 651.481.9201
www.larsonengr.com

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DEMOLITION
PLAN

Issues and Revisions:

I hereby verify that this plan, specifications or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Eric Meyer, P.E.
Eric Meyer, P.E.

Date: 12-28-2017 Reg. No.: 44592

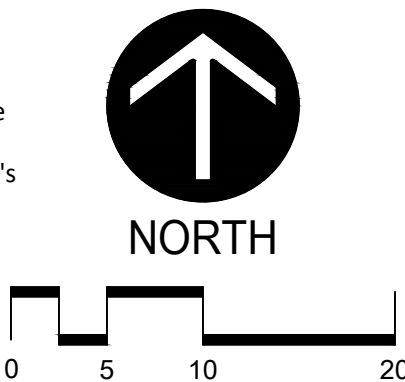
Commission No. 12176138

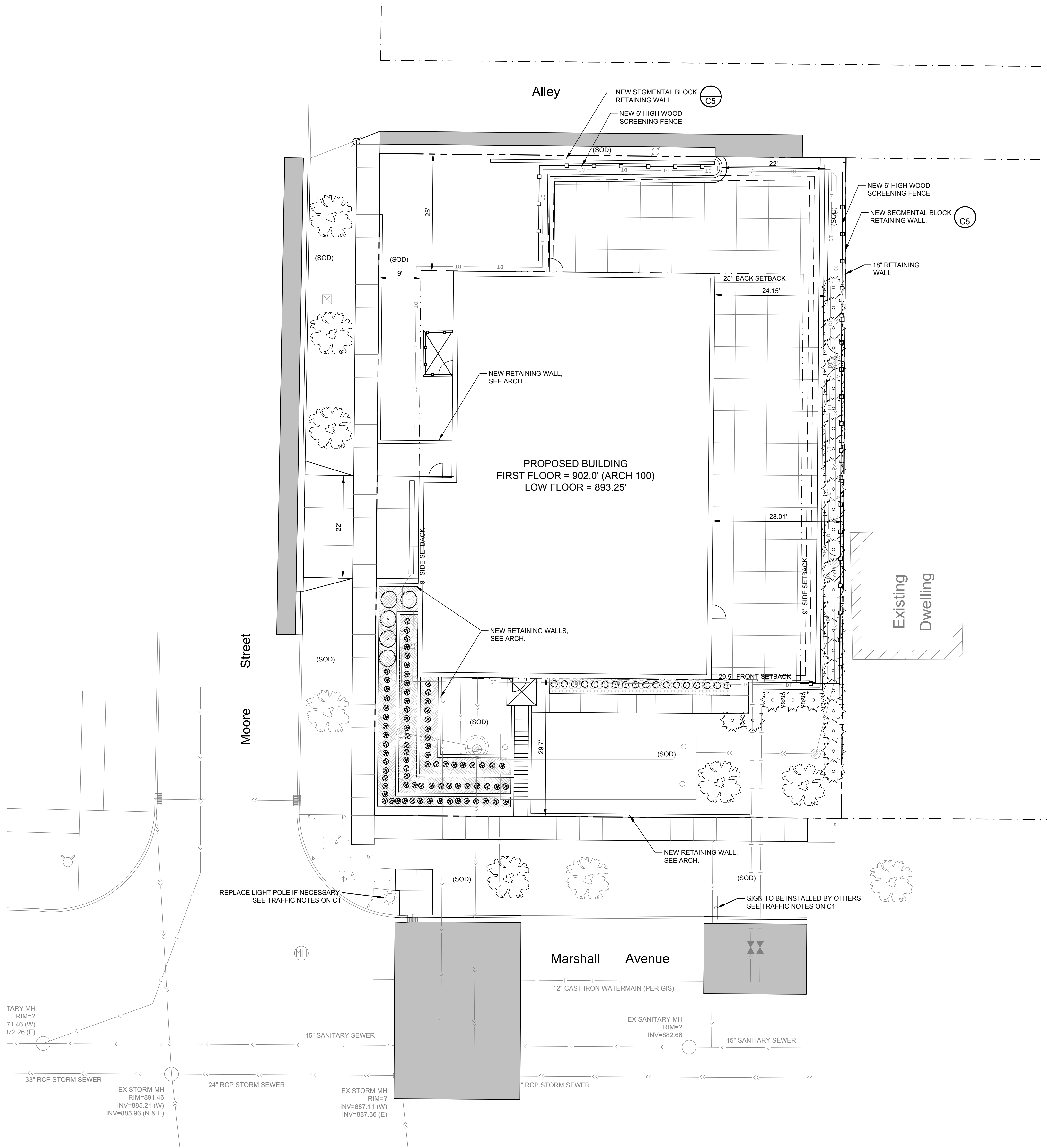
Drawn by KBK

Checked by EGM

SHEET

C1





SYMBOL LEGEND

- NEW BITUMINOUS PAVEMENT
- NEW CONCRETE PAVEMENT
- NEW STOOP / PATIO
SEE ARCHITECTURAL
- NEW GREEN ROOF
SEE ARCHITECTURAL
- NEW 4" WOOD MULCH OVER WEED BARRIER
- NEW 4" LANDSCAPE ROCK OVER WEED BARRIER
- NEW BOULEVARD TREE
(SWAMP WHITE OAK OR HACKBERRY)
- NEW PYRAMIDAL ARBORVITAE
- NEW NORTHWIND SWITCHGRASS
- NEW ALPINE CURRANT
- NEW OSTRICH FERN

IRRIGATION NOTES

- Irrigation system is design-build. Provide commercial grade drip-line irrigation in mulched and landscape rock planting beds and pop up heads in mowed turf areas. Provide shop drawings for review and approval.
- Install PVC Class 160 SDR-16 sleeves beneath hard surfaces. Extend sleeves 18 inches beyond hardscape. Sleeve sizes to be two sizes larger than irrigation piping and 4-inch for wiring.
- Install thrust blocking at all tees and bends.
- All fittings shall be Schedule 40.
- Provide 18 inches of wire slack at each valve.
- All wire splices, valves, and quick couplers shall be located in valve boxes.
- Irrigation contractor is responsible for first year's winterizing and the following spring start up.

LANDSCAPING NOTES

- Provide 24" of planting medium at all landscape beds (60% sand, 25% loam, 15% compost).
- Provide 6" of imported, processed topsoil for all sod areas.
- Trees planted on the boulevard are to be 2" caliper and have a minimum of a one year warranty.
- Where driveways, sidewalks or other surface paving are removed all concrete, asphalt and base materials shall be removed.
- Boulevard soils are to be protected during construction. Soil compaction due to construction activities shall be mitigated and soils loosened prior to final grading.



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White Bear Lake, MN 55110
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PAVING AND
LANDSCAPING PLAN

Issues and Revisions:

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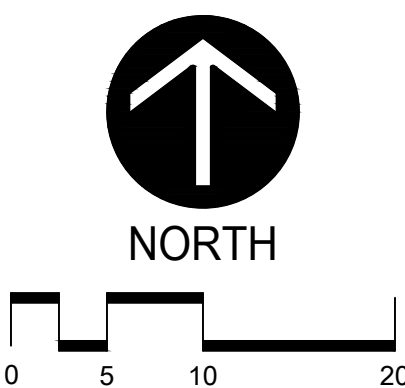
Eric Meyer, P.E.
Date: 12-28-2017 Reg. No.: 44592

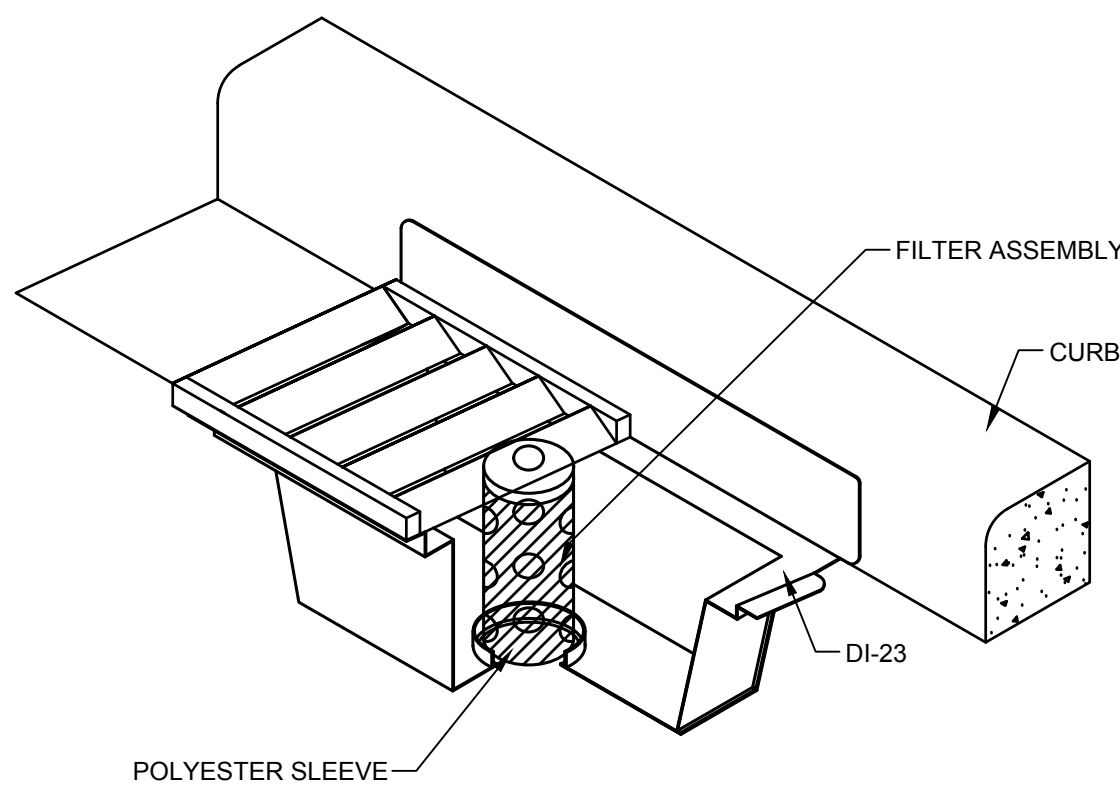
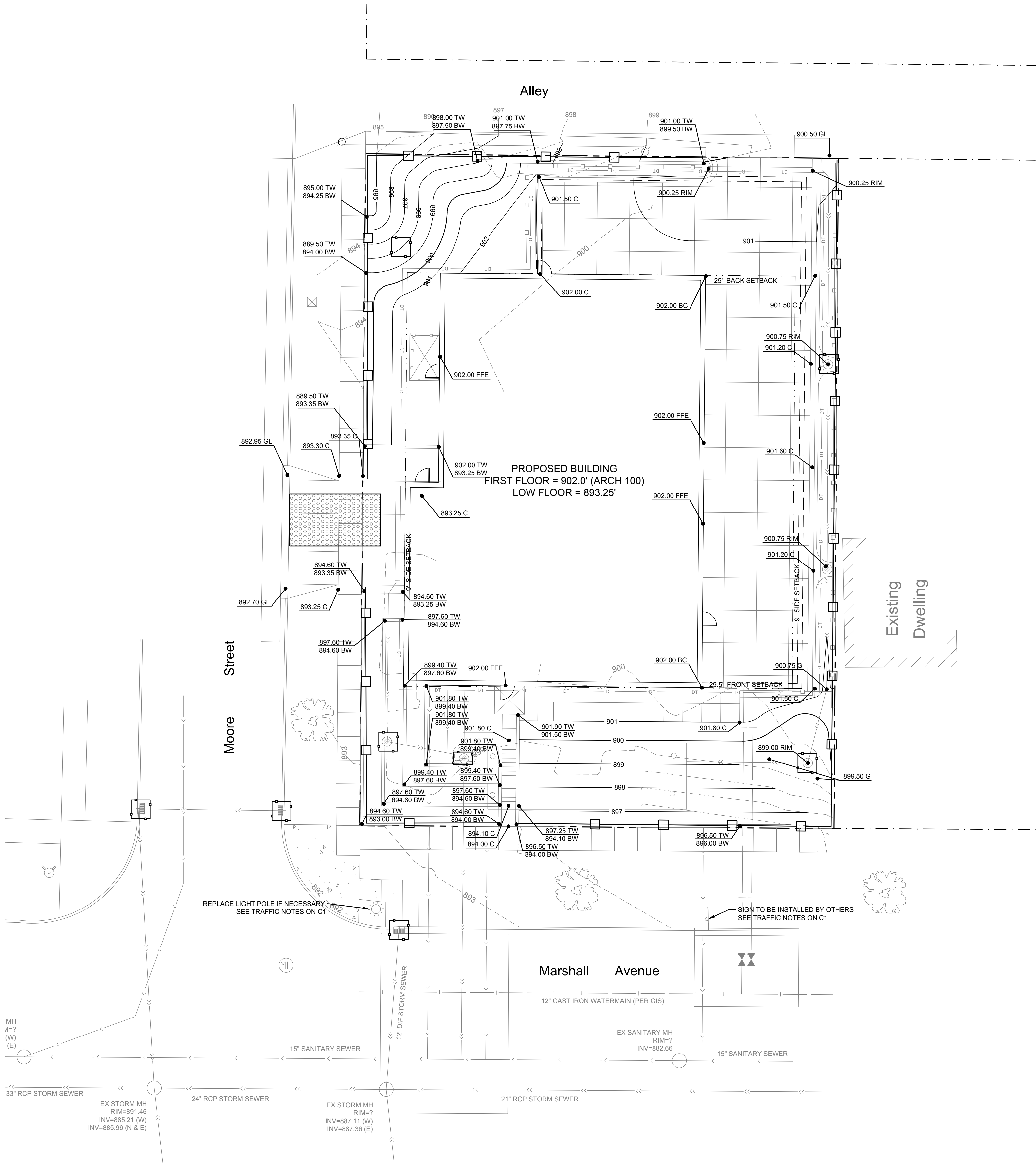
Commission No. 12176138
Drawn by KBK
Checked by EGM

SHEET

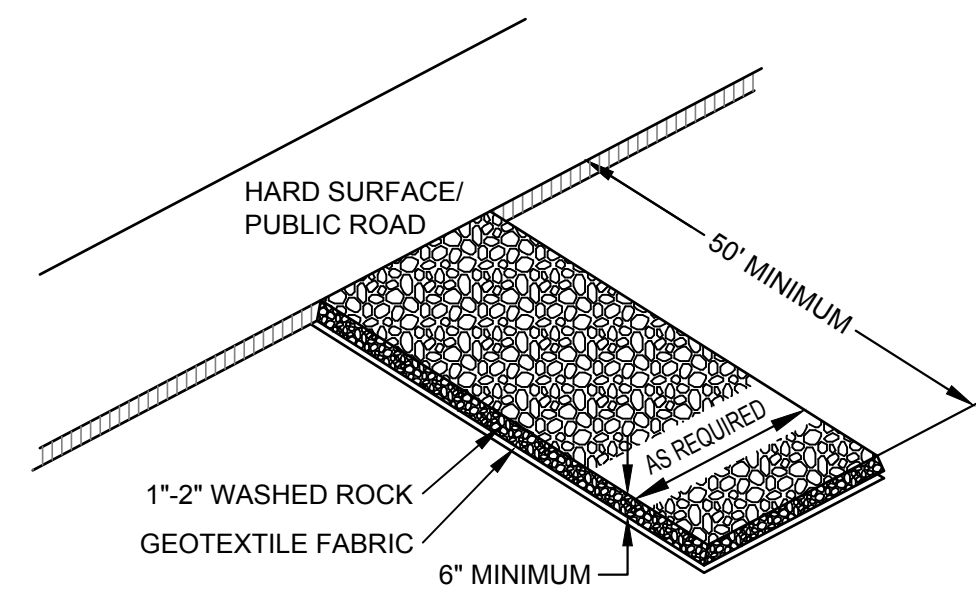
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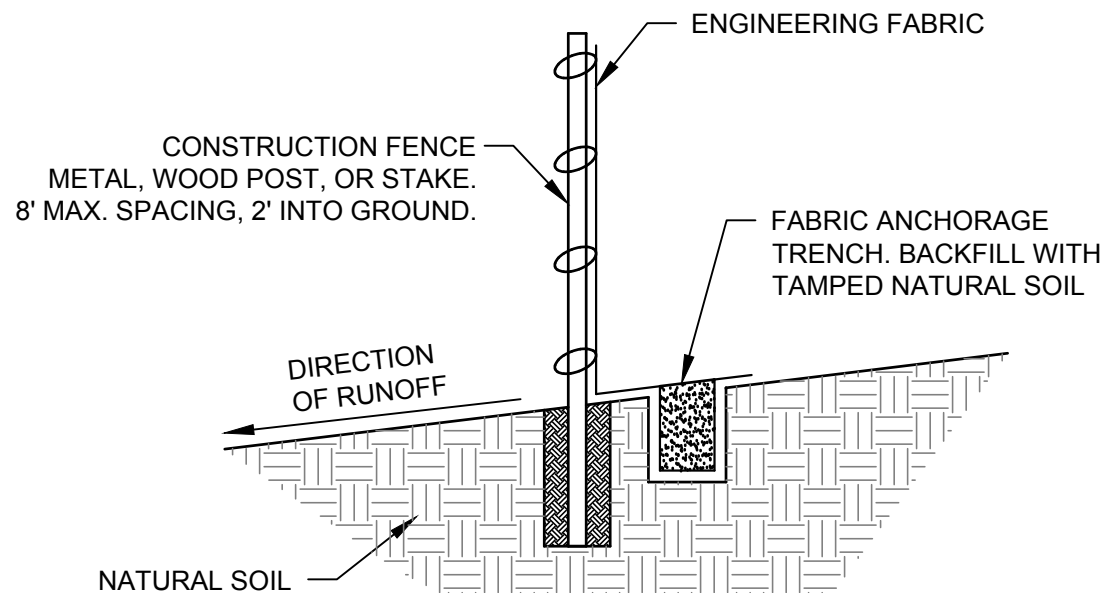




WIMCO INLET PROTECTION DEVICE OR EQUAL
NOT TO SCALE



ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE



SILT FENCE INSTALLATION DETAIL
NOT TO SCALE

LEGEND		
	950	EXISTING CONTOURS
	950	PROPOSED CONTOURS - MAJOR INTERVAL
	949	PROPOSED CONTOURS - MINOR INTERVAL
		GRADE BREAK LINE
	2.0%	GRADE SLOPE
		SILT FENCE
		RIP-RAP / ROCK CONST. ENTRANCE
		INLET PROTECTION
		CONCRETE WASHOUT STATION
SPOT ABBREVIATIONS:		
TC		TOP OF CURB
GL		GUTTER LINE
B		BITUMUNOUS
C		CONCRETE
EO		EMERGENCY OVERFLOW
G		GROUND
ME		MATCH EXISTING
(*)		EXISTING TO BE VERIFIED

EROSION CONTROL NOTES

1. Install temporary erosion control measures (inlet protection, silt fence, and rock construction entrances) prior to beginning any excavation or demolition work at the site.
2. Erosion control measures shown on the erosion control plan are the absolute minimum. The contractor shall install temporary earth dikes, sediment traps or basins, additional siltation fencing, and/or disk the soil parallel to the contours as deemed necessary to further control erosion.
3. All construction site entrances shall be surfaced with crushed rock across the entire width of the entrance and from the entrance to a point 50' into the construction zone.
4. The toe of the silt fence shall be trenched in a minimum of 6". The trench backfill shall be compacted with a vibratory plate compactor.
5. All grading operations shall be conducted in a manner to minimize the potential for site erosion. Sediment control practices must be established on all down gradient perimeters before any up gradient land disturbing activities begin.
6. All exposed soil areas must be stabilized as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement.
7. The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water. Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 14 days after connecting to a surface water and construction in that portion of the ditch has temporarily or permanently ceased.
8. All storm sewer catch basins not needed for site drainage during construction shall be covered to prevent runoff from entering the storm sewer system. Catch basins necessary for site drainage during construction shall be provided with inlet protection.
9. In areas where concentrated flows occur (such as swales and areas in front of storm catch basins and intakes) the erosion control facilities shall be backed by stabilization structure to protect those facilities from the concentrated flows.
10. Inspect the construction site once every seven days during active construction and within 24 hours after a rainfall event greater than 0.25 inches in 24 hours.
11. All BMPs must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the capacity. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.
12. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts.
13. All soils tracked onto pavement shall be removed daily.
14. Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or condyts and ditches unless there is a bypass in place for the stormwater.
15. Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.
16. Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.
17. External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed onsite.
18. All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
19. Upon completion of the project and stabilization of all graded areas, all temporary erosion control facilities (silt fences, hay bales, etc.) shall be removed from the site.
20. All stormwater treatment facilities shall be restored to their design condition immediately following stabilization of the site.
21. Concrete washouts shall not be located within the drip line of a tree.

GRADING NOTES

1. Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
2. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
3. Grades shown in paved areas represent finish elevation.
4. All construction shall be performed in accordance with state and local standard specifications for construction.
5. Elevations are on NGVD 88 datum. NGVD 88 elevation 694.26 = St Paul 0.00.

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GRADING AND EROSION CONTROL PLAN

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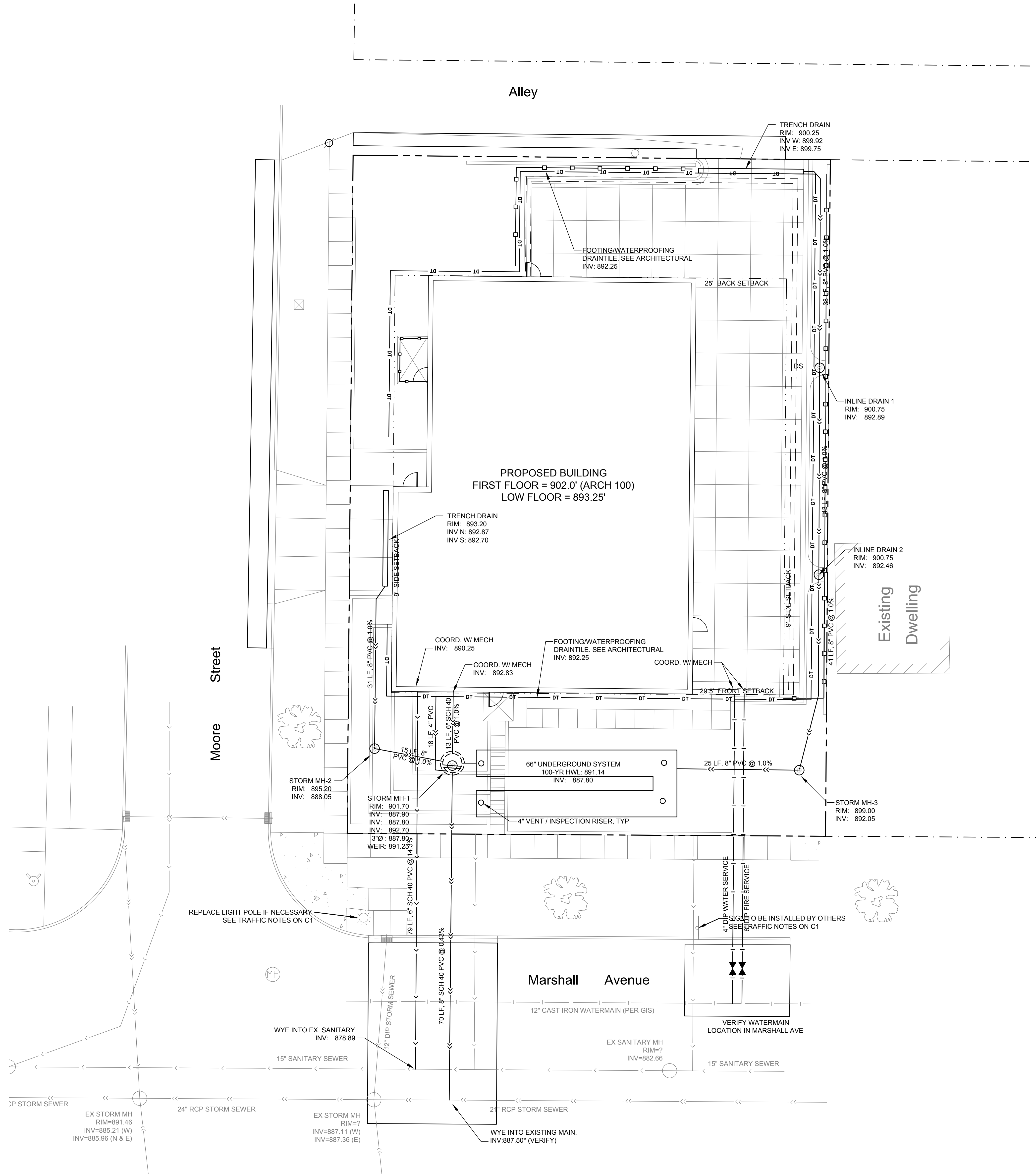
Eric Meyer, P.E.
Date: 12-28-2017 Reg. No.: 44592

Commission No.	12176138
Drawn by	KBK
Checked by	EGM

SHEET

C3.0

THIS SHEET SCALE
0" 5' 10' 20'



PERMITTING

SEWER REPAIR PERMIT: Plumbing Contractor to obtain "Repair Permits" from Public Works for proposed modification to the existing storm sewer connections. Call St Paul PW permit desk (651-266-6234) for information on obtaining this permit.

SEWER REMOVAL/ABANDONMENT PERMIT: Plumbing Contractor to obtain "Removal Permits" from Public Works to cut off existing sewer connection services to the property. Services A11882 & A12719 will need a removal permit. Call St Paul PW permit desk (651-266-6234) for information on obtaining this permit.

SEWER CONNECTION PERMIT: License house drain contractor to obtain (Sewer Connection Permit) to construct new sanitary and storm connection in street from main to the property. Call St Paul PW permit desk (651-266-6234) for information on obtaining this permit.

Contact Saint Paul Regional Water Services (SPRWS) for questions, permits, fees, inspections, specifications, plans, or information that may be required for the water service and/or the water meter.

Sanitary and/or storm sewer services passing within 10 feet of the building are governed by the MN Plumbing Code. Specification for pipe material selection and notes for required air test of the piping, compliant with MN State Plumbing Code 4714 Section 11090, must be shown on the plan. This system must be reviewed and approved by Rick Jacobs, Senior Plumbing Inspector (651-266-9051) at the time of the Plumbing Plan review to ensure that it meets Plumbing Code standards.

Contact the City of Saint Paul Department of Public Works Sewer Division for questions, permits, fees, inspections, specifications, plans, or information that may be required for sewer and storm piping work performed outside the building, including "retention systems".

All primary roof drains shall be piped internally to below grade, exit the building, and be connected to the storm sewer. MPC 4714.1101.1.

Secondary Roof Drainage shall drain to an approved place of disposal in the form of Secondary Roof Drains installed per MPC 4714.1101 & 1102, and Minnesota State Building Code 1503.4.1-5. Secondary roof must discharge onto permeable soils and cannot drain onto the sidewalk. MPC 4714.1101.1. An approved place of disposal that can be approved by the Authority Having Jurisdiction for secondary roof drainage is in form of secondary roof drains piped internally, down to within 18 inches of grade, through the outside wall, onto a splash block installed per MPC 1101.5.3, and laid over permeable soils of an adequate amount where saturation of the soil will not occur.

LEGEND

○	STORM MANHOLE	— CTV —	CABLE UNDERGROUND LINE
○	CATCH BASIN	— E —	ELECTRIC OVERHEAD LINE
□	CURB INLET	— F0 —	ELECTRIC UNDERGROUND LINE
▲	FLARED END	— F —	FIBER OPTIC UNDERGROUND LINE
○	SANITARY MANHOLE	— N —	NATURAL GAS UNDERGROUND LINE
○	HYDRANT	— S —	SANITARY SEWER PIPE
⊗	GATE VALVE & BOX	— S —	STORM SEWER PIPE
⊗	WATER SHUTOFF	— T —	TELEPHONE UNDERGROUND LINE
☀	LIGHT POLE	— W —	WATERMAIN PIPE
		— D —	DRAINTILE PIPE

UTILITY NOTES

- All sanitary manholes to be City of St. Paul Type 1. (St. Paul std. Plate 2101B).
- All sanitary service Y-connections shall be ductile iron pipe.
- Sanitary service runs shall be PVC, schedule 40.
- Abandoning existing sewer service or making new connections to City sewer must be done to City standards by a Licensed House Drain Contractor under a permit from Public Works Sewer Section. Call 651-266-6234 for inspections.
- All unused existing water services to be cut off by St. Paul Regional Water Service.
- 6" water service to be installed by St. Paul Regional Water Service.
- All unused existing water services to be cut off by SPRWS. Excavation and restoration by owner's contractor. New water services will not be turned on until required cutoffs have been performed.
- Refer to SPRWS "Standards for the Installation of Water Mains" Standard Plate D-11 for restrained pipe requirement.
- All water service valve boxes within construction area must be exposed and brought to grade upon completion of construction.
- Pipe material for 8" Ductile Iron Pipe must be Class 52. Pipe material for 6" and 4" Ductile Iron Pipe must be Class 53. The exterior of ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179. The interior cement mortar lining shall be applied without asphalt seal coat.
- Maintain 8 feet of cover over all water mains and services.
- Maintain 3 feet vertical separation between water and sewer pipes or a 12 inch separation with 4 inch high density insulation per SPRWS Standard Plate D-10 for typical water main offsets.
- The contractor must obtain an obstruction permit from public works, Tony Dagostino, if trucks/equipment will be driving over curbs or if construction will block city streets, sidewalks, or alleys.
- Adjacent streets and alleys must be swept to keep them free of sediment. Contractor must monitor conditions and sweep as needed or within 24 hours of notice by the City.
- All storm sewer RCP pipe shall be class 5.
- See Project Specifications for bedding requirements.
- All new storm sewer manholes shall be by the City of St. Paul std. Plate #2104C-Type 4.
- New storm sewer catch basins shall be City of St. Paul std. Plate #2015E-Type 7A.
- All pipe work inside of property to be performed by a plumber licensed by the State of Minnesota and Certified by the City of Saint Paul. SPRWS requires separate outside and inside plumbing permits for each new water service.
- Water services to be installed according to SPRWS "Standards for the Installation of Water Mains".
- Water facility pipework within right of way to be installed by SPRWS. Excavation and restoration by owner's contractor.
- Elevations are on NGVD 88 datum. NGVD 88 elevation 694.26 = St Paul 0.00.
- A four-sided trench box is required on all excavations deeper than 5 feet where underground work or inspection is to be performed by SPRWS. Ladders are required and must extend 3 feet above the surface of the trench. Sidewalks, pavements, ducts and appurtenant structures shall not be undermined unless a support system or another method of protection is provided. Trenches in excess of 20 feet in depth must be signed off by a registered professional engineer. Excavated material must be kept a minimum of 2 feet from the edge of the trench.
- Pipe must be wrapped in V-Bio Polywrap encasement.
- The contractor providing excavation is responsible for obtaining all excavation and obstruction permits required by any governing authority.
- Contractor to maintain access to the fire department connection for fire department personnel at all times during the construction period.

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UTILITY PLAN

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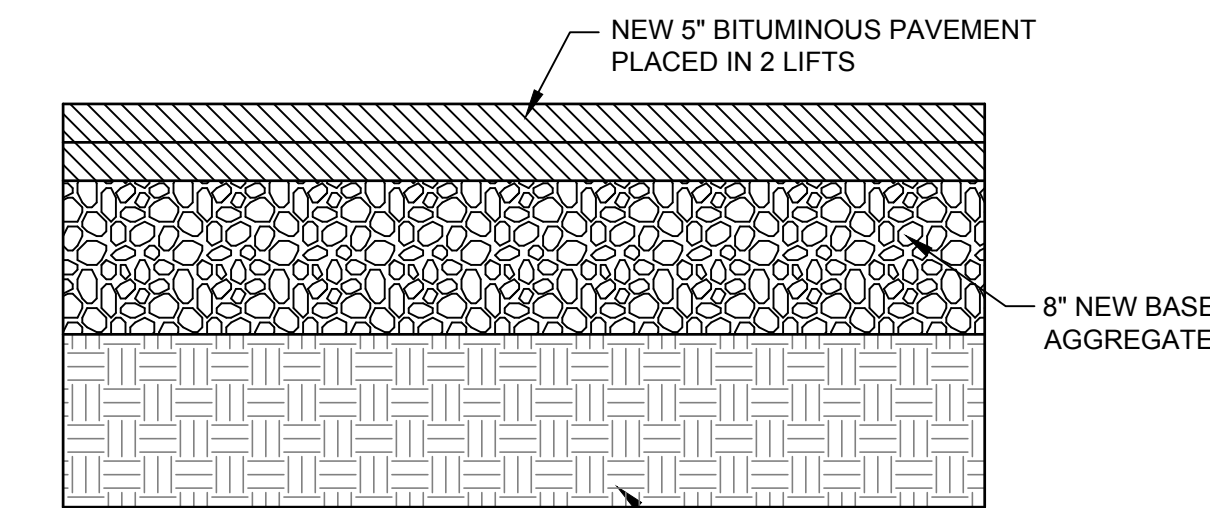
Eric Meyer, P.E.
Date: 12-28-2017 Reg. No.: 44592

Commission No. 12176138
Drawn by KBK
Checked by EGM

SHEET

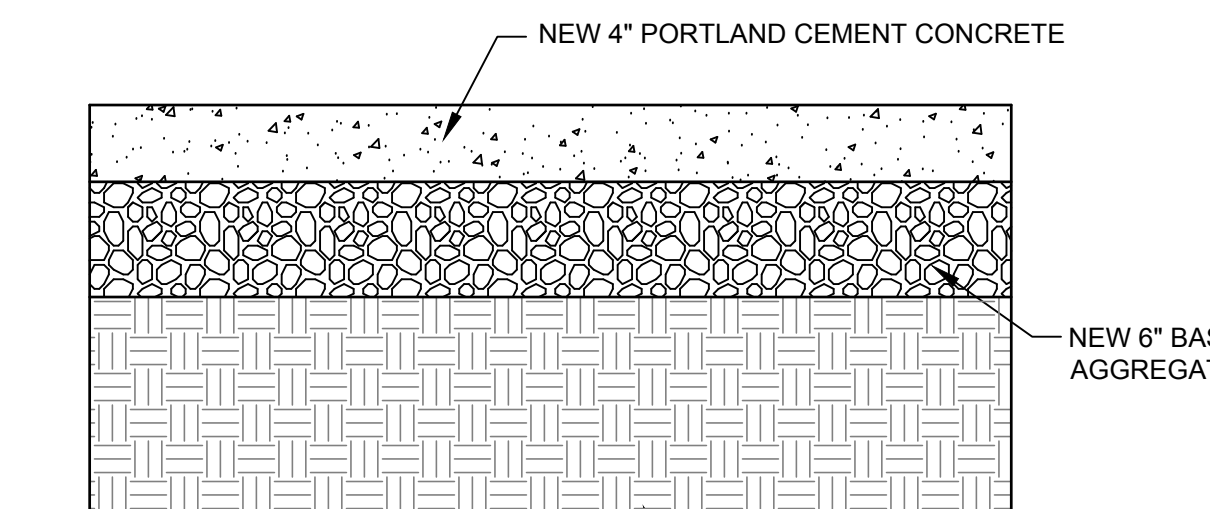
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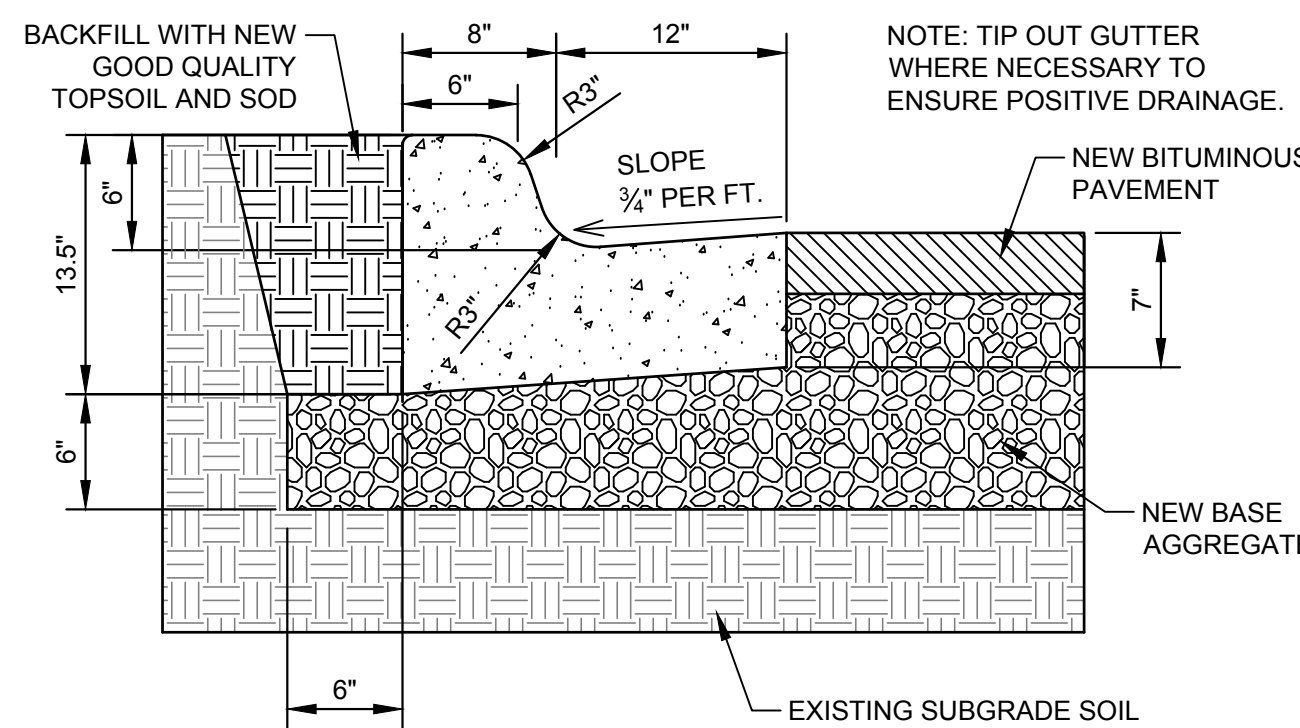
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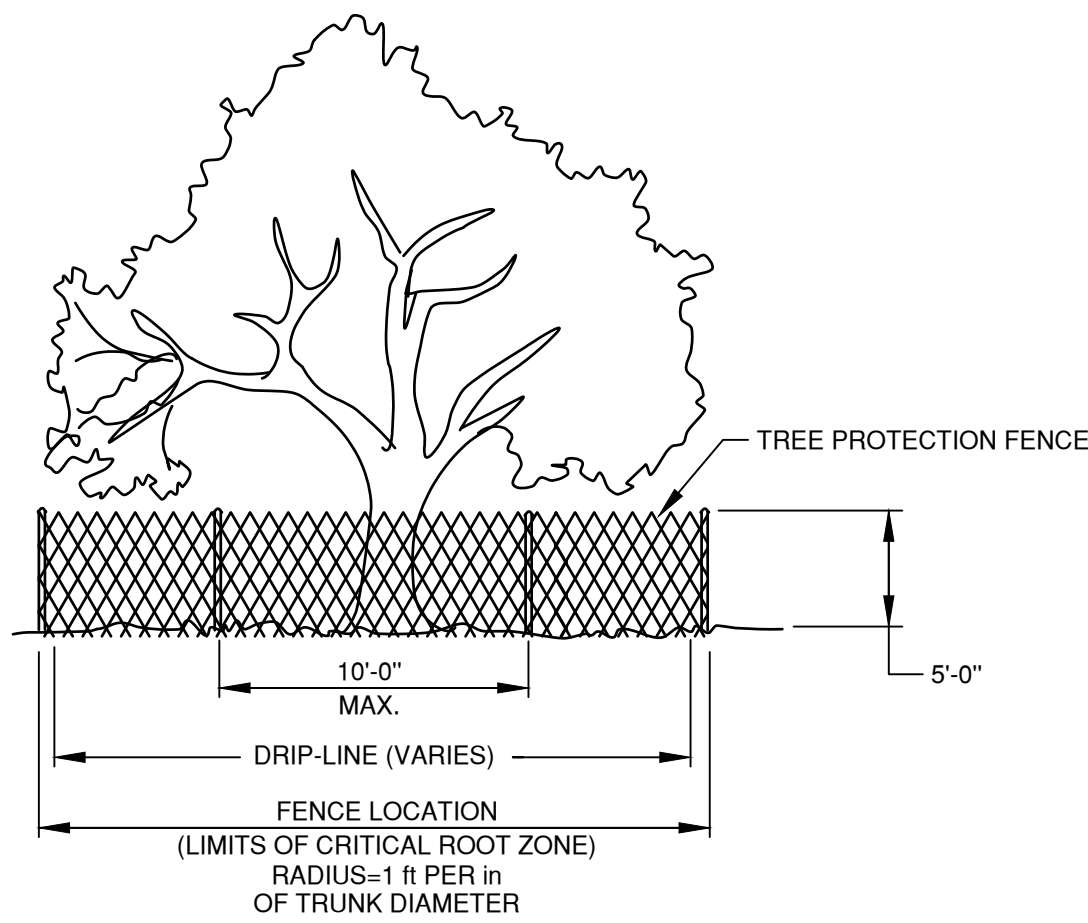
CONCRETE CONSTRUCTION DETAIL

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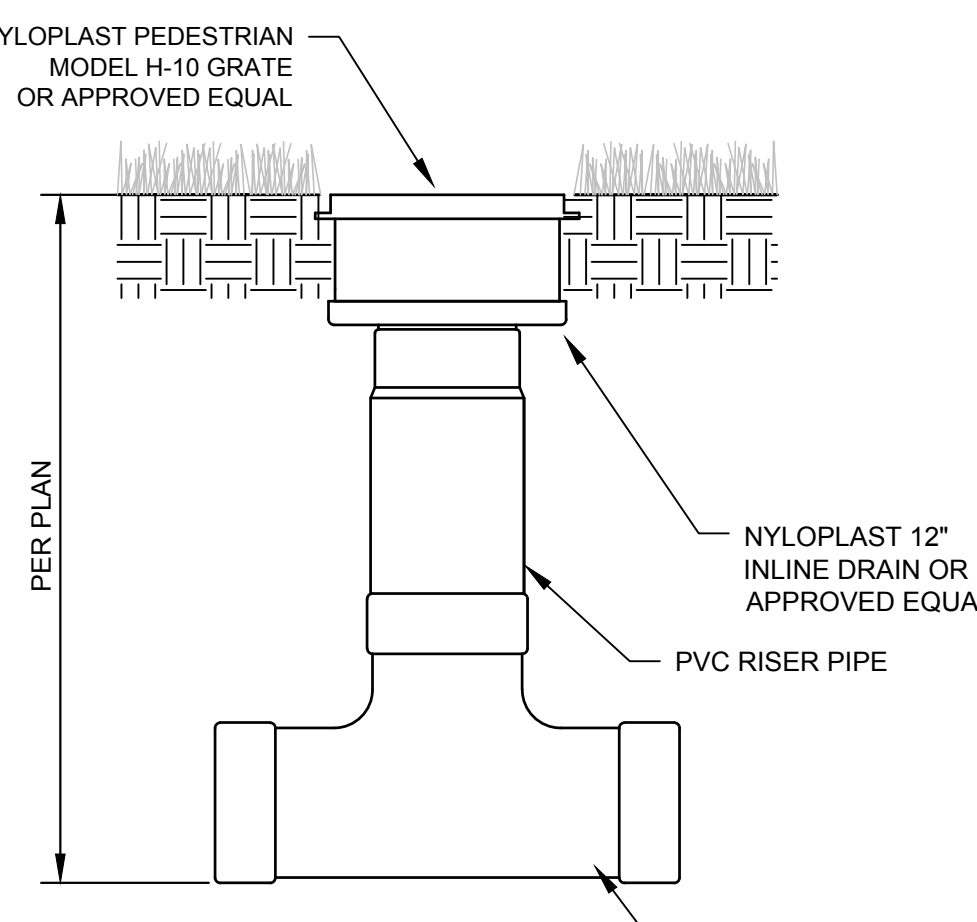
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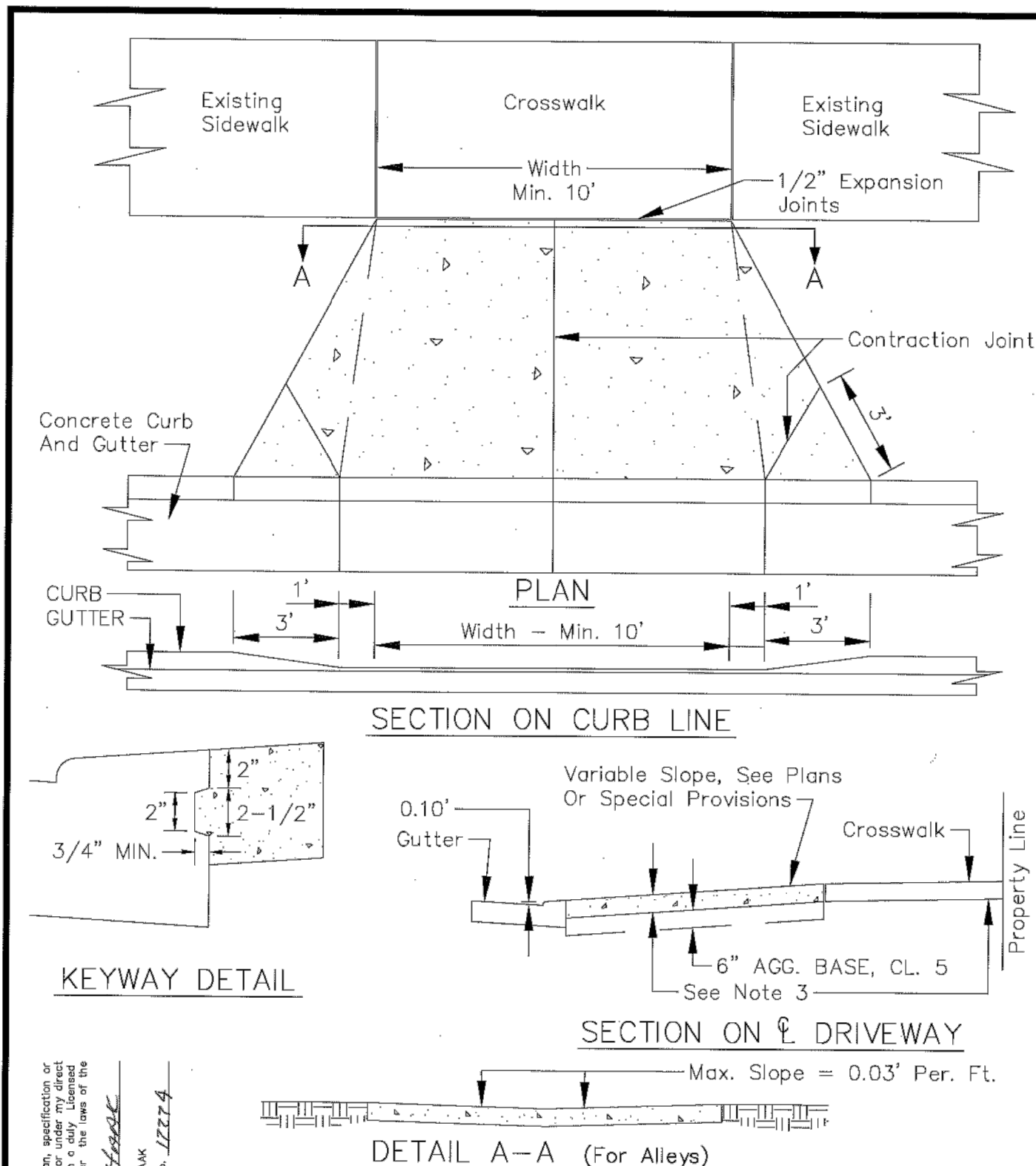
TREE PROTECTION

NOT TO SCALE



INLINE DRAIN DETAIL

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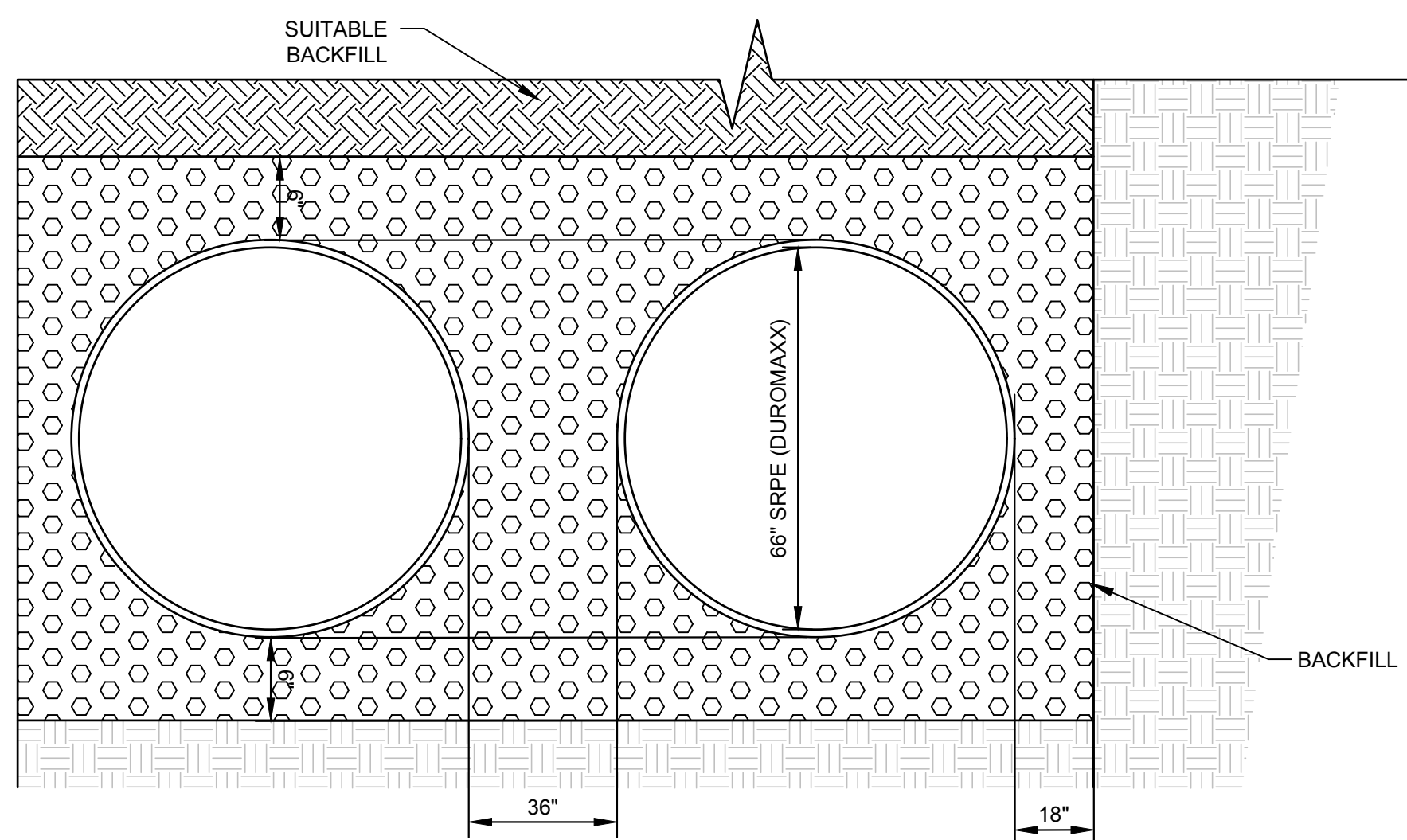


CONCRETE DRIVEWAY TYPE 6

1. Panel Width Shall Not Exceed 10' Without A Contraction Joint.
2. Driveway To Be One Course Concrete Pavement, Mix No. 3F52.
3. 6" Thick For Residential Drive, 8" Thick For Commercial Drive And Alley Or As Specified.
4. Keyway To Be Installed On New Curb Prior To Driveway Construction. No. 4 Dowel Bars 1' Long Spaced 2' O.C. May Be Substituted For Keyway.

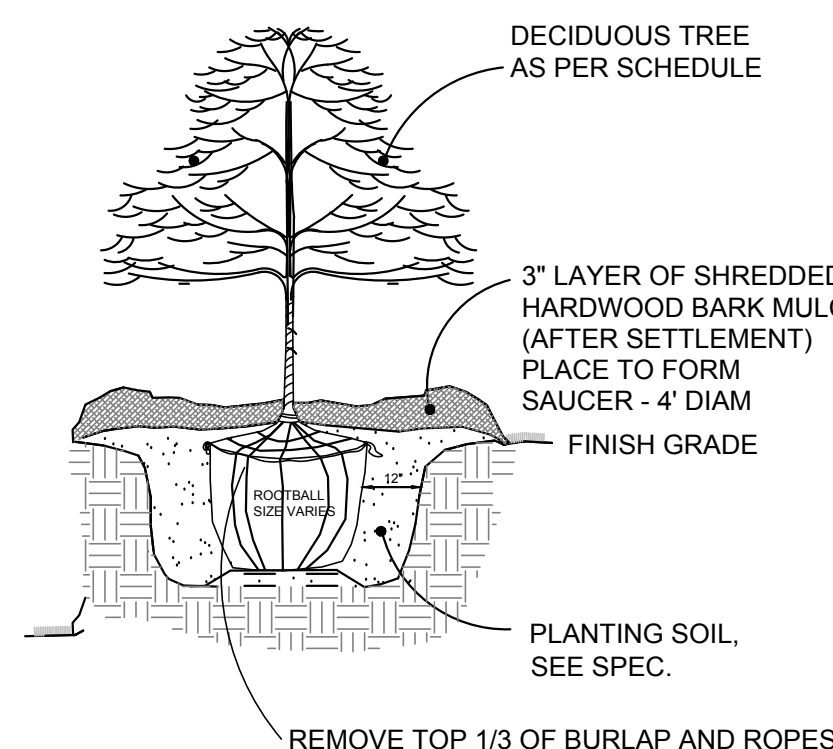
APPROVED: *[Signature]* CITY ENGINEER
CITY OF ST. PAUL
DEPARTMENT OF PUBLIC WORKS
CONCRETE DRIVEWAY
TYPE 6
Date of Revision: DEC 2015
Standard Plate No. 1206D

NOT TO SCALE



UNDERGROUND STORAGE SECTION

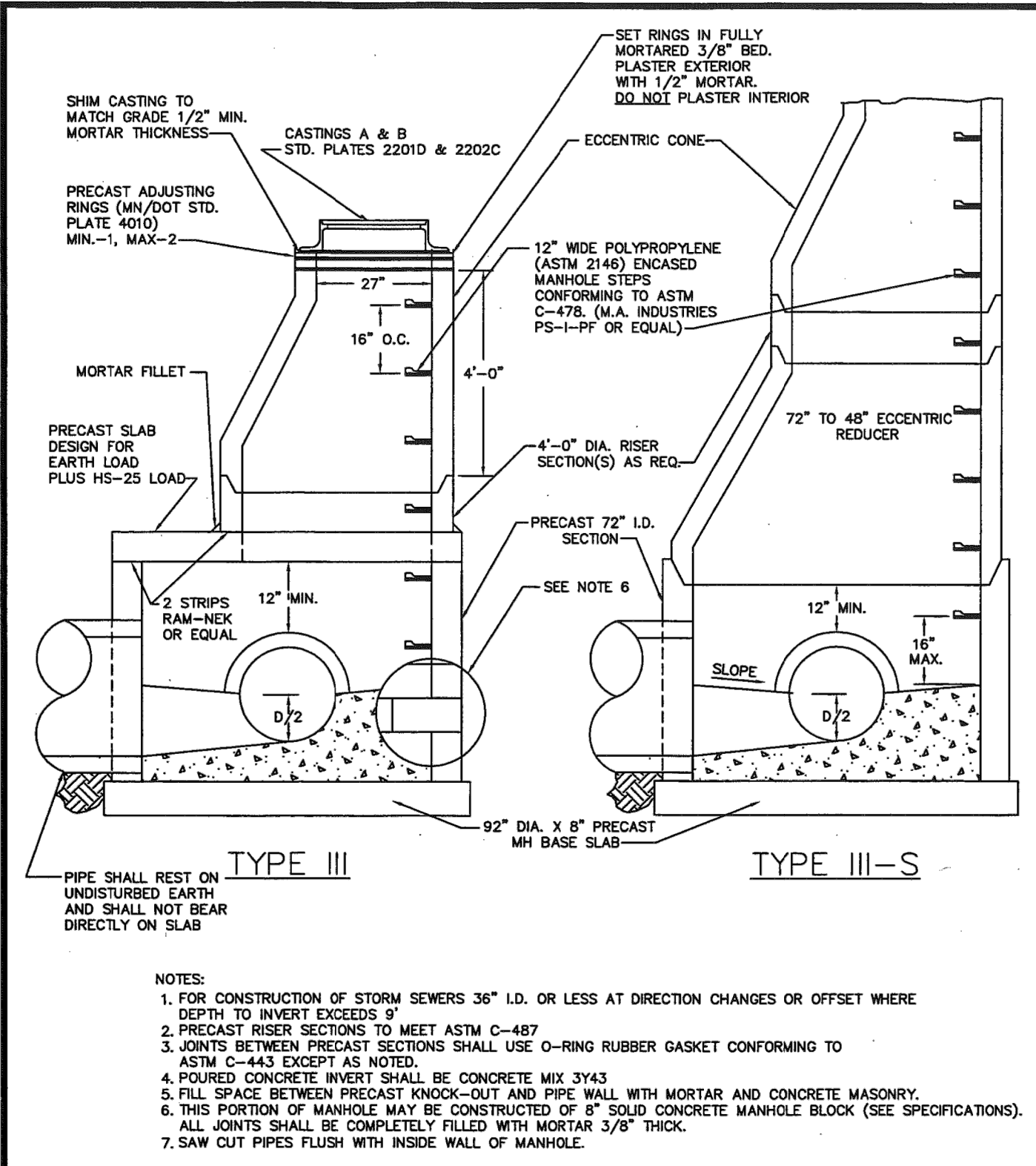
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DECIDUOUS TREE PLANTING DETAIL

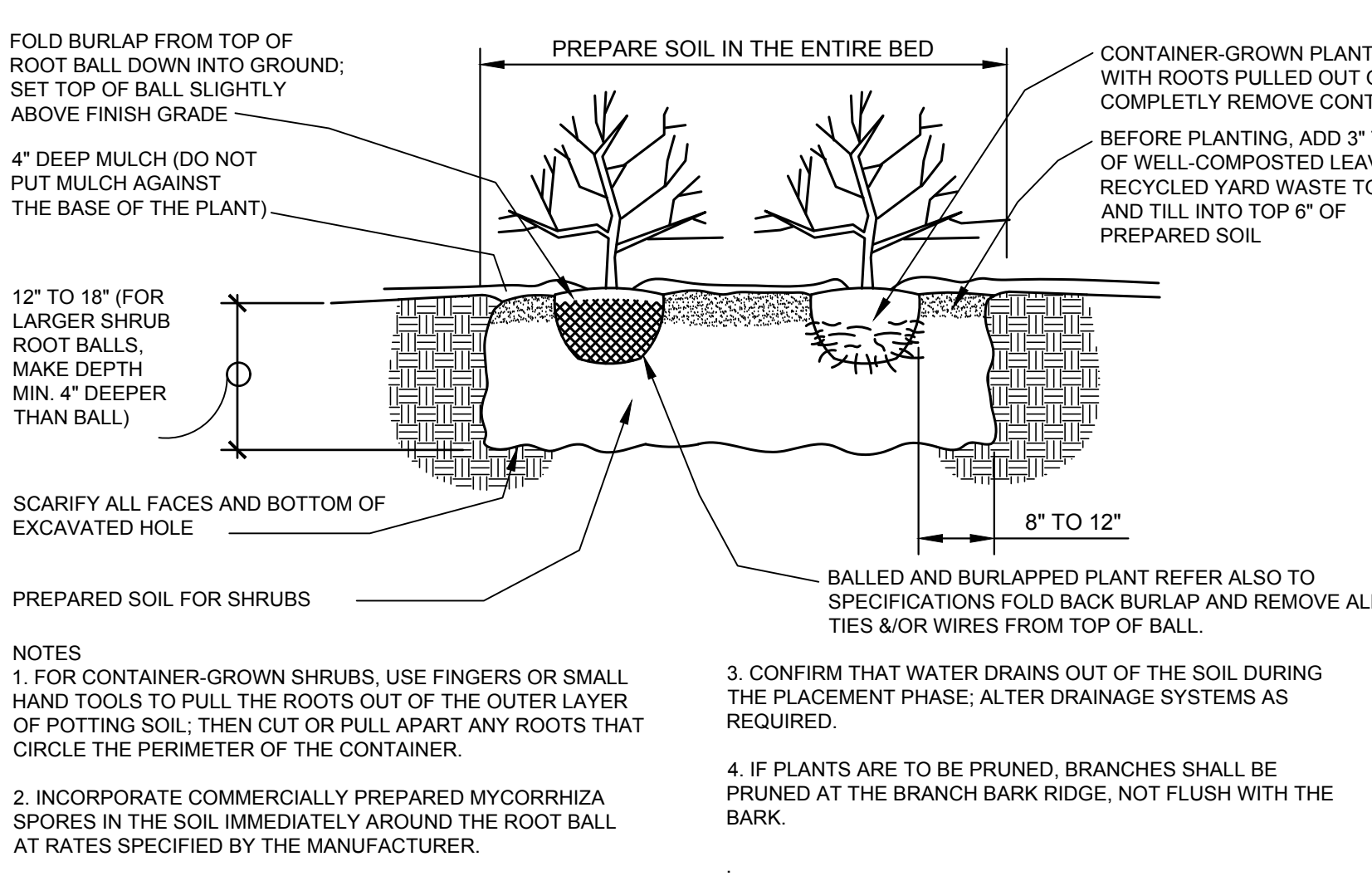
NOT TO SCALE

- NOTES:
1. PROVIDE AND INSTALL PLANT MATERIALS THAT MEET SPECIFICATIONS AND ARE OF THE SIZE TYPE, AND SPECIES GIVEN IN PLANT SCHEDULE.
 2. REMOVE DEAD OR DAMAGED BRANCHES. RETAIN THE NATURAL FORM OF THE TREE OR SHRUB.
 3. DO NOT CUT THE LEADER.
 4. PLACE WEED BARRIER. DIG PLANT HOLES 12" MIN. LARGER THAN BALL, ALL SIDES. BACK FILL WITH PLANTING SOIL - SEE SPEC. SCARIFY BOTTOM OF PLANTING HOLE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 5. IN CASE OF ANY DISCREPANCIES BETWEEN THIS DETAIL, PLANS OF SPECIFICATIONS, THE SPECIFICATION SHALL GOVERN.



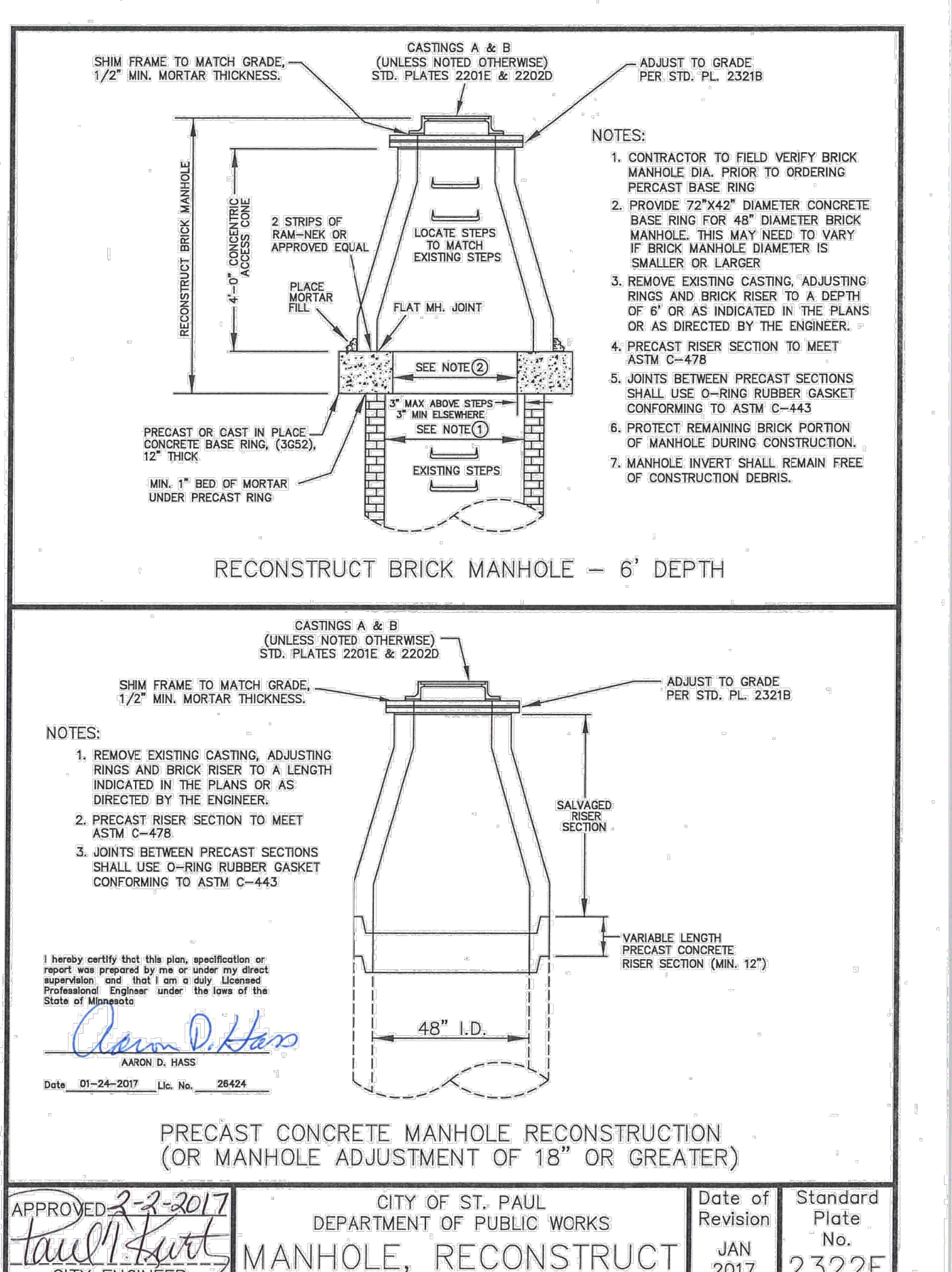
APPROVED: *[Signature]* CITY ENGINEER
CITY OF ST. PAUL
DEPARTMENT OF PUBLIC WORKS
MANHOLE, TYPE III & III-S
Date of Revision: JULY 2002
Standard Plate No. 2103D

NOT TO SCALE



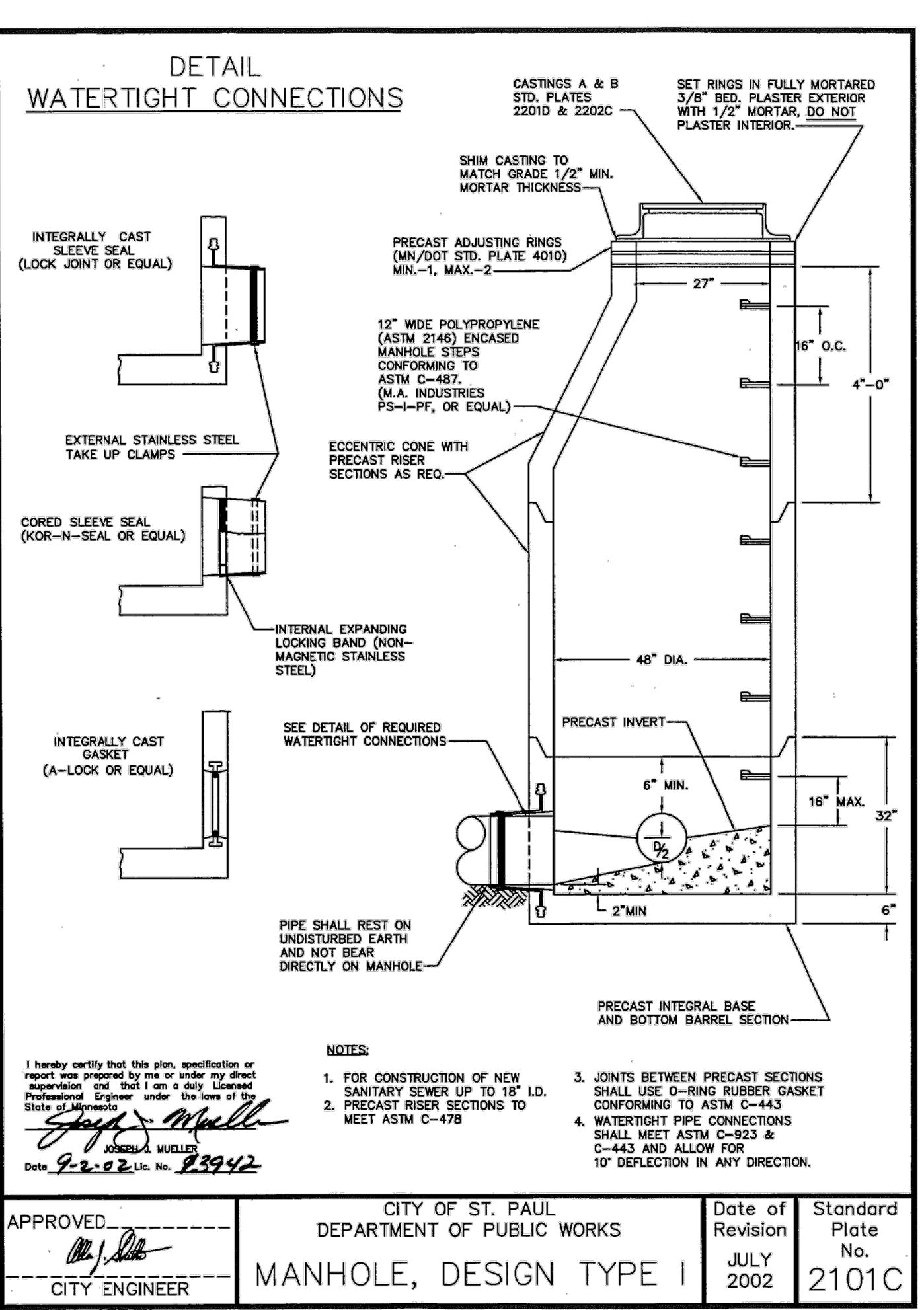
DECIDUOUS OR EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE



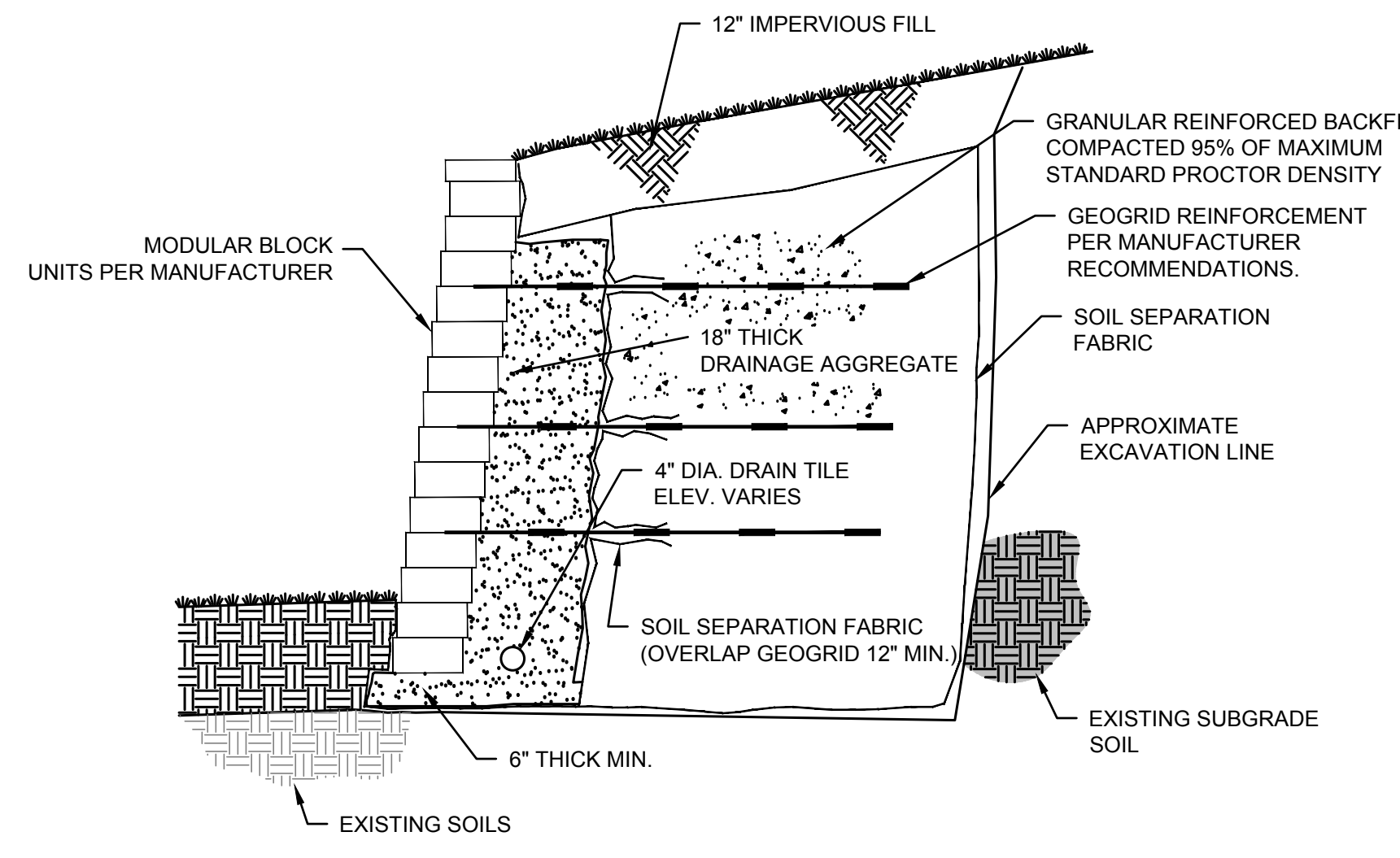
RECONSTRUCT BRICK MANHOLE - 6' DEPTH

NOT TO SCALE



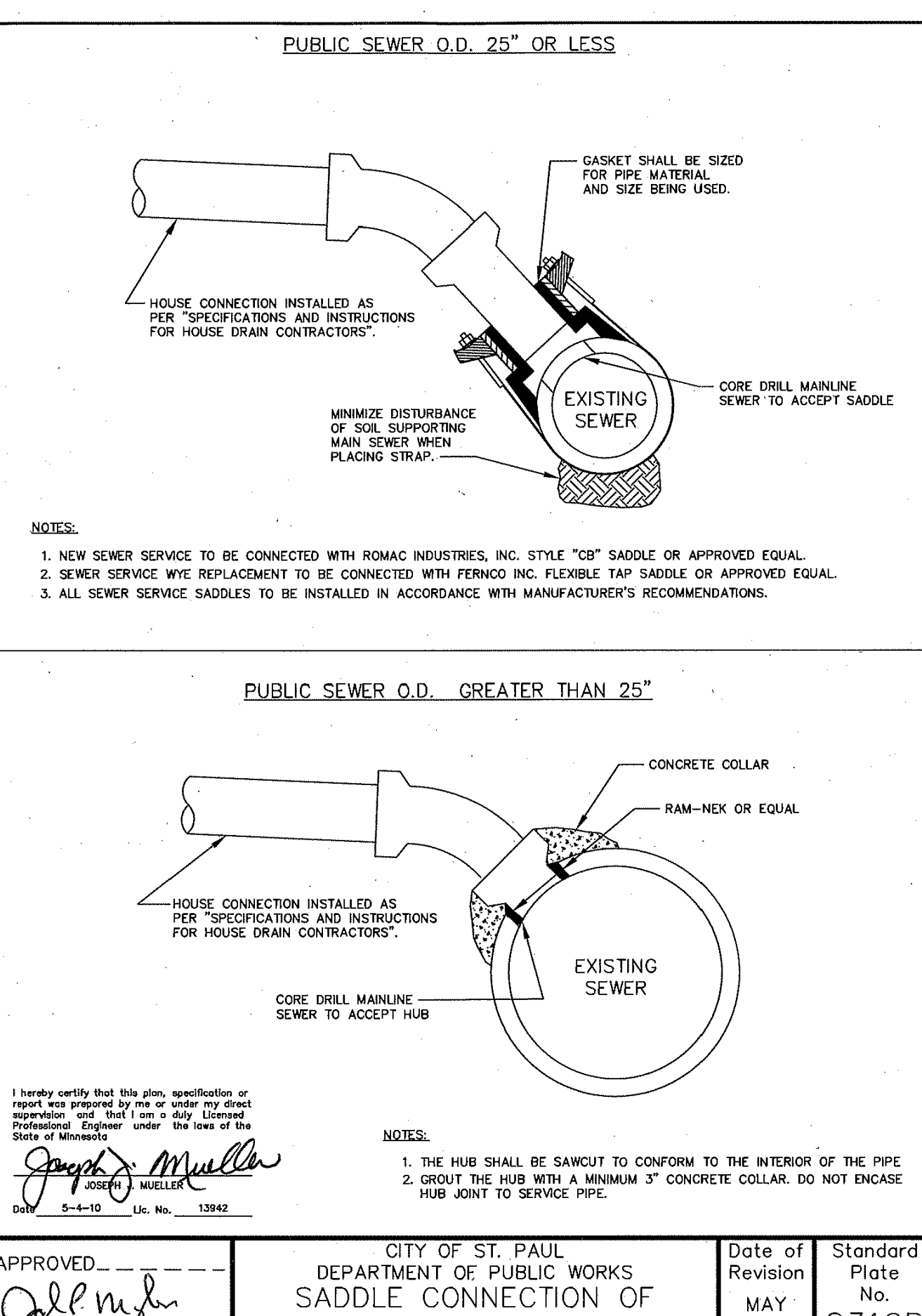
APPROVED: *[Signature]* CITY ENGINEER
CITY OF ST. PAUL
DEPARTMENT OF PUBLIC WORKS
MANHOLE, DESIGN TYPE I
Date of Revision: JULY 2002
Standard Plate No. 2101C

NOT TO SCALE



RETAINING WALL DETAIL

NOT TO SCALE



PUBLIC SEWER O.D. 25\"/>

NOT TO SCALE

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DETAILS

Issues and Revisions:

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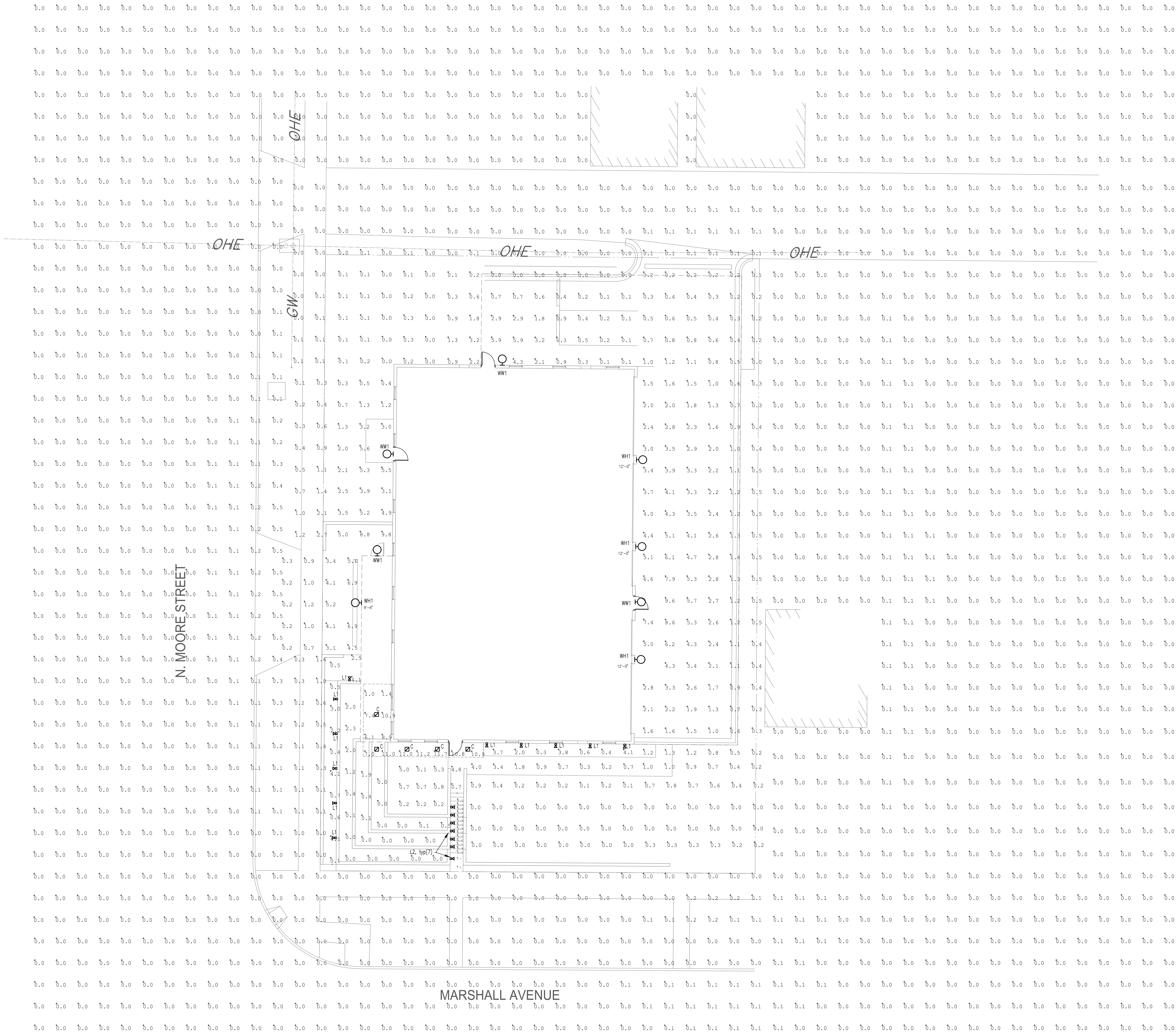
[Signature]
Eric Meyer, P.E.
Date: 12-28-2017 Reg. No.: 44592

Commission No. 12176138
Drawn by KBK
Checked by EGM

SHEET

C5

THIS SHEET SCALE



1 SITE PLAN - PHOTOMETRIC
SCALE: 1" = 10'-0"



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(651) 642-9200
www.popearch.com

MCR Property
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NEW
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MARSHALL AVE
APARTMENTS
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emanuelson-podas
consulting engineers
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050
www.epinc.com

Issues and Revisions:	
CITY SITE PLAN REVIEW	10-18-2017
CITY RESUBMISSION	12-13-2017

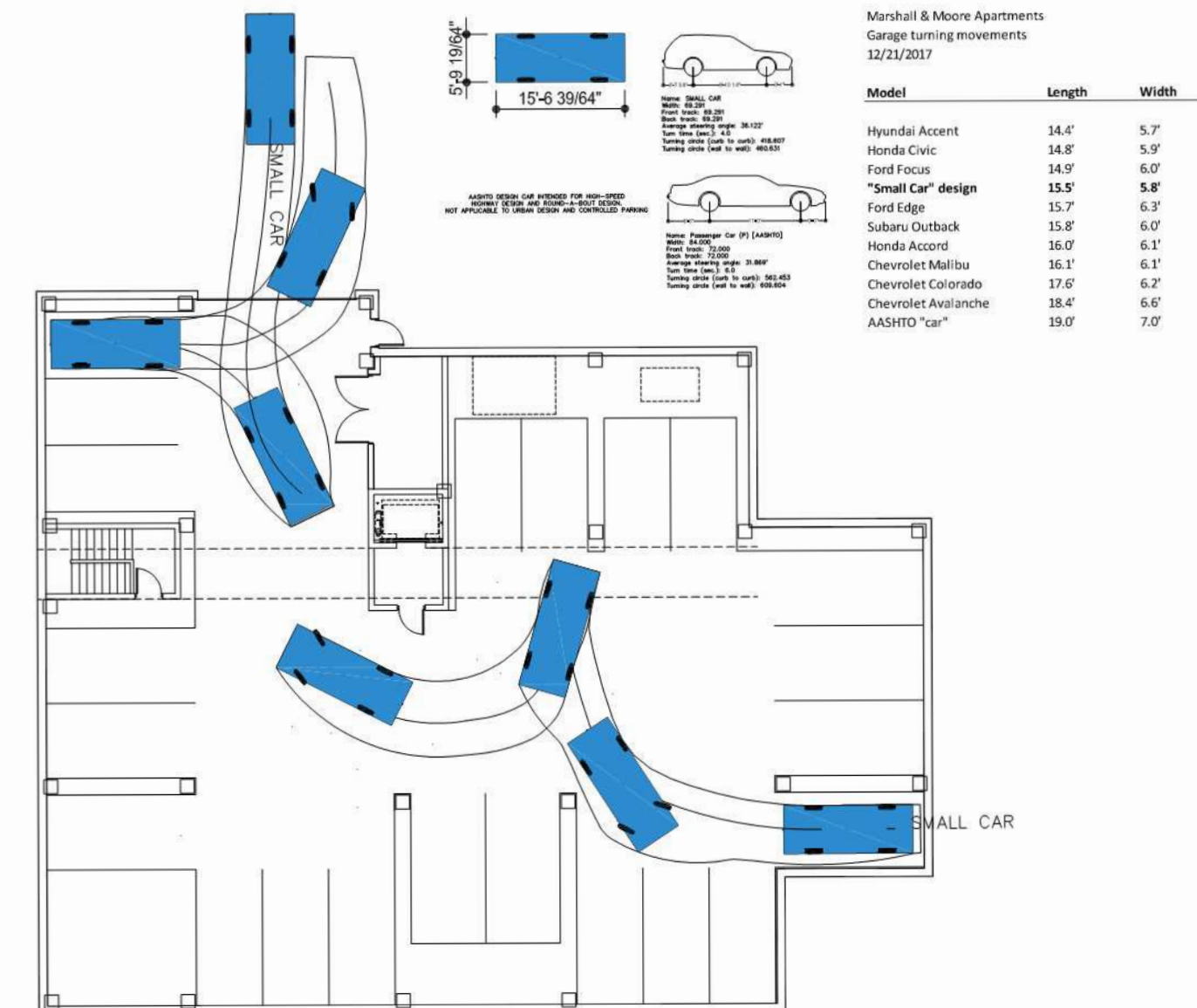
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature: *Matthew W. Fults*
Name: MATTHEW W. FULTS
Date: 12/11/2017 License: 40887

Commission No: 4145.0000
Drawn by: DAJ
Checked by: MWV

SHEET
E0.2
TRUE SHEET SCALE:
0" 1/2" 1"

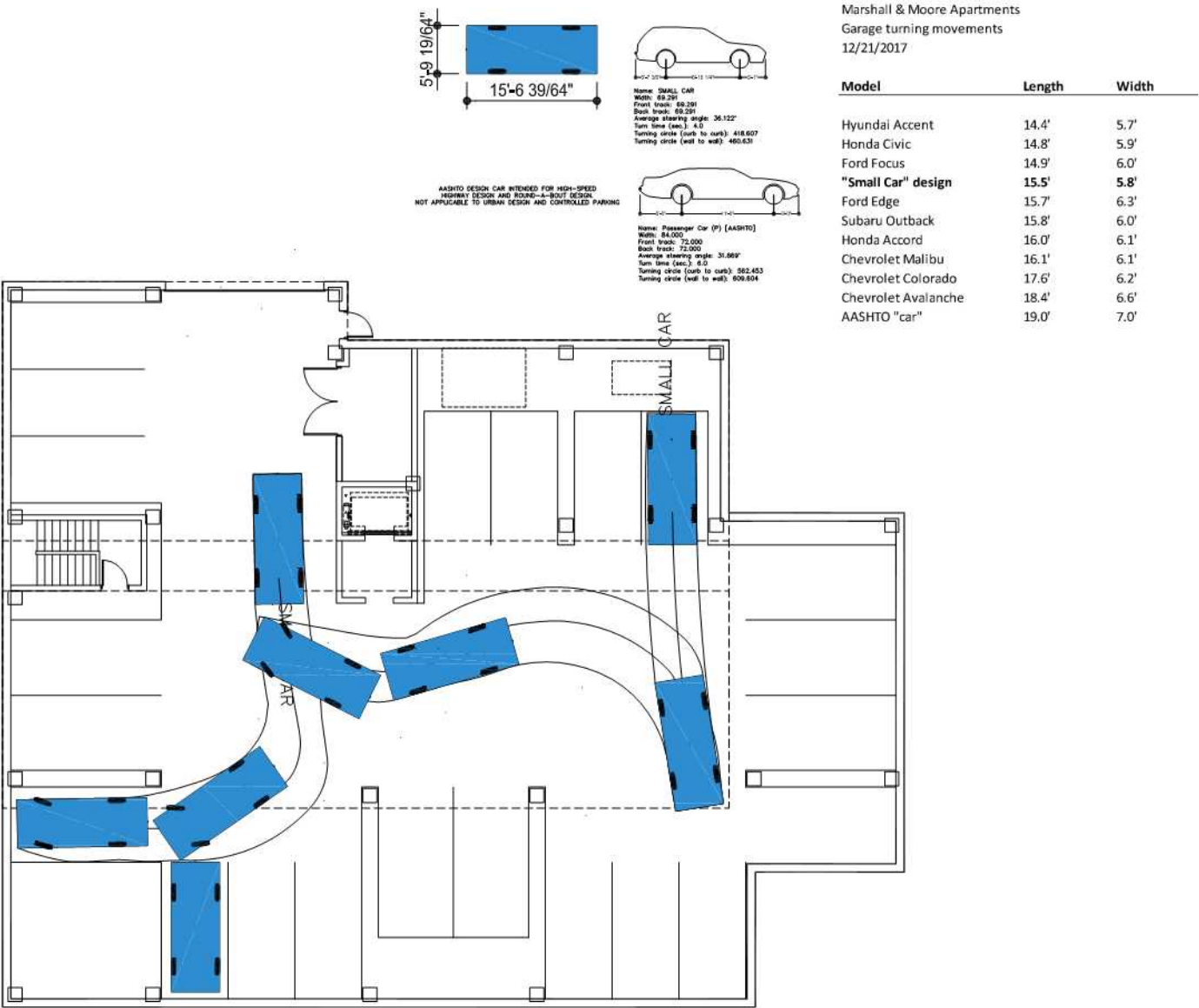
SITE PLAN REVIEW
12/28/2017
51666-17088



VEHICLE TURNING DIAGRAMS

MCR Property Holdings, LLC
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SAINT PAUL, MINNESOTA

SITE PLAN REVIEW
12/28/2017
51666-17088

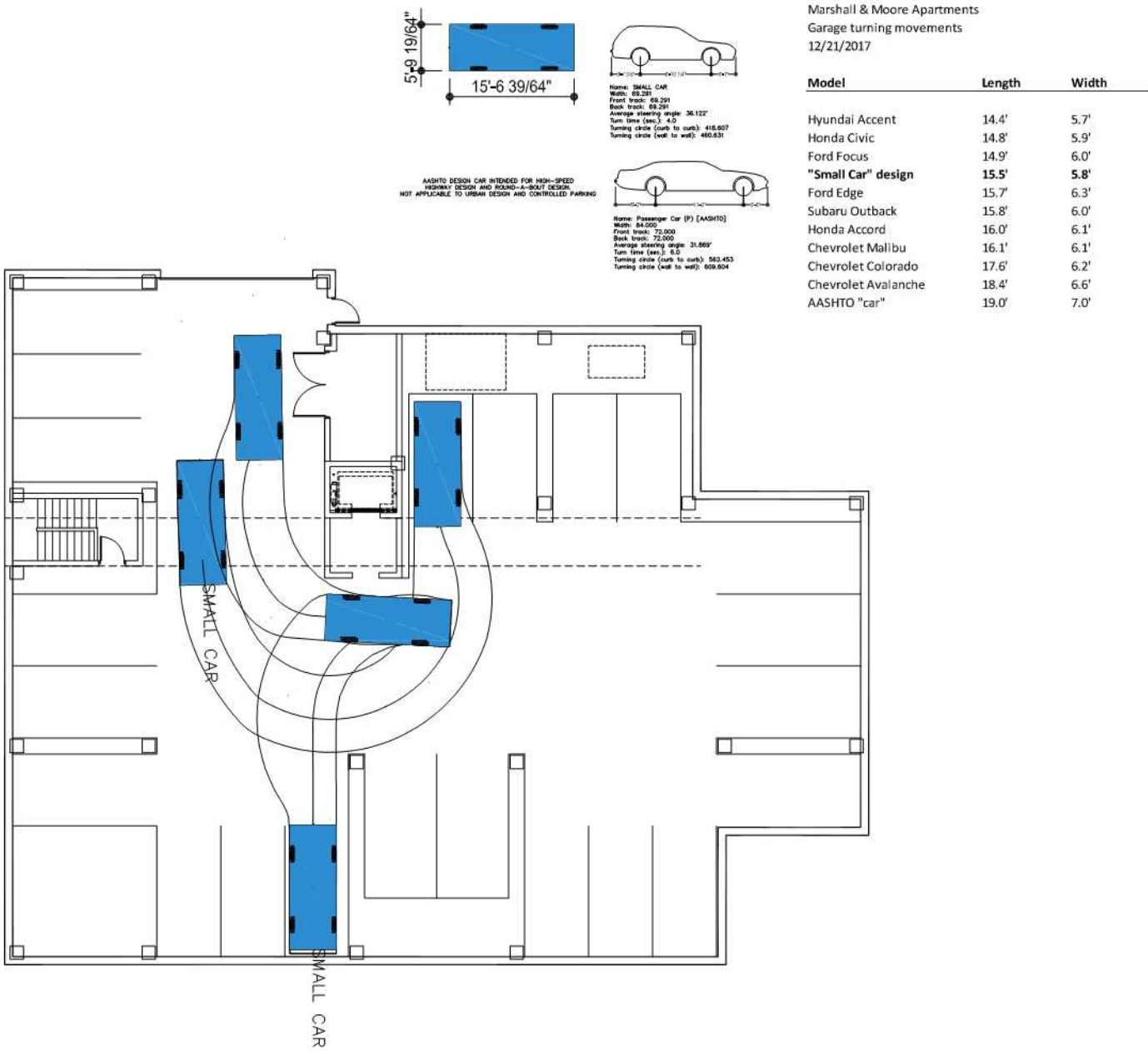


LOWER LEVEL 2

VEHICLE TURNING DIAGRAMS

MCR Property Holdings, LLC
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SAINT PAUL, MINNESOTA

SITE PLAN REVIEW
12/28/2017
51666-17088

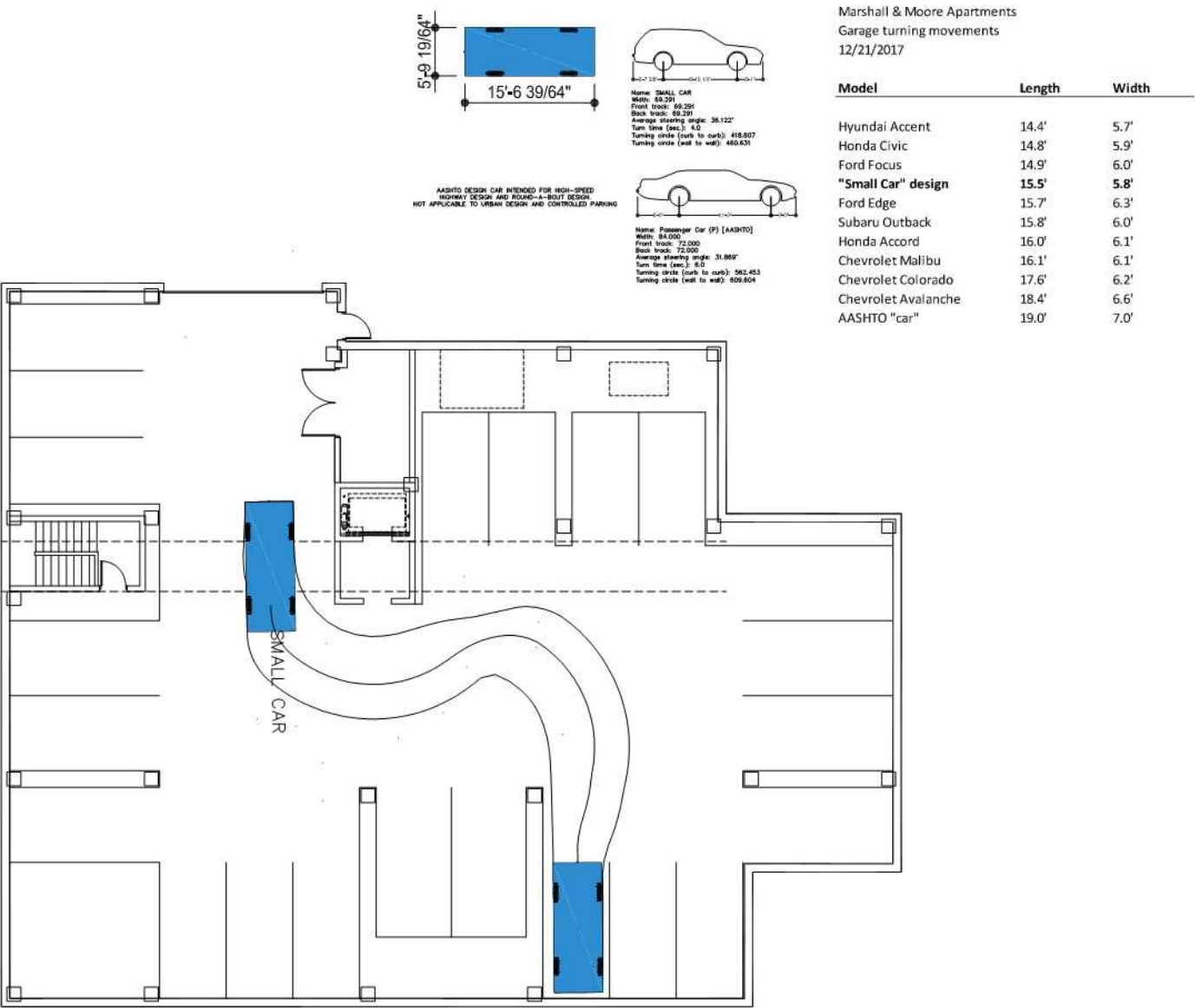


LOWER LEVEL 3

VEHICLE TURNING DIAGRAMS

MCR Property Holdings, LLC
MARSHALL & MOORE APARTMENTS
SAINT PAUL, MINNESOTA

SITE PLAN REVIEW
12/28/2017
51666-17088

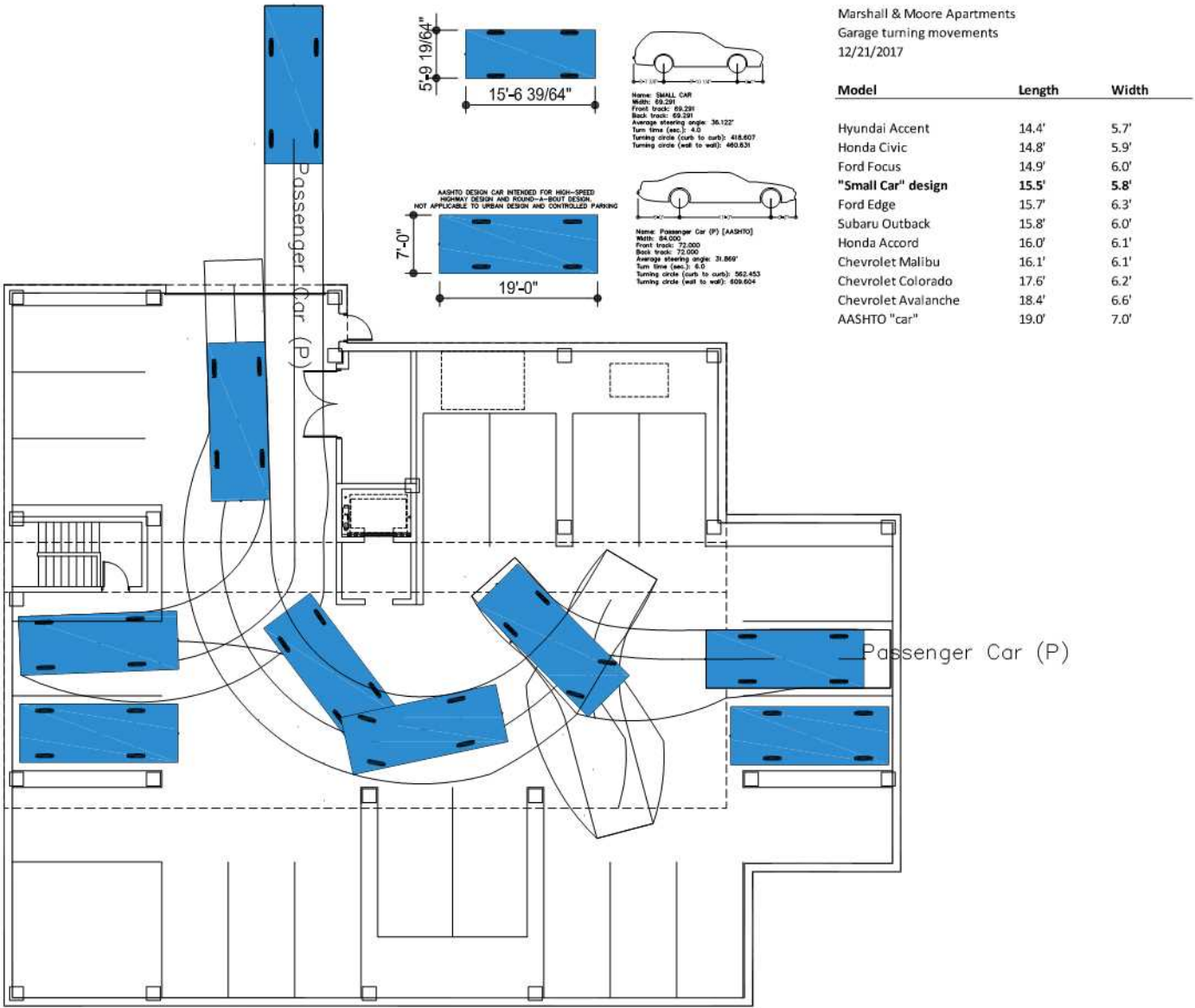


LOWER LEVEL 4

VEHICLE TURNING DIAGRAMS

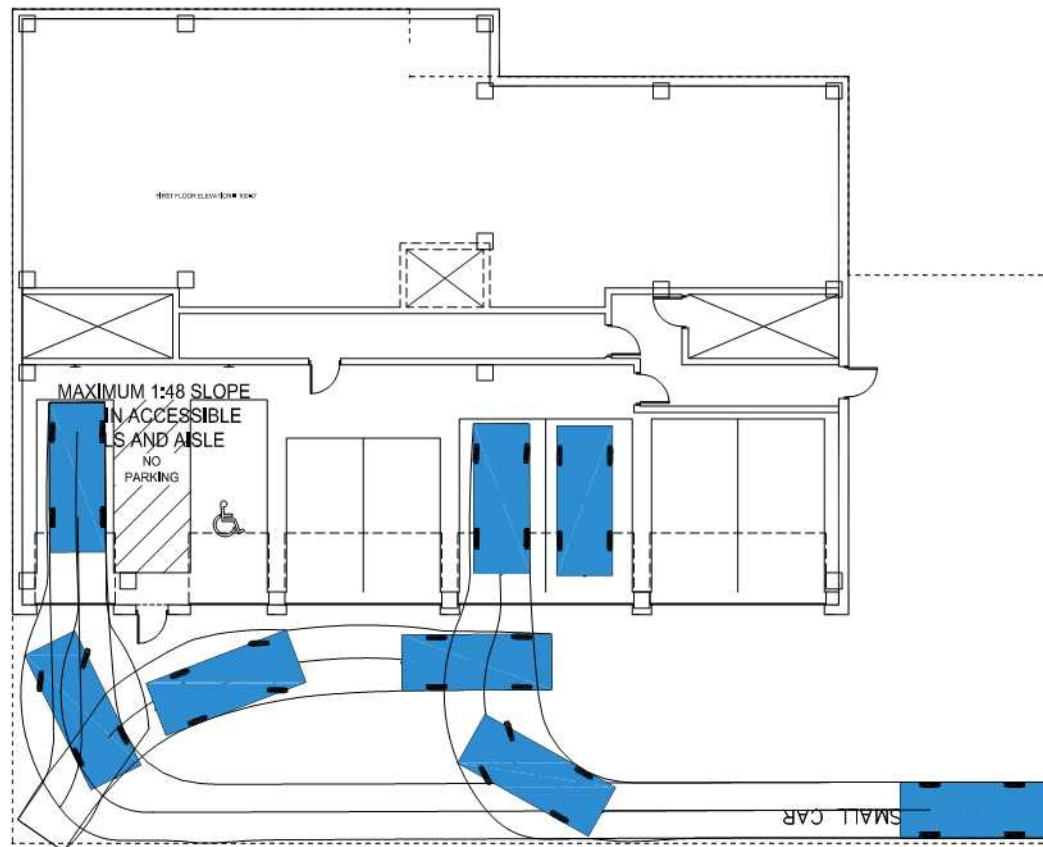
MCR Property Holdings, LLC
MARSHALL & MOORE APARTMENTS
SAINT PAUL, MINNESOTA

SITE PLAN REVIEW
12/28/2017
51666-17088

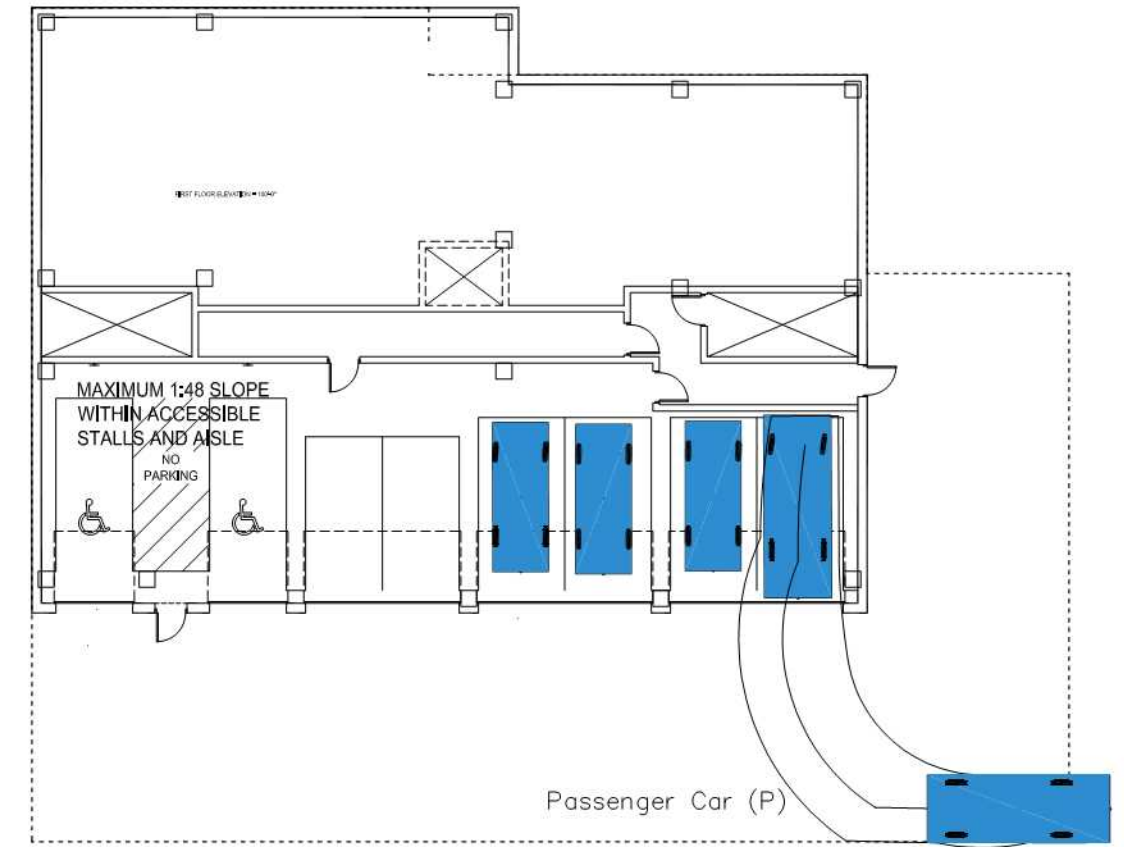


LOWER LEVEL 5

VEHICLE TURNING DIAGRAMS



UPPER LEVEL 1



UPPER LEVEL 2

MCR Property Holdings, LLC
MARSHALL & MOORE APARTMENTS
SAINT PAUL, MINNESOTA

SITE PLAN REVIEW
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VEHICLE TURNING DIAGRAMS