

DRAINAGE MANAGEMENT PLAN

INTRODUCTION

The purpose of this submittal is to provide a final drainage management plan for the proposed greenhouse and crusher fines parking lot located at 135 & 137 Charleston SE in Albuquerque, New Mexico. The sites are legally described as Lots 14 & 15, Block 1, B.M. Moore Addition. The proposed greenhouse building is 1,440 square feet, more or less. The parking lot will be constructed of crusher fines, which is a permeable surface.

EXISTING HYDROLOGIC CONDITIONS

The site is currently zoned C-1. Streets and surrounding properties are fully developed. According to FEMA maps (Panel 35001C0358F, dated November 19, 2003), the site is located in a Zone 'X' designated flood hazard zone.

The existing calculations (see the Basin Data Table this sheet) show that the site discharges 1.10 cfs (cubic feet per second) to the adjacent properties to the west. This runoff traverses the sites at a northwesterly direction and eventually drains on to Grove Pl. SE.

PROPOSED HYDROLOGIC CONDITIONS

The proposed conditions for the site allow the same drainage pattern to continue. According to the basin calculations, the proposed improvements cause an increase of 0.10 cfs (for a total of 1.20 cfs) to the 100-yr runoff rate and a 248 cubic foot increase to the 6-hour runoff volume. It is in our opinion that this slight increase is negligible and will not impact the drainage of the site or other downstream properties.

CONCLUSION

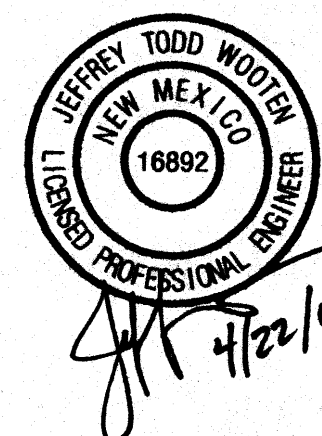
This drainage management plan provides for grading and drainage elements which are capable of safely passing the 100 year storm and which meets city requirements. Due to the additional 1,440 SF of impervious area, the flow rate increases 0.10 cfs during a 100-year, six-hour storm. This increase is negligible and should not cause any negative impacts downstream. With this submittal, we are requesting final grading and drainage plan approval for building permit.

DRAINAGE CERTIFICATION

I, JEFFREY T. WOOTEN, NMPE 16892, OF THE FIRM WOOTEN ENGINEERING, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 02/23/07. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY VLADIMIR JIRIK, NMPS 10464, OF THE FIRM ALBUQUERQUE SURVEYING COMPANY, WHO OBTAINED THE SURVEY DATA ON 04/10/09. I FURTHER CERTIFY THAT I PERSONALLY VISITED THE PROJECT SITE ON 01/23/07 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR FINAL CERTIFICATE OF OCCUPANCY (FINAL C.O.).

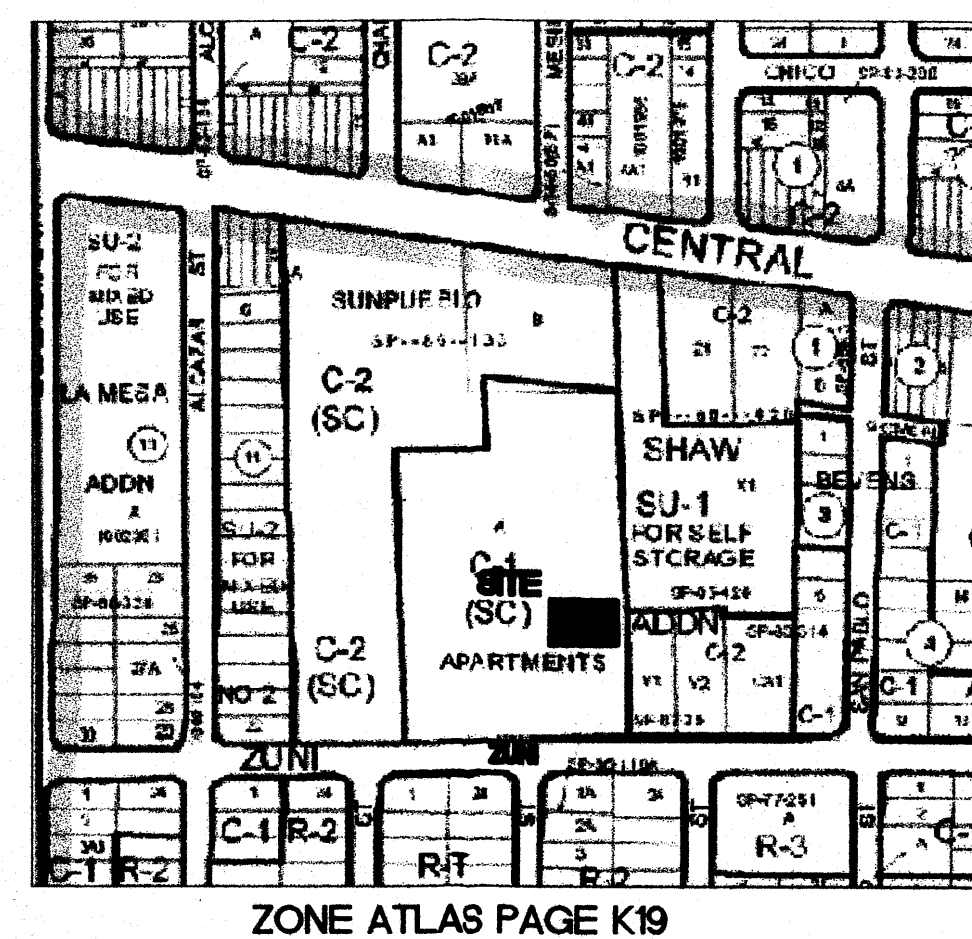
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

JEFFREY T. WOOTEN, NMPE 16892



Desert Spring Nursery
Existing/Proposed Conditions Basin Data Table

This table is based on the DPM Section 22.2, Zone: 3											
BASIN ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (cfs)	WT E (Inches)	V(100) ₃₆₀ (CF)	V(100) ₄₄₀ (CF)
EXISTING CONDITIONS											
A	13925	0.32	0.0%	0.0%	100.0%	0.0%	3.45	1.10	1.29	1497	1497
PROPOSED CONDITIONS											
A	13925	0.32	0.0%	0.0%	80.0%	20.0%	3.76	1.20	1.50	1745	1852



LEGEND

- ← FLOW ARROW
- 27.8 PROPOSED TOP OF GRADE/PVMT ELEVATIONS
- FL27.8 PROPOSED FLOW LINE/GUTTER ELEVATIONS
- TC27.8 PROPOSED TOP OF CURB ELEVATIONS
- 515 EXISTING CONTOUR
- 515 PROPOSED CONTOUR
- EXISTING STORM DRAIN
- FLOW LINE
- RIDGE LINE

GRADING NOTES

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES ARE TO BE PROVIDED BY THE CONTRACTOR AND SHALL BE INCIDENTAL TO THE PROJECT COST.
- ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
- EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
- A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
- PAVING AND ROADWAY GRADES SHALL BE +/- 0.05' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE THE SWPPP DOCUMENT (IF NECESSARY) AND SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.

Wooten Engineering

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CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

SURVEY NOTES:

- BEARINGS ARE GRID BASED ON NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD27 DATUM. BASIS OF BEARINGS IS BEARING S 60°40'42" W BETWEEN ACS CONTROL STATIONS "6-K20(R)" AND "7-L18". DISTANCES ARE GROUND. BEARINGS AND DISTANCES SHOWN IN PARENTHESES ARE RECORD VALUES.
- ELEVATIONS ARE SLD29 DATUM VALUES BASED ON ACS CONTROL STATION "6-K20(R)", ELEVATION = 5,390.736 FEET. ELEVATIONS OF ALL SURVEYED POINTS WERE DETERMINED USING GPS/RTK SURVEY METHODS AND GEOID2003 MODEL.

Grading and Drainage Plan Note:

This is not a boundary survey, data is shown for orientation only. The boundary information depicted by this plan is based upon the topographic survey prepared by Vladimir Jirik, NMPS no. 10464, dated January 2007. Topographic survey information is based upon a topographic survey prepared by Vladimir Jirik dated January 2007, NMPS no.10464.

Final Construction Documents

Desert Spring Nursery
135 & 137 Charleston SE
Albuquerque, New Mexico

Project Title

Drawn By JTW Checked By JTW
Proj. No. 2007001 Date 02/23/07

Revisions

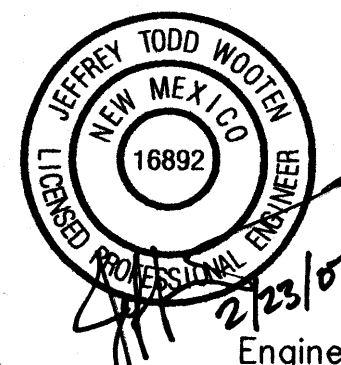
GRADING PLAN

Sheet Title

APR 22 2009

HYDROLOGY SECTION

Sheet 1 of 1



C1

Design Criteria:

- A. ZONING DESIGN CRITERIA**
- LEGAL DESCRIPTION: LOTS 14 AND 15, BLOCK 1, BM MOORE ADDITION, BERNALILLO COUNTY, NEW MEXICO
 - LOT SIZE: 13,925 SF (0.32 ACRES)
 - ZONING CLASSIFICATION: C-1
 - PERMITTED AND ACTUAL USE: RETAIL NURSERY
 - SETBACKS:

A. REQUIRED	
1. FRONT	5 FEET
2. SIDE	11 FEET
3. REAR	0 FEET
B. PROVIDED	
1. FRONT	26 FEET
2. SIDE	20 FEET
3. REAR	10 FEET
 - HEIGHT:

A. ALLOWED	26 FEET
B. ACTUAL	20 FEET
 - PARKING REQUIREMENTS:

A. GREENHOUSE	1,440 / 4 = 4
TOTAL PARKING PROVIDED:	
1. STANDARD ACCESSIBLE SPACES	1
2. STANDARD PARKING SPACES	3
TOTAL	4
 - LANDSCAPING

A. NET LOT AREA	12,560 SF
B. REQUIRED	1,284 SF
C. PROVIDED	1,050 SF (25%)

LANDSCAPE BUFFERS

1. FRONT	10 FEET
2. SIDE	6 FEET
3. REAR	6 FEET
 - BICYCLE SPACES:

A. REQUIRED	4 / 20 = 1 NO LESS THAN 2
B. PROVIDED	2
 - ZONE ATLAS PAGE NO. K-15-Z
- B. ARCHITECTURAL DESIGN CRITERIA**
- OCCUPANCY GROUP: M
 - TYPE OF CONSTRUCTION: VN
 - FLOOR AREA:

A. ALLOWABLE AREA	9,000 SF
B. ACTUAL AREA	1,440 SF
 - OCCUPANT LOAD: 1,440 SF / 300 = 5
 - FIRE RESISTIVE REQUIREMENTS

A. EXTERIOR BEARING WALL	NON RATED
B. INTERIOR BEARING WALLS	NON RATED
C. EXTERIOR NONBEARING WALLS	NON RATED
D. STRUCTURAL FRAME	NON RATED
E. PARTITIONS - PERMANENT	NON RATED
F. FLOORS	NON RATED
G. ROOFS	NON RATED
H. SHAFT ENCLOSURES	NON RATED
I. EXTERIOR DOORS AND WINDOWS	PROTECTED LESS THAN 10 FT
- C. PLUMBING FIXTURE CALCULATIONS:**
1,440 SF / 300 = 5 OCCUPANTS (ACTUAL)
/ 30 = 48 OCCUPANTS (MERCANTILE)
- REQUIRED: 1 WC, 1 LAV, 1 DRINKING FOUNTAIN, 1 SERVICE SINK
PROVIDED: 1 WC, 1 LAV, 1 DRINKING FOUNTAIN, 1 SERVICE SINK

General Notes:

- THERE WILL BE NO STORAGE RACKS OVER 8'-0" IN HEIGHT.

Final Construction Documents

Desert Spring Nursery
137 and 139 Charleston St. S.E.
Albuquerque, New Mexico

Project Title APR 27 2009

Drawn By JA Checked By KEG

Proj. No. 2006-47 Date 2/9/07

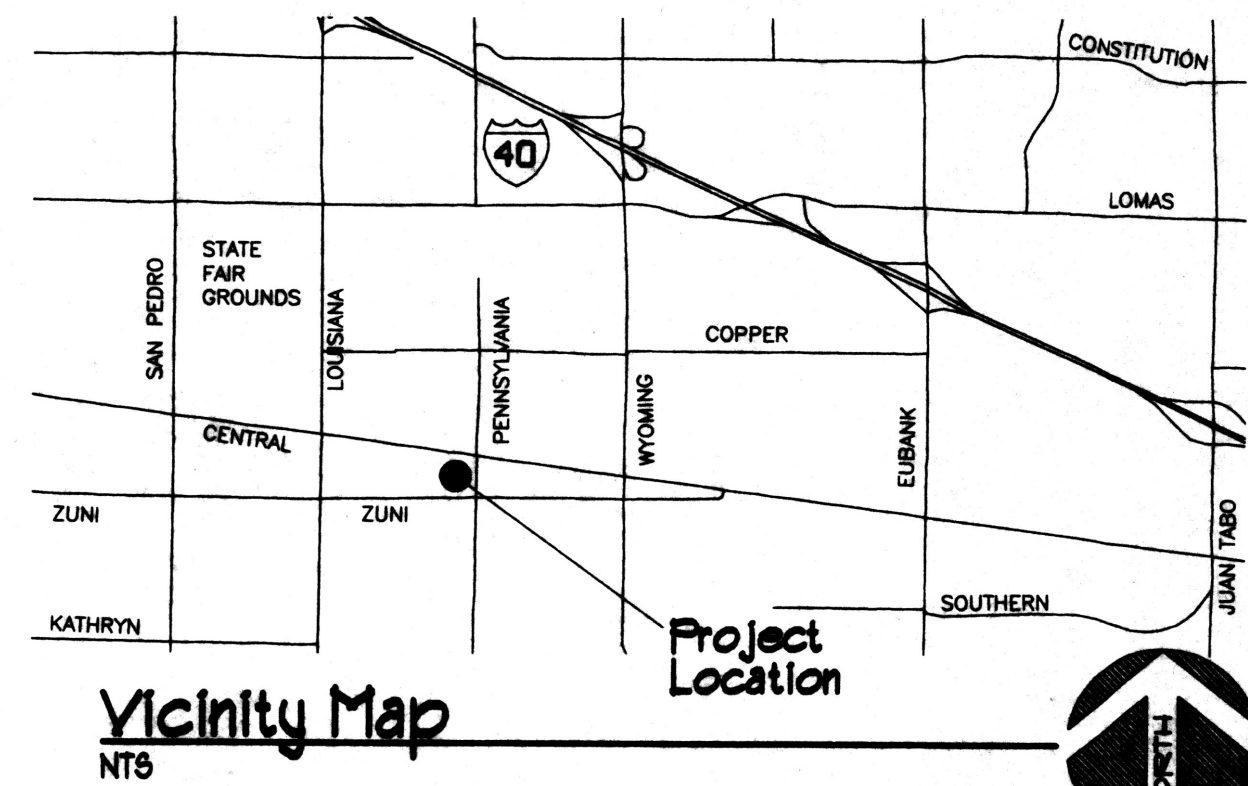
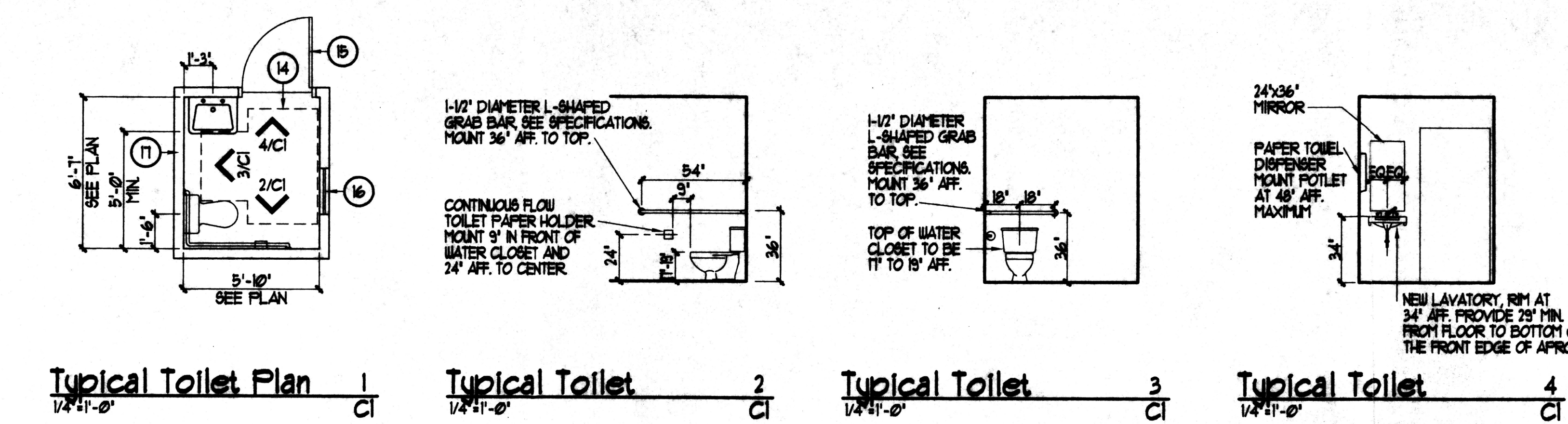
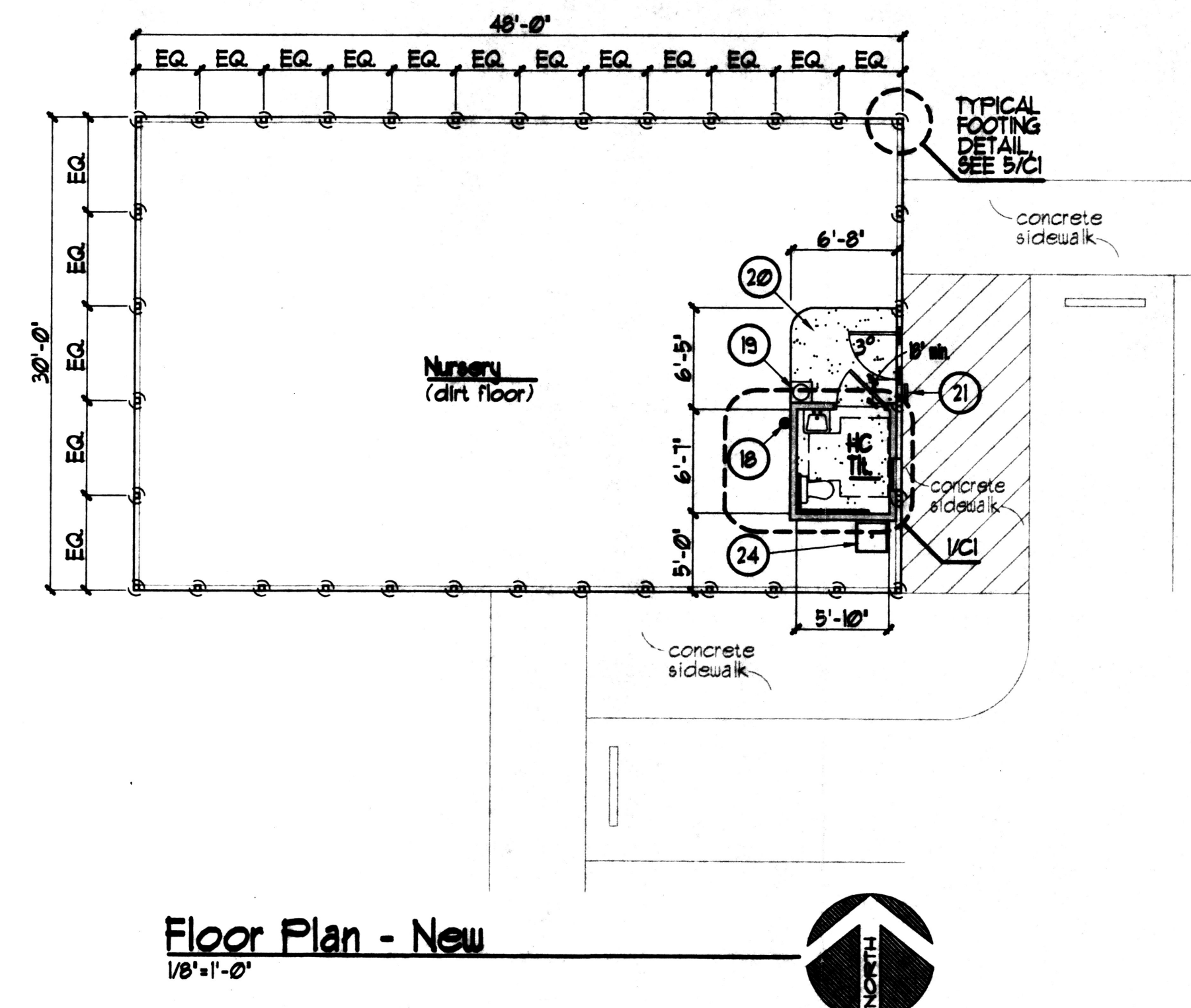
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4/25/07 Revisions Architect Engineer

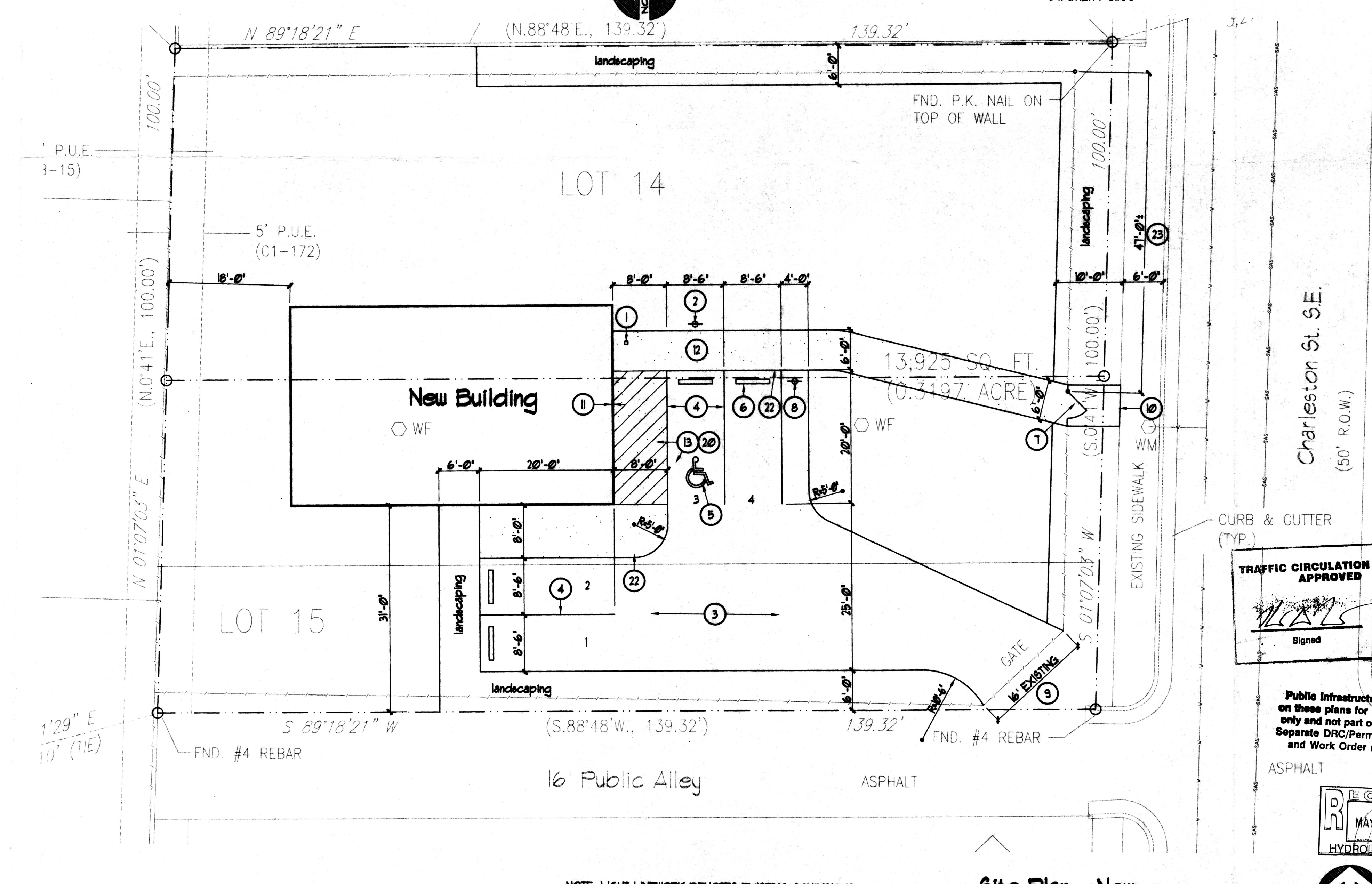
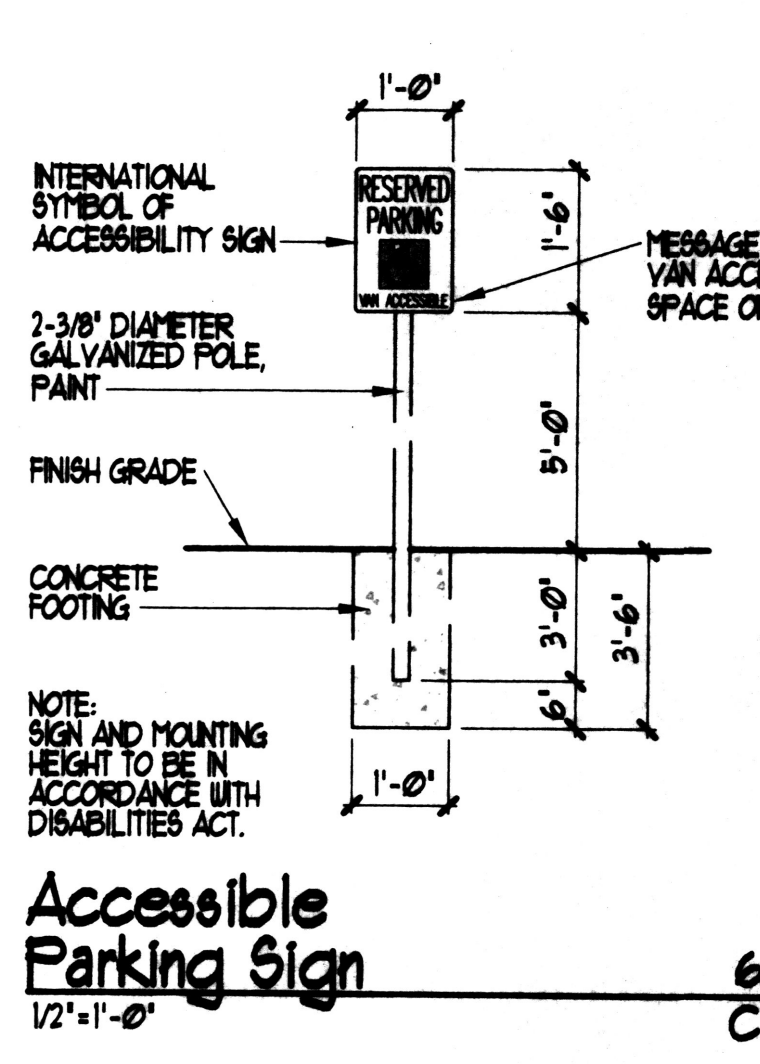
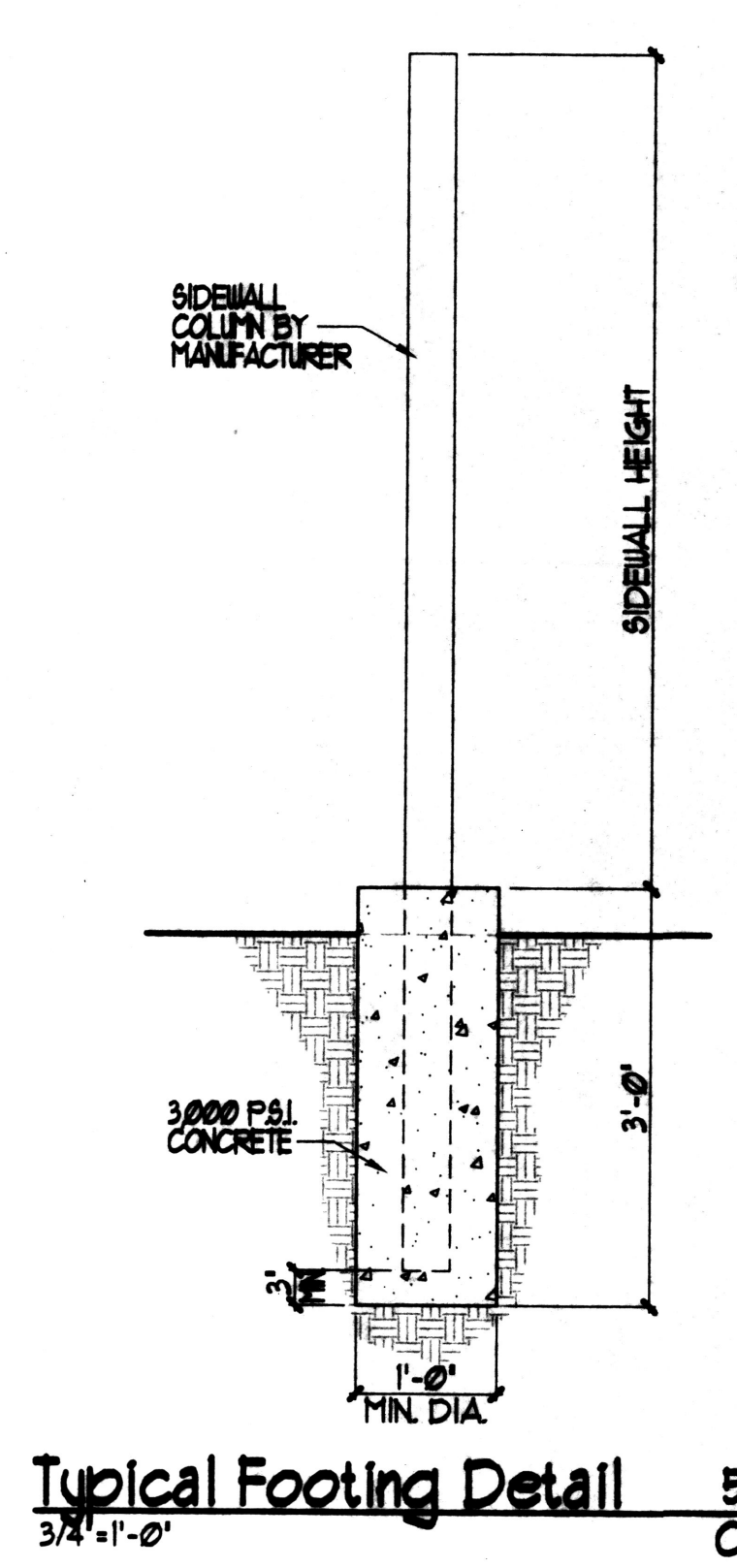
SITE PLAN - NEW, FLOOR PLAN - NEW, DETAILS

Sheet Title Sheet - of -

C1



- Keyed Notes C1:**
- BIKE POST (2 HOOKS).
 - FREESTANDING HANDICAP SIGN (VAN ACCESSIBLE), SEE 6/C1.
 - 2' CRUSHER FINES.
 - PAINTED STRIPING.
 - PAINTED HANDICAP SYMBOL.
 - PARKING BUFFERS.
 - PASSAGE GATE.
 - FREE STANDING MOTORCYCLE PARKING SIGN.
 - EXISTING GATE - WILL REMAIN OPEN DURING BUSINESS HOURS.
 - NEW SIDEWALK TO BE FLUSH WITH EXISTING (ADA COMPLIANT).
 - NEW CONCRETE FLUSH WITH BUILDING ENTRANCE.
 - CONCRETE SIDEWALK (NO THICKENED EDGE).
 - CONCRETE AT PARKING SPACE, FLUSH WITH SIDEWALK.
 - 5' X 5' TURNAROUND.
 - 3'-0" X 6'-8" HC WOOD DOOR.
 - 2'-0" X 2'-0" OPERABLE WINDOW.
 - 3'-5/8" X 25 GA METAL STUDS @ 16" O.C. WITH 1/2" GYPSUM BOARD AT EACH SIDE (CEILING TO BE GREENHOUSE MATERIAL).
 - TYPE 2A/B/C FIRE EXTINGUISHER WITH BRACKET.
 - PORTABLE WATER COOLER.
 - CONCRETE SLAB TO BE 4" THICK WITH 6X6 10/10 WWM ON COMPACTED FILL THICKENED EDGE TO 8' X 8' AT PERIMETER TYPICAL.
 - PREMISE ID. 6' HIGH MINIMUM HEIGHT NUMBERS.
 - FLUSH ELEVATIONS BETWEEN PARKING AND WALK.
 - LOCATE AT EXISTING FENCE POST.
 - UTILITY SINK.



NOTE: LIGHT LINEWORK DENOTES EXISTING CONDITIONS.
BOLD LINEWORK DENOTES NEW CONSTRUCTION.

